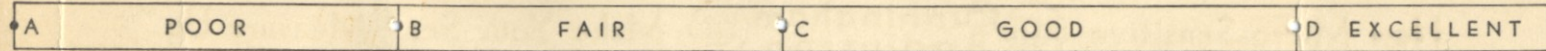


RADIO SET PERFORMANCE YARDSTICK

NIGHT TIME



0

300 MILES

600 MILES

1000 MILES

PAT APPLIED FOR

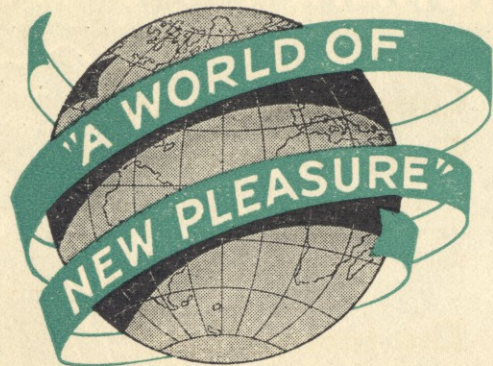
New Micro-Sensitive



Lunningham
Radiotron



Make Your Set "Measure Up"



Tomorrow Arrives in Australia—Today!

Just as when it's noon in New York City, it's 11 in Chicago, 10 in Denver and only 9 a.m. in San Francisco, so time varies proportionately around the world as illustrated by the chart on the back cover. The Log on pages 10-12 enables you to determine the time in any international-broadcasting city: Opposite Sydney, Australia, for example, you will note a "+15" indicating that it is 15 hours later there than in New York. Hence on Monday

★ ★ ★ **L**ITERALLY, a world of new pleasure is opened to you by RCA Victor Globe Trotters. There is a vast fund of sparkling entertainment in the radio programs of every nation in the world. It is important, however, that the new "armchair world tourist" realize at the outset that the short waves which bring these programs to the living-room are quite different from the familiar standard waves. So you may understand them and get maximum Globe Trotter pleasure, RCA Victor presents this book.

at 10.00 a.m. by Eastern Standard Time, it is 1 a.m. Tuesday in Australia.

Before You Tune in a World Radio Station...

Before dialing foreign programs, you should obtain certain information in advance. The Log is arranged to provide you, in addition to call letters, wavelengths and frequencies, locations, days of the week and hours of the day on the air, and the correct time in the country of transmission. It is suggested that you refer to the table on page 4 as a supplementary guide. When you have

the information needed, dial *very slowly* and with volume turned high. Short-wave channels are so narrow that you may easily pass over the broadcast without noticing it.

New Terms for Old...

A new terminology comes to radio with the advent of short-wave reception. Familiarize yourself at the start with such terms as: *megacycles*: 1000 kilocycles; *band*, as the "49-meter band": a wave-length classification; Kennelly-Heaviside Layer, an atmospheric stratum which deflects sky-waves earthward; and others on page 3.



Schedules of Foreign Broadcasting Stations

Many foreign radio stations do not broadcast on so regular or definite a schedule as U. S. stations; nor are their programs announced so far in advance. Therefore it is well to consult a newspaper or periodical in which current schedules appear, supplementing this handbook.

Some Interesting Facts about Short Waves . . .

Sky-waves and ground-waves—Radio waves leave the transmitter in two directions, skyward and along the ground. *Ground-waves* travel close to the earth and for only a comparatively short distance. *Sky-waves*, however, rise until they encounter the Kennelly-Heaviside Layer, which deflects them earthward. As they encircle the earth, sky waves continuously "bounce" from sky to earth and back, much as a tennis ball might bounce repeatedly between floor and ceiling.



Skip-distance is a short-wave factor it is well to be familiar with also. It is the distance between where ground waves stop and sky-waves first strike the earth; and the distance between points where sky-waves touch the earth. Skip-distances vary according to atmospheric conditions, the altitude of the Kennelly-Heaviside Layer, distance from transmitter, etc. It should be remembered that transmissions of different stations have different skip-distances; and that while you may be within the skip-distance (or silent zone) of certain stations, other broadcasts are available to you which can't be tuned in in other localities. Remember, *RCA Victor Globe Trotters receive every foreign program that is receivable in your locality at any given time!*

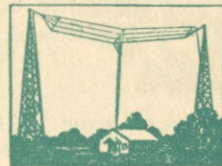


Consider Time and Seasonal Factors, Too

Consult the table on page 4 to understand the effect of time and season on World broadcasting and reception.

The International Entertainment Bands

By International agreement, short-wave entertainment programs are broadcast almost entirely within four major classifications—that is, at approximately 49 meters (6.0–6.15 megacycles), 31 meters (9.5–9.6), 25 meters (11.7–11.9) and 19 meters (15.1–15.35). All RCA Victor Globe Trotters receive broadcasts at these wave-lengths. And when your Globe Trotter pointer is set at any of these dial markings, you *know* that receivable programs of the proper wave-lengths will reach you clearly, dependably.



Broadcasting of Many Types on RCAVICTOR

Globe Trotters

In addition to the best possible reception of World Programs, RCA Victor Globe Trotters bring you the standard domestic programs you're used to, with amazing beauty of tone, sensitivity and selectivity. And on your Globe Trotter you'll also hear programs of *several other types!* Some Globe Trotter Models bring in police calls and ships at sea; and all Globe Trotters bring you aircraft signals, amateur broadcasting and domestic short-wave programs.



Police Calls give you the exciting pleasure of hearing officers in scores of U. S. cities dispatched to fires, accidents and scenes of crime. (At the present time: 1550-1712 and 2400-2500 kc.)

Effect of Time of Day and Season of Year on Short-Wave Transmission

Wave-Length (meters)	Ground-Wave Range Miles	Sky-Wave (Summer) Reliable Range		Sky-Wave (Winter) Reliable Range	
		Noon	Midnight	Noon	Midnight
		Miles	Miles	Miles	Miles
100	90	—90	90—600	90—100	90—2500
49	75	100—200	250—5000	200—600	400—*
31	60	200—700	1000—*	500—2000	1500—*
25	50	300—1000	1500—*	600—3000	2000—*
19	35	400—2000	2500—*	900—4000	X
15	15	700—4000	X	1500—*	X

*—Unlimited distance.

X—Ordinarily cannot be heard.

NOTE—Time and season apply to transmitting station. The above table applies to transmitters of relatively high power and to receivers operating under favorable conditions.



Aircraft Signals furnish the thrill of hearing two-way conversations between airports and planes plunging through space. (At night, 2300-3500 kc.; day, 4100-5700 kc.)

Amateurs' broadcasting provides the experimental talks and signals between private stations operated by radio enthusiasts. Always interesting, these informal chats by air are frequently amusing, and informative too. (1800-2000 kc., 3900-4000 and 14150-14250.)

Ships at Sea: At various points on your Airplane Dial you will hear from ships hundreds of miles at sea.

Domestic Short Waves: The United States has several excellent short-wave stations which broadcast to all the world. Sometimes when atmospheric conditions mar standard broadcasts, U. S. listeners dial the same station's short-wave frequency and hear the same program with pleasing clarity and fidelity. See short-wave "companion" stations on page 13.

Foreign Entertainment Programs: Your greatest thrill will be programs from strange foreign lands... songs and instrumental music, lectures, news flashes, sports events from Europe and Asia, Africa, Australia, South America, as well as the North American Continent. Arrange your Globe Trotting itinerary from the opposite page!



