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Modern Recording & Music (ISSN 0273-8511) is published monthly by MR&M Publishing Corp., 1120 Old Country Rd., Plainview, NY 11803 Design and contents are copyright 1985 by MR&M Publishing Corp., and must not be reproduced in any manner except by permission of the publisher Second class postage paid at Plainview. New York, and at additional mailing offices Subscription rates \$18 00 for 12 issues, \$31 00 for 24 issues, \$46 \$3 00 per year for subscriptions outside of U S Subscriptions must be paid in advance in U S funds Postmaster Second Form 3579 to MR&M Publishing Corp., 1120 Old Country Rd. Plainview. NY 11803

An Alternative to dbx Noise Reduction

In the July '84 Talkback column one of your readers was asking for an alternative to the discontinued Tascam DX-8 for his 80-8 recorder. Jim Rupert presented two alternatives: 1.) Four 2-channel dbx units or 2.) Find a used or new DX-8 which might still be in stock.

Well, there is another alternative, and I feel it is a much better one. LT Sound manufactures an 8-channel simultaneous encode/decode dbx compatible unit. Not only will this unit interface perfectly with his 80-8 today, but if he goes to a Studer tomorrow he can interface perfectly with that machine as well. The unit is front panel calibratable for either -10 or +4 levels. Each channel's noise reduction may be individually bypassed. Other versions in 2- and 4-channel formats are also offered.

Though not manufactured under license of dbx, these units meet or exceed all of dbx's published specs and obtain such a high level of compatibility that they are used interchangeably with the dbx system in a number of 24-track studios in Nashville and around the world. Thank you for bringing these facts to the attention of your readers.

When you're right, you're right! I did indeed inadvertently overlook any options besides dbx noise reduction when I answered the question. I respectfully stand corrected.

The LT Sound unit sounds like a honey. Before I could recommend it to the reader who originally asked for advice, I would need to know a bit more of your pricing information to be sure it fit within the limitations of an 'economy minded' budget. Would you be willing to forward more complete information to me here at the magazine? In the future, I'll be careful not to overlook you and your fine ideas again!

-Jim Rupert

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Talk Back

A Level-Headed Question

I have a few questions pertaining to the matching up of all the levels in my recording chain.

I am presently using the Carvin MX 1688 Mixer that has been adjusted to a -10 dBV operating level, with the eight outputs going to a Tascam 38 with dbx-Type I noise reduction on all eight channels. Then I am also mixing down to a Tascam 32 with dbx. My questions are: What's the best way to get all VU meters in line with the same level throughout? How important is it to get all machines in tow with each other? Also, what is the difference in practical terms between using a +4 dBM or -10 dBV operating level while recording, since many of my effects have switches for either?

Actual Size

–Charles Ray Allen Pasadena, TX

In A/B tests, this tiny condenser microphone equals any world-class professional microphone. Any size, any price.

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Bruce Bartlett replied to Charles Ray Allen's inquiry.

Those are good questions, Charles. It's common practice to set the mixer meters and recorder meters to track each other. That way you have to watch only the mixer meters while recording. Also, when the mixer and recorders are all peaking around 0 VU, they are operating at an optimum level for distortion and noise performance.

Here's a calibration procedure to match levels:

1. If you don't have a test oscillator (tone generator) built into your mixer, get an external oscillator. Set it to 1 kHz and about -50 dB level. An alternative to a 1 kHz tone generator is a continuous sine-wave synthesizer note, "C" two octaves above middle C (1024 Hz).

2. Feed the tone into a mixer mic input routed to output bus 1 of your mixer.

3. Bring up the mixer gain until the mixer bus 1 meter reads "0 VU."

4. With dbx switched OUT, set the record level to read "0 VU" on track 1 of the multitrack recorder.

5. With dbx switched IN, adjust the "record trim" pot on the dbx so that the multitrack-machine record level still reads "0 VU." Don't touch the record level on the multitrack recorder. Note: Since dbx operation varies with frequency, you must use a 1 kHz tone. If you don't have a 1 kHz tone, just calibrate with the dbx switched out.

6. Repeat these steps for all eight channels. Or, feed the tone to all eight channels simultaneously and adjust each channel.

7. While recording the "0 VU" tone

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on all tape tracks, set the "source/ tape" switches on the recorder to "tape." Set the "reproduce" level for each recorder track so the meters read "0 VU."

8. With the 2-track recorder's dbx switched OUT, feed a 0 VU tone to buses 1 and 2 of your mixer (or the stereo mixdown buses), and set the record levels on the 2-track machine to read "O VU." Repeat the above steps for dbx adjustments and 2track reproduction levels.

Now that the mixer and recorders are calibrated to match each other, leave the recorder controls alone. Set levels with the mixer faders only.

Note that different instruments require different recording levels. Instruments with weak attack transients (organ, voice) can be recorded around +3 VU maximum. Instruments with a strong attack (piano, drums, percussion) should be recorded around -3 to -14 VU to prevent distortion. That's because the meter responds too slowly to transient peaks to indicate true recording levels.

Some recorder meters have peakindicating LEDs. In that case, set the record level as high as possible (using the console faders) but low enough so the LEDs don't flash. The LEDs take precedence over the meters for setting recording levels.

Record and play back different types of instruments. Note what *mixer* meter readings produce maximum undistorted record levels for each instrument. Duplicate these readings in future sessions.

The signal the dbx feeds to the tape recorder is compressed, so the recorder meters will "wiggle" less than the mixer meters during recording.

Now let's consider system operating levels. If your mixer is adjusted for -10 dBV operating level, set your effects to that level too.

A level of +4 dBm is 11.8 dB higher than a level of -10 dBV. In theory, a cable carrying a nominal +4 dBm signal will have a signal-to-noise ratio 11.8 dB better than a cable carrying a -10 dBV signal. This is an advantage in environments with strong RFI or hum fields. But in most studios with short cables, the difference is negligible.

Good luck on calibrating your system. You'll find it's easier to use when you have to watch only the mixer meters, and adjust only the mixer faders.

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Everyone knows the benefit of a well designed coaxial loudspeaker... a single-point sound source. Until now, the most popular coaxials presented severe power limitations...had to have "trick" crossovers...and needed time compensation. Gauss technology has changed all that.

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For additional information on the new Gauss coaxial loudspeaker, call or write Cetec Gauss, 9130 Glenoaks Blvd., Sun Valley, CA 91352, (213) 875-1900. Or better yet, hear it at a selected sound specialist soon.





bruce bartlett

Remote Recording of Classical Music

Perhaps your civic orchestra or high school band is giving a concert, and you'd like to make an audiophile-grade recording. Or maybe there's an organist or string quartet playing at the local college, and they want you to record them.

You can make professional-quality recordings of these ensembles. This article shows how. We'll describe the necessary equipment, microphone techniques, and session procedures.

Incidentally, recording classicalmusic ensembles is a great way for beginning recordists to gain experience. With just two microphones and a 2-track recorder, they can learn much about acoustics, microphone placement, level setting, and editing—all essential skills in the studio.

The Tape Deck

A good cassette recorder can be used for live recording, but for the highest quality I recommend a 2track open-reel tape recorder costing about \$1,200 to \$1,600. Open-reel decks have more high-frequency *headroom* than cassette decks. That is, open-reel units record highfrequency peaks with flatter response and lower distortion. Also, with open-reel machines, you can edit the tape to remove noises and pauses between musical selections.

A half-track tape machine is preferable to a quarter-track unit because half-track provides a 3 dB better signal-to-noise ratio and lesssevere dropouts, all else being equal. In addition, if you plan to edit the tape, you can record in only one direction. so half the tape is wasted with the quarter-track format.

Excellent machines are made by Sony, Teac/Tascam. Otari, Nagra. Tandberg, and Revox, among others. The Revox A77 and B77 models are especially popular for on-location recording.

An alternative to an audio tape



Figure 1. Illustrating "accurate localization."



Figure 2. Coincident-pair microphone technique.

deck is a videocassette recorder with the Beta Hi-Fi or VHS Hi-Fi system. Its performance approaches that of digital recorders.

Highest quality can be had with a digital audio processor (such as a Sony PCM-F1) in combination with a videocassette recorder. The analog signal from microphones is converted into a digital signal by the processor and is recorded on videotape. The tape playback sounds just like the microphone signal, virtually without added noise, wow and flutter, or distortion. A disadvantage is that the tape cannot be edited except by copying from one machine to another —an imprecise procedure.

Microphones

Next on our list of equipment are some quality microphones. You'll need two or three of the same model number. Good microphones are essential, for the microphones—and their placement—determine the sound of your recording. You should spend at least \$200 to \$400 per microphone for professional-quality sound.

For live recording, I recommend condenser microphones with a wide, flat frequency response and very low self-noise (less than 21 dB equivalent SPL, A-weighted).

These microphones are available with an *omnidirectional* or *unidirectional* pickup pattern. Omnidirectional mics are equally sensitive to sounds arriving from any direction, so they help to add liveness (reverberation) to a recording made in an acoustically "dead" hall. Most omni condensers have excellent low-frequency response, making them useful for pipe-organ or bass-drum recordings.

Unidirectional microphones (such as cardioids) are most sensitive to sounds approaching the front of the microphone, and partly reject sounds approaching the sides and rear. They help reduce excessive reverberation in the recording.

Some condenser microphones require an external power supply; others work on internal batteries. Your microphone dealer or product literature can explain what's needed.

You can mount the microphones on stands, or hang them from the ceiling



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Other PR99 MKII features include: • Diecast chassis and headblock for durability • Self-sync • Input mode switching • Front panel microphone inputs • Balanced " + 4" imputs and outputs • Swiss German craftsmanship and precision. Options include monitor panel, re mote control, steel roll-around console, and carry case.

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with nylon fishing line. Stands are much easier to set up, but are more visually distracting at live concerts. Stands are more suitable for recording rehearsals or private sessions.

The mic stands should have a tripod folding base, and should extend at least 14 feet high. You can purchase "baby booms" (such as made by Atlas) to extend the height of regular mic stands. Many camera stores have telescoping photographic stands that are lightweight and compact.

A useful accessory is a stereo bar or stereo microphone adapter. This device mounts two microphones on a single stand for stereo recording.

In difficult mounting situations. Crown PZMs (Pressure Zone Microphones) may come in handy. They can lie flat on the stage floor, or can be mounted on the ceiling or on the front edge of a balcony. They also can be attached to clear plexiglass panels that are hung or mounted on mic stands.

Other Equipment

10

For monitoring, you need some closed-cup (circumaural) headphones to block out the sound of the live musicians. You want to hear only what's being recorded. Of course, the headphones should be wide-range and smooth for accurate monitoring.

You'll have to sit far from the musicians to clearly monitor what you're recording. To do that, you'll need a pair of 50-foot microphone extension cables. Longer extensions will be needed if the mics are hung from the ceiling.

Buy the best high-output, low-noise tape vou can afford (as recommended by the recorder manufacturer). A tape thickness of 1.5 mil is preferred because it reduces print-through. Print-through is the transfer of a magnetic signal from one laver of tape to the next, causing an echo or pre-echo.

A 1200-ft, reel of 1.5 mil tape provides 30 minutes recording time at 7½ i.p.s., recording one direction. An 1800-ft, reel of 1 mil tape provides



Figure 4. Near-coincident-pair technique.





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Produced by David Karr for Notch Productions.

DECEMBER 1984



Figure 5. Spaced-pair technique.

45 minutes. Avoid using tape under 1 mil thick because the tape can stretch easily and is prone to print-through.

You may want to use a noisereduction unit—such as Dolby or dbx—to reduce tape hiss by 10 to 30 dB. If you use such a device, you'll also need a small stereo microphone mixer to boost the microphones' signal level up to the "line level" required by the noise-reduction units. Shure and Sony, among others, make some excellent mixers. Mixers are also necessary when you want to record more than one source—say, an orchestra and a choir, or a band and a soloist. You might put a pair of microphones on the orchestra and another pair on the choir. The mixer blends the signals of all four mics into a composite stereo signal. It also lets you control the balance (relative loudness) among microphones.

Other miscellaneous equipment includes a power extension cord,

multiple outlets, spare mic cables, leader tape, an editing block, splicing tape, a grease pencil, a stop watch, and duct tape.

Recording Goals

Now that we have the equipment, let's define what we hope to achieve with it. An aim of classical-music recording is to re-create in the listening room an accurate sonic image of the musical ensemble, and the concert hall reverberation, as heard from some ideal seat in the audience. We want to pick up the sound of the ensemble as a whole, leaving the musical balance up to the composer, conductor, and musicians.

We also have goals for stereo imaging. Instruments in the center of the ensemble should be reproduced exactly between the two playback speakers. Instruments at the sides of the orchestra should be reproduced from the left or right speaker. Instruments located half-way to one side should be reproduced half-way to one side, and so on. *Figure 1* illustrates this objective, which I'll call "accurate localization."

Note that you must sit equidistant



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from the speakers when judging stereo imaging; otherwise the images will shift toward the side on which you're sitting. Sit as far from the speakers as they are spaced apart. Then the speakers will appear to be 60 degrees apart, which is about the same angle an orchestra fills when viewed from a typical ideal seat in the audience (say, 10th row center).

During playback, a large ensemble should spread from speaker to speaker, while a quartet can have a narrower spread.

Stereo Microphone Techniques

Many record companies prefer to use multiple microphones and multitrack techniques when recording classical music. Such methods provide extra control of balance and definition, and are necessary in difficult situations. However, the clarity of digital recording is forcing a trend back to simpler techniques. In this article we'll focus on some of these simple methods because they seem to be the wave of the future.

Basically, you place two or three mics several feet in front of the group, raised up high. The microphone placement controls the "perspective" or sense of distance to the ensemble, the balance among instruments, and the stereo imaging.

There are three microphone techniques commonly used for stereo recording: the "coincident pair," the "near-coincident pair," and the "spaced pair" techniques. Each has its own advantages and disadvantages.

With the coincident pair (or X-Y) method, two directional microphones are mounted with their diaphragms placed one above the other, angled apart to aim approximately toward the left and right sides of the ensemble (see Figure 2). In other words, you mount two cardioid mics on a stereo bar so that their grilles are touching and angled apart. (Other directional patterns can be used, too.) The greater the angle between microphones, the greater the stereo spread.

Listening tests have shown that coincident cardioid microphones tend to reproduce the musical ensemble with a narrow stereo spread. That is, the reproduced ensemble does not spread all the way between speakers.

A recording made with coincident techniques is monocompatible; i.e., the frequency response is the same in mono or stereo. Because of the coincident placement, there are no time or phase differences between channels to degrade the frequency response if both channels are combined to mono. If you expect your recordings to be heard in mono (say, on the radio), then consider coincident methods.

A special form of the coincidentpair technique is the Mid-Side (MS) recording method (Figure 3). A cardioid or omni mic facing the middle of the orchestra is summed and differenced with a bidirectional mic aiming to the sides. This produces left- and right-channel signals. With this technique, the stereo spread can be remote-controlled by varying the ratio of the mid signal to the side signal. This remote control is a big advantage at live concerts, where you can't physically adjust the microphones during the concert.

Another coincident-pair method is the *Blumlein* array, which uses two bidirectional mics angled 90 degrees apart and facing the left and right sides of the ensemble.

Some microphone companies mount two coincident microphone capsules in a single housing, forming a *stereo microphone*—an expensive but convenient tool.

Near-coincident placement also angles the microphones apart, but



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the microphone grilles are spaced apart horizontally a few inches (Figure 4). Even a few inches of spacing increases the stereo spread and adds a sense of ambient "warmth" or "air" to the recording. The greater the angle or spacing between mics, the greater the stereo spread.

Near-coincident techniques tend to provide accurate localization. That is, instruments at the sides of the orchestra are reproduced at or very near the speakers, and instruments half-way to one side tend to be reproduced half-way to one side.

Two examples of near-coincident methods are the ORTF system (two cardioids angled 110 degrees apart and spaced seven inches apart horizontally) and the NOS system (two cardioids angles 90 degrees and spaced 12 inches).

With the *spaced-pair* (or A-B) technique, two microphones are



Figure 6. Two PZM microphones mounted on two panels for nearcoincident stereo recording.

placed several feet apart, aiming straight ahead toward the musical ensemble (as in *Figure 5*). The mics can have any polar pattern. The greater the spacing between microphones, the greater the stereo spread.

The spaced-pair technique tends to make off-center images relatively unfocused or hard-to-localize. This method is useful if you prefer the sonic images to be diffuse, rather than sharply focused (say, for a blended effect). Microphone spacings greater than about three feet result in an "exaggerated separation" effect, in which instruments near the center are reproduced nearly full-left or full-right.

A disadvantage of the three-foot spacing is that the microphones pick up instruments in the center louder than those on the sides. You can improve the balance by spacing the mics about 10 feet apart (at the expense of accurate localization).

For better control of the stereo spread in spaced-microphone recordings, a center mic can be placed in between the outer pair with its output mixed to both channels. This is the method most often used on Telarc records. Using three spaced



mics also permits balancing of widely separated instrumental groups.

We mentioned earlier that Crown PZM microphones can be mounted on clear plastic panels. These panels can be spaced apart for spaced-pair stereo, or placed with one edge touching to form a "V" for nearcoincident stereo (*Figure 6*). Alternatively, two PZMs can go on opposite sides of a single panel for coincident miking. This arrangement also adds some "liveness" or ambience to recordings made in an acoustically "dead" hall.

Angling directional microphones apart produces intensity differences between stereo channels; spacing microphones apart produces time differences between channels. These differences create the stereo effect.

Preparing For The Session

Armed with the previous information, you're ready to go on-location. First ask the musical director what groups and soloists will be playing, where they will be located, and how long the program will be.

If possible, plan to record in a venue with good acoustics. There should be adequate reverberation time for the music being performed. This is very important, because it can make the difference between an "amateur"-sounding recording and a "commercial"-sounding one. Try to record in auditoriums or spacious churches rather than in band rooms or gymnasiums.

Next get all your equipment ready. Demagnetize the tape heads, tape guides, and capstan. Clean these components as well as the idler wheel. Check all cables and equipment for proper operation.

Collect enough tape for the recording. If you can't locate a $10\frac{1}{2}$ -in. reel of tape, splice together and wind two 1200-ft. reels of tape onto a single empty $10\frac{1}{2}$ -in. reel. Make two of these. If your machine doesn't accept a $10\frac{1}{2}$ -in. reel, use a 7-in. reel (1800-ft. of tape), which allows 45 minutes of continuous recording time at $7\frac{1}{2}$ i.p.s.

Keep your equipment inside your home or studio until you're ready to leave. Tape decks left outside in a cold car may become sluggish, and batteries may lose some voltage.

Session Set-up

Allow an extra hour or so for set-up

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and for fixing broken cables, etc. There's always something unexpected in any new recording situation.

When you first arrive at the recording venue, locate some AC power outlets where you want to set up. Check that these outlets are "live." If not, ask the custodian to turn on the appropriate circuit breaker.

Find a table or folding chairs on which to set your equipment. Plug into the AC outlets and let your equipment warm up. Leave a few turns of AC cord near the outlet, and tape down the cord so it isn't pulled out accidentally.

Now take out your microphones

and place them in the desired stereo mic'ing arrangement. As an example, we'll describe a set-up using two crossed cardioids on a stereo bar (the near-coincident method), mounted on a single microphone stand. Let's say we're recording an orchestra rehearsal.

Screw the stereo bar onto the mic stand, and mount two cardioid mics on the stereo bar. For starters, angle them 110 degrees apart and space them seven inches apart horizontally. Aim them down so that they'll point at the orchestra when raised.

You may want to mount the microphones in shock mounts or put the stands on sponges to isolate the mics



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from floor vibrations.

As a starting position, place the mic stand behind the conductor's podium, about 12 feet in front of the front-row musicians. Connect mic cables and mic extension cords. Raise the microphones about 14 feet off the floor. This prevents overly loud pickup of the front row relative to the back row of the orchestra.

Leave some extra turns of mic cable at the base of each stand so you can reposition the stands. This slack also allows for people accidentally pulling on the cables. Try to route the mic cables where they won't be stepped on, or cover them with mats.

If you're using just two mics, you can plug them directly into your tape deck. If you're using two mics and a noise-reduction unit, plug the mics into a mixer to boost the mic signals up to line level, then run that linelevel signal into the noise-reduction unit connected to the recorder line inputs. If you're using multiple mics and a mixer without noise reduction, plug the mixer outputs into the recorder line inputs.

1

Now put on your headphones, turn up the record level controls, and monitor the signal. When the orchestra starts to play, set the recording levels to peak around 0 VU. The monitored signal indicates the effectiveness of the microphone placement.

Microphone Placement

The microphones must be placed closer to the musicians than a good live listening position. If you place the mics out in the audience where the live sound is good, the recording will probably sound muddy and distant when played over speakers. That's because all the recorded reverberation is reproduced up-front along a line between the playback speakers, along with the direct sound of the orchestra. Close micing (five to 20 feet from the front row) compensates for this effect by increasing the ratio of direct sound to reverberant sound.

The closer the mics are to the orchestra, the closer it sounds in the recording. If the instruments sound too close, too edgy, too detailed, or if the recording lacks hall ambience, the mics are too close to the ensemble. Move the mic stand a foot or two farther from the orchestra and listen again.

If the orchestra sounds too distant, muddy, or reverberant, the mics are

Eventually you'll find a spot where the direct sound of the orchestra is in a pleasing balance with the ambience of the concert hall. Then the reproduced orchestra will sound neither too close nor too far.

