SCOTT®
AM/FM Stereo Tuner 570T

INTRODUCTION

For 3 decades H. H. Scott High Fidelity components have been satisfying the needs of discerning music listeners all over the world. We welcome you to our growing family of Scott owners.

All Scott High Fidelity components are manufactured under the same rigid quality control used by manufacturers of professional equipment, where quality control procedures are followed for testing each component part as well as at each successive stage of assembly. These controls and the attention to detail, assure the high degree of reliability for which professional equipment is noted.

To be sure of obtaining the best possible performance from your new Scott High Fidelity components read this operating manual carefully and become thoroughly familiar with the unit before starting to use. Keep this manual handy for future reference.

NOTICE

This appliance is manufactured with a serial number, located on the rear panel.

The final purchaser is requested to record the serial and model numbers, as well as other information listed, so that a record of purchase will be on hand should loss of the equipment occur.

Model No. __________________________ Serial No. __________________________

Date of Purchase ___________________ Dealer's Name _______________________

Address __________________________ Telephone No. _________________________

Warranty Registration Date ________________________

H. H. Scott Inc. 1978 Printed in Japan
WARNING:
TO PREVENT FIRE OR SHOCK
HAZARD, DO NOT EXPOSE THIS
APPLIANCE TO RAIN OR MOISTURE.

THE TUNER SYSTEM

The Model 570T is a high fidelity stereo tuner designed to be incorporated with other high fidelity components into a complete stereo system. It offers the following facilities:
- 75 Ohm and 300 Ohm Antenna Inputs for FM
- Sensitive dual-gate MOS FET in the FM front end
- Three dual element ceramic filters used in the IF section
- PLL (Phase Locked Loop) IC used in the FM stereo decoder
- Dual meters used for a conventional signal strength readout and FM center tuning
- Two Output Jacks produce fixed signal and variable signal outputs
- MPX (Multiplex) Filter for noise-free FM stereo reception
- Mute Switch for elimination of between-station noise
- Unswitched convenience outlet
- Built-in ferrite loopstick antenna for convenient AM reception

be to your advantages to save original carton, fillers, cushionings, etc. They will prove valuable in preventing damage should you ever have to transport or ship your tuner.
- Accessories contained in original carton (excluding the tuner) are:
  - Operating Manual
  - Warranty Card
  - Replacement Fuse
  - Dipole Antenna
  - Shielded Audio Cable
  - Line Cord

Tuner Installation
Installation of the Scott Model 570T is not complicated. However, the following guidelines must be followed for satisfactory performance and to assure full coverage under the terms of the warranty.
- Do not attempt to remove the cabinet cover — there are no user serviceable parts inside the tuner. Refer servicing to qualified personnel.
- Make sure that the Power Switch is in the Off position before making any installation or connections.
- The tuner and associated equipment may be placed on a table, shelf, or it may be mounted in furniture suitably designed for the purpose.
- The equipment must not be exposed to excessive dust, moisture, or direct sources of heat.
- If mounted where ventilation may be restricted, care must be taken to provide a minimum opening of approximately 50 sq. in. (320 sq. cm), for free air movement, in and out of the cabinet to the room.
- To clean the cabinet, wipe with a cloth soaked in a neutral cleaner or a polishing cloth. Do not use benzine or thinner which will damage the cabinet finish.

Tuner Connections
Refer to pictorial CONNECTION DIAGRAM on last page.
- AM Antenna
  Select use of attached loopstick or additional long wire antenna.
- FM Antenna
  Select dipole supplied or connect suitable external antenna system.

INSTRUCTIONS

Unpacking
- Carefully remove all items from the container and check for damage.
- Before discarding any of the packing materials, examine them carefully for items you may have overlooked. It will
Tuner Power Supply
Plug the cord set into the tuner AC inlet and other end into the wall outlet. Refer to rear panel for specified voltage and frequency before making any connections.

Output
Connect left and right channel inputs of your amplifier to Output Jacks — Fixed or Variable with shielded audio cables. Make connection to proper channel.

Control Functions

1. Power Switch (POWER-ON)
   Place in On (lever up) position to turn power on. The meters and tuning scale will be illuminated.

2. Output Level Control (OUTPUT LEVEL)
   Controls the output level from Variable Output Jacks for both AM and FM reception. Turn clockwise to increase the output level and turn counterclockwise to decrease it. Note that this control does not affect the Fixed Output Jacks.

3. Tuning Control
   Used to tune in AM or FM stations. Use 88 to 108 MHz scale on the tuning dial for FM stations, and 530 to 1600 kHz scale for AM stations.

4. MPX Filter Switch (MPX FIL-OFF)
   Activates a special high frequency filter to reduce any high frequency noise that may occur during FM stereo reception.

5. Stereo-Mono Switch (STEREO-MONO)
   Determines the manner in which a received station will be reproduced by the tuner.
   - Stereo (lever up): Provides stereophonic reception of any FM stereo broadcast. This position also provides automatic FM stereo reception.
   - Mono (lever down): The left and right channel signal detected from an FM stereo broadcast is mixed and reproduced through both channels.