Leading World Stations Arranged Alphabetically by Nations and Cities

Nation and City	Station	Mega-cycles
Africa		
Johannesburg	ZTJ	6.12
Australia		
Melbourne	VK3ME	9.51
Sydney	VK2ME	9.59
Austria		
Vienna	UOR2	6.07
Bolivia		
La Paz	CP5	6.08
Brazil		
Rio de Janeiro	PSK	8.18
Canada		
Toronto	VE9GW	6.09
Winnipeg	VE9JR	11.72
Colombia		
Barranquilla	HJ1ABB	6.45
Cuba		
Havana	COC	6.01
Denmark		
Copenhagen	OXY	6.09
Ecuador		
Riobamba	PRADO	6.60
England		
London	GSA	6.05
"	GSB	9.51
"	GSC	9.58
"	GSD	11.75
"	GSE	11.86
"	GSF	15.14
"	GSG	17.77

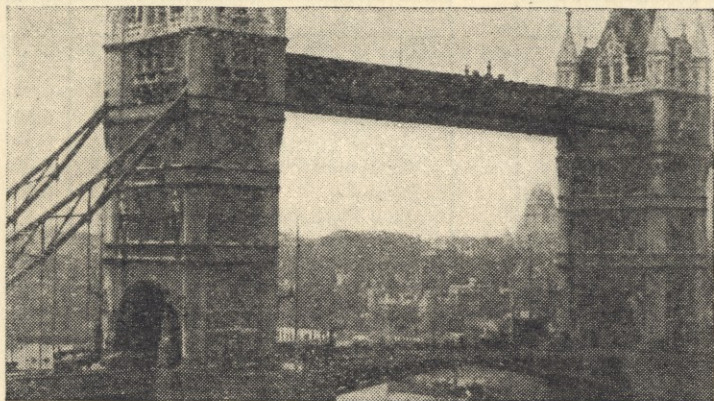
Nation and City	Station	Mega-cycles
France		
Paris	FYA	11.70
"	"	11.90
"	"	15.24
Germany		
Berlin	DJA	9.56
"	DJB	15.20
"	DJC	6.02
"	DJD	11.76
Holland		
Huizen	PHI	11.73
Italy		
Rome	I2RO	11.81
Japan		
Tokio	J1AA	9.75
Kenya (Africa)		
Nairobi	VQ7LO	6.06
Mexico		
Mexico City	XETE	9.60
Morocco		
Rabat	CNR	8.04
"	"	12.83
Nova Scotia		
Halifax	VE9HX	6.11
Portugal		
Lisbon	CT1AA	9.59
Spain		
Madrid	EAQ	9.85
Switzerland		
Geneva	HBP	7.80
"	HBL	9.59

Nation and City	Station	Mega-cycles
U. S. A.		
Boston	W1XAL	6.04
Chicago	W9XAA	6.08
"	W9XF	6.10
Cincinnati	W8XAL	6.06
Miami	W4XB	6.04
New York City	W2XE	6.12
"	"	11.83
"	"	15.27
"	W3XAL	17.78
"	"	6.10
Philadelphia	W3XAU	9.59
"	"	6.06
Pittsburgh	W8XK	6.14
"	"	11.87
"	"	15.21
Schenectady	W2XAD	15.33
"	W2XAF	9.53
Springfield, Mass.	W1XAZ	9.57
U. S. S. R.		
Khabarovsk	RW15	4.27
Moscow	RW49	6.00
"	RW50	12.00
Vatican City		
"	HVJ	5.97
"	"	15.12
Venezuela		
Caracas	YVIRC	6.11
"	YV3BC	6.16
Maracaibo	YV5BMO	6.07

NOTE—See complete log and station data on pages 10-15.



A Typical World Cruise by RCA Victor Globe Trotter



(COURTESY U. S. LINES)

We arrive in London!

The glamorous British capital where many an empire has been shaped; home of leaders in commerce, in literature, and of dramatic figures in world history. Here Big Ben booms out the hour by Greenwich Mean Time, a criterion for every time on earth . . . and thus signs on and off the air the "GS" Stations. As you hear the British Broadcasting Company presenting a London Symphony Orchestra, news flashes, speeches by Britain's distinguished—you're in England.

Thence to Italy . . .

A gondolier singing a Venetian ballad . . . Naples at night . . . and classic Rome, the native place of Caesars . . . these are but a few of the romantic glimpses Rome's station I2RO brings to U. S. listeners. Much of the charm of Italy has crept into the broadcasts which carry the nation's spirit across the seven seas. And within the walls of Vatican City another type of broadcast draws the Catholics of the world into intimate communion. For the first time in all history a Pope can address his faithful followers the world over. Station HVJ is a world station that carries encyclicals and consolation to the halt, the lame and the blind in the four corners of the earth. Much of the world's great music and religious teaching emanates from Italy.



(COURTESY U. S. LINES)



Let's Visit the New Russia

All eyes are on Russia, interested in the colossal experiment of the Second Five-Year Plan. The new régime calls for intensive broadcasting. Many important stations function regularly in the land of the Soviets, and more spring up from month to month. No programs are so tirelessly presented—and listened to—as talks on industry, commerce, the progress of the Second Five-Year Plan. (Illustration shows citizens of the

(COURTESY INTOURIST)



new Russia outside the famous Kremlin.) Music is provided, too; genuine Russian music with its distinctive flavor and rhythm; and playlets are presented with the full artistry of a miniature Moscow Art Theatre . . . listen in on Stations RW15 in Siberia and RW50 in Moscow.

On to South America . . . Colombia!

A turn of the delicate pointer of our Airplane Dial on Monday Evening at eight (E.S.T.), and we hear the sweet soprano voice of Senorita Sarita Herrera. At 6.5 megacycles, it's HJ1ABB, and our Log tells us that's Barranquilla, Colombia. Yes, and it's an RCA Victor Program, telling the world about Globe Trotters. Thousands of them are in use in South America, as on every continent of the earth. Listen in on the *many* colorful programs of HJ1ABB!



. . . and Caracas

A wealth of fascinating entertainment emanates from the dependable RCA Victor-equipped Station YVIRC, high in the mountains of Venezuela. Now we hear comely Senorita Angeles Fuentes starring in a dramatic playlet; now Rafael Guinland broadcasting humor that's made him as famous as Amos 'n' Andy. Never has South America been so close to her northern sister nations as Globe Trotters bring her.



Amidst the Canals and Windmills

In a distant charming land of boat-filled canals and quaint, picturesque windmills—Holland!—we find Radio Station PHI, Huizen, broadcasting to all the world, on a frequency of 11.7 megacycles. PHI's programs are announced by Philip Stutz, a linguist who speaks five languages idiomatically, thus adding special interest for listeners in the United States. Below is a group of typical Dutch peasants in bizarre



native costume—surely reminiscent of the Old World. Now from PHI you can hear as modern programs as ever filled a microphone. PHI presents “instrumental and vocal programs, both popular and classical—but no jazz!” asserts the station management.

