

1938

# Grunow

## RADIO LOG

REV 56 1937

The illustration features two globes, one positioned behind the other, showing the continents of North and South America. A red ribbon with white stripes at its ends is draped across both globes. The text "ALL THE WORLD.." is written in white, bold, sans-serif capital letters along the upper curve of the ribbon.

ALL THE WORLD..

And ALL THE TONE!

## REGARDING YOUR NEW RADIO

The modern radio receivers of today are far advanced over their predecessors of a few years ago. They are far more sensitive — they are keyed up for greater distance and range. They require more careful operation if one would secure the greatest amount of pleasure from their ownership. Read carefully and understand everything printed on these pages — it will aid you in the operation of your set.

Since the modern receiver is built to bring in greater distance over the entire Radio Spectrum, it is possible that its sensitivity may be misinterpreted by the new owner, due to the fact that static interference seems more noticeable until you become used to its operation. Do not let this disturb you — but spend a few evenings tuning your set and adjusting its controls until you have become thoroughly familiar with its operation.

Man-made static, such as street cars, motors of all kinds, elevators, washing machines, vacuum cleaners, sewing machines or any appliance, often cause interference, and if you experience trouble due to "noisy reception" it is wise to make a careful check of all appliances in use nearby.

## STANDARD BAND TUNING

The following data will help you to operate the radio dial more easily, and help you to GET OUT of the receiver the full radio enjoyment BUILT INTO it at the factory.

THE RADIO SPECTRUM shows the general classification of services to which broadcasting facilities are assigned. Identities of stations in the Broadcast Band "B" appear on the next four pages. Geographical divisions group the stations most likely heard in your community whether on the west coast, central area, or east coast. Enter your exact dial readings for these stations in the blank center column. Fill in the rest of the blank spaces for stations you pick up at intermediate points. Stations with power of T, U, V, W and Z can generally be heard from coast to coast at night, frequently more clearly than stations nearer to you with lower power. Those with H, K, M and O power on same kilocycle with super-power stations operate only in daylight hours.

## KILOCYCLES BECOME MEGACYCLES

Note that the spectrum, your log and your dial use a decimal instead of a comma below 1600 and 1650 Kilocycles becomes 1.65 Megacycles.

## SHORT WAVE

"V" indicates short wave channels offering Voice entertainment. They are listed on pages 10 to 13. Time of operation is of greatest importance. By ruling out FOUR rows of hour figures on page 10 the chart is converted to your receiving time. The two symbols between each hour line represent one half hour. Pointed up, morning is indicated; down for afternoon. Follow the column for time you are tuning, if station is shown to be operating; to the left you can see whether the program is "daily"; "W & Sat"; or on what schedule. If all three figures of the megacycle number are bold, the reception of the program should be good. If only one is bold, it is likely to be only fair.

Spots in the spectrum marked "A" are used by some 30,000 amateurs. "C" for Aircraft. "p" for Municipal Police Broadcasts, "S" Ships, "T" Television, "W" for Government Weather and Air Beacon Stations. And on those not marked will be heard phone and commercial stations, etc. mostly in code.

European and other foreign short wave stations operate *only a portion of the time*. Consult the schedule for days and hours.

## SHORT WAVE TUNING TIPS

Turn the dial pointer to the approximate setting required. Increase your volume. If your set has tone control turn it to low pitch if atmospheric conditions are noisy. Now tune with extreme care, slowly and evenly. When you locate a station move your tuning knob back and forth until you are satisfied it is the exact point. Re-adjust volume and tone control to suit you. Enter your dial reading for each station. It will be useful for getting the station again and become a reference point for locating stations at adjacent frequencies. Foreign stations sometimes vary slightly from their assigned megacycle and the number you may have recorded.

With slow, careful tuning, faint signals can frequently be developed to great strength. Simply because a station is broadcasting at a given time, do not blame your radio if you are unable to get it. Remember, there are many forces over which man has no control which prevent you from getting reception at times—skip distances—storms—directional antennas of stations, etc.

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100 150 200 250 300 500 750 1000 1500 2000 WATTS POWER 2500 5000 10000 15000 25000 50000 100,000 250,000 500,000  
 H I J K L M N O P Q CODE R S T U V W X Y Z

