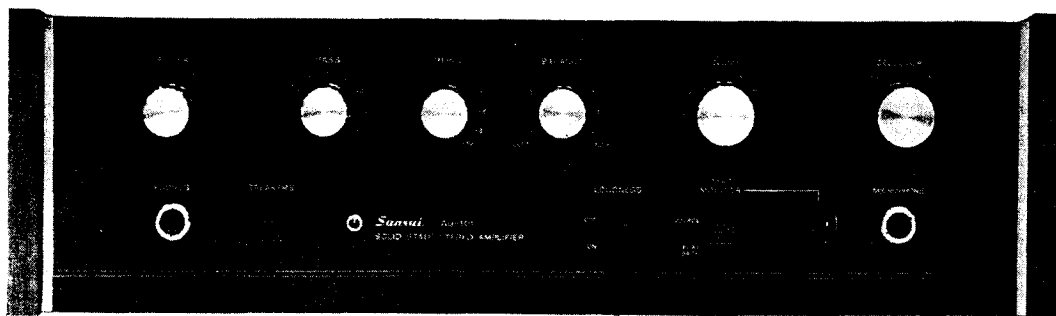


# OPERATING INSTRUCTIONS & SERVICE MANUAL

SOLID-STATE STEREO AMPLIFIER

## SANSUI AU-101



*Sansui*

SANSUI ELECTRIC CO., LTD.

# OPERATIONS

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Congratulations, you are now the owner of a new Sansui AU-101 control amplifier manufactured by Sansui, the world's foremost audio-only specialist.

The AU-101 incorporates many of state-of-the-art features of the more powerful Sansui AU-555A, including an all silicon solid state design, professional arrangement of controls and a satin-black control panel. Like all other AU series amplifiers, the AU-101's tonal quality has been perfected and proved not only by precision electronic measuring instruments, but also by repeated listening tests in a wide variety of environments.

These manual and operating sheet have been prepared to guide you in operating and caring for your AU-101 correctly. Please read them carefully and retain for future reference.

## RECORD PLAYER

### Listening to a Record

1. Set the SELECTOR switch to PHONO.
2. Make appropriate settings of controls on the record player.
3. Adjust the BALANCE control for equal sound from both right and left speakers.
4. Use all other controls and switches according to your personal taste and room acoustics.

## TUNER

### Listening to a Radio Program

1. Set the SELECTOR switch to AUX.
2. Use tuning controls to reach the desired station. Make appropriate settings of controls on the tuner.
3. Adjust the amplifier's front panel controls and switches according to your personal taste and room acoustics.

## MICROPHONE

Use high-impedance (10 kilo-ohms or more) dynamic microphones for optimum performance.

### Operation

1. Set the SELECTOR switch to MIC.
2. Use all other controls and switches according to taste and listening conditions.

## TAPE DECK

### Recording on Tapes

1. Set the SELECTOR switch to the program to be recorded.
2. Make appropriate settings of controls on the tape deck.

### Listening to Tapes

1. Set the TAPE MONITOR switch to PLAYBACK.
2. Make appropriate settings of controls on the tape deck.
3. Use the amplifier's front panel controls and switches according to your personal taste and listening conditions.

### Tape Monitoring

Monitoring is possible only with a tape deck which has its own playback preamplifier as well as separate recording and playback heads. To monitor, proceed in the same manner as indicated in the section entitled 'Listening to Tapes'.

#### NOTE:

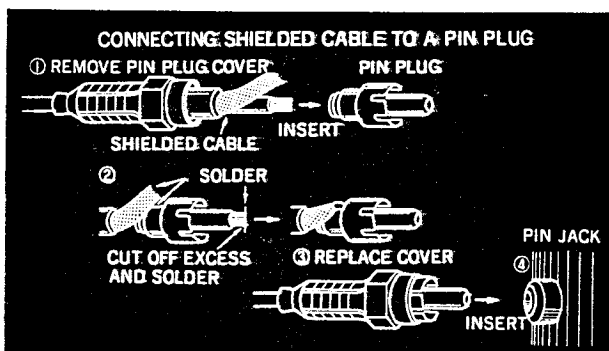
1. Tape decks referred to in this section include only those with built-in playback preamplifiers.
2. Tape recorded sound cannot be controlled by the switches and controls on the front panel of the amplifier. They control sound from the speakers only.

