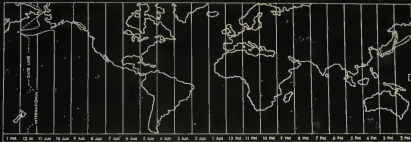


*Read Carefully*



*Know Your Zenith*

WORLD WIDE *Time* MAP

### BEST RECEPTION TABLE

BAND + MOST FAVORABLE TIME + MOST FAVORABLE DISTANCE

49M....	Night—Winter	Day—300 Miles
		Night Over 1500 Miles
31M....	Day—Late Afternoon	Over 500 Miles
	and Night—Winter	
25M....	Evenings or Late Summer	Day Under 2000 Miles
	Afternoon	Night Over 2000 Miles
19M....	Early Mornings and	Over 1500 Miles
	Summer Evenings	
14M....	Early Mornings and	Over 1500 Miles
	Summer Evenings	

## YOUR SHORT WAVE

## Radio Log

STATION	CITY	TIME	BAND	MEGACYCLES
BBC	London	.	15.2	1900
	Stockholm	1840	17.25	1000
WDR	Bonn		17.0	1000
HFE	Bonn		17.0	1000

[illegible][illegible]

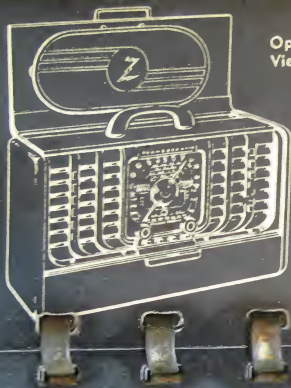


# LOG OF U.S. CLEAR CHANNEL STATIONS

(Notes: For local and regional broadcast stations refer to local newspaper listings.)

CITY AND STATE	KC	CALL
<b>Alabama</b>		
Birmingham	1070	WAPI
<b>Arkansas</b>		
Blytheville	900	KLCH
Little Rock	1010	KLBA
Hot Springs	1090	KTHS
<b>California</b>		
Los Angeles	640	KFI
Los Angeles	710	KMPC
San Jose	740	KQW
San Francisco	810	KGO
Modesto	840	KTBB
Glendale	870	KIEV
Visalia	940	KTKC
Los Angeles	1020	KFYD
Los Angeles	1070	KNL
San Francisco	1100	KJBS
Pasadena	1110	KPAS
Stockton	1140	KGOM
Sacramento	1530	KFBK
Bakersfield	1560	KPMC
San Francisco	680	KFO
<b>Colorado</b>		
Denver	850	KOA
<b>Connecticut</b>		
Hartford	1080	WTIC
<b>District of Columbia</b>		
Washington	1500	WTOP
<b>Florida</b>		
Miami	710	WFTL
Gainesville	850	WBUF
<b>Georgia</b>		
Atlanta	750	WSB
Macon	940	WMAZ
<b>Illinois</b>		
Chicago	470	WMAQ
Chicago	720	WGN
Chicago	780	WBBM
Chicago	820	WAIT
Chicago	890	WBHR
Chicago	890	WLS
Chicago	1000	WCFL
Chicago	1050	WDS
Travis	1080	WCAZ
Carthage	1110	WMBI
Chicago	1160	WJJD
Chicago	1180	WLDS
<b>Indiana</b>		
Indianapolis	1070	WIBC
Fort Wayne	1190	WOWO
<b>Iowa</b>		
Ames	640	WOI
Des Moines	1040	WHO
Waterloo	1540	KXEL
<b>Kansas</b>		
Coffeyville	490	KGGF
Pittsburg	810	KOAM
Wichita	1070	KFBI
<b>Kentucky</b>		
Henderson	860	WSON
Louisville	840	WHAS
<b>Louisiana</b>		
New Orleans	870	WWL
Shreveport	1130	KWEH
<b>Maryland</b>		
Baltimore	1090	WBAL
<b>Massachusetts</b>		
Lowell	480	WLAW
Boston	850	WHOH
Boston	1030	WBZ
Springfield	1030	WBZA
Boston	1510	WAMEX
<b>Michigan</b>		
Detroit	760	WJR
East Lansing	870	WEAS
Ann Arbor	1050	WPAG
Pontiac	1130	WCAR
<b>Minnesota</b>		
Minneapolis	770	WLB
Marshall	770	WCAL
Minneapolis	830	WCCO
Minneapolis	1130	WDGY
St. Paul	1500	KSTP
<b>Missouri</b>		
St. Joseph	480	KSHQ
St. Louis	770	WBW

