OPERATING MANUAL

SCOTT

SCOTT CONSOLE

H.H. SCOTT

STEREO INDICATOR
Lights up when tuned to an FM stereo broadcast.

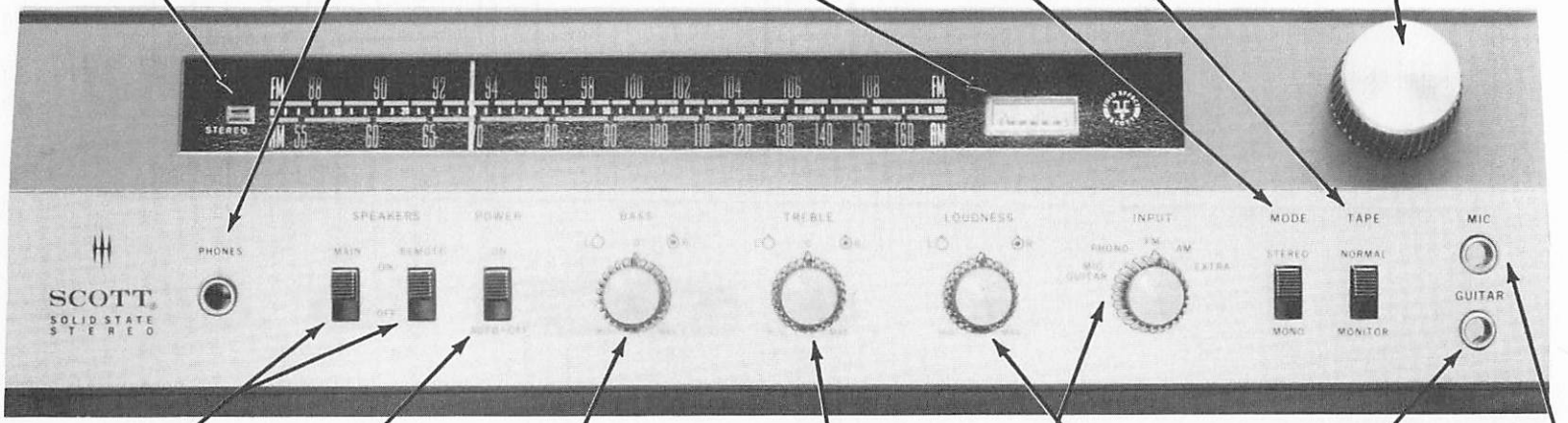
HEADPHONE OUTPUT
To connect a set of low impedance stereo headphones.

TUNING METER
For best listening adjust the tuning dial so that you get the highest possible reading on the meter.

MODE
For all stereophonic listening, set to Stereo position. Mono position for monophonic listening.

TAPE MONITOR
To listen to tape played on a regular Tape Recorder. This switch can also be used to monitor a recording when used with a tape recorder with separate playback and record heads.

TUNING KNOB
To select the desired FM or AM station.



SPEAKERS
1. MAIN switch on; REMOTE switch off: main speakers only
2. MAIN switch on; REMOTE switch on: both main and remote speakers
3. MAIN switch off; REMOTE switch on: remote speakers only
4. MAIN switch off; REMOTE switch off: earphones only

(NOTE: Earphones may be used whether MAIN and/or REMOTE switches are in on or off position)

POWER
To turn the receiver on or off.

BASS
Modifies low frequency sounds. Set to suit your taste.