In Far-off Australia, Kookaburra

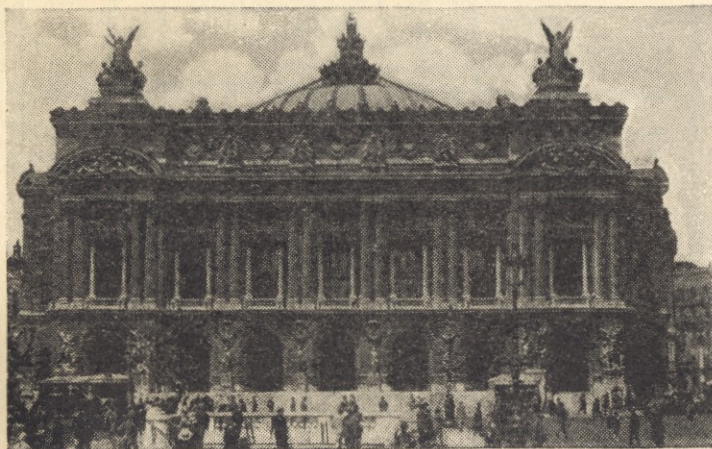


This busy scene in Sydney Harbor might well be mistaken for a thriving waterway in New York or San Francisco. But there's no mistaking programs from VK2ME in Sydney, for they're signed on and off the air by the Kookaburra Bird. Hear him once, and you'll know why his raucous screech has earned him the title “laughing jackass.” You'll enjoy the music and dramatics on these stations, but probably more, the talks on Australian life . . . crocodile hunting and sheep-raising and kangaroos.



There's Gayety in Gay Paris

When you tune in the powerful Station FYA, you get the Paris that dances in a Montmartre night-club, taxi-rides, care-free, down tree-lined boulevards, picnics in the Bois de Boulogne and soberly thrills to great opera in the famous Opera House pictured below. Hear great music from symphony orchestras . . . plays, some of them in English . . . hear the inimitable French versions of dance compositions by Americans . . . hear French folk songs . . . and enjoy the opportunity FYA offers you to improve your French.



(COURTESY U. S. LINES)

Das Vaterland ist Music-land

No nation in history has produced such a wealth of great music as Germany. No knowledge of music can be nearly complete without study of such monumental musical names as Bach, Beethoven, Brahms, Wagner, Schumann, Schubert. Today Germany's fine musical tradition lives on, and for the first time, the artistry of German musicians is available to the world through such great organizations as the Berlin State Opera and the Berlin Philharmonic Orchestra, over DJA, DJB, DJC and DJD. Listen in on the new régime, as well as on such charming folk tunes as inspire these Bavarians to their country-dances.



(COURTESY GERMAN TOURIST INFO. OFFICE)

* * *

This is a *typical* tour, but we've left lands unexplored. Listen in on Johannesburg and Rabat in Africa, and travel to far-off Japan—by Globe Trotter.



Short-Wave Stations (77-46 Meters) and Broadcasting Schedule

Station	Wave- Length (Meters)	Freq. in Mega- cycles	LOCATION	Schedule	E. S. T.	Time later (+) or earlier (-) than EST; see 'A'
Amateur Signals	77-75	3.9-4				
RW15	70.2	4.27	Khabarovsk, U. S. S. R.	S-M-T-W-T-F-S	1-9 A. M.	+14 Hours
HVJ	50.2	5.97	Vatican City	S-M-T-W-T-F-S	2-2.15 P. M.	+ 6 "
RW49	50.0	6.00	Moscow, U. S. S. R.	S-M-T-W-T-F-S	3-5 P. M.	+ 7 "
COC	49.9	6.01	Havana, Cuba	S-M-T-W-T-F-S	5-7 P. M.	0 "
DJC	49.8	6.02	Berlin, Germany	*S-M-T-W-T-F-S	P. M.: 2-4.30 and 9-12	+ 6 "
W4XB	49.6	6.04	Miami, Florida, U. S. A.	S-M-T-W-T-F-S	4 P. M.-1 A. M.	0 "
GSA	49.5	6.05	London, England	*S-M-T-W-T-F-S	2.45-5.45 and 6-8 P. M.	+ 5 "
W3XAU	49.5	6.06	Philadelphia, Pennsylvania, U. S. A.	S-M-T-W-T-F-S	8 P. M.-1 A. M.	0 "
W8XAL	49.5	6.06	Cincinnati, Ohio, U. S. A.	S-M-T-W-T-F-S	12-1.30 and 6.30-9.30 A. M. P. M.: 1.30-3.30 and 6-12	0 "
VQ7LO	49.5	6.06	Nairobi, Kenya, Africa	S-M-T-W-T-F-S	11 A. M.-2 P. M.	+ 8 "
UOR2	49.4	6.07	Vienna, Austria	Irregular	Irregular	+ 6 "
YV5BMO	49.4	6.07	Maracaibo, Venezuela	S-M-T-W-F-S	5.30-10.30 P. M.	+32 Mins.
W9XAA	49.3	6.08	Chicago, Illinois, U. S. A.	Sunday	11.30 A. M.-9.15 P. M.	- 1 Hour
OXY	49.2	6.09	Copenhagen, Denmark	S-M-T-W-T-F-S	2-6 P. M.	+ 6 "
VE9GW	49.2	6.09	Toronto, Canada	S-M-T-W-T-F-S	3-11 P. M.	0 "
CP5	49.2	6.09	La Paz, Bolivia	M-T-W-T-F-S	6.30-7.30 and 9-11.30 P. M.	+1½ "
W9XF	49.2	6.10	Chicago, Illinois, U. S. A.	S-M-T-W-T-F	12-2 A. M. P. M.: 4.30-8 and 9.30-12	- 1 "
W3XAL	49.2	6.10	New York City, U. S. A.	Saturday	5.30-12 Midnight	0 "
YV1RC	49.1	6.11	Caracas, Venezuela	S-M-T-W-T-F-S	10.30 A. M.-1 P. M. 5.15-10 P. M.	+32 Mins.
VE9HX	49.1	6.11	Halifax, N. S.	S-M-T-W-T-F-S	9.30-12 M. and 5-11 P. M.	+ 1 "
ZTJ	49.0	6.12	Johannesburg, Africa	S-M-T-W-T-F-S	4-6 and 8-10.30 A. M. 11 A. M.-3.30 P. M.	+ 7 Hours
W2XE	49.0	6.12	New York City, U. S. A.	S-M-T-W-T-F-S	6-11 P. M.	0 "
W8XK	48.9	6.14	Pittsburgh, Pennsylvania, U. S. A.	S-M-T-W-T-F-S	4.30-12 Midnight	0 "
YV3BC	48.7	6.16	Caracas, Venezuela	S-M-T-W-T-F-S	4.30-10 P. M.	+32 Mins.
HJ1ABB	46.5	6.45	Barranquilla, Colombia	S-M-T-W-T-F-S	12-1 and 7.30-10 P. M.	0 Hours

