

MARANTZ DESIGN AND SERVICE

Using superior design and selected high grade components, MARANTZ company has created the ultimate in stereo sound. Only **original MARANTZ parts** can insure that your MARANTZ product will continue to perform to the specifications for which it is famous.

Parts for your MARANTZ equipment are generally available to our National Marantz Subsidiary or Agent.

ORDERING PARTS:

Parts can be ordered either by mail or by telex. In both cases, MARANTZ part number has to be specified. If you order by mail, fulfil MARANTZ order forms.

MARANTZ S.A.
EUROPEAN PARTS DEPARTMENT
2, Avenue Léopold III
B-7120 PERONNES-lez-BINCHE
BELGIUM
TWX: 57589 SEPLT B

MARANTZ NATIONAL PARTS DEPARTMENT
20525 Nordhoff Street
Chatsworth, California 91311
Phone: 1-800-423-5108
Phone: 1-213-998-9333

The following information must be supplied to eliminate delays in processing your order:

1. Complete address
2. Complete part numbers and quantities required
3. Description of parts
4. Model number for which part is required
5. Way of shipment
6. Signature: any order form or telex must be signed otherwise such part order will be considered as null and void.

PARTS ORDERING:

Parts may be ordered from the following addresses:

EUROPE

MARANTZ S.A.
European Parts Department
2, Avenue Léopold III
B-7120 Péronnes-lez-Binche
Belgium

MARANTZ S.A.
326 Avenue Louise Bte 32
1050 Bruxelles
Belgium

MARANTZ AUDIO U.K. LTD
Unit 15/16
Saxon Way Industrial Estate
Moor Lane
Harmondsworth UB7 OLW
Great Britain

MARANTZ AUSTRIA Ge.M.B.H.
25 Franz Lisztgasse
2380 Perchtoldsdorf
Austria

MARANTZ BELGIUM
45 Rue Auguste Van Zande
1080 Brussels
Belgium

MARANTZ DENMARK
Bregnerødvej 132b
3460 Birkerød
Denmark

MARANTZ FRANCE
4 Rue Bernard Palissy
92600 Asnières
France

**MARANTZ GERMANY
G.M.B.H.**
Max Planckstrasse 22
6072 Dreieich 1
Germany

MARANTZ ITALIANA S.p.A.
Via Monte Napoleone 10
20121 Milano
Italy

MARANTZ NEDERLAND B.V.
Wagenmakersweg 3
3449 HV Woerden
Netherlands

AUSTRALIA

MARANTZ AUSTRALIA PTY
19 Chard Road
Brookvale, NSW 2100
Australia

U.S.A.

MARANTZ COMPANY, INC.
National Service Dept.
P.O. Box 577
Chatsworth, CA 91311
U.S.A.

JAPAN

MARANTZ JAPAN, INC.
35-1, 7-chome, Sagamiono
Sagamihara-shi, Kanagawa
Japan

MARANTZ SVENSKA A.B.
Svartviksvägen 56
Traneberg
Bromma
Sweden

All of the above locations are fully equipped to take care of your total service needs. Because various countries have differing configuration requirements, it is necessary that you contact the service facility in your particular country. In the event that there is no service location listed for your country, please, contact the nearest facility for the necessary assistance.

In case of difficulties, do not hesitate to contact the Technical Department at abovementioned address.

NOTE—FOR U.S.A. ONLY

Parts for your MARANTZ stereo are generally available within 72 hours throughout the nation via a toll-free line to our National Parts Depot in California. The sales professionals who take your call immediately refer to their own desk top computer terminal and can quickly determine the availability and price information you require. If, for some reason, your order should exceed our available stock, we usually can instantly provide an alternate replacement part or current delivery information. When the order is placed and confirmed, the computer simultaneously generates "hard copy" orders at the distribution center. As hard copies come directly from the computer to the national parts depot, your requested stock is assembled and prepared for shipment and placed on the first available carrier for delivery to you.

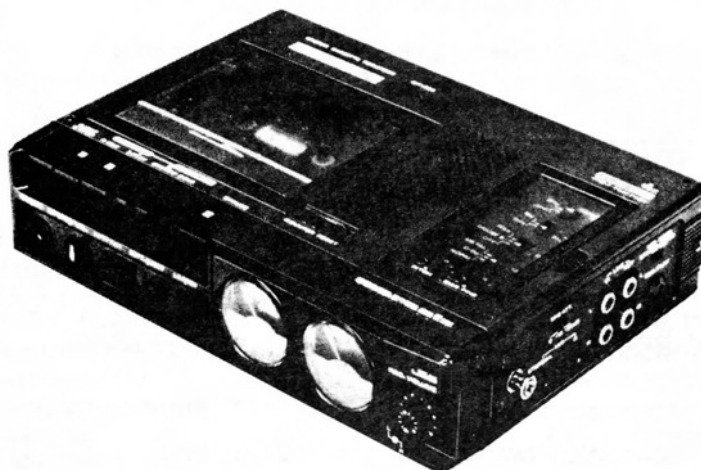
Phone orders will eliminate mail delays, and we encourage the use of this method. If you order by mail, use MARANTZ parts order forms which are available from MARANTZ NATIONAL PARTS DEPARTMENT.

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MODEL CP430/PMD430 STEREO CASSETTE RECORDER



INTRODUCTION

This service manual are prepared for use by Authorized Warranty Station and contains service information for Marantz Stereo Cassette Recorder.

Servicing information and voltage data included in this manual are intended for use by the knowledgeable and experienced technician only. All instructions should be read carefully. No attempt should be made to proceed without a good understanding of the operation of the Cassette Recorder.

The parts list furnishes information by which replacement parts may be ordered from the Marantz Company. A simple description is included for parts which can be usually obtained through local suppliers.

1. SHOCK, FIRE HAZARD SERVICE TEST:

CAUTION: After servicing this appliance and prior to returning to customer, measure the resistance between either primary AC cord connector pins (with unit NOT connected to AC mains and its Power switch ON), and the face or front Panel of product and controls and chassis button.

Any resistance measurement less than 1 Megohms should cause unit to be repaired or corrected before AC power is applied, and verified before return to user/customer.

Ref. UL Standard NO. 1270. Para 66. 3. D (Mandatory Test after servicing Electrical Appliances, effective 7-1-83).

2. P.W. BOARDS

As can be seen from the circuit diagram, the chassis of your Cassette Recorder consists of the following units. Each unit mounted on a printed circuit board is described within the square enclosed by a bold dotted line on the circuit diagram.

1. Rec/Play Amp mounted on P.W. Board PK01
2. TAPE EQ AMP mounted on P.W. Board PJ01
3. ATT Switch mounted on P.W. Board PK03
4. L.E.D. mounted on P.W. Board PX02
5. Mecha Control mounted on P.W. Board PM01
6. Control Switch mounted on P.W. Board PS01
7. Light mounted on P.W. Board PX01
8. Mic Mode mounted on P.W. Board PK02
9. Dolby NR L mounted on P.W. Board P601
10. Dolby NR R mounted on P.W. Board P602

3. TEST EQUIPMENT REQUIRED FOR SERVICING

For measuring or checking your Cassette Recorder, the following instruments and materials are necessary.

- VTVM
- Audio Oscillator (AF OSC)
- Attenuator (600 Ω)
- Oscilloscope
- Bandpass Filter (1 kHz)
- IEC A-Curve Filter
- Wow and Flutter Meter
- Torque Meter (Cassette Type)
- Digital Frequency Counter
- Distortion Meter
- Blank Tapes (Completely erased with bulk eraser)
 - TDK AC-212 (Normal)
 - TDK AC-512 (Special/CrO₂)
 - TDK AC-712 (Metal)

NOTE: If any doubt is noted in a measured value, use new tape.

- | | |
|--------------|---|
| • Test Tapes | (New Tape) |
| MTT-111 | Wow and Flutter, Tape Speed |
| MTT-112 | Measurements of Output Level |
| MTT-112B | Signal-to-Noise Ratio |
| MTT-150 | Adjustment of Output Level |
| MTT-256 | Frequency Response (for Normal) |
| MTT-356 | Frequency Response (for Special/CrO ₂ and Metal) |
| MTT-121 | Cross Talk |
| MTT-141 | Channel Separation |

4. MECHANISM AND CIRCUIT DESCRIPTION

4.1 Muting System

The muting circuit is provided to reduce the pops noise when generates on the Line Out at power ON/OFF.

1) When power is turned on

As the base voltage of QU03 is higher than the emitter voltage during the charge current flows to QU02 through RU03 & RU02, QU03 is ON and it sends the muting voltage.

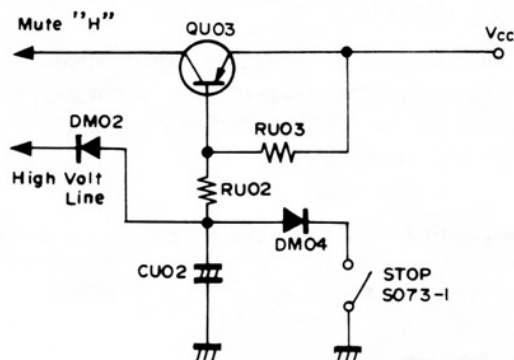
CU02 have been charged up, both the base and the emitter voltages of QU03 is equal. QU03 is OFF and the muting is released.

2) When the STOP button is depressed

When the stop switch S073-1 is ON, the base current flow through DU04. Also discharging CU02, QU03 is ON instantly, the muting system operate to reduce the pops noise at power ON/OFF.

DM02 provides to discharge CU02 on AUTO STOP.

As the muting time is in proportional to capacitance of CU02, it is presetted by matching the threshold time of TAPE EQ Amp.



4.2 Auto PLAY and Automatic Rewind Stop

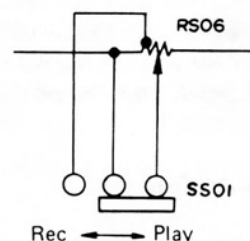
With SS01 set to ON during PLAY, the rewind button will lock when pressed. When counter reaches 999, the rewind lock releases and the PLAY operation resumes. In this condition, both CUE and REVIEW buttons do not operate and both buttons are locked. Also, when the FF button is pressed and locked in place, the lock releases when the counter reaches "900" and the PLAY mode is entered. When the tape has finished winding in both modes before the counter reaches the respective positions, the AUTO STOP function and all buttons are released. Also when the REWIND button alone is locked, the tape rewinds and rewind stops when the counter reaches "999". The same applies for fast forward operation which stops at "900". When the counter is between "900" and "999", both REWIND and FF buttons do not lock.

4.3 Auto Stop

The AUTO STOP function which detects the end of the tape is carried out by hole IC (QM08). The signal from QM08 is added to the pin ④ of QM07, while the auto stop duration is designated inside QM07. The time it takes for the auto stop function to activate after the tape stops, is determined in CM08. At this time TE is $TE = 75 \times CM08 (\mu F) mSec$, while TW is $TW = 30 \times CM07 (\mu F) mSec$ as long as the auto stop function is operating. When it does not shut off the first time, TE--TW--TE--TW is repeated until it shuts off.

4.4 Pitch Control

The pitch control is used to vary the tape speed for playback operation. During recording, it is automatically set to the RS06 center position by SS01.



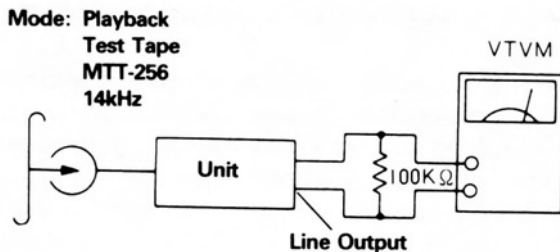
5. ELECTRICAL ADJUSTMENTS

Precautions for Adjustment and Measurement

1. Before playing back the test tape, thoroughly demagnetize the heads, capstan and similar metal parts using an eraser, as the test tape-recorded tone is easily erased.
2. Do not place the test tape on any measuring instrument.
3. Do not put the test tape near a place where the eraser is used.
4. Method of Demagnetization: Turn the eraser power switch on at a position far away from the heads. Bring the eraser close to the heads, capstan and other parts to be demagnetized, and move it up and down four or five times to demagnetize. Slowly separate the eraser far away from the parts, and turn the power switch off.
5. Do not use any magnetized adjusting tool. If necessary, demagnetize with a bulk eraser from time to time in the course of each adjustment.
6. Do not turn semi-fixed resistor or coil more than needed.
7. Measure speed and wow and flutter in the normal operating state.
8. Do not apply locking bond excessively.
9. Check the line voltage and the output of low frequency oscillator 2 – 3 times a day to see if they are set as specified.

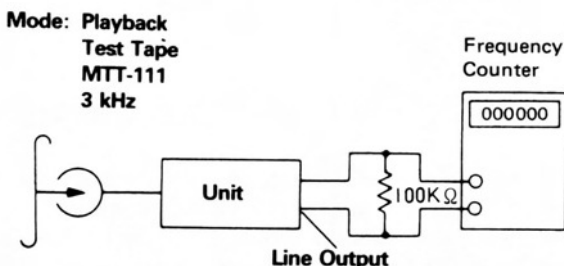
5.1 Head Azimuth Adjustment

1. Play the test tape MTT256 back. Adjust the head azimuth adjusting screw for maximum VTVM reading.
2. If the peak levels of the left and right channels are different set the screws to obtain the mechanical center between the peaks.
3. After adjustment, repeat the playback and stop settings several times to confirm no azimuth deviation.
4. After adjustment, lock the screws with bond.



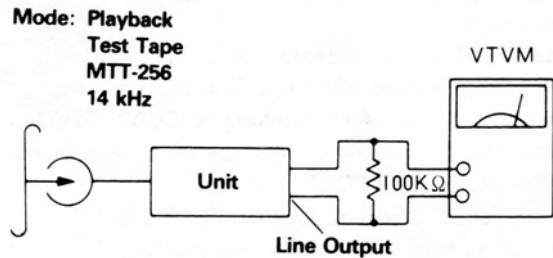
5.2 Tape Speed Adjustment

1. Play the 3kHz signal of the test tape MTT-111 back.
2. Adjust the adjusting resistor (RM05) on the PM01 P.W. Board so that counter readings are between 2990 – 3010Hz.



5.3 Playback Equalizer Measurement

1. Adjust the tape selector switch to NORMAL.
2. Play the 315Hz signal of the test tape MTT-256 back. The VTVM at 0dB.
3. Play the 12.5kHz signal of the test tape back. Confirm a frequency response of 0 to 1dB in reference to the 315Hz signal level.
Then, play the 12.5kHz signal back. Set the tape selector to CrO₂, Metal. Confirm the 12.5kHz signal readings at – 4.5dB, ±1dB.

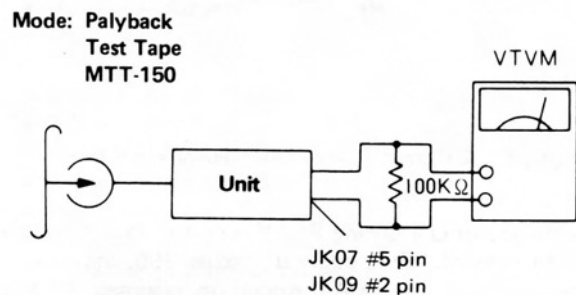


5.4 Playback Level Adjustment

1. Adjust the Tape Selector Switch to NORMAL and turn the NR switch OFF.
2. Play the test tape MTT-150 back. Adjust RK03(L) and RK04(R) so that the voltage of JK07 ⑤ pin and JK09 ② pin is 100 mV. In this operation, make sure the voltage of LINE OUT reads 500 mV + 1 dB.

NOTE:

1. Proceed both for the right and left channels in the same way.



5.5 Level Meter Adjustment

1. Adjust the Tape Selector Switch to NORMAL and turn the NR switch OFF.
2. Play the test tape MTT-150 back. Adjust RK73(L) and RK74(R) at +3dB Level Meter reading.

5.6 Playback Noise Measurement

1. Set the selector switch to NORMAL and NR switch to OFF.
2. Play back the blank tape and make sure that the noise volume is below 2mV when the REC LEVEL Knob is set to both maximum and minimum.

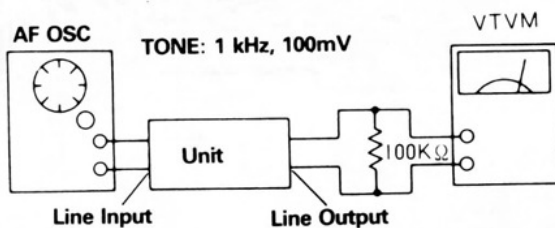
NOTES:

1. Perform measurements when the power hum is at minimum.
2. Perform measurements under conditions where induction noise will not affect measurements.

5.7 MPX Filter Adjustment

1. Adjust the tape selector switch to NORMAL.
2. Put the blank tape in the cassette holder, and set the SK03 in the Source position. (MPX Filter: ON).
3. Add a 1kHz, -20dB signal to LINE IN. Adjust the Rec. Volume knob to 0dB Level Meter reading.
4. Set the input signal at 19kHz $\pm$ 10Hz. Adjust L602(L) and LG61(R) to the minimum level.
If the value is 40dB or more, the adjustment is completed.