# MAINTENANCE

## Wire Connections

When connecting tape decks, record player or other components to the AU-101, be sure to use shielded wire. The use of an ordinary cord or vinyl wire may cause humming and buzzing. The length of the shielded wire should be shorter than 5 feet. Be sure that all lead wires between the amplifier and components are properly connected. If the connections are loose or in touch with other parts, the amplifier will not function properly, may pick up noise, and even breakdown over a period of time. Also, be sure to read the manufacturer's instructions for any component before connecting it to the AU-101.

The shielded wire is made up for use as illustrated below:

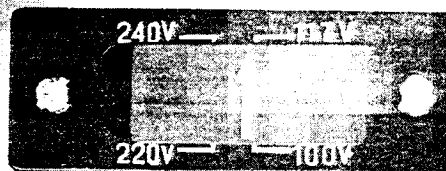


## Power Fuse

Should the amplifier fail to operate and the power indicator fail to light up when the POWER switch is turned on, the probable cause is either a power stoppage or a blown fuse. To check, remove the AU-101's line cord from its a.c. outlet, turn the fuse holder on the rear panel counterclockwise and remove the fuse. If it is blown, replace it with a new glass-tubed fuse of the same capacity (100~117V—2A, 220~240V—1.5A) after determining and eliminating the trouble source that caused the fuse to blow. Using wire or a fuse of a different capacity as a stop-gap measure is dangerous and should be avoided.

## Voltage Adjustment

This plug has been set to the voltage of your area prior to shipment. If the amplifier is ever moved to an area with another voltage requirement, this plug must be changed to the proper voltage of the new area. To change, remove the cramp from the back panel, remove the plug from the voltage socket you have been using, and plug the arrow head into the appropriate voltage requirement of 100, 117, 220 or 240 volts.



## Quick-Acting Fuses

If, after the POWER switch is turned on and the power indicator lights up, neither channel operates or only one operates normally, is either because one or both quick-acting fuses have blown. In this case, remove the line cord from its a.c. outlet and remove the bonnet from the chassis to check to see if the fuses are blown. If the fuses are faulty, replace them with identical 1.5A fuses (supplied) after finding and eliminating the source of trouble that caused them to blow. The trouble is probably by short at the output circuit or excessive input fed into the input circuit.

