

HIGH FIDELITY trade new

VOLUME 24, NO. 3
MARCH 1980

VIDEO
Disc Wars

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HOW **JAPAN** WILL RUN THE AUDIO RACE IN '80

INSIDE

Turntable/Cartridge Trends
What You Need To Know About Super Discs
Dealers On What's Wrong with Hi Fi
Photography In Advertising





The car stereo that took two years to build, takes no time to sell.

With industry surveys pointing to at least a 25% increase in high-end AM/FM cassette unit sales this year, Sanyo's FT2400 will be just what you need to make those big-ticket, high-profit sales.

That's because we saw the high-end explosion coming two years ago, and started designing the "ultimate" AM/FM/cassette deck.

Now, after two years of honing and perfecting, the FT2400 is here.

It was definitely worth the wait.

The FT2400 provides audiophile performance and luxury features... in a great-looking unit that's designed to fit most standard size domestic cars.

At under \$300* it has the industry's most advanced technology, like Metal tape compatibility with switchable equalization for great sound with any tape type, and ultra-sensitive synthesizer tuning with digital readout of frequency, time, and date. We've included Dolby[®] B, 10-station electronic memory tuning, Auto-Reverse, bass & treble controls with optional biamping... and much more.

For your growing subcompact and foreign car market, Sanyo downsized the FT2400 and came up with the FT2200 — virtually identical in everything but size.



FT2200

Both radio/cassette decks offer hefty 1000mV preamp outputs to drive outboard power amps (required) without noise problems. So they sound sensational.

When you add the rest of Sanyo's industry-leading high-end line, you've got all of today's hottest technology covered... at all the right price points to make selling any customer a snap. Which will make you a big success in high performance car stereo.

In no time at all.

| FT2400 AM FM STEREO CASSETTE DECK | |
|-------------------------------------|------------------------------------|
| Frequency response | 40-19,000 Hz (+3dB, metal tape) |
| Wow & flutter | 0.07% WRMS |
| Signal-to-noise ratio (Dolby on) | 62dB |
| FM sensitivity | 14.8dBf |



Sanyo Electric Inc., 1200 W. Artesia Blvd., Compton, CA 90220

Contact your nearest Sanyo rep:

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BUSINESS IS A MATTER OF NUMBERS. IF YOURS DON'T MEASURE UP, LOOK AT THESE.

Some lines are profitable, some aren't. Some are promoted enthusiastically, some are not. One thing is certain. What you don't need is a store full of hi-fi equipment that is not top quality and does not sell. So if your sales profit figures don't measure up,

these will help to change them — seven different profit lines from Osawa, the Measure of Quality. Lines you should pay special attention to if you carry Osawa—even more attention to if you're not an Osawa dealer yet. Every one is top quality, and all are heavily promoted to your customer.

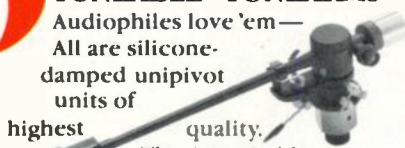
29 NAGAOKA ACCESSORIES

A brand-new line of audio accessories from Osawa, sure to bring repeat traffic into your store. Designed for everyone from the impulse buyer to the dedicated audiophile. Never heard of them? You'll be hearing plenty about them in the year ahead.



3 ULTRACRAFT TUNEABLE™ TONEARMS

Audiophiles love 'em—All are silicone-damped unipivot units of highest quality. They're suitable for use with virtually any cartridge on the market.



4 SATIN® CARTRIDGES

A Satin Moving Coil Cartridge for \$99.95? You bet. And there are three other Satin Moving Coil models, too—all with user-replaceable styli, and all with an output level high enough not to require a transformer or pre-amplifier.



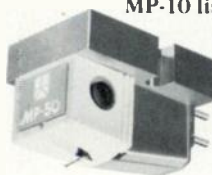
2 DISK MATS

Audio critics have raved about how Disk Mats improve the sound of music by damping vibrations and adding weight and mass to turntable platters. The SE-22 Disk Mat and our new model, the OM-10, will be winners with critics and customers alike.



6 HIGH-CONTRAST MP CARTRIDGES

The Osawa high-contrast cartridge—totally free in stylus movement, totally rigid in fixed structures—is now available in six models. The new MP-10 lists for only \$39.95. The top-performance MP-50, the cartridge you don't listen to, but listen through, is priced to sell for \$199.95.



4 HECO SPEAKERS

Hi-fi enthusiasts all over the world know about the high quality of Heco speakers. And now, for the first time, Osawa has brought them to the USA. There are four models to choose from—all compact, three-way acoustic suspension units with high sensitivity and outstanding frequency response.



1 ARISTON TURNTABLE

Critically acclaimed for its 9½ pound precision machined platter, the Ariston RD-11S Transcription Turntable is easily one of the finest belt-driven turntables available anywhere at any price.



19 OSAWA SALES REPS

You can find them—and all of our terrific numbers by calling (212) 687-5535.

OSAWA
The Measure of Quality

OSAWA & CO. (USA) Inc., 521 Fifth Avenue, New York, New York 10017
Distributed in Canada by Intersound Electronics, Montreal, Quebec

Performance and reliability. That's what radio stations look for in a turntable and that's why 73 of the top 100 radio stations that use turntables use Technics direct drive. In fact, of those stations surveyed by Opinion Research Corporation, Technics was chosen 6 to 1 over the nearest competitor.

Why station engineers choose Technics.

"Latest state of the art." "Reliability and past experience." "Low rumble, fast start." "Wow and flutter, direct drive and constant speed." Those are just a few quotes from radio station engineers. And what they liked about Technics direct drive you will, too.

The D-Series:

Unsurpassed performance for the price.

Consider 0.03% wow and flutter and -75 dB rumble. Those are the kinds of specs you may find in more expensive turntables, but Technics gives them to you for \$125* in the SL-D1 manual, for \$150 in the SL-D2 semi-automatic and for \$170 in the SL-D3 fully auto-

matic turntable. So if you thought you couldn't afford the performance of Technics direct drive, think again about the D-Series.

The Q-Series: Quartz accuracy.

With speed accuracy of 99.998%, wow and flutter of only 0.025% and rumble of -78 dB, it's no wonder that so many radio stations choose Technics quartz-locked turntables over any other. And when you consider the prices—\$190 for the SL-Q2 semi-automatic and \$220 for the SL-Q3 fully automatic—you'll choose Technics, too. Especially when you compare the Q-Series specs, the tonearm and the suspension system to other seemingly comparable turntables.

The MK2 Series:

Torque and quartz-locked pitch control.

A startup time of 0.7 seconds, or 1/4 of a revolution. That's torque. Quartz-locked pitch control. That's accuracy. Those are two reasons top radio stations use Technics turntables. You'll get both with the MK2

You should buy a Technics direct drive turntable for the same reasons 73 of the top 100 radio stations do.



Series along with an aluminum diecast chassis and a double-isolated suspension system. Technics SL-1800 MK2 manual at \$300, the SL-1700 MK2 semi-automatic at \$350 and the SL-1600 MK2 fully automatic at \$400. Each proves you don't have to be a radio station to afford performance good enough for a radio station.

The SL-10: The turntable of the 80's.

Not much bigger than a record jacket, the SL-10 has a quartz-locked direct-drive motor, a moving coil cartridge with a pre-preamp, and a servo-controlled linear tracking arm which results in virtually zero tracking error ($\pm 0.1^\circ$). What's more, the SL-10 couldn't be easier to operate. Simply place a record on the platter, close the cover and it automatically plays, even on its side or upside down.

Now that you know what radio stations look for in a turntable, shouldn't you look at the turntables 73 of the top 100 radio stations use. Technics direct drive.

* All prices are Technics recommended prices, but actual price will be set by dealers.

drive turntable for the radio stations did.



LETTERS

To the Editor:

Greatly appreciated your "What the hell is wrong with the hi fi business" article in your January issue. After 10 years in the business I went to WCES prepared to do my bit to stabilize our market. Frankly I think the seeds of this problem were sown with the demise of fair trade and the inability of our industry to admit to itself that they

"... the seeds of this problem were sown with the demise of fair trade and the inability of our industry to admit to itself that they (we?) just couldn't go on doing business the same old way."

(we?) just couldn't go on with doing business the same old way.

Since you aren't "coming to see" us in Minneapolis I am enclosing a copy of the agreement I requested that all my suppliers sign and return to me. I'm sure you would find the supplier's reactions interesting. Keep up the good work! Thank you.

**Kimberley John Crumb
President
Audio Innovations
Minneapolis**

Editor's Note: Thanks for your letter and interest in *High Fidelity Trade News*. We're taking the liberty, below, of printing your letter to your suppliers as well as the agreement you asked your suppliers to sign.

WCES 1980

Our Supplier:

As the audio business goes into a time of stress we are going to measure the dedication of our suppliers with the enclosed "most favored customer" agreement. Simply put, the agreement only asks that we not be put at a disadvantage by our own suppliers. It is my fond belief that those who sign and abide by this agreement will find themselves in a mutually profitable arrangement. For those unable or unwilling to complete this agreement I will, of course, measure our ability to replace you with a supplier that will. Please call or write with any questions.

**Sincerely,
Kimberley John Crumb**

President Audio Innovations

P.S. Complete two copies and send. One will be returned to you signed by us. Thank you.

1980 "MOST FAVORED CUSTOMER" AGREEMENT

1. This is an agreement between Audio Innovations Inc. (herein referred to as "customer") and _____ (herein referred to as "Supplier.")
2. The purpose of this agreement is to further a mutually beneficial, long term relationship between customer and supplier.
3. Statement: For the calendar year 1980, that Audio Innovations Inc. receive the same treatment as the supplier's "most favored customer" in the trade area . . . the Twin Cities metro area.
4. This "treatment" is to be defined by, but not limited to:
 - a. pricing & terms
 - b. freight policy
 - c. delivery dates
 - d. promotional funds
 - e. all other aspects normally considered in purchasing
5. Customer agrees to abide by the terms of the franchise agreement and to further the image and sales of the suppliers products and/or services.
6. Supplier shall offer price protection on all units in customer's stock in the event of a price reduction. Supplier shall within 10 days inform customer of said reduction and customer shall supply the number of units in stock, with serial numbers if units are so marked. Credit shall be applied to customer's account in less than 30 days.
7. That there be no deviation from this agreement without the written consent of the officer's of Audio Innovation's Inc.

| | | |
|-----------------|--------|-----------------|
| _____ | signed | _____ |
| _____ | firm | _____ |
| _____ | date | _____ |
| SUPPLIER | | CUSTOMER |

An Open Letter To Hi-Fi Manufacturers:

The cover of January *High Fidelity Trade News* covered an important subject to both us hi-fi retailers and manufacturers: **WHAT THE HELL IS WRONG WITH THE HIFI BUSINESS?** But the articles that followed seemed to place most of the blame on us retailers.

Yes, most of the salesman don't know the basics of hi fi, let alone have the ability to convert the complex audio technology into easy to understand plain English for the hi fi consumer.

Yes, most salesmen and dealers know only one way to sell hi fi: the lowest price.

"... no two dealers will ever support the same brand . . ."

Yes, the economy is down, and world events certainly don't give the buying public confidence in the world they live in.

And one point not mentioned, no two dealers will ever support the same brand, so there is no reinforcement of a dealer's opinion or recommendation with another's, and this goes for the high end esoteric dealers too.

But think about it. This is not new. Ever since fair trade was done away with; this situation has existed. Why in 1979 did, all of a sudden, people stop buying hi fi like they used to?

I think a good part of the business downturn in the hi fi business is due to the manufacturers turning our quality oriented business into not much more than a used car business. Models which used to stay current for three years are now changing in as little as six months — with no real improvements. And model lines don't make any sense.

Last year Kenwood introduced new technology in amplifiers: high speed. Here was an alternative to the me-too receivers everyone had. Now we could step the buyer up to a better product, not just a separate amp and tuner. Here was supposedly better technology available in separates, which you could

(Continued on page 52)

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BPA



Designed



to sell

Some time ago, we took major steps to ensure that our products could compete—in every way—with any turntable made anyplace. We knew that this was the only way Garrard could stay ahead in a rapidly changing, sharply competitive world.

An elite team of designers and engineers was formed called the Advance Design Group. Their assignment was to keep our turntables at the frontiers of technology and enable us to deliver them at prices that made them saleable.

In short, what we wanted were turntables designed to sell.

That the first products of the Advance Design Group are being made available now is fortuitous indeed. The times simply call for a logical,

full line that responds to every section of the market, while providing a respectable profit for our dealers.

There's a model at every important price point. And you can meet the need (or whim) of your customer for direct or belt drive, multiple or single play, front controls, carbon fibre headshells, super-light tonearms—and still give them the now-famous Garrard 3-year limited warranty.

These days, we don't have to tell you that it's more important than ever to buy what will sell—profitably. Advance Design Group turntables are designed to sell.

Call your Garrard rep now.

Garrard Advance Design Group

Garrard U.S.A., 100 Commercial St., Plainview, N.Y. 11803

AS WE GO TO PRESS

THE 1980 DETROIT HI FI SHOW proved that there's still a market out there for audio equipment. According to show promoter Terry Rogers, the Cobo Hall event drew over 23,000 people over the three-day run from February 15-17, perhaps spurred by a new wrinkle in the Rogers show format--a super sale promotion claimed to have moved more than \$100,000 of component merchandise right off the show floor. With that, Rogers pronounced the Cobo facility the best in the U.S. for a hi fi show.

BGW IS NOT going factory-direct as reported by HFTN on this page last month when we scooped the industry on Peter Horsman's resignation. A company spokesman says, in effect, "How can we?" What that means is BGW is phasing out of the consumer hi fi market. "We're remaining with our reps for all professional products we market," says the spokesman.

SOUND CONCEPTS, REMEMBER them--the original time delay company. They've been quietly doing business at their Brookline, Mass HQ but are now going to get more aggressive with the introduction of a stereo image restoration control system due to hit the market by mid-May. President Joel Cohen says the \$199.95 outboard system "is not a delay system." In fact, in a sense, it can replace a time delay or substitute for one. "Time delay is very expensive. Our new device creates an effect just as dramatic but at much less cost. It makes sense, in terms of priority, to buy this first, then perhaps later add a time delay, which sounds very nice added to our new product," says Cohen, who says his new system allows sound to retain its original clarity and also provides a continual adjustment control in terms of where you are in relation to speakers (i.e., the system doesn't have to be adjusted and the room doesn't have to be specially set up).

JIM JOHNSTON HAS RESIGNED as vice president and general manager of Jensen's home audio products group. No reason was given for the resignation which is effective immediately. In other personnel changes around the industry, Sparky Wren has resigned from JVC and is now vp-sales at Ultralinear. Also, George L. Savage has been named national marketing service manager at Alpine Electronics, according to Reese Haggott, Alpine vp. At Ampex, Stanley Silverman has come aboard as director of market planning, a new position.


THE AMPEX-SIGNAL MERGER is expected to be wrapped up by mid-1980, with Signal absorbing Ampex. Signal chairman and ceo Forrest Shumway sees Ampex as "a well managed company with a great future. We contemplate no changes in its operating philosophy nor in its existing management."

ALLIED ARTISTS INDUSTRIES says Bankruptcy Judge John Galgay has approved an agreement for the sale to Lorimar Productions of Allied Artists Video Corp. as well as Allied Artists Pictures, Allied Artists Television Corp, and the interest of Allied Artists Industries in the motion picture "The Betsy." Proceeds of the sale will be used to discharge Allied's obligations. The company filed petitions under Chapter XI of the Federal Bankruptcy Act in April of last year.

IT'S NO SECRET that Onkyo has been promising a more aggressive advertising and marketing campaign in the eighties. Now it's a reality, according to national sales manager Mark Friedman, who has unveiled the first ads in that new campaign, titled "The Secret of Onkyo."

State of the **AR** t.



AR Verticals, the finest speakers in AR history. Audition them and be astonished. Left to right: AR9, AR92, AR91, AR90. Your AR Dealer has literature or write: AR, 10 American Drive, Norwood, MA 02062.  TELEDYNE ACOUSTIC RESEARCH (c) 1990



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ON THE COVER: Designed by Alfons Reich and photographed by Ed Haas, Hi Fi Trade News decided to express the theme of this month's cover story, a report on how Japanese manufacturers of hi fi plan to market in the U.S. this year, very simply, through a headline and a single graphic element: a running shoe. We leave the question of whether it's a winner to your judgment.



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Select what you want in a record cleaner.

☐ Convenience in use and storage.

You shouldn't need a separate shelf, elaborate motions or an act of Congress to clean your records. A comfortable, hand-held instrument that works best on a rotating turntable is ideal.

☐ Effectiveness against micro-dust.

Tiny, invisible dust particles hide in delicate record grooves and can be ground into the vinyl. Only a slanted (directional) fiber using special ultra-small fiber tips can scoop up, rather than rearrange, this micro-dust contamination.

☐ Effectiveness against chemical contamination.

Fingerprints and vapor-borne oils will deposit into channels of a record groove. Such contamination hides from adhesive rollers and all dry cleaning systems. Only a special fluid plus micro-fibers can safely remove such audible, impacted deposits.

☐ Total removal of contamination/fluid.

Capillary action—the lifting of fluid by small fiber surface tension—is totally effective. You want to get contamination off the record, along with any fluid traces.

☐ Lasting construction.

You want quality. A record cleaner can last a lifetime. A plastic wonder can crack into oblivion—or you can purchase the hand-rubbed elegance of milled walnut befitting the rest of your audio system.

☐ Ultimate economy.

The value of a truly fine record cleaner is justified by the cost of replacing your record collection. Fifteen dollars is a small investment in long-term protection.

☒ All of the above.

**DISCWASHER, the Superior
Record Cleaner.**

See the finer audio dealers for a demonstration.



discwasher, inc. 1407 N. Providence Rd., Columbia, MO 65201

Anatomy of a Pace Altus car stereo buyer.

This guy's been shopping around. He knows what he wants. He wants good sound at a good price. He doesn't want to settle for less. But he doesn't want to pay for a lot of fancy features that he doesn't need either. He wants a good sound deal. He wants Pace Altus.

This is most likely a first-time car stereo buyer. And he's probably planning on spending under \$200. But just in case he wants to go a little heavier, Pace Altus offers him a full line of car stereo equipment. From your basic AM unit to 50 watt speakers to a 7-band graphic equalizer that's equal to the best.

He doesn't want new jeans. These have finally gotten comfortable.

This fellow's done some legwork. He's checked out some other lines. But he's looking for a better deal. And you can give it to him on your whole Pace Altus line. Because we can offer you a great deal on the whole Pace Altus line.

This customer looks long and hard before he buys. He reads everything he can get his hands on. So when he sees our advertising aimed directly at him, he gets the message. Pace Altus is a good sound deal.

Like many young customers, this one will do his own installation. It's the best way to save a buck without missing out on Pace Altus quality.

How his stereo will ultimately sound is the single most important thing to our hero. So he's going to be mighty interested in the Pace Altus self-selling merchandiser that holds anywhere from two to eighteen units plus speakers.

Tap, tap, tap.



pace / ALTUS
auto stereo sound center

Pace Altus is a good, solid company. And we plan to be around for a long time. For further information contact the Marketing Department, PATHCOM, INC. 24105 S. Frampton Ave., Harbor City, California 90710. Call toll free (800) 421-1196, and in California (800) 262-1208.

paceALTUS

SCOTCH® CASSETTES.

SELL THE ONE COMPONENT THAT MAKES ALL THE OTHER COMPONENTS SOUND LIKE A MILLION.



Here's what you offer your customer to make all his other recording components perform at their best possible level. Scotch Recording Tape lets high-end decks record and play back true, pure sound, cassette after cassette—a mighty profitable consideration.

Scotch Metafine® is the metal tape that inspired a new generation of cassette decks, including leaders like JVC and Pioneer.



Recording almost to the limits of the audible range, Metafine metal tape has an output 2½ times greater than chrome at low frequencies; 3 times greater at high

frequencies. A full 10dB improvement over today's standard chrome tapes is Metafine's competitive edge.

The Scotch Master™ Series includes three premium tape formulations. Each provides a different sound for types of recording as different as your customer's choice of equipment. Master I® Normal Bias is out-



standing for high-level recording like jazz or rock. Master II® Chrome Bias is sensitive enough to deliver all the sound from mood music to classics. Master III® FeCr offers tremendous clarity, with a high-end punch that's just right for high performance car stereos.

Depending on your customer's deck, Metafine can extend recording frequency response all the way from 20 to 20,000 Hz.

New National Advertising. backs up Scotch Recording Tapes again this year. Ads tell your customers precisely how good these tapes are, in the pages of audiophile magazines like *Stereo Review*, *High Fidelity* and *Audio*, and on radio. There's extensive merchandising, too.

It's not just tape. Here's a *component* as important to your customer as his deck, because it lets him achieve true, pure sound. That means true, pure profit for you.

Contact your Scotch Recording Tape Representative today.



SCOTCH® RECORDING TAPE. THE TRUTH COMES OUT.

3M

AUDIO EXPORT: The Race America Never Ran

During the last few years American hi fi manufacturers have become increasingly interested in the export market. Proof that this is true was evidenced recently when more than 30 industry leaders attended an export seminar in New York sponsored by this publication and its European sister magazine ACE INTERNATIONAL.

The rhetorical question arose, "Why is Japan more successful than America in exporting hi fi as well as many other products?"

Studying the geographical and economic conditions of the two nations hints at the answer.

Japan has approximately one-half the population of the United States, (115,000,000). She has virtually no natural resources and little arable land. Her entire population is squeezed into a land mass not larger than the state of California. In actual fact her usable land is only one quarter the size of California. And at the close of World War II, there was certainly no consumer market in war torn Japan.

America, on the other hand emerged from World War II unscathed, with a population starving for quality consumer products. She was rich in land mass and natural resources. She was the leader of the free world and filled with the headiness of victory and invincibility.

American businessmen, returning to their native shores had no need to see beyond the Atlantic and Pacific. Within her borders everyone clamored for American products. American businessmen, including those pioneers in high fidelity, filled with the American dream, were going to give this nation the products everyone was waiting for.

Japan, during post war reconstruction, recognized that with a growing population and no natural resources, she simply had to export to survive.

Every Japanese school boy was taught about Japan's need to export; rarely was an American child taught anything of the world outside her borders.

The difference, of course, was in the interpretation of what constitutes "the market."

For Japan, a small island, the market necessarily was "the world." America would perceive "the market" as the "world" only when the American market began to reach maturation.

In a word, those manufacturers with greater production than can be consumed at home, naturally look elsewhere for customers.

For Japan, her domestic market only became a factor after post-war reconstruction. For America, export markets only became important after the domestic market peaked.

It is doubtful that anyone will soon catch Japan in the export markets of the world for audio products. However, history is now assisting America in so far as accessibility to the domestic Japanese market.

There are a number of reasons for this: the American balance of payments problem plus a tightening U.S. market has brought about a tougher negotiating posture with the Japanese government during the Tokyo Round of the GATT negotiations. Japan, recognizing the value of continued cooperation between the U.S. and herself has adjusted her thinking somewhat. At the same time, Japan, now one of the affluent nations of the world finds her own population seeking diversified products.

A decade ago, still confident American hi fi manufacturers, with the American market growing geometrically, saw the cultural, legal and marketing difficulties of entering Japan with their products as being not worth the effort. The Japanese did not want their products, they said. The barriers were too great. Americans who ventured overseas, except perhaps Harman, turned their back on Japan as unavailable. Now, with growth in the domestic market not increasing very rapidly, or in some instances not at all, Americans are less intimidated by the Japanese market.

Clearly, the reasons for the difference in time lag between America's and Japan's interest in export can be largely attributed to perceived need. For Japan, the years ahead will be more difficult. As both the United States and other Western European manufacturers find their home markets maturing they are getting more aggressive in exporting and are taking a tougher stance in international trade negotiations.

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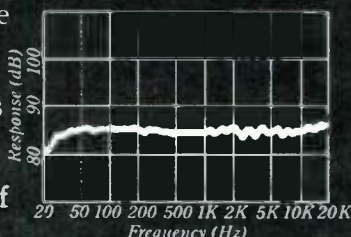
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*Billboard Disco Survey, 1978.

**Recording Institute of America Survey.

"Electronics is limitless." This statement by Matsushita's chairman, Masaharu Matsushita, explains in a nutshell the confidence Japanese manufacturers have while looking towards the 80's and beyond. With the accelerating technology in the industry and the aggressive marketing strategy of the large manufacturers, this confidence is probably not unwarranted.

Technology is a key word in describing the success of the electronics industry in Japan. Says Norio Ohga, deputy president of Sony, "The industry is flourishing today because of semi-conductor technology such as LSI's, IC's and micro-computers. In the 80's the speed of technological advances will become even faster."

In audio, the top manufacturers have good reason to look favorably on the next decade. Their technological advances in the past several years have been phenomenal. Recent hardware and software advances, as in metal tape and compatible cassette decks, have heralded in a new age in quality components. And some of the top companies' growth rates reflect this technological upswing. Though the worldwide markets differ, the top Japanese companies are predicting overall growth in the next few years. Kunihiro Watanabe, manager of stereo division general planning department of Matsushita states, "In the 1980's there will be 5-7% growth in audio sales. It will probably be the same as the growth in the gross national product."

The U.S. Market

In the giant American market the general mood is that the sales level will remain the same for the next year, with some companies posting increases and others decreases. Matsushita's Watanabe predicts 20% growth for his company. Echoing this is JVC's Yoshifumi Harakawa, manager of stereo division export department. "In the overall American hi fi market, there will be no change from last year, but it

should improve in 1981. However, JVC expects a 10% growth. In the American market we have had selected distribution, and next year we plan to continue to strengthen our sales network. Our general trend is to extend the product line-up."

Sony's Ohga reports that Sony will

also begin to take a much more active role in the American market. "We just finished consolidation in the US last spring, so now we are looking forward to increased sales in the giant US market."

Aiwa paints an even rosier picture for their company in the U.S. market. Says Hiroshi Tsuchida, manager of international trade division for North and South America, "We predict 50% growth for the company in the American market next year. However, the total market will probably show no gain." Aiwa feels that their marketing strength and some strong product lines will carry them well in the highly competitive American market. Adds Tsuchida, "We feel that three product lines will do well for Aiwa: first, mini components which will serve as second and personal systems for audiophiles; second, cassette decks with metal tape compatibility; and third, upper end portable radio/cassette recorders. Metal tape compatible radio/cassette recorders will enter the market next year."

Upbeat On Europe

In the overall European market manufacturers are much more optimistic. Says JVC's Harakawa, "In Europe there are good market conditions. We

HOW JAPAN WILL RUN THE AUDIO RACE IN '80

have had 140% growth from last year and expect another 100% growth next year. However, we do expect more competition from European manufacturers."

Several products will be leading the push for greater sales in the world's markets. In amplifiers, JVC, Matsushita and Pioneer are now marketing their new class A amplifiers. With superior performance specifications, they are expected to do well.

The metal tape compatible cassette deck is another product that is expected to sell briskly. With the advent of metal tape in particular, cassette quality has become so good it may finally remove open reel recorders from the average audio consumer's consideration. Akai, which as a company actually grew up with the open reel recorder, has had to adjust to this market condition. Akai's deputy general manager for the foreign trade department, A. Kubota, says, "The reel to reel market is declining because cassettes have improved, both from a hardware standpoint and a software standpoint. Leading the way has been dynamic range expansion units, noise reduction units and metal tape. Though the market is not that large, Akai has roughly a 50% share of the reel to reel export market. Sales of seven inch decks have been declining while the ten inch decks have remained the same. Unless there are changes in PCM or multitrack recording, reel to reel has reached a technological plateau."

Though there may be a technological plateau with open reel, it is just the opposite with speakers and micro-

by Kevin J. McAuliffe





Kunihiro Watanabe



A. Kubota



Norio Ohga

phones. Says Kubota, "Speaker and microphone technological advancements have been late in comparison to the rest of the audio line-up. Frequency response, dynamic range and distortion will all show improvements in the future." In agreement is JVC's Harakawa, "Next year there will be plain diaphragm speakers in Japan. Speaker size will remain the same for the next year or so, but then will become thinner."

With the emphasis put on advancements in speaker design and performance, there will be a greater sales push in foreign markets. Many Japanese manufacturers feel a particular weakness in speaker marketing, but

with an improved product they hope to reach the sales levels of their other hi fi components.

System Components

Perhaps the most promising section of audio sales is in system components. Manufacturers hope they will take an increasingly larger share of the market.

System components are not only doing well on the Japanese market, but also in Europe. Akai's Kubota adds, "In Europe, system components will be strong, perhaps taking 30-50% of market sales in the next two years. Mini components will reach about the 10-20% level in the next two years." Kubota goes on to say, "In order to

remain strong in system components and modular systems, it is important for a manufacturer to be strong in all facets of the audio line-up."

Though system components are now on the American market, some manufacturers doubt whether the American market is ready for them, especially in the mini components segment. But mini components are becoming more appealing to the cost performance conscious buyer. Says Kubota, "When mini components first came on the Japanese market, their cost performance was 30-50% higher than regular sized components. In the next two years, however, this percentage will improve to only 10-20% higher." With

its obvious size advantage, this might just be what the category needs to make it on the American market.

Design Trends

Asked about the general trends in audio design, Matsushita's Watanabe replied, "Audio products will become easier to use through the utilization of touch sensors and buttons with many functions. The clean look is in. Displays will be digital, perhaps even displayed on the television screen. Though we are not sure exactly how, audio connections will be simplified. Component sizes will also continue to shrink. They will require less power, be of better quality and highly efficient. And finally fashion will become more important in components. They will be

"... fashion will become important in components ... (not just) ... sound reproduction."

styled to fit the lifestyles of consumers rather than just be sound reproduction units."

On general trends Aiwa's Tsuchida concurs, but adds a note of caution, "After a new product introduction by one company, it only takes eight to nine months for that idea to be adapted to another company's product line. Hence, long range predictions are at most an educated guess. However, in the immediate future there will not be any generational changes. Basically it will be hi fi improvements. Specifications will improve and products will become more sophisticated and easier to use."

Prices Going Up

The question of audio prices brought out mixed opinions from Japanese manufacturers. Though prices have

New products are introduced nearly daily into the huge Japanese consumer electronics market. On the theory that electronic fairs provide a good way to see general trends in the industry and have a glimpse of what the future will bring, Hi Fi Trade News last fall paid a visit to the 28th All-Japan Audio Fair.

The eight-day fair featured thousands of products (many of which are just now reaching the American market), live music demonstrations, lectures and a typhoon. The typhoon was not on the agenda, neither was it a hot new consumer electronic product, but it did little to dampen the excitement and crowds surrounding the fair. Over a quarter-million people visited the exhibition and viewed products from 79 companies.

The fair was held at Harumi, in the port district of Tokyo. Three large buildings were provided for the use of the participating companies and for events and lectures. Two buildings housed exhibits, the third was used for lectures, product demos, films and concerts. Like our own CES, show biz hoopla pulls traffic, and all products are arranged for maximum touchability.

Education Is The Aim

Since the fair is open to the general public, one of the overall goals of the manufacturers is to educate consumers. Japanese are discerning buyers and re-

dropped recently, some industry leaders such as Sony's Ohga predict that prices will soon go up. Basically it is a question of what direction the market takes. If it is a question of refining present technology, through the gradually lowering prices of IC's plus good rationalization and design, the prices

The Japanese Market

quire a lot of information before buying a product. They haul away bagsful of product literature.

Cassette decks dominated many booths and attracted attention from the predominantly young audiophiles in attendance. Metal compatible tape decks and metal tape itself, in ample supply, were hot items.

Another visible trend in Japan is the slim look, which is spreading to all product categories, and particularly system components. Mini-components were exhibited by Aiwa, Akai, Aurex (Toshiba), Hitachi, Sony and Technics. Akai's UC-5 mini-component series is soon due out on the market.

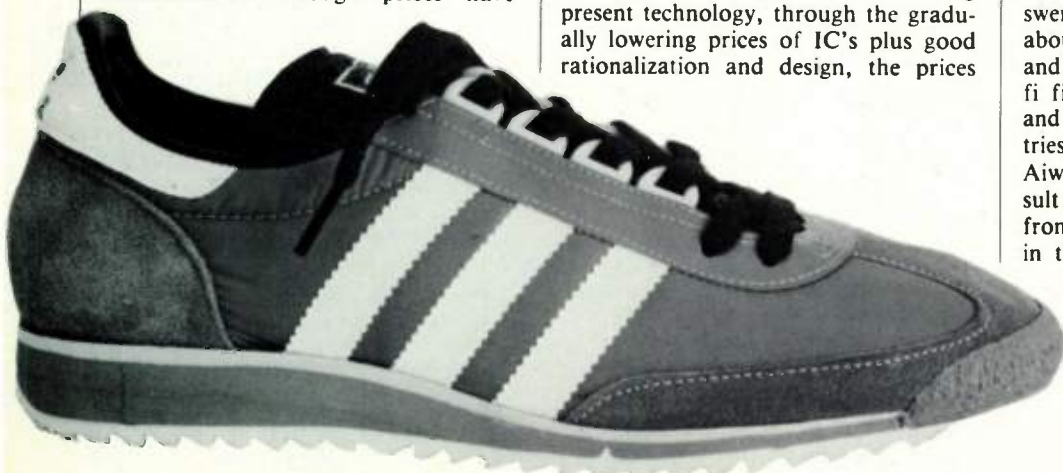
Linear tracking turntables were also in the spotlight with the Technics SL-10, now reaching the U.S. market, attracting particular attention. No larger than an album cover (see separate story in this issue), the unit is priced at about \$400 in Japan, \$600 in the U.S. JVC displayed its new electro dynamic servo tonearm in the Y series turntables.

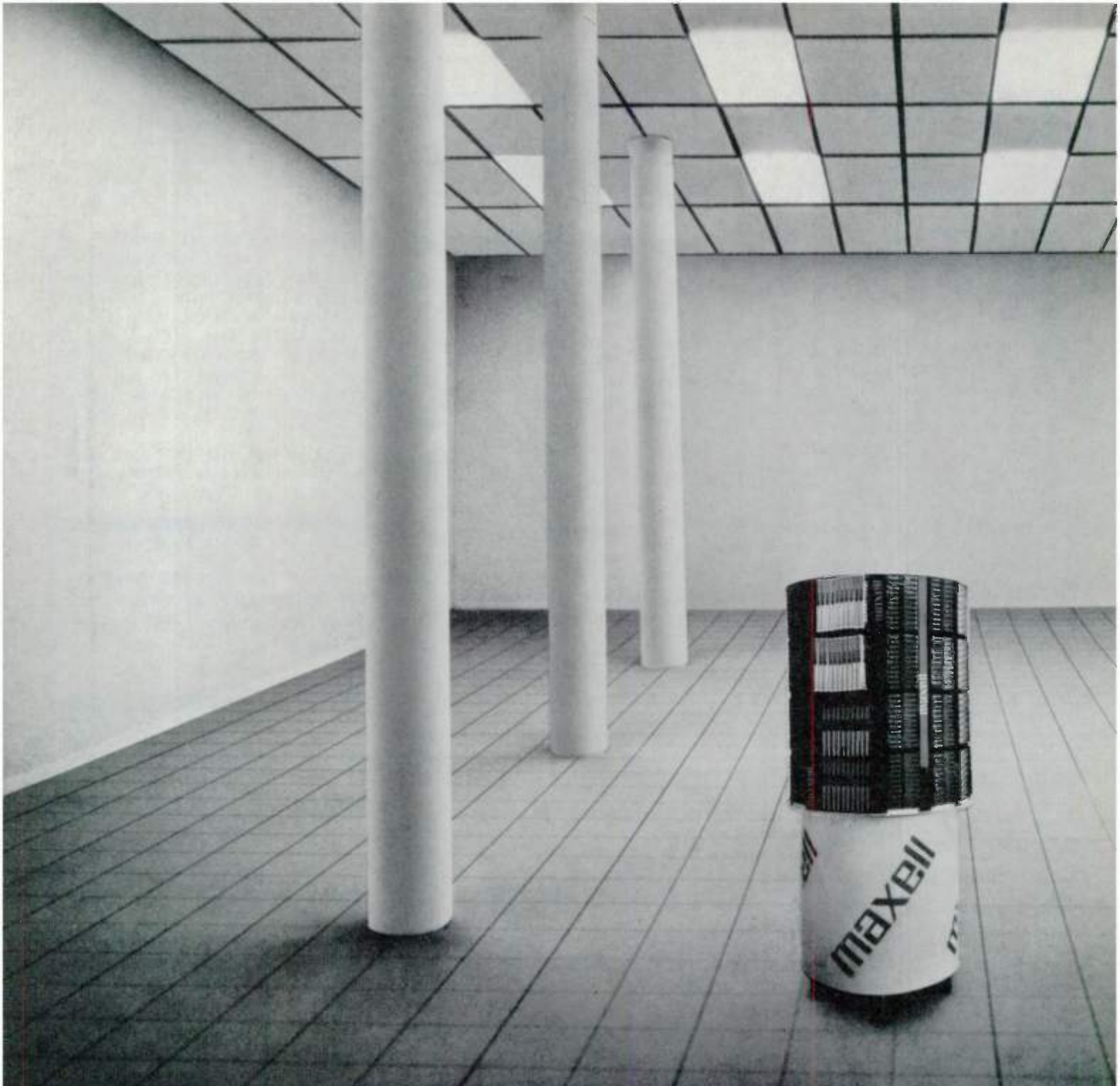
PCM units were also on display, as was Pioneer's video disc, which was then taken to WCES for demonstration to U.S. audio dealers.

Dynamic range expansion systems, such as Toshiba's pioneering ADRES adaptors, went hand-in-hand with many of the cassette deck displays. Higher-range systems feature built-in adapters, but mid-and-lower-end units require an outboard system.

should continue to lower. If it is new technology, prices will go up.

Asked about the effect of the entrance of other Asian countries into the audio field, JVC's Harakawa answered, "JVC is not really worried about the competition from Korean and Taiwanese manufacturers in the hi fi field. Overall their quality is lower and with high inflation in their countries they cannot compete in price." Aiwa's Tsuchida agrees in the end result but adds, "There will be an influx from Korea, Taiwan and Hong Kong in the next year, however, in the ex-





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tremely competitive American market, the higher end makers will have an edge."

PCM

"It has been 100 years since Edison invented the record player and there has been a major technical innovation every 25 years since then. Stereo was the most recent one and the next era is right now. Though it was invented in the 1930's, the next major step will be PCM." These words by Sony's Ohga set the tone for the largely optimistic view most manufacturers have for the next generation of products — PCM.

Says Matsushita's Watanabe, "PCM is just starting and is just for professional use now. It will be three to five years before it enters into the general consumer market. The price will have to fall to ¥300,000 before it will begin to take off. Now the price of PCM processors are from ¥500,000 on up. When the price falls below ¥300,000 between 1985 and 1990, sales will pick up. By 1990, PCM will occupy an in-

"... competition from Korean and Taiwanese manufacturers... their quality is lower and with high inflation they cannot compete..."

creasingly important role in the market. Open reel PCM will remain just in the professional use market, but disc and cassette tape will do well in the consumer market. Sales of regular (analog) hi fi systems will be down by 15% in 1990."

Some manufacturers privately feel that the price of this new technology is too high for the performance benefits obtained through PCM. However, Sony's Ohga replies, "A television fanatic would not pay \$10,000 for a

"The video market will exceed the audio market in the near future."

color television, but audiophiles regularly pay \$10,000 for the best equipment. They will pay almost any amount for even slight improvements." Riding on the sales of professional systems and the dedicated audio enthusiast, the prices of units might lower fast enough to match Watanabe's predictions. Others feel, however, that the only thing which will lower PCM prices will be new technology, such as super LSI's.

Audio/Video

Though audio will remain important, the future of the home entertainment industry will turn increasingly to audio visual equipment. Products such as video cassette recorders, video discs, video projectors and multiplex systems (bilingual and stereo system for television broadcasts in Japan) will be hooked up to television. The mass communication industry will become more personal with the average person having more and more choice about what, where and when he chooses to watch television.

New electronic cameras, replacing optical ones, are both smaller and lighter and will add another new selling feature to video tape recorders. Video discs will remove the viewer all together from the whims of broadcasters.

"The video field has excellent potential," says Akai's Kubota, "with VTR, video camera and video disc being the backbone. The video market will exceed the audio market in the near future. In fact, figures for 1979 show the video exports have already exceeded standard television exports."

The video disc market, however, is still suffering from a lack of standardization. There are currently three main types: optical, electro-capacitance and

mechanical. Because of this variety there has been little software development. And Japanese manufacturers are looking toward the U.S. for this software development. They will watch with keen interest the RCA debut to see how the consumer reacts.