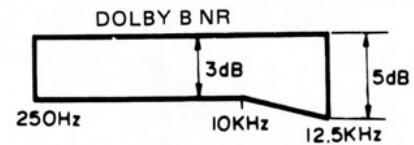
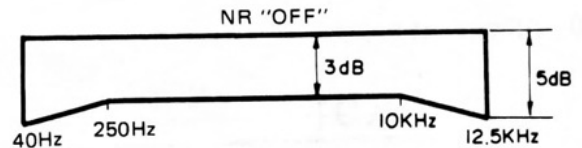
Mode: record



5.8 Record/Playback Frequency Response and Record Level Adjustment

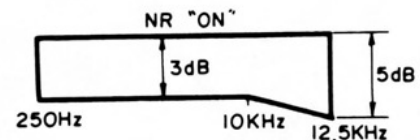
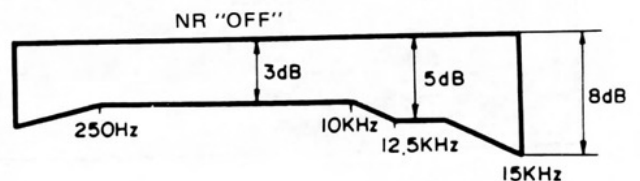
[NORMAL]

1. Set the tape selector switch to NORMAL.
2. Set the MPX filter to OFF and Dolby NR to Dolby B.
3. Insert the AC-212 test tape in the cassette holder and set the recording conditions. Set the monitor switch to SOURCE and attenuate from 1kHz, 500mV to -25dB on Line Out.
4. Set the monitor switch to TAPE and adjust RL07(L) and RL08(R) so that the level for 1kHz and 10kHz is brought within ± 0.5 dB.
5. Adjust RK41(L) and RK42(R) so that the level of 1kHz is the same when the monitor switch is changed from SOURCE to TAPE.
6. After making these adjustment, record and playback at 1kHz, 10kHz, 12.5kHz. Make sure results comply with the following diagram.



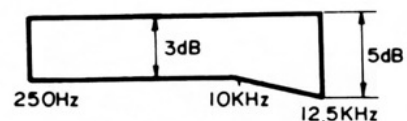
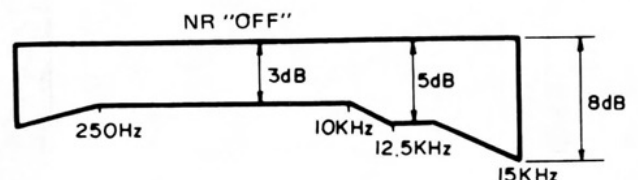
[CrO₂]

1. Set the tape selector switch to CrO₂.
2. Insert the AC-512 test tape in the cassette holder and set the recording conditions. Attenuate from 500mV to -25dB on Line Out with the attenuator and record at 1kHz, 10kHz, 12.5kHz and 15kHz on an unrecorded section of the tape.
3. Record and playback at 1kHz, 10kHz, 12.5kHz and 15kHz. Make sure results comply with the following diagram.



[METAL]

1. Adjust the Tape Selector Switch to METAL.
2. Load the test tape AC-712 into cassette holder. Perform measurements as with CrO₂, and make sure they conform with the Chart.

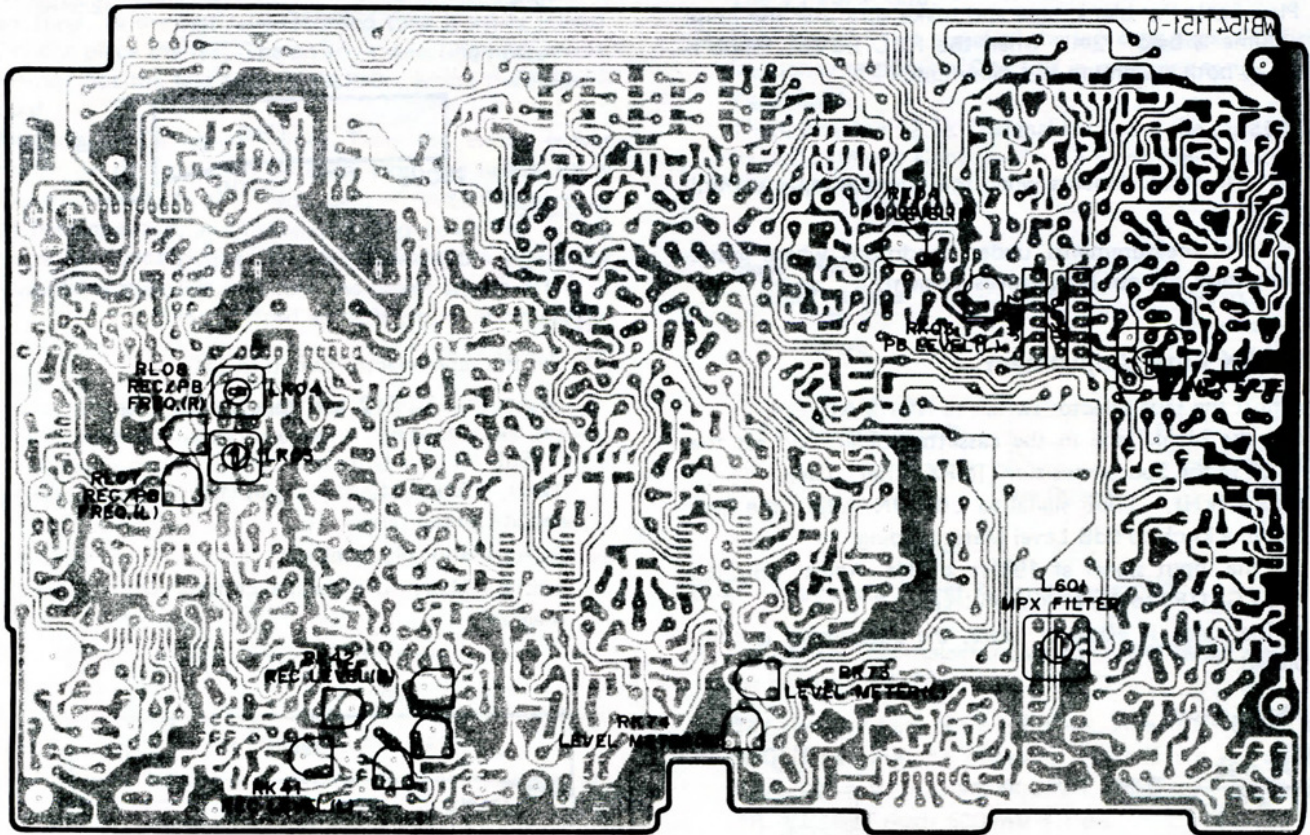


NOTE:

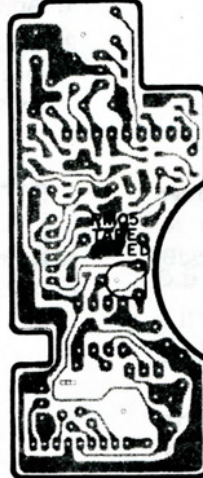
Adjustment points for NORMAL, CrO₂, METAL are common with CB01(L) and CB02(R).

