### FM STEREO RADIO LISTENER'S GUIDE

The NEW Dimension In Radio



World Radio History

Part of the last

### YOUR NEW FM STEREO RADIO RECREATES MUSIC IN A THRILLING DIMENSION



### Congratulations!

You are about to enjoy the newest, most exciting sound in home entertainment—General Electric FM stereo radio.

Combining two of the finest innovations in modern listening, your Stereo FM Radio is the best sound reproduction method yet devised. It will provide you countless enjoyable hours of music entertainment.

FM, or Frequency Modulation broadcasting, is the same high-quality programming you have enjoyed for years. Stereophonic sound is the sound reproduction phenomenon that provides you music in its full dimension of depth, direction, and even motion.

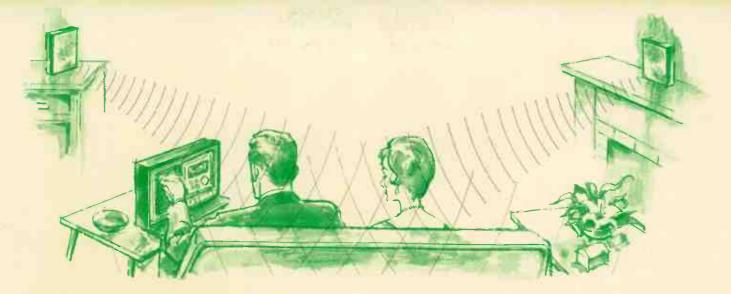
Combined in your new radio, FM stereo results in full dimensional sound reproduction that recreates exciting concert hall performances right in your home.

**TO UNDERSTAND STEREO**, imagine yourself at the concert hall listening to a fine concert orchestra. Place a hand over one ear. You will now be listening to monophonic sound — all the sounds shackled into a single artificial channel.

Now listen with both ears. You will hear the orchestra from different angles, with audible direction and a sense of perspective. The music has depth and full realism.

You can now recreate in your home the same concert hall performance, with all the vivid perspective to which your ears are accustomed.

FM stereo stations broadcast two separate channels of sound. Your new FM stereo radio receives both channels



combined on one broadcasting signal. The radio then separates the two channels, amplifies them, and sends them to two different speakers.

Before you turn on your new FM Stereo Radio, open the two hinged wing-speakers. Each is a full-range speaker, capable of reproducing with full fidelity the quality and original direction of the sound transmitted by the radio station.

Although you can enjoy faithful sound reproduction in stereo with the speakers in place on their hinges, greater stereo sound separation can be achieved by detaching the hinged speakers and extending them. Do this by merely lifting each speaker off its hinge. Extension cables, enclosed in the pocket on the rear of the radio, will carry sound to the extended speakers. Plug one end of each cable into the appropriate jack on the end of the speaker enclosures. The other end of each cable should be plugged into the extension speaker jacks (labeled SPEAKERS) on the rear of the radio.

This full-range two-speaker stereo system is far superior to three-speaker units using partial range speakers. With the latter, the original stereo direction is lost and the stereo effect is impaired.

For the truest stereo effect, the listener should seat himself equidistant from the two speakers. Space between the listener and speakers should be clear of obstacles which impair full-sound stereo.

The stereo effect for the entire room can also be improved by corner placement of stereo speakers. The speakers should be placed an equal distance from the corner along each wall.

### TUNING YOUR FM STEREO RADIO

#### STEREOPHONIC FM

1. Turn the FUNCTION switch to STEREO.

2. Use the TUNING knob to tune to a station broadcasting in stereo. The STEREO STAR will glow when you tune to a station broadcasting in stereo. (See page 5 for more on the STEREO STAR).

**3.** Adjust the volume to a comfortable listening level with the LOUDNESS knob.

**4.** After you have the station properly tuned in, turn the FUNCTION switch back to FM-AFC.

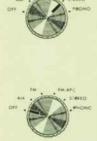
5. Adjust the BALANCE knob so the sound from the two speakers appears to come from a point mid-way between them.

6. Turn FUNCTION switch back to STE-REO.

7. Adjust tonal range of the set to suit your listening taste with the TONE knob. Turn the control to the right to emphasize the high (treble) notes, or to the left to emphasize the low (bass) notes.

8. To turn the set off, return the FUNC-TION switch to the OFF position.





#### MONOPHONIC FM

Some FM stations may not broadcast in stereo at all, or they may stereocast only a portion of their programs. Tune in these monophonic broadcasts as follows:

1. Turn FUNCTION switch to FM-AFC. (See page 6 for an explanation of AFC, Automatic Frequency Control.)

2. Tune to desired station and adjust volume and tone as in stereophonic operation.

**3.** Turn set off by returning FUNCTION knob to OFF position.

#### AM PROGRAMS

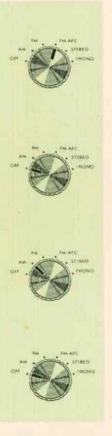
Your versatile new General Electric FM Stereo Radio is also equipped to receive AM (standard broadcast) programs.

