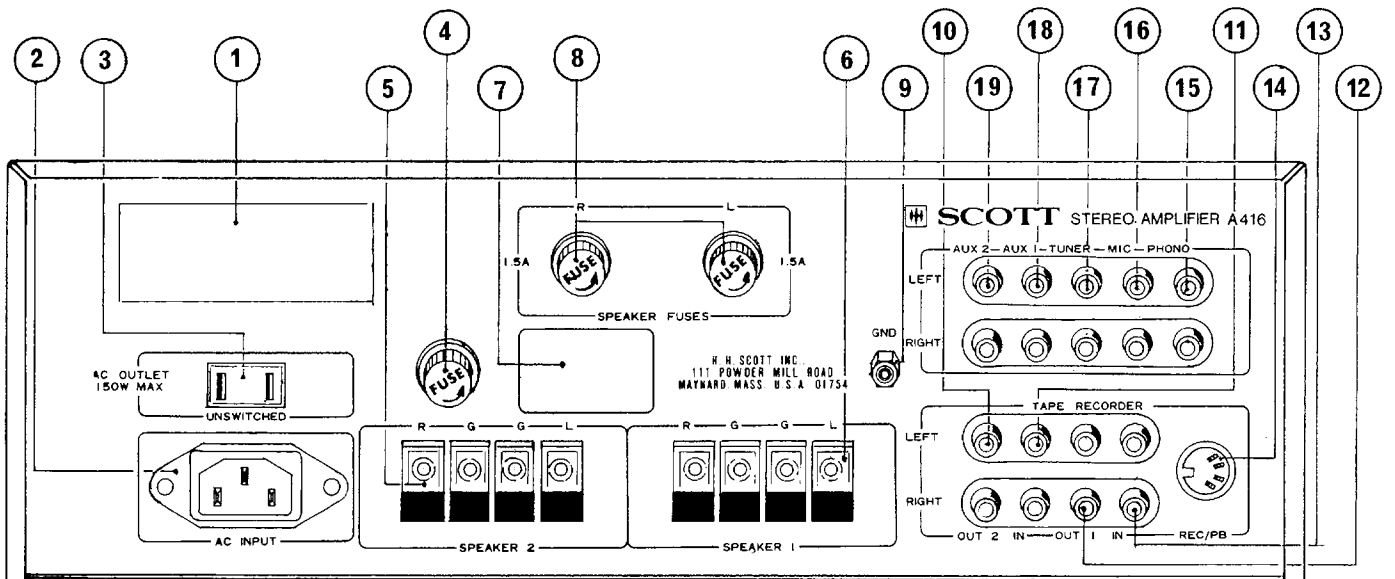
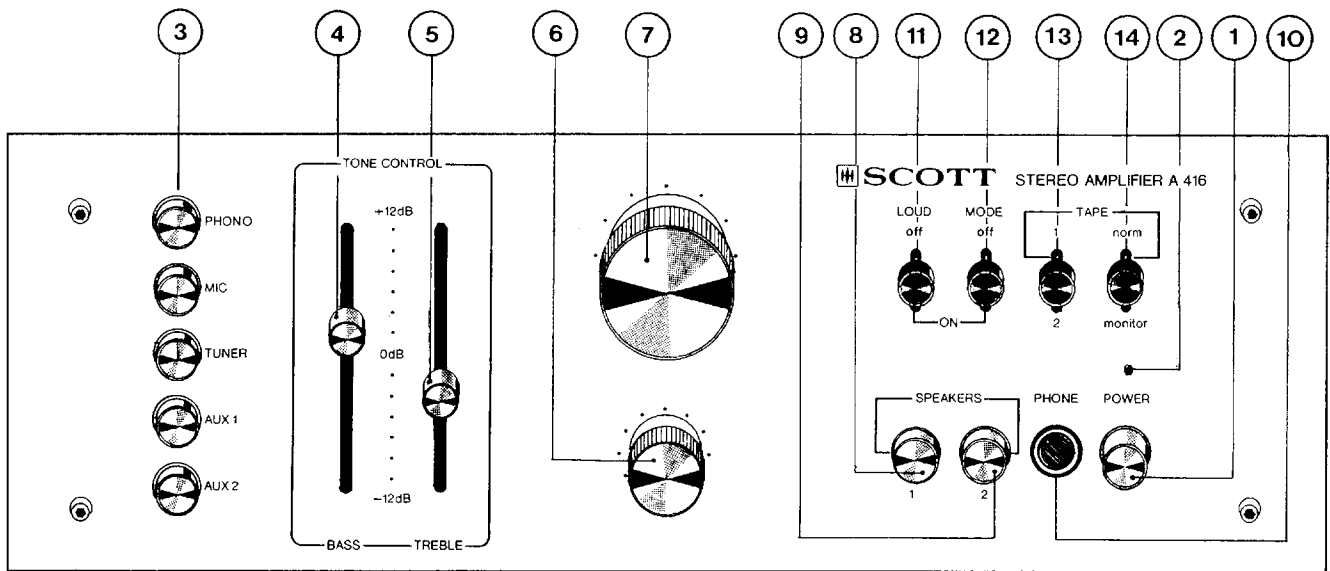