Most manufacturers believe that video tape recorders will coexist with video discs. Depending on what manufacture is queried, there is a different answer on what the sales ratio will be. Akai's Kubota says, "Video disc is only for playback while VTR is mainly a time/shift machine. The video disc will not take off soon in the general consumer market, but will do well in industrial use."

Sony's Ohga also feels that video disc sales will not grow as fast as video tape recorders. "Video disc will not

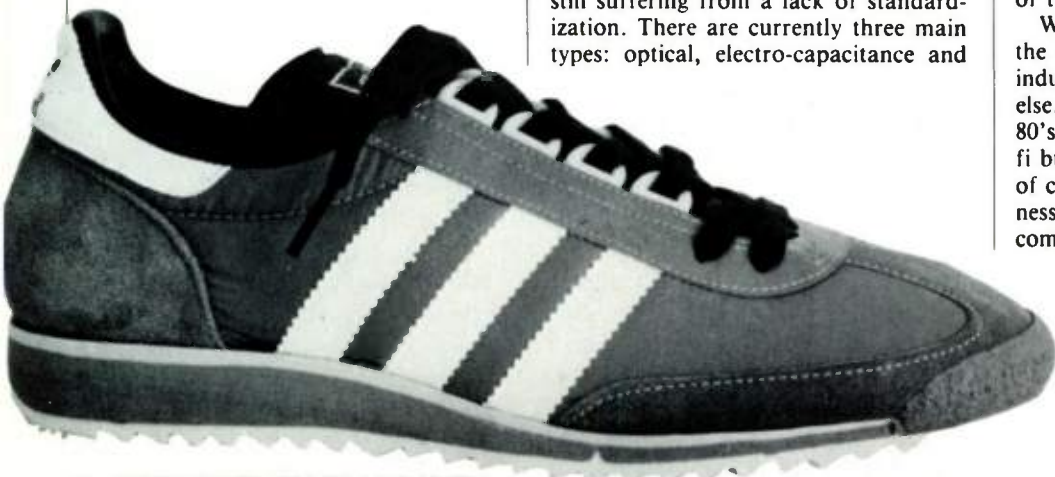
"In the eighties the number of companies in the hi fi business will become smaller..."

grow as fast because it is not now in people's homes. If the price of a video disc can match an LP, then there may be a big market. If the price of a disc is three to four times higher, the market will not expand."

Survival

New video and audio technology will, in a large part, determine the success or failure of consumer electronic companies. Sony's Ohga says, "In the 1980's, the company that has an acceptable product in the digital sound recording and playback field will win out. We plan to continue to manufacture conventional audio equipment, but we will also play an important role in developing digital sound audio. Digital techniques will increase in all facets of the industry."

With the gauntlet thrown down by the majors, it will be up to the rest of industry to keep up or try something else. Says JVC's Harakawa, "In the 80's the number of companies in the hi fi business will become smaller because of companies dropping out of the business and absorption of others by larger companies."



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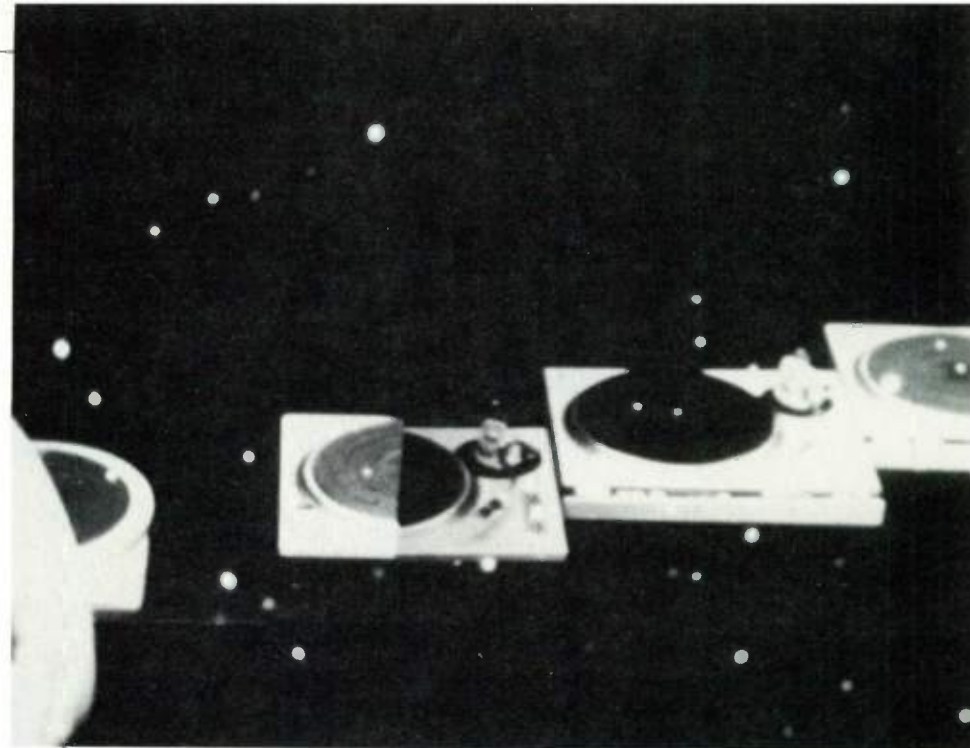
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The difference that a fine turntable makes to a home music system is now being recognized by the general consumer more than ever. Gradually, the view of the turntable as a passive component in the sound reproduction process is being eradicated, particularly as many of the variables in the construction of the player are being overturned of late by several high-end models. But, as happens in hi fi all the time, the benefits are quickly accruing to the low end as well.

If the machine is divisible into three parts — the turntable portion (incorporating the platter and drive system), the tone arm and the base, then we can quickly see how much progress is being made on this humble, analog, scratch-prone playback system.

Most of us are familiar with the innovations in drive system technology. 'Direct drive' is the code name here, but direct drive itself is not the big step forward that a servo to control the direct drive motor is. The minute, instant by instant adjustments in spinning speed that a servo provides work best with a directly driven platter — because over the stretch of an elastic belt the adjustments might never make it to the disc. (Referring the servo to a quartz crystal allows for the ultimate in accuracy, because a signal bounced



Trends In Turntable

to mind) produce models with servo-controlled platter speed. These players keep the best characteristics of belt drive: distance between the motor and the platter, for less vibration and 'cogging' than all but much more expensive direct drive units; which brings us to the other benefit — moderate cost.

Both B.I.C. and Philips use a micro-processor servo control. L.E.D. display shows the actual platter speed and the effect of pitch controls, with models in the \$200 to \$300 range. Of interest among such units is the new Dual U.L.M. (Ultra Low Mass) series, in which a very low mass tone arm is

combined with a similarly light cartridge, made to Dual specs by Ortofon. The top of this line, the ULM 731Q (\$560), is a direct drive unit that can be operated by infrared remote control — the same remote unit that controls the new Dual 839 cassette deck, which certainly simplifies recording only certain cuts off an album.

Tone Arms

What's happening in the tonearm

"... a signal bounded off a quartz facet vibrates remarkably and predictably true."

NEGLIGIBLE RUMBLE and minute acoustic feedback help make the 305D turntable by STD a top-of-the-line model. Manufactured by a Scottish company, the unit has a wow and flutter figure averaging 0.06% and is distributed by Barry Foster Sales, Yonkers, N.Y.

THE YP-D71 by Yamaha is a direct-drive turntable with a combination FG/quartz-locked PLL double servo system. "The FG servo system checks and keeps constant the speed proportional frequency which the FG (frequency generator) generates to assure rock-steady platter rotation."

off a quartz facet vibrates remarkably and predictably true.)

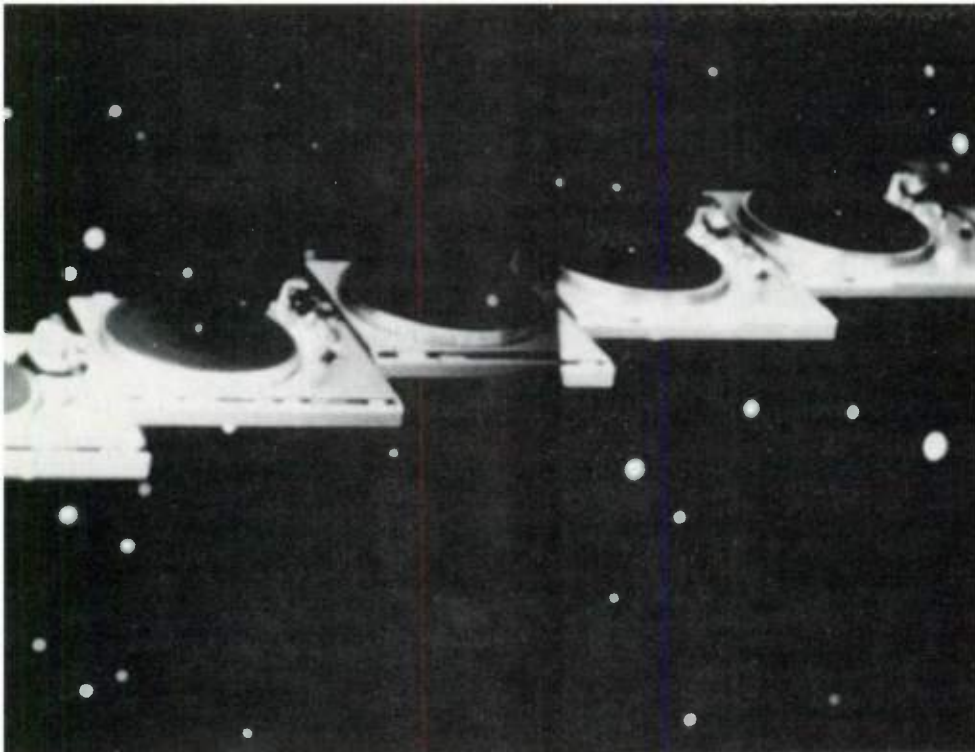
Theoretically, a belt driven turntable can utilize a servo control system, but if it is not based on the actual platter speed, it cannot compensate for the behavior of the belt. A few manufacturers (Dual, B.I.C. and Philips come

sector of the world? Over ten years ago Rabco came out with a radial tracking tone arm — one that does not pivot, but instead tracks on a straight line from outside to inside. Harman Kardon and B&O have kept a couple of such models in production since then, but more recently Revox, Series 20, Phase Linear, and Aiwa all have brought out new radial tracking record players.

What are the benefits of radial tracking? When discs are made the master is cut at a right angle to its rotation, just as these machines play back. So, there is no tracking error, or any resultant distortion, or loss of high



World Radio History



Design

frequencies. And there's less wear on your groove — because there is always equal pressure on each side, without the need for anti-skating compensation. The design also allows the tone arm to be shorter and lighter, for even less vibration and general distortion.



ONKYO'S TOP-of-the-line turntable, the CP-1280F features a direct-drive system with quartz control, includes a low mass tonearm and has a wow and flutter of 0.025% WRMS. The single-play, fully automatic, dual-motor system has a suggested retail price of \$450.

Aiwa's System 3000 combines direct drive with a radial tracking tone arm. An optical sensor detects any deviation from proper speed or angle to the rec-

ord, and activates a servo which controls the continuously variable motor that drives the tone arm. The unit is completely automatic — including the ability to play up to ten cuts in a pre-programmed sequence, and automatic adjustment to any of three disc sizes. The list price is \$1200.

The Phase Linear 8000 Series Two does pretty near everything the Aiwa 3000 does, except it is not programmable, and comes down to a sort of reasonable \$750.

Returning to normalcy, in a manner of speaking, are a couple of turntables with pivoting tone arms from Optonica. The more expensive (at \$1200), the RP-9705, can be programmed for up to ten cuts, by infrared remote control. An extra little tone arm pivots along with the one that bears the cartridge, and carries an optical band that counts the bands on the record. At only \$400, the RP-7705 has no remote control, but can program up to nine instructions if you don't mind walking over to your record player every so often. It has the same double tone arm, of course. There is a low end Optonica, model RP-4705, for \$280.

Sony too, makes an extremely interesting new turntable. This one, the PS-B80 (\$1,800) has a pivoting tone arm, but one controlled by two linear motors (one in each pertinent direction) directed by electronic servo. These motors give the arm resilience enough to compensate for even badly warped records. Other features include a brush positioned below the needle's rest posi-

tion that automatically cleans it, and fully automatic memory and logic. Other Sony turntables are more reasonably priced, but less exciting, though included are a few very well built direct drive units at quite a low cost.

Role of the Base

What are the compromises that hap-

"What are the compromises that happen . . . when a turntable is offered at low cost?"

pen these days when a turntable is offered at low cost? Historically and endemically, a less expensive, less exacting base is the first.

A base is often considered only in terms of its appearance, but it greatly affects sonic performance. Obviously, the base is there so that the turntable and tone arm assembly can sit on top of it. Beyond support, it must also isolate the mechanics of the player from any vibration coming in from outside — like dancing feet, or a neighbor's pounding speakers, or your own pounding speakers. These cause 'acoustic feedback,' which sounds halfway between a howl and a buzz. If you've got any, it's easiest to hear when both volume and bass are pinned. When you can feel the beat of the bass in your feet (not to mention anywhere higher up) odds are the rec-

OPTONICA'S new RP-4705 turntable is fully-automatic and features a direct-drive frequency generator servo motor with static tonearm. Price is \$280.



ord player feels it too. Base duty, then, is to keep the outside agitation from the needle, where it would be added to the sound coming out of the groove, and reamplified. Most acoustic feedback never reaches the level of an out and out howl; it just muddies up the sound, so that it's hard to tell what's going wrong.

New formulations in plastics are allowing for better bases than ever. The reason your new stock of turntables are mostly encased in plastic rather than the old finished wood is not, truthfully, due to "things ain't what they used to be." Even the low end, hundred dollar turntable can offer excellent isolation these days (a fine example is the B.I.C. 911, or even the lowest priced of the new A.D.C. line); unfortunately, there are many that don't. Test playing at top volume is the only way to tell, as specs don't really say anything about this vital performance category. Here is one reason for a sound-proofed listening room!



GARRARD'S DDQ550 turntable incorporates a quartz-lock operation, an ultra-light straight arm and a carbon-fibre headshell. This semi-automatic, front-controlled model is driven by a coreless, slotless, brushless motor which prevents clogging.

New Features

Another optional, major feature of a record player is its ability to stack and change records. The most interesting new model we've seen of this type is the B.S.R. XR-50. This changer will lower a disc to the platter gently (gently!), program the play of several tracks, then return it to the stack. The unit's memory stores up to twenty-seven instructions relating to sequencing and repetition of items to be played. And everything can be controlled by a wireless remote. (If you recognize a couple of these features from the A.D.C. Accutrac Plus 6,

Audio continues to be one of the most competitive industries around, and not even the many turntables we've named have cornered the market on innovative new products. Here are a few other new record player designs that really caught our eye:

| Model | Features |
|-----------------------------|---|
| Fisher MT-6330 | Infrared remote, fully automatic, direct drive with 120 pole linear motor (reduces cogging.) |
| Garrard DD-132 | Direct drive with slotless, coreless, brushless DC motor — totally eliminating cogging. |
| Sansui (several new models) | "Dyna Optimally Balanced" tone arm. Sansui claims a great reduction in vibration, friction, and feedback. |
| Sanyo Plus Q50 | Uniquely, the digital readout tells (among other things) the playing time logged by the stylus. |

you're quite right.)

What are the other trends that we see developing in turntables? Well, except for certain holdouts we've already discussed, direct drive seems to have conquered the platter, while the control of functions is getting more computerized all the time — as in other components. Eventually we'll see turntables that ultrasonically detect dust and blow it away, turntables whose remotes control all the components of your system, turntables that are even smaller and lighter than we're used to. Stackability does not look to be terribly more popular in the future than now, and one thing we can't foresee is much being done to isolate CB interference. Sufferers must continue to, for the most part, suffer on.

Digital

Beyond all this, the development around the corner is of course the completely digital player. Similiar to the videodisc, but in its Philips, J.V.C., Mitsubishi, Sony, Panasonic and Pioneer varieties, quite different and incompatible with each other.

MODEST PRICING, smooth rotation and minimal vibration distinguish Scott's new PS18 semi-automatic turntable. The unit, which features a new low-mass straight tonearm that reduces mistracking and distortion, has a wow and flutter rate of less than 0.07% and retails for \$129.95.



We've listened to several prototypes already. Not only are all vital specs of the standard player greatly improved upon (including playing time), but most importantly, compatibility with the videodisc promises high quality stereo eventually, in a new mixed medium. And these discs have the basic capacity to eventually store holographic sound and image information. The audible spatial effect we'll hear in several years will go way beyond almost defunct quad and even time delay. The exact position of each noise can be recorded — even though most speakers are not good enough at this stage to sing it out. And because there is nothing analog about the laser disc, the quality of the recording is indel-

"... specs don't really say anything about this vital performance category."

ible: much more so even than audio tape. This may be a loss to record care companies, but for the rest of us, it should do away with all the problems inherent in listening to scratched plastic.

This future compatibility is the big plus. Just now, nothing is compatible with anything. The Sony and Philips systems are both optical. They work by bouncing laser light off microscopic pits within a recording. The modulations produced in light are then converted to a digital electric signal by passing through a photodiode. The digital signal is then decoded, and shoved out into your amp. However, Sony's DAD-X1 uses a twelve inch disc that spins at 450 rpm for two and a half hours, while Philips' Compact Disc has a four and a half inch diame-

ter, plays on only one side for a maximum of an hour, and spins at a rate that varies between 215 and 500 rpm (determined by the relative position of the laser scanner.) Sony's prototype audio disc is fully compatible with Sony's prototype video disc. Philips already has its Magnavision disc on the market but its Compact Disc is not compatible with the visuals.

J.V.C.'s new disc system exemplifies an alternate technology. No laser is employed at all. The VHD/AHD is actually a videodisc player that, with a PCM adapter, can be expanded to include audio. It operates by varying electrical capacitance between the surface of the disc and an electrode stylus. J.V.C.'s disc has a diameter of twelve inches, plays an hour per side, and rotates at nine hundred rpm. Disc and stylus wear remains the same problem as ever, for such a capacitance system as for a needle and

"Eventually we'll see turntables that ultrasonically detect dust and blow it away . . ."

groove, and there's no eventual holographic compatibility, so technological advantages are limited.

The Big Hang-up

Several manufacturers have the prototypes, but all seem afraid of the consumer indecision that results from incompatibility. Some compromises will have to be made, but may take a long time in coming. Clearly, each company is emphasizing different capabilities in its units, with different priorities. It's already been over ten years since the first videodisc prototype (and a laser audio disc has been just as possible ever since), but then videodiscs carry no commercials — how revolutionary!

"When you can feel the beat of the bass in your feet odds are the record player feels it too."

— and that's a moot issue for audio. Well, we're not about to junk our brand new, remote controlled, radial tracking, servo controlled and programmable turntable yet. Or, for that matter, our old unit that plays 78's.

A DIGITAL PLAYER RUNDOWN

| Manufacturer | Type of System | Compatible With |
|--------------|----------------|--|
| Philips | Optical | Nothing else, but this should be the first unit in full production |
| Pioneer | Optical | Pioneer videodisc prototype, and Philips' Magnavision |
| JVC | Capacitance | JVC videodisc prototype |
| Sony | Optical | Sony videodisc prototype |

Technics: Stayin On Top

Technics moved into the forefront of turntable technology 10 years ago with the creation of the first direct-drive turntable, the model SP-10. From that beginning, Technics has solidified its position in the turntable market, adding new features such as quartz phase-locked control and quartz pitch control to its roster of landmark turntable innovations.

Having established a strong reputation with turntables, Technics was able to expand successfully into other hi fi

exciting and innovative thing that has happened in turntables for a long time," boasts Jeff Berkowitz, Technics vp and general manager. "And perhaps it is the product linking Technics innovations of the past with developments for the future."

The potential marketing strength of the SL-10 might best be said to rest on its highly-simple operation despite its equally high degree of sophistication. One of its potentially most useful features is its flexibility of use: since upper and lower halves "lock" when in use, the unit can be played tilted or standing on its side (the first wall-hanging turntable).

The upper-half of the SL-10 contains a built-in linear-tracking tonearm, the unit's drive system and a micro-computer electronic control block. The lower half is fitted with Technics' own integral rotor platter direct-drive motor and its driving and phase-locked control circuitry. Models employ a Technics 310 MC moving coil car-



JEFF BERKOWITZ
Sees the future.

product categories on its way to becoming a major U.S. audio supplier.

Now, U.S. audio dealers are about to receive a new Technics turntable which may be no less revolutionary in its impact on the turntable market than direct-drive was 10 years ago.

The unit is the SL-10, an ultra-compact quartz, direct-drive model which is no wider than a record jacket.

The Link

"This turntable is probably the most



MODEL SL-10
The future is now

tridge. One of the drawbacks to a perception of the SL-10 as a true audio-ophile product is the fact that you cannot substitute another cartridge brand for the Technics cartridge it comes equipped with now. However,

(Continued on page 40)

PRODUCTS FOR PROFIT



YOU DON'T EVEN have to lift the dust cover to operate JVC's new L-A55 direct-drive turntable with exterior controls. "The coreless FG servo motor greatly reduces 'cogging' — the microscopic fits and starts in platter operation" says JVC. It retails for \$149.95.

"TONEARM DISTORTION is completely eliminated and record wear is greatly reduced with the Revox B795 turntable," says the company. Its Linatrack system tracks tangentially along a straight line, the way record masters are cut, for more precise sound reproduction.



THE RESIN CONCRETE, a compression-molded mixture of limestone granules, glass powders and polyester resin, in its base helps Kenwood's KD-4100 fully automatic, direct-drive turntable minimize acoustic and mechanical vibration. Retailing for \$249 it boasts a wow and flutter of less than 0.03% WRMS.

IS THIS THE BEST CARTRIDGE IN THE WORLD?

There are any number of cartridges available today that perform exceedingly well on paper.

On the other hand, the Adcom Crosscoil moving coil cartridge was designed to demonstrate its superiority in the only place it really counts, the record groove.

A superiority that becomes immediately apparent the first time you lower the Adcom Crosscoil onto a record and experience its uncanny ability to reproduce every nuance of the original performance with a clarity and subtlety of detail other designs don't begin to approach.

In fact, in a widely publicized challenge to other cartridge manufacturers* the Adcom Crosscoil out-measured and outperformed the entire field, more than 50 of the world's most highly acclaimed designs.

An impressive achievement? Just ask the also-rans.

No less impressive, however, is the innovative thinking and engineering that went into creating the Adcom Crosscoil. For it was decided that the Crosscoil would be the first cartridge to fully translate the theoretical advantages of the moving coil design into real world performance.

The cartridge takes its name from the unique "X" shaped armature upon which its generating coils are wound. The "X" shape permits many more turns of wire to be wound on each of the cross pieces as compared to conventional moving coil designs. In this way, output is increased significantly, while the overall weight of the cartridge is reduced.

In practice, the Adcom Crosscoil generates enough output to drive a standard phono input with-



out the need of an expensive transformer or pre-preamp. Thus, aside from the obvious cost savings, the Crosscoil eliminates a major source of noise and distortion.

Not only does the Adcom Crosscoil provide more output, but its moving mass is extremely low permitting its use in a whole new generation of low mass, high performance tone arms.

Additionally, a newly developed "controlled compliance" cantilever assembly with an optimized stiffness to mass ratio insures that the cartridge/tone arm resonance will fall exactly where it

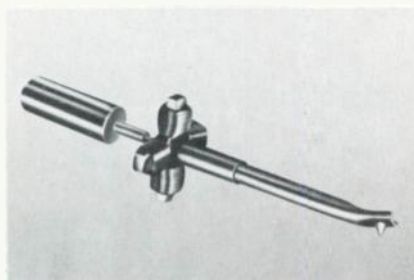
should, above record warp and below audibility.

Finally, the Adcom Crosscoil's specially contoured LineTrace diamond stylus which is grain oriented and nude mounted, provides greater contact area between stylus and record groove minimizing record wear and extending bandwidth to beyond 60k Hz while reducing all forms of distortion to insignificant levels.

If you've read this far, it should be apparent that the Adcom Crosscoil is a signal advance in moving coil technology.

Is it the world's best cartridge? We think so. But we want you to make that happy discovery for yourself.

For additional information and an ear opening demonstration, see your Adcom rep, contact us at the address below or call us at (201) 828-8590.



*A public demonstration at the Consumer Electronics Show in Chicago, June 1979

ADCOM CROSSCOIL™

ADCOM, 9 Jules Lane, New Brunswick, N.J. 08901

©Adcom 1979

Picking Up On Turntable Vibes

Sold another turntable? Don't let the customer leave yet — not until you're sure bad vibes won't come between him and the turntable he fell in love with in your soundroom.

A large number of accessory and turntable manufacturers have developed add-on products which cut back or eliminate turntable vibrations caused by external and internal sources. Audio-Technica, Discwasher, Osawa, Kenwood, Mitchell Cotter and others offer anti-vibration solutions which include weight and platter clamps, turntable pads, isolation decks, rubber turntable feet, and more. They're designed to create satisfied turntable customers for you and your business — and bring customers back when they have other audio needs.

But will they come back if the turntable they auditioned in your soundroom plays a different tune in their living room? You'd be surprised at just how much interference potential exists in even the average living room. Generally, there are airborne vibrations which can come up from speakers, and there is ambient noise throughout the room which can be transferred up through and into the turntable. There is noise which is stylus-induced, and lastly there is noise which is generated by some turntables themselves. You might, in fact, caution the customer about these possibilities, reminding him not to set up his turntable in any area which might be a hotbed of external vibrations. Even a loose floorboard, for example, might cause sufficient vibration problems to throw a stylus out of contact with the record groove.

Airborne

Airborne vibrations, which we said earlier could come from speakers, can also be produced by surrounding air conditioning or heating systems or anything else operating in the vicinity of the turntable. And each time these vibrations interfere with that perfect stylus-disc groove relationship necessary for optimum sound reproduction, intermodulation distortion, phase distortion and acoustic feedback can occur.

There is also something else, labeled by some engineers as "secondary source reactions," which can also cause vibration problems. Explained simply, secondary source reaction oc-

curs when the airborne vibrations mentioned resonate with certain objects in a room and cause their own source of disturbance. The worst example of this type of vibration comes from ordinary window glass which can often "rattle" if sonically stimulated. Other sources of turntable-based noises include motor vibrations, bearing noises, belt vi-

brations and spring noises. Again, any of these sources can move the record out of phase with the turntable platter.

Direct conduction

Solid speaker cabinet motion, ambient vibrations, and secondary source vibrations as we described here can be transmitted to the turntable and record through direct conduction — up from the floor through the furniture or a bookshelf and to the turntable itself. For example, if a speaker is sitting on the floor, it moves as the music plays and this motion is transferred through the floor and eventually to the turntable. Ambient vibration, harder to define but also detrimental to sound quality produced by your customers' records, can be illustrated by a vibrating refrigerator which might eventually transmit its sound waves up through to the turntable system.

How do all these vibrations affect the record? When these vibrations reach the record, the record responds by flexing. This "flexing" can then cause noise.

Anti-Vibration Aides

One product introduced to help keep the record in its place, as it were, is something called a disc stabilizer. One of its makers is Kenwood, which feels the battle against disc vibration is worth winning and offers, in addition to this stabilizer product, a specially-formed turntable sheet. Its DS-20/21 three-piece disc stabilizer system suppresses vibrations by holding the record firmly in place, while the TS-10 turntable sheet "keeps the mechanical impedance beneath the stylus at the right level while cutting out disc vibration," says Kenwood.

How does your customer use this disc stabilizer? First a record is placed on the turntable, and a positioning gauge is placed on the record. The outer disc stabilizer is then set on the outside of the disc and aligned with the gauge to hold the record in its optimum position. The gauge is removed, and the inner disc stabilizer is put into position.

Kenwood's TS-10 turntable sheet is constructed of a ceramic material including crystals of alumina, the second hardest substance after diamonds. The sheet is designed to replace the turntable mat which comes with the turntable. According to Kenwood engi-



FROM
Turntable mats to . . .

... the battle against disc vibration is worth winning
... "



DISCWASHER'S
DiscFoot system

**For appearance,
performance and
profit – Interface
by Electro-Voice.**

**The third
generation.**

Six years ago in 1973, Electro-Voice started a revolution in speaker system design by introducing a new design technique for achieving high efficiency and extended low-bass response in a small cabinet: the Interface:A. As many other manufacturers were beginning to adopt this new technique, E-V stepped ahead again in 1977 with the world's first vented midrange speaker and expanded the Interface line to seven models.

Now we are adding the Super-Dome,[™] the only dome tweeter we know of that can match the low-frequency performance of Interface designs. Each model has also been redesigned with exquisitely detailed styling.

The schedules are already set for full-page advertising in the major high fidelity publications, and a supplemental program in other books your customers are likely to read. A comprehensive point-of-purchase program will

reinforce the ad message in your store. But, we aren't going to let the effort stop there. A VTR sales training program will be made available to you for sharpening your salesmen's skills and is even suitable for your customer seminars.

The legendary Interface performance, in beautiful new cabinet styling, and a dramatically effective support program will assure strong sales. Have a look at the pricing and discount structure, and you'll recognize that Interface belongs in your store.

For further information contact Bill Smith, Consumer Products Sales Manager, Electro-Voice, 600 Cecil Street, Buchanan, Michigan 49107.



Interface[®]



neers, this material works better than glass or rubber mats. Kenwood says rubber is less effective at combating low range vibrations, especially at frequencies below 200 Hz; glass mats handle the low range vibration problems but have difficulties in the mid and high frequency ranges, the company asserts.

Any number of other manufacturers also are offering ceramic-type turntable mats, including Osawa which is marketing the Nagaoka line of audio and record care accessories. Among the features of its mat is its depressed center section to allow for record label

"When these vibrations reach the record, the record responds by flexing."

protrusion. A companion to the mat, a disc-grip stabilizer which is to be placed over the turntable spindle, also serves to eliminate vibrations. In addition to cutting down on vibrations, the mat's concave surface also works to support warped records.

There are other manufacturers which produce record weights or clamps as solutions to vibration problems. Producers of the heavy metal weights argue their product is necessary to increase the mass of the record so that it more firmly adheres to the playing surface which in the end allegedly leads to more accurate sound reproduction.

Disadvantages

Another group of manufacturers argue, though, that weights have their drawbacks since they throw off the balance of the turntable system. One source explained, "Weights make the turntable bearing produce more noise by increasing the load on the bearing. Increased wear is one result. In addition, weights react slowly to high frequency transients and, thirdly, weights contribute to what we call weight rattle which occurs when the weight rattles against the spindle . . ."

He continued, "In order to be effective the weight must be quite heavy, which tends to imbalance carefully sprung suspended platter systems. The motor in direct drive turntables was designed specifically for a particular rotation inertia. The feedback system was designed with specific turntable mass in mind.

The engineer completed his point by noting, "When you increase the mass of the turntable, you increase the

amount of energy required to speed up the turntable. As a result, when the feedback system sends the motor a certain amount of energy to speed up that platter, it will be insufficient to do so when one has increased the mass through the use of a weight. In most direct drive turntables it has been observed that the motor is in constant catch-up condition which results in uneven speed regulation."

Although there is no argument against the fact that an item which serves to clamp a record more tightly to the playing surface does contribute to improved clarity in the mid range, imaging in the high end, and punch in the bass end, there is some controversy as to how much weight is allowable.

One solution recently appearing in the market is called the DisClamp and is distributed for its Canadian manufacturer by Hervic Electronics. This plastic product is clamped over the spindle, and holds the record tightly in place. Very little extra weight is added to the platter. One dealer we know with sophisticated testing equipment checked the product out for us and noted that it did, indeed, contribute to better fidelity. He also believed that the heavy metal type of solution seemed to offer drawbacks, again because of the imbalance it could throw into the turntable system.

The bulk of these products — not necessarily the platter mats but some of the weights and other add-ons — do require explanation to the customer at retail. Especially with the heavy type of platter mats and weights, one must always check that the customer has a turntable which can handle the product. For example, if your customer is an owner of an older Acoustic Research suspension type turntable, you'll

" . . . one must always check that the customer has a turntable which can handle the product."

find some of the mats literally stop the table's rotational movement dead in its tracking. Your customer is certain to be back in your shop to return the item and question what certainly appears to him as a "black magic" product or "hype" on the part of you the retailer. One solution, in this instance, might be the lighter-type of clamping product which contributes an audible difference but does not prevent the turntable from working.

Patter of little feet

Beneath the turntable and beyond the platter there are other products

" . . . there is some controversy as to how much weight is allowable . . ."

which aid in cutting back unwanted vibrations. Audio-Technica calls its version the Audio Insulator Set (Model AT-605) and Discwasher's "Feedback Cure" is called the DiscFoot.

The DiscFoot "works in combination with existing feet for dramatic reduction of feedback" says Discwasher. The DiscFoot systems contains four isolation feet, four platform caps, four furniture protecting sheets and four special damping pads to adapt the units to certain turntables. Additional single DiscFoot units are available for turntables weighing over 22 pounds. DiscFoot systems cost \$22 suggested retail.

Last, but certainly not least, if padding, spindling, clamping and other isolation approaches don't quell vibrations, Audio-Technica adds one more product which it suggests for use by your audiophile customers. Called "Sonic Tonic", this product is a vibration damping compound which is applied to small turntable parts such as headshell connections, cartridge leads, fingerlifts and other parts. Dabbed on with its own brush, the product dries to a clear, soft rubbery compound. (Audio-Technica also makes its own model AT-618 disc stabilizer, theirs with a resilient rubber outer layer to absorb and damp resonances as it presses the record against the turntable.)

With creative merchandising, there are a variety of turntable add-on products — including the stabilizers, fluids, and weights mentioned here — that dealers can tack onto turntable sales. More importantly, they can tack on additional profit dollars.

discover . . .



The inside story of a classic.

Introducing a new type of record cleaner. Meet the CLASSIC 1, the only cleaner of its kind. Developed to satisfy you, the discriminating audiophile.

Neutralizing the static charges that attract and hold destructive micro-particles of dust and dirt on your record's surface is one of the major problems in record care.

Ordinary cleaners attempt to reduce static charges by applying fluid directly to the surface of the record or cleaning unit. Direct application of fluid involves an inherent risk of harmful residue build-up and should be avoided except in the case of abnormally dirty or greasy records. In fact, normal maintenance should not involve wetting the record.

At last, the CLASSIC 1 has the answer to safe and effective cleaning. Not only are static charges reduced, but the problem of residue formation is eliminated. Cleaning is safe and effective because inside the CLASSIC 1 is



the exclusive MICRO STOR SYSTEM which utilizes a humidification/cleaning process rather than a 'wet' technique.

The secret to the MICRO STOR SYSTEM is a permeable matrix of many thousands of tiny glass beads which retain the cleaning fluid. Through capillary action, a vapor penetrates the velvet surface creating a field of humidity sufficient to reduce static charges. Disc contaminants can now be removed safely and easily without wetting the record and risking residue build-up.

Discover the ultimate in record care. The CLASSIC 1, a Sound Saver product. Available at finer audio dealers . . .

*This ad will be seen by your customers
in major national magazines . . .*

Introducing the incredible new ADC Integra Series: the Integra XLM-III, Integra XLM-II and Integra XLM-I.

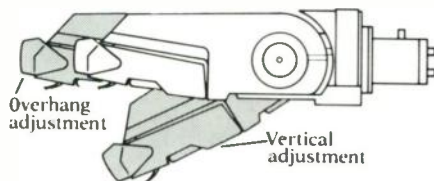
The first all carbon-fibre integrated headshell/cartridges designed to minimize tracking angle distortion two ways.

Two ways that'll turn even your hardest customer into your easiest sale. And your profit picture into a masterpiece.

OVERHANG DIMENSION ADJUSTMENT

As a tonearm "sweeps" a record the angle the stylus makes with the record groove constantly changes. The result is offset angle error. Is it serious? An error as little as 2° can more than double cartridge distortion! That's serious! And that's why the new ADC Integra was designed so anyone can set the optimum offset angle simply by adjusting the overhang dimension. It's

easy. We've even included a Tracking Angle Gauge.



VERTICAL TRACKING ANGLE ADJUSTMENT

Nearly all records are cut with a vertical tracking angle of 20°. That's the way they're made. That's the way they're meant to be played. Sounds simple. But when you see how much tonearm heights vary, from turntable to turntable, getting the exact vertical tracking angle isn't simple anymore.

Unless of course you recommend a new ADC Integra. It's vertical tracking angle is adjustable. In calibrated degree increments. From

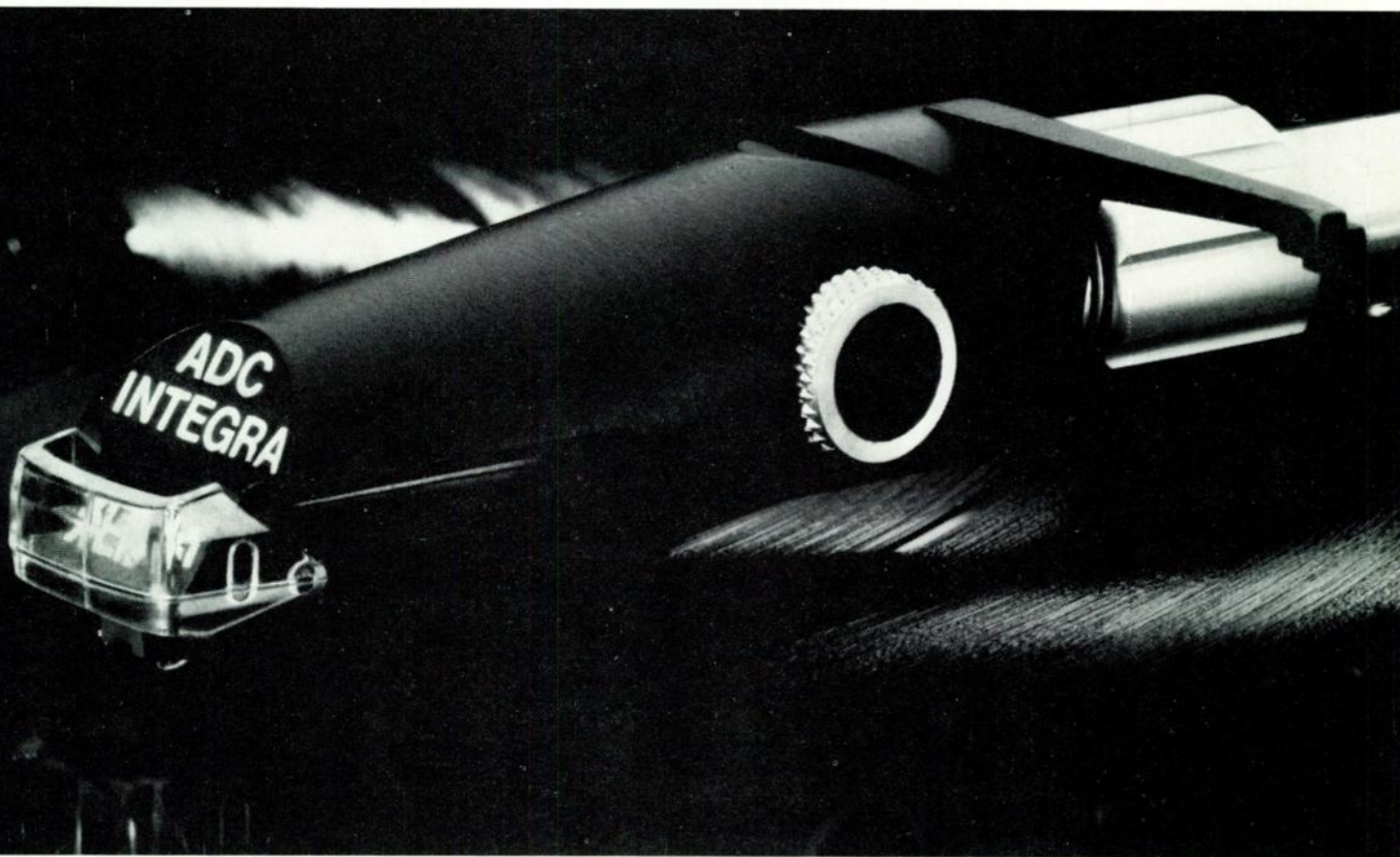
-8° to +8°. Enough to compensate for all tonearm heights. Including most changers.

If all that sounds impressive, wait until you hear what's next. All new ADC Integras have bayonet type mounts. No more screws. No more wires. No more hassles. Once you've made the sale you've got it made. All you do is plug it in.

Nothing could be easier. Or more profitable. Except perhaps upgrading your customers' Integra next time you see him. If he bought a new ADC Integra XLM-I all you have to sell him is the RXM-III replacement stylus. It automatically upgrades his Integra XLM-I to an Integra XLM-III.

