INSTALLATION AND OPERATING INSTRUCTIONS

UNIVERSAL - PORTABLE
6 Tube Receiver

BATTERY - 110-V. AC - 110-V. DC

(CHASSIS 6A19)

ZENITH
LONG DISTANCE RADIO
"THE ORIGINAL AUTOMATIC"

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

202-212

GENERAL: This receiver is a portable 6 tube superheterodyne with a tuning range covering the standard broadcast band (550 to 1570 KC).

It is equipped with a DETACHABLE WAVEMAGNET which is an exclusive patented Zenith feature making possible efficient operation in automobiles, trains, airplanes, boats, buses, and shielded steel buildings where other portables without this DETACHABLE WAVEMAGNET either fail to operate or work with a much lower degree of efficiency.

The receiver can be operated from anyone of three sources of power, as follows:

1. The Portable Z-985 Zenith dry battery pack.
2. 110-volt 60 cycle Alternating Current.
3. 110-volt Direct Current.

TUBES. 1LA6 - 2:1LN5 - 1LH4 - 3Q5G - 117Z6G.

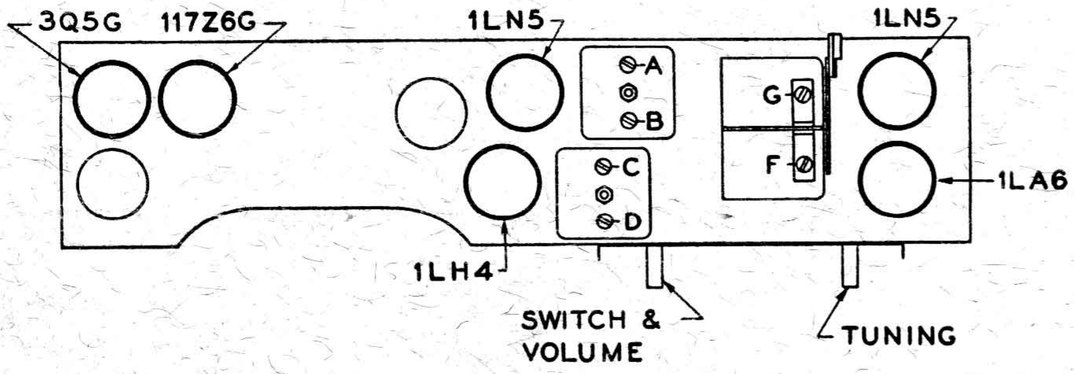


Fig. 1—Top view of chassis showing location of tubes

PREPARING THE RECEIVER FOR OPERATION:

To prepare this receiver for battery operation, it is necessary to first install the single unit Z-985 Zenith dry battery pack. The back cover is unlatched and opened, and after removing the wooden block, the battery pack is placed in the compartment at the lower part of the cabinet with the power socket facing the back of the cabinet. Next insert the battery plug into the battery pack socket (see Fig. 4) and replace wooden block.

Important. The 110 volt plug must be placed in the socket provided (see Fig. 4) in order for the receiver to operate on dry battery power. This automatically operates a safety switch.

The excess 110 volt line cord may be stored in the space provided at the right hand side of the lower compartment.

The back cover is then closed and the receiver is ready for operation.