CITY AND STATE	KC	CALL
Clayton	830	KFUD
Kansas City	880	WHB
St. Louis	1120	KMOX
<b>Nebraska</b>		
Omaha	660	KOWH
Grand Island	750	KAMJ
Norfolk	780	WJAG
Lincoln	1110	KFAB
<b>New Hampshire</b>		
Portsmouth	750	WHBB
<b>New Mexico</b>		
Albuquerque	770	KOB
Albuquerque	1030	KOB
<b>New York</b>		
New York	660	WEAP
New York	710	WOR
New York	770	WJZ
Schenectady	810	WGY
New York	830	WNYC
Ithaca	870	WHCU
New York	880	WABC
New York	1010	WINS
New York	1050	WHN
New York	1130	WNEW
Rochester	1180	WHAM
New York	1190	WUB
Newburgh	1220	WGNY
Buffalo	1520	WKBW
New York	1560	WQXR
<b>North Carolina</b>		
Raleigh	680	WPTF
Henderson	890	WHNC
Charlotte	1110	WBT
<b>Ohio</b>		
Akron	640	WHKK
Cincinnati	700	WLW
Columbus	820	WOSU
Cleveland	850	WJW
Cleveland	1100	WTAM
Cleveland	1220	WGAB
Cincinnati	1530	WCKY
<b>Oklahoma</b>		
Norman	440	WNAD
Tulsa	1170	KYGO
Oklahoma City	1520	KOMA
<b>Oregon</b>		
Portland	750	KXL
Portland	1080	KWJJ
Portland	1190	KEX
<b>Pennsylvania</b>		
Butler	680	WISB
Reading	850	WREU
Philadelphia	990	WIBG
Pittsburgh	1020	KDKA
Philadelphia	1210	WCAU
York	900	WBSA
Philadelphia	1060	KYW
<b>South Dakota</b>		
Sioax Falls	1140	KSOO
<b>Tennessee</b>		
Nashville	650	WSM
Knoxville	990	WNOK
Nashville	1510	WLAC
<b>Texas</b>		
Dallas	660	KSKY
San Antonio	480	KABC
Houston	740	KTRH
Dallas	820	WFAA
Fort Worth	820	WEAP
Corpus Christi	1010	KWBU
Corpus Christi	1030	KWBU
Dallas	1080	KRLD
San Antonio	1200	WQAI
<b>Utah</b>		
Salt Lake City	1160	KSL
<b>Virginia</b>		
Alexandria	730	WPK
Richmond	1140	WRVA
<b>Washington</b>		
Seattle	710	KIRO
Seattle	770	KZA
Seattle	1000	KOMO
Seattle	1090	KEVE
Spokane	1510	KGA
<b>West Virginia</b>		
Wheeling	1170	WVVA
<b>Alaska</b>		
Fairbanks	660	KPAR
<b>Hawaii</b>		
Honolulu	760	KGU
<b>Puerto Rico</b>		
Mayaguez	990	WPRR



Open Front  
View

Fig. 1

### THE SIX BAND RANGES ARE:

Broadcast—535 to 1620 Kilocycles  
 49 Meters—6.0 to 6.27 Megacycles  
 31 Meters—9.45 to 9.85 Megacycles  
 25 Meters—11.6 to 12.1 Megacycles  
 19 Meters—15.0 to 15.6 Megacycles  
 16 Meters—17.5 to 18.3 Megacycles

(Kc. indicates kilocycles; Mc. indicates megacycles)

## General Features

Your ZENITH Trans-oceanic Portable is a Battery or 110 volt AC-DC operated eight-tube superheterodyne radio, covering the standard broadcast and foreign-domestic short wave bands. It has seven tuned circuits, and a three-section tuning condenser with a tuned radio frequency stage insuring maximum sensitivity and selectivity. Freedom from blasting on powerful stations is assured by a new automatic volume control circuit which controls three

