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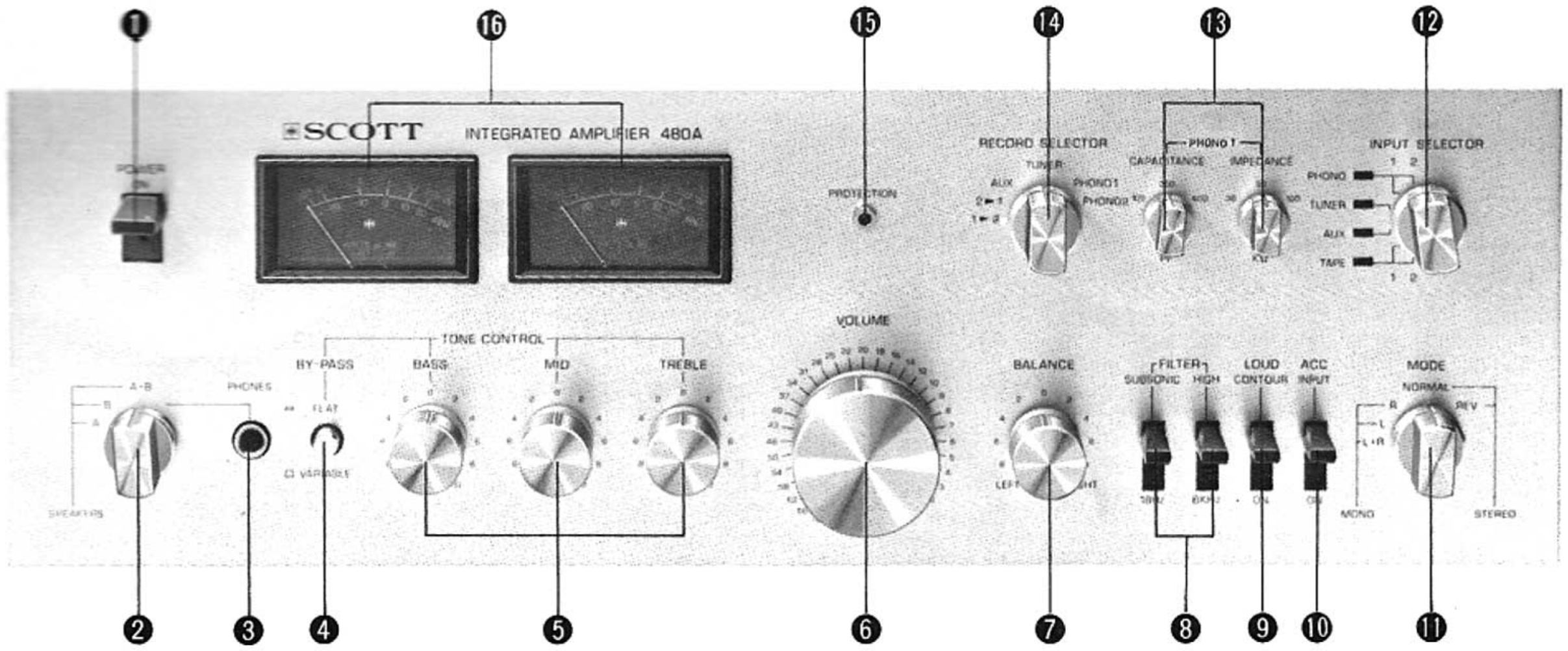


SCOTT®

Integrated Stereo Amplifier 480A

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 to 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.

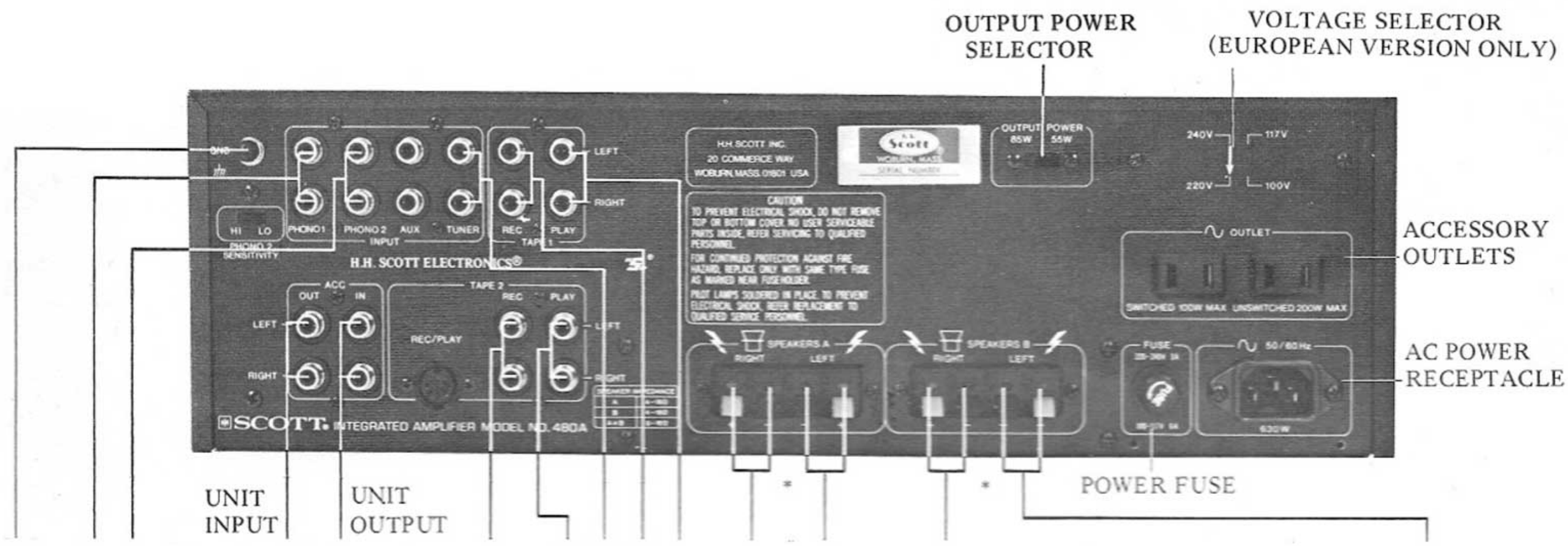
Model No. _____ Serial No. _____

Date of Purchase _____ Dealer's Name _____

Address _____ Telephone No. _____

Warranty Registration Date _____

Printed in Japan



WARNING:

TO PREVENT FIRE OR SHOCK HAZARD, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.

