

Service Manual

74 CD57/01B/02B/05B
74 CD67/01B/02B/05B/01G/02G
/11B/12B/15B/12G
CD-67/67SE UBL, FB, FN
Compact disc player

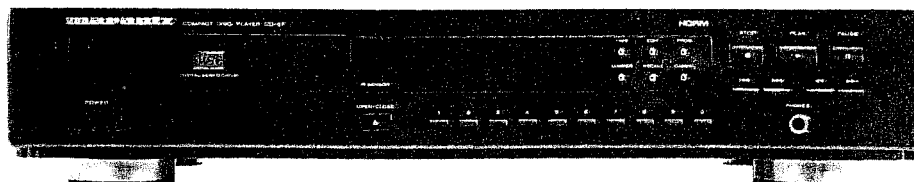


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Please use this service manual with referring to the guide (D.F.U.) without fail.
修理の際は、必ず取扱説明書を準備し操作方法を確認の上作業を行ってください。

marantz®

model CD-57 CD-67 CD-67SE

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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.

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Parts can be ordered either by mail or by Fax. In both cases, the correct part number has to be specified.

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
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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 bottom.

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

Ref. UL Standard NO.1492.

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

1. TECHNICAL SPECIFICATIONS

| | CD-57 | CD-67 | CD-67SE |
|--|------------------|------------------------------------|------------------|
| Audio Characteristics | | | |
| Channels | | 2 channels | |
| Sampling frequency | | 44.1 kHz | |
| Quantization | | 16-bit linear/channel | |
| Error correction | | Cross-interleave read solomon code | |
| D/A conversion | | 1-bit linear/channel | |
| Wow & flutter | | Precision of quartz | |
| Optical Readout System | | | |
| Laser | | GaAIAs semiconductor | |
| Wavelength | | 780 nm | |
| Frequency Characteristics | | | |
| Frequency range | 5 Hz – 20 kHz | 5 Hz – 20 kHz | 5 Hz – 20 kHz |
| Dynamic range | > 96 dB | > 96 dB | > 96 dB |
| S/N ratio | > 102 dB | > 104 dB | > 104 dB |
| Channel separation (1 kHz) | > 100 dB | > 102 dB | > 102 dB |
| THD (1 kHz) | 0.0025 % | 0.0025 % | 0.0025 % |
| Analog output jack | | | |
| Output level | 2V RMS | 2V RMS | 2V RMS |
| Output impedance | 200 ohms | 200 ohms | 200 ohms |
| Digital output | | | |
| Pin jack | 0.5 Vp-p/75 ohms | 0.5 Vp-p/75 ohms | 0.5 Vp-p/75 ohms |
| Optical output | — | -19 dBm | -19 dBm |
| Power Supply | | | |
| /01, /11 version | | 115/230V AC 50/60 Hz | |
| /02, /05, /12, /15 version | | 230V AC 50 Hz | |
| Power consumption | 11 W | 12 W | 12 W |
| Cabinet, etc. | | | |
| Dimensions | | | |
| Width | 439 mm | 439 mm | 439 mm |
| Height | 86 mm | 86 mm | 88 mm |
| Depth | 310 mm | 310 mm | 310 mm |
| Net weight | 4.3 kg | 4.3 kg | 5.8 kg |
| Operating temperatures | | +5 °C ~ +35 °C | |
| Operating humidity | | 5 % ~ 90 % (without dew) | |
| Accessories | | | |
| Remote control unit (RC-63CD) | 1 | 1 | 1 |
| AA (R6) batteries | 2 | 2 | 2 |
| Stereo audio cable with RCA pins | 1 | 1 | 1 |

Specifications subject to change without prior notice.



**CAUTION
VARO!
WARNING
ADVERSEL
DANGER
VORSICHT**

INVISIBLE LASER RADIATION WHEN OPEN. AVOID EXPOSURE TO BEAM.
AVATTAESSA OLET ALTTIINA NÄKYMÄTTÖMÄLLE LASER SÄTTEILYLLE ÄLÄ KATSO SÄTEESSEN.
OSYNLIG LASERSTRÅLNING NÄR DENNA DEL ÄR ÖPPNAD BETRAKTA EJ STRÅLEN.
USYNLIG LASERSTRÅLNING VED ÅBNING. UNDGÅ UNSÄTTELSE FOR STRÅLING.
INVISIBLE LASER RADIATION WHEN OPEN. AVOID DIRECT EXPOSURE TO BEAM.
UNSICHTBARE LASERSTRAHLUNG WENN ABDECKUNG GEÖFFNET. NICHT DEM STRAHL AUSSETZEN.

**CLASS 1 LASER PRODUCT
KLASSE 1 LASER PRODUKT
I.H.T. IEC 825**

2. サービスモード

1. サービスモードへの入り方
 - [STOP]、[PLAY]、[NEXT]、[PREV] keyのうち2つ以上を押して電源を入れる。
2. モード0 (表示 P 0 0)

状態: [FOCUS OFF] [SPINDLE OFF] [RADIAL OFF] [MUTE ON]

 - [CUE] keyを押すとスレッドが外周へ移動します。
 - [REVIEW] keyを押すとスレッドが内周へ移動します。
 - [NEXT] keyを押すとモード1へ移行します。
3. モード1 (表示 P 0 1)

状態: [FOCUS ON] [SPINDLE OFF] [RADIAL OFF] [MUTE ON]

 - [NEXT] keyを押すとモード2へ移行します。
 - [PREV] keyを押すとモード0へ移行します。
4. モード2 (表示 P 0 2)

状態: [FOCUS ON] [SPINDLE ON] [RADIAL OFF] [MUTE ON]

 - [NEXT] keyを押すとモード3へ移行します。
 - [PREV] keyを押すとモード0へ移行します。
5. モード3 (表示 P 0 3)

状態: [FOCUS ON] [SPINDLE ON] [RADIAL ON] [MUTE OFF]

 - [PREV] keyを押すとモード2へ移行します。

* サービスモードの全ての状態で以下のキーが有効です。

 - 1) [STOP] keyを押すとFLが全点灯します。
 - 2) [PAUSE] keyを押すとモデル番号とバージョンを表示します。

Cd 67 : 10
|
プロセッサバージョン番号

- 3) [PLAY] keyを押すと通常 (サービスモード以外) と同じ動作となります。
ただし、異常が確認された時にエラー番号が表示されます。(例: Err 10)
右の表を参考にしてください。

6. サービスモードの解除
 - 電源を切るとサービスモードが解除されます。

2. SERVICE MODE

1. How to enter into the Service Mode
 - Turn the power on while pressing at least 2 of [STOP], [PLAY], [NEXT], [PREV] keys.
2. Mode 0 (Display P00)

Condition: [FOCUS OFF] [SPINDLE OFF] [RADIAL OFF] [MUTE ON]

 - The Sled moves outside when pressing [CUE] key.
 - The Sled moves inside when pressing [REVIEW] key.
 - The function moves to Mode 1 when pressing [NEXT] key.
3. Mode 1 (Display P01)

Condition: [FOCUS ON] [SPINDLE OFF] [RADIAL OFF] [MUTE ON]

 - The function moves to Mode 2 when pressing [NEXT] key.
 - The function moves to Mode 0 when pressing [PREV] key.
4. Mode 2 (Display P02)

Condition: [FOCUS ON] [SPINDLE ON] [RADIAL OFF] [MUTE ON]

 - The function moves to Mode 3 when pressing [NEXT] key.
 - The function moves to Mode 0 when pressing [PREV] key.
5. Mode 3 (Display P03)

Condition: [FOCUS ON] [SPINDLE ON] [RADIAL ON] [MUTE OFF]

 - The function moves to Mode 2 when pressing [PREV] key.

* The following key operation can be available at all of the conditions of the service mode.

 - 1) All of FL display light by pressing [STOP] key.
 - 2) Model Number and Version Nbr of the μ -processor are displayed by pressing [PAUSE] key.

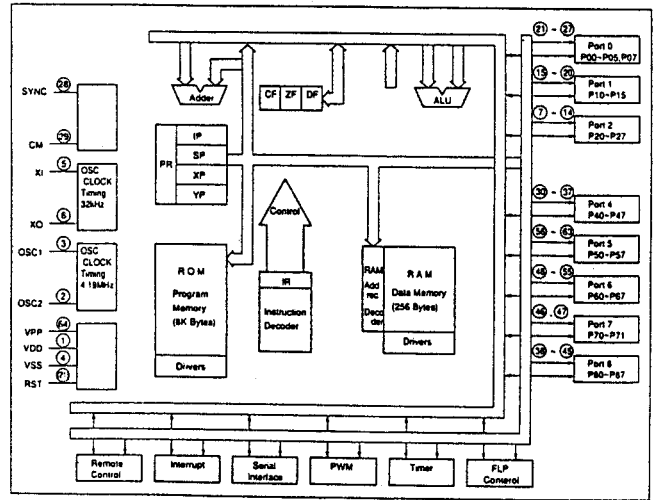
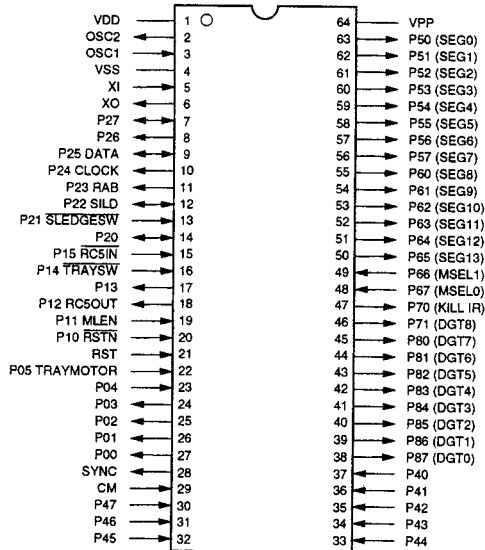
Cd 67 : 10
|
 μ -Processor Version Nbr.

- 3) The same as Normal operation (except Service mode) is performed by pressing [PLAY] key.
However if some default is detected, an error code is displayed. (For example: Err 10)
The content for each error code is shown below.

| Error Code | Error |
|-------------|-----------------|
| Err 02 | FOCUS Error |
| Err 07 | SUB CODE Error |
| Err 08 | T. O. C Error |
| Err 09 | DECODER Error |
| Err 10 | RADIAL Error |
| Err 11, 12 | SLED Error |
| Err 13 | SPINDLE Error |
| Err 16 ~ 20 | SEARCH Error |
| Err 30 | DOOR Error |
| Err 31 | TRAY Error |
| Err 32 ~ 47 | KEY INPUT Error |

6. Cancelling the Service Mode
 - The Service Mode is cancelled by turning the power off.

3. MICROPROCESSOR AND IC DATA MN187164 (MICROPROCESSOR)



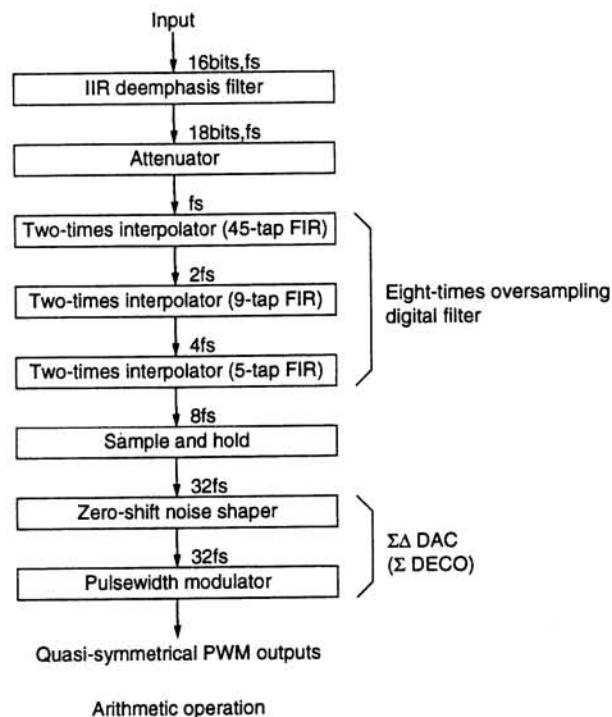
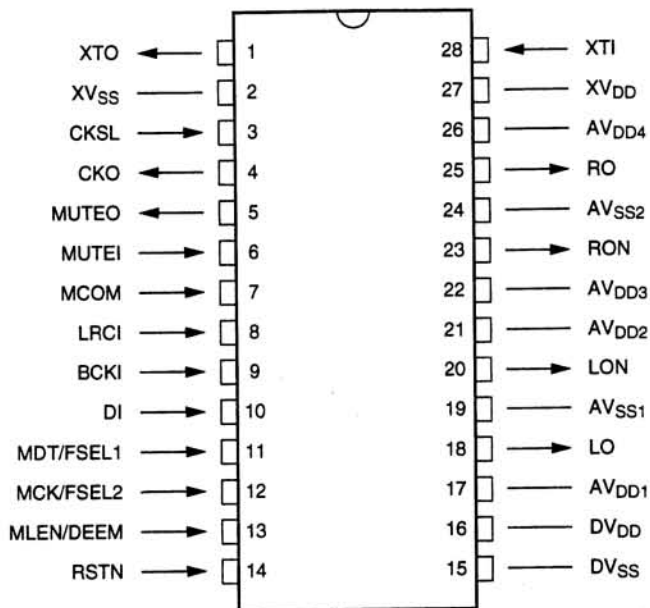
| Pin Nbr | Pin Name | I/O | Function | Pin Nbr | Pin Name | I/O | Function |
|---------|---------------|-----|----------------------|---------|-------------|-----|----------------------|
| 1 | Vdd | - | Power Supply +5V | 33 | P44 | I | Key Input, KEY 5 |
| 2 | OSC2 | O | Clock out (8.0MHz) | 34 | P43 | I | Key Input, KEY 4 |
| 3 | OSC1 | I | Clock in (8.0MHz) | 35 | P42 | I | Key Input, KEY 3 |
| 4 | Vss | - | GND 0V | 36 | P41 | I | Key Input, KEY 2 |
| 5 | XI | I | 0V | 37 | P40 | I | Key Input, KEY 1 |
| 6 | XO | O | Not Used | 38 | P87 (DGT0) | O | FL Digit Data, G9 |
| 7 | P27 | O | SAA7372 RESET | 39 | P86 (DGT1) | O | FL Digit Data, G8 |
| 8 | P26 | O | Not Used | 40 | P85 (DGT2) | O | FL Digit Data, G7 |
| 9 | P25 DATA | I/O | Data Bus Data, SIDA | 41 | P84 (DGT3) | O | FL Digit Data, G6 |
| 10 | P24 CLOCK | O | Data Bus Clock, SICK | 42 | P83 (DGT4) | O | FL Digit Data, G5 |
| 11 | P23 RAB | O | SAA7372 RAB | 43 | P82 (DGT5) | O | FL Digit Data, G4 |
| 12 | P22 SILD | I/O | SAA7372 SILD (latch) | 44 | P81 (DGT6) | O | FL Digit Data, G3 |
| 13 | P21 SLEDGESW | I | Sledge SW, SLSW | 45 | P80 (DGT7) | O | FL Digit Data, G2 |
| 14 | P20 | O | Not Used | 46 | P71 (DGT8) | O | FL Digit Data, G1 |
| 15 | P15 RC5IN | I | RC-5 code Input | 47 | P70 KILL IR | O | Kill IR, N.C. |
| 16 | P14 TRAYSW | I | Tray In/Out SW, TRSW | 48 | P67 MSEL0 | I | Model Select SW 0 |
| 17 | P13 | O | Not Used | 49 | P66 MSEL1 | I | Model Select SW 1 |
| 18 | P12 RC5OUT | O | RC-5 code Output | 50 | P65 (SEG13) | O | FL Segment Data, P1 |
| 19 | P11 MLEN | O | SM5872 MLEN (latch) | 51 | P64 (SEG12) | O | FL Segment Data, P2 |
| 20 | P10 RSTN | O | SM5872 RSTN (reset) | 52 | P63 (SEG11) | O | FL Segment Data, P3 |
| 21 | RST | I | RESET | 53 | P62 (SEG10) | O | FL Segment Data, P4 |
| 22 | P05 TRAYMOTOR | O | Tray Motor | 54 | P61 (SEG9) | O | FL Segment Data, P5 |
| 23 | P04 | O | Not Used | 55 | P60 (SEG8) | O | FL Segment Data, P6 |
| 24 | P03 | O | Not Used | 56 | P57 (SEG7) | O | FL Segment Data, P7 |
| 25 | P02 | O | Not Used | 57 | P56 (SEG6) | O | FL Segment Data, P8 |
| 26 | P01 | I | Not Used | 58 | P55 (SEG5) | O | FL Segment Data, P9 |
| 27 | P00 | I | Not Used | 59 | P54 (SEG4) | O | FL Segment Data, P10 |
| 28 | SYNC | O | Not Used | 60 | P53 (SEG3) | O | FL Segment Data, P11 |
| 29 | CM | I | 0V | 61 | P52 (SEG2) | O | FL Segment Data, P12 |
| 30 | P47 | I | Key Input, KEY 8 | 62 | P51 (SEG1) | O | FL Segment Data, P13 |
| 31 | P46 | I | Key Input, KEY 7 | 63 | P50 (SEG0) | O | FL Segment Data, P14 |
| 32 | P45 | I | Key Input, KEY 6 | 64 | Vpp | - | Power Supply -25V |

