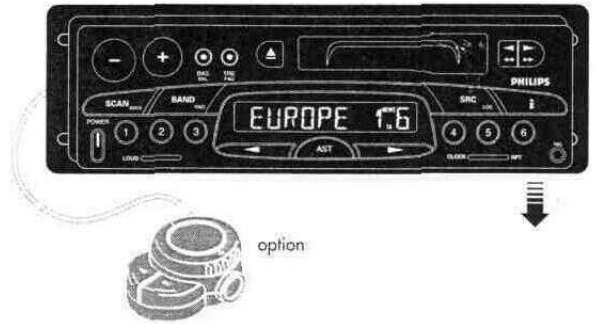


Service
Service
Service



Service Manual

For repair information of the Cassette deck see Service Manual of Auto Cassette Deck CDS-36PS3.

12 V

| Table of contents | Page |
|--------------------------------------|------|
| Reference table | 1 |
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Reference Table

| | RDS (TA) | 2CH LINE OUT | REMOTE CONTROL | CDCC | TEL_MUTE | CLOCK | INSTALL |
|----------|----------|--------------|----------------|------|----------|-------|---------|
| RC438/00 | X | X | X | X | X | X | |
| RC438/10 | | X | X | X | X | X | X |
| RC438/12 | | X | X | X | X | X | X |
| RC408/00 | X | | X | | X | X | |
| RC408/10 | | | | | X | X | X |
| RC408/12 | | | | | X | | X |

Technical Specifications

General

| | | |
|------------------------------|---|--------------|
| Power Supply | : | 10.5 - 16.0V |
| Quiescent Current (at 12.6V) | : | < 3.0mA |
| Fuse | : | 10A |

Radio

| | | |
|-----------------------------|---|-------------------|
| FM | : | 87.5 - 108MHz |
| LW | : | 144 - 288kHz |
| MW | : | 531 - 1629kHz |
| IF-FM (1/2) | : | 10.7MHz/72.2MHz |
| IF-AM(1/2) | : | 10.7MHz/450kHz |
| α - 3dB | : | 5 \pm 3 μ V |
| FM sensitivity for 26dB S/N | : | <=5 μ V |
| MW sensitivity for 26dB S/N | : | <=50 μ V |
| LW sensitivity for 26dB S/N | : | <=38 μ V |

Cassette Deck CDS-AST

| | | |
|-----------------|---|------------------------|
| Number | : | 2 X 2 |
| Tapespeed | : | 4.76cm/second +3% - 1% |
| Wow and Flutter | : | 0.3% |
| Cross talk | : | > 45dB |

Amplifier

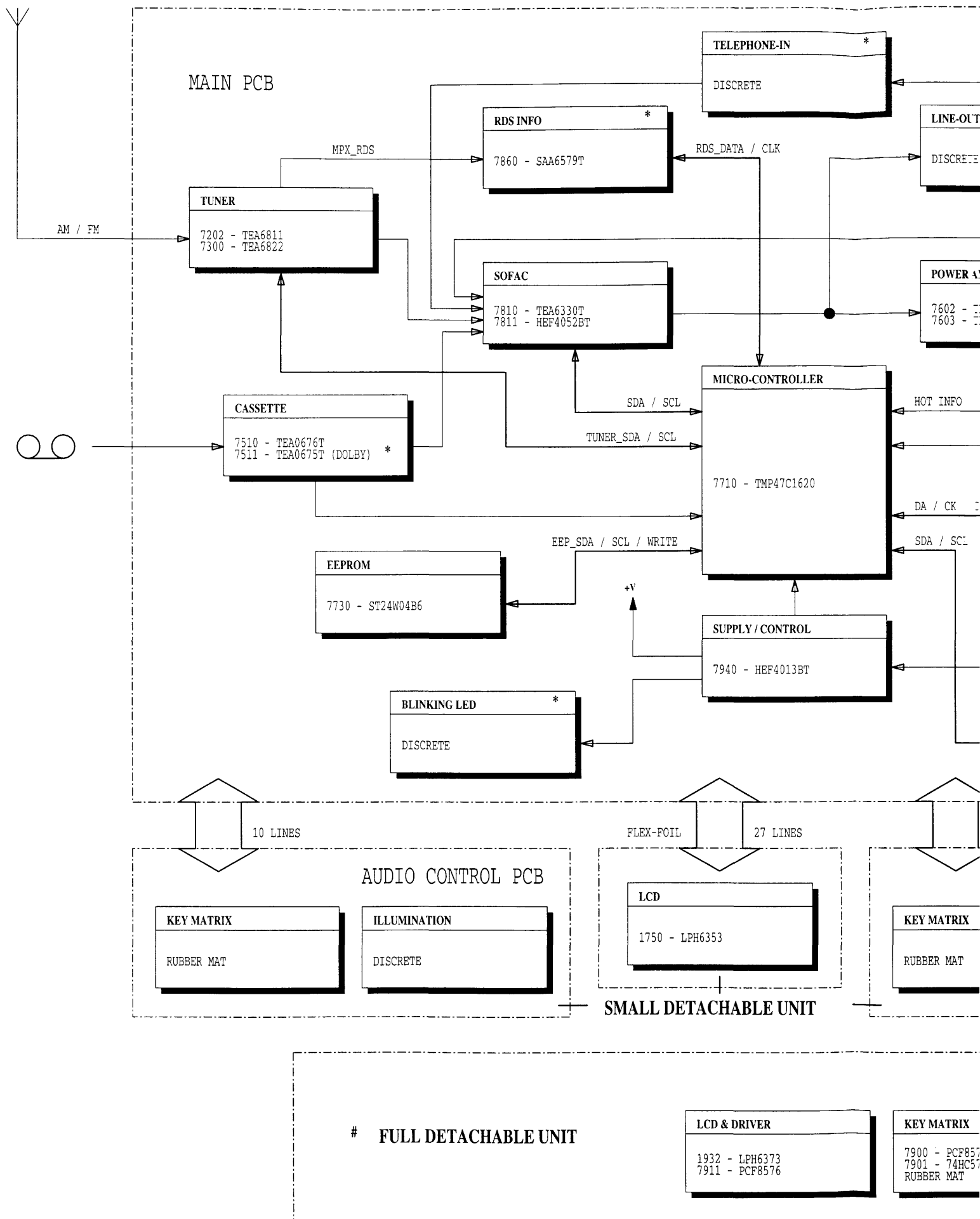
| | | |
|--------------------------|---|----------------------------|
| Output Power (D=10%) | : | 4x20W \pm 1dB/4 Ω |
| Loudness | : | 8 \pm 2dB at 60Hz |
| Bass | : | 12 \pm 2dB at 60Hz |
| Treble | : | 10 \pm 2dB at 10kHz |
| Max. line out current *) | : | 500mA |
| Max. line out voltage *) | : | 1V |

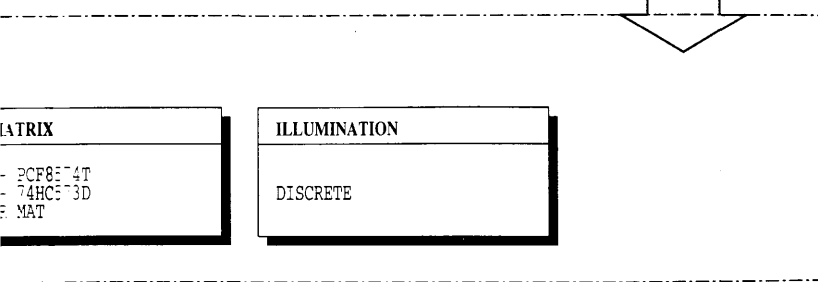
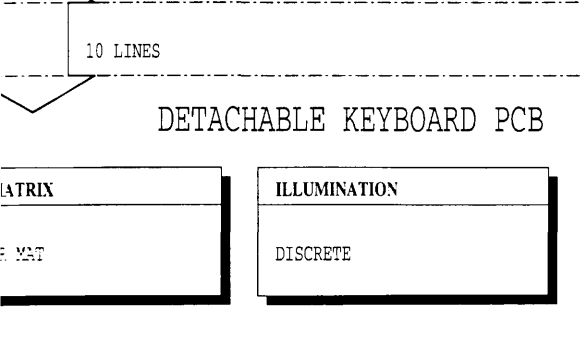
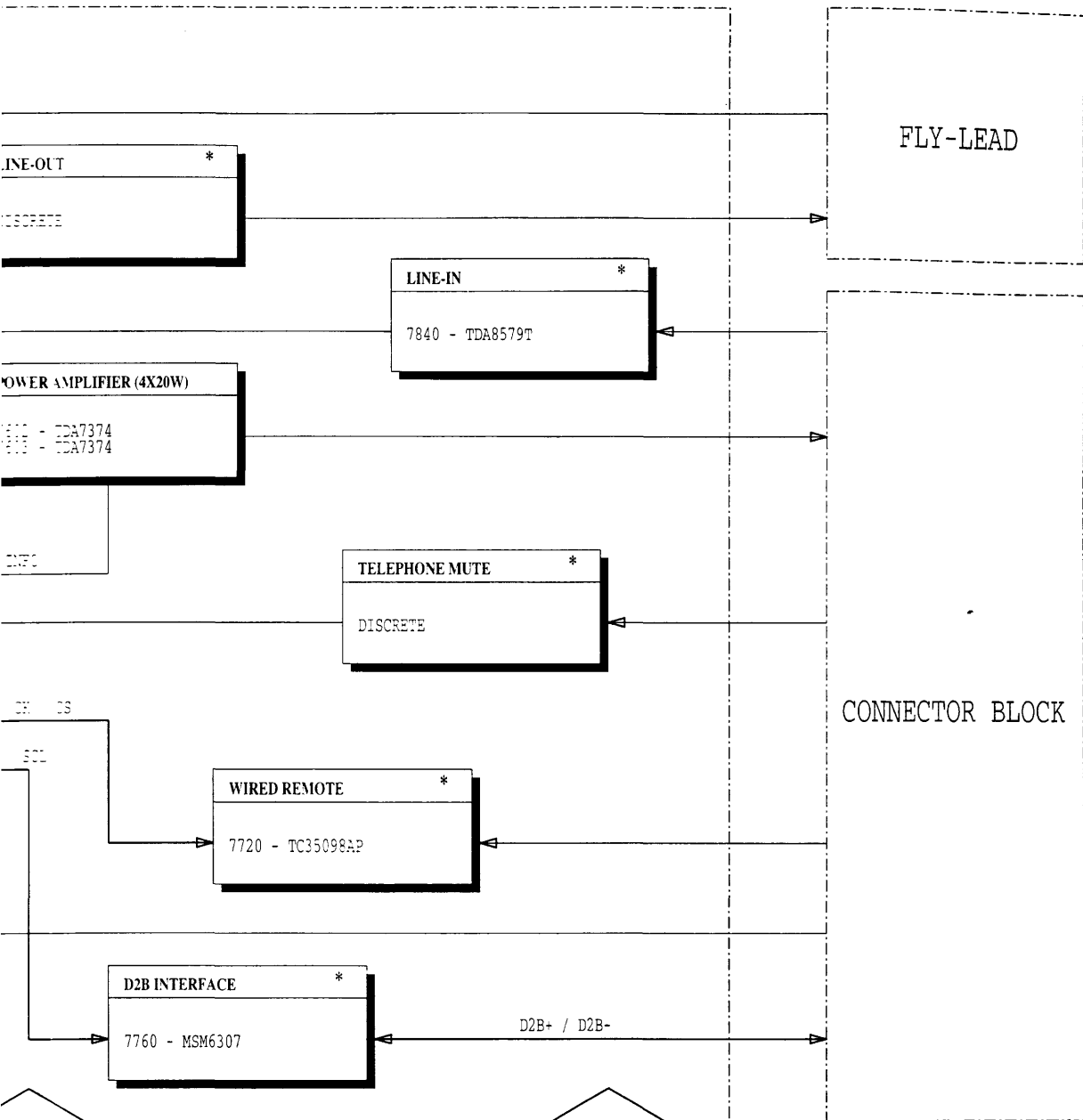
Tuner range table

| Area | Bands | Frequency | Grids Manual/Search |
|--------|-------|---------------|---------------------|
| Europe | FM | 87.5 - 108MHz | 50kHz/100kHz |
| | LW | 144 - 288kHz | 1kHz |
| | MW | 531 - 1629kHz | 1kHz/9kHz |
| USA | FM | 87.5 - 108MHz | 50kHz/100kHz |
| | AM | 530 - 1710kHz | 1kHz/10kHz |
| JAPAN | FM | 76.0 - 90MHz | 50kHz/100kHz |
| | MW | 531 - 1629kHz | 1kHz/9kHz |

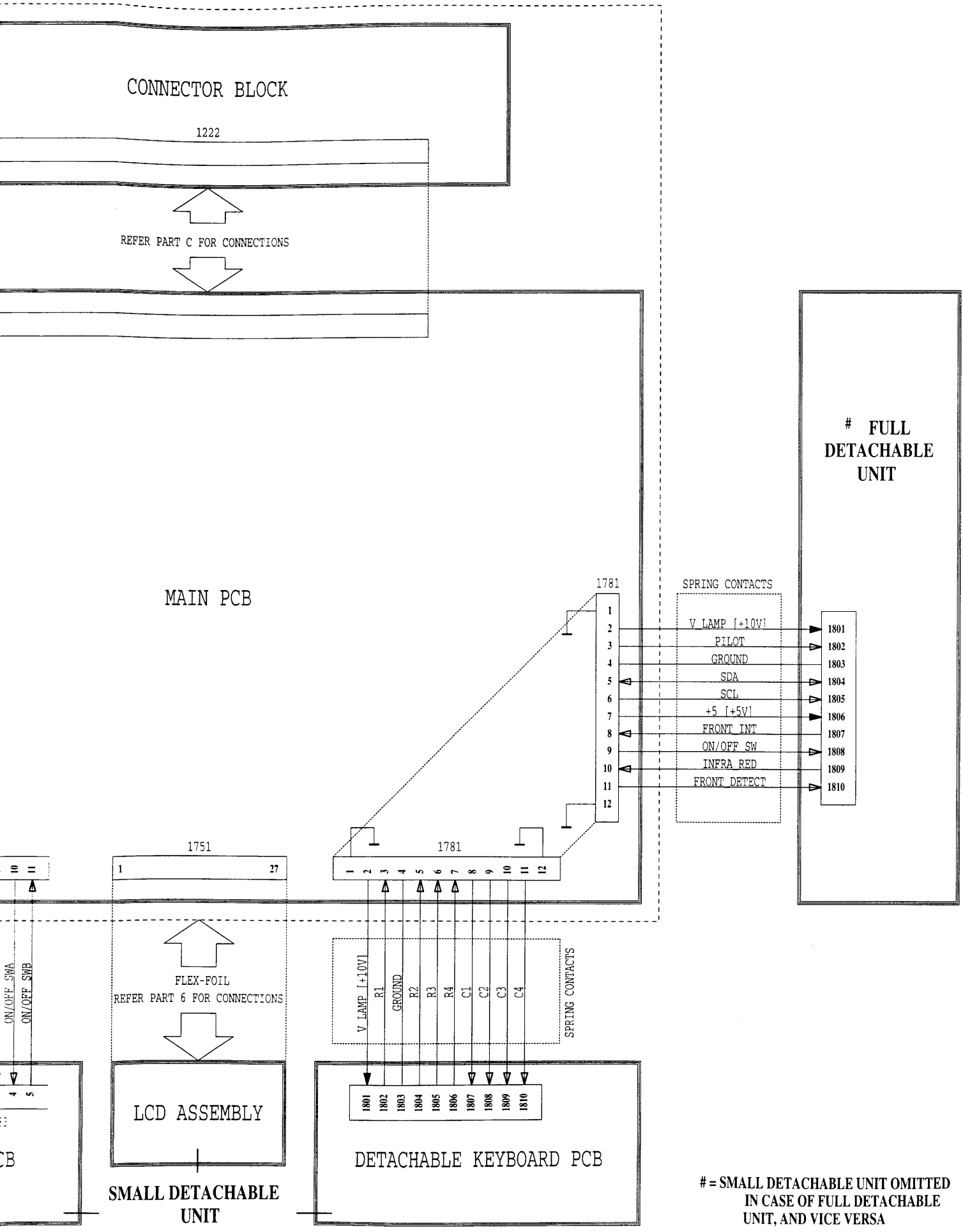
*) See Reference Table

ART A : ELECTRICAL ARCHITECTURE





*** = OPTION**
= SMALL DETACHABLE UNIT OMITTED IN CASE OF FULL DETACHABLE UNIT, AND VICE VERSA

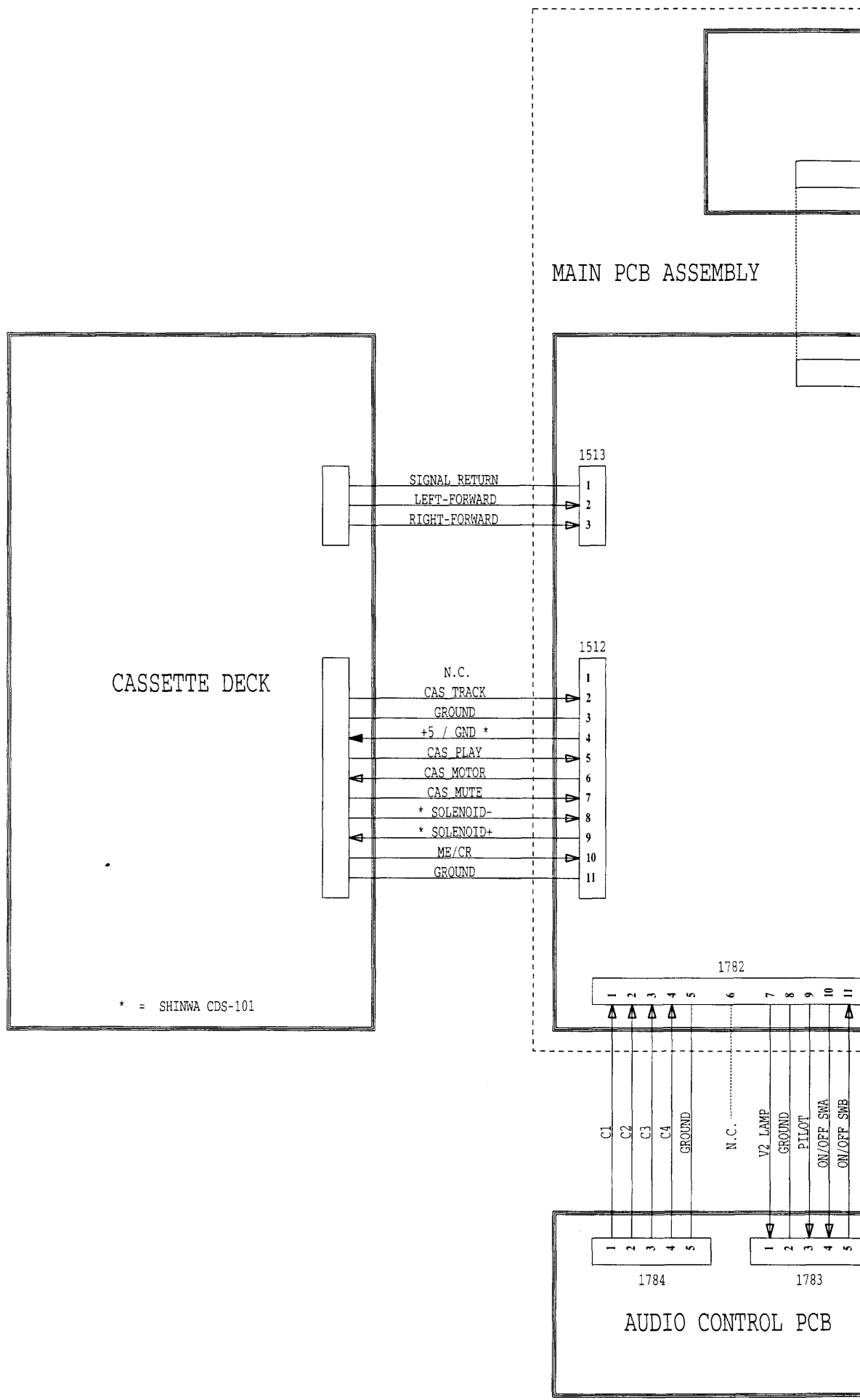


PART B : WIRING DIAGRAM

to dashboard/centre console

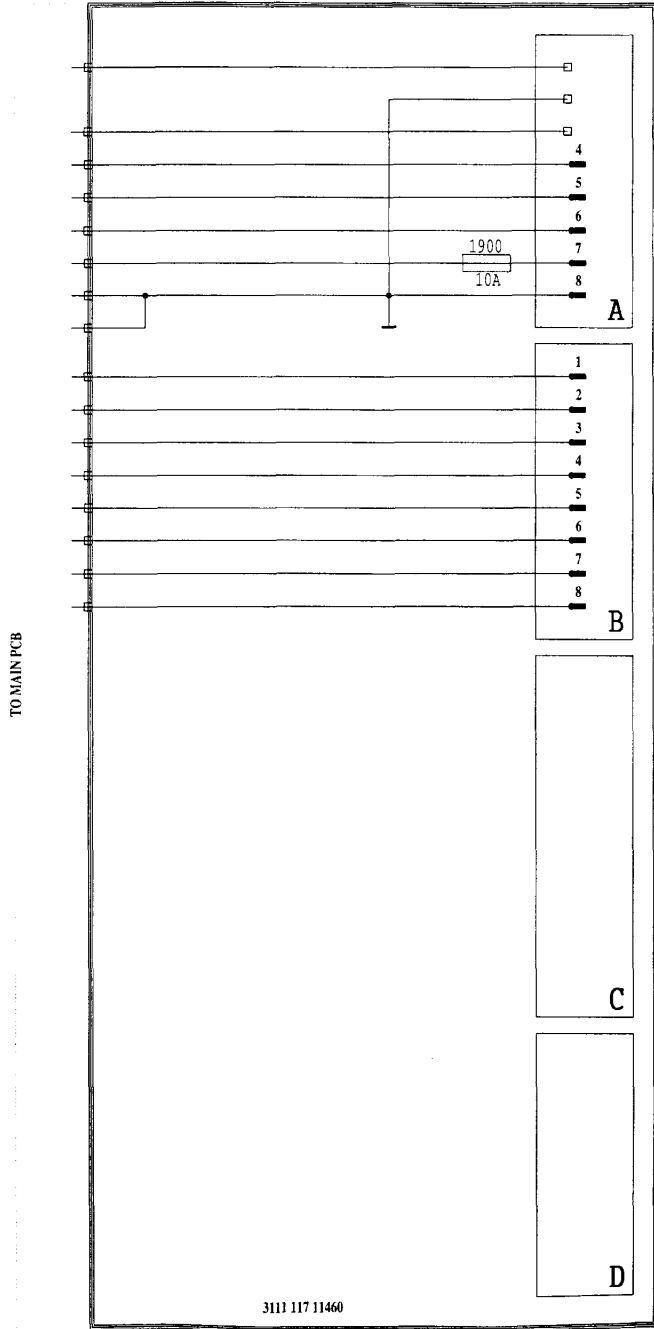
Replace with a blade-type fuse of the correct rating.
INTERFERENCE SUPPRESSION
 Most modern cars have sufficient interference suppression. If you experience interference generated by the car, consult your garage.