THE STEREO SYSTEM

The model 480A is a high fidelity stereo amplifier designed to be incorporated with other high fidelity components into a complete stereo system. It offers the following features:

- Outputs and switching for one or two pair of loudspeakers.
- Inputs for two stereo turntables with magnetic cartridges.
- Stereo inputs for an AM/FM Tuner. Specifically designed to accept the matching Scott Models 530T, 570T or 590T, will also accept many other brands.
  Stereo inputs to accept any one of the following:
  Cassette player
  Eight track cartridge player
  Open reel tape player
  Other high level (150 mV) sources.
- Tape recorder inputs and outputs permit connection of any two of the following:
  Two or Three head recorder/playback unit
  Cassette or cartridge recorder.
- Unique switching circuitry permits recording of any one source on two tape recorders while independently listening to any other source.
- Accessory inputs and outputs permit connection and switching of any one of the following:
  A noise reduction device
  A graphic equalizer
  A four channel decoder

INSTRUCTIONS

Unpacking

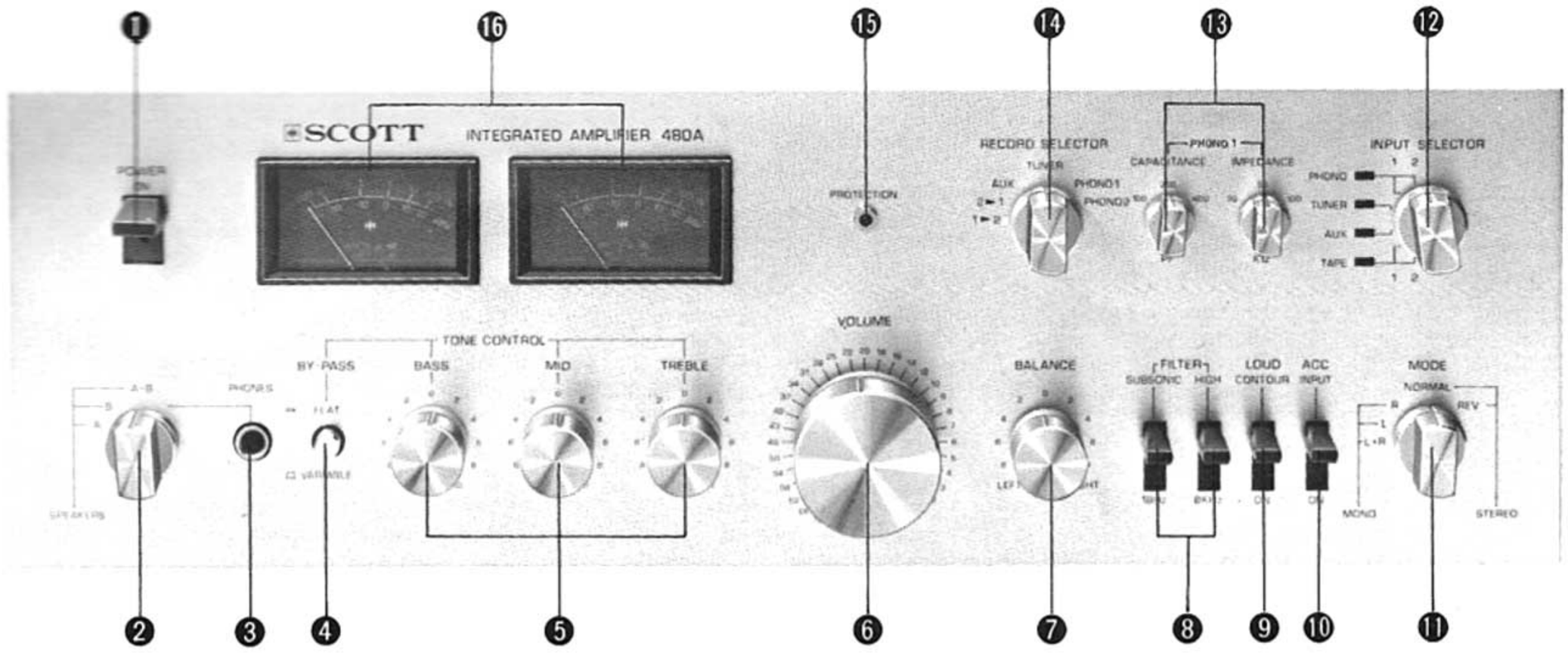
- Carefully remove all items from the container and check for damage.
- Before discarding any of the packing materials, examine them carefully for items you may have overlooked. It will be to your advantage to save original carton, fillers, cushonings, etc. They will prove valuable in preventing damage should you ever have to transport or ship your amplifier.
- Accessories contained in original carton [excluding the amplifier] are:
  Operating Manual
  Replacement Fuse
  Warranty Card
  Line Cord

Amplifier Installation

Installation of the Scott model 480A is not complicated. However, the following guidelines must be followed for satisfactory performance and to assure full coverage under the terms of the warranty.

Cautions

- Do not attempt to remove the cabinet cover – there are no user serviceable parts inside the amplifier.
  Refer servicing only to qualified personnel.
- Make sure that the Power Switch is in the Off position before making any installation or connections.
- The amplifier 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 approx. 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.



Amplifier Connections

Refer to pictorial CONNECTION DIAGRAM on last page.

- **Loudspeakers (SPEAKERS A/SPEAKERS B)**
  Connect left and right channel main speakers to amplifier terminals "A".
  Use suitable gauge wire. For wire lengths of less than 20 feet (6 m), 18 gauge wire is recommended. For longer distances, 16 gauge should be used. This is necessary to avoid power loss and to maintain good control or "damping" of the loudspeaker.
  Use care not to "short circuit" speaker cables.
  Phase properly. That is, connect the positive or plus terminal on each speaker to the corresponding plus terminal on the amplifier. The minus terminals are likewise connected together. This insures that the speakers are working together and not against each other, providing optimum imaging and best bass response.
  Take care to connect left and right speakers to the proper channel.
  In the same manner, a second pair of speakers may be connected to the speaker B terminals.