49 METER BAND

See footnotes on Page 12



Short-Wave Stations (46-25 Meters) and Broadcasting Schedule

Station	Wave- Length (Meters)	Freq. in Mega- cycles	LOCATION	Schedule	E. S. T.	Time later (+) or earlier (-) than EST; see 'A'
PRADO Amateur	45.3 42.9- 41.1	6.60 7.0- 7.3	Riobamba, Ecuador Mostly Code	Thursday	8-11 P. M.	- 14 Mins.
HBP	38.5	7.80	Geneva, Switzerland	Saturday	5.30-6.15 P. M.	+ 6 Hours
CNR	37.3	8.04	Rabat, Morocco, Africa	Sunday	2.30-5 P. M.	+ 5 "
PSK	36.6	8.18	Rio de Janeiro, Brazil	S-M-T-W-T-F-S	7-7.30 P. M.	+ 2 "
GSB	31.5	9.51	London, England	*S-M-T-W-T-F-S	1.30-3.30 A. M. 11-1 and 1.15-5.45 P. M.	+ 5 "
VK3ME	31.5	9.51	Melbourne, Australia	Wed. and Sat.	5-7 A. M.	+15 "
W2XAF	31.5	9.53	Schenectady, New York, U. S. A.	S-M-T-W-T-F-S	7.45-11 P. M.	0 "
DJA	31.4	9.56	Berlin, Germany	*S-M-T-W-T-F-S	8-11 A. M. 4.15-7.30 P. M.	+ 6 "
W1XAZ	31.4	9.57	Springfield, Massachusetts, U. S. A.	S-M-T-W-T-F-S	7 A. M.-1 A. M.	0 "
GSC	31.3	9.58	London, England	*S-M-T-W-T-F-S	6-8 P. M.	+ 5 "
VK2ME	31.3	9.59	Sydney, Australia	Sunday	1-2 and 3-8.30 A. M. 10.30-11.30 A. M.	+15 "
CT1AA	31.3	9.59	Lisbon, Portugal	Tues. and Fri.	4.30-7 P. M.	+ 5 "
HBL	31.3	9.59	Geneva, Switzerland	Saturday	5.30-6.15 P. M.	+ 6 "
W3XAU	31.3	9.59	Philadelphia, Pennsylvania, U. S. A.	S-M-T-W-T-F-S	12 M.-6 P. M.	0 "
XETE	31.3	9.60	Mexico City, Mexico	S-M-T-W-T-F-S	8-10 P. M.	- 1 "
J1AA	30.5	9.75	Tokio, Japan	Irregular	Early A. M.	+14 "
EAQ	30.4	9.85	Madrid, Spain	S-M-T-W-T-F-S	5.30-7 P. M.	+ 5 "
FYA	25.7	11.70	Paris, France	S-M-T-W-T-F-S	P. M.: 3-6 and 6.15-12.00	+ 4 "
VE9JR	25.6	11.72	Winnipeg, Canada	M-T-W-T-F-S	8-11.30 P. M.	- 1 Hour
PHI	25.6	11.73	Huizen, Holland	S-M-W-F-S	7.30-10 A. M.	+ 5 1/3 "
GSD	25.5	11.75	London, England	*S-M-T-W-T-F-S	1.15-3.15 A. M. 1.15-2.45 P. M.	+ 5 "
DJD	25.5	11.76	Berlin, Germany	*S-M-T-W-T-F-S	P. M.: 2-4.30 and 9-12	+ 6 "
W2XE	25.4	11.83	New York City, U. S. A.	S-M-T-W-T-F-S	2-4 P. M.	0 "

31 METER BAND

25 METER BAND

See footnotes on Page 12



Short-Wave Stations (25-16 Meters) and Broadcasting Schedule

	Station	Wave- Length (Meters)	Freq. in Mega- cycles	LOCATION	Schedule	E. S. T.	Time later (+) or earlier (-) than EST; see 'A'
26 METER BAND CONT'D	I2 RO	25.4	11.81	Rome, Italy.....	S-M-T-W-T-F-S	11.15 A. M.-12.30 P. M. 1.15-6 P. M.	+ 6 Hours
	GSE	25.3	11.86	London, England.....	*S-M-T-W-T-F-S	9 A. M.-1 P. M.	+ 5 "
	W8XK	25.3	11.87	Pittsburgh, Pennsylvania, U. S. A.....	S-M-T-W-T-F-S	4.30-10 P. M.	0 "
	FYA	25.2	11.90	Paris, France.....	S-M-T-W-T-F-S	11.15 A. M.-2.15 P. M. 3-6 P. M.	+ 4 Hours 51 Mins.
19 METER BAND	RW5O	25.2	12.00	Moscow, U. S. S. R.....	Irregular	Irregular	+ 7 Hours
	CNR	23.4	12.83	Rabat, Morocco, Africa.....	Sunday	7.30-9 A. M.	+ 5 "
	HVJ	19.8	15.12	Vatican City.....	S-M-T-W-T-F-S	5-5.15 A. M.	+ 6 "
	GSF	19.8	15.14	London, England.....	*S-M-T-W-T-F-S	7-11 A. M. and 3-5.30 P. M.	+ 5 "
	DJB	19.7	15.20	Berlin, Germany.....	*S-M-T-W-T-F-S	12.45-2 and 8-10 A. M.	+ 6 "
	W8XK	19.7	15.21	Pittsburgh, Pennsylvania, U. S. A.....	S-M-T-W-T-F-S	10 A. M.-4.15 P. M.	0 "
	FYA	19.7	15.24	Paris, France.....	S-M-T-W-T-F-S	8-11 A. M.	+ 4 Hours 51 Mins.
16 METER BAND	W2XE	19.6	15.27	New York City, U. S. A.....	S-M-T-W-T-F-S	11 A. M.-1 P. M.	0 Hours
	W2XAD	19.6	15.33	Schenectady, New York, U. S. A.....	S-M-W-F	2.30-3.30 P. M.	0 "
	GSG	16.9	17.77	London, England.....	*S-M-T-W-T-F-S	7-8.30 A. M.	+ 5 "
	W3XAL	16.9	17.78	New York City, U. S. A.....	S-M-T-W-T-S	11 A. M.-5 P. M.	0 "

NOTE A—The time in each country listed is the number of hours later (+) or earlier (-), than E. S. T. For instance, "+14" occurs opposite "Khabarovsk, U. S. S. R." There it is 14 hours later than in the Eastern Standard Time Zone. Hence if it is 7 P. M. by Eastern Standard Time, it is 9 A. M. the next day in Khabarovsk. Add 1 hour more to determine each "+" time from Central Standard Time; 2 hours from Mountain Standard Time; and 3 hours from Pacific Standard Time. Where the time differential is preceded by "-", subtract 1 hour less for C. S. T., 2 less for M. S. T., 3 less for P. S. T.

* Station operates on a slightly different schedule during the summer months. In general, schedules will be shifted one hour earlier during the period affected—such changes may be obtained most reliably through station announcement and may be noted upon the chart.

** Station operates irregularly at present—schedule shown should therefore be regarded as approximate.



When the Atmospherics Interfere with Domestic Reception

When atmospheric conditions render regular reception bad, tune in your favorite station's short-wave "companion station." If the same program is being broadcast on the international short waves, you'll get it clearly.

Standard U. S. Stations			Their Short-Wave Companions			
Station	Frequency (kc.)	Location	Station	Wave-Length (meters)	Frequency (kc.)	Location
KDKA	980	Pittsburgh, Pa.	W8XK	19.71 25.25 48.83	15210 11870 6140	Saxonburg, Pa.
WABC	860	New York, N. Y.	W2XE	25.32 48.99	11840 6120	Wayne, N. J.
WEEI	590	Boston, Mass.	WIXAL	49.67	6040	Boston, Mass.
CRCT	6095	Toronto, Can.	VE9GW	49.22	6095	Bowmanville, Ontario, Can.
WBZ	990	Boston, Mass.	W1XAZ	31.33	9570	Millis, Mass.
WBZA	990	Springfield, Mass.				
WCAU	1170	Philadelphia, Pa.	W3XAU	31.26 49.48	9590 6060	Newtown Sq. Pa.

Standard U. S. Stations			Their Short-Wave Companions			
Station	Frequency (kc.)	Location	Station	Wave-Length (meters)	Frequency (kc.)	Location
WCFL	970	Chicago, Ill.	W9XAA	49.31	6080	Chicago, Ill.
WENR	870	Chicago, Ill.	W9XF	49.15	6100	Downer's Grove, Ill.
WGY	790	Schenectady, N. Y.	W2XAD W2XAF	19.55 31.46	15340 9530	Schenectady, N. Y.
WIOD	1300	Miami, Florida	W4XB	49.67	6036	Miami Beach, Florida
WJZ	760	New York, N. Y.	W3XAL	16.87 49.15	17772 6100	Boundbrook, N. J.
WLW	700	Cincinnati, O.	W8XAL	49.48	6060	Mason, Ohio

(Courtesy "Radex")

Note—Current short-wave information may be obtained from the Electrical Equipment Division, Bureau of Foreign and Domestic Commerce, Department of Commerce, Washington, D. C., U. S. A.