SAA7372GP (DIGITAL DECODING IC WITH RAM)

| SYMBOL | PIN | DESCRIPTION |
|-------------------|-----|--|
| V _{SSA1} | 1 | analogue supply* |
| V _{DDA1} | 2 | analogue supply* |
| D1 | 3 | unipolar current input (central diode signal input) |
| D2 | 4 | unipolar current input (central diode signal input) |
| D3 | 5 | unipolar current input (central diode signal input) |
| V _{RL} | 6 | reference input for ADC |
| D4 | 7 | unipolar current input (central diode signal input) |
| R1 | 8 | unipolar current input (satellite diode signal input) |
| R2 | 9 | unipolar current input (satellite diode signal input) |
| IREFT | 10 | current reference for calibration ADC |
| V _{RH} | 11 | reference output from ADC |
| V _{SSA2} | 12 | analogue supply* |
| SELPLL | 13 | selects whether internal clock multiplier PLL is used |
| ISLJCE | 14 | current feedback from data slicer |
| HFIN | 15 | comparator signal input |
| V _{SSA3} | 16 | analogue supply* |
| HFREF | 17 | comparator common mode input |
| IREF | 18 | reference current pin (nominally V _{DD} /2) |
| V _{DDA2} | 19 | analogue supply* |
| TEST1 | 20 | test control input; this pin should be tied LOW |
| CRIN | 21 | crystal/resonator input |
| CROUT | 22 | crystal/resonator output |
| TEST2 | 23 | test control input; this pin should be tied LOW |
| CL16 | 24 | 16.9344 MHz system clock output |
| CL11 | 25 | 11.2896 MHz clock output |
| RA | 26 | radial actuator output |
| FO | 27 | focus actuator output |
| SL | 28 | sledge control output |
| TEST3 | 29 | test control input; this pin should be tied LOW |
| V _{DD1P} | 30 | digital supply periphery* |
| DOBM | 31 | bi-phase mark output (externally buffered) (tri-state) |
| V _{SS1} | 32 | digital supply* |
| MOTO1 | 33 | motor out 1 - versatile (tri-state) |
| MOTO2 | 34 | motor out 2 - versatile (tri-state) |
| SBSY | 35 | subcode byte sync (tri-state) |
| SFSY | 36 | subcode frame sync (tri-state) |
| RCK | 37 | subcode clock input |
| SUB | 38 | P to W subcode bits (tri-state) |
| V _{SS2} | 39 | digital supply |
| V5 | 40 | versatile output pin |
| V4 | 41 | versatile output pin |
| V3 | 42 | versatile output pin (open drain) |
| KILL | 43 | kill output - programmable (open drain) |
| MISC | 44 | general purpose DAC output (tri-state) |
| DATA | 45 | serial data output (tri-state) |
| WCLK | 46 | word clock output (tri-state) |
| V _{DD2P} | 47 | digital supply periphery* |
| SCLK | 48 | serial bit clock output (tri-state) |
| V _{SS3} | 49 | digital supply* |
| CL4 | 50 | 4.2336 MHz μ P clock output |
| SDA | 51 | μ P interface data I/O line (open drain output) |
| SCL | 52 | μ P interface clock line |
| RAB | 53 | μ P interface R/W and load control line (decoder part) |
| SILD | 54 | μ P interface R/W and load control line (servo part) |
| N/C | 55 | No connection |
| V _{SS4} | 56 | digital supply* |
| RESET | 57 | power-on reset input (active low) |
| STATUS | 58 | request line/status register output (open drain) |
| V _{DD3C} | 59 | digital supply core* |
| C2FAIL | 60 | indication of correction failure (open drain) |
| CFLG | 61 | correction flag output (open drain) |
| V1 | 62 | versatile input pin |
| V2 | 63 | versatile input pin |
| LDON | 64 | laser drive on output (open drain) |

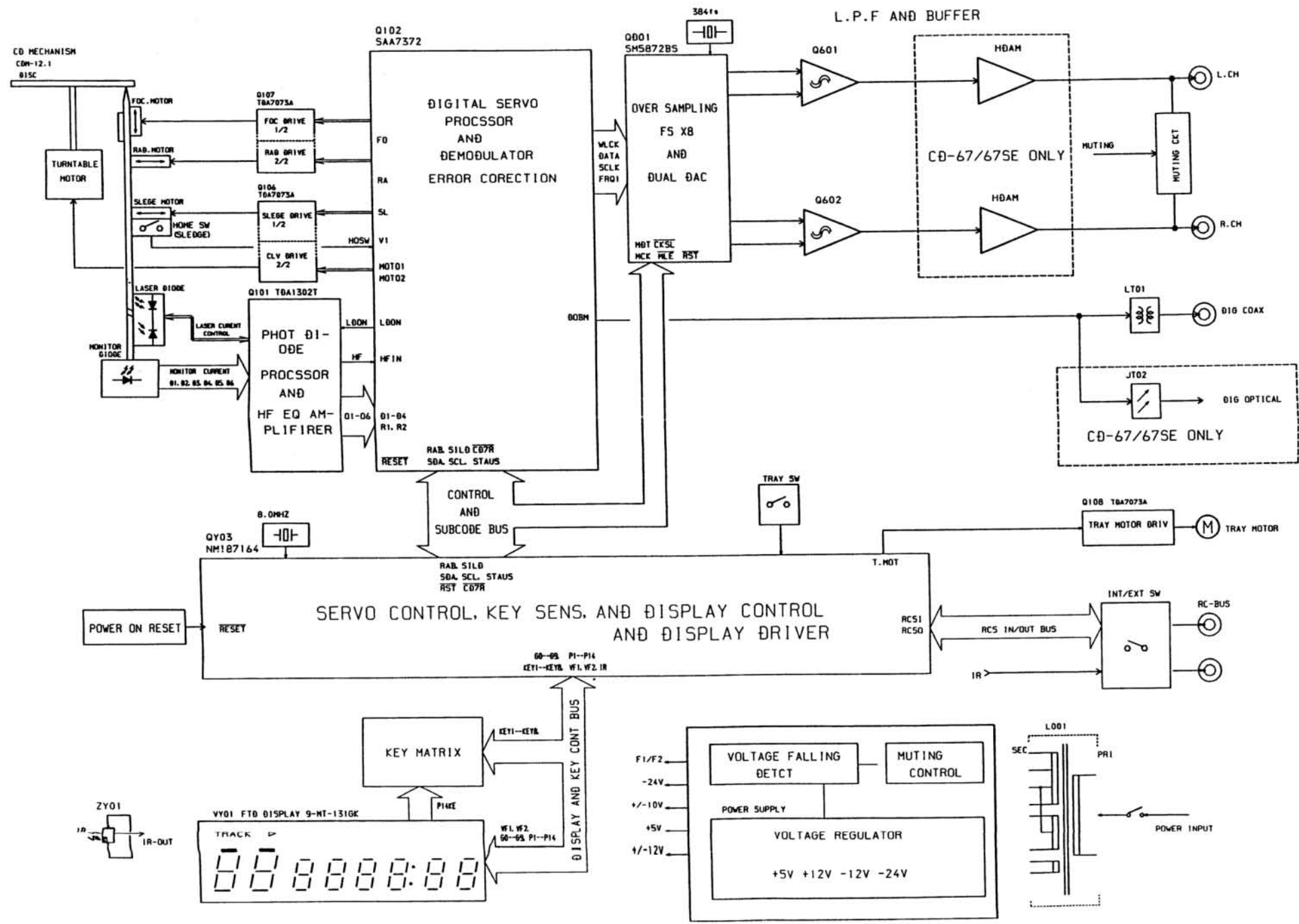
* Note: All supply pins must be connected to the same external power supply voltage.

SM5872BS (DIGITAL FILTER AND D/A CONVERTER)



| Pin Nbr | Pin Name | I/O | Function |
|---------|-------------------|-----|--|
| 1 | XTO | O | Crystal oscillator output |
| 2 | XV _{SS} | - | GND (X'TAL) |
| 3 | CKSL | I | This pin should be tied HIGH for normal operation. Internal pull-up resistor |
| 4 | CKO | O | Clock output (384fs) |
| 5 | MUTE _O | O | Mute detect output |
| 6 | MUTE _I | I | Mute input. Internal pull-resistor |
| 7 | MCOM | I | Interface mode select input. Internal pull-up resistor : H = Interface mode L = Local |
| 8 | LRCI | I | Data sample rate clock input. Internal pull-up resistor : H = L ch L = R ch |
| 9 | BCKI | I | Bit clock input. Internal pull-up resistor |
| 10 | DI | I | Serial data input. Internal pull-up resistor |
| 11 | MDT/FSEL1 | I | Microprocessor interface data input (and local mode frequency select input). Internal pull-up resistor |
| 12 | MCK/FSEL2 | I | Microprocessor interface clock input (and local mode frequency select input). Internal pull-up resistor |
| 13 | MLEN/DEEM | I | Microprocessor interface latch enable input (and local mode deemphasis control input). Internal pull-up resistor |
| 14 | RSTN | I | Reset input. Internal pull-up resistor |
| 15 | DV _{SS} | - | GND (Digital) |
| 16 | DV _{DD} | - | Power supply (Digital) |
| 17 | AV _{DD1} | - | Power supply 1 (Analogue) |
| 18 | LO | O | Left-channel positive PWM output |
| 19 | AV _{SS1} | - | GND 1 (Analogue) |
| 20 | LON | O | Left-channel negative PWM output |
| 21 | AV _{DD2} | - | Power supply 2 (Analogue) |
| 22 | AV _{DD3} | - | Power supply 3 (Analogue) |
| 23 | RON | O | Right-channel negative PWM output |
| 24 | AV _{SS2} | - | GND 2 (Analogue) |
| 25 | RO | O | Right-channel positive PWM output |
| 26 | AV _{DD4} | - | Power supply 4 (Analogue) |
| 27 | XV _{DD} | - | Power supply (X'TAL) |
| 28 | XT _I | I | Crystal oscillator or external clock input, 384fs (16.9344 MHz) |

4. BLOCK DIAGRAM

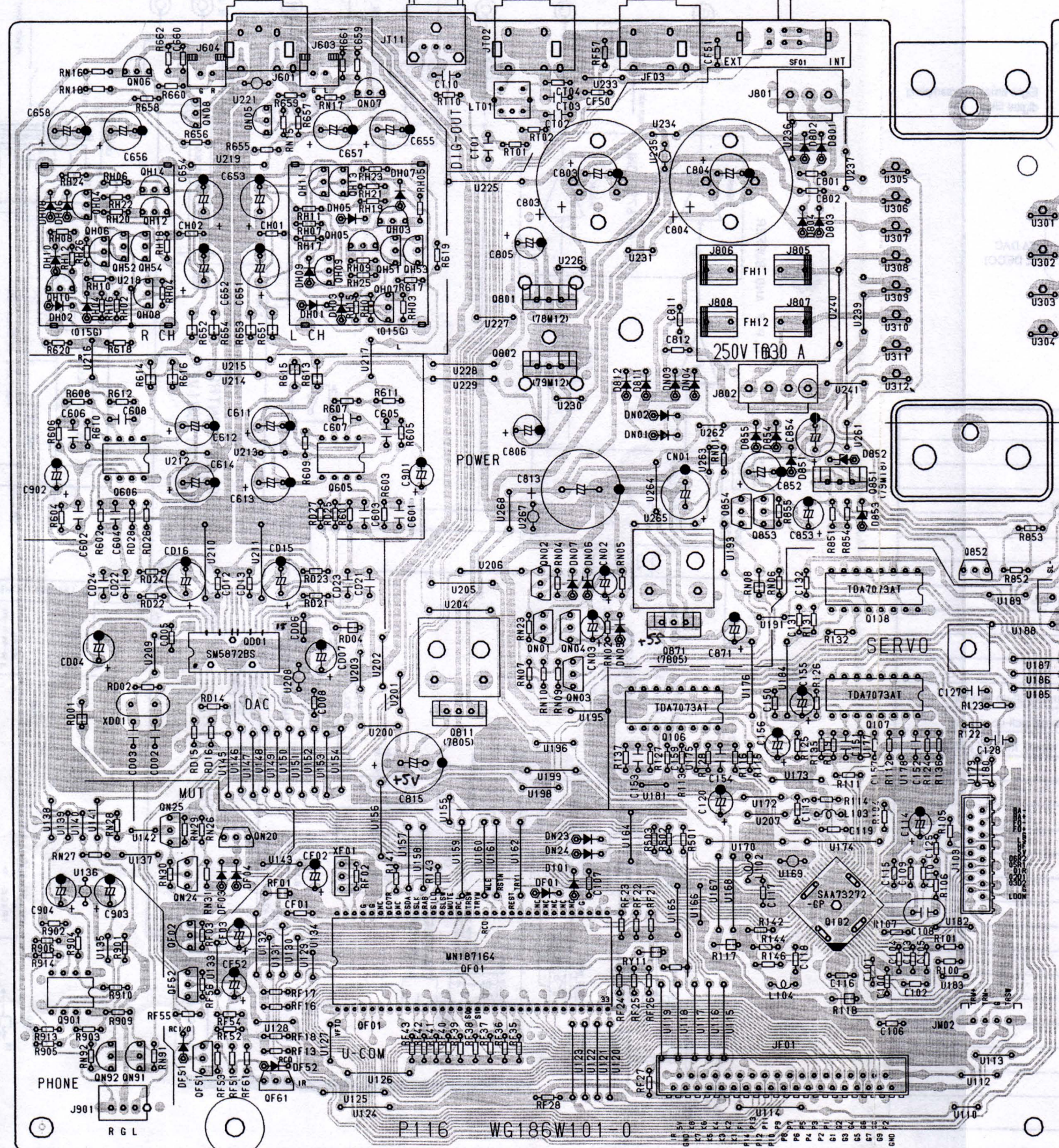


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5. SCHEMATIC DIAGRAMS AND PARTS LOCATIONS (PATTERN SIDE)