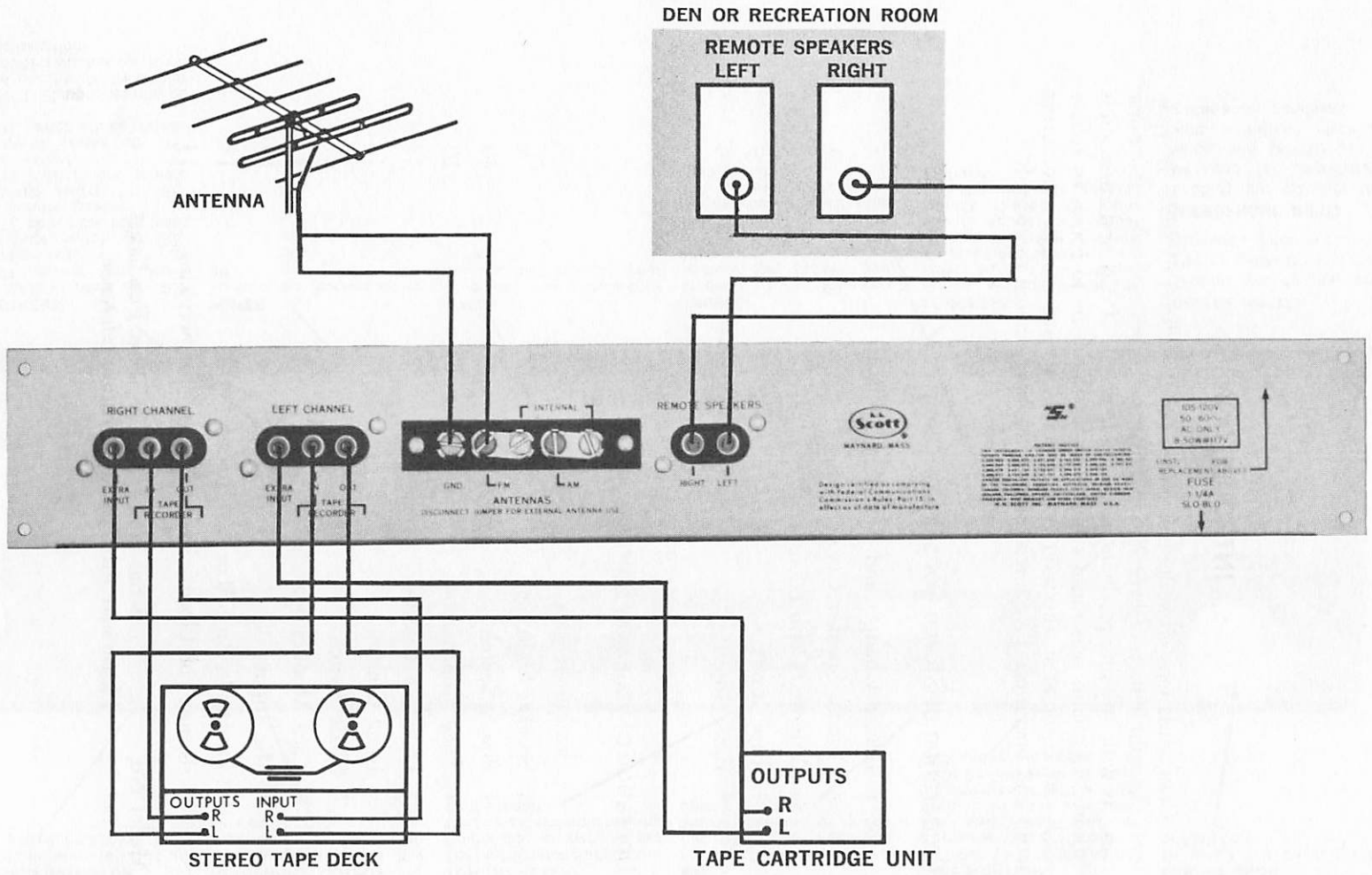
TREBLE
Modifies high frequency sounds. Set to suit your taste.

INPUT
Allows you to select whatever program material you wish to hear.

LOUDNESS
Makes system louder or softer to suit your taste. To make one speaker louder than the other. Permits you to adjust for unequal sounds caused by room acoustics or faulty program material.

GUITAR INPUT
Enables you to play an electric guitar through the compact's electronics.

MICROPHONE INPUT
Enables the compact to be used for amplifying voice, and can be used with or without electric guitar accompaniment.


DEN OR RECREATION ROOM
REMOTE SPEAKERS
LEFT
RIGHT
ANTENNA
RIGHT CHANNEL
LEFT CHANNEL
INTERNAL
REMOTE SPEAKERS
Scott
MAYNARD, MASS
105-120V
50-60~
AC ONLY
FUSE
1 1/4A
SLO-BLO
EXTRA INPUT
TAPE RECORDER
GND.
FM
AM
ANTENNAS
RIGHT
LEFT
OUTPUTS
R
L
INPUT
STEREO TAPE DECK
TAPE CARTRIDGE UNIT

INTRODUCTION

Congratulations on your selection of this new Scott Console. It represents the culmination of over 20 years of engineering research and innovation. As with any fine product, a reasonable degree of care and attention is required to obtain maximum enjoyment for the years to come. In todays solid state equipment, the most critical period of time is right now during setup and operation. Please read this instruction manual thoroughly.