Note : Do not use improper screw. The maximum usable size is 'M5x6 screw'. Using other screw can result in damage of the unit.



PART C : CONNECTOR BLOCK

4X20W CONNECTOR BLOCK

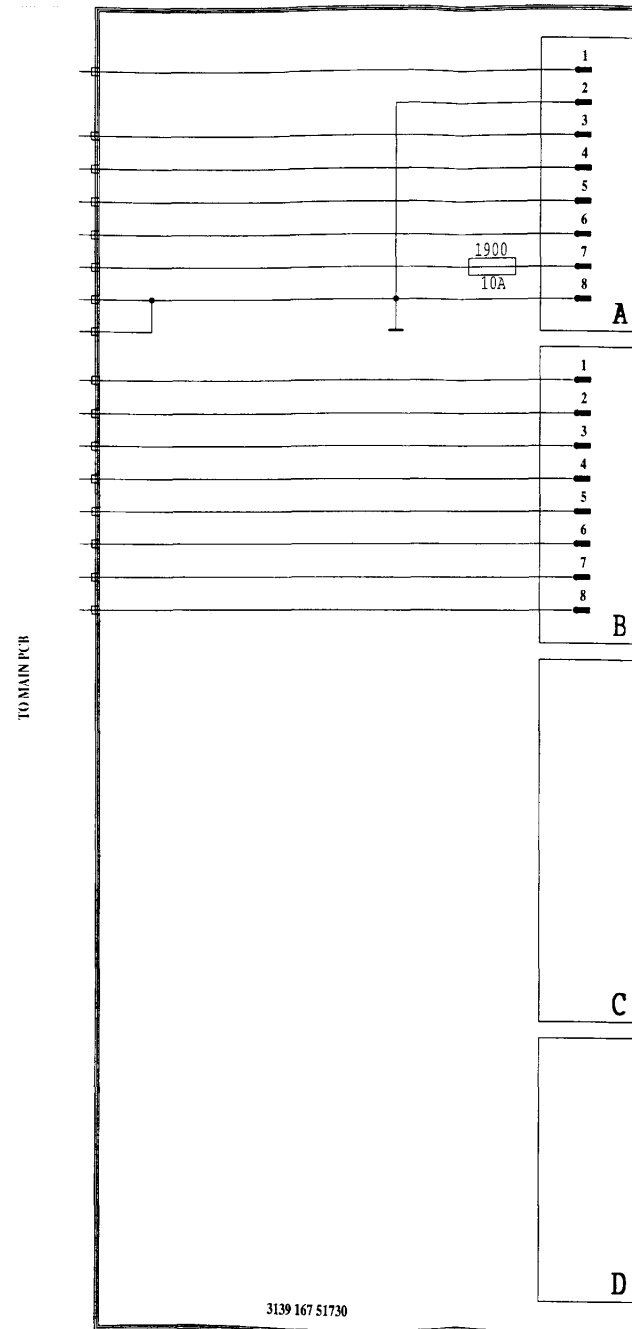


- N.C.
- N.C.
- N.C.
- PERMANENT PLUS
- AUTO AERIAL
- PILOT / EXTERNAL ILLUMINATION
- IGNITION PLUS
- POWER GROUND
- + REAR RIGHT
- + FRONT RIGHT
- + FRONT LEFT
- + REAR LEFT

3111 117 11460

FOR RC628/00, RC638/10, RC638/80, RC408/10, RC408/12

4X20W CONNECTOR BLOCK

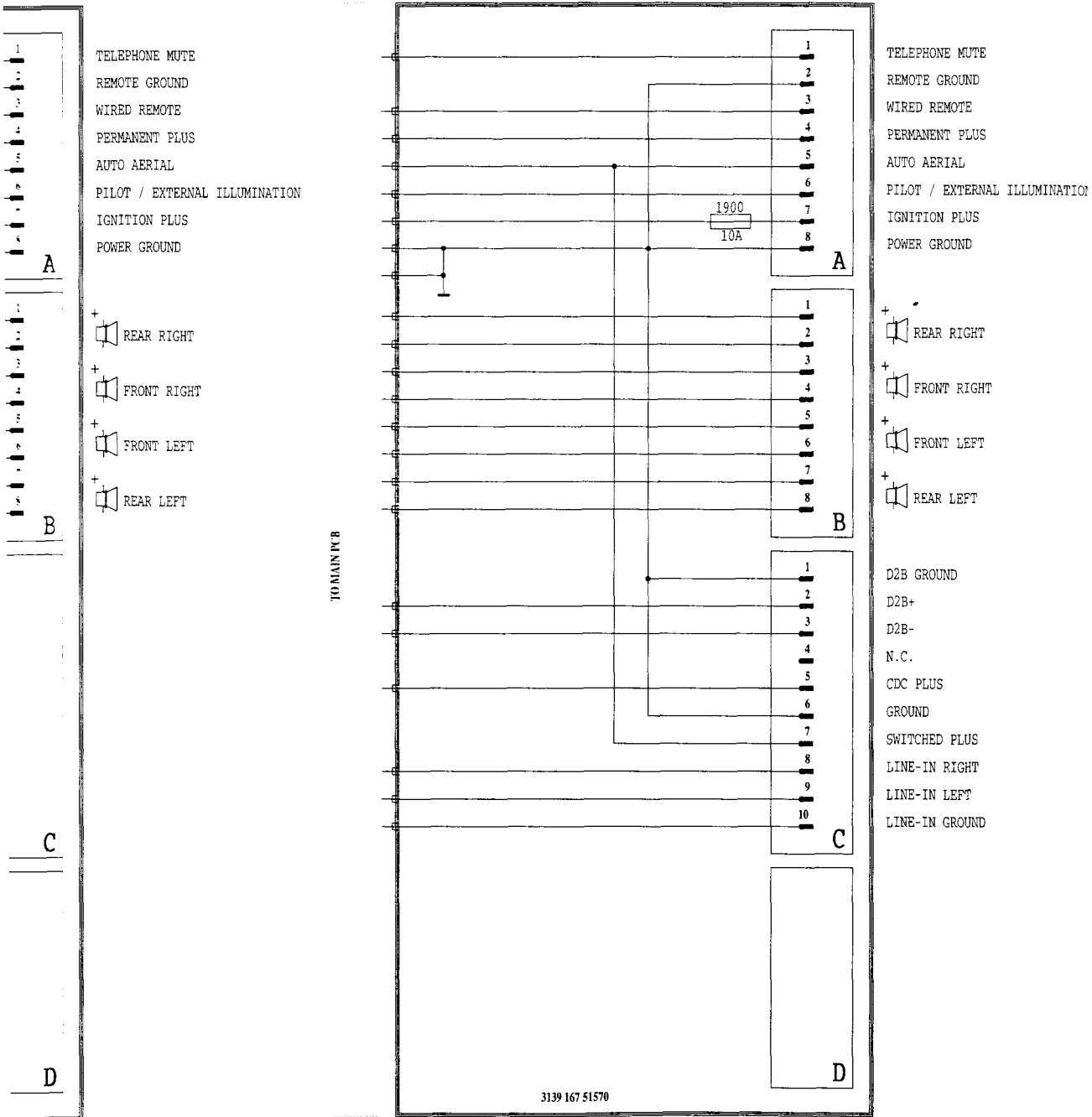


TO MAIN PCB

3139 167 51730

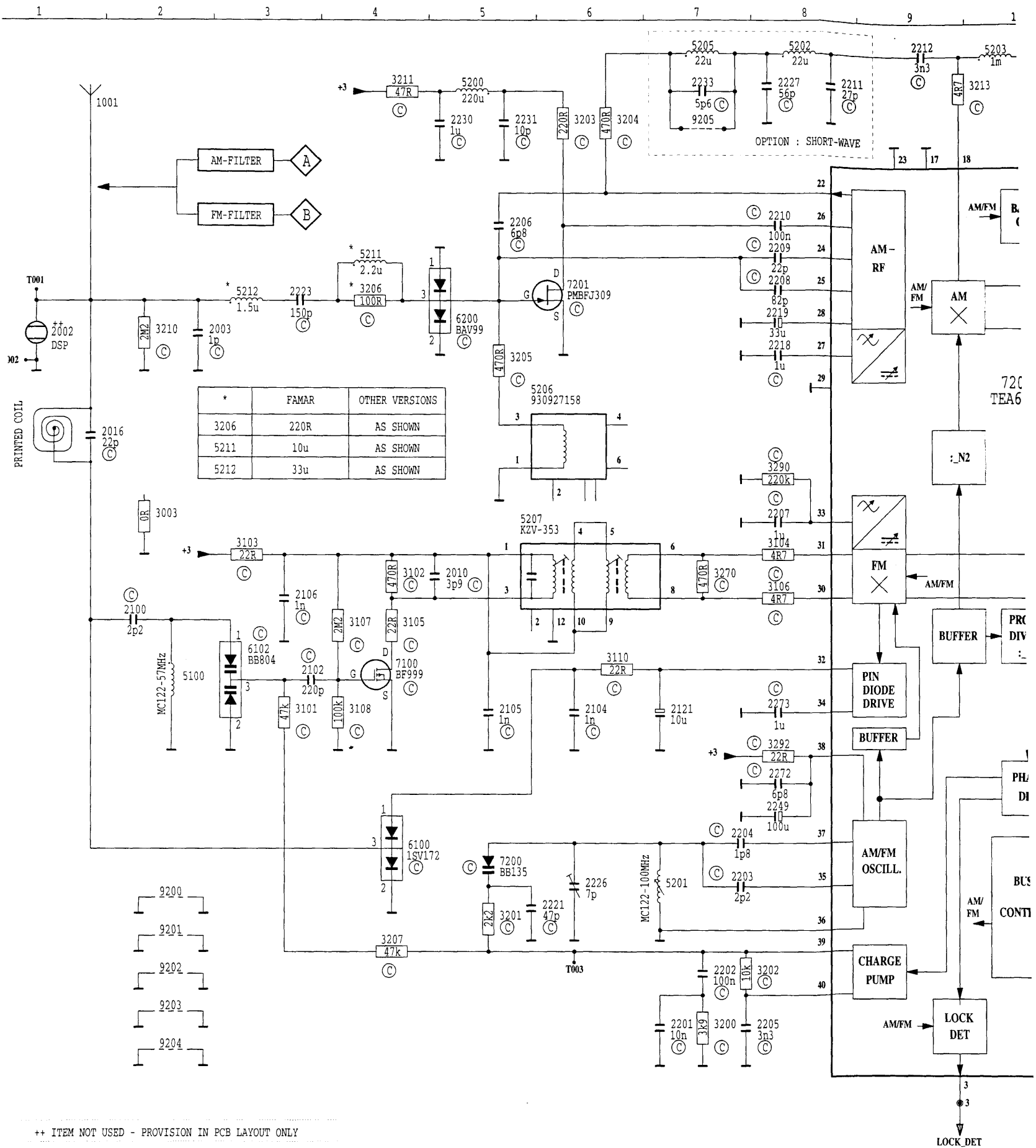
FOR RC638/12, RC648/00, RC408/00

4X20W CONNECTOR BLOCK



FOR RC348/00, RC348/30, RC348/97, RC388/00, RC448/30, RC468/00
RC338/10, RC438/00, RC438/10, RC438/12

RT 1 : TUNER IC91 (MAIN PCB)



++ ITEM NOT USED - PROVISION IN PCB LAYOUT ONLY

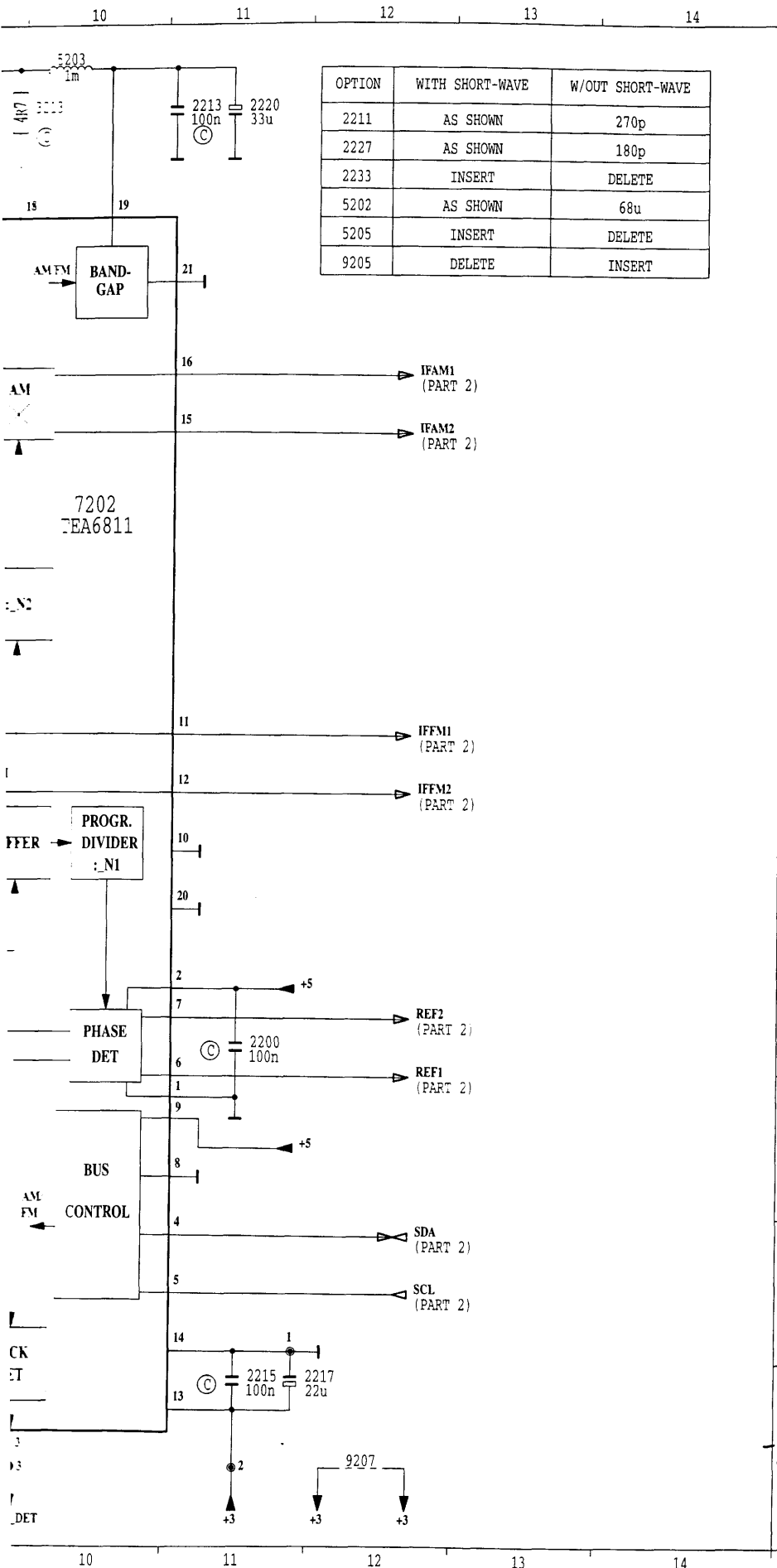
..... J11/A4/E2/G7
 G12/H6
 C12

IFAM2 C12
 IFFM1 E12
 IFFM2 F12

LOCK_DET J9
 REF1 H12
 REF2 G12

SCL I12
 SDA I12
 T001 C1

T002
 T003



| OPTION | WITH SHORT-WAVE | W/OUT SHORT-WAVE |
|--------|-----------------|------------------|
| 2211 | AS SHOWN | 270p |
| 2227 | AS SHOWN | 180p |
| 2233 | INSERT | DELETE |
| 5202 | AS SHOWN | 68u |
| 5205 | INSERT | DELETE |
| 9205 | DELETE | INSERT |

- 1001 A 2
- 2002 C 1
- 2003 C 1
- 2010 D 1
- 2016 D 1
- 2100 E 1
- 2102 E 1
- 2104 E 1
- 2105 E 1
- 2106 E 1
- 2121 G 1
- 2200 G 11
- 2201 J 7
- 2202 J 7
- 2203 J 7
- 2204 H 7
- 2205 H 7
- 2206 J 7
- 2207 E 1
- 2208 C 1
- 2209 E 1
- 2210 E 1
- 2211 A 1
- 2212 A 1
- 2213 A 11
- 2215 J 11
- 2217 J 11
- 2218 C 1
- 2219 C 1
- 2220 A 11
- 2221 H 1
- 2223 C 1
- 2226 H 1
- 2227 A 1
- 2230 A 1
- 2231 A 1
- 2233 A 1
- 2249 H 1
- 2272 G 1
- 2273 G 1
- 3003 E 1
- 3101 E 1
- 3102 E 1
- 3103 E 1
- 3104 E 1
- 3105 F 1
- 3106 E 1
- 3107 F 1
- 3108 G 1
- 3110 F 1
- 3200 J 7
- 3201 I 5
- 3202 I 5
- 3203 A 6
- 3204 A 6
- 3205 C 5
- 3206 C 4
- 3207 I 4
- 3210 C 2
- 3211 A 4
- 3213 A 10
- 3270 E 7
- 3290 D 8
- 3292 G 8
- 5100 F 2
- 5200 A 5
- 5201 H 7
- 5202 A 8
- 5203 A 10
- 5205 A 7
- 5206 D 5
- 5207 E 5
- 5211 B 4
- 5212 C 3
- 6100 H 4
- 6102 F 4
- 6200 C 1
- 7100 H 1
- 7200 H 1
- 7201 C 1
- 7202 D 10
- 9200 H 2
- 9201 I 2
- 9202 I 2
- 9203 I 2
- 9204 J 2
- 9205 A 7
- 9207 J 12

Voltage measured in FM mode with
A4 = 14.4V
A7 = 14.4V
 unless otherwise stated.

(OFF) = Power off
 (ON) = Power on

- +1 +14.4V
- +2 +13.8V
- +3a, +3b 8.5V
- +4 +5V
- +5, +5a, +5b +5V
- +7 +5V
- +CDCC 14.4V
- Vref 5V
- V_LAMP 10V

7100 BF999
 G 0.4V
 D 8V
 S 0V

7201 PMBF J309
 G 5V
 D 8V
 S 0V

T002 C1
 T003 I6

Voltage measured in FM mode with
A4 = 14.4V
A7 = 14.4V
unless otherwise stated.