The incredible new ADC Integra Series: Integra XLM-III, Integra XLM-II and Integra XLM-I. Their bayonet mounts make them easy to install. Everything else makes them hard to beat.

THERE'S ONLY ONE THING EASIER THAN SELLING A NEW ADC INTEGRA...INSTALLING IT.



audio salesman

March 1980

PULL-OUT
SECTION
Photo-Copy ... and give to
Your Sales Staff

How Retail Salesmen View Business

Dick Adams,
Soundsmith, Portsmouth, N.H.

"Basically, business is what you make it. Right now, obviously, there's a lot of negative talk around. But, November, December, and January have been very good to us, and February has started off well. So, basically, I'm optimistic. I do think, however, that this is the time to get rid of any bad decisions you may have made in the past—like over-stock inventory you're sitting on, or lines that haven't moved. Cashflow is more important than ever!"

John Carpenter,
Tweeter, Etc., Nashua, N.H.

"Speaking of car stereo—my area of expertise—I think it will be average. It depends on what happens at CES. The amount of car stereo business seems directly related to innovative new products. If they really do come out with some stuff that's really great, business will be really great. If they come out with average products, you'll see an average year. Home stereo, I would not want to comment, as I've been wrong in the past!"

Doug Allen
CMC Corporation
St. Louis, Missouri

"If things keep going the way it started off, it will be a great year. Agressive promotion, which is one of the characteristics of our company, is working—it's bringing in the customers!"

Walt Stinson,
ListenUp

Denver, Colorado

"I'm very optimistic for us. But, I don't share that optimism for other dealers I see around me. The dealers who have put in time and effort positioning themselves are the ones that are successful. These are the ones who have a good idea of who they are in the market, and have positioned themselves squarely in the center of a major market group. On the other hand, a lot of dealers fail to realize that the hi-fi market is really many different markets, and they have to decide which market they're best suited to go after, want to go after, and stick to it."



Harry Elias,
JVC

"The 1980's will show a 15 to 20% growth in hi-fi. But 1979 will show a decline from the previous year, so a gain of even 20% this year may not be significant. 1979 has taught us a lesson. Hi-fi should be exposed to more people. I still believe there's plenty of money out there, and that people are buying home entertainment systems. Dealers promoting and advertising heavily are still enjoying good business."

HIGH FIDELITY
trade news

A Word About Audio Salesman

Audio salesmen are the forgotten men of hi-fi. Industry attention tends to be focused on manufacturers, reps, and store owners, yet it is the store salesman who does the work. Which is why we're starting **Audio Salesman**.

We want to help you do your job better. The success of our industry in the months ahead will depend more than ever on your ability to make the most of every customer who enters your store.

Advertising can bring customers in, but you have to sell them!

Each month, we'll cover a variety of topics designed to keep you informed about the industry in general, and selling in particular. We'll also be surveying salesmen in different parts of the country. Drop us a line if you want us to contact you when we survey salesmen in your part of the country, and keep us informed with any comments—for or against—which you might have about **Audio Salesman**.

The Manufacturers' Outlook on the 80's



Stew Greenberg,
Yamaha

One basic mistake that many of us make is to assume that the average consumer is primarily concerned with which brand to buy, or what store to buy from. Mr. Average Consumer, however, is probably thinking: "I only have a few hundred dollars to spend on myself for non-essentials..." In other words, audio manufacturers are competing with the producers of other leisure-time products, oil companies, supermarkets, and clothing retailers. This is stiff competition."



Jon Kelly,
Audio Technica

"Cartridge Marketing is becoming increasingly complex. This year, it's a buyer's market where the customer can be more selective. At first, the cartridge market seemed underpopulated, but now everyone is in the act. It is important to realize that such products are sold at the point of sale by the floor salesman. They are not pre-sold. To the degree we can do it, we will increase trade advertising and sales training to communicate effectively beyond the owner/operator level to the floor salesman."

Our point of view:
You can't know too
much about a good
thing. Number 41
in a series of
factual discussions.



audio-talk from audio-technica®

A CARTRIDGE PROGRESS REPORT

For the past decade or so, keeping up with technological change in phono cartridge design hasn't been a major challenge. Because—frankly—there have been very few changes of major importance, which is too bad.

Sure there have been refinements. But they've been small and steady, so that each new crop of cartridges is just a bit better than the last. And taken over a decade, the improvement has been well worth while.

A MAJOR REEXAMINATION

Even so, cartridge design has been long overdue for some major rethinking. And that's exactly what has happened at Audio-Technica. No, we haven't invented any new laws of physics, but we have done more intensive research than is evident elsewhere, and it has resulted in some unusual new design approaches with very real merit for the consumer.

TWO NEW CARTRIDGE DESIGNS

Two new products typify this approach: the new Omnitec Series moving magnet cartridges, and the equally innovative AT30E moving coil cartridge with user-replaceable stylus.

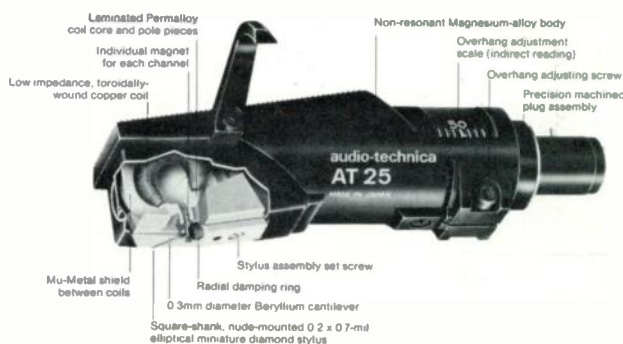
THE **omnitec™** SERIES

Let's first discuss the Omnitec Series. Four new cartridges, all benefitting from the same fresh thinking. Two of them, the AT23a and AT25 combine the cartridge body and the head-shell into a single assembly. The other two, Models AT22 and AT24 use the more conventional ½" mounting. But that's where conventional thinking ends.



A SIGNIFICANT REDUCTION IN MOVING MASS

Most recent cartridge improvements have rightfully concentrated on the moving assembly: stylus, cantilever, magnets or coils, and suspension. And the Omnitec Series takes full advantage of the latest advances in this area with a beryllium cantilever for high stiffness and low mass, and an extremely small elliptical stylus. In fact, the stylus is just 9/100ths of a millimeter (0.0035") across! And, of course, all Omnitec Models use our unique Vector-Aligned™ dual magnetic system, to further reduce effective moving mass.



But now look at the coils and pole pieces. There's no other cartridge built like this. Because we've gone back to basic physics to optimize this area of cartridge design so often taken for granted.

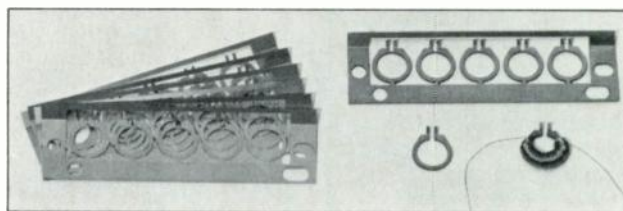
THE UNIQUE OMNITEC TOROIDAL COIL

In conventional phono cartridges there are usually two or four wire coils, wound on bobbins, with separate cores inserted in each coil, and pole pieces attached to the cores. Now look at the Omnitec design. Just two coils, each wound in the shape of a toroid, or doughnut. This shape inherently insures the least possible flux leakage, important for efficiency and good stereo separation.

And note that the Omnitec coils are wound directly on the permalloy core, with no insulating bobbin. Eliminating this spacer improves magnetic coupling and efficiency while reducing bulk. The toroidal coil is an elegantly simple concept which until now was believed too difficult and expensive to apply in quantity production. But Audio-Technica research has found the way to achieve these benefits at reasonable cost.

INTEGRATED COIL CORE AND POLE PIECES

The actual coil cores are no less ingenious. The core and both pole pieces are a single continuous structure. And each is created from six thin layers of photo-etched



permalloy, whose laminations reduce high-frequency eddy current losses. Another benefit of the Omnitec construction is the reduction of internal electrical connections in each cartridge from as many as sixteen to just four. This inherent simplicity reduces the possibility of intermittents, losses, and also improves cartridge-to-cartridge uniformity. But that's not all.

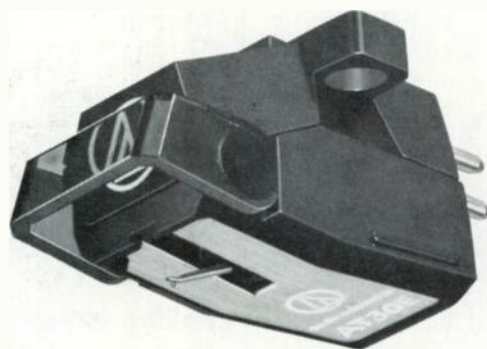
DRAMATICALLY LOWER INDUCTANCE

Without the losses inherent in conventional designs, our coil can offer much lower inductance than is typical. Just 85 mH compared with perhaps 500 mH. It is this single characteristic, perhaps more than any other, which contributes to the remarkable transparency attributed to these cartridges. Transients are reproduced cleanly, and stereo depth is clarified.

But we weren't content. Having physically and electrically isolated the coils, we added a mu-metal shield between them for the last measure of isolation. Combined with the inherent geometric advantage of our Vector-Aligned magnets and pole pieces, stereo separation is outstanding at every frequency.

There are a host of seemingly tiny details which further contribute to flawless sound. The stylus assembly, for instance, is held rigidly in place with a set screw, rather than depending on the usual friction fit which may permit the entire stylus assembly to vibrate slightly at high recorded levels. And the AT23a and AT25 are housed in non-resonant magnesium alloy bodies with a calibrated over-hang adjustment. Plus even a special resonance-damping pad on the top of the cartridge body. And gold-plated connectors, of course.

The advances you can see and hear in our Omnitec Series of Vector-Aligned cartridges are tangible proof of the dedication to innovative engineering at Audio-Technica. And we're not limited to a single concept or technology, but are actively exploring every viable alternative. This multi-faceted approach results in greater product diversity with practical benefits for every Audio-Technica dealer. Here's proof.



THE NEW AT30E

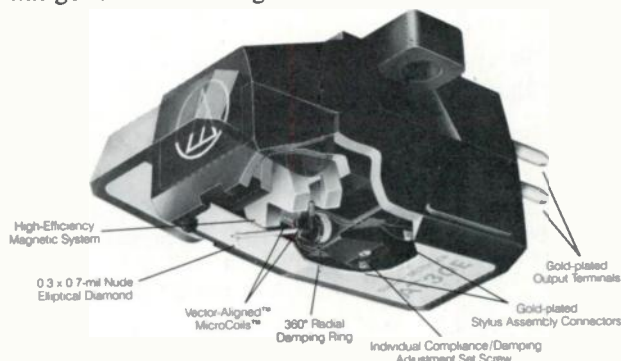
Introducing the first really practical moving coil cartridge: the Audio-Technica AT30E with Vector-Aligned Dual Moving MicroCoils. Until now, moving coil cartridges were almost exclusively for the truly dedicated audiophile. Lovely sound, but some serious drawbacks.

THE 3 BIG PROBLEMS OF THE PAST

When the stylus of earlier moving coil cartridges became worn or damaged, the cartridge had to go back to the factory, leaving you without sound for perhaps weeks on end. And tracking wasn't all that distinguished; cantilever suspensions were typically low in com-

pliance. And of course the output was very low. So either a transformer or a pre-preamplifier was needed with most electronics.

The AT30E has solved the two toughest problems with imaginative engineering. And the widespread addition of moving coil inputs to many present electronic designs has gone far in solving the third.



A USER-REPLACEABLE STYLUS

Making the stylus user-replaceable was primarily a mechanical problem. But it required a sharp departure from conventional thinking to accomplish. The result offers the same advantages as the stylus assembly design of our Vector-Aligned moving magnet cartridges, with the coils correctly oriented to each groove wall. The entire assembly simply unplugs, with large, gold-plated plugs to transmit the coil signals to the output connectors. Efficient coil-winding techniques and ultra-precise hand assembly were the secrets to the success of the design. And the result imposed no compromise of the basic moving coil advantages.

IMPROVED TRACKING

In fact, by minimizing the mass of the coils and their supports, we were able to create a suspension system with much higher compliance than had been typical in the past. And this permits us to offer a decided improvement in tracking ability.

The result is a cartridge with all of the advantages of traditional moving coil thinking but virtually none of the barriers to acceptance by most potential users.

We're extremely proud of these advances in phono cartridge technology. And we feel they demonstrate a sense of leadership that has been needed in the industry. But they are only a beginning. The best is yet to come. From Audio-Technica first!

Jon R. Kelly
President



AUDIO-TECHNICA U.S., INC.
Dept. 30B, 33 Shiawassee Avenue
Fairlawn, Ohio 44313
(216) 836-0246

audio salesman

What Would You Have Done?

Here's the scene: a busy lady in New York City rushes insecurely into a hi fi store in search of speaker wire. Much to her relief, a kindly salesman asks her a question or two about her music system, cuts a long strand of wire from a roll and stuffs it inside her coat, telling her, "Stick this wire in there before the manager sees you and you're all set."

Question: Was the sales person right to do what he did? Was he "throwing away" a source of add-on sales and profits for his employer? Or, was he crazy like a fox, giving away a dollar or two and creating good will? What would you have done in that situation? Send a letter to the editor of Hi Fi Trade News, Ron Marin, and let us know. We'll pass on the replies, in an upcoming issue.

Three Ideas to Create Sales

Three easily-overlooked profit opportunities are:

1. Cassette Recorders

Cassette recorders are mainly sold to customers who come in and ask for one. Instead of waiting for customers to come in, take the initiative, and try to sell a cassette recorder with every system you sell! Even if you don't make the sale at the time you sell the system, you're at least planting a seed in the customer's mind. Thirty-days later, six months later, a year later, the customer will realize that there's more to life than records and FM, and will come back to you to buy the recorder!

2. Head Demagnetizers and Head Cleaners

Why settle for selling a cassette recorder, when

you can easily sell necessary accessories like head demagnetizers, head cleaners, and case lots of recording tape? Customers will appreciate your taking the time to explain how these accessories are important to their listening pleasure, and will generally Thank You for your effort (as they write out a bigger check). Taking the time to educate the customer about accessories, and their proper use, is one more way to show a customer he's important to you, and another opportunity to establish a dialogue with him.

3. Equalizers

Four out of five systems sold could probably benefit from an equalizer. All listening rooms create their own acoustic environments. Very often, speakers that sound good in a showroom sound poor in the home. An equalizer takes care of that. In addition, an equalizer gives customers something to play with—increasing their emotional involvement with their system. Demonstrate the benefits of an equalizer to second-time buyers, and they'll probably be impressed enough to buy—even if they came in to look at turntables!

New Products To Keep An Eye On



Lux Model L-480

New Duo-Beta circuitry from Lux, first to appear in a new line of amps and integrations, starting as low as \$395. Much talk about the new Bang & Olufsen Beocord 8000 at \$995, and the new Boston Acoustics A-100 speaker.

In The Media

High Fidelity March 1980
Products Reviewed: Apt 1 Amplifier; Yamaha Cj-6 Preamplifier; Amberr Series 70 Amplifier; Hafler DH-200 Amplifier; Cizek KA-1 Classic Speaker; Acoustic Research AR-25 Speaker. (Pages 28 to 44).

Capsule Review: Acoustic Research AR-25 "... and when the modest price is taken into account, the AR-25 must be reckoned a remarkable achievement. It definitely warrants a hearing by the audiophile on a budget.



Stereo Review February 1980
Products reviewed: ADC Sound Shaper Three; Realistic STA-2200 AM/FM Receiver; Beyer DT440 Headphones; JBL L150 Speaker System; Crown SL-1 Preamplifier and PL-1 Power Amplifier. (Pages 36 to 52.)

Capsule Review: The JBL L150 "... balance over the spectrum excellent ... a warm character ... nothing impelled us to readjust the tweeter and midrange ... the deep-bass response can be nothing less than overpowering."

HIGH FIDELITY
trade news

Preferred Customer's Sales Growing In Popularity

"Preferred customer's Sales are a hassle to run, unless your mailing list is organized, but the results—both immediate and long-term—make it worth it. We sold items we've been sitting on for months, plus increased store traffic for two weeks afterwards," reports Bob Levin, Hawthorne Stereo, Portland, Oregon

Audio Seminars More Popular

Audio Salon in NYC joined the growing ranks of retailers hosting special clinics and seminars. Their Jan. 16th seminar was hosted by Rick Pines, Training Co-ordinator from AIWA. The entire AIWA line was presented along with complimentary champagne and cheese.

Other seminars held during the first two months of 1980 included an invitation-only ADS Time-Delay seminar at Gramophone, Ltd. (Baltimore), and a B & O turntable clinic at Anderson Audio, Nashville.

Selling is selling, says Joe Girard

Joe Girard believes he can sell anything to anybody. And the Guinness Book of World's Records thinks so too. Now Joe's rules for successful selling, which apply to any product category, are available in his paperback book "How to Sell Anything To Anybody." (NY, Warner Books, 1979). The text emphasizes the importance of each customer and tips are given on personal presentation. Read it. It's worth it.

Listen to the professionals. Listen to the new Jensen System C.



It's the newest of the elite new generation of Jensen speakers. A highly refined, vented, 3-way, 4-driver system with outstanding sales potential.

The System C incorporates our latest advances in features and design. A 10" low frequency driver. 2" soft fabric dome midrange driver. A front firing 1" soft dome high frequency driver. And a rear firing 2" cone high frequency driver.

Combine these drivers with a remarkably "intelligent" crossover network, a unique power protection circuit and a meticulous cabinet design.

The result is superior sound reproduction with an affordable price tag.

It's new. It's available for immediate delivery. And it's definitely worth looking into.

So listen to the professionals. Listen to the new Jensen System C. Just one of a full line of Jensen home high fidelity speakers.

JENSEN
SOUND LABORATORIES

DIVISION OF INTERNATIONAL JENSEN INCORPORATED AN ESMARK COMPANY

Convenience Comes To Cartridges

So Does More Product To Choose From —
Breakthrough Year For Moving Coil?

BY BENNETT EVANS

Consumer cartridge buyers are being offered wider choice and greater convenience in the use of their purchases in 1980. These are two of the key trends in cartridges which have merged from product introductions at the Winter Consumer Electronics Show.

While there is not likely to be any significant breakthroughs in cartridge technology this year, many of the trends of 1979 are being extended and widened as the industry moves into 1980. Some of those trends include an expansion of moving coil designs, more cartridges pre-mounted to fit various arms (especially the "S" or "J"-shaped, universal head types), more line-contact styli, lower stylus and cartridge masses, exotic cantilever materials and construction and (perhaps the most recent) styli held rigidly in place by screws.

Moving-coil music

The music of the moving-coil will be heard in far more homes in 1980, for several reasons. First, there are more brands and models of MC cartridges than ever before: Adcom, Audio-Technica, Denon, Dynavector, Fidelity Research, JVC, Koetsu, Mission, NAD, Ortofon (of course — they're about the oldest MC cartridge manufacturer), Onkyo, Satin, Sony, Sumiko (Premier), Technics, Thorens and Yamaha. Note, too, that several of the newer

names to that list are broad-line component makers (Denon, JVC, NAD, Onkyo, Sony, Technics, Thorens and Yamaha) — and that at least one major cartridge specialist (Audio-Technica) has just entered the MC fold. That's proof — (if proof were needed) of the MC's greater acceptance — not to mention the still greater acceptance that such names will bring.

***"The . . . moving coil will
be heard in far more homes
in 1980 . . .***

Other factors have made the MC cartridge more accessible. The price range is broadening (down to \$99.95 for the latest Satin, up to \$1000 for the Dynavector DV-100 Karat, and \$1500 for the Koetsu from Precision Fidelity). More and more MC cartridges have user-replaceable styli (Audio-Technica, Satin, and others) and output-levels roughly comparable with moving-magnet cartridges. Or such, at least, is the claim; while Satin, Adcom, Dynavector (with their R20A and 20B) MC cartridges have outputs of 2.5 to 3 mV (about equivalent to low-output moving magnet or induced magnet types), a few others claim comparability with outputs of 0.4 to 0.5 mV — about one-tenth that of stan-

dard magentics, though more than twice that of many moving-coil types. Sumiko's Premier series, with an output of 0.35 mV refers to this as "moderate" output, which will require a booster transformer or head amp with some systems, but not all.

Audio-Technica, however, points out that the MC cartridge's low output may no longer be the sales problem that it once was, since more and more amps and preamps now have MC inputs. Certainly, as major component makers begin selling MC cartridges themselves, you can expect to see more MC inputs on their electronics.

Meanwhile, apparently feeling they'd rather fight than switch, Pickering had a display at WCES that pointed out the disadvantages of moving coil: "undesirable greater mass" and "irregular winding, loose wires and insufficiently rigid coupling" systems, all illustrated with scanning-electron-microscope blowups of cartridge interiors. On the same display, oscilloscope photos demonstrated "faster and more uniform rise time of moving magnet vs. moving coil" cartridge designs.

MC innovations

As moving-coil cartridges become more numerous, interesting innovations may get lost in the shuffle. Adcom's Crosscoil cartridge has its coils wound on an "X" shaped armature, permitting more turns of wire (hence, higher output — 2.5 mV for



the XC series) with, it is claimed, no large increase in weight (or, presumably, in moving mass). Adcom also claims the "X" shape allows better controlled damping, for better mid-range transient response.

Audio-Technica's salespoints include "Vector-Aligned" design, with "each coil . . . located in the ideal geometric relationship to reproduce 'its' side of the record groove" — an alignment system used in the company's Audio-Technica and Signet moving-magnet cartridges, too. The AT30E MC cartridge is also available pre-packaged with an AT630 transformer, for use in systems without built-in head amps.

Denon's DL-103S is one of the few MC cartridges claiming four-channel capability (Ortofon's SL 20Q is the other) — Some of the few cartridges of any type to make that claim, today. Dynavector has an ultra-short (2.5mm) cantilever, to raise its high-frequency resonance to 50kHz, thus allowing the omission of rubber dampers. Fidelity Research's FR-7 has a high-conductivity silver coil. JVC's MC-2E has an ultra-low-mass, printed-circuit coil. Ortofon is busily promoting its Wide Range Damping (WRD) system, with dual rubber dampers decoupled by a metal disc, so that only one damper will work at high frequencies.

Sony's new XL-55 and XL-44 cartridges have push-pull, figure-8 coils, plus low-mass, conical armatures without iron cores (more and more MC cartridges now use iron-free coil designs), for lower distortion. Technics has its "Technics Temperature Defense Damper" — a damping system relatively free from changes in effectiveness with changing temperatures.

Goodbye, little screws!

Installing cartridges has long been a time-consuming nuisance for dealers and customers alike. More and more cartridges now come pre-installed, easing the pain a little.

Most popular pre-mount is, naturally enough, the "universal" shell, long used by Ortofon and SME, now used by most of the Japanese manufacturers as well. Among the cartridge companies with products in universal shells are Acutex, ADC, Audio-Technica, Bang & Olufsen, Dynavector, Fidelity Research, Nagatron, Ortofon, Osawa, Sony, Technics and Yamaha.

" . . . low output may no longer be the sales problem . . . since more and more amps now have MC inputs."

Most of these shells claim other advantages beside mere ease of mounting: lower mass and better-damping resonance than separate shells and cartridges. ADC's new Integra series also has adjustable tracking angle. And the Acutex and B&O cartridges can be plugged into or out of their shells.

But not all such pre-mounts are "universal" types, either. Thorens two MC cartridges are pre-mounted to fit — naturally — Thorens arms. And Ortofon's Concorde cartridges now come in universal heads and pre-mounted on arm-stubs for the newest SME arms — not to mention the OEM pre-mount versions sold by Thorens and Dual. (The OEM versions, incidentally, take different replacement styli from those

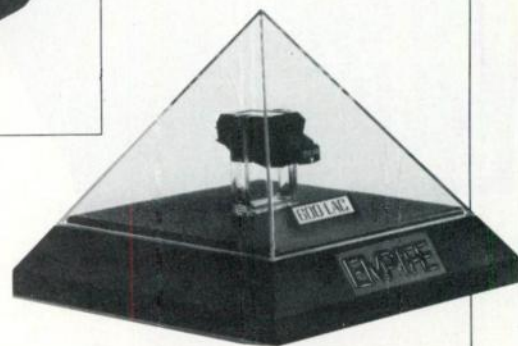
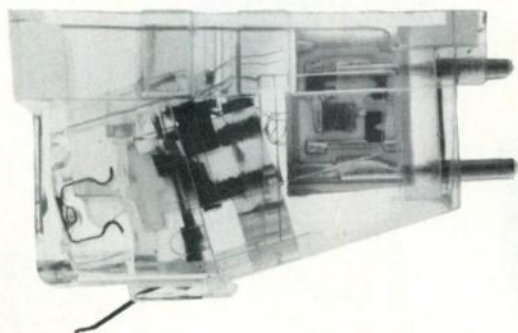
sold by Ortofon itself.) With the ULM pre-mounted cartridge, the Dual arms have effective masses of only 8 grams — and the SME III/Ortofon 30H combination yields an effective mass of only 4.5 grams. Lower mass (when properly matched with a suitably compliant cartridge) means far better ability to track warped or eccentric records, among other things.

Putting styli on the line

Tracking high-frequency groove modulations takes a skinny stylus — riding at the right height in the groove takes a fatter one. Elliptical styli were the first attempt at solving this paradox: seen head-on, they had comparatively fat radii, while their edges tapered to much smaller curves.

But by concentrating the cartridge's tracking force on a narrower area, elliptical styli increased record wear — unless used at lower tracking forces, which reduced tracking ability. CD-4 quadraphonic records brought this problem to a head, since their high-frequency subcarriers needed very thin-edged styli for proper tracking. Hence the Shibata stylus and other CD-4 designs, which had extremely sharp side radii, but whose "footprint" on the groove wall was a taller line than the elliptical, for increased contact area and less groove wear.

The new generation of stylus designs is a modification of this, designed to sacrifice some of the CD-4 stylus's ability to track ultrasonic frequencies in exchange for better tracking of audible ones on stereo records. Ortofon's Henry Roed explains that their "Fine-line" stylus "has three times the contact area of the elliptical, but doesn't



sit as deeply in the groove as CD-4 styli had to in order to pick up the subcarrier — so it doesn't pick up excess dirt from the groove bottom." The others (Shure's "Hyper-elliptical", Pickering's "Stereohedron," etc. — almost every manufacturer now has some version) have similar advantages.

More and more styli in top-of-the-line cartridges are now "nude" diamonds — diamonds mounted directly to the cantilever, rather than in metal mounts that are then attached to the cantilever — for lower moving mass and better transient response.

Cantilevers go exotic

Cantilevers — the thin tubes that transmit the stylus tip's vibrations into the cartridge body — are no longer just the simple little pipes they used to be. In the fight for increased rigidity with decreased moving mass, they're stepped (Shure), tapered (Acutex), and made of ever-more-exotic new materials.

Aluminum is pretty light, and pretty common as a cantilever. UT-58 aluminum (described by Osawa as the hardest aluminum alloy) is used by Osawa and Nagatron. Beryllium is used by Micro-Acoustics and Yamaha; boron by Mission, Osawa and Technics; carbon fiber by Nagatron. Nagatron also has a model with a titanium cantilever, while Technics has one using titanium nitride. Compound or multi-layer construction is used by Dynavector (aluminum and beryllium), Sony (beryllium and carbon fiber) and Onkyo (carbon fiber with duraluminum).

But the most exotic of them all are the cantilevers which are — like the stylus tips themselves — jewels. Bang & Olufsen's is a single-crystal sapphire, claimed to be 40% stiffer than beryl-

lium and five times as stiff as aluminum, with the advantages of undistorted transmission of the stylus's vibrations, reduced phase distortion (the velocity of sound in sapphire is said to be double that in aluminum), and a tip resonance above 20kHz. Dnyavector's DV-100 Ruby uses a ruby cantilever (laser-drilled to hold its diamond tip), for similar reasons, while their DV-100 Karat (\$1000) has a cantilever made of diamond.

Sony also showed a model of a roughly \$1000 prototype with a diamond cantilever ground back to leave a projecting stylus tip. Replacement styli on these cartridges should definitely be worth selling.

"... Pickering . . . pointed out the disadvantages . . ."

Sonus's new Dimension 5 cartridge has a "single-transmission" cantilever with a "lambda" stylus — the latter a diamond that fits into the open end of the cantilever rather than fitting into a hole drilled across the cantilever. The claimed advantages include greater phase coherence, lower dynamic mass, and a high-frequency resonance of 35k to 40k Hz, obviating the need for more than minimal damping.

Screw-on styli

If you see a cartridge with a screw holding its stylus assembly, though, it won't be to keep one of these precious-crystal styli from being lost or strayed or stolen. Instead, it will be to ensure optimum alignment (so says Audio-Technica and Signet) and to maintain perfect rigidity (Osawa).

Protecting styli is the motive (against damage, not theft), though, behind Shure's "Side-Guard" stylus design, introduced last year on their SC39 Pro cartridge series, and now available on their new M97 Era IV series. Rake these cartridges across a record or "clean" them with your finger, and their styli retreat shyly back into the cartridge body, like a turtle's head into its shell.

The M97 cartridges also incorporate several features of the V15 Series IV, such as the telescope-stepped stylus shank, and the "dynamic stabilizer" — a carbon-fiber brush on a damped mount, which simultaneously cleans and grounds the record while damping cartridge resonances.

Shure is now offering upgraded replacement styli for most of their old cartridges (most recently for the M95 and V15/III). Audio-Technica offers stylus upgrades for their AT15S and AT20S, too.

New pivot patterns

AKG created a stir a few years back by focusing attention on the pivot-point stability of phono cartridges. If the stylus merely pivoted on a block of rubber, said the sages of Vienna, the pivot point would vary slightly, varying the effective stylus length, and muddying up both sound and stereo image. Apparently, a lot of companies have come around to AKG's point of view: among those claiming more stable, single pivot points were ADC ("Omni-Pivot"), Micro-Acoustics, Nagatron, Satin, Sonus and Technics.

Down with inductance

One last trend: lower coil inductance. Some moving-coil propo-



Koss introduces a totally new concept in stereophones.

The new Koss HV/X high velocity stereophone represents a remarkable breakthrough in hear-thru stereophone design and performance. For the first time, Koss engineers have been able to create a lightweight, hear-thru stereophone that combines the transparency of high velocity phones with the superior bass performance of closed-type phones. The result is an ingenious new stereophone that not only offers your customers a breathtaking musical experience, but also offers you a whole new sales opportunity.

CONTOURED VARIABLE-DENSITY EARCUSHIONS

While most lightweight, hear-thru stereophones have earcushions that fit against the ear, the new Koss HV/X features a unique, contoured, variable-density cushion that fits around the ear. Not only does this unique earcushion design create a far more comfortable stereophone but it has also allowed Koss



engineers to create a dramatically better element design as well.

These new variable-density earcushions are made up of a very porous material that is acoustically transparent at the perimeter of the earcushion yet compressed toward the center region.

This varies the pattern of acoustic resistance over portions of the earcushions creating the proper seal for specific bass frequencies while

allowing the flow of middle and high frequencies at the perimeter of the earcushions.



LIGHTWEIGHT ELEMENT

The uniqueness of the new variable-density earcushions made it possible for Koss engineers to design a lightweight element

capable of reproducing the famous Sound of Koss. Incredibly, even though the overall weight of the element was reduced, Koss engineers were able to develop a magnet with enough magnetic density to drive an extra large diaphragm. With a response range of 15 to 35,000 Hz, the new Koss HV/X will drive your customers into ecstasy, our competitors nuts, and your sales force into a frenzy writing orders.

X-RATED SENSATIONS

When it comes to hot sales items this year, nothing will be hotter than these X-rated Koss stereophone sensations: Koss HV/X and Koss HV/XLC with volume/balance controls. Contact your Koss Representative, immediately. Or get on the Koss hot line (800-558-0465) to Jeff Martin, National Sales Manager. With our national advertising and promotion program telling millions of music lovers all about how the new Koss HV/X and HV/XLC stereophones offer both the open, airy, up-front sound of hear-thru stereophones and the deep, rich bass performance of closed-type stereophones, you'll want to be well stocked with the Sound of Koss.

© 1980 Koss Corp.



Koss HV/XLC

KOSS® stereophones/loudspeakers
hearing is believing™

CARTRIDGES

(Continued from page 38)

nents claim that low inductance is the reason why they find the MC sound more musical. Certainly, the lower the inductance, the less the cartridge's frequency response will depend on the capacitance of the cables connecting it and the input it's connected to. So more and more cartridges of all varieties — MC, MM and induced-magnet — are now proclaiming lower inductance.

Empire has another inductance angle: their induced-magnet (moving-iron) cartridge does not use the resonance between coil inductance and external circuit capacitance to compensate for the effects of stylus resonance (others, they say, do). This, too, makes external circuit capacitance less important.

Testing time

Claiming how good your latest cartridge is easy. Proving how good it is (or at least, how much better it is than your customer's current cartridge) is becoming easy, too. Audio-Technica and Signet both showed cartridge analyzers soon to be available for dealer purchase. Ortofon showed a

prototype which will be available for dealer-sponsored clinics this year, to gain experience and comments that will help produce an even more refined production version next year; among other advantages, it prints out results. And Adcom was using a Commodore



NAGATRON's
model 9600

Pet-computer with an Eventide spectrum analyzer attachment (also available for Radio Shack TRS-80 and Apple II) which displayed frequency responses of various cartridges, though it could be used for other components, too. A separate printer made permanent records of the frequency response analyses.

TURNTABLES

(Continued from page 24)

Technics officials say future versions

of the SL-10 will allow for use with other cartridge brands.

"This product offers users a great deal of versatility," said Berkowitz. "And with living space becoming more and more a factor, the small size of the unit is also important. There is a strong demand for Technics to open up the technology used in the SL-10 to more and more areas, and perhaps it lends itself to some of the new video products appearing on the horizon. We will see, in the future, as we get further into production, improvements in this model and subsequent versions at less than the initial suggested retail of \$600."

Berkowitz also said demand for the SL-10, both from U.S. dealers and in Japan, has been strong, with the unit already the recipient of one of Japan's Grand Prix design awards.

Berkowitz notes, too, in terms of Technics maintaining its dominance in the turntable market in the eighties, that the company not only produces turntables but is also a producer of cutting lathe equipment and other technologies used in the ultimate manufacture and design of turntables. That, the company feels, gives it an edge in the great turntable race.

The Original Short Story

"Some moving coil manufacturers move in mysterious ways. At Dynavector, we like to think we are constantly (and relentlessly) moving forward to recreate the excitement of the original musical performance.

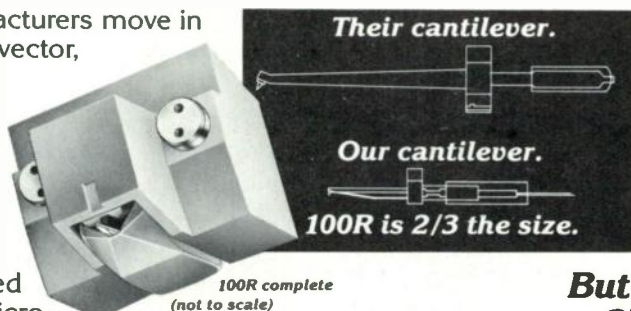
Shorter is better.

"Dynavector has uncovered the real truth. By using micro-miniaturization of internal components and a cantilever of only 2.5mm in length, the realization of tremendous transient attack—coupled with exceptional trackability—is finally at hand.

"With this short cantilever (2/3 the size of traditional cartridges), the resonant frequency in our DV/Karat series is greater than 50kHz.

How we did it.

"The resultant effect of such a high resonant frequency made possible the elimination of all rubber used in its most traditional sense—as a damper.



"Rubber, as used in this sense, has two major faults: it is subject to temperature change as well as deterioration with age. Thus, our cartridges are not at the mercy of 'the creeping time effect of rubber.'

But in the final analysis...

"The truth is always in the listening. Please call me for details on the new generation Dynavector MC cartridges—the new 100 Ruby, 100 Diamond and 20A and 20B Mark 2 series. And, ask about our DV 505 tone arm and two great transformers.

"For a great ending to your next component sale, make it Dynavector. Wouldn't it be just a little criminal to sell anything else?"

Dynavector Systems USA, Inc., 30708 Lakefront Drive, Agoura, CA 91301 (213) 991-5010.

Dynavector

The soft touch

Speaker for higher.



Unique qualifications.

For example, a tweeter mounted directly in the grille.

It's the Jensen 6½" Coax II car stereo speaker. And by putting the 2" tweeter where it is, we've improved the high frequency dispersion. And slimmed down the speaker.

Experienced treble-shooter... for better dispersion.

High frequencies can be tricky...they usually just want to travel straight forward. But the up-front position of this direct radiating tweeter helps disperse those highs throughout the whole car.

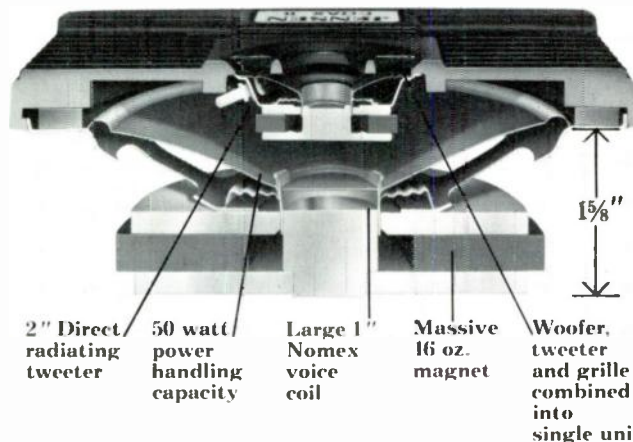
So whether you install these speakers low in your front doors or back in the rear deck, you can be sure you're going to hear all of the treble this unique speaker has to offer.

Beefed up music.

That's what you'll get from the 6½" Coax II. Music with plenty of meat on its

bones. Music with a frequency response that stretches from 50 Hz to 40,000 Hz.

Not only from the tweeter in the grille. But also from the 6" woofer behind it. This woofer's hefty 16 oz. magnet and large 1" Nomex[®] voice



coil serve up a second helping of full, balanced bass. While a responsive rim suspension and meticulous cone design give this speaker extra sensitivity.

This highly efficient, 4 ohm Coax II will handle up to 50 watts of continuous power. And make the very most of it.

A slimmed down speaker.

No extra fat on this speaker...it's only 1⅝" deep and it fits your current 5¼" cutout. So it will fit in more car doors, more rear decks, and more tight spaces than ever before.

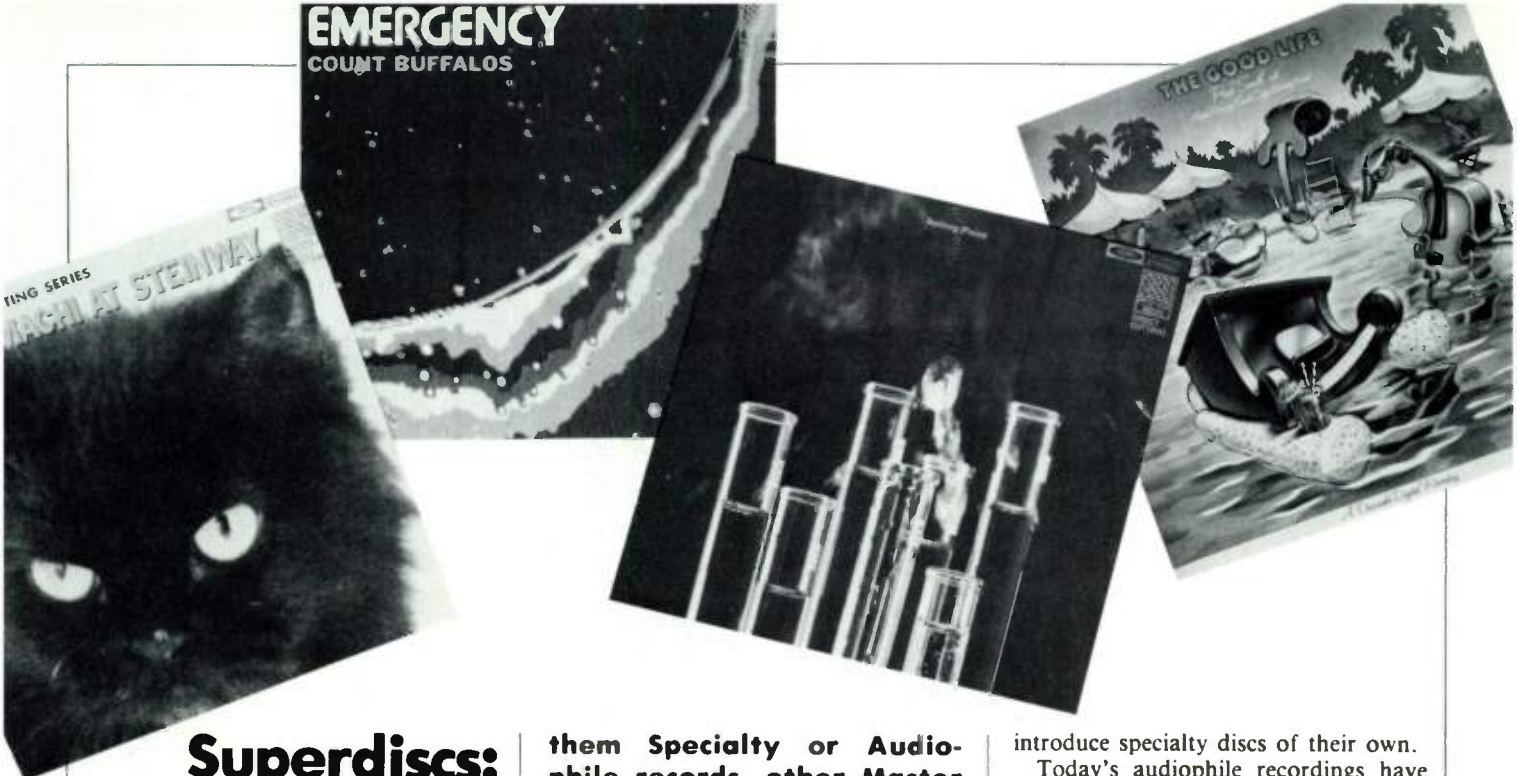
The Jensen 6½" Coax II is also easier to install, thanks to its new uni-body construction. The grille is permanently affixed to the speaker unit. Which not only makes installation easier, but also means a sturdier speaker with less vibration.