- **Phono Turntable/Changer (PHONO 1/PHONO 2)**
  Use cables provided with turntable, or obtain insulated and shielded audio cables terminated with standard pin plug. The main turntable should be connected to the Phono-1 input jacks. Connect separate ground lead to amplifier GND.
  Connect turntable power plug to accessory outlet, or wall receptacle.
  A second turntable may be connected in the same manner to Phono-2. Because this input does not have the facility for variable input impedance and capacitance, it should be used for a secondary turntable or changer.

- **Phono 2 Sensitivity Switch (PHONO 2 SENSITIVITY/ HI-LO)**
  This switch changes the gain of the Phono 2 preamplifier. Because of this it can accommodate virtually any magnetic cartridge, high or low output.
  - **Hi**: In this position, Phono 2 gain is the same as Phono 1 gain. This is for use with low output higher quality cartridges.
  - **Lo**: Reduces the phono 2 gain so it can be used with higher output (generally lower quality) cartridges.

- **Tuner (TUNER)**
  Use insulated and shielded audio cables terminated with standard pin plug (phono plug), connect to Tuner input jacks. Observe proper channel connection. Connect power supply cord to switched accessory outlet or wall receptacle. Provide suitable antenna.

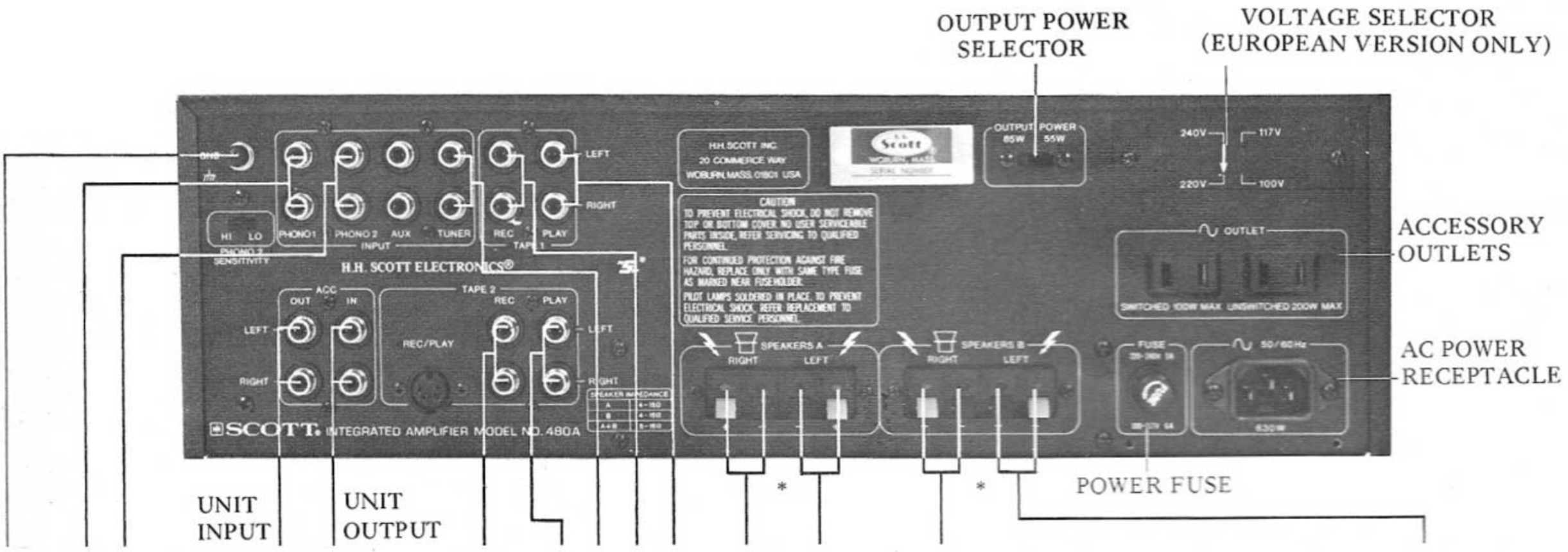
- **AUX Equipment (AUX)**
  Use insulated and shielded audio cables terminated with standard pin plug (phono plug). Connect to AUX input jacks, make proper channel connection.
  Connect power plug to amplifier accessory outlet, or wall receptacle.

- **Tape Recorder (TAPE 1 REC-PLAY/TAPE 2 REC-PLAY)**
  Connect output of main tape deck to Tape 1 Play Jacks. Connect tape deck's input to Tape 1 Rec Jacks.
  Use insulated and shielded audio cables.
  Connect recorder power plug to unswitched accessory outlet or wall receptacle.
  A second tape recorder may be connected to Tape 2 Jacks. Use cables and make connections as above.

- **Output Power Selector (OUTPUT POWER)**
  This switch selects maximum output power of the amplifier – full 85 watts per channel or 55 watts per channel. Adjust for your individual need.
  WARNING: To prevent damage to the amplifier do no change position of this switch when unit is operating.

- **Accessory (ACC OUT-IN)**
  Use cables supplied or obtain suitable insulated and shielded audio cables.
  Connect accessory power plug to unswitched accessory outlet or wall receptacle.

- **Amplifier Power Supply**
  Plug the cord set into the amplifier and into the wall outlet. REFER TO REAR PANEL FOR SPECIFIED VOLTAGE AND FREQUENCY BEFORE MAKING ANY CONNECTIONS.



OPERATION

Control Functions

❶ Power Switch (POWER)

Place in ON (up) position to turn power on. The meters and one of the Input Indicators will be illuminated (Protection Indicator will also be illuminated for the initial 3 seconds after turn on – this is normal).

❷ Speaker Select Switch (SPEAKERS/A- B- A+B- PHONES)

Permits you to select one of four listening conditions.