A416

18/18 WATT
HIFI STEREO AMPLIFIER

OPERATING
MANUAL



A416

INTRODUCTION

For over 25 years, H.H. SCOTT Inc. has been manufacturing the ultimate in high-fidelity components, and we are pleased to welcome you to our evergrowing family of satisfied customers. We are confident that you and your family will enjoy many years of troublefree listening pleasure from your new SCOTT stereo amplifier.

Your new SCOTT amplifier is a sophisticated and flexible unit. It is neither complicated to install nor to operate. However, to obtain optimum performance, a few moments of your time are required to read this manual in order to become familiar with its many features and how to use them.

All references to front and rear panel controls and connection nomenclature on your new amplifier are made in Bold Face Type exactly as they appear on the unit to aid in rapid identification.

Should there be any questions which are not fully answered by this operating manual, please contact your local SCOTT dealer.

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AMPLIFIER CONNECTIONS AND OPERATION

Please take great care in unpacking your amplifier. We suggest that you keep the original packing material in case you move or you have to send back the unit for servicing.

INSTALLATION AND ELECTRICAL CONNECTIONS

REAR PANEL

1. LINE VOLTAGE SELECTOR

Line voltage selector is under the black cover. Before connecting amplifier to wall outlet, check that the line voltage selector is in the correct position. In general, Europe supplies 220/240 Volt while North-America uses 110/120 Volt.

2. POWER CORD RECEPTACLE

3. This outlet is unswitched and has line voltage when the power cord is connected to the line.

4. LINE FUSE

The value of the fuse depends upon the line voltage. For 110/120 Volt operation use 1.5 AMP fuse; for 220/240 Volt operation a 0.75 AMP fuse is employed. All line fuses are the slow action type.

5. SPEAKER OUTPUT 2

6. SPEAKER OUTPUT 1

For all speaker connections make sure that the phasing is correct. Speakers between 4 and 16 ohms impedance can be used. Note: if two pairs of speakers are connected make sure that each speaker has a minimum impedance of 8 ohm.

To avoid power loss in the speaker cables, follow the recommendations of wire sizes for given lengths of cable:

- up to 12 meters 0.75 mm diameter
- above 12 meters 1.5 mm diameter
- above 30 meters 2.5 mm diameter.

7. SERIAL NUMBER

Every unit manufactured by H.H. SCOTT has a serial number. This number is essential for the 3-year warranty and should be mentioned in any correspondence regarding your set.

8. SPEAKER FUSES

The output stages are electronically protected against overload. Should a short circuit condition at high volume setting be maintained for a longer time period, these fuses will open. The fuse type used is a standard 1.5 AMP quick acting and must not be replaced with a larger value. To protect speakers with low power ratings, a lower value may be installed. Consult your dealer if in doubt.

9. GROUND TERMINAL

To reduce hum to a minimum, this terminal is used to interconnect the chassis or ground lead of the turntable to the amplifier. Attach the ground lead from your turntable to this terminal.

10. TAPE OUT 2

Output for second tape recorder see (12).

11. TAPE IN 2

Input for second tape recorder see (13).

12. TAPE OUT 1

Signal from this jack is fed to tape 1 recorder line input for recording purposes. Tone control, filters and volume settings have no effect on the signal from this output.

13. TAPE IN 1

The output signal coming from tape 1 recorder during playback is fed into this jack.