Preparation of Stereo Console for Use

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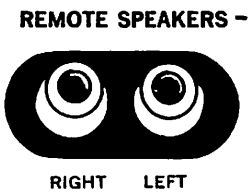
Model No. ..... Serial No. ..... Date Purchased .....
Please note these items for future reference.

PREPARATION OF AUTOMATIC TURNTABLE FOR USE OR SHIPMENT

Refer to the instructions on the rear of the Console.

CONNECTING THE REMOTE SPEAKERS

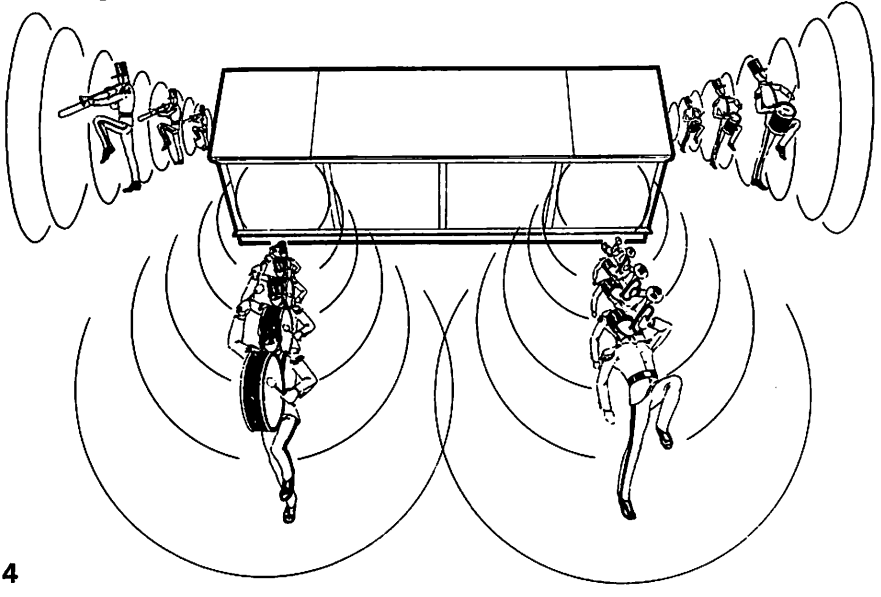
The speakers in your Console are already connected. For additional speakers these remote receptacles are available.



The speaker outputs ("L" & "R" "REMOTE") are used for a separate set of stereo speakers in a secondary listening area (den or patio, for example).

These two outputs, in combination with the "SPEAKERS" switch on the front panel, allow you to select either the main set of speakers, your remote speakers, or both.

A new feature has been added to your Scott Console. Additional mid-range and/or tweeter speakers are located on the sides of the cabinet as well as in front to increase the sound dispersion and provide an omni-directional or a reverberatory effect. As you can see by the following diagram, total sound and energy radiates in a much broader pattern thus increasing the available listening area for stereo reproduction.



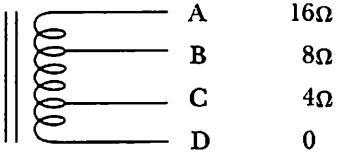
Therefore, room placement of your new Scott Console for stereo effect is far less critical.

MULTIPLE SPEAKER MATCHING FOR TRANSISTOR AMPLIFIERS

A number of schemes have been proposed for matching multiple loudspeakers to transistor amplifiers.

What it all boils down to is that we must not permit the impedance of the loudspeaker system as seen by the amplifier to drop below 4 ohms. The simple solutions using resistors or series-parallel hookups are not suitable for more than one extra pair of loudspeakers. When it is desired to have more than two loudspeakers connected to any one channel at one time, it is best done by means of a transformer. Not just any transformer will do, however. Most transformers sold for this purpose were designed for public address systems, carrying speech frequencies and do not have enough inductance to operate properly at the lower frequencies required for good high fidelity music reproduction. There is, however, a way around the problem. We can use the secondary winding of a good quality output transformer designed for tube-type hi fi amplifiers. These are readily available at parts jobbers or can be purchased as spare parts from a hi-fi manufacturer. Any good quality transformer that has 4 ohm, 8 ohm, and 16 ohm taps will do the job.