- **A**: Connects the sound output to the speakers attached to the Speaker A output terminals.
- **B**: Connects the sound output to the speakers attached to the Speaker B output terminals.
- **A+B**: Connects the sound output simultaneously to the speakers attached to the Speaker A and Speaker B output terminals.
- **Phones**: In this position, all speakers are silenced and the sound output is connected only to the headphones plugged into the Phones Jack 3) located to the right of this switch. Since the signal is always fed to this jack, regardless of switch position, it is recommended that the headphones be disconnected when not in use to avoid possible overload.

NOTE: The A set of speakers are normally located in your principal listening area and the B set of speakers usually in a second remote location.

❸ Headphones Jack (PHONES)

Accepts plug from a stereo headphone for private listening.

❹ By-Pass Switch (BY-PASS/FLAT-VARIABLE)

When set to the Flat (depressed) position, this switch disables all tone controls and the amplifier produces a normal flat response, regardless of the tone control settings. In the Variable (released) position, all tone controls are operational.

❺ Tone Controls (TONE CONTROL/BASS-MID-TREBLE)

These three controls allow you to adjust the tonal balance of the sound output.

- **Bass**: Increases or decreases the level of the low frequencies in the program material. Clockwise rotation increases and counterclockwise rotation decreases.
- **Mid**: Operates in the same manner as the Bass Control, except that it provides adjustment of midrange frequency levels.
- **Treble**: Operates in the same manner as other two controls, except that it provides adjustment of high frequency levels.

❻ Volume Control (VOLUME)

Permits adjustment of the volume for left and right channels simultaneously.

❼ Balance Control (BALANCE)

Provides left to right balance of the program material. Normally this control should be set to its center (0) position.

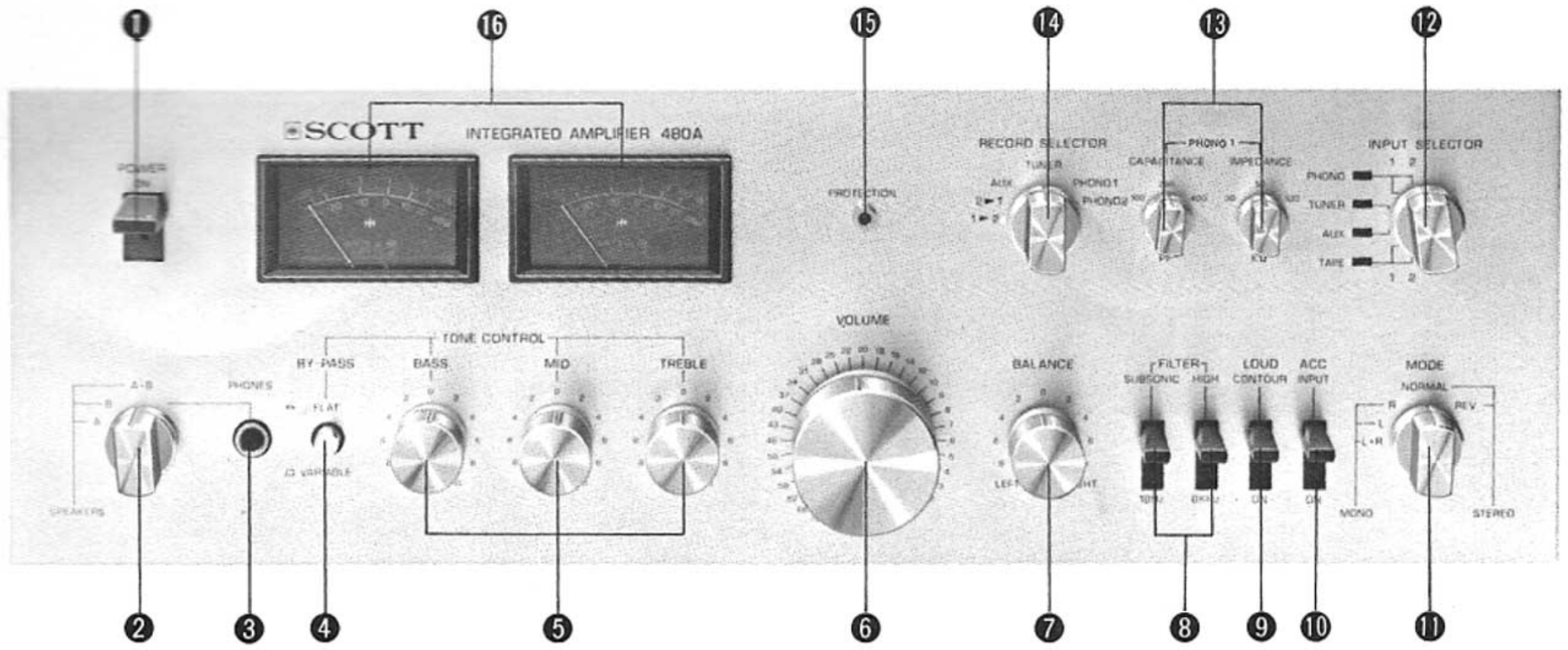
❽ Filters (FILTER/SUBSONIC-HIGH)

These filters are used to remove low and high frequency noise from various program materials.

- **Subsonic**: Filters out the subsonic (very low) frequencies. This can be particularly useful when a turntable produces undesirable low frequency signals caused by rumble, record warps or acoustic feedback from loudspeakers. Although these frequencies may not be audible, they can result in excessive movement of the woofer speaker cone, causing intermodulation in the loudspeaker. This filter can be left in the "On" position at all times with no ill effects. It should be emphasized that this filter does not affect the audible low frequencies and its operation can be verified only by observation of the woofer cone during record play.
- **High**: This filter is used to remove high frequency noise sometimes encountered in program materials.
  Such noise would be experienced when playing a worn record or a tape having excessive hiss.
  Since all high frequency filters have some effect on the high frequency response of the program material, they should not be used unless disturbing high frequency noise is present.