5.9 Alignment Points

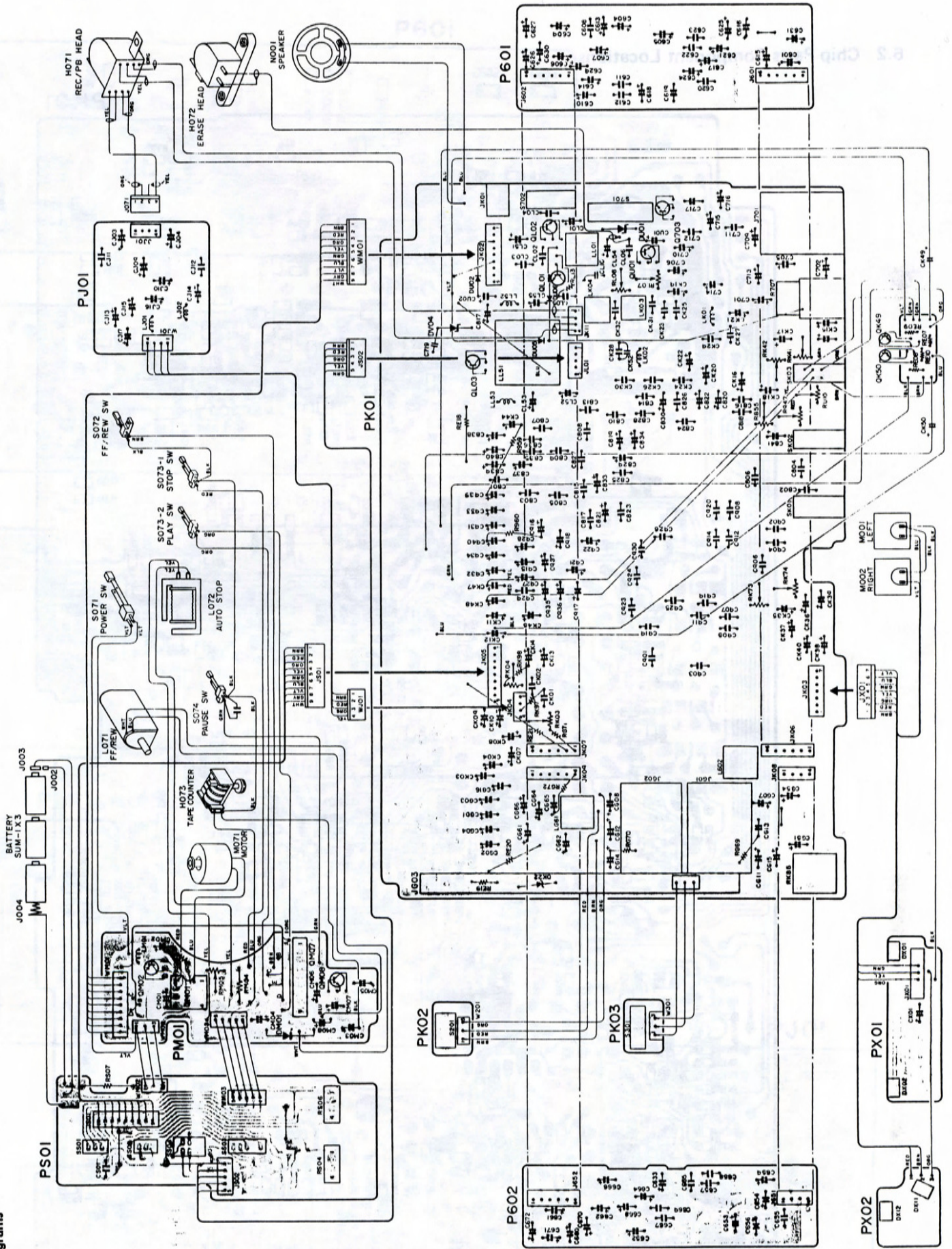
PK01



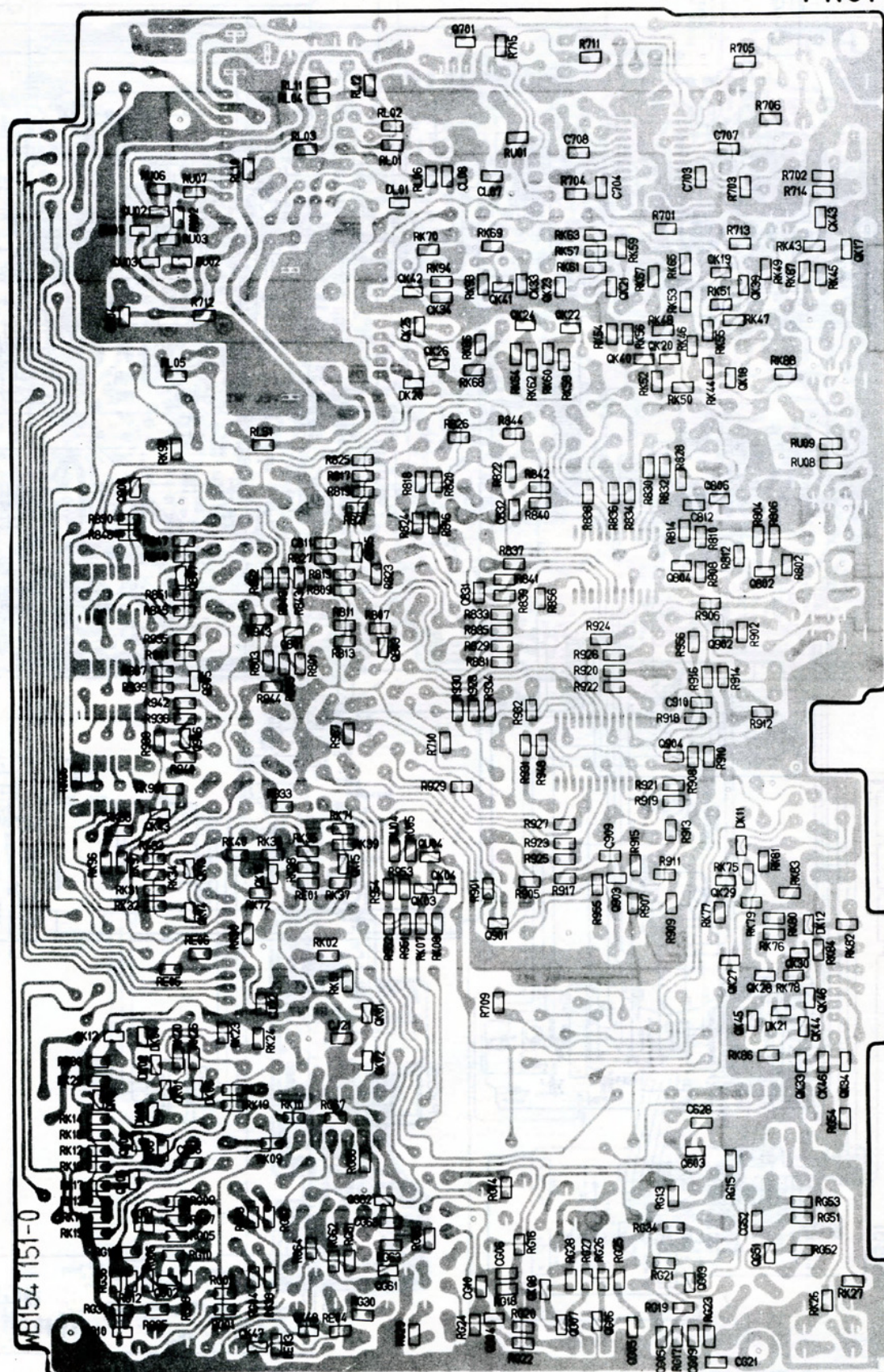
PM01



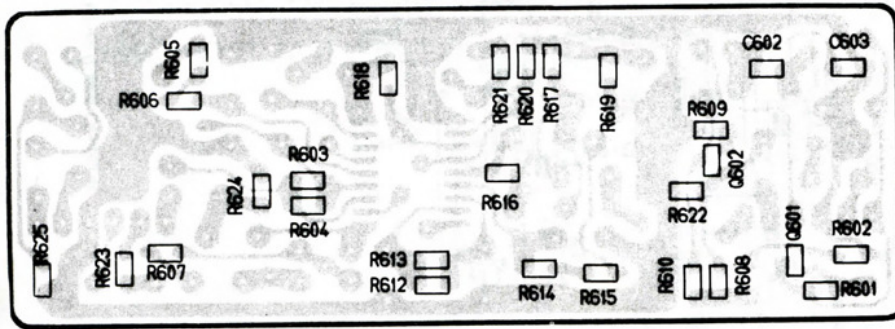
6. DIAGRAMS 6.1 Wiring Diagrams



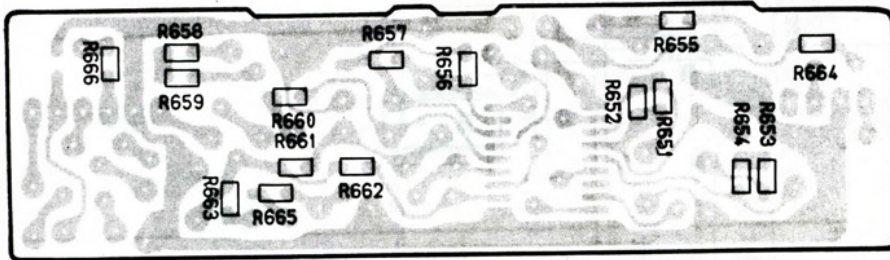
PK01



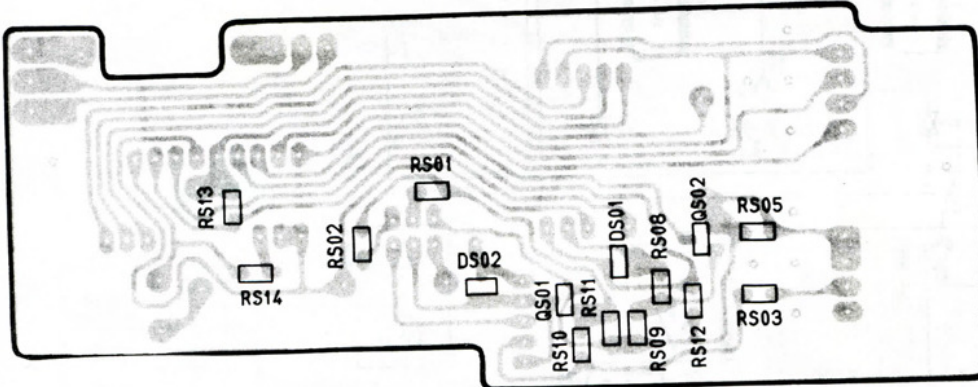
P601



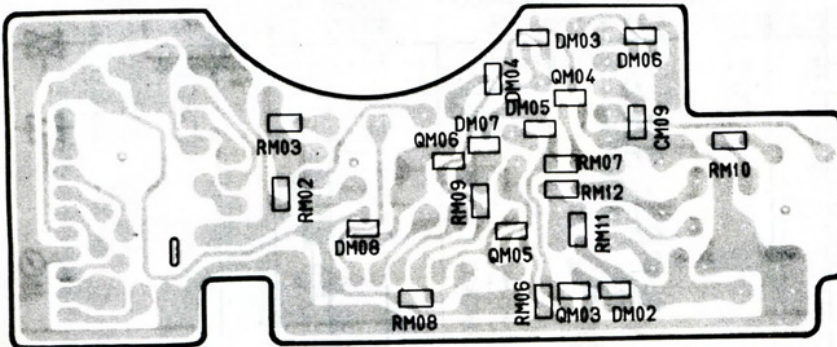
P602



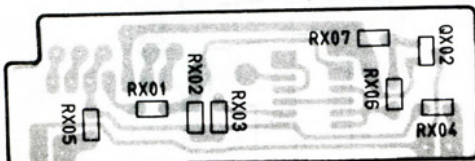
PS01



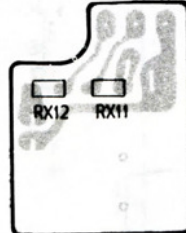
PM01



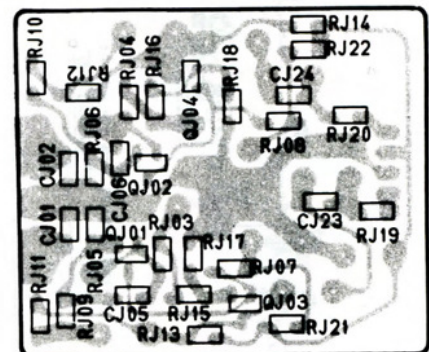
PX01



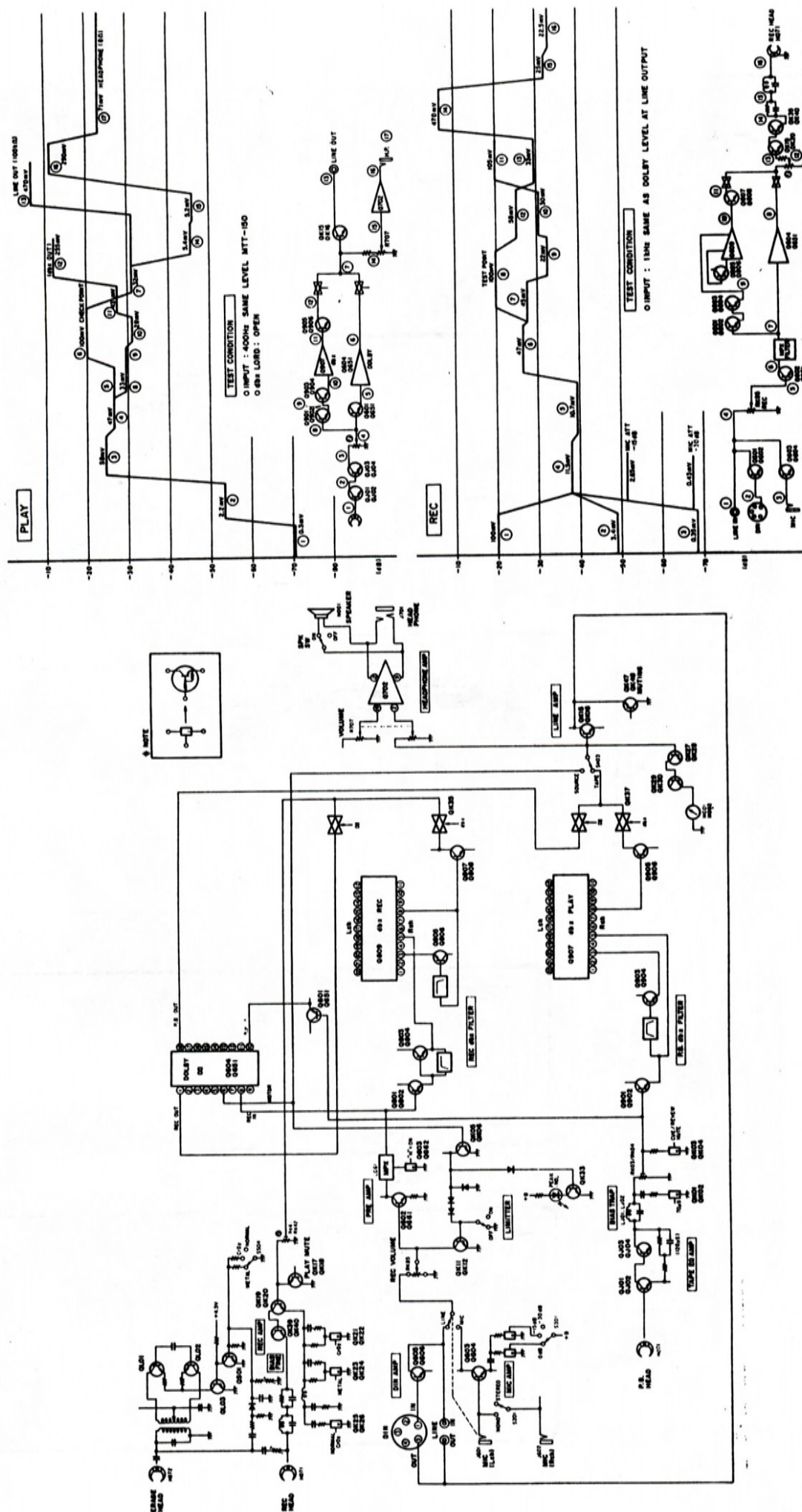
PX02



PJ01

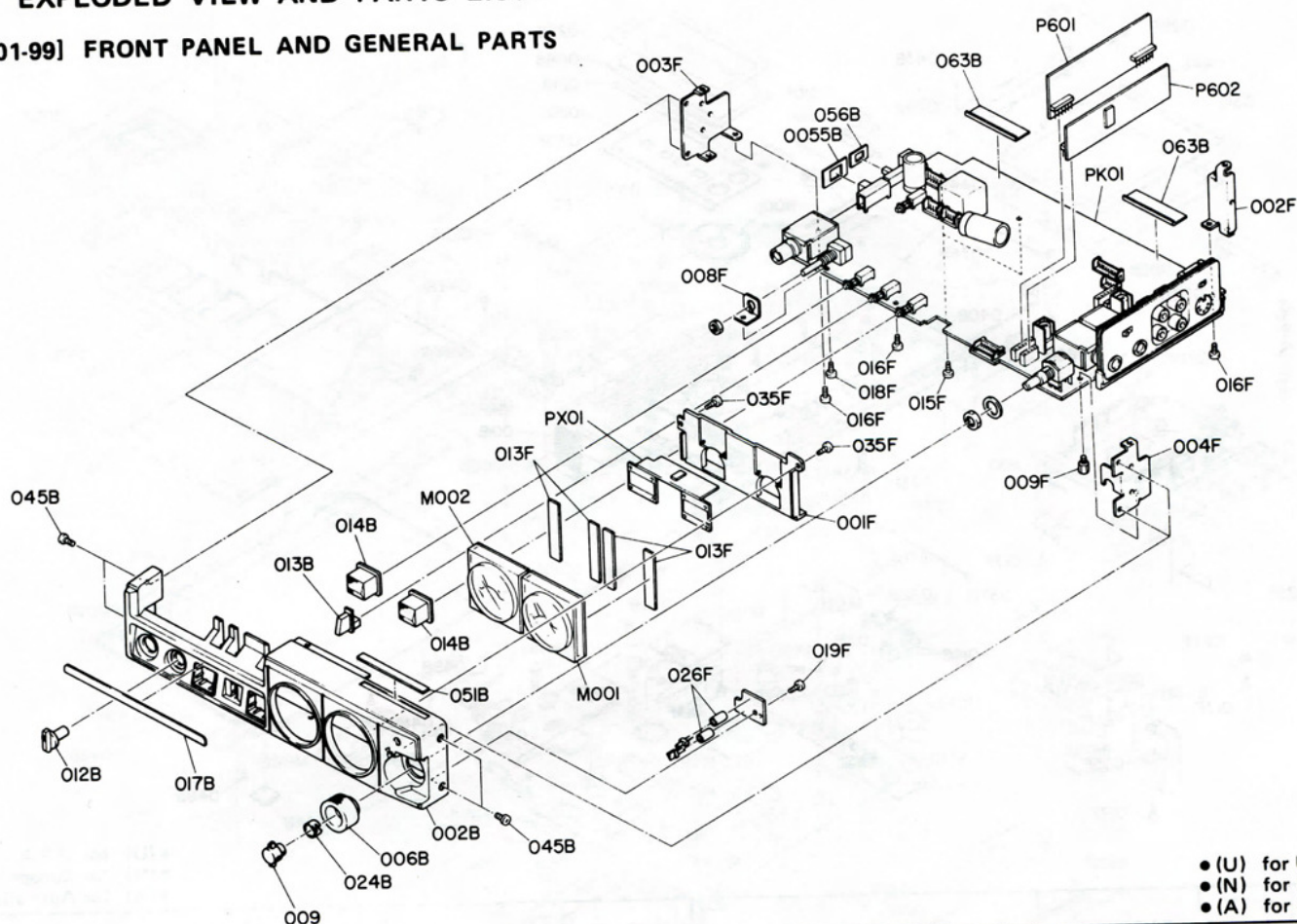


6.3 Block/Level Diagrams



7. EXPLODED VIEW AND PARTS LIST

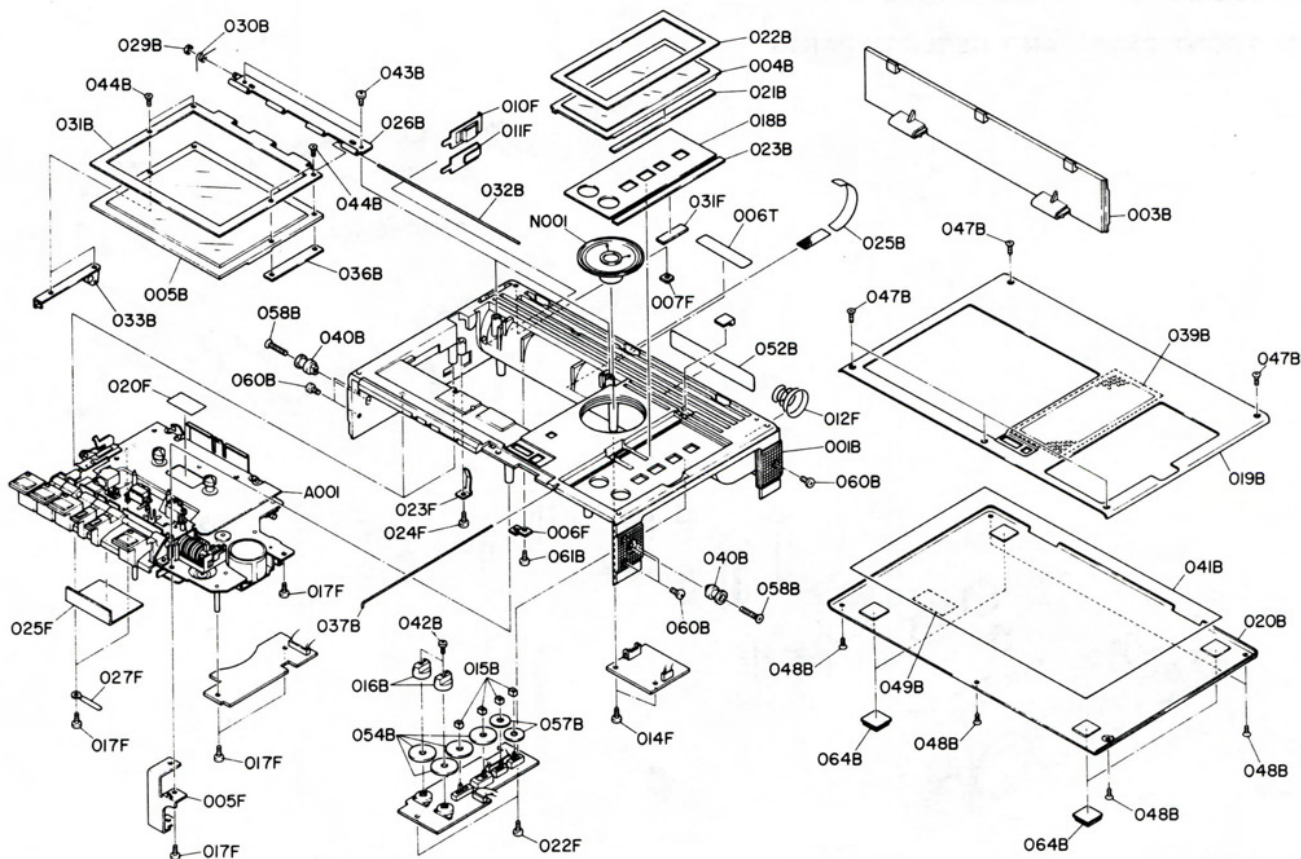
[C01-99] FRONT PANEL AND GENERAL PARTS



• (U) for U.S.A.
• (N) for Europe
• (A) for Australia

REF. DESIG.	Q'TY			PART NO.	DESCRIPTION
	U	N	A		
002B	1			153T064050	Case Front
002F		1	1	153T064030	Case Front
006B	1	1	1	153T154500	Knob Assy Rec Volume (L)
009B	1	1	1	153T154510	Knob Assy Rec Volume (R)
012B	1	1	1	153T154030	Knob Monitor Volume
013B	1	1	1	153T154040	Knob Batt./Light
014B	2	2	2	153T154050	Knob Monitor/Limiter
017B	1	1	1	153T265040	Indicator
024B	1	1	1	153T005010	Clamper
045B	4	4	4	51102606S0	B.H.M. Screw B2.6 x 6
051B	1	1	1	153T251010	Badge
055B	1	1	1	153T303030	Mask
056B	1	1	1	153T303040	Mask
063B	2	2	2	153T303070	Mask
001F	1	1	1	153T104020	Retainer Level Meter
002F	1	1	1	153T160050	Bracket
003F	1	1	1	153T160060	Bracket
004F	1	1	1	153T160070	Bracket
008F	1	1	1	153T104070	Retainer
009F	1	1	1	153T113010	Stud
013F	4	4	4	153T118010	Spacer
015F	2	2	2	51302608B0	P.H. Tapped Screw P2.6 x 8
016F	3	3	3	51572606B0	P. Tapped Screw P2.6 x 6
018F	1	1	1	51572604B0	P. Tapped Screw P2.6 x 4
019F	1	1	1	51300306B0	P.H. Tapped Screw P3 x 6
026F	2	2	2	153T055020	Collar
035F	2	2	2	51300308B0	P.H. Tapped Screw P3 x 8
M001	1	1	1	IM31040010	V.U. Meter L
M002	1	1	1	IM31040020	V.U. Meter R