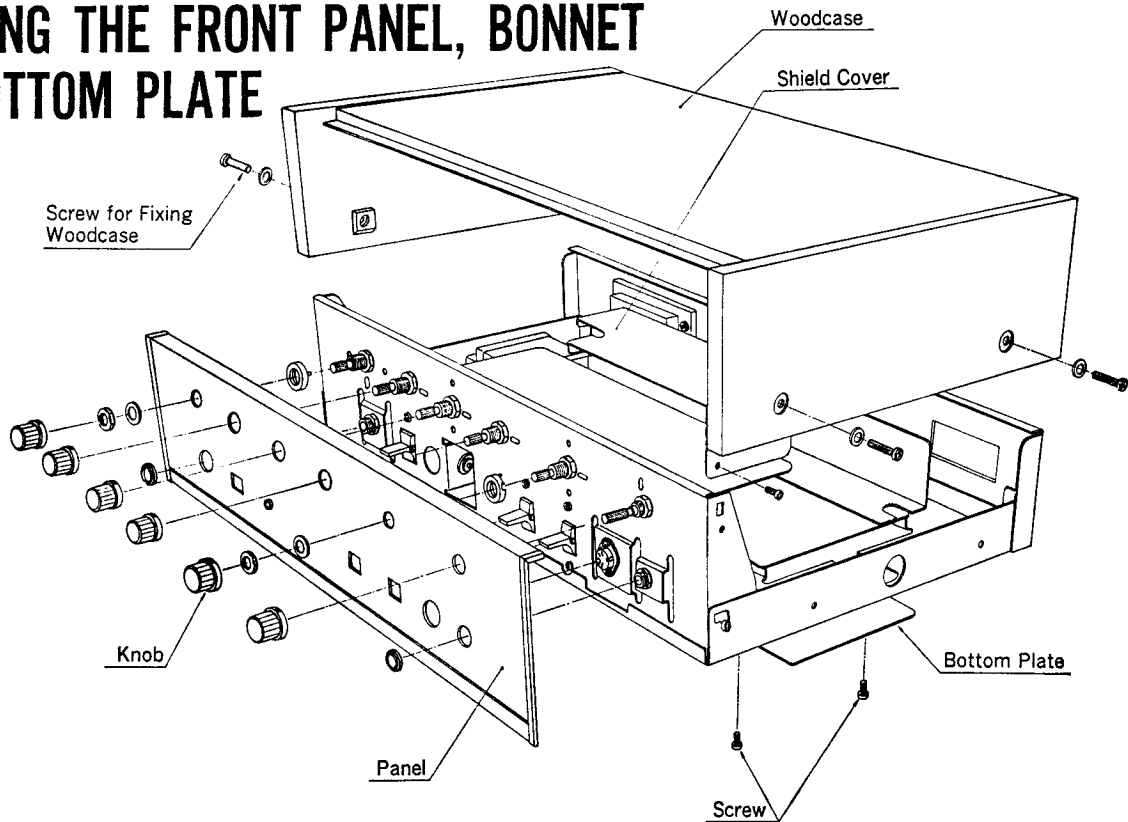
## A.C. Outlets

The AU-101 is provided with two A.C. outlets on its rear panel. One outlet (marked SWITCHED) is switched on and off by the POWER switch on the front panel.

**Caution:** The maximum capacity of this outlet is 50VA, and the other (marked UNSWITCHED) is 150VA. Never use either beyond their rated capacity. The voltage supplied by the AC outlets is the same as the power supply voltage used.

# DISASSEMBLY PROCEDURE / SPECIFICATIONS

## REMOVING THE FRONT PANEL, BONNET AND BOTTOM PLATE



## SPECIFICATIONS

### POWER OUTPUT

MUSIC POWER (IHF): 50W at 4 ohms load  
44W at 8 ohms load

CONTINUOUS POWER: 18/18W at 4 ohms load  
15/15W at 8 ohms load

TOTAL HARMONIC DISTORTION:  
less than 0.8% at rated output

POWER BANDWIDTH (IHF):  
25 to 40,000Hz

FREQUENCY RESPONSE (at normal listening level)  
20 to 60,000Hz  $\pm 2$ dB

CHANNEL SEPARATION (at 1,000Hz, rated output)  
PHONO: better than 45dB  
AUX: better than 45dB

HUM AND NOISE (IHF)  
PHONO: better than 65dB  
AUX: better than 75dB

INPUT SENSITIVITY (at 1,000Hz, rated output)  
PHONO: 3mV (50k ohms)  
MIC (MONO): 4mV (50k ohms)  
AUX: 200mV (50k ohms)  
TAPE MON (pin): 200mV (50k ohms)  
TAPE RECORDER (DIN): 200mV (50k ohms)

### RECORDING OUTPUT

TAPE REC (pin): 200mV  
TAPE RECORDER (DIN): 30mV

LOAD IMPEDANCE: 4 to 16 ohms

EQUALIZER PHONO: RIAA NF type  
MIC: flat NF type

### TONE CONTROLS

BASS:  $\pm 13$ dB at 50Hz  
TREBLE:  $\pm 10$ dB at 10,000Hz

LOUDNESS CONTROL: +8dB at 50Hz, +3dB at 10,000Hz

### SWITCHES

SELECTOR: MIC, PHONO, AUX  
TAPE MONITOR: SOURCE, PLAY BACK  
SPEAKER: ON, OFF

SEMICONDUCTORS: Transistors; 18 Diodes; 4

### POWER REQUIREMENTS

POWER VOLTAGE: 100, 117, 220, 240V 50/60Hz  
POWER CONSUMPTION: 30W (rated)

DIMENSIONS: 407mm(16")W, 115mm(4 $\frac{1}{2}$ ")H,  
278mm(10 $\frac{15}{16}$ ")D

WEIGHT: 5.9kg (13 lbs.)