If the transformer has terminals for the primary winding, it is best to tape over them so that they will not be accidentally used or short-circuited; likewise, if the transformer has wire leads, it is best to cut off the primary wires completely. We should end up with four terminals or wires—a common terminal, and a terminal each for the 4 ohm, 8 ohm and 16 ohm taps. Mark the 16 ohm tap with the letter "A", the 8 ohm tap with the letter "B", the 4 ohm tap with the letter "C", and the common tap with the letter "D". This is shown in the sketch below.

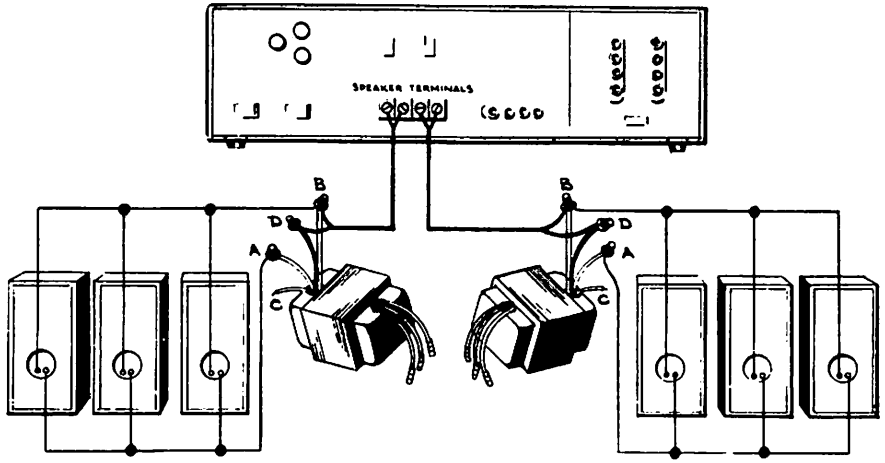


Determine how many speakers are to be connected in parallel to each channel. It is desirable that they all be of the same nominal impedance. The table below shows the maximum number of speakers of each impedance that may be connected to a channel and shows the transformer terminal combinations to be used for making such connections.

Amplifiers	Speakers	Max. No. 16Ω in Parallel	Max. No. 8Ω in Parallel	Max. No. 4Ω in Parallel
A-D	C-D	8	4	2
B-D	A-B	12	6	3
B-D	B-C	24	12	6
A-D	B-C	50	25	12

It is suggested that if a transformer having lead wires is used, wire nuts be used for making the connections, as it is convenient and avoids short circuits.

If it is desired to switch off one or more speakers in the string, this may be done by the simple usage of a toggle switch at each speaker. If it is desired to reduce the volume level at certain individual speakers, an L-pad of the appropriate impedance should be used.



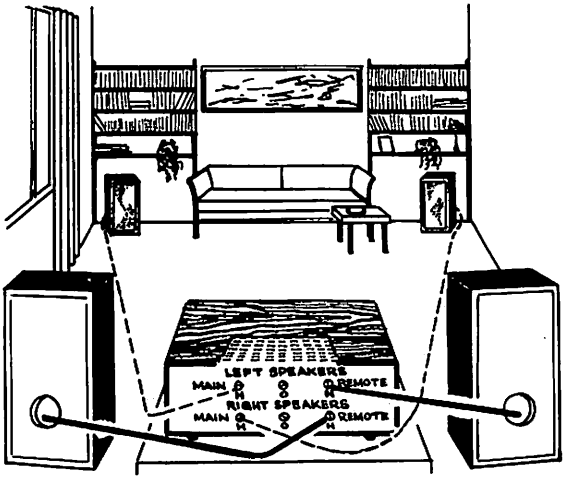
AN EXAMPLE OF THREE 4 OHM SPEAKERS ON EACH CHANNEL

SURROUND WITH SOUND

Add another dimension to your listening pleasure. Just as the change from mono to stereo adds spaciousness to music, so does the addition of another pair of stereo speakers provide further enhancement of the stereo effect. Try it with any of the new Scott Controlled Impedance speakers—you will be pleasantly surprised.

Simply attach your left front speaker to the left main terminal and your right rear speaker to the left remote terminal. Connect your right front speaker to the right main terminal and your left rear speaker to the right remote terminal. Attach ground wires to "O" terminals for corresponding channels. Be sure that both Main and Remote switches on the front panel are pushed in.