Now concentrate on the stereo spread. If the spread heard over headphones is too narrow, that means the mics are angled or spaced too close together. Increase the angle or spacing between mics until localization is accurate. Note: Increasing the angle between mics will make the instruments sound farther away; increasing the spacing will not.

If instruments near the center are heard far-left or far-right in your headphones, that indicates your mics are angled or spaced too far apart. Move them closer together until localization is accurate.

Due to psychoacoustic phenomena, coincident-pair recordings have less stereo spread over headphones than over loudspeakers. Take this into account when monitoring.

Sometimes a soloist plays in front of the orchestra. You'll have to capture a tasteful balance between the soloist and the ensemble. That is, your mics should be placed so that the relative loudness of the soloist and the accompaniment is musically appropriate. If the soloist is too loud relative to the orchestra (as heard on headphones), raise the mics. If the soloist is too quiet, lower the mics. You may want to add a "spot" mic about 3 feet from the soloist and mix it in with the other microphones.

Recording

Now that the mics are positioned properly, you're ready to record. The recording time at $7\frac{1}{2}$ i.p.s. is twice the recording time at 15 i.p.s. So record at $7\frac{1}{2}$ i.p.s. to conserve tape; use 15 i.p.s. for cleanest sound and greatest headroom.

If you're recording a live concert, you might want to set your record levels to read about -10 VU with the opening applause. This procedure will result in approximately correct recording levels when the musicians start playing.

Start recording a few seconds before the music starts. Once the recording is in progress, let the record-level meters peak at +3 VU on the loudest peaks. Ignore meter pinning on bass-drum accents. Leave the recording level alone as much as possible. If you must adjust the level, do so slowly and try to follow the dynamics of the music.

If there is applause at the end of a musical piece, you can fade it out over three seconds by carefully turning down the record-level controls of the mixer master volume control.

At the intermission, fast-forward the tape onto the take-up reel so it is stored tail-out. This reduces printthrough. Label the tape reel and its box.

Thread on your next reel of tape and record the second half of the concert. After the concert, pack the mics away first; otherwise they may be stolen or damaged.

Editing

Once you have your tapes home, you may want to edit them to make a tight presentation. Using a splicing block and a single-edge razor blade, cut out the tape between musical selections and replace it with about four seconds of leader tape. This is blank plastic or paper tape used to separate selections on a tape reel.

When editing the tape, mark and cut the tape just before the beginning of each piece, and just after the reverberant "tail" fades out at the end of each piece. A yellow grease pencil or china marker is typically used to mark edit points.

If you plan to send your tapes to a record-mastering company, make up two reels—one for side one of the record; one for side two. Splice on about 30 seconds of leader at the beginning and end of each reel. Try to keep under 18 minutes per side, 25 minutes maximum, because longer programs will result in the record being cut with reduced level, bass, or stereo separation.

Label each reel and store the tape tail out. Time each reel with a stop watch from the start of the first song to the end of the last song, including the leader between selections. Put the timing and record-label information in the tape boxes.

Congratulations! You now have your finished product—a recording with sound quality that rivals commercial records. In fact, since you used only two or three microphones, your tape probably sounds more realistic than most records.

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Lighting For Video

ithout proper lighting there could be no music video. Lights—either from the sun or the light bulb—make it possible for the video camera to "see." So rule one when shooting a video is to get enough light through the camera lens so you can record a good, strong signal onto the tape.

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For mystery or drama, you'll want a lot of dark shadows. When you eliminate the shadows, you can create a happy, glamorous, high-fashion look.

Before we find out how to use light, it is important to know what kinds of lights the video pros use. If you have worked in the area of live performance, you may know some of these terms because of your experience in lighting the stage for your act. Then you'll also know that each piece of lighting equipment has its own special capabilities.

• The main or "key" light determines the camera's exposure. It's generally positioned in the front, a bit off-center, and is the brightest light source on the set.

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• A "fill" light is used to soften shadows by filling them with light. Spotlights are sometimes used as fill lights.

• Set or background lights are used to separate the objects on the set.

• Barn doors. Adjustable solid shutters at the sides or at sides, top, and bottom of lamp. These doors can be opened, closed, or adjusted at any needed midway point to help shape the light beam and put it where it's supposed to go.

• Boom arm. A horizontal extension

bar that clamps to a vertical floor stand. A small lamp can hang from the end of the boom arm, reaching into otherwise inaccessible locations.

• Broad light. A wide-source light, generally with a rectangular reflector box instead of the more common round reflector scoop. The bulb is usually tubular with a long, relatively narrow light-emitting surface.

• Diffusion sheet. Usually a large, white card that can be positioned to provide soft, reflected light, either from the sun or from studio lights.



It is most commonly used for broad fill light and where a broad light isn't available.

• Heat-resistant filter. Many lamps have grooves or slots at the front of their housing to hold colored filters. Since all lamps generate a great deal of heat, it's important to select filters that will not discolor, warp, or melt when subjected to lamp heat.

• Lighting umbrella. A large, white, highly reflective umbrella mounted on a light stand designed to take the light from a single lamp and reflect it as broad, diffused light. Umbrellas are especially useful in locations away from the studio because of their compactness and portability.

• Portable dimmer. Device for controlling the light's brightness over a continuously variable range from zero to full brightness. Dimmers can be resistive, transformer-type, or electronic. Often, a dimmer board is used, which provides fingertip controls for several lamps.

• Quartz halogen bulb. High-brightness bulb that is extremely efficient when compared with a conventional incandescent lamp. The color temperature is consistent and doesn't change as the bulb ages. These lamps get extremely hot, however, and the quartz bulb is very susceptible to damage; never touch a quartz bulb even when it's cool, since normal skin oil can interact with the quartz glass and shorten its operating life.

• Screen or scrim. Protective screen or mesh placed in front of lights to protect talent from bulbs that may pop or explode.

• Snoot. A funnel-like light attachment that provides a narrow, easily pointed beam of light.

Hints For Proper Lighting

Use live people in the scene when measuring the light. Viewers are most sensitive to lighting changes on people's faces.

Unless you're going for a dramatic effect, the scene must be lighted so that it seems natural and compatible with the location. For example, a living room scene should be lighted so that the lights play on such naturally lighted areas as a table with a table lamp. Don't light a living room scene as if it was a stage musical show.

Make sure that foreground and background objects are lighted from separate sources and that the lighting keeps them separate and dis-

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tinguishable from each other. You can also change the background. To do this, use a dim light to control focus or make one light a little brighter than the other. You can also change the background or foreground shape or light one area with a slightly different color than the other.

Textured objects should be lighted so the texture is accented. Otherwise, it may be lost in the reproduction. Do this by letting the light just skim the surface. Other techniques include using a single light, moving the camera closer, or increasing the texture of the object.

Additional Light Sources And Special Situations

There are several techniques used to get enough light to the camera (remember rule one). These techniques include shooting outdoors or near a window, opening the camera lens or turning up the camera's sensitivity, and, of course, using the wide variety of lights available to video pros.

When using artificial lights, there are additional techniques that will increase the brightness. These include lighting a smaller area (concentrate the lights), bringing the lights closer to the subject, and, the obvious, using more lights.

The biggest problem you will encounter is lighting people. Here are some typical situations and their solutions:

• Bald, shiny head (probably not a big problem with your band members, but you may want someone's father in the scene as a character actor). Solution: cut down the rim light.

• Broad features. Solution: Put part of the face in shadow.

• Contrasting clothes. Solution: Change clothes unless you want a garnish look.

• Dark skin. Solution: Use a dark background.

• Moving subject. Solution: Light the key locations or positions.

• Squinting talent. Solution: Brighten dark area of the set.

• Sweating talent. Solution: Get the talent out of the light between takes.

• Two people. Solution: Let each person's key light be the other person's rim light.

Video is an excellent medium for the amateur cameraman. You can shoot your scene, and before you "strike" (tear down) the set, you can play the video and see your creation, make your corrections, and reshoot the scene. Therefore, when lighting the scene use your imagination and experiment.





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aryl Hall and John Oates are the most popular duo in the history of recording. That's a proven fact. But unlike many other megastars, they refuse to succumb to complacency. At the risk of rejection, they've continued to experiment with each new recording, expanding on what they've already accomplished rather than repeating it.

Not all of their efforts have been smash hits, but the list of those which have captured mass attention is impressive. In the past four years alone Hall and Oates have assembled a virtual non-stop string of gold and platinum: "Kiss On My List," "I Can't Go For That (No Can Do)," "Say It Isn't So," and many more. Their brand of rock 'n' soul, as it's commonly been called, has managed to appeal to millions of record buyers without bringing on the wrath of critics—all seem to agree that the H&O formula successfully combines accessibility with inventiveness. The pair relentlessly redefines their own concepts and uses the studic as a tool to their artistic advantage, not as a short cut to a bulkier bank account.

Growing up in Philadelphia, both Daryl and John developed an early love for rhythm and blues and soul music, as well as the rock music of the day. Everything from doo-wop to Motown to gritty soul inspired them, and by the mid-'60s both Hall and Oates were singing with Philly acts on locally-made recordings. The legend goes that the pair met on an elevator while escaping a gang fight and after discovering their mutual interests, began working together. They moved to New York and released their first album, Whole Oates, in 1972.

Since then, of course, success has never really ceased. Early hits such as "Rich Girl," "She's Gone" and "Sara Smile" demonstrated not only an inherent understanding of the soul singing style they loved, but an ability to create well-crafted songs which were fleshed out by state-of-



the-art recording techniques and had no trouble finding their way to radio.

Over the years, the duo has grown, and though they have fallen short commercially a few times with their more extreme diversions, Hall and Oates have essentially retained their stronghold for more than a decade. Their 1980 album Voices, and 1982's $H^{2}O$ yielded hit singles which eclipsed all previous Hall and Oates sales records, while keeping ahead of the pack in their melding of street sounds and studio artistry.

In early 1984 Hall and Oates entered their favorite studio, New York's Electric Lady, to begin work on their latest RCA album, *Big Bam Boom*. As they've done since *Voices*, the duo produced themselves, bringing in co-producer Bob Clearmountain to engineer and perform mixing magic on the tracks. With additional input from their band—Tom T-Bone Walk on bass, G. E. Smith on guitar, Mickey Curry on drums and Charlie DeChant on sax—another solid effort resulted.

Big Bam Boom mixes the familiar and the untried, with a harder street/urban edge permeating the LP. Following its release, Daryl Hall and John Oates spoke with Modern Recording & Music about the making

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of the record, their attitude regarding recording in general, and their rather opinionated feelings about video, corporate sponsorship and the recent phenomenon of black-white crossover, for which they were in no small way responsible.

Modern Recording & Music: Your latest album, *Big Bam Boom*, seems to be your most advanced record technologically.

Daryl Hall: I just think we used the new technology more than we did before; there's more things to use, so we're using them.

MR&M: What was some of the new equipment you used?

DH: The Fairlight, the Synclavier...

John Oates: Various drum machines.

MR&M: Is the drum sound that begins the album a machine?

DH: Nothing is anything by itself. It's probably a real drum, a sample drum that could've been one of our drummer's sample things, a Linn drum, a Simmons drum...who knows?

JO: For instance, on some songs it may be our drummer's drums, but they may be sampled from another song. We used them again.

DH: We overlay things just to get a great snare sound. There are so many different combinations. It's hard to pinpoint what you're hearing.

MR&M: This also seems to be your most dance-oriented record, although you've always leaned in that direction. JO: Yeah, we just figured we'd go all the way with it.

DH: I think it's the most extreme album we've done in every way, taking things to the farthest extent. We like to work with sounds so we figured we'd try to take things as far as we could.

MR&M: In the past, some of your experimentations, like X-Static and Along The Red Ledge, didn't really work out commercially. When you go into the making of an album do you think in terms of how it will sell?

DH: It wasn't the right time with those albums.

JO: You weren't allowed to experiment in the '70s.

DH: We think about commerciality only in the sense of keeping up with our own standards. We don't want to be obscure for obscurity's sake. But that isn't something we think about when we're doing the arrangements. We're thinking about writing the songs. MR&M: Are you afraid of losing some of the AOR radio play you've had in the past because of the heavier dance orientation?

JO: Actually, I think we'll gain it because AOR is starting to go more toward our direction, which is whiteblack crossover. It's headed more in that direction now than at any time in the past 15 years.

DH: Segregated radio is on the wane.

MR&M: What do you think finally caused that?

JO: Peer pressure. I think that keeping up with some of the progressive stations forced them to realize that there is another way of programming.

MR&M: I understand that this album was largely written in the studio as you worked. How did that method differ from what you've done in the past?

DH: Only in its extremity. For the past five albums we've been doing it more and more. What we've been doing is less and less pre-production. That's because it's not us against the world anymore. We have a group of musicians who we can rely on who play with us live and understand us. So we can afford not to work it all out beforehand, to do it right there and then cut it while it's fresh. It's much more spontaneous that way.

MR&M: So it's really gotten to the point where writing and recording are one and the same?

JO: Exactly. A lot of the recording process dictates the writing.

MR&M: Do you also find yourself writing lyrics to fit what you're doing instrumentally in the studio?

DH: Yeah, but that's nothing new. We've always done that.

JO: We took a week off during the middle of this album and just wrote lyrics. We got to the point where we couldn't go any further with the songs.

Everybody who throws in their two cents changes the purity of something. Purity is what we're striving for; one of the things that soul incorporates is a sense of purity and realness. We didn't use a sequencer on this whole album; we don't even own one. We used a human sequencer: our fingers. That's significant because to me a sequencer is an instrument that plays itself, and we didn't do that.

DH: But we don't just write words to fit. There's a lot of thought that goes into it. The lyrics are very meaningful to us.

MR&M: You've said that this album was written in about a week. Do you find that there is a certain similarity to the songs because of the short time frame in which they were written?

DH: There is a complete thought running through it; there is a theme. MR&M: What is it?

JO: (laughs) We know there is one but we don't know what it is. It's in there somewhere. The critics will tell us what we were thinking about.

DH: I sense a lot of societal things in this, more than interpersonal relationship kind of things. We always used interpersonal relationships as the hook, to bring people into bigger things. I don't think we're doing that quite so much on this album. We're being more open about it and writing about...

JO: We're writing a little more straightforwardly now, rather than surrounding the essence of the subject with a relationship theme, which is what we did in the past. Something like "your kiss is on my list" sounds good, but what the song is about is something really different. We're dealing with less of that.

DH: We're dealing with more general topics. "All American Girls" is about upward mobility and ethnic groups. "Modern Love" is about love in general, not a "you and me" kind of love. It's about the concept of love in our society. What does it mean? What does emotion mean anymore? "Out Of Touch" is the same. How much selffulfillment must we seek as people and what do we lose through that seeking? Those are the kinds of subjects we're dealing with.

MR&M: Do you think your fans generally understand what you're saying in your music?

DH: I think there are a lot of different perceptions. There's everything from "Kiss On Your List" to people who actually understand what we're talking about. There's everything from people who just listen to music to people who really understand it.

JO: I think it's interesting that our foreign audience seems to inherently understand what we're doing more than even the Americans. They seem to scrutinize it, to delve into it a little bit more.

MR&M: Why did you originally decide to produce your own records a few years ago?

DH: For all the reasons we've been talking about; to have more control and do it right. Everybody who throws in their two cents changes the purity of something. Purity is what we're striving for; one of the things that soul incorporates is a sense of purity and realness.

MR&M: Can you maintain purity by using so many synthesized instruments?

DH: They're just tools to us, just like an acoustic guitar. I mean, an electric guitar and an electric bass are electronic instruments.

JO: It's all in the creativity of the artist.

DH: We play them; we don't let them play us. That's the difference. We didn't use a sequencer on this whole album; we don't even own one. We used a human sequencer: our fingers. That's significant because to

What we've been doing is less and less pre-production. That's because it's not us against the world anymore. We have a group of musicians who we can rely on, who play with us live and understand us. So we can afford not to work it all out beforehand, to do it right there and then cut it while it's fresh. It's much more spontaneous that way. me a sequencer is an instrument that plays itself, and we didn't do that. That's an example of how we use these things in a musical way.

MR&M: How were the tracks constructed? From the bottom up?

DH: That's exactly how. From the drums, usually. Then we put a bass line, and then we add whatever the rhythm instruments are going to be.

MR&M: How were the recording sessions structured?

DH: We did most of the recording itself in the control room, as opposed to the studio.

JO: The only time we really used

our specifications and our engineer's specifications, so it's almost like having a custom built studio. It's exactly what we want, it's convenient, it's friendly and they do a good job.

MR&M: What kind of board is in there? And which effects?

JO: There's a Neve and an SSL (Solid State Logic). We just used the stock effects: harmonizers, AMS delay, a lot of digital reverb and stuff like that.

MR&M: Did you use any special mics or mic'ing techniques for *Big Bam Boom*?

We're writing a little more straightforwardly now, rather than surrounding the essence of the subject with a relationship theme, which is what we did in the past. Something like "your kiss is on my list" sounds good, but what the song is about is something really different.

the studio was for the drums and the guitar. And that was just for the amps; the guitarist was actually in the room.

DH: We didn't use headphones, except for the singing. We piled up all the synthesizers.

JO: We had all the keyboards in the control room so we could go from one to the other. Plus, most of them were MIDI'd, so we had the flexibility of using a multiplicity of keyboards at the same time. We based a lot of things on our home tapes, our sketch tapes, and we'd go for a groove.

MR&M: You've used Electric Lady Studios in New York for a while. What do you like about their facility?

JO: They've remodeled a lot of it to

DH: We have certain vocal mics which tend to suit our voices better: the Neumann U87 and U47.

JO: I use AKG C414. We both have such distinctive sounds in our voices.

DH: But it's not a hard and fast rule, either. It depends on the song and what kind of sound you want.

MR&M: What was Bob Clearmountain's involvement with this record?

DH: He was the co-producer and engineer. He's strictly an engineer.

JO: He does his job so effortlessly and well that it leaves us plenty of room to be free to keep our minds on our jobs. And in terms of mixing the guy is a genius.

DH: Plus, we used Arthur Baker this time, who I guess you'd call a

production consultant, creative mixer, or whatever he is. The thing about Bob is he's the greatest at getting what you get on tape and having it sound more balanced. Arthur, on the other hand, is a creative mixer and he changes everything around. He goes for vibe. So what we did throughout the project, from the rhythm tracks on. we had Arthur come in and constantly be there, remixing things. Then we would take his remixes and we'd put overdubs on according to what he'd done with the arrangement. I don't know if anybody's ever done that.

JO: Rather than just doing an album and then giving it to Arthur or Jellybean Benitez and saying "Make a dance record out of it," what we did was to integrate the whole process. It's not like having two records. It's not like what Bruce Springsteen did, which was to record a rock 'n' roll record and then give it to Arthur to make a dance record out of it.

DH: We took it even further in the video for "Out Of Touch." which is sort of a hybrid combination of an extreme 12-inch mix and a single, both of which Arthur was involved with anyway.

MR&M: Was any additional recording required for that?

JO: Yeah, we added some percussion. We gave Arthur a pretty free hand to go in and do things, and anything we liked we kept.

DH: Although I don't think there's anything that's on the dance mixes that isn't on the real album. It might be extended but I don't think there are any instruments that aren't on it. Just some percussion.

MR&M: Is recording a smooth process for you or is there always something that bothers you when you go in to record?

DH: The only thing that bothers us is that we never have enough time to step back and listen to it for awhile; it's always put your head down and pull your way through. But that has nothing to do with the recording; that has to do with our lives. Other than that, we have a real good working relationship with everyone we work with. I think there's a lot of understanding and they take our direction very well so our brains are still in control—we're the composers. But they interpret our ideas the way we would if we were playing.

MR&M: Does it get easier as you go along?

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DH: No, but we set high standards for ourselves: we're constantly stretching.

JO: It could be easier if we just wanted to tread water.

MR&M: Was there anything particularly unusual about the making of this record?

DH: At the end of "All American Girl," we used a conversation that I had in the middle of the night with a Venezuelan girl. We were discussing the song as I played her the rhythm track. And as we were talking I was asking her these questions pertaining to the subject of the song and she was answering me this way. So it was like taking a real situation and sticking it in the record.

MR&M: "Goin' Through The Motions" is like a cross between doo-wop and heavy metal.

JO: (laughs) That's a good observation; that's what it is. That's what weare. We used a lot of computer vocals on that; we played them on the Synclavier.

MR&M: You started in Philadelphia, which, of course, has a rich R&B and dance music tradition. How much of your current musical direction do you owe to your roots in Philly?

DH: A great deal of it.

JO: We wouldn't sound like this if we grew up in Iowa.

MR&M: Your videos have been quite popular, yet I know John has stated that he doesn't enjoy making them. Is that true?

DH: I would be a very happy person if videos didn't exist. Being a musician, I'd rather have people just listen to music than look at it. But since the world isn't perfect, it's here and our job is to try to make the best of it and to try to do something artistic with it. That's the real challenge. The biggest problem that I find is that the musician, the creator of the song, is usually relegated to an actor's situation and can't really control what the outcome of the video is going to be. We're trying to bridge the gap and establish a rapport with somebody. We've gone through a lot of people and Jeff Stein (director of "Out Of Touch") is working out really well. He's the best so far.

MR&M: How do you arrive at the concept for a video, say, with "Out Of Touch?"