Revision 56

\*Columbia; †NBC Red; ‡NBC Blue; †NBC Red & Blue; ^Mutual

WESTERN		MIDDLE WESTERN		KILO.	Dial No.	CENTRAL	EASTERN
Wash., Ore., Cal., Utah, Etc.		Minn., Ia., Neb., Mo., Tex., Etc.				Ill., Mich., Ohio, Tenn., Etc.	Mass., N. Y., Pa., N. C., Etc.
CJRM Moose Jaw, Sask. . . . .	O	†KSD-KFUO St. Louis, Mo. . . . .	O	540			CFNB Fredericton, N.B. M
KOAC Corvallis, Ore. . . . .	O	*KTSB San Antonio, Tex. . . . .	O	550		*WKRC Cincinnati, Ohio. . . . .	*WGR Buffalo, N. Y. . . . .
†KFYR Bismarck, N. D. . . . .	O	†KWTO Springfield, Mo. . . . .	O	560		WSVA Staunton, Va. . . . .	WDEV Waterbury, Vt. . . . .
*KLZ Denver, Colo. . . . .	O	*KFOM Beaumont, Tex. . . . .	O	570		WIND Chicago-Gary. . . . .	*WFIL Philadelphia, Pa. . . . .
*KSFO San Francisco, Cal. . . . .	O	*WNAX Yankton, S. D. . . . .	O	580		†WIS Columbia, S.C. . . . .	*WQAM Miami, Fla. . . . .
*KVI Tacoma, Wash. . . . .	O	*WKKO Ft. Worth, Tex. . . . .	M	590		*WKBK Youngstown, Ohio . . . . .	†WWNC Asheville, N. C. . . . .
KMTR Los Angeles, Cal. . . . .	O	*WIBW Topeka, Kas. . . . .	M	600		WOSU Columbus, Ohio . . . . .	WMCA New York (4 WSYR) Q
CKUA Edmonton, Alta. . . . .	M	KSAC Manhattan, Kas. . . . .	M	610		WILL Urbana, Ill. . . . .	†WTAG Worcester, Mass. . . . .
†KMJ Fresno, Cal. . . . .	O	XEPN Pecos, Nebras. W . . . . .	S	620		*WCHS Charleston, W. Va. . . . .	*WDBO Orlando, Fla. . . . .
†KHQ Spokane, Wash. . . . .	O	†WOW Omaha, Neb. . . . .	S	630		†WKZO Kalamazoo, Mich. . . . .	*WEEI Boston, Mass. . . . .
CJOR Vancouver, B.C. . . . .	M	*WMT Cedar Rapids, Ia. . . . .	O	640		CMW Havana, Cuba . . . . .	*WICC Bridgeport Conn M
†KFSO San Diego, Cal. . . . .	M	*WREC Memphis, Tenn. . . . .	O	650		CMW Havana, Cuba M	*WCAO Baltimore, Md. . . . .
*KFRS San Francisco, Cal. . . . .	O	†WDAF Kansas City, Mo. . . . .	O	660		WJAY Cleveland, Ohio . . . . .	WIP Philadelphia, Pa. . . . .
†KGW Portland, Ore. . . . .	O			670		†WTMJ Milwaukee, Wis. . . . .	*WLDZ Bangor, Maine . . . . .
†KTAR Phoenix, Ariz. . . . .	O			680		WFLA-WSUN Florida . . . . .	*WHJB Greensburg, Pa. . . . .
CJRW Winnipeg, Man. . . . .	M	KFRU Columbia, Mo. . . . .	M	690		WGBF Evansville, Ind. . . . .	CFCY Charlottesville, Va. . . . .
KGFX Pierre, S.D. . . . .	J	WOI Ames, Iowa . . . . .	S	700		†WMAL Washington, D.C. . . . .	†WPRO Providence, R.I. . . . .
†KFI Los Angeles, Cal. . . . .	W	WAAW Omaha, Nebr. . . . .	M	710		WHKC Columbus, Ohio . . . . .	WGAN Portland, Me. . . . .
				720		†WISM Nashville, Tenn. . . . .	
				730		XEAL Mexico City, Mex. . . . .	†WEAF New York City . . . . .
†KPO San Francisco, Cal. . . . .	W	KFEQ St. Joseph, Mo. . . . .	R	740		†WMAQ Chicago, Ill. . . . .	
CJCY Calgary, Alta. . . . .	M	XET Monterey, Mex. . . . .	M	750		NAA Arlington, Va. . . . .	†WPTF Raleigh, N.C. . . . .
				760		*†WLW Cincinnati, Ohio . . . . .	*CFRB Toronto, Ont. . . . .
KIRO Seattle, Wash. . . . .	O			770			
KMPC Beverly Hills, Cal. M							*WOR Newark, N.J. . . . .
CJCA Edmonton, Alta. . . . .	O					*WGN Chicago, Ill. . . . .	
KTRB Modesto, Cal. . . . .	K	KMMJ Clay Center, Neb. . . . .	O			CMCL Havana, CMK . . . . .	*CKAC Montreal, Que. . . . .
†KGU Honolulu, Hawaii. . . . .	R					†WSB Atlanta, Ga. . . . .	WHEB Portsmouth, N.H. . . . .
KXA Seattle, Wash. . . . .	K	WEW St. Louis, Mo. . . . .	O			*WJR Detroit, Mich. . . . .	
XEOK Tijuana, Mex. . . . .	R	*KFAB Lincoln, Nebr. . . . .	T				†WJZ New York (WBAL) W
						*WBBM Chicago, Ill. . . . .	CMBF Havana, Cuba . . . . .
†KQHL Billings, Mont. . . . .	O	KFDY Brookings, S.D. . . . .	O	780		CKSO Sudbury, Ont. . . . .	*WEAN Providence, R.I. . . . .
KEHE Los Angeles, Cal. . . . .	O	XEYZ Mexico City (XEN) T		790		WMC Memphis Tenn. . . . .	†WJAR Norfolk, Va. . . . .
†KGO San Francisco, Cal. . . . .	T	KOAM Pittsburg, Kas. . . . .	O	800		HIX Santo Domingo, RD. . . . .	†WGY Schenectady, N.Y. . . . .
		†WFAA Dallas, (WBAP) W		810			WTBO Cumberland, Md. . . . .
		*WCCO Minneapolis, Min W		820			WNYC New York City. . . . .
XEBG Tijuana, Mex. . . . .	O	†KOA Denver, Colo. . . . .	W	830		*WHAS Louisville, Ky. . . . .	
CFQC Saskatoon, Sask. . . . .	O	XERA Villa Acuna, Mex. . . . .	Z	840		WRUF Gainesville, Fla. . . . .	WHDH Boston, Mass. . . . .
KIEV Glendale, Cal. . . . .	K	*WWL New Orleans, La. . . . .	T	850			WEEU Reading, Pa. . . . .
KEMO Tijuana, Mex. . . . .	S	*WHB Kansas City, Mo. . . . .	O	860		WKAR E. Lansing, Mich. . . . .	†CRCT Toronto, Ont. . . . .
				870			*WESG Elmira, N.Y. . . . .
KLX Oakland, Cal. . . . .	O	WSUI Iowa City, Ia. . . . .	M	880		†WENR-WLS Chicago. . . . .	*WABC-WBOQ N. York W
*KFPY Spokane, Wash. . . . .	O	KFKA Denver (KPOF) M		890		CRCO Ottawa, Ont. . . . .	WGBI-WQAN Scranton, Pa. . . . .
†KARK Little Rock, Ark. . . . .	M	KFNFB Shenandoah (KUSD) M		900		WOC Meridian, Miss. . . . .	WPHR Richmond, Va. . . . .
KGBU Ketchikan, Alaska . . . . .	K	XEW Mexico City. . . . .	W	910		WBAA Lafayette, Ind. . . . .	†WJAR Providence, R.I. . . . .
KSEI Pocatello, Idaho . . . . .	K	†WKY Okla. City, Okla. . . . .	O	920		*WMMN Fairmont, W. Va. . . . .	*WGST Atlanta, Ga. . . . .
*KHJ Los Angeles, Cal. . . . .	O	XENT Nueva Laredo, Mex. X		930		WLBL Stevens Pt., Wis. . . . .	WBEN Buffalo, N.Y. . . . .
CJAT Trail, B.C. . . . .	O	†KPRC Houston, Texas. . . . .	O	940		†WJAX Jacksonville, Fla. . . . .	WELI New Haven, Conn. M
†KOMO Seattle, Wash. . . . .	O	†KFELTKVOD Denver. . . . .	M	950		CKY Winnipeg, Man. . . . .	CRCM Montreal, Que. . . . .
KROW Oakland, Cal. . . . .	O	KMA Shenandoah, Ia. . . . .	O	960		†WWJ Detroit, Mich. . . . .	WORL Boston, Mass. . . . .
*KQIN Portland, Ore. . . . .	O	†WDAY Fargo, N. D. . . . .	O	970		WAAF Chicago, Ill. . . . .	WRAX-WPEN Philadelphia K
KFWB Hollywood, Cal. . . . .	O	WHA Madison, Wis. . . . .	S	980		CMX Havana. . . . .	CHNS Halifax, N.S. . . . .
		*KMBC Kansas City, Mo. . . . .	O	990		*WBRC Birmingham, Ala. . . . .	*WDBJ Roanoke, Va. . . . .
		XEAW Reynosa, Tams. . . . .	W	1000		†WAVE Louisville, Ky. . . . .	†WCSH Portland, Maine. . . . .
				1010		XEFO Mexico City, Mex. . . . .	WATJ Jersey City, N.J. . . . .
		XEAF Nogales, Mexico. . . . .	N	1020		WHAL Sachinaw, Mich. . . . .	†WRC Washington, D.C. . . . .
KFVD Los Angeles, Cal. . . . .	O	†WHO Des Moines, Iowa. . . . .	O	1030		CMCD Havana, Cuba. . . . .	CHNC New Carllate, Que. . . . .
CKCK-CHWC Regina, Sk. M		KGGF Coffeyville, Kas. . . . .	O	1040			WIBG Glenside, Pa. . . . .
KQW San Jose, Cal. . . . .	O	WNAO Norman, Okla. . . . .	O	1050			†KDKA Pittsburgh, Pa. . . . .
		XEJ Juarez, Mex. . . . .	O				†WBZ-WBZA Boston. . . . .
CFCN Calgary, Alta. . . . .	T	XEB Mexico City, Mex. . . . .	T			*WNOX Knoxville, Tenn. . . . .	WHN New York City. . . . .
KWJJ Portland, Ore. . . . .	M	*KRDL Dallas, Tex. . . . .	T			WOZ Tuscola, Ill. . . . .	†KYW Philadelphia, Pa. . . . .
KYOS Merced, Cal. . . . .	K					†CKLW Windsor-Detroit. . . . .	CMCY Havana, Cuba. . . . .
*KNX Los Angeles, Cal. . . . .	W	KFBI Abilene, Kas. . . . .	S				†WTIC Hartford, Conn. . . . .
						WEAU Eau Claire, Wis. . . . .	CRCK Quebec, Que. . . . .
						WGVA Indianapolis, Ind. . . . .	