Alphabetical Listing of Standard U. S. Broadcasting Stations ★

Station	Location	Kilo-cycles
WAAM	Newark, N. J.	1250
WABC	New York City, N. Y.	860
WBOQ	New York City, N. Y.	860
WADC	Tallmadge, Ohio	1320
WAPI	Birmingham, Ala.	1140
WAVE	Louisville, Ky.	940
WBAK	Harrisburg, Pa.	1430
WBAL	Baltimore, Md.	1060
WBAP	Fort Worth, Texas	800
WBBM	Chicago, Ill.	770
WBRR	Brooklyn, N. Y.	1300
WBEN	Buffalo, N. Y.	900
WBIG	Greensboro, N. C.	1440
WBRC	Birmingham, Ala.	930
WBT	Charlotte, N. C.	1080
WBZ	Boston, Mass.	990
WBZA	Boston, Mass.	990
WCAE	Pittsburgh, Pa.	1220
WCAI	Northfield, Minn.	1250
WCAU	Philadelphia, Pa.	1170
WCBD	Zion, Ill.	1080
WCCO	Minneapolis, Minn.	810
WCFL	Chicago, Ill.	970
WCKY	Covington, Ky.	1490
WCOC	Meridian, Miss.	880
WCSS	Portland, Maine	940
WDAE	Tampa, Fla.	1220
WDAF	Kansas City, Mo.	610
WDAG	Amarillo, Texas	1410
WDAY	Fargo, N. D.	940
WDGY	Minneapolis, Minn.	1180
WDOD	Chattanooga, Tenn.	1280
WDRS	Hartford, Conn.	1330
WDSU	New Orleans, La.	1250
WEAF	New York City, N. Y.	660
WEBC	Superior, Wis.	1290
WEEI	Boston, Mass.	590
WEEU	Reading, Pa.	830
WENR	Chicago, Ill.	870
WESG	Elmira, N. Y.	1040
WEW	St. Louis, Mo.	760
WFAA	Dallas, Texas	800

Station	Location	Kilo-cycles
WFAB	New York City, N. Y.	1300
WFBL	Syracuse, N. Y.	1360
WFBM	Indianapolis, Ind.	1230
WGAR	Cleveland, Ohio	1450
WGES	Chicago, Ill.	1360
WGN	Chicago, Ill.	720
WGR	Buffalo, N. Y.	550
WGY	Schenectady, N. Y.	790
WHA	Madison, Wis.	940
WHAM	Rochester, N. Y.	1150
WHAS	Louisville, Ky.	820
WHDH	Boston, Mass.	830
WHK	Cleveland, Ohio	1390
WHP	Harrisburg, Pa.	1430
WIBA	Madison, Wis.	1280
WIBW	Topeka, Kan.	580
WILL	Urbana, Ill.	890
WIND	Gary, Ind.	560
WIOD	Miami, Fla.	1300
WMBF	Miami, Fla.	1300
WIS	Columbia, S. C.	1010
WJAG	Norfolk, Nebr.	1060
WJAS	Pittsburgh, Pa.	1290
WJAX	Jacksonville, Fla.	900
WJDX	Jackson, Miss.	1270
WJJD	Chicago, Ill.	1130
WJR	Detroit, Mich.	750
WJSV	Alexandria, Va.	1460
WJZ	New York City, N. Y.	760
WKAQ	Porto Rico	1240
WKAR	E. Lansing, Mich.	1040
WKBH	La Crosse, Wis.	1380
WKBW	Buffalo, N. Y.	1480
WKY	Oklahoma City, Okla.	900
WKZO	Kalamazoo, Mich.	590
WLAC	Nashville, Tenn.	1470
WLB	Minneapolis, Minn.	1250
WLBL	Stevens Point, Wis.	900
WLBW	Erie, Pa.	1260
WLS	Chicago, Ill.	870
WLW	Cincinnati, Ohio	700
WLWL	New York City, N. Y.	1100

Station	Location	Kilo-cycles
WMAQ	Chicago, Ill.	670
WMBD	Peoria, Ill.	1440
WMBI	Chicago, Ill.	1080
WMC	Memphis, Tenn.	780
WMT	Waterloo, Iowa	600
WNAO	Boston, Mass.	1230
WNAO	Yankton, S. D.	570
WNEW	Newark, N. J.	1250
WNOX	Knoxville, Tenn.	560
WNOI	San Antonio, Texas	1190
WOC	Des Moines, Iowa	1000
WHO	Des Moines, Iowa	1000
WODA	Paterson, N. J.	1250
WOI	Ames, Iowa	640
WOQ	Kansas City, Mo.	1300
WOR	Newark, N. J.	710
WORK	York, Pa.	1000
WOSU	Columbus, Ohio	570
WOW	New York City, N. Y.	1130
WOW	Omaha, Nebr.	590
WOWO	Fort Wayne, Ind.	1160
WPG	Atlantic City, N. J.	1100
WPTF	Raleigh, N. C.	680
WOAM	Miami, Fla.	560
WREO	Memphis, Tenn.	600
WREN	Lawrence, Kans.	1220
WRHM	Minneapolis, Minn.	1250
WRUF	Alexandria, Va.	830
WRVA	Richmond, Va.	1110
WSAI	Cincinnati, Ohio	1330
WSAZ	Huntington, W. Va.	1190
WSB	Atlanta, Ga.	740
WSM	Nashville, Tenn.	650
WSPD	Toledo, Ohio	1340
WTAM	Cleveland, Ohio	1070
WTAQ	Eau Claire, Wis.	1330
WTIC	Hartford, Conn.	1060
WTMJ	Milwaukee, Wis.	620
WWJ	Detroit, Mich.	920
WWL	New Orleans, La.	850
WWNC	Asheville, N. C.	570
WWVA	Wheeling, W. Va.	1160

Station	Location	Kilo-cycles
WXYZ	Detroit, Mich.	1240
KDKA	Pittsburgh, Pa.	980
KDYL	Salt Lake City, Utah	1290
KECA	Los Angeles, Calif.	1430
KEX	Portland, Oregon	1180
KFAB	Lincoln, Nebr.	770
KFAC	Los Angeles, Calif.	1300
KFBB	Great Falls, Mont.	1280
KFBI	Abilene, Kans.	1050
KFDM	Beaumont, Texas	560
KFDY	Brookings, S. D.	550
KFEQ	St. Joseph, Mo.	680
KFH	Wichita, Kans.	1300
KFI	Los Angeles, Calif.	640
KFKA	Greeley, Col.	880
KFNF	Shenandoah, Iowa	890
KFOX	Long Beach, Calif.	1250
KFPY	Spokane, Wash.	1340
KFRS	San Francisco, Calif.	610
KFRS	San Diego, Calif.	600
KFUO	Clayton, Mo.	550
KFWB	Hollywood, Calif.	950
KFYR	Bismarck, N. D.	550
KGA	Spokane, Wash.	1470
KGB	San Diego, Calif.	1330
KGBZ	York, Nebr.	930
KGER	Long Beach, Calif.	1360
KGGF	Coffeyville, Kans.	1010
KGHL	Billings, Mont.	950
KGIR	Butte, Mont.	1360
KGO	San Francisco, Calif.	790
KGRS	Amarillo, Texas	1410
KGU	Honolulu, Hawaii	750
KGW	Portland, Oregon	620
KHJ	Los Angeles, Calif.	900
KHQ	Spokane, Wash.	950
KIDO	Boise, Idaho	1350
KJR	Seattle, Wash.	970
KLRA	Little Rock, Ark.	1390
KLX	Oakland, Calif.	880
KLZ	Denver, Col.	560
KMA	Shenandoah, Iowa	930