JO: There was nothing that really jumped out lyrically. The lyrics didn't seem to lend themselves to a strong image that we could base a DH: We're going to be doing a lot of videos with Jeff, for sale or whatever, so this is kind of an introductory video. That's why we're actually emphasizing the album title, *Big Bam Boom*, in the video. We'll probably use elements of the set from this first video in some of the others from the album.

MR&M: MTV has taken a lot of heat for supposedly not airing many black videos. Would you agree or disagree with that charge?

JO: I think that was last year's argument. I think they've addressed the situation the way they want to. It's their show and they want to program the kind of music that'll get into the skin of the people they reach. I think that there are a lot of videos and a lot of good music to draw from now.

MR&M: So, do you feel that video has been helpful to the music?

JO: Let's put it this way: it's been helpful to the music *business*. It's revived interest from the point of view of the fans. I don't think you can even measure the amount of help that new bands have gotten from it.

DH: I don't know if there would be any new bands if it wasn't for video.

JO: The Duran Duran situation is the perfect example.

DH: There's no other way for a new band to get a shot anymore.

JO: And for established bands, some have been able to integrate themselves into it and use the medium properly and others haven't.

MR&M: But on the other hand, an unsigned band that doesn't have the money to make a video can't hope to compete, even if they can scrape up enough to put out their own record.

JO: That's not true. It doesn't take \$100.000 to make a video. There's plenty you can do on a small budget.

DH: Have you seen Johnny Rotten's video? It cost him about \$6,000 and it works. MTV has been playing it.

JO: MTV is willing to play anything that comes off well. If it's shot on Super 8 or on a home VHS unit and it's happening, fine.

MR&M: Your current tour is being sponsored by General Motors, and you've been castigated by some

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people in the press for accepting corporate sponsorship. Why did you decide to do so?

DH: Because what the hell is the difference between being sponsored by General Motors or RCA? A record company is a corporation too, and RCA sells refrigerators. I think it's a ridiculous thing to even talk about.

MR&M: How much input does your band—which has remained the same for a while now—have when making a record?

JO: They have input. We're the filters, the last ones who the ideas go through, and we make the final decisions.

MR&M: Does the live show attempt to duplicate the record or do you see it as a completely separate entity?

JO: It starts with the record but then we go from there. We extend things live; it's a completely different thing.

MR&M: Your current tour includes over 90 dates. Will a song evolve or change from the first date to the 90th?

JO: Oh yeah, the actual arrangement can change and sometimes just the attitude of the song can change.

MR&M: Daryl, you and Arthur Baker worked on Diana Ross's hit "Swept Away" last summer. What was she like to work with?

DH: Um, I don't know. She was nice, she was friendly. It was right at the beginning of our project so I really didn't devote that much of my mind to it. I had a song and went into the studio. basically with my band. and I got a vocal out of her. Then I left the rest to Arthur.

MR&M: A few years ago you were quoted as saying you had no interest in working with artists such as Diana or Barbra Streisand.

DH: Yeah, but you know what? Things change. I still had no interest but I did it anyway. You know what was interesting? Doing backgrounds with her. That was the most fun. The record came out good; I did it mostly as a favor to RCA.

MR&M: Was it easier to get a perspective on someone else's music as a producer?

DH: It really wasn't someone else's music because it was my song. I just had a different singer.

MR&M: Any final comment on Big Bam Boom?

DH: Only that we think it's the best thing we've done and it boggles the mind.

robert santelli

Dennis Bouell



British Reggae Trailblazer

ne can't go far in a discussion of British reggae without delving into the work of Dennis Bovell. Songwriter, musician, arranger, and producer extraordinaire, Bovell has been in the forefront of British reggae since its earliest days.

Born in Barbados (not Jamaica, as many people think), Bovell emigrated to England as a youth and almost immediately became involved with reggae. In the late '60s and early '70s, a period when Jamaican musicians living in England sought to match the quality of reggae coming out of Kingston, Dennis Bovell succeeded where all others had failed.

"No one else was doing much in England, in terms of reggae, at the time," recalls Bovell. "The only thing reggae musicians here could count on was backup work whenever a Jamaican artist toured the country. The reggae records made in England just weren't happening, and the people knew it."

Bovell, however, changed that. Starting from scratch, Bovell learned his way around the recording studio and found the answer to why English reggae records were inferior to those made in Jamaica. Within a couple of years, Bovell's records A lot of people go into the studio, throw a song down on tape, and then when it comes to the mix, they try and equalize this and that. That's not me at all. I equalize from the word "go"

were matching, almost stride for stride, the sound of Jamaican reggae records.

"Without Dennis Bovell, British reggae would never have gotten off the ground." says Jah Bunny. one of Britain's best and earliest reggae drummers. and a longtime musical associate of Bovell. "Dennis is a genius. He knows how to get the right idea and the right sound on tape. All British reggae musicians and producers owe him something."

Adds another drummer, Drummie Zeb of the British reggae outfit, Aswad: "Dennis opened the door for bands like Aswad, Steel Pulse and Black Slate. He and his band, Matumbi, showed younger groups the way things ought to be done."

Matumbi was a pioneering British reggae band. Under Bovell's leadership, the group made reggae that had its own identity—a delectably English one. Matumbi's success helped ignite a whole new wave of younger British reggae bands which earnestly attempted to be original, both in scope and format, rather than merely imitate whatever was coming out of Kingston. It was Bovell, more than any other producer and bandleader, who helped loosen the British dependerce on Jamaican reggae.

These days Bovell is busy working in his South London recording studio, Studio 8. producing reggae and nonreggae acts, and working closely with artists such as the venerable dub poet, Linton Kwesi Johnson. Last year Johnson took Bovell and Bovell's superb band, the Dub Band, on an American tour that reaped all sorts of critical acclaim. It was Bovell's first trip to the States. "A heavy place, America," laughs Bovell.

Modern Recording & Music caught up with Bovell at his studio between projects. We found him to be a man

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very set in his outlook on music. especially reggae. and a producer who is certain of what works and what doesn't in the recording studio. As a producer. Bovell has always been bold and even a little brazen. to boot. Perhaps that's why few producers in reggae—English or Jamaican—match his accomplishments and reputation. And that's what we spoke about first.

Modern Recording & Music: You weren't necessarily the first English reggae producer to make English reggae records, but you certainly were the first to achieve considerable success. What did you do that was different from what other English reggae producers were doing in the early and mid '70s?

Dennis Bovell: Well, let's see. At the time, to really make a record that would sell, you had to make it sound as though it came straight from Jamaica. English reggae had a way of sounding a bit cockeyed, if you know what I mean. The recording engineers just weren't experienced enough with reggae. They tried to make Jamaican-sounding reggae records, but they couldn't get the drums and bass to sound right. There was this myth that if you wanted to make a good reggae record. you had to record it in Jamaica. I thought, "Well, that's rubbish." Human beings live there; human beings live here (England). And we had more sophisticated recording equipment than they had. It was in the operating of it that gave the English problems.

The people making reggae in London. say, just didn't know the recipe for making home-grown sounding reggae. So I took it upon myself to discover this recipe. Eventually I found the key to success. I made reggae records in England that nobody could tell were made here. People on the street just figured they (the records) came from Jamaica. and they bought them.

MR&M: How did you go about discovering, as you say, this recipe?

DB: I was in the studio everyday. A friend of mine, Dennis Harrison, well, he used to have a record label called D.I.P. He built himself an 8-track studio, and he asked me if I'd be his engineer. I said yeah. That gave me the opportunity to work, practically live, in the studio. I worked things out until I had the right reggae recipe. Another thing I must tell you, though, is that I adopted a different marketing strategy for these records I purchased. The records that were coming up from Jamaica often had hand-written labels in the early days. Sometimes there wasn't even a label, period. So I set about marketing my records the same way. We even charged import prices. These records sold, mon! (laughs)

MR&M: What band recorded these records for you?

DB: I called the band the Fourth Street Orchestra. We made about four albums. This was in, oh, 1976.

Selected Dennis Bovell Discography

Ya Learn (with the Fourth Street Orchestra)/Rama/1976 I Wah Dub/EMI/1980 Strictly Dub Wise/United Artists/1978 Point Of View (with Matumbi)/Capitol/1979 Brain Damage/Phonogram/1981 **MR&M**: It almost sounds as if you hoodwinked English buyers into buying your records.

DB: It was the only way to get the music exposed back then. If the people on the street knew these records were made in England, they wouldn't ever have listened to them. There was a bad prejudice that we had to overcome.

MR&M: What were the names of these albums?

DB: Ya Learn, A Who Soy, Higher Ranking Scientific Dub Wise, and one other.

MR&M: Did anyone realize what you were doing? I mean, did the public ever catch on?

DB: We got exposed because I made the mistake of letting the singer of Matumbi, Bevin Fagen, sing on one track of one of the albums, and it gave us away (laughs). You could tell his voice anywhere. The song was called "Write Them A Letter."

MR&M: So the Fourth Street Orchestra was a combination of yourself, local musicians and an occasional member from Matumbi?

DB: Yeah. People like Nick Straker, Yah Bunny, and that one time, Bevin Fagen.

MR&M: Correct me if I'm wrong, but despite the fact that the Fourth Street Orchestra paved the way for British reggae acceptability, it was Matumbi that had the most impact, right?

DB: This is true, but remember, there were some marginally successful bands before Matumbi: Greyhound. Cimarons, the Undivided. They helped pave the way too, so that Matumbi could strike out and become the first really popular English reggae outfit which even sold records outside of England.

MR&M: From a producer's standpoint, what is the main difference or



British reggae group Aswad

differences between British and Jamaican reggae?

DB: There are a lot of differences. The accent of the vocalist is different in Jamaica, for one thing. British reggae singers sing with a British accent, but Jamaicans sing in Jamaican pathois. That makes the flow of the vocals very different. Next is the subject matter. Jamaicans sing about Jamaican issues, and there's a lot of Rasta visions in the music. Not so true for British reggae singers. Plus, no Jamaicans are going to sing about the problems we have in Brixton, because they're not exposed to them. The only group that ever did that was Black Uhuru. But Uhuru is

Jamaicans sing about Jamaican issues, and there's a lot of Rasta visions in the music. Not so true for British reggae singers. Plus, no Jamaicans are going to sing about the problems we have in Brixton, because they're not exposed to them.

the exception to the rule. The next difference is in the drumming. English drummers like Drummie Zeb of the band Aswad have a different hi-hat accent. The emphasis on the hi-hat is jazzier. As for the bass player. Jamaican bass players play behind the beat as if they're cheating and don't know the song. English bass players play out in front of the song. Jamaican bass players also take a lot of rest. Recently, though, I've noticed that a lot of Jamaican bass players are incorporating the English way of playing reggae bass. Next is the piano difference. The spring or stab of the piano keys is different. Jamaican keyboard players have a spring to their playing that English reggae keyboard players don't have. I think I've covered the major areas of difference. There might be some others that I just can't think of at the moment.

MR&M: What is your personal approach in the studio? Say you're going to record a band; how do you go about getting a proper sound for the band?

DB: The first thing I do is concern myself with the drummer. I want to hear the rolls he wants to play in the tune we're working on. I have to make sure the rolls are somehow
related to the chord structure of the tune. We work on tuning and the sound of the drums next. A key is getting the bass drum to have the same tone as the bass guitar. Also, it's important to have a nice big and fat snare sound. Then, of course, I make sure all the other instruments have a proper tone and a proper sound.

MR&M: What about mixing? I know you're quite a perfectionist when it comes to this aspect of recording.

DB: Yes. A lot of people go into the studio, throw a song down on tape, and then when it comes to the mix. they try and equalize this and that. That's not me at all. I equalize from the word "go." As soon as I get into that studio. I make the sound on the mix. I find this method not only helps me, but it also helps the musicians. If you're playing something, and you don't have to imagine the final sound of the song, you do a better job. A producer has to make that sound heard-right then and there. That way the musicians know just what you're after. The feelings come into play. Now once I've accomplished this, I go for steadiness. I try for steadiness from the first take on. Once I get a steady take—a take that has consistent feeling all the way through-then I'll start to think about overdubbing. Usually I'll think about piano, organ or synthesizer overdubs, then some percussion. After that, quite often I like to put the back-up vocals on so that when the lead voice goes on, the singer is singing with the full band. That's very, very important, I think. Singers can react off the background vocals and the instrumentation, and will usually wind up with a better delivery than if it was done another way.

MR&M: Do you see yourself in the studio making a record, or recording music?

DB: I make music. I create music. The record comes later. Without music, there is no record.

MR&M: Who are some of the major artists you've worked with over the years?

DB: Steel Pulse. They once won a talent competition of which I was a judge. First prize was a date in the studio with me! (laughs). I produced, I don't know, the group's first five or six singles. I've also worked with a number of non-reggae artists, too. People don't realize that I've worked with the Boomtown Rats, Bananarama, Thompson Twins, Marvin Gaye. Reggae, you see, is just one tempo. Why limit yourself?

MR&M: In terms of production, recording and songwriting, Jamaican reggae has been more influenced by American funk and R&B, whereas British reggae owes a lot to rock. Would you agree with that?

DB: Definitely.

MR&M: Why is that so?

DB: Well, we're right here in the middle of Rock City (London), right in the middle of the land of loud guitars! (laughs) I'll tell you, Americans never really got into loud guitars and feedback like the British did. I think Americans are mostly interested in rhythm. That's because it's been thrown at them so heavily. But here in England, hey, heavy metal was born here. In Kingston, Jamaica, they don't listen to heavy music; they listen to American funk.

There was this myth that if you wanted to make a good reggae record, you had to record it in Jamaica. I thought, "well, that's rubbish." Human beings live there; human beings live here (England). And we had more sophisticated recording equipment than they had.

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The strangest thing is that in Jamaica—the home of reggae—they play very little reggae on the radio. You have to go to the sound system dance or the record shop to hear the newest sounds. So reggae musicians down there who are trying to get their music heard on the radio lean their styles to more what the radio disc jockeys are playing—rhythm and funk. Likewise with things in England. You hear rock on the radio here. Reggae bands in England slant their sounds toward rock to get that vital radio exposure.

MR&M: How do you feel about what bands like the Police, UB40, and Men At Work have done, namely, combining reggae with rock and coming up with a brand new hybrid sound?

DB: It was a good thing for them to do. Let's face it. the majority of people in this part of the world and in the United States are white. I don't think many people identify with much outside themselves. They probably tolerate some things, but when it comes to the crunch, you'll identify with your own kind. The Police and UB40 were among the pioneers because before them, white people didn't play reggae. There wasn't enough of an identification.

MR&M: Who would you consider to be your biggest influence as a producer?

DB: I took from everyone. But whatever I heard and liked. I always made sure to modify it to fit my needs. I'll add something or take something out. But no one stands out as being a bigger influence than anyone else.

MR&M: What instruments are you proficient at?

DB: Guitar, keyboards, drums, trombone, bass, violin, cello, double bass, melodica, harp.

MR&M: Are you self-taught on all these instruments?

DB: Completely self-taught.

MR&M: How did you come to learn the violin and cello?

MR&M: Well, I was playing bass in school. Ah, yes. I did have some lessons while I was in school. But before then, I could play guitar. Eventually I learned how to use the bow. From there it was natural for me to check out the violin. For a time I was going to make a career as a violinist or celloist, because I really liked the sound of those two instruments.

MR&M: When you produce an act

or a band, would you say it's not unusual for you to play on the record?

DB: Not unusual at all. Because what happens is, if for some reason a band member can't get hold of the right idea, and say it was my idea in the first place, then I think it's my job as producer to be able to say to that person, "Hey, this is the way you do it." You can't just tell someone to do something, because it might be impossible for them to do it at the moment. Whenever I see someone trying to force something like that out of a musician, the inevitable reply is, "Okay, if you're so good, you do it." Rather than deal with that sort of thing, I do it. (laughter) I'll demonstrate what I want without demoralizing the player. When I produced the band the Slits, I played quite a bit of the keyboard licks.

MR&M: Is there, however, ever a point when a producer has to step back and—

DB: Yes.

MR&M: How do you know when to do that?

DB: You know because you're told by someone in the band. You're told to get off the case. (laughs) Seriously, though, you just know that if you make this band sound a certain way in the studio, it's never going to sound that way live. See, I like to make records that are human. Anyone can include a 75-piece orchestra on a track, but can a 75-piece orchestra fit on a small club stage or in a middle-sized venue?

MR&M: Essentially, then, what you're saying is that a primary concern of yours as a producer is to make sure the sound you get in the studio can be recalled live.

DB: Yes. exactly. I think it's really important. People hear about you because of a record. So they come to see you play live. People want to hear what they heard on the record—soundwise. You have to get that sound, or at least be able to do justice to it. See what I'm saying? I try to bear in mind any limitations the band might have or bring into the studio with it. That, I think, is a sensible approach to making records.

MR&M: Do you have any particular method you use in selecting what bands or artists you'll work with and which ones you won't work with?

DB: If someone phones me and asks me to do a production, I'll say the usual: "Send me a tape." Some artists I just don't want to bother with for whatever reason. For others, I'll listen very carefully to the mateMR&M: You've been one of the primary producers behind lover's rock. How do you achieve a lover's rock sound in the studio as compared to say, a more rootsy reggae sound?

DB: Well, for one thing, you have to use a softer drum sound, something like what you hear from soft soul music. It still has to have a reggae feel, but it's not as hard. You got to feel inside of you the swoon of lover's rock. Remember, lover's rock is essentially soft reggae with love lyrics. One of the ways I work on this type of reggae is by arranging the harmonies so that they flourish. Every possible note that you're working on has to bloom.

MR&M: The British are more known for lover's rock than their counterparts in Jamaica.

DB: Yeah, because we invented lover's rock. See, in the early '70s there weren't any real good female vocalists in London. So I got this girl who used to hang around my sound system. Her name was Louisa Mark. I got her to cut a song called "Caught You In A Lie." It went right to the top because here was a little girl singing reggae. The song had a real innocence to it, a real lover's innocence. But it wasn't called lover's rock yet. Then a label came out called Lover's Rock, and all of a sudden. it became associated with this new type of music. Also, Augustus Pablo had a song out in Jamaica called "Lover's Rock." But it was a British invention that eventually spread to Jamaica.

MR&M: What's happened to lover's rock? There doesn't seem to be the interest in it that there was a few years ago.

DB: Human beings just like to buy new things all the time. It may not be that popular today, but I don't think it's dead. Lover's rock will be back in strong fashion in a couple of years.

MR&M: One of your most critically acclaimed albums—one that you produced, wrote and performed was *Brain Damage*.

DB: That was a double album. It was also a personal satisfaction. I said to myself before I started the record: "I like reggae music. But I also like rock 'n' roll." So what I did was to combine those ideas. Then I added some funk and some Afro and Calypso beats. The best example of

DB: Yes, I think so. It's probably true because there's more people playing reggae in England than anywhere else in the world. London is secretly becoming the center of reggae. It's stealing the honor away from Kingston. More and more Jamaican musicians are coming over here to live. Of course, there will always be that root reggae element in Jamaica. But England is a much bigger market than Jamaica. There's a lot more records to be sold here. So it makes sense to have reggae's center located here.

what resulted can be found on the

song called "Heaven." I don't think

anyone can classify that record

MR&M: What's been your motive

DB: I get bored working with just

one kind of music. Music is music. I

don't see why musicians don't expand

into areas that they're not usually

associated with. To label yourself a

rock musician or a reggae musician

is a kind of prejudice. Besides, it's

really out of date, considering what

we were talking about before (the

triumph of the Police, UB40, etc.). I

feel really strongly about this, and

that's why I'm presently working to

MR&M: Why wasn't Brain Dam-

age released in the States? As I recall,

it was only available as an import,

and even then it was a difficult LP to

DB: I didn't want it to come out in

America. I even had it put in the

contract with Phonogram, the com-

pany that released it here in England,

that it could be released anywhere in

DB: Well, because I was afraid of

America. I didn't know anybody

there. I had never been there. This

was, remember, in 1981. I was afraid.

I guess, of the record being mis-

MR&M: More than one reggae

artist has said that the future of

reggae is in England. Would you

the world, except America.

MR&M: Why was that?

put my beliefs on disc.

for delving into more than just

strictly a reggae record.

reggae?

find.

understood.

agree with that?

MR&M: What are your goals as a producer and recording artist? Do you have anything in particular that you're currently striving for in your music?

DB: I want to produce music that has a world class sound and world class instrumentation. I could live with myself very easily knowing I've accomplished that.

MODERN RECORDING & MUSIC

bob grossweiner



Those legendary stories about starting out in the mail room of the William Morris Agency might be true for some. But Spencer Proffer, age 35, has spent more than half of his life working his way up on the creative end of the music business, from being an artist/writer to acting as record company president and producer. Throw in arranger and lawyer and you have one of the most versatile people in the music industry.

Proffer is best known for his production of Quiet Riot's multi-platinum albums *Metal Health* and *Condition Critical* (there were two previous Quiet Riot albums released only in Japan with different personnel, most notably the late guitarist Randy Rhoads, that both Proffer and the band hope will never be issued in America) for his own record label, Pasha/CBS Records.