100	150	200	250	300	500	750	1000	1500	2000	WATTS	POWER	2500	5000	10000	15000	25000	50000	100,000	250,000	500,000								
H	I	J	K	L	M	N	O	P	Q	CODE	R	S	T	U	V	W	X	Y	Z									
<b>WESTERN</b>											<b>MIDDLE WESTERN</b>					<b>KILO</b>		<b>Dial No.</b>	<b>CENTRAL</b>					<b>EASTERN</b>				
WJAG Norfolk, Nebr. . . . . O											†KTHS Hot Springs, Ark. . . . . T					106o			XEA Guadalajara, Mex. . . . . M					†WBAL Baltimore, Md. . . . . T				
KJBS San Francisco, Cal. . . . . M											WCAZ Carthage, Ill. . . . . H					107o			†WTAM Cleveland, Ohio. . . . . W									
XEAQ Tia Junna, Mex. . . . . O											*KMOX St. Louis, Mo. . . . . W					108o			WMBI Chicago, Ill. (WCBD) S					*WBT Charlotte, N. C. . . . . W				
CRCV Vancouver, B. C. . . . . S											*KWKH Shreveport, La. . . . . T					109o												
*KQDM Stockton, Cal. . . . . O											KSOO Sioux Falls, S. D. . . . . R					110o			XELO Piedras Negras, Mex. W					WLWL New York City. . . . . S				
KFID Spok'o, Wash. (KRSC)H											WTAW College Station, Tex M					112o			*WISN Milwaukee, Wis. . . . . K					*WPG Atlantic City, N. J. . . . . S				
*KSL Salt Lake City, Utah. W																113o			WJBO Baton Rouge, La. . . . . M					†WDEL Wilmington, Del. . . . . K				
											†KVOO Tulsa, Okla. . . . . V					114o			WJJD Chicago, Ill. . . . . U					WDV New York City. . . . . O				
											XEH Monterey, Mex. . . . . K					115o			†WAPI Birmingham, Ala. . . . . S					*WSPR Springfield, Mass. . . . . M				
											XED Guadalajara, Mex. . . . . M					116o			†WOWO Ft. Wayne, Ind. . . . . T					†WHAM Rochester, N. Y. . . . . W				
											WDGY Minneapolis, Minn. . . . . O					117o			WMAZ Macon, Ga. . . . . O					*WWVA Wheeling, W. Va. S				
†KEX Portland, Ore. . . . . S											†WAOI San Antonio, Tex. W					118o			WSAZ Huntington, W. Va. . . . . O					WINS New York City. . . . . O				
KOB Albuquerque, N. M. . . . . T											KBTM-KGHI-KFXD-KGEK					120o			WSDQ Waukegan, W. Va. . . . . O					WATR Waterbury, Conn. . . . . H				
KTBC Visalia, Cal. . . . . K											KFJB-KMLE-WEND-WJBW					120o			WBHP-WJRD-WJBC-WJBL					†WHT-WJNO-WRBL-WAYX				
KSUN-KGJ-KVCV-KVEC											KWNO-KGDE-KATE-WLA					120o			WWAE-WFAM-WMPC-WHBC					WABI-WIX-K-WMFR-WKBS				
†KWG-KFXD-KONC-KOOS											*KADA-WBBZ-WCAT-WDSM					120o			WCPD-WHBY-WCLO					WFTC-WEST-WKBO-WNRS				
KVS-KELO											KFPW-WHFF-HGLO-KIUL					121o			WJBY-WCRW-WBEC-WBSC					WAIM-WCAX-WLVA				
*KDON-KPPC-KROY-KFXM											KANS-WMFG-WMFR-WGCM					121o			WEDQ-WTAX-WBDU-WJRI					WFOY-WPAX-WJE-WBRB				
KPPA-KLAH-KFJI-KGY											KFVS-KFOR-KDLR-KVSO					121o			WJW-WCDL-WGLY-WALR					WJNY-WGNY-WGBB-WJTN				
											*KASA-KWTN-KOCA-WIBU					121o			WSX-WOMT					WQAY-WFS-WSDC-WKOK				
KTW Seattle. . . (KWSC) . . . . O											†WREN-KFKU Kansas City O					122c			*WDAE Tampa, Fla. . . . . O					†WCAE Pittsburgh (WCAD) O				
CJOC Lethbridge, Alta. . . . . H											†KGBX Springfield, Mo. . . . . M					123c			WFBM Indianapolis, Ind. . . . . O					WNAAC Boston, Mass. . . . . O				
KYA San Francisco, Cal. . . . . O											KCGM Albuquerque, N. M. . . . . M					123c			†WXY Detroit, Mich. . . . . O					WOL Washington, D. C. . . . . O				
KCGU Mandan No. Dakota K											KLPN Minot, N. D. . . . . K					124o			XEKL Leon, Mex. . . . . M					CJCB Sydney, N. S. . . . . O				
KTFI Twin Falls, Idaho. . . . . M											*KTAT Ft. Worth, Tex. . . . . O					124o			WDSU New Orleans, La. . . . . O					WKAQ San Juan, P. R. . . . . O				
KIT Yakima, Wash. . . . . K											WLB-TWGN Minneapolis M					125o			†WNEW New York (WBB) O					WAIR Winston-Salem, N. C. K				
KFOK Long Beach, Cal. . . . . O											WCAI Northfield Minn. . . . . O					125o			†WHIO Dayton, O. . . . . O					WNBX Springfield, Vt. . . . . M				
*KQVO Missoula, Mont. . . . . O											†KCOIL Omaha, Neb. . . . . O					126o			*WTOC Savannah, Ga. . . . . O					†WFBR Baltimore, Md. . . . . M				
KVOA Tucson, Arizona. . . . . O											KWPC Port Arthur (KRGV) V					126o			WASH, WOOD (Gr. Rpds. M)					WORC Worcester, Mass. . . . . M				
KHSI Chico, Cal. . . . . K											*KWLC-KGCA Decorah, Ia H					127o			*WJDX Jackson, Miss. . . . . O					WTNJ-WCAM-WCAPNJ M				
*KOL Seattle, Wash. . . . . O											*KFOR Colo. Springs, Colo. . . . . O					127o			WDOB Chattanooga, Tenn. . . . . O					WJAS Pittsburgh, Pa. . . . . M				