Only Scott speakers have been specially developed to provide optimum performance with today's electronically advanced solid-state components. Unlike older vacuum tube amplifiers, solid-state components give best performance over a narrow range of speaker impedance. The impedance of ordinary speakers varies considerably as the sound frequency changes. With increased impedance, available power is reduced. Lowered impedance may distort your amplifier's output circuits. Scott has deliberately controlled the impedance of the speakers by integrated engineering development of both speakers and crossover to specifically match the capabilities of solid-state equipment. Scott Controlled Impedance speakers both safeguard your valuable equipment and give you the kind of sound you wanted when you bought solid-state components.

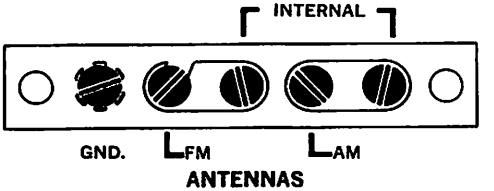


CONNECTING THE ANTENNA

Internal FM Antenna

Your new Console incorporates an internal (FM) line cord antenna which will provide very good signal reception in areas of moderate to strong signals up to 25 miles.

Do not connect any other external antenna when using this arrangement.



ANTENNAS

DISCONNECT JUMPER FOR EXTERNAL ANTENNA USE

IMPORTANT: The line cord (power cord) should be completely unraveled, otherwise the performance of the internal antenna will be affected.

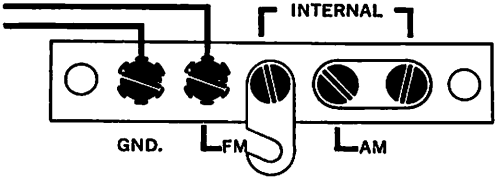
External FM Antenna

In areas of weak and noisy stations an outside antenna is recommended. The use of such an antenna system will also improve the reception on those distant FM signals you want to receive.

To connect an external antenna, disconnect the shorting link from the terminal screw marked FM EXT. and let it hang freely by itself. Connect the external antenna lead-in wire to the terminals marked FM EXT. and ground.

Since the beam antenna is extremely directional, it is important that it be positioned toward the desired stations for best reception. If your favorite stations are located in widely differing directions from your home, an antenna rotor is recommended.

Repeat above procedure for external AM antenna by disconnecting link between GND. and AM EXT.



ANTENNAS

DISCONNECT JUMPER FOR EXTERNAL ANTENNA USE

Using Your TV Antenna

In many cases the television antenna can be used for FM with excellent results providing the TV antenna is not one designed to receive TV signals only.

CONNECTING A TAPE RECORDER

To Make Tape Recordings

Your Scott Console has a special set of output jacks which permit you to make tape recordings from your records or from any station you are listening to. The tape recorder is completely unaffected by the volume and the tone controls of the Unit.

Connect an audio cable from the Left channel: TAPE OUTPUT on the Console to the left input of the tape recorder. Repeat for the right channel. Some tape recorders have both a high level (or tuner) input and a low level (or microphone) input. Use the high level input for all connections from the Console. If there is any question, refer to the recorder instructions and follow accordingly.

If you have a monophonic tape recorder, connect the Left channel TAPE OUT of your Console to the tape input jack of your recorder.

To Play-back Tape

(For tape recorders with their own playback pre-amplifiers)

Connect an audio cable from the left channel output of the recorder to the left channel TAPE IN input jack on your Console. Repeat for the right channel. In order to listen to the tape, switch the TAPE switch on the front panel to the MONITOR position.

If you are listening to a monophonic tape recorder, connect the tape recorder's output cable to the left channel TAPE IN input jack. Slide the MODE switch to MONO so that the sound can be heard over both speakers.

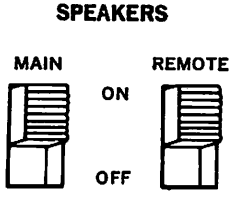
EXTRA INPUT

An extra stereo input is provided for any other high level source you may wish to connect, such as a tape cartridge player or TV set. The TV must have a phono output jack built-in or installed. If this extra source is a stereophonic device with two leads, connect the left channel lead to the left channel EXTRA input and the other to the right channel EXTRA input. Set the INPUT switch to EXTRA. If it is a monophonic device with only one lead, connect it to the left channel EXTRA input. To listen to this latter signal over both speakers, you should turn the MODE switch to MONO position and the INPUT to the EXTRA position.