(OFF) = Power off
(ON) = Power on

| | |
|-------------|--------|
| +1 | +14.4V |
| +2 | +13.8V |
| +3a, +3b | 8.5V |
| +4 | +5V |
| +5, +5a,+5b | +5V |
| +7 | +5V |
| +CDCC | 14.4V |
| Vref | 5V |
| V_LAMP | 10V |

7100 BF999

| | |
|---|------|
| G | 0.4V |
| D | 8V |
| S | 0V |

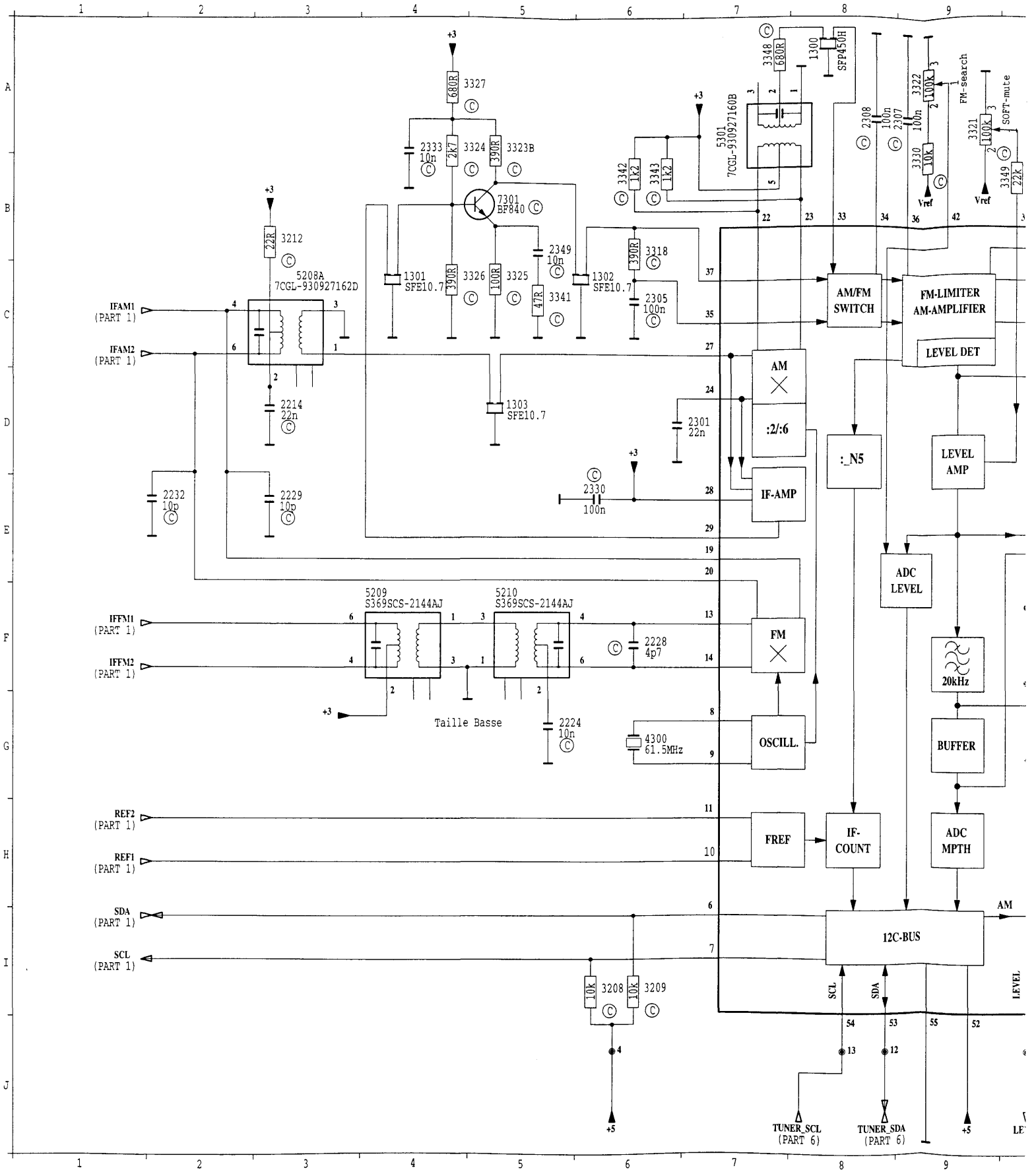
7201 PMBF J309

| | |
|---|----|
| G | 5V |
| D | 8V |
| S | 0V |

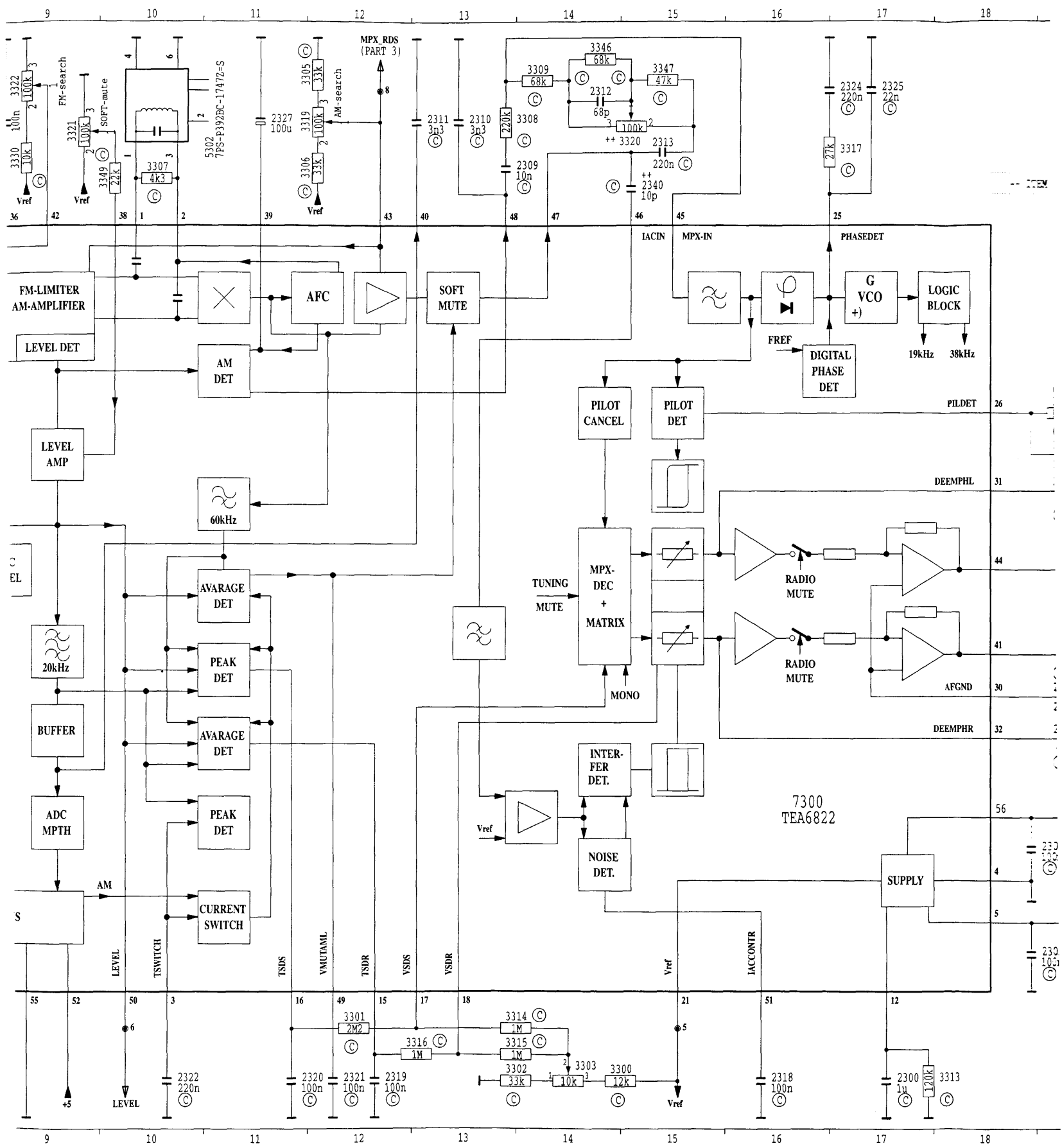
7202 TEA6811

| | |
|----|-----------------------------------|
| 1 | 0V |
| 2 | 5V |
| 3 | 5V |
| 4 | 5V |
| 5 | 5V |
| 6 | Pulse waveform 0.24v p-p 5V dc |
| 7 | Pulse waveform 0.24v p-p 5V dc |
| 8 | 0V |
| 9 | 5V |
| 10 | 0V |
| 11 | 8.5V |
| 12 | 8.5V |
| 13 | 8.5V |
| 14 | 0V |
| 15 | 8.5V |
| 16 | 8.5V |
| 17 | 0V |
| 18 | 0V |
| 19 | 0V |
| 20 | 0V |
| 21 | 0V |
| 22 | 0V |
| 23 | 0V |
| 24 | 0V |
| 25 | 0V |
| 26 | 0V |
| 27 | 0V |
| 28 | 0V |
| 29 | 0V |
| 30 | 3.1V |
| 31 | 3.1V |
| 32 | 0V |
| 33 | 4.3V |
| 34 | 4.2V |
| 35 | 2.6V |
| 36 | 0V |
| 37 | 6.1V |
| 38 | 8.2V |
| 39 | 3.6V |
| 40 | 3.6V |

PART 2 : TUNER IC91 (MAIN PCB)

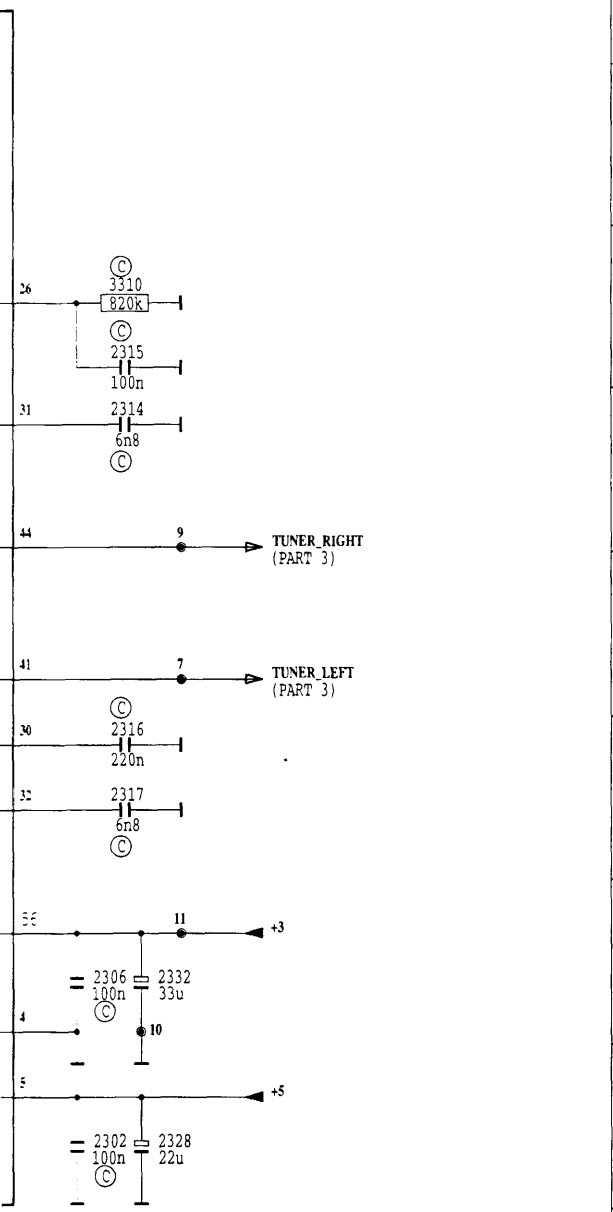


- | | | | | | | | |
|-------------|--------------------|-------------|----|-------------|-----|------------|----|
| +3b | H20/G3/D6/B3/A4/A6 | IFAM2 | C1 | LEVEL | J10 | REF2 | H1 |
| +5b | I20/J9/J6 | IFFM1 | F1 | MPX_RDS... | A12 | SCL | I1 |
| IFAM1 | C1 | IFFM2 | F1 | REF1 | H1 | SDA | I1 |



..... H1 TUNER_LEFT F20 TUNER_SDA J8
 I1 TUNER_RIGHT E20 Vref J15/B9/B12
 I1 TUNER_SCL J8

-- ITEM NOT USED - PROVISION IN PCB LAYOUT ONLY



Voltage measured in FM mode with
A4 = 14.4V
A7 = 14.4V
unless otherwise stated.

(OFF) = Power off
 (ON) = Power on

7300 TEA6822
(continue.....)

| | | |
|-----------|--------------|--------|
| 1 | +1 | +14.4V |
| 2 | +2 | +13.8V |
| 3a, 3b | +3a, +3b | 8.5V |
| 4 | +4 | +5V |
| 5, 5a, 5b | +5, +5a, +5b | +5V |
| 7 | +7 | +5V |
| +CDCC | +CDCC | 14.4V |
| Vref | Vref | 5V |
| V_LAMP | V_LAMP | 10V |

(continue.....)

| | |
|----|--------------|
| 33 | 0.7V |
| 34 | 1V |
| 35 | 2.8V |
| 36 | 2.8V |
| 37 | 2.8V |
| 38 | 2.6V |
| 39 | 3.2V |
| 40 | 0.6V |
| 41 | Radio Left |
| 42 | 0V |
| 43 | MPX_RDS |
| 44 | Radio Right |
| 45 | 2.9V |
| 46 | 0V |
| 47 | Audio signal |
| 48 | 5V |
| 49 | 5V |
| 50 | 4.5V |
| 51 | 6V |
| 52 | 5V |
| 53 | Data |
| 54 | Data |
| 55 | 0V |
| 56 | 8.5V |

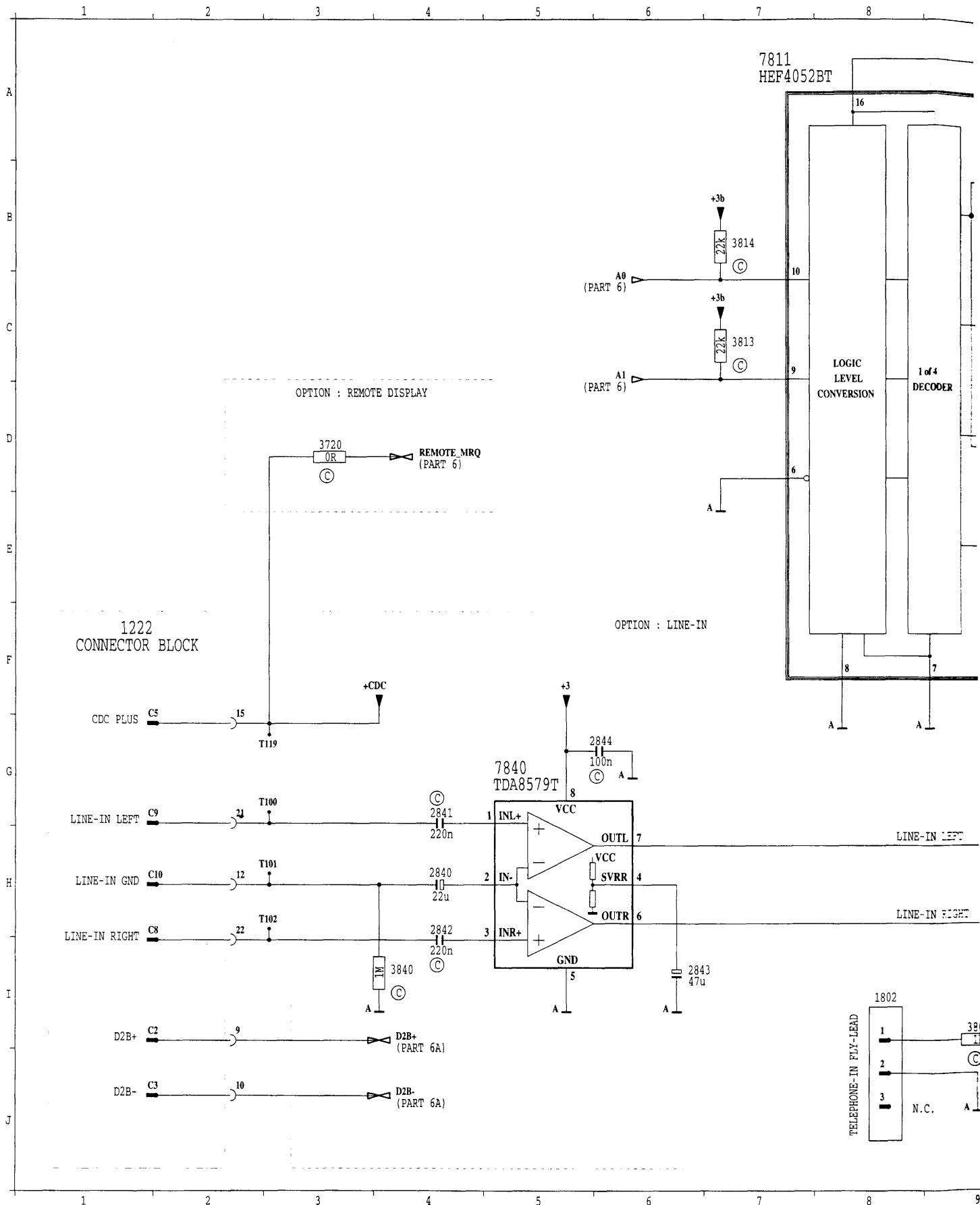
7300 TEA6822

| | |
|----|--------------------------|
| 1 | 4V |
| 2 | 4V |
| 3 | 1V |
| 4 | 0V |
| 5 | 5V |
| 6 | 5V |
| 7 | 5V |
| 8 | 4V |
| 9 | 4V |
| 10 | Pulse waveform 0.24V p-p |
| 11 | Pulse waveform 0.24V p-p |
| 12 | 5V |
| 13 | 2.2V |
| 14 | 2.2V |
| 15 | 4.5V |
| 16 | 4.5V |
| 17 | 2.5V |
| 18 | 2.5V |
| 19 | 8.5V |
| 20 | 8.5V |
| 21 | 5V |
| 22 | 8.5V |
| 23 | 8.5V |
| 24 | 3V |
| 25 | 5V |
| 26 | 3.6V |
| 27 | 3V |
| 28 | 8.5V |
| 29 | 6V |
| 30 | 1.8V |
| 31 | 2.3V |
| 32 | 2.3V |

7301 BF840

| | |
|---|------|
| C | 6.4V |
| B | 1V |
| E | 0.2V |

PART 3 : RDS, SOFAC, LINE-IN & TELEPHONE-IN (MAIN PCB)

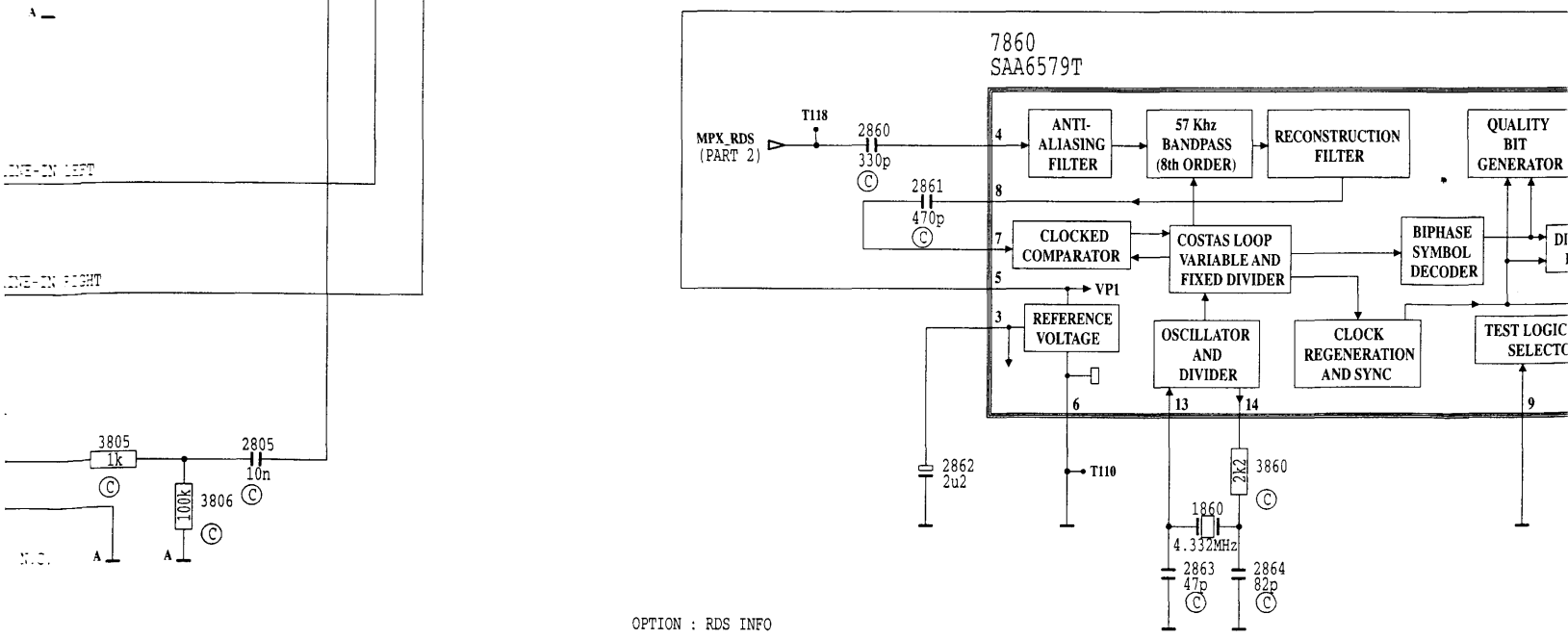
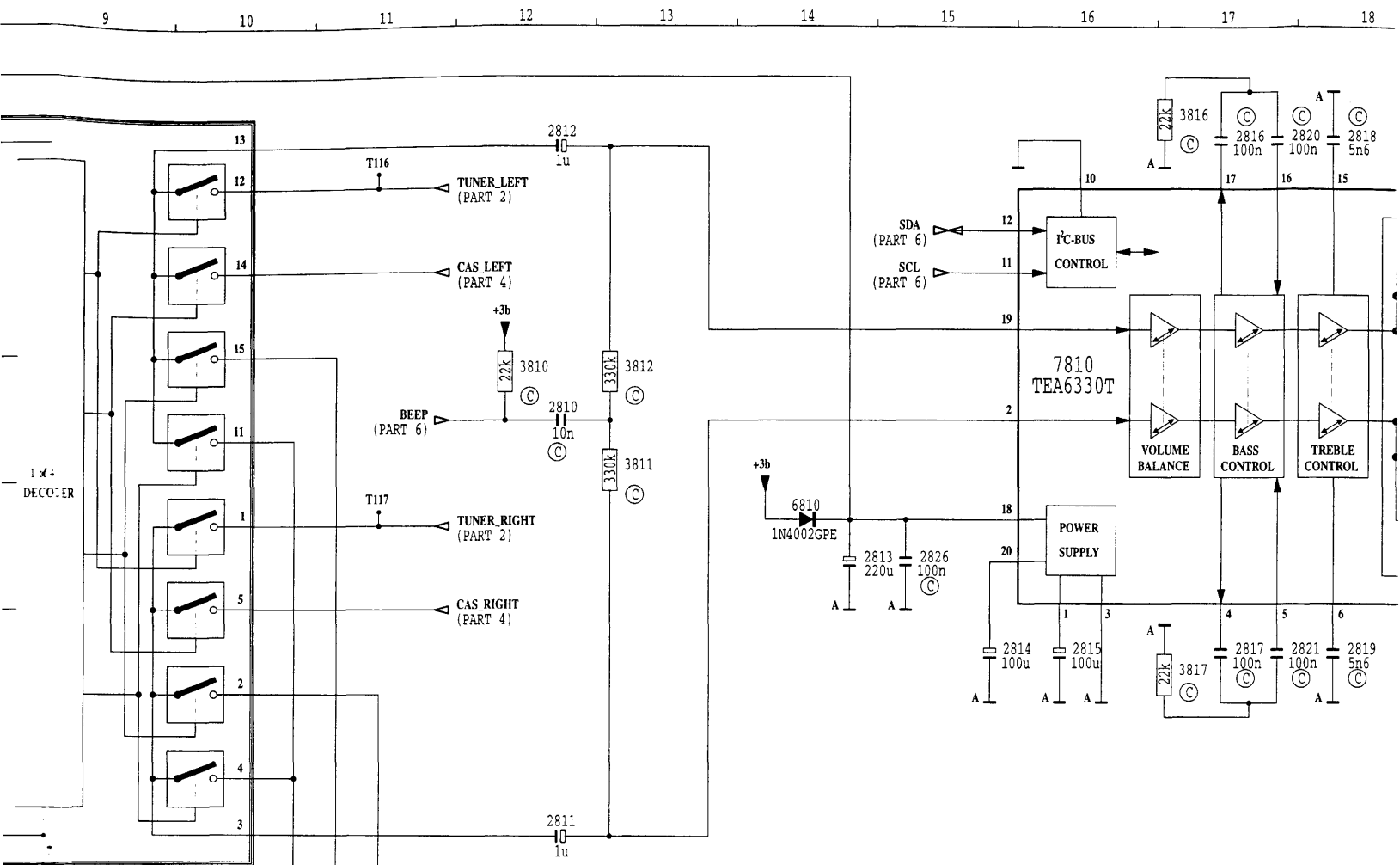