14. TAPE IN/OUT (DIN)

Contact in DIN plug corresponds to DIN 41 523 configuration for record and playback. Contacts of DIN jack are as follows:

1. TAPE OUT LEFT
4. TAPE OUR RIGHT
2. GROUND
5. TAPE IN RIGHT
3. TAPE IN LEFT.

Note: The DIN plug is always connected in parallel to the tape in/out 1 with reduced output level (DIN norm).

15. PHONO INPUT

Input for turntable with magnetic cartridge.

16. MIC

If only one Mic. is used switch Mode (12) to Mono.

17. TUNER

Whether you use an integrated stereo or mono tuner, you will have two leads to connect to the amplifier. One lead will carry the left channel information and should be connected to the left tuner input. The other lead should be connected to the right tuner input.

18 + 19. AUX-1 AND AUX-2

Two extra stereo inputs are provided for any other high level sources you may wish to connect to your amplifier. You can connect a third tape recorder, ceramic cartridge or sound from your TV set. Set the input selector to AUX-1 or AUX-2 whichever you are using. If it is a monophonic device, connect it to the left or right channel AUX input. To listen to this signal over both speakers, switch the MODE switch (12) to Mono.

FRONT PANEL

1. POWER

Power in "IN" position activates the amplifier.

2. POWER FUNCTION LIGHT

Indicates when the amplifier is in operation.

3. INPUT SELECTOR

PHONO

Turntable with magnetic cartridge

MIC

TUNER

AUX 1 + AUX 2

AUX 1 and AUX 2 input for turntable with crystal cartridge or television sound.

4. BASS

BASS modifies the low frequency sound of left and right channel; set to suit your taste.

5. TREBLE

TREBLE modifies the high frequency sound of left and right channel; set to suit your taste.

6. BALANCE

To correct any stereo imbalance in the program material; center position (12 o'clock) for equal amplifier gain on both channels.

7. VOLUME CONTROL

8 + 9. SPEAKER 1 + 2

These two switches allow you to select various combinations of speakers as follows:

1. System-1 switch on;
System-2 switch off: main speakers only
2. System-1 switch on;
System-2 switch on: both main and remote speakers operating.
3. System-1 switch off;
System-2 switch on: remote speakers only.
4. System-1 switch off;
System-2 switch off: headphones only.

Note: Headphones may be used whether main and/or remote switches are in "ON" or "OFF" position.

10. PHONE

Allows you to listen to your headphones. Headphone impedance should be between 8 and 2000 ohm. Best results between 200 and 400 ohm.

11. LOUD

To compensate the response of the human ear at low listening levels. The low and high frequencies are boosted when the switch is in "ON" position. In "OFF" position the frequency response is flat at all volume levels.

12. MODE

When switched on mono, every program source is in Mono.

13. TAPE 1 + 2

Input selector for two tape recorders. In tape 1 position and (14) in monitor position, tape 1 is switched on playback. In tape 2 position and (14) in monitor position, tape 2 is switched on playback.

Note: the tape 1 and 2 outputs are always in parallel which means that recording with two tape recorders at the same time is possible.

14. TAPE MONITOR

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 from a record. The INPUT selector will be in the PHONO position. With the TAPE MONITOR switch in the "OUT" position, the system will be playing the actual record. With the switch moved to MONITOR, the system will now be playing the tape recording of the record 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 record. This method will work only for recorders with separate record and playback heads.

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TECHNICAL SPECIFICATIONS

Power output, continuous RMS,
both channels driven at 1 kHz:

8 ohms	22 W
4 ohms	28 W

Power bandwidth	18 W	40 - 20 000 Hz
	15 W	20 - 20 000 Hz

Frequency response (\pm 2 dB)	15 - 35 000 Hz
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Total harmonic distortion (at rated output)	0.3 %
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IM distortion	0.2 %
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S/N ratio