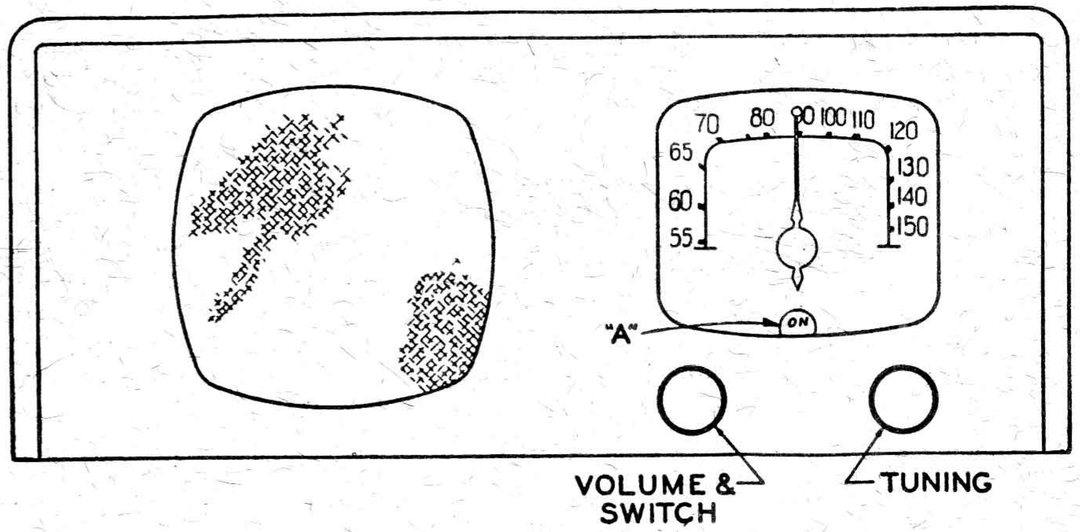


Fig. 2

OPERATION: Opening the hinged front cover exposes the dial, controls and speaker, as shown in Fig. 2.

The set is turned on by rotating the left hand switch and volume control knob in a clock-wise manner which first turns on the receiver and then controls the volume throughout the rest of its range. The red dot "A" in the lower center of the dial indicates that the receiver is turned ON. When the dot disappears the receiver has been turned OFF.

CARE SHOULD BE TAKEN TO SEE THAT THE RED DOT DISAPPEARS WHEN THE RECEIVER IS NOT IN USE thus conserving the life of the battery.

Tuning is accomplished by the right hand tuning control knob shown in Fig. 2. This knob should be turned slowly to avoid passing over the weaker or more distant stations. Under normal conditions the WAVEMAGNET may be left in position in the receiver case. Since the WAVEMAGNET is slightly directional it may be necessary to rotate the receiver to another position for best reception. The same procedure is followed in reducing electrical interference.

DETACHABLE WAVEMAGNET: The patented DETACHABLE WAVEMAGNET makes possible efficient operation of this receiver in automobiles, trains, airplanes, boats, buses, and shielded steel buildings. The WAVEMAGNET is connected to the receiver by a flexible cable ("B" in Fig. 3). It is held within the cover of the cabinet by means of two clamps, and when removed may be applied to a window by means of the two rubber suction cups "A" which should be moistened with water or glycerine to make them adhere firmly to the window glass.

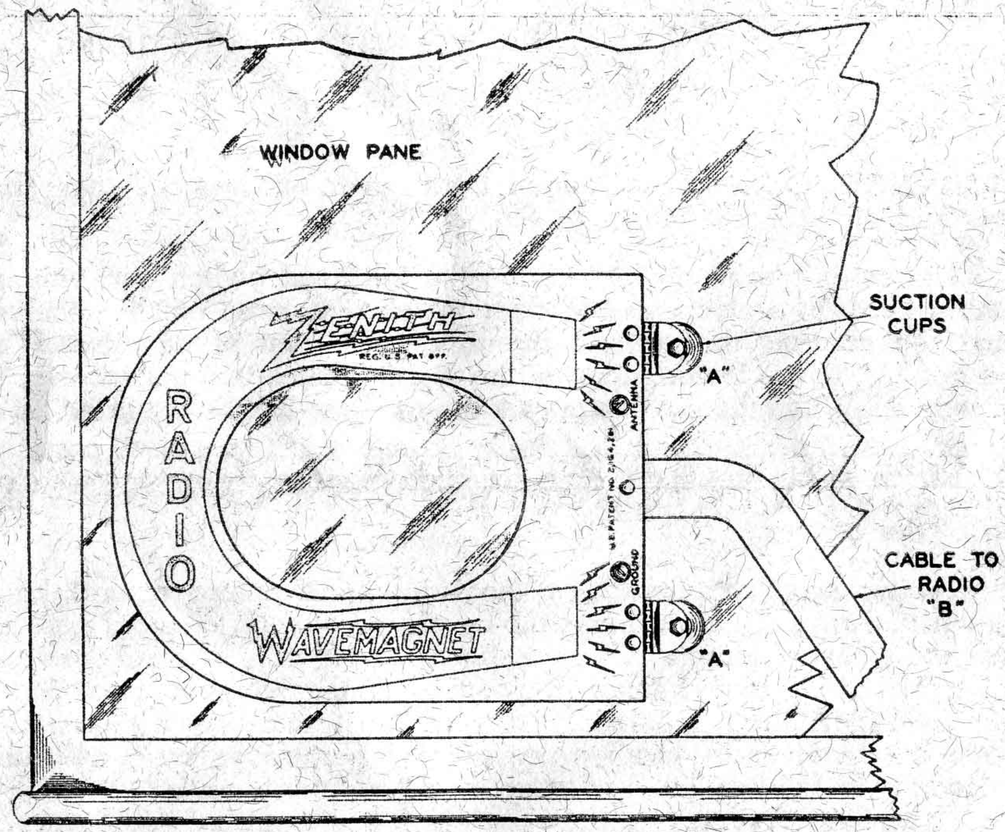
IMPORTANT: The WAVEMAGNET cable is so designed as to fold evenly when the WAVEMAGNET is placed within the cabinet cover and care should be taken that this cable is always so folded when within the cabinet.