PHONE JACK (Low Level Output)

This output jack permits you to use stereo earphones for private listening or for monitoring tape recordings, without disturbing others.

SPEAKER SWITCHES

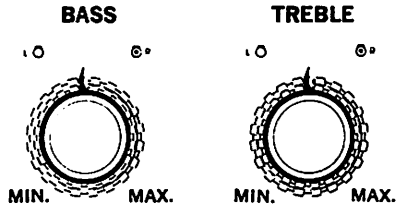


These switches are designed to complement the front panel HEADPHONE JACK. When using headphones, you may wish to turn off the loudspeakers to avoid feedback to a microphone or disturbing others in the room. By sliding the SPEAKER switches to the OFF position, all signals to the main and remote speakers will be turned off without affecting the signals to the HEADPHONES. In the on position, both the HEADPHONES and the loudspeakers will be operative.

"POWER ON/OFF" SWITCH

The Console is turned on and off by means of a slide switch. This feature permits you to leave the LOUDNESS control at the desired setting when turning the unit off. The solid state amplifier of the Console requires no warm-up time; consequently the unit is ready for use immediately upon being turned on.

TONE CONTROLS



The tone controls used in your Console are actually two separate controls (one for each channel) held together by friction. When you turn the treble control, you are changing the high frequencies on both channels. If you desire to modify one channel only, firmly grasp the knob that affects the channel you do NOT wish to change. Then turn the other knob as you wish.

These controls modify the sound to suit the listener's taste, the room acoustics, and the program material being used. H. H. Scott provides separate controls for each channel to permit you to compensate for electrical differences between speakers, and to allow for differences in their placement in the room.

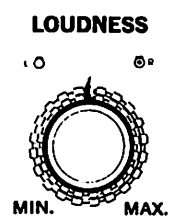
The BASS control modifies the low frequencies while the TREBLE control modifies the high notes. Rotating the controls clockwise causes an increase in the amplitude of these frequencies, while rotating counterclockwise causes a reduction.

Feel free to use these controls as you see fit. You are the one who must be satisfied with the over-all sound, and the tone controls are the principal way of assuring that you are.

Monospan

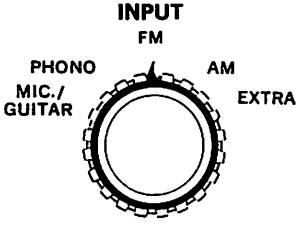
By having separate tone controls, Scott makes it possible for you to simulate stereophonic sound on your older monophonic records. Simply turn UP the TREBLE control on your left speaker, and turn DOWN the TREBLE control for the right speaker. Then turn UP the BASS control for the right speaker, and turn DOWN the BASS control for the left speaker. The amount of boost or cut is strictly a matter of taste. You will find that the higher-pitched instruments like violins and flutes appear to be coming from the left speaker, while the deeper toned instruments appear to be coming from the right speaker. This will certainly add to your enjoyment of monophonic material.

LOUDNESS CONTROL



The LOUDNESS control on your Console is a clutched control. It is actually two separate controls, one for each channel, locked together by friction. If one channel is louder than the other, it is easy to correct this problem. Firmly grasp the knob that controls the channel that is louder and with your other hand, rotate the knob on the softer channel slightly clockwise. You can now use the clutched control as a regular volume control. Mode Switch must be in STEREO.

INPUT SWITCH



The INPUT switch allows you to select whatever program material you wish to hear. For instance, if you wish to listen to a record played on your record player, the INPUT switch should be turned to Phono position.

MODE SWITCH

AUTOMATIC STEREO–If you are primarily interested in stereo program material, the switch will usually be in this position. The FM tuner will automatically switch to stereo if tuned to a stereo broadcast, and automatically return to monaural operation if stereo is no longer being broadcast or when tuned to a monaural broadcast.

MONO–If a stereophonic cartridge is being used to play monophonic records, use this position. It automatically combines the outputs from the left and right channels of the cartridge into a single monophonic signal. In the process of combining the two channels, noise and rumble present in the original record, and noise caused by vertical motion in your stereo cartridge is cancelled, resulting in much clearer reproduction of your mono records.

This position is also used when playing all other monophonic sources.

TAPE MONITOR SWITCH

To listen to the playback of recorded tape, slide the TAPE switch to the MONITOR position. When you are finished with the tape, IMMEDIATELY RETURN the SWITCH to the NORMAL position. Otherwise you will be unable to hear any other program material.