*1,000 watts and over



Station	Location	Kilo-cycles
KMBC	Kansas City, Mo.	950
KMMJ	Clay Center, Nebr.	740
KMOX	St. Louis, Mo.	1090
KNX	Los Angeles, Calif.	1050
KOA	Denver, Col.	830
KCAC	Corvallis, Ore.	550
KOB	Albuquerque, N. M.	1180
KOIL	Kouncil Bluffs, Iowa	1260
KOIN	Portland, Oregon	940
KOL	Seattle, Wash.	1270
KOMA	Oklahoma City, Okla.	1480
KOMO	Seattle, Wash.	920
KOY	Phoenix, Ariz.	1390
KPO	San Francisco, Calif.	680
KPRC	Houston, Texas	920
KRLD	Dallas, Texas	1040
KROW	Oakland, Calif.	930
KSAC	Manhattan, Kans.	580
KSCJ	Sioux City, Iowa	1330
KSL	Salt Lake City, Utah	1130
KSOO	Sioux Falls, S. D.	1110
KSTP	St. Paul, Minn.	1460
KTAB	San Francisco, Calif.	560
KTAR	Phoenix, Ariz.	620
KTAT	Fort Worth, Texas	1240
KTBS	Shreveport, La.	1450
KTFI	W. Twin Falls, Idaho	1240
KTHS	Hot Springs National Park, Ark.	1040
KTM	Los Angeles, Calif.	780
KTSA	San Antonio, Texas	1290
KTW	Seattle, Wash.	1220
KUOA	Fayetteville, Ark.	1260
KVOO	Tulsa, Okla.	1140
KVOR	Colorado Springs, Col.	1270
KWK	St. Louis, Mo.	1350
KWKH	Shreveport, La.	850
KWSC	Pullman, Wash.	1220
KYA	San Francisco, Calif.	1230
KYW	Chicago, Ill.	1020

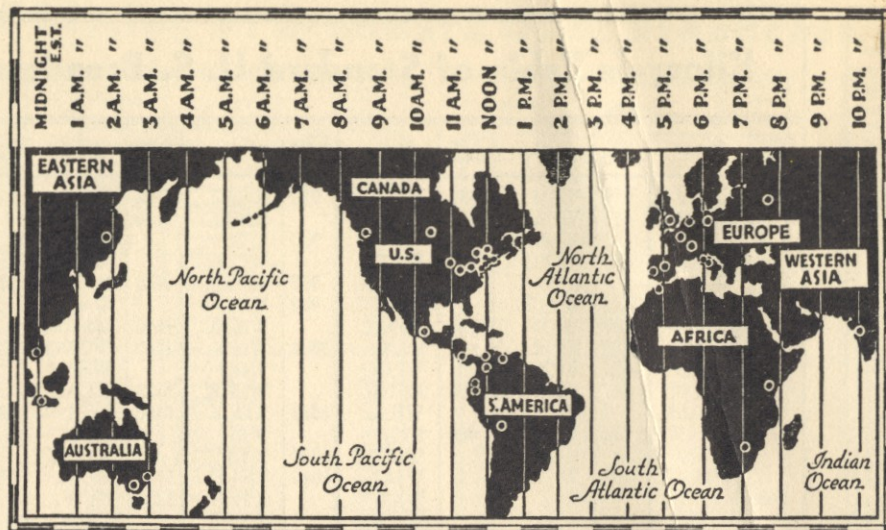
*1,000 watts and over

Kilocycle Table of Standard U. S. Broadcasting Stations ★

Kilo-cycles	Station	Kilo-cycles	Station	Kilo-cycles	Station	Kilo-cycles	Station	Kilo-cycles	Station	Kilo-cycles	Station	Kilo-cycles	Station
550	KFDY	650	WSM	830	WRUF	950	KGHL	1110	WRVA	1250	WLB	1340	KFPY
	KFBU	660	WEAF	850	KWKH		KMBC	1130	KSL		WNEW		WSPD
	KFYR	670	WMAQ		WWL	970	KJR		WJJD		WODA	1350	KIDO
	KOAC	680	KFEQ	860	WABC		WCFL		WOV		WRHM		KWK
	WGR		KPO	870	WENR	980	KDKA	1140	KVOO	1260	KOIL	1360	KGER
560	KFDM		WPTF		WLS	990	WBZ		WAPI		KUOA		KGIR
	KLZ	700	WLW	880	KFKA		WBZA	1150	WHAM		WLBW		WFLB
	KTAB	710	WOR		KLX	1000	WHO	1160	WOWO	1270	KOL		WGES
	WIND	720	WGN		WCOC		WOC		WWVA		KVOR	1380	WKBH
	WNOX	740	KMMJ	890	KFNF		WORK	1170	WCAU		WJDX	1390	KLRA
	WQAM		WSB		WILL	1010	KGGF	1180	KEX	1280	KFBB		KOY
570	WNAX	750	WJR	900	KHJ		WIS		KOB		WDOD		WHK
	WOSU		KGU		WBEN	1020	KYW		WDGY		WIBA	1410	KGRS
	WWNC	760	WEW		WJAX	1040	KRLD	1190	WOAI	1290	KDYL		WDAG
580	KSAC		WJZ		WKY		KTBS	1220	KTW		KTSA	1430	KECA
	WIBW		WBAL		WLBL		WESG		KWSC		WIBC		WBAK
590	KHQ	770	KFAB	920	KOMO		WKAR		WCAE	1300	WJAS		WHP
	WEEI		WBBM		KPRC	1050	KFBI		WDAE		KFAC	1440	WBG
	WKZO	780	KTM		WWJ		KNX		WREN		KFH		WMBD
	WOW		WMC		KBZ	1060	WBAL	1230	KYA		WBBR	1450	KTBS
600	KFSD	790	KGO	930	KGBZ		WJAG		WFBM		WFAB		WGAR
	WREC		WGY		KMA		WTIC		WNAC		WIOD	1460	KSTP
610	KFRC	800	WBAP		KROW	1070	WTAM	1240	KTAT		WMBF		WJSV
	WDAF		WFAA	940	WBRC	1080	WBT		KTFI		WOQ	1470	KGA
620	KGW	810	WCCO		KOIN		WCBD		WKAQ	1320	WADC		WLAC
	KTAR	820	WHAS		WAVE		WMBI		WXYZ	1330	KGB	1480	KOMA
	WTMJ	830	KOA		WCSH	1090	KMOX	1250	KFOX		KSCJ		WKBW
640	KFI		WEEU		WDAY	1100	WLWL		WAAM		WDRG	1490	WCKY
	WOI		WHDH	950	WHA		WPG		WCAL		WSAI		
					KFWB	1110	KSOO		WDSU		WTAQ		