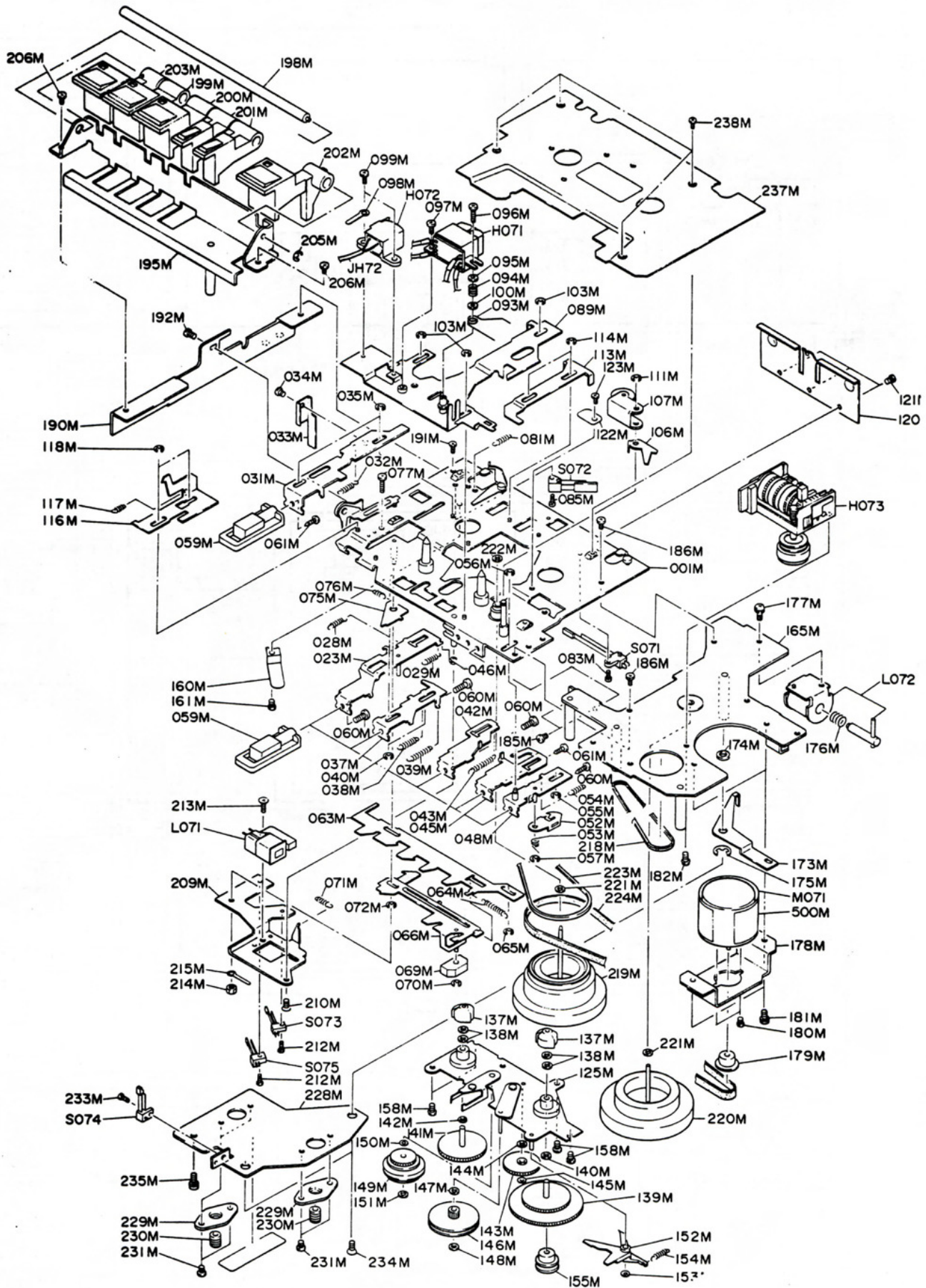
[C02-99] MAIN CASE AND GENERAL PARTS



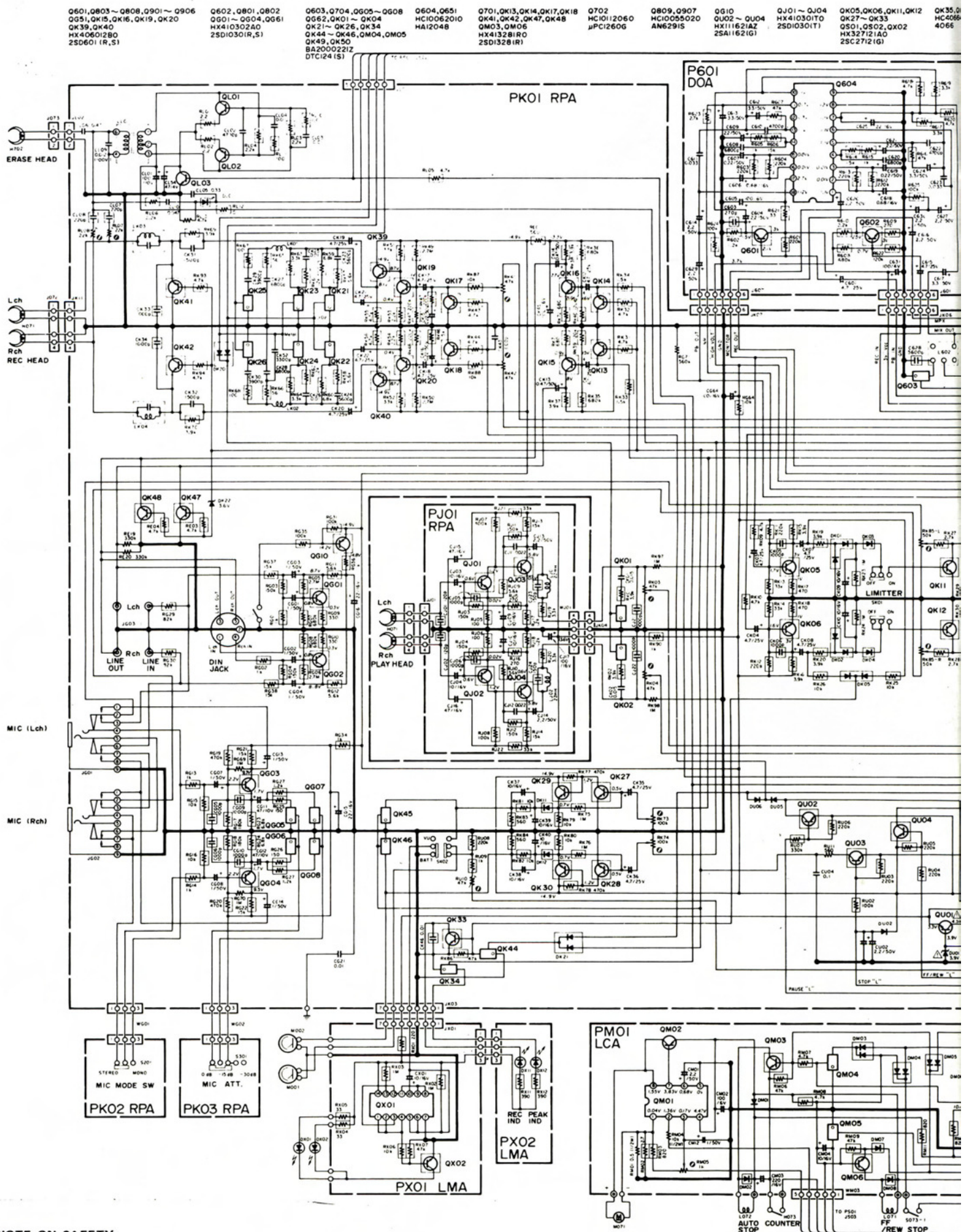
• (U) for U.S.A.
• (N) for Europe
• (A) for Australia

REF. DESIG.	Q'TY			PART NO.	DESCRIPTION	REF. DESIG.	Q'TY			PART NO.	DESCRIPTION
	U	N	A				U	N	A		
001B	1			153T064040	Case Top	049B	1	1	1	4581861010	Label
001B		1	1	153T064010	Case Top	052B	1	1	1	153T861010	Label
003B	1			153T257050	Lid Battery	054B	4	4	4	153T303020	Mask
003B		1	1	153T257010	Lid Battery	057B	2	2	2	153T303060	Mask
004B	1	1	1	153T257020	Lid Control	058B	2	2	2	51040318S0	F.H.M. Screw F3 x 1.8
005B	1	1	1	153T257030	Lid Cassette	060B	5	5	5	51102606S0	B.H.M. Screw B2.6 x 6
015B	4	4	4	153T154060	Knob Slide Switch	061B	1	1	1	51300306B0	P.H. Tapped Screw P3
016B	2	2	2	153T154070	Knob Pitch/Bias Fine						
018B	1	1	1	153T265030	Indicator	064B	4	4	4	153T057000	Leg Cover
019B	1			153T053060	Cover Top	005F	1	1	1	153T160080	Bracket
019B		1	1	153T053050	Cover Top	006F	1	1	1	153T104050	Retainer
020B	1			153T053070	Cover Bottom	007F	1	1	1	153T104060	Retainer
020B		1	1	153T053040	Cover Bottom	010F	1	1	1	153T129010	Terminal
021B	1	1	1	153T305010	Magnet	011F	1	1	1	153T129020	Terminal
022B	1	1	1	153T063010	Escutcheon	012F	1	1	1	YL11010090	Terminal (-)
023B	1	1	1	153T060010	Clinger	014F	2	2	2	51062605A0	P.H.M. Screw P2.6 x 5
025B	1	1	1	153T007010	Strip	017F	8	8	8	51300308B0	P.H. Tapped Screw P3 x 8
026B	1	1	1	153T153500	Hinge Assembly	020F	1	1	1	251T274010	Reflector
029B	1	1	1	64002500A0	RG Ring, E	022F	2	2	2	51300306B0	P.H. Tapped Screw P3 x 6
030B	1	1	1	153T115090	Spring						
031B	1	1	1	153T153020	Hinge Cassette Cover	023F	1	1	1	153T115100	Spring
032B	1	1	1	153T112380	Shaft	024F	1	1	1	51300306B0	P.H. Tapped Screw P3 x 6
033B	1	1	1	153T104500	Retainer Assembly	025F	1	1	1	153T303080	Mask
036B	1	1	1	153T104040	Retainer	027F	2	2	2	4220005030	Clamper
037B	1	1	1	153T112370	Shaft Control Cover	031F	1	1	1	4123107070	Sheet
039B	1	1	1	153T107010	Sheet Top Cover						
040B	2	2	2	153T055010	Collar Top Case	006T	1			2112265010	Indicator Serial No. Card
041B	1	1	1	153T120010	Insulator Bottom Cover	006T		1	1	2112265110	Indicator Serial No. Card
042B	2	2	2	51061704S0	P.H.M. Screw P1.7 x 4	A001	1	1	1	154T304500	Mechanism Assembly
043B	2	2	2	51302606U0	P.H. Tapped Screw P2.6 x 4	N001	1	1	1	QK00408030	Speaker 8Ω
044B	4	4	4	51840204S0	F.H.M. Screw F2 x 4						
047B	5	5	5	51842607S0	F.H.M. Screw F2.6 x 7						
048B	5	5	5	51842605S0	F.H.M. Screw F2.6 x 5						

[P01-99] PARTS ASSEMBLED ON THE CHASSIS



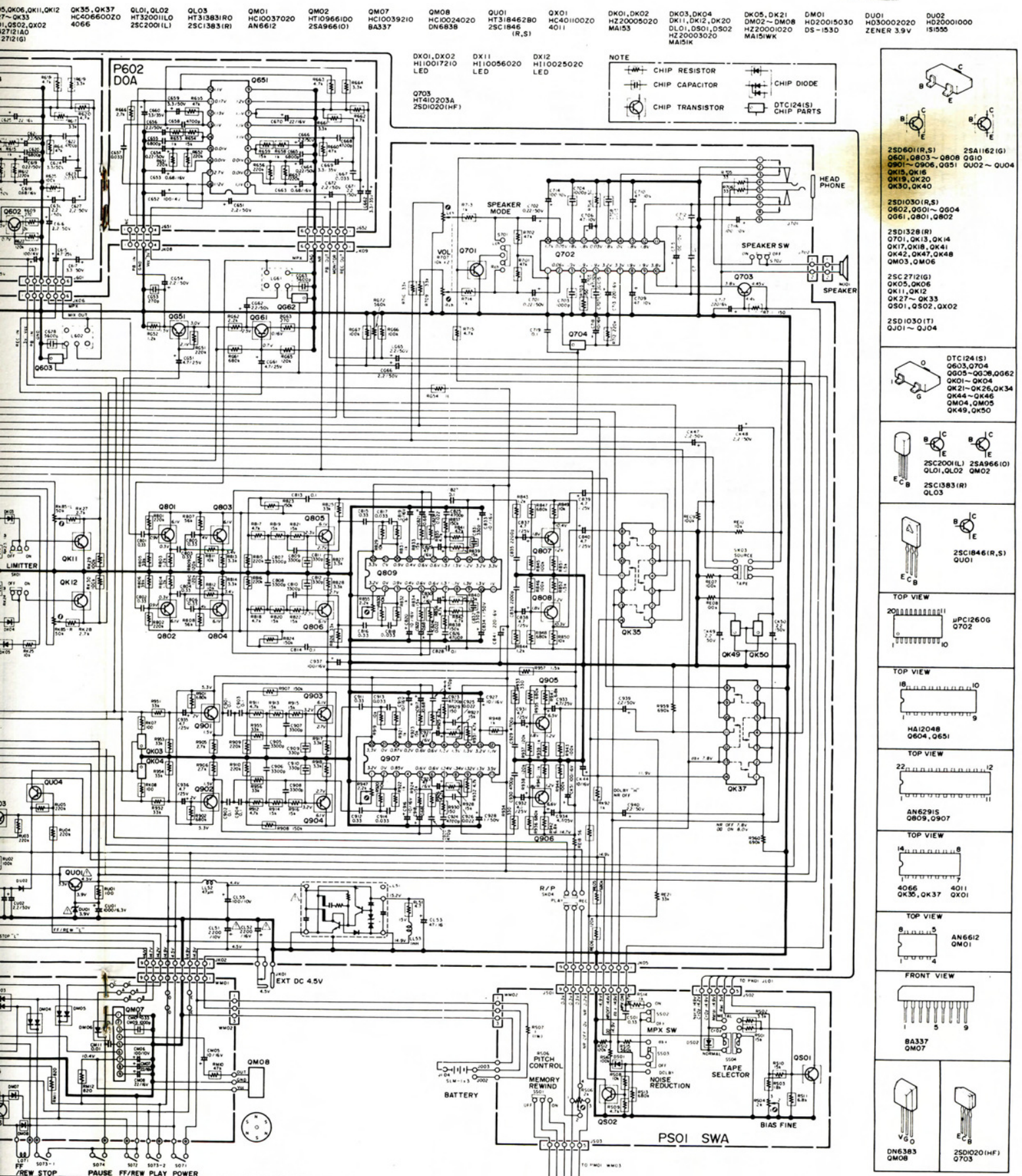
10. SCHEMATIC DIAGRAM



NOTE ON SAFETY:

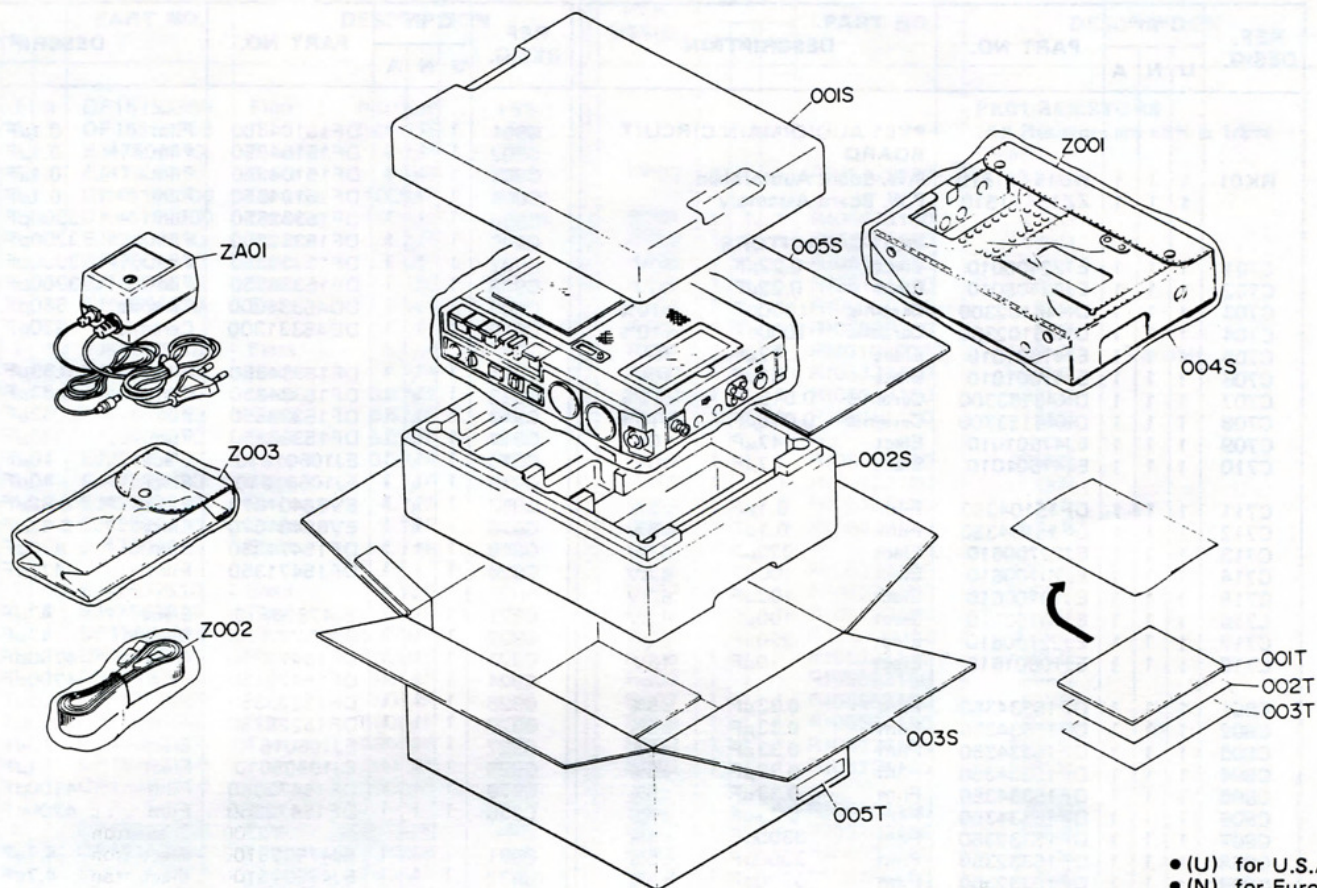
Symbol  Fire or electrical shock hazard. Only original parts should be used to replace any part marked with symbol. Any other component substitution (other than original type), may increase risk of fire or electrical shock hazard.