If your tape recorder incorporates a separate playback head (with playback electronics) it is possible to listen to a

recording a fraction of a second after it is made, as a quality check. Let us assume that you are making a recording of the FM station you are listening to. The switch will be in the FM position. With the TAPE switch in the NORMAL position, the system will be playing the actual broadcast. With the TAPE switch moved to the MONITOR position, the system will now be playing the tape recording of the broadcast just after it has been recorded. By moving the TAPE switch back and forth, it is possible to hear whether the recording is equivalent to the actual broadcast.

MIC INPUTS

MIC

GUITAR

An additional feature of your Scott Console is the provision for amplifying outputs of musical instruments such as microphones, guitars, accordions, etc.

These musical instruments can be connected to the microphone inputs shown above.

Adapter cables will have to be used between your musical instruments and the inputs on your Stereo Console, unless your instrument utilizes the matching plugs.

Using this home entertainment feature is quite simple. Let's say, for example, you wish to record your own vocal with guitar accompaniment. First, connect a cable from a dynamic microphone to either one of the Microphone inputs (depending on which channel you wish the vocal to be heard on). Now insert the connecting cable from a guitar into the other input. If you wish to combine the sounds from both microphone and guitar so they will be heard on both channels, place the Input switch in the MIC position and the Mode switch in the MONO position.

If you wish microphone to be heard on one channel, and guitar on the other, place the Mode switch in the STEREO position.

If only one instrument is to be heard on both channels, then remove one instrument entirely and place the mode switch in the mono position. If you wish to be heard in one channel only, then place the mode switch in the stereo position and you will be heard in the channel that your instrument is plugged into.

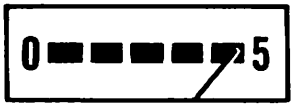
CAUTION: When using your Console with a microphone, be sure to position the microphone far enough *behind* the loudspeakers so as to avoid audio feedback (a loud squealing sound).

TUNING IN AN FM OR AM STATION

FM is capable of providing wide frequency response, low distortion, and noise-free reception. Scott's new Field Effect Transistor FM circuitry provides the finest in crystal-clear 3-dimensional FM stereo. However, to take full advantage of this capability, it is essential that the station be tuned exactly. To insure precise tuning, Scott includes an accurate tuning meter on the receiver.

Tuning Meter

The precision tuning meter shows the strength of the incoming FM signal. Turn the tuning dial slowly and stop when the pointer has reached maximum. The meter reading will vary from station to station depending on the amount of signal present from the transmitter. The reading may even vary from day to day on the same station due to atmospheric conditions. Just tune to the point where the meter reads highest and you will be set for best reception.



Occasionally you will note that the meter may swing violently back and forth. This indicates that an airplane is passing nearby. The swinging will stop once the plane has gone.

Listening To An FM Stereo Broadcast

The development of FM Multiplex (stereo) broadcasting is one of the great breakthroughs in home entertainment. Your new Scott Console will provide the maximum in listening pleasure when used to receive one of these remarkable broadcasts. First, you must locate a stereo program. This can be done by referring to your newspaper or to the FM station's program booklet. A much easier way is to use the convenient built-in stereo indicator.

Scott Auto-Sensor Circuit

The amazing Auto-Sensor actually switches your Console to stereo automatically when you are tuned to a station broadcasting in multiplex. If the station returns to normal monophonic operation, the tuner will automatically switch back to monophonic reception. You never have to think about resetting the controls.

To listen to a stereo broadcast with the Auto-Sensor circuit, turn the INPUT switch to FM and the mode switch to AUTOMATIC STEREO. Tune across the dial slowly. When you locate a stereo signal, the pilot light on the faceplate will illuminate and the tuner will instantly switch to stereo operation.

REMOVAL OF AUTOMATIC TURNTABLE FOR SERVICING

CAUTION!! Be sure Console is unplugged before removing the changer for servicing.

Remove three screws from back and four screws from bottom holding the cardboard cover on the rear of the console. Move the two shipping locks of the changer from the horizontal position to a vertical position. Remove the power cable and two audio cables. Lift changer off of mounting board.

REMOVAL OF THE CHASSIS FOR SERVICING

CAUTION!! Be sure Console is unplugged before removing the chassis for servicing.