TRIPLE HI-FICIENCY SWITCH: This receiver incorporates an ultra high efficiency WAVEMAGNET, the characteristics of which may be pre-

served regardless of the position or location in which it is used, by means of a control known as the Triple Hi-Ficiency switch on the rear of the chassis (see Fig. 4).

This switch has three positions, and should always be placed in the center position when the WAVEMAGNET is used within the cabinet.

The two outside positions of the switch allow compensation for variations of the WAVEMAGNET characteristics when it is used outside of the receiver case. After the WAVEMAGNET is mounted on the window of the train, auto, airplane, etc., a weak station should be tuned in, and reception noted with the switch in each of all three positions. USE THE POSITION GIVING THE BEST RECEPTION.



The BEST position of the WAVEMAGNET should be determined by experiment. Read instructions carefully.

Fig. 3—Showing Detachable Wavemagnet in position on a window glass

USING THE RECEIVER IN AN AUTOMOBILE: The WAVEMAGNET should first be removed from the case and placed in position on one of the windows of the automobile (see Fig. 3). The proper window to which to attach the WAVEMAGNET can only be determined by experiment and will be different in various cars. It is suggested that one of the rear door windows be tried first and then that the other windows also be tried to determine which is best in your automobile. There are no two windows which will be alike.

The receiver should be tuned to a station and the WAVEMAGNET moved around slowly in different positions on different windows to find the best point of reception. It may be the lower rear corner

of one of the rear door windows—it may be the forward lower corner —it may be one of the top corners—it may be the middle—although usually the middle of the window is the poorest position.

The WAVEMAGNET should first be tried in a position parallel to the glass. It should also be tried at different angles with respect to the glass, for while a position parallel to the glass may be best, this is not always true. An angle of 45 degrees—or some other angle—may be more satisfactory in your car. The suction cups are hinged for this purpose. (See Fig. 3.)

The most advantageous point of location for the WAVEMAGNET should first be found without the engine running. Then with the engine running the WAVEMAGNET should be tried at different angles with respect to the glass to determine the position and angle resulting in best reception with minimum motor noise.

Once the best position on the glass and the best angle with respect to the glass has been determined, both for best reception and minimum motor noise, the WAVEMAGNET should be attached to the glass by means of the two rubber suction cups which should first be moistened with water or glycerine to make them adhere firmly to the glass.

It is again emphasized that no two automobiles are alike, that no two windows are alike, and that the very nature of this device permits the user to select the most advantageous position resulting in best reception.

If some motor noise is still present it will be advisable to apply standard suppression equipment to the ignition system which can be done by any capable auto radio service station.

