

OPERATING MANUAL



SCOTT

 SCOTT

342-C FM  
STEREO RECEIVER



**ARCHIEF**  
DOCUMENTATIEDIENST  
NVHR

#### MUTING

In the "ON" position effectively reduces the annoying rushing sound which normally occurs between FM stations.

#### TUNING METER

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

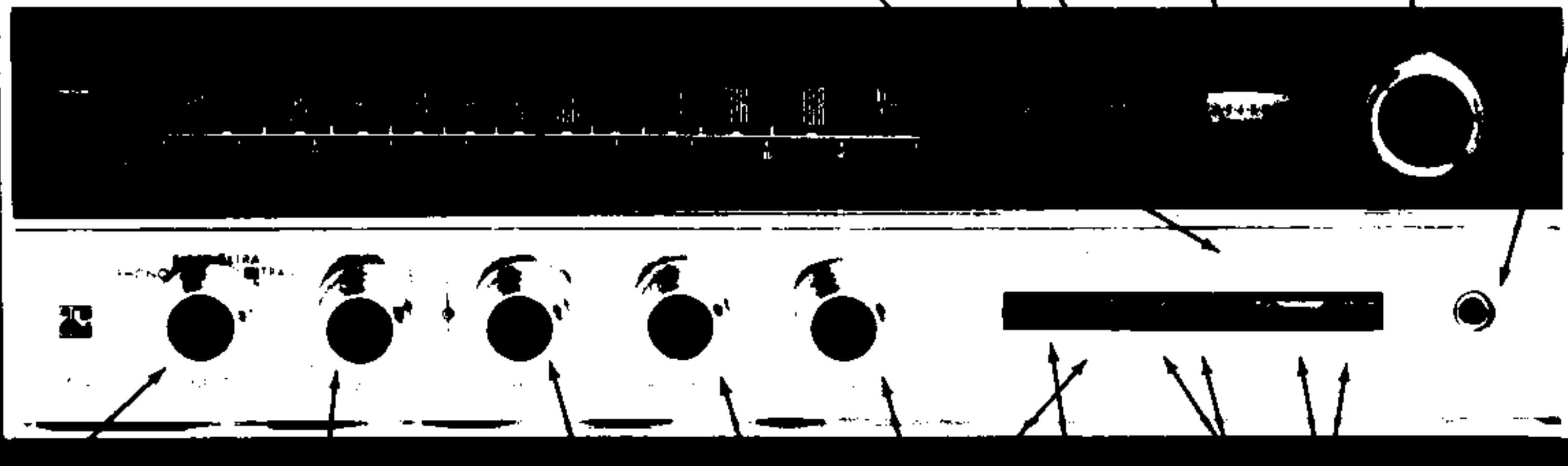
#### HEADPHONE OUTPUT

To connect a set of low impedance stereo headphones.

#### TUNING KNOB

To select the desired FM station.

See page 11



#### INPUT

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

#### BASS

Modifies low frequency sounds. Set to suit your taste.

#### TREBLE

Modifies high frequency sounds. Set to suit your taste.

#### BALANCE

To make one speaker louder than the other. Permits you to adjust for unequal sounds caused by room acoustics or faulty program material.

#### LOUDNESS/POWER

Makes system louder or softer to suit your taste. To turn the receiver on or off.

#### NOISE FILTER

Out — For normal listening  
In — To reduce high frequency noises such as record surface noise.

#### VOLUME COMPENSATION

In "LOUD" position introduces a circuit that boosts the extreme high notes and low notes for listening at low levels. Compensates for a natural characteristic of the human ear. "VOL." position removes circuit completely.

#### SPEAKERS 2.1

See page 10

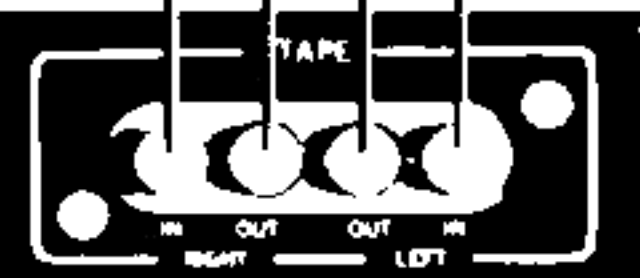
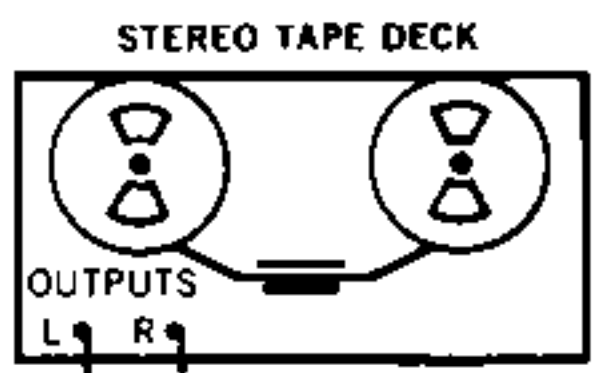
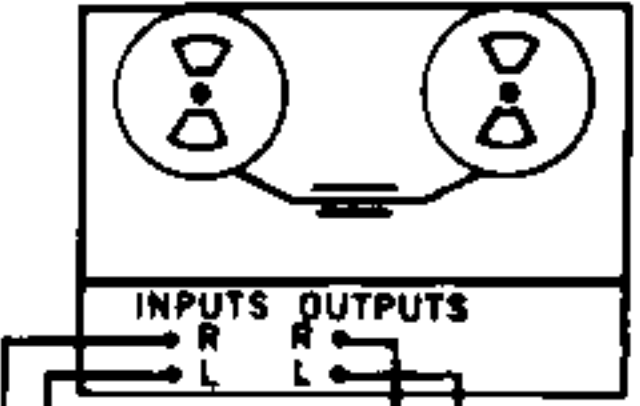
#### TAPE

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.