Q10,Q104,Q106,Q152,Q106,Q154,Q108,Q114,Q112,Q108 QN05,Q111,Q113,Q109,Q105,Q107,Q103,Q151,Q153,Q107
 Q606 QD01 Q605 Q811 QN01,QN03,QN04 Q871,Q106 Q854,Q853 Q851,Q108,Q107 Q852
 QN92,QN91 QN25,QN24,QN20,QF02,QF52,QF51,QF61 QF01 Q102

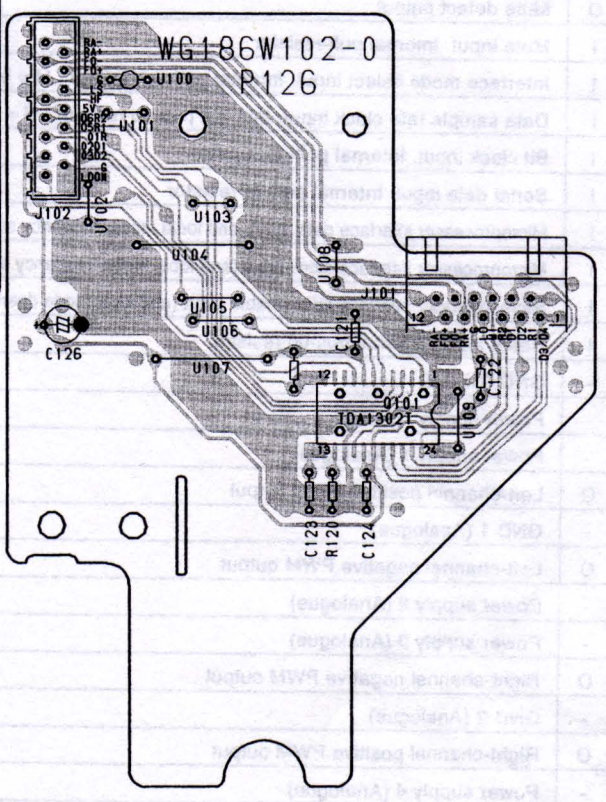
P116 MAIN PCB



FOR CONTINUED CAUTION:
 PROTECTION AGAINST FIRE
 HAZARD. REPLACE ONLY WITH
 SAME TYPE FUSE.

ATTENTION:
 UNE PROTECTION AFIN D'ASSURER
 CONTRE LES RISQUES PERMANENTE
 D'INCENDIE. REMPLACER
 FUSIBLE UNIQUEMENT PAR UN
 DE MEME TYPE FUSE.

P126 SERVO PCB

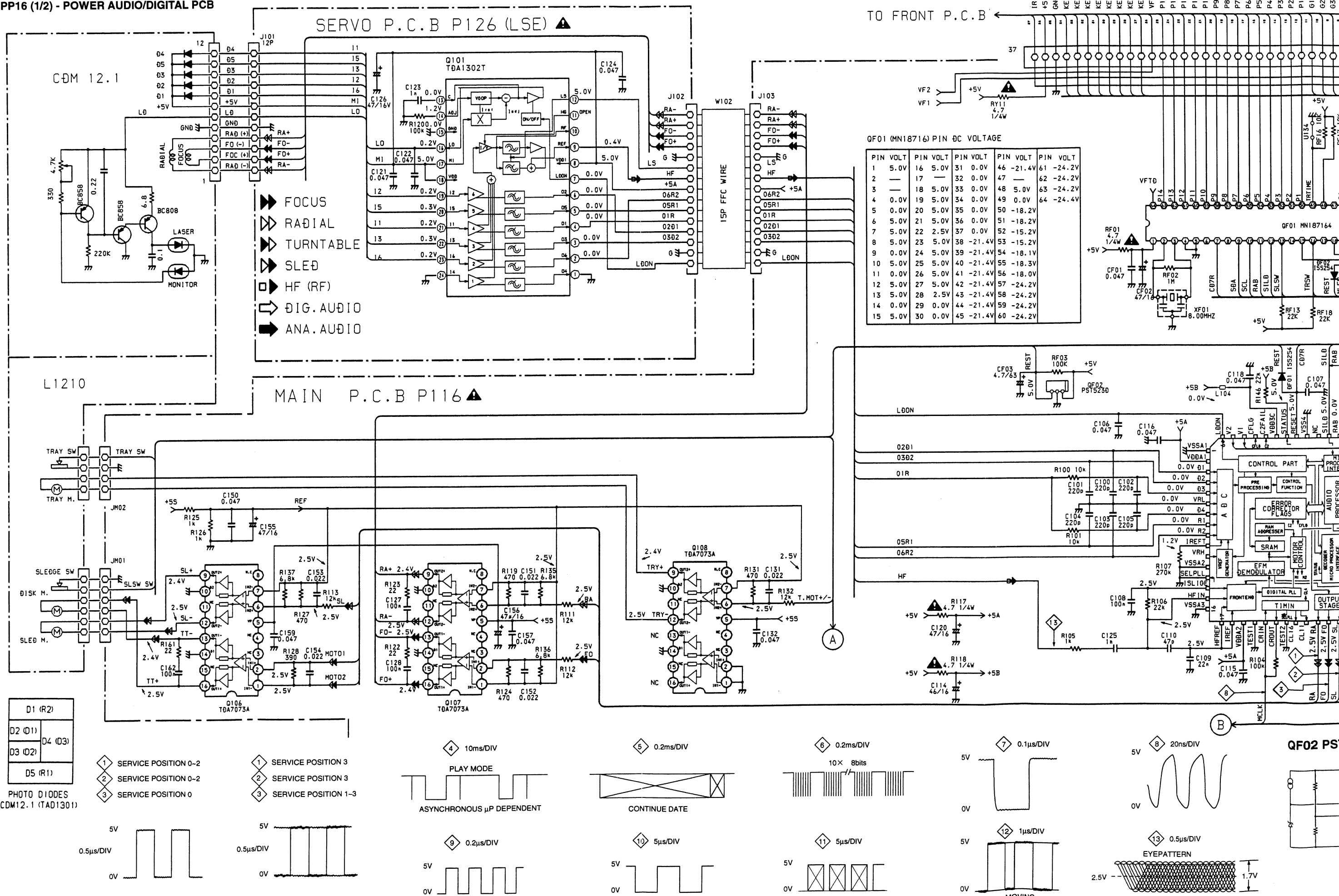


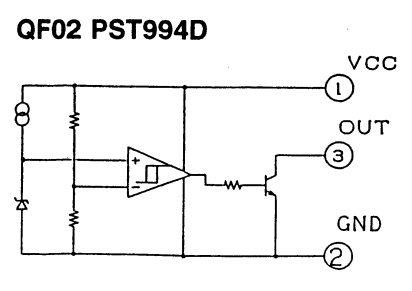
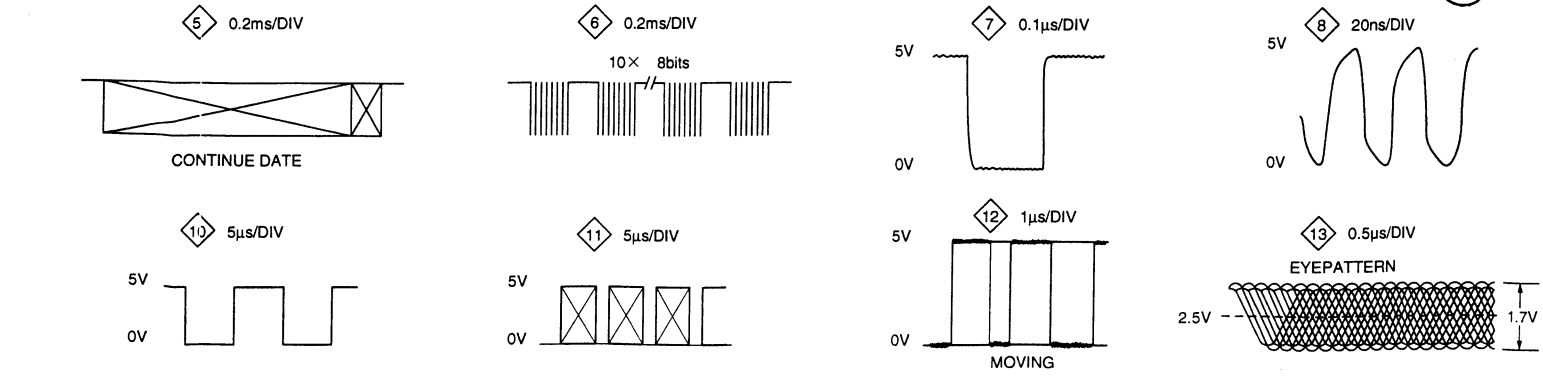
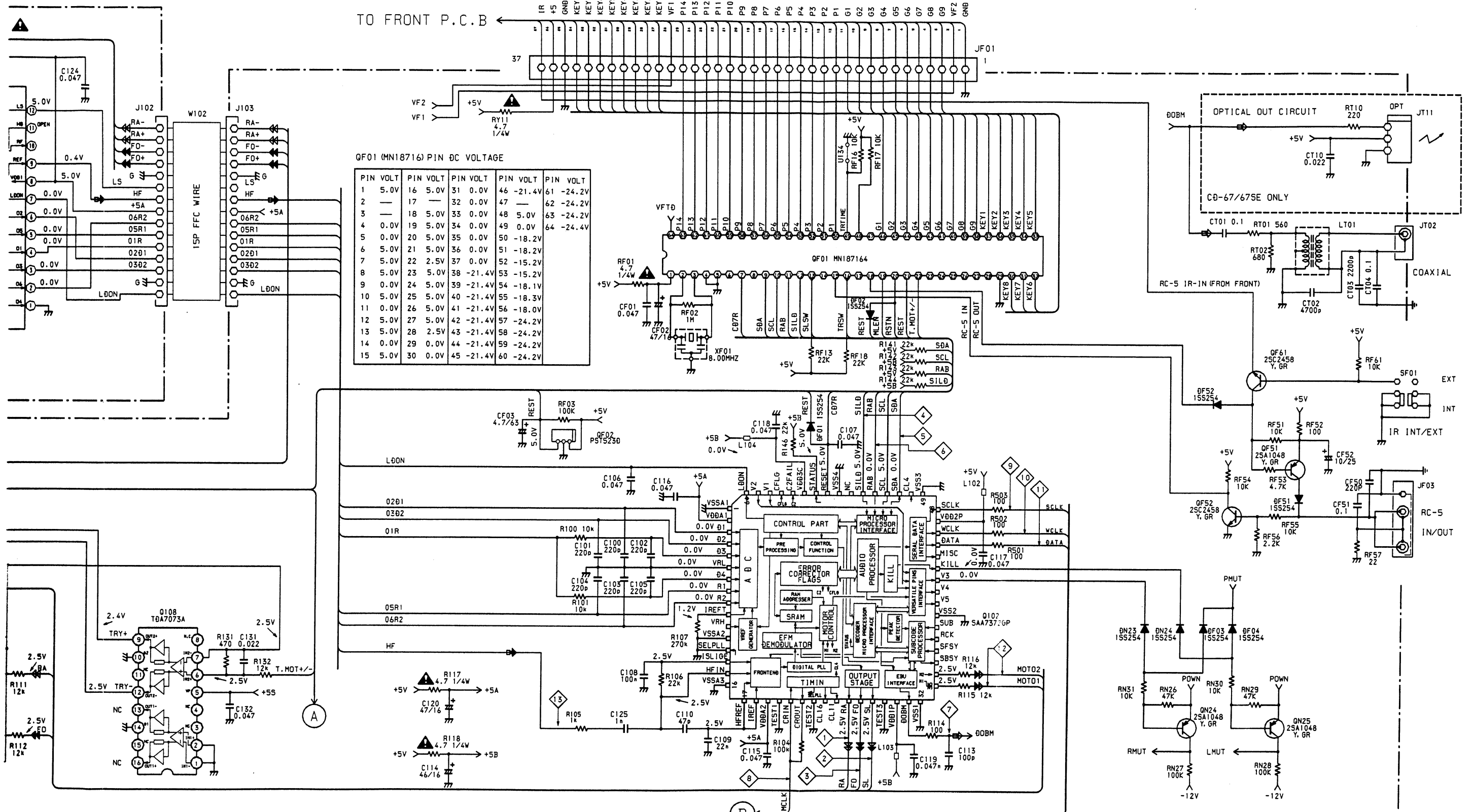
Q101

P116 WG186W101-0

WG186W102-0
 P126

PP16 (1/2) - POWER AUDIO/DIGITAL PCB

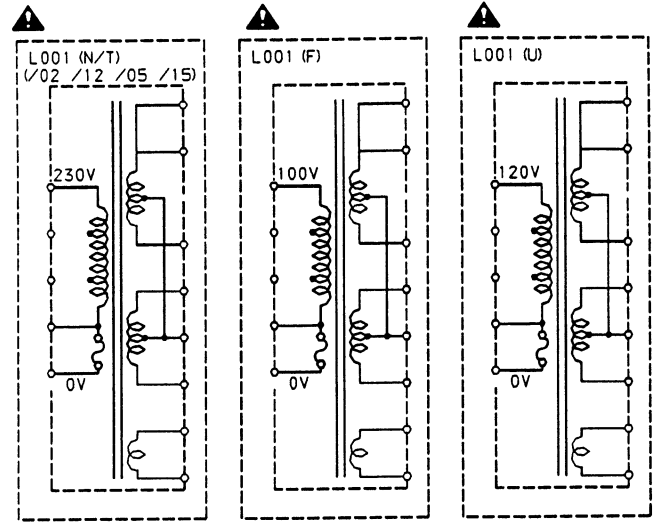




安全上の注意:
 ▲ が付いている部品は、安全上重要な部品です。必ず指定されている部品番号の部品を使用してください。

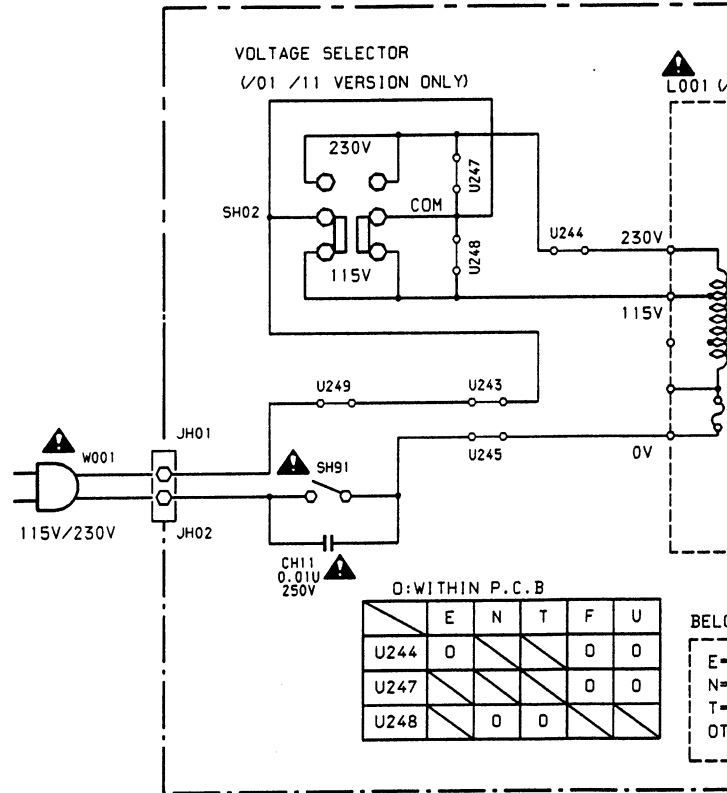
NOTE ON SAFETY:
 Symbol ▲ Fire or electrical shock hazard. Only original parts should be used to replace any part marked with symbol ▲. Any other component substitution (other than original type), may increase risk of fire or electrical shock hazard.