MODEL CP430/PMD430



REF. DESIG.	Q'TY			PART NO.	DESCRIPTION	REF. DESIG.	Q'TY			PART NO.	DESCRIPTION
	U	N	A				U	N	A		
001M	1	1	1	153T105500	Main Chassis Ass'y	147M	1	1	1	59163202G9	Washer Under Take Up Pulley
023M	1	1	1	153T354500	Lever Stop Ass'y	148M	1	1	1	59123502G9	Washer Stop Ws. Take Up Pulley
028M	1	1	1	251T11510R	Spring Stop Eject Selector	149M	1	1	1	242T26211R	Pulley FF/REW Idler
029M	1	1	1	242T11512R	Spring Stop Lever	150M	1	1	1	59163202G9	Washer Under F/R Idler
031M	1	1	1	153T354020	Lever Rec	151M	1	1	1	59123202G9	Washer Stop Ws. F/R Idler
032M	1	1	1	242T11512R	Spring Rec Lever	152M	1	1	1	242T00210R	Arm Auto Stop (Plastics)
033M	1	1	1	153T125010	Joint Spring Rec Switch	153M	1	1	1	251T11412R	Stopper Stop Ws. Auto Arm
034M	1	1	1	51821702S0	P.H.M. Screw P1.7 x 2	154M	1	1	1	153T115040	Spring Auto Stop Arm
035M	2	2	2	64001500LR	RG Ring, E Rec Lever	155M	1	1	1	153T262020	Pulley Counter
037M	1	1	1	251T35401R	Lever Play	158M	4	4	4	51821702S0	P.H.M. Screw P1.7 x 2
038M	1	1	1	251T11511R	Spring Play Lever	160M	1	1	1	153T115020	Spring Back Tention
039M	1	1	1	251T11512R	Spring Play Lever Head Plate	161M	1	1	1	51821702S0	P.H.M. Screw P1.7 x 2
040M	2	2	2	64001500LR	RG Ring, Play Lever	165M	1	1	1	153T105520	Chassis Sub Ass'y
042M	1	1	1	251T35402R	Lever REW	173M	1	1	1	153T121010	Link Play Auto Stop
043M	1	1	1	251T11513R	Spring REW Lever	174M	1	1	1	59050805G9	Washer Auto Stop Link
045M	1	1	1	251T35403R	Lever FF	175M	1	1	1	64000400LR	RG Ring, Auto Stop Link
046M	1	1	1	242T11516R	Spring FF Lever	176M	1	1	1	153T115030	Spring Solenoid Coil
048M	1	1	1	153T354510	Lever Pause Ass'y	177M	1	1	1	51822603S0	P.H.M. Screw P2.6 x 3
052M	1	1	1	153T002040	Arm Pause	178M	1	1	1	153T160020	Bracket Motor
053M	1	1	1	153T115060	Spring Pause Arm	179M	1	1	1	153T262010	Pulley Motor
054M	1	1	1	153T115070	Spring Pause Lever Ass'y	180M	2	2	2	51821725SR	P.H.M. Screw P1.7 x 2.5
055M	1	1	1	64001500LR	RG Ring, Pause Lever Ass'y	181M	2	2	2	51442604A0	L. Washer
056M	1	1	1	64000200LR	RG Ring, Pause Lever Ass'y	182M	2	2	2	51302604B0	P.H. Tapped Screw P2.6 x 4
057M	1	1	1	64001500LR	RG Ring, Pause Arm	185M	2	2	2	51821703S0	P.H.M. Screw P1.7 x 3
059M	6	6	6	153T354040	Lever Button Joint	186M	2	2	2	51820203S0	P.H.M. Screw P2 x 3
060M	4	4	4	51401705PR	B.H. Tapped Screw B1.7 x 5	190M	1	1	1	153T160040	Bracket Button Holder
061M	2	2	2	51381705PR	P.H. Tapped Screw P1.7 x 5	191M	1	1	1	51820203S0	P.H.M. Screw P2 x 3
063M	1	1	1	153T054010	Cam Play/Rec Lock	192M	1	1	1	51821703S0	P.H.M. Screw P1.7 x 3
064M	1	1	1	153T115150	Spring Play/Rec Lock Cam	195M	1	1	1	153T271500	Holder Button Ass'y
065M	1	1	1	64001500LR	RG Ring, Play/Rec Lock Cam	198M	1	1	1	153T112130	Shaft Button
066M	1	1	1	153T054500	Cam FF/REW Lock Cam Ass'y	199M	1	1	1	153T270010	Button Stop/Eject
069M	1	1	1	251T06010R	Clinger Magnet Coil	200M	1	1	1	153T270020	Button Play
070M	1	1	1	64001500LR	RG Ring, Clinger	201M	2	2	2	153T270030	Button FF And REW
071M	1	1	1	251T11514R	Spring FF/REW Lock Cam	202M	1	1	1	153T270040	Button Pause
072M	1	1	1	64000200LR	RG Ring, Cam	203M	1	1	1	153T270050	Button Rec
075M	1	1	1	251T00210R	Arm Anti After Rec	205M	1	1	1	64000200LR	RG Ring, Button Shaft
076M	1	1	1	251T11515R	Spring Anti After Rec	206M	2	2	2	51820203S0	P.H.M. Screw P2 x 3
077M	1	1	1	518217050R	P.H.M. Screw P1.7 x 5	209M	1	1	1	153T160010	Bracket Coil And Switch
080M	1	1	1	242T11518R	Spring Cue/Rev Arm	210M	1	1	1	51040208A0	F.H.M. Screw F2 x 8
081M	1	1	1	242T11512R	Spring Rec Safty Arm	212M	2	2	2	51821404SR	P.H.M. Screw P1.4 x 4
083M	1	1	1	51821703S0	P.H.M. Screw P1.7 x 3	213M	1	1	1	51041703SR	F.H.M. Screw F1.7 x 3
085M	1	1	1	51820235SR	P.H.M. Screw P2 x 3.5	214M	1	1	1	53111703ER	Hexagon Nut Coil And Switch
089M	1	1	1	154T105500	Chassis Head Plate Ass'y	215M	1	1	1	251T00511R	Clamper Switch Wire
093M	1	1	1	154T115010	Spring Pinch Roller	218M	1	1	1	153T264020	Belt Counter
094M	1	1	1	154T115020	Spring Azimuth	219M	1	1	1	153T273010	Flywheel Main
095M	1	1	1	54020201S0	Flat Washer, P	220M	1	1	1	153T273020	Flywheel Dummy
096M	1	1	1	51100205S0	B.H.M. Screw B2 x 5	221M	2	2	2	59163202G9	Washer Under Flywheel
097M	1	1	1	51100203S0	B.H.M. Screw B2 x 3	222M	1	1	1	59143502GR	Washer Oil Defense
098M	1	1	1	251T00511R	Clamper Head Wire	223M	1	1	1	242T26412R	Belt Drive
099M	2	2	2	51100245S0	B.H.M. Screw B2 x 4.5	224M	1	1	1	153T264010	Belt Main
100M	1	1	1	153T012010	Washer Pinch Roller Spring	228M	1	1	1	153T160030	Bracket Flywheel
103M	3	3	3	64001500LR	RG Ring, Head Plate	229M	2	2	2	153T104010	Retainer Adjuster
108M	1	1	1	153T002010	Arm Pause	230M	2	2	2	153T164010	Adjuster Fly Thrust Adjust
107M	1	1	1	153T255500	Pinch Roller Ass'y	231M	4	4	4	51820203SR	P.H.M. Screw P2 x 3
111M	1	1	1	64001500LR	RG Ring, Pinch Roller Ass'y Install	233M	1	1	1	51821404SR	P.H.M. Screw P1.4 x 4
113M	1	1	1	242T35416R	Lever Cue/Review	234M	2	2	2	51042604S0	F.H.M. Screw F2.6 x 4
114M	2	2	2	64001500LR	RG Ring, Cue/Review Lever	235M	1	1	1	51442604A0	L. Washer
116M	1	1	1	251T258010	Hook Cassette Door	237M	1	1	1	153T053010	Cover Mecha
117M	1	1	1	251T11517R	Spring Hook	238M	4	4	4	51821702SR	P.H.M. Screw P1.7 x 2
118M	2	2	2	64001500LR	RG Ring, Hook	500M	3	3	3	153T109010	Shield Slid Motor
120M	1	1	1	153T115010	Spring Cassette Back	H071	1	1	1	LH82162010	Rec/Play Head Combination R/P
121M	3	3	3	51821702S0	P.H.M. Screw P1.7 x 2	H072	1	1	1	LH31000570	Erase Head
122M	1	1	1	251T00510R	Clamper Take Up Lever	H073	1	1	1	153T052010	Counter
123M	1	1	1	51821702S0	P.H.M. Screw P1.7 x 2	L071	1	1	1	ME0014004R	Solenoid Coil REW
125M	1	1	1	153T105530	Chassis Reel Base Ass'y	L072	1	1	1	ME10180010	Solenoid Coil Auto Stop
137M	2	2	2	242T00410R	Table Reel Cap	M071	1	1	1	MM00450020	D.C. Motor
138M	4	4	4	59020405G9	Washer Under Reel Cap	S071	1	1	1	SM0101097R	Mini Switch Motor
139M	1	1	1	153T058010	Gear Take Up Clutch W/Shaft	S072	1	1	1	SM0101114R	Mini Switch FF/REW
140M	1	1	1	59020402G9	Washer Under Take Up Clutch	S073	1	1	1	SM0101115R	Mini Switch Play
141M	1	1	1	153T058020	Gear Supply Gear W/Shaft	S074	1	1	1	SM0101115R	Mini Switch Pause
142M	1	1	1	59020402G9	Washer Under Supply Gear	S075	1	1	1	SM0101115R	Mini Switch Stop
143M	1	1	1	242T05811R	Gear FF						
144M	1	1	1	59020402G9	Washer Under FF Gear						
145M	1	1	1	251T11411R	Stopper						
146M	1	1	1	242T26210R	Pulley Take Up						

[H01-99] PACKING MATERIALS



- (U) for U.S.A.
- (N) for Europe
- (A) for Australia

REF. DESIG.	Q'TY			PART NO.	DESCRIPTION	REF. DESIG.	Q'TY			PART NO.	DESCRIPTION
	U	N	A				U	N	A		
001S	1	1	1	153T809010	Cushion Top	Z001	1	1	1	153T831010	Carrying Case
002S	1	1	1	153T809020	Cushion Bottom	Z002	1	1	1	153T156010	Strap
003S	1			153T801020	Packing Case	Z003	1	1	1	153T831020	Carrying Case
003S		1	1	154T801010	Packing Case						
004S	1	1	1	9013025010	Polyethy Bag	ZA01			1	AA90005020	A.C. Adaptor
005S	1	1	1	153T803010	Partitioner	ZA01		1		AA90005010	A.C. Adaptor
						ZA01	1			AA12005010	A.C. Adaptor
001T		1	1	153T851310	User Manual						
001T	1			153T851210	User Manual						
002T		1	1	154T851320	User Manual Spec Flysheet						
002T	1			154T851220	User Manual Spec Flysheet						
003T			1	9631000090	Warranty Card						
003T		1		154T856010	Circuit Diagram						
003T	1			2818854020	Warranty Card						
005T	1			9526019020	Serial No. Card						
005T		2		9526019060	Serial No. Card						
005T			3	9526019030	Serial No. Card						

8. ELECTRICAL PARTS LIST

• (U) for U.S.A.
• (N) for Europe
• (A) for Australia

REF. DESIG.	Q'TY			PART NO.	DESCRIPTION	
	U	N	A			
RK01	1	1	1	WB154T1510 ZZ154T1510	PK01-AUDIO/MAIN CIRCUIT BOARD P.W. Board Audio/Main P.W. Board Assembly	
C701	1	1	1	EJ22405010	PK01-CAPACITORS	
C702	1	1	1	EJ22405010	Elect 0.22μF 50V	
C703	1	1	1	DK46102300	Elect 0.22μF 50V	
C704	1	1	1	DK46102300	Ceramic 1000pF ±10%	
C705	1	1	1	EJ47601010	Ceramic 1000pF ±10%	
C706	1	1	1	EJ47601010	Elect 47μF 10V	
C707	1	1	1	DK46153300	Elect 47μF 10V	
C708	1	1	1	DK46153300	Ceramic 0.015μF ±10%	
C709	1	1	1	EJ47601010	Ceramic 0.015μF ±10%	
C710	1	1	1	EJ47601010	Elect 47μF 10V	
C711	1	1	1	DF15104350	Elect 47μF 10V	
C712	1	1	1	DF15104350	Film 0.1μF ±5%	
C713	1	1	1	EJ22700610	Film 0.1μF ±5%	
C714	1	1	1	EJ10700610	Elect 220μF 6.3V	
C715	1	1	1	EJ10700610	Elect 100μF 6.3V	
C716	1	1	1	EJ10700610	Elect 100μF 6.3V	
C717	1	1	1	EJ22700610	Elect 100μF 6.3V	
C718	1	1	1	EJ10601610	Elect 220μF 6.3V	
C801	1	1	1	DF15334350	Elect 10μF 16V	
C802	1	1	1	DF15334350	Film 0.33μF ±5%	
C803	1	1	1	DF15334350	Film 0.33μF ±5%	
C804	1	1	1	DF15334350	Film 0.33μF ±5%	
C805	1	1	1	DF15334350	Film 0.33μF ±5%	
C806	1	1	1	DF15334350	Film 0.33μF ±5%	
C807	1	1	1	DF15334350	Film 0.33μF ±5%	
C808	1	1	1	DF15334350	Film 3300pF ±5%	
C809	1	1	1	DF15334350	Film 3300pF ±5%	
C810	1	1	1	DF15334350	Film 3300pF ±5%	
C811	1	1	1	DD45331300	Ceramic 330pF ±5%	
C812	1	1	1	DD45331300	Ceramic 330pF ±5%	
C813	1	1	1	DF15104350	Film 0.1μF ±5%	
C814	1	1	1	DF15104350	Film 0.1μF ±5%	
C815	1	1	1	DF15334350	Film 0.33μF ±5%	
C816	1	1	1	DF15334350	Film 0.33μF ±5%	
C817	1	1	1	DF15334350	Film 0.33μF ±5%	
C818	1	1	1	DF15334350	Film 0.033μF ±5%	
C819	1	1	1	EJ10601610	Film 0.033μF ±5%	
C820	1	1	1	EJ10601610	Elect 10μF 16V	
C821	1	1	1	EV68401670	Elect 10μF 16V	
C822	1	1	1	EV68401670	Elect 0.68μF 16V	
C823	1	1	1	DF15223350	Elect 0.68μF 16V	
C824	1	1	1	DF15223350	Film 0.022μF ±5%	
C825	1	1	1	DF15472350	Film 0.022μF ±5%	
C826	1	1	1	DF15472350	Film 4700pF ±5%	
C827	1	1	1	DF15472350	Film 4700pF ±5%	
C828	1	1	1	DF15104350	Film 0.1μF ±5%	
C829	1	1	1	EJ47600610	Film 0.1μF ±5%	
C830	1	1	1	EJ47600610	Elect 47μF 6.3V	
C831	1	1	1	DD45331300	Elect 47μF 6.3V	
C832	1	1	1	DD45331300	Ceramic 330pF ±5%	
C833	1	1	1	EJ10601610	Ceramic 330pF ±5%	
C834	1	1	1	EJ10505010	Elect 10μF 16V	
C835	1	1	1	DF15223350	Elect 1μF 50V	
C836	1	1	1	DF15223350	Film 2200pF ±5%	
C837	1	1	1	EJ47502510	Film 2200pF ±5%	
C838	1	1	1	EJ47502510	Elect 4.7μF 25V	
C839	1	1	1	EJ47502510	Elect 4.7μF 25V	
C840	1	1	1	EJ47502510	Elect 4.7μF 25V	
C841	1	1	1	EJ22700610	Elect 4.7μF 25V	
C901	1	1	1	DF15104350	CG01 1 1 1 EJ10505010	Elect 1μF 50V
C902	1	1	1	DF15104350	CG02 1 1 1 EJ10505010	Elect 1μF 50V
C903	1	1	1	DF15104350	CG03 1 1 1 EJ10505010	Elect 1μF 50V
C904	1	1	1	DF15104350	CG04 1 1 1 EJ10505010	Elect 1μF 50V
C905	1	1	1	DF15332350	CG05 1 1 1 DK46102300	Ceramic 1000pF ±10%
C906	1	1	1	DF15332350	CG06 1 1 1 DK46102300	Ceramic 1000pF ±10%
C907	1	1	1	DF15332350	CG07 1 1 1 EJ10505010	Elect 1μF 50V
C908	1	1	1	DF15332350	CG08 1 1 1 EJ10505010	Elect 1μF 50V
C909	1	1	1	DD45331300	CG09 1 1 1 DK46102300	Ceramic 1000pF ±10%
C910	1	1	1	DD45331300	CG10 1 1 1 DK46102300	Ceramic 1000pF ±10%
C911	1	1	1	DF15334350	CG11 1 1 1 EJ47601010	Elect 47μF 10V
C912	1	1	1	DF15334350	CG12 1 1 1 EJ47601010	Elect 47μF 10V
C913	1	1	1	DF15333350	CG13 1 1 1 EJ10505010	Elect 1μF 50V
C914	1	1	1	DF15333350	CG14 1 1 1 EJ10505010	Elect 1μF 50V
C915	1	1	1	EJ10601610	CG15 1 1 1 EJ22601610	Elect 22μF 16V
C916	1	1	1	EJ10601610	CG16 1 1 1 EJ22601610	Elect 22μF 16V
C917	1	1	1	EV68401670	CG21 1 1 1 DK46103300	Ceramic 0.01μF ±10%
C918	1	1	1	EV68401670	CG51 1 1 1 EJ47502510	Elect 4.7μF 25V
C919	1	1	1	DF15471350	CG53 1 1 1 DD45271300	Ceramic 270pF ±5%
C920	1	1	1	DF15471350	CG54 1 1 1 EJ22505010	Elect 2.2μF 50V
C921	1	1	1	EJ47600610	CG61 1 1 1 EJ47502510	Elect 4.7μF 25V
C922	1	1	1	EJ47600610	CG62 1 1 1 EJ22505010	Elect 2.2μF 50V
C923	1	1	1	DF15472350	CG63 1 1 1 DK46562300	Ceramic 5600pF ±10%
C924	1	1	1	DF15472350	CG64 1 1 1 EJ10701010	Elect 100μF 10V
C925	1	1	1	DF15223350	CG65 1 1 1 EJ22505010	Elect 2.2μF 50V
C926	1	1	1	DF15223350	CG66 1 1 1 EJ22505010	Elect 2.2μF 50V
C927	1	1	1	EJ10601610		
C928	1	1	1	EJ10505010		
C929	1	1	1	DF15472350		
C930	1	1	1	DF15472350		
C931	1	1	1	EJ47502510		
C932	1	1	1	EJ47502510		
C933	1	1	1	EJ47502510		
C934	1	1	1	EJ47502510		
C935	1	1	1	EJ47502510		
C936	1	1	1	EJ47502510		
C937	1	1	1	EJ10701010		
C939	1	1	1	EJ22505010		
C940	1	1	1	EJ22505010		