#### MODE

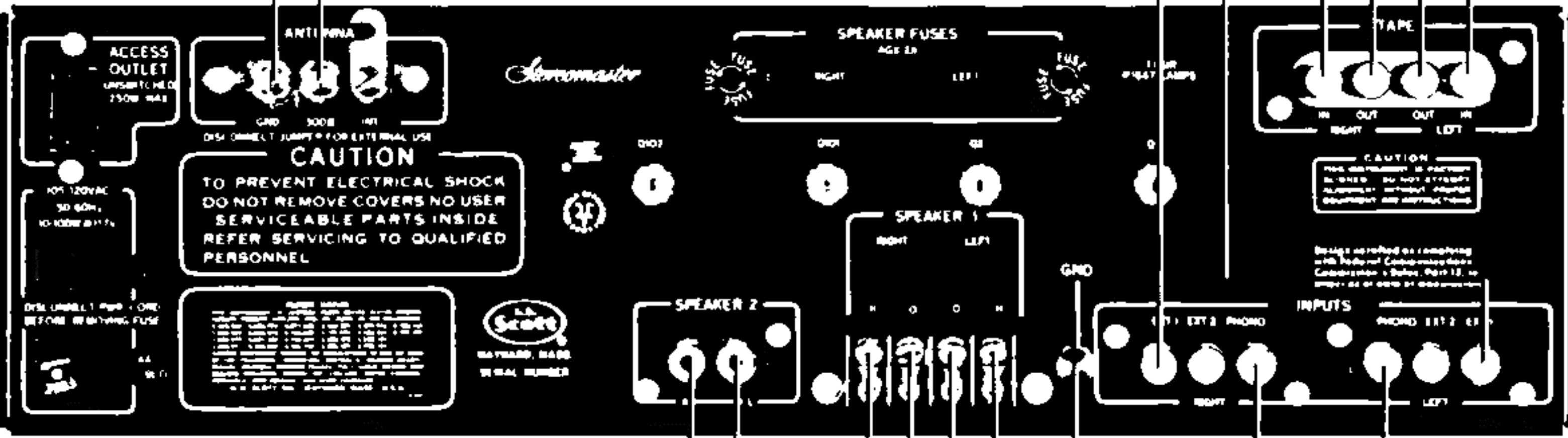
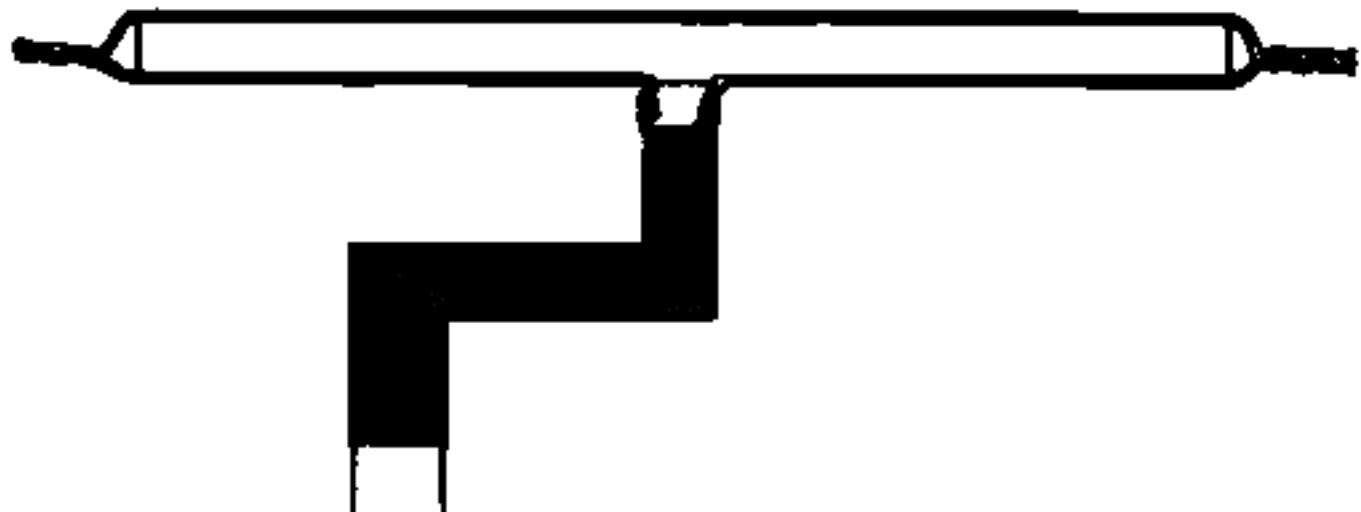
For all stereophonic listening, set to Stereo position. Mono position for monophonic listening.