"Pasha Records is an avenue for me to find, discover and develop new talent with CBS's backing," says Proffer. "I'm a record producer and Pasha is a production company that furnishes its services to various labels. We're also very heavily into film scores, having worked on *Stayin' Alive* and *All the Right Moves."*

hoto by Stu Simone/New Image Inf'

At age 17, Proffer began his musical career as a songwriter for A&M. Gary Lewis and the Playboys recorded his "Picture Postcard," and by the time he was 20, Proffer had had over 70 of his songs recorded by various artists. He also wrote the music for jingles for Pepsi and Bell Telephone, and composed the music for the ABC TV series, *The Hardy Boys*.

As an artist, Proffer recorded for ABC/Dunhill, MGM, and Columbia under the forgetful monikers Proffer. Marmelzat & Reed, and Dakota. When he realized his recording career was never going to become fruitful, Proffer began climbing corporate ladders, first at CBS and later as national executive director of United Artists Records, where he was in charge of the creative director of the music division and served as liaison with UA's film division. He signed new talent, was responsible for talent already on the label and selected material for all artists. He produced six artists for UA, yielding 11 top 50 hits for the label in 18 months, as well as Tina Turner's explosive "Acid Queen" for the Tommy movie, which inexplicably was not on the soundtrack. He produced two top 10 singles for Paul Anka and a smash for R&B artist Vernon Burch.

Feeling somewhat inhibited within a large corporation, Proffer started his own company and produced former Hollies lead singer Allan Clarke. Clarke's *I've Got Time* was highlighted by a cover version of Bruce Springsteen's "Blinded By The Light," long before Manfred Mann scored heavily with it. His acute ability to pick old songs for artists to revive has been a key to Proffer's success as producer.

Proffer decided to build his own studio in 1978, the Pasha Music House (located at 5615 Melrose Avenue, Hollywood, CA 90038). "There are only three or four producers in Los Angeles, Val Garay, Keith Olsen, and Richard Perry," states Proffer, "who have designed and built their own studio in adjunct to their production careers.

I'm probably one of the only producers though, who has built a business behind my production career," he offers. "We have a marketing and promotion staff which backs up every record I make and effectively coordinates with the record companies. We have a publishing enterprise, and at least 100 of our songs are recorded each year. I've set up an international operation where my records come out on labels other than CBS International."

The first album produced at the Pasha Music House was the cinematic Children of the Sun by Australian rocker Billy Thorpe. More recently, Proffer has produced the Vanilla Fudge's reunion album, Mystery, for Atlantic Records, with a guest performance by Jeff Beck, Roderick Falconer for MCA Records, Canadian heavy rock band Kick Axe for Pasha/CBS, and Quiet Riot's Condition Critical. In 1985, he will produce albums for Heart, King Cobra, and Kick Axe's follow-up.

Modern Recording & Music caught up with Proffer a few times during the past year. The first was during the most exciting week in his eighteen year career—when Quiet Riot's Metal Health jumped from number two to number one on the Billboard album charts. We later spoke to him after the completion of Condition Critical.

I'm like a custom tailor—you come into Pasha, you don't buy off the rack.

Modern Recording & Music: Can you describe the Pasha Music House?

Spencer Proffer: It's about 11,000 square feet. We have two 24-track rooms. The monitors are Altec 604E with a mastering lab crossover, which we customized for the room. We have MCI 528 consoles. We have pretty well remodeled the entire studio and taken some of the electronics out of the board.

MR&M: Why do you like the MCI?

SP: It's the most compact, yet full range, console that I've worked on in a while. You can get your hands on everything without a lot of body movement and get the full spectrum of EQ and flexibility. With the modifications we made to our board specifically, it gives us the most high end transience as well as bottom end sock that I've heard in a long time.

The room is pretty well customized for the type of records I make. It's a rock 'n' roll room. I don't think I could put the Mantovani string section in here, but in terms of making state-ofthe-art records, it's very good.

MR&M: Why did you build your own studio?

SP: For the most part because I really don't like watching a clock while making records. I try to paint pictures with sounds and in order to do that I need all the paint brushes at my disposal and in the manner in which I want to use them. I found myself having a lot of trouble getting into studios when I needed to or when I felt emotionally that I wanted to work. The kind of records I make aren't three-hour sessions that can be booked in advance and regimented. They have a much more creative flow to them. In order to make the kind of records I want to make, I need to have access to a facility at all times, so I built my own studio. I thought it was really worth while to mortgage my life to build the kind of room I wanted to work in.

MR&M: How much did it cost you? SP: Plenty! It's worth over two million dollars today. When we master our records, we have to use a minimal amount of EQ, and it's a very true room. What you hear in the room is what you hear when you leave the room.

MR&M: Do you let other producers use the studio?

SP: Yes. The Pointer Sisters, Eddie Money, Ted Nugent, and Willie Nelson have all recorded here. Portions of the soundtrack of *Staying* Alive were also done here. It's usually booked to people I know within the industry. The studio was designed and built like someone's home; it's like an English country house. It doesn't have a very commercial feel. It has a very homey feel. We have a fireplace, and it's all brick inside. It's very special, and therefore we don't open it up to the street, per se. It's usually booked through the industry, to friends, and for record company projects that I think are very meritorious. Since there are two studios, and I can only do one shift a day, it's accessible.

MR&M: Who are your engineers? SP: I have a staff of engineers headed by Duane Baron, who has

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Quiet Riot

been engineering my records for a number of years. On staff are Mikey Davis, Hanspeter Huber, and Larry Brown, who designed and built the room with me.

MR&M: Does an outside producer have to employ one of your engineers?

SP: Not necessarily, as long as he knows how to use the equipment and treats it with the respect and care it needs. Outside producers can come in and bring their own engineers.

MR&M: How do you rate pricewise with other studios in Los Angeles?

SP: Competitively.

MR&M: Why would someone want to record at Pasha compared to another studio in town?

SP: Listen to the records that come out of here. A studio is really the product of the people working the room. You can have a "B" studio with an "A" producer and an "A" engineer and pull an "A" album out of it. If you really have it together, and if our room is used to its maximum efficiency, you can get more punch out of the room than I've heard in a lot of rooms. You can get a lot more of a spectrum of sound in terms of the EQ possibilities. The dimensional sound qualities that appear on our records can be gotten if the room is used to its maximum efficiency. There are tremendous rooms in the city. The reason I use Pasha is because I know it and I built it. It sounds like an English studio; it doesn't sound like a Los Angles studio.

MR&M: What's the difference between a Los Angeles and a British studio?

SP: It's an intangible characteristic that appears on a record. Many people have thought for many years that I was an English producer, possibly because a lot of the artists I've produced have been English. It doesn't have the Eagles Jackson Browne sound, but if the Eagles or Jackson Browne came in, it would sound good. It's a very versatile room. We've done black records, soundtracks, rock 'n' roll.

MR&M: I would assume the room has a strong bass and drums ambience.

SP: We have also done some string recordings here, and the high-end transience has been tremendous. It's a very track-oriented room in terms of the bottom end of things, the kickdrum sounds. Carmine Appice, one of rock's foremost drummers, refuses to record in another studio. We managed to capture the biggest drum sound that he feels he ever got in his entire career.

MR&M: Before you built your own studio, what Los Angeles studio did you like the best?

SP: Cherokee was my favorite room because of the flexibility of equipment there, the drum and bass response, and the vibes of the room. The ambience of a room is very important, as is the time that you work and how the room makes you feel psychologically.

MR&M: Have you ever produced in New York?

SP: No! I've not had the opportunity. Any projects that I've been able to produce have been done at Pasha because the artists want to play here. It's such a controlled, warm environment that once they see the room, they're willing to relocate themselves in Los Angeles for the course of the project.

MR&M: How did you customize the studio to make it really unique?

SP: The actual layout is the ideal way I would like to have a studio, particularly the control room, where we have ear level monitors, when you're sitting behind the control desk, the angles of the monitors are pretty well directed to the people sitting behind the desks. The monitors are not mounted way up in the corners. They're pretty true. We raised our console six feet, and we positioned the room for maximum hearing—not only for efficiency, but for comfort.

You don't have to crank it as loud as you do in other studios in terms of maximum dB level in order to feel vibed about what you hear coming back out of the monitor system. We positioned the speakers and built the walls in such a way that when you're sitting in the control room, you really feel surrounded in the warmest way.

MR&M: Are both of your studios basically the same?

SP: No. I use the smaller studio to do vocal overdubs and other overdubs and to make demos. I would never track or mix in the smaller studio because the larger room is so ideal for tracking and mixing.

MR&M: Most studio owners I've encountered freely use state-of-theart terminology, so much so that it has become relatively meaningless. It seems as if there's a battle to see who can be the first to get a new toy.

SP: It is meaningless! We've got every toy that you can use and they all work, but it's no more state-of-the-art than any other studio. It is kept up to today's standards. It is maintained well, and the equipment is always working. But I don't know what state-of-the-art means.

We constantly get new toys as they are needed. I try them out. The manufacturers give me a grace period, and I have the opportunity by making records to try the stuff out and see how functional it is. If it's something new, functional and workable, then we'll acquire it. I love the EMT 251 echo unit—an expensive unit—as it really happens to give records an additional dimension, so we got one.

MR&M: What is your favorite equipment?

SP: It depends what I'm working on. I use different equipment for different projects. There is a certain way to use a Lexicon, but we do things a bit differently. We'll feed one thing into another and back through another, depending upon what sound I'm going for. Sometimes I don't use a multitude of outboard gear on a project; some projects I'll record very straightahead. Sometimes I'll use harmonizers going through Kepexes to digital delay units. It really depends on the particular sound I'm trying to get.

MR&M: What kind of effects did you employ on Quiet Riot's *Metal Health*?

SP: Very little. We kept that as live and as ambient a record as possible. I wanted to get an anthem, stadium type of sound. The way we mic'ed the drums, recorded the vocals, and mixed the record are the ways we make it feel ambient. Duane positioned the mics differently for Quiet Riot than he did for Vanilla Fudge. The drum sound we use on soundtracks is light years away from Quiet Riot and is tailored to what the film score should sound like. I'm like a custom tailor—you come into Pasha. you don't buy off the rack. It's all hand-made for the artist.

MR&M: How did you differ the mic'ing between Quiet Riot and Vanilla Fudge?

SP: Basically, without going into specifics because it's something we really pride ourselves on, we custom tailor the techniques in the way our engineer approaches the mic'ing of each prospective project with what we want to accomplish sonically. The only general comment I can make is that we will try to custom tailor the sound to what the band should sound like when they go out live and what vibe and ambience they would like to get for a record. Most bands want to sound unique unto themselves so it becomes our assignment, when we become involved in a project, to truly customize the sound to be indigenous to that particular project.

MR&M: How do you decide which projects to undertake as a producer?

SP: The ones that get me the most excited. Then I meet with the people and find out how passionate they are, how committed they are, how hard they are willing to work, and how much input they will take. I'm not a good guy to hire if they want a passive producer. I get very involved in the music and arrangements. I mix my records myself. I become another member of the band, per se, or a partner if it's a solo artist.

MR&M: By mixing yourself. do you mean you don't let them mix at all?

SP: No. The bands are involved intricately in all stages of recording, but when I said mix it myself, I meant that my hands are the only ones on the board when it comes down to putting it into 2-track. That is not to say that Duane is not intricately involved in the entire process, but the ultimate judgement of perspective and overall direction of the record

When you welk into a studio with a road map, you know where your destinations are. We take detours once we get in, but everybody in Quiet Riot is proficient and so adept as a professional player that any ideas I or they may heve, we both can edapt to. has to be left to me. I welcome artists to contribute, but I want them to respect my input. If they don't want my input but just want me there for name value or vibe sake, I would get very frustrated. I would feel that I didn't contribute. I'm a *contributing* producer.

MR&M: Do you prefer to produce new artists or established ones?

SP: Both. I hope to, in the course of the next year, work with two or three established artists and hope to take their creativity one step further. On the other hand, it's very exciting for me to be involved in baby projects and take them from zero to a new level. Quiet Riot is a perfect example. It's exciting to be on the ground floor and mold the direction as well as to ratify and expand one.

MR&M: How do you find new artists? From demos, seeing them live or word-of-mouth from industry associates?

SP: All of the above. Sometimes I might be somewhere and see someone that blows me away. But for the most part. I'm turned on to them by a record company, a manager, an attorney, or someone I have some degree of respect for, who will have me listen to the artist initially. If I like what I hear, I'll take it to the next step, which is to see them live.

With Quiet Riot, I took them into the studio to cut some demos to see how our work relationship would be before we made any formal commitments for the long term. So it's avery careful screening process. With Quiet Riot, I've put in a tremendous amount of time and emotional commitment with them on the ground floor. I look forward to a long and creatively expansive relationship with the band.

MR&M: What do you find distinctive about Quiet Riot?

SP: Kevin DuBrow and Carlos Cavazo happen to write songs that have hooks that invite the audience to participate. Quiet Riot's music you not only enjoy, but you get the feeling of seeing them live and wanting to get involved with it. All of their songs are anthem-oriented and beg you to join in. I think that they can be a real cultural phenomenon in that it would open a demographic appeal to heavy metal music on a much broader basis. And they certainly have proved it by having the number one album in America.

MR&M: Since they are a hard rock/heavy metal band, how did you

capture their force of attack on record?

SP: Very naturally. What you see live is what you hear on the record, to a large degree. Obviously, they're much better now because their album was recorded in January-February. 1982. Their playing expertise and ability to communicate is so much stronger now since they've been touring solidly.

MR&M: How long did it take you to record *Metal Health*?

SP: About five weeks.

MR&M: Did you record it live or did you layer the tracks?

SP: It's recorded as live as possible. but at the same time, we do take advantage of some of the technology available. We cut our tracks. then worked on Kevin's vocals and the background vocals with the rest of the guys. We then did the guitar overdubs. There was some sweetening on *Metal Health*—some keyboards and some special effects. But it was a real basic, simple approach. It took five weeks for the whole album from top to bottom, including mixing.

MR&M: As rock albums seem to go these days, that's pretty quick. Obviously the band rehearsed a lot before going into the studio.

SP: Absolutely! The band was tight. We all knew what we wanted. There was a lot of pre-production outside of the studio. The arrangements were together. When you walk into a studio with a road map. you know where your destinations are. We take detours once we get in. but everybody in Quiet Riot is proficient and so adept as a professional player that any ideas I or they may have, we both can adapt to.

MR&M: How many tracks did you record?

SP: Fifteen. and we used nine.

SP: Were any of the leftover tracks used on their next album *Condition Critical*?

SP: No.

MR&M: How did you decide which tracks to use?

SP: The ones the band and I liked and felt were the most representative of what they wanted to be released to the public. We maintain all the artistic control of our (Pasha) dealings with CBS. It was a truly collaborative effort between the band and myself.

MR&M: Metal Health is a guitar attack record...

SP: ...right. For example, the Vanilla Fudge is keyboard-oriented

while Billy Thorpe's records were more technologically oriented with lots of sound effects.

MR&M: On *Metal Health*, how much guitar overdubbing was utilized?

SP: We reinforce some of the basic parts, and we added some parts, but never a tremendous amount.

MR&M: Did you ever eliminate the basic guitar track?

SP: No. We just reinforced them. MR&M: What about the keyboards on Vanilla Fudge's album?

SP: The Fudge record was recorded in a very unique way, one instrument at a time.

MR&M: You probably couldn't get all the guys into the studio at the same time.

SP: There may be some element of truth to that! Individually, they were a delight to work with, but collectively it was a bit difficult due to different personalities. They're all magnificent players. The way we approached the album was that Carmine (Appice) programmed the drum machines, including the Mattel Synsonic Drums, which Carmine is national spokesman for along with Buddy Rich. So we started off with a programmed drum synthesizer, and Mark Stein played simultaneously on keyboards. Drums weren't played, per se, on the tracks. Carmine is such a magnificent player that we wanted to make sure all his parts fit the record. Once we added the guitars and vocals, then we put Carmine's drums on and really arranged the drum parts to fit the songs. This is some of Carmine's finest drumming.

This was a very overdubbed record, a very arranged album. After drums, we put on bass, background vocals, guitar overdubs, keyboard overdubs, and effects. Two tracks were recorded live.

MR&M: I noticed that the bass was recorded after the vocals somewhere in the middle of making the album. Usually, bass and drums are recorded first on many albums.

SP: These guys are such tremendous players that they have a tendency to overplay if everything is done at once. We really wanted to customize this record to fit the scope and breadth of the material. This record is like a painting, and we wanted to weave the colors in and out of each other. The title track has a bass solo one of their first records with a bass solo—which Tim Bogert performed. "Don't Stop Now" has a great keyboard/synthesizer solo. There are guitar solos. Every track is like a mini-short story lyrically.

MR&M: Would you say that Jim is more of a lead bassist than a rhythm player?

SP: For the most part. He provided a strong foundation, but he also provided a colorful rendition of his instrument. We didn't want to get in the way of some of the other things going on. The most important thing was the vocals. Mark Stein sang lead on all but one track, which Tim sang.

MR&M: How did you get Jeff Beck to play on the album?

SP: Jeff is an old friend of Carmine's and Tim's since the days of Beck, Bogert & Appice. When Jeff was in Los Angeles last year, he came by the studio when I was working on the DNA album with Carmine and Rick Derringer. He was impressed with the way the session sounded, and Jeff and I talked about the possibility of working together, ultimately with me as the producer. In the course of those talks. Carmine told him that we were starting a Vanilla Fudge record. The Fudge was one of Jeff's favorite bands so Carmine asked Jeff if he would guest on the album for a few tunes. Jeff said, "Let me hear a few tunes when you get them down. and if I like it. I'll be pleased to play.' When we finished the basic tracks for the whole album, Carmine and I flew over to London and met with Jeff and played him the tracks. Jeff thought they were terrific and agreed to play on a few tracks.

MR&M: So Jeff came back to Los Angeles and your studio.

SP: No. Due to Jeff's scheduling, it was easier to bring the tracks to him to overdub in England than for him to come to Los Angeles.

MR&M: Do you have a network of sessionists you normally call?

SP: No. I use different people for different records. A lot of the projects I do are by self-contained bands.

MR&M: Is there a big difference in producing a studio album and a live album?

SP: My only experience in doing a live record was Sheffield Lab's live direct-to-disc Tower of Power recording in 1981. My engineer then, Larry Brown, was in direct charge and I was executive producer on the project. The big difference, obviously, is your option to make changes, to extenuate certain aspects of the project. I happen to like the combination of both. I don't like to spend a lot of time overdubbing: I like to capture the magic of a unit as live as possible and only use overdubs to extenuate. to bring out, and to color to a degree, which never takes away from the basic approach—to exaggerate certain aspects of it.

We recorded Tower of Power at the MGM Sound Stage, where they did the *Wizard Of Oz*. It's a humongous place to record: it feels like a football stadium. very distinguished from a recording studio which has its inherent, structural characteristics.

MR&M: In your sessions, how much input do you get from the artist and how much do you bring to the session?

MR&M: I get all the input in the world from the band. My job is to make sure they're going down the right path. In some situations. I'll merely make sure that what they're doing is what they want to accomplish. Other times. I find I have to rearrange songs from top to bottom in terms of every instrument. I'm also an arranger.

In rock 'n' roll, the arrangements are really more of an approach. In other words. I may have the drummer play a different feel, have the guitarist play a different rhythm, have the bass pattern bounce around differently or have the keyboards enter, exit and be different texturally. Sometimes I'll get involved in all of those: sometimes, if a band is together—Quiet Riot is pretty together—I leave it alone.

MR&M: Do you ever change a band's instrumentation?

SP: On the Fudge album, there are some songs that Mark and Carmine wrote that were going to be primarily keyboard oriented, which I made guitar oriented. "It Gets Stronger" was very upbeat and in double time; it's now a quasi-reggae tune that is very mystical, turned from a head pounder into a ballad.

MR&M: Why?

SP: Because I didn't feel the marriage of lyrics and music was appropriate in its original incarnation.

MR&M: How did the band take to it?

SP: Initially, they hated the concept until they tried it and then lived with it for a few days. Now it's Mark's favorite track on the album.

MR&M: Let's talk about cover songs. *Metal Health* has all original songs except for Slade's "Cum On Feel The Noize." How did that track come about?

SP: I had them try it. I thought that its lyrical content was totally congruent with everything Quiet Riot was writing. I thought that the song sounded like a hit tune. It was one of my all time favorite English records. and I believed it could be a hit in America. And I was proven right. (The song hit #5 on the *Billboard* charts.) It was never originally a hit by Slade so it was somewhat unfamiliar to an American audience and was never a major hit before in this country.

Kevin's voice sounds somewhat reminiscent of Noddy Holder's. who is Slade's lead singer. I thought that we could be true to the original song yet give a Quiet Riot approach to it.

MR&M: The Fudge are primarily known for their contorted versions of other people's songs. *Mystery* contains two covers. the Supremes' old hit "My Word Is Empty" and the Dionne Warwick chestnut "Walk On By." Did you also bring these to them?

SP: Yes. We tried about 15 in the pre-production context. We felt the arrangements were truly unique and truly indigenous to the Fudge, pretty magical, symphonically oriented. The intro to "Walk On By" is like the prelude to a Richard Wagner symphony, then it kicks ass when it gets into the song.

MR&M: It's typical of the Fudge in their old formula.

SP: "Walk On By," the album's first single, was pure Vanilla Fudge but with modern technology. It sounds young and vibrant.

MR&M: Condition Critical in-

I welcome artists to contribute, but I want them to respect my input. If they don't want my input but just want me there for name value or vibe sake, I would get very frustrated. cludes another Slade cover, "Mama, Weer All Crazee Now."