Excellent references.

Give a listen to the new Jensen 6½" Coax II's. The speakers with the grille-mounted tweeters.

We think you'll agree that they're just the right speakers to fill the position in your car.

JENSEN
SOUND LABORATORIES
AN ESMARK COMPANY



Superdiscs: Platters Fit For A King

them **Specialty or Audiophile records, other Master recordings, while the concise and picturesque term Superdisc has also been gaining favor.**

What are we talking about? The finest analog recordings ever to spin on a turntable; recorded, processed, and pressed with lavish attention to detail to meet the demands of the fussiest hi fi buffs and the world's finest, most expensive music systems.

At prices of \$12 and up per disc, they're not cheap. But given the declining quality of many commercial labels, and the superb, sumptuous sonic performance achieved by most of these recordings, the buyers simply do not seem to care. In the past two years, they've sold like flapjacks at a Sunday church breakfast, a pace fast enough to make many of the commercial giants sit up, take notice, and begin to

introduce specialty discs of their own.

Today's audiophile recordings have their origins in the special effects records of the fifties and sixties, and the limited edition discs put out by speaker manufacturers like AR and JBL as system demonstration material. For both types, the technical sound quality of the finished product — smooth, wide frequency response, low distortion, and good stereo separation — was as important as the musical content, since the records were intended for use with the upper crust of available stereo systems. Some claim that the first true Superdisc recordings made for musical purposes were the Audiophile label recordings of E. D. Nunn, recorded with custom equipment and processed with extraordinary care. Many others believe that Sheffield's "Lincoln Mayorga and Distinguished Colleagues, Volume 1" the first modern direct-to-disc recording, released in 1968, was a real trailblazer (in mint condition, copies are now worth up to \$1500).

Over 800 discs

The present Superdisc market encompasses at least 800 discs from a diverse and constantly changing assortment of about fifty U.S. and foreign record producers. New companies and recordings are being added to the list all of the time, as public interest and awareness of the genre grows, and many observers feel that the specialty disc field will comprise a substantial portion of the total record sales market within the next few years. They point to the growing number of big-name artists who have begun to appear on specialty discs — Fleetwood Mac, Virgil Fox, The Kingston Trio, Dave Brubeck and Gordon Lightfoot — among others as proof of the trend.

At the technical level, specialty rec-

There is a new breed of record out there, a breed so new even a name has not been chosen. Some call

Trying To Dish Out The Best

Approximately 35 members of the super fi recording industry met recently to launch their own trade association, according to Nautilus Recordings' marketing director Baxter Boyington.

Said Boyington, one of the leading figures in the formation of the group, "We felt there was a need and desire for an association, despite the fact that we are competitors."

Some of the areas which the group may join forces on include getting good parts and vinyl, ex-

changing credit and collection information, and lobbying for special exhibition areas at CES.

"Of course we can work together to educate both dealers and consumers on the virtues of super fi recordings," added the marketing director.

The group currently has a steering committee at work gathering information and putting together the beginning of a formal program. At this time there is no specific timetable for finalizing the group's efforts.

| Company | Labels Represented | Primary Musical Interests | Approximate Total Catalogue Size | Technical Approach | Per Disc Retail Price |
|---|--|----------------------------------|---|----------------------------------|------------------------------|
| American Gramophone (Precision Sound Marketing) 24310 Second Place Bothell, WA 98011 | American Gramophone | Pop/jazz & Light Classics | 4 | Hi Tech & D to D | \$13.95 \$14.95 |
| Angel Records 1370 Avenue of the Americas New York, NY | Angel | Classical & Marches | 30 | Hi Tech | \$8.98 |
| Audio Directions 1035 Draughon Avenue Nashville, TN 37204 | Audio Directions | Jazz & Pop/country | 2 | Digital & D to D | \$13.95 |
| Audiosource 1185 Chess Drive Foster City, CA 94404 | Proprius, Lyricon, Three Blind Mice, Philips Direct Cut, Audiolab, Sarastro East Wind, Mercury RCA, East Wind, Merlin | Broad Spectrum | 250 | Digital D to D & Hi Tech | \$11.95 to \$17.50 |
| Audio-Technica U.S. Inc. 33 Shiawassee Avenue Fairlawn, OH 44313 | Toshiba, EMI, Telarc, RCA Japan, Umbrella | Broad Spectrum | 60 | Digital & D to D | \$15.95 to \$17.95 |
| Century Records 6550 Sunset Boulevard Hollywood, CA 90028 | Century | Rock, Big Band Jazz, Disco | 17 | Digital, D to D, & Hi Tech | \$7.95 to \$14.95 |
| Crystal Clear Records 648 Mission Street San Francisco, CA 94105 | Crystal Clear | Pop & Light Classics | 25 | D to D | \$16.98 |
| dbx 71 Chapel Street Newton, MA 02195 | Orion, Sine Qua Non, Chalfont, Varese Sarabande, Desmar, Vox, Desto, dbx | Classical & Orchestral | 20 | Hi Tech | \$8.00 \$12.00 |
| Supersounds Ltd. 2210 Wilshire Boulevard Santa Monica, CA 90403 | Delos | Classical & Brass | 60 | Digital & Hi Tech | \$17.98 |
| Direct-Disk Labs 16 Music Circle South Nashville, TN 37203 | Direct-Disk | Jazz, Country & Bluegrass | 20 | Digital, D to D & Hi Tech | \$15.00 |
| Discwasher Records 1407 North Providence Road Columbia, MO 65201 | Denon, Discwasher, Kiras, Chalfont, Varese Sarabande | Broad Spectrum | 110 | Digital, & D to D | \$15.00 |
| Mobile Fidelity Sound Lab P.O. Box 919 Chatsworth, CA 91311 | Mobile Fidelity | Pop & Jazz | 25 | Hi Tech | \$14.95 |
| Orinda Recording Corp. P.O. Box 808 Orinda, CA 94563 | Orinda, Parallax | Pop & Disco | 5 | Digital & D to D | \$8.98 |
| Orion Marketing 761 Shell Beach Road Pismo Beach, CA 93449 | Nautilus, Trend, Romar, Flying Disc, ASI, JVC, East Wind | Broad Spectrum | 20 | Digital, D to D & Hi Tech | \$12.95 to \$16.50 |
| Realtime Records 10391 Jefferson Blvd. Culver City, CA 90230 | Realtime | Broad Spectrum | 13 | Digital, D to D & Hi Tech | \$15.00 |
| Sheffield Lab P.O. Box 5332 Santa Barbara, CA 93108 | Sheffield | Pop, jazz & light classics | 10 | D to D | \$15.00 |
| Sound 80 Records 2709 East 25th Street Minneapolis, MN 55406 | Sound 80 | Classical & jazz | 3 | Digital & D to D | \$10.95 |
| Sumiko, Inc. 3000 College Avenue Berkeley, CA 94705 | Reference, Ambience | Pop & jazz | 6 | Hi Tech | \$13.00 |

ords can be categorized as belonging to one of four basic groupings:

- **Direct-to-disc** recordings are made, as the term implies, by passing the musical signals from the microphones and/or instruments directly to the record-cutting lathe, without the use of a tape recorder. The sonic degradation caused by successive generations of tape copies and extensive electronic processing is thus avoided, although each selection must be cut "live," since the master lacquer cannot be edited or corrected.

- **Digital** recordings employ an unusual type of tape recorder which has performance specifications far better than those of conventional recorders, so good, in fact, that digital (often also called PCM) recordings rival direct-to-disc records in transparency of signal quality. Digital recorders operate by converting the musical signal into bits of computer information, storing it on tape in this numerical form, and then re-converting it to a conventional musical signal in playback. Unlike the direct-to-disc process, editing, retakes, and corrections to the final disc are possible when digital techniques are used.

- **High technology** recordings use

conventional tape recorders with a simplified chain of steps between the performers and the final recording. Engineers may remove all noise reduction, compression, and other sound-processing devices from the chain, operate the recorder at very high tape speeds, or use other techniques to "stretch" the capabilities of conventional recording technology as far as possible, and thereby approach the sonic quality of direct-to-disc or digital recordings.

- **Remastered** recordings are made by taking the original master tape of a commercially released disc and producing a new master disc and pressings from it, with extreme attention to quality. The musical material on the disc is therefore identical to that on the commercial release, while the sound quality is considerably better.

Maintaining fidelity

Beyond these four basic production methods, however, a number of other techniques are commonly used by specialty record suppliers as means of maintaining fidelity. Most Superdiscs are made of a vinyl compound that contains no material reground from defective or returned discs; **virgin vinyl**, as this pure material is called, is considerably less prone to surface noise

because it does not contain the impurities found in "regrind." A few companies also use an exceptionally hard vinyl compound originally developed for use in discrete quadrophonic discs, called **CD-4 vinyl**.

Another popular technique is called **half-speed mastering**, a process in which both the master tape and the master disc lacquer are played at half speed, thus easing demands on the cutting equipment and lowering distortion. A few recordings have adopted **45 r.p.m. playing speed** despite their 12-inch diameter, the rationale here again being reduced distortion and noise. And most audiophile discs have **antistatic, non-abrasive plastic or rice paper inner sleeves** to prevent the record from being damaged by storage or transfer.

In the retailing context, Superdiscs are an attractive product type for dealers seeking a healthy-margined, moderate-ticket item for repeat, gift, promotional, and impulse sales. Profit margins on specialty disc typically run 33 to 45 per cent gross, and local price footballing is rare, given that the diversity of releases makes head-to-head competition unusual. Extended sales presentations on the discs are generally not required, and pilferage is not a major problem because of the size of the albums.

As with many specialty products, however, sharp merchandising is required to derive maximum return from Superdisc sales. Industry marketing executives note that explanatory, eye-catching racks and point of purchase materials that introduce the audiophile record concept are essential, as is placement for maximum visibility and traffic.

Well-maintained, clean Superdiscs should be used for most soundroom equipment demonstrations, and salesmen should be instructed to bring the concept up in passing as part of their sales presentations. Baxter Boyington, Marketing Director of Nautilus Recordings a major specialty disc supplier, recommends a minimum of twelve to twenty titles in an initial display, representing a variety of musical interests, as well as a 2 for 1 ordering ratio (order two for each one sold) during the initial trial sales period.

Most superdiscs are wholesaled through networks of distributors that handle a new record labels each, although there are exceptions. Vendor choices will obviously be determined to some extent by local distribution patterns and total catalog size and diversity. Bear in mind, however, that some labels with a relatively small catalog outsell larger competitors because of demand for particular releases, gener-

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The STD 305M has received more praise and sound comment from leading Hi-Fi authorities and manufacturers throughout the world than any other turntable in its class. Manufactured in Scotland. The birthplace of skilled engineering.

For further details of technical specification please contact:

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Yonkers-New York 10701
Telephone:
'914' 965-5818.



ated by artist popularity or favorable reviews.

Special interest merchandising in audio has now reached a point where rapid commitments to new concepts are often necessary; a wait-and-see attitude on new product types can cost retailers the right lines, regional ex-

clusively, and the undeniable advantage of having a product as its popularity crests. Specialty records fall into this category, so if you are thinking about making a commitment to the Superdisc idea, act fast. Otherwise, you may be left out in the cold by dealers who acted faster.

Digital Sound Goes Hollywood

For Hollywood, this is the year of the future.

The huge financial successes of "Star Wars" and "Close Encounters" three years ago sent many major motion-picture studios scrambling for a science-fiction project, and two of the biggest films — Disney's "The Black Hole" and Paramount's "Star Trek The Motion Picture" — have recently reached theaters. Both are pure-Hollywood visions of things to come, with immense space ships, glib robots, inhuman villains, and sinuously beautiful (although sometimes bald) heroines.

All this, plus one innovation of special interest to audiophiles: both of these films-of-the-future have soundtrack albums that were recorded using the technology of the future — digital recording technology, a cinematic first. The result? Two rousing orchestral recordings, heavy on trumpet fanfare, the clash of cymbals, and exotic percussive effects, both with gloriously open, dynamic sound quality, and at about half the price of typical digital discs.

Remember Fantasia?

Of the two, "The Black Hole" is perhaps the more technically innovative, in that both the actual musical soundtrack heard in the theater and the soundtrack album (Buena Vista 5008) were recorded digitally, using 3M's widely acclaimed Digital Mastering System. Disney has been involved with avant-garde cinema technology before, of course; their "Fantasia" was the first movie soundtrack ever recorded in stereo. For "The Black Hole," a 94-piece orchestra was assembled, and the music recorded on the 3M 4-track digital machine and then transferred to 35 millimeter film (most movie scores are recorded directly on film). The same performances, with different microphone placements, were also taped on the 32-track machine, for use on the soundtrack album.

Although initially recorded in analog form and then only digitally mastered (using the Sony PCM-1600 digital recording system), "Star Trek"'s soundtrack album (Columbia JS 36334) is no less sonically impressive than "The

Black Hole." Executive producer Bruce Botnick notes that the album was planned from the first with the audiophile in mind. A simple three-microphone array was used for the recording, to obtain a natural sounding acoustic image and sense of ambience. The sessions were live, with no overdubbing, and special electronics with extended low-frequency response were used to capture the deep bass found in the percussion instruments used.

Super Demo Material

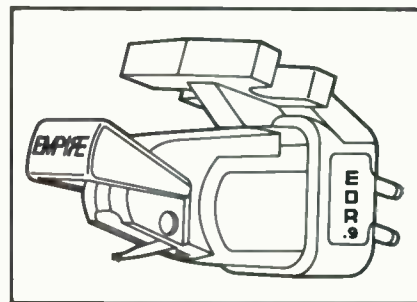
In both discs, the music seems ideally suited to the digital medium. Composers John Barry ("The Black Hole") and Jerry Goldsmith ("Star Trek") have both chosen to build the musical elements of the films around swashbuckling, massed-orchestral overtures, very much in the style of Erich Korngold's dramatic themes for thirties



THE BLACK HOLE

adventure films like "Captain Blood". Barry goes on to a series of brooding, dark, mood pieces which match the demeanor of the film's Captain Nemo-like central character. Goldsmith represents the distances of space and the presence of alien forces through exotic-sounding percussion instruments that clang and echo with eerie effect through much of the score. The effects reach the listener with extraordinary clarity and vividness in both recordings. Either makes a superb audiophile demonstration piece, musically accessible to everyone, spine-tingling in dynamics, and yet with the sort of inner musical detail needed to effectively demonstrate subtle distinctions between components. Check 'em out; it's hard to imagine a better pair of demo discs for the science-fiction hi fi components of the eighties.

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Phase Linear: Marriage 2-Way Street

Phase Linear's view of 1980 — and beyond — is highly optimistic, due in no small part to its acquisition by Pioneer as the decade of the seventies drew to a close.

With the acquisition completed long enough ago to have begun yielding benefits both to Pioneer and Phase Linear, we recently asked Terry Pennington, Phase Linear's chief engineer, to what extent the company is now drawing on Pioneer's technological capabilities.

Pennington stressed first that the benefits have not accrued solely to

Phase Linear. "There's been a mutually beneficial exchange, with Pioneer drawing on our preamp and amplifier design capabilities. We are benefitting from such things as Pioneer's mechanical capabilities, as needed in the area of tape decks, as well as in Pioneer's greater production capacity."



TERRY PENNINGTON
Chief Engineer

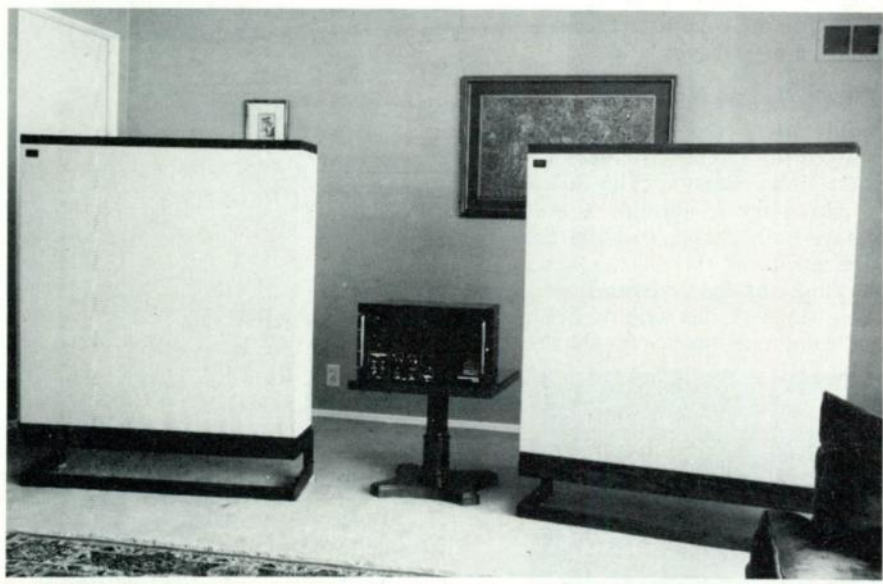
Specifically, Pennington pointed out that his company's first tape deck, the model 7600 cassette recorder, was both designed and built by Pioneer. And, although three new speaker systems, Phase Linear's first major effort to become an influence at the high end of the loudspeaker market, were designed in the U.S., they are being built by Pioneer.

1980 Strategy

For the shorter term, the 1980 year, Phase Linear has three broad efforts underway designed to increase its share of the high end audio market. The focus of the first effort remains in Phase Linear's bread-and-butter business of electronics; the second is on high-end speakers, as reflected in the three new models unveiled in January priced from \$1,000 a pair up to \$2,400; and the third is on pro sound equipment, which Phase Linear will be entering this summer.

Overall, Phase Linear president Don Prewitt promises four or five new products every six months over the next year to two years, enough new products to keep the company's sales curve on an upward diagonal far into the eighties.

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SWISS-MADE Lenco turntables are offered in the U.S. by Benjamin Electroproducts and include models L-55SR, 75SR and 78SR. Users can adjust speed to any value between 30-86rpm, and the 55SR has 16 2/3rpm setting. Prices range from \$210 to \$285. Contact Joe Benjamin, 180 Miller Pl., Hicksville, N.Y. 11801. (516)-931-5558.

AUDIOPLEX, headed by a bright 22-year-old businessman, Steven Kaye, is launching V-Pods, new speaker stands which come in a variety of sizes. Kaye plans to introduce a family of accessory sound aids in the months ahead. Audioplex can be reached at P.O. Box 101, Maplewood, N.J. 07040. (201)-675-6363 or (201)-672-0007.



SP85, BIC/Avnet's new microprocessor turntable, incorporates a digital drive system featuring quartz crystal servo control and is priced at \$239.95. A four-character digital readout indicates actual platter speed and may be used as an electronic stopwatch. BIC is found at South Service Rd., Westbury, N.Y. 11590. Or call (516)-334-7450.



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MORE FOR YOUR MONEY
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What's the hardest thing to learn about selling?

"To prevent your own opinion from overwhelming what the customer wants," says Mike Peltz, assistant manager and salesman for Harvey Sound in New York City.

Peltz, an avant-garde composer and former music teacher who has been a "hi fi nut" since he was a kid, recently advanced to assistant manager status due to his perceptive handling of customers and sales personnel. He's been with Harvey's for four years.

"Selling well is a question of perceiving what the customer needs. If you listen well enough he'll tell you exactly what that is."

The best and most regular customer is one in whom a salesperson has built up confidence, continued Peltz, who said that sometimes means not selling.

"Situations arise when I tell a customer, 'If you hear the difference, spend the money, if not, don't.' They respect your frankness and you usually make a friend who returns to his 'audio source' for advice and future sales."

The Harvey Customer

"We know our market and we go after it," said Peltz who described the average customer as over 25, knowledgeable and a lover of fine sound.

"The first time buyer is important here, but our main sales thrust is directed toward the more sophisticated step-up/add-on consumer seeking to increase his listening pleasure."

Another factor in professional selling is pride.

"There's a rule here that we don't denigrate products that we don't carry. It invites ill will and distrust, and besides, the day of the 'plug it in, blow you up component is gone'," said Peltz.

Knowledgeable and specialized salespeople comprise a vital element in Harvey's selling philosophy, continued Peltz.

"... I tell a customer, 'If you hear the difference, spend the money, if not, don't.'"

Specialized Approach

"Although every salesman here could sell anything from a \$5.99 clock radio to a recording studio worth thousands of dollars, some salesmen specialize in a particular area. For example, Steve Bloom, a whiz with chemistry and computers, understands — and loves explaining the complex language of computer games."

Specialization and overall sales education is a must to combat today's "ferocious competition" in the electronics field, as well as to sell more knowledgeable consumers, according to Peltz.

"Harvey sales personnel frequently attend manufacturer seminars, sometimes three to four in a week, where company representatives demonstrate and explain new equipment — how it works, how to sell it properly."

Despite the challenges of the market, business has "consistently gotten better" at Harvey's. Peltz sums up why: "We're merchandising better, our support services are excellent, we're competitive price wise for the type of equipment we sell and, of course, the quality of our sales and management team keeps improving."

Beyond selling

Shoplifting: Known shoplifters are "aggressively annoyed" at Harvey Sound, said Peltz.



LISTEN,
and sell, says Mike.

"The guards spot them when they walk in, then we let them know that we know they're here by watching — or more intimidating yet, by pretending not to watch them." Discouraged, most shoplifters go elsewhere, said Peltz.

"We also keep good security up front — without a prison like atmosphere, use surveillance cameras and brief employees on shrinkage prevention methods like removal of unused demonstration equipment from counters."

Salesman Slumps: "The emotional state of a salesman is very important. To sell properly he must be outgoing and communicative. If he's not — and he's relatively new — I get him off the floor and talk to him. If he's been selling a while, he'll usually work things out best by himself."

Defective Equipment: "It happens on occasion, especially with the buyer who insists on sealed factory label equipment. I try to isolate the problem via the phone by asking questions. Some people get hot under the collar and it becomes necessary to calm them down before anything."

Professional Sound Systems Start With The Stanton 881S

Stanton Magnetics presents the new 881S Professional Calibration Standard Cartridge. It's the cartridge preferred by recording engineers worldwide and sets a new standard for home audiophiles. Its patented, low mass Stereohedron™ stylus tip makes possible the flawless reproduction of high velocity modulations present on today's finest recordings. The Stanton 881S... where great sound begins.

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Dual cassette decks
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1 Direct Load and Lock (DLL) system.

There's no door between you and the cassette. You simply insert the cassette and it locks in perfect alignment. There's no eject button either. To remove the cassette—even while it's operating—just pull it out. (All four models)

2 Equalized record-level indicators.

They read the high-frequency boost that all cassette decks add to the incoming signal but only equalized meters read. This minimizes the possibility of oversaturating the tape and assures optimum dynamic range. (All four models)

3 Full metal capability, plus...

...six-way bias/equalization, LED peak-level indicators and switchable overload protection. (820, 830, 839RC)

4 Electronic editing in playback.

Now you can fade out unwanted materials during playback—while you're listening to the tape. No more living with unwanted sounds, interruptions and abrupt endings. (830 and 839RC)

5 Automatic reverse in recording and playback... plus wireless remote control.

And a two-motor, dual capstan, twin belt closed capstan drive system; computer-logic solenoid controls; 8% pitch control; automatic tape slack prewind; two-way memory stop and play; and output level controls. (839RC)

6 And our franchise policy ensures stand-out profits because we've limited ourselves to no more than 200 dealers until July 1, 1982.

That's 1982.

Dual

Videodisc Action Heats Up

STILL GUESSING about which format will reign supreme? Looks like video dealers will have more guessing games to play in the near future as the competition heats up in the videodisc arena in much the same way as it has in the videocassette category. The recent announcement that Matsushita is preparing to launch a videodisc player incompatible with the already-announced systems by RCA Corporation and N. V. Philips of Eindhoven has caused a great deal of interest in the video marketplace.

The industry worldwide has long been anxious to determine which way this Japanese giant would place its technological powers. Discussions had been held with RCA at one point, regarding the possibility that they might license the company's disc technology. In addition, Matsushita's JVC subsidiary had also been working on its own versions of disc technology. The final decision by Matsushita was to discard its own system, and to side with JVC's VHD (Very High Density) solution.

And where stands RCA and Philips/

Magnavox? While Matsushita has announced no specific marketing plans to date, Magnovox has had its product in stores for about one year, retailing for around \$775. With great fanfare, RCA announced in-depth plans to market its own product through its vast distributorship. Hopes are that product will begin to filter through during the first quarter of 1981, at a suggested retail of about \$500.

At this juncture, Matsushita plans are sketchy, with launchings expected to rollout from Japan and onward to the United States and Europe. No release date was issued as we went to press.

Both the Matsushita system and the RCA system work on a capacitance principle similar to that of a conventional phonograph. The Matsushita system, however, uses an electrode to guide the stylus across a grooveless record. The RCA SelectaVision system uses a diamond stylus to retrieve audio and video information from microscopic pits on the disc. Philips, of course, uses an optical pickup system.



ESQUIRE SWEEPSTAKES winners' names are drawn by Vince Marini (l.), east coast ad manager, and Cindy Still, marketing services. Esquire ran the sweeps in conjunction with vcr owner survey, giving away a color tv set.

Consumers Are Curious — Video

CONSIDERING A VIDEO SHOW? According to Elayne Haggan, vice president and general manager of the New England Video Center in Boston, audio and video dealers planning to promote and present video products can learn from her recent experience.

According to Haggan, "Since home video is so new, not many people know much about it yet. As the only consumer-oriented video store in our area, it is our job to teach people what



ELAYNE HAGGAN

is around and how to use the equipment. People who came to our Show seemed eager to buy something, although they weren't necessarily ready

for a major investment."

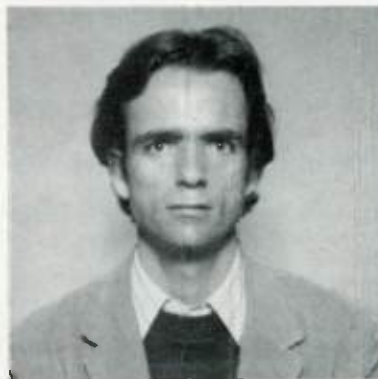
To help them "buy something," Haggan emphasized that dealers should stock sufficient quantities of smaller items such as accessories, magazines, books and tape care kits. The store also used a special price promotion on a videocassette recorder to capture interest. Another "absolute necessity" at a Home Video Show is a videodisc, Haggan adds.

"People are curious and it is a big draw, especially if it is not available in your area yet," she said.

How successful was New England's Video Show? The store attracted over 1000 visitors, and drew about \$30,000 in sales. Held in conjunction with the store's first anniversary, the show used US JVC national sales manager Dick Quinlan to demonstrate a range of JVC product including its HR-6700 videocassette recorder. Additional promos included drawings for \$100 gift certificates, a newsletter and discounts on accessory products.

"There's a long term gain," Haggan concluded. "We are still seeing sales as a cumulative effect of the show."

MEET THE STAFF



Kevin McAuliffe is literally our foreign correspondent, his beat the Japanese electronics industry. Reporting from Tokyo, the 28-year old McAuliffe has since his graduation from San Diego State University in 1973 travelled throughout Asia working as a technical copy editor, a teacher, and even as a tourguide. Kevin's on-location reports begin in the March issue of HIGH FIDELITY TRADE NEWS.

LETTERS

(Continued from page 4)

not get in a receiver. These products became available in April, and by June at CES what does Kenwood do, but introduce receivers with high speed circuitry. The buying public knows that anything new and good will be available cheaper soon, so they wait. Besides that, Kenwood did not even give enough time to build up high speed momentum with the separates so that the receivers did not do that well anyway.

In April, last year, JVC introduces

metal tape decks; they can't deliver the high end model but the KD-6 is available. Then two months later, in June in Chicago, JVC introduces the KD-A7 which replaces it at \$20 more. You try to build up a momentum with a model, and then it's gone.

The biggest factor in sales is recommendations of equipment by friends. When the buyer sees a friend with a product he likes, his fear of complex componentry and fast talking salesman is diminished because he knows his friend likes his. He goes to the store to

buy it, and it's discontinued.

And what about the lack of logic in the current lines out. JVC has a 50 watt receiver with 0.03% for \$300. But their "step up" is a 35 watt with DC amplifier and equalizer and \$90 more — but with much less power. But the buying public knows little about DC amps and why they are better. JVC does little to help that situation. Sony introduced a new cassette deck line. The \$320 model has fancy LED meters, but the more expensive \$400 model has conventional VU's. And Sony's \$600 deck is three head but the top of the line lab series \$1200 machine is two-head. The hi fi buyer can only wonder which is better.

I think the hi fi business has grown because of true competition and a quality buying public. And hi fi manufacturers have never felt bad about advertising directly against the competition. But advertising these days seems to lack credibility. Hitachi advertises that maybe Sony and Yamaha are wishing they had MOSFET power amplifiers. Yet the V-FET and MOSFET are virtually the same thing, manufactured slightly differently, with all the advantages of each exactly the same. What do you think the knowledgeable hi fi buyer thinks when he reads the Hitachi ad; when he read ads by Yamaha and Sony five years before which said the same thing.

I think the cure to what ails the hi fi industry is the manufacturers offering product which in their opinion they think is better — not which they think will sell better in the market place; and product mixture which makes sense — so as you spend more *all* the features get better. That's the way it used to be, and the products kept getting better and better and the industry grew

"The buying public knows anything new and good will be available cheaper soon, so they wait."

and grew. Models stayed until significant improvements were able to be offered, and when they were, it was usually at a lower price. Today model changes are just the same old thing at the same old price — and all it adds up to is confusion among not only the buying public but the audio dealers themselves.

Manufacturers . . . let us live with the models you produce for just a little while so you can really make something better next time, and save your

HOW YOU CAN TURN CLAIMS INTO FACTS—LISTENERS INTO BUYERS—AND INVENTORY INTO CASH.

The only thing better on your sales floor than a BPI 3000C is an award winning sales person. The BPI 3000C has, however, turned many marginal sales people into top producers and top production on the sales floor is the name of the game. You spend a lot of money on advertising to generate store traffic and that traffic has to be sold or it's just wearing out your carpet.

SALES; THAT'S WHAT THE BPI 3000C IS ALL ABOUT

Important audio specifications are quickly and conveniently displayed in an understandable way; they are displayed with numbers. When you make statements about your products that can be backed up by an impartial digital display, you are establishing a level of credibility that can be achieved in no other way.

COMPARE TWO STEREO UNITS SIMULTANEOUSLY

Comparison of two stereo units is easily accomplished with the 4 channel inputs on the BPI 3000C. This is one heck of a way to close the audiophile — or upgrade a customer to a higher quality system!

THE ONLY ONE OF ITS KIND

The BPI 3000C is the only completely self-contained audio analyzer on the market today with digital display, push button functions, a full complement of internal isolated oscillators (including square wave), and styling that compliments your merchandise.



FEATURES: • Digital readout is easily understood, minimizes errors in reading • 4 channels permit comparing two stereo units simultaneously • IMD & THD set levels matched permitting switching from THD to IMD without additional level setting • Convenient one-package unit contains built-in loads • Accurate power measurements by sensing and automatically multiplies current and voltage across loads.

I want to know more about the BPI 3000C and how it can help me. Please send additional information immediately.

Name _____
Company _____
Address _____
City _____ State _____ Zip _____
Title _____ Phone _____



7853 Balboa Ave., San Diego, CA 92111, Phone (714) 279-3344

LETTERS

tooling costs, and save us dealers, and the hi fi business, in general, from disaster. Please, try and remember the

"... remember the way it used to be when you made something you were proud of, and it lasted until you made something better . . ."

way it used to be when you made something you were proud of, and it lasted (until you made something better), and you educated the public about it's merits with educational advertising.

An Audiophile-businessman Dealer
Henry Alterman
Owner
Alterman Audio
New Orleans

To the Editor:

The article in your January issue by Harold Weinberg does hit home. As one of the "high-end" dealers (who usually take a tongue-lashing at every-one else's expense) of recent experience, I can only agree that the panic that is now taking place has ample justification . . . at least in the minds of those type of dealers who never know what the hell is going on in the first place!

The situation reminds me of the American-car used-car salesman. He just can't seem to figure out that perhaps no one wants his 8-mpg juggernaut! It comes as no surprise to me that the audio industry should parallel the auto industry in many ways. The same types of misconceptions have existed from the outset. I know. I was an early "victim"!

Education is mentioned. This is an area where the high-end dealer does everyone else (saleswise) a favor. More often than not he is the one who finally sets the prospective customer on the right path . . . i.e.: shopping for SOUND and QUALITY. At the store which I work in (Audio Gallery, Sarasota) one only has to spend a few days to get an idea of the widespread misinformation that permeates the buying market. We are constantly "debriefing" or questioning the buyer about his wants, needs and ability to tell the difference. The ideas that have been instilled in him are classic brainwashing symptoms. Where do they begin? At the roots of the industry! He has

never read a bad review in any publication; he never knew that *European* equipment existed; he does not know the PRIMARY function of a turntable; he equates wattage (like horsepower) with prestige; he equates biggest with best; SHE is deathly afraid of audio salesmen; he is afraid of HER as an audio salesperson(!); the best price is always the best deal, and if it isn't, just what is the truth?!

Well, this could go on all day; no one person has all the answers, and I fear that many of them don't understand the questions anyway! On the large scale it is up to each CONCERNED and DEDICATED dealer who knows his product well to point out the LIES and MISCONCEPTIONS that continue to abound. He should fight against the dealer who unfairly makes comparisons using defective merchandise. He should hold firm on pricing while emphasizing his stores' advantages and long term value. He should provide the incentive to make a realistic comparison with the customer's present equipment . . . or the equipment he is contemplating from another dealer.

While the last remark may sound somewhat dubious, ask yourself: how much confidence do I have in my product? If the answer is negative, or questionable, then by all means don't accede. I suppose this is rehashing a point, but I feel it's one that is of utmost importance.

"He (the customer) has never read a bad review in any publication . . ."

Lastly there is the rep and the manufacturer. Mr. Weinberg's observations about reps are good; perhaps too good. After all, ask yourself: why did the manufacturer bother to build this item if it is no better than the previous one except by a few percentage points!? . . . and, why do they make 15 models of receivers when the least expensive one sounds just as good as the larger one . . . perhaps better!? Does the product really do what it's supposed to? (Of course, WE have to know what it's supposed to do?) Does the manufacturer's information about the product lead us to where it belongs in the real scheme of a system? Do the numbers (specs) directly relate to sound? . . . or anything that the prospective customer can call useful?!

I shall make one final analogy. Is an automobile designed to hit brick build-

ings? Why *should* it be?? Wouldn't *avoiding* an accident be more reasonable? Is a living-room sofa ideal support for driving? Should safety devices only protect us from *certain types* of collisions? Does the thing *have* to be redesigned each year? If it's such a quality product (as the ad might say) why is it worth little at trade-in time? If it does its job so good, why get a new one every two years?!

In other words, perhaps many of our products are not doing the job they are intended to do. But until we educate ourselves better, we'll never be able to pass along the best ideas to the consumer and manufacturer

"... manufacturers (turned) our quality oriented business into not much more than a used car business."

alike. . . .

In closing, I must say that Harold Weinberg has established a criteria for articles in your magazine. I can only hope that the trend continues in his favor, as a more knowledgeable industry will be highly beneficial to us all. Thanks for listening. . . .

Richard E. Muller
Audio Gallery
Sarasota, FL 33581

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HOW DEALERS ADVERTISE



BY
ROGER C. PARKER

There's nothing more telling than a good photograph, yet good photographs rarely appear in stereo advertisements.

This is in spite of the fact that stereo retailers around the country spend tens of thousands of dollars a year on photography.

Why the wasted money (and lost sales?)

The answer is simple: most retailers don't communicate their needs to the photographer.

Partly this is because most retailers don't know what they want their photographs to say. They want "photos" in their catalogue or tabloid, but they don't take the time to specify what each photo should consist of.

As a result, they hire a photographer — loosely defined as anyone who owns a Nikon, the photos are taken, and a certain amount of time later, finished products are delivered.

Needless to say, the photos are rarely what the retailer wanted. With the photographs in hand, he can now

criticize and explain what he didn't want, but it's too late. The deadline is tomorrow, the money has been spent, so the photos must be used (or the project scrapped).

There has to be a better way, and there is. It's called "planning." Each photograph must be painstakingly planned in advance. A drawing or sketch must be prepared showing what each finished photograph should look like.

In addition, deadlines must be posted realistically far in advance, the media where the photos are to be used must be specified, equipment, models, and location must be lined up, and a working budget established.

Direction Is The Key

But, most important is the drawing. The drawing is vital, for the simple reason that most photographers are not Art Directors. Although highly-

"The best photographer is useless if he doesn't take the right photograph . . . photographers are not mind readers."

skilled technicians in their own right, even the best photographers need a starting point, a direction.

(Continued on page 56)



By **Gene Galipeau,**
Airbrush Artist

As an artist and photo retoucher, (Airbrush Artist), it is my job to correct mistakes that could have been avoided by careful thought and planning.

When taking photographs for an advertising campaign, tabloid, or a single

ad, follow these tips. You'll make my job easier, and save yourself time and money.

1. Start With A Layout

Effective photographs begin with a detailed drawing of what the finished photograph, and the finished ad, will look like. There's no way a photographer can take an effective photograph unless he knows what he's trying to accomplish. This beginning can be as simple as a sketch, or can be complete to the point that light effects and shadows are shown.

2. Choose the Right Format

Format refers to the type of camera and film-size used. Select the format that's right for the situation. Although 35 mm cameras are right for in-store candids and employee shots, for example, the ideal format for product shots and at-home location shots is 4 x 5, or 8 x 10. The larger film size of

(Continued on page 56)

PHOTOGRAPHY

HOW TECH HI FI DOES IT

The Hi-Fi Book, Tech Hi-Fi's annual catalogue, stands at the top of stereo advertising. Its use of color photographs to set a mood positions **The Hi Fi Book** head and shoulders above anything else available.

To find out how Tech Hi-Fi manages to produce such an outstanding masterpiece each year, HFTN contacted Ric Deutch, who runs Tech Hi-Fi's advertising program. Ric outlined three things that contribute to the success of **The Hi-Fi Book**:

"One: we give our photographers very close art direction. Just hiring a
(Continued on page 58)



IN ADVERTISING



PARKER

(Continued from page 54)

Even a rough sketch will often be enough to guide a photographer, giving him an idea of perspectives, size and spatial relationships, and lighting.

Without a sketch, however, the photographer does what he thinks is best — and his judgment can be totally at odds with the final use of the photograph. Perhaps the best example of this is a horizontal photograph, when the ad layout specifies a vertical photograph.

Unless the photographer was told to take a vertical photograph, he can't be blamed. Yet, how many retailers take the time to tell their photographer what shape photos to take?

It all comes down, once again, to the primary of **planning over talent**. The best photographer is useless if he doesn't take the right photograph. So, he has to be told what photograph to take.