**STEREO TAPE RECORDER**



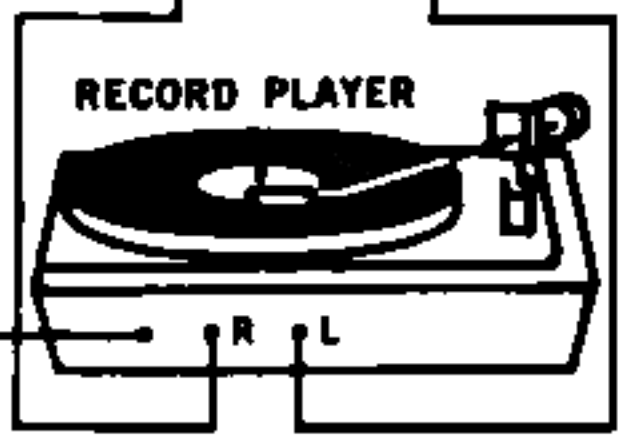
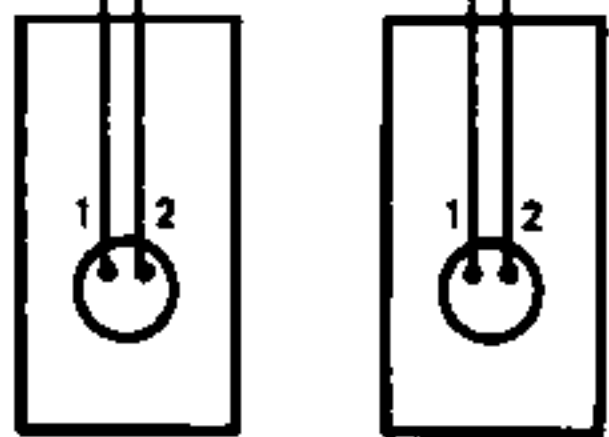
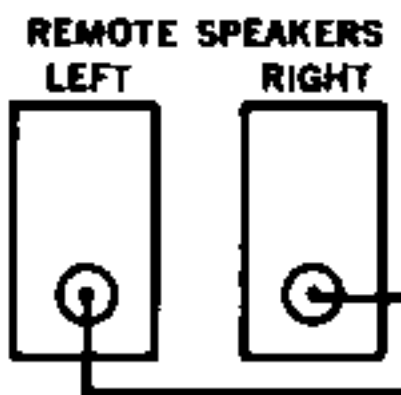
**CAUTION**  
 This distributor is factory  
 aligned. Do not attempt  
 alignment without proper  
 equipment and instruction.

Design verified as complying  
 with Federal Communications  
 Commission's Safety Part 15, as  
 amended at date of publication.



**CAUTION**  
 TO PREVENT ELECTRICAL SHOCK  
 DO NOT REMOVE COVERS NO USER  
 SERVICEABLE PARTS INSIDE  
 REFER SERVICING TO QUALIFIED  
 PERSONNEL

Model	Frequency	Power	Impedance	Dimensions
SR-100	50-15,000	10	16	10 1/2 x 10 1/2 x 10 1/2
SR-100A	50-15,000	10	16	10 1/2 x 10 1/2 x 10 1/2
SR-100B	50-15,000	10	16	10 1/2 x 10 1/2 x 10 1/2
SR-100C	50-15,000	10	16	10 1/2 x 10 1/2 x 10 1/2
SR-100D	50-15,000	10	16	10 1/2 x 10 1/2 x 10 1/2
SR-100E	50-15,000	10	16	10 1/2 x 10 1/2 x 10 1/2
SR-100F	50-15,000	10	16	10 1/2 x 10 1/2 x 10 1/2
SR-100G	50-15,000	10	16	10 1/2 x 10 1/2 x 10 1/2
SR-100H	50-15,000	10	16	10 1/2 x 10 1/2 x 10 1/2
SR-100I	50-15,000	10	16	10 1/2 x 10 1/2 x 10 1/2
SR-100J	50-15,000	10	16	10 1/2 x 10 1/2 x 10 1/2
SR-100K	50-15,000	10	16	10 1/2 x 10 1/2 x 10 1/2
SR-100L	50-15,000	10	16	10 1/2 x 10 1/2 x 10 1/2
SR-100M	50-15,000	10	16	10 1/2 x 10 1/2 x 10 1/2
SR-100N	50-15,000	10	16	10 1/2 x 10 1/2 x 10 1/2
SR-100O	50-15,000	10	16	10 1/2 x 10 1/2 x 10 1/2
SR-100P	50-15,000	10	16	10 1/2 x 10 1/2 x 10 1/2
SR-100Q	50-15,000	10	16	10 1/2 x 10 1/2 x 10 1/2
SR-100R	50-15,000	10	16	10 1/2 x 10 1/2 x 10 1/2
SR-100S	50-15,000	10	16	10 1/2 x 10 1/2 x 10 1/2
SR-100T	50-15,000	10	16	10 1/2 x 10 1/2 x 10 1/2
SR-100U	50-15,000	10	16	10 1/2 x 10 1/2 x 10 1/2
SR-100V	50-15,000	10	16	10 1/2 x 10 1/2 x 10 1/2
SR-100W	50-15,000	10	16	10 1/2 x 10 1/2 x 10 1/2
SR-100X	50-15,000	10	16	10 1/2 x 10 1/2 x 10 1/2
SR-100Y	50-15,000	10	16	10 1/2 x 10 1/2 x 10 1/2
SR-100Z	50-15,000	10	16	10 1/2 x 10 1/2 x 10 1/2



# INTRODUCTION

Congratulations on your selection of this new Scott Stereo. 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 today's solid state equipment, the most critical period of time is right now during setup and operation. Please read this instruction manual thoroughly. Do not attempt to operate the Stereo until you have made *all* the external connections required.