+3b B7/F5/D14
 +5 G21
 +CDC F4
 A0 B6
 A1 C6

BEEP C11
 CAS_LEFT B12
 CAS_RIGHT D12
 CDC PLUS F1
 D2B+ I1

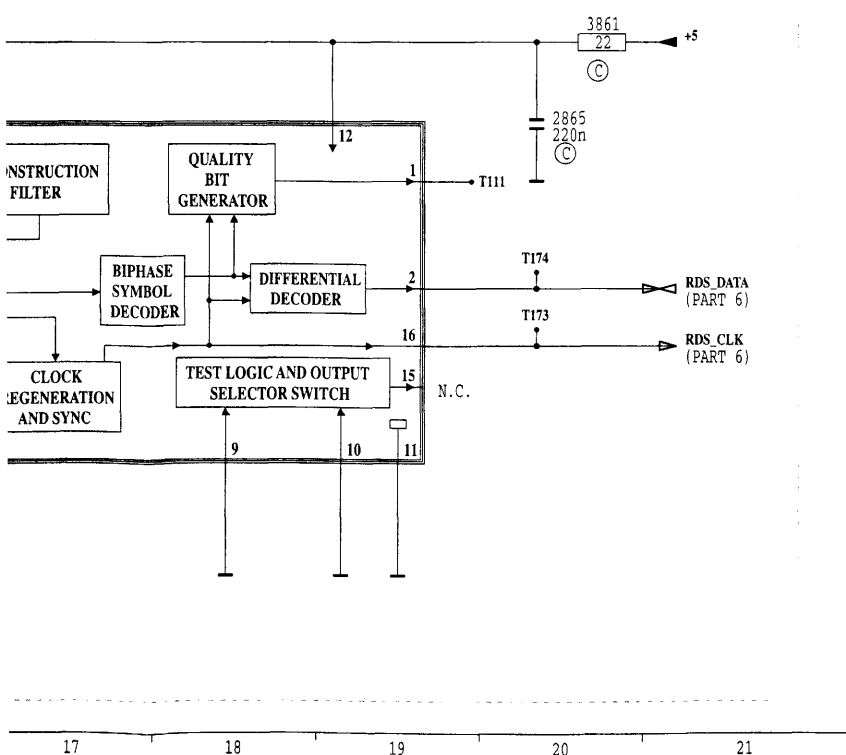
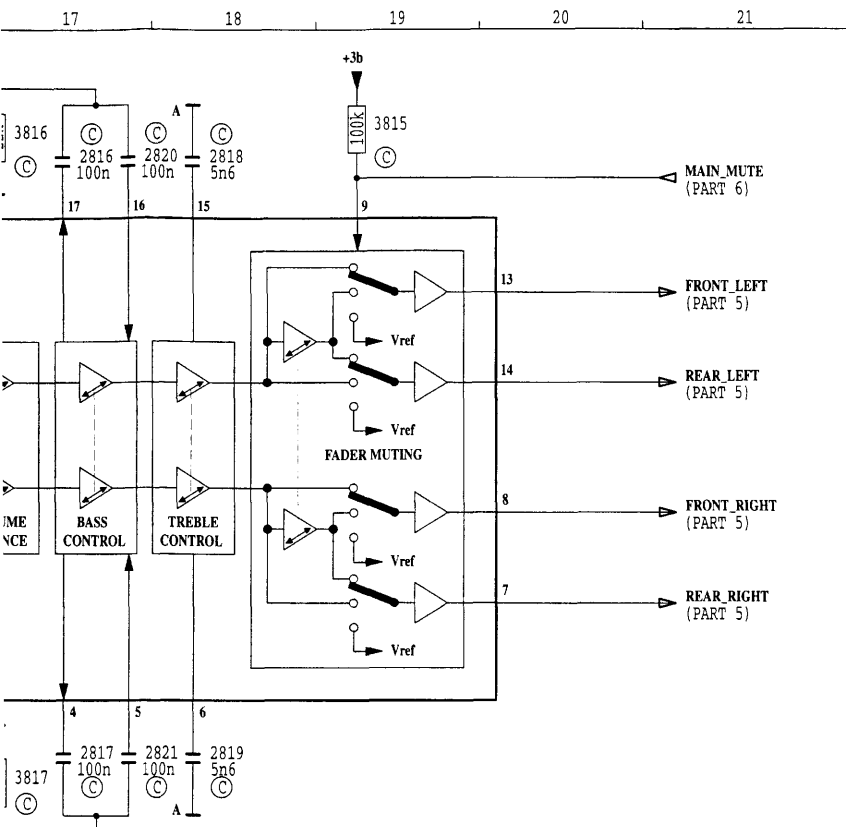
D2B- J1
 FRONT_LEFT B21
 FRONT_RIGHT C21
 LINE-IN GND H1
 LINE-IN LEFT G1

LINE-IN L
 LINE-IN F
 LINE-IN F
 MAN_MU
 MPX_RD



OPTION : RDS INFO

| | | | |
|------------------------|----------------------|----------------|----------------------|
| LINE-IN LEFT H9 | RDS_CLK H21 | SCL B15 | T117 D11 |
| LINE-IN RIGHT H1 | RDS_DATA H21 | SDA B15 | T118 G14 |
| LINE-IN RIGHT H9 | REAR_LEFT B21 | T110 J15 | T173 H20 |
| MAN_MUTE A21 | REAR_RIGHT D21 | T111 H19 | T174 H20 |
| MPX_RDS G13 | REMOTE_MRQ D4 | T116 A11 | TUNER_LEFT A12 |



Voltage measured in FM mode with
A4 = 14.4V
A7 = 14.4V
 unless otherwise stated.

(OFF) = Power off
 (ON) = Power on

1222 F 1
 1802 I 8
 1860 J16
 2805 I10
 2810 C12
 2811 F12
 2812 D13
 2813 D15
 2814 E15
 2815 E16
 2816 A17
 2817 E17
 2818 A18
 2819 E18
 2820 A18
 2821 E18
 2826 D15
 2840 H 4
 2841 G 4
 2842 H 4
 2843 I 6
 2844 G 6
 2860 G14
 2861 H14
 2862 I14
 2863 J16
 2864 J16
 2865 G20
 3720 D 3
 3805 I 9
 3806 J10
 3810 C12
 3811 C13
 3812 C13
 3813 C 7
 3814 B 7
 3815 A19
 3816 A17
 3817 E17
 3840 I 4
 3860 I16
 3861 F20
 6810 D14
 7810 C16
 7811 A 7
 7840 G 5
 7860 G15

| 7811 HEF4052BT | |
|----------------|-------|
| 1 | 4V |
| 2 | 4.48V |
| 3 | 4V |
| 4 | 0V |
| 5 | 4V |
| 6 | GND |
| 7 | GND |
| 8 | GND |
| 9 | 0V |
| 10 | 0V |
| 11 | 0V |

| 7860 SAA6579T/V1 | |
|------------------|-------------------|
| 1 | Square wave 5Vp-p |
| 2 | Square wave 5Vp-p |
| 3 | 2.5V |
| 4 | Audio signal |
| 5 | 5V |
| 6 | <0.5V |
| 7 | Audio signal |
| 8 | Audio signal |
| 9 | 0V |
| 10 | 0V |
| 11 | 0V |
| 12 | 5V |
| 13 | Sine wave 0.6Vp-p |
| 14 | Sine wave 3.2Vp-p |
| 15 | N.C. |
| 16 | Square wave 5Vp-p |

| 7840 TDA8579T | |
|---------------|------|
| 1 | 4.9V |
| 2 | 5.1V |
| 3 | 4.9V |
| 4 | 5.3V |
| 5 | GND |
| 6 | 4.5V |
| 7 | 4.5V |
| 8 | 8.5V |

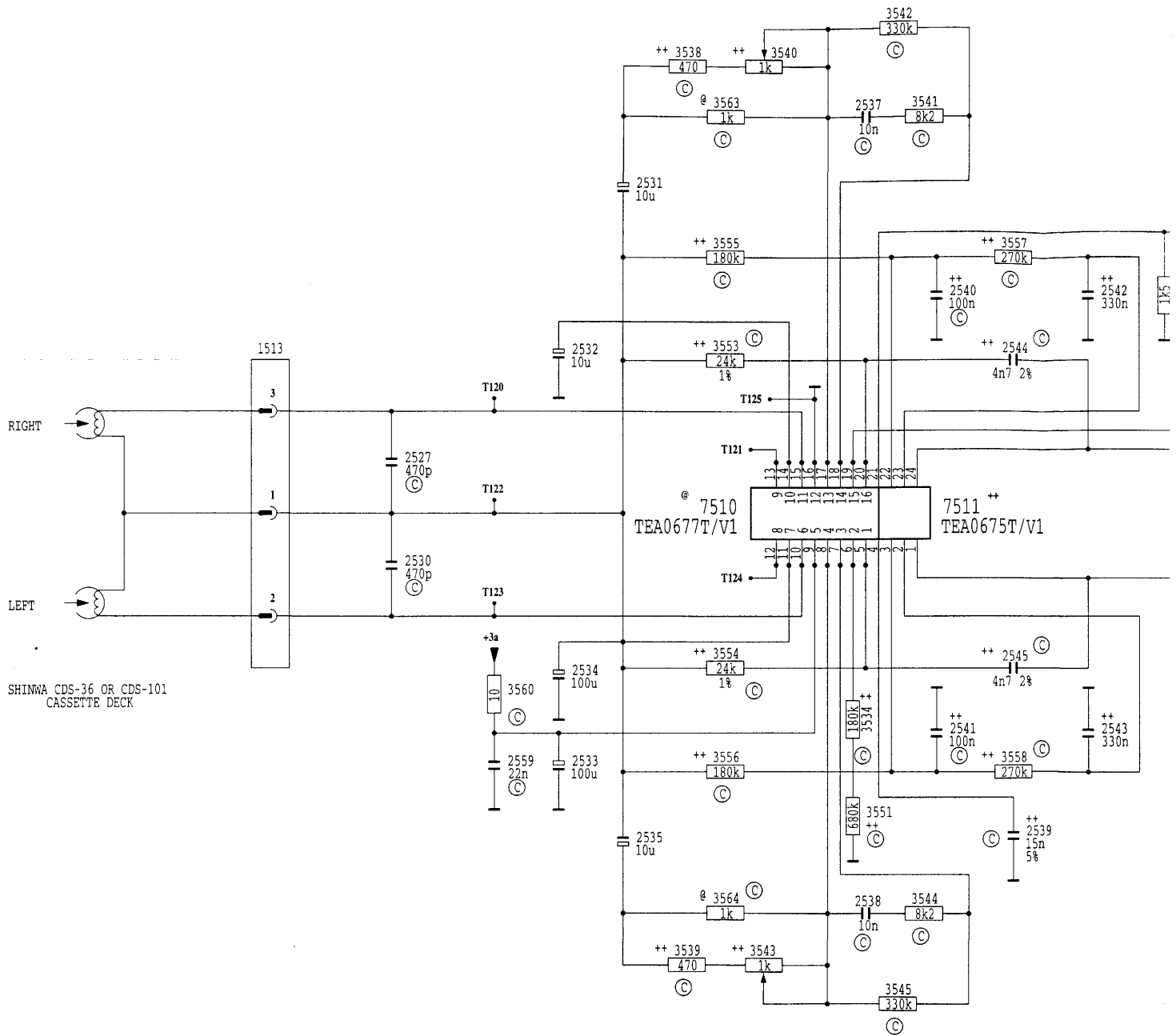
7810 TEA6330T

| | |
|----|-------|
| 1 | 7.8V |
| 2 | 4V |
| 3 | 0V |
| 4 | 3.9V |
| 5 | 3.9V |
| 6 | 3.9V |
| 7 | 3.9V |
| 8 | 3.9V |
| 9 | 8.5V |
| 10 | 0V |
| 11 | 4.9V |
| 12 | 4.9V |
| 13 | 3.9V |
| 14 | 3.9V |
| 15 | 3.9V |
| 16 | 3.9V |
| 17 | 3.9V |
| 18 | 7.85V |
| 19 | 3.9V |
| 20 | 3.9V |

7 D11
 8 G14
 3 H20
 4 H20
 TUNER_LEFT A12
 TUNER_RIGHT D12

PART 4 : CASSETTE PRE-AMPLIFIER & DOLBY (MAIN PCB)

1 2 3 4 5 6 7 8 9



INSERT IN CASE OF SHINWA CDS-36 CASSETTE DECK
 * INSERT IN CASE OF SHINWA CDS-101 CASSETTE DECK

++ INSERT ONLY IN SETS WITH DOLBY
 @ INSERT ONLY IN SETS WITHOUT DOLBY

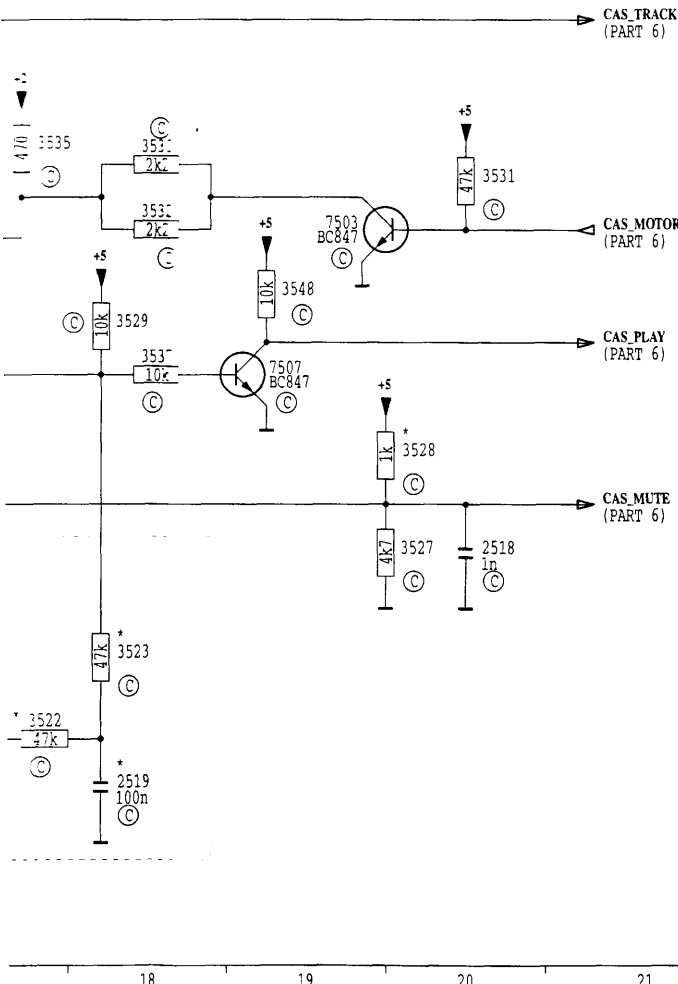
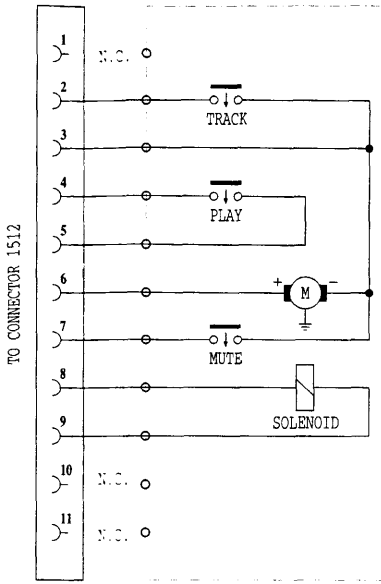
1 2 3 4 5 6 7 8 9

- +2 E16/E17
- +3a G10
- +3b G11/F5
- +5 E15/E20/F17/G18/J20/I12

- CAS_LEFT E12
- CAS_RIGHT D12
- DOLBY_ON C13
- LEFT_REV E1

- LEFT_FWD E1
- LEFT B1
- MSS H12
- MSS_OUT B5

OPTION : SHINWA CDS-101 CASSETTE DECK



Voltage measured in FM mode with

A4 = 14.4V

A7 = 14.4V

unless otherwise stated.

(OFF) = Power off

(ON) = Power on

7513 BC847

Voltage measured in

Tape play mode.

+1 +14.4V

C 5V (ME/CR on)

+2 +13.8V

0V (ME/CR off)

+3a, +3b 8.5V

B 0V (ME/CR on)

+4 +5V

0.7V (ME/CR off)

+5, +5a, +5b +5V

E 0V

+7 +5V

+CDCC 14.4V

Vref 5V

7503 BC847

V_LAMP 10V

C 0.12V (CASS. PLAY)

11.5V (CASS. EJECT)

B 0.7V (CASS. PLAY)

0V (CASS. EJECT)

7509 BC847

Voltage measured in

Tape play mode.

E 0V

C 4V (Dolby on)

0V (Dolby off)

7507 BC847

B 0V (Dolby on)

C 4.9V (CASS. PLAY)

0.7V (Dolby off)

0V (CASS. EJECT)

E 0V

B 0V (CASS. PLAY)

0.7V (CASS. EJECT)

7511 TEA0675T

Voltage measured in

Tape play mode.