TRANSFORMER FOR OTHER VERSION



| | |
|---------|-----------|
| FUSE | FH11/FH12 |
| E. N. T | T 630MA |
| U. F | 1.6A |

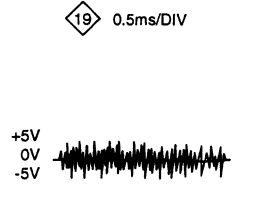
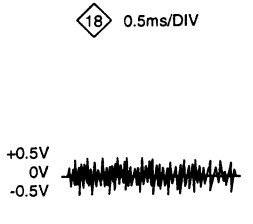
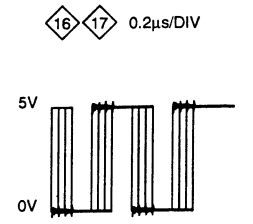
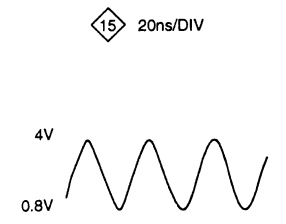
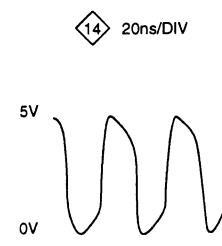
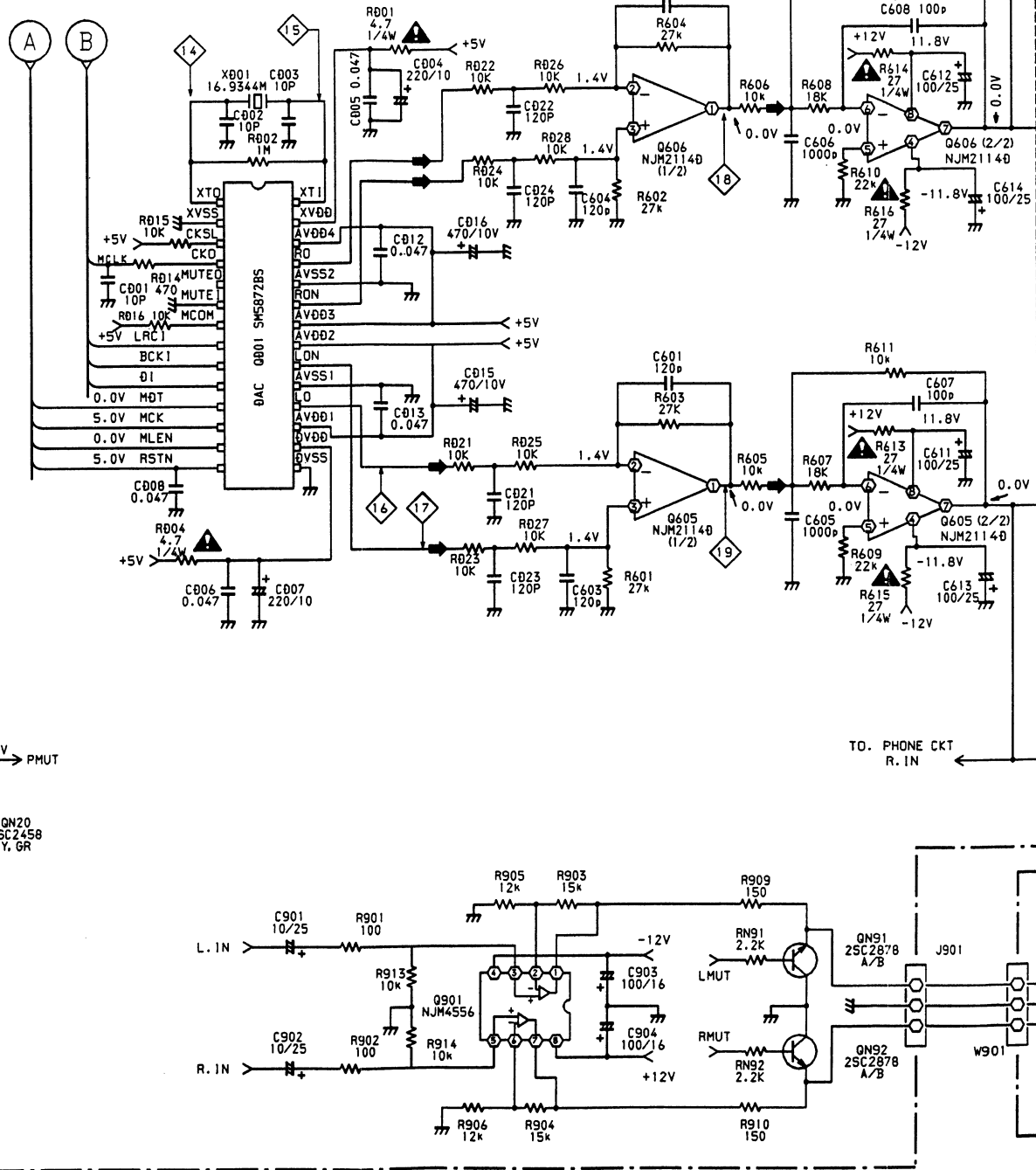
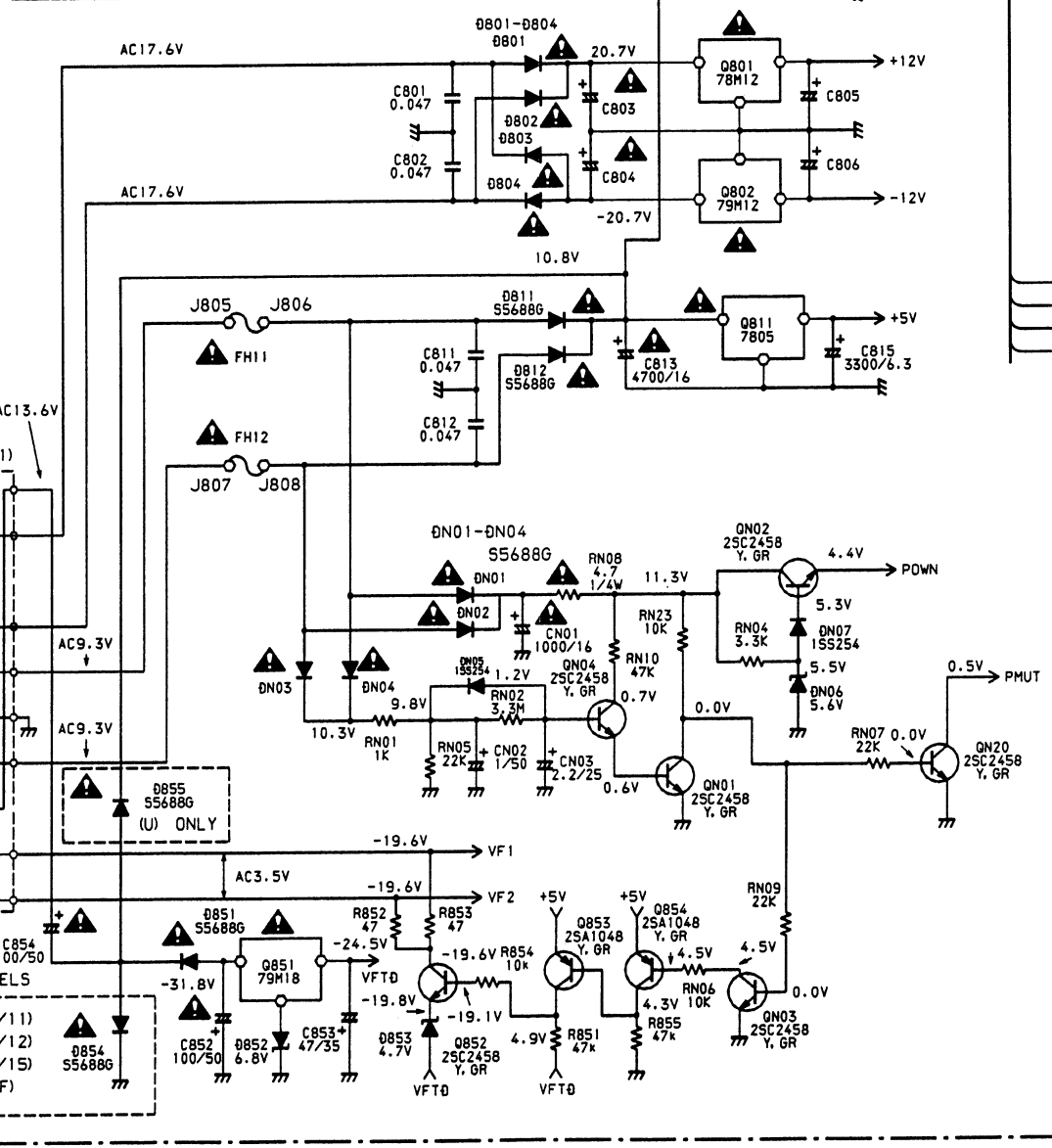
| | | |
|------|-----------------|-----------------|
| | C0-57 | C0-67 |
| C803 | 220UF/50V (RA2) | 470UF/35V (ARS) |
| C804 | | |
| C805 | 100UF/16V (RA2) | 470UF/16V (RA2) |
| C806 | | |



