# Admiral Magic Mirror Television

# Instructions for Operating Models 24X15, 24X16, 24X17

This set is a Television-Radio-Phonograph combination. The television receiver covers all twelve channels. The radio covers the Standard Broadcast band. This set uses a three-speed record changer which automatically plays 33, 45 and 78 RPM records.

It is important to note that the television receiver and the radio receiver work independently of each other, but for best results they should not be operated at the

# REGISTRATION POSTCARD

An Admiral Registration Postcard is included with your set. To be certain your television receiver is properly registered with the factory, be sure the Registration Postcard is properly filled out and mailed.

The serial number can be found at the rear of the television chassis in the upper left hand corner. The model number label is on the inside wall near the bottom of the cabinet.

#### OPERATING VOLTAGE

This set is designed to operate from a 117 volt, 60 cycle A.C. power outlet. DO NOT ATTEMPT TO OPERATE THIS RECEIVER ON DIRECT CURRENT (D.C.). Note that separate line cords are used. One is for the television receiver; the other is for the radio and phonograph.

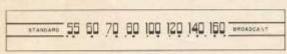
# INSTALLATION

The placement of a television receiver in the room is important. It should be so placed that a minimum of light falls on the screen of the picture tube. It should also be placed for maximum visibility as determined by the seating arrangement of the room.

Do not place the receiver cabinet back directly against a wall or other obstruction. Failure to observe this precaution will result in excessive heat and possible part failure. The receiver should not be placed close to sources of heat (such as radiators).

# OPERATING THE RADIO

The radio has four control knobs (as indicated below) consisting of two single controls and one dual purpose control. The dual purpose control consists of a small (inner) knob and a large outer knob or ring. The two knobs work independently of each other.



Admiral







Off Volume: The Off Volume and Tone controls are on one shaft (right control). Turn the radio on by rotating the Off Volume control (inner knob) to the right. Further rotation to the right increases the volume for either radio or phonograph operation.

Tone: The Tone control is the larger (outer ring) portion of the dual purpose control. Turn this knob all the way to the left for maximum bass response. If the knob is turned all the way to the right, maximum high note response is obtained. The most natural reproduction will be found near the center point.

Tuning: The Tuning control is the center knob. Turn this knob until the dial pointer indicates the frequency of the station you desire. Then move the pointer on either side of this point until the station is received with deepest tone and maximum clarity. The Tuning control should never be used to adjust the volume as this will result in poor tone quality.

Dial Scale: The dial numbers indicate kilocycles if one zero is added. For example, if the dial pointer is at 70, the radio is tuned to 700 kilocycles. The tuning range is 535 to 1620 kilocycles.

Radio-Phono: Turn this knob to the left ("RADIO") for broadcast reception. Turn it to the right ("PHONO") for phonograph operation.

Radio Antenna: The radio is provided with a built-in Aeroscope radio antenna. This antenna eliminates the need for aerial or ground wires in most locations.

If an external antenna is desired, connect (preferably by soldering) the external antenna lead-in wire to the terminal lug on the back of the internal loop antenna. The internal loop antenna is mounted on a fibre board which is attached to the back of the radio-phono chassis.

The lead-in should be stapled or tacked to the cabinet rail, being sure to allow enough slack so the lead is not pulled tight when the "Tilt-Out" cabinet door is opened.

# PHONOGRAPH

For phonograph operation, turn the "RADIO-PHONO" knob to the PHONO (right) position. Turn the set on by rotating the OFF VOLUME control to the right. Operate the phonograph as described in the separate phonograph instruction sheet.

# OPERATING THE TELEVISION RECEIVER

The operating controls on this Admiral television receiver are located on the front panel of the receiver. Each control serves a dual function. Each control consists of a small inner knob (I-shaped) and a large outer knob or ring (O-shaped). The two knobs on each control work independently of each other. The controls and their function are as follows:

Horizontal: Stops breaking up or "tearing" of the picture.

Vertical: Stops up or down motion of the picture.

Contrast: Adjusts contrast between light and dark areas.

Brightness: Adjusts the average brightness of the picture.

Off Volume: Turns the set on. Adjusts sound volume. Focus: Used to focus the picture for clear detail.

Channel: Selects proper channel for station desired.

Sharp Tuning: A fine tuning adjustment for clearest picture and best sound.