Remember: photographers are not mind readers. They're like printers. They do fine work, are mechanically and technically very advanced, yet they

don't know — and can't be expected to know — what's going on between your ears. You have to take the time to tell them what you're trying to accomplish — or work through an intermediary (i.e. Art Director) who can.

So, give yourself a break. Don't go off half-cocked. Plan your photographs in advance of the photo session. Give the photographer as much information as possible — including a sketch of each photograph. And give him enough time to do the job right. Then, if the results aren't what you wanted, it's his fault, not yours.

GALIEPEAU

(Continued from page 54)

these cameras gives added clarity, plus the ability to enlarge the photo to any working size — from full-page spread to poster. The larger negatives are also easier to work with when retouching is needed.

3. Quality Control Your Components

Before having stereo components photographed, check them carefully. Nobody likes to see a beautiful photo spoiled by components that are defective, scratched, or chipped. The time used to retake the photograph, or retouch the scratched front panel, is money that you're throwing away.

4. Choose the Right Props

Props should support the product, not overwhelm it. I have seen many good photos become just average because of poor props, or the lack of them. It's a good idea to use props that photograph well, or are related to the subject. For example, with a turntable, use headphones, album covers, etc. Avoid expensive props — grecian urns, harpsichords, etc. They distract.

5. Identify Your Photographs

You may know what the components are, but the next person to use the photograph may not know a woofer from a tweeter. For this reason, it's a good idea to place a 4 x 5 file card in an area of the photograph that will not be used in the final picture. By keying each photo to a page layout or ad title, confusion is eliminated.

6. Planning Prevents Disappointment

Graphics and photographs should harmonize. One of the worst things you can do is come up with a layout after the photo is taken. For example, if you intend to reverse type out of an area of the photograph, make sure the photo is dense enough to support the type, and that the type does not obscure important parts of the photo. (I

the ULTIMATE EQUALIZER—

Soundcraftsmen's NEW

'SCAN-ALYZER' EQUALIZER

MADE IN U.S.A. \$499
Model AE 2420-R, including Case

GUARANTEED to improve —and enhance— any fine stereo component system!

The Patent-Pending DIFFERENTIAL COMPARATOR circuitry of the "SCAN-ALYZER" EQUALIZER IS THE KEY TO HIGH PRECISION ACCURATE EQ analysis. The basic simplicity of the DIFFERENTIAL COMPARATOR circuitry makes it possible for even a novice to accurately EQ his room and his system, yet that same circuitry is so highly accurate it can actually be used for 0.1 dB laboratory measurements in EQ analysis. This combination of

equalizer and analyzer creates a functional component that should be an integral part of every high quality home stereo system. The "SCAN-ALYZER" EQUALIZER with its accompanying COMPUTONE CHARTS, can be used in a home stereo system for so many important functions we can't begin to list them here. See your nearest Soundcraftsmen dealer, or circle Reader Card, for complete information.

5 EQUALIZERS from \$249 to \$550



SE400—SILVER OR BLACK \$249.



RP2201-R \$200.



RP2205-R \$370.



TB2044-R \$500.

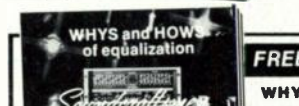
3 STATE-OF-THE-ART PREAMPS, \$399 to \$699



SP4001 \$499



SP4000 \$300 (not shown)



SP4002 \$600.

3 CLASS H 250w AMPS from \$649 to \$949



EA5003 \$949.



HA5002—\$700.



PA5001—\$649 (not shown) \$649.



FREE! 16-page Full-Color Brochure

WHY'S AND HOW'S OF EQUALIZATION

Includes TEST REPORTS, complete specifications, Class "H" amplifier ENGINEERING REPORT, EQ COMPARISON CHART, and the "WHY'S & HOW'S" of equalization—an easy-to-understand explanation of the relationship of acoustics to your environment. Also contains many unique IDEAS on "How the Soundcraftsmen Equalizer can measurably enhance your listening pleasures;" "How typical room problems can be eliminated by Equalization;" and a 10-POINT "DO-IT-YOURSELF" EQ evaluation checklist so you can FIND OUT FOR YOURSELF WHAT EQ CAN DO FOR YOU!

SEND \$6.00 FOR EQUALIZER-EVALUATION KIT: 1-12" LP TEST RECORD, 1 SET OF CHARTS, 1 CONNECTOR, 1 INSTRUCTION FOLDER
Made in U.S.A. by SOUNDCRAFTSMEN INC. • 2200 South Ritchey • Santa Ana, CA 92705 U.S.A.

MOST MUSIC LOVERS HAVE A PROBLEM. OVERWEIGHT.

Not the kind of overweight that requires cutting out chocolate mousse. We mean the kind that causes record wear, performance below potential and, alas, audible distortion.

Only an Ortofon dealer can help.

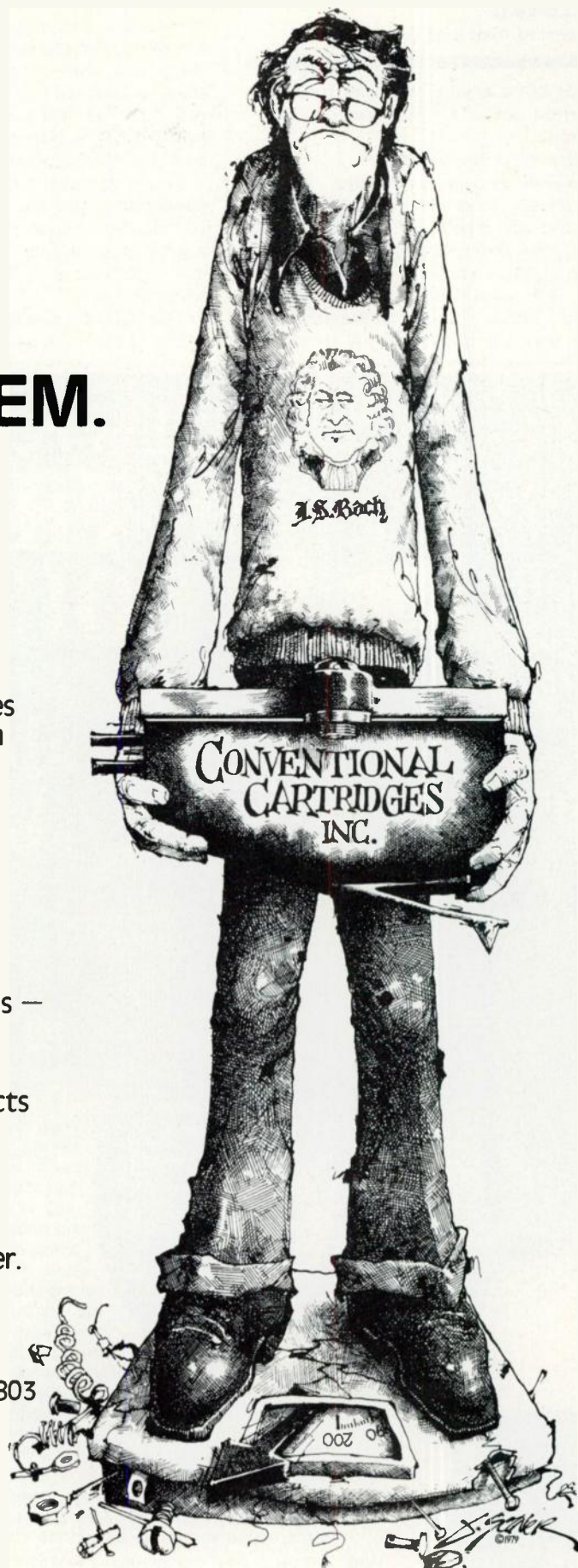
Only an Ortofon dealer can reduce effective tonearm mass by up to 40%.

Only an Ortofon dealer can offer an Ortofon LM cartridge weighing 2.6 grams — that's about half the weight of a conventional cartridge.

As for the kind of overweight that affects your waistline, just eliminate 3-martini lunches with reps, cheese cake, banana cream pie and halvah.

Contact us. We'll tell you how you can have an Ortofon Weight Reduction Center.

ortofon 122 Dupont St.
Plainview, N.Y. 11803



GALISPEAU

(Continued from page 56)

don't know anyone who can read type reversed out of a white area of a photograph.)

7. Bracket Your Exposures

When having a product photographed, have the photographer bracket his exposures, and take more than one shot per setting. One exposure slightly over, and one slightly under, will give you a better choice of which photo to use. Bracketing will give you alternative photos to use in

newspapers and magazines, depending on which requires more contrast. Bracketing also gives you "safety" shots, in case the original exposure was off (due to a faulty lightmeter, or improper film development.)

8. Avoid Dating Your Photographs

To get the most mileage out of your photographs, do not date them unless you absolutely have to. It is a waste of a good photograph if you cannot reuse it because it is quickly dated by seasonal props.

9. Use a Studio Environment

The ideal setting for component

photography is a studio. The photographer has all the elements of his trade to create the best possible photo. Just the fact that he can control the lighting is a large factor in creating a good photo. Studio environments are also preferred because of a lack of confusion caused by people "wanting to watch" and getting in the way.

10. Learn More About Photography

Having a knowledge of the process involved in good photography is essential. It will make your advertising campaign easier, less expensive and more effective.

Remember: retouching should be used as a last-resort to make a good photograph better, not to correct mistakes that should not have happened in the first place.

TECH HI FI

(Continued from page 54)

photographer and saying: "Take good pictures!" doesn't work. Our photographers work from very tight layouts.

"Second; we hire the very best photographers, and pay top dollar. We're using the person we consider the best in New England, and he's very expensive. But, we're getting full value for our money. In other years, we tried to save money, and didn't get the results we were after.

"Third: we aim for story appeal in each photograph. That's where I feel our 1980 catalogue is the best ever. Instead of showing stereo components and people arranged together in a haphazard way, we focus on their *interaction* — how people enjoy stereo in the home. This, of course, echoes David Ogilvy's dictum that every photograph should involve the viewer and tell a story."

The format of *The Hi-Fi Book* sets off the photographs to best advantage. *The Hi-Fi Book* is printed horizontally, 8½ by 11. Each of the system photographs occupies a full page, bled off the top and bottom and sides. No type appears on the page. System descriptions appear on facing pages.

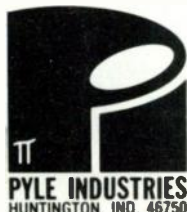
On the front cover, note the way the title is reversed out of "empty" areas of the photograph, leaving "action" areas untouched. Note the way the title is subordinate to the photograph, yet very present.

Needless to say, the first step in such an ambitious undertaking as *The Hi-Fi Book* is to know what you want to sell in each price range — and arrange to have the equipment in stock, on display and enthusiastically supported by salespersonnel.

it's really
THE
SOUND
she
loves
PYLE
Musical
Instrument/Disco
Speakers

When music experts start talking about real musical instrument and disco speakers... the insiders say, PYLE. If you want big sounds, sweet sounds or low-down sounds, PYLE does it better and more competitively. PYLE musical instrument and disco speakers range from 8" through 15" with magnets

as large as 70 ounces. The 70 ounce models feature huge 2½" high temperature voice coils, capable of handling over 300 watts. Also available is a wider variety of treble horns, including the hottest Solid-State Piezoelectric super horn around. And, this sound started over a generation ago with engineers, technicians and goals on the part of PYLE people. To get full information on the complete PYLE line of speakers write for your free catalog. You'll like the clutter-free policies and terms as well as competitive pricing. What's more, you'll quickly learn what we already know... it's really the sound she loves.



SANSUI SELECT SYSTEMS

A systematic approach to increased sales.

The best way to increase sales is to sell to the millions of men and women who do not yet own hi-fi components. And the best way to sell them is to sell Sansui Select Systems.

Sansui Select Systems are designed and engineered to appeal to the demanding first-time buyers who want a brand name they know, respect and can rely on; who expect top-notch music reproduction with minimum fuss; who want their hi-fi to offer that rare combination of styling simplicity and the sophisticated "audio-look" which includes digital readouts and LED displays; and who insist, above all, on great value.

Sansui **Select System 80** offers all this, and more. It features our new **A-80/T-80 matching amp and tuner** which take advantage of many unique Sansui technologies.

The A-80 DC-Servo integrated amp delivers a big, clean 65 watts/ch. min. RMS both channels into 8 ohms from 20-20,000Hz. THD is an inaudible 0.05%. And the A-80 offers all the features and convenience hi-fi buffs want — like power meters, variable loudness control, calibrated LED peak indicators, and even a "head amp" for MC cartridges. The T-80 uses Sansui's patented Digitally Quartz Locked LSI tuning system, famous for its error- and distortion-free performance.

So that your customers can record from two sources, we included the superb **D-90 cassette deck** with switchable bias and EQ, and timer start facility — as well as the computerized, fully automatic, direct drive **FR-D4 turntable** with Sansui's unique Dyna-Optimum Balanced (DOB) tonearm for accurate, friction-free performance.

The **GX-90 cabinet** with smoked glass doors protects all the components, including a sophisticated control system

and handsome digital clock, the **AT-15S Audio Program Timer**. The 3-way **SPA-3700 speakers** use impressive acoustic suspension 12" woofers and offer mid and high level controls. Recommended amplifier power range is 20-100 watts.

Contact your Sansui rep today — because with the name Sansui, and with the extensive ad campaign in such broad-based consumer books as *Playboy*, *Penthouse*, *Skiing*, and *Popular Photography*, and hi-fi books too, Sansui Select Systems are an unbeatable system.



SUPERCOMPO
SELECT SYSTEM 80

Sansui

SANSUI ELECTRONICS CORP.

Lyndhurst, New Jersey 07071 • Gardena, Ca. 90247



Customers Playing More Than One?

Sell Them Multi-Play, Says BSR Exec

What's the basic advantage of multi-changer turntables as compared to single play units?

"Convenience," says Vic Amador, president of BSR's consumer products group. "Five or six years ago there was a viable reason to 'go single' if you were worried about record care and achieving performance specifications," he continued. Today, when hi-end single and multi-play units perform comparably, the convenience of playing more than one record becomes a selling point, noted the vp.

The Mood's The Thing

"With single play, you could be switching records every 18 minutes, but with a 6 play multi unit you would have up to two full hours of listening. And that's quite an advantage — especially when the music's purpose is to create a romantic mood," quipped Amador.

An increased market demand, created in the last four to five years, caused many turntable manufacturers to review their technical resources and devise a multi-play unit that achieved the performance specifications of the hi-end single-play unit, said Amador.

"What we have and continue to find in the American market that grew up with the record changer, is that when it thinks turntable, it still thinks in terms of the multi-play unit."

Market Demand

"Consumers began to demand hi-end multi-play systems and turntable manufacturers are now producing them."

BSR is no exception. The company is presently developing a new line of multi-play turntables that will feature super hi-end models. These will join BSR's Accuglide turntable, the XR-50, which lowers and raises records gently without dropping them.

According to Amador, the new breed of turntable to be manufactured by BSR and other companies promises to "look and perform like the finest single-play unit, but will have the insertion of a multi-play spindle that allows you to play more than one record."

To achieve this goal emphasis will be placed on the turntable's drive system and tonearm, said Amador.

"In our new turntables we're using a belt-drive system, which is much



VIC AMADOR
In favor of romance.

***"... the American market
... grew up with the record
changer ... when it thinks
turntable, it still thinks ...
multi-play ..."***

***"... several myths ...
often interfere with multi-
play acceptance."***

quieter than a direct-drive one." With direct-drive the turntable is part of the motor, he explained. There's no isolation and motor noise could be picked up by the turntable. The belt driven unit uses a resilient belt between the motor and the turntable that effectively dampens any motor noise and improves overall turntable performance," said Amador.

"Ideally the tone arm wants to be invisible, rigid and lightweight so it avoids contributing to the mass of the stylus," he continued. Previously, manufacturers had placed their empha-

sis on drive systems and motors and not enough consideration was given to the tonearm's function in sound reproduction.

"Now there's a very definite trend occurring that utilizes high-quality, low mass tonearms such as Dual's ULM," said Amador.

Myths

Although the multi-play market is established and the product has been proven, several myths, believed by both salesmen and consumers alike, often interfere with multi-play acceptance.

"Some people think there's something wrong when the records slap together," said Amador. "The recorded information is stored in the grooves. Even without the groove guard, the rim thickness that acts as a buffer, the record only hits the top surface of the record, which contains no information."

Another myth is that multi play has more mechanical parts, and therefore more places to malfunction, whereas single play has only one, continued Amador. "This was true with the pure manual single-play unit, but with today's fully automatic turntables, which place and remove the tonearm automatically, the same amount of parts are built in."



Model 101



Model 104aB



Model 105 Series II



The Profit Line



Whether your customer is being guided by size, price, available amplifier power or his concern for furnishings, there is a suitable KEF loudspeaker system to offer at a profit.

When KEF designs and builds a loudspeaker, the most advanced computer-aided digital techniques are used to achieve a "Target Finish Response" and integrate the component parts into a Total Design Concept.

The story is as logically simple or technically complex as your customer could require, and is all fully documented to make your presentation easy.

KEF is also the only manufacturer of high quality loudspeaker systems to offer you the unique—and proven—additional profit option of a full range of loudspeaker kits and drive units, supported by complete technical specifications and cabinet construction plans. Plus the advantage of auditioning the finished kit right in your store prior to purchase

Throughout the entire line, KEF can be profitable for you.

Corelli



Calinda



Cantata



KEFKIT



Model 303



Model 304



KEF Electronics, Ltd.
c/o Intratec, P.O. Box 17414
Dulles International Airport
Washington, DC 20041

Dealers In Driver's Seat

One of the most significant changes in the consumer electronics industry has been taking place with little notice.

The first strong indication became apparent to industry observers in late 1978 and grew in strength in 1979. If the trend continues, by the end of 1980 the most significant change of the decade will have occurred despite the fact that many people in the industry still won't have recognized this change.

The change? A transition from a manufacturer-dominated industry toward one of partnership between retailers and manufacturers.

Yes, We Have No Retailers

One example of how some people are ignoring this trend, and the need to respond to it directly and positively, occurred at a recent "industry function." The purpose of the function was to honor those people who contributed to the growth of the audio industry by enshrining them in a "hall of fame." Which is a very good idea.

But, at best there were no more than three or four retailers in the vast room (and no retailers have been admitted to the hall of fame). As far as the eye could see there were manufacturers, trade media people and a large contingent of reps. But only a very few retailers. I believe the trend toward a retailer-dominated industry will be even stronger in 1980. 1980 will be a difficult year. The economy is uncertain and so are consumers.

Sales will still be made, but the same sales and gross profit performance by a retailer will require more expertise and more work.

The evolutionary trend of stronger retailers will accelerate as weaker retailers fold while stronger, smarter retailers get stronger still. It's a fact of life that the rich usually get richer during lean times. And the audio industry will be no different.

What is different this time around compared to 1972 when audio sales last flattened out, is the emergence of stronger local, regional and national retailers. If one of the big 20-30-or more store chains operating in three or four or more cities decided to blow out a brand it doesn't effect just one city but several. And if another strong retailer decides to join in as recently happened to one brand in Los Angeles,

the many independents have little choice but to go along, causing that brand severe harm.

The point was brought home to me early in my tenure in this industry when I was visiting with the marketing VP of a major audio chain. I was making some important pronouncements on the future of the industry and explaining how our newly increased ad budget would have a large impact when the retailer interrupted me politely and asked how large our budget was. Almost \$2 million, I replied. (That was several years ago, —

"Trying to cram more goods into the pipeline has already resulted in having the pipeline spit these goods right back out for a few manufacturers."

our budget is bigger now). That's terrific he said, it's almost as much as we spend!

Having removed my foot from my mouth, I spent the rest of the day listening to this person, who by the way is now one of Clarion's largest accounts.

The consumer electronics industry, particularly the audio portion of the industry, flourished as the distribution pipeline grew and more and more new products were entered into the pipeline.

Today, that pipeline is full and it has nowhere else to grow. The pipeline already reaches every city and every type of retail establishment.

Trying to cram more goods into the pipeline has already resulted in having the pipeline spit these goods right back out for a few manufacturers.

But back to my basic thesis: retailers have discovered that they are now the equal partners of manufacturers. In a few cases some retailers are even acting as the senior partners.

This is a trend which will accelerate because of the growing strength of the



BY
DON COLEMAN

well-established retailers. And because retailers are emphasizing their importance to manufacturers in numerous subtle and not so subtle ways.

The New Truth

The net result of these changes in retailer growth and equally important in retailer perception, is a different attitude which I call the new truth.

The "new truth" means retailers are no longer content to serve as a conduit for no-profit products no matter how "big" the product name.

The sophistication of retailers, both large and small, who more fully understand their place in the market is another aspect of this. Some retailers are choosing to become volume sellers, while others are choosing the personal service route, particularly in car stereo where installation can make a dramatic difference in sales and profitability.

The price of entry into the business has zoomed. Once a small storefront and a few pieces of merchandise obtained on credit from a friendly rep were all that was needed. Today it's a different story. It takes money — a great deal of money to get into the business and to stay in the business. The only retailers who will survive are those who understand the need for profits and return to equity. And in the same vein, the only manufacturers who will survive and grow are those who will understand the needs of their partners, the retailers.

I like to think that along with our many product firsts, we at Clarion are also among the first to understand this basic change in how we all relate to each other.

Don Coleman is senior vice president marketing for Clarion Corporation of America. Prior to joining Clarion, Coleman worked for Ford where he held a number of management positions. He joined Ford after receiving his Masters of Business Administration Degree from Stanford University School of Business.

INTRODUCING 3 DECKS FOR CUSTOMERS WHO HAVE MORE TASTE THAN MONEY.

Finally. Cassette decks for the music lover with a gold ear and a tin purse.

Top of AKAI's new 3 model offering is the GX-M10, featuring our exclusive deluxe Twin Field Super GX head designed for optimum performance on metal tape with improved specs on all conventional types, as well.

The GX-M10, at \$299.95*, also includes our Instant Program Search System that seeks out and plays any one of 9 separate selections.

AKAI's CS-M02 is a metal-capable deck with the economical Sendust head, that gives superb results on all tape formulations at a cost of only \$229.95.

Both units are dazzlers at twice the price with super deck features like high-current erase heads for metal tape, auto

play, Dolby** noise reduction, fluorescent bar meters and a timer switch record/playback capability.

And for the first time buyer, AKAI offers the CS-M01, an amp-style deck that gives handsome results on CrO₂, normal and FeCr tape. You'll also find Dolby, mono/stereo mic jacks, a multiplex filter, auto-stop and the timer record/playback capability. Tagged at \$179.95.

So there you have it.

Three brand new decks from AKAI, for all your customers who waited patiently for more than they could afford.

AKAI

You never heard it so good.



PROMOTION

TV SPOTS Take Awards For Goody's



AUDIO RETAILERS!



**You can make more money
selling RKO cassettes!**

RKO Tape Corp. is looking for a select group of audio retailers interested in making a profit on a brand-new, top-quality line of cassette tapes . . . retailers who know, as we do, that tape can be profitable.

We're the RKO Radio people. We wouldn't be in the tape business if it weren't profitable.

But to be profitable for us, it has to be profitable for you. That's why we're limiting our distribution to high-quality audio stores.

To maximize profits for both of us, we're supporting our dealers with advertising. Not only national ads, but regional ads as well — right where they count, in your market.

And we're offering a first-rate product

line that won't play second fiddle to any other brand of cassettes — bar none. With a name like RKO, we couldn't do otherwise. We have too much to lose.

There's RKO Ultrachrome, a second-generation, true chrome tape that's been shown in laboratory tests to give metal-tape performance on conventional cassette decks.

There's RKO Broadcast I, a premium ferric that brings broadcast quality to the home recordist at consumer prices.

And there's RKO XD, our "workhorse" tape, with enough midrange headroom to give even the most fumble-fingered beginner the ability to make recordings that sparkle.

So if you're looking for profits in an exciting new cassette line, look to RKO.



RKO TAPE CORP.

3 Fairfield Crescent, West Caldwell, N.J. 07006 • Telephones: 201-575-8484, 212-233-3520

TWO SAM GOODY tv spots themed "We Fill Your Life With Music" walked off with prizes from both the retail advertising award panel at CES in Las Vegas and, most recently, at the Annual Retail Advertising Conference held last month in Chicago. The spots won first and second place, respectively, in their category. Above is a frame from one of the commercials and a photo snapped during the awards presentation: (l. to r.) Roger Rice, TV Bureau of Advertising, Joe DiMartino, Goody ad director, and Bert Adams of Markland Advertising, Goody's agency. Doris Shaw, vp-sales promotion at the May Co., Los Angeles, looks on.



JOHN ANTHONY receives Rep-of-Year Award from Joe Woodstock, Stanton national sales manager, and Gordon Hurt (c.), corporate vp and Stanton's advertising and marketing director. Anthony's award is based on sales achievements and overall excellence of performance.

How to deliver more FM with every system you deliver. Even sophisticated tuners rarely achieve the quality of FM they were built to deliver. The reasons boil down to the antenna. And that's why B-I-C invented The Beam Box, the first electronically directable FM antenna. Unlike fixed dipole antennas, it can "face" all points on the compass. You simply tune to the signal's direction. And while it can't make a weak signal stronger, by discriminating it seems that it does. The Beam Box virtually eliminates multipath reflections, and improves both stereo separation and signal-to-noise ratio. Most any music system can benefit. And it has no competition. If you're not handling The Beam Box, you're giving up easy profits. For details, write B-I-C/AVNET, Westbury, N.Y. 11590. **The Beam Box®**

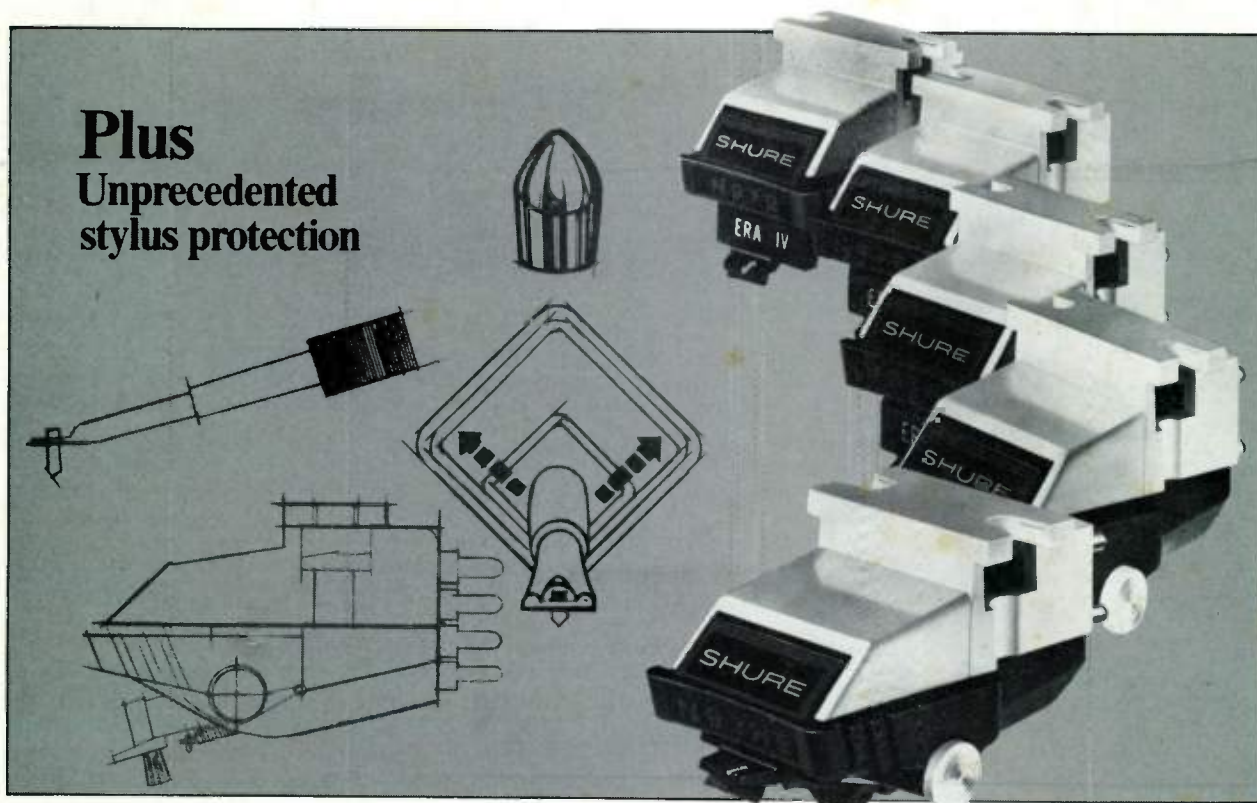


Say "Bee-Eye-Cee". Think "Best-In-Components."

Series Z Changer-Turntables | Cassette Decks | SoundSpan™ Speaker Systems | The Beam Box.®

fact: five new Shure Cartridges feature the technological breakthroughs of the V15 Type IV

**Plus
Unprecedented
stylus protection**



the M97 Era IV Series phono cartridges

| Model | Stylus Configuration | Tip Tracking Force | Applications |
|-----------------------------|----------------------------|---------------------------------------|---|
| M97HE | Nude Hyperelliptical | $\frac{3}{4}$ to $1\frac{1}{2}$ grams | Highest fidelity where light tracking forces are essential. |
| M97ED | Nude Biradial (Elliptical) | $\frac{3}{4}$ to $1\frac{1}{2}$ grams | |
| M97GD | Nude Spherical | $\frac{3}{4}$ to $1\frac{1}{2}$ grams | |
| M97EJ | Biradial (Elliptical) | $1\frac{1}{2}$ to 3 grams | Where slightly heavier tracking forces are required. |
| M97B | Spherical | $1\frac{1}{2}$ to 3 grams | |
| 78 rpm Stylus for all M97's | Biradial (Elliptical) | $1\frac{1}{2}$ to 3 grams | For 78 rpm records. |

Shure has written a new chapter in the history of affordable hi-fi by making the space-age technological breakthroughs of the incomparable V15 Type IV available in a *complete line* of high-performance, moderately-priced cartridges: the M97 Era IV Series Phono Cartridges, available with five different interchangeable stylus configurations to fit every system and every budget.

The critically acclaimed V15 Type IV is the cartridge that astonished audiophiles with such vanguard features as the Dynamic Stabilizer—which simultaneously overcomes record-warp caused problems, provides electrostatic neutralization of the record surface, and effectively removes dust and lint from the record—and, the unique telescoped stylus assembly which results in lower effective stylus mass and dramatically improved trackability.

Each of these features... and more... has been incorporated in the five cartridges in the M97 Series—there is even an M97 cartridge that offers the low distortion Hyperelliptical stylus! What's more, every M97 cartridge features a unique lateral deflection assembly, called the SIDE-GUARD, which responds to side thrusts on the stylus by withdrawing the entire stylus shank and tip safely into the stylus housing before it can bend.

NEW! M97 Series Era IV Phono Cartridges...
Five new invitations to the new era in hi-fi.



Shure Brothers Inc., 222 Hartrey Ave., Evanston, IL 60204 In Canada: A. C. Simmonds & Sons Limited
Outside the U.S. or Canada, write to Shure Brothers Inc., Attn. Dept. J6 for information on your local Shure distributor.
Manufacturers of high fidelity components, microphones, sound systems and related circuitry.

RECEIVED

Audio • Video • Autosound

MAY 18 1983

High Fidelity Trade News

A PUBLICATION OF COMMUNICATION CHANNELS, INC. MAY 1983

Who's Who In Compact Disc You Can't Tell The Players Without Our Scorecard



SANSUI PC-V1000

HF 171300565 I 8212 A 193216
AL HAWKES
PRESIDENT
HAWKES TV SOUND CELLAR
10 HARDY RD
WESTBROOK
NA3 ***
121 ***
3DG ***
ME 04092



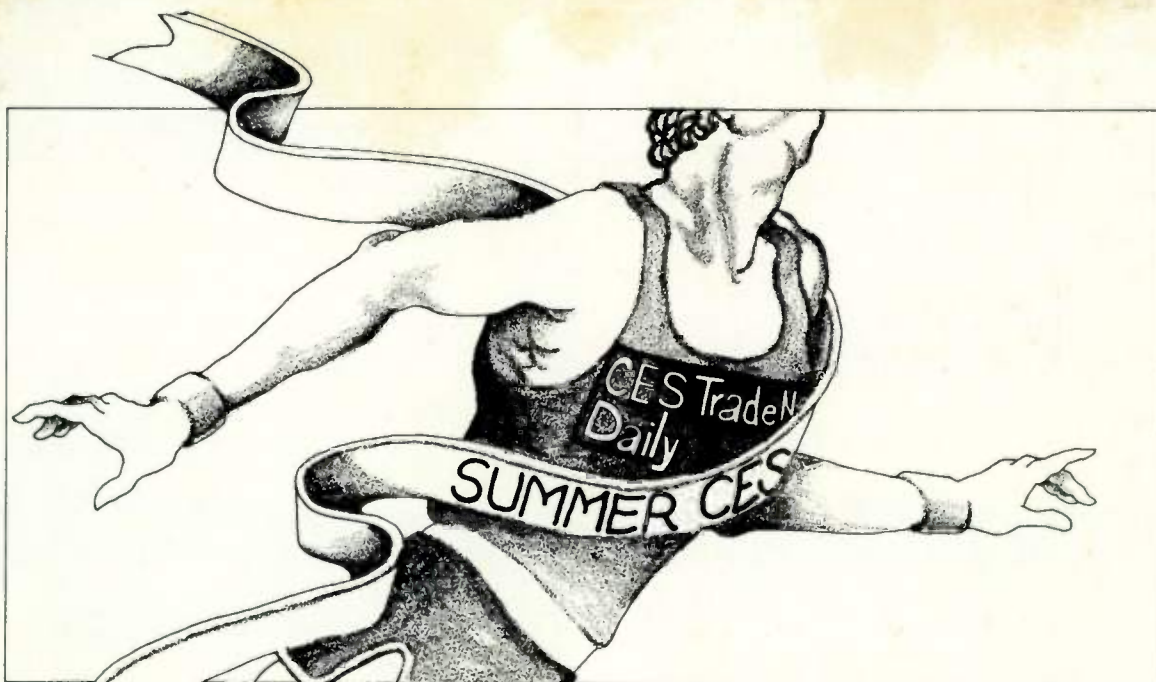
ONKYO DX-5



SONY CDP-101



KYOCERA DA-11



BE FIRST

and get ahead of your competition!

Advertise in the CES TRADE NEWS DAILY and get the first and best exposure available at Summer CES.

CES TRADE NEWS DAILY'S 1st issue, dated Saturday, June 4, (the show opens Sunday, June 5) will be distributed at all the major hotels beginning noon, Friday, June 3. (No other "daily" is expected to be available until Sunday morning, June 5!) Your advertising will reach your customers while they're waiting for the show to open and deciding who to see.

Our experienced editors and reporters will be on the show floor each day bringing your current and potential customers news on the show and the industry. CES

TRADE NEWS DAILY will impart a sense of immediacy to your customers. They'll see terrific color reproduction in the **only NEWSPAPER** just for Summer CES.

When ordering your ad space, be certain to specify the issue numbers, days and dates you want, issue #1: Sat. 6/4/83. #2: Sun. 6/5/83. #3: Mon. 6/6/83. And #4: Tue. 6/7/83. CES TRADE NEWS DAILY will NOT be published on Wednesday, June 8, when all your customers are going home.

Take advantage of DISCOUNT RATES offered now. Reserve your space today.

RUSH YOUR INSERTION ORDERS NOW

CES Trade News Daily

An Independent Newspaper Published Daily at the CES by Communication Channels, Inc.

- All hotels door to door
- By models at the show
- From bins in the Convention Center

RUSH YOUR INSERTION ORDERS NOW!

1.a. BLACK/WHITE RATES

| | 1X | 2X | 3X | 4X |
|--------------|--------|--------|--------|--------|
| Tabloid Page | \$2250 | \$1950 | \$1750 | \$1550 |
| Jr. Page | 1850 | 1750 | 1600 | 1450 |
| 2/3 Page | 1600 | 1550 | 1400 | 1250 |
| 1/2 Page | 1400 | 1250 | 1200 | 990 |
| 1/3 Page | 1050 | 990 | 800 | 750 |
| 1/6 Page | 625 | 525 | 450 | 425 |

ADVERTISING RATES

g. COVER RATES - Include cost of 4-color.

Non-cancellable.

| | 1X | 2X | 3X | 4X |
|-----------------------------|------|------|------|------|
| Second (inside front) Cover | 4160 | 3625 | 3240 | 2875 |
| Third (inside back) Cover | 3840 | 3410 | 3105 | 2750 |
| Back Cover | SOLD | SOLD | SOLD | SOLD |

SPECIAL POSITION - Non-cancellable.
10% extra on space and color.

b. DISCOUNTS OFFERED

Full Page High Fidelity Trade News advertisers with current 3X contracts are entitled to 5% discount on all space in CES Trade News Daily.

Full Page High Fidelity Trade News advertisers with current 6X (or larger) contracts are entitled to 10% discount on all space in CES Trade News Daily.

Full page High Fidelity Trade News advertisers with current 6X (or larger) contracts are entitled to 15% discount on all space in CES Trade News Daily when buying space in all four (4) issues.

c. CLASSIFIED AND READING NOTICES

| | 1X | 2X | 3X | 4X |
|--------------------|-----|-----|-----|-----|
| Size (2-1/8w x 1h) | 140 | 120 | 110 | 100 |

d. COLOR RATES

| | |
|---------|-----|
| 2/COLOR | 400 |
| 4-COLOR | 950 |

e. **BLEED** - Available only in gutter on spreads.
No charge.

f. Printing Specifications:

Photo offset - negatives required, right reading, emulsion side down. Screen black & white 65-100, 4 color 85-100. Plates not accepted. Call publisher if additional information is needed.

h. INSERTS

2 pages one sheet - page rate less 15%
4 pages to six pages - page rate less 25%
8 pages and above - page rate less 40%
Inserts less than junior page -
minimum charge one junior page.

2. PRODUCTION CHARGES - At cost/non-commissionable.

3. DIMENSIONS - AD PAGE (Trim Size 11-3/8" x 15")

| | |
|-------------|-----------------|
| Tabloid | 10-1/4" x 14" |
| Junior Page | 7" x 10" |
| 2/3 Page | 4-1/2" x 10" |
| Island Half | 4-1/2" x 7" |
| 1/2 Horiz. | 7" x 4-7/8" |
| 1/3 Sq. | 4-1/2" x 4-7/8" |
| 1/3 Vert. | 2-1/8" x 10" |
| 1/6 Vert. | 2-1/8" x 4-7/8" |

4. PUBLISHED

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Issue #4: Tuesday, June 7, 1983.

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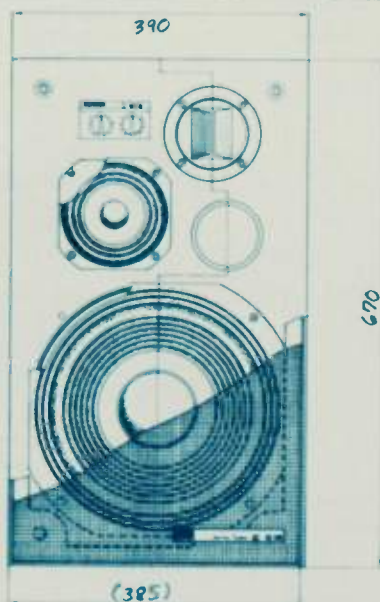
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YOU'RE GOING TO SELL MIRROR IMAGE SPEAKERS LEFT AND RIGHT.

PIONEER
NEW PRODUCT PROFILE — 1983

| | | | |
|---------------------|---|-------------|-----------|
| MODEL NO. | S-910 | PRODUCT NO. | 14 of 103 |
| DESCRIPTION | 3-Way 12 inch mirror image speaker system | | |
| T.M.P. | 12/82 | T. INTRO | 1/83 |
| DEVELOPMENT CONCEPT | <ul style="list-style-type: none"> *Mirror image symmetrical configuration for superior stereo imaging *High power handling capability for wide dynamic range of digital recordings | | |
| SELLING POINTS | <ul style="list-style-type: none"> *High power handling capability with low distortion *Mid and high frequency level controls *High tech drivers *More impact, realism on digital and dir | | |
| FEATURES | <ul style="list-style-type: none"> *Sewly designed Beryllium Ribbon Tweeter *Polymer Graphite™ (PG) midrange and woo *Mirror image baffle *Solid ported bookshelf cabinet *80w rated power *250w Music power *6.3 ohm impedance *30 Hz -- 50 KHz frequency response | | |

DESIGN DRAWING



#14 OF 103 NEW PRODUCTS

DESIGNER

Toshio Nasu

TN

ENGINEER

Fujio Tanaka

xyj

PIONEER
Because the music matters.

