# Operating Guide

TO HELP YOU ENJOY YOUR NEW

Zenith

### AM-FM RADIO RECEIVER

MODEL H723Z1

AND OTHER MODELS USING

CHASSIS 7H04Z1



#### GENERAL

This new Zenith Table Model Radio offers complete radio reception at its best. It is designed to provide Frequency Modulation (FM) on the FM band, as well as standard broadcast reception.

A number of important new features which add to the tone quality and performance have been perfected by Zenith engineers for this receiver.

The receiver circuit utilizes an entirely new type of filter system and the new Selenium Rectifier, both of which help to provide increased output for better performance.

#### POWER SUPPLY

This receiver may be operated on 50 to 60 cycle 117 volt Alternating Current (AC) or from 117 volt Direct Current (DC). NOTE: If receiver does not operate within one minute when connected to Direct Current, the power plug should be reversed in the wall socket. This procedure should also be followed if a hum is apparent when the receiver is operated on Alternating Current.

#### FREQUENCY MODULATION

Radio broadcast transmissions are of two types, Amplitude Modulation (Standard Broadcast) and Frequency Modulation (FM).

Frequency Modulation provides a tremendous improvement in the reduction of interference or static. In most installations, particularly those not too distant from the transmitting station, static of all types is entirely absent.

Frequency Modulation allows the transmission of not only a greatly increased tonal range, resulting in hearing musical instruments and sounds which previously have been unheard, but also a greatly increased dynamic range that allows the loudest and softest passages to be heard in their true proportions.

#### ANTENNA

For STANDARD BROADCAST — Your receiver is equipped with a builtin Wavemagnet which eliminates the need for an external antenna under average conditions. If hum is apparent when operating the receiver, reverse the AC plug and move the AC cord away from the Wavemagnet.

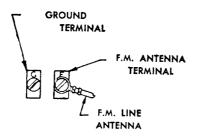


Figure 1 - Antenna Connections on back of Wavemagnet

For FREQUENCY MODULATION — The special built-in Line Antenna is designed for Frequency Modulation reception and in average locations where fairly strong signals are received from the transmitting station, this antenna system will provide excellent reception. Be sure the AC cord is stretched out in back of the receiver. Do not coil or bunch it up. Also try the plug both ways in the power socket for the position which gives best FM reception.

In locations where electrical interference is experienced, particularly close to areas with heavy automobile traffic, or in locations distant from the transmitting stations a Zenith FM Antenna Kit S14188 should be employed. This Antenna Kit may be purchased from your Zenith Dealer. To connect the lead-in from the FM Antenna Kit S14188 to the receiver, first remove the line antenna (blue wire) from the "F" terminal (see Fig. 1). Connect one side of the lead-in to the "F" terminal and the other side to the terminal marked "G."

#### DIAL CALIBRATION

STANDARD BROADCAST BAND: The bottom dial scale is the broadcast portion of the dial, and is calibrated in kilocycles, minus the last zero.

For example, a station listed as operating on 650 kilocycles will be found at 65 on your dial scale. A station listed at 1450 kilocycles will be tuned in at 145 — and so on. Use this scale when the Band Switch is set to AM position.

FREQUENCY MODULATION BAND: The station channel of the Frequency Modulation band extends from 88 to 108 megacycles. To cover this range the Zenith dial has one FM scale. This scale is used when the Band Switch is set to FM position. It is calibrated from 88 MC to 108 MC.

#### TUNING

STANDARD BROADCAST BAND: Figure 2 shows the position of Tuning and Volume Control knobs. To place the instrument in operation, turn the Volume Control knob to the right. This will turn on the set. Allow about 30 seconds for the tubes to reach operating temperature. Set the Band Switch to the AM position.

To tune the receiver, turn the Tuning Control knob slowly to the desired station and readjust the Volume Control knob to the right or left to the desired volume. To turn the receiver OFF, rotate the Volume Control knob as far as it will go to the left, until a "click" is heard.

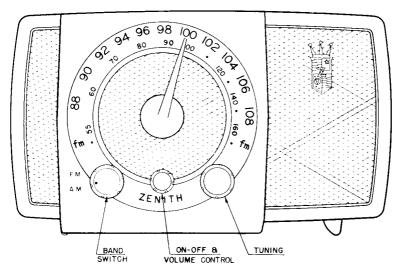


Figure 2 - Front Panel View

FREQUENCY MODULATION BAND: The receiver is turned ON and OFF in the same manner as in standard broadcast operation. The Band Switch must be set to FM position. TUNING THE RECEIVER ON THE FREQUENCY MODULATION BAND WILL REQUIRE MORE CARE THAN ON THE BROADCAST BAND. A hissing sound may be noted when tuning between Frequency Modulation stations. This is normal, and will disappear as the station is tuned in. After a station is located, the pointer should be moved back and forth over it until the point of quietest reception and best tone quality is found. Correct tuning is indicated by the disappearance of background noise. Although Frequency Modulation stations are heard over great distances on rare occasions, do not expect to tune in other than your local stations. The nature of Frequency Modulation transmission limits reception to areas within the approximate horizon.

## Warranty

Zenith Radio Corporation warrants each new Zenith radio receiver, phonographic reproducer, or combination thereof, and each new Zenith Quality Tube to be free from defects in workmanship and material arising from normal usage. Its obligation under this warranty is limited to replacing any part or parts of the receiver, reproducer or combination, or replacing tubes which, within ninety (90) days from date of purchase, shall be returned to the authorized dealer from whom the purchase was made and which shall be found to have been thus defective in accordance with the policies established by Zenith Radio Corporation.

The obligation of Zenith Radio Corporation is limited to making replacement parts available to the purchaser, and does not include either the making or the furnishing of any labor in connection with the installation of such replacement parts nor does it include responsibility for

any transportation expense.

Zenith Radio Corporation assumes no liability and shall not be liable in any respect for failure to perform or delay in performing its obligations with respect to the above warranty if such failure or delay results, directly or indirectly, from any preference, priority or allocation order issued by the Government, or because of any other act of the Government or by war, conditions of war, inadequate transportation facilities, conditions of weather, acts of God, strikes, lockouts, governmental controls, or Zeniths' reasonable requirements for manufacturing purposes, or any cause beyond its control or occurring without its fault, whether the same kind or not.

#### Conditions and Exclusions

This warranty is expressly in lieu of all other agreements and warranties, expressed or implied, and Zenith Radio Corporation neither assumes nor authorizes any representative or other person to assume for it any other liability in connection with the sale of Zenith Radio rereivers, phonographic reproducers, or combinations thereof, or Zenith Quality Tubes.

The warranty herein shall not apply to any receiver or parts thereof which have been repaired or replaced by anyone other than an authorized Zenith dealer, service contractor or distributor or which have been subject to alteration, misuse, negligence or accident, or to the parts of any receiver which has had the serial number or name

altered, defaced or removed.

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