# COMPLETE TUNING PROCEDURE

Follow steps 1 through 4 in order. Also see the notes below the Horizontal-Vertical control and the Channel-Sharp Tuning control. If you can not tune in a satisfactory picture, see "Checking Operation" below.

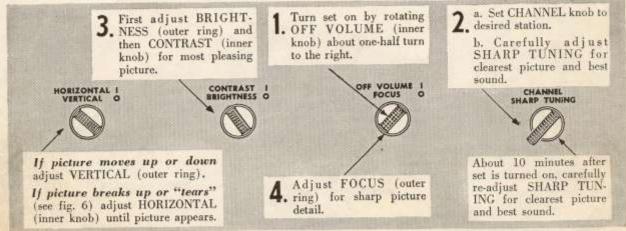


FIGURE 1. Tuning Procedure

## IMPROVING PICTURE QUALITY

After you have tuned in the picture as described in the chart above (Fig. 1), it is sometimes possible to improve picture quality.

A. Be sure the SHARP TUNING control has been carefully set by tuning for clearest picture and best sound. Do not try to tune for brightest picture. Clearest picture and best sound is generally obtained by watching the picture and adjusting the SHARP TUNING control so that the picture detail appears bright and clear. At this point, the sound should also be best. However, if the sound is slightly distorted, a compromise adjustment should be made.

Be sure that the picture is properly focused before adjusting the SHARP TUNING. See figure 8.

- B. Try readjusting the FOCUS to improve picture detail.
- C. Better pictures may sometimes be obtained by changing the settings of the BRIGHTNESS and CONTRAST controls. See Figures 4, 5 and 7. Set the BRIGHTNESS

control at a slightly different position and then adjust the CONTRAST control for best reception. Try several such control settings to determine the ones giving the most satisfactory picture.

# SELECTING A DIFFERENT STATION

When correctly adjusted for reception of one television station, the receiver may be tuned to another station by merely setting the CHANNEL control to the desired station and carefully "touching-up" the SHARP TUNING control for clearest picture and best sound.

If picture breaks up or tears (as shown in Figure 6) when switching to a different channel, adjust HORIZONTAL control to the position where there is no tearing when switching from channel to channel. Sometimes, the picture can be improved by slight readjustment of the CONTRAST control.

### TURNING RECEIVER OFF

Merely turn the OFF VOLUME control fully to the left until the switch "clicks." To simplify tuning when set is to be used again, do not disturb other control settings.

# CHECKING OPERATION

# TEST PATTERN

A test pattern of the type shown in Figure 2, or a similar pattern, is usually broadcast for a short time before a television program begins. This convenience enables you to properly tune in your set before the actual program begins.

Better results will be obtained if the receiver is tuned in with the test pattern, rather than with a program on the air. When the receiver is properly adjusted, the test pattern will be clearly defined, steady, and will have various shades including white, light gray, medium gray, dark gray and black.

Figure 2 shows correct adjustment of the receiver. Figures 3, 4, 5, 6, 7, 8 and 9 show the result of wrong adjustment of

various operating controls. Correction in each case is obtained by following the instructions given with each figure.

If the receiver seems to be inoperative, check its operation on another station or at a later time. In the event that you are unable to get satisfactory television reception by adjustment of the receiver operating controls, call your Admiral authorized service technician.

# CAUTION

If the screen is blank except for a very bright line, turn your receiver off immediately and call your Admiral authorized service technician.



Figure 2. Correct Picture.

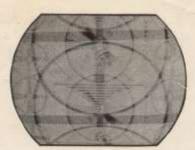


Figure 3. Adjust VERTICAL.



Figure 4. Adjust CONTRAST and BRIGHTNESS.

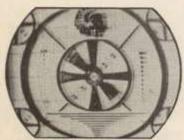


Figure 5. Too much contrast; turn CONTRAST to left.

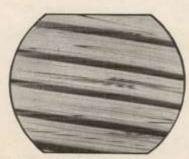


Figure 6. Picture breaks up or "tears"; adjust HORIZONTAL.

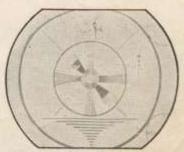


Figure 7. Excessive brightness; turn BRIGHTNESS to the left.

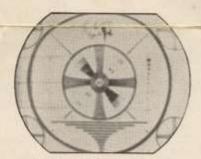


Figure 8. Improper focus; adjust FOCUS.