KQBB Great Falls, Mont. . . . . O											†WIBA Madison, Wis. . . . . O					128o			WCLL-WTRC-WLBC-WBOW					WNEI-WFAL New York O				
KLS Oakland, Cal. . . . . K											†WEEC Duluth, Minn. . . . . O					129o			WCRN-WFDK-WDFB-WEXL					WVBC-WHZZ New York O				
†KDYL Salt Lake City. . . . . O											*KTRH Houston, Tex. . . . . O					129o			WJIS-WRDL-WEMP-WGH					WVBC-WHZZ New York O				
KALE Portland, Ore. . . . . M											WFBK (Greenville S.C.) U					130o			WAGS-WAGF-WDWS-WEQA					WOL-WLAK-WTAL-WNBH				
KFAC Los Angeles, Cal. . . . . O											*KFM Wichita, Kas. . . . . O					130o			WGL-WGRC-WHDF-WBMB					WLNH-WMBO-WBR-WMFF				
KINY-KCRJ-KSRD-KHUB											WSGN-KCRN-KVOL-KRMD					131o			WPAW-WHBO-WRIN-WSAU					WSJS-WFBG-WSAJ-WJAC				
KGEZ-KROA-KMED-KWOS											KVOX-KROC-WAML-KWOS					131o			WSM Dayton, Ohio. . . . . O					WHAU-WHZZ New York O				
KXRO-KIT-KGFV-KRMC											KPDN-KRRV-KFXR-KAND					131o			WALA Mobile Ala. . . . . M					WVBC-WHZZ New York O				
											KFLP-KTSM-WDAH-KFYO					131o			*WHK Cleveland, Ohio. . . . . O					WQDM St Albans, Vt. . . . . O				
KID Idaho Falls, Idaho. . . . . M											*KRNT Des Moines, Iowa. . . . . O					132o			†WIRE Indianapolis, Ind. . . . . O					WARD-WVFW-WBBC NY M				
*KQMB Honolulu. . . . . O											†KGMF Pueblo, Colo. . . . . M					132o			WBCN Bay City, Mich. . . . . O					WAB Boston, Mass. . . . . M				
KMO Tacoma, Wash. . . . . O											*KSCJ Shreveport, La. . . . . K					133o			WSEA Montgomery, Ala. . . . . M					WHIS Bluefield, W. Va. . . . . K				
*KGB San Diego, Cal. . . . . O											KRIS Corpus Christi, Tex. . . . . K					133o			WMSD-WHFC-WCBS-WLAF					WILM-WHFF-WGPC-WAGH				
†KQIR Butte, Mont. . . . . M											KCDY Huron, S. D. . . . . K					134o			WPAD-WELL-WMBC-WJMS					WMAJ-WJBR-WED-WLEU				
KIDO Boise, Idaho. . . . . O											KGN0 Dodge City, Kas. . . . . K					134o			WPAO-WPAR					WAZL-WMBS-WPRP-WCHV				
KGER Long Beach, Cal. . . . . O											†KWK St. Louis, Mo. . . . . O					135o			WBN Memphis, Tenn. . . . . M					*WHCC Rochester (WOK) M				
KQAR-KERN-KRE-KICA											*KCRK Enid, Okla. . . . . K					136o			*WBG Greensboro, N. C. . . . . M					WCSA Fall River, Mass. . . . . O				
KGLF-KAST-KSLM-KOBH											WQBC Vicksburg, Miss. . . . . O					136o			†WGAR Cleveland, Ohio. . . . . M					†WHOM Jersey City, N. J. . . . . K				
KRKO-KEEN-KUJ-KWYO											KLLD-ROND-KYEM-KFGG					137o			†WTFI Atlanta Ga. . . . . M					*WJSV Washington, D. C. . . . . T				
KIUP-KOKO-KGKL											*WOC-KVGB-WMIN-WHLS					137o												
*KOH Reno, Nev. . . . . M											WFOR-KCMO-KTOK-KFJZ					137o												
KRCL Lewiston, Ida. . . . . K											KLUF-KFRO-KMAC					137o												
*KOY Phoenix, Ariz. . . . . O											WKBH La Crosse, Wis. . . . . O					138o												
†KLO Ogden, Utah (KHBC) M											*KLR Little Rock, Ark. . . . . O					139o												
KMED Medford, Ore. . . . . K											†KTUL Tulsa Okla. . . . . M					140o												
†KQNC Amarillo, Tex. . . . . O											KFM Grand Forks, N. D. . . . . M					141o												
KUMA-KGGC-KRRC-KORE											WROK Rockford, Ill. . . . . M					141o												
KBPS-KXL-KEUB-KGIW											KCMC-KALB-WJBO-WMBH					142o												
KIDW-KWBG-KRLH											KGFJ-KABR-KRBC-KNET					142o												
†KECA Los Angeles, Cal. . . . . O											KIUN-KABC-WACO-KFJZ					142o												
KDFN Casper, Wyo. . . . . M											†KSO Des Moines, Ia. . . . . K					143o												
KIEM Eureka, Cal. . . . . M											KGNF No. Platte, Neb. . . . . O					143o												
KGCX Wolf Point, Mont. . . . . O											*WMB Peoria, Ill. . . . . M					144o												
											KXYZ Houston, Tex. . . . . O					144o												
											†KTHS Shreveport, La. . . . . T					145o												
Spokane, Wash. . . . .											†KSTP St. Paul-Minn polls. T					146o												
																147o												
†KFBK Sacramento, Cal. . . . . S											*KOMA Oklahoma City. Ok S					148o												
																149o												
KYCA-KXO-KVOE-KDB											KOTN-KWBB-WTMV-KSJS					150o												
KAWM-KOVC-KRRR-KUTA											KPLC-KDAL-KGKY-KBIX					150o												
KQP											KKNW-KBST-KNEL-KXFI					150o												
											KROD-KPLT-KGKB-KGFI					151o												
											KXBY Kansas City, Mo. . . . . O					153o												
*KPMC Bakersfield, Cal. . . . . O																155o												