❾ Loudness Contour (LOUDNESS CONTOUR-ON)

When switched to the ON (down) position, compensates for deficiencies in human hearing ability at low listening levels based on the Fletcher-Munson curves (audio levels of high and low frequencies are boosted).



⑩ **Accessory Input Switch (ACC INPUT-ON)**
This switch provides in its "On" (down) position the possibility of adding any required accessory, such as an expander or graphic equalizer, in series with the source selected on the Input Selector 12). If no accessory is plugged into the accessory jacks, the Accessory Switch should be left in the "Off" position.

⑪ **Mode Switch (MODE)**
Determines the manner in which program material will be reproduced through the left and right channels.

- **Mono-R**: A single program source connected to the right channel input jacks is reproduced through both channels.
- **Mono-L**: A single program source connected to the left channel input jacks is reproduced through both channels.
- **Mono-L+R**: A program source connected to the left and right channel input jacks is mixed and reproduced through both channels.
- **Stereo-Normal**: This provides stereophonic reproduction of any stereo program source.
- **Stereo-Reversed (REV)**: This also provides stereophonic reproduction of any stereo program source except that the left and right channel signals are reversed.

⑫ **Input Selector (INPUT SELECTOR)**
Selects the program source to be listened to through the loudspeakers or headphones. This switch has no effect on the signal which is fed to the tape recorder outputs for recording purposes. Because of this, any input can be selected for listening while a recording of the same or any other input is being made.

- **Phono 1, 2**: Selects the outputs of the stereo turntables connected to the Phono 1 and/or Phono 2 Input Jacks, respectively. The 480A is provided with 2 independent phono preamplifiers. Because of this, it is possible to make a recording from one turntable while you are listening to a record on the second turntable.
- **Tuner**: Selects the tuner output signal connected to the Tuner Input Jacks.
- **Aux**: Selects the program source connected to the Aux Input Jacks.
- **Tape 1, 2**: Selects the outputs of the tape decks connected to the Tape 1 Play and/or Tape 2 Play Input Jacks, respectively.

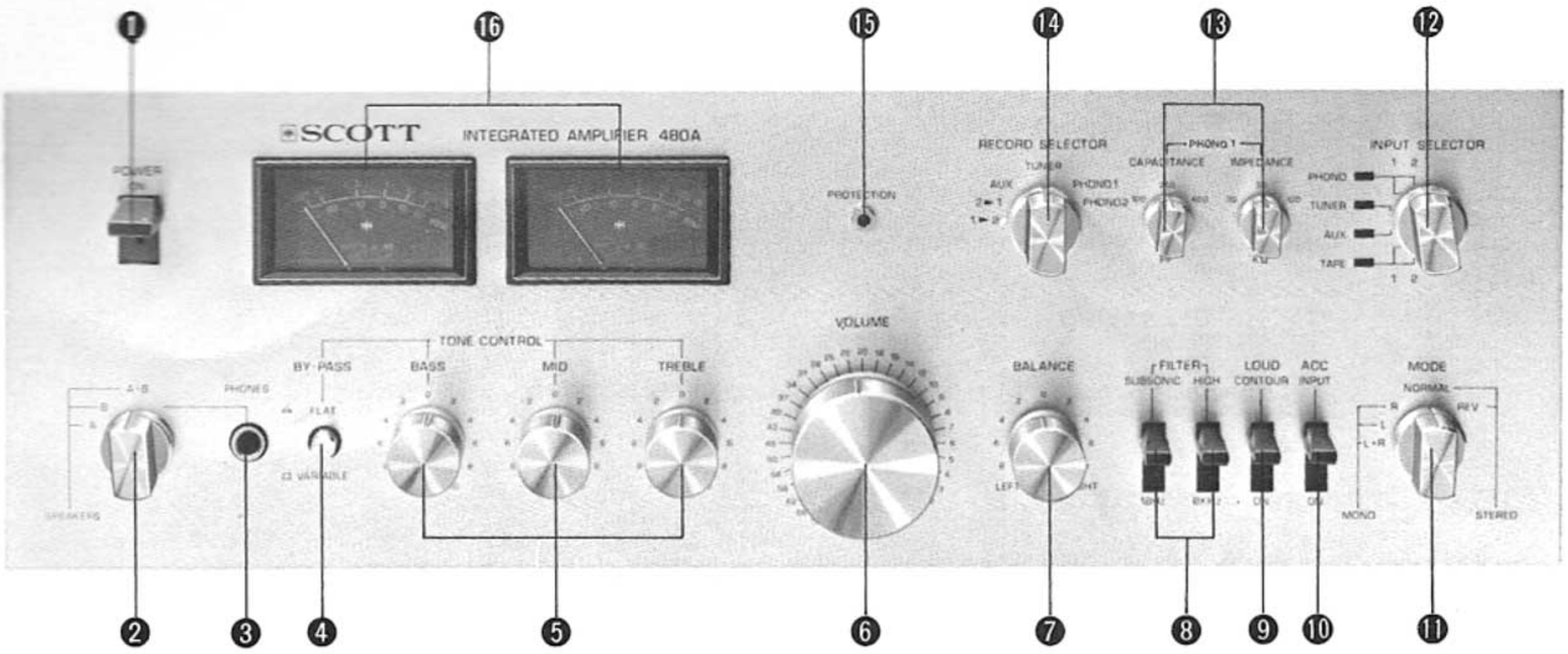
⑬ **Phono 1 Capacitance/Impedance Selectors (PHONO 1/ CAPACITANCE-IMPEDANCE)**
These switches change the input impedance and capacitance of the Phono 1 inputs.
Because these parameters can greatly affect high frequency phono cartridge performance, use of these switches allows you to adjust the phono input for optimum performance from your cartridge. Consult literature from cartridge manufacturer for recommended impedance and capacitance. The capacitive load on the cartridge is really the sum of the amplifier capacitance (100 pF, 250 pF or 400 pF) plus the capacitance of the turntable wires and connecting cables. Consult turntable manufacturer's literature for these values. The resistive load is switchable to 30 kohm, 50 kohm or 100 kohm. Unless otherwise specified, the 50 kohm position is recommended.