Time Around the World

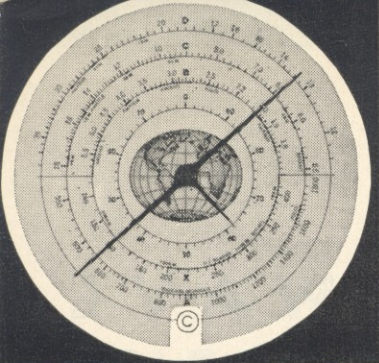


**FOR BEST WORLD RECEPTION, INSTALL AN
RCA WORLD-WIDE ANTENNA SYSTEM
and USE RCA RADIO TUBES**



**RCA Victor Co.
Inc.
Camden, N. J.**

Form 8833 txa djh



RCA VICTOR

Globe Trotter

"PERSONALOG"

For use when operating the Globe Trotters which employ the Small—Vernier—Pointer

Nation and City	Station	Mega-cycles	Scale	Small Pointer
Africa				
Johannesburg	ZTJ	6.12		
Australia				
Melbourne	VK3ME	9.51		
Sydney	VK2ME	9.59		
Austria				
Vienna	UOR2	6.07		
Bolivia				
La Paz	CP5	6.08		
Brazil				
Rio de Janeiro	PSK	8.18		
Canada				
Toronto	VE9GW	6.09		
Winnipeg	VE9JR	11.72		
Colombia				
Barranquilla	HJ1ABB	6.45		
Cuba				
Havana	COC	6.01		
Denmark				
Copenhagen	OXY	6.09		
Ecuador				
Riobamba	PRADO	6.60		
England				
London	GSA	6.05		
"	GSB	9.51		
"	GSC	9.58		
"	GSD	11.75		
"	GSE	11.86		
"	GSF	15.14		
"	GSG	17.77		
France				
Paris	FYA	11.70		
"	"	11.90		
"	"	15.24		
Germany				
Berlin	DJA	9.56		
"	DJB	15.20		
"	DJC	6.02		
"	DJD	11.76		
Holland				
Huizen	PHI	11.73		
Italy				
Rome	I2RO	11.81		
Japan				
Tokio	J1AA	9.75		

Nation and City	Station	Mega-cycles	Scale	Small Pointer
Kenya (Africa)				
Nairobi	VQ7LO	6.06		
Mexico				
Mexico City	XETE	9.60		
Morocco				
Rabat	CNR	8.04		
"	"	12.83		
Nova Scotia				
Halifax	VE9HX	6.11		
Portugal				
Lisbon	CT1AA	9.59		
Spain				
Madrid	EAQ	9.85		
Switzerland				
Geneva	HBP	7.80		
"	HBL	9.59		
U. S. A.				
Boston	W1XAL	6.04		
Chicago	W9XAA	6.08		
"	W9XF	6.10		
Cincinnati	W8XAL	6.06		
Miami	W4XB	6.04		
New York City	W2XE	6.12		
"	"	11.83		
"	"	15.27		
"	W3XAL	17.78		
"	"	6.10		
Philadelphia	W3XAU	9.59		
"	"	6.06		
Pittsburgh	W8XK	6.14		
"	"	11.87		
"	"	15.21		
Schenectady	W2XAD	15.33		
"	W2XAF	9.53		
Springfield, Mass.	W1XAZ	9.57		
U. S. S. R.				
Khabarovsk	RW15	4.27		
Moscow	RW49	6.00		
"	RW50	12.00		
Vatican City				
"	HVJ	5.97		
"	"	15.12		
Venezuela				
Caracas	YV1RC	6.11		
"	YV3BC	6.16		
Maracaibo	YV5BMO	6.07		

In the "Scale" column, write the scale letter "B" or "C," etc., on which the station megacycle reading is found. (One megacycle equals 1000 kilocycles; thus, VK3ME (above) broadcasts on 9.51 megacycles or 9510 kilocycles.)

Bring the long needle as closely as possible to the station megacycle reading; then complete tuning with the small pointer on the smallest, inner scale. Mark this reading under the heading "Small Pointer" for future reference. The small Vernier pointer "magnifies" the action of the long needle, traveling several inches around its dial, while the long needle covers a fraction of an inch.

Important: Due to the extreme accuracy of the small pointer, the readings will change as the set warms up unless it is allowed to operate for a quarter of an hour or so, before tuning short waves.

THE PERFECT COMBINATION

for ALL-WAVE
ENTERTAINMENT

1

RCA VICTOR *Globe Trotter* RADIO

Only an RCA VICTOR All-Wave Globe Trotter provides the famous six points of RCA Victor superiority, producing easy and accurate tuning, greatest tone fidelity, selectivity, sensitivity, durability—in fact, producing maximum Globe Trotting Pleasure!

2

RCA *World Wide* ANTENNA SYSTEM

The fascination of tuning in colorful distant lands requires also a superb aerial. The RCA World-Wide Antenna System eliminates the "man-made" interference and produces pure, and purely enjoyable, reception around the earth.

3

AROUND THE WORLD IN YOUR ARMCHAIR

The new tuning technique required by Globe Trotter operation is made marvelously simple in "Around the World in Your Armchair." This Short-wave Log and Hand Book gives complete, up-to-date data on leading short-wave stations of the World. With this book by your radio, supplemented by your Personalog, you have all the material you need to understand and get the most from radio-touring the globe!



"All-Wave" Receiver

Eight-Tube, Four-Band, A-C Superheterodyne

—OPERATING INSTRUCTIONS—

Electrical Specifications

Circuit—Superheterodyne with automatic volume control and push-pull power stage.

Tuning Range—140 to 410 and 540 to 18,000 kilocycles, as follows:

Band	Limits (kc)	Services
X	140-410	Weather Repts.—Europ. Broadcast.
A	540-1720	Standard Broadcast—Police
B	1720-5400	Police—Aviation—Amateur
C	5400-18000	S-W Broadcast—Amateur

Tubes—RCA-6D6 (2), RCA-6A7 (1), RCA-76 (1), RCA-75 (1), RCA-42 (2), RCA-5Z3 (1). See diagram on label inside cabinet for locations of tubes, tube shields and grid-cap wires.

Power Rating—See rating symbol on chassis.

Symbol	Voltage	Frequency (cycles)
A	105-125	50-60
B	105-125	25-60
C	100-130/195-250	50-60

As shipped from factory, "A" and "B" models are connected for 115-125 volts (chassis fuse in "120"-volt position). With either of these models, therefore, shift fuse to "110"-volt position if local voltage is between 100 and 115. *Remove power cord plug from outlet before handling fuse.*

All sets rated "C" are connected at factory for 225-250 volts unless prominently specified otherwise on chassis. Such instruments can be converted by dealer for operation at 100-117, 117-130 or 195-225 volts when required. *Do not disturb position of chassis fuse in this model.*

Failure of instrument to operate may indicate that fuse is burned out, particularly so if dial remains unlighted. In such cases, examine fuse and replace with another of same rating (3 amperes) if original is found defective. Obtain replacement fuses from your dealer.

Antenna Requirements

For short-wave reception, a good antenna installation is very important. The recently-developed *double-doublet* antenna system, now available as an accessory kit (Stock No. 9500), is scientifically correct to insure maximum signal strength and least interference and is quickly convertible for use at frequencies below as well as within the short-wave spectrum. It is easily installed, neat in appearance and inexpensive. Ask your dealer for details.

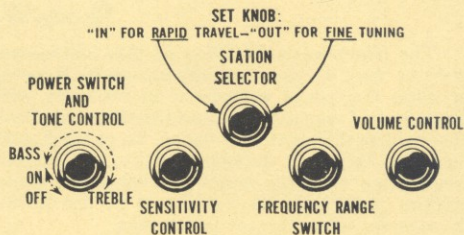
As an alternative, two antennas of the conventional type are recommended—one for Bands X, A and B and the other for Band C. The former should be 50-100 feet long and the short-wave antenna 24-29 feet long, these measurements including the respective lead-in wires. It is important, especially so for the shorter antenna, to erect the span at right-angles to and as far as possible from local sources of electrical-noise interference such as power lines, street railways, passing automobiles and motor-driven household appliances.