- (U) for U.S.A.
- (N) for Europe
- (A) for Australia

REF. DESIG.	Q'TY			PART NO.	DESCRIPTION			REF. DESIG.	Q'TY			PART NO.	DESCRIPTION			
	U	N	A						U	N	A					
CK01	1	1	1	DF15153350	Film	0.015μF	±5%	R602	1	1	1	RI05122180	PK01-RESISTORS (All Resistors are ±5% & 1/8W Chip)			
CK02	1	1	1	DF15153350	Film	0.015μF	±5%									
CK03	1	1	1	EJ47502510	Elect	4.7μF	25V									
CK04	1	1	1	EJ47502510	Elect	4.7μF	25V									
CK05	1	1	1	DK46102300	Ceramic	1000pF	±10%									
CK06	1	1	1	DK46102300	Ceramic	1000pF	±10%									
CK07	1	1	1	EJ47502510	Elect	4.7μF	25V									
CK08	1	1	1	EJ47502510	Elect	4.7μF	25V									
CK09	1	1	1	EJ10601610	Elect	10μF	16V									
CK10	1	1	1	EJ10601610	Elect	10μF	16V									
CK11	1	1	1	EJ47502510	Elect	4.7μF	25V						Variable			
CK12	1	1	1	EJ47502510	Elect	4.7μF	25V									
CK13	1	1	1	EJ47405010	Elect	0.47μF	50V									
CK14	1	1	1	EJ47405010	Elect	0.47μF	50V									
CK15	1	1	1	EJ22405010	Elect	0.22μF	50V									
CK16	1	1	1	EJ22405010	Elect	0.22μF	50V									
CK17	1	1	1	EJ47502510	Elect	4.7μF	25V									
CK18	1	1	1	EJ47502510	Elect	4.7μF	25V									
CK19	1	1	1	EJ47502510	Elect	4.7μF	25V									
CK20	1	1	1	EJ47502510	Elect	4.7μF	25V									
CK21	1	1	1	EJ47502510	Elect	4.7μF	25V									
CK22	1	1	1	EJ47502510	Elect	4.7μF	25V									
CK23	1	1	1	DF15562350	Film	5600pF	±5%									
CK24	1	1	1	DF15562350	Film	5600pF	±5%									
CK25	1	1	1	DF15103350	Film	0.01μF	±5%									
CK26	1	1	1	DF15103350	Film	0.01μF	±5%									
CK27	1	1	1	DF15682350	Film	6800pF	±5%									
CK28	1	1	1	DF15682350	Film	6800pF	±5%									
CK29	1	1	1	DF15392350	Film	3900pF	±5%									
CK30	1	1	1	DF15392350	Film	3900pF	±5%									
CK31	1	1	1	DF15152350	Film	0.0015μF	±5%									
CK32	1	1	1	DF15152350	Film	0.0015μF	±5%									
CK33	1	1	1	DD46102300	Ceramic	1000pF	±10%									
CK34	1	1	1	DD46102300	Ceramic	1000pF	±10%									
CK35	1	1	1	EJ47502510	Elect	4.7μF	25V									
CK36	1	1	1	EJ47502510	Elect	4.7μF	25V									
CK37	1	1	1	EJ10601610	Elect	10μF	16V									
CK38	1	1	1	EJ10601610	Elect	10μF	16V									
CK39	1	1	1	EJ10601610	Elect	10μF	16V									
CK40	1	1	1	EJ10601610	Elect	10μF	16V									
CK43	1	1	1	DK46102300	Ceramic	1000pF	±10%									
CK44	1	1	1	EJ10601610	Elect	10μF	16V									
CK45	1	1	1	EJ10701010	Elect	100μF	10V									
CK46	1	1	1	DK46103300	Ceramic	0.01μF	±10%									
CK47	1	1	1	EJ22505010	Elect	2.2μF	50V									
CK48	1	1	1	EJ22505010	Elect	2.2μF	50V									
CK49	1	1	1	EJ22505010	Elect	2.2μF	50V									
CK50	1	1	1	EJ22505010	Elect	2.2μF	50V									
CK51	1	1	1	EA10701610	Elect	100μF	16V									
CL01	1	1	1	EJ10701010	Elect	100μF	10V									
CL02	1	1	1	DF15472350	Film	4700pF	±5%									
CL03	1	1	1	DF15103350	Film	0.01μF	±5%									
CL04	1	1	1	DF15103350	Film	0.01μF	±5%									
CL05	1	1	1	DF15334350	Film	0.33μF	±5%									
CL06	1	1	1	DF15474350	Film	0.47μF	±5%									
CL07	1	1	1	DD45221300	Ceramic	220pF	±5%									
CL08	1	1	1	DD45221300	Ceramic	220pF	±5%									
CL09	1	1	1	DF15123550	Film	0.012μF	±5%									
ΔCL51	1	1	1	EA22801010	Elect	2200μF	10V									
ΔCL52	1	1	1	EA22801610	Elect	2200μF	16V									
CL53	1	1	1	EJ47601610	Elect	47μF	16V									
CL54	1	1	1	EJ47600410	Elect	47μF	4V									
CL55	1	1	1	EJ10701010	Elect	100μF	10V									
CU01	1	1	1	EA10800610	Elect	1000μF	6.3V									
CU02	1	1	1	EJ47502510	Elect	4.7μF	25V									
CU04	1	1	1	DF15104350	Film	0.1μF	±5%									
CU05	1	1	1	EJ22505010	Elect	2.2μF	50V									

- (U) for U.S.A.
- (N) for Europe
- (A) for Australia

REF. DESIG.	Q'TY			PART NO.	DESCRIPTION	
	U	N	A			
R851	1	1	1	RI05272180	2.7kΩ	Trimming
R852	1	1	1	RI05272180	2.7kΩ	
R855	1	1	1	RA02220600	2.2kΩ	
R856	1	1	1	RI05102180	1kΩ	
R901	1	1	1	RI05684180	680kΩ	
R902	1	1	1	RI05684180	680kΩ	
R905	1	1	1	RI05272180	2.7kΩ	
R906	1	1	1	RI05272180	2.7kΩ	
R907	1	1	1	RI05154180	150kΩ	
R908	1	1	1	RI05154180	150kΩ	
R909	1	1	1	RI05224180	220kΩ	
R910	1	1	1	RI05224180	220kΩ	
R911	1	1	1	RI05472180	4.7kΩ	
R912	1	1	1	RI05472180	4.7kΩ	
R913	1	1	1	RI05153180	15kΩ	
R914	1	1	1	RI05153180	15kΩ	
R915	1	1	1	RI05153180	15kΩ	
R916	1	1	1	RI05153180	15kΩ	
R917	1	1	1	RI05332180	3.3kΩ	
R918	1	1	1	RI05332180	3.3kΩ	
R919	1	1	1	RI05103180	10kΩ	
R920	1	1	1	RI05103180	10kΩ	
R921	1	1	1	RI05102180	1kΩ	
R922	1	1	1	RI05102180	1kΩ	
R923	1	1	1	RI05153180	15kΩ	
R924	1	1	1	RI05153180	15kΩ	
R925	1	1	1	RI05472180	4.7kΩ	
R926	1	1	1	RI05472180	4.7kΩ	
R927	1	1	1	RI05153180	15kΩ	
R928	1	1	1	RI05153180	15kΩ	
R929	1	1	1	RI05151180	150Ω	
R930	1	1	1	RI05151180	150Ω	
R931	1	1	1	RI05472180	4.7kΩ	
R932	1	1	1	RI05472180	4.7kΩ	
R933	1	1	1	RI05331180	330Ω	
R934	1	1	1	RI05331180	330Ω	
R935	1	1	1	RI05684180	680kΩ	
R936	1	1	1	RI05684180	680kΩ	
R937	1	1	1	RI05124180	120kΩ	
R938	1	1	1	RI05124180	120kΩ	
R939	1	1	1	RI05102180	1kΩ	
R940	1	1	1	RI05102180	1kΩ	
R941	1	1	1	RI05682180	6.8kΩ	
R942	1	1	1	RI05682180	6.8kΩ	
R943	1	1	1	RI05104180	100kΩ	Trimming
R944	1	1	1	RI05104180	100kΩ	
R947	1	1	1	RA02220600	2.2kΩ	
R948	1	1	1	RI05102180	1kΩ	
R951	1	1	1	RI05333180	33kΩ	
R952	1	1	1	RI05333180	33kΩ	
R953	1	1	1	RI05104180	100kΩ	
R954	1	1	1	RI05104180	100kΩ	
R955	1	1	1	RI05333180	33kΩ	
R956	1	1	1	RI05333180	33kΩ	
R957	1	1	1	RI05152180	1.5kΩ	
RE01	1	1	1	RI05561180	560Ω	1/6W
RE03	1	1	1	RI05472180	4.7kΩ	
RE04	1	1	1	GD05472160	4.7kΩ	
RE05	1	1	1	RI05684180	680kΩ	
RE06	1	1	1	RI05124180	120kΩ	
RE11	4	4	4	GD05684180	680kΩ	
RE14	1	1	1	GD05105180	1MΩ	
RE15	1	1	1	GD05105180	1MΩ	
RE16	1	1	1	GD05333180	33kΩ	
RE17	1	1	1	GD05333180	33kΩ	
RE18	1	1	1	GD05560160	56Ω	1/6W
RE19	1	1	1	GD05334160	330kΩ	1/6W
RE20	1	1	1	GD05334160	330kΩ	1/6W

REF. DESIG.	Q'TY			PART NO.	DESCRIPTION
	U	N	A		
RG01	1	1	1	RI05102180	1kΩ
RG02	1	1	1	RI05102180	1kΩ
RG03	1	1	1	RI05154180	150kΩ
RG04	1	1	1	RI05154180	150kΩ
RG05	1	1	1	RI05275180	2.7MΩ
RG06	1	1	1	RI05275180	2.7MΩ
RG07	1	1	1	RI05684180	680kΩ
RG08	1	1	1	RI05684180	680kΩ
RG09	1	1	1	RI05221180	220Ω
RG10	1	1	1	RI05221180	220Ω
RG11	1	1	1	RI05562180	5.6kΩ
RG12	1	1	1	RI05562180	5.6kΩ
RG13	1	1	1	RI05102180	1.2kΩ
RG14	1	1	1	RI05102180	1.2kΩ
RG15	1	1	1	RI05103180	10kΩ
RG16	1	1	1	RI05103180	10kΩ
RG17	1	1	1	RI05184180	180kΩ
RG18	1	1	1	RI05184180	180kΩ
RG19	1	1	1	RI05474180	470kΩ
RG20	1	1	1	RI05474180	470kΩ
RG21	1	1	1	RI05153180	15kΩ
RG22	1	1	1	RI05153180	15kΩ
RG23	1	1	1	RI05682180	6.8kΩ
RG24	1	1	1	RI05682180	6.8kΩ
RG25	1	1	1	RI05151180	150Ω
RG26	1	1	1	RI05151180	150Ω
RG27	1	1	1	RI05122180	1.2kΩ
RG28	1	1	1	RI05122180	1.2kΩ
RG29	1	1	1	RI05823180	82kΩ
RG30	1	1	1	RI05823180	82kΩ
RG31	1	1	1	RI05104180	100kΩ
RG34	1	1	1	RI05102180	1kΩ
RG35	1	1	1	RI05104180	100kΩ
RG36	1	1	1	RI05102180	1kΩ
RG37	1	1	1	RI05153180	15kΩ
RG38	1	1	1	RI05153180	15kΩ
RG51	1	1	1	RI05224180	220kΩ
RG52	1	1	1	RI05122180	1.2kΩ
RG54	1	1	1	RI05100180	10Ω
RG61	1	1	1	RI05684180	680kΩ
RG62	1	1	1	RI05222180	2.2kΩ
RG63	1	1	1	RI05271180	270Ω
RG64	1	1	1	RI05103180	10kΩ
RG65	1	1	1	RI05124180	120kΩ
RG66	1	1	1	RI05104180	100kΩ
RG67	1	1	1	RI05104180	100kΩ
RG68	1	1	1	RI05000180	0Ω
RK01	1	1	1	RI05392180	3.9kΩ
RK02	1	1	1	RI05392180	3.9kΩ
RK03	1	1	1	RA04730600	47kΩ
RK04	1	1	1	RA04730600	47kΩ
RK07	1	1	1	RI05101180	100Ω
RK08	1	1	1	RI05101180	100Ω
RK09	1	1	1	RI05472180	4.7kΩ
RK10	1	1	1	RI05472180	4.7kΩ
RK11	1	1	1	RI05224180	220kΩ
RK12	1	1	1	RI05224180	220kΩ