OPERATION ON TRAINS: This receiver will operate efficiently on trains by applying the DETACHABLE WAVEMAGNET to a glass window in the same manner as in an automobile. The best window, position, and angle with respect to the glass, should be determined by experiment.

The receiver, WAVEMAGNET, and connecting cable should be kept away from table lamps, ventilator wires, or other exposed electrical wiring which may cause electrical interference and noisy reception. When operating this receiver in an observation car or club car it may be necessary to remove the plug of any nearby table lamp from its receptacle should this lamp be in close proximity to the receiver, WAVEMAGNET, or connecting cable.

OPERATION IN AIRPLANES, BOATS and BUSES: The DETACHABLE WAVEMAGNET should be affixed to a window glass in the same manner as in an automobile. The best window, position, and angle with respect to the glass, should be determined by experiment.

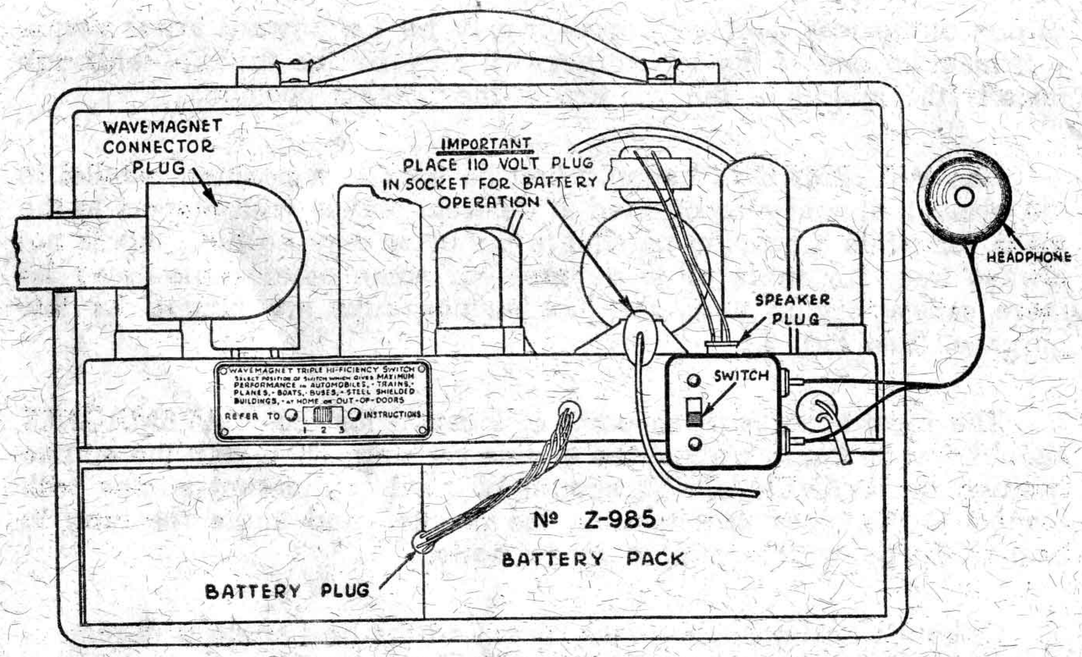


Fig. 4

OPERATION IN SHIELDED STEEL BUILDINGS: In shielded steel buildings such as hotels and office buildings the DETACHABLE WAVEMAGNET will allow reception where ordinary radios will not function. The WAVEMAGNET should be placed on the window glass in the same manner as in an automobile. The best window, position, and angle with respect to the glass, should be determined by experiment.

OPERATION ON 110-VOLT 60 CYCLE ALTERNATING CURRENT OR 110-VOLT DIRECT CURRENT: To operate the receiver on 110-volt 60 cycle Alternating Current or 110-volt Direct Current it is only necessary to remove the 110-volt plug from the receptacle in the rear of the receiver and plug it into the 110-volt power outlet. When using on Direct Current it may be necessary to reverse the socket plug.

The battery saver switch is automatically operated when the 110-volt plug is removed from the receptacle on the chassis and prevents any drain from the dry battery pack while the receiver is being used on 110-volt power supply.