Split Second Scale

Short Wave Bands

Broadcast Band

Volume

Radiogram



atures

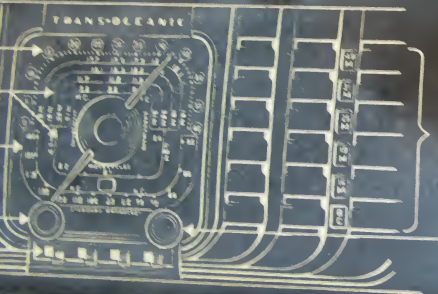
Battery or 110  
sterodyne radio,  
foreign-domestic  
units, and a three-  
radio frequency  
selectivity. Free-  
assured by a  
controls three

tubes on the broadcast band. A Deluxe permanent magnet speaker in conjunction with push-pull output-tubes provides greater undistorted power and finer tone than ever before.

The four button "RADIORGAN" tone control permits selection of sixteen different tone combinations. The built-in movable WAVEMAGNETS provide reception in trains, planes, automobiles, boats and steel constructed buildings. They consist of the standard WAVEMAGNET located on the inside of the front cover, and a special Zenith short wave WAVEMAGNET, each specifically designed for reception in its own band or bands. A WAVEBOOSTER

has been built into the short wave WAVEMAGNET to bring in short wave stations with greatly added volume. Pressing the black metal button on the top right corner allows a WAVEROD antenna to snap up which, when fully extended, provides increased pick up for short wave reception.

The Band Selector buttons on the front panel provide an easy means of selecting the Broadcast (BC) or the Short Wave band most suitable to the time of day. Each short wave band is electrically SPREAD, which means that stations are separated from each other to a degree permitting great ease of tuning.



Band Buttons

Tuning Knob

Fig. 2

A calibrated second scale has been incorporated along the top edge of the dial face. It permits short wave stations to be accurately logged and easily relocated.

All parts are fully treated against moisture, temperature and other climatic conditions. Variations in the performance of the receiver because of seasonal or geographical changes are held to a minimum, and the receiver will operate at its maximum efficiency throughout the world.

Power consumption on the electric light line is rated at 20 watts.



Open Front  
View

Fig. 1

## General Features

Your ZENITH Trans-oceanic Portable is a Battery or 110 volt AC-DC operated eight-tube superheterodyne radio, covering the standard broadcast and foreign-domestic short wave bands. It has seven tuned circuits, and a three-section tuning condenser with a tuned radio frequency stage insuring maximum sensitivity and selectivity. Freedom from blasting on powerful stations is assured by a new automatic volume control circuit which controls three

tubes on the broadcast band. A Deluxe permanent magnet speaker in conjunction with push-pull output-tubes provides greater undistorted power and finer tone than ever before.

The four button "RADIORGAN" tone control permits selection of sixteen different tone combinations. The built-in movable WAVEMAGNETS provide reception in trains, planes, automobiles, boats and steel constructed buildings. They consist of the standard WAVEMAGNET located on the inside of the front cover, and a special Zenith short wave WAVEMAGNET, each specifically designed for reception in its own band or bands. A WAVEBOOSTER

has been built into the short wave WAVEMAGNET to bring in short wave stations with greatly added volume. Pressing the black metal button on the top right corner allows a WAYEROD antenna to snap up which, when fully extended, provides increased pick up for short wave reception.

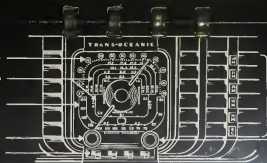
The Band Selector buttons on the front panel provide an easy means of selecting the Broadcast (BC) or the Short Wave band most suitable to the time of day. Each short wave band is electrically SPREAD, which means that stations are separated from each other to a degree permitting great ease of tuning.

### THE SIX BAND RANGES ARE:

Broadcast—535 to 1620 Kilocycles  
49 Meters—6.0 to 6.27 Megacycles  
31 Meters—9.45 to 9.85 Megacycles  
25 Meters—11.6 to 12.1 Megacycles  
19 Meters—15.0 to 15.6 Megacycles  
16 Meters—17.5 to 18.3 Megacycles

(Kc. indicates kilocycles; Mc. indicates megacycles)

Split Second Scale  
Short Wave Bands  
Broadcast Band  
Volume  
Radiorgan



Band Buttons  
Tuning Knob

Fig. 2

A calibrated second scale has been incorporated along the top edge of the dial face. It permits short wave stations to be accurately logged and easily relocated.