# PRINTED CIRCUIT BOARDS AND PARTS LIST

W: Parts No. X: Parts Name Y: Stock No. Z: Position of Parts

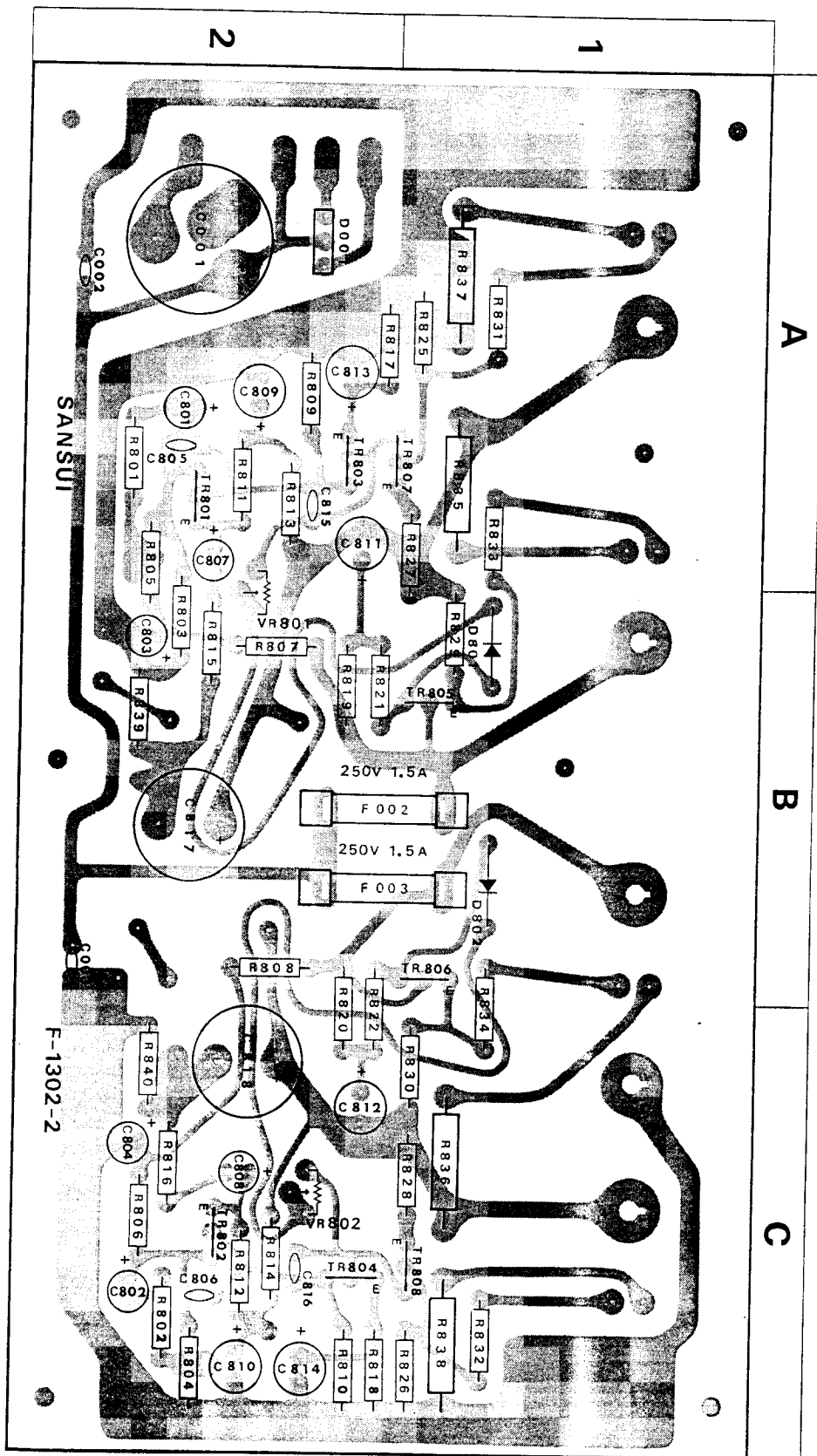
## MAIN AMP. BLOCK <F-1302-2>

W	X	Y	Z
R801	2.2k $\Omega$	0101222	2 A
R802	2.2k $\Omega$		2 C
R803	100k $\Omega$	0101104	2 B
R804	100k $\Omega$		2 C
R805	270k $\Omega$	0101274	2 A, B
R806	270k $\Omega$		2 C
R807	220k $\Omega$	0101224	2 B
R808	220k $\Omega$		2 B
R809	1.8k $\Omega$	0101182	2 A
R810	1.8k $\Omega$		2 C
R811	150 $\Omega$	0101151	2 A
R812	150 $\Omega$		2 C
R813	12k $\Omega$	0101123	2 A
R814	12k $\Omega$		2 C
R815	6.8k $\Omega$	0101682	2 B
R816	6.8k $\Omega$		2 C
R817	220 $\Omega$	0101221	2 A
R818	220 $\Omega$		2 C
R819	1k $\Omega$	0101102	2 B
R820	1k $\Omega$		2 B, C
R821	3.3k $\Omega$	0101332	2 B
R822	3.3k $\Omega$		2 B, C
R825	220 $\Omega$	0101221	1 A
R826	220 $\Omega$		1 C
R827	27 $\Omega$	0101270	1 A
R828	27 $\Omega$		1 C
R829	220 $\Omega$	0101221	1 B
R830	220 $\Omega$		1 C
R831	10 $\Omega$	0101100	1 A
R832	10 $\Omega$		1 C
R833	10 $\Omega$		1 A
R834	10 $\Omega$		1 B, C
R835	0.5 $\Omega$	0152508	1 A
R836	0.5 $\Omega$		1 C
R837	0.5 $\Omega$		1 A
R838	0.5 $\Omega$		1 C
R839	470 $\Omega$	0111471	2 B
R840	470 $\Omega$		2 C
VR801	200 $\Omega$ (B)	1032021, 2	2 A, B