HEADPHONE: In some cases such as in trains, airplanes or hospitals it may be desirable to use the receiver without annoying nearby persons. This may be done by using a Zenith headphone or Hushatone and adaptor, which not only attaches easily to the receiver but also enables the user to disconnect the radio speaker by use of a switch on the adaptor. These accessories are available through your Zenith dealer.

To attach the adaptor, first remove the speaker plug from the socket on the rear of the chassis, and plug it into the adaptor unit. The adaptor is then plugged into the speaker socket, and the headphone terminals inserted into the two connectors on the adaptor. It is then ready for use. (See Fig. 4.) The switch on the adaptor operates either the loudspeaker or the headphones as desired.

ANTENNA AND GROUND TERMINALS: Antenna and Ground Terminals are provided on the DETACHABLE WAVEMAGNET which permit the use of an outside antenna and ground in locations remote from broadcast stations where signals are unusually weak.

Where external antenna and ground is used we recommend that the antenna be from 75 to 100 feet in length and as high as possible. In such cases a good ground is very important and may consist of a connection to a cold water pipe or a rod driven several feet into the earth in a damp location.

SERVICE: If this receiver should fail to function properly it should be taken to your ZENITH dealer who is best equipped to thoroughly test the battery pack and tubes or render any required service.

WARRANTY

The Zenith Radio Corporation guarantees each new Zenith receiver and each new 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 ninety 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 been thus defective. The ZENITH QUALITY TUBES used in this receiver are guaranteed against mechanical and electrical defects under the same warranty as the receiver. 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 or tubes which shall have been repaired or altered outside of our factory in any way so as in our judgment to affect its stability or reliability, 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.

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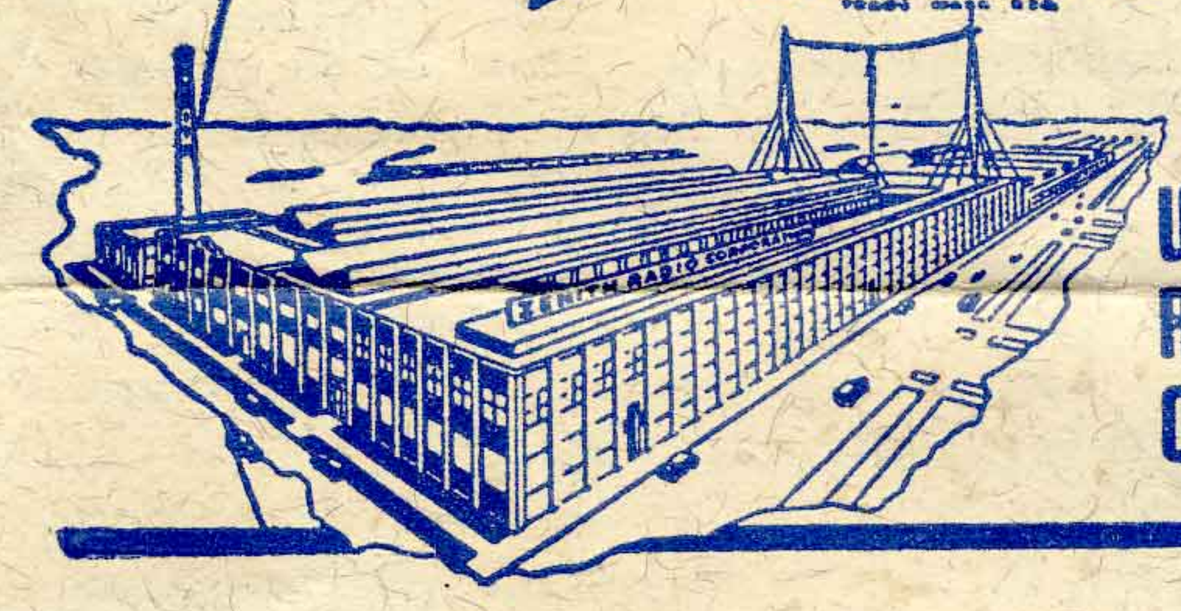

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