⑭ **Record Selector (RECORD SELECTOR)**
This switch selects the program source to be recorded onto tape decks connected to the Tape Rec Output Jacks. It provides complete independence from the Input Selector switch. Recording of any source is possible, regardless of the reproduction of other program material through the amplifier.

- **Phono 1, 2**: In this position, Phono 1 or Phono 2 recording signals are fed to the Tape Rec Output Jacks, regardless of the position of the Input Selecto switch 12).
- **Tuner**: Provides tuner output signal to the tape deck(s,.
- **Aux**: Feeds any stereo program source connected to the Aux Input Jacks to the tape deck(s).
- **2 → 1**: Feeds output from tape deck 2 to input of tape deck 1 for tape copying.
- **1 → 2**: Feeds output from tape deck 1 to input of tape deck 2.

⑮ **Protection Indicator (PROTECTION)**
This indicator normally lights during first few seconds of operation until internal circuits stabilize and speaker relay energizes. If protection circuit is activated during operation, this indicator will light. Turn off power and check speaker wiring.

⑯ **Power Output Meters**
The amplifier power output can be read on the left and right channel meters. These meters give a direct readout of



TROUBLE SHOOTING GUIDE

The following guide is intended as an aid in 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 amplifier to your dealer.

PROBLEM	SUGGESTED REMEDY
Amplifier inoperative when Power is switched on.	Check POWER FUSE, refer to rear panel for proper replacement. Be sure power cord is properly connected to powered outlet having the same voltage as specified on amplifier rear panel. If amplifier is very hot due to extreme stress, shut off power switch and wait until unit cools. Power transformer is equipped with a thermal switch which opens when temperature rises to an excessive level. When transformer cools to a safe level, the switch will automatically close and the amplifier will be fully operational.
Indicator lights up but no output any mode of operation.	Check speaker cables for loose or shorted connection. Check speaker switch for proper speaker selection. Check ACC switch is in off (up) position.
No output One channel	Refer to above. Exchange speaker cables to determine if problem is in speaker or cables. If phono only, check phono leads and cartridge connections. Interchange phono-cables to input jacks to check whether the same channel remains inoperative.
Scratchy or noisy Phono sound.	Life the tone arm. If the noise stops, the problem probably originates in the cartridge or associated wiring. Repair and/or replace as indicated, connect ground wire between changer mechanism and amplifier GND terminal (when supplied with turntable or changer).
Hum, Phono only.	Be sure Phono cable plugs are fully inserted in amplifier jacks. Move Phono cables around (while listening) to reveal an intermittent or broken shielded lead. Repair or replace as indicated. Connect Ground wire as noted above.
Hum, other inputs.	Check cables and connections, reverse amplifier power plug. Reverse the accessory power plug.

SPECIFICATIONS

Minimum Continuous RMS Output Power per channel, both channels driven into 8 Ohms from 20 Hz – 20 kHz with no more than rated THD
85 watts

Total Harmonic Distortion [78 IHF rated, at 20 Hz – 20 kHz]
0.03%

Intermodulation Distortion [at rated output, 60:7000 Hz; 4:1]
0.03%

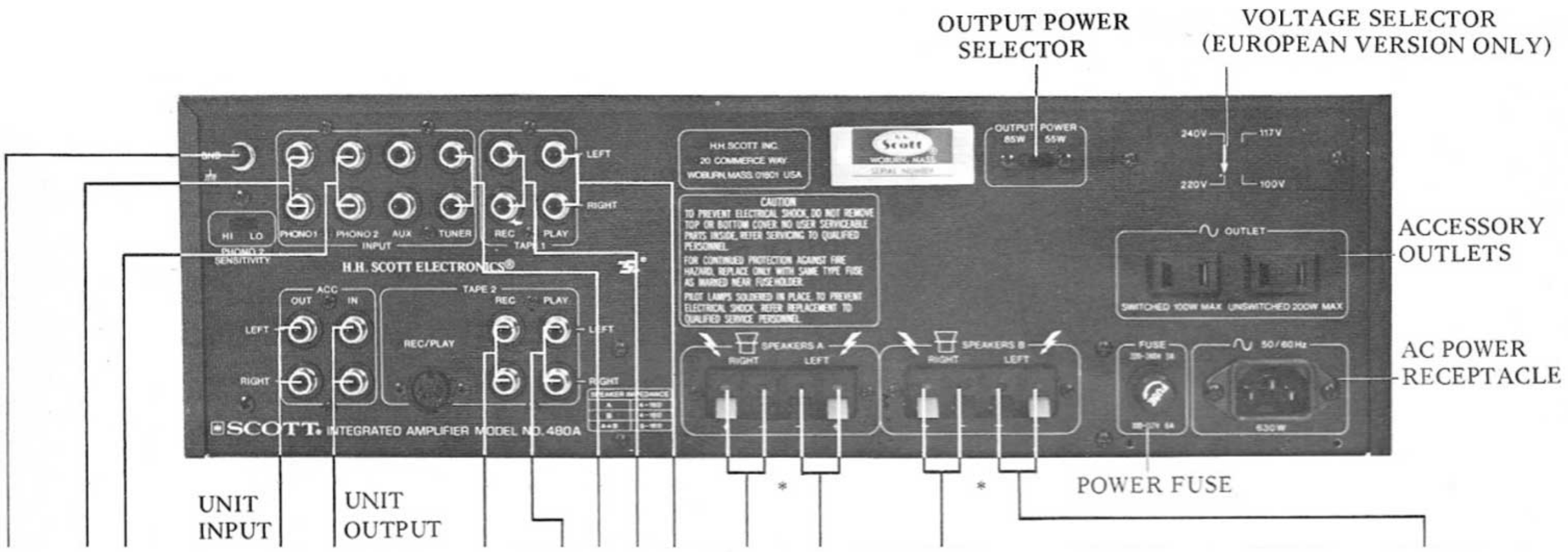
Frequency Response [at 1 watt output, ±0.5 dB]
20 Hz to 20 kHz