VR802			1, 2 C
C001	1000 $\mu$ F 50 V EC.	0549104	2 A
C002	0.01 $\mu$ F $\pm 100\%$ 50 V CC.	0650103	2 A
C801	1 $\mu$ F	0515109	2 A
C802	1 $\mu$ F		2 C
C803	4.7 $\mu$ F	0515479	2 B
C804	4.7 $\mu$ F		2 C
C805	47 pF	0660470	2 A
C806	47 pF		2 C
C807	10 $\mu$ F	0512100	2 A
C808	10 $\mu$ F		2 C
C809	100 $\mu$ F	0512101	2 A
C810	100 $\mu$ F		2 A
C811	100 $\mu$ F	0513101	2 A
C812	100 $\mu$ F		2 C

W	X	Y	Z	
C813	47 $\mu$ F	6.3 V EC.	2 A	
C814	47 $\mu$ F		2 C	
C815	100 pF	50 V EC.	2 A	
C816	100 pF		2 C	
C817	1000 $\mu$ F	35 V EC.	2 B	
C818	1000 $\mu$ F		2 C	
C819	0.047 $\mu$ F $\pm 80\%$ CC.	0657473	2 B	
TR801	XA-495BL (B, C, D)	0300161, 2, 3	2 A	
TR802			2 C	
TR803			2 A	
TR804	2SC634A (5, 6) or	0305890, 1	2 C	
TR805			CDC8000-1 (B, C)	1 B
TR806	2SA678 (5, 6) or	0300290, 1	1 B	
TR807			CDC9000-1 (B)	1, 2 A
TR808			or 0300201	1 C
TR809	2SC1060 (B, C)	0305711, 2		
TR810				
TR811				
TR812				
D001	10-DC-1	00310680	2 A	
D801	SV-02	0310490	1 B	
D802			1 B	
F002	1.5A Quick Acting Fuse	0430101	1, 2 B	
F003			1, 2 B	

CR: Carbon Resistor  
 SR: Solid Resistor  
 CeR: Cement Resistor  
 MC: Mylar Capacitor  
 EC: Electrolytic Capacitor

OC: Oil Capacitor  
 CC: Ceramic Capacitor  
 MPC: Metallized Polyester  
 Capacitor