Figure 9. Sound bars and buzzing, sound; adjust SHARP TUNING.

# BUILT-IN "ROTO-SCOPE" ANTENNA

This set is equipped with the new Admiral Built-In "Roto-Scope" Antenna which may eliminate the need for either an indoor or outdoor antenna if your home is in a "normal signal strength" area.

OPERATING THE "ROTO-SCOPE" ANTENNA: The Roto-Scope antenna is operated by the antenna control lever which extends from the back of the cabinet near the top. See figure 11. The antenna control lever can be set to any of three different positions which, in effect, allow the Roto-Scope to be oriented (rotated) for best possible reception on all channels operating in your area.

To determine the best position of the antenna control lever, first tune in a television station as described under "Operating The Television Receiver." After tuning the set for clearest picture and best sound, move the antenna control lever to each of its three positions (extreme left, center and extreme right). As the lever is moved to the different positions, carefully watch for the position giving the clearest picture. A good picture should have sharp detail and freedom from multiple images ("ghosts", see figure 14). Also, it should not have a "speckled" background appearance which looks something like falling snow.

The antenna control lever should be left in the position which gives



Figure 11. Rear of Cabinet.

the most satisfactory picture on all channels operating in your area.

Note: Sometimes, rotating the set slightly will improve the picture. Sometimes moving the set to another location in the room, even as little as two or three feet away, will make an approximate difference in the picture. However, if it is not possible to find a setting which gives satisfactory reception on ALL channels, it may be desirable to reposition the antenna control lever for each station being tuned in.

WEAK SIGNAL AREAS: Some signal areas are so weak, or some particular locations are so unfavorable, that it is not possible to get satisfactory pictures with a built-in antenna. Under these conditions, in some locations an indoor antenna may improve reception. In most locations an outdoor antenna will improve reception.

Before connecting an indoor or outdoor antenna, be sure to disconnect the built-in Roto-Scope antenna by loosening the two screws holding the antenna lead clips to the antenna terminals. Do not reconnect the Roto-Scope leads. When disconnected, it is advisable to cover the Roto-Scope antenna lead clips with tape, and to tape the antenna extension to the side of the cabinet.

If you require an indoor or outdoor antenna, be sure to ask your dealer about Admiral's antennas. Admiral antennas and transmission line are made of the highest quality materials and workmanship. They are designed for good appearance, sturdiness, long use and top performance.

#### INTERFERENCE

The operation of certain types of electrical equipment will often interfere with television reception. Some common "interference" pat-terns are shown in figures 12 to 15. Interference conditions should be considered when the television receiver is first installed and the proper antenna system installed to minimize interference effects. Sometimes a new source of interference will give trouble after an installation has been made and operating satisfactorily for some time. In such cases, the cause of such interference can be deter-mined and sleps taken to correct the difficulty. The services of a trained television technician are required for this job. You can assist him by identifying the type of interference.



Figure 12. Short wave transmitter interference.



Figure 13. Automobile ignition interference.



Figure 14. "Ghosts".



Figure 15. Interference from electronic medical equipment.

# WARRANTY NOTICE

We warrant each new Admiral television set to be free from defects in factory workmanship or material under normal use and service. Our obligation under this warranty is limited to repairing or exchanging any defective part of the set, if the part is returned through our distributor, transportation prepaid, within 90 days from the date the set is sold to the original purchaser.

If the set does not operate properly, immediately contact the dealer from whom it was purchased, unless you have purchased a service policy giving other instructions.

Our obligation is limited to supply parts; and we do not obligate ourselves to replace the complete set. This warranty is void on any set which has been tampered with or which has been subject to misuse, negligence or accident.

This warranty is in lieu of all other warranties, expressed or implied, and no representative or person is authorized to assume for us any other liability in connection with the sale of Admiral Radio products.

# SERVICE POLICY

We recommend that every Admiral owner purchase a Service Policy from the Admiral dealer. This policy provides service calls and parts replacement in your home at no further cost for the term of the policy.

# CLEANING PICTURE WINDOW

The picture window should be cleaned only with a damper of chamois or a soft, lint-free cloth, with as little rubbing as possible.

Do not use cleaners or solvents of any kind. Cleaners and solvents such as kerosene, carbon tetrachloride and most of the kitchen-type cleaners may damage the window.

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