©1983 Pioneer Electronics (USA) Inc., P.O. Box 2345, Long Beach, CA 90801

Circle No. 1 on Reader Service Card

World Radio History

High Fidelity Trade News

Volume 27 No. 5

features

AUDIO

TECHNICALLY SPEAKING: HOW TO COPE WITH DIGITAL'S DYNAMIC RANGE

Start by telling your customers they don't have to rebuild their sound systems.

12

DIGITAL WITHOUT TEARS

You don't need 10,000 watts and power-gobbling speakers to enjoy digital's benefits.

14

WHO'S WHO IN COMPACT DISCS

You can't tell the players without our scorecard.

16

AM STEREO: FOUR HORSEMEN WON'T MEAN ITS APOCALYPSE

While transmitter manufacturers challenge each other as King of the Hill, ingenious receiver manufacturers are building units capable of picking up any system broadcast.

40

VIDEO

McVIDEO?

Franchises and affiliates offer alternatives to going it alone in the risky world of video.

38

AUTOSOUND

SPARKOMATIC GOES ON THE ROAD WITH SUPERTRAMP

One of the world's major autosound manufacturers joins forces with one of the world's major rock bands for a gigantic promotion.

35

CES PREVIEW

MAKE YOUR TIME COUNT AT THE SUMMER CES

With a game plan in hand, retailers needn't be overwhelmed by the largest annual U.S. trade show.

36

INTERVIEW

THE FEMALE CUSTOMER

Understanding what a woman wants when she enters an audio specialty store can mean cashing in on the profit potential of this growing market.

42

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8 Hi-Fi/Video News

4 Publisher's Memo

48 Wavemakers

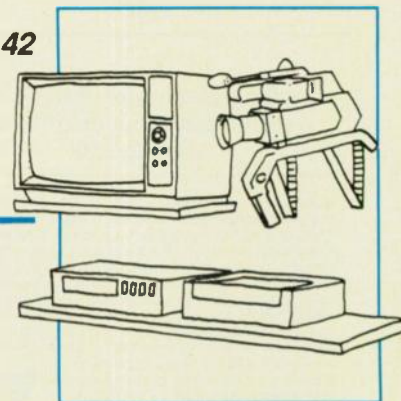
The Cover: While the few Compact Disc players that are available have been selling briskly across the nation, the majority of manufacturers are just now preparing to introduce their models. Soon there will be more than 20 from which to choose. Cover design by Sheryl O'Connell.



Marketing Digital
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MASH Momentos
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Audio/Video Salesman
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For
advertising representatives
with regional sales offices
see page 50

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BPA



A Statement Of Purpose*

We all recognize how difficult it is to make ends meet these days and for those of us involved in the merchandising and marketing of non-industrial electronics it is even more difficult. We at **High Fidelity Trade News** have been giving this matter a good deal of thought in consideration of how we may best continue to serve your interests. We are in a better position to do this than we were some months ago because of activities that have taken place within our own organization. As you may know, for many years **High Fidelity Trade News** was published by Syndicate Magazines Inc. As of Jan. 1, 1983, Syndicate Magazines Inc. was merged into Communication Channels Inc. of Atlanta, Ga. CCI is the largest publisher of business periodicals in the Southeast and, indeed, one of the largest publishers of such periodicals in the United States. We are now in a position to lend many years of business judgment and expertise to the production and distribution of **High Fidelity Trade News**.

Those of you who receive **HFTN** on a regular basis will have noticed singular changes that have taken place since the January 1983 issue, and greater changes are planned, not only in the way the magazine looks, but in what it says and to whom it is being said.

Advertisers must know that a magazine is being delivered to a proper purchasing influence. It does an advertiser no good to have copies distributed to persons who are not in a position to act upon the information presented in that advertisement. And so we are restructuring our circulation base to provide not only more readers, but more influential readers.

New people and new products come into every field all the time and for this reason **High Fidelity Trade News** will devote more attention to these new people and products so that you will have a better understanding of all that is occurring within your own industry. In a word, we are making every attempt to produce the finest editorial product available and we will succeed. As the months go by we will announce a new name for **High Fidelity Trade News**, a name that will more closely reflect the markets you serve.

With the resources of a major organization behind us, we can promise a continuation of the publication of the journal and the **CES Trade News Daily**, which we have been producing for many years. We ask for your support, your consideration and your cooperation in furnishing us with your comments and criticisms. We can only produce a better journal with your help. We can only produce a better climate for the sale of your products and services with your help.

If there are any questions as to advertising closing dates, our intentions or our assessment of what the future will hold, please contact me or any one of our sales representatives. It will be appreciated.

Very truly yours,
Wm. B. Manning

*The statement that appears on this page has been distributed to our advertisers and their agencies in order to inform that audience of our intentions and aims. Our readers are deserving of the same information. Whether for advertiser or reader, the purpose is the same — to enjoy a more prosperous business environment.

IN UNDER 7 MINUTES, WE'LL SHOW YOU HOW TO TURN BASF CHROME INTO GOLD.



BEFORE

Get the unique profit edge that turns Chrome into gold.

Ever wonder why you have to sell a lot more tape these days to make a buck? With all

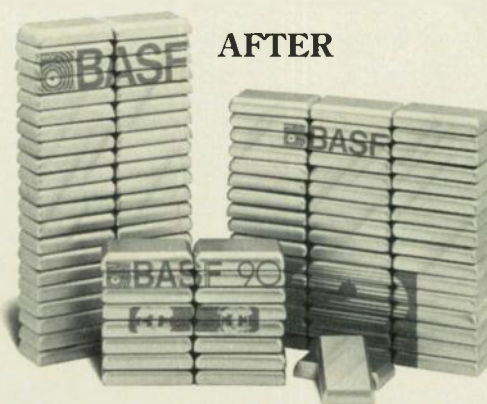
the "me too" lines on the market, it's just about impossible to make a worthwhile margin on any tape. Well, here's the one tape line that's designed to protect your margins. BASF Chrome.

What turns BASF Chrome into gold? It starts with virtually the only unique selling advantage in the business. BASF offers an exclusive Pure Chrome formulation in both audio and video, for the kind of superior quality your customers demand. That's not just an advertising claim—it's the reason recording industry standard-setters like A&M Records and Mobile Fidelity Sound Lab choose BASF Chrome for their own studios.

The BASF commitment to dealers puts more gold in your pockets.

This year's the best one yet to go for the gold with BASF Chrome. We're making our largest investment in you to date with our extensive new dealer support program. And we're boosting sellthrough with the most intensive consumer advertising effort in our history. When you add it all up, you'll see why more retailers than ever are discovering how to turn Chrome into gold.

Get the complete BASF line of audio and video tapes and Qualimetric FlexyDisks® working for you right away. And get the difference that turns Chrome into gold for you.



AFTER



CALL US ON IT. 1-800-

1-800-225-4350 (Northeastern* and Southern States) 1-800-225-3326 (Midwest and Western States)

* In Massachusetts call (617) 271-4170

SANSUI'S AM STEREO TUNER DUE BY SEPTEMBER: Tom Yoda, Sansui vice president of sales and marketing, announced in mid-April that the company would begin marketing home and auto equipment with universal AM stereo reception capabilities by September. Previously Sansui had speculated that its AM stereo receiver would not reach the market until the last quarter of the year. (See story on page 40: *AM Stereo: Four Horsemen Won't Mean Its Apocalypse*) The home unit, expected to take the form of an AM stereo/FM stereo tuner, and the car stereo due in September will be equipped with the special Sansui circuit that receives all four proposed systems for broadcasting AM stereo with specifications that meet the parameters of the individual systems.

PARKER BROS. LOSES ROUND ONE IN ANTITRUST SUIT: A federal judge has denied Parker Bros.' request for a preliminary injunction against Atari's recent practice of refusing to supply its products to distributors that carry competitors' products. As reported by **HFTN** this month (See story on page 8: *Antitrust Suit Slows Atari Actions*), Parker Bros. was granted a temporary restraining order in March against Atari as a result of a suit that claims Atari and parent company Warner Communications had violated the Clayton and Sherman Antitrust Acts. Parker Bros. says it will appeal the decision against the preliminary injunction while awaiting a hearing on its original suit.

T-SHIRTS SPREAD CLEAN MESSAGE: A T-shirt emblazoned with the message: "I give one of life's great performances — and keep it clean" is featured in a joint coupon promotion being launched next month by Akai America Ltd. and Allsop Inc. All Akai audio and video product containers and Allsop head cleaning kits for recording equipment will include a coupon offer that lets purchasers buy the T-shirt, a \$6 value, for \$3.95. Also included in all containers is a coupon for \$5 off any Akai product. The company expects to achieve more than a million targeted consumer impressions as a result of the promotion.

ACADEMIC CENTER STUDIES MAGNETIC RECORDING: An academic Center for Magnetic Recording Research is being developed with the support of several industry leaders at the University of California, San Diego. The \$12 million facility is the first of its kind for basic recording research, which a 3M spokesman called "critically important to help maintain U.S. leadership in memory technology." The university is contributing \$1 million, land for the center and four new faculty members whose specialty is magnetic recording research. Additional funding is being provided over a five-year period by 3M, IBM, Control Data Corp., Eastman Kodak, Data Electronics Inc., Pfizer Inc. and Verbatim Corp.

JOYSTICK DISTRIBUTOR RECEIVES 1982 AWARD: Discwasher has named A.I. Rosenthal Associates Inc. as PointMaster Distributor of the Year for 1982. The distributor, which covers Maryland, the District of Columbia, Southern New Jersey, Eastern Pennsylvania, Virginia and Delaware, received the award for selling the most PointMaster Competition joysticks.

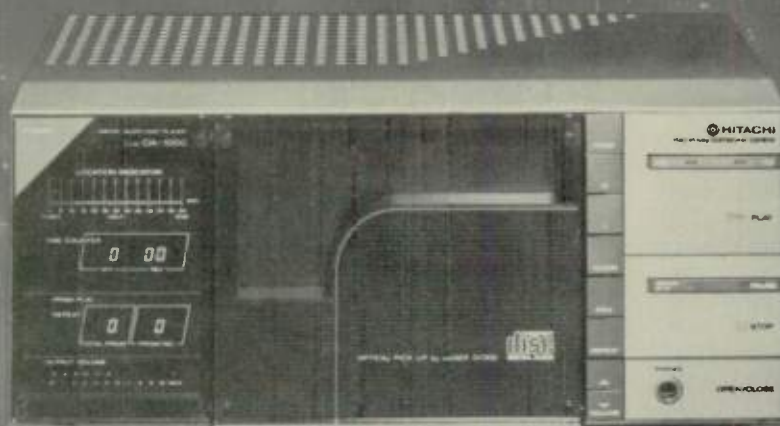
MANUFACTURING VP CELEBRATES 30 YEARS: JBL Inc.'s vice president of manufacturing Tony Pacheco recently celebrated his 30-year anniversary with the firm at a company party held in his honor. Pacheco began his career in JBL's manufacturing facility in March 1953, advancing to factory superintendent, machine shop supervisor and production manager by 1966. In 1973 he was promoted to director of manufacturing, and in 1974, he was appointed to his present position.

INSTANT WINNER GAME PROMOTES ACTIVISION CARTRIDGE: Activision Inc. is promoting its *Keystone Kapers* video game, to be introduced this month, with a nationwide \$35,000 "Katch the Krook" giveaway. Inside specially marked packages of *Keystone Kapers* is a rub-and-win game card with which purchasers can try to "katch" the "krooks" tic-tac-toe fashion. Prizes, which resemble elements of the game play in *Keystone Kapers*, include two \$5,000 series EE U.S. Savings Bonds, 250 AM/FM portable radios, 500 engine-powered model airplanes and 1,500 beach balls. Cards that aren't instant winners still offer a Mystery Rebate good on the purchase of one of five Activision titles, the identity of which is concealed beneath covered squares on the bottom of each card.



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EIA/CEG Pursues Move For SCES

WASHINGTON, D.C. — The consensus of EIA/CEG board members who met during the association's annual spring conference in March was that New York City offers many advantages as a summer CES sight. However, a final decision about the suggestion, which was proposed because the summer show has been outgrowing its quarters at McCormick Place in Chicago, probably will not come until after this year's June show.

Facing a number of unresolved issues, including secured commitments for hotel accommodations, transportation, etc., the board directed the CEG staff to conduct those negotiations and report back within 90 days of the March 16 meeting.

In other business at the spring meeting, the board voted to provide financial support to the Custom Automotive Sound Association in order to help alleviate the economic effects on autosound equipment manufacturers who belonged to both groups.

"It had become apparent that many of the objectives and activities of CEG's Car Audio Subdivision and those of CASA overlap," explained Jack Wayman, EIA/CEG senior vice president. "This situation did not represent an efficient allocation of resources for car audio manufacturers, either individually or as a group."

He said the two organizations had worked jointly for several months trying to find the best way to serve the interests of the members of both groups and the industry as a whole. "It was subsequently decided by the EIA/CEG board of directors that it would be beneficial for CASA to concentrate its efforts on maintaining a free and open marketplace, while CEG would take responsibility for industry development, engineering and marketing services activities with the cooperation of CASA and its members."

Other action taken by the board included: underscoring support for both the Home Recording Rights Coalition and the Audio Recording Rights Coalition; adopting a new pre-registration and on-site registration system to be introduced at the upcoming SCES; and approving development of a consumer electronics industry data base to provide a profile of the retail segment of the industry as well as of the products it sells.

Antitrust Suit Slows Atari Actions

BEVERLY, Mass. — Parker Brothers was granted a temporary restraining order in March against Atari and Warner Communications, enjoining and restraining Atari and Warner from inducing wholesale distributors of video game software not to use, deal in or purchase such goods from any competitor of Atari, including Parker Brothers.

The suit claims Atari and Warner have violated and continue to violate the Clayton and Sherman Antitrust Acts.

Spokesmen for Parker Brothers say that beginning earlier this year, Atari started offering 40 of the country's major video game and personal computer wholesale distributors contracts to distribute Atari hardware and software, excluding competitors from their main channel of distribution. The distributors were given until March 31 to sign the contract, and according to the offer, Atari would discontinue sales of its hardware and software to any distributor who didn't accept the agreement.

The complaint filed by Parker states, "The effect of the agreement is to lessen or eliminate competition or to attempt to create a monopoly in the software markets."

Atari Enters Home Telephone Market

SUNNYVALE, Calif. — Atari Inc. announced plans in March to enter the home telecommunications market with a line of microprocessor-based systems.

Plans call for marketing to begin in the United States early in 1984, according to Peter Wensberg, president of the newly formed AtariTel Division. He said a number of products already are in the pre-production stage.

"Atari plans to become an active marketing partner with telephone operating companies to distribute the new line," Wensberg said. In addition the systems, which Atari says will incorporate features now available in other residential telecommunications products, will be sold through traditional consumer electronics channels.

AtariTel is Atari's fourth division, joining Home Computers, Coin-Operated Games and the Consumer Products Group.

Jensen Honors Test Designers

SCHILLER PARK, Ill. — The two men responsible for International Jensen's patented Computer Control Automatic Radio Testing Line and combined acoustical transducer and grille for the Car Audio Division were honored by the company at an awards dinner recently.

Shure Salespeople Win Club Med Trips

EVANSTON, Ill. — Eric LeWinter of Lyle Cartridges in Woodmere, N.Y., and Bob Hardy of Adray's in Los Angeles are planning week-long vacations to Club Med's resort in Cancun, Mexico, thanks to Shure Brother Inc.

The two were grand prize winners in Shure's Era V Society Counterperson Drawings.

The contest was open to all Shure V15 Type V salespeople. Entrants submitted copies of V15 Type V sales receipts, from which prize winners were selected in three random drawings.

Winners in the two preliminary drawings were awarded Shure tour jackets, \$100 U.S. Savings Bonds and Shure V15 Type V phonograph cartridges.

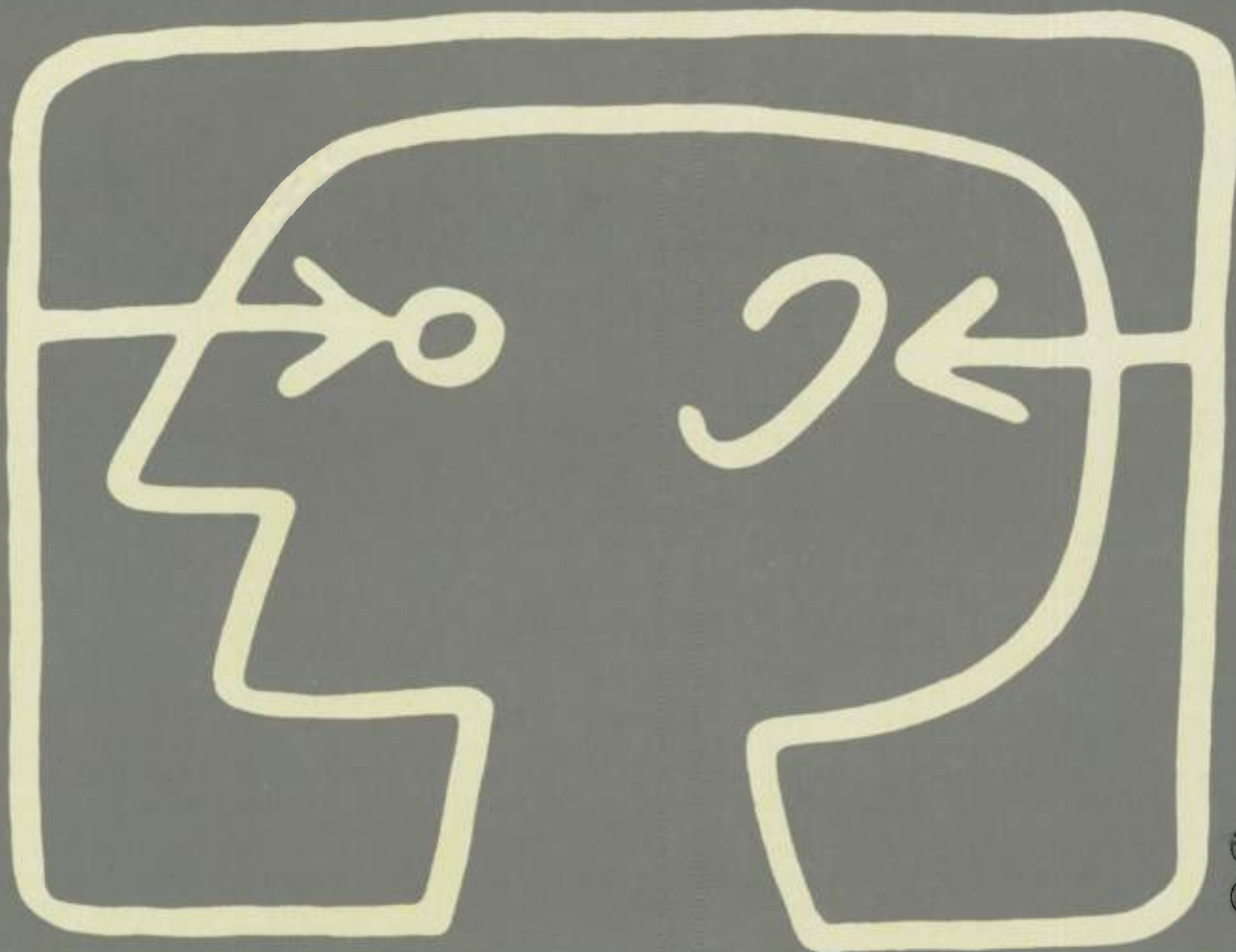


Bob Hardy (left) accepts Club Med prize from Shure rep Dan Levine.

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Circle No. 5 on Reader Service Card

How To Cope With Digital's Dynamic Range

Start by telling your customers they *don't* have to rebuild their sound systems.

By Ralph Hodges
Technical Editor

We stand, it is said, on the threshold of the highest order of sound reproduction ever experienced, or perhaps even imagined. Never again need the recording medium come under suspicion of limiting, compressing or discernably distorting the music. Never again need the playback device be unjustly accused of errors of commission or omission. Program material will reach us in a form accessible to computer analysis through many decimal places, and because there will thus be nowhere for mistakes and sloppiness to hide, there will therefore be no more mistakes and sloppiness.

Attractive indeed, and probably even attainable if luck is with us. But according to many, there remains one difficult hurdle ahead. Digital audio is virtually here, but we aren't prepared. The revolution awaits us, but we are lagging behind. We are not digital-ready.

How's That Again?

Generally, the state of digital readiness seems to be defined by the manufacturer you're talking to at

the time. Preamplifier people tend to believe that front-end electronics will be overloaded regularly by DAD players. The power-amplifier crowd proclaims that digital's peak levels will bring all but the mightiest wattage capability to grief. Speaker makers are talking about new designs intended to withstand God-knows-what. And the rest of us wait around wondering which way to run, either to embrace this technology or to escape it.

Once again, we're overlooking the truly important kernel in this exceptionally bountiful harvest: the music. What does the music need or demand? What do people want from music? Where has music been all these years if digital-dictated technology is the only thing that can bring it to life?

By raising these obvious questions I am not leading up to an anti-digital tirade. Like most people regarded as being in possession of the relevant facts, I like digital and its potential, and I believe it is arriving at just about the right time. But I dispute any implications that digital can, or should, change the nature of music, and just as vigorously dispute the idea that analog technology, properly employed, does it a fatal injustice. If I'm right, then much of the high-fidelity-equipped public is digital-ready now, in which case it should be able to adopt digital program sources without a qualm. If I'm wrong, I think we're in for some trouble.

The most touted attribute of digital media as they are evolving is dynamic range, and there's probably no one who will argue that a range in

excess of 90 dB isn't impressive. But what dynamic range is really needed for music, what range is desirable for the home listener, and what range is likely to provide full satisfaction without endangering aural or mental health?

The dynamic range of *any* musical performance is infinite, no matter how loud it gets or doesn't get, because its sound will ultimately fade away into total silence. So there's no dynamic-range capability that can strictly be called adequate. But skilled performers in, say, a symphony orchestra usually have a good sense of the utmost loudness they can use without destroying the balance of the ensemble, and the greatest softness they can attempt without falling below the level of the audience's breathing — or their own, for that matter.

Paralleling this, home audiences typically have an acute sense of the maximum loudness they want from a music performance, and they also have a noise level (created by traffic outside and domestic appliances inside) that determines how soft they want the music to get. And finally, both orchestra and audience seem to have an ingrained instinct, likely imposed by both psychological and physiological factors, for what the extremes of loud and soft should be to create excitement without displeasure or discomfort.

So in terms of the maximum dynamic range with which music is played and heard, we wind up with three dynamic ranges to consider: the performer's practices, the listeners' preferences and the possibilities available from the listening



Before joining HFTN, Ralph Hodges spent 10 years as technical editor of Stereo Review and a brief time as communications manager for Dolby Labs.

environment. Be it coincidence or not, all three work out to approximately the same number, which is a shade or so shy of 60 dB. From most reliable evidence, this is the greatest dynamic range that listeners want to hear and that listening environments permit in practice. From the testimony of experienced recording people, it is also the greatest dynamic range at which a trained symphony orchestra will play — and the consensus is that a symphony orchestra working with 19th-century repertoire still provides the widest dynamic range of any music source.

Again, this is not to say that music doesn't have infinite dynamic range. It does. But according to sound-level-meter measurements by myself and others, an orchestra in a concert hall, miked from the most advantageous audience seat, does not get much louder than 100 dBC ("C" refers to flat-frequency-response weighting), and it typically stops playing at just under 60 dBC, because it knows it will not be heard if it goes lower. Take this 40-dB dynamic range figure, add a very generous 20 dB to allow for peaks that sound-level meters are not really designed to register, and the number 60 shines forth clearly and consistently.

Other Music

But after all, who listens to symphonic music except me? Isn't it well known that rock bands hover around something like 110 dB and go up to 120 dB if they can? Exactly so, but the point is that these bands do "hover" and often never play any lower than 110 dB, which means their dynamic range is effectively zero. The level you choose to play them back at is your own business, but don't confuse dynamic range with just plain loud. The two concepts are entirely different.

As for middle-of-the-road music, engineer Fred Catero, who has many recording credits with performers such as Barbra Streisand and Santana, says that with big bands in studios he rarely sees dynamic ranges in excess of 55 dB, even with relatively close miking and a very quiet recording environment. He also submits that this is too much for the home listener, and he tends to compress dynamic range slightly and subtly to achieve something in the neighborhood of 45 dB maximum.

(Catero's theory here is that the physiological mechanism of the ear will introduce compression anyway if the sound level goes to extremes. If the music is compressed to just the right degree initially, the ear and everything else involved will be

saved a great deal of trouble, and the brain that finally processes the audio signal into what we perceive will never know the difference. Catero's view will be considered controversial, but it has a solid basis in psychoacoustic studies, and Catero's experience with sound and how it is heard is exceptionally long and extensive. However, lest there be any misunderstanding, I should mention that many of Catero's past credits do not involve records that attempt much more than 20 dB of dynamic range. Producers and artists have the final decision on how much compression is employed, and the engineer is obliged to go along.)

Of course, Catero's background has been that of a purveyor of music to the masses. What of the esoteric contingent and audiophile records? With cannon fire and carillons it's certainly possible to make live music much louder than a symphony orchestra can contrive, and therefore to increase dynamic range. But should it be increased beyond what today's best records encompass? Spectral's Richard Fryer, who was involved with Reference Recordings' new release of the Berlioz *Symphonie Fantastique* by the Utah Symphony, believes that 60 dB is probably as much as the recording team encountered, and as much as the final recording should have. He further notes that loudspeakers for monitoring purposes have been the major problem. As befits an esoteric organization, Reference Recordings has preferred to use electrostatic or quasi-electrostatic speaker systems, but they have determined that such loudspeakers cannot play loud enough, whereas conventional speakers do not play accurately enough. They do not, however, find that conventional sound systems of reasonable quality and capacity are deficient in dynamic range for the requirements of real music.

Back To Digital

There is certainly no indication at this time that digital recordings, having a claimed capability of 90 dB dynamic range, ever intend to use it. A range of 60 is more than most people desire, and a range of 90 is crazy and well beyond the reach of any sound system likely to be designed for consumer applications in the foreseeable future. What 90 dB means for a digital recordist is that he's got 30 dB of margin. Ten of that will enable him to keep average levels well below the catastrophic overload point of digital recording systems. The other 20 will put the noise floor of the recording system down where the noise of the record-

ing environment will probably be the limiting factor. This is a delightful prospect, and we are all going to benefit from it in one way or another. But don't let anyone tell you that you're suddenly going to be hearing 90 dB of dynamic range instead of 60, or less (about 40 to 45 for a Mozartean orchestra, as it happens). If you did, you'd want to leave the room. And you'd certainly have no practical use in that room for equipment capable of such a range. Its proper place is on the battlefield, or in installations designed to check the reliability of missile parts under conditions of violent acoustic inflictions.

Nevertheless, Catero with his mid-fi background and Fryer with his esoteric orientation share one view. If we are going to be living with recording media capable of 90 dB, we are going to hear deeper into the mix than ever before, and there will be no place for any incompetence of the recording personnel to hide. There won't be noise, there won't be distortion in the conventional sense, and there won't be the excuse that the consumer will never hear this blooper once the record is mastered, pressed and stuffed into a bin in some record store. Both men rejoice in this, with Catero stating, for publication, that the audiophile objections to digital are, for the most part, the poor production practices of recording teams. And both should profit from the arrival of digital if they are, as I suspect, as good as they think.

In the meantime, going overboard about the playback requirements of digital is going to prove a mistake. Unless an existing system is very creaky, it will handle as much dynamic range as its owners want. If it distorts while doing so, that's another thing and will have to be addressed when digital recordings are generally available and their distortion characteristics up for examination. Richard Fryer suggests that digital recordings will sound best on mid-fi equipment, presumably because the faults in the recording system will be masked. Fred Catero believes that the best digital recordings will sound best on the best sound system available, and that the whole digital business is going to separate the sheep from the goats. I have no problem with either point of view.

But don't, for the moment, start telling your customers they will have to rebuild their playback systems from scratch in order to participate in the digital revolution. I will have a problem with that, and so, I think, might you. □

Digital Without Tears

You don't need 10,000 watts and power-gobbling speakers to enjoy digital's benefits.

By Norman Eisenberg

There are many advantages in digital sound, and it just may be that one of them has been blown out of proportion. That's the matter of dynamic range and how it relates to amplifier power and loudspeaker capability. The digital program source can contain at least half again more of the total dynamic range available on present day analog recordings (90 decibels as compared to 60 dB). In this regard, of course, digital offers a closer approach to the realism and excitement of live sound than analog.

But this plus factor seems to be a new source of confusion among dealers and buyers alike. Does it mean we need new amplifiers with up to 1-kilowatt power output? Does this in turn mean that those of our present-day speakers that are hardly rated to cope with that much power are suddenly to become obsolete? Does it also imply that the "high" in high fidelity takes on a new meaning — that of inordinately high volumes that suggest the threshold of pain or trouble with the neighbors?

If you answer questions like these with an unqualified "Yes," your next thought could well be: How the hell is this going to be sold to any significant market? How am I going to convince buyers that it's worth getting? And what kind of mayhem are we likely to run into when trying to demonstrate it?

Digital makes things a lot easier for an awful lot of potential customers who want good quality sound but who do not want to become masters of the fine and often maddening points of such audio involvements.

If your answer to those questions is a firm "No," then you might well wonder what all the fuss is about. Why bother with digital in the first place?

The fact is, there's a lot more to digital than merely greater dynamic range. But first let's look at the dynamic range item, since that seems to be uppermost in everyone's mind.

In terms of normal, average playback levels, a digital program may require little or no more than the same power that now suffices for clean reproduction of analog discs. Depending on speaker efficiency, room size and acoustical character, and one's own listening tastes, that could be from 10 to 20 watts on the average.

However, the digital recording has

the built-in potential for greater dynamic range, which could drive the power requirement up to several hundreds of watts, at least for momentary peaks. Even what is considered a high-powered amplifier today could clip on such peaks.

Enormous Peaks

If you take (or if your customer takes) the perfectionist approach, well then—yes, we are now talking about an amplifier that can offer enormous "headroom." That is to say, while its average power rating need not be astronomical, it should have the potential for hitting those enormous peaks cleanly.

What if it does not do so? The peaks will lose some of their potential impact, or you can simply opt to run the system at a reduced volume setting. Instead of going after 120 dB in the listening room, settle for 110 dB. That is still plenty loud and it still will allow a digital source to sound cleaner than the analog recording. Remember, a difference in 10 dB of apparent loudness means a difference in ten times the power, which could mean the difference between say, a 1-kilowatt amplifier and a 100-watt job. Of course, the 1-kW amplifier will do more for the digital sound (assuming, of course, the speakers can handle that much power) than the 100-watt amplifier. But even the latter will allow *most* of

the improvement offered by digital to be appreciated *most* of the time. For *all* of the improvement *all* of the time, okay — use the 1-kW approach. But a good 100-watt or 200-watt amplifier will not necessarily sell digital short, and especially so since there are other pluses to digital besides its dynamic range.

In fact, I think these other benefits could well prove more convincing to an awful lot of buyers than dynamic range.

One of these is the generally cleaner sound of digital regardless of what level you play it at. The digital disc is a *cleaner* format than the analog disc. It has not only a higher maximum sound level, but also a lower noise floor. The music emerges more forcibly from a quiet context.

The inherent distortion of a digital disc also is lower than that of an analog disc.

Channel separation of a digital disc is far greater than it ever could be for an analog disc.

Master Tape Quality

Life expectancy of a digital disc is literally indefinite. Since it is played with no physical contact with a stylus, there is no groove deterioration, no degradation of original quality merely as a result of playing it, as there is with analog discs.

By the same token, the digital disc is virtually indestructible and—with its protective overlay—not susceptible to dirt, smears, and the like. And, should some dirt get on the disc, it will be mostly ignored anyway by the laser beam that tracks the disc.

Assuming the disc has been manufactured competently, it should be as good as the original master tape from which it was processed. It provides, that is to say, "master tape quality" in a home music system for the first time in sound-recording history—and this quality will last regardless of the number of playings. Not only is it virtually impervious to dirt, it also is highly resistant to the problems that have plagued analog records, such as warpage and changes in temperature or humidity.

It also is more compact than an analog equivalent, and thus takes less storage space. The 4.7-inch diameter of the new compact digital disc means it can be stored on ordinary shelves without the need for outside record cabinets.

There's more. The digital disc does away with concern over stylus dimensions, stylus condition, cleaning, concern over tracking force, skating, overhang adjustment and so on. This may take some of the

steam out of audio "tweakery" but it makes things a lot easier for an awful lot of potential customers who want good quality sound but who do not, as a concomitant, care to become masters of the fine and often maddening points of such audio involvements. In a sense, actually, the totality of the digital disc player itself could well refocus attention on the original and basic idea behind the whole high fidelity movement—which is, of course, to listen to and enjoy the music.

All this comprises the digital promise, for both consumers and the trade. And the promise becomes fairly attainable when you think of

the digital player itself as an "attachment" for an existing stereo system, a new program source that obligingly plugs right into an unused "auxiliary" input on a receiver or amplifier and can make that system sound better than it ever did before—even if you do have to compromise on the ultimate dynamic range. My guess is that once the digital player is incorporated into a stereo system, the owner will become a prospect for a new amplifier and/or speakers—probably at a later date. Until then, of course, he still can get a lot more "woof" and "tweet" from his present equipment. □



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Circle No. 6 on Reader Service Card

Who's Who In Compact Disc

By Karen Donde
Assistant Editor

By the end of this month, half a dozen manufacturers of digital au-

dio disc players are expected to have models for sale on retail shelves in the United States. By the end of June, seven more brands of players should be available to retailers here. Meanwhile, most of the remaining licensees of Compact Disc technology still are eyeing the market somewhat suspiciously, waiting to see how American consumers react to the concept of the Compact Disc, the pricing of the players, averaging slightly less than \$1,000, and the relatively limited, albeit growing, number of recordings from which they have to choose.

Whether those suspicions are justified, or whether those manufacturers who are taking the plunge will hit the market at exactly the right time, this spring is the most exciting period for the U.S. Compact Disc market. One manufacturer told **High Fidelity Trade News** that he believes the schedule that most industry leaders projected for the U.S. CD market at the January CES already has been moved up by three months. Another, when first contacted by **HFTN**, said that company was set for for a big June launch of its digital audio disc player. A week later, the same spokesman contacted **HFTN** again and announced that its player would be available in April.

A few manufacturers already are looking ahead to second- and third- generation players carrying lower retail prices to be available by the end of this year.

Although nearly all manufacturers agree that the Compact Disc player eventually will become a mass market item, given proper development of economies of scale for the hardware and a wide ranging library of software titles, most are aiming the initial models at the upscale audiophile/music enthusiast who wants to find the ultimate in reproduction of sound.

Two companies, however, said they are gearing their first players for the mass market, with \$800 the lowest price announced so far.

Certainly, the next two to three months will be very important ones for the Compact Disc system, and retailers need to be armed and ready to provide the crucial link between the technology and the consumer if they want CD to be the impetus to their audio business manufacturers have been predicting. Manufacturers are ready to help, and have worked with **HFTN** to provide the following outline of where each stands in the development of the U.S. digital audio disc player market.

Sony Corp. of America

The co-developer of the Compact Disc system has had its player on the retail shelves since mid-March and, according to Marc Finer, product communications manager, it plans to open distribution up to about 150 selected retailers by the summer.

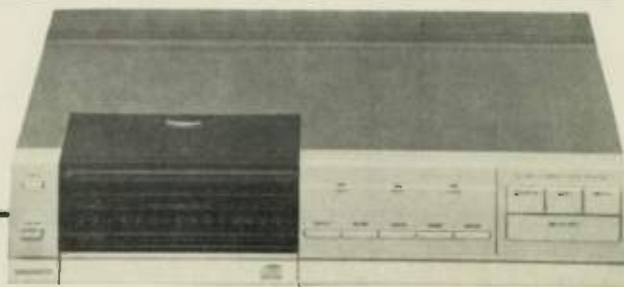
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|------------------------------------|---|
| Model Number | —CDP-101 |
| Introduction Date | —On retail shelves since March |
| Pricing | —\$900 |
| Distribution | —Selected audio specialists nationwide. About 60 of the “best retailers in the country” currently are test marketing player. Plans are to make player available to 150 selected retailers by the summer. |
| Target Customer | —High-end audio buyer; “Definitely not the mass market until future generations of the product offer lower prices” |
| Selling Points | —Sony is co-developer of CD system. Player is compact, easy to use and offers remote control. |
| Advertising & Promotion | —Message will emphasize the near perfect re-creation of sound. Slogan is “Sony creates seventh row center forever.” Emphasis also is on the feature advantages of the CD systems. Print advertising is concentrated in consumer buff books, due to newness of the technology and price point. Promotion to the trade includes CES and players furnished to reviewers for editorial evaluations. Company also is beginning to furnish players to radio stations in exchange for promotion of the CD concept and Sony name. |
| Availability | —No problems anticipated |
| Service programs | —Trained personnel are in place in nationwide service organization of self-servicing dealers, independent service centers and factory service centers. |
| Warranty | —Standard one year, parts and labor |

Magnavox

The American subsidiary of the European co-developer of system is bringing out three separate models of players during its Spring Preview, which, according to Harlan Lippincott, Magnavox product manager/homeaudio, began last month. Its models carry the lowest suggested retail prices announced so far in the market, and the company's marketing spokesmen say Magnavox is aiming at the mass market.

| | |
|------------------------------------|--|
| Model Number | —FD-1000, FD-2000, FD-3000 |
| Introduction Date | —April, early May and late May, respectively, for Spring Preview; full-scale launch planned for June |
| Pricing | —FD-1000,\$800; FD-2000,\$800; FD-3000,\$900 |
| Distribution | —During Spring Preview, all three models will go to 25 selected accounts, mainly fashion department stores and some TV/appliance stores. |
| Target Customer | —Mass market |
| Selling Points | —The digital audio disc's potential for pure, perfect sound; Ease of operation of the Magnavox models; A simpler electronic design, in digital-to-analog converters, filters, etc., that with three special techniques used by Magnavox — oversampling, digital filtering and noise shaping — provides the effectiveness of the pure 16-bit system |
| Advertising & Promotion | —Message first will make consumer aware that the digital audio disc player is not an evolution of the turntable, then will emphasize selling points of Magnavox models. Methods will include in-store displays that include the players in a complete sound system; training for retail personnel; a toll-free number to be used for ordering software and a special response package for persons ordering the players, in the event the store runs out. |
| Availability | —There will be "enough units to cover the needs of the selected retailers." |
| Service programs | —Service is available from selected service centers that specialize in the players. |
| Warranty | —Standard one year, parts and labor |

Top-of-the-line FD-3000



World Radio History

Cybernet International Inc. (Kyocera)

Cybernet sees the biggest challenge to successful marketing of its Kyocera DA-01 digital audio disc player as the ability to judge the price stability of the marketplace, and, according to Mitchell Ravitz, sales manager, be there with the right price at the right time.

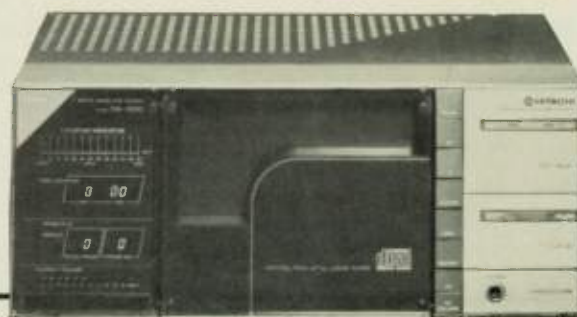
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|------------------------------------|--|
| Model Number | —DA-01 |
| Introduction Date | —April |
| Pricing | —\$1,050 |
| Distribution | —The Kyocera network of audio specialists |
| Target Customer | —The audiophile: the person who wants something better in sound reproduction |
| Selling Points | —Proprietary dual digital/analog filtering techniques for better sound with high resolution electronics and speakers; wireless remote control |
| Advertising & Promotion | —Cybernet is boosting its national advertising program for the Kyocera brand by 50% to include promotion of the DA-01. Placement will be focused in consumer buff magazines. The company plans to reach the trade through its own sales reps and direct mail pieces. By the first of April, the company already had done in-store sneak previews in 10 cities, with more in-store promotion planned. |
| Availability | —Will not be a problem |
| Service programs | —No special programs will be necessary. Spokesman says repair is largely a matter of replacing problem components. |
| Warranty | —Not finalized, but units shipped April 1 were carrying one year parts and labor |

Hitachi Sales Corp. of America

Hitachi is confident that the demonstration of the Compact Disc player will sell it, says James T. Maynard, vice president/sales and marketing Audio Component Products, so it has launched a large advertising campaign for the DA-1000 with that goal in mind.

| | |
|------------------------------------|---|
| Model Number | —DA-1000 |
| Introduction Date | —April |
| Pricing | —\$1,000 |
| Distribution | —Hitachi's regular dealer network |
| Target Customer | —In the beginning, because of the price, the audiophile who enjoys true reproduction of sound |
| Selling Points | —Hitachi is a pioneer in the technology, with more than 140 patents and patent applications involved in development and focusing of its player's laser diode. Also, "the demonstration will sell it." |
| Advertising & Promotion | —Hitachi is packaging two digital audio discs with each player. In addition, a large kick-off campaign accompanying last month's introduction includes trade and consumer publications, although it is being concentrated in buff books. In-store promotions are being developed, including point-of-purchase materials and a "CD Sales Kit." Advertising message focuses on enticing the consumer to witness a demonstration of the product. |
| Availability | —No problems anticipated |
| Service programs | —Hitachi engineers have completed training course at CD facilities in Japan so they can train U.S. authorized service technicians in proper procedures for the digital audio players. |

DA-1000



NEC Home Electronics (U.S.A.) Inc.