## Installation of your new Receiver

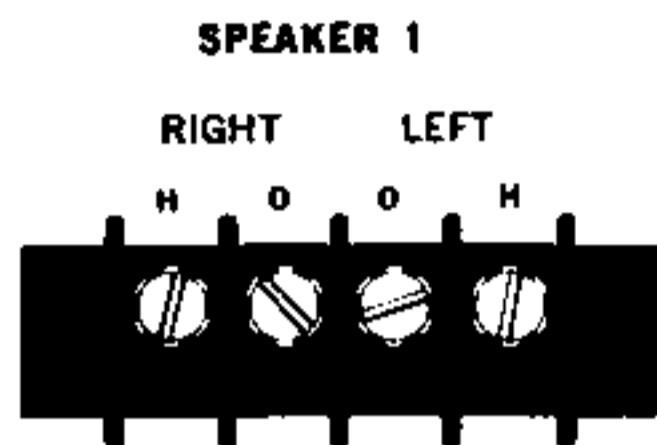
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## CONNECTING THE SPEAKERS

A barrier strip for main speaker connections is located on the rear of your Receiver. The screw terminal marked Right is for connecting the right-hand speaker (as you face them from your listening area); the terminal marked Left is for the left-hand speaker.



The other speaker outputs (Speakers Left & Right) 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 "SPEAKER" switches on the front panel, allow you to select either the main set of speakers, your remote speakers, or both.

## CONNECTING THE ANTENNA

### Internal FM Antenna

Your new Stereo 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.

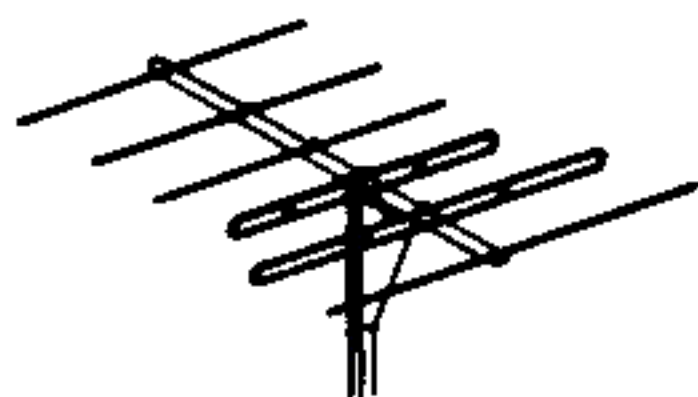
**IMPORTANT:** The line cord (power cord) should be completely unraveled, otherwise the performance of the internal antenna will be affected.

### External FM Antenna

An FM dipole antenna is supplied with the unit. In strong signal areas this should be more than adequate to pull in most of the FM stations available. Antenna connections are made to the terminal strip marked "Antenna" located on the back panel. The dipole leads are connected to the screws marked "G" and "300 ohm" respectively as shown. The dipole should be opened to a full "T" and positioned for optimum performance.



In fringe areas, or areas of high interference, an external directional antenna may be necessary. This is particularly true for multiplex stereo reception. Reflections from hills or nearby tall buildings can cause annoying distortion. There are many fine yagi FM antennas available which will provide strong signal and reduce interference thus enhancing the range of the tuner. The remarkable sensitivity of your Scott Receiver when combined with a good antenna will permit you to receive an astonishing number of distant FM stations, either monophonically or in stereo.



In areas of extremely high noise, such as a busy highway, the following system is suggested.

Mount a yagi antenna at some point as far removed from the source of the disturbance as possible. Use an impedance matching balun mounted on the antenna and run 72 ohm shielded antenna lead-in wire to the unit. Use another impedance matching balun at the antenna terminal of the unit. Since the yagi antenna is extremely directional, it is important that it be positioned for the best reception of desired stations. In areas where stations are available in diverse directions, an antenna rotator is suggested.

## CONNECTING A TAPE RECORDER

### To Make Tape Recordings

Your Scott Stereo 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.

#### TAPE



Connect an audio cable from the Left channel: TAPE OUTPUT on the Stereo 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 Stereo. 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 Stereo 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 Stereo. 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 INPUTS

Four extra stereo inputs are provided for any other high level source you may wish to connect, such as a tape cartridge player, AM radio, or TV set. The AM radio or TV must have a phono output jack built-in or in-



LEFT

stalled. If one extra source is a stereophonic device with two leads, connect the left channel lead to the left channel EXTRA-1 input and the other to the right channel EXTRA-1 input. Set the INPUT switch to EXTRA-1. If it is a monophonic device with only one lead, connect it to the left channel EXTRA-1 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-1 position. Follow the same procedure for any device connected to the EXTRA-2 inputs.

## CONNECTING TO PHONO INPUTS

**IMPORTANT: ALWAYS TURN THE LOUDNESS CONTROL ALL THE WAY DOWN TO "0", OR TURN THE POWER OFF WHENEVER CONNECTING OR DISCONNECTING ANY CABLES TO THE RECEIVER.**

## STEREO RECORD PLAYER WITH MAGNETIC CARTRIDGE



RIGHT

To connect a turntable or changer utilizing a magnetic stereo cartridge, connect the shielded leads from the player to the PHONO inputs on the back of the receiver. Check the instructions provided by the record player manufacturer to be certain that you are inserting the left channel lead into

the left channel input of the unit and the right input into the right channel.

## STEREO RECORD PLAYER WITH CERAMIC OR CRYSTAL CARTRIDGE

Connect a crystal or ceramic cartridge to the Phono input. Use the special adaptors which are normally supplied with crystals or ceramic cartridges for this purpose. This type of cartridge can be plugged directly into the Extra inputs, however, some of the bass frequencies will be lost and the signal may sound "weak."