7506 BC636

1 Tape left

C 13.06V (CASS. PLAY)

2 3.6V

0.13V (CASS. EJECT)

3 4.2V

B 13.1V (CASS. PLAY)

4 4.2V

13.36V (CASS. EJECT)

5 Tape left

E 12.36V (CASS. PLAY)

6 6.8V

13.36V (CASS. EJECT)

7 4V

8 4V

9 8.4V

10 4.2V

11 4.2V

12 4V

13 4V

14 6.6V

15 4.2V

16 0V

17 4.2V

18 4.2V

19 4.8V (ME/CR off)

5V (ME/CR on)

20 Tape right

21 0.8V (Dolby off)

4V (Dolby on)

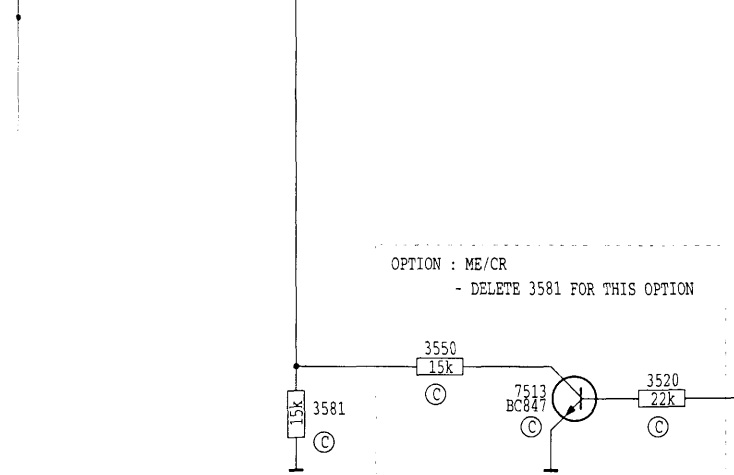
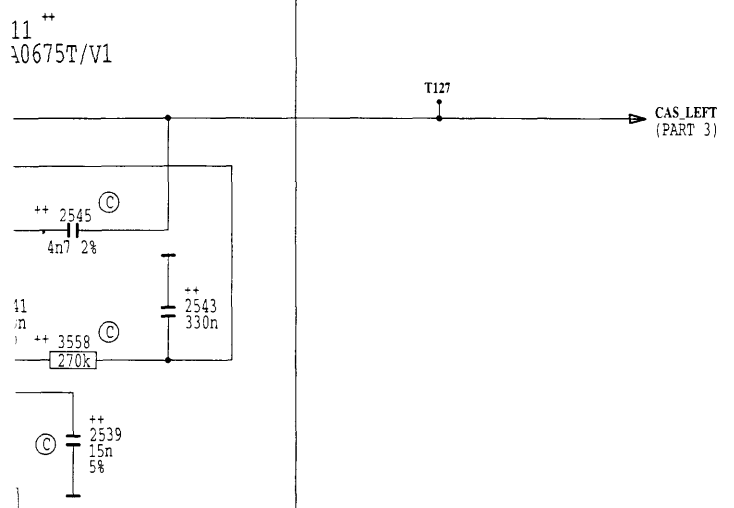
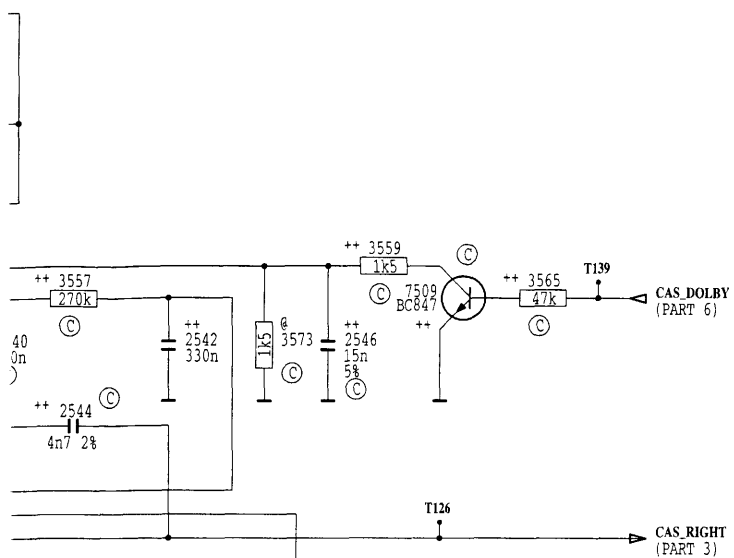
22 3.6V

23 3.2V

24 Tape right

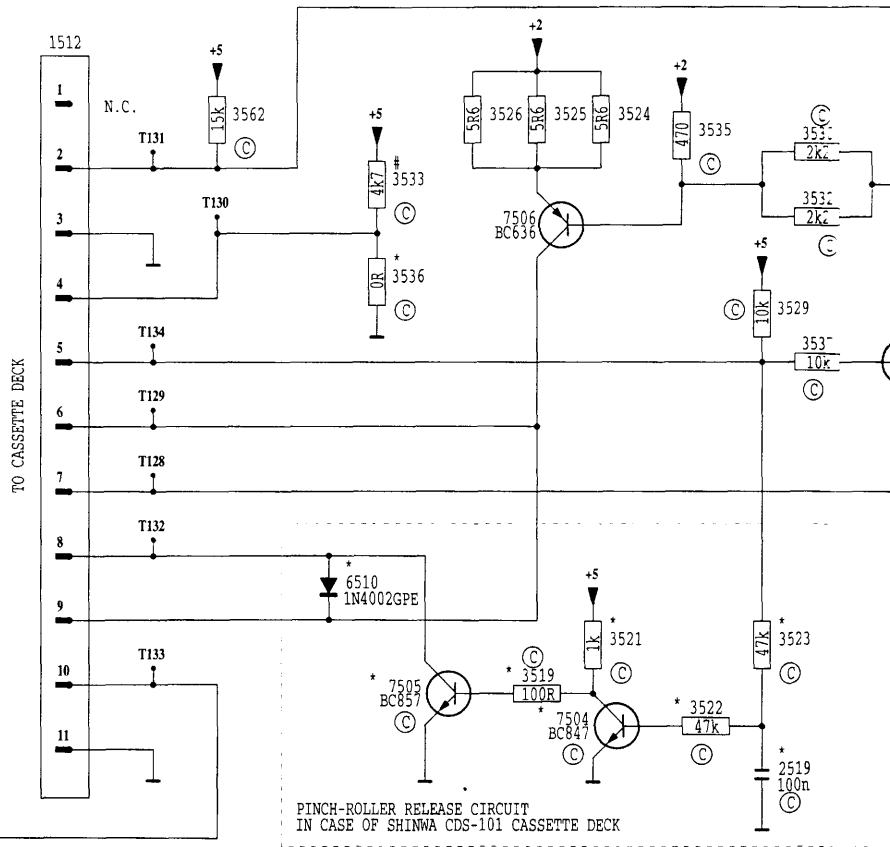
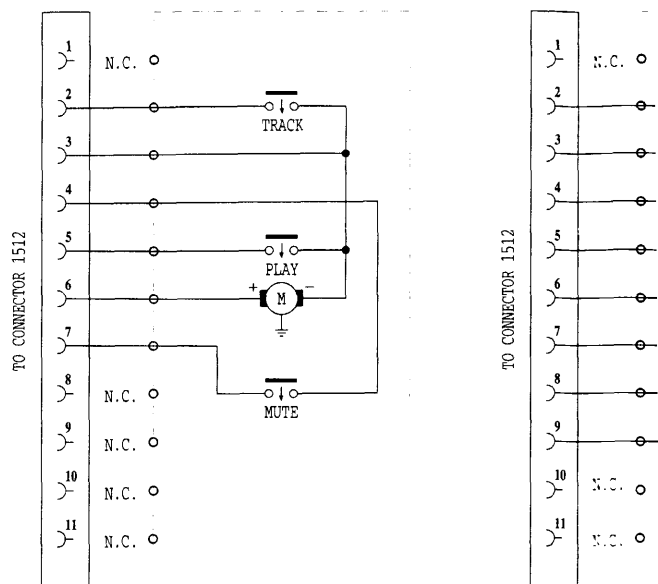
1512 E13
1513 C 3
2518 H20
2519 J18
2527 D 4
2530 E 4
2531 B 6
2532 C 5
2533 G 5
2534 F 5
2535 G 6
2537 A 6
2538 C 6
2539 C 6
2540 B 6
2541 F 6
2542 C 10
2543 F 10
2544 C 9
2545 F 9
2546 C 11
2559 G 5
3519 I 16
3520 J 12
3521 I 17
3522 I 17
3523 I 18
3524 F 17
3525 F 17
3526 F 16
3527 H 20
3528 H 20
3529 G 18
3530 F 18
3531 F 20
3532 F 18
3533 F 15
3534 F 8
3535 F 17
3536 G 15
3537 G 18
3538 A 6
3539 H 6
3540 A 7
3541 A 8
3542 A 8
3543 H 9
3544 H 9
3545 G 9
3546 C 6
3547 C 6
3548 G 6
3549 B 11
3550 F 5
3551 F 14
3552 A 6
3553 C 12
3554 C 10
3555 J 10
3556 I 11
3557 I 11
3558 I 11
3559 B 11
3560 F 5
3561 F 14
3562 A 6
3563 H 6
3564 H 6
3565 C 12
3566 C 10
3567 J 10
3568 I 11
3569 I 11
3570 C 11
3571 E 7
3572 E 8
3573 J 12

131 F14
130 F14
134 G14
129 G14
T128 H14
T132 H14
T133 I14



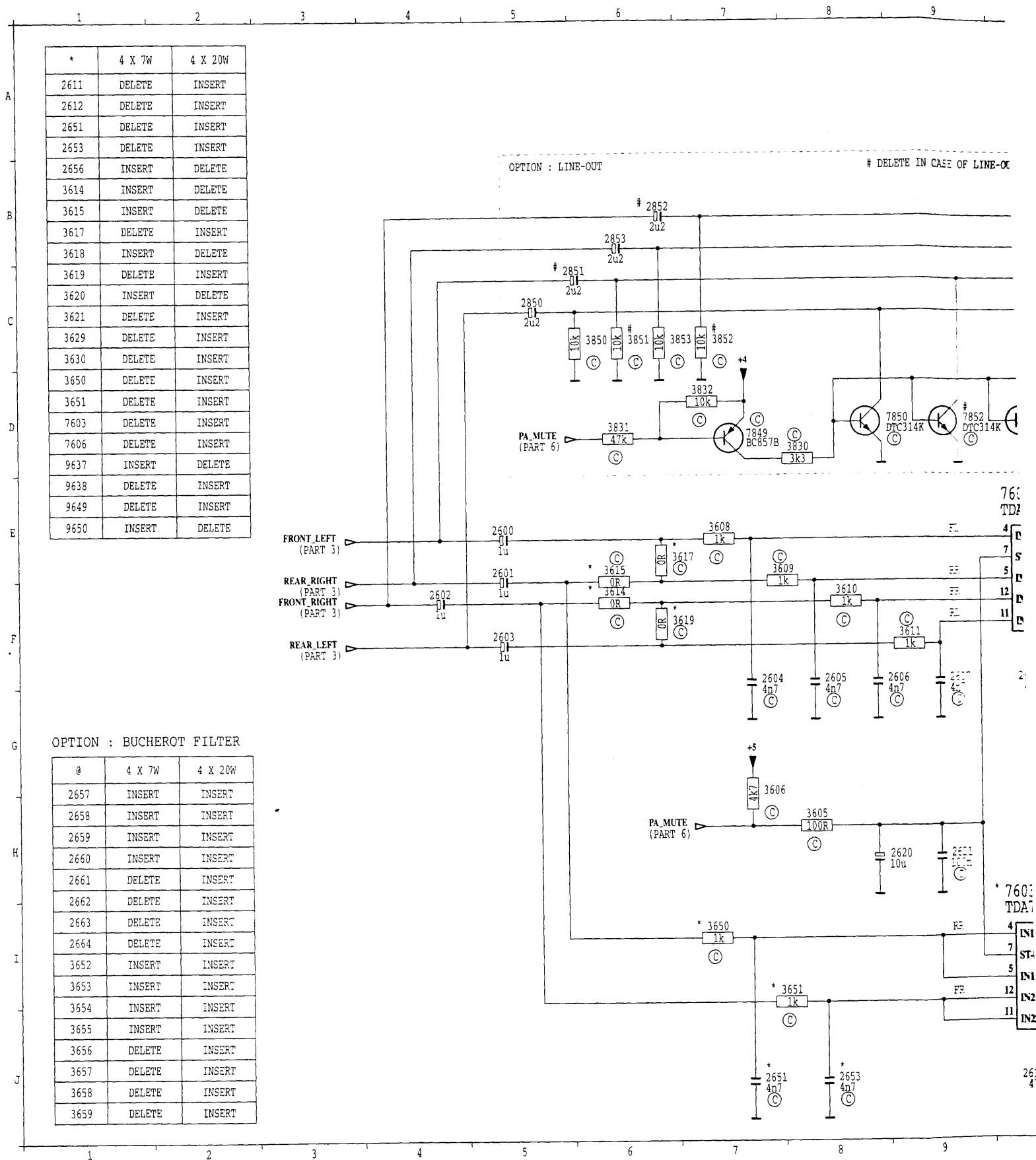
OPTION : SHINWA CDS-36 CASSETTE DECK

OPTION : SHINWA



| | | | | | | | | |
|-------|-----------------|----|------------|----|------------|-----|------------|-----|
| . E1 | RIGHT FWD | D1 | T122 | E5 | T124 | E6 | T131 | F14 |
| . B1 | RIGHT REV | D1 | T123 | E5 | T139 | B12 | T130 | F14 |
| . H12 | RIGHT | A1 | T125 | D7 | T126 | D11 | T134 | G14 |
| . B5 | T120 | D5 | T121 | D7 | T127 | E11 | T129 | G14 |

PART 5 : POWER AMPLIFIER & LINE-OUT (MAIN PCB)



| * | 4 X 7W | 4 X 20W |
|------|--------|---------|
| 2611 | DELETE | INSERT |
| 2612 | DELETE | INSERT |
| 2651 | DELETE | INSERT |
| 2653 | DELETE | INSERT |
| 2656 | INSERT | DELETE |
| 3614 | INSERT | DELETE |
| 3615 | INSERT | DELETE |
| 3617 | DELETE | INSERT |
| 3618 | INSERT | DELETE |
| 3619 | DELETE | INSERT |
| 3620 | INSERT | DELETE |
| 3621 | DELETE | INSERT |
| 3629 | DELETE | INSERT |
| 3630 | DELETE | INSERT |
| 3650 | DELETE | INSERT |
| 3651 | DELETE | INSERT |
| 7603 | DELETE | INSERT |
| 7606 | DELETE | INSERT |
| 9637 | INSERT | DELETE |
| 9638 | DELETE | INSERT |
| 9649 | DELETE | INSERT |
| 9650 | INSERT | DELETE |

OPTION : BUCHEROT FILTER

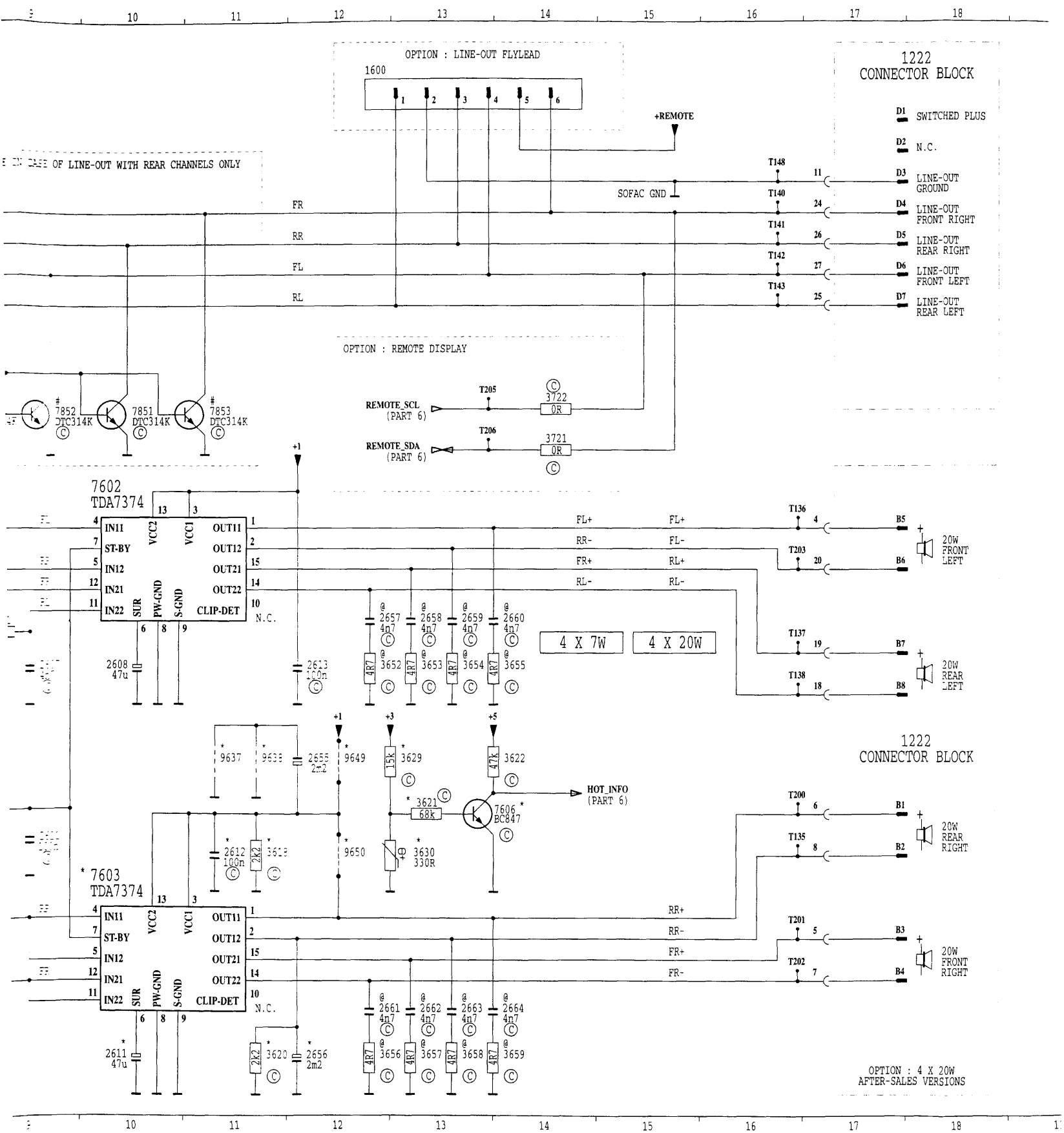
| @ | 4 X 7W | 4 X 20W |
|------|--------|---------|
| 2657 | INSERT | INSERT |
| 2658 | INSERT | INSERT |
| 2659 | INSERT | INSERT |
| 2660 | INSERT | INSERT |
| 2661 | DELETE | INSERT |
| 2662 | DELETE | INSERT |
| 2663 | DELETE | INSERT |
| 2664 | DELETE | INSERT |
| 3652 | INSERT | INSERT |
| 3653 | INSERT | INSERT |
| 3654 | INSERT | INSERT |
| 3655 | INSERT | INSERT |
| 3656 | DELETE | INSERT |
| 3657 | DELETE | INSERT |
| 3658 | DELETE | INSERT |
| 3659 | DELETE | INSERT |

+REMOTE A15
 FRONT_LEFT E3
 FRONT_RIGHT F3
 HOT_INFO H15

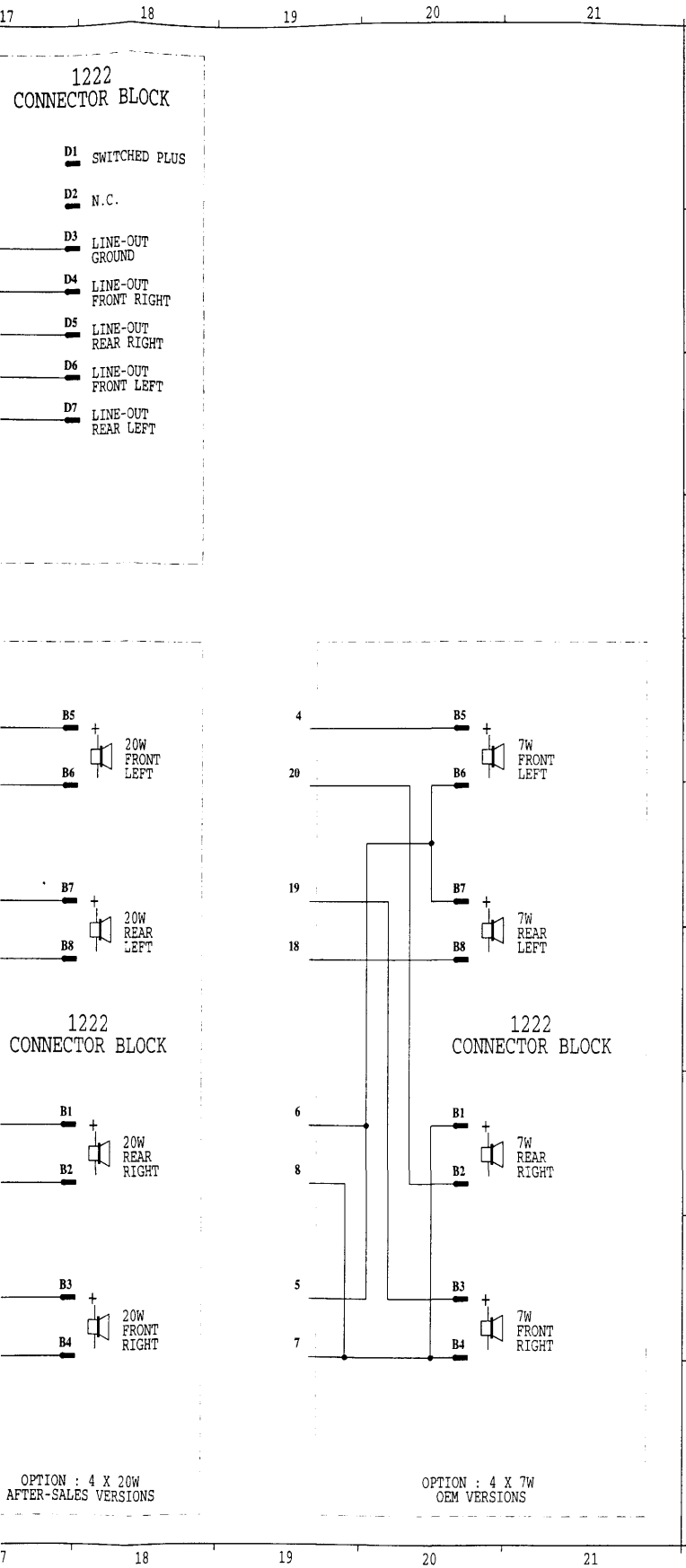
PA_MUTE H6/D5
 REAR_LEFT F3
 REAR_RIGHT E3
 REMOTE_SCL D12

REMOTE_SDA D12
 SOFAC_GND B15
 T135 H16
 T136 E16

T137
 T138
 T140
 T141



- T137 F16
- T138 F16
- T140 B16
- T141 B16
- T142 C16
- T143 C16
- T148 B16
- T200 H16
- T201 I16
- T202 I16
- T203 E16
- T205 D13
- T206 D13



..... D13

Voltage measured in FM mode with

A4 = 14.4V

A7 = 14.4V

unless otherwise stated.