1. Turn FUNCTION switch to AM.

2. Tune to desired station and adjust tone and volume as in FM listening.

3. Turn set off by returning FUNCTION switch to OFF position.

NOTE: Automatic Frequency Control (AFC) is not necessary and does not work when radio is receiving AM programs.



#### STEREO STAR

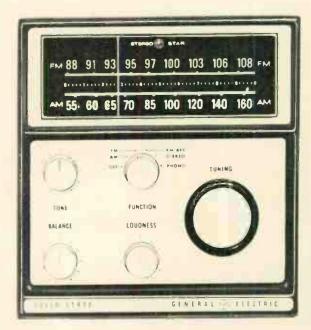
The STEREO STAR indicator light located above the tuning dial will glow when you tune to a station that is broadcasting in FM Stereo. Thus this will help you to pick out the stereo stations as you tune across the dial. Occasionally, when tuning across the dial, momentary bursts of background noise may cause the light to flicker. This occasional flickering should, of course, be disregarded.

#### STEREO PHONOGRAPH

This new radio can also be used to listen to phonograph records — either stereophonic or monophonic. Plug the left channel output cable from your phonograph turntable into the left channel phono jack on the rear of the radio, and the right channel output cable into the right channel phono jack. Turn the FUNCTION switch to PHONO.

If hum occurs, reverse position of radio and/or turntable power plug in wall outlet. If hum persists, the turntable chassis must be grounded to the radio chassis by a wire connected from the turntable to the ground screw on the radio back. On G-E turntables made for this use, the ground wire is already attached to the turntable as part of the phono cable.

NOTE: Use only phono turntables with high-output phono cartridges such as a crystal cartridge. Most low-output cartridges such as magnetic or controlled reluctance types do not have sufficient output to work satisfactorily without an external preamplifier.



## HINTS FOR GREATER ENJOYMENT OF FM STEREO



#### ANTENNAS ARE IMPORTANT

When listening to a distant station it is quite common to receive regular monophonic FM broadcasts clearly, and yet hear considerable background noise when you switch to FM Stereo. The best solution involves extending the range of your radio by attaching an outside antenna.

Although the built-in antenna for FM is sufficient for moderate to strong stations, an outside antenna increases the number of stations you can receive. In addition, an outside antenna often helps to improve reception in areas subject to electrical interference.

Should you need an outside antenna, consult your radio serviceman. He will help you choose the best type of antenna, and will install it safely to protect you from lightning hazards.

When an outside antenna is used, the twin leads should be attached to the screw terminals on the rear of the radio. The wire which provides the connection to the built-in antenna should be removed from the antenna terminal when an outside antenna is used.

#### AUTOMATIC FREQUENCY CONTROL (AFC) ...

... works when the set is receiving FM programs to assure accurate, drift-free reception. It helps to keep the radio locked on the station to which it is tuned.

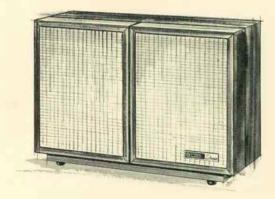
At times when the desired station frequency is closely adjacent to a stronger station, the AFC may tune the set to the stronger station. If this happens, simply tune-in the desired station without utilizing AFC. (FUNCTION switch in FM position.)

The same tuning procedure can help you pinpoint weak stations. Without using AFC, turn your dial to the desired station. Then switch in the AFC (FUNCTION switch in FM-AFC position), and the signal will not fade or drift.

When tuning-in stations in this manner, you will notice that often the FM station you desire can be heard at two or three points quite close together on the dial. Always tune carefully to the loudest and clearest point of best tone quality and freedom from noise.

#### PRESERVING THE FINISH

A bit of care will do much to preserve the fine-furniture appearance of your new radio. General Electric's Satinkote Cream Polish is available from your dealer. Satinkote will enhance the deep, lustrous wood finish, and keep your radio cabinet bright and rich for weeks on end.



#### SERVICE

This new FM stereo radio is a complex piece of electronic apparatus and should be serviced only by those especially trained in FM stereo servicing techniques. Competent service can be obtained from one of the General Electric Radio/Phono Service facilities shown on the accompanying sheet. These firms receive factory training and are prepared to provide service both under the terms of the warranty and after the warranty period has expired. Inquiries about General Electric Radio Service may be directed to: Manager—Product Service, General Electric Company, 1001 Broad Street, Utica, New York.

# WARRANTY

General Electric Company warrants to the purchaser of this new General Electric radio that if any part thereof proves to be defective in material or workmanship within 90 days from the date of original purchase for use, such defective part will be repaired or replaced free of charge. The Company has no other obligation or liability in connection with said radio.

To obtain repairs or replacements, within the terms of this warranty, said radio should be brought to the attention of a General Electric Servicenter or factory-authorized service station.

This warranty is void if said radio has been subject to misuse or abuse.

This warranty applies only to products purchased for use within, and retained within, the continental limits of the United States, Alaska, and Hawaii. The Company makes no warranty, expressed or implied, to purchasers located elsewhere.

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