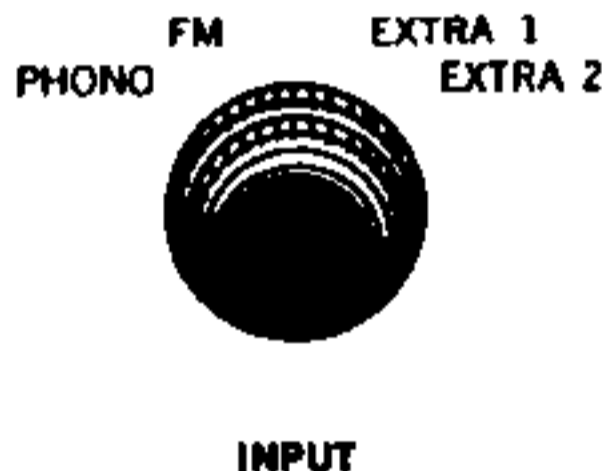
## MONOPHONIC RECORD PLAYER

The instructions outlined above are equally valid here. The only difference is that there will be only one lead to connect and this should be inserted in the Left input. To play a monophonic record so it is heard over both loudspeakers, turn the MODE switch to MONO.

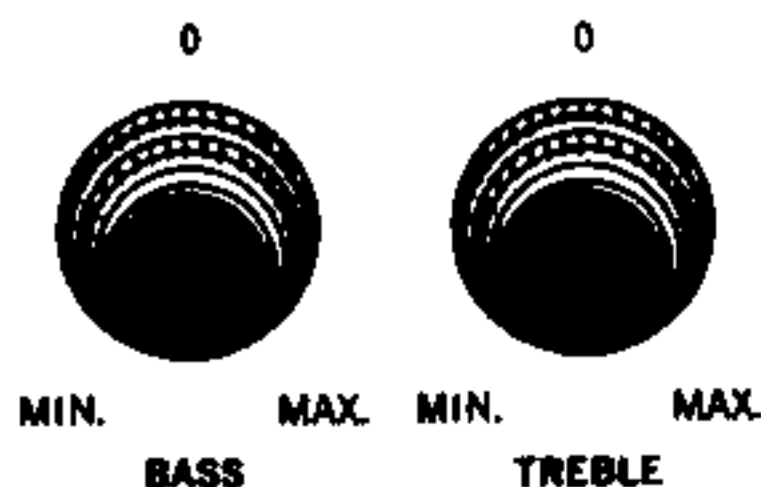
## OPERATION OF YOUR RECEIVER

### INPUT

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 a Phono position.



### TONE CONTROLS



The tone controls used in your receiver 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 user's taste, the room acoustics, and the program material being used. H. H. Scott provides separate controls for each channel to permit you to adjust for differences between speakers, and differences due to placement of the speakers in the room. The BASS control modifies the low frequency while the TREBLE control modifies the high notes. Rotating the controls clockwise causes an increase in the amplitude of the frequencies, while rotating counter-clockwise causes a reduction.

## LOUDNESS AND BALANCE CONTROLS



The **LOUDNESS** control is also the on/off switch and can be easily rotated for desired listening level.

If the volume is the same at each position, the system is in balance. If it is not, then it is out of balance and this must be corrected by the following simple method: The **BALANCE** control on your receiver is designed to correct for any differences in volume between channels caused by occasional program material, channel variation, placement of speakers, or particular room acoustics. By rotating the control clockwise, the right channel will increase in volume in comparison to the left channel. Rotation counter-clockwise has the opposite effect. By moving the control to its extreme position it is possible to eliminate one channel completely, if desired.

## FILTER

Noise distortion, or static may be on the record or tape being played by the FM station. The wide frequency response of your Scott receiver permits you to hear everything, both the good and the bad. The difficulty may be at the station. If the interference is present when the **MODE** switch is in stereo but not present in mono, push in the **FILTER** switch.

This filter does not affect the regular FM carrier. It only affects the subcarrier which tends to be more prone to noise pickup. The use of this switch position can drastically reduce noise without affecting the frequency response of the main carrier. As the subcarrier transmits the stereo information, use of the switch will cause a slight reduction in stereo separation.

## VOLUME COMPENSATION

COMP.

VOL.

LOUD

It is a phenomenon of the human hearing mechanism that when volume is low, the ear is less sensitive to extreme low and high notes.

Thus, whenever the system is being operated at a low level, the sound will not seem to be as wide range as it is at higher levels. To compensate for this deficiency, your receiver incorporates a special circuit which automatically boosts the extreme lows and highs whenever the volume is reduced. When the sound level is increased, this compensation automatically decreases since it is no longer needed. When the switch is in the VOL. position the compensation network is inactive.

## TAPE SWITCH

TAPE

MONITOR

NORMAL

To listen to the playback of recorded tape, from an external tape recorder simply push the Tape switch to the MONITOR position. In this position it automatically bypasses the INPUT switch and permits you to listen to tape only. 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 the recording a fraction of a second after it is made as a quality check. Let us assume that a recording is being made off-the-air. The INPUT 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 switch moved to MONITOR, the system will now be playing the tape recording of the broadcast just after it has been recorded. By moving the switch back and forth it is possible to hear whether the recording is equivalent to the actual broadcast.\*

\*Only for recorders with separate record and playback heads.