(OFF) = Power off

(ON) = Power on

7606 BC847

| | | |
|---|----|--------------|
| C | 5V | |
| | | 0V ("hot") |
| B | 0V | |
| | | 0.7V ("hot") |
| E | 0V | |

7849 BC857B

| | | |
|---|-----------|-------------|
| C | 0V (ON) | |
| | | 4.8V (OFF) |
| B | 4.8V (ON) | |
| | | 4.2V (OFF) |
| E | 4.9V (ON) | |
| | | 4.83V (OFF) |

7850 - 7853 DTC314K

| | | |
|---|---------|------------|
| C | 0V (ON) | |
| | | GND (OFF) |
| B | 0V (ON) | |
| | | 3.1V (OFF) |
| E | GND | |

7602 TDA7374

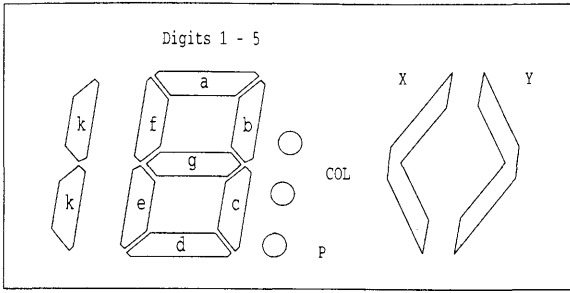
| | |
|----|-------|
| 1 | 6V |
| 2 | 6V |
| 3 | 12.3V |
| 4 | 4.5V |
| 5 | 0.6V |
| 6 | 0.6V |
| 7 | 4.5V |
| 8 | GND |
| 9 | GND |
| 10 | N.C. |
| 11 | 0.6V |
| 12 | 0.6V |
| 13 | 12.3V |
| 14 | 6V |
| 15 | 6V |

7603 TDA7374

| | |
|----|-------|
| 1 | 6V |
| 2 | 6V |
| 3 | 12.3V |
| 4 | 4.5V |
| 5 | 0.6V |
| 6 | 0.6V |
| 7 | 4.5V |
| 8 | GND |
| 9 | GND |
| 10 | N.C. |
| 11 | 0.6V |
| 12 | 0.6V |
| 13 | 12.3V |
| 14 | 6V |
| 15 | 6V |

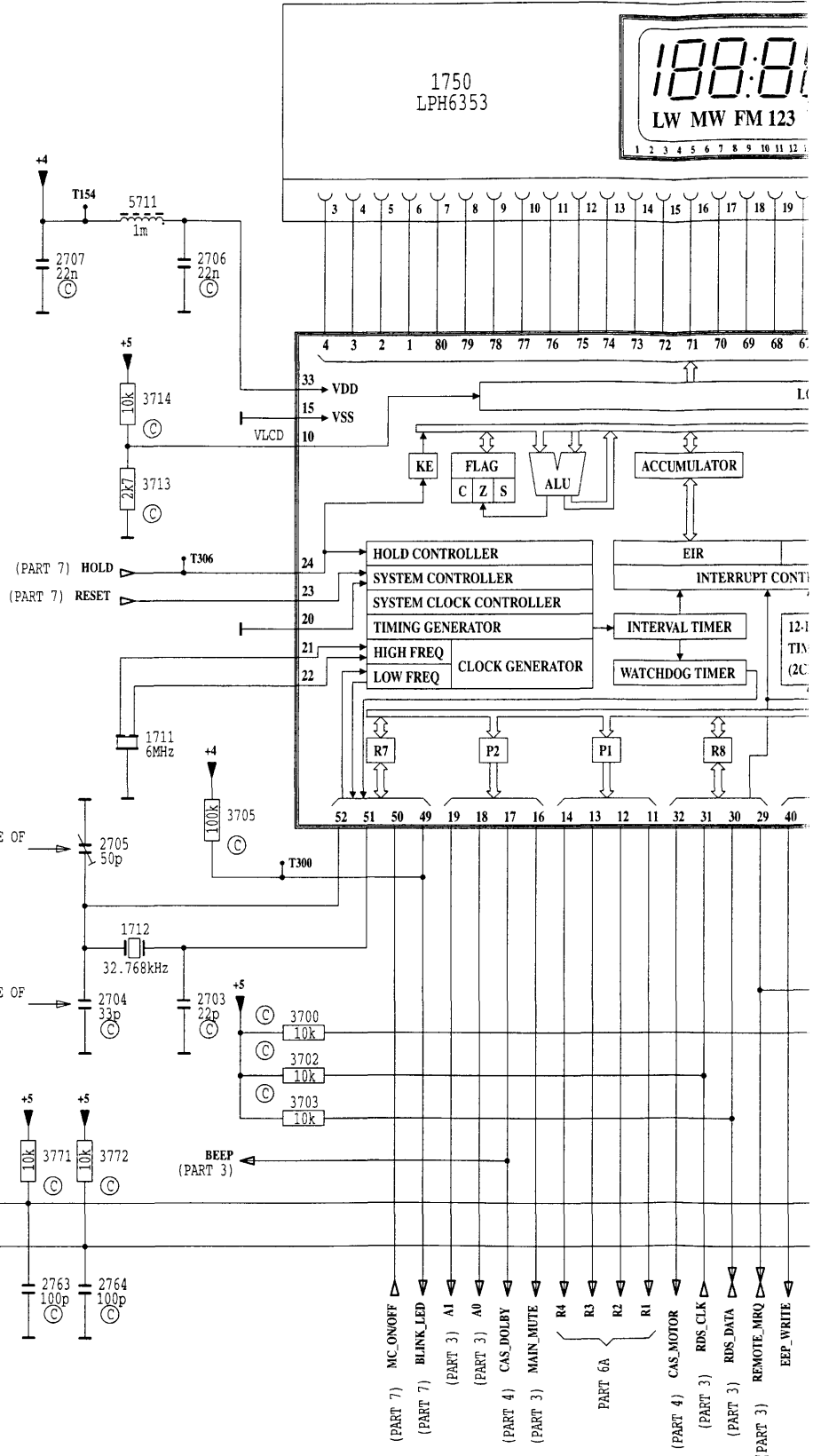
1222 A17
1222 G17
1600 A12
2600 E 5
2601 E 5
2602 F 4
2603 F 5
2604 F 7
2605 F 8
2606 F 9
2607 F 9
2608 F 10
2611 J 10
2612 H 11
2613 F 12
2620 H 8
2621 H 9
2651 J 7
2653 J 8
2655 G 12
2656 J 12
2657 F 12
2658 F 13
2659 F 13
2660 F 14
2661 J 12
2662 J 13
2663 J 13
2664 J 14
2850 C 5
2851 C 6
2852 B 6
2853 B 6
3605 H 8
3606 H 7
3608 E 7
3609 E 8
3610 F 8
3611 F 9
3614 F 6
3615 E 6
3617 E 7
3618 H 7
3619 F 7
3620 J 11
3621 H 13
3622 G 14
3629 G 13
3630 H 13
3650 I 7
3651 I 8
3652 F 13
3653 F 13
3654 F 13
3655 F 14
3656 J 13
3657 J 13
3658 J 13
3659 J 14
3721 D 14
3722 D 14
3830 D 8
3831 D 6
3832 D 7
3850 C 6
3851 C 6
3852 C 7
3853 C 7
7602 E 10
7603 I 10
7606 H 14
7849 D 7
7850 D 8
7851 D 10
7852 D 9
9637 G 11
9638 G 11
9649 C 12
9650 H 12

PART 6 : MICRO-CONTROLLER, EEPROM, LCD, REMOTE CONTROL & TELEPHONE MUTE (MAIN PCB)



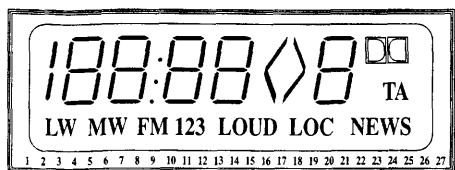
LCD PINOUT TABLE

| 7710 DRIVER PINS | 1750 LCD PINS | COM 1 | COM 2 |
|------------------|---------------|-------|-------|
| 6 | 1 | COM 1 | |
| 5 | 2 | | COM 2 |
| 4 | 3 | 1e | LW |
| 3 | 4 | 1d | 1c |
| 2 | 5 | 1f | 1g |
| 1 | 6 | 1a | 1b |
| 80 | 7 | 2e | MW |
| 79 | 8 | 2d | 2c |
| 78 | 9 | 2f | 2g |
| 77 | 10 | 2a | 2b |
| 76 | 11 | k | FM, P |
| 75 | 12 | 2 | 1 |
| 74 | 13 | 3e | 3 |
| 73 | 14 | 3d | 3c |
| 72 | 15 | 3f | 3g |
| 71 | 16 | 3a | 3b |
| 70 | 17 | 4e | TA |
| 69 | 18 | 4d | 4c |
| 68 | 19 | 4f | 4g |
| 67 | 20 | 4a | 4b |
| 66 | 21 | X | NEWS |
| 65 | 22 | Y | LOC |
| 64 | 23 | 5e | LOUD |
| 63 | 24 | 5d | 5c |
| 62 | 25 | 5f | 5g |
| 61 | 26 | 5a | 5b |
| 60 | 27 | COL | COL |

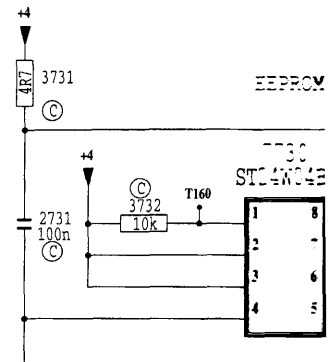
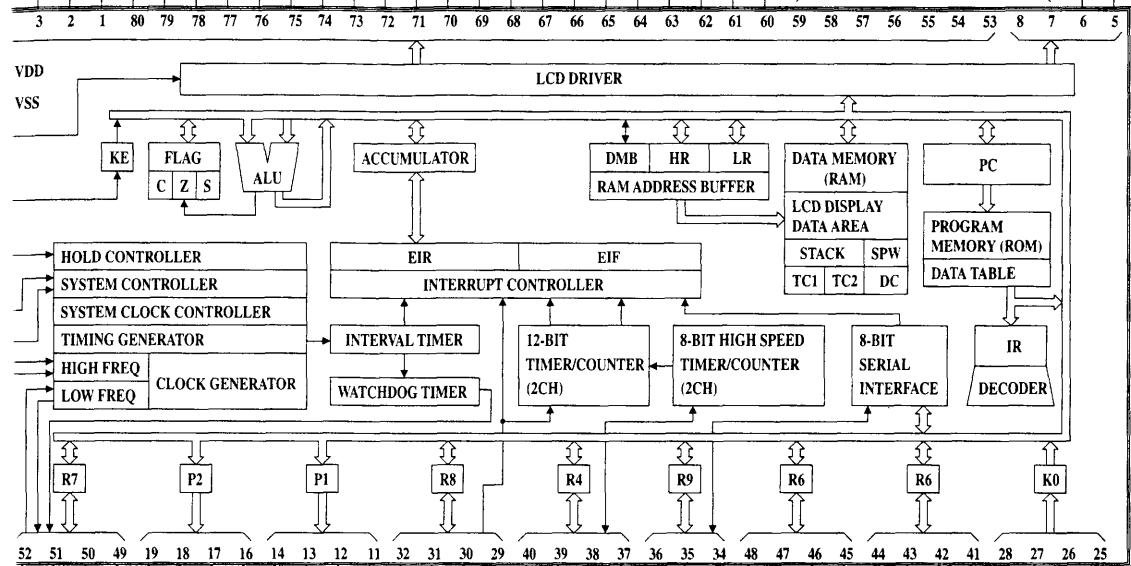


- +4 A19/B19/A15/H15/F6
- +5 G20/D17/G15/G6/I4
- A0 J8
- A1 A7
- BEEP H6
- BLINK_LED A7
- C1 C20
- C1 J11
- PCS 77 660
- C2 C20
- C2 J11
- C3 C20
- C3 J12
- C4 C20
- C4 J12
- CAS_DOLBY J8
- CAS_MOTOR J9
- CAS_MUTE J13
- CAS_PLAY J13
- CAS_TRACK J13
- D2B_INT J11
- EEP_SCL B19
- EEP_SCL J13
- EEP_SDA B19
- EEP_SDA J13
- EEP_WRITE J13
- EEP_WRITE J13
- HOLD J13
- HOT_INFO J13
- MAN_MUTE J13
- MC_ON/OFF J13
- ONN/OFF J13
- PA_MUTE J13

1750
LPH6353

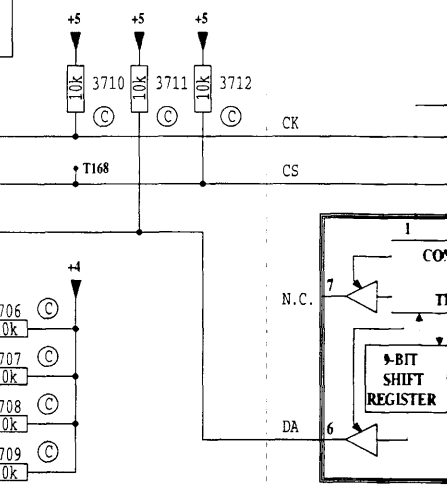
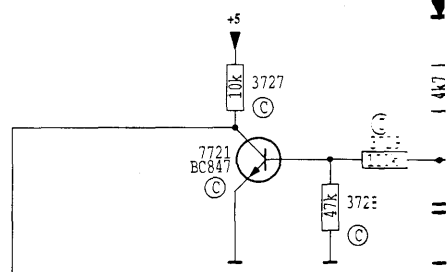


7710
TMP47C1620
N.C.



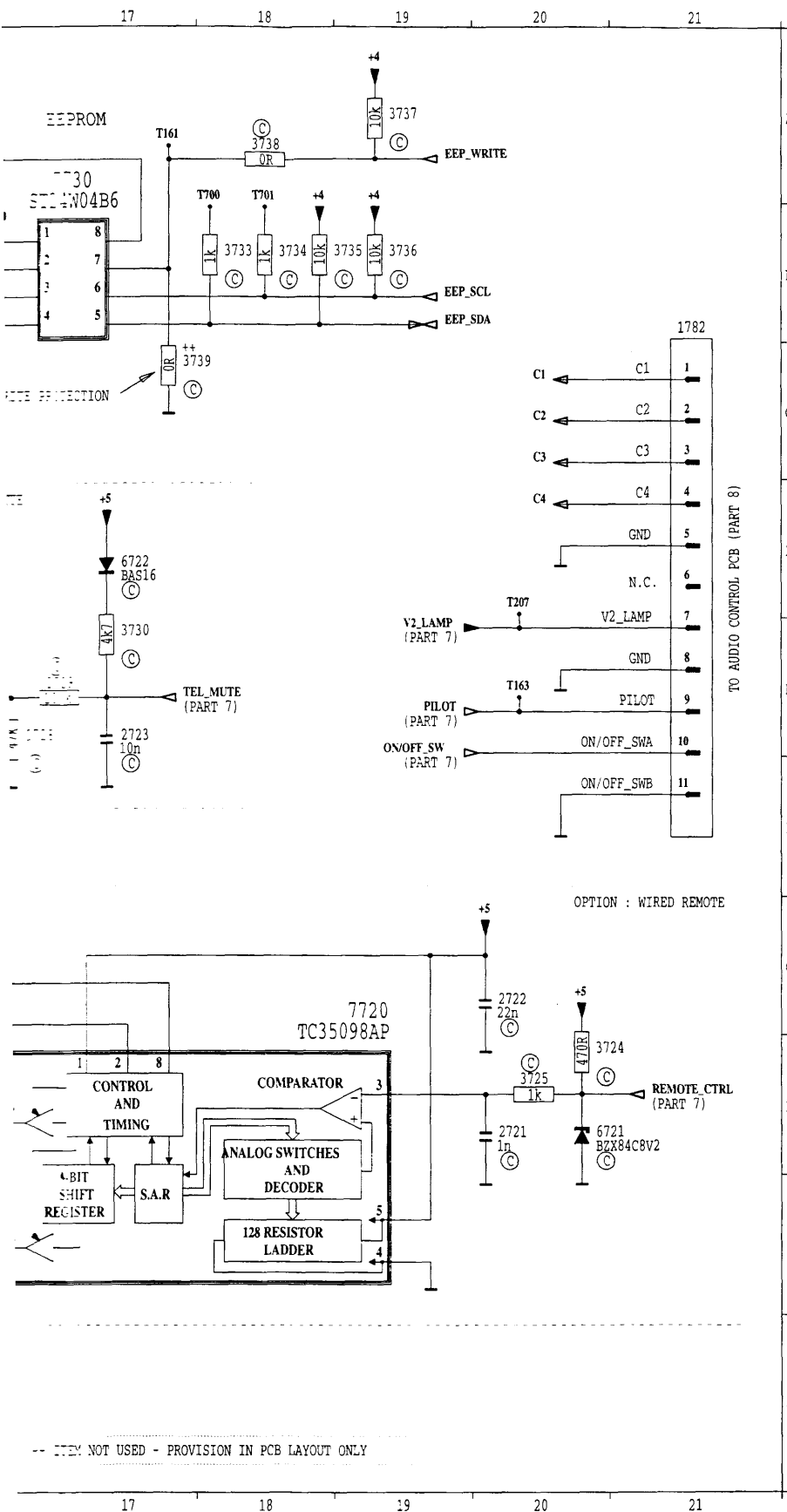
INSERT IN CASE OF NO WRITE PROTECTION

OPTION : TELEPHONE MUTE



- (PART 7) MC_ON/OFF
- (PART 7) BLINK_LED
- (PART 3) A1
- (PART 3) A0
- (PART 4) CAS_DOLBY
- (PART 3) MAIN_MUTE
- R4
- R3
- R2
- R1
- (PART 4) CAS_MOTOR
- (PART 3) RDS_CLK
- (PART 3) RDS_DATA
- (PART 3) REMOTE_MQR
- EEP_WRITE
- (TEST_CLOCK) T30
- (PART 5) REMOTE_SCL
- (PART 6A) DBR_INT
- (PART 5) REMOTE_SDA
- C1
- C2
- C3
- C4
- (PART 5) PA_MUTE
- EEP_SCL
- EEP_SDA
- CAS_PLAY
- CAS_MUTE
- CAS_TRACK
- HOT_INFO

- | | | | |
|--------------------|----------------------|----------------------|----------------------|
| AS_MUTE J13 | EEP_WRITE A19 | PILOT E19 | REMOTE_SCL J11 |
| AS_PLAY J13 | EEP_WRITE J10 | R1 J9 | REMOTE_SDA J11 |
| AS_TRACK J13 | HOLD D5 | R2 J9 | RESET D5 |
| 2B_INT J11 | HOT_INFO J13 | R3 J8 | SCL I1 |
| EP_SCL B19 | MAN_MUTE J8 | R4 J8 | SDA I1 |
| EP_SCL J13 | MC_ON/OFF A7 | RDS_CLK J9 | T163 E20 |
| EP_SDA B19 | ONN/OFF_SW F19 | RDS_DATA J9 | T157 I3 |
| EP_SDA J13 | PA_MUTE J12 | REMOTE_MQR J10 | T158 I3 |



1711
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3736
3737
3738
3739
3769
3770
3771
3772
5711
6221
6222
7710
7720
7721
7730

Voltage measured in FM mode with
A4 = 14.4V
A7 = 14.4V
 unless otherwise stated.
 (OFF) = Power off
 (ON) = Power on

7760 MSM630
(continue.....)

| | | | |
|--------------|--------|----|------|
| +1 | +14.4V | 16 | GND |
| +2 | +13.8V | 17 | 5V |
| +3a, +3b | 8.5V | 18 | N.C. |
| +4 | +5V | 19 | 2.5V |
| +5, +5a, +5b | +5V | 20 | 2.5V |
| +7 | +5V | 21 | 5V |
| +CDCC | 14.4V | 22 | N.C. |
| Vref | 5V | 23 | 5V |
| V_LAMP | 10V | 24 | 2.3V |
| | | 25 | 2.3V |
| | | 26 | 5V |
| | | 27 | 5V |
| | | 28 | N.C. |
| | | 29 | 5V |
| | | 30 | 5V |
| | | 31 | 5V |
| | | 32 | 5V |