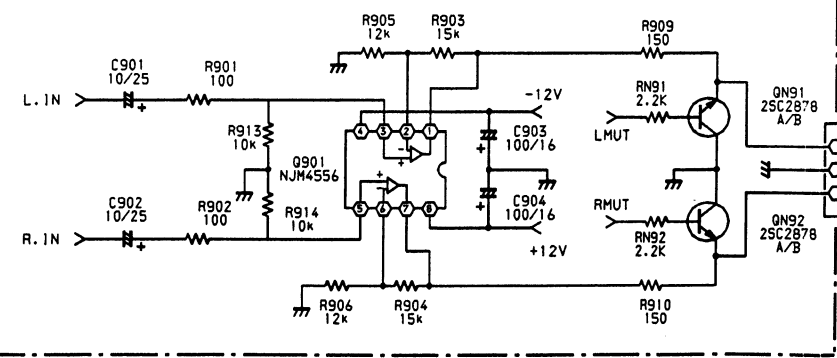
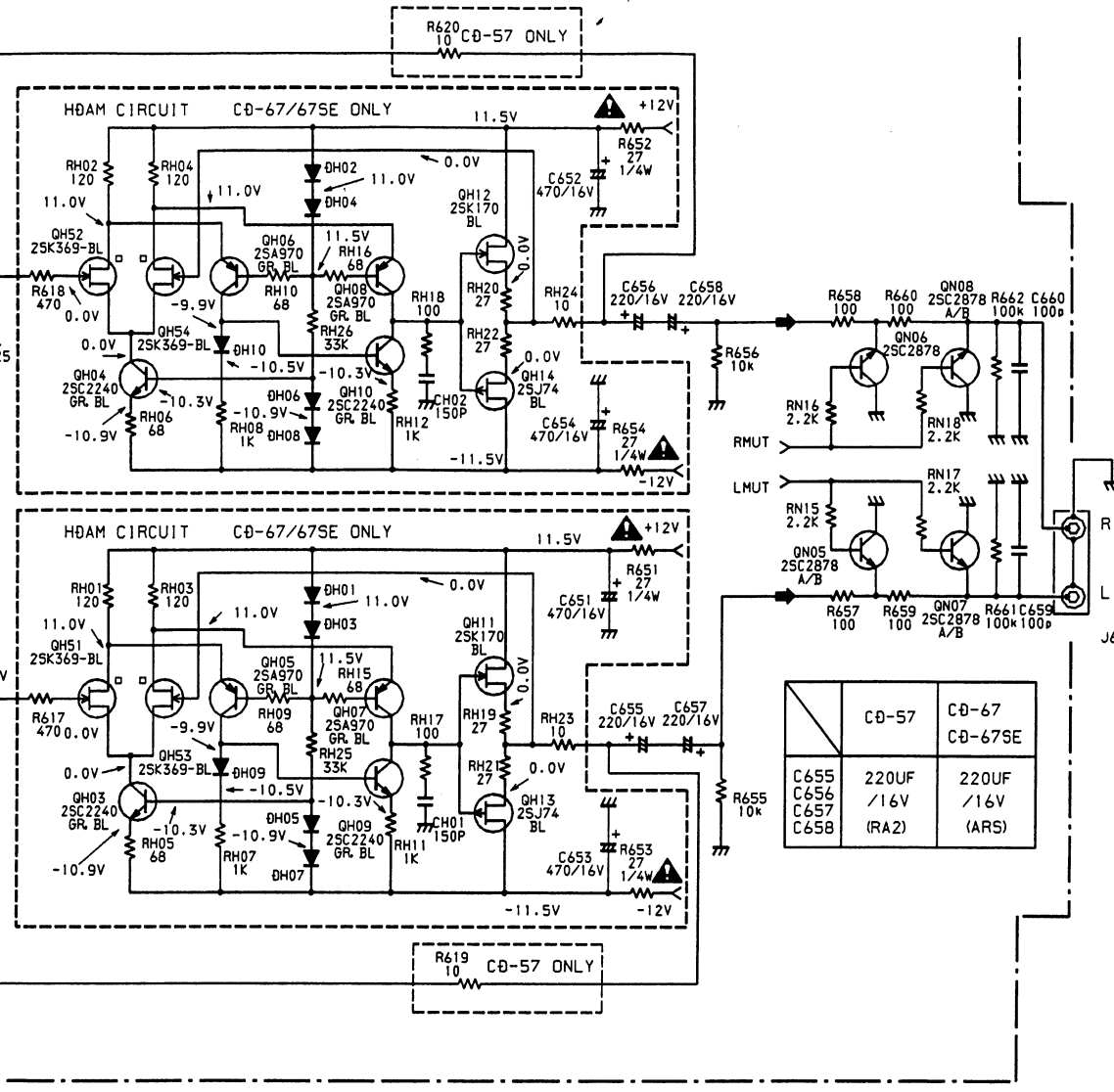
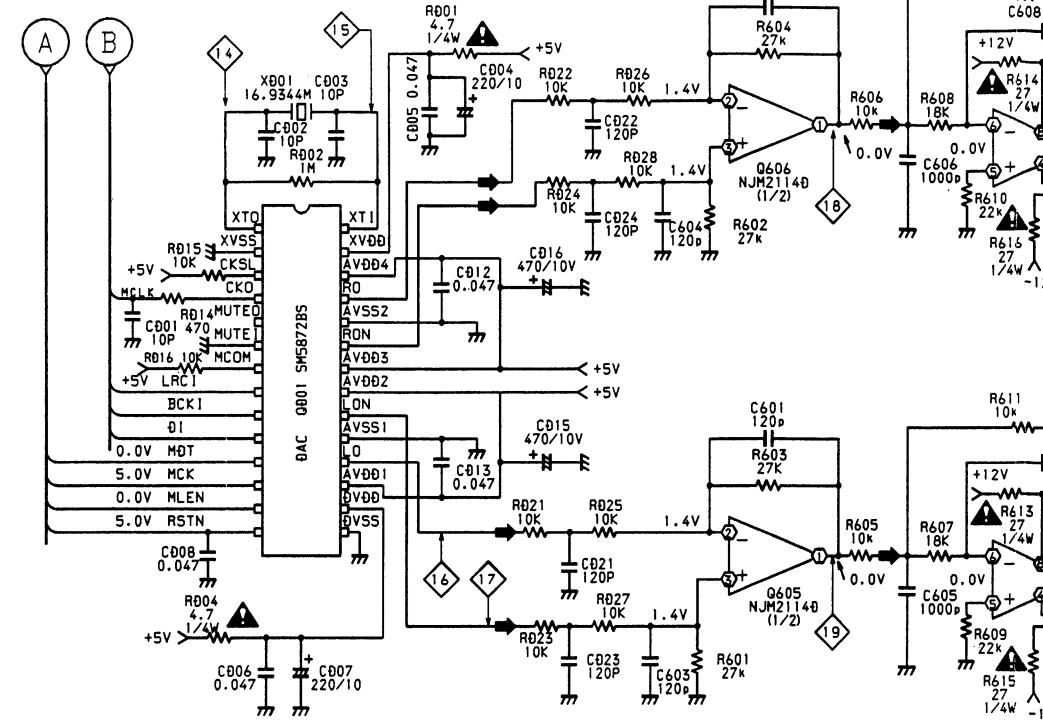
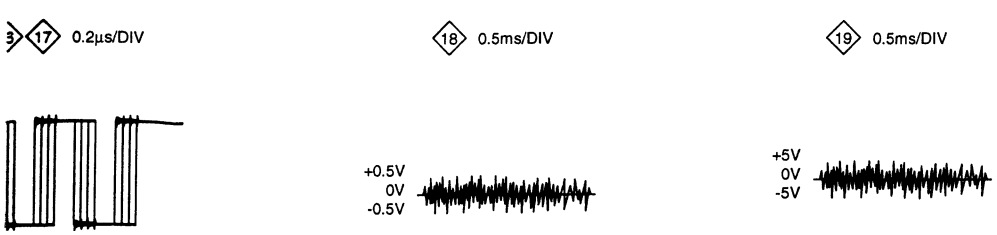
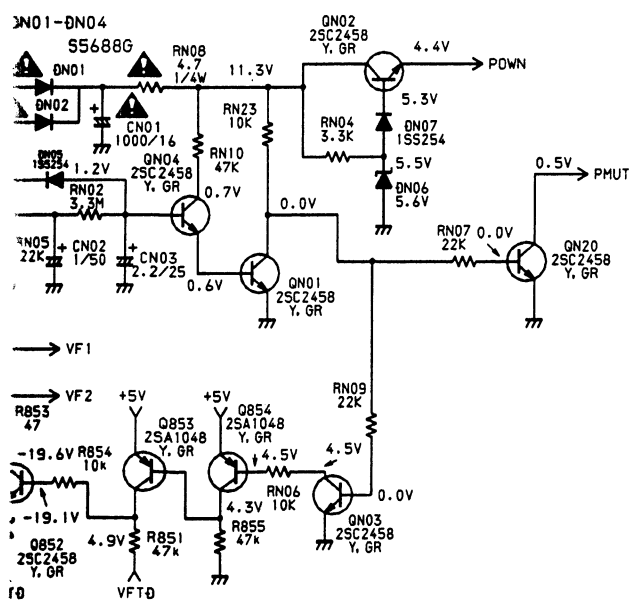
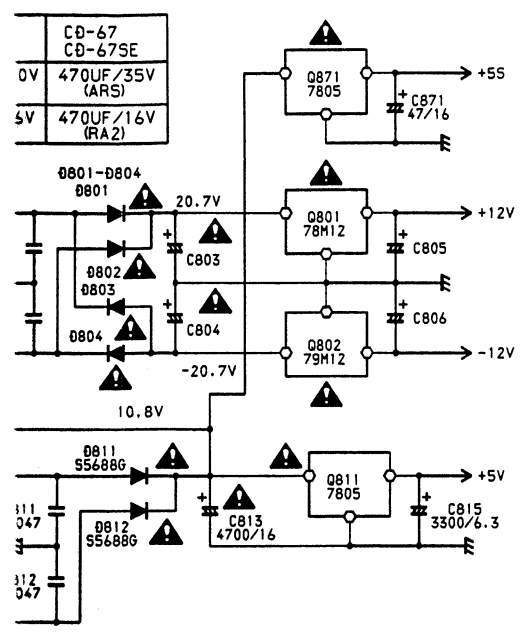
O: WITHIN P.C.B

| | | | | | |
|------|---|---|---|---|---|
| | E | N | T | F | U |
| U244 | 0 | | | 0 | 0 |
| U247 | | | | 0 | 0 |
| U248 | 0 | 0 | | | |

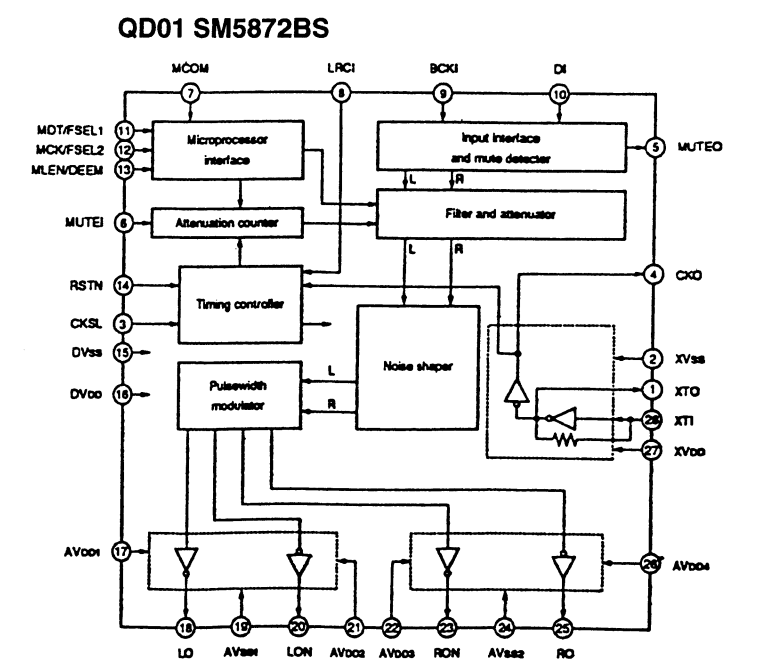
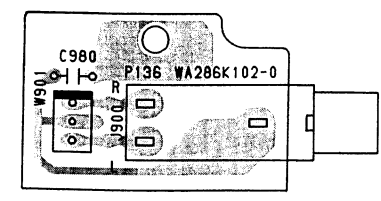
BELOW MODELS
 E= /01 /11)
 N= /02 /12)
 T= /05 /15)
 OTHER= (F)



安全上の注意：
 ▲ が付いている部品は、安全上重要な部品です。部品を使用してください。
NOTE ON SAFETY:
 Symbol ▲ Fire or electrical shock hazard. On to replace any part marked with symbol ▲. An (other than original type), may increase risk of

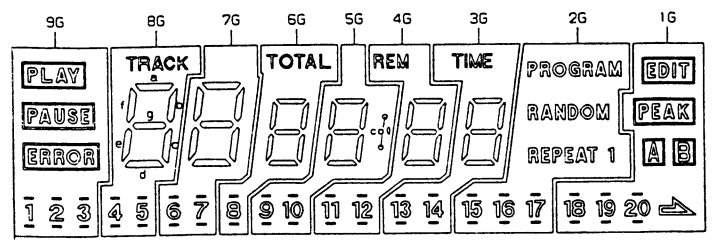
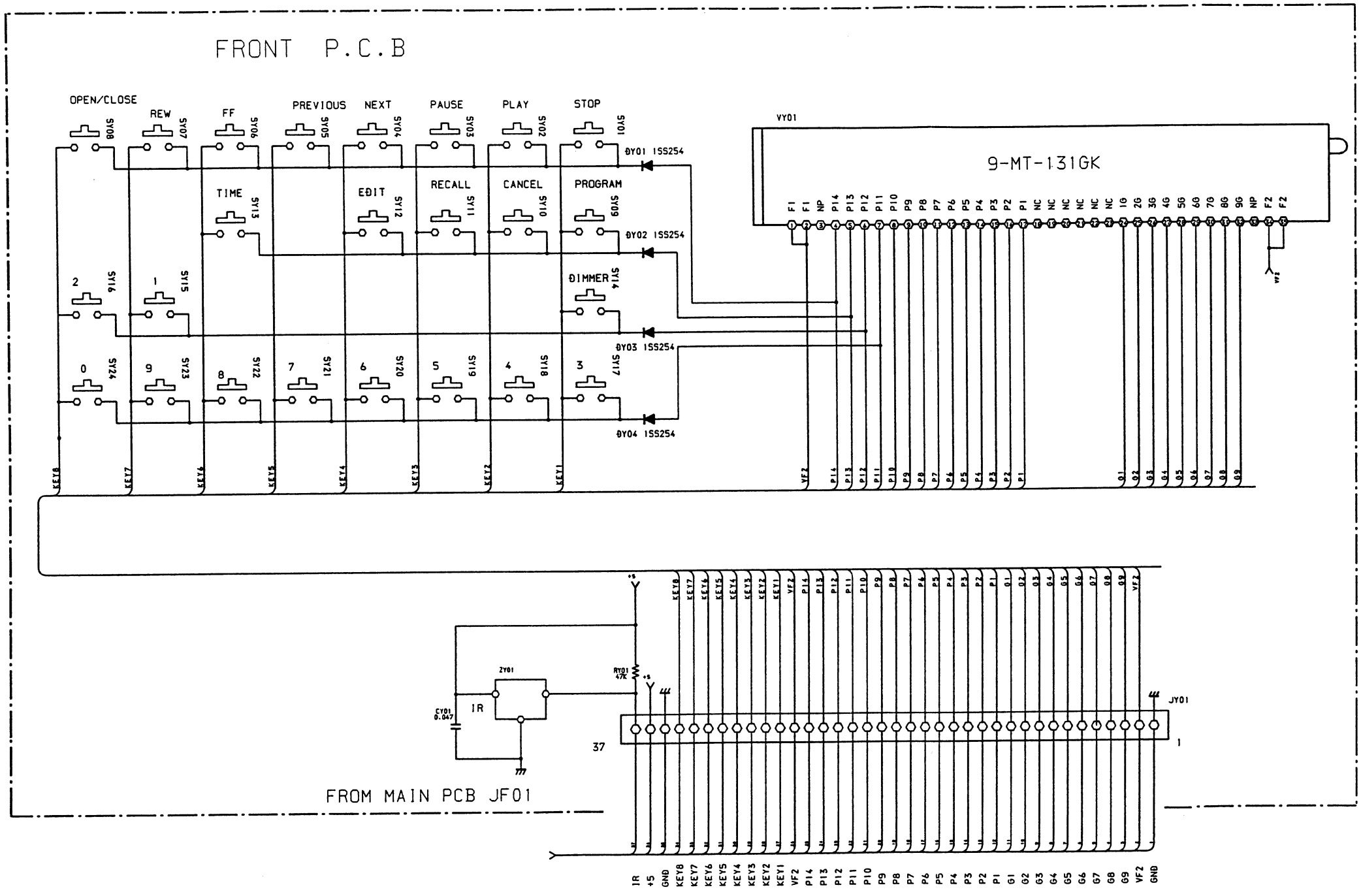


P136 PHONES PCB



安全上の注意:
 ▲ が付いている部品は、安全上重要な部品です。必ず指定されている部品番号の部品を使用してください。

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.