# PRINTED CIRCUIT BOARDS AND PARTS LIST

W: Parts No. X: Parts Name Y: Stock No. Z: Position of Parts

## EQUALIZER/TONE CONTROL BLOCK <F-1303>

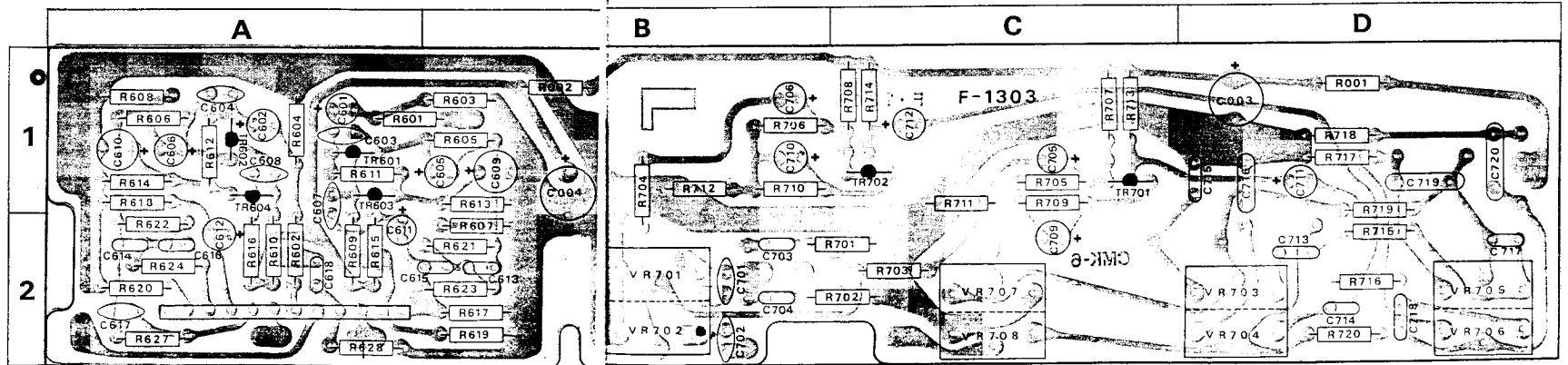
W	X	Y	Z
R001	1.5kΩ	0111152	1D
R002	2.2kΩ	0111222	1B
R601	2.2kΩ	0101222	1A, B
R602	2.2kΩ	0101222	
R603	56kΩ	0101563	1B
R604	56kΩ	0101563	1A
R605	56kΩ	0101563	1B
R606	3.9kΩ	0101392	1B
R607	3.9kΩ	0101392	1A
R608	330Ω	0101331	2B
R609	330Ω	0101331	1A
R610	180kΩ	0101184	2A
R611	180kΩ	0101184	2A
R612	390kΩ	0101394	1A
R613	390kΩ	0101394	1A
R614	680Ω	0101681	2B
R615	680Ω	0101681	1A
R616	6.8kΩ	0101682	2A
R617	6.8kΩ	0101682	2A
R618	100kΩ	0101104	2B
R619	100kΩ	0101104	2A
R620	470kΩ	0101474	1B
R621	470kΩ	0101474	2A
R622	220kΩ	0101224	2B
R623	220kΩ	0101224	2A
R624	18kΩ	0101183	2B
R625	18kΩ	0101183	2A
R626	18kΩ	0101183	2A
R627	18kΩ	0101183	2A
R628	470kΩ	0101474	2A

W	X	Y	Z
R701	27kΩ	0101273	2B, C
R702	27kΩ	0101273	2B, C
R703	2.2kΩ	0101222	2C
R704	2.2kΩ	0101222	1, 2B
R705	56kΩ	0101563	1C
R706	56kΩ	0101563	1B
R707	470kΩ	0101474	1C
R708	470kΩ	0101474	1C
R709	1kΩ	0101102	1C
R710	1kΩ	0101102	1B
R711	330Ω	0101331	1C
R712	330Ω	0101331	1B
R713	5.6kΩ	0101562	1C
R714	5.6kΩ	0101562	1C
R715	12kΩ	0101123	2D
R716	12kΩ	0101123	2D
R717	1.8kΩ	0101182	1D
R718	1.8kΩ	0101182	1D
R719	2.7kΩ	0101272	1, 2D
R720	2.7kΩ	0101272	2D
VR701,702	250kΩ(B) × 2 Volume Control	1010610	2B
VR703,704	100kΩ(A) × 2 Treble Control	1010600	2D
VR705,706	100kΩ(A) × 2 Bass Control	1010600	2D
VR707,708	100kΩ(HB) Balance Control	1010590	2C
C003	470μF 35 V EC.	0514471	1D
C004	470μF 25 V EC.	0513471	1, 2B