6. Mute Switch (MUTE-OFF)
   Introduces a special muting circuit which eliminates noise between stations on FM.

7. AM-FM Selector (AM-FM)
   Selects the program source to be received.
   - AM: Selects AM reception.
   - FM: Selects automatic FM stereo reception.

8. FM Center-Tuning Meter
   Permits precise FM tuning to center of station to assure optimum FM reproduction. Tune for center reading.

9. Signal Strength Meter
   Used for tuning on AM. Also shows relative signal strength on both AM and FM.

10. Stereo Indicator (STEREO)
    Lights up to indicate that the receiver has switched to stereo reception on FM.

Tuner Operation

With tuner installed and connected as outlined, proceed as follows.

- Power On
  - Set the Power Switch 1) to On (lever up) position to turn power on.

- AM Reception
  - Rotate AM-FM Selector 7) to AM position.
  - Rotate Tuning Control 3) to select desired station.
  - Adjust Output Level Control 2) to desired level.
  - A properly tuned station is indicated by maximum Signal Strength Meter 9) reading.
  - Adjust loopstick antenna for maximum signal.
  - During AM reception, MPX Filter, Stereo-Mono, Mute Switches and Center Tuning Meter are inoperative.

- FM Reception
  - Rotate AM-FM Selector 7) to FM position.
  - Rotate Tuning Control 3) to select desired station.
  - Adjust Output Level Control 2) to desired level.
  - Tuner will automatically switch from mono to stereo FM operation when tuned to an FM stereo broadcast provided that Stereo-Mono Switch 5) is set in Stereo (lever up) position. Stereo broadcasts are indicated by the illuminated Stereo Indicator 10) labeled STEREO in the dial area.
A properly tuned FM station is indicated by exact center reading of the Center Tuning Meter 8). Use Signal Strength Meter 9) for initial tuning on FM.

- When listening to very weak stations, the MPX Filter Switch 4) moved to on (Lever down) will reduce background noise.
- Maximum reduction of background noise will be attained by switching Stereo-Mono Switch 5) to Mono. This will, of course, put the system in a monophonic mode of operation.
- When listening to weak stations, the Mute Switch 6) should be switched to Off (lever up) to prevent the tuner from switching to a mute condition due to reduced signal strength.

Supplied 300 Ohm FM Antenna

An FM dipole antenna is supplied with your new tuner. In strong signal area, this should be more than adequate for reception of most FM stations. Antenna connections are made to the terminal strip marked ANTENNA-FM-300 Ohm located on the rear panel. The dipole leads are connected to the screws marked 300 Ohm. The Ground screw is not used for the dipole antenna. The dipole should be unfolded to its full T-type size and oriented for optimum performance. Dipole antennas are most sensitive to FM reception when positioned perpendicular to the station. The antenna is correctly positioned for high quality reception when the Signal Strength Meter 9) on the front panel reads a maximum.

Exterior FM Antenna (300 Ohm)

For fringe (weak signal) areas, or areas where interference to FM reception is high, the use of a Log-Periodic, or Yagi antenna system is recommended. These antennas are directional and high gain in nature, thus tending to reduce most undesired interference due to reflected signals (multipath distortion) and ignition noise. In areas where stations are located in different directions from the point of reception, the antenna must be repositioned for optimum reception of individual stations. For this reason, a good quality rotor is suggested. To minimize the introduction of multipath distortion and ignition interference by the antenna lead-in wires, the use of balanced and shielded 300 ohm (twin lead) cable is recommended. Unshielded twin-lead is suitable where the lead-in wire length from the antenna is short, and when used it should be twisted at the rate of 1 to 2 turns per foot. Long unshielded lead-in wires can act as omnidirectional antenna and can cancel the advantages of directional antenna systems. Unshielded twin-lead is also more susceptible to ignition noise than shielded cable.

Shielded 300 ohm cable consists of two inner signal conductors with an outer shield. An insulating jacket is also provided, covering the shield. The two signal conductors are connected to the screws marked 300 ohm and the shield is connected to the screw marked GND.

Exterior FM Antenna (75 Ohm)

A second set of antenna terminals is provided for connecting an unbalanced 75 ohm antenna cable. These terminals should be used whenever a 75 ohm coaxial cable is used as a lead-in from the antenna. The braided outer conductor is connected

Detailed Tuner Connections

Ferrite Loopstick Antenna

The ferrite loopstick antenna is a sensitive pick-up element of the AM receiver section. For maximum station reception, it must be properly positioned away from the rear chassis and other metallic surface. The associated connecting cables and AC power cord should be dressed as far away as possible. For optimum performance, the antenna should be positioned for maximum signal strength when the dial is tuned to your favorite stations. Use Signal Strength Meter 9) for reference.