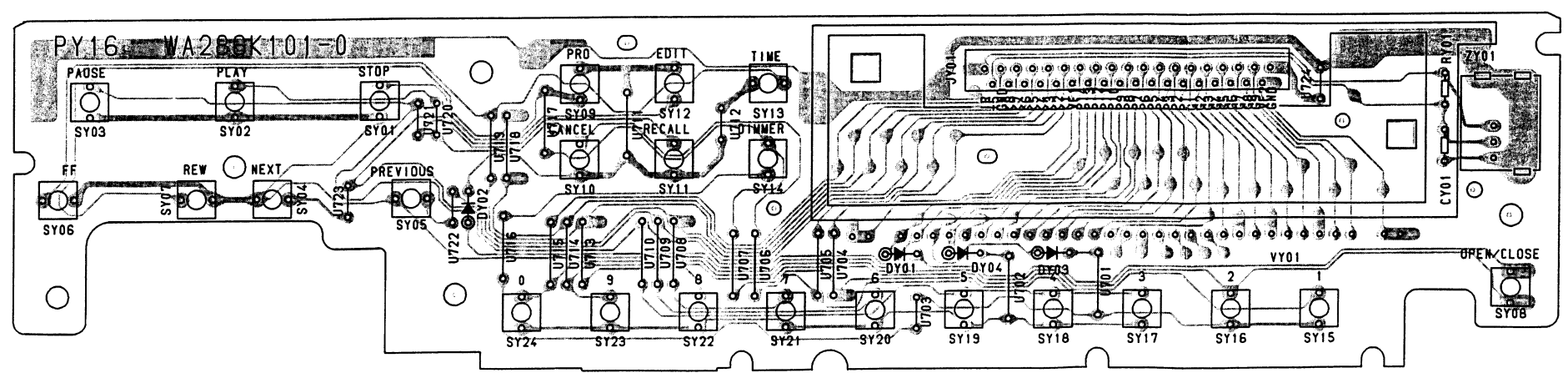


ANODE CONNECTION

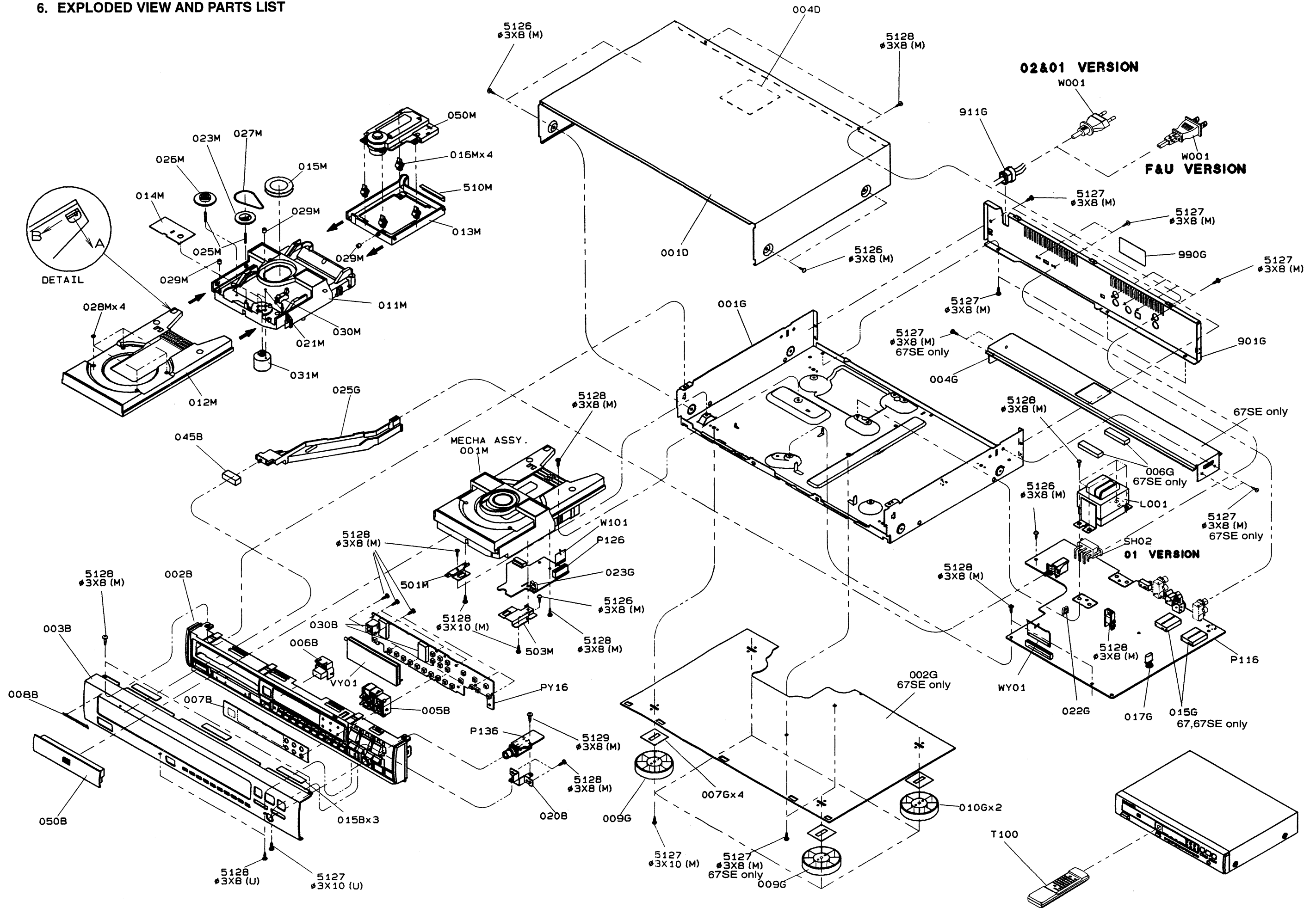
| | 9G | 8G | 7G | 6G | 5G | 4G | 3G | 2G | 1G |
|-----|-------|-------|-----|-------|------|------|------|---------|--------|
| P1 | - | a | a | a | a | a | a | PROGRAM | PEAK |
| P2 | (1) | b | b | b | b | b | b | 3 | 3 |
| P3 | 1 | c | c | c | c | c | c | (15) | (18) |
| P4 | (1) | d | d | d | d | d | d | 1 | 1 |
| P5 | - | e | e | e | e | e | e | REPEAT | REPEAT |
| P6 | ERROR | f | f | f | f | f | f | - | A |
| P7 | (2) | g | g | g | g | g | g | (15) | (18) |
| P8 | 2 | (4) | - | TOTAL | col | REM | (13) | (16) | (19) |
| P9 | (2) | 4 | (6) | - | (9) | (11) | 13 | 16 | 19 |
| P10 | (3) | (4) | 6 | (8) | 9 | 11 | (13) | (16) | (19) |
| P11 | 3 | (5) | (6) | 8 | (9) | (11) | (14) | (17) | (20) |
| P12 | (3) | 5 | (7) | (8) | (10) | (12) | 14 | 17 | 20 |
| P13 | PLAY | (5) | 7 | - | 10 | 12 | (14) | (17) | (20) |
| P14 | PAUSE | TRACK | (7) | - | (10) | (12) | TIME | RANDOM | EDIT |

9-MT-131GK
ANODE CONNECTION

PY16 FRONT PCB



6. EXPLODED VIEW AND PARTS LIST



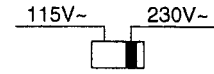
[VERS.:VERSION, U:U.S.A., F:Japan, K:Far East, /XX:Europe]

| POS. NO. | VERS. COLOR | PART NO. (For EUROPE) | DESCRIPTION | PART NO. (For U/K/F) |
|----------------|-----------------------|-----------------------|---|----------------------|
| 002B | BLACK | 4822 464 10206 | CHASSIS FRONT PL BLK | 185W105020 |
| 002B | GOLD | 4822 464 10207 | CHASSIS FRONT PL GLD | 185W105120 |
| 003B | CD-57 BLACK | 4822 459 04341 | FRONT PANEL AL CD-57 BLK | 185W248010 |
| 003B | CD-67 BLACK | 4822 459 04342 | FRONT PANEL AL CD-67 BLK | 186W248010 |
| 003B | CD-67 GOLD | 4822 459 04343 | FRONT PANEL AL CD-67 GLD | 186W248020 |
| 003B | CD-67SE BLACK | 4822 459 04344 | FRONT PANEL AL CD-67 SE BLK | 187W248010 |
| 003B | CD-67SE GOLD | 4822 459 04345 | FRONT PANEL AL CD-67 SE GLD | 187W248020 |
| 005B | | 4822 410 62898 | BUTTON D3 GOLD HOT STAMPED | 285K270020 |
| 006B | BLACK | 4822 410 62899 | BUTTON OPEN/CLOSE BLK | 285K270030 |
| 006B | GOLD | 4822 410 62931 | BUTTON OPEN/CLOSE GLD | 285K270130 |
| 007B | | 4822 450 62145 | WINDOW CD-57/67 WITH REMOTE | 285K158010 |
| 008B | BLACK | | BADGE MARANTZ BADGE (BL) | 185J251010 |
| 008B | GOLD | | BADGE MARANTZ BADGE (GL) | 185J251110 |
| 045B | BLACK | 4822 410 62744 | BUTTON POWER BLACK | 285K270010 |
| 045B | GOLD | 4822 410 62745 | BUTTON POWER GOLD | 285K270110 |
| 050B | BLACK | 4822 454 30491 | TRAY ESCUTCHEON BLACK | 285K063010 |
| 050B | GOLD | 4822 454 30494 | TRAY ESCUTCHEON BLACK | 285K063110 |
| 001D | BLACK | | LID TOP COVER BLACK | 185W257010 |
| 001D | GOLD | | LID TOP COVER GOLD | 185W257110 |
| 009G | | 4822 462 42045 | LEG, (GOLD HOT STAMP) FRONT | 183J057010 |
| 010G | | 4822 462 42048 | LEG, (GOLD HOT STAMP) REAR | 183J057110 |
| 025G | | 4822 403 70989 | LINK, POWER SW. | 285K121010 |
| 001M | | | MECHANISM SAM LOADER 1210/11 | 271K304510 |
| 011M | | 4822 444 50678 | CHASSIS 3104 144 01230 | 271K105030 |
| 012M | | 4822 444 50679 | TRAY 3104 144 01420 SLIDE | 271K163010 |
| 013M | | 4822 464 50895 | CHASSIS 3104 144 00450 SUBCHASSIS | 271K105040 |
| 015M | | 4822 402 61412 | CLAMPER 3104 147 10030 ASSY | 271K005010 |
| 016M | | 4822 325 50215 | BUFFER 3104 144 00650 SUSPENSION | 271K056010 |
| 021M | | 4822 502 12001 | SCREW 2522 201 00002 SCR.TORXM2X4 | 271K010010 |
| 023M | | 4822 528 81465 | PULLEY 3104 144 00400 PULLEY | 271K262010 |
| 026M | | 4822 528 81464 | GEAR 3104 144 00390 DRIVE PINION | 271K058010 |
| 027M | | 4822 358 31168 | BELT 3104 144 00900 DRIVE BELT | 271K264010 |
| 028M | | 4822 325 80511 | BUFFER 3104 144 01390 ORNAMENTAL TU | 271K056030 |
| 029M | | 4822 325 60379 | BUFFER 3104 144 00810 DAMPING G ROMME | 271K056020 |
| 030M | | 4822 276 13222 | MINI SWITCH 8204 055 29120 SINMEI QA S1229 | *SM000300R |
| 031M | | 4822 361 21492 | D.C MOTOR 3104 148 00270 RF-310T A-1140 | *MM000660R |
| 050M | | 4822 691 30278 | MECHANISM 3104 147 00300 CDM12.1 EX WIR | 271K304560 |
| ▲W001 | U | | A.C POWER CORD (U) MAYOR UL/CSA | YC01800580 |
| ▲W001 | /05/15 | | A.C POWER CORD MAIN BS 250V5A | YC02000700 |
| ▲W001 | /01/02/11//12 | | A.C POWER CORD MAIN N | YC01800440 |
| ▲W001 | F | | A.C POWER CORD AC (F/E) | YC02000770 |
| WY01 | /01/02/05/11/12/15, F | | JUMPER LEAD, SUMI-CARD37P/120MM | YU37120500 |
| WY01 | U | | JUMPER LEAD, SUMI-CARD37P/120MM | YU37120520 |
| PACKING | | | | |
| 001T | U | | USER MANUAL CD-67/67SE COMB | 186W851250 |
| 001T | /01/02/05/11/12/15 | 4822 736 14664 | USER MANUAL CD-57/67/67SE COM. | 186W851310 |
| 001T | F | | USER MANUAL CD-67/67SE COMB. | 186W851110 |
| B001 | | | BATTERY UM-3NEPH/2S AN D 2P | ZF23302000 |
| J081 | CD-57 | 4822 321 21438 | CONNECTIVE CORRCA ST. 1M | ZD01000330 |
| J081 | CD-67/67SE | 4822 321 62205 | CONNECTIVE CORD RCA ST. 1M (GOLD) | ZD01000550 |
| J082 | /01/11 | | JACK AC ADAPTER PLUG 6A 250V | YJ04002310 |
| T100 | | 4822 218 10527 | UNIT KIT IR COMANDER (RC-63CD) | ZK286K0010 |

VOLTAGE CONVERSION (/01B version only)

To convert the unit to a different power source voltage, change the position as illustrated in the drawing below.

VOLTAGE SELECTOR



CAUTION

DISCONNECT POWER SUPPLY CORD FROM AC OUTLET BEFORE CONVERTING VOLTAGE.

7. ELECTRICAL PARTS LIST

ASSIGNMENT OF COMMON PARTS CODES.

RESISTOR

- R***** : (1) GD05 x x x 140, Carbon film fixed resistor, ±5% 1/4W
R*** : (2) GD05 x x x 160, Carbon film fixed resistor, ±5% 1/6W

① ——— Resistance value

Examples ;

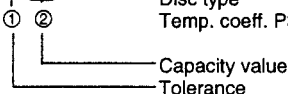
① Resistance value

| | | | |
|---------------|---------------|----------------|----------------|
| 0.1 Ω.....001 | 10 Ω.....100 | 1 kΩ.....102 | 100 kΩ.....104 |
| 0.5 Ω.....005 | 18 Ω.....180 | 2.7 kΩ.....272 | 680 kΩ.....684 |
| 1 Ω.....010 | 100 Ω.....101 | 10 kΩ.....103 | 1 MΩ.....105 |
| 6.8 Ω.....068 | 390 Ω.....391 | 22 kΩ.....223 | 4.7 MΩ.....475 |

(Note) Please distinguish 1/4W from 1/6W by the shape of parts used actually.

C*** : CERAMIC CAP.

- (1) DD1 x x x 370, Ceramic capacitor
 Disc type
 Temp. coeff. P350 ~ N1000, 50V



Examples ;

- ① Tolerance (Capacity deviation)
- | |
|-----------------|
| ± 0.25pF..... 0 |
| ± 0.5pF..... 1 |
| ± 5%..... 5 |

*Tolerance of COMMON PARTS handled here are as follows :

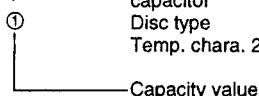
| |
|---------------------------|
| 0.5pF ~ 5pF..... ± 0.25pF |
| 6pF ~ 10pF..... ± 0.5pF |
| 12pF ~ 560pF..... ± 5% |

② Capacity value

| | | |
|----------------|---------------|----------------|
| 0.5 pF.....005 | 3 pF.....030 | 100 pF.....101 |
| 1 pF.....010 | 10 pF.....100 | 220 pF.....221 |
| 1.5 pF.....015 | 47 pF.....470 | 560 pF.....561 |

C*** : CERAMIC CAP.

- (1) DK16 x x x 300, High dielectric constant ceramic capacitor
 Disc type
 Temp. chara. 2B4, 50V



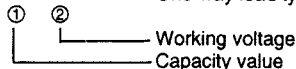
Examples ;

① Capacity value

| | | |
|----------------|-----------------|------------------|
| 100 pF.....101 | 1000 pF.....102 | 10000 pF.....103 |
| 470 pF.....471 | 2200 pF.....222 | |

C*** : ELECTROLY CAP. (≠), FILM CAP. (≠)

- (1) EA x x x x 10, Electrolytic capacitor
 One-way lead type, Tolerance ± 20%



Examples ;

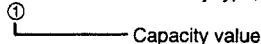
① Capacity value

| | | |
|-----------------|----------------|-----------------|
| 0.1 μF.....104 | 4.7 μF.....475 | 100 μF.....107 |
| 0.33 μF.....334 | 10 μF.....106 | 330 μF.....337 |
| 1 μF.....105 | 22 μF.....226 | 1100 μF.....118 |
| | | 2200 μF.....228 |

② Working voltage

| | |
|---------------|--------------|
| 6.3 V.....006 | 25 V.....025 |
| 10 V.....010 | 35 V.....035 |
| 16 V.....016 | 50 V.....050 |

- (2) DF15 x x x 350 ——— Plastic film capacitor
 DF15 x x x 310 ——— One-way type, Mylar ± 5% 50V
 DF16 x x x 310 ——— Plastic film capacitor
 One-way type, Mylar ± 10% 50V



Examples ;

① Capacity value

| | |
|---------------------------|-----------------|
| 0.001 μF (1000pF).....102 | 0.1 μF.....104 |
| 0.0018 μF.....182 | 0.56 μF.....564 |
| 0.01 μF.....103 | 1 μF.....105 |
| 0.015 μF.....153 | |

- NOTE** : 1) The above CODES (**R*****, **R*****, **C*****, **C***** and **C*****) are omitted on the schematic diagram in some case.
 2) On the occasion, be confirmed common parts on the parts list.
 3) Refer to "Common Parts List" for the other common parts (R105, DD4, DK4).