For quick reference and the convenience of your family and friends, circle or mark the call letters of LOCAL stations.

# Grunow

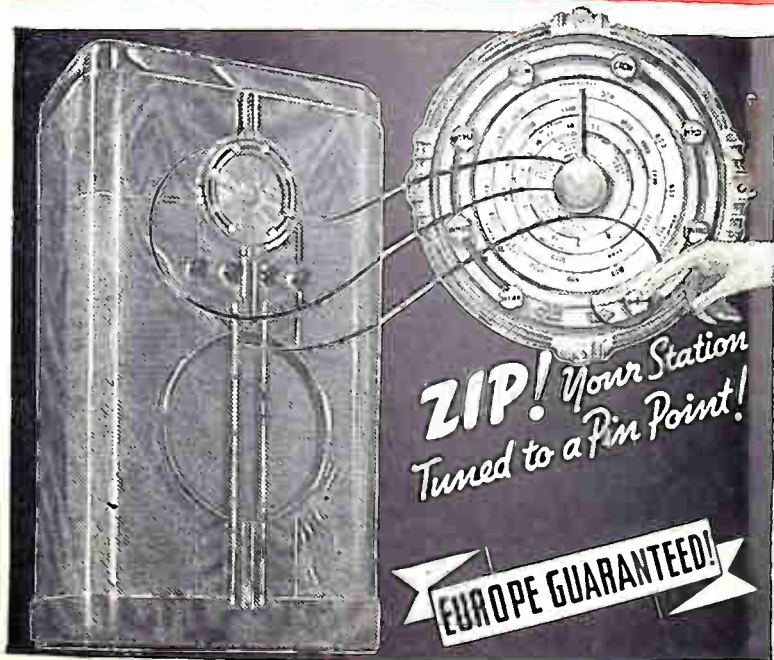
FOR 1938

# HALVES

THE  
PRICE  
OF

# TELEDIAL

AUTOMATIC TUNING



*ZIP! Your Station  
Tuned to a Pin Point!*

**EUROPE GUARANTEED!**

## GRUNOW CONSOLE... Model No. 589

Here is *true* automatic tuning of the most modern type at half the usual price!... Actually tunes 10 stations in 10 seconds! A powerful set, with hair-line precision selectivity... A.C.; 5 tubes; large 10 station "Teledial" automatic tuning; indirectly lighted calibrated dial; 2 wave bands... 550-1750 K.C.; 5500-18,000 K.C. Includes American, foreign, police, amateur and aviation reception; 8" dynamic speaker; automatic volume control. Banjo type cabinet of straight, stump, striped, mottled and rotary grain walnut.

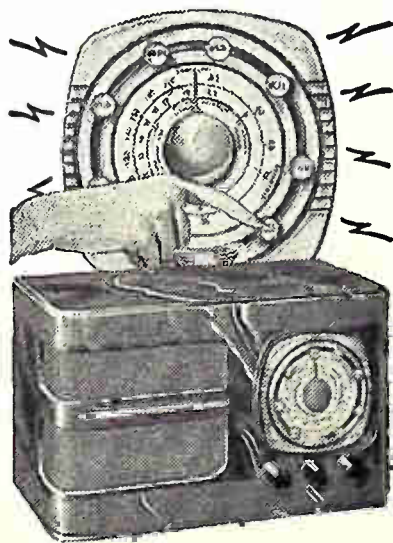
TELEDIAL TUNING SETS  
ARE AVAILABLE WITH  
8, 10 AND 16 STA-  
TION BUTTONS.

## GRUNOW TABLE MODEL... No. 588

For the first time... "Teledial" automatic tuning on a table set! Tunes 8 stations in 8 seconds... AUTOMATICALLY! A highly sensitive set with pin point tuning accuracy. A.C.; 5 tubes; 8 station "Teledial" automatic tuning; indirectly lighted calibrated dial; 8" dynamic speaker; 2 wave bands, 550-1720 K.C.; 2200-6700 K.C. Includes American, foreign, police, amateur and aviation broadcasts; automatic volume control. Cabinet of pin stripe, stump and straight grain walnut.

RECEPTION OF ANY  
RADIO IS IMPROVED  
WITH THE GRUNOW  
DOUBLET ANTENNA.

YES! Famous "Teledial" automatic tuning is now within reach of everyone!... Imagine! A big beautiful Console, that tunes 10 stations perfectly in 10 seconds... AUTOMATICALLY... plus guaranteed European reception for only \$54.95!... Just think of being able to tune in 8 stations in 8 seconds for the FIRST TIME on a Table Set... yet this amazingly powerful radio costs only \$36.95!... No wonder everyone calls GRUNOW for 1938 the greatest radio value of the year!... So... why be satisfied with less performance than GRUNOW gives, now that prices are so low? See... hear... the amazing GRUNOW for 1938... TODAY! Find out first hand how GRUNOW has brought radio enjoyment to an all-time high!... 17 outstanding models with Foreign Station reception and "Teledial" at prices from \$36.95 up... You can buy a new GRUNOW for 1938 on convenient time payments from your GRUNOW dealer. Ask him about it!...



**EUROPE GUARANTEED**

If you live in Central Time Zone, rule out the other FOUR rows of hour figures. Copy those for your zone for same lines on next pages. Follow column for hour you tune. If symbol appears glance left to learn days station operates. See if three digits in megacycle number are heavy black, denoting it is generally being heard well. Two, one, or none black require comparative care. "A" at left marks Amateurs, "S" Ships, "C" airCraFt.