SP: Originally we weren't going to do it. Originally we played it in the context of the first album. The Quiet Riot songs on *Condition Critical* are far better than the cover songs on the first album, *Metal Health*. But we did it for fun. It wasn't even a business move. Those two songs were our favorite play songs. It was a tribute to Slade. It wasn't meant as an economic or capitalistic move by any means.

MR&M: Are you also involved with the making of artists' videos?

SP: Yes. I get very involved with videos on all my projects from storyboarding, conceptualizing, final editing, and overseeing the whole process. Many people have thought that I make visual records, that I tend to see pictures when I make a record. I like to be able to translate that without being too literal, and to keep it interesting, with a sense of humor. I feel that I'm closest to the band's music, next to the band.

MR&M: Do you ever record a song with the video in mind?

SP: No. I try to stay true to recording a song, but while recording. visual images will pop into my mind and storyboards come into play which I remember when it comes time to do a video.

MR&M: Do you see any new trends in recording?

SP: Basically, I see recording done with visual images in mind. Technology grows all the time with new equipment on the market; it's a question of application. With a lot of projects, you can apply all the advance techniques. With some projects, you need to stay pretty true to the old ones. When I produced Billy Thorpe six years ago, we made it 48track in order to get the kind of sound effects we put on the record. We needed a lot more than the 24 tracks offered us. We wanted to put 70 to 80 voices on and keep the separation. We recorded them three at a time, and the only way to do that was to link up two 24-track machines, and to transfer the basic tracks down to two. leaving another 22 tracks open. We then put the vocals on those 22 tracks times a few voices. and then mixed them down to the original 24 without any major generation losses. I haven't recorded 48 tracks since then because the projects haven't called for it, I did not want to keep bouncing down generation after generation so it took a lot of extra time and care.

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I don't think rock and roll records, per se, need all 24 tracks. I don't necessarily use all 24 tracks on each record. Sometimes I'll use a track for just an effect; that might happen for only 8 to 16 bars and sometimes even less than that, and I may not use that track again. On the Rod Falconer album, we only used 20 of the 24 tracks on a great number of the tunes.

MR&M: Do you ever request a musician to change brands of instruments to get a particular sound you're looking for?

SP: Sure. If somebody comes in with a Fender guitar and it might not be the optimum or best sound for the particular tune, I might suggest a switch of guitar or amp. I'm very into making sure that the right colors and textures appear on a record. But if it's a band, I want to make sure I capture their sound, and their sound is usually whatever they've got. If it needs to be changed to be right for the song, we'll change it.

MR&M: Quiet Riot is a hardrocking heavy metal band. How would you describe heavy metal?

SP: A heavy metal guitar is a fine, well executed, hard-banging guitar shoved up in your face.

MR&M: Okay. Now is there any key way to record a heavy metal guitarist?

SP: Just make sure you mix properly and mic the amps. We tear apart our studio. We don't even record the guitarist in the studio. We take our lounge, which is all brick and wood, take all the furniture out of it, and put up heavy boards to bounce some of the sound waves off. We put the amps in front of the fireplace because it sounds great.

MR&M: Do you get an echo effect? SP: We get a real live ambient, stadium feel for the guitar.

MR&M: Is the guitar going direct into the board?

SP: No, it's not direct. I would not record a heavy metal guitar direct because you don't have any ambience that way. Metal personifies a live sound, and you can't get a live vibe direct. Dire Straits, on the other hand, would sound great direct, especially with the way Mark Knopfler plays guitar.

MR&M: Who are some of the people you would love to produce and why?

SP: David Bowie and Peter Gabriel, because they personify the ultimate artistry to me, lyrically, musically, MR&M: How do you approach film soundtracks?

SP: My latest film project was Up The Creek for Orion, which was the first soundtrack where I was commissioned to produce the entire soundtrack from the ground up. I produced every track wth Cheap Trick, Heart, Ian Hunter, Shooting Star, my new heavy rock band Dick Axe, Danny Spanos, Randy Bishop, and the closing title was performed by the Beach Boys. I was very excited about this project because it was one of the first soundtracks where one producer produced all of the recordings to give a symmetry of sound. style, and approach.

MR&M: What new sessions are you working on?

SP: I produced a debut album for the Canadian rock band Kick Axe. I saw them perform in Edmonton, and I found them to be one of the most exciting and distinctive new rock 'n' roll bands.

MR&M: What makes them so distinctive?

SP: This is the first heavy rock 'n' roll band that I've come across that truly had four-part harmonies while hitting hard in the true tradition of Deep Purple and Led Zeppelin. Each member is an adept, consummate musician as well as a wide-range singer. The record is hard driving musically and every song has a massive hook with four-part harmonies. It's real exciting aesthetically and musically.

MR&M: If you listen to the guitar sound you got from Carlos Cavazo of Quiet Riot and Larry Gilstrom of Kick Axe, there is a great similarity. Did you record them the same way?

SP: To a degree, but each guitarist has his own characteristics and sound. We might have set up the recording technique in a similar fashion—the various different amplifications, and little different mic'ings on the amps—but the different styles of the players create a little different sound and approach based on its being custom-tailored to the player rather than to the general, overall sound. The foundation was set up the same way, but the mic'ing positions and the amp settings were different.

MR&M: What do you feel are their stylistic differences?

SP: The manner in which they play their instruments, their influences, their roots, their phrasing, and their melodic approach to solos. Both Carlos and Larry, as well as Ray (Raymond Arthur Harvey, Kick Axe's other guitarist) have a very melodic, majestic approach to rock 'n' roll guitar playing, except they came from different places with different influences.

MR&M: What was it like working with the Little River Band?

SP: Very good. We did the Little River Band in Australia. Some of their road technicians have developed a new headphone mixer system. You can have eight separate tracks, and a person listening through a headphone playback can actually submix their own balances in the midst of recording. I just got six of these for the Pasha Music House.

It was a wonderful musical experience working with the Little River Band. They're the most musical and adventurous group of players I've worked with, and they're probably the best harmony singers I've come near in my professional experience. The record is highly visual and imaginative in terms of textures and colors, and for the first time, I was able to work with a brilliant Fairlight synthesizer computer genius, David Herfhelder. He's a classically trained keyboard player who has composed modern symphonies on his keyboard set. He even has a 24-track mixer for his Fairlight and adjacent keyboards that go with his whole setup. It was a great learning and growth experience working with someone as musical and texturally oriented as David was.

This was also the first time that I've worked with a group that has two fabulous singers, John Farnham and Wayne Nelson, the bass player. John sang on eight out of the 10 tracks; Wayne was on two. They truly have an incredible, natural harmonic blend and passionate vocal style that are very complimentary. Graham Gobel is also one of the finest harmony singers I've encountered. I spent two weeks in a small warehouse in Melbourne, Australia, working on the arrangements and the songslyrics and changes with the bandand then we proceeded to go and finish the album.

It retains the harmonic and melodic sense of their past hits, but at the same time, it has a lot more character and definition.

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Tascam "Ministudio"



've had the opportunity to review a lot of fine products over the years, but every so often something special comes along. Sometimes it's the creativity behind the product that impresses me, sometimes the cost-effectiveness, and sometimes the level of technical innovation. In the case of the TASCAM Mini Studio, what impresses me is that TASCAM seems to have created pretty close to the perfect 4-track cassette -not only is it inexpensive, it features extremely logical operation, good sound quality, portability, and even tasteful styling. In fact, I felt there were only a couple of inconvenient aspects: one is that the Mini Studio cannot record on all four tracks at once (you have to settle for one or two at a time, but for those who mostly work solo, this is generally not much of a problem). Also, the Mini Studio uses dbx noise reduction. While this gives superb noise performance for 4channel work, it means that the machine is not compatible with standard Dolby B tapes. However, I assume that someone buying the Mini Studio would be doing so for the 4-track capabilities, and would not be too concerned about using it as a standard cassette deck.

Having tested most of the available cassette multitrack machines, I've logged a lot of hours with them and have been generally pleased with all the units I've tried. However, some have subtle limitations which, while not diminishing the value of the machine, nonetheless make the recording process more complicated than one might like. The Mini Studio is remarkably free of any complications: in fact, it is so easy and fast to use that it's as close as I have yet come to plugging a recorder directly into my creative faculties. Strong words? Well, I must say that I'm pretty impressed with this machine...so let's move on to specifics.

What is it? The Mini Studio is a fairly lightweight, portable device that can be powered by batteries or TASCAM's optional PS-P1 AC adapter. (Note that the 10 "C" cells required for battery operation make up a significant portion of the overall weight.) While a little bit larger and more expensive (\$600 list) than some competing 4-track portables, the Mini Studio boasts an unusually complete roster of functions and features. For example, each mixer channel includes the following:

• ¼-inch phone jack input for mic or line level signals, located right on the front edge of the recorder for easy accessibility. Score one for our side; I really like not having to fool around on the back panel when doing basic input patching!

• Preamp trim control for matching the input to anything from mic to line level signals. (Incidentally, you can plug a guitar or similar high impedance output device directly into the mixer with only a slight loss of highs. However, using an external buffer or preamp between the high impedance output and mixer input gives the best possible results.)

• Bass/treble, boost/cut EQ. The EQ section, while simple, provides 10 dB boost or cut at 10 kHz and 10 dB boost or cut at 100 Hz.

• Panpot (yes, you can mix down in stereo).

• Slide fader that actually feels pretty decent, and input select switch to choose between Tape, Off, or Mic/Line.

Mixing sub-system capabilities. You can think of the Mini Studio as having three separate mix capabilities: Main mix, cue mix, and remix. Main mix simply uses the mixer capabilities to send signals to the tape. Cue mix has four separate level controls (one for each tape channel) and takes its signal from the tape; the Main Mixer signal may also be combined with the Cue bus and sent to the mono headphone output (with associated level control). A cue/remix switch selects between the cue mode described above and remix, where the tape signals go through the main mixer and appear at two line level RCA phono jack outputs. Remix is also used for ping-ponging ("bouncing") tracks in addition to regular remixing. (There are also individual outputs for each channel if you want to bypass the Mini Studio mixer and go into something a little more upscale.)

Each mixer bus output (Left and Right) has a record function switch to select the bus signal destination. The left bus switch lets you send the bus signals to track 1 or 3, while the right bus switch lets you send the bus signals to track 2 or 4. Each switch also has a "safe" position to discourage accidental erasure.

The transport. The Mini Studio runs cassettes at $1\frac{7}{8}$ ips, and allows 4-channel recording in one direction only. The machine is biased for high bias tapes such as TDK SAX. TASCAM recommends that you use the shortest length of tape possible for a given job, and I concur.

The Mini Studio also includes in/out switch for the dbx noise reduction, $a\pm 15$ percent speed control, index counter with zero return, pause control, and punch-in/ punch-out capability. The transport controls can provide cue or review functions by pushing down fast forward or rewind respectively with the play button engaged, but perhaps more interestingly, with the Mini Studio you need only press the record switch to go into record (you do not have to press record and play at the same time). Is this the start of a trend?

Convenience features. The on-off LED blinks when the batteries are running low; also, to save batteries there's a momentary pushbutton switch that lets you light up the meters temporarily (great for setting levels in low-lit clubs). The Mini Studio requires about 200 mA average current and pushing the light button adds another 50 mA. Therefore, you can't expect the batteries to last forever but they should give fairly long life. Note that if you use the AC adapter instead of batteries, the meter lights remain on.

Those who work solo in the studio will appreciate the remote punch-in/punch-out jack. By plugging in TASCAM's optional RC-30P footswitch, you can do punches without having to take your hands off the instrument (for more about remote in/out punching, see my article in the July 1980 issue of MR&M).

Being able to monitor four signals at once through the four meters is convenient, however, there is no peak-reading feature. For those who are experienced in analog tape recording, this is no big deal—we all know how to back off several dBs when recording percussive sounds, signals with high frequency transients, etc. However, since for many musicians the Mini Studio will be their introduction to recording, I feel a peak LED or equivalent would be helpful. To be fair, the manual acknowledges the lack of a peak reading meter and stresses the importance of proper recording levels; still, with modern electronic music devices peak indicators have become more important than ever, and are really more of a necessity than a luxury these days (although they do add to the cost...).

The manual. TASCAM clearly recognizes that the Mini Studio is an entry-level machine, and has written the manual accordingly. Those who are getting into recording for the first time should find the step-bystep instructions on overdubbing and bouncing most helpful; also, there is some useful information on mixing, using EQ, and how dbx works. While not necessarily a comprehensive tutorial, the latter sections will take care of new Porta One owners until they head down to their library or music store bookshelf for a more substantive treatment of the art of recording.

Final comments. The Mini Studio includes guitarlike strap posts, however these are *not* the strap-lock type so be careful when slinging the Mini Studio over your shoulder! The strap could easily come disengaged from the post, and I'm sure you would not want to see your beloved machine practicing a crash-landing.

Also on the subject of care and handling, at the recent New York AES show I met a fellow writer (Ron Bienstock) who had an excellent suggestion on how to improve the Mini Studio: add rubber corner bumpers. This may sound silly, but we are dealing with a portable device, and portable devices do bump into things, so why not add a little protection? TASCAM does offer a flight case or soft case for the Mini Studio; possibly, rubber corner bumpers could be attached to the soft case for extra protection.

Overall, I am very impressed with the Mini Studio. For those who want to learn about multitrack recording, it provides an excellent and affordable starting point—yet seasoned veterans will also be impressed by the straightforward operation and ease of use. TASCAM appears to have listened to what people wanted and acted accordingly, so if you're in the market for a 4-track cassette recorder, check out this one...it certainly merits your consideration.

How to Prepare for an On-Location Recording

day's lesson is titled "I think I'm Ready, But How Does Everyone Else Do Their Soundchecks?" This is my interpretation of a workable system for the preparation of the on-location production, up to and including the sound check. In my articles I'm going to bare my soul; to admit things that even Jim Rupert wouldn't admit (and we know what those are, don't we, Jim?). I'm going way back to the beginning when I was even wetter behind the ears than I am now. When I first started, I did not know how to properly prepare for an on-location session or how to conduct a successful sound check. What's worse, I didn't want to look stupid, so I didn't ask anyone. Here's what happened:

Since everything I did was on-location, and I was low on mics, tracks, funds, and experience, I figured the sound man should do some of my work. So I would take a cue or monitor send from the house board to cover the vocals along with the instruments I didn't have enough mics for (like those road bands with 47 keyboards). This arrangement didn't give me much control, but it gave me the flexibility to go inside and talk to the girls while the band was onstage. I learned fast, and extra microphones topped my priority list. Forget the need for tracks-in on-location, extra tracks are for those who don't like taking chances. Absolute Recording operated as a 2-track studio for the first seven years of business. I am proud of most of my 2track work, and it's rewarding to live up to the saying that not every studio engineer can mix well live, but every good on-location engineer can work a studio.

I don't care what equipment you have, there is one thing that you don't have enough of in an on-location situation, and that is time. I take that back—here is a better parallel: If you are recording a soloist playing classical guitar next door to your home, and you are set up at 10 AM for a show that begins at 8 PM, you won't have enough time. It's when you have a recording 60 miles away in the basement of a home in a town of 634 people on Sunday afternoon that you will have five and a half hours of spare time between the time that you have finished setting up until the time the drummer wakes up.

Anyway, I always allow myself two hours of uninterrupted set-up time, with an extra hour for soundcheck. Make sure that this hour is prior to the time that the patrons are allowed into the venue. Do the proper preliminary work, or it will surely come back to haunt you. Get the manager's permission to record. Make sure that your snake will reach to where you wish to be located. Establish the names of the members of the band along with their rank and file, and attempt to minimize the number of cooks in your stew. Listen to the band prior to the evening of the session, if possible-will they be playing originals? Will they be switching instruments? Microphones? If you are not lucky enough to have visual contact (being in a trailer, I ended up going to an inexpensive black and white closed circuit television system), you will need a talkback system.

If you are not completely familiar with the material being played, can the band provide you with a play list showing lead vocals, instrument leads, and other notes of interest? Better yet, is there a manager, girlfriend, or loyal fan that knows the band and the music well enough to assist you? What about a spoon player that might sit out a song or two and who can run back and answer your questions mid-set? What are the lighting controls and are they on faders (the single most annoying problem known to an on-location engineer)? How are the circuits run and where are the breakers? Is the AC close to your board so that your power cord need not cross seating areas? Do you get free drinks (don't forget to ask about this)? Which sets are to be recorded? Do you really have to take all this guff from the rhythm guitar player (geez, just because his exgirlfriend is pregnant with the ex-lead singer's child, can't he at least try to be civil?).

Make mental notes: Who says they're in charge, and who really is? Work closely with that member of the band (when there is no producer/manager) who doesn't allow his ego to get in the way of his creativity and the desire to end up with the best possible product for all. Don't allow yourself to be dragged into unproductive inner-band hassles. In a subtle but



noticeable way try to be accommodating and helpful but be quick to draw a decisive line when needed. Make every attempt to pacify and sooth fragile alter-egos, even when you disagree ("a little more mids on the snare...little more...perfect!"—and you never even turned the knob). Suggest, never insist.

This is an awful lot to remember; a check list would assist you in carrying out a session that is as close to being flawless as possible. I have found that documented information is invaluable. Sit down at your typewriter and create the helpful tools necessary—a sheet that has room at the top to draw a rough stage lay-out showing the location of the instruments and microphone placement (take this with you when you give the band a preliminary listen). Below your stage lay-out list the snake input, the corresponding instrument, type of mic used (or direct), channel assignment, EQ setting, attenuation, pan pot position—any information you may find pertinent for a quick glance during a session, a reminder during a mixdown, or a guide for another future session.

Come up with some sort of take sheet so that you may document song titles, leads, take numbers, counter readings, special effects, corresponding notes (false start, phone ringing, dog barking), and anything else you may deem appropriate. Keep a receipt book handy for deposits and payments, and provide the band with a completed invoice for services rendered. You may need to check into service contracts, legal responsibility waivers to free you of involvement in copyright infringements, and music releases. These can be rather basic and the library is a good source. I'm sure that any expensive lawyer would like to speak with you on this. For that matter, so would any inexpensive lawyer.

After typing up these documents, take them to the nearest copy machine or quick printer so you will have an ample amount—bar napkins aren't too impressive in court. Don't forget that in addition to doing your best at engineering the session, you must also maintain a level of professionalism to your business, even if it is a hobby. If you wish to be paid for your services, establish strict guidelines for yourself and your clients. When backed into a corner by a client, you can always blame your lack of compromise on your "business policies," even if you did create them. Most people, even the most persistent, will cut you some slack if you say "my rate card won't allow for anything less" or "I have to stick with my rates and policies." Believe me, this is a big help for those of us spineless do-gooders who can never say no. It helps to give you some backbone; don't be afraid to use it, even if you think it sounds phony.

I told you I was going to bare my soul, didn't I? I have actually allowed (more than once, I am ashamed to say) bands to keep me up until five in the morning playing their tape while they pat each other on the back. The next day these guys are at the Holiday Inn in Poughkeepsie with my money! Thank goodness I took precautions—I've still got their tape! OK, 'fess up! Some of you guys have tapes just like mine, don't you? Moral of the story? GET A DEPOSIT!!!

Now that I've covered many of the ways other people can screw up your session, let's discuss how you can avoid doing it yourself.

Put together some sort of inventory check list. This

will help you while packing for the session and when you're loading out. A sore spot in my past was forgetting a nice AKG microphone after a session in Chicago. After returning home and discovering my mistake, I made a special trip to retrieve it. Unfortunately, the bouncer said, they must have misplaced it, but the rhythm guitar sure sounded nice on the stage over his shoulder through a mic that looked a lot like mine.

Another confession? I have actually been known to arrive at a session without blank tape! Here are a few rules of thumb: try to set up your equipment as acoustically isolated from the P.A. as possible. If you must set up in front of the band, don't roll off the low end levels due to compensating for what is leaking into your headphones from the frontals. Attempt to group your sections together on the board: rhythm, drum kit, vocals, guitars. Make sure that you take advantage of the area on the board between the front edge of the board and the input faders. Below each fader, on masking tape, write the input: BASS/SNARE/HI-HAT/KICK/RHYTHM GUT/LEAD GUT/KEYS, etc. Pan each input preliminarily to where you think it would sound best. Don't overdo the separation here. Also, it is good practice to assign the more dominant, lowerpitched instruments to the outside tracks of a multitrack recorder. Instruments like bass guitar and organ pedals are less susceptible to dropouts and flutter common to these tracks. Try to have a band representative with you during the sound check. Talk to the sound man if there is one. Have him fill you in on the band's quirks and routines, and on the idiosyncrasies of the room. If you have to soundcheck alone, set the mix to your preference and record a run-down. Then have each member of the band listen and comment on the mix, one by one. Don't give them a license to steal by touching your board or misdirecting you. I have found that most musicians are also frustrated engineers, and they would love to help you out. On the other hand, I know of many engineers who are frustrated musicians as well.

Now, assuming that you have properly prepared, you are set-up, it is two hours before the show (one hour before the session without a live audience), and the band is on stage at your beck and call. If so, call me—I want to know who you are and how you accomplish this feat.