NOTE ON SAFETY FOR FUSIBLE RESISTOR :

The suppliers and their type numbers of fusible resistors are as follows :

1. KOA Corporation

| Part No. | Type No. | Description |
|----------------|---------------------|----------------|
| NH05 x x x 140 | RF25S x x x x Ω J | (± 5% 1/4W) |
| NH05 x x x 120 | RF50S x x x x Ω J | (± 5% 1/2W) |
| NH85 x x x 110 | RF73B2A x x x x Ω J | (± 5% 1/10W) |
| NH85 x x x 140 | RF73B2E x x x x Ω J | (± 5% 1/4W) |

* Resistance value Resistance value (0.1 - 10kΩ)

2. Matsushita Electronic Components Co., Ltd

| Part No. | Type No. | Description |
|----------------|----------------|---------------|
| NF05 x x x 140 | ERD-2FCJ x x x | (± 5% 1/4W) |
| RF05 x x x 140 | | |
| NF02 x x x 140 | ERD-2FCG x x x | (± 2% 1/4W) |
| RF02 x x x 140 | | |

* Resistance value * Resistance value

Examples :

* Resistance value

| | | | |
|---------------|---------------|----------------|----------------|
| 0.1 Ω.....001 | 10 Ω.....100 | 1 kΩ.....102 | 100 kΩ.....104 |
| 0.5 Ω.....005 | 18 Ω.....180 | 2.7 kΩ.....272 | 680 kΩ.....684 |
| 1 Ω.....010 | 100 Ω.....101 | 10 kΩ.....103 | 1 MΩ.....105 |
| 6.8 Ω.....068 | 390 Ω.....391 | 22 kΩ.....223 | 4.7 MΩ.....475 |

ABBREVIATION AND MARKS

| | | | |
|----|------------------------|----|-----------------------|
| 1 | ANT. : ANTENNA | 2 | BATT. : BATTERY |
| 3 | CAP. : CAPACITOR | 4 | CER. : CERAMIC |
| 5 | CONN. : CONNECTING | 6 | DIG. : DIGITAL |
| 7 | HP : HEADPHONE | 8 | MIC. : MICROPHONE |
| 9 | μ-PRO : MICROPROCESSOR | 10 | REC. : RECORDING |
| 11 | RES. : RESISTOR | 12 | SPK : SPEAKER |
| 13 | SW : SWITCH | 14 | TRANSF. : TRANSFORMER |
| 15 | TRIM. : TRIMMING | 16 | TRS. : TRANSISTOR |
| 17 | VAR. : VARIABLE | 18 | XTAL : CRYSTAL |
| 19 | | 20 | |
| 21 | | 22 | |
| 23 | | 24 | |
| 25 | | 26 | |
| 27 | | 28 | |
| 29 | | 30 | |

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.

安全上の注意 :

▲ がついている部品は、安全上重要な部品です。必ず指定されている部品番号の部品を使用して下さい。

| POS. NO. | VERS. COLOR | PART NO. (For EUROPE) | DESCRIPTION | PART NO. (For U/K/F) | POS. NO. | VERS. COLOR | PART NO. (For EUROPE) | DESCRIPTION | PART NO. (For U/K/F) |
|----------|-------------|-----------------------|---|----------------------|----------|-------------------------|-----------------------|---|----------------------|
| Q852 | | 4822 130 42298 | TRS. 2SC536SP, 2SC2458, 2SC3311, 2SC1740S | HT30001000 | | | | P116-MISCELLANEOUS | |
| Q853 | | 4822 130 42715 | TRS. 2SA608SP, 2SA1048, 2SA1309, 2SA933S | HT10001000 | ▲FH11 | CD-57/01/02/05 | | FUSE T 630MA 250V SL | FS10063210 |
| Q854 | | 4822 130 42715 | TRS. 2SA608SP, 2SA1048, 2SA1309, 2SA933S | HT10001000 | ▲FH11 | F, U | 4822 253 40196 | FUSE 1.6A 125V GGS | FS10160310 |
| Q901 | | 4822 209 82362 | IC NJM4556D | HC10016090 | ▲FH11 | CD-67/01/02/05/11/12/15 | 4822 070 36301 | FUSE 630MA 250V BS LISTED | FS10063850 |
| QD01 | | 4822 209 32762 | IC SM5872BS DIG.FIL & DAC | HC10010350 | ▲FH12 | CD-57/01/02/05 | | FUSE T 630MA 250V SL | FS10063210 |
| QF01 | | 4822 209 15166 | MAIN CPU MN187164 | HU186WA000 | ▲FH12 | F, U | 4822 253 40196 | FUSE 1.6A 125V GGS | FS10160310 |
| QF02 | | 4822 209 15167 | IC RESET IC PST994D | HC10073550 | ▲FH12 | CD-67/01/02/05/11/12/15 | 4822 070 36301 | FUSE 630MA 250V BS LISTED | FS10063850 |
| QF51 | | 4822 130 42715 | TRS. 2SA608SP, 2SA1048, 2SA1309, 2SA933S | HT10001000 | J103 | | 4822 265 41351 | JACK ZC-015 15P-CONNECTER | YJ07007960 |
| QF52 | | 4822 130 42298 | TRS. 2SC536SP, 2SC2458, 2SC3311, 2SC1740S | HT30001000 | J601 | CD-57 | | TERMINAL 1L2P W/R A OUT | YT02021210 |
| QF61 | | 4822 130 42298 | TRS. 2SC536SP, 2SC2458, 2SC3311, 2SC1740S | HT30001000 | J601 | CD-67/67SE | 4822 265 31045 | TERMINAL RCA P-JACK W/R GOLD | YT02021080 |
| QH03 | CD-67/67SE | 4822 130 43233 | TRS. 2SC2240 (GR OR BL) | HT322402A0 | JF01 | | 4822 265 61251 | JACK 37 PIN FFC | YJ06011070 |
| QH04 | CD-67/67SE | 4822 130 43233 | TRS. 2SC2240 (GR OR BL) | HT322402A0 | JF03 | | 4822 267 41009 | TERMINAL 2P RCA PIN JACK | YT02020890 |
| QH05 | CD-67/67SE | 4822 130 42949 | TRS. 2SA970 (GR OR BL) | HT109702A0 | JH01 | | | TERMINAL AC CORD ON PCB | YL01010250 |
| QH08 | CD-67/67SE | 4822 130 42949 | TRS. 2SA970 (GR OR BL) | HT109702A0 | JH02 | | | TERMINAL AC CORD ON PCB | YL01010250 |
| QH09 | CD-67/67SE | 4822 130 43233 | TRS. 2SC2240 (GR OR BL) | HT322402A0 | JM01 | | 4822 265 30473 | PLUG 6P PLUG 86B-XH-A | YP06003420 |
| QH10 | CD-67/67SE | 4822 130 43233 | TRS. 2SC2240 (GR OR BL) | HT322402A0 | JM02 | | 4822 265 30482 | PLUG 4P PLUG 84B-XH-A | YP06003440 |
| QH11 | CD-67/67SE | 5322 130 41844 | F.E.T. 2SK170 BL | HF201701G0 | JT02 | CD-57 | 4822 265 10328 | TERMINAL 1L1P BLK | YT02010780 |
| QH12 | CD-67/67SE | 5322 130 41844 | F.E.T. 2SK170 BL | HF201701G0 | JT02 | CD-67/67SE | 4822 290 81638 | TERMINAL 14X14 RA 1L1P BLK | YT02010790 |
| QH13 | CD-67/67SE | 4822 130 62649 | F.E.T. 2SJ74 BL | HF100741G0 | JT11 | CD-67/67SE | 4822 267 31369 | OPT. CONNECTOR GP1F32T | YJ15000090 |
| QH14 | CD-67/67SE | 4822 130 62649 | F.E.T. 2SJ74 BL | HF100741G0 | ▲L001 | CD-57/02/05 | 4822 146 10645 | POWER TRANSF. | TS15740010 |
| QH51 | CD-67/67SE | 4822 130 42839 | F.E.T. 2SK369BL | HF203691B0 | ▲L001 | CD-57/01 | 4822 146 10644 | POWER TRANSF. | TS15740020 |
| QH54 | CD-67/67SE | 4822 130 42839 | F.E.T. 2SK369BL | HF203691B0 | ▲L001 | CD-67, U | | POWER TRANSF. | TS15740030 |
| QN01 | | 4822 130 42298 | TRS. 2SC536SP, 2SC2458, 2SC3311, 2SC1740S | HT30001000 | ▲L001 | CD-67/02/05 | 4822 146 10645 | POWER TRANSF. | TS15740010 |
| QN04 | | 4822 130 43818 | TRS. 2SC2878 A OR BRANK | HT328782A0 | ▲L001 | CD-67/01 | 4822 146 10644 | POWER TRANSF. | TS15740020 |
| QN05 | | 4822 130 43818 | TRS. 2SC2878 A OR BRANK | HT328782A0 | ▲L001 | CD-67, F | | POWER TRANSF. | TS15740040 |
| QN08 | | 4822 130 42298 | TRS. 2SC536SP, 2SC2458, 2SC3311, 2SC1740S | HT30001000 | ▲L001 | CD-67/12/15 | 4822 146 10646 | POWER TRANSF. | TS15740050 |
| QN20 | | 4822 130 42298 | TRS. 2SC536SP, 2SC2458, 2SC3311, 2SC1740S | HT30001000 | ▲L001 | CD-67/11 | 4822 146 10647 | POWER TRANSF. | TS15740060 |
| QN24 | | 4822 130 42715 | TRS. 2SA608SP, 2SA1048, 2SA1309, 2SA933S | HT10001000 | ▲L001 | CD-67SE, U | | POWER TRANSF. | TS15740070 |
| QN25 | | 4822 130 42715 | TRS. 2SA608SP, 2SA1048, 2SA1309, 2SA933S | HT10001000 | ▲L001 | CD-67SE, F | | POWER TRANSF. | TS15740080 |
| QN91 | | 4822 130 43818 | TRS. 2SC2878 A OR BRANK | HT328782A0 | L102 | | 4822 526 10584 | FERRITE CORE | FC90090010 |
| QN92 | | 4822 130 43818 | TRS. 2SC2878 A OR BRANK | HT328782A0 | L103 | | 4822 526 10584 | FERRITE CORE | FC90090010 |
| ▲R614 | | 4822 116 83036 | P116-RESISTORS 27 Ω ±2% 1/4W | RF02270140 | L104 | | 4822 526 10584 | FERRITE CORE | FC90090010 |
| ▲R615 | | 4822 116 83036 | 27 Ω ±2% 1/4W | RF02270140 | LT01 | | 4822 142 60388 | PULSE TRANSF. | TP41042010 |
| ▲R616 | | 4822 116 83036 | 27 Ω ±2% 1/4W | RF02270140 | ▲SF01 | | 4822 277 21824 | SLIDE SWITCH | SS02021620 |
| ▲R651 | CD-67/67SE | 4822 116 83036 | 27 Ω ±2% 1/4W | RF02270140 | ▲SH02 | /01/11 | 4822 277 21763 | SLIDE SWITCH | SS02021240 |
| ▲R654 | CD-67/67SE | 4822 116 83036 | 27 Ω ±2% 1/4W | RF02270140 | ▲SH91 | | 4822 276 13364 | PUSH SWITCH | SP01011990 |
| ▲RD01 | CD-67/67SE | 4822 052 10478 | 4.7 Ω ±5% 1/4W | RF05047140 | XD01 | | 4822 242 72334 | CRYSTAL 16.9344MHZ | JX16002260 |
| ▲RD04 | CD-67/67SE | 4822 052 10478 | 4.7 Ω ±5% 1/4W | RF05047140 | XF01 | | 4822 242 72066 | SERAMIC VIB. CST8.0MHZ (MT) TAPING | FQ08004010 |
| ▲RF01 | | 4822 052 10478 | 4.7 Ω ±5% 1/4W | RF05047140 | | | | P126-HP CIRCUIT BOARD | |
| ▲RN08 | | 4822 052 10478 | 4.7 Ω ±5% 1/4W | RF05047140 | | | | P126-CAPACITORS | |
| ▲RY11 | | 4822 052 10478 | 4.7 Ω ±5% 1/4W | RF05047140 | C121 | | 4822 122 40589 | CER. 0.047 μF +80%-20% 50V | DA17473110 |
| ▲R*** | | | | | C124 | | 4822 124 41539 | ELECT. 47 μF M 16V | OA47601620 |
| | | | | | C126 | | 4822 124 41539 | ELECT. 47 μF M 16V | OA47601620 |
| | | | | | Q101 | | 4822 209 33992 | P126-SEMICONDUCTORS IC TDA1302T SERVO PRIAMP | HC10136490 |
| | | | | | R*** | | | P116-RESISTORS(COMMON) CARBON FILM FIXED RESISTOR, ±5% 1/6W, R120 | |
| | | | | | J101 | | 4822 265 41349 | P126-MISCELLANEOUS JACK TOC-L12X-A1 12P-CONNECTER | YJ07007950 |
| | | | | | J102 | | 4822 265 41351 | JACK ZC-015 15P-CONNECTER | YJ07007960 |
| | | | | | | | | P136-CIRCUIT BOARD | |
| | | | | | C151 | | | P136-CAPACITORS | |
| | | | | | C154 | | | FILM 0.022 μF ±0.5% M 50V | DF15223350 |
| | | | | | C980 | | 4822 122 30103 | CER. 0.022 μF +80%-20% 50V | DK18223310 |
| | | | | | J900 | BLACK | 4822 267 31691 | P136-MISCELLANEOUS JACK HEAD PHONE HLJ0540-01-410 | YJ01003870 |
| | | | | | J900 | GOLD | 4822 267 31692 | JACK HEAD PHONE HLJ0540-01-430 | YJ01003880 |