Phono	65 dB
Aux.	80 dB

Input sensitivity

Phono	2.2 mV
Microphone	10 mV
Aux.	200 mV
Tuner	200 mV

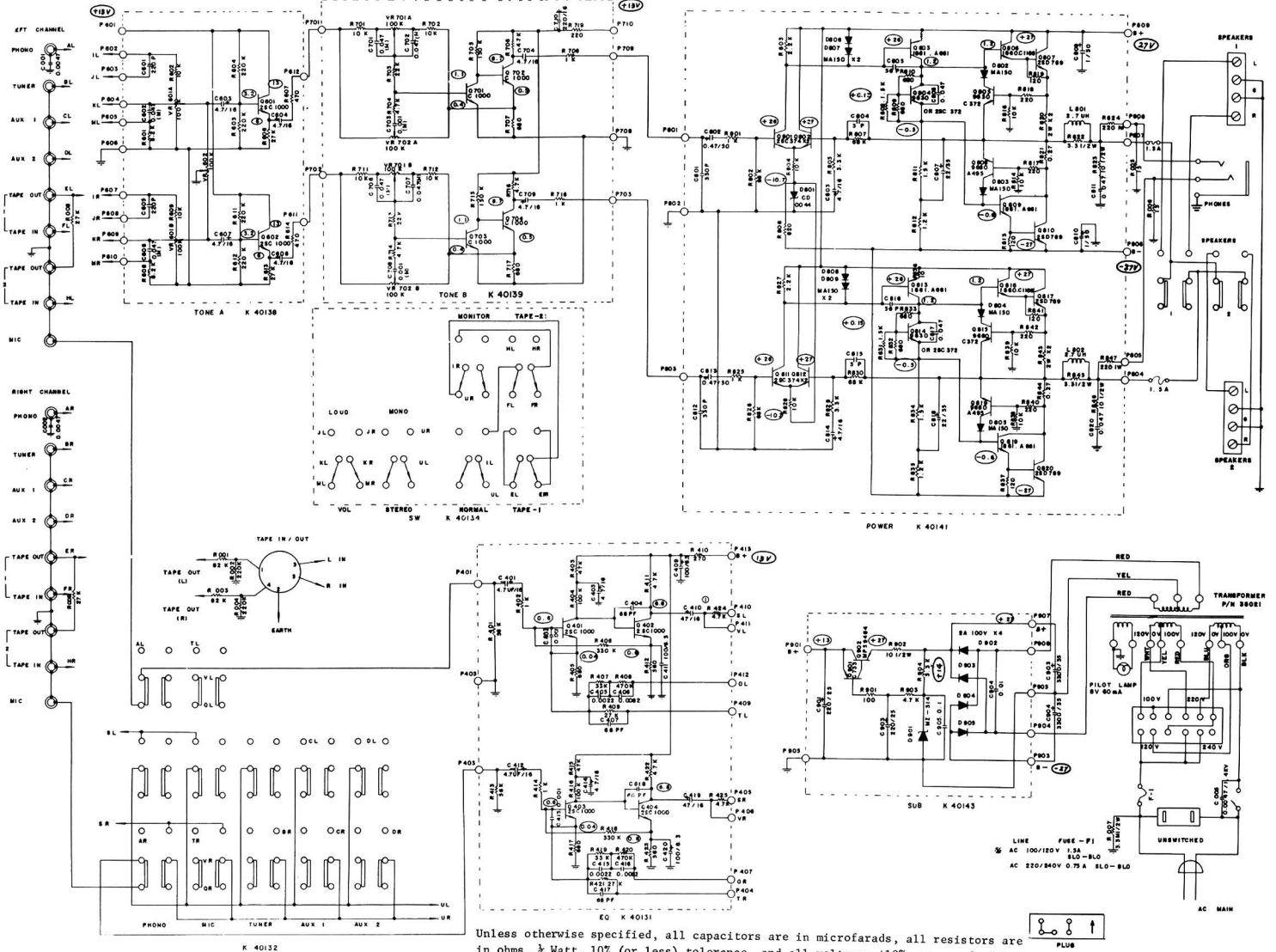
Speaker impedance	4, 8, 16 ohms
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Power requirement	100,120,220,240 VAC (50-60 Hz)
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Dimensions	350 x 125 x 285 mm
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Weight	7,2 kg
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A-16 CIRCUIT DIAGRAM



Unless otherwise specified, all capacitors are in microfarads, all resistors are in ohms, $\frac{1}{2}$ Watt, 10% (or less) tolerance, and all voltages $\pm 10\%$, measured with 20,000 ohm per Volt VOM. 117V power line.





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