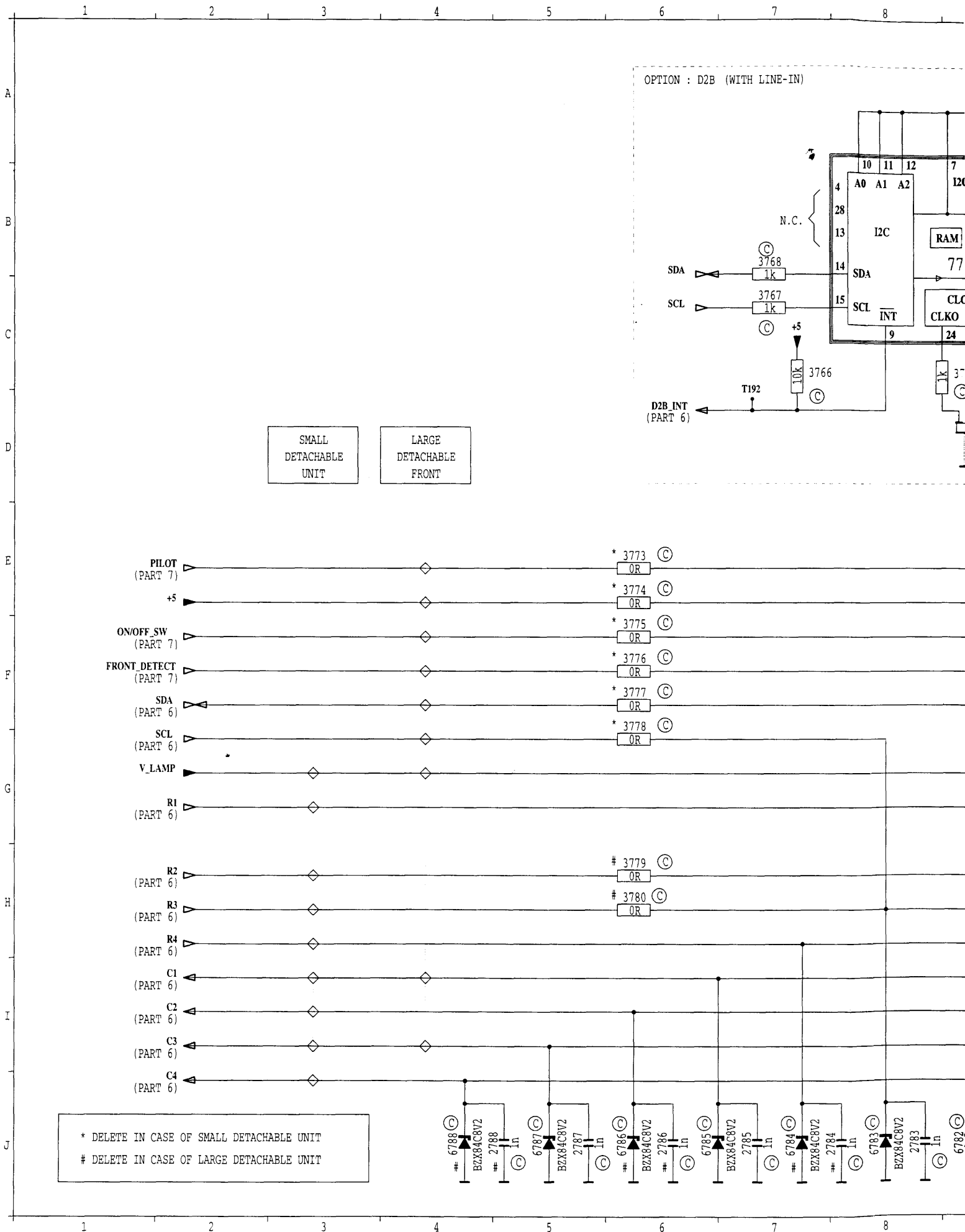
7721 BC847
 C 0V
 B 0.6V
 E 0V

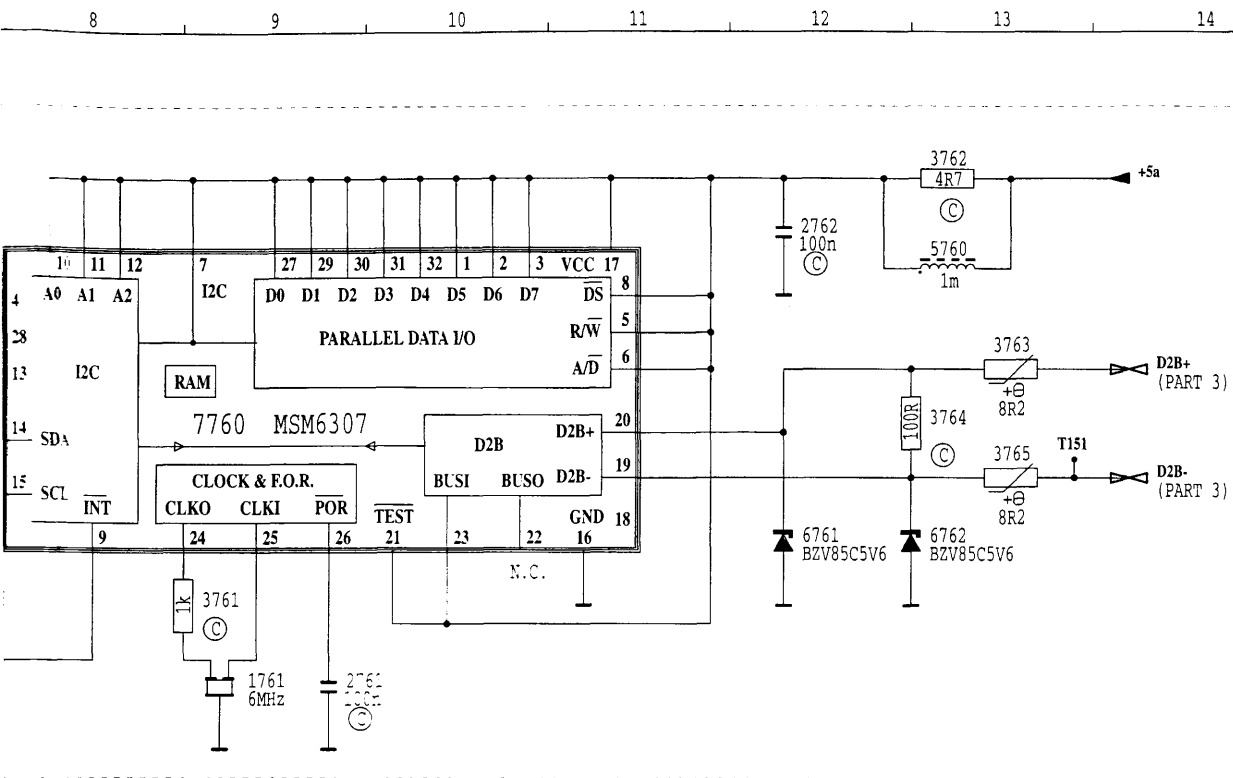
7760 MSM6307

| | |
|----|------|
| 1 | 5V |
| 2 | 5V |
| 3 | 5V |
| 4 | N.C. |
| 5 | 5V |
| 6 | 5V |
| 7 | 5V |
| 8 | 5V |
| 9 | 5V |
| 10 | 5V |
| 11 | 5V |
| 12 | 5V |
| 13 | N.C. |
| 14 | 5V |
| 15 | 5V |

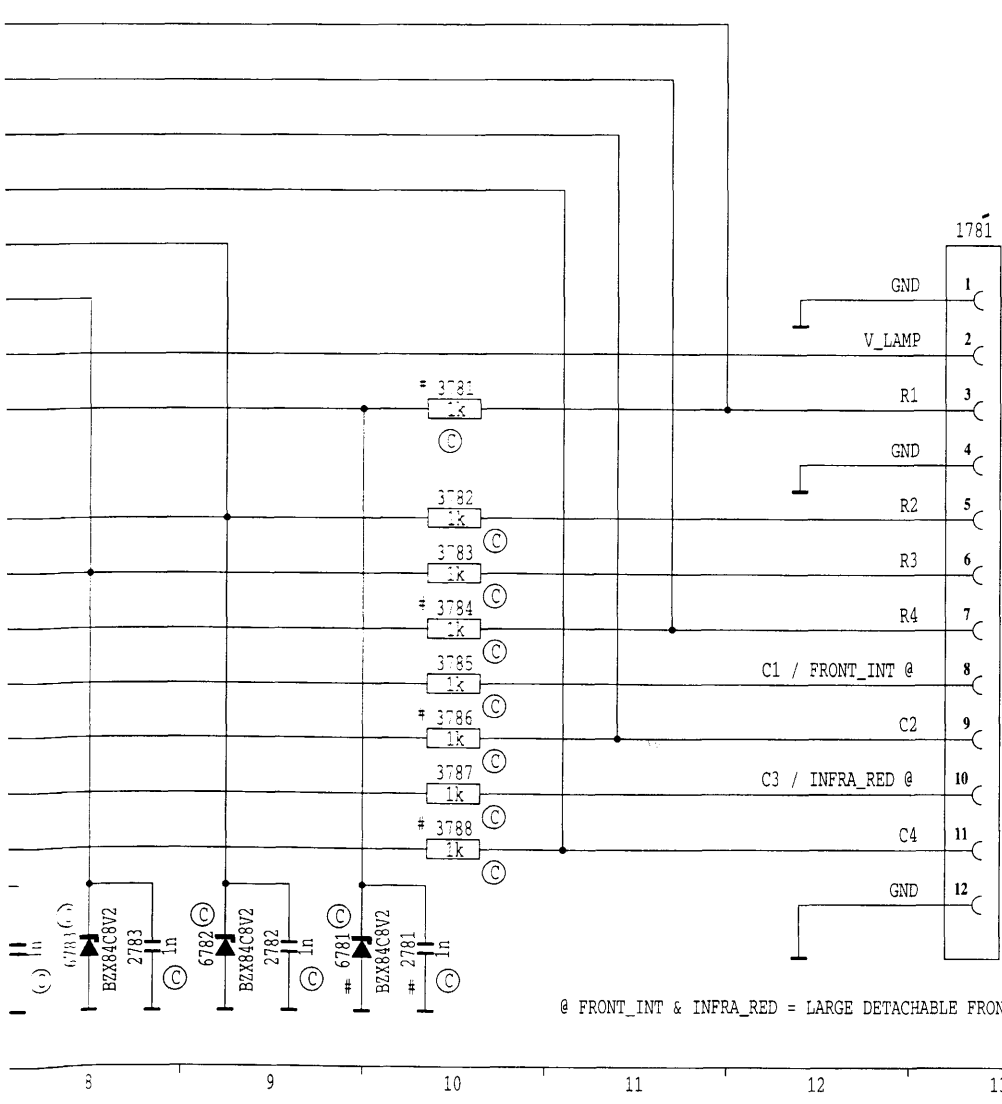
| | | | | |
|----|------|-----|-----------|-----|
| 1 | T161 | A17 | T306 | D6 |
| 1 | T168 | G15 | T700 | B18 |
| 5 | T207 | D20 | T701 | B18 |
| | T301 | J10 | TEL_MUTE | E17 |
| | T302 | I14 | TUNER_SCL | J1 |
| 10 | T303 | I14 | TUNER_SDA | I1 |
| | T304 | I14 | V2_LAMP | E19 |
| | T305 | I14 | | |

PART 6A : D2B & DETACHABLE FRONT CONNECTOR (MAIN PCB)





1761 D 9
 1781 F13
 2761 D 9
 2762 A12
 2781 J10
 2782 C 9
 2783 C 9
 2784 C 9
 2785 C 9
 2786 C 9
 2787 C 9
 2788 C 9
 3761 C 9
 3762 A13
 3763 B13
 3764 B13
 3765 C13
 3766 C 7
 3767 C 7
 3768 C 7
 3773 F 6
 3774 F 6
 3775 F 6
 3776 F 6
 3777 F 6
 3778 F 6
 3779 F 6
 3780 H 6
 3781 G10
 3782 H10
 3783 H10
 3784 H10
 3785 I10
 3786 I10
 3787 I10
 3788 I10
 5760 A13
 6761 C12
 6762 C12
 6781 J 9
 6782 J 9
 6783 C 9
 6784 C 9
 6785 C 9
 6786 C 9
 6787 C 9
 6788 C 9
 7760 B 9



TO DETACHABLE FRONT PCB

E
 F
 G
 H
 I
 J

Some useful tips on Micro-processor

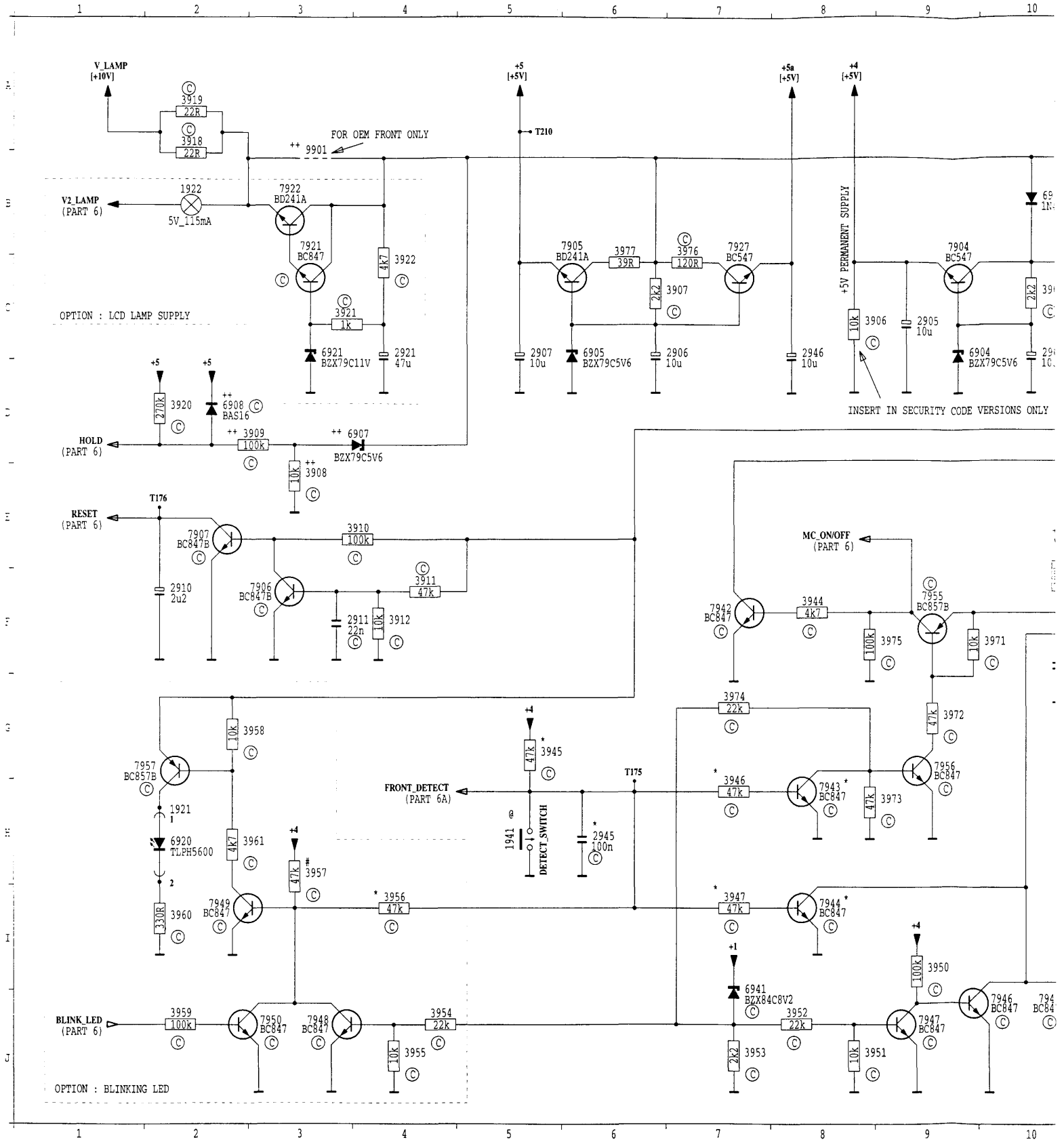
Voltage and waveform are measured with A4 and A7 connected with 14.4V unless otherwise stated.

(on) = Power on

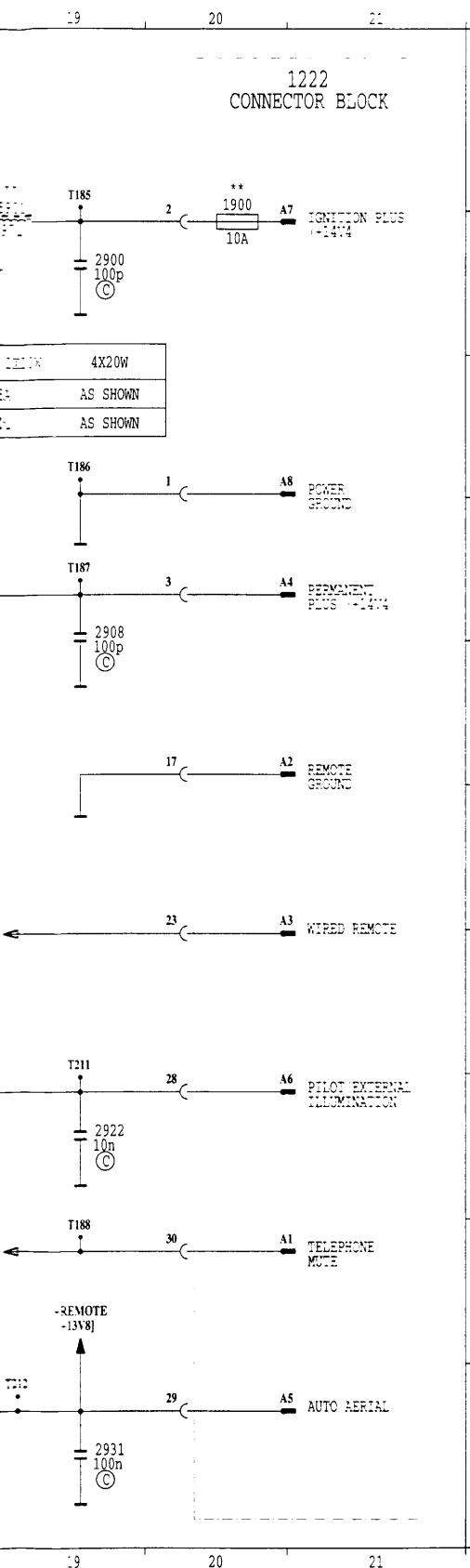
(off) = Power off

| Pin. No. | Name | I/O | Function / Description | Voltage/Waveform |
|----------|----------------------|-----|--|--|
| 1-4 | | O | LCD segment driver output. | Square wave, 1.2Vdc, 50% duty cycle (on) Square wave, 0Vdc, 50% duty cycle (off) |
| 5-6 | | O | Common drive output. | Staircase waveform, 1.2Vdc (on) Staircase waveform, 0Vdc (off) |
| 7-9 | | | No connection | |
| 10 | VLCD | | LCD drive power supply | 1.7V (on), 0V (off) |
| 11 | R1 | O | Row Keyboard scan | |
| 12 | R2 | O | Row Keyboard scan | |
| 13 | R3 | O | Row Keyboard scan | |
| 14 | R4 | O | Row Keyboard scan | |
| 15 | | | uP ground | |
| 16 | MAN_MUTE | O | To mute SOFAC | 0V (Mute), 8.5V (non mute) |
| 17 | CAS_DOLBY / Beep | O | | 0V (Dolby on), 5V (Dolby off) |
| 18 | A0 | O | Source selector | |
| 19 | A1 | O | Source selector | |
| 20 | GND | | Ground | |
| 21 | | | Crystal oscillator for clock | |
| 22 | | | Crystal oscillator for clock | |
| 23 | RESET | | uP Reset | 4V when either A4 or A7 is connected. |
| 24 | HOLD | | | 4.8V (on), 0V (off) |
| 25 | HOT_INFO | I | For Thermal shutdown. | 5V when temperature of set is ok. 0V when temperature of set is too high. Display shows "hot". Volume will be reduce automatically. |
| 26 | CAS_TRACK | I | To indicate Track direction | 0V (Reverse direction), 5V (Forward direction) |
| 27 | CAS_MUTE | I | Mute cass. during Fast mode. | 5V (Cass. in Fast mode) |
| 28 | CAS_PLAY | I | To indicate cass. play | 0V (Cass. play), 5V (Cass play) |
| 29 | REMOTE_MRQ | I/O | For wire remote control | 4.9V (on), 0V (off) |
| 30 | RDS_DATA | I/O | | 4.9V (on), 0V (off) |
| 31 | RDS_CLK | I | | 4.8V (on), 0V (off) |
| 32 | CAS_MOTOR | O | | 5V (Cass. play), 0V (Cass. Stop) |
| 33 | | | uP supply | 4.58V (on) & (off) |
| 34 | REMOTE_SDA | I/O | For wire remote control | 5V (on), 0V (off) |
| 35 | D ² B_INT | I | D ² B interrupt when CDC is connected | At 5V & 5ms/Div setting on scope, you can see a dip in voltage which represent D ² B interrupt when CDC is connected. |
| 36 | REMOTE_SCL | O | For wire remote control | 5V (on), 0V (off) |
| 37 | TEST CLOCK | | For Clock accuracy alignment | |
| 38 | SDA | I/O | Serial data | 5V (on), 0V (off) |
| 39 | SCL | O | General I2C bus control | 5V (on), 0V (off) |
| 40 | EEP_WRITE | O | EEprom write enable | 0V (Write enable), 5V (write disable) |
| 41 | EEP_SDA | I/O | EEprom serial data | 5V (on), 0V (off) |
| 42 | EEP_SCL | O | EEprom clock | 5V (on), 0V (off) |
| 43 | | I | TEL_MUTE (Phone "Lo") | 5V (set is muted and display shows "CALL") 0V (set play as normal) |
| | | | TEL_MUTE (Phone "HI") | 5V (set play as normal) 0V (set is muted and display shows "CALL") |
| 44 | PA_MUTE | O | Power amplifier line out mute. | 0V (mute), 5V (non mute) |
| 45 | C4 | I | Column Keyboard scan | |
| 46 | C3 | I | Column Keyboard scan | |
| 47 | C2 | I | Column Keyboard scan | |
| 48 | C1 | I | Column Keyboard scan | |
| 49 | BLINK_LED | O | Send pulses to blink LED when FRONT_DET is high | |
| 50 | MC_ON/OFF | I | | 4.4V (on), 0V (off) |
| 51 | | | Crystal oscillator | Sine wave, 0.5Vdc |
| 52 | | | Crystal oscillator | Sine wave, 2Vdc. |
| 53-59 | | | No connection | |
| 60-80 | | O | LCD driver output | Square wave, 1.2Vdc, 50% duty cycle (on) Square wave, 0Vdc, 50% duty cycle (off) |

PART 7 : SUPPLY/CONTROL & BLINKING LED (MAIN PCB)



- | | | | |
|------------|-----|----------------|-----|
| T185 | B19 | T212 | J19 |
| T186 | C19 | +REMOTE | I19 |
| T187 | D19 | +1 | A18 |
| T211 | H19 | TEL_MUTE | I18 |
| T188 | I19 | +2 | J17 |



| | | | |
|------|-----|------|-----|
| 1222 | A20 | 7923 | F15 |
| 1921 | H 2 | 7924 | H15 |
| 1922 | B 2 | 7925 | H16 |
| 1931 | B11 | 7926 | B15 |
| 1941 | H 5 | 7927 | B 7 |
| 2900 | B19 | 7940 | E11 |
| 2901 | B18 | 7941 | I12 |
| 2902 | C15 | 7942 | F 7 |
| 2903 | C14 | 7943 | H 8 |
| 2904 | C10 | 7944 | I 8 |
| 2905 | C 7 | 7945 | J10 |
| 2906 | C 7 | 7946 | J10 |
| 2907 | C 5 | 7947 | J 9 |
| 2908 | D19 | 7948 | J 3 |
| 2910 | F 2 | 7949 | I 3 |
| 2911 | F 4 | 7950 | J 3 |
| 2914 | C13 | 7955 | F 9 |
| 2915 | C12 | 7956 | G 9 |
| 2921 | C 4 | 7957 | G 2 |
| 2922 | H15 | 9901 | B 3 |
| 2923 | H16 | | |
| 2931 | T19 | | |
| 2941 | F13 | | |
| 2942 | I14 | | |
| 2943 | J12 | | |
| 2944 | F10 | | |
| 2945 | H 6 | | |
| 2946 | C 8 | | |
| 3901 | B17 | | |
| 3902 | C16 | | |
| 3903 | B11 | | |
| 3904 | B11 | | |
| 3905 | C10 | | |
| 3906 | C 9 | | |
| 3907 | E 7 | | |
| 3908 | E 7 | | |
| 3909 | D 3 | | |
| 3910 | F 3 | | |
| 3911 | F 4 | | |
| 3912 | F 4 | | |
| 3913 | C11 | | |
| 3914 | A 5 | | |
| 3915 | D 3 | | |
| 3920 | D 3 | | |
| 3921 | C 3 | | |
| 3922 | C 4 | | |
| 3923 | H17 | | |
| 3924 | H17 | | |
| 3925 | H17 | | |
| 3926 | F11 | | |
| 3927 | F16 | | |
| 3928 | G11 | | |
| 3929 | E14 | | |
| 3930 | E16 | | |
| 3931 | J18 | | |
| 3938 | H13 | | |
| 3939 | I13 | | |
| 3940 | C11 | | |
| 3941 | F10 | | |
| 3942 | H14 | | |
| 3943 | H14 | | |
| 3944 | H14 | | |
| 3945 | H 7 | | |
| 3946 | H 7 | | |
| 3947 | H 7 | | |
| 3948 | C12 | | |
| 3949 | I12 | | |
| 3950 | F 9 | | |
| 3951 | J 3 | | |
| 3952 | C 6 | | |
| 3953 | C 6 | | |
| 3954 | C 6 | | |
| 3955 | C 6 | | |
| 3956 | C 6 | | |
| 3957 | C 6 | | |
| 3958 | H 3 | | |
| 3959 | F 2 | | |
| 3960 | H 3 | | |
| 3961 | H 3 | | |
| 3971 | F10 | | |
| 3972 | G 9 | | |
| 3973 | H 9 | | |
| 3974 | G 9 | | |
| 3975 | B 3 | | |
| 3976 | B 6 | | |
| 3977 | B 6 | | |
| 5901 | B19 | | |
| 6901 | B18 | | |
| 6902 | C17 | | |
| 6903 | C14 | | |
| 6904 | C10 | | |
| 6905 | C 6 | | |
| 6906 | E10 | | |
| 6907 | D 4 | | |
| 6908 | D 8 | | |
| 6909 | D13 | | |
| 6915 | C13 | | |
| 6920 | H 2 | | |
| 6921 | C 3 | | |
| 6931 | J17 | | |
| 6941 | J 7 | | |
| 6942 | J11 | | |
| 7901 | A16 | | |
| 7902 | B16 | | |
| 7903 | E14 | | |
| 7904 | B 6 | | |
| 7905 | B 6 | | |
| 7906 | B 6 | | |
| 7907 | E 3 | | |
| 7915 | B12 | | |
| 7921 | B 3 | | |
| 7922 | B 3 | | |

Voltage measured in FM mode with

A4 = 14.4V
A7 = 14.4V

unless otherwise stated.