AM- <b>A</b>	PM- <b>v</b>	Both- <b>d</b>	F	D	S	T	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	
			Eastern	(CD)			11	12	1	2	3	4	5	6	7	8	9	10	11	12											
			Central				11	12	1	2	3	4	5	6	7	8	9	10	11	12											
			Mountain				10	11	12	1	2	3	4	5	6	7	8	9	10	11	12										
			Pacific				9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12									

NOTES

Mag.	Call	Place	When	Mtrs.	1	2	3	4	5	6	7	8	9	10	11	12
4.79	HJ2ABC	Cucuta, Col.	ex.Su.	62.60												
5.74	TGS	Guatemala	Cy. W.Th.&Su.	52.26												
5.76	YNOP	Managua, Nic.	ex.Su.	52.08												
5.78	OAX4D	Lima, Peru	W&Sat	51.90												
5.80	YV5RC	Caracas, Venez.	Daily	51.72												
5.83	TIGPH	San Jose, C.R.	ex.Su.	51.46												
5.85	YV1RB	Maracaibo, Ven.	ex.Su.	51.28												
5.87	HRN	Tegucigalpa, Hon.	Daily	51.11												
5.90	TILS	San Jose, R.D.	ex.Su.	50.80												
5.90	YV3RA	Barquisimeto, Ven.	ex.Su.	50.80												
5.92	YV4RH	Valencia, Ven.	ex.Su.	50.70												
5.93	HH2S	Port-au-Pr., Haiti	ex. Su.	50.63												
5.94	TG2X	Guatemala City	MWSa	50.51												
5.95	IJN	Bogota, Col.	ex. Su.	50.42												
5.97	HJ4ABD	Medellin, Col.	ex.Su.	50.25												
6.00	XEBT	Mexico City	Daily	49.97	▲▲	▲▲										
6.00	HP5K	Colon, Panama	ex.Su.	49.96												
6.01	COCO	Havana, Cuba	Daily	49.92												
6.01	HJ3ABH	Bogota, Col.	ex.Su.	49.92												
6.02	DJC	Berlin, Ger.	Daily	49.83												
6.03	HP5B	Panama City	Daily	49.75												
6.03	HJ4ABP	Medellin, Col.	ex.Su.	49.73												
6.04	W1XAL	Boston, Mass.	M&F	49.67	◆◆	◆◆										
6.04	HJ1ABG	Barranquilla, Col.	ex.Su.	49.62												
6.05	HJ3ABD	Bogota, Col.	ex.Su.	44.59												
6.06	W8XAL	Cincinnati	Daily	49.50	◆◆	◆◆										
6.06	W3XAU	Philadelphia	Daily	49.50	◆◆	◆◆										
6.07	CFRX	Toronto, Ont.	Daily	49.41	◆◆	◆◆										

6.08	W9XAA	Chicago	MW&Sa	49.34												
6.10	W9XF	Chicago	TTF&Sn	49.18	▲▲	▲▲										
6.10	W3XAL	Boundbr'k, N.J.	Daily	49.18												
6.11	HJ4ABB	Manizales, Col.	ex.Su	49.08												
6.11	HJ1ABB	Barranquilla, Col.	ex.Su	49.08												
6.13	VE9HX	Halifax, N. S.	Daily	48.92												
6.13	COCD	Havana, Cuba	Daily	48.92												
6.14	W8XK	Pittsburgh	Daily	48.86												
6.15	H15N	Moca City R.D.	ex.Su.	48.78												
6.15	CJRO	Winnipeg, Man.	Daily	48.78	▲▲	▲▲										
6.15	YV5RD	Caracas, Ven.	Daily	48.78	▲▲	▲▲										
6.24	HRD	La Ceiba, Honduras	ex.Su.	48.11												
6.24	HIN	Trujillo, R.D.	ex.Su.	47.99												
6.26	OAX4G	Lima, Peru	Daily	47.86												
6.27	YV5RP	Caracas, Ven.	ex.Su.	47.80												
6.30	YV4RD	Maracay, Venez	ex.Su.	47.62												
6.31	HIZ	Trujillo, R.D.	ex.Su	47.50												
6.34	H1IX	Trujillo, R.D.	Tu.&Fr.	47.32												
6.37	YV1RH	Maracaibo, Ven.	Daily	47.10												
6.40	YV5RH	Caracas, Venez	ex.Su.	46.88												
6.41	TIPG	San Jose, C.R.	Daily	46.80												
6.52	YV4RB	Valencia, Venez.	Daily	46.01												
6.62	PRADO	Riobamba, Ecu.	Th.	45.31												
6.63	HIT	Trujillo, R.D.	ex.Su.	45.25												
6.66	HC2RL	Guayaquil, Ec.	Tu	45.00												
6.68	TIEP	San Jose, C.R.	ex.Su.	44.88												
6.78	HIH	San Pedro, R.D.	ex.Su.	44.07												
A 7.80	HBP	Geneva, Switz.	Sat.	38.47												
8.25	HC2CW	Guayaquil, Ecu.	ex.Su.	36.46												
9.12	HAT-4	Budapest, Hung.	Su&W	32.81												
9.36	OAX4J	Lima, Peru	Daily	32.05												
9.43	COCH	Havana, Cuba	Irr.	31.88												
9.45	TGWA	Guatemala City	Daily	31.80												
9.49	EAQ-2	Madrid, Spain	Daily	31.60												
9.50	PRF5	Rio de Janeiro	ex.Su	31.58												
9.50	VK3ME	Melbourne, Aus.	M to Sa	31.58	▲▲	▲▲	▲▲									



**ALASKA**  
Ketchikan KGBU 900 O

**ALABAMA**  
Birmingham WAPI 1140 S  
\*WBRC 930 O  
Mobile WALA 1380 M  
Montgomery WBFA 1410 M

**ARIZONA**  
Phoenix KOY 1390 O  
KTAR 820 O  
Tucson KVOA 1260 O

**ARKANSAS**  
Hot Springs KTBS 1060 T  
Little Rock KLLA 1390 O

**CALIFORNIA**  
Bakersfield KPAC 1650 O  
Fresno KCMJ 580 O  
Long Beach KFOX 1250 O  
KGBR 1360 O  
Los Angeles KECA 1430 O  
KELIE 780 O KFAC 1300 O  
KFI 640 W KFVD 1000 O  
KFWB 950 O KIHJ 900 O  
KMTF 870 O KNKX 1050 W  
KRDJ 1250 O  
Oakland KILX 880 O  
KROW 930 O  
Sacramento KFBI 1400 S  
S. Diego KGB 1330 KFSI 600 O  
San Francisco KPBC 610 O  
KGO 790 T KPPO 680 W  
\*KFSO 560 O KFYA 1230 O  
San Jose KQW 1010 O

**COLORADO**  
Colorado Springs KVOR 1270 O  
Denver KKLZ 560 O  
KHOA 830 W KFEL 920 M  
Pueblo KGHF 14320 M

**CONNECTICUT**  
Bridgeport WVIC 600 M  
Hartford WTCI 1040 W  
\*WDRB 1330 O  
Waterbury WBRY 1530 O

**DISTRICT OF COLUMBIA**  
Washington WJWS 1160 T  
\*WOL 1230 O WRRC 930 M

**FLORIDA**  
Clearwater WFLA 620 O  
Gainesville WRUF 830 S  
Jacksonville WJAX 900 O  
Miami WQED 1300 O  
\*WQAM 560 O  
Orlando WDBO 580 O