Let's begin with the soundcheck. I like to begin with the drummer. I have always felt that if you can satisfy the drummer who plays seven or more drums, you should be able to satisfy the guitarist with one guitar. One at a time, begin with the first input—attenuate first, then bring the fader up to a safe level. Then, do a rough EQ and check the preliminary pan and effects send. I double-check EQ, and then I have a practice that works well for me: I establish an even line across the board for all input faders that is at or near the shaded or marked "holding point." First, turn the attenuation for that module all the way up, then set the fader at your predetermined point, and adjust the level to 0 VU average with the attenuation. Every once in a while the level will be too low at your standard position with attenuation all the way down. Just set these inputs for the proper level and mark the fader position on your masking tape strip.

The reason that I incorporate this practice is

simple—there will always be a starting point which you can return to at any time, no matter how much out of hand the mix gets. If you get into trouble, go back to where you started. Unless there have been noticeable changes in stage volume (unlikely, don't you think?), you should find at least a satisfactory mix there. Another benefit is that you will get the most from the headroom of your input modules as they go into the subs and master, reducing noise. Just be sure that as you are fine-tuning during the session that you ride the faders, not the attenuators!

I start the soundcheck with the drums—snare first, then hi-hat (many times these have to be split together to save inputs, or a single mic for both is not uncommon), then snare with hi-hat. Next, kick drum (listen for pedal squeaks), on to rack(s), then floor(s). If the kit uses double anything-kicks, rack toms, or floor toms, you may either split these or strategically place a single mic between them. End with overheads if you can spare the channels and have the mics, then do a full kit mix (watch your sub-masters or master levels at this point, don't bring down the input faders). Listen for squeaks, pops, howls, and various other unwanted noises. Don't let the rattle of the snare throw you off during a soundcheck—if they bother you, have the drummer turn off the snare.

After you're satisfied, move on to the next input. For me, that is the bass guitar. If you develop a workable routine for instrument placement on the inputs, you'll have a better feel as to where to go quickly to make adjustments. For the bass guitar, my standard operating procedure is to convert a low impedance XLR to a '/4-inch phone plug through a matching transformer and plug into the paralleled input of the bass amp head on the front. If there is no paralleled input available, you may use a 'y' cord, but this often creates more problems than it solves. It may be best just to mic it. If you do use the extra input, it enters the board as a mic level. If the bass guitarist uses any effects on stage (most won't), then he probably won't like this arrangement.

Use this same process throughout the soundcheck—attenuate, bring up the fader, EQ, check the pan, send effects. Then set the pre-determined fader level, set attenuator, and fine-tune EQ. I like to check bass guitar with kick drum for the same level and feel, not too overpowering, but powerful. If you are providing a monitor mix to speakers or phones, make sure that this balance is well established in that mix.

Keyboards. Even now I will usually take a feed from the keyboardist's on-stage mixer. If he has more than one keyboard he will probably pre-mix, and you can bet that he has spent more time attaining the proper balance than you will be able to. This feed will no doubt terminate in a 1/4-inch phone jack at line level. If the keyboardist uses, say, a B-3 through a Leslie with a Fender Rhodes piano without pre-mixing, I would run two mics on the Leslie, one on the high and one low, and use a 'y' cord split for the Rhodes. If you can't spare the channels, then split the Leslie into one channel with two mics. If you can't spare the mics, run one mic on Leslie high in one channel, and 'y' the Rhodes on the other. If you can't spare the channels or the mics, run one mic on the Leslie high, and split that with the Rhodes into one channel. Remember that the level of the Rhodes increases as you move up the scale

(anyone found a good way to compensate for that?), and you should check the level across the spectrum.

Electric guitar is elementary, but you may wish to play with mic techniques. I have always mic'd electric guitars to maintain the musician's stage effects. Make sure that you have the guitarist(s) establish a stage level and stay there (or as close as possible), leads excepted. In the middle of your session when the guitar or any instrument for that matter, sounds as though he's plugged directly into your monitors, he is no doubt compensating for the soundman's monitor mix that has him too low. Unfortunately, you didn't create the problem, but you have to deal with its effects. Acoustic guitars (love those Ovations) should have their pickups 'y-ed' if they have them; otherwise mic it.

Vocals should be rough set by themselves, then finetuned during a run-down song. Split all vocal mics with a good stage splitter. If you don't have splitters, use the house send (like I did) until you do get splitters. Familiarize yourself with each vocalist's name and sound so you will be able to make quick allowances in vocal mixes.

I'm going to let you fend for yourselves on those instruments like vibes, mouth harp, steel guitars, dobros, and so forth. With proper preparation you should have noticed these inherent problems and allowed extra set-up time for their needs.

Take into consideration the possibilities of audience mics if you have extras. If you don't, there should be enough response leaking through the vocal mics to suffice. If you have the mics, run two into two channels in stereo. Watch the level of these mics, though—they should stay off during the soundcheck, low during the performance and raised, then faded, at the end of each song. Always place your audience mics on or near the stage with the dead side to the P.A. frontals to minimize losing control of your mix through the leakage of the house mix. Try not to emphasize the placement of these mics to the audience or you may tend to hear unfavorble reactions about your mother, or other cute and flamboyant cliches.

Then, bring up all input faders to their predetermined positions with the master off. Have the band run down a few tunes with a good cross-section of musical arrangements-harmonies, solos, all instruments, etc. Then establish the master fader at the proper VU level on the boards (depending on the headroom of the tape, this is usually 0 VU). This level should coincide with the levels of the tape deck VU meters. Calibrate these levels often with a test tone through the board. Fine-tune the levels of the separate sections with the sub-master faders and finally, finetune the individual input faders if necessary. After you are happy with the mix, have the band run down one of their more complex selections and put this on tape for their approval. You should now be able to sit back and bask in the glory of knowing that your preparation was well done. Now, what to do with five and a half hours on a Sunday afternoon...

You may have noticed that I completely side-stepped the area of trouble-shooting. Some time I may devote an entire article to that problem alone. Until then, let me say one word concerning trouble-shooting onlocation: "CORDS!"

Next month, the last of this three-part series, "The Tape Rolls." Join me, won't you?

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Looks At

Tape Recorders

Understanding The Specs

The charts that follow are divided into two sections: open reel recorders and cassette recorders. Both are used in the studio, and each has its place, but the simple truth is that if you want to record music in the highest quality, you want open reel.

By inference, this does not say that cassette recording is not serious; it can be. But it is also true that anything sonic that cassettes can do, open reel can do better. For example, if you need multi-track, the most you can get in cassette systems is 4 tracks, while open reel decks have as many as 24 tracks (and may go beyond that in the near future). Then, too, if you need to edit tapes, your choice is open reel. At the studio standard speed of 15 inches per second, a 10.5-inch reel of 1.5 mil tape offers 30 minutes of recording. At the 7.5 in./sec. speed, that time is, of course, doubled. And if thinner tapes are used, (see MR&M's October Directory of Tape), those times are increased by 50 percent.

Understanding the Specifications

In our charts for open reel recorders, there are separate specs for the Number of Channels and for the Number of Tracks. The first spec calls for the electronic channels on the recorder, the second for the number actually on the tape. Visually, this number is the same, but it need not be; it is possible for a recorder to have, for example, 4 channels but 8 tracks. To use all 8, one would have to record the first 4, bounce them (transfer them to the other 4 tracks) and then record 4 more tracks—for a total of 8 tracks from a 4-channel machine.

Open reel tape is made in four standard widths: ¼-inch, ½-inch, one inch, and two inch. For the same tape length on a reel, wider tape will cost more than narrower tape. But another factor to consider is the number of tracks a machine puts on a given width of tape. Some recorders will put 8 tracks on ½-inch tape, and others will put 8 tracks on ¼-inch tape. The wider tape will also provide wider tracks and wider spaces between the tracks, resulting in better performance characteristics.

Every deck listed employs three motors for tape transport. Two in each deck drive the respective platters over which the reels of tape are positioned. They thus control high speed winding in both directions (and also serve to affect the tensioning of the tape against the recorder's heads). Better head contact is essential to achieve the best transfer of the signal from the electronics onto the tape (and off it in playback, as well).

The third motor is the tape drive motor. It powers the capstan, around which the tape is wrapped or pressed. This creates the actual tape speed. Many modern machines use DC-servo motors. Electronics drive these motors, often using electronic clocks to highly regulate the speed of the motor. Often, DCservo drive motors permit electronic adjustment of the playback speed (hence the musical pitch) for special needs.

An earlier design, still in use is the ac hysteresissynchronous motor. The speed of this motor is determined by the accuracy of the power company's 60 Hz. In the U.S., this regulation is exceptionally good.

All professional open reel recorders have at least three heads. There is, in the direction of tape travel, an erase head, record head, and playback head. This is the standard configuration, but some manufacturers offer extra heads for special purposes. If more than 3 heads are listed in the charts, the FEATURES column in the directory for that product should provide information on the special heads and their functions. The maximum reel size determines the largest reel of tape that can be used. The standard today is 10.5 inch reel capacity, but some compact recorders can only accommodate 7 inch reels, while some expensive multi-channel recorders can accommodate reels larger than 10.5 inches.

Wow and flutter indicates the speed deviation of a recorder and is measured in percentage of variation in ratio to ips. The lower the percentage the better, and note that the spec is for top-speed flutter. On recorders with several speeds the flutter will usually be lowest at the highest speed—another argument for recording at the highest possible speed on a particular recorder.

Top-speed frequency response is important to know, and again, it is usual on recorders for the widest frequency response to be available at the highest tape speeds.

Microphone and high-level impedance specs dictate two questions: Will the console interface with the recorder? And will the microphone inputs, if the recorder has any, work with quality low-impedance mics?

RECORD-INDICATOR TYPES describes the kinds of meters or other level indicators that the recorder is equipped with. Under recording situations you want these devices to indicate the level going onto the tape.

THD (total harmonic distortion) and Unweighted S/N (signal-to-noise ratio) signify relative information about a particular recorder's performance, but you cannot always depend on the comparing of one manufacturer's products against another. This is because these dB figures are entirely dependent on the standard recording level against which they were measured. Since there are many standard recording levels, one recorder's 70 dB S/N could actually be the same as another's 67 dB. You ultimately must get more information from the manufacturer than can be put in any chart of this kind.

Finally, there are the various mechanical specs, the last of which is price. These are, of course, the manufacturer's suggested list prices.

The FEATURES column is where we have permitted the particular manufacturer to tell you what is important about his product.

Cassettes

In our cassette charts, not all the specs we asked for on open reel recorders appear. This is primarily because many manufacturers do not give all specs, and also because, in general, a cassette recorder is not a mastering machine in the same sense that open reel is. For these machines—and we have tried to list only those products that are useful to your professional needs—you may well find that the most important spec (besides price) is the FEATURES column, in which the manufacturer lists what it considers to be the important facts about the recorder.

Now, on the charts:

and the second in the second i	1.0 65 13.5 29 850.00 Two track with sync,7.5 and 15 14.0 14.0 in/sec.speeds.	1.0 63 13.5 29 1450.00 Similar to above unit but 4 track. 14.0 6.8	1.06014.0291995.00The original t-in. 8-track with Dolby C. Records up to 4 tracks13.5bolby C. Records up to 4 tracks at the same time.	1.0 60 14.0 29 2500.00 As A-8 above but records all 8 above	1.0 63 17.0 67 6800.00 Has Dolby C.NR, and can be video 17.5 9.3 9.3 this unit are available.	
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5050-MK3 2	5	5	47	4	dc servo	direct	ect 10	10.5 0.04	25-22k +/-2	150-10k	10k	2 meters w LED pk	0.5	72	18.8 17.3 28.3	68	2795.00	Microprocessor controlled counter, 3 speeds,SMPTE connector,plug-in heads.
5050-МК4 -4	4	4	3	m	dc servo	direct	10	.5 0.05	30 r 20k +/-2	50k	50k	4 meters w LED pk	0.3	70	18.8 17.3 27.5	17	3895.00	Same as Mk3 above.
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MTR-10-2	2	7	34-	е 	qc	direct	10	.5 0.04	33-27k +1,-2	n/a	20k	2 meters w LED pk	0.15	77	45.0 22.8 25.3	220	6450.00	Model is also available in full, quarter-inch two track, or half inch four track formats.
MX-70	00	00	1 3	<u>٣</u>	dc	direct		10.5 0.04	50-24k +/-2	10k	10k	8 meters w LED pk	0.2	72		ť	12500.00	Prewired for 16 track. Full 16 track system is \$14950.00.
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PR99 MKII 2	5	2 *	<u>0</u>	e	ac servo	direct	10	.5 0.06	30-22k +2,-3	22k	5k	2 meters w LED pk	0.3	68	17.8 19.0 8.0	40.5 2	2250.00	Balanced in and out, reel time counter,address and zero locate, self-sync,tape dump,vari-speed.
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480B	8	-40	m	с С	dc servo	direct	10.5	0.05	40-22k +/-3	n/a	10k	8 meters	.0.8	62	17.0 19.9 12.2	81.64	4495.00	Model 440B is similar but is a 4- track, 2 -in. version at \$2995.00 <mark>.</mark>
580B	00	-40	с) 	m	dc servo	direct	10.5	0.04	30-24k +/-2	n/a	10k	8 meters	0.8	62	19.9 17.0 12.7	88.55	5995.00	Model 52NB is similar but is 4- track, 4-in. version at \$\$3495.00, both offer SMPTE compatibility.
Technics	, ,	~	, c	* 7	0 7		2 <mark>01</mark> 2	018	40-204	4.7k	1 50k) meters	8.0	60	the second second	57.3 1	1600-00	*Extra Å-track nlav head isolated
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RS-1520 2	2	ula.	3	4	dc servo	direct	10.5	0.018	40-20k +/-2	4.7k	10k	2 meters	0.8	60	19.8	61.8 2	2100.00	Similar to model above with NAB/ IEC eq.fine bias and eq adjust, bal./unbal.in/out,logic control.
RS1700	4	-43		5	dc servo	direct	10.5	0.018	40-20k +/-	4.7k	150k	2 meters	0.8	60	17.5 19.4	58.5 2	2100.00	All features of RS-1500 with auto reverse.

fearutes	4-track recorder with Dolby C nr, internal 4 x 4 mixer.	4-track recorder with Dolby B nr, internal mixer, battery portable, tracks 1-2 are fully compatible with home/auto cassettes.	Die-cast transport, azímuth stable headblock, microprocessor transport control, modular electronics,tape~type sensor,mic/line mixing.	Same as B-710 but has balanced in/out.		Two speeds.	4-channel recorder.	*S/n spec with built-in dbx nr. 4-channel recorder.	Complete portable 4-channel studio.
ise' 4 ^{14-D} one' H-W-D weight, 109. Weight, 109.	1300.00	4955.00	1999.00	2200.00	349.00	825.00	900.00	1300.00	599.00
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CASSETTES Model	Fostex 250	X-15 Studer 1	B-710	A-710 2 TEAC Tascam	225	1228	234	244	mini- studio Porta One

rearures	*S/n spec with Dolby C nr.	Pro deck with XLR connectors, balanced lines, RS-232 port, custom software 8-bit processor w/32k memory.*S/n spec with Dolby C nr.	Same as TC 910 but playback only with play azimuth adjust and pitch control. *S/n spec with Dolby C nr.	Has Dolby B,C and dbx nr,phase comp circuitry, microprocessor control,vernier bias adjust, electronic tape counter,optional remote.	*S/n spec in table with nr on. Dolby B or C nr available, full logic controls, play and record 2 or 4 track, pitch control.	Manufacturers
D	1385.00	1895.00	1695.00	800.00	570.00	Fostex 15431 Blackburn Avenue Norwalk, CA 90650
A SU	21.8	<mark>21.8</mark>	21.8	12.3	12.25	Otari Corporation 2 Davis Drive
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11 Hart	*	150k		47k	P	Technics 1 Panasonic Way
et " et " d Net all his international which international his int	n/a	n/a		n/a	50k	Secaucus, NJ 08512 Yamaha International Corp.
Paper Pont	20-20k	20-20k +/-2		20-23k +/-3	40-14k 3	P.O. Box 6600 Buena Park, CA 90622
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Practical Music Video Production

Part 4: Portable/Remote Production

The simplest video production setup is a camera connected directly to a videotape machine. One person can easily carry both a handheld camera and a battery-powered VTR, thereby becoming a self-contained mobile production unit. (This is the set-up commonly used by television news cameramen in the field.) The camera supplies the video and sync signals, and a built-in microphone on the camera supplies the audio. The VTR records all three whenever you pull the trigger on the camera.

Portable video is a powerful tool for the aspiring recording artist. Until recently most musicians never got a chance to watch themselves perform. Now, with video, they can finally see themselves as they appear to the audience-a real eye-opener, and an invaluable asset for bands looking to tighten up their stage performances and project a more professional visual image. With a portable camera and VTR, you can record rehearsals for instant playback and analysis, shoot live gigs on location, and produce inexpensive demos for clubs, agents, and record companies.

Naturally, you'll need a camera and a VTR. If you don't own a home recording setup, you can easily rent one from any video movie rental outlet. This is ½-inch equipment good for work tapes and club demos, since playback equipment is widely available. You will have to choose between Beta and VHS formats. Neither is inherently superior; your choice here will depend more on which format your intended viewers have. If necessary, you can dub copies of your finished tape from one format to the other later on.

You may want to consider shooting with ³/₄-inch equipment. This is the format commonly used for smallformat studio productions and record company demos. It gives you better quality, and it's easier to find editing facilities in this format. (Public access-cable studios, for example, have gear available on a free, firstcome, first-served basis.) You can make ½-inch dubs of your finished tape for home use if you wish.

Regardless of the format you select, the key to a successful production is *preparation*. This is especially true of protable/remote shoots, because you won't have as much control on location as you do in the studio. Careful advance work will make the difference between smooth sailing and a fiasco.

Scouting Your Location

By all means go and check out your intended location before the shoot. This is extremely important. You're going to be very busy once the action starts, and you don't want any unpleasant last-minute surprises.

Scoping the Room

The first thing to consider is the layout of the room. Where will the action take place? Where will you want the camera? Is AC power available? (Even if you plan to run the recorder entirely on batteries, you may need power for lights or a TV monitor.) Are there any obstructions blocking your view or restricting your movement? Are you and your equipment out of the flow of traffic? If possible, scope out the room at the same time of day and under the same conditions as the shoot. If you're planning to shoot a club date, for example, do your scouting on a busy night so you can get a realistic idea of the sound, light, and background noise levels under actual show conditions.

Lighting Considerations

Will there be enough light available for a clean video signal? Most porable cameras will operate adequately under normal-to-bright room lighting, but it's easy to get fooled. Club stages, for example, are sometimes too dim for good video, even with the stage lighting turned up full. (The stage seems brighter than it really is because the house lights are turned down so low in comparison.) If possible, take the camera with you on your scouting trip and shoot a little test footage. If your light levels are too low, an indicator in the camera will blink, and you'll get a dark, "noisy" video signal on tape. You'll have to find a way to get more light on the subject.

Avoid any camera placement that forces you to shoot directly into a strong light source, such as a window or a spotlight. The glare will not only turn your subject into a featureless silhouette, but you'll run the risk of permanently damaging the camera's video pickup tube. Find a different camera angle, or consider masking the light source with a curtain or gel filter.

Audio Considerations

Plan your audio recording strategy as if you were going to make a liveremote recording of the event on a moderately priced audio tape recorder, which is essentially what the audio component of your VTR is. Go with the simplest setup you can get away with, using your own best judgment and your previous audio recording experience.

The camera has a built-in microphone, intended to let you move around freely, but it may not be up to the rigors of capturing live rock 'n' roll. You may prefer to bypass the camera mic in favor of a well placed, high-quality external mic, or you may choose to take a direct audio feed off the mixing board. Either of these options will limit your mobility, since the recorder will be tied to an additional audio cable, but the improvement in sound may be worth it.

Most VTRs have an automatic gain control (AGC), which rides your record levels and limits peaks. The limiting tends to be slow and quite audible in music, so you'll probably want to override this feature and set your record levels manually. If you do this, be sure to monitor your levels as the shoot progresses. It's easy to become preoccupied with the camera and forget all about the VU meters when the action heats up.

Final Preparations

Coordinate your planning with any other people who might be involved: bands, sound and light crews. club owners, and so forth. They can be extremely helpful to you. (They can also make things difficult if you don't give them enough advance notice of your intentions.)

Will you need any special security passes or permits to move around freely during the shoot? If so, make the necessary arrangements well in advance. You may also need to obtain written legal clearances from the artists before you can tape them. This is serious business for contracted artists or copyrighted material.

Finally, plan your tape changes (if any) so that they occur during lulls in the action, make sure your batteries are fully charged, and pack up your gear.

Recorder Setup and Camera Adjustment

Arrive early for the shoot in order to give yourself plenty of time to get set up. Run your power and audio cables as needed, connect up the camera, and make sure the VTR is set for camera operation. (There should be a switch labeled CAM/TV or CAM/LINE. You select CAMERA to shoot and TV or LINE to play back.) Pop in a tape and put the VTR in RECORD mode. The camera should now control the recorder-starting and stopping the tape as you pull the camera trigger. Check your audio record levels and run a little test footage.

White-Balancing the Camera

You can adjust the color signal the camera sends out, much like you'd adjust the color on a TV set. This is White-balancing is necessary because different light sources emit different colors of light. Sunlight, for example, is reddish at sunrise and sunset, but relatively blue at midday. The light from ordinary incandescent lightbulbs is orange-yellow by comparison, while fluorescent light is blue-green. Your eyes correct for this, so you don't normally notice it, but it's very noticeable on film and videotape. The white-balance control allows you to correct for these differences, depending on the kind of light you're shooting under.