External AM Antenna

AM external antenna terminals are provided for a properly designed long wire AM antenna system. Such antennas are useful when the desired AM stations are at a considerable distance from the tuner. A simple long wire antenna can consist of a length of single conductor, insulated wire of 30 feet (9 meters) or longer, extending from the tuner external terminal to the outside of the building. This wire should be positioned away from electrical cables and appliances. As a rule, the longer and higher the antenna, the better the reception. However, as signal pick-up of broadcast stations is increased, so also is the pick-up of undesirable man-made interference. Therefore, the external AM antenna should be evaluated on a trial-and-error basis.
to clamp. Refer to connection diagram on last page for proper cable preparation and hook-up. This type of lead-in offers the same advantages as shielded 300 ohm cable by minimizing interference picked up by the lead-in cable.

Many apartment buildings provide T.V. antenna service from rooftop antennae, which feed a distribution system to T.V. antenna wall receptacles. These systems usually provide a 50–75 ohm source impedance and may serve as a satisfactory antenna for FM reception.

**CAUTION:** Suitable grounding must be provided for all AM and FM exterior antenna systems through recognized procedures. If in doubt, consult a professional specializing in antenna installation.

**NOTE:** Do not attempt to connect any two FM antennae to the tuner terminals. Such connections will result in poor performance.

**Grounding**

Under certain conditions a good EARTH GROUND will improve performance of the tuner by reducing interference conducted via the power line. A good ground may also improve the AM performance. Good earth grounding dictates that the ground wire be as short as possible, connected to a specifically designed, copper clad, steel rod driven into moist earth, or to the cold water supply pipe as it enters the building. Clean oxides from rod or pipe and use suitable ground clamp.

**Deemphasis Selector Switch**

The deemphasis switch is set at the factory for the proper deemphasis. It is suggested that the switch setting be checked again following installation, to be sure that it has not been accidentally moved. The proper position is 75 µS for North America and 50 µS for Europe. A 25 µS position is provided to permit the use of an external Dolby* B-type noise reduction decoder. FM broadcasts using this system have been approved by the Federal Communications Commission in the United States, and a number of broadcasters are now using it.

**TROUBLE SHOOTING GUIDE**

The following guide is intended as an aid on correcting problems encountered when setting up the Stereo System. Although the suggested remedy might seem quite elementary, it may be sufficient to make corrections without returning the tuner to your dealer.

**PROBLEM**

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<th>Troubleshooting Guide</th>
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<td><strong>PROBLEM</strong></td>
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<tr>
<td>Tuner inoperative when Power switched on</td>
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<tr>
<td>Dial lights up but no output from associated amplifier</td>
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<td>No output one channel</td>
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* TM DOLBY Laboratories.
Noisy AM reception
Usually caused by electrical appliances within the building, or automobile ignition.
Use commercial noise filter on appliances.
Install external AM antenna.
Locate tuner as far as possible from television receiver.
Locate external AM antenna as far as possible from interfering source.
Install proper earth ground (see Grounding).

Weak FM reception
Check all external antenna connections.
Install a properly designed antenna (see FM antenna).
Position receiving antenna for maximum signal.

FM Multipath distortion
Caused by a broadcast signal reaching the FM receiving antenna from two directions: #1 direct from transmitter to receiver, #2 the same signal but received as a reflection from a nearby building or other surface.
Position receiving antenna for minimum distortion (usually max. signal).

Noisy FM reception
Install external antenna.
Use shielded lead in wire.
Install proper earth ground.
Rotate antenna for maximum signal.
Connect power line noise filters to interfering appliances.

SHIPPING INFORMATION

Repair and Service
Occasionally it may become necessary to have your tuner repaired. If difficulties arise, first consult the TROUBLE-SHOOTING GUIDE section of this manual to determine if the problem is of a minor nature which can be rectified quickly in your own home.

If service is required, there is a broad network of Factory authorized service stations as well as Factory service in the USA and Europe. For information about service, please write to the factory for instructions.

Include in your letter the model and serial number along with a complete description of the problem. No tuner should be returned to the factory without RETURN AUTHORIZATION.

Your receiver should be packaged carefully using the original packing material. If the packing has been discarded or damaged, write to the factory for new material. New packing material (if still available) and shipping instructions will be shipped to you at a nominal charge.

When shipping, insure unit for the full value and use a reputable carrier. Whatever method of shipping used, be sure to obtain a receipt from the carrier.

SPECIFICATIONS: 570T

FM
Tuning Range:
87.5 to 108 MHz

Usable Sensitivity (IHF):
10.3 dBf (1.8 μV)

50 dB Quieting Sensitivity-Mono:
16.1 dBf (3.5 μV)

50 dB Quieting Sensitivity-Stereo:
35.6 dBf (33 μV)

Capture Ratio:
1.0 dB

Selectivity at ±400 kHz:
70 dB

Distortion at 1 kHz-Mono:
0.1%
1. Remove approx 1-1/4" of outer insulation from cable.
2. Remove all but 3/8" of the shield braid.
3. Remove inner insulation, leaving 3/16" of the insulation exposed. The center conductor should be approx 1/2" long.