Power Bandwidth [at –3 dB]
10 Hz to 40 kHz

Damping Factor [at 1 kHz, for 8 Ohm load]
> 100

Input Sensitivity [for rated output]
Phono 1: 2.5 mV
Phono 2 Hi: 2.5 mV
Phono 2 Lo: 5 mV
Aux, Tuner: 150 mV
Accessory Input: 150 mV
Tape Play Jacks 1 and 2: 150 mV
Tape 2 DIN Input: 150 mV

Maximum Input Voltage
Phono 1: 180 mV
Phono 2 Hi: 180 mV
Phono 2 Lo: 360 mV
Aux, Tuner: 10V



Accessory Input: 10V
Tape Play Jacks 1 and 2: 10V
Tape 2 DIN Input: 10V

Signal-to-Noise Ratio [shorted input, IHF A network]
Phono 1; Ref. 10 mV: 90 dB
Phono 2; Ref. 10 mV: 90 dB
Aux, Tuner: 95 dB
Tape Play Jacks 1 and 2: 95 dB
Tape 2 DIN Input: 95 dB

Tone Control Range
Bass (100 Hz): ±10 dB
Mid (1 kHz): ±6 dB
Treble (10 kHz): ±10 dB

Filter Attenuations [12 dB/oct.]
High (8 kHz): −3 dB
Sub-sonic (18 Hz): −3 dB

Loudness Contour Compensation [Volume Control set to −30 dB]
100 Hz: +7 dB
10 kHz: +3.5 dB

Crosstalk
1 kHz: 80 dB

Channel Balance [maximum Volume Control]
0.5 dB

RIAA Tolerance [78 RIAA rated, 20 Hz to 20 kHz]
±0.5 dB

Channel Separation [78 IHF rated]
Phono 1 and 2 (1 kHz): 65 dB
Aux, Tuner, Accessory Input, Tape Play 1 and 2,
Tape 2 DIN Input (1 kHz): 75 dB

Tape Recording Output Level [at rated input sensitivity level]
Tape 1 Rec: 150 mV
Tape 2 Rec: 150 mV
Tape 2 DIN Output: 30 mV

AC Power Requirement
117V AC 60 Hz (USA/CANADA version)
100V/117V/220V/240V, switchable
AC 50/60 Hz (European version)

Power Consumption
240 Watts (UL/Canada), 630 Watts (Europe)

Dimensions
17″W, 5-1/4″H, 14-1/4″D
430W, 132H, 330D (mm)

NET WEIGHT
29.0 lbs
13 kgs

SHIPPING INFORMATION

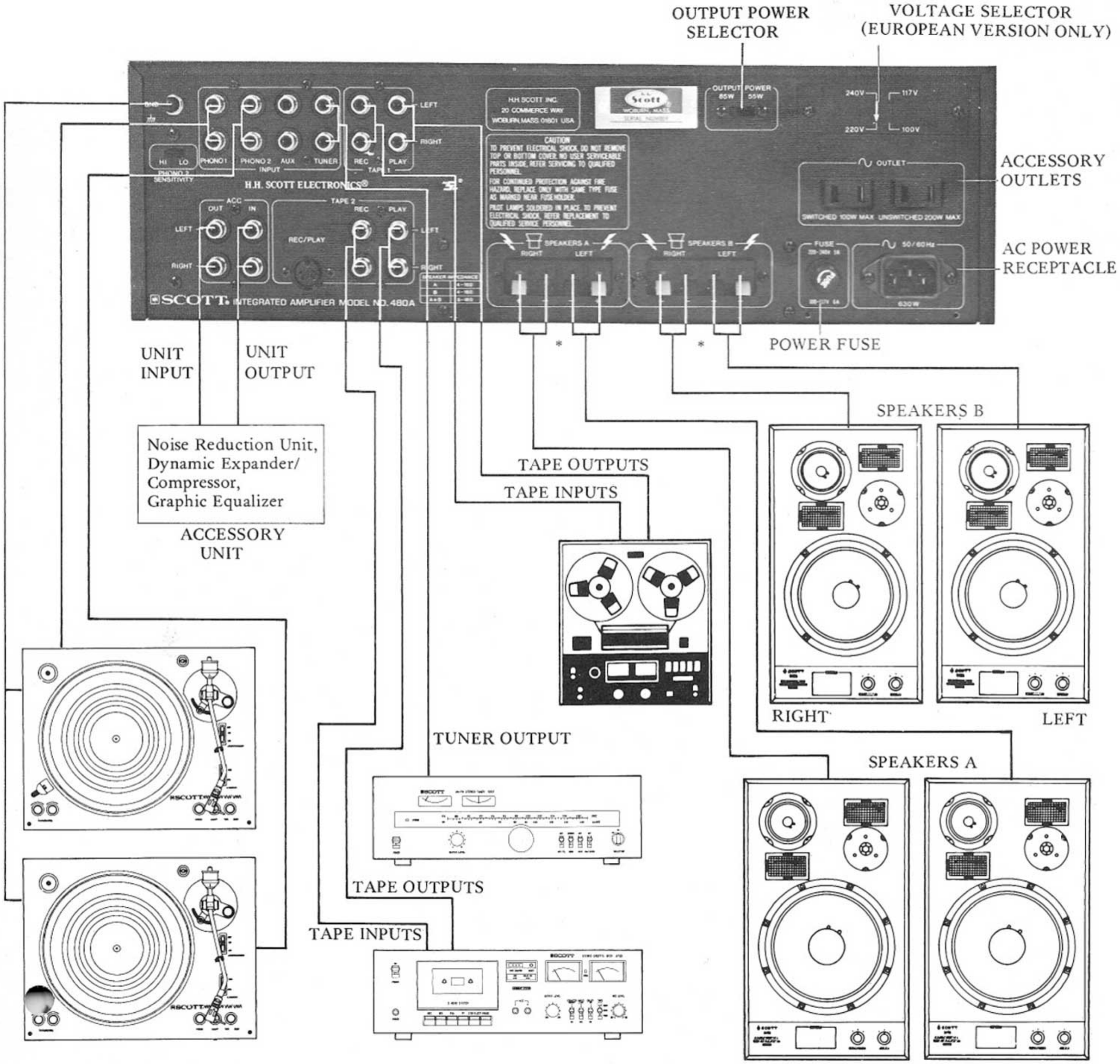
Repair and Service

Occasionally it may become necessary to have your amplifier 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.