- (U) for U.S.A.
- (N) for Europe
- (A) for Australia

REF. DESIG.	Q'TY			PART NO.	DESCRIPTION	
	U	N	A			
RK13	1	1	1	RI05333180	33kΩ	
RK14	1	1	1	RI05333180	33kΩ	
RK15	1	1	1	RI05392180	3.9kΩ	
RK16	1	1	1	RI05392180	3.9kΩ	
RK17	1	1	1	RI05331180	330Ω	
RK18	1	1	1	RI05331180	330Ω	
RK19	1	1	1	RI05392180	3.9kΩ	
RK20	1	1	1	RI05392180	3.9kΩ	
RK23	1	1	1	RI05105180	1MΩ	
RK24	1	1	1	RI05105180	1MΩ	
RK25	1	1	1	RI05103180	10kΩ	
RK26	1	1	1	RI05103180	10kΩ	
RK27	1	1	1	RI05272180	2.7kΩ	
RK28	1	1	1	RI05272180	2.7kΩ	
RK29	1	1	1	RI05104180	100kΩ	
RK30	1	1	1	RI05104180	100kΩ	
RK31	1	1	1	RI05472180	4.7kΩ	
RK32	1	1	1	RI05472180	4.7kΩ	
RK33	1	1	1	RI05152180	1.5kΩ	
RK34	1	1	1	RI05152180	1.5kΩ	
RK35	1	1	1	RI05684180	680kΩ	
RK36	1	1	1	RI05684180	680kΩ	
RK37	1	1	1	RI05392180	3.9kΩ	
RK38	1	1	1	RI05392180	3.9kΩ	
RK39	1	1	1	RI05124180	120kΩ	
RK40	1	1	1	RI05124180	120kΩ	
RK41	1	1	1	RA04730600	47kΩ	Trimming
RK42	1	1	1	RA04730600	47kΩ	Trimming
RK43	1	1	1	RI05472180	4.7kΩ	
RK44	1	1	1	RI05472180	4.7kΩ	
RK45	1	1	1	RI05153180	15kΩ	
RK46	1	1	1	RI05153180	15kΩ	
RK47	1	1	1	RI05224180	220kΩ	
RK48	1	1	1	RI05224180	220kΩ	
RK49	1	1	1	RI05275180	2.7MΩ	
RK50	1	1	1	RI05275180	2.7MΩ	
RK51	1	1	1	RI05333180	33kΩ	
RK52	1	1	1	RI05333180	33kΩ	
RK53	1	1	1	RI05222180	2.2kΩ	
RK54	1	1	1	RI05222180	2.2kΩ	
RK55	1	1	1	RI05472180	4.7kΩ	
RK56	1	1	1	RI05472180	4.7kΩ	
RK57	1	1	1	RI05562180	5.6kΩ	
RK58	1	1	1	RI05562180	5.6kΩ	
RK59	1	1	1	RI05682180	6.8kΩ	
RK60	1	1	1	RI05682180	6.8kΩ	
RK61	1	1	1	RI05122180	1.2kΩ	
RK62	1	1	1	RI05122180	1.2kΩ	
RK63	1	1	1	RI05332180	3.3kΩ	
RK64	1	1	1	RI05332180	3.3kΩ	
RK65	1	1	1	RI05560180	56Ω	
RK66	1	1	1	RI05560180	56Ω	
RK67	1	1	1	RI05101180	100Ω	
RK68	1	1	1	RI05101180	100Ω	
RK69	1	1	1	RI05392180	3.9kΩ	
RK70	1	1	1	RI05392180	3.9kΩ	
RK71	1	1	1	RI05681180	680Ω	
RK72	1	1	1	RI05681180	680Ω	
RK73	1	1	1	RA01040600	100kΩ	Trimming
RK74	1	1	1	RA01040600	100kΩ	Trimming
RK75	1	1	1	RI05105180	1MΩ	
RK76	1	1	1	RI05105180	1MΩ	
RK77	1	1	1	RI05474180	470kΩ	
RK78	1	1	1	RI05474180	470kΩ	
RK79	1	1	1	RI05103180	10kΩ	
RK80	1	1	1	RI05103180	10kΩ	
RK81	1	1	1	RI05103180	10kΩ	
RK82	1	1	1	RI05103180	10kΩ	
RK83	1	1	1	RI05561180	560Ω	
RK84	1	1	1	RI05561180	560Ω	
RK85	1	1	1	RD05030190	50kΩ	Variable
RK86	1	1	1	RI05473180	47kΩ	
RK87	1	1	1	RI05103180	10kΩ	
RK88	1	1	1	RI05103180	10kΩ	
RK90	1	1	1	RI05102180	1kΩ	
RK92	1	1	1	RI05102180	1kΩ	
RK93	1	1	1	RI05472180	4.7kΩ	
RK94	1	1	1	RI05472180	4.7kΩ	
RK96	1	1	1	RI05000180	0Ω	
RL01	1	1	1	RI05022180	2.2Ω	
RL02	1	1	1	RI05022180	2.2Ω	
RL03	1	1	1	RI05222180	2.2kΩ	
RL04	1	1	1	RI05222180	2.2kΩ	
RL05	1	1	1	RI05472180	4.7kΩ	
RL06	1	1	1	RI05222180	2.2kΩ	
RL07	1	1	1	RA02230600	22kΩ	Trimming
RL08	1	1	1	RA02230600	22kΩ	Trimming
RL10	1	1	1	RI05101180	100Ω	
RL11	1	1	1	RI05101180	100Ω	
RL12	1	1	1	RI05000180	0Ω	
RL13	1	1	1	GD05472160	4.7kΩ	1/6W
RL51	1	1	1	RI05047180	4.7Ω	
RU01	1	1	1	RI05101180	100Ω	
RU02	1	1	1	RI05104180	100kΩ	
RU03	1	1	1	RI05224180	220kΩ	
RU04	1	1	1	RI05224180	220kΩ	
RU05	1	1	1	RI05224180	220kΩ	
RU06	1	1	1	RI05224180	220kΩ	
RU07	1	1	1	RI05334180	330kΩ	
RU08	1	1	1	RI05224180	220kΩ	
RU09	1	1	1	RI05102180	1kΩ	
RU10	1	1	1	RA04730600	47kΩ	Trimming
RU11	1	1	1	GD05561140	560Ω	1/4W

• (U) for U.S.A.
• (N) for Europe
• (A) for Australia

REF. DESIG.	Q'TY			PART NO.	DESCRIPTION	REF. DESIG.	Q'TY			PART NO.	DESCRIPTION
	U	N	A				U	N	A		
Q603	1	1	1	BA20002210	PK01-SEMICONDUCTORS Semiconductor DTC-124S	QK39	1	1	1	HX406012B0	Transistor 2SD601 (R,S) Chip
Q701	1	1	1	HX413281R0	Transistor 2SD1328 R Chip	QK40	1	1	1	HX406012B0	Transistor 2SD601 (R,S) Chip
Q702	1	1	1	HC10112060	IC Headphone Amp	QK41	1	1	1	HX413281R0	Transistor 2SD1328 R Chip
Q703	1	1	1	HT410203A0	Transistor 2SD1020 (H.F)	QK42	1	1	1	HX413281R0	Transistor 2SD1328 R Chip
Q704	1	1	1	BA20002210	Semiconductor DTC-124S	QK44	1	1	1	BA20002210	Semiconductor DTC124S
Q801	1	1	1	HX410302A0	Transistor 2SD1030 (R,S) Chip	QK45	1	1	1	BA20002210	Semiconductor DTC124S
Q802	1	1	1	HX410302A0	Transistor 2SD1030 (R,S) Chip	QK46	1	1	1	BA20002210	Semiconductor DTC124S
Q803	1	1	1	HX406012B0	Transistor 2SD601 (R,S) Chip	QK47	1	1	1	HX413281R0	Transistor 2SD1328 R Chip
Q804	1	1	1	HX406012B0	Transistor 2SD601 (R,S) Chip	QK48	1	1	1	HX413281R0	Transistor 2SD1328 R Chip
Q805	1	1	1	HX406012B0	Transistor 2SD601 (R,S) Chip	QL01	1	1	1	HT320011L0	Transistor 2SC2001 L
Q806	1	1	1	HX406012B0	Transistor 2SD601 (R,S) Chip	QL02	1	1	1	HT320011L0	Transistor 2SC2001 L
Q807	1	1	1	HX406012B0	Transistor 2SD601 (R,S) Chip	QL03	1	1	1	HT409732B0	Transistor 2SD973 (R,S)
Q808	1	1	1	HX406012B0	Transistor 2SD601 (R,S) Chip	QU01	1	1	1	HT410203A0	Transistor 2SD1020 (H,F)
Q809	1	1	1	HC10055020	IC AN6291S	QU02	1	1	1	HX111621A0	Transistor 2SA1162 G Chip
Q901	1	1	1	HX406012B0	Transistor 2SD601 (R,S) Chip	QU03	1	1	1	HX111621A0	Transistor 2SA1162 G Chip
Q902	1	1	1	HX406012B0	Transistor 2SD601 (R,S) Chip	QU04	1	1	1	HX111621A0	Transistor 2SA1162 G Chip
Q903	1	1	1	HX406012B0	Transistor 2SD601 (R,S) Chip	DK01	1	1	1	HZ20005020	Diode MA153 Chip
Q904	1	1	1	HX406012B0	Transistor 2SD601 (R,S) Chip	DK02	1	1	1	HZ20005020	Diode MA153 Chip
Q905	1	1	1	HX406012B0	Transistor 2SD601 (R,S) Chip	DK03	1	1	1	HZ20003020	Diode MA151K Chip
Q906	1	1	1	HX406012B0	Transistor 2SD601 (R,S) Chip	DK04	1	1	1	HZ20003020	Diode MA151K Chip
Q907	1	1	1	HC10055020	IC AN6291S	DK05	1	1	1	HZ20001020	Diode MA151WK Chip
QG01	1	1	1	HX410302A0	Transistor 2SD1030 (R,S) Chip	DK11	1	1	1	HZ20003020	Diode MA151K Chip
QG02	1	1	1	HX410302A0	Transistor 2SD1030 (R,S) Chip	DK12	1	1	1	HZ20003020	Diode MA151K Chip
QG03	1	1	1	HX410302A0	Transistor 2SD1030 (R,S) Chip	DK20	1	1	1	HZ20001020	Diode MA151WK Chip
QG04	1	1	1	HX410302A0	Transistor 2SD1030 (R,S) Chip	DK21	1	1	1	HZ20001020	Diode MA151WK Chip
QG05	1	1	1	BA20002210	Semiconductor DTC124S	DK22	1	1	1	HD30034060	Zener RD3.6E
QG06	1	1	1	BA20002210	Semiconductor DTC124S	DL01	1	1	1	HZ20003020	Diode MA151K Chip
QG07	1	1	1	BA20002210	Semiconductor DTC124S	DU01	1	1	1	HD30002020	Zener IS1555 etc.
QG08	1	1	1	BA20002210	Semiconductor DTC124S	DU02	1	1	1	HD20001000	Diode IS1555 etc.
QG10	1	1	1	HX111621A0	Transistor 2SA1162 G	DU05	1	1	1	HD20001000	Diode IS1555 etc.
QG51	1	1	1	HX406012B0	Transistor 2SD601 (R,S) Chip	DU06	1	1	1	HD20001000	Diode IS1555 etc.
QG61	1	1	1	HX410302A0	Transistor 2SD1030 (R,S) Chip	J701	1	1	1	YJ01002280	PK01-MISCELLANEOUS Jack
QG62	1	1	1	BA20002210	Semiconductor DTC124S	JG01	1	1	1	YJ01002280	Jack Mic L
QK01	1	1	1	BA20002210	Semiconductor DTC124S	JG02	1	1	1	YJ01002280	Jack Mic R
QK02	1	1	1	BA20002210	Semiconductor DTC124S	JG03	1	1	1	BY01130010	Jack RCA/DIN
QK03	1	1	1	BA20002210	Semiconductor DTC124S	JK01	1	1	1	YJ04000840	Jack DC Input
QK04	1	1	1	BA20002210	Semiconductor DTC124S	JK02	1	1	1	YJ06003090	Jack (9P)
QK05	1	1	1	HX327121A0	Transistor 2SC2712 G Chip	JK03	1	1	1	YJ06003270	Jack (7P)
QK06	1	1	1	HX327121A0	Transistor 2SC2712 G Chip	JK04	1	1	1	YJ06003040	Jack (4P)
QK11	1	1	1	HX327121A0	Transistor 2SC2712 G Chip	JK05	1	1	1	YJ06003090	Jack (9P)
QK12	1	1	1	HX327121A0	Transistor 2SC2712 G Chip	JK06	1	1	1	YJ06002560	Jack (6P)
QK13	1	1	1	HX413281R0	Transistor 2SD1328 R Chip	JK07	1	1	1	YJ06002560	Jack (6P)
QK14	1	1	1	HX413281R0	Transistor 2SD1328 R Chip	JK08	1	1	1	YJ06002540	Jack (4P)
QK15	1	1	1	HX406012B0	Transistor 2SD601 (R,S) Chip	JK09	1	1	1	YJ06002560	Jack (6P)
QK16	1	1	1	HX406012B0	Transistor 2SD601 (R,S) Chip	JK11	1	1	1	YJ06003040	Jack (4P)
QK17	1	1	1	HX413281R0	Transistor 2SD1328 R						
QK18	1	1	1	HX413281R0	Transistor 2SD1328 R						
QK19	1	1	1	HX406012B0	Transistor 2SD601 (R,S) Chip						
QK20	1	1	1	HX406012B0	Transistor 2SD601 (R,S) Chip						
QK21	1	1	1	BA20002210	Semiconductor DTC124S						
QK22	1	1	1	BA20002210	Semiconductor DTC124S						
QK23	1	1	1	BA20002210	Semiconductor DTC124S						
QK24	1	1	1	BA20002210	Semiconductor DTC124S						
QK25	1	1	1	BA20002210	Semiconductor DTC124S						
QK26	1	1	1	BA20002210	Semiconductor DTC124S						
QK27	1	1	1	HX317121A0	Transistor 2SC2712 G Chip						
QK28	1	1	1	HX317121A0	Transistor 2SC2712 G Chip						
QK29	1	1	1	HX317121A0	Transistor 2SC2712 G Chip						
QK30	1	1	1	HX317121A0	Transistor 2SC2712 G Chip						
QK33	1	1	1	HX317121A0	Transistor 2SC2712 G Chip						
QK34	1	1	1	BA20002210	Semiconductor DTC124S						
QK35	1	1	1	HC406600Z0	IC 4066						
QK37	1	1	1	HC406600Z0	IC 4066						

- (U) for U.S.A.
- (N) for Europe
- (A) for Australia

REF. DESIG.	Q'TY			PART NO.	DESCRIPTION
	U	N	A		
JL01	1	1	1	YJ06003050	Jack (5P)
L601	1	1	1	LS10440060	M.P.X. Coil
LG61	1	1	1	LS10440060	M.P.X. Coil
LJ01	1	1	1	LC22260100	Choke Coil 22mH
LJ02	1	1	1	LC22260100	Choke Coil 22mH
LK01	1	1	1	LC25650700	Choke Coil
LK02	1	1	1	LC25650700	Choke Coil
LK03	1	1	1	LC24760520	Choke Coil
LK04	1	1	1	LC24760520	Choke Coil
LL01	1	1	1	TC10110010	OSC Transf.
LL51	1	1	1	TC10200090	OSC Transf.
LL52	1	1	1	LC14730040	Choke Coil
LL53	1	1	1	LC21050700	Choke Coil
S701	1	1	1	SS01030040	Slide Switch Speaker Monitor Mode
S702	1	1	1	SS01020490	Slide Switch Speaker Monitor ON/OFF
SK01	1	1	1	SP02020730	Push Switch Limiter
SK02	1	1	1	SP02020740	Push Switch Batt/Light
SK03	1	1	1	SP02020730	Push Switch Monitor
SK04	1	1	1	SP02020740	Push Switch Rec/Play
P601	1	1	1	WB154T1520	P.W. Board Dolby (L)
	1	1	1	ZZ154T1520	P.W. Board Assembly
C601	1	1	1	EJ47502510	Elect 4.7μF 25V
C603	1	1	1	DD45271300	Ceramic 270pF ±5%
C604	1	1	1	EJ22505010	Elect 2.2μF 50V
C605	1	1	1	EJ10700610	Elect 100μF 6.3V
C606	1	1	1	EV68401670	Elect 0.68μF 16V
C607	1	1	1	EJ22405010	Elect 0.22μF 50V
C608	1	1	1	DF15682350	Film 6800pF ±5%
C609	1	1	1	EJ22505010	Elect 2.2μF 50V
C610	1	1	1	EJ33503510	Elect 3.3μF 35V
C611	1	1	1	DF15333350	Film 0.033μF ±5%
C612	1	1	1	DF15492350	Film 4700pF ±5%
C613	1	1	1	EJ33503510	Elect 3.3μF 35V
C614	1	1	1	EJ22505010	Elect 2.2μF 50V
C615	1	1	1	EJ47502510	Elect 4.7μF 25V
C616	1	1	1	EJ22505010	Elect 2.2μF 50V
C617	1	1	1	EJ33503510	Elect 3.3μF 35V
C618	1	1	1	EV68401670	Elect 0.68μF 16V
C619	1	1	1	EJ22405010	Elect 0.22μF 50V
C620	1	1	1	DF15682350	Film 6800pF ±5%
C621	1	1	1	EJ22505010	Elect 2.2μF 50V
C622	1	1	1	DF15472350	Film 4700pF ±5%
C623	1	1	1	DF15333350	Film 0.033μF ±5%
C624	1	1	1	EJ33503510	Elect 3.3μF 35V
C625	1	1	1	EJ22601610	Elect 22μF 16V
C626	1	1	1	EJ22505010	Elect 2.2μF 50V
C627	1	1	1	EJ22505010	Elect 2.2μF 50V
C628	1	1	1	DK46562300	Ceramic 5600pF ±10%
C629	1	1	1	EJ22505010	Elect 2.2μF 50V
C630	1	1	1	EJ22505010	Elect 2.2μF 50V
C631	1	1	1	EJ10700610	Elect 100μF 6.3V
P601-RESISTORS (All Resistors are ±5% & 1/8W Chip)					
R601	1	1	1	RI05224180	220kΩ
R603	1	1	1	RI05224180	220kΩ
R604	1	1	1	RI05224180	220kΩ
R605	1	1	1	RI05102180	1kΩ
R606	1	1	1	RI05153180	15kΩ
R607	1	1	1	RI05473180	47kΩ
R608	1	1	1	RI05684180	680kΩ
R609	1	1	1	RI05271180	270Ω
R610	1	1	1	RI05222180	2.2kΩ
R612	1	1	1	RI05224180	220kΩ
R613	1	1	1	RI05224180	220kΩ
R614	1	1	1	RI05153180	15kΩ
R615	1	1	1	RI05102180	1kΩ
R616	1	1	1	RI05473180	47kΩ
R617	1	1	1	RI05332180	3.3kΩ
R618	1	1	1	RI05472180	4.7kΩ
R619	1	1	1	RI05332180	3.3kΩ
R620	1	1	1	RI05472180	4.7kΩ
R621	1	1	1	RI05330180	33Ω
R622	1	1	1	RI05124180	120kΩ
R623	1	1	1	RI05272180	2.7kΩ
R624	1	1	1	RI05104180	100kΩ
R625	1	1	1	RI05104180	100kΩ
R667	1	1	1	RI05000180	0Ω
Q601	1	1	1	HX406012B0	P601-SEMICONDUCTORS
Q602	1	1	1	HX410302A0	Transistor 2SD601 (R,S) Chip
Q604	1	1	1	HC10062010	Transistor 2SD1030 (R,S) Chip
					IC HA12048
J601	1	1	1	YP06002560	P601-MISCELLANEOUS
J602	1	1	1	YP06002560	Plug (6P)
					Plug (6P)
P602	1	1	1	WB154T0010	P.W. Board Dolby (R)
	1	1	1	ZZ154T0010	P.W. Board Assembly
C652	1	1	1	EJ10700610	P602-CAPACITORS
C653	1	1	1	EV68401670	Elect 100μF 6.3V
C654	1	1	1	EJ22405010	Elect 0.68μF 16V
C655	1	1	1	DF15682350	Elect 0.22μF 50V
C656	1	1	1	EJ22505010	Film 6800pF ±5%
C657	1	1	1	DF15333350	Elect 2.2μF 50V
C658	1	1	1	DF15472350	Film 0.033μF ±5%
C659	1	1	1	EJ33503510	Film 4700pF ±5%
C660	1	1	1	EJ33503510	Elect 3.3μF 35V
C661	1	1	1	EJ22505010	Elect 3.3μF 35V
					Elect 2.2μF 50V
C662	1	1	1	EJ33503510	Elect 3.3μF 35V
C663	1	1	1	EV68401670	Elect 0.68μF 16V
C664	1	1	1	EJ22405010	Elect 0.22μF 50V
C665	1	1	1	DF15682350	Film 6800pF ±5%
C666	1	1	1	EJ22505010	Elect 2.2μF 50V
C667	1	1	1	DF15333350	Film 0.033μF ±5%
C668	1	1	1	EJ33503510	Elect 3.3μF 35V
C669	1	1	1	DF15472350	Film 4700pF ±5%
C670	1	1	1	EJ22601610	Elect 22μF 16V
C671	1	1	1	EJ22505010	Elect 2.2μF 50V
C672	1	1	1	EJ22505010	Elect 2.2μF 50V