NEC plans to capitalize on its experience with PCM satellite communications and, according to Gary Bryant, marketing services/video products, emphasize how its resources in the full field of electronics are brought to bear on research and development of its consumer electronics products.

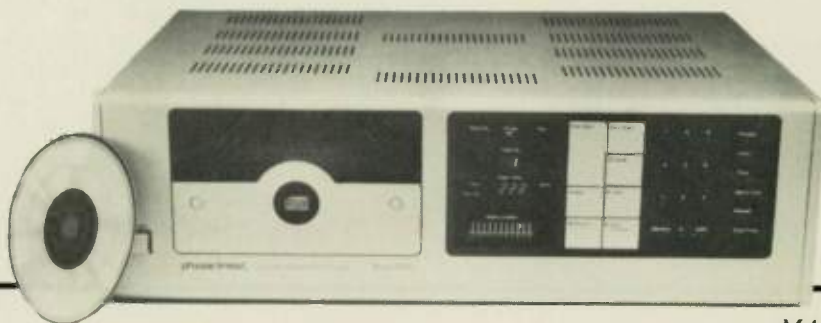
| | |
|------------------------------------|--|
| Model Number | —CD-803 |
| Introduction Date | —May |
| Pricing | —\$1,200 |
| Distribution | —Individual sales reps have been asked to recommend appropriate dealers for the player. Those will include upscale audio dealers, or maybe some video specialists, who already are handling high quality audio equipment. Distribution will be nationwide, although limited to major market areas. |
| Target Customer | —The consumer characterized by upscale demographics, i.e., an income of more than \$35,000 |
| Selling Points | —Non-delay digital filter was developed by NEC from its experience with PCM satellite communications. The filter uses a multiplicative process to remove unwanted information, reportedly better than analog filters used in other players. NEC also emphasizes user convenience. |
| Advertising & Promotion | —Message will emphasize NEC's wide ranging background in electronics and how that experience has helped in development of the CD-803. Placement will be centered around audio buff books and selected regional or city consumer magazines, with some trade advertising. |
| Availability | —Spokesman says NEC expects to sell all it provides initially, and then take orders. |

Phase Linear

Touting itself as the first completely American-owned company to market a digital disc player, Phase Linear is tying the marketing of the 9500 compact digital disc player in with its DRS Series of amplifiers, which according to Angela Siedlecki, communications manager, provides the high power amplification needed to reproduce the dynamic range of the compact digital disc.

| | |
|------------------------------------|---|
| Model Number | —9500 |
| Introduction Date | —By end of May, company will have ample quantities for display and inventory. |
| Pricing | —\$995 |
| Distribution | —Existing retail network nationwide |
| Target Customer | —Audiophiles who already own high-end hi-fi systems |
| Selling Points | —Programmability features; high-quality performance; ease of operation; Phase Linear's DRS series of high power amplifiers, which the company says provide the required power levels to handle the digital disc's dynamic range |
| Advertising & Promotion | —Plans are not finalized. |
| Availability | —Ample for display and inventory by end of May |
| Service programs | —Service support is available through Phase Linear's current local service center networks, which boast an average turn-around time of three days. |
| Warranty | —One year, parts and labor |

Model 9500



Technics

Although Technics merchandising spokesman Paul Foschino says he believes the digital audio disc system eventually will become a mass-market item, it will be handled gently during its infancy with limited distribution and educational advertising. The company doesn't expect to make any money on its player the first year, at least not compared to the dollars it is investing.

| | |
|------------------------------------|---|
| Model Number | —SL-P10 |
| Introduction Date | —Players will reach this country in May and be on retail shelves in June. |
| Pricing | —\$1,000 |
| Distribution | —Plans are not finalized, but spokesmen indicate it probably will be centered around small, high-end dealers and audio chain stores with familiar names. |
| Target Customer | —Company believes the price of hardware and kinds of software available (largely classical) have selected the customer for it: the audiophile or music enthusiast. |
| Selling Points | —Technics' involvement in development of digital process; the Technics-developed LSI and specially designed solid state semiconductor laser pickup system; ease of operation; auto disc loading; programmability features |
| Advertising & Promotion | —Message will be educational during first year and will emphasize Technics' commitment to digital. A national advertising campaign is planned, with print ads particularly in the mass audience consumer publications. Besides print, company is "considering other options" but cannot be specific yet. Company will provide dealer help when and where it is needed, but believes simply the existence of the player in retailers' stores will provide the necessary promotion. |
| Availability | —Dealers will dictate the quantities they can sell. Company can provide more than initially projected if they are needed, but wants to avoid flooding the market. |
| Service programs | —Because Technics players go through quality control checks after reaching this country and before being shipped to dealers, spokesman anticipates few problems. Company's existing service network already is receiving training, and although device is complicated, its repair is relatively simple. |
| Warranty | —Two years, parts and labor |

Yamaha Electronics Corp.

Yamaha believes the Compact Disc system offers tremendous potential for advertising in the long run, but, says Jay Eagle, sales division manager, with the limited number of players available when Yamaha begins shipping in late May or early June, this company plans no significant amounts of consumer advertising at the start.

| | |
|------------------------------------|---|
| Model Number | —CD-1 |
| Introduction Date | —Official introduction at May dealer meeting, with shipments expected to begin late May or early June |
| Pricing | —Not firm, but more than \$1,200 |
| Distribution | —All of Yamaha's existing audio specialty dealers, described as a "discreet network" of dealers that can provide the proper explanation of the player and system. Yamaha's secondary network of department stores will not get this first-generation model but may get future generations as the product matures. |
| Target Customer | —The knowledgeable audio buyer |
| Selling Points | —Yamaha's proprietary circuitry, including the laser positioning and precise focusing; variable focusing ability and output; overall performance ability of digital audio disc. |
| Advertising & Promotion | —No significant amount of consumer advertising is planned because of limited quantities of players available. Trade print advertising will be small due to CES exposure and other promotions. |
| Availability | —"We know we won't have enough." However, no rationing among dealers is anticipated. |
| Service programs | —The existing preferred customer service network will be equipped to handle service problems, with support through service manuals and regular service conferences. |
| Warranty | —One year is expected, though decision is not finalized. |

CD-1



Sharp Electronics Corp.

Sharp believes the digital disc system will be accepted more readily across a wider range of consumers than most of its competitors are anticipating and is pricing its player to be "one of the most competitive." However, Bill Yanke, national sales/merchandising manager for audio products, would only be as specific as "less than \$1,000" in late March.

| | |
|------------------------------------|--|
| Model Number | —DX-3 |
| Introduction Date | —Tentative, depending on software. At press time spokesman anticipated Sharp would begin dealer demos in May and would have stock available in June. "As of June 1, we will be prepared to react if the software market responds," the spokesman said. |
| Pricing | —Not yet announced, but it will be "one of the most competitive." Less than \$1,000 was the closest estimate. |
| Distribution | —Sharp is still studying options, but it is likely the product will be offered to a majority of its established distribution, which includes chain audio stores, audio/video specialists, department stores and a few appliance-type stores. |
| Target Customer | —A wider range of customer than simply the audiophile |
| Selling Points | —Sharp's broadening consumer electronics reputation as a technologically advanced company; ease of operation of the Sharp player; pricing |
| Advertising & Promotion | —No specific plans, but message will emphasize player's technologically advanced components and competitive price and will be targeted to reach the mass market. |
| Availability | —Adequate |



DX-3

Sansui Electronics Corp.

With prices ranging from \$800 to more than \$1,200, Sansui does not expect a run on the players. Instead, it will be a slow-build market. Tom Yoda, vice president/sales and marketing, foresees no availability problems, even though the June introduction of the PC-V1000 will follow Sansui's conservative attitude toward new product introduction quantities.

| | |
|------------------------------------|--|
| Model Number | —PC-V1000 |
| Introduction Date | —June |
| Pricing | —Less than \$1,000 is closest estimate |
| Distribution | —Product will be made available to all existing Sansui dealers, which include high-fidelity specialty stores and some brown goods outlets and department stores. |
| Target Customer | —Sansui anticipates two initial buyers: the audiophile who already is spending \$18 on an analog record in search of ultimate sound reproduction; and the person who must be the first to have a new product. |
| Selling Points | —Sansui's digitalization processes are adopted from its PC-XI digital processor, which Sansui says has been judged as having an error correction rate 10 better than competitive processors. Sansui also emphasizes styling and price. |
| Advertising & Promotion | —A budget is undecided, but placements are anticipated in the hi-fi magazine market. Sansui also has plans for an in-store promotion, but will describe it only as "an educational device for the sales force as well as customers." |
| Availability | —Sansui maintains its conservative strategies for determining introduction quantities. No allocations are planned. |
| Service programs | —Existing national service network will handle player. |
| Warranty | —Sansui's standard warranty |

Toshiba America Inc.

Toshiba's T. Watanabe, merchandise manager sound equipment, said in March that the Compact Disc software picture, which had caused player manufacturers to delay U.S. introductions, "suddenly has become very exciting," a development that moved up the schedule projected at the January CES for developing the U.S. market by three months.

| | |
|------------------------------------|--|
| Model Number | —XR-Z90 |
| Introduction Date | —June CES, with second model expected by end of the year |
| Pricing | —\$1,000, although spokesman predicts the CD player prices will go down rapidly, perhaps to \$500 by the end of 1984 |
| Distribution | —Company already is loaning models to selected department stores for demonstrations. At introduction, distribution will be limited to key high-fidelity chains, but spokesman suggests that in long run, CD players may find their way into record stores. |
| Target Customer | —High-end hi-fi buyer |
| Selling Points | —The XR-Z90's microcomputer and its circuitry for correcting errors, which Toshiba says is better than the competitors |
| Advertising & Promotion | —Final plans are undecided, although spokesman said the main emphasis will be on consumer education, probably through co-op advertising arrangements and demonstration help in dealers' stores. Company also is considering joining with a group of CD industry leaders in a joint advertising group to promote the CD system. |
| Availability | —Adequate for limited distribution |

Onkyo U.S.A. Corp.

Demand for Onkyo's CD player in Japan has left its U.S. counterpart still wondering when there will be enough players left over to begin distribution in the United States. At the end of March, Onkyo's Ken Furst, national product and advertising manager, speculated that the earliest he would get any of the DX-5 units in this country was after the June CES.

| | |
|------------------------------------|--|
| Model Number | —DX-5 |
| Introduction Date | —June is the earliest date anticipated. |
| Pricing | —\$999?, depending on yen exchange rates in next month |
| Distribution | —Offered mainly for demonstrations to selected dealers of Onkyo's new upscale audio line |
| Target Customer | —"People with a lot of discretionary income who are into toys" and those who want to have anything new as soon as they can get it; Spokesman says he doesn't expect the CD player to be a consumer item until next year. |
| Selling Points | —Onkyo believes it has achieved the best "compromise" in the focusing of the laser. It also boasts proprietary processing circuitry and appealing cosmetics. |
| Advertising & Promotion | —With the initial limited rollout, expect ads to emphasize "come and see" promotions at the local dealer level. No large scale campaign is planned because of the limited product available. Trade promotion will be centered around CES, direct mail and Onkyo's own reps. However, spokesman expects the CD player to get much attention in the company's fall advertising schedule. |
| Availability | —Limited, due to demand in Japan and Europe; Company now is trying to determine the best way to allocate what players do make it to the U.S. market. |
| Service programs | —U.S. technicians are receiving training at the factory. Onkyo also expects to have a "technician in residence" from the factory for the introductory stages. Service manuals are being provided. |
| Warranty | —Not finalized, but probably the same as other products: two years parts and labor. |

Aiwa America Inc.

Aiwa believes the prices being discussed by companies already planning U.S. CD player introductions are all "over the lot," and while it expects to see initial interest sparked by the introduction, it plans to wait until the market "comes back down to reality," according to Vince Wheeler, national sales promotion manager.

| | |
|------------------------------------|--|
| Model Number | —dX-1000 |
| Introduction Date | —"Not before summer" is closest estimate. Company is waiting both for software availability and market awareness. |
| Pricing | —Will decide when initial market enthusiasm settles down |
| Distribution | —Plans include Aiwa's existing network of audio salons and selected department stores. |
| Target Customer | —The audio-salon equipment buyer and the department-store audio equipment shopper, which Aiwa sees as two different consumers |
| Selling Points | —True compact size, less than 3 inches high; auto front slot loading; full servo control, label down loading for extra protection from scratches; plus programmability features |
| Advertising & Promotion | —Message will emphasize that "there will be a difference in sound quality" among the different players, plus features of the CD system. Aiwa is not ready to comment about media selections, but "there will be an education job for dealers and consumers." |
| Availability | —Sufficient when product is introduced |



Marantz Co. Inc.

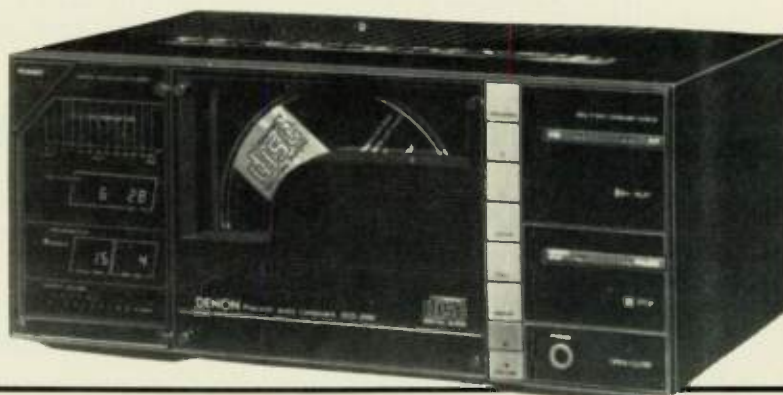
The real selling job for the CD system will be to those consumers looking for "beer budget best buys." Product marketing manager Rocky Caldwell said retailers and manufacturers will have to make this buyer understand that although he won't be able to get it for a McDonald's price, this CD system will provide him with the best sound reproduction available.

| | |
|------------------------------------|---|
| Model Number | —CD 73 |
| Introduction Date | —Late summer was best estimate, as of late March. |
| Pricing | —Should be less than \$1,000 |
| Distribution | —Marantz' normal distribution channels, which include some department stores and small specialty independents |
| Target Customer | —Initially, an upscale consumer with more disposable income than most; The majority will be those who want to be the first to have whatever is newest; second are those looking for "audiophile sound for a McDonald's price" |
| Selling Points | —Marantz player uses European chip set; sound quality potential for CD system; programmability features, efficiency, pricing |
| Advertising & Promotion | —The player will be integrated into company's overall image campaign, which emphasizes Marantz brand name and its heritage, but also will be handled with a separate marketing approach. Company plans in-store promotions that will put its technicians on the sales floors for those customers who want to "talk shop" on an engineering level, particularly for audio specialty dealers. |
| Availability | —Spokesman suspects that "nobody will get nearly as many as he asks for in the initial go-round." |
| Service programs | —No special plans for this player, as yet |

Denon America Inc.

Denon, sticking close to an image it has worked to build as a respected name in high-fidelity audio equipment, does not want to market a Denon CD player until it can provide a model it believes offers enough advantages over the competitors to carry the Denon name, according to Eric Fossum, marketing/sales vice president.

| | |
|------------------------------------|--|
| Model Number | —DCD-2000 |
| Introduction Date | —Company has begun providing this first generation model to dealers for demonstration only. Second-generation models are expected in September and December. |
| Pricing | —The demo model carries a suggested retail price of \$1,000. |
| Distribution | —Selected dealers for demo only. |
| Target Customer | —The same customer that buys other Denon products and knows the name. |
| Selling Points | —When Denon begins marketing a player, it will have a product it believes is better than its competitors. The Denon name and reputation will be a key selling point. |
| Advertising & Promotion | —No large-scale campaign is anticipated because "Denon doesn't need CD to put it on the map," and the company doesn't see these first generation players as the savior of the industry, at least not among the audiophiles who are being led to believe this is the ultimate sound for which they have been waiting. |
| Availability | —Will have adequate supply when player is marketed. |



DCD-2000

Studer Revox America Inc.

Studer Revox "definitely" will have a digital audio disc player in the U.S. market, but Lawrence Jaffe, Revox director of marketing and sales, says it will not be soon. Studer Revox believes the digital disc player technology has a way to go before it reaches the company's standards for quality. Jaffe says Revox loyalists will have a year to a year and a half to wait.

JVC Co. of America

According to George Meyer, national product manager, a decision about when to market JVC's CD player in the United States will be made in Japan and will depend on reports of software availability from U.S. representatives. Once the company deems software supply sufficient, the Japanese plant can make the players available immediately. JVC will show the player at the June CES.

Kenwood Electronics Inc.

Although Kenwood has begun some dealer demonstrations with its prototype L-03DP CD player, Benjamin Ukaji, product planning manager/home audio, says it is hesitant about entering the U.S. market full-scale because of the limited amount of digitally mastered software available. Kenwood believes the quality of most of the Compact Discs being made from analog masters will be a problem for the acceptance of the CD system by the U.S. market, and, therefore, remains "undecided" about when it will enter the field.

Sanyo Electric Inc.

Company spokesmen reported that a decision was made during Sanyo's March sales meeting to hold off introduction of the Sanyo Compact Disc player for a number of reasons, including limited software availability.

Pioneer Electronics (USA) Inc.

As of late March, Pioneer spokesmen reported that they had no plans to introduce the player shown at the January CES to the U.S. market. It will be marketed only in Japan and Europe. A decision about whether or not to change that policy was not expected until late summer or early fall.

Fujitsu Ten Corp. of America

This licensee will wait to see how the CD market develops in the United States before considering any introductions consistent with its product line.

Information was unavailable at press time from Fisher Corp., Mitsubishi Electric Sales America Inc. and Crown Japan.

Sparkomatic Goes On The Road With Supertramp

One of the world's major autosound manufacturers joins forces with one of the world's major rock bands for a gigantic promotion.

By Timothy L. Martin
Editor

In a unique move in the consumer electronics field, Sparkomatic Corp. has signed an agreement with the English rock group Supertramp to sponsor the band's 1983 world tour. Beginning in June, the tour will cover 50 cities in 10 countries in Europe and North America.

Supertramp is one of the greatest bands still together today, with a list of hit albums that includes *Crime of the Century*, *Breakfast in America* and *Famous Last Words*.

The tour is designed to increase brand awareness for the autosound manufacturer on a major scale. "The joining together of two music makers — Sparkomatic and Supertramp — will produce real sound effects," said company president Edward Anchel. "Sparkomatic will be placed more firmly in the minds of the 18-34 year age group, not only in America, but around the world where Sparkomatic products are sold."

To promote the tour, aptly titled "Sparkomatic Car Sound Presents Supertramp World Tour '83," Sparkomatic has instituted a multi-million dollar advertising

campaign featuring four-color ad spreads and single pages in such publications as *Playboy*, *Penthouse*, *Rolling Stone*, *Sport* and other magazines. Locally tailored radio spots and newspaper ads will feature specific tour information — dates, time, location — and will be used to announce local retail tie-in promotions that are also planned.

Two contests will coincide with the world tour: a pre-tour national sweepstakes with a trip to see and hear Supertramp perform in concert in Europe as the grand prize, and a local on-tour sweepstakes offering "Backstage with Supertramp" passes, concert tickets, T-shirts and posters as prizes.

Anchel would not reveal either the terms of sponsorship nor its cost, except to say that Sparkomatic will spend several million dollars.

Members of the band, presented at a special press preview recently, expressed their delight at having found a sponsor for their tour that was "not a beer or cigarette company but an audio company of audiophile

quality." (The rock group The Who, one of the few bands equal in stature to Supertramp, last year went on tour with sponsor Jos. A. Schlitz Brewing Co.) A band spokesman said that rather than reducing ticket prices for concert-goers, sponsorship by a major corporation such as Sparkomatic means that ticket prices will not have to be raised in order to meet the enormous costs a band incurs when it goes on the road.

U.S. cities on Supertramp's tour include Atlanta, Baltimore, Boston, Buffalo, Chicago, Cleveland, Dallas, Denver, Detroit, Houston, Indianapolis, Kansas City, Los Angeles, Milwaukee, Minneapolis, New York, Philadelphia, San Diego, Seattle and St. Louis.

In early June, when Supertramp is kicking off its tour, Sparkomatic will be debuting three new high-end car stereo systems at the Summer Consumer Electronics Show in Chicago. Anchel explained the emphasis on high-end autosound by pointing out that his company's best-selling unit is also its most expensive. □

Make Your Time Count At The Summer CES

With a game plan in hand, retailers needn't be overwhelmed by the largest annual U.S. trade show.

By Marilyn Nason

Veteran buyers and first-timer retailers share the same basic problems when preparing for both major and regional trade shows. Time, money and potential buying trends are all part of the myriad topics that must be factored into the decisions retailers make in relation to show attendance by their store personnel.

While each retailer obviously has individual decisions to make, all agree that proper planning before, during and after the show is the key to optimizing this vital aspect of retailing.

As the summer and winter Consumer Electronics Shows assume mounting importance to all retailers in this highly competitive, ever-changing industry, retailers nationwide are reassessing these shows "every step of the way to be sure we're always on target," according to one St. Louis retailer.

This philosophy was shared by many retailers across the United States spot surveyed by **High Fidelity Trade News**. They said that both known and hidden costs involved in major show attendance force them to reanalyze the entire situation each time a show rolls around.

"It really comes down, first and foremost, to a question of whether to attend or not," said a spokesman for Stereo Village Inc. For him, the answer is an emphatic yes when it comes to CES, even with increasing transportation, hotel, meal and ancillary costs.

Jim Buckler, secretary-treasurer of the seven-store, Atlanta-based chain, believes strongly in his chain's attendance at CES and normally brings four people with him. These include two regional buyers,

one overall company official to deal directly with manufacturers and one chain representative from the credit end of their business.

Every step of the way in preparing for the show, Stereo Village representatives carefully map out a schedule, setting up appointments with some vendors even before leaving Atlanta.

Stereo Village also finds it helpful to review manufacturers' histories and product lines. Buckler said the chain does a quarterly, yearly and two-year history of a manufacturer's merchandise by category, zeroing in on comparative analyses, projected sales and a breakdown of historical sales results.

Normally the Stereo Village team plans to spend three days at the show, two on the floor and one in reviewing tactics. "We've already checked out the high points of the show, thanks to trade publications and vendor literature, so we have formed some initial opinions and goals upfront," Buckler said.

Stereo Village does no buying at the show, contending that "all manufacturer deals offered at the shows have already been outlined to us beforehand and are still good after the show." The only exceptions are closeouts that demand the retailers' immediate decisions during the show.

Like several other retailers, Stereo Village does not break down inventory into categories for viewing or buying purposes at the show. "We consider ourselves a total specialty store, so we work via a central buyer system rather than by individual buyers for each category, as some retailers prefer doing," Buckler said.

During the show, all four work as

a unit in dealing with key "super-major vendors," then split up to work with those offering minor products suitable for their four stores in Atlanta and three stores in New Orleans.

Does spending all their time with the vendors they know deprive them of the opportunity to see what's new from other vendors? "Perhaps," Buckler acknowledged, "but our time is caught up with our vendors. We just feel this is most important, to us and them, to be sure we're exchanging all the information needed to assure optimizing our relationship."

Reflecting, he observed, "Somehow we always seem to find some time to check out new products and vendors at most shows, so I don't feel we're ignoring new possibilities or trends at a specific show."

Allocating enough time after working with known vendors was cited as a common problem among all retailers surveyed. "I'd hate to think I'd overlooked a new vendor who might be just right for us," a Los Angeles buyer admitted.

For him, the solution lies in "touring the entire show floor when I first arrive, not scheduling any appointments the first day to allow myself that first day to see everything without spending too much time in any one booth or at appointments off the floor."

He also determines, well ahead of the show, what new trends he might be looking for by keeping an ear tuned to his customers. "We listen very carefully to what they tell us, what they ask for and their criticisms, using all this as the basis for much of our ordering," he emphasized.

Retailers reported consistently that throughout the preparation for show attendance, time is a prime consideration. "Time spent studying pre-show trade publications and vendor literature is as important to me as time on the show floor itself," said Mariano Riago, owner of Video Station of Asheville, N.C., who finds the publications' illustration of the CES floor plan and outline of the exhibitor booth directory particularly helpful.

"I always use these to locate vendors I must see, then try setting up an aisle-to-aisle list before (I) even start onto the floor," he said. "It saves lots of lost time backtracking, plus assures me we won't miss those we must see first time around the floor."

After his reading, Riago prepares a generic list of products already in his store and all buys already committed, plus introductions he believes are specifically important for his store. "That way I've got a basic laundry list started, yet haven't bound myself too tightly into definite buying directions before getting to Chicago," Riago said.

He plans to take two people with him, and they generally spend three days. Riago and his people work the floor together the first time around, then, after comparing what they've seen with what they've listed on the pre-show planning list, they return to close deals and talk with manufacturers or vendors.

Some retailers prefer to plot out even more detailed schedules to maximize the time they will spend at the show. The St. Louis retailer interviewed said that he allows 10 minutes per booth for the first visits to vendors he already uses. He explains upfront to those vendor reps that he simply wants literature, basic facts and a preliminary look-see or demo at that time but will return later with an appointment for serious buying discussions.

For a new vendor or a new product he is considering for his store, this retailer usually allows 15 minutes for the first visit to get an overview of the product and/or a sense for what this vendor is like. "That night I decide whether to return the next day to the booth," he added.

When packing for the show, many of the retailers contacted include an instant camera and tape recorder, which prove helpful for the hotel-room decision making. "With these, I don't have to rely on my memory or take notes, and I can make better decisions," one retailer said.

Show-sponsored seminars, workshops and social events drew varied opinions from the retailers inter-

viewed. Riago said he has found that these show extras provide considerable helpful information for him and his employees.

For Buckler, however, lack of time prohibits such attendance. "We don't know everything about our business and industry," the Stereo Village executive noted. "But we didn't come to a CES to get retailing education. (We came for) new merchandise education."

Stereo Village management prefers to "get educated by our vendors."

Finding Time for Regionals

While most retailers agree with Buckler that the CES is a must-attend event, they are becoming more cautious about committing money and time away from the store to attend the growing number of regional trade shows.

"We just can't be away from our stores to attend all of (the regional shows), even if we could afford them," said Video Station's Riago.

Most of the retailers contacted by

HFTN said they must carefully consider the benefit/cost value of the show that comes along. "While I may feel one year I should go to several regionals because customer buying trends are in a state of change," commented the St. Louis retailer, "another year I simply will forego them, being content working with reps in my store."

One retailer who is reluctant to commit the time and money even to the CES is the Video Show 4th Dimension chain, based in Tampa, Fla. A spokesman told HFTN that the sheer expense of sending personnel to Chicago or Las Vegas keeps representatives of the seven-store group away. The Video Show spokesman suggested that "we'd probably feel differently if it weren't for the super-detailed, prompt post-show coverage major trade publications provide us from the CES."

The chain's managers believe this coverage, combined with manufacturer-sponsored training sessions, provide the sales staff with the necessary product information. □

A Pre-CES Laundry List

☐1. Read trade publications' previews of the show and the new products that will be there, noting your needs.

☐2. List present inventory and already-committed buys.

☐3. Schedule appointments with preferred vendors before leaving home.

☐4. Using show floor plan, list by aisle those vendors prioritized as (a) Must see; (b) Like to see; and (c) Never heard of, but worth looking into.

☐5. Determine which of those people attending the show with you will do what when to maximize time and minimize expenses.

☐6. Arrange your briefcase into inventory categories, including information about current inventory, already-committed buys, new products to see, etc., then allow space in each product category to add literature gathered from the first trip around the floor. Each category can then be studied separately between floor trips or appointments.

☐7. Determine whether you will do any buying based on trends you might spot, attractive closeouts

and show specials or whether you will only commit after the show.

☐8. Determine optimum delivery dates by category.

☐9. Begin early compiling customer comments and input and include those in your briefcase, filed either by brand name or product category.

☐10. Determine what seminars, workshops or events you or your staff members will attend, making sure to factor time for them into the overall trip schedule.

☐11. Determine a budget for both merchandise buying and show attendance and commit yourself to stay within it.

☐12. Allot time after your return to do a post-show evaluation comparing how valuable the trip proved to be and expenses; judging how successful your methods of working the show were; making appointments with vendors; tempering the manufacturer or trade press excitement of a new trend with realistic appraisals of your market; and reflecting on whether or how the show has affected or should affect your approach to specific merchandise mix or marketing concepts.

McVideo?

Franchises and affiliates offer alternatives to going it alone in the risky world of video.

By Geri Hanna

Just as the "Golden Arches" beckon hungry travelers on the nation's highways, transmitting towers and lightning bolts lure videophiles in cities across the country.

The transmitting tower is the logo for Video Station, a software affiliate operation with more than 450 stores. The lightning bolt is a symbol used to identify Video Connection, a franchise with 260 outlets.

VCRs are in only a small percentage of American living rooms, but their numbers are growing steadily and market saturation is a long way off. To keep the public supplied with a continuous flow of pre-recorded tapes and fascinating new equipment, chains of local video stores have sprung up virtually overnight. There are already more than 10 such franchise or affiliate operations listed in various franchise directories.

The advertising clout and buying power of the franchises can strike fear into the heart of the lone independent. So it is no wonder that many retailers are jumping for the life preservers offered by franchisors.

For those who are thinking about getting into the business of video, video franchises do it all for them. Most operations offer turnkey deals providing everything from color coordinated carpeting and designer wallpaper to personalized newsletters for the customers. These packages are priced from \$34,500 to \$250,000, depending on the options chosen.

The largest operation, Video Station, is "pushing 500" outlets, an estimated third of which are satellite stores — branches of the same franchise. National Video is merchandising private label goods to its 308 stores and is opening its own model store and training school in Chicago.

Then there is Video Biz, started by two former Station executives, which has 100 affiliates in 90 cities. Video Encounters (owned by Amex International, in import/export firm) is also a Sharp distributor with more than 200 stores specializing in hardware only. Video Crossroads International provides a specialized computer program, an in-store promotion system and a variety of inside information to its 25 franchisees. Video Depot is teaching its 46 affiliates "volume merchandising."

There's Safety in Numbers

Apparently the franchise concept works. According to Department of Commerce statistics, 65% of all small businesses fail in the first five years compared to less than 5% for franchise operations. The video retailing franchises contacted by **High Fidelity Trade News** reported closure rates of less than 5%.

Belonging to a franchise or affiliate organization ensures the small operator of a better chance of survival. The clout wielded by large chains is generated by group buying, national and regional advertising, specialized training, name recognition and expert merchandising.

The franchise idea is so attractive that even established independents are opting to become franchisees or affiliates. Several operations offer "conversion packages." George Atkinson, president of Video Station, said he is allowing a typical George's Video to "change his religion" and become a true blue Video Station for a \$7,500 licensing fee; the new affiliate gets good will and a non-competitive clause for a 50,000-population territory.

Video Crossroads has a \$7,500 conversion deal including training and site selection — "We may ask them to move," said president Jim Lahm. Video Encounters charges a \$2,500 fee for conversion, said pres-

ident Al Marengo. Video Depot makes its \$52,500 package available to independents, with credit for existing inventories, according to general partner Phil Di Giorgio.

On the other hand, Ron Berger, president of National Video, said his organization does not offer any conversions. "I think our image is very important. The customer has come to expect a certain atmosphere and style when they come to a National Video store," he said. "Typically a (conversion prospect) wants to mix audio and video or other products," a no-no in a National Video outlet, Berger said.

However, he pointed out National has a very successful franchisee who also operates three separate audio stores. Berger said Peter Dol Bianco in Sudbury, Ontario, now owns four National Videos in addition to his hi-fi outlets.

There are franchise and affiliate operations with a host of different programs. Franchises usually offer on-going advertising and more comprehensive (and more expensive) packages whereas affiliates are start-up deals with optional ad funds. For their services, the franchisors charge royalties and ad fees that are a percentage of the store volume.

Affiliating, says Video Station's Atkinson, "is like living with someone without being married. Franchisees are the guys paying alimony."

Here are some of the special programs that distinguish the blue clacker (Video Biz) from the silver lightning bolt (Video Connection) and the transmitting tower (Video Station) from the TV set (Video Crossroads):

VIDEO STATION. An affiliate operation, Video Station does not charge royalties but does ask for contributions for national advertis-

ing. Atkinson charges \$43,500 for a new store but suggests at least a \$50,000 investment. He points out that a lack of expertise in the field as well as insufficient cash have led to the demise of many video stores.

The retailing executive is proud of the fact many of his stores have "cloned themselves," spinning off additional Stations.

"We are pushing almost 500" outlets, he said. "On any given day I discover more and more satellites have opened up. The other day I heard about eight grandchildren out of British Columbia I didn't know I had."

Atkinson has recently restructured his video club so the membership card is honored by Stations everywhere from Alaska to New York. "Even if a station should demise," the membership would be honored, he said.

VIDEO BIZ. "We just converted to a franchise," said M. Ray Fenster, president of the operation. "All our affiliates will be converting." Although the affiliates will not be charged a royalty, they will be asked to contribute 2.5% of their gross to a national ad fund, he said. The franchisor is planning national advertising in regional and special interest as well as general interest publications.

Currently advertised in *The Wall Street Journal*, Video Biz affiliates were going for \$34,500. The price included some inventory, exclusive territory, training and an inventory control system. Fenster said an interested party should allow \$7,000 to \$10,000 for fixtures, signage, rent, etc.

"Most of our people seem to get a chain going; at least a dozen have satellites," Fenster said, adding that many buy the rights to additional territories for future expansion.

NATIONAL VIDEO. A group of private investors, along with company president Ron Berger, recently bought back National Video from a company called Unidyne, which was primarily in the oil business, Berger said.

National has been beefing up its dealer support program in the field, and the company is in the process of training and hiring a group of "field merchandising managers whose sole function is to help the franchisee increase profits," explained Berger. "The people we've recruited are from (J.C.) Penney's and (Montgomery) Wards. The first is out in the field, the second just completed training and the third is about to start."

There are more than 300 National Video stores in the United States and Canada, according to Berger. He mentioned that only five of his outlets had closed their doors, adding that National carefully screens all applicants.

Berger expects investors to have \$50,000 to \$70,000 to put into a new store for various expenses and product inventory. He mentioned there should always be a cash operating reserve on hand. In addition to the start-up costs, National franchisees contribute royalties (2%) and ad fees (2%).

VIDEO CROSS ROADS INTL. With 25 outlets in the United States, Video Cross Roads has expanded into the Canadian provinces. Lahm said his firm has been selected by Woolco to set up video departments in its Canadian chain of 120 stores, and he is talking to a number of U.S. chains about similar arrangements, he said.

Video Cross Roads provides a number of special services to its stores, including its Vid Net computer system and Select-A-Movie catalog program. Select-A-Movie includes counter catalogs with special categories of films, reviews of each title and counter cards. There are also reviews on each cassette case. Vid Net software prints out info on inventory, movie title rental activity, title reservations and rental agreements. Customers receive a transaction slip detailing their transactions.

Calling his operation, the "Cadillac of Video Franchising," Lahm charges \$75,000 to \$90,000 for the total package. He also advises franchisees to have \$10,000 in working capital for a new store.

VIDEO CONNECTION. One of the largest franchises, Video Connection, like McDonalds, has a "university" to train its franchisees and their employees. Staffed by experts in business management and technology, the training at the Rhode Island Center runs two full weeks and is mandatory for all new franchisees, according to Bert Tenzer, Video Connection president.

A Video Connection franchise costs \$29,975 without start-up inventory. The package includes futuristic fixture designs, custom wallpaper and coordinated carpeting, inventory control, display video hardware and specialized forms.

Besides appearing on the signage, the VC logo is now on a line of video accessories and tape. Tenzer also is producing his own special interest health and hobby movies.

VIDEO DEPOT. "Our affiliates are able to compete with anyone; even though they are single owner stores, they can compete with any chain," said Phil Di Giorgio. The video hardware operation charges its affiliates cost for inventory and there is no royalty. "We are not just selling something. We have a large investment as well." He said the 11 company-owned stores represent nearly 25% of the 46 current outlets.

Specializing in hardware, a Video Depot affiliate requires a \$52,500 investment, Di Giorgio said. This includes hardware inventory, accessories, blank tape and 350 pre-recorded tapes. "We open only full service video stores," he said. Besides carrying three or four VCR lines, the Depots also sell TVs and monitors.

VIDEO ENCOUNTERS. Active in the Southern states, Video Encounters is also the Sharp distributor in the area, offering low prices to its franchisees. The hardware-only retailer specializes in wide screen TV in its 200 outlets.

Depending on the amount of inventory and services opted for by the franchisee, an Encounter outlet goes for from \$35,000 to \$250,000. The new owner is well trained both in another store before opening and on site for five to 10 days after the opening, company president Al Marango said.

Protected territories range from 50,000 to 75,000 population on the average, depending on demographics. Site selection is well advised. "We are very selective," he said. "We do a lot of research before a store opens. We'd rather not open a store than open it in the wrong place." There have been no closures, he pointed out.

In addition to the franchise or affiliate fees, most of the video retail executives suggested their new store owners have a minimum of \$8,000 to \$10,000 cash reserve. As a store grows, usually the inventory is expanded.

However, even with the security blanket of belonging to a national or regional operation, there have been problems. When the parent company goes under, the businessman is left alone again.

There have been at least two franchise concepts that never got off the ground. Atkinson said there was a \$1 million organization called Video Society that has disappeared. In addition, there was a highly publicized venture known as Video People that is not listed in any franchise directory. □

AM Stereo: Four Horsemen Won't Mean Its Apocalypse

While transmitter manufacturers challenge each other as King of the Hill, ingenious receiver manufacturers are building units capable of picking up any system broadcast.

By Karen Donde
Assistant Editor

The introduction of multi-system receivers for AM stereo will put the decision of which of the four AM stereo broadcast systems will become the standard for the marketplace in the hands of broadcasters, representatives from the four AM stereo system developers told Southeastern broadcasters at a seminar hosted by the Federal Communications Commission in Atlanta March 17.

Leonard Kahn, president of Kahn Communications, said these multi-mode receivers being marketed by names familiar to consumers, such as Sansui and Sony, will allow the marketplace to function because consumers will be able to buy one receiver that will pick up any of the four proposed broadcasting systems put on the air.

While Sansui, the first of those familiar names to show off a prototype of the multi-mode AM stereo receiver at January's CES, was still stating that its market introduction of such a receiver was not expected before the last quarter of 1983, Sony has revealed that it plans to intro-

duce the model SRF-A100 AM stereo and FM stereo radio this summer. Production manager John Strom said the unit, thanks to a Sony-developed integrated circuit, accepts all four proposed systems for broadcasting AM stereo.

According to Strom, the suggested retail price is expected to be \$89.95. While small enough to be used like a Walkman with headphones, the SFR-A100 also has two built-in speakers.

"We had hoped the FCC would make a decision (about choosing one of the four systems as the standard for the industry)," Strom said. "But since they decided to make it a marketplace decision, we felt the only conscientious way to provide an AM stereo receiver was designing one that would accept all four systems."

According to a Sansui spokesman, the prototype AM stereo car tuner shown at the CES was also to be shown at last month's National Association of Broadcasters convention and will again be part of Sansui's display at June's CES.

However, the decision about what kind of product will eventually incorporate the multi-mode AM stereo receiver circuitry had not been made as of late March.

Eventually, he said, all of Sansui's receivers would be equipped to pick up AM stereo.

Although the circuitry that allows these AM stereo receivers to accept all four proposed systems has given receiver manufacturers a way to participate in what is still a four-system market, Kahn told the broadcasters in Atlanta that he expected the multi-mode receiver to stay on the market only about a year. By then, he said, broadcasters experimenting with the different systems will begin favoring one system over the others, and when that system dominates the marketplace, there no longer will be a need for multi-mode receivers.