1. Remove eight screws holding the back cover and an additional two screws from the accessory panel located beneath the back cover.

2. Remove four screws (two per side) holding the chassis in place.

3. Remove two screws holding AM Antenna Bracket.

4. Remove plastic power plug from left side of compartment and also unscrew the receptacle for this plug.

5. Remove the two main speaker cables by reaching in under the accessory panel and pulling plugs toward the front of the Console. Now the chassis is ready to be taken out of the Console. NOTE!! If the chassis is still tight, loosen the screws that hold the adjustable wood panel that is located behind the front panel.

6. Pull the chassis out and down and it will slide out.

7. If AM servicing is not necessary omit step 3. Reverse this procedure for reinstalling the chassis for servicing.

CUSTOMER TROUBLE SHOOTING GUIDE

It is extremely unlikely that you will experience any difficulty with your new SCOTT. In time however, minor problems may arise with your SCOTT unit and this guide is enclosed for your convenience. By checking the various symptoms and their solutions, a trip to your dealer or Authorized Warranty Service Station can possibly be eliminated.

NO OUTPUT (ANY MODE OF OPERATION)

1. Check speaker fuses (if any).
2. Check balance L and R switch (if any) to insure that is is in the proper position.

3. Reverse the speaker cables to insure that the speaker is not defective. Also check the cables to be sure that they are firmly connected to their receptacles and to insure that the speaker cable is not defective.
4. Activate all slide or push button switches three or four times to remove dust on internal contacts.
5. Be sure the tape monitor switch is in the NORMAL position.

NO OUTPUT 1 CHANNEL ONLY

1. Refer to above procedure.
2. Check cartridge for loose or frayed connections.
3. Check cables from changer to SCOTT unit.

UNIT DOES NOT OPERATE WHEN TURNED ON

1. Check main power fuse; if defective replace with same value. DO NOT attempt to install a larger fuse, this could cause internal damage to the unit.

POOR FM RECEPTION–CAN NOT RECEIVE STEREO STATIONS OR ONLY A FEW STEREO STATIONS

1. In steel buildings (high rise apartments) an external antenna is recommended. Follow installation instructions in your Operating Manual.

AM NOISY AND SCRATCHY

1. Due to the excellent amplification in your SCOTT unit, the inherent noise of AM is noticeable especially at night. To minimize this noise, use your noise filter and/or turn the bass and treble controls to minimum.
2. Also rotate your AM antenna to the point of least noise.

SCRATCHY OR NOISY CONTROLS

1. Spray the affected controls with a low oil residue contact cleaner (Swish).

WARRANTY

All Scott consoles purchased from authorized Scott dealers are guaranteed against defects in material and workmanship. Any part found to be defective by the manufacturer or his agent within two years from the date of sale of the console to the customer will be replaced. Any labor performed in connection with the above within 90 days from said date of sale will also be covered under this guarantee.

The above covers units serviced by an authorized Scott console dealer or his agent including on the customer's premises.

In addition, since the electronic chassis in your console is a Scott component, it is also covered by Scott's standard component which covers labor as well as material for two years. To qualify under this warranty the electronic chassis must be removed from the console and delivered to and picked up from an authorized Scott warranty service station or the Customer Service Department, H. H. Scott, Inc., 111 Powdermill Road, Maynard, Mass., 01754.

To validate the guarantee, the enclosed warranty card must be returned to H. H. Scott, Inc. within ten days from the date of purchase from an authorized Scott dealer.

The above warranty does not apply to (1) accessory parts explicitly covered by the field warranty of an original manufacturer; such as a branded turntable or tape recorder if provided; (2) units subjected to accidental damage or misuse in violation of instructions; (3) normal wear and tear; (4) units repaired or altered by other than authorized service agencies; and (5) units with removed or defaced serial number.

Should your Scott console require service at any time, please do one of the following:

1. Contact the dealer from whom it was purchased. Most Scott console dealers have competent service departments and are fully capable of performing complete and thorough service.

(or)

2. Write to the Service Department, Scott Console Division, H. H. Scott, Inc., 111 Powdermill Road, Maynard, Mass., describing the difficulty in detail. Be sure to include the model and serial number of your Scott unit.

Your new Scott console is the finest of its type. It was skillfully designed, carefully manufactured and thoroughly tested. Your choice of our equipment will result in years of listening pleasure.

H SCOTT

029-1173-050

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