Pensacola WCOA 1340 M  
Tallahassee WDAE 1220 O

**GEORGIA**  
Atlanta WGST 890 O  
\*WSB 740 W WTFI 1450 M  
Macon WMAZ 1180 O  
Savannah WTOG 1260 O

**HAWAII**  
Honolulu HGU 750 R  
\*KGMB 1320 O

**IDAHO**  
Boise KIDO 1360 O

**ILLINOIS**  
Chicago WBBM 770 W  
WUAB 970 S WVBXAA 6.05  
WGNR 870 W WXPB 6.10  
\*WGN 720 W WLS 870 W  
\*WMAQ 670 W WMBI 1080 S  
Peoria WMBD 1440 M  
Rockford WROK 1410 M

**INDIANA**  
Evansville WGBF 630 M  
Ft. Wayne WWOV 1160 T  
Gary WINI 560 O  
Hammond WHIP 1480 S  
Indianapolis WFBM 1230 O  
\*WIRE 1400 O WGVA 1050 O  
Lafayette WBAA 890 O

**IOWA**  
Ames WOI 640 S  
Cedar Rapids WMT 600 O  
Des Moines KRNT 1320 O  
\*KSO 1430 M WBO 1000 W  
Sioux City WSCJ 1330 O

**KANSAS**  
Abilene KFB 1050 S  
Coffeyville KGGF 1010 O  
Lawrence KFKU 1220 O  
Pittsburgh KOAM 790 O  
Topeka WIBW 580 O  
Wichita KFH 1300 O

**KENTUCKY**  
Covington WKCY 1400 T  
Louisville WAVE 940 O  
\*WHAS 820 W

**LOUISIANA**  
New Orleans WDSU 1250 O  
\*WSB 1320 M \*WWL 850 T  
Shreveport KFTBS 1450 O  
KWKH 1100 O

**MAINE**  
Bangor WLBZ 620 O  
Portland WCSH 940 O

**MARYLAND**  
Baltimore WBAL 1060 T  
\*WBAL 760 R \*WGAO 600 M

**MASSACHUSETTS**  
Boston WLBZ 900 W  
WIXAL 6.04-11.79  
\*WEEI 590 O WHDH 830 O  
\*WEEI 920 M \*WNAC 1230 O  
Fall River WBSR 1450 O  
Worcester WTAG 880 O

**MICHIGAN**  
Bay City WBCM 1410 O  
Detroit WJR 750 W  
\*WWJ 920 O WXYZ 1240 O  
Grand Rapids WOOD 1270 M  
Lansing WKAR 860 O

**MINNESOTA**  
Duluth WDBZ 1290 O  
Minneapolis WCCO 810 W  
WDGJ 1180 O WLB 1250 O  
St. Paul KTST 1460 V

**MISSISSIPPI**  
Jackson WJDX 1270 O  
Vicksburg WQBC 1360 O

**MISSOURI**  
Kansas City KMBC 950 O  
\*WDAL 910 O KXBY 1530 O  
Springfield KWTO 560 O  
St. Louis KMOX 1090 W  
\*KSLD 560 O \*KWKW 1350 O

**MONTANA**  
Billings KHGL 780 O  
Butte KHGR 1340 O  
Great Falls KFBB 1280 O  
Missoula KGOV 1200 O  
Wolf Point KGGK 1450 O

**NEBRASKA**  
Lincoln KFAB 770 T  
North Platte KGNF 1430 O  
Omaha WLAW 960 M  
\*KSLD 560 O \*KOIL 1260 O

**NEVADA**  
Heno KOH 1380 M

**NEW HAMPSHIRE**  
Manchester WFEA 1310 M

**NEW JERSEY**  
Atlantic City WPG 1100 S  
Newark WOR 710 W

**NEW MEXICO**  
Albuquerque KOB 1160 S

**NEW YORK**  
Buffalo WBBN 900 O  
\*WGR 550 O \*WKBW 1480 S  
Elmira WESG 850 O  
Long Island City WQXR 1550 O  
New York WABC 880 W  
\*WXXI 6.12-11.83-15.27-21.52  
\*WJFA 660 W \*WXXL 8.10-17.8  
WIN 1010 O WINS 1150 O  
\*WJZ 760 W WLW 1100 S  
WVCA 570 M WNEW 1250 O  
WNTC 810 O WOV 1130 O  
Rochester WIIAN 1150 W  
Schenectady WGY 790 W  
\*W2XAE 9.53-15.33  
Syracuse WFB 1360 O

**NORTH CAROLINA**  
Asheville WUNC 570 O  
Charlotte WBT 1080 W  
Greensboro WBIG 1440 O  
Raleigh WPTF 680 S

**NORTH DAKOTA**  
Bismarck KFTR 550 O  
Fargo WDAY 940 O  
Grand Forks KFJM 1410 M

**OHIO**  
Akron WADC 1320 O  
Cincinnati WRC 550 O  
\*WLV 700 Z \*WSAI 1330 O  
\*W2XAL 6.06  
Cleveland WGAR 1450 M  
\*WHK 1390 O WTM 1070 W  
\*WBNS 1430 M WOSU 570 O  
Columbus WHKC 640 M  
Dayton WHIO 1260 O  
Toledo WSPD 1340 O

**OKLAHOMA**  
Norman WYAD 1010 O  
Okla. City KOMA 1480 S  
\*WKY 900 O  
Tulsa KTVQ 1140 V  
\*KTUL 1400 M

**OREGON**  
Corvallis KOAC 550 O  
Portland KEX 1180 S  
\*KGW 620 O \*KOLN 940 O

**PENNSYLVANIA**  
Philadelphia KYW 1020 T  
\*WCAU 1170 W \*WFL 560 O  
\*W3XAU 6.06-9.59 WIP 610 O

**PENNSYLVANIA (Cont.)**  
Pittsburgh KDKA 980 W  
\*WPXI 6.14-11.87-15.21-21.54  
\*WCAE 1220 O \*WJAS 1290 O  
Reading WEEU 830 O  
York WORK 1320 O

**PUERTO RICO**  
WKAQ San Juan 1240 O

**RHODE ISLAND**  
Providence WEEW 780 O  
\*WJAR 890 M \*WPRO 930 O

**SOUTH CAROLINA**  
Columbia WIS 560 O  
Greenville WIBC 1300 O

**SOUTH DAKOTA**  
Brookings KFDY 780 O  
Sioux Falls KSOO 1110 R  
Yankton WYAX 570 O

**TENNESSEE**  
Chattanooga WDDO 1280 O  
Knoxville WNOX 1010 O  
Memphis WMCN 780 O  
\*WNR 1430 M \*WREC 600 O  
Nashville WFLC 1470 S  
\*WSM 650 W