## MODE SWITCH

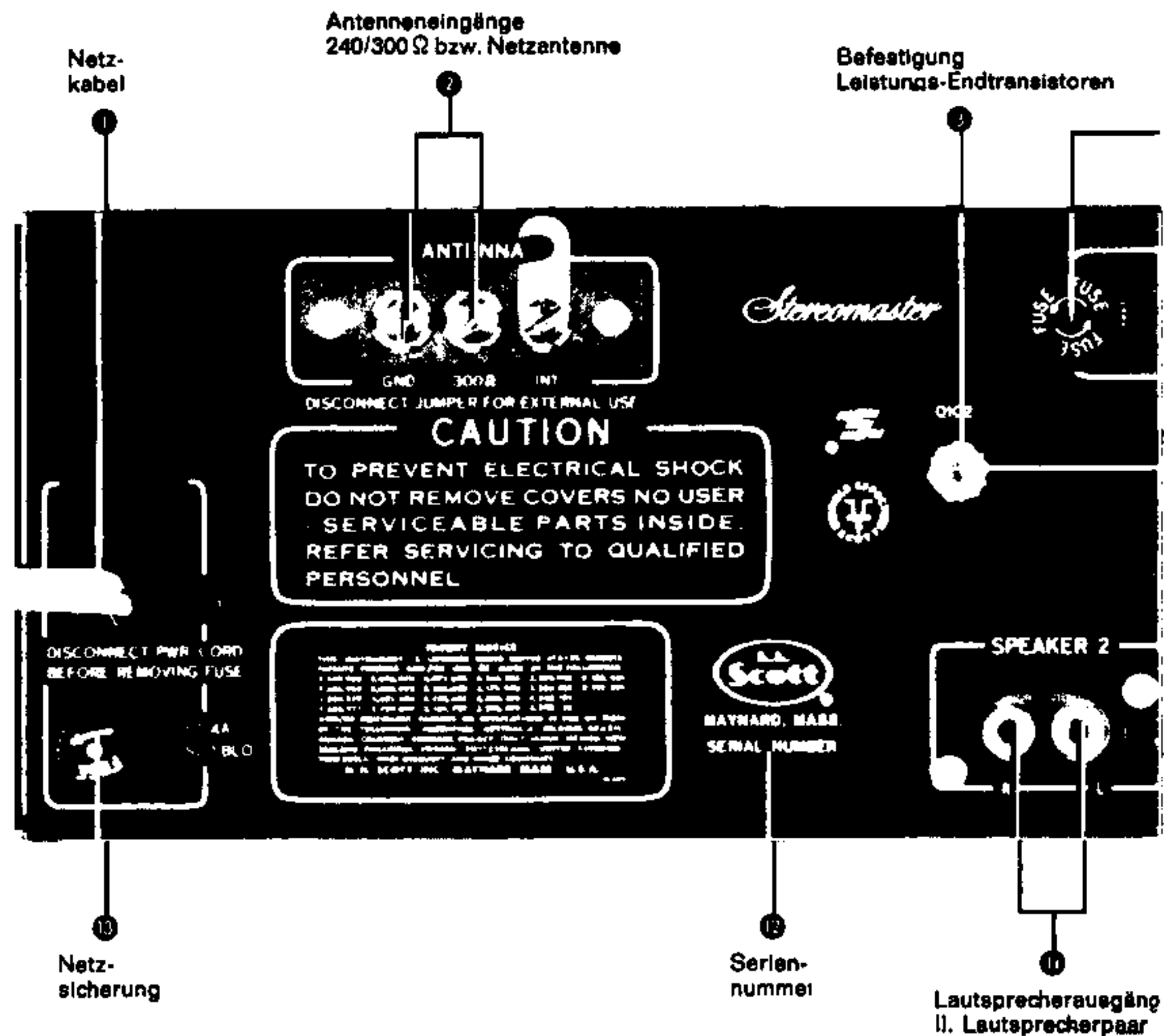
MODE

MONO

STEREO

**STEREO**—If you are primarily interested in stereo program material, the switch will usually be in this position.

**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



### 1 Netzkabel

Anschluß über Europastecker 220 V / 50 Hz

### 2 Antenneneingänge 240/300 Ω bzw. eingebaute Netzantenne

Der 342-C erlaubt den Anschluß von 240/300 Ohm Antennenleitungen (symmetrisch - Schlauchleitung) bzw. die Verwendung der eingebauten Netzantenne.

Unter normalen Bedingungen und nicht zu großen Kabellängen geschieht die Niederführung unter direktem Anschluß an die eigentliche Antenne über 240 Ω-Schlauchleitung. Anschluß in diesem Fall direkt an die Klemmen 300 Ω - GND.

Bei großen Kabellängen und/oder Antennenniederführungen durch sog. „elektrische Störnabel“ wie z. B. Zündstörungen, Bus- und Straßenbahnoberleitungen, Aufzügen, med. HF-Geräten u. ä. kommt folgende Installation zur Durchführung: Antenne (240 Ω) - Übertrager - Koaxialkabel (60 Ω) - Übertrager (240 Ω).

In günstigen Empfangsgebieten kann auch die eingebaute Spezial-Netzantenne verwendet werden. In diesem Fall ist der Kurzschlußbügel von INT nach der Klemme 300 Ω zu legen. Daß mit dieser Behelfsantenne die Möglichkeiten in Bezug auf UKW-Empfang nicht ausgenutzt werden können, bedarf keiner besonderen Erklärung.

**WICHTIG!** Bei Anschluß einer Antenne darf der Kurzschlußbügel keine Verbindung mit der Klemme 300 Ω haben!

In allen Antennenproblemen empfiehlt es sich einen Spezialisten hinzuzuziehen, oder sich mit dem Antennenhersteller direkt in Verbindung zu setzen.

### 3 Befestigung der Leistungs-Endtransistoren

Die komplette Treiber- und Endstufe ist im Gerät aufgesteckt (Snap-in-Technik). Aus Kühlgründen sind die Leistungstransistoren zusätzlich mit der Rückwand verschraubt.