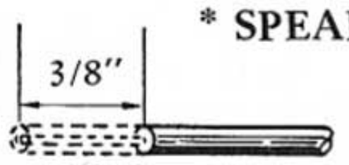
If service is required, there is a broad network of Factory authorized service stations as well as Factory service in the USA and Europe. For information, please write to the Customer Service Department nearest to you. The address is shown on the back of this manual. Include in your letter the model and serial number along with a complete description of the problem. No amplifier should be returned to the factory without RETURN AUTHORIZATION.

Your amplifier 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.

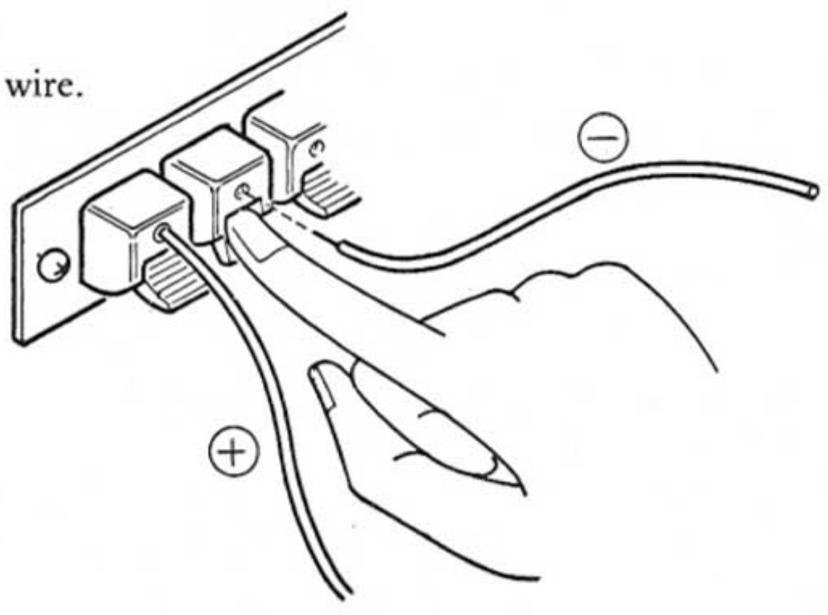


* SPEAKER WIRING

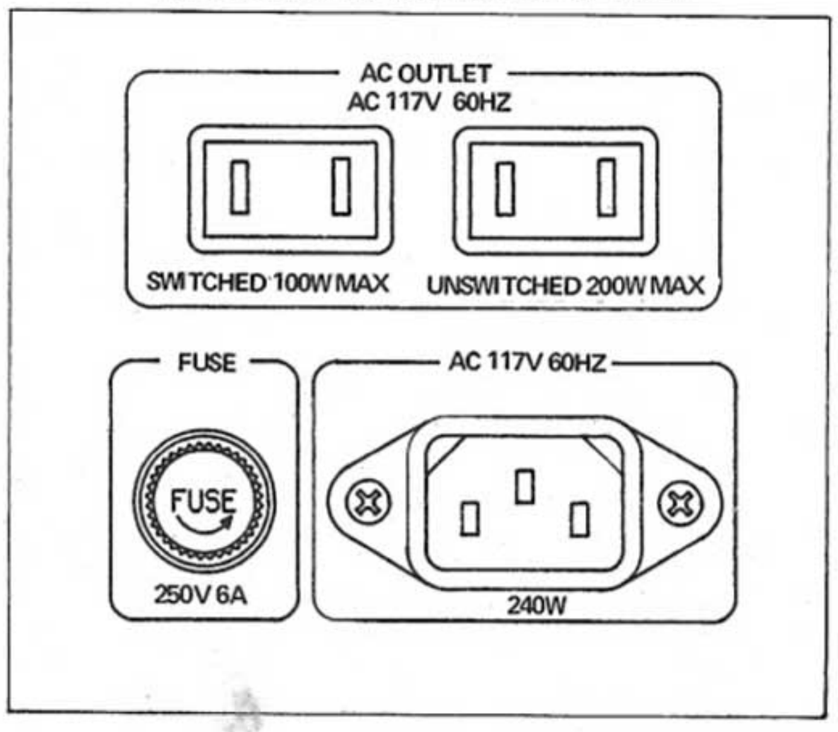


Remove insulation from wire end.

Twist stranded wire.



USA/Canada Version Rear View



TECHNISCHE DATEN 480 A

Ausgangsleistung DIN	2 x 130 Watt an 4 Ohm
Ausgangsleistung IHF	2 x 85 Watt an 8 Ohm, bei einem Frequenzbereich von 20...20000Hz und angegebenem Nennklirrfaktor von nicht mehr als 0,03%
Klirrfaktor 10 W 20Hz...20kHz	0,015%
Intermodulationsfaktor	0,03%
Eingangsempfindlichkeit:	
Phono 1	2,5 mV
Phono 2	2,5/5,0 mV
Andere Eingänge	150 mV
Fremdspannungsabstand:	
Phono (nach RIAA 10 mV 1 kHz)	90 dB
Andere Eingänge	95 dB
Frequenzbereich:	
Phono (nach RIAA 20Hz...20kHz)	±0,5 dB
Andere Eingänge (1W 20Hz...20kHz)	±0,5 dB
Übersteuerungsfestigkeit Phono	180/360 mV
Klangeinstellung:	
Bässe 100 Hz	±10 dB
Mitten 1 kHz	± 6 dB
Höhen 10 kHz	±10 dB
Rauschfilter 10kHz	12 dB/Okt.
Subsonicfilter 18Hz	12 dB/Okt.
Gehörrichtige Lautstärke-Einstellung -30 dB 10kHz/100Hz	+3,5/+7 dB
Kanaltrennung Phono 1kHz	65 dB
Andere Eingänge 1 kHz	75 dB
Eingangsübersprechdämpfung 1kHz	80 dB
Dämpfungsfaktor	> 100