All parts are fully treated against moisture, temperature and other climatic conditions. Variations in the performance of the receiver because of seasonal or geographical changes are held to a minimum, and the receiver will operate at its maximum efficiency throughout the world.

Power consumption on the electric light line is rated at 30 watts.



# Operating Instructions

Read Carefully—Know Your Zenith

## 1. Preparing receiver for operation

a OPEN REAR DOOR OF CASE by simply pulling on finger grip provided. Insert the two prong plug into the Z1 battery. Place the battery in the retainer at the lower left corner of the cabinet. b Place battery removal ribbon over top of battery pack, and push pack into compartment provided. The ribbon provides easy removal when replacement of the battery (Pack No. Z985) becomes necessary. Insert battery cable plug into receptacle provided on the battery.

## 2. Battery operation

a INSERT LINE CORD PLUG into the CHANGE OVER socket on top rear of chassis. (See Figure 3.) b Turn the receiver ON by rotating the left control knob clockwise. The red indicator will appear in the lower center of dial face showing the power has been turned on. When not in use always make CERTAIN that power is OFF and indicator disappears. c Proceed as instructed under Paras. 9, 10, 11 and 12. d Batteries will give approximately 150 hours of service.



Fig. 3

## 3. Light socket operation

(110-125 volts DC or AC, 25 to 60 cycles) a Remove the line cord plug from CHANGE OVER socket. Removal of this plug automatically trips the BATTERY SAVER switch and prevents battery drain while operating from the light socket. b Plug the line cord into convenient light socket. After the receiver is in operation try reversing the plug for minimum hum or noise when operated on alternating current. c On direct current, reverse the plug if the set does not operate within approximately one

minute after having been turned ON. The set will operate ONLY with the plug in one position on DIRECT current.

## 4. Tuning dial

(See Fig. 2) Study the dial carefully. The broadcast band is calibrated in kilocycles with the last zeros deleted for convenience. This is the white bottom scale, indicated by the lower half of the pointer. The short wave bands are spread and calibrated in megacycles. Four are located in the upper half of the dial face, and one in the lower

half. Read with the upper half or lower half of the pointer as the case may be.

## 5. Split-second scale

This feature is provided in the upper outer edge of the dial face to assure ease and accuracy in logging and relocating the foreign stations. Example: A station heard at 9.55 megacycles would be logged at 9.5 on the tuning band, plus the number of seconds occurring on the split second scale, which in this case would be 24 seconds.

(Le.  $9.5 + 24$ )

## 6. Radiorgan

The tonal characteristics of the receiver may be regulated to the listener's personal preference by means of the four tone buttons below the dial. The combination of these four buttons in either of their two positions offers sixteen possible tone combinations. To operate, push in the direction of the arrow. The portion of the tonal range affected is shown below each button.



## 7. Headphones

In trains, dormitories, hospitals or schools, etc., it may be necessary to operate the receiver without annoying nearby persons. The use of headphones is especially helpful for airplane travel. A special low impedance Zenith headphone, part number 39-10, available through your Zenith dealer, is easily adaptable to the receiver by inserting the terminals in the connector at the rear of the chassis. (See Figure 3.) Attaching the headphones automatically disconnects the speaker.

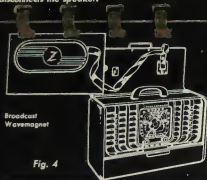


Fig. 4

## 8. Tube Complement

Type	Use
<b>RADIO TUBES</b>	
1—1L45.....	R. F. Amplifier
1—1L6.....	Mixer
1—1L45.....	I. F. Amplifier
1—1L5.....	A. V. C., 2nd Detector and Audio Amplifier
1—1L3.....	Inverter
2—1L4.....	Push-Pull Power Amplifier
<b>RECTIFIER TUBE</b>	
1—117Z6GT.....	Rectifier