**TEXAS**  
Amarillo KGNC 1110 O  
Beaumont KEDM 560 O  
Dallas KRLD 1040 T  
\*WFAA 800 W WRR 1280 M  
Ft. Worth WBAF 800 W  
KTAT 1240 O  
Houston KPRC 920 O  
\*KPRH 1160 O KXVZ 1140 O  
San Antonio KXTSA 550 O  
\*WQAI 1190 W

**UTAH**  
Cedar KKL 1400 M  
Salt Lake City KIDY 1290 O  
\*KSL 1130 W

**VERMONT**  
St. Albans WQDM 1390 O  
Waterbury WDEV 550 M

**VIRGINIA**  
Norfolk WTAZ 780 M  
Richmond WJVA 1110 S  
Roanoke WDBJ 930 O  
Staunton WSA 550 M

**WASHINGTON**  
Seattle KIRO 710 O  
\*KJR 970 S \*KOL 1270 O  
\*KOMO 920 O KTW 1220 O  
Spokane KFPY 890 O  
\*KGA 1470 S \*KIHJ 590 O  
Tacoma KVI 570 O

**WEST VIRGINIA**  
Charleston WCHS 580 M  
Fairmont WVMXN 890 M  
Huntington WSAZ 1190 O  
Wheeling WVVVA 1160 S

**WISCONSIN**  
Green Bay WTAQ 1330 O  
La Crosse WKBB 1380 O  
Madison WHA 940 S  
\*WIBA 1280 O  
Milwaukee WTMJ 620 O  
Stevens Point WLBL 900 S

**WYOMING**  
Casper KDFN 1440 M

**CANADA**

**ALBERTA**  
Calgary CFCA 1030 T  
Edmonton CJA 730 O

**BRITISH COLUMBIA**  
Trail CJAT 910 O  
Vancouver CJOR 600 M

**MANITOBA**  
Winnipeg CKY 910 U  
CJRO 6.14 CJRX 11.72

**NOVA SCOTIA**  
Halifax CHNS 930 O  
Sydney CJCB 1240 O 6.13

**ONTARIO**  
Hamilton CKOC 1120 M  
Oshawa CRO 880 O  
Sudbury CKSO 780 O  
Toronto CFRB 690 T  
\*CRCT 840 S CJRX 6.09  
Windsor CKLW 1030 S

**PRINCE EDWARD ISLAND**  
Charlottetown CFCY 630 O

**QUEBEC**  
Montreal CFCF 600 M  
\*CKAC 730 S CPCM 910 S  
New Carlisle CHNC 960 O  
Quebec CRCK 1050 O

**SASKATCHEWAN**  
Moose Jaw CJRM 540 O  
Regina CHWC-CKCK 1010 M  
Saskatoon CFQC 840 O

**ARGENTINA**  
Buenos Aires LSX 10.35  
LRU 15.29 LRX 9.06

**AUSTRALIA**  
Melbourne VK3ME 9.50  
3LR 9.58  
Sydney VK2ME 9.59

**BRAZIL**  
Rio de Janeiro PRF 9.50

**BULGARIA**  
Sofia LZA 14.87

**CHILI**  
Santiago CEC 10.67

**COLOMBIA**  
Barranquilla HJ1AB-6.04-6.11  
Bogota HJN 5.95  
HJ3AB-6.01-6.05-6.12-6.07  
Cali HJ5ABD 6.08  
Cartagena HJ1AB-9.50-9.61  
Ibaque HJ4AB 6.09  
Manizales HJ4AB 6.11  
Medellin HJ4AB-6.03-6.10-6.14

**COSTA RICA**  
San Jose TIGPH 5.83  
TIPG 6.41 TIEP 6.68

**CUBA**  
Havana CMBC 630 O  
CMCY 780 O CMK 730 M  
CMW 600 M CMX 920 P  
COCD 6.13 COCH 9.43

**ECUADOR**  
Guayaquil HC2CW 8.25  
HC2HL 6.66  
Riobamba PLADO 6.62

**ENGLAND**  
London GS-9.51-9.58-11.75-  
15.14-15.31-17.79-21.87

**FRANCE**  
Paris TPA-11.72-11.88-15.24

**GERMANY**  
Berlin DJ-6.02-9.54-9.56-  
11.77-15.11-15.20-15.28-17.76

**HAITI**  
Port au Prince HJKK 920 O  
HJ2S 5.91 HJ3W 9.61

**HOLLAND**  
Eindhoven PCJ 9.50-15.22  
Huisen PHJ 17.77

**HONDURAS**  
Tegucigalpa HJRN 5.87  
San Pedro HJRP 6.36

**HUNGARY**  
Budapest HJAS-3 15.37  
HAT-4 9.12

**ITALY**  
Rome I2RO-9.63 11.61  
Vareian City HVJ 15.12

**JAPAN**  
Tokio JVM 10.74 JZJ 11.90

**MEXICO**  
Mexico City XEB 1030 T  
XEPT 6.00 XEPE 940 S  
XEN 780 O XEW 890 W  
New Laredo XENT 910 X  
Piedras Negras XELO 1110 W  
XEPN 580 X  
Reynosa XEAW 960 W  
Tijuana XEMO 860 S  
Villa Acuna XERA 840 Z

**PANAMA**  
Panama HJPS-6.03-6.08-9.60

**PERU**  
Lima OAX4-5.78-9.26

**POLAND**  
Warsaw SPW 13.63

**PORTUGAL**  
Lisbon CTIAA 965. CSW 9.94

**RUSSIA**  
Moscow RNE 12.00 RAN 9.60

**SANTO DOMINGO**  
Puerto Plata HJIS 6.42  
Santiago HJA 6.19  
Trujillo HJN 6.24  
HIT 6.63 HIZ 6.31-6.34

**SPAIN**  
Madrid EAQ 9.48-9.86

**SWITZERLAND**  
Geneva HB-7.80-9.65

**VENEZUELA**  
Caracas YV5R-5.80-6.15-6.27  
YV5RH 6.40  
Maracaibo YV1R-5.85-6.39  
Maracaibo YV4R 6.30  
Valencia YV4R-5.91-6.52



# FOR FINEST WORLD RECEPTION!



## GRUNOW DOUBLET SHORT WAVE ANTENNA

Add to the enjoyment of all-world reception by installing a new 1938 Grunow Doublet Short Wave Antenna . . . Users everywhere are enthusiastic! Takes very little space, yet improves short wave listening far better than expensive old-style installations . . . Grunow engineers have developed a compact inexpensive antenna that not only increases "pick-up" on both standard and short wave broadcasts, but also cuts out "man-made" static amazingly, lasts indefinitely and requires no attention. Packed complete in carton, along with detailed instruction for installing. Only . . . \$5.00. See your Grunow dealer.