### 4 Endstufensicherungen L und R

Sicherungstyp: AGX-2A

Extrem flink reagierende Spezialsicherung. Letzte Stufe des integrierten elektronischen Sicherungssystems zum Schutz der Leistungstransistoren gegen Überbelastung durch äußere Einflüsse

wie z. B. Kurzschluß, starke Unteranpassung u. ä. Es dürfen ausnahmslos nur Originalsicherungen verwendet werden. Ersatzsicherungen im Beipack.

### 5 Zusatzeingänge 1 und 2

Die beiden Eingänge sind bei einer Empfindlichkeit von je 2 x 350 mV universell zum Anschluß von Tonbandgeräten (Wiedergabe), Plattenspielern mit Kristallsystem, Fernsehgeräten mit Diodenausgang, spez. Radioempfangsteilen u. ä. geeignet.

### 6 + 7 Tonband-Aufnahme / Tonband-Wiedergabe

Bei Anschluß eines Tonbandgerätes für Aufnahme (6) TAPE OUT) sei auf folgendes hingewiesen:

Dieser Ausgang ist nach internationaler Norm ausgelegt. Bei Geräten, die nicht der Norm entsprechen bzw. keinen regelbaren Eingangsspannungsteiler besitzen, kann es zu einer Übersteuerung der Aufnahmeverstärker kommen. Verzerrungen der Aufnahme sind die Folge. Sichere Abhilfe wird durch Vorschalten eines Spannungsteilers im Verhältnis 1:10 (47 kΩ : 470 kΩ) erreicht. Den Einbau kann jeder HiFi-Fachhändler vornehmen.

Tonband-Wiedergabe: Anschluß an (7) TAPE IN Adapter Cinch-Stecker / 5polige Diodenkupplung bzw. entspr. Verbindungskabel sind im Fachhandel erhältlich.

Kontaktbelegung nach DIN 41 523 Tonband-Steckverbindungen (stereophon):

1 Aufnahme linker Kanal	2 Masse	5 Wiedergabe rechter Kanal
4 Aufnahme rechter Kanal		3 Wiedergabe linker Kanal

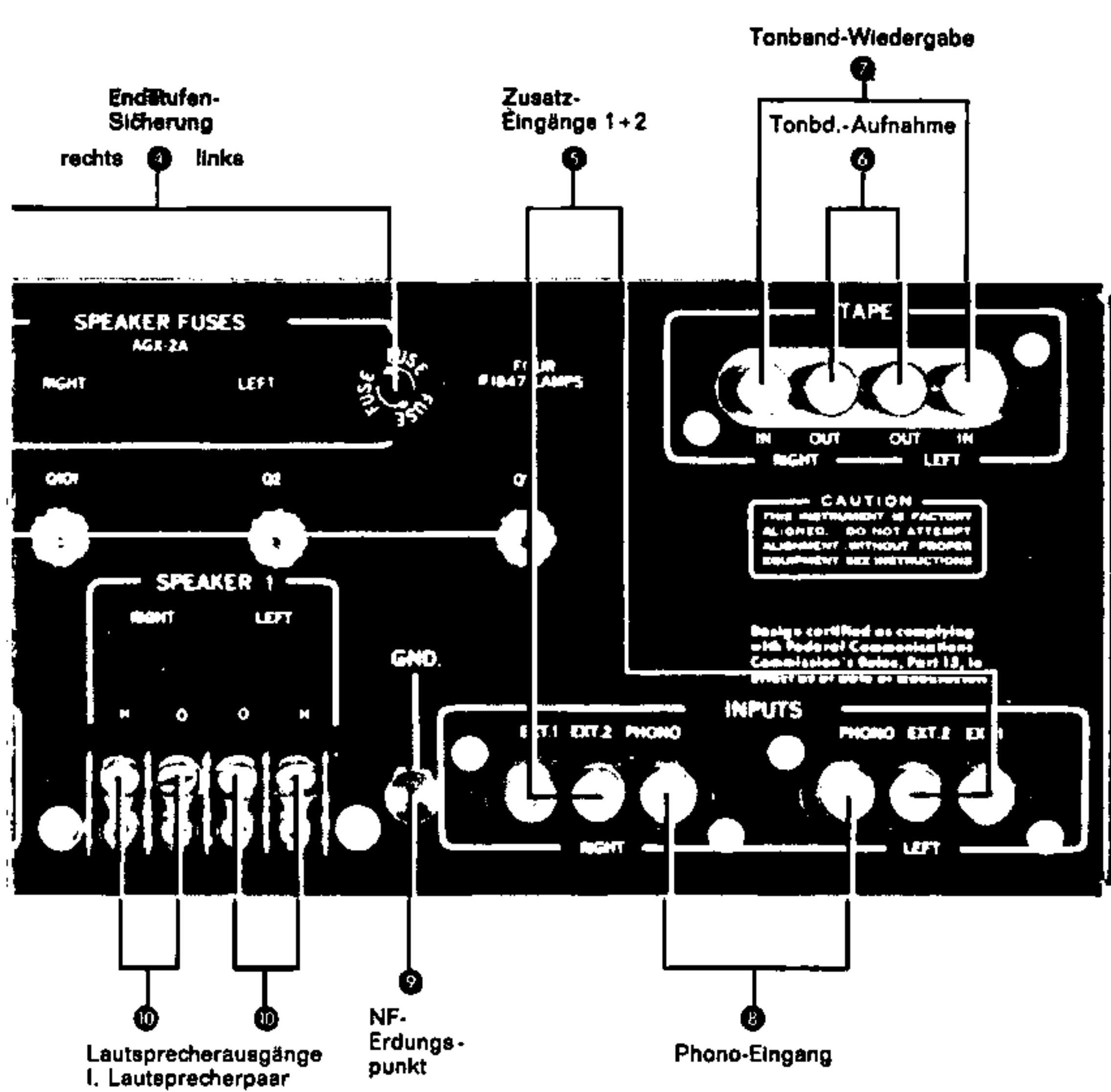
### 8 Phono-Eingang

Plattenspieler mit Magnetsystem.