Most cameras have an AUTO setting which will automatically correct the color balance as you move from one type of light to another. The AUTO adjustments free you from having to worry about every little lighting change. but they're often visibly slow and somewhat inaccurate. (Something like having an AGC on the color controls.) For important shoots you may wish to use an external color monitor and set the white-balance manually.

Using an External Monitor

An external monitor is a portable color TV set that you can hook up to the recorder. It allows you to see the camera's output as it's being recorded. Provided the color controls on the monitor are properly adjusted, you can use it as an accurate reference when setting the camera's color balance.

The monitor also allows you to watch immediate playbacks of your tape. You *can* play the tape back through the camera's viewfinder, which is actually a tiny black-andwhite video monitor, but it won't tell you anything about the accuracy of the color you're recording, and only one person can watch it at a time. The external monitor lets everyone see themselves, right on the spot.

Portable Camera Controls

The focus and zoom controls on portable cameras are located on the lens itself; you may rotate one ring on the lens to focus and another to zoom, or a single ring may rotate for focus, and slide forward and back to zoom. Most portable cameras also have motorized zoom controls which you operate with pushbuttons or a rocking switch; these tend to give you a smoother zoom than you can achieve with the manual zoom controls. The aperture (f-stop) adjustment is also located on the barrel of the lens, though most portable cameras also have AUTO aperture controls. Like the other automatic controls, these can free you to concentrate on your subject, but they react somewhat slowly to changes in light level and may work against you in some situations.

Camera Operation

If you're just getting started with cameras, I recommend sticking with the AUTO features. You'll have enough to think about just framing up shots and staying in focus, and you'll at least be assured of getting a reasonably good recording on tape. Only after basic camera operation becomes second nature to you should you venture to override the autopilot and try to stay on top of everything manually.

Hand-holding the camera will give you maximum mobility, but it may limit you to wider camera angles. It's very difficult, if not impossible, to keep a handheld camera steady enough for professional-looking telephoto shots. You may actually be able to get a greater variety of shots from a stationary camera on a tripod.

Use your zoom sparingly. Remember that any movement—yours or the subject's—will be amplified at the telephoto setting. If you do a trucking shot where you're walking with the camera, go to wide-angle first. Remember, too, that focusing gets more critical as you zoom toward telephoto position (see last month's installment for a quick review of depth-of-field).

Light levels will also affect focusing. When shooting in a dimly lit club, for example, you may have to work with the lens aperture wide open. As a result, your depth-of-field (the range of area in sharp focus) will diminish, and you'll have to make more adjustments to keep your subjects in focus as they move in and out of this narrow range.

There's a knack to good camera work, and with practice you'll begin to pick it up. As you do, you'll find your tapes beginning to look more and more professional. Next month we'll delve into video editing and picturization. We'll learn how the pros turn a reel of raw camera footage into a sequence that can curl your hair, bring you to tears, or rock you right out of your Adidas. 'Til then.

MODERN RECORDING & MUSIC

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Music And The Law Record Contracts, Part 2

Term

LL standard artist contracts are "exclusives," meaning that the artist may record only for that one record company during the term of the agreement. It insures that the company will be able to exploit the artist to his greatest potential without fear that others will benefit from the company's promotional and advertising efforts and expense.

The term of the contract is usually defined as one year with several (normally four) one-year options. These options belong to the company, not the artist. The company has the sole right to renew the contract (exercise the options) each year during its term. If the artist is successful and is selling a large number of records, the options will be picked up. If the sales are less than satisfactory, the options will not be exercised, and the artist will be free to deal with other record companies. If, however, the record company sees potential in the artist that has not yet been realized, it will exercise its options. In some cases, an unscrupulous company will continue to pick up the options even if it does not see any potential in the artist, whereas a reputable company will release the artist from the contract if it determines that keeping the artist on contract will provide no economic benefit.

Each year, the recording agreement has minimum and maximum recording requirements. The first year normally provides for a minimum of one single and one album to be recorded with a maximum of two of each on demand. The second year requirements are two singles and two albums with a maximum of three. The third year requirements usually consist of three singles and two albums, with one album required for each year thereafter. In some cases, the requirement is for one album every 18 months. This provision recognizes the rigors of touring and promoting an album and the time needed to write and develop new material.

To exercise its options and keep the contract in effect, the record company must have the artist record the minimum for that particular year. This does not mean that the company has to promote or even print the recordings. Its only obligation is to pay the artist a certain sum and/or have him record that minimum number of records. There are many cases in which master tapes are gathering dust on shelves because the company exercised its option but did not choose to print and release the recording. In the dance markets (disco, break dance, "new music," etc.), the minimums and maximums are based on single releases, not albums. The single may consist of one tune, using a vocal arrangement on one side and an instrumental arrangement of the same tune on the other. Extended play albums (EPs) containing four to six songs may be stipulated in place of full length albums.

The term of the contract is not as clear cut as it may seem. Though the contract provides for several oneyear periods, each individual year may be extended until the artist meets his obligation to record the minimum number of records stated in the agreement. In several instances, the second or third year of the contract has lasted as long as 18 months to three years. Such extensions normally occur when the artist does a great deal of touring. Discovering and developing new ideas for songs is quite difficult when playing six months of one-night stands. Nevertheless, the contract may require that the artist do so. It also generally provides that the record company has the sole right to accept or reject the new material. Such rejection can further extend the term.

To protect the artist, his representatives should negotiate escape clauses into the contract. These clauses provide that if the company does not sell a minimum number of records, spend certain sums for support or promotion, or exercise the options within a certain time, the contract is terminable. Extensions of each yearly term should be limited, if possible. Without such clauses, the artist may be tied to a particular company for six or seven years on a five-year contract without ever having any product released. This scenario is not common, but it has happened.

Advances

Advances are sums of money paid to the artist prior to or during the time he is recording his record. The purpose of this remuneration is to allow him to pay his rent and other living expenses while concentrating solely on his recording. During the 1960s and '70s, huge advances were paid to all sorts of groups, established or not. This practice is no longer customary. Established artists and superstars are still getting these huge sums, but newcomers are not.

There are two types of advances, recoupable and non-recoupable. The first type is deducted from the royalty fund when the records begin to sell. In essence, the record company loans the money to the artist who then repays it from his royalties. If there are no sales, the record company is out that amount. Non-recoupable advances are given to superstars, and are the equivalent of a professional sports team giving a bonus to a star athlete for signing with it. This type of advance recognizes the value and prestige the artist brings to the company. It is most often found when one company is trying to woo an artist away from another company.

Royalties

There are three major types of royalties—performance, mechanical, and publishing. Each is treated separately in the contract.

Performance royalties are those percentages of the retail or wholesale price of every record sold which is paid to the artist for his performances incorporated in the record. The exact percentage rate is determined during negotiation. It may be a constant figure throughout the term of the contract, but will usually increase each year of the agreement or as sales grow. Factors such as the fame and recording success of the artist, the desire of the record company to record that artist or song, and the abilities of the negotiators, contribute strongly in determining this rate.

Performance royalty rates differ from record company to record company and artist to artist. An artist who is recording his first record can expect a royalty rate of 5 to 8 percent. A successful artist should receive between 7 and 10 percent, and a star will move into the double digits. These percentages are most commonly based on the retail list price of the record. If base on the wholesale price, however, the rate should be doubled since wholesale is approximately one-half of retail. The actual amount is determined by multiplying the list price of the record by the royalty rate times the number of records sold. (\$7.98 list price × 10 percent royalty rate × 1,000,000 records sold equals \$798,000).

Mechanical royalties are paid for the use of each composition in the recording. It is now four cents per composition, but the record companies will place maximum amounts into the contract to cover the compositions recorded on albums. They may state, for instance, that they will pay a maximum of 30 or 35 cents per album to be apportioned among all the compositions on the album. This number is multiplied by the number of records sold.

Publishing royalties are paid to the songwriter for

those songs placed in print. If the performer is not the songwriter, he will not share in these funds. Standard rates are: six cents for piano copies, 10 percent of the wholesale price of orchestrations, 10 percent of the wholesale price of composite works based on the fraction that the work is of the entire publication, but only one-half of these amounts if from foreign sales and licenses.

Once the record is recorded and begins to sell, the artist's share is credited to his account and placed in a "royalty fund." It is this fund from which he is paid, but it is also this fund from which "recording costs" and "advances" are first taken. The structure of the royalty fund can be quite complex, including royalty credits, reserves, disbursements, and allotments.

A record contract can contain 20 or more clauses pertaining to recording royalties, each clause imposing a limitation on the royalties the artist will actually receive. Several clauses define what a sale is and whether the artist will receive full, partial, or no royalty credit for that particular type of sale. Sales may be categorized as United States and foreign retail sales, United States and foreign record club sales, promotional sales, direct mail and "special" sales, sales made in Armed Forces Exchanges, budget sales, and a host of others. The full royalty rate is usually paid only for United States retail sales. Fifty percent of that rate will be paid for United States record clubs, budget, and promotional sales. Foreign sales may be 50 percent or less of the original rate, and will be affected by currency rate of exchange, bookkeeping, and collection policies.

To protect themselves from the costs of returned and defective merchandise, record companies hold "reserves" in the artist's royalty fund. This means that the company will not pay the artist his full share on all shipped records, but will hold some of that amount as a reserve in the eventuality that all records shipped are not sold. This practice is universal. There have been instances where 75 percent or more of the records shipped have been returned, either because the product was defective or the public did not buy it. The artist's attorneys should try to protect him by negotiating language into the contract that limits the percentage of the fund that may be held in reserve, and which permits regular accountings of that reserve.

Most record contracts allow 10 percent of list price to be deducted for breakage. Though no longer a problem with the modern materials being used in records, it is still a regular practice in the industry. Another deduction is for containers—that is, the cost of the design and manufacture of the jacket and sleeve or case in which the record is sold. This deduction may total 10 to 15 percent of the list price for records and 20 to 25 percent for cassettes, even though cassette containers are now cheaper to produce than record containers. These deductions are taken off the top, so the artist's royalty may actually be based on 90 percent or less of the retail list price, not 100 percent.

Many records sold are not paid for by the retailer who sells them, or they are purchased by him at a price far below wholesale. In either case, the artist receives no royalty for such goods even if they are sold for full retail list price. These "free goods" are used to help the retailer generate high volume and profits in advertised sales. The number of such free goods should be limited in the contract if possible, and no returned free goods should be charged against the artist's royalty fund.

Promotion and Advertising

A recent court decision in a publishing case stated that the publishing company must use its best efforts to promote a book it is publishing, and it must set and spend a reasonable amount to advertise that book. This decision has not yet been extended to the record industry. Record companies will not guarantee minimum advertising and promotion budgets for new artists. No matter how good the record is, its chance to become a hit is dependent upon the record company promoting it. Promotion may take the form of radio, television and magazine advertising, promotional giveaways, parties, and the like. To be sold, the record must be known. It must be played on the right radio stations to the right audiences and its video version must be seen on television and in discos.

If the company thinks it has a hit, it will pull out all the stops. If it does not, the record will die an ignominious death on the shelves. Now, however, the publishing case may be able to be used as a precedent to force the record company to promote and advertise the record. Several court decisions will be necessary to determine this case's effects on the record industry. Regardless of the outcome, the artist's representatives should do their best to obtain some promotional guarantees.

Another aspect of promotion is the appearance and program of the artist. Though usually controlled by the artist and his personal manager, the record company will contribute a great deal of input. Image will determine the audience to whom the artist is appealing. The artist must be certain that he understands what he is to be and to whom he is to play. The wrong image will result in poor record sales. Though not spelled out specifically in the record contract, both parties must have a meeting of the minds in these matters.

Another promotion problem is "coupling," in which the record company combines the recordings of several artists on the same record. There is a danger that the artist will be professionally damaged by the inclusion of lesser groups on the record, or that his particular type of music will lose its impact when coupled with different styles. Coupling can provide another source of royalties for the artist if packaged properly in so-called "Best of" albums, but this type of compilation is used mainly to resurrect old hits. The artist should try to achieve some type of control over the exercise of this provision.

As stated earlier, the purpose of this article is to give the artist some understanding of the contents of a record contract. There are many other clauses that were not discussed or which were touched upon only lightly. In no way will this article prepare the artist to negotiate his own record contract. The form of the terms in such contracts changes rapidly, and the use of punctuation can change the meaning of a clause. Record contracts are serious legal documents that should not be entered into lightly. Five years of an artist's life is a terribly long time, particularly if he finds that he and the record company have diametrically opposing ideas regarding his music and the method in which it should be recorded and presented.

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what's new in sound and music

TASCAM MINISTUDIO

Tascam's new Ministudio. Porta One, is a portable, battery-operated, 4-channel audio mixer/recorder designed for tough field work and convenient operation. Significant features of the Ministudio are: standard 1% ips speed for playback of standard stereo cassettes, the ability to assign one or all 4 channels to any track, and switchable dbx noise reduction for wide dynamic range. The Ministudio has a clearly marked panel, flexible functions, lightweight packaging and is a valuable tool for composers, lyricists or anyone



SAKATA DIGITAL DRUM MACHINE

Sakata, distributed by Multivox, has a new digital drum machine, the DPM 48. This machine has 22 digitally recorded voices with a separate PLAY button for each voice. There are nine separate volume faders with individual audio outputs as well as stereo and mono outputs



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and a master volume control. Patterns can be programmed in real and step time and are stored on RAM cartridges with memory backup and protect switches. Individual patterns or complete songs can be programmed, as well as repeat figures and drum breaks controlled by foot switch operation. ROM chips for Latin percussion, synthesized drum, and rock drum sets are available, as well as a trigger interface for operating the DPM 48 with external drum pads. The programming section and voice sections are clearly separated. INSERT and ERASE keys allow quick editing and easy progam correction. The DPM 48 features an auto correction feature, programs in different time signatures, and accepts note denominations down to a thirty-second note.

who wants to work out musical concepts without concern for time. budget or location. After a piece is worked out, it may be mixed down to stereo or all four tracks transferred to a larger format studio machine using four discrete TAPE OUT jacks. The Ministudio can also be used for field recording, interviews for radio shows, news gathering for broadcast or cable TV, making videos, or shooting a film on location. The Ministudio's input channel mute (OFF) switch permits bringing channels into the mix without changing a setting. Each channel has a twoband EQ with center detent plus PAN for use during recording, overdubbing and mixdown. Discrete 4track tape cue mix and separately adjustable headphone output level control enhance monitoring flexibility. It is possible to mix all four input channels and recorded tape tracks into an independently controlled headphone output to hear what is being recorded and overdubbed as it happens. Accidental erasures are no longer a problem with the Ministudio's RECORD MATRIX switches. The Recorder section is servo-controlled for smooth. gentle tape motion with variable Pitch control, and a counter with Zero Return for faster cueing. Offspeed recording is prevented by the Ministudio's flashing low-battery power LED indicator. Positive settings and protection against damage or accidental movements are ensured with low-profile, easy-touch controls. Optional AC and auto battery adaptors complement the built-in battery supply. Suggested retail price is \$599.

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FENDER CHROMA POLARIS

Fender's new Chroma Polaris keyboard synthesizer combines sixchannel polyphonic analog tone generators with sophisticated digital control. The instrument is said to combine the superior characteristics of both analog and digital technologies. What was done was to start with an analog synth, and apply digital techniques in areas such as envelope generation, programming, and the built-in sequencer. Some of the Polaris's capabilities include: storage and instant recall of 132 complete voice programs, velocity sensitive keyboard, programmable keyboard splitting. MIDI and Chroma (8-bit parallel) interfaces,

AUDIX DYNAMIC MICROPHONE



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The Audix UD-260 is a highoutput, low-impedance microphone which incorporates a new air-suspension design and an integrated capsule system for easy field replacement. Designed as a rugged high-end vocal microphone for stage and live applications where an ON-OFF switch (lockable) is desired, the UD-260 provides a smooth response from 50 Hz to 18,000 Hz without harsh midrange peaks, and a tight cardioid pick-up pattern for higher gain before feedback. Available in black. non-reflective gray and six other colors with matching cables. Supplied with holder and padded carrying pouch. Suggested list price is \$179

and the ability to store, chain and loop up to 12 separate sequences. The Polaris sequencer incorporates a unique Tempo-Tap footswitch for controlling rate. When starting to record a sequence, the player simply taps in the desired tempo, with the instrument automatically supplying a digital metronome (click track). If playback at a different rate is desired, the player need only tap the new tempo and push the PLAY switch. In addition to MIDI control of up to three data streams (main keyboard, split keyboard, and sequencer), the Polaris also provides sync-pulse outputs that work with

virtually any drum machine on the market. All programming is done with simple function switches and high-resolution real-time sliders (there is no keying in of numeric values or edit modes), and every function switch has an LED indicator that lights up or flashes to guide the player through the appropriate switch sequence. The instrument provides a cassette interface for storage of voice programs and sequences, and interfaces with Apple II-type computers for data storage and sequencing possibilities. Suggested retail price, \$1995.00.

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GARFIELD ELECTRONICS NANO DOC

Garfield Electronics' new Nano Doc rhythm controller provides simultaneous, low cost, synchronization of sequencers and drum machines from Roland, Oberheim, Sequential Circuits, Linn, Korg, Moog, Emu, Simmons and others. Designed and manufactured by the makers of Doctor Click and Mini Doc, Nano Doc also synchronizes all sequencers and drum machines to tape for multitrack recording and lists for only \$250.

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TANDBERG PROFESSIONAL CASSETTE DECKS

Tandberg's new TCD 900 Series of professional cassette machines consists of the TCD 910 Master Cassette Recorder and the TCD 911 playbackonly version. The TCD 900 Series incorporates state-of-the-art design and functions specifically planned for studio and professional applications. Among them are: discrete three-head system, dual-capstan, closed-loop drive and four servocontrolled, belt-isolated motors. peak-reading, equalized meters (which respond to a two-millisecond peak within 1 dB), built-in oscillators for bias, record current, and azimuth adjustment. The TCD 911 features a front panel playback aximuth adjustment and pitch control, allowing correct playback of tapes recorded on other decks, and advanced electronics, with an absence of integrated circuits in the signal path. Selected polyester capacitors and metal film resistors are used, along with circuitry design featuring a minimum of negative feedback. Further, both models are equipped with an 8-bit microprocessor with 32K of EPROM memory, which operates the LED real-time counter in minutes and seconds, as well as the units' autosearch mode, recap function, and, in



the case of the TCD 910, the foursecond auto record mute (with manual override). The microprocessor also features a volatile memory which can store as many as 10 cue points. Serial interface is made possible with an optional RS-232C port. The decks come with electronically-balanced XLR connectors and can be optionally transformerbalanced upon request. Other options include an infrared remote control and rack mount. The TCD 910 also offers these proprietary circuits: the patented DYNEQ headroom extension system which monitors high frequency record boost and automati-

cally trims the record levels, the ACTILINEAR II transconductance amplifier which increases audio headroom in excess of 20 dB by converting the record and bias signals to a pure current source, and phase-corrective circuitry with superior sound quality and accurate imaging, which will actually record and play back a square wave. These features are coupled with Dolby B and Dolby C noise reduction systems, the latter employing fourth generation Dolby C chips.

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APHEX MODULAR AURAL EXCITER

Aphex Systems' new modular Aural Exciter, model 900B, is designed to fit in Aphex rack systems or dbx F900 rack systems. By providing modules which will fit in existing rack systems, recording, post production, broadcast and sound engineers have the opportunity to add the psychoacoustic enhancement of the Aural Exciter to every audio channel. The new monaural Modular Aural Exciter features improved circuitry. utilizing a proprietary hybrid circuit developed by Aphex. Operation is similar to previous Aural Exciters, with the exception of an additional control which allows the engineer to shape the characteristics of the high pass network, allowing greater creative flexibility. Suggested list price is \$295.



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MAKING TRACKS

Maurice White has been at Mama Jo's in North Hollywood producing his new CBS album with co-producer Robbie Buchanan. Jack Joseph Puig was at the board with Steven Ford assisting...Jean Kluger has been in at The Castle producing European artist Will Tura. Chuck Ainlay engineered for the project. The band includes **Bob Moore** on bass and the remaining living members of Elvis Presley's original band, featuring Scotty Moore and D. J. Fontana... Reachout International Records (ROIR) will soon release a cassette tape which includes 19 contemporary bands playing '60s style garage band music. Mastering was done at Song Shop Studios in Manhattan. Bands included are New York's Vipers, Fuzztones, and Mosquitos, California's Pandoras, Gravedigger V, and Things, and Sweden's **Shoutless.** The project was compiled by *MR&M*'s own editor. Jeff Tamarkin... **Cindi Lauper** was in mixing an audio track for the video of her single "Money" at Fort Lauderdale's New River Studios. Ed Thacker was at the board with help from New River's Ted Stein, Lenny Petze produced... John "Jellybean" Benitez was in New York's Sigma Sound remixing Melissa Manchester's "Thief of Hearts" for a film soundtrack. Michael Hutchinson was at the board...David Gruen was at Skyline and Planet with producer Rick Derringer and executive producer Jake Hooker. Tommy Edmonds engineered... Dan Fogelberg has been at the Bennett House in Tennessee. Marty Lewis was both producer and engineer for the project...Arthur Baker has been at Shakedown Sound in New York producing the Ultimate III MC's. The group has recently released their first 12-inch, "What Are We Gonna Do," for Partytime Records...Rob Stevens was in mixing Torsten DeWinkel's debut album which features Alphonse Mouzon, Michael Brecker and Billy Cobham. The album is for EMI America...Gary Himmelfarb has been at Washington D.C.'s Lion & Fox Recording producing a Ras Records reggae Christmas album. The album features the label's full lineup, including Michigan & Smiley, Peter Briggs, Don Carlos, Freddie MacGregor, Eek-A-Mouse, June Lodge and the Studio One Band ... Steve Hillage, former guitarist with English band **Gong**, has signed to produce Columbia Records' Cock Robin. Hillage has recently produced such groups as **Real Life** and **Simple Minds**...At Miami's Criteria Studios: **George Clinton** was in working on a 12-inch version of the single "Bodyguard" from his upcoming album. Richard Achor was at the board with Stan Lambert assisting. Dizzy Gillespie was in doing overdubs for a new album. Stan Lambert engineered with Steve Johnson assisting. Leslie West and Corky Laing from Mountain were also in working on a new LP. Producer Peter Solley and Criteria engineer Jim Sessody shared engineering duties...