- (U) for U.S.A.
- (N) for Europe
- (A) for Australia

REF. DESIG.	Q'TY			PART NO.	DESCRIPTION
	U	N	A		
					P602-RESISTORS (All Resistors are $\pm 5\%$ & 1/8W Chip)
R651	1	1	1	RI05224180	220k Ω
R652	1	1	1	RI05224180	220k Ω
R653	1	1	1	RI05102180	1k Ω
R654	1	1	1	RI05153180	15k Ω
R655	1	1	1	RI05473180	47k Ω
R656	1	1	1	RI05224180	220k Ω
R657	1	1	1	RI05224180	220k Ω
R658	1	1	1	RI05102180	1k Ω
R659	1	1	1	RI05153180	15k Ω
R660	1	1	1	RI05473180	47k Ω
R661	1	1	1	RI05332180	3.3k Ω
R662	1	1	1	RI05472180	4.7k Ω
R663	1	1	1	RI05472180	4.7k Ω
R664	1	1	1	RI05332180	3.3k Ω
R665	1	1	1	RI05330180	33 Ω
R666	1	1	1	RI05272180	2.7k Ω
Q651	1	1	1	HC10062010	P602-SEMICONDUCTOR IC HA12048
J651	1	1	1	YP06002540	P602-MISCELLANEOUS Plug (4P)
J652	1	1	1	YP06002560	Plug (6P)
PJ01	1	1	1	WC154T2430	PJ01-TAPE EQ CIRCUIT BOARD P.W. Board Tape EQ.
	1	1	1	ZZ154T2430	P.W. Board Assembly
CJ01	1	1	1	DD45121300	PJ01-CAPACITORS Ceramic 120pF $\pm 5\%$
CJ02	1	1	1	DD45121300	Ceramic 120pF $\pm 5\%$
CJ03	1	1	1	EJ10601610	Elect 10 μ F 16V
CJ04	1	1	1	EJ10601610	Elect 10 μ F 16V
CJ05	1	1	1	DK46102300	Ceramic 1000pF $\pm 10\%$
CJ06	1	1	1	DK46102300	Ceramic 1000pF $\pm 10\%$
CJ09	1	1	1	EJ10601610	Elect 10 μ F 16V
CJ10	1	1	1	EJ10601610	Elect 10 μ F 16V
CJ11	1	1	1	DF15223350	Film 0.022 μ F $\pm 5\%$
CJ12	1	1	1	DF15223350	Film 0.022 μ F $\pm 5\%$
CJ13	1	1	1	EJ22505010	Elect 2.2 μ F 50V
CJ14	1	1	1	EJ22505010	Elect 2.2 μ F 50V
CJ15	1	1	1	EJ47601610	Elect 47 μ F 16V
CJ16	1	1	1	EJ47601610	Elect 47 μ F 16V
CJ17	1	1	1	EA10701610	Elect 100 μ F 16V
CJ21	1	1	1	DK46102300	Ceramic 1000pF $\pm 10\%$
CJ22	1	1	1	DK46102300	Ceramic 1000pF $\pm 10\%$
CJ23	1	1	1	DD45151300	Ceramic 150pF $\pm 5\%$
CJ24	1	1	1	DD45151300	Ceramic 150pF $\pm 5\%$
RJ03	1	1	1	RI05154180	PJ01-RESISTORS (All Resistors are $\pm 5\%$ & 1/8W Chip)
RJ04	1	1	1	RI05154180	150k Ω
RJ05	1	1	1	RI05820180	82 Ω
RJ06	1	1	1	RI05820180	82 Ω
RJ07	1	1	1	RI05104180	100k Ω
RJ08	1	1	1	RI05104180	100k Ω
RJ09	1	1	1	RI05562180	5.6k Ω
RJ10	1	1	1	RI05562180	5.6k Ω
RJ11	1	1	1	RI05154180	150k Ω
RJ12	1	1	1	RI05154180	150k Ω
RJ13	1	1	1	RI05153180	15k Ω
RJ14	1	1	1	RI05153180	15k Ω
RJ15	1	1	1	RI05271180	270 Ω
RJ16	1	1	1	RI05271180	270 Ω
RJ17	1	1	1	RI05122180	1.2k Ω
RJ18	1	1	1	RI05122180	1.2k Ω
RJ19	1	1	1	RI05332180	3.3k Ω
RJ20	1	1	1	RI05332180	3.3k Ω
RJ21	1	1	1	RI05333180	33k Ω
RJ22	1	1	1	RI05333180	33k Ω
					PJ01-SEMICONDUCTORS
QJ01	1	1	1	HX410301T0	Transistor 2SD1030 T Chip
QJ02	1	1	1	HX410301T0	Transistor 2SD1030 T Chip
QJ03	1	1	1	HX410301T0	Transistor 2SD1030 T Chip
QJ04	1	1	1	HX410301T0	Transistor 2SD1030 T Chip
JJ01	1	1	1	YJ06003040	PJ01-MISCELLANEOUS Jack (4P)
WJ01	1	1	1	YB00110140	Connective Cord (4P)
PK02	1	1	1	WB154T1540	PK02-MIC MODE CIRCUIT BOARD P.W. Board Mic Mode
	1	1	1	ZZ154T1540	P.W. Board Assembly
DS02	1	1	1	HZ20003020	PK02-SEMICONDUCTOR Diode MA151K Chip
S201	1	1	1	SS02020740	PK02-MISCELLANEOUS Slide Switch Mic Mode
PK03	1	1	1	WB154T1550	PK03-MIC ATTENUATOR CIRCUIT BOARD P.W. Board Mic Attenuator
	1	1	1	ZZ154T1550	P.W. Board Assembly
S301	1	1	1	SS01030050	PK03-MISCELLANEOUS Slide Switch Mic Att.
PK04	1	1	1	WZ154T0020	PK04-MONITOR CIRCUIT BOARD P.W. Board Monitor
	1	1	1	ZZ154T0020	P.W. Board Assembly
RE07	4	4	4	RI05104180	PK04-RESISTORS (All Resistors are $\pm 5\%$ & 1/8W Chip)
RE10	4	4	4	RI05104180	100k Ω
QK49	1	1	1	BA20002210	PK04-SEMICONDUCTORS Semiconductor DTC124S
QK50	1	1	1	BA20002210	Semiconductor DTC124S
PM01	1	1	1	WC154T2420	PM01-MOTOR CIRCUIT BOARD P.W. Board Motor
	1	1	1	ZZ154T2420	P.W. Board Assembly
CM01	1	1	1	EJ22505010	PM01-CAPACITORS Elect 2.2 μ F 50V
CM02	1	1	1	EJ10700610	Elect 100 μ F 6.3V
CM03	1	1	1	EA22701630	Elect 220 μ F 16V
CM04	1	1	1	EJ10601610	Elect 10 μ F 16V
CM05	1	1	1	EJ10601610	Elect 10 μ F 16V
CM06	1	1	1	EJ10701010	Elect 100 μ F 10V
CM07	1	1	1	EJ22601610	Elect 22 μ F 16V
CM08	1	1	1	EJ22601610	Elect 22 μ F 16V
CM09	1	1	1	DK46102300	Ceramic 1000pF $\pm 10\%$
CM10	1	1	1	DF15334350	Film 0.33 μ F $\pm 5\%$
CM11	1	1	1	DK18103310	Ceramic 0.01 μ F +80%, -20%
CM12	1	1	1	EJ10505010	Elect 1 μ F 50V

- (U) for U.S.A.
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REF. DESIG.	Q'TY			PART NO.	DESCRIPTION
	U	N	A		
RM01	1	1	1	NB50052390	PM01-RESISTORS (All Resistors are ±5% & 1/8W Chip) 0.5Ω 1/2W
RM02	1	1	1	RI05027180	2.7Ω
RM03	1	1	1	RI05821180	820Ω
RM04	1	1	1	NB51032200	10kΩ 1/2W
RM05	1	1	1	RA01020600	1kΩ Trimming
RM06	1	1	1	RI05473180	47kΩ
RM07	1	1	1	RI05472180	4.7kΩ
RM08	1	1	1	RI05472180	4.7kΩ
RM09	1	1	1	RI05473180	47kΩ
RM10	1	1	1	RI05473180	47kΩ
RM11	1	1	1	RI05821180	820Ω
RM12	1	1	1	RI05821180	820Ω
QM01	1	1	1	HC10037020	PM01-SEMICONDUCTORS IC AN6612
QM02	1	1	1	HT10966100	Transistor 2SA966 0
QM03	1	1	1	HX413281R0	Transistor 2SD1328 R Chip
QM04	1	1	1	BA20002210	Semiconductor DTC124S
QM05	1	1	1	BA20002210	Semiconductor DTC124S
QM06	1	1	1	HX413281R0	Transistor 2SD1328 Chip
QM07	1	1	1	HC10039210	IC BA337
QM08	1	1	1	HC10024020	IC DN6838
DM01	1	1	1	HD20015030	Diode DS-153D
DM02	1	1	1	HZ20001020	Diode MA151WK Chip
DM03	1	1	1	HZ20001020	Diode MA151WK Chip
DM04	1	1	1	HZ20001020	Diode MA151WK Chip
DM05	1	1	1	HZ20001020	Diode MA151WK Chip
DM06	1	1	1	HZ20001020	Diode MA151WK Chip
DM07	1	1	1	HZ20001020	Diode MA151WK Chip
DM08	1	1	1	HZ20001020	Diode MA151WK Chip
WM01	1	1	1	YB00190100	PM01-MISCELLANEOUS Connective Cord
WM02	1	1	1	YZ03060260	Jumper Lead
WM03	1	1	1	YU05057800	Jumper Lead
PS01	1	1	1	WC154T2410	PS01-SWITCH CIRCUIT BOARD P.W. Board Switch
	1	1	1	ZZ154T2410	P.W. Board Assembly
CS01	1	1	1	DF15334350	PS01-CAPACITOR Film 0.33μF ±5%
RS01	1	1	1	RI05153180	PS01-RESISTORS (All Resistors are ±5% & 1/8W Chip) 15kΩ
RS02	1	1	1	RI05332180	3.3kΩ
RS03	1	1	1	RI05182180	1.8kΩ
RS04	1	1	1	RB02020020	2kΩ Variable
RS06	1	1	1	RB02020020	2kΩ Variable
RS07	1	1	1	GJ05010010	1Ω 1W
RS08	1	1	1	RI05103180	10kΩ
RS09	1	1	1	RI05473180	47kΩ
RS10	1	1	1	RI05153180	15kΩ
RS11	1	1	1	RI05682180	6.8kΩ
RS12	1	1	1	RI05124180	120kΩ
RS13	1	1	1	RI05684180	680kΩ
RS14	1	1	1	RI05102180	1kΩ
RS15	1	1	1	GD05564180	560kΩ
RS16	1	1	1	GD05104180	100kΩ
QS01	1	1	1	HX327121A0	PS01-SEMICONDUCTORS Transistor 2SC2712 G Chip
QS02	1	1	1	HX327121A0	Transistor 2SC2712 G Chip
DS01	1	1	1	HZ20003020	Diode MA151K Chip
JS01	1	1	1	YB00130210	PS01-MISCELLANEOUS Connective Cord
JS02	1	1	1	YB00290060	Connective Cord
SS01	1	1	1	SS01020470	Slide Switch Memory Rew.
SS02	1	1	1	SS01020470	Slide Switch MPX Filter
SS03	1	1	1	SS01030030	Slide Switch N.R.
SS04	1	1	1	SS02030250	Slide Switch Tape Selector
PX01	1	1	1	WC154T2440	PX01-METER LED CIRCUIT BOARD P.W. Board Meter LED
	1	1	1	ZZ154T2440	P.W. Board Assembly
CX01	1	1	1	EJ10601610	PX01-CAPACITORS Elect 10μF 16V
RX01	1	1	1	RI05221180	PX01-RESISTORS (All Resistors are ±5% & 1/8W Chip) 220Ω
RX02	1	1	1	RI05105180	1MΩ
RX03	1	1	1	RI05105180	1MΩ
RX04	1	1	1	RI05330180	33Ω
RX05	1	1	1	RI05330180	33Ω
RX06	1	1	1	RI05103180	10kΩ
RX07	1	1	1	RI05473180	47kΩ
RX11	1	1	1	RI05391180	390Ω
RX12	1	1	1	RI05391180	390Ω
QX01	1	1	1	HC401100Z0	PX01-SEMICONDUCTORS IC 4011
QX02	1	1	1	HX327121A0	Transistor 2SC2712 G Chip
DX01	1	1	1	HI10017210	L.E.D. LED
DX02	1	1	1	HI10017210	L.E.D. LED
WX01	1	1	1	YB00120170	PX01-MISCELLANEOUS Connective Cord (7P)
PX02	1	1	1	WB154T1530	PX02-PEAK/REC INDICATOR CIRCUIT BOARD P.W. Board Peak/Rec Indicator
	1	1	1	ZZ154T1530	P.W. Board Assembly
DX11	1	1	1	HI10056020	PZ01-SEMICONDUCTORS L.E.D. Rec.
DX02	1	1	1	HI10025020	L.E.D. Peak Ind.
(W01-99)		Assembly and Wiring			
(T01-99)		Adjustment			
(X01-00)		Correction			
NOTE ON SAFETY: Symbol Δ Fire or electrical shock hazard. Only original parts should be used to replace any part marked with symbol Δ . Any other component substitution (other than original type), may increase risk of fire or electrical shock hazard.					

9. TECHNICAL SPECIFICATIONS

Tape Drive System	Single Capstan Drive
Cartridge	Philips type compact cassette
Track System	Compatible Stereo 4-track 2-channel
Tape Speed	4.75 cm/sec.
Heads	3 Head System
	Record: Super Hard Metal Alloy
	Playback: Super Hard Metal Alloy
	Erase: Dual Gap Metal Alloy
Motor	DC Servo Motor
Overall Frequency Response at 25 dB below 0 VU	
Normal Tape	30 Hz ~16 kHz
CrO ₂ Tape	20 Hz ~18 kHz
Metal Tape	20 Hz ~20 kHz
Signal-to-Noise Ratio: with A-Curve Filter to 3% Distortion (K3)	
Dolby OFF	59 dB
Dolby B (ON)	65 dB
dbx (ON)	80 dB
Wow and Flutter	
DIN WTD	0.15%
Outputs	
Line Level/Impedance	500 mV/3 k ohms
Headphone Level/Impedance	3 mV/8 ohms
DIN Level/Impedance	500 mV/3 k ohms
Input (Level at 0 VU)	
Line Sensitivity/Impedance	100 mV/50 k ohms
Mic Sensitivity/Impedance	0.32 mV/10 k ohms
DIN Sensitivity/Impedance	0.1 mV/k ohms
Fast Rewind Time	110 sec. (C-60)
Fast Forward Time	110 sec. (C-60)
Power Requirements	
	3 Batteries: R20/Size "D"
	Rechargeable Battery: Model RBD 430 (optional)
	AC adapter: 110–120V, 220–240V
	AC 50, 60 Hz
Power Consumption	AC 6.5W/DC 3.5W
Dimensions	
Panel Width	227 mm
Panel Height	50 mm
Depth	165 mm
Weight	1.3 kg

Specifications and appearance are subject to change for modification without notice.