Another AM stereo developer disagreed about the impact of the multi-mode receiver, saying the circuitry would make such a receiver too expensive to be accepted by the public. Chris Payne, broadcast manager for Motorola Inc., cited Delco's

December recommendation of the Motorola system as a bigger influence and said that Delco's report already was making a difference with receiver manufacturers, several of whom, Payne indicated, have begun building receivers for the Motorola system.

Both Kahn and Dave Hershberger, associate principal engineer for Harris Corp.'s Broadcast Division, disputed Payne's estimation of the cost of producing the multi-mode receivers. Kahn said that manufacturers could afford to produce the multi-system receivers because of the total dollar potential of AM stereo, and Hershberger answered Payne's doubts about the availability of the chip needed to produce a multi-mode receiver less expensively by pulling one of the chips from his briefcase and showing it to the audience of broadcasters.

Kahn and Hershberger also discounted the Delco decision. Kahn called Delco's testing procedures into question and suggested that not only will Delco not lead the way to selection of one AM stereo system, "Delco won't lead Oldsmobile."

Hershberger reminded the audience that Delco's decision was only a recommendation to GM and not a commitment to begin producing Motorola-compatible receivers for GM cars.

When asked by one broadcaster why the four companies could not work together to come up with one AM stereo system among themselves, Bob Streeter, representing North American Philips Corp. (Magnavox), said that the sharp competition for shares of the financial potential of AM stereo would not permit such working together.

Motorola's Payne pointed out that U.S. antitrust laws also prohibit such cooperation between companies.

Streeter stressed that the kind of cooperation that would be needed in order for AM stereo to compete with FM stereo would be between the broadcast system manufacturers and receiver manufacturers to produce a total system acceptable to consumers.

Consumers have been led to believe that FM stereo is superior to AM, Streeter said. Therefore, when AM stereo is introduced, it must start out at the level of quality of a 20-year-old system, if proponents expect it to be competitive with FM, he added.

One broadcaster asked each panel member to explain, briefly, why his particular system was the one broadcasters should buy. Hershberger cited the high technol-

ogy of the Harris system. Streeter said the Magnavox system was designed to be economical and "consumer-usable." Kahn said he believes the present and future of AM stereo lies in the use of independent sidebands, the key to his system. Payne insisted that all the different systems are compromises; it is simply a matter of where each developer puts the imperfections. He said Motorola believes it has found the best places for those imperfections and reminded that Motorola

can produce both broadcasting and receiving equipment.

Another broadcaster wanted to know when he could expect a 50% saturation of AM stereo receivers in the market. Responses ranged from "maybe never" (Payne) and "five to 10 years depending on the economy" (Streeter) to a guess of "two to three years" (Hershberger) and a statement that the market would begin to see the impact of AM stereo on advertising rate increases "within the next year" (Kahn). □

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The Female Customer

Understanding what a woman wants when she enters an audio specialty store can mean cashing in on the profit potential of this growing market.

Audio retailers may have recognized the profit potential of the increasing numbers of women investing in audio equipment, but most are still a long way from understanding the female customer, her reasons for buying and the kind of shopping experience she is seeking when considering her audio purchase. This observation was made by *Glamour Magazine's* electronics editor, Chris Begole, who spoke with several women who recently had been shopping for audio equipment.

"Women are looking for a combination of comfort, solid information and good product selection in their audio retail stores," she said. "But, unfortunately, they are still choosing where they shop based on which disadvantages they feel best prepared to deal with."

Although most young women shopping for audio are aware they will find a broader selection of products and more knowledgeable salespeople in audio specialty stores, they are hesitant because of the hi-fi jargon, high-pressure sales tactics and macho-oriented environment they have found there, she explained. They find that they have to convince the salesperson that they are serious customers, that they have their checkbooks with them and are worthy of the salesperson's attention.

This situation often leads the woman customer to a department store, where she knows she will find



Most women still are choosing where they shop based on which disadvantages they feel best prepared to handle.

*Chris Begole
Glamour Magazine*

a familiar environment. The store credit card routine and delivery and return policies are familiar, so she knows she won't get stuck with gear she cannot return easily. Still, she realizes that she usually will pay top dollar and not benefit from the flexibility and expertise of an audio specialist.

Ms. Begole said the group of women with whom she spoke was pretty evenly divided as to which alternative provided the least obstacles.

What these women seemed to want, she explained, was simply to be able to walk into any audio outlet and be treated without hesitation as a serious potential customer. Instead, most of them find a world still dominated by the myth of the "male

expert," and some have gone so far as to anticipate that attitude and make it work for them.

"Women report that they are treated better, get more information and get more service and attention if they bring a male, *any* male, with them when they go shopping," Ms. Begole said. "Salespeople tend to evaluate a woman's bringing a man with her as a sign that she will defer to his judgment, when, in fact, she sees him as the only way a salesperson will take her seriously." Even then, she must accept that the sales pitch automatically will be directed at her companion.

Without exception, Ms. Begole's sources also reported that the salespeople underestimated how much the women knew about audio

equipment. "I think that salespeople find it difficult to distill technical information down to ordinary language without going too far and having it inadvertently sound like babytalk," she said.

Although the women said that, eventually, most salespeople adjust their sales presentations to the customer's actual knowledge level, they suggested that salespeople could create a better, more immediately productive selling situation by upgrading their estimates of how much a typical woman shopper is likely to know about stereo systems.

Looking For Basics

In terms of general sales techniques, Ms. Begole said women seem to appreciate finding equipment on display with prices clearly marked. "It is understood that prices will vary somewhat depending on the package that is purchased, but a ball-park price tag is a much-requested item," she said.

Another request, which Ms. Begole said surprised her, was for product brochures to take home for detailed reading. "They say they want more technical information, not less, but by that they seem to mean details about what each feature does and how it should be used properly. Specifications are not what they are after."

High-fidelity buzzwords like wow, flutter, THD, LED, woofer, tweeter, etc., often used to describe those specifications, are anxiety provokers, and not only for women customers.

Interesting to Ms. Begole, though, were comments from several women about how amazed they felt as they discovered, during the sales pitch, how really easy, simple and logical audio equipment is to use. They said they anticipated it would be difficult and were delighted to discover they were wrong.

"If salespeople could find a way to demonstrate proper use of gear and discuss it in plain English, eventually we might get to the point that women stop anticipating the worst," she observed.

Some of the women Ms. Begole spoke to did report good experiences finding the right audio equipment. Generally, however, most pointed to their own advance research and self confidence as the primary reasons for their good experiences. Their self confidence, they said, enabled them to hammer away with questions until they got answers they understood and to "muster enough nerve" to tell the salesperson to go away for a few minutes to give them time to think.

"One woman I talked with who had worked with a female salesperson volunteered that as a definite benefit long before I had a chance to probe that aspect of her experience," she added. "Another rave review came from a woman who obviously had been given a superb demo. I could barely get her to stop marveling about the fact that she could compare various receiver combinations and the fact that she could hear differences in performance."

Identifying The Market

Ms. Begole's research suggests to audio specialty retailers that they need to recognize where a woman customer sees herself in the overall audio market if they expect to tap the profit potential presented by this growing buying group. They must know who this customer is and what products will satisfy her audio entertainment needs.

According to Ms. Begole, this new market largely is made up of women in their 20s. They say they are influenced most in making their audio purchase decisions by newspaper advertising, *Consumer Reports* and friends who own stereo components. The friends they consult in-

clude both men and women, and they often base their estimate of what they need on the equipment their friends have.

Married women and women with live-in mates make joint decisions with their partners, and dual-earner households shop together, with the woman viewing her preferences as 50% of the buying decision. These should be particularly eye-opening facts to those salespersons still addressing the man when a couple comes in to look for a new stereo system.

Women's preferences for products seem to lean toward those that are easier to use, simpler to hook up or better planned from a human engineering standpoint. "Specifically," Ms. Begole reported, "I think women like the one-brand system concept, especially the mid-sized ones. Why? They're easy to buy, they offer the upgrading flexibility that comes with components and their name brands are familiar. Also, I think plug-in cartridge mounts will appeal to women, and so will the component systems that interconnect without connector cords. Space-saving sleek designs, such as in front-loading turntables, also will do well," she predicted. □

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JVC's Audio Express racing promotion targets \$1 million for car audio line.

Autosound Stars In JVC Campaign

A \$2 million marketing campaign, which features sponsorship of race car driver John Collins, is supporting the introduction of JVC Co. of America's 1983 car audio line.

More than \$1 million is being spent on print and radio advertising, much of it tied to the national racing schedule of Collins and his team, whose car, *The Audio Express*, is raced at tracks throughout the country.

The balance of the campaign budget is earmarked for a variety of point-of-purchase merchandising aids and a series of dealer promotions tied to Collins' racing schedule. These involve personal appearances by Collins and *The Audio Express* at JVC car audio dealers during the six month period of the campaign.

Trade advertising broke in March, and consumer advertising, which begins with June issues, includes buff books in the car field, including *Motor Trend*, *Car & Driver*, *Road & Track* and *Hot Rod*. JVC also is planning insertions in such general interest publications as *Playboy* and *Penthouse*.

A heavy schedule of newspaper and radio advertising linked to the racing program is planned for 20 major markets.

Radio Stations Get CD Players

Sony has provided selected classical music FM radio stations and leading album-oriented rock FM stations in key markets across the country with its CDP-101, digital audio playback system, so that Compact Disc broadcasts can be scheduled as part of the stations' regular programming.

The company, which began shipment of its CD player to selected re-

tailers in March, hopes to expose FM listeners to the sonic potential of the Compact Disc and its technology. The company also hopes to establish the Sony name firmly with the CD technology through promotion by the radio stations.

Stations supplied with Sony CD players are WNEW and WQXR in New York, KMET and KFAC in Los Angeles, WFMT in Chicago, WFLN and WYSP in Philadelphia, WBCN and WCRB in Boston, WRIF and WQXR in Detroit, WKLS in Atlanta, WMMS and WCLV in Cleveland, KZEW in Dallas, KBPI and KVOD in Denver, KLOL and KLEF in Houston, KXTR in Kansas City, WTMI in Miami, WQFM in Milwaukee, WDVE and WQED in Pittsburgh, KFSD in San Diego, KISW and KING in Seattle, WWDC and WGMS in Washington, D.C., KDKB in Phoenix and the Eastern Public Radio network.

Amp, Cable Firms Team Up On Rebate

SAE and Monster Cable have begun an ongoing rebate program designed to boost each company's quality image by emphasizing the need for high-end connecting wire to ensure optimum playback fidelity with SAE's 01 Series amps.

"Our 01 amps are capable of delivering tremendous amounts of clean power to meet the demands of any speaker," said Mike Joseph, SAE's marketing director. "We need speaker wire that's equally capable, which is why we're offering the Monster Cable program to our customers."

In the program, SAE 01 Series purchasers are offered Monster Cable rebate cards, which they may send with proof of purchase to Monster Cable headquarters in exchange for a \$2 rebate coupon for Monster Cable or Interlink wire, or a \$4 coupon for Powerline.

SAE has worked with Monster Cable before. The X-Series line already

is packaged with Monster Cable products.

Spokesmen for the cable company also announced that Monster Cable is being used for internal wiring in the Klipschorn Loudspeaker, parent of the line from Klipsch & Associates.

Kraco Targets Sports Enthusiasts

Two separate campaigns, one a six-week TV advertising blitz and the other an eight-month retailer promotion program, are putting the Kraco name in front of sports enthusiasts.

The six-week blitz, which began late last month, consists of 30-second TV spots, each tagged with local retailer identifications, which are placed to saturate more than 20 of the company's top markets. The messages feature Kraco's Designer Series car stereos, Turbo Series speakers and Mayday emergency hand-held CB communicators.

The spots are scheduled to appear on coverage of professional sports events, as well as on popular talk shows.

The six-month campaign ties in retailer promotions with the company's Indy-car racing program. This marks the third consecutive year that the Kraco 150 has launched the Indy Car World Series at Phoenix International Raceway. The March 20 event was aired on NBC-TV's *Sportsworld*.



"Kraco car stereo, we blow the others away" is the slogan for one of Kraco's recent TV ads.

The company is following the same ad blitz format established for the Phoenix event for races scheduled in other key markets throughout the season. In Phoenix, the blitz involved large space ads placed by Kraco retailers in the two Phoenix daily newspapers. The ads offered a selection of stereos and speakers at special price points along with free Kraco racing hats and discount race admission coupons. Driver Mike Mosley made store appearances with the Kraco race car.

MASH Video Promo Features Contest

In conjunction with the release of the final episode of MASH on video cassette, CED and laser disc, CBS/Fox Video has opened a display contest to pre-recorded video retailers nationwide.



Mementos from the MASH TV series will be awarded to display winners.

Prizes include several recognizable mementos from the television series, including a 1942 street-ready Army Jeep, plasma bottles, beach towel sets, golf umbrellas, books, hats and dog tags.

Retailers can order MASH-related point-of-purchase materials from their CBS/Fox Video distributors. To be eligible for the contest, retailers must submit a photograph entry of MASH displays in their stores. The displays must include some of the provided point-of-purchase materials, but are not limited to them. Photographs must be submitted to CBS/Fox Video MASH Display Headquarters, P.O. Box 1052, Euless, Texas 76039 no later than July 27, which, not coincidentally, is the 30th anniversary of the ending of the Korean War.

CBS/Fox Video also has announced a separate packaging promotion to encourage VCR owners to select and build a library of acknowledged film classics. Certain titles of the company's video cassettes and video discs will be identified by a rectangular, silver and black CBS/

Fox Video Collection label. The first three titles to be so identified are *Marty*, *Inherit the Wind* and *Witness for the Prosecution* and are available in Beta and VHS formats at a suggested retail price of \$49.98.

Mitsubishi Counts On Its 'Middle Name'

The largest advertising campaign in the six-year history of Mitsubishi Car Audio is being launched this spring to promote the company's high-end Diamond Collection and Specialty Series autosound products.

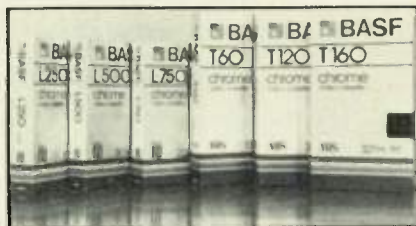
"The factory has made a serious, total commitment to the car audio after-market," said Mike Hyde, general manager, "as evidenced by Japan's willingness to participate in the American marketing process."

Hyde said the Mitsubishi brand awareness has "skyrocketed" since the introduction of Mitsubishi Motors automobiles and the attendant advertising program begun last November. "Car is our middle name," Hyde said.

The ad budget for Mitsubishi Car Audio has been increased more than 30% over last year to accommodate the new promotion schedule. Placements are centered around such consumer magazines as *Penthouse*, *Esquire*, *Rolling Stone*, *Omni*, *National Lampoon* and *Motor Trend*.

Packaging Provides Look Of Chrome

BASF Systems Corp. is reinforcing the chrome message of its chromium dioxide video tape line by packaging the cassettes with new, predominately silver-colored graphics.



Packaging reinforces chrome image.

According to Mark Dellafera, BASF marketing director, "the major objective for the new packaging is to state clearly our position as the prime supplier of a pure chrome video tape."

He said because of the proliferation of video tape brands, customer loyalty has not yet been developed. "Therefore," he explained, "product packaging is most important in ob-

taining an initial consumer trial." And BASF is confident that once a customer tries its pure chromium dioxide formulations, he will become a loyal BASF video tape user.

Nortronics Offers Retailer Promotions

In light of what Nortronics Co. Inc. sees as a brightening U.S. economy, the company has launched a merchandising plan for its recorder maintenance product lines to enable its retailers and distributors to have the products on their shelves when the customers start buying.

The plan includes such features as freight on volume orders, a rebate program, new discount terms and additional advertising and public relations efforts.

"We believe that consumers are feeling better about the nation's economy and are preparing to buy," said Mervin Kronfeld, vice president of marketing. "We want (our retailers) to be able to give the customers the best deal possible. Our new terms will help them do that."

British Rock Group Attracts 4,000 Fans

The appearance of British rock group Duran Duran at an in-store promotion for the world's first and largest Video Shack, at 1608 Broadway in New York, attracted more than 4,000 fans, making it one of the most attention-getting in-store promotions ever staged in the electronics industry.

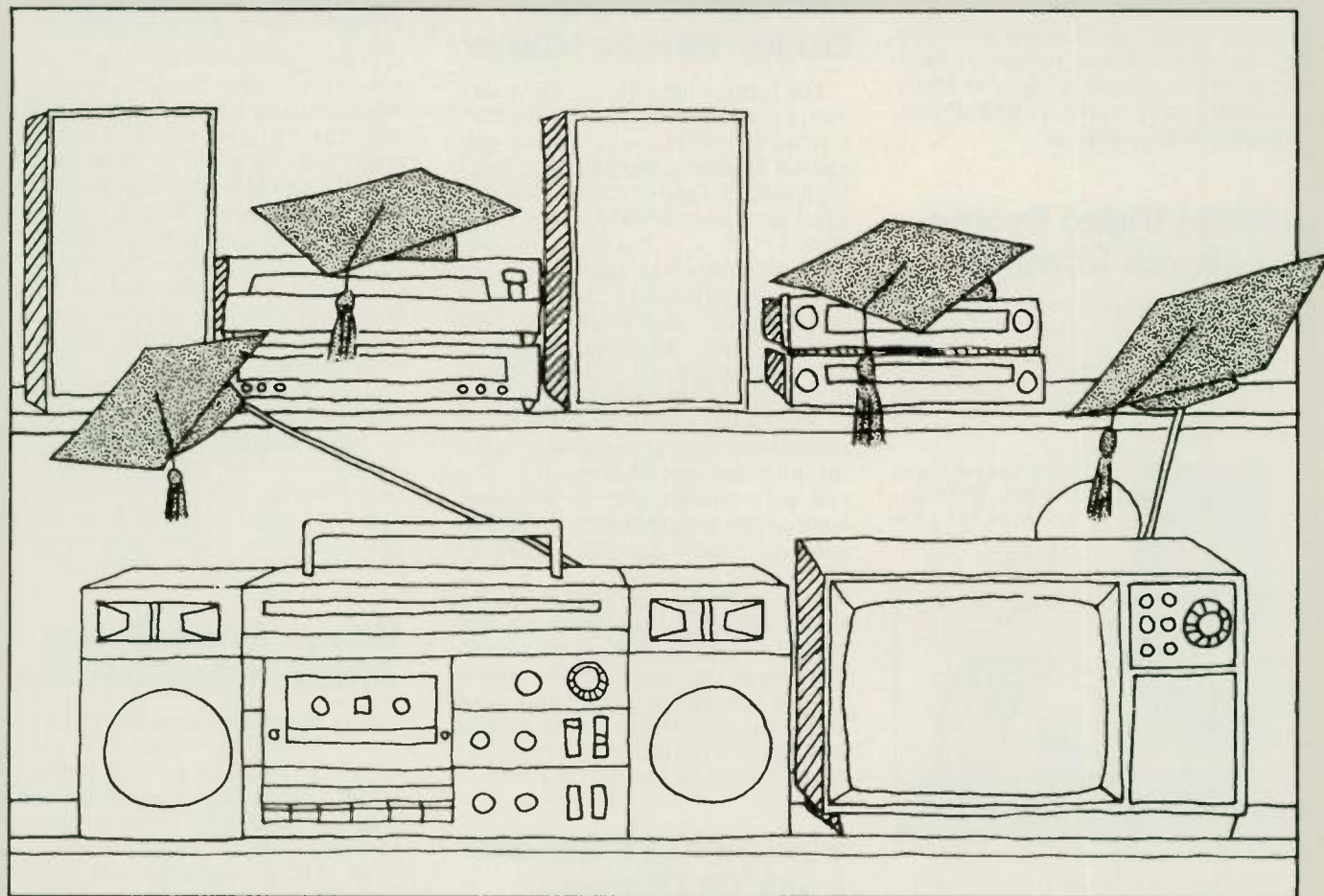
The group had just arrived in the United States to promote its new Sony Video 45, and a Video Shack spokesman said onlookers compared the outpouring of young people to the first visit by the Beatles to this country and Elvis Presley's first trip to New York.

The spokesman also reported that sales were brisk for Duran Duran's Sony Video 45.

Shure Earns Endorsement

Shure Brothers Inc. has added the Little River Band to its list of endorsements from professional musicians. Formed in 1975 in Australia, the group became one of that country's top rock groups. Since coming to America, the group has released seven top-selling albums and several Top 20 singles.

audio/video SALESMAN



Graduation Time In The Showroom

Graduation time is approaching again, traditionally a prime selling season for us. When June rolls around, you'll see shoppers looking for specific gifts, but now is the time to begin planting suggestions in your customers' minds.

Low- to mid-priced components and systems make the ideal gift for a graduate, and appropriate merchandise should be displayed and labeled to remind shoppers of their upcoming congratulatory purchases. Work with your manager in assembling "beginner systems" that feature a modest receiver, turntable and bookshelf speakers (remember that several of these systems will have to fit into small dorm rooms next year). Even less costly "starter systems" can be assem-

bled using only speakers and a receiver.

Sales of traditional compact stereo have been on the decline for some time now, but boom boxes and detachable-speaker portable systems are filling the void. These mini-systems are splendid graduation gifts and should be presented as components, not portable radios. Detach the speakers and plug in a turntable to one of the better models in order to demonstrate the differences between it and regular "boxes."

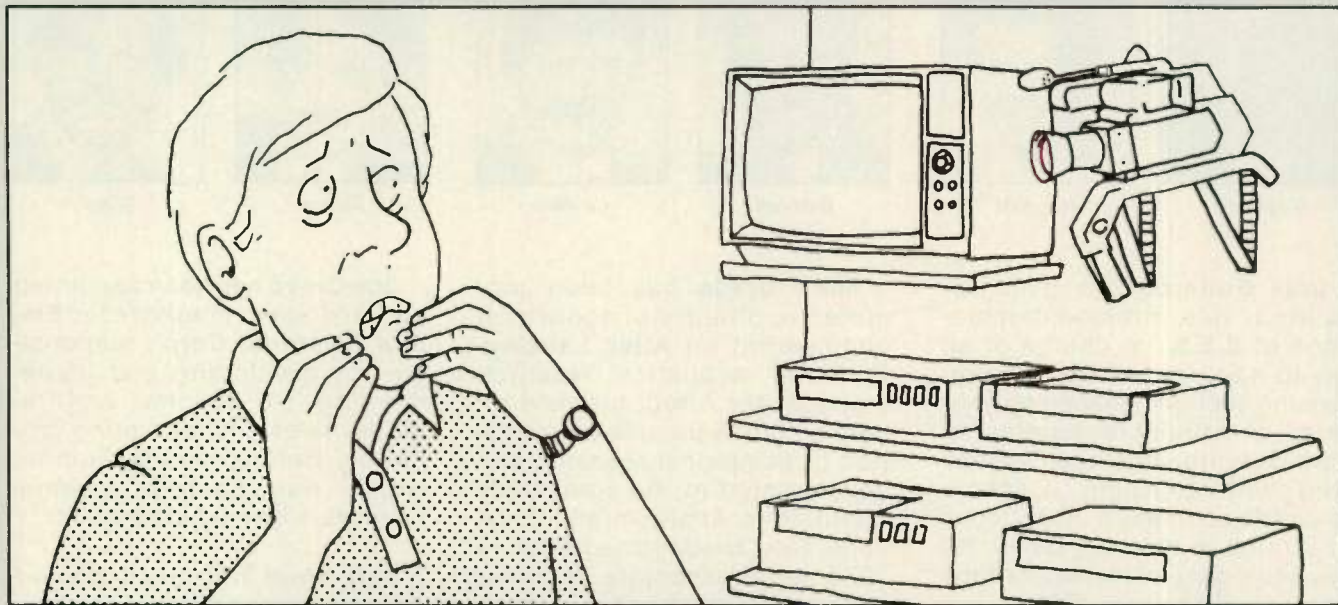
Good Autosound System

Some young adults will receive a car this graduation, and they'll want a good autosound system to go into it. Package and tag a combination of

components to take advantage of this. Select the most universal components possible: say, a set of 5¼-inch speakers and a mini-chassis receiver. This enables you to fit the graduation package into a wide variety of vehicles. Avoid super-featured, costly components. You want to create some impulse buying among your customers, and this means attempting to hit the \$150 to \$200 price point.

Cassette decks, both first-time purchase and upgrades, remain one of the most popular gift items for graduates. Bulk display a popular piece or tag a best-seller with an appropriate graduation present label to start your customers thinking about spending their gift money in your direction.

audio/video SALESMAN



Dangerous Desires! Overcoming The Novice's Fears

The snowballing popularity of video tape recorders promises to make the product a common household appliance. Now that the tech-types have obtained their first, and some their second, decks, a new breed of buyers is approaching the VCR in a slow, cautious manner. This new buyer's experience with home video is limited to his living room TV set. In many cases he is unfamiliar with the use of even simple features like remote control and electronic tuning.

When these people seek stereo systems, they are offered a wide choice of entry levels differing in features and complexity. They find simple compacts and portables, pre-packaged, pre-wired systems and full-blown separates.

The VCR buyer is not faced with this sort of choice. Recorders differ only in format and features, each model seeming as difficult to operate as the next. Unlike the compact stereo system, with only a couple of loudspeakers to plug in and an AC cord, video recorders are alien beings. "Where's the volume control?" these buyers will ask naively, uncertain of how to hook it up or even how to insert a tape.

Before selling this type of customer on a specific model recorder, your job is to demonstrate how easy it actually is to hook up and operate a VCR. Begin by explaining the various benefits of owning a machine, because these are the very considerations that have piqued your customer's curiosity. Include the ability to save favorite shows and series, the availability of movie rentals and the value of time-shifting.

Next, explain the basic fundamentals of VCR hookup to allay fears of the unknown dangers lurking within the beast. Show the customer that the unit can hook up to any set at all and that the cables are included with the gear. Explain, also, how the machine actually records from itself and not the television set. This tends to be one of the toughest concepts to get across and is often misunderstood, even after the purchase.

As salespeople who treat the VCR as an everyday item, we tend to view the machines on a feature-first basis. Avoid presenting the freeze frames and searches, however, until the customer has understood how to play and record a tape.

Begin by unhooking and recon-

necting the machine. This demonstrates how simple it is to hook it up. Next, give the customer a blank tape and have him press the buttons and make a short recording himself. Afterwards, let him play it back. This short demonstration tends to reinforce the customer's desires for the machine, along with assuring him that there is little danger of damaging the device.

Special Effects Options

Once the customer has used and enjoyed the VCR, present the special effects options right on the tape he already has recorded. Lastly, demonstrate the record timer, presenting it as no more difficult to use than a clock radio.

Keep in mind that your customer is asking about video recorders because he really wants one and probably has wanted one for some time now. One of the main reasons he has waited so long before seriously shopping for a VCR is because of his basic apprehension of the product and his ability to use it. By taking him by the hand and easing his fears one by one, you'll find yourself easily transforming his cautious desire for a VCR into a purchase invoice.



Gutierrez



Haggott



Bernard



Caldero



Greco



Ward

Luis Gutierrez has been appointed vice president/operations at **B.E.S.**, in charge of all day-to-day operations, encompassing overall management and sales and financial administration. Gutierrez has been associated with Bertagni speakers since the company's inception in Argentina in the late 1960s. He has been general manager of the U.S. operation since 1979.

Glenn Urgel has been appointed to the newly formed position of national sales manager of **Infinity Systems'** Domestic Sales Department. He is working with the Infinity network of dealers and representatives throughout the United States and Canada to ensure closer coordination and rapport with the factory. Urgel's experience in the audio business includes positions as field representative for JBL and Western sales manager for Hitachi. He joined Infinity in 1981 as Western regional manager.

Reese Haggott has been named general manager of **Alpine Electronics of America** in the United States. The new title is in addition to existing responsibilities as executive vice president of Alpine/Luxman. Haggott is now responsible for the day-to-day operation of the newly expanded Torrance, Calif., facility and the warehouse operation in Indianapolis, as well as the sales and marketing of Alpine car stereo products and Luxman home audio components in the United States and Latin America. Haggott has directed the sales, marketing and organization effort of Alpine of America since its inception in November 1978.

Mark Ureda has been promoted to director of acoustical engineering for **Altec Lansing**. Formerly acoustics research manager for Altec, his new responsibilities include coordination of acoustical research and development at the company's facilities in Anaheim and Oklahoma City. Ureda joined Altec in 1976 as an associate engineer and was instrumental in initiating the extensive Altec engineering computer system now used by the company. He holds several patents for his earlier work on the Altec Mantaray line of constant directivity loudspeaker horns, employed in both commercial and home loudspeaker systems.

Ron Bernard has been appointed president of **Jack Carter Associates**. Bernard has been with the consumer electronics rep firm for four years, serving as vice president since December 1979. He originated annual three-day training seminars for all Jack Carter employees and has shared in expanding the company's Sales Training and Merchandising Department into a staff of three full-time employees.

Steve Caldero has been promoted to national sales manager of **JBL Inc.'s** Consumer Division. He is charged with continuing to implement distribution philosophies set forth two years ago by Harman International chairman of the board Sidney Harman and HI/JBL president Jerry Kalov in supervising JBL's regional managers and its 19-territory force of reps and dealers. Caldero joined JBL as Western regional sales manager late in 1982.

Joe Greco has been appointed national sales manager for **Empire Scientific Corp.**, responsible for developing and implementing all national and regional sales and marketing programs. Before joining Empire, Greco was Eastern regional sales manager at Nikko Audio.

Phil Ward has been named vice president and general manager of **Audio King**, a retailer of home entertainment products in the Minneapolis/St. Paul market. The company also has promoted **Scott Preston** to the new position of executive vice president and **Richard Wessel** to the new position of vice president and controller.

Jon Duncan has been named Western regional sales manager for **Hitachi Audio**. He has more than 10 years experience in audio sales and marketing, including positions at Panasonic and Zenith distributor Sues, Young and Brown. Duncan replaces Cal Haywood, who left the company.

Bruce R. Maier has been appointed group vice president of consumer products for **International Jensen**. In his new position, Maier supervises the domestic marketing, sales and product development activities of all International Jensen consumer product lines, while continuing to serve as president of the Dishwasher Division of International Jensen.

Michael Koss has been promoted to vice president/marketing at **Koss Corp.** Previously director of marketing, Koss is responsible for all product planning and worldwide marketing

activities. Koss, son of company founder and chairman John Koss, joined the company in 1976 and was instrumental in developing the company's Music Box personal portable stereo line. He has held the positions of marketing services manager for Koss Europe and product manager/audio components and personal portable stereo.

Gary Hodge has been appointed vice president/sales of the newly formed consumer electronics division of **Kraco Enterprises**. The company also announced the promotion of **Bob Brocoff** to senior vice president/finance and treasurer. Hodge directs the national sales operations for Kraco's new lines of cordless and corded telephone products and plays a major role in the development and introduction of other Kraco electronic products.

Bruce Market has joined **Yamaha Electronics Corp. USA** as national sales manager of component systems. Market is responsible for coordinating sales and marketing activities for the Concert Series line. Formerly Fisher Corp.'s national sales manager/TV, Market had been with that firm four years. He has held retail sales positions with the Federated Group and Pacific Stereo.

David Delgrosso has been named Central and Eastern regional sales manager for **Luxman** home audio components, responsible for the Midwest and upper Eastern regions of the country. Delgrosso spent eight years in the retail field, including the founding and part ownership of one retail outlet in suburban Detroit, and also has worked more than five years as a rep for such lines as Technics, Audio-Technica and Alpine/Luxman.

Kay Black has been appointed sales promotion coordinator for the Recorder Care Division of **Nortronics Co. Inc.** She is working with development of product literature and packaging, press releases, advertising, promotions and trade shows. She joins the Recorder Care Division with

three and a half years of experience as human resources representative and communications coordinator for the company.

Murray Swindell has been named executive vice president and chief operating officer for **Leading Edge Products**. The company also appointed **Timothy Huber** vice president of marketing. Swindell assumes responsibilities of the chief operating officer following a 20-year career at the Polaroid Corp, where he had been vice president of North American Marketing Operations since 1980.

Dr. Alfred L. Moye, former deputy assistant secretary for the U.S. Department of Higher Education during the Carter administration, has accepted the newly created post of national

educational sales manager for the Home Computer Division of **Atari Inc.** Dr. Moye is developing and implementing sales programs targeted at elementary, high school and college educators. Most recently Dr. Moye was vice president of academic affairs and dean of faculties at Chicago's Roosevelt University.

Mark Yoseloff has been promoted to executive vice president of **Coleco Industries Inc.** from executive vice president/product operations. His new responsibilities include direction of Product Operations, Operations Planning and Control and Management Information Systems. Coleco also announced the promotion of **Paul Meyer** to senior vice president/operations planning and control from vice president/finance.

calendar of events

June 5-8 — 1983 Summer Consumer Electronics Show, McCormick Place, Chicago. EIA/CEG's second installment for 1983 will include more of the newest consumer electronics products in every category. *Contact:* Consumer Electronics Show, Two Illinois Center, Suite 1607, 233 N. Michigan Ave., Chicago, Ill. 60601.

June 9-14 — Sim-Hi-Fi-Ives: International Exhibition of Music, High Fidelity, Video and Consumer Electronics, Milan Fair Centre, Milan, Italy. The last two days will be reserved for the trade. *Contact:* Segreteria generale: Via Domenichino, 11-20149, Milano. Telex: 313627 GEXPO I.

June 17-19 — Automotive Service Councils of California Western Regional Trade Show, Anaheim Convention Center, Anaheim, Calif. Automotive stereos and CB radios are among the product categories that will be on display at this trade show for the automotive service industry. *Contact:* IAP Shows Inc., 24781 Camino Villa Ave., El Toro, Calif. 92630 (714) 586-8730.

July 31-August 4 — Third Annual Association of Progressive Rental Organizations Convention and Trade Show, Caesar's Palace Hotel, Las Vegas, Nev. APRO is com-

prised of rental dealers who market within the consumer electronics, home appliance and furniture industries with the rent-to-own concept. *Contact:* Roy Duckworth, Global Enterprises Inc., P.O. Box 1907, Austin, Texas 78767.

Aug. 1-6 — National Electronics Sales & Service Convention and Trade Show, Olympia Resort & Spa, Oconomowoc, Wis. The Aug. 4 trade show, devoted to retail sales and service dealers and technicians, is incorporated into a six-day convention package of industry and association events. Exhibit space discounts continue through June 30. *Contact:* NESDA/ISCET National Electronics Sales & Service Convention, 2708 W. Berry St., Ft. Worth, Texas 76109.

Sept. 2-11 — International Audio and Video Fair Berlin, The Berlin Fairgrounds, Berlin. Featuring the latest consumer and electronics products from all over the world, the fair allows dealers to view, compare and place orders. Accompanying the exhibition are a variety of seminars, meetings and conferences, allowing dealers and exhibitors to exchange experiences and ideas. *Contact:* AMK Berlin, Company for Exhibitions, Fairs and Congresses, Postfach 1917 40, Messedamm 22, D-1000 Berlin 19.

Shipping Cost Index

A revised and updated *Small Shipment Breakpoint Index*, intended as an aid in achieving cost-effective outbound and inbound shipment of products and commodities subject to motor carrier Class Ratings of Class 100 or lower, has been published by the Recording Industry Association of America Inc. Audio discs and pre-recorded tapes are examples of products included in the classification. Prepared using a system of averages developed from the United Parcel Service and motor carrier tariff bureau rates, the index contains eight charts, which can be used to determine whether shipments would realize best economy via UPS or via motor common carrier. RIAA is making the publication available to RIAA member companies, their suppliers and customers through the National Association of Recording Mer-

chandisers. An annual subscription includes quarterly updates to reflect rate changes.

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Rock Era Sourcebook

Herb Hendler has chronicled the youth-oriented influences of the rock music era on the entire population in a year-by-year treatment of the progression of musical events, artists, songs and dances that swept America for nearly three decades. Titled *Year by Year*, the book was published as a documentary sourcebook for an era in American culture that, according to Hendler, formed the social climate for an extremely populous and influential generation of Americans. \$29.95.

Circle No. 101 on Reader Service Card

Company Overview

Why BASF? is a 32-page brochure designed to provide a new perspective on the company's worldwide operations in chemicals, plastics, colorings, coatings, nutrition, pharmaceuticals, information systems and oil and gas. It probes long-term strategies and the distinctions and strengths basic to BASF's future and its earnings potential, while offering readers who have not kept up-to-date on the company the opportunity to study the details of BASF's experience in new and established fields of activities.

Circle No. 104 on Reader Service Card

Record Industry Trends

A recently published three-year trend study, spanning 1979, 1980 and 1981, reports industry-wide data about consumer purchases of records and pre-recorded tapes. Released by the Recording Industry Association of America, *Consumer Purchasing of Records and Pre-recorded Tapes in the United States* examines buying habits for the total market and separately for the retail and direct marketing sectors. It offers in-depth consumer profiles for each sector based on demographics and music type.

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ONLY ONE AUDIO DEALER IN TWENTY WILL CARRY THE KYOCERA R-851 TUNER/AMPLIFIER

WITH MOS FET AMPS.



Our R-851 is only for those dealers whose customers demand the best. Those who want sound that's pure and distinctive... who hear subtleties others miss.

Demonstrate the silence before you demonstrate the sound.

Switch on the R-851 and let customers switch from one function to another. Let them try Phono. Tape 1. Tape 2. Auxiliary. Back to Phono.

Absolute silence (of course, they'll get sound on AM/FM). Silence is the mark of a great receiver. And great engineering.

Sound that brings customers closer to the source.

We've turned on the R-851 for some very experienced—even jaded—audio ears, and all we can say is it stops 'em every time. The sound is different. The sense of *being there* is almost overpowering. All this comes from 85 watts per channel of power* (with dynamic power far above this figure) and some of the most sophisticated circuitry in the business.

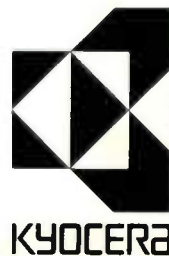
Above all, it uses MOS FET's, the new breed of output transistors, in the amplifier section. They can handle the transients, the power surges, the power requirements of present-day sound (and tomorrow's digital sound) better than bipolar transistors ever could—and give you a sonic purity like no other.

Fine tuned for every audio need.

From front end to output jacks, the R-851 offers every feature an audio enthusiast might want. The most commonly used controls are right up front—the more esoteric ones are placed behind a neat flip-down front panel. There's microprocessor-controlled quartz-locked tuning with 14 station programmable memory (7 AM & 7 FM); automatic station seek; 3-band parametric-style equalizer; fluorescent display panel; and two-way tape monitoring and dubbing.

Most important, with the R-851 you have a tuner/amplifier that sets you apart from most dealers. A component that will bring in the upscale customers who are willing to invest in the very best. A component that enables you to meet the needs of the most meticulous audiophile.

If you'd like details on the benefits of carrying the Kyocera line, contact: Cybernet International Inc., 7 Powder Horn Drive, Warren, NJ 07060 (201) 560-0060.



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*85 watts RMS per channel, both channels driven, at 8 Ohms with no more than 0.015% THD from 20-20,000 Hz.

MAKE A WISH.

As a dealer, you've probably wished for a way to make high-end car stereo a hell of a lot easier to sell.

You've more than likely wished for models with innovative features that you can easily and convincingly demonstrate.

A great place to start would be a powerful 15 watt per channel built-in amp with virtually *no distortion* (0.3% THD). And, some of that nifty new home audio technology like Dolby C* and a frequency synthesizer tuner.

To absolutely clinch the sale, you'd wish for features like a standby switch that allows listening to the tuner while you fast-wind a tape... and a mechanism that eliminates tape damage.

And, naturally, you'd want the whole package to look good enough to pop out on the display rack.

If these are the type of things that are on

your wish list, have we got good news for you: Sanyo has already designed your ideal car stereo.

It's called the FTX 180 and it's the flagship of Sanyo's remarkable new FTX Series. Best of all, it has every feature mentioned above (and then some!) and the kind of sound reproduction that's actually thrilling to hear.

In fact, there's a little bit of the FTX 180 in every Sanyo car stereo we make—37 models in all, from \$49.95 to \$399.95*. So, if your customer doesn't find exactly what he's looking for in one model, he'll definitely find it in another.

See your Sanyo rep today and start taking advantage of the FTX Series right away.

Because, instead of wishing you had great car stereo to sell, now you can sell great car stereo anytime you wish.

*TM Dolby Labs

†Suggested retail prices are guidelines to effectively merchandise Sanyo products
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