| POS. NO. | VERS. COLOR | PART NO. (For EUROPE) | DESCRIPTION | PART NO. (For U/K/F) | POS. NO. | VERS. COLOR | PART NO. (For EUROPE) | DESCRIPTION | PART NO. (For U/K/F) |
|--------------------------------|-------------|-----------------------|----------------------------|----------------------|------------------------------------|-------------|-----------------------|--|----------------------|
| P116-MAIN CIRCUIT BOARD | | | | | | | | | |
| P116-CAPACITORS | | | | | | | | | |
| C100 | | 4822 126 10408 | CER. 220 PF | DA16221110 | C902 | | 4822 124 41534 | ELECT. 10 µF M 25V | OA10602520 |
| C105 | | | | | C903 | | 4822 124 41535 | ELECT. 100 µF M 25V | OA10702520 |
| C106 | | 4822 122 40589 | CER. 0.047 µF +80%-20% 50V | DA17473110 | C904 | | 4822 124 41535 | ELECT. 100 µF M 25V | OA10702520 |
| C107 | | 4822 122 40589 | CER. 0.047 µF +80%-20% 50V | DA17473110 | CD01 | | 4822 122 32185 | CER. 10 PF 50V BLK | DD11100300 |
| C109 | | 4822 122 40588 | CER. 0.022 µF | DA17223110 | CD02 | | 4822 122 32185 | CER. 10 PF 50V BLK | DD11100300 |
| C110 | | 4822 126 10513 | CER. 47 PF | DA15470110 | CD03 | | 4822 122 32185 | CER. 10 PF 50V BLK | DD11100300 |
| C113 | | 4822 126 10364 | CER. 100 PF | DA16101110 | CD04 | | 4822 124 90363 | ELECT. 220 µF M 10V | OA22701020 |
| C114 | | 4822 124 41539 | ELECT. 47 µF M 16V | OA47601620 | CD05 | | 4822 122 40589 | CER. 0.047 µF +80%-20% 50V | DA17473110 |
| C115 | | | | | CD06 | | 4822 122 40589 | CER. 0.047 µF +80%-20% 50V | DA17473110 |
| C119 | | 4822 122 40589 | CER. 0.047 µF +80%-20% 50V | DA17473110 | CD07 | | 4822 124 90363 | ELECT. 220 µF M 10V | OA22701020 |
| C120 | | 4822 124 41539 | ELECT. 47 µF M 16V | OA47601620 | CD08 | | 4822 122 40589 | CER. 0.047 µF +80%-20% 50V | DA17473110 |
| C125 | | 4822 122 33639 | CER. 1000 PF | DA16102110 | CD12 | | 4822 122 40589 | CER. 0.047 µF +80%-20% 50V | DA17473110 |
| C132 | | 4822 122 40589 | CER. 0.047 µF +80%-20% 50V | DA17473110 | CD13 | | 4822 122 40589 | CER. 0.047 µF +80%-20% 50V | DA17473110 |
| C150 | | 4822 122 40589 | CER. 0.047 µF +80%-20% 50V | DA17473110 | CD15 | CD-57 | 4822 124 90363 | ELECT. 220 µF M 10V | OA22701020 |
| C155 | | 4822 124 41539 | ELECT. 47 µF M 16V | OA47601620 | CD15 | CD-67/67SE | 4822 124 90371 | ELECT. 470 µF M 10V | OA47701020 |
| C156 | | 4822 124 41539 | ELECT. 47 µF M 16V | OA47601620 | CD16 | CD-57 | 4822 124 90363 | ELECT. 220 µF M 10V | OA22701020 |
| C157 | | 4822 122 40589 | CER. 0.047 µF +80%-20% 50V | DA17473110 | CD16 | CD-67/67SE | 4822 124 90371 | ELECT. 470 µF M 10V | OA47701020 |
| C159 | | 4822 122 40589 | CER. 0.047 µF +80%-20% 50V | DA17473110 | CD21 | CD-57 | 4822 126 11559 | CER. 120 PF ± 50V BLK | DD15121300 |
| C601 | CD-57 | 4822 126 11559 | CER. 120 PF ± 0.5% 50V BLK | DD15121300 | CD21 | CD-67/67SE | 4822 121 70544 | FILM 120 PF ± 100V | OF15121540 |
| C601 | CD-67/67SE | 4822 121 70544 | FILM 120 PF ± 0.5% 100V | OF15121540 | CD22 | CD-57 | 4822 126 11559 | CER. 120 PF ± 50V BLK | DD15121300 |
| C602 | CD-57 | 4822 126 11559 | CER. 120 PF ± 0.5% 50V BLK | DD15121300 | CD22 | CD-67/67SE | 4822 121 70544 | FILM 120 PF ± 100V | OF15121540 |
| C602 | CD-67/67SE | 4822 121 70544 | FILM 120 PF ± 0.5% 100V | OF15121540 | CD23 | CD-57 | 4822 126 11559 | CER. 120 PF ± 50V BLK | DD15121300 |
| C603 | CD-57 | 4822 126 11559 | CER. 120 PF ± 0.5% 50V BLK | DD15121300 | CD23 | CD-67/67SE | 4822 121 70544 | FILM 120 PF ± 100V | OF15121540 |
| C603 | CD-67/67SE | 4822 121 70544 | FILM 120 PF ± 0.5% 100V | OF15121540 | CD24 | CD-57 | 4822 126 11559 | CER. 120 PF ± 50V BLK | DD15121300 |
| C604 | CD-57 | 4822 126 11559 | CER. 120 PF ± 0.5% 50V BLK | DD15121300 | CD24 | CD-67/67SE | 4822 121 70544 | FILM 120 PF ± 100V | OF15121540 |
| C604 | CD-67/67SE | 4822 121 70544 | FILM 120 PF ± 0.5% 100V | OF15121540 | CF01 | | 4822 122 40589 | CER. 0.047 µF +80%-20% 50V | DA17473110 |
| C605 | CD-67/67SE | 4822 121 70437 | FILM 1000 PF ± 0.5% 100V | OF15102540 | CF02 | | 4822 124 41539 | ELECT. 47 µF M 16V | OA47601620 |
| C606 | CD-67/67SE | 4822 121 70437 | FILM 1000 PF ± 0.5% 100V | OF15102540 | CF03 | | 4822 124 40246 | ELECT. 4.7 µF M 63V | OA47506320 |
| C607 | CD-57 | 5322 122 32265 | CER. 100 PF ± 0.5% 50V BLK | DD15101300 | CF50 | | 4822 126 10408 | CER. 220 PF | DA16221110 |
| C607 | CD-67/67SE | 4822 121 70543 | FILM 100 PF ± 0.5% 100V | OF15101540 | CF51 | | 4822 126 11558 | CER. 0.1 µF 80%-20% 50V | DA17104110 |
| C608 | CD-57 | 5322 122 32265 | CER. 100 PF ± 0.5% 50V BLK | DD15101300 | CF52 | | 4822 124 41534 | ELECT. 10 µF M 25V | OA10602520 |
| C608 | CD-67/67SE | 4822 121 70543 | FILM 100 PF ± 0.5% 100V | OF15101540 | CH01 | CD-67/67SE | 4822 126 11069 | CER. 150 PF | DA16151110 |
| C611 | | 4822 124 22238 | ELECT. 100 µF M 25V | OA10702550 | CH02 | CD-67/67SE | 4822 126 11069 | CER. 150 PF | DA16151110 |
| C614 | | | | | ▲CH11 | | 4822 121 43732 | FILM 0.01 µF M 250V | DF77103500 |
| C651 | | | | | CN02 | | 4822 124 41543 | ELECT. 1 µF M 50V | OA10505020 |
| C651 | | | | | CN03 | | 4822 124 90357 | ELECT. 2.2 µF M 50V | OA22505020 |
| C654 | CD-67/67SE | 4822 124 22277 | ELECT. 470 µF M 16V | OA47701620 | CT01 | | | FILM 0.1 µF J 50V | DF15104310 |
| C655 | CD-57 | 4822 124 90364 | ELECT. 220 µF M 16V | OA22701620 | CT02 | | 4822 122 31125 | CER. 4700 PF Z 50V | DK18472310 |
| C655 | CD-67/67SE | 4822 124 80123 | ELECT. 220 µF M 16V ARS | OA22701640 | CT03 | | | CER. 2200 PF K 50V | DK16222300 |
| C656 | CD-57 | 4822 124 90364 | ELECT. 220 µF M 16V | OA22701620 | CT04 | | 4822 126 11558 | CER. 0.1 µF Z 50V | DA17104110 |
| C656 | CD-67/67SE | 4822 124 80123 | ELECT. 220 µF M 16V ARS | OA22701640 | CT10 | CD-67/67SE | 4822 122 30103 | CER. 0.022 µF Z 50V | DK18223310 |
| C657 | CD-57 | 4822 124 90364 | ELECT. 220 µF M 16V | OA22701620 | P116-CAPACITORS (COMMON) | | | | |
| C657 | CD-67/67SE | 4822 124 80123 | ELECT. 220 µF M 16V ARS | OA22701640 | ELECTROLYTIC CAPACITOR | | | | |
| C658 | CD-57 | 4822 124 90364 | ELECT. 220 µF M 16V | OA22701620 | ONE-WAY LEAD TYPE, | | | | |
| C658 | CD-67/67SE | 4822 124 80123 | ELECT. 220 µF M 16V ARS | OA22701640 | TOLERANCE ± 20% | | | | |
| C659 | CD-57 | 5322 122 32265 | CER. 100 PF ± 0.5% 50V BLK | DD15101300 | C108, C127, C128, C131, C151-C154, | | | | |
| C659 | CD-67/67SE | 4822 126 10364 | CER. 100 PF | DA16101110 | C162, CT01, CT03, | | | | |
| C660 | CD-57 | 5322 122 32265 | CER. 100 PF ± 0.5% 50V BLK | DD15101300 | C605, C606 | | | | |
| C660 | CD-67/67SE | 4822 126 10364 | CER. 100 PF | DA16101110 | P116-SEMICONDUCTORS | | | | |
| C801 | CD-57 | 4822 122 30103 | CER. 0.022 µF +80%-20% 50V | DK18223310 | D853 | | 4822 130 33759 | ZENER DIODE, 4.7V RD4.7ES O4A24.7, MTZJ4.7A | HD30471000 |
| C801 | CD-67/67SE | 4822 122 40589 | CER. 0.047 µF +80%-20% 50V | DA17473110 | DF01 | | | | |
| C802 | CD-57 | 4822 122 30103 | CER. 0.022 µF +80%-20% 50V | DK18223310 | DF04 | | 4822 130 32362 | DIODE 1SS254 30V 0.1A | HD20022210 |
| C802 | CD-67/67SE | 4822 122 40589 | CER. 0.047 µF +80%-20% 50V | DA17473110 | DF51 | | 4822 130 32362 | DIODE 1SS254 30V 0.1A | HD20022210 |
| ▲C803 | CD-57 | 4822 124 90366 | ELECT. 220 µF 50V M | OA22705020 | DF52 | | 4822 130 32362 | DIODE 1SS254 30V 0.1A | HD20022210 |
| ▲C803 | CD-67/67SE | 4822 124 80823 | ELECT. 470 µF 35V M | OA47703540 | DH01 | | | | |
| ▲C804 | CD-57 | 4822 124 90366 | ELECT. 220 µF 50V M | OA22705020 | DH10 | CD-67/67SE | 4822 130 32362 | DIODE 1SS254 30V 0.1A | HD20022210 |
| ▲C804 | CD-67/67SE | 4822 124 80823 | ELECT. 470 µF 35V M | OA47703540 | DN05 | | 4822 130 32362 | DIODE 1SS254 30V 0.1A | HD20022210 |
| C805 | CD-57 | 4822 124 90354 | ELECT. 100 µF M 16V | OA10701620 | DN06 | | 4822 130 33948 | ZENER DIODE, 5.6V RD5.6ES O4AZ5.6, MTZJ5.6A | HD30561000 |
| C805 | CD-67/67SE | 4822 124 22277 | ELECT. 470 µF 16V M | OA47701620 | DN07 | | 4822 130 32362 | DIODE 1SS254 30V 0.1A | HD20022210 |
| C806 | CD-57 | 4822 124 90354 | ELECT. 100 µF M 16V | OA10701620 | DN23 | | 4822 130 32362 | DIODE 1SS254 30V 0.1A | HD20022210 |
| C806 | CD-67/67SE | 4822 124 22277 | ELECT. 470 µF 16V M | OA47701620 | DN24 | | 4822 130 32362 | DIODE 1SS254 30V 0.1A | HD20022210 |
| C811 | | 4822 122 40589 | CER. 0.047 µF +80%-20% 50V | DA17473110 | Q102 | | 4822 209 91174 | IC CD RECORDER SAA7372GPCD7 | HC10132490 |
| C812 | | 4822 122 40589 | CER. 0.047 µF +80%-20% 50V | DA17473110 | Q106 | | 4822 209 61073 | IC TDA7073A DUAL DRIVER | HC10137490 |
| ▲C813 | | 4822 124 80582 | ELECT. 4700 µF 16V M | OA47801620 | Q107 | | 4822 209 61073 | IC TDA7073A DUAL DRIVER | HC10137490 |
| C815 | | 4822 124 80773 | ELECT. 3300 µF M 6.3V | OA33800620 | Q108 | | 4822 209 61073 | IC TDA7073A DUAL DRIVER | HC10137490 |
| ▲C852 | | 4822 124 90355 | ELECT. 100 µF 50V M | OA10705020 | Q605 | | 4822 209 31153 | IC DUAL LOW NOISE OP-AMP NJM2114D | HC10111090 |
| C853 | | 4822 124 80772 | ELECT. 47 µF M 35V | OA47603520 | Q606 | | 4822 209 31153 | IC DUAL LOW NOISE OP-AMP NJM2114D | HC10111090 |
| ▲C854 | | 4822 124 90355 | ELECT. 100 µF 50V M | OA10705020 | | | | | |
| C871 | | 4822 124 41539 | ELECT. 47 µF M 16V | OA47601620 | | | | | |
| C901 | | 4822 124 41534 | ELECT. 10 µF M 25V | OA10602520 | | | | | |

[VERS.:VERSION, U:U.S.A, F:Japan, K:Far East, /XX:Europe]

| POS. NO. | VERS. COLOR | PART NO. (For EUROPE) | DESCRIPTION | PART NO. (For U/K/F) |
|-------------------|-------------|-----------------------|--|----------------------|
| | | | PY16-FRONT CIRCUIT BOARD | |
| | | | PY16-CAPACITORS | |
| CY01 | | 4822 122 40589 | CER. 0.047 μ F +80%-20% 50V | DA17473110 |
| | | | PY16-SEMICONDUCTORS | |
| DY01 | | 4822 130 32362 | DIODE 1SS254 30V 0.1A | HD20022210 |
| DY02 | | 4822 130 32362 | DIODE 1SS254 30V 0.1A | HD20022210 |
| DY03 | | 4822 130 32362 | DIODE 1SS254 30V 0.1A | HD20022210 |
| DY04 | | 4822 130 32362 | DIODE 1SS254 30V 0.1A | HD20022210 |
| | | | PY16-RESISTORS(COMMON) | |
| | | | CARBON FILM FIXED RESISTOR, \pm 5% 1/6W: RY01 | |
| | | | PY16-MISCELLANEOUS | |
| | | | R*** | |
| SY01 & SY24 | | 4822 276 20508 | PUSH SWITCH | SP01011280 |
| VY01 | | 4822 130 91287 | DISPLAY UNIT 9MT131GK FTD | HQ30914410 |