(OFF) = Power off
(ON) = Power on

| | |
|--------------|--------|
| +1 | +14.4V |
| +2 | +13.8V |
| +3a, +3b | 8.5V |
| +4 | +5V |
| +5, +5a, +5b | +5V |
| +7 | +5V |
| +CDCC | 14.4V |
| Vref | 5V |
| V_LAMP | 10V |
| +REMOTE | +13.8V |

7940 HEF4013BT

| | |
|----|-------|
| 1 | N.C. |
| 2 | 4.56V |
| 3 | 0V |
| 4 | GND |
| 5 | 4.56V |
| 6 | 0V |
| 7 | GND |
| 8 | GND |
| 9 | GND |
| 10 | GND |
| 11 | GND |
| 12 | N.C. |
| 13 | N.C. |
| 14 | 5V |

7901 BD438

| | |
|---|-------------|
| C | 13.8V (ON) |
| | 0V (OFF) |
| B | 13.7V (ON) |
| | 14.4V (OFF) |
| E | 14.4V |

7902 BC857B

| | |
|---|-------------|
| C | 13.8V (ON) |
| | 0V (OFF) |
| B | 12.9V (ON) |
| | 14.4V (OFF) |
| E | 13.7V (ON) |
| | 14.4V (OFF) |

7925 BC847

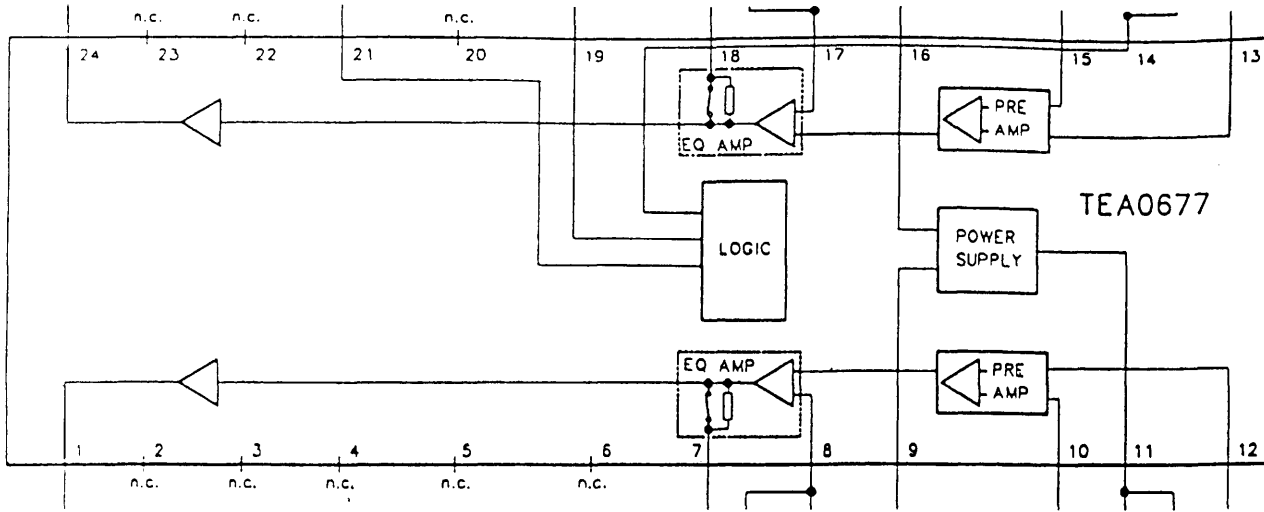
| | |
|-------|---|
| (ON) | = Set is turn on. |
| (OFF) | = Set is turn off and apply 14.4V at pinA6. |
| C | 0V (ON) |
| | 0.6V (OFF) |
| B | 0.6V (ON) |
| | 0V (OFF) |
| E | GND |

7924 BC847

| | |
|-------|---|
| (ON) | = Set is turn on. |
| (OFF) | = Set is turn off and apply 14.4V at pinA6. |
| C | 0V (ON) |
| | 0V (OFF) |
| B | 0V (ON) |
| | 0.6V (OFF) |
| E | GND |

7923 BC857B

| | |
|-------|---|
| (ON) | = Set is turn on. |
| (OFF) | = Set is turn off and apply 14.4V at pinA6. |
| C | 0V (ON) |
| | 14.37V (OFF) |
| B | 0V (ON) |
| | 13.36V (OFF) |
| E | 0V (ON) |
| | 14.4V (OFF) |



PINNING

| SYMBOL | PIN | DESCRIPTION |
|------------------|-----|---------------------------------------|
| OUTA | 1 | output channel A |
| n.c. | 2 | not connected |
| n.c. | 3 | not connected |
| n.c. | 4 | not connected |
| n.c. | 5 | not connected |
| n.c. | 6 | not connected |
| EQA | 7 | equalizing output channel A |
| EQFA | 8 | equalizing input channel A |
| V _{CC} | 9 | voltage supply |
| INA1 | 10 | input channel A1 (forward or reverse) |
| V _{REF} | 11 | reference voltage |
| INA2 | 12 | input channel A2 (reverse or forward) |
| INB2 | 13 | input channel B2 (reverse or forward) |
| HS | 14 | headswitch input |
| INB1 | 15 | input channel B1 (forward or reverse) |
| GND | 16 | ground |
| EQFB | 17 | equalizing input channel B |
| EQB | 18 | equalizing output channel B |
| EQS | 19 | equalizing switch input |
| n.c. | 20 | not connected |
| ACUR | 21 | auxiliary current |
| n.c. | 22 | not connected |
| n.c. | 23 | not connected |
| OUTB | 24 | output channel B |

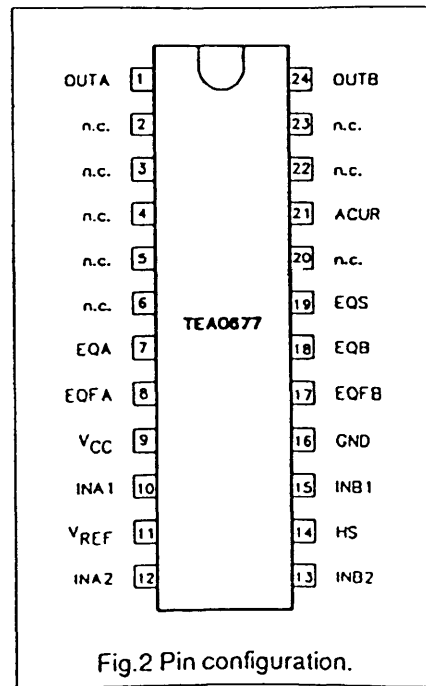
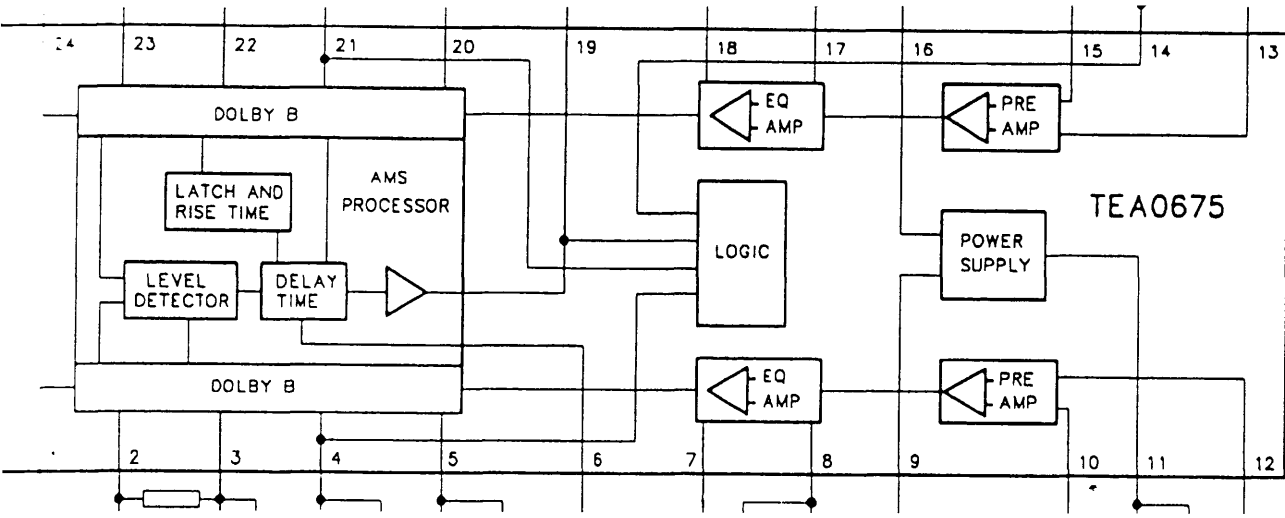


Fig.2 Pin configuration.

PINNING

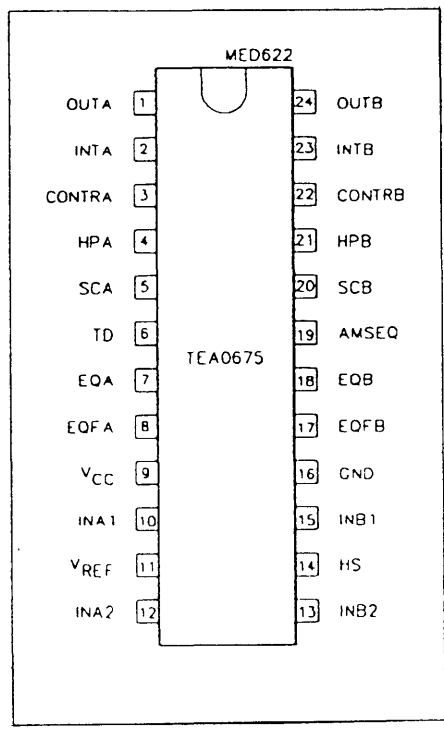
| SYMBOL |
|------------------|
| OUTA |
| INTA |
| CONTRA |
| HPA |
| SCA |
| TD |
| EQA |
| EQFA |
| V _{CC} |
| INA1 |
| V _{REF} |
| INA2 |
| INB2 |
| HS |
| INB1 |
| GND |
| EQFB |
| EQB |
| AMSEQ |
| SCB |
| HPB |
| CONTRB |
| INTB |
| OUTB |

11 TEA0675

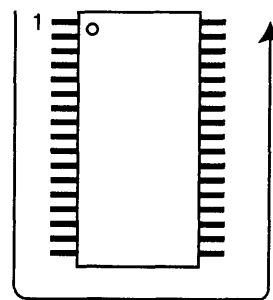
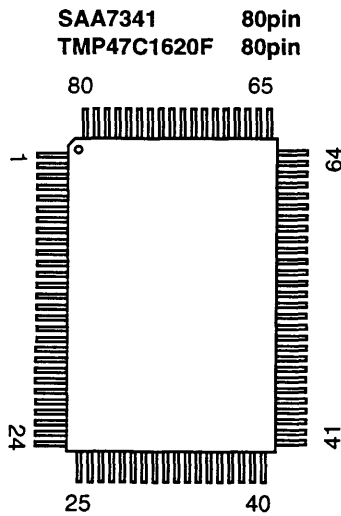
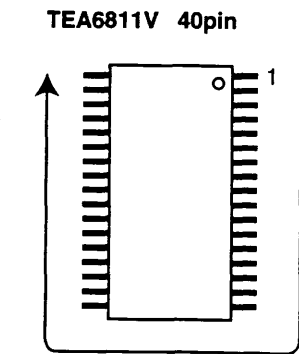
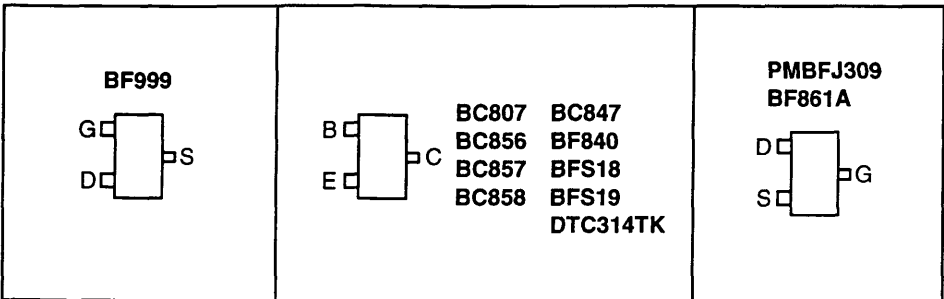
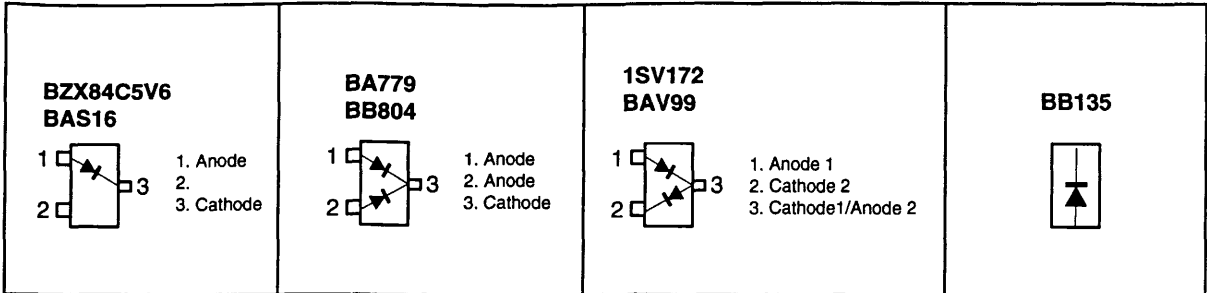
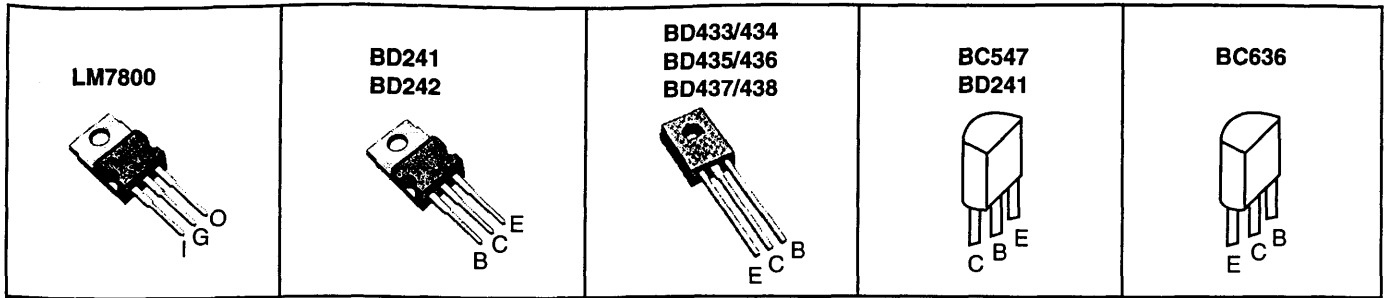


NING

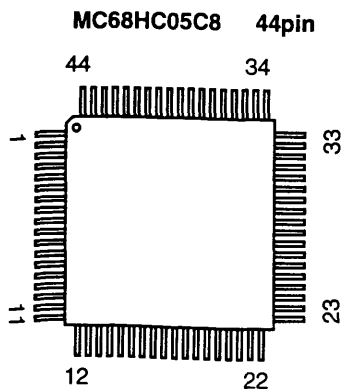
| SYMBOL | PIN | DESCRIPTION |
|--------|-----|---------------------------------------|
| OUTA | 1 | output channel A |
| INTA | 2 | integrating filter channel A |
| CONTRA | 3 | control voltage channel A |
| HPA | 4 | high-pass filter channel A |
| SCA | 5 | side chain channel A |
| | 6 | delay time constant |
| EQOA | 7 | equalizing output channel A |
| EQFA | 8 | equalizing input channel A |
| VCC | 9 | voltage supply |
| INA1 | 10 | input channel A1 (forward or reverse) |
| VREF | 11 | reference voltage |
| INTA | 12 | input channel A2 (reverse or forward) |
| | 13 | input channel B2 (reverse or forward) |
| | 14 | headswitch input |
| INA1 | 15 | input channel B1 (forward or reverse) |
| ND | 16 | ground |
| EQFB | 17 | equalizing input channel B |
| EQOB | 18 | equalizing output channel B |
| AMSEQ | 19 | AMS output and EQ-switch input |
| SCB | 20 | side chain channel B |
| HPB | 21 | high-pass filter channel B |
| CONTRB | 22 | control voltage channel B |
| INTB | 23 | integrating filter channel B |
| OUTB | 24 | output channel B |



TERMINAL GUIDE OF IC'S, TRANSISTORS AND DIODES



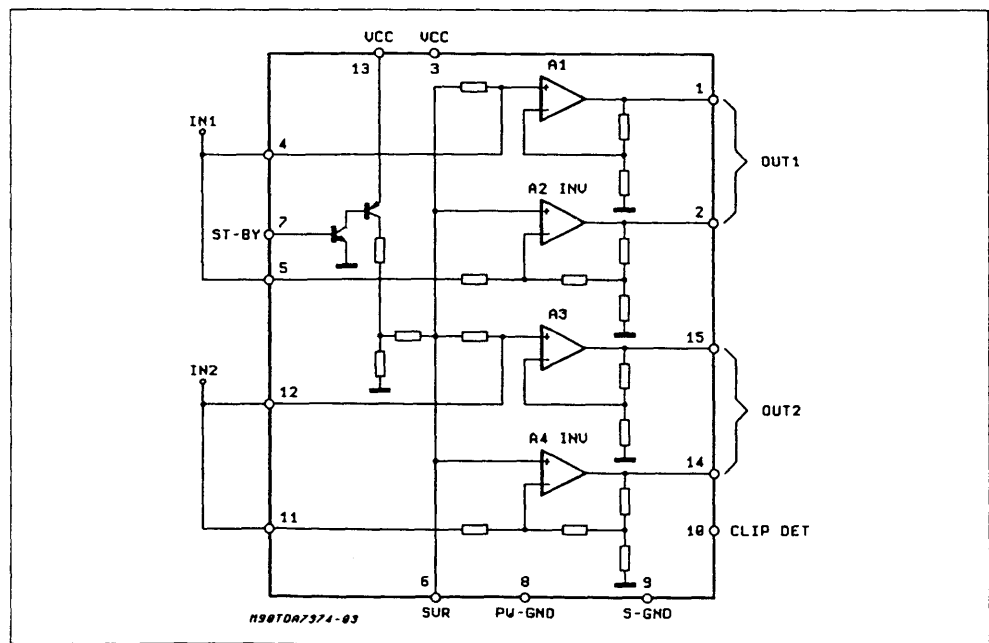
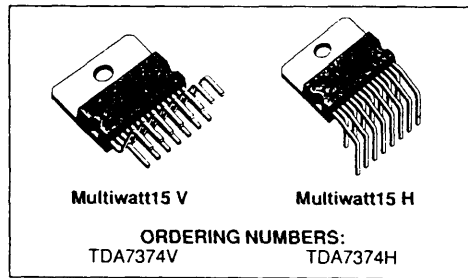