W	X	Y	Z
C601	1μF	0515109	1A
C602	1μF	0515109	1A
C603	68pF	0660680	1A
C604	68pF	0660680	1A
C605	10μF	0512100	1A, B
C606	10μF	0512100	1A
C607	68pF	0660680	1, 2A
C608	68pF	0660680	1A
C609	10μF	0512100	1B
C610	10μF	0512100	1A
C611	4.7μF	0512479	1, 2A
C612	4.7μF	0512479	2A
C613	0.012μF	0601127	2B
C614	0.012μF	0601127	2A
C615	0.004μF	0601406	2A, B
C616	0.004μF	0601406	2A
C617	220pF	0660221	2A
C618	0.033μF	0601337	2A
C701	150pF	0660151	2B
C702	150pF	0660151	2B
C703	0.02μF	0601207	2B
C704	0.02μF	0601207	2B
C705	1μF	0515109	1C
C706	1μF	0515109	1B
C709	47μF	0510470	2C
C710	47μF	0510470	1B
C711	1μF	0515109	1D
C712	1μF	0515109	1C

W	X	Y	Z
C713	0.002μF	0601206	2D
C714	0.002μF	0601206	2D
C715	0.02μF	0601207	1D
C716	0.02μF	0601207	1D
C717	0.022μF	0601227	2D
C718	0.022μF	0601227	2D
C719	0.22μF	0601228	1D
C720	0.22μF	0601228	1D
TR601	2SC871R (E, F)	0305474,5	1A
TR602	2SC871R (E, F)	0305474,5	1A
TR603	2SC871 (E, F)	0305471,2	1A
TR604	2SC871 (E, F)	0305471,2	1A
TR701	2SC871R (E, F)	0305474,5	1C
TR702	2SC871R (E, F)	0305474,5	1C
S1(e~d)	Selector Switch 1-4-3	1101240	2A

For Service Manuals Contact  
**MAURITRON TECHNICAL SERVICES**  
 8 Cherry Tree Rd, Chinnor  
 Oxon OX9 4QY  
 Tel:- 01844-351694 Fax:- 01844-352554  
 Email:- enquiries@mauritron.co.uk





# OTHER PARTS AND THEIR POSITION ON CHASSIS

W: Parts No. X: Parts Name Y: Stock No.

W	X	Y
R625	470k $\Omega$	0101474
R626	470k $\Omega$	0101474
R629	220k $\Omega$	0101224
R630	220k $\Omega$	0101224
R631	100k $\Omega$	0101104
R632	100k $\Omega$	0101104
R841	330 $\Omega$	0111331
R842	330 $\Omega$	0111331
	$\pm 10\%$ $\frac{1}{4}$ W CR.	
	$\pm 10\%$ $\frac{1}{2}$ W SR.	
C005	0.022 $\mu$ F $\pm 20\%$ 250V MPC.	0605227
S2(a, b)	Tape Monitor Switch	1170060
S3(a, b)	Loudness Switch	1170060
S4(a, b)	Speaker Switch	1170090
S5	Power Switch	1190011
T001	Power Transformer 400-5467	4000800
CO001,002	AC Outlet	2450010
J601	DIN Socket marked TAPE MONITOR on the front Panel	2430050
F001	2A Power Fuse (100~120V)	0430131
	1.5A Power Fuse (220~240V)	0430021
	Power Fuse Holder	2300060
F004	2A } Wired in Fuse	0431840
F005	2A }	0431840
F006	1A }	0431820
PL001	6.3V 0.25A Pilot Lamp	0400090

## Accessories List

1. OPERATING INSTRUCTIONS & SERVICE MANUAL .....	1
2. OPERATING SHEET .....	1
3. PIN-PLUGS .....	2
4. POLISHING CLOTH.....	1
5. QUICK-ACTING FUSES (1.5 A).....	2

\* Design and specifications subject to change without notice for improvements.