Wir empfehlen bei diesem hochempfindlichen Eingang den Anschluß direkt mit Cinch-Steckern vorzunehmen. Die Verwendung eines Adapters DIN-Buchse / Cinch-Stecker kann zu Masseproblemen führen und damit Brummtörungen zur Folge haben.

### 9 NF-Erdungspunkt

Je nach vorliegenden Verhältnissen kann es erforderlich werden, den Plattenspieler zusätzlich zu erden. Hierzu wird eine Verbindung



zwischen den Plattenspielerchassis und dem NF-Erdungspunkt hergestellt.

Eventuell auftretende statische Aufladungen werden durch Verbindung dieses Punktes mit einer vorhandenen Erde (z. B. Antennenabschirmung) vermieden.

**10 Lautsprecheranschlüsse L und R I. Lautsprecherpaar**

In Verbindung mit der Lautsprechertaste 12 Vorderseite sind die Klemmleisten wie folgt belegt:

- O - H RIGHT Rechter Kanal
- O - H LEFT Linker Kanal

Beim Anschluß muß auf richtige Polung der Lautsprecher geachtet werden. Phasentest z. B. mit der „dhfi Schallplatte“ 1 oder 2. Die Lautsprecheranschlüsse sind universell für den Anschluß von Lautsprechern mit Impedanzen von 4 - 16 Ohm geeignet.

Um sicheren Kontakt zu bekommen und jegliche Kurzschlußgefahr an den Klemmen untereinander zu vermeiden, wird die Verwendung von Kabelschuhen empfohlen.

**11 Lautsprecheranschlüsse Rund L II. Lautsprecherpaar**

In Verbindung mit der Lautsprechertaste 11 (Vorderseite) sind die Cinch-Buchsen wie folgt belegt:

- SPEAKER 2 - R Rechter Kanal
- SPEAKER 2 - L Linker Kanal

**12 Seriennummer**

Die Seriennummer jedes ausgelieferten Gerätes wird in unserer Kundendienstabteilung registriert. Wir gewähren lt. unseren Garantiebestimmungen eine zweijährige Garantie ab Verkaufsdatum, wenn die, jedem Gerät beigelegte Garantieanforderungskarte ordnungsgemäß ausgefüllt in unserem Besitz ist. Im Interesse des Käufers sei auf diese Tatsache nochmals hingewiesen.

**13 Netzsicherung**

Sicherungstyp: F-SB-0,7

Um Schäden am Gerät zu vermeiden, dürfen nur Originalsicherungen verwendet werden. Ersatzsicherung im Beipack.

TECHNISCHE DATEN SCOTT 342 - C		
TUNER - TEIL	Empfangsbereich in MHz (UKW-Bereich)	87,6 - 108
	Empfindlichk. für 26 dB Rauschabst. in mikroVolt	1,5
	Selektivität für 300 kHz in dB	60
	Bandbreite ZF-Verstärker	220
	AM-Unterdrückung in dB	60
	Kreuzmodulationunterdrückung in dB	80
	Begrenzung-Einsatzpunkt in mikroVolt	< 1,5
	Klirrgrad 1 kHz $\pm$ 75 kHz Hub in %	0,6
	Obersprechdämpfung bei 1 kHz in dB	40
	Obersprechdämpfung bei 15 kHz in dB	35
Fremdspannungsabstand $\pm$ 40 kHz Hub in dB	60	
VERSTÄRKER - TEIL	Musikleistung beider Kanäle in Watt (4 Ohm)	100 (IMF)
	Dauerleistung pro Kanal in Watt (8 Ohm)	2 x 30
	Klirrgrad bei 1 kHz Nennleistung und Aussteuerung beider Kanäle in %	0,6
	Intermodulation 4:1 in % bei Nennleistung	0,4
	Frequenzgang über alles in Hz $\pm$ 1 dB	18 - 25 K
	Fremdspannungsabstand in dB	
	niederpegelige Eingänge (Phono)	- 60
	Fremdspannungsabstand in dB	
	hochpegelige Eingänge (Monitor, Tuner)	- 75
	Eingänge in mV:	
	Phono	2,8
Tuner	integriert	
extra I und extra II	2 x 350	
Bandwiedergabe	250	
Monitor (Tonbandau)	250	
Regelumfang Baßregler in dB bei 30 Hz	24	
Regelumfang Höhenregler in dB bei 10 kHz	24	
Rauschfilter ab 5 kHz - 6 dB/Oktave	vorhanden	
Lautsprecher (autom. Anpassung in Ohm)	4 - 16	
ALLGEMEINES	Quarzfilter (Zwischenfrequenz in MHz)	10,7
	Anzahl der FETs	3
	Anzahl der ICs	6
	Gesamtbestückung Transistoren/Dioden	98/39
	Chassis-Abmessungen - Breite x Höhe x Tiefe (cm)	40 x 13 x 30
Gehäuse in Nußbaum, Teak, Palisander und Schleiflack lieferbar		