Two terminals are provided on rear of chassis for connections to antenna and ground. For best results, the ground wire should be as short as possible and fastened securely either to a water pipe in the basement or to an external metallic stake driven five to eight feet into the soil.

Operation

1. Turn power *on* and allow a few seconds for heating of tubes.

2. Set Range Switch so that band letter visible through small opening in dial corresponds to that frequency scale which includes the desired station or tuning range. The short-wave



broadcast bands are identified on Scale C by their nominal wavelengths (as an example, "49M" denotes the 49-meter band). Use the Short-Wave Station List and Program Schedule as a reference guide.

3. Advance Volume Control (clockwise) until background noise (static) is heard.

4. Rotate Station Selector to setting where pointer indicates the assigned frequency of desired station and proceed to tune receiver accurately for best quality of reproduction. Tune slowly through the short-wave bands, preferably with Station Selector knob pulled forward to engage the *slow-speed* drive available for precise adjustments. Log settings of both main and *vernier* pointers to facilitate reception from same station at future times. Always use Volume Control—never the Station Selector—for regulating volume.

5. Adjust Tone Control for preferred tone quality—extreme clockwise for *full-range* reproduction. To emphasize *bass* or subdue static interference when excessive, turn knob counter-clockwise.

6. If several moderately-strong stations are available, silent tuning between station settings may be obtained by turning the Sensitivity Control clockwise until background noise (at any point on the dial where no station can be heard) just disappears. Obviously, weak or distant stations below the noise level will not be received after this adjustment.

7. Turn power *off* when discontinuing operation.



Short-Wave Reception

The short-wave facilities of this instrument may be used to greatest advantage by keeping in mind the usual variations in behavior with frequency of transmission and the time standards observed at different longitudes. In general, such reception is most satisfactory at the highest frequencies when the major portion of the transmission path is in daylight, and at the lowest frequencies when the reverse is true.

Unreliable service from distant short-wave stations ordinarily is attributable either to fading or to the so-called "skip effect" encountered when the sky wave is reflected back to earth at a point beyond the radius of the local or ground wave. The latter component travels a relatively short and uniform distance (perhaps 35 miles at

19 meters and 75 miles at 49 meters) whereas the return point of the sky wave is extremely variable, increasing in distance from the transmitter from day to night and from summer to winter as well as with frequency. Obviously, reception in the intervening or "skip-distance" region will be either impossible or very erratic, such conditions existing usually over a range of from 25 to 400 miles at 49 meters and from 400 miles to infinity at 19 meters.

The program schedules listed on the accompanying chart are given with respect to both Eastern Standard and Greenwich Mean times, either of which is readily convertible to time standards observed at other longitudes.



"All-Wave" Receiver

Six-Tube, Three-Band, A-C Superheterodyne

— OPERATING INSTRUCTIONS —

Electrical Specifications

Circuit—Superheterodyne with automatic volume control.

Tuning Range—540 to 18,000 kilocycles, as follows:

Band	Limits (kc)	Services
A	540-1720	Standard Broadcast—Police
B	1720-5400	Police—Aviation—Amateur
C	5400-18000	S-W Broadcast—Amateur

Tubes—RCA-6D6 (2), RCA-6A7 (1), RCA-6B7 (1), RCA-41 (1), RCA-80 (1). See diagram on label inside cabinet for locations of tubes, tube shields and grid-cap wires.

Power Rating—See rating symbol on chassis.

Symbol	Voltage	Frequency (cycles)
A	105-125	50-60
B	105-125	25-60
C	100-130/195-250	50-60

As shipped from factory, Rating C instruments are connected for 225-250 volts unless prominently specified otherwise on chassis. Such instruments may be converted by dealer for operation at 100-117, 117-130 or 195-225 volts when required.

Antenna Requirements

For short-wave reception, a good antenna installation is very important. The recently-developed *double-doublet* antenna system, now available as an accessory kit (Stock No. 9500), is scientifically correct to insure maximum signal strength and least interference and is quickly convertible for use at frequencies below as well as within the short-wave spectrum. It is easily installed, neat in appearance and inexpensive. Ask your dealer for details.

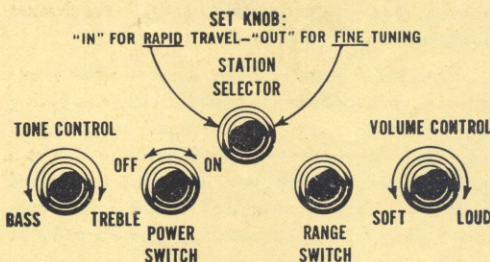
As an alternative, two antennas of the conventional type are recommended—one for the two lower-frequency bands (A and B) and the other for band C. The former should be 50-100 feet long and the short-wave antenna 24-29 feet long, these measurements including the respective lead-in wires. It is important, especially so for the shorter antenna, to erect the span at right-angles to and as far as possible from local sources of electrical-noise interference such as power lines, street railways, passing automobiles and motor-driven household appliances.

Two terminals are provided on rear of chassis for connections to antenna and ground. For best results, the ground wire should be as short as possible and fastened securely either to a water pipe in the basement or to an external metallic stake driven five to eight feet into the soil.

Operation

1. Turn power *on*, allow a few seconds for heating of tubes and advance Volume Control (clockwise) until background noise (static) is heard.

2. Set Range Switch so that band letter visible through small opening in dial corresponds to that frequency scale which includes the desired station or tuning range. The short-wave



broadcast bands are identified on Scale C by their nominal wavelengths (as an example, "49M" denotes the 49-meter band). Use the Short-Wave Station List and Program Schedule as a reference guide.

3. Rotate Station Selector to setting where pointer indicates the assigned frequency of desired station and proceed to tune receiver accurately for best quality of reproduction. Tune slowly through the short-wave bands, preferably with Station Selector knob pulled forward to engage the *slow-speed* drive available for precise adjustments. Always use Volume Control—never the Station Selector—for regulating volume.

4. Adjust Tone Control for preferred tone quality—extreme clockwise for *full-range* reproduction. To emphasize *bass* or subdue static interference when excessive, turn knob counter-clockwise.

5. Turn power *off* when discontinuing operation.



Short-Wave Reception

The short-wave facilities of this instrument may be used to greatest advantage by keeping in mind the usual variations in behavior with frequency of transmission and the time standards observed at different longitudes. In general, such reception is most satisfactory at the highest frequencies when the major portion of the transmission path is in daylight, and at the lowest frequencies when the reverse is true.

Unreliable service from distant short-wave stations ordinarily is attributable either to fading or to the so-called "skip effect" encountered when the sky wave is reflected back to earth at a point beyond the radius of the local or ground wave. The latter component travels a relatively short and uniform distance (perhaps 35 miles at

19 meters and 75 miles at 49 meters), whereas the return point of the sky wave is extremely variable, increasing in distance from the transmitter from day to night and from summer to winter as well as with frequency. Obviously, reception in the intervening or "skip-distance" region will be either impossible or very erratic, such conditions existing usually over a range of from 25 to 400 miles at 49 meters and from 400 miles to infinity at 19 meters.

The program schedules listed on the accompanying chart are given with respect to both Eastern Standard and Greenwich Mean times, either of which is readily convertible to time standards observed at other longitudes.