## 10. Standard broadcast reception

(Steel Structures.) **a** In steel structures and vehicles, remove the BROADCAST WAVEMAGNET by unsnapping it from the cover with the aid of the finger indentations provided on the upper edge. **b** Open back of the case, and remove the black extension cord and suction cups. **c** Snap one end of the black ribbon cord on the red side of the BROADCAST WAVEMAGNET. Next, snap suction cups on the two remaining snap buttons. Fasten the other end of the black ribbon cord by the aid

## 9. Standard broadcast reception

(Normal Conditions.) **a** Use the receiver with all three antennas in position as shipped from the factory. It is not necessary to extend the WAYEROD or remove the WAVE-MAGNETS under normal conditions.

Loop antennas are naturally directional. If reception of a station is not satisfactory rotate the entire receiver for the position of greatest signal and least interference. The directional property is also helpful in eliminating noises caused by local electrical devices. **b** Press BROAD-

of the snap buttons to the two upper button fasteners on the right side of the lid. **d** Moisten the suction cups and apply the BROADCAST WAVEMAGNET to a corner of the window. (See Fig. 4.) **e** Experiment with various positions on the window for best reception and minimum noise.

## 11. Shortwave reception

(Average Conditions.) **a** Raise cover to upright position. **b** Press WAYEROD button and extend the WAVE-

CAST button. **c** Turn set "ON" with left knob. Turn this control to a well advanced position and reset to desired volume after a station has been tuned in. **d** Tune with the right knob and read the Standard Broadcast scale on the dial. **e** Adjust RADIORGAN for desired tone. **f** When hunting for distant broadcast or short-wave stations, set the volume control knob to an advanced position. Turn it back to the desired level after station has been tuned in.

ROD to its FULL length. (See Fig. 5.) **c** Press desired Shortwave button. **d** Turn set "ON" by rotating left knob clockwise. **e** Tune set with right knob (tune very slowly) and read dial scale corresponding to band button.

## 12. Shortwave reception

(In Steel Structures, Ships, Planes, Trains and Shielded Vehicles.) **a** Lift SHORTWAVE WAVEMAGNET out of holders inside back cover, and snap the two suction



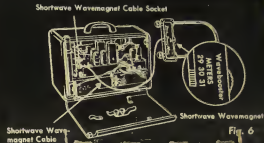
Fig. 5

cup on to the hinges on the SHORTWAVE WAVEMAGNET. b Insert the SHORTWAVE WAVEMAGNET cable plug into socket provided on rear of chassis. (See Figure 6.) When this is done, the Waverod is automatically disconnected, and may be pushed down and locked back into the case. c Tune the set as outlined in paragraph 11, c, d, and e. d Experiment with various positions and angles on the windows for best reception and minimum noise. e Set the BAND SELECTOR switch on the SHORTWAVE WAVEMAGNET to the desired band. This

will be the one corresponding with the button in use on the control panel. f After tuning in a station on the dial, turn the WAVE BOOSTER wheel through its full range, and set it to the point of best reception. g The SHORTWAVE WAVEMAGNET only operates on the 19, 25 and 31 meter bands. Don't try to use it on Standard Broadcast.

### Important

Remove SHORTWAVE WAVEMAGNET plug from socket before attempting to use WEVEROD.



# Warranty

The Zenith Radio Corporation guarantees each new Zenith receiver and each Zenith quality tube to be free from defects in workmanship and material.

Our obligation under this warranty is limited to making good at our factory any part or parts of the receiver which within 90 days from date of purchase shall be returned to us with transportation charges prepaid, and which on examination shall be found to our satisfaction to have become thus defective. This warranty is expressly in lieu of all other warranties expressed or implied, and we neither assume nor

authorize any representative or other person to assume for us any other liability in connection with the sale of Zenith receivers or Zenith quality tubes.

This warranty shall not apply to any receiver which shall have been repaired or altered outside our factory, nor which has been subject to misuse, negligence or accident, nor which has had the serial number or name altered, defaced or removed. Neither shall this warranty apply to any receiver in which other than ZENITH QUALITY TUBES and GENUINE ZENITH DRY BATTERY PACKS have been used.

ZENITH RADIO CORPORATION, CHICAGO 39, U. S. A.