ON THE ROAD

Let's Active has been working their way west from Washington, D.C. to Chicago. Additional dates in the Midwest, Southwest, West Coast and Southeast have also been scheduled...Dio has resumed their U.S. tour with Elektra recording group Dokken opening for several shows. A full-length video of Dio in concert was released on December 5 by Warner Home Video. The video was shot at the Spectrum in Philadelphia during the first part of their 1984 world tour... General Public has just finished up their debut American tour at New York's Madison Square Garden, with the Fixx...Daryl Hall & John Oates are finishing up the first leg of their 1984-85 world tour, "Big Bam Boom: Live Thru '85," with a December 18th date at the Forum in L.A....

MISCELLANY

The University of Miami's School of Music is the first school in the southeastern United States to offer a master's degree in computer and electronic music. The new program will emphasize electronic and computer music composition, performance and research, computer hardware and software for music, and analog and digital synthesis techniques—the creation, modification, and control of sound electronically.





JULIAN LENNON: Valotte. [Produced by Phil Ramone; engineered by Bradshaw Leigh and Pete Greene; recorded at Music Shoals Sound Studio, Alabama; Bear Tracks Recording Studio, Suffern, New York; A&R Recording Studios, Clinton Recording Studios, and The Hit Factory, New York City.] Atlantic 7 80184-1.

Performance: Searching Recording: Meticulous

Let's get it right out in the open: the vocal similarities are incredible. I'm talking, of course, about the similarities between Julian Lennon and his late, great father, John. The rich texture, the wide range, the intense *feeling*—they're all there in Julian's vocals, much like they were there in dad's. Such a nice thing to hear a Lennon voice again.

As for Valotte, well, almost equally glowing kudos. Julian Lennon is only 21 years old, yet he is well on his way to becoming a truly top-notch singer and songwriter. There's a certain emotional clarity and candor that comes through in Lennon's voice as well as in his songs that's downright touching.

Despite this, however, Valotte is no masterpiece. It has a weakness that can't be brushed under the carpet— Valotte lacks a true direction. Quite often Lennon's numerous influences (there are others besides his father) overshadow his performance and his commitment to seek his own musical identity. What results is a fine showcase of Julian Lennon's talent and future promise as a great recording artist, but an album that goes one way, then another.

Tunes like the title song and "On The Phone" bear John's influence in a big way. But "O.K. For You," a nifty funk song, and "Space," a tune that sounds like something off an old



Crosby, Stills and Nash LP, work against side one's cohesion. Side two is better in this department, except that the chinka-chinka ska upbeat heard on "Too Late For Goodbyes" does clash with an L.A. sounding "Jesse" and another John-influenced song, "Lonely."

Fortunately, it's not nearly as bad as it might sound, thanks to producer Phil Ramone. Ramone managed to weave the wide assortment of influences and styles together via superb instrumentation so that in the end, *Valotte* does contain some pretty special moments—even if they're not one right after another.

Ramone's formula? For starters. he employed such session studs as drummer Roger Hawkins, bass player David Hood, and keyboardist. Barry Beckett from Music Shoals; then he got percussionist Ralph MacDonald and such horn players as trumpeters Jon Faddis and Joe Shepley, and saxophonist Michael Brecker, to add their talents to the record. But perhaps the key to Valotte's success is the remarkably clear and crisp sound heard throughout the record. The acoustic piano that's featured on a majority of cuts, plus the background horns, come across sounding wonderfully vivid and three-dimensional. Lennon's voice is alive and tender as mentioned before, and there's never a case where the instrumentation competes with the vocals.

Valotte, then, is a good, not great record. But let's give Julian Lennon a break. There's going to be a lot of pressure on him, perhaps for a long time to come. There's going to be comparison galore. As a debut, Valotte holds up well. But as Julian learns to focus his influences rather than imitating them...let's just say things might get really exciting.

-robert santelli



THE RAMONES: Too Tough To Die. [Produced by T. Erdelyi and Ed Stasium; engineered by Ed Stasium; recorded at Mediasound, New York.] Sire 25187-1.

Performance: Uncompromising Recording: Raw

On Too Tough To Die, The Ramones prove they are indeed just that. America's premier mid-'70s punk rockers have gone back to the sound and the simple intentions that made their early records (*The Ramones*, *Rocket To Russia*, etc.) so much fun to listen and dance to. And what they've come up with is a no-holdsbarred, blitzkrieg rock 'n' roll record that's about as honest and straightforward as you can get these days.

The dominant sound heard on *Too Tough To Die* is what else but buzzsaw guitars that rip and shred in classic punk fashion. No fancy gimmickry. No studio tricks. No reliance on synthesizers (although there is a pinch of synthesizer on the tune "Chasing The Night"). Nothing sweet or affectionate, either. Just 13 hopped-up rockers that sweat like the dickens and hit hard, then vanish like they never passed through your speakers.

Songs such as "I'm Not Afraid of Life," "Howling At The Moon (Shala-la)," "Planet Earth 1998," and "Wart Hog" all revolve around the same premise and production strategy: rock 'n' roll is best when it's loud, fast, and unforgiving. Dee Dee Ramone, who wrote most of the songs on the album, including the abrasive "Wart Hog" (along with Johnny Ramone), seems virtually obsessed with such a credo. Perhaps that's what makes each song rock harder than the next.

First comes the countdown, then the stentorian guitars and bulging backbeat, and finally, the vocals. The chord structure for every song on "Too Tough To Die is basic, even elementary (as has always been the case with the group), and the lyrics are amusingly inane. There's very little, if any, tonal or melodic alterations heard on the LP and precious few solos.

But what there is a lot of is spirit. And energy. And it's these two qualities, more than any others, that make *Too Tough To Die* too compelling to ignore.

-robert santelli

HORACE TAPSCOTT: The Tapscott Sessions Vol. 4. [Produced by Tom Albach; engineered by Dennis Moody; unknown recording site.] Nimbus NS-1814.

Performance: Emphatically elegant Recording: Spaciously clear

This is the fourth volume of solo

piano compositions by an extremely challenging musician named Horace Tapscott. Tapscott has been active in the Los Angeles black music scene for more than two decades through his teaching and organizing of several jazz orchestras. A member of one of his ensembles, the saxophonist Arthur Blythe, is now honored throughout the world. Tapscott, his associate, is hardly a familiar name outside of Los Angeles. One suspects that this latest installment in the Tapscott recording history might change this situation of unjustified neglect.

Six of the eight compositions on this album are Tapscott originals. A first listening reveals that Tapscott is an important composer who operates in a solo piano tradition that began with Art Tatum and continues to the present in the work of younger players like Anthony Davis. The roots of this style are as much in Western classical piano as in the tonal vocabularies of the blues and of African musics. Much as keenly focused ears can hear a lot of Dvorak in Tatum and a fair amount of Messiaen in Cecil Taylor, one can hear traces of Bartok in Tapscott. Tapscott has that same ear for delicately wistful harmonies in the minor modes, that same lust for folk dance rhythms. Listen to "The Hero's Last Dance" on the first side of this album: I dare you to imagine Bartok's ghost not clapping his hands in glee.

This emphasis upon Tapscott's



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The whole session emits an air of elegance. power, and a poetic grasp of romantic moments in the midst of the brutal urgencies of everyday living in a big city ghetto. Few solo jazz piano albums in recent years have so married sensuality to intelligence, introspection to worldly consciousness. I suggest that you not only get a copy of Volume 4 of the Tapscott saga, but also check out the earlier three volumes. (All are available from New Music Distribution Service, 500 Broadway, N.Y., N.Y. 10012.)

This record is pressed on premium virgin vinyl and is digitally recorded. The sound is oddly spacious, a trifle too echo-ridden. Since Tapscott seems to favor the sustain pedal on his piano quite a bit, a looming quality is enhanced through this production which makes sustained notes seem to float in the air like vaguely remembered dream images.

A Tapscott original on this recording is entitled "First Call Of The Hummingbird." Any lovers of that sound will appreciate the genius of Tapscott.

norman weinstein

ROBERT QUINE/FRED MAHER:

Basic. [Produced by Robert Quine and Fred Maher; engineered by Mario Salvati; no studio listed; mixed at Sorcerer Sound.] Editions EG EGED36.

Performance: Improvisational tension Recording: Nonchalant

Basic is 47 minutes of highly improvised music by guitarist Robert Quine (Richard Hell and the Voidoids. Lou Reed) and drum programmer/ guitarist/bassist Fred Maher (founding member of Material, Lou Reed). In fact, the album is so basic that it was recorded in Quine's living room, and most tracks appearing on the LP are either first or second takes. Mistakes have been left in to retain the spontaneity of what was structured just a minute or two before the recording.

Both musicians have played together with Lou Reed (*Legendary Hearts*) and have toured with him (*Live in Italy* import) and have obviously struck up a friendship. Although *Basic* is basically a guitar album. Maher has been a drummer for 12 years and has only been playing guitar for three years and bass for one year. Unfortunately, a scorecard is needed to denote who is playing what and when.

A few of the tunes are dronal, some sound like guitar jams out of the San Francisco era circa the late '60s, and some compositions are esoteric. avantgarde type pieces. There is wide variety, sometimes even in the same piece. For example, "Summer Storm" has a slight Irish aura before turning into a dronal piece, and "Pickup" has some dissonance over its dronal underbelly. Basic is actually a tone poem of colors, textures and layers of sound that is an antithesis to commerciality yet aesthetically pleasing, simply because some record label is more interested in an artistic statement than sales. Yet the musicians are their own worst enemies: they claim that the additional guitar solo in "Stray" obscured the rhythmic texture. But without that basic track also included on the LP, the listener has a hard time deciphening that feeling.

Basic has both unfinished and completed qualities, which means Quine/Maher will probably return as a duo, possibly in Maher's living room or a studio. For a home recording, Basic has excellent sonic qualities. —bob grossweiner

KAZUMI WATANABE: *Mobo I.* [Produced by Aki Ikuta, Doug Epstein and Kazumi Watanabe; engineered by Doug Epstein; recorded at Media Sound in New York City, NY.] Gramavision GR 8404.

Performance: Ethereal reggae with chops

Recording: Sparse, exceedingly clean

The Japanese-born guitarist has gotten further away from the funk trappings that plagued his earlier Inner City LPs like *Mermaid Boulerard*. That slick. hook-oriented, fusion-funk album featured a cast of the West Coast's slickest session players: guitarist Lee Ritenour, drummer Harvey Mason and pianist Patrice Rushen, among other funksters.

With this Gramavision debut, Watanabe seems more infatuated with reggae rhythms. Wisely, he has secured the talents of drummer Sly Dunbar and bassist Robbie Shakespere to hold down his islands-influenced rhythm section. He couldn't have made a better choice.

Sly and Robbie are *the* Jamaican rhythm tandem. Their presence on this album lends reggae credibility and supplies Watanabe with the proper groove and mood for him to skate over.

"Walk, Don't Run" is an intriguing, reggae-fied version of the Ventures' classic, with Sly and Robbie laying it down in their inimitable manner. The 16-minute "Mobo #2" is another reggae excursion, this time augmented by soloists Michael Brecker on tenor sax, Marcus Miller on bass and Weather Report drummer Omar Harkim on additional percussion.

Watanabe himself is a formidable, imaginative soloist with an array of colors to his palette. His ethereal chordal strains and gentle oriental motifs on "American Short Hair" and "Mobo #2" are nearly subliminal. But the accomplished guitarist gets to flaunt his fiery fusion chops on the raucous "Half Blood." where his fingers fly up and down the fretboard with the speed and dexterity of an Al Di Meola or an Eddie Van Halen.

"Yenshu Tsubame Gaeshi" is a tightly-executed *tour de force* highlighting Watanabe's inspired interplay with pianist Kei Akagi. This high energy outing, with all its incredibly precise triplets and unison lines and maddening stops, is very reminiscent of the virtuoso fusion work to which Return To Forever aspired during its reign. Akagi also proves to be an inventive harmonic player in the tradition of acoustic Herbie Hancock, going outside the melody line for some adventurous detours.

This album is a vast improvement over the guitarist's past work. Though Watanabe is borrowing generously from the islands for rhythmic inspiration on *Mobo I*. the album bears his stamp of originality. My advice to Kazumi: forget the formulaic West Coast crusin' stuff and stick with these more open-ended, spacious grooves that give everyone more room to blow, particularly yourself. —bill milkowski

Young Roots: Early Basie and Present-Day Stacy

nat hentoff

As part of an evening's tribute to Count Basie at New York's Kool Jazz Festival this past June, some of the Count's earliest big band colleagues played a set of tunes recorded by Basie with the Bennie Moten orchestra in 1932. Most had not been on the actual session, but they had been part of jazz zeitgeist of the time; and although now in their sixties and seventies, they played that night with the zest and precision of their youth.

The original 1932 performances are now available again in *Count Basie: Kansas City Style* on RCA Victor, and they are essential to any reasonably comprehensive big band collection. On the first (Bennie Moten) side, the soloists include the marvelously melodious and resourceful "Hot Lips" Page on trumpet, tenor saxophonist Ben Webster, and reedman Eddie Barefield who, 52 years later at the Kool Festival, played with even more elan than on these recordings.

The second side is devoted to a 1929 session with trumpeter Ed Lewis (also at the Kool concert) and trombonist-guitarist Eddie Durham. All the way through, Basie delights in his mastery of stride piano with its Harlem roots in Fats Waller (a teacher of the Count). Those who are familiar only with Basie's masterfully spare style of later years will now hear that it was a matter of choice, not of necessity. He had the chops to play all over the keyboard.

The quality of sound, considering the period, is well-balanced, with considerable presence both for solo and ensemble passages. It's a pity no engineering and reengineering credits were given.

Jimmy Rowles is a pianist who doesn't go as far back as Basie, but has been a distinctively subtle and supple presence on the jazz scene for decades. He is a non-pareil accompanist (Billy Holiday, Ella Fitzgerald, Peggy Lee) and a ceaselessly imaginative soloist. Rowles is also the father of a young musician whose work is marked by lyricism, naturally good taste, and relaxed time.

Her name is Stacy Rowles; her horns are trumpet and flugelhorn; and her first album is *Tell It Like It Is* (Concord). Not surprisingly, the unerringly stimulating pianist is Jimmy Rowles, with Herman Riley (tenor and flute), Chuck Berghofer (bass), and Donald Bailey (drums).

It's an attractive debut. Stacy knows how to tell a story on her horn; her sound is clear and personal; she phrases with grace and some wit; and she helps create an ambience of good feeling.

Like her father, Stacy has a rare skill in selecting choice repertory from the full range of jazz and quality pop; Duke Ellington's "Alabamy Home," Willard Robison's "Old Folks," and Billy Strayhorn's "Lotus Blossom." Clearly, moreover, this was not a let'smake-it-up-as-we-go session. Much thought went into the date because Stacy Rowles felt she was ready and wanted to be sure the album sounded as if she is indeed ready. She is.

As is the Concord custom, the sound is spacious, clear, clean, with just enough presence.

COUNT BASIE: *Kansas City Style.* [No information concerning producers and engineers.] Victor AFM1-5180.

STACY ROWLES: *Tell It Like It Is.* [Leonard Feather, producer; Jim Mooney, engineer.] Concord Jazz CJ-249.

PHIL CUNNINGHAM: Airs & Graces.

[Produced by Phil Cunningham and Neil Ross; engineered by Neil Ross; recorded at REL Studios, Edinburgh, Scotland.] Green Linnet Records SIF 3032.

Performance: Rousing and respectful

Recording: Luminescently glowing

Recording of traditional Irish and Scottish folk music are often rather dry affairs, of interest solely to students of that genre. Attempts to render such musical styles commercially palatable by adding electric instruments (a la Fairport Convention) or by using improvisatory structures associated with fusion (a la Pentangle) have resulted in records that largely erase the charm and vitality of folk tradition. Phil Cunningham's solo album, Airs & Graces, is the first and only record I know of which updates the Irish/ Scottish folk music tradition while maintaining a sense of evocative authenticity.

Cunningham achieves this musical triumph by adroitly performing on a large variety of traditional instruments including accordion, pennywhistle, guitar and cittern. He brings to every one of these instruments a sure sense of timing, a precise sense of tone, speed, spunk, and spirit. The album opens with a traditional reel which allows Cunningham to display his flashy technique on accordion.

Yet Cunningham is no less engaging when he plays the Prophet 5 synthesizer, Roland Vocoder, or string machine. He has created arrangements for traditional folk airs and dances in which electronic instrumentation doesn't sound electronic. The blanket of synthesized sound which Cunningham plays on the slow air "Margaret MacKinnon of Digg" sounds like oceanic waves. The synthesizer opening to the "Farewell To Ireland" reel is angelically inspired. Few other synthesizer players, with the exception of Ralph Towner of the group Oregon, can derive such emotionally pastel and delicate tonalities from the instrument.

Airs & Graces is a perfectly paced album, a rarity these days. Rousing reels segue into mournful airs which then lead into stirring marches and joyful dances. Except for small guest appearances by Koos Koos McKaffertty on piano and Finlay M. MacRae on Not only does Cunningham establish himself as one of the most talented multi-instrumentalists on the folk scene today, he also demonstrates his considerable skill as a producer. Achieving the right sonic balance in arrangements pitting soft acoustic instruments against loudly voiced synthesizers is no mean feat. Cunningham has intelligently done so and has created a sound that is smooth and luminiscently glowing.

There is a very inviting and warming atmosphere permeating this recording. His music embodies all of the warmth a stranger on a cold night might find in an Irish pub.

–norman weinstein

GATO BARBIERI: *Para Los Amigos.* [Produced by Gato Barbieri and Teo Macero; engineered by Gregg Mann; recorded live in concert at an unidentified site.] Doctor Jazz W2X39204.

Performance: Thunderously celebratory Recording: Mush

Gato Barbieri first caused a stir on these shores by combining the Coltrane sax influence with the rhythms of his native Argentina. His approach toward the tenor sax was to play it with the most unrelenting intensity possible, moving from one emotional climax to the next. Shrill notes in the upper register abounded. The music was highly dramatic. And Gato added to the drama of his tenor by chanting like a shaman preparing for an ascent to the spiritual world. Albums were released totally filled with this bombast. Some critics started to complain. Some audiences began to diminish. So Gato moved to A&M records in the late '70s and produced highly commercialized records under the guiding hand of Herb Alpert, who attempted to blanket the strident Gato sound under waves of strings and synthesized goo.

After attempting to make his sound slicker and more digestible to

gringos, Gato is back—he of the blasting horn. *Para Los Amigos* is a two-record set recorded in concert which recaptures all the fire and brimstone of the old Gato. Backed by a very hot eight-piece Latin/jazz unit, Gato cooks his way through nearly an hour and a half of searing tunes from his youth.

The nine numbers here are all infectiously uptempo, charged by the brilliantly flashy drumming of Bernard Purdie and supported by percussionist Guillermo Franco. Franco has also recorded with another Coltrane devotee, pianist McCoy Tyner who, like Gato, likes his music with a Dionysian fever. Eddie Martinez is wildly exciting on acoustic piano and Lincoln Goines positively thunders on bass.

There are no inferior cuts here, and if there is a high point on Side "B" when the bounding "Brazil" segues with an unexpected cymbal wash into the jaggedly volcanic dance rhythms of "Viva Emiliano Zapata." My solo criticism of the performance —a trivial one—involves Gato chanting the names of the countries of Latin America on "El Arriero." Corny. And obtrusive, in the same way that Keith Jarrett's moanings are on his solo piano records.

Para Los Amigos is an overwhelming and majestic tribute to the dynamic power of a great tenor player in the Coltrane/Rollins mode. Grant the limited nature of his emotional sensibility (maybe he screams rather than sings during his morning shower), and then sit back and enjoy this ecstatic blast of a recording.

But be prepared to deal with terrible recording quality. Both the gifted pianist Eddie Martinez and guitarist Bill Washer are poorly recorded and are repeatedly overwhelmed in the mix by Purdie's drums. Goines' bass sometimes sounds murky and the electric keyboards of Frank Ferrucci sound about as sonically dimensional as those \$1.98 Chinese wind chimes your aunt bought at K-Mart. Is the recording site unidentified to protect the reputations of the guilty?

In spite of the shabby recording quality, Barbieri and his band play with such joyful abandon that this recording is essential for lovers of Latin music and jazz who believe that a meaningful fusion of both traditions is worth heeding and shaking a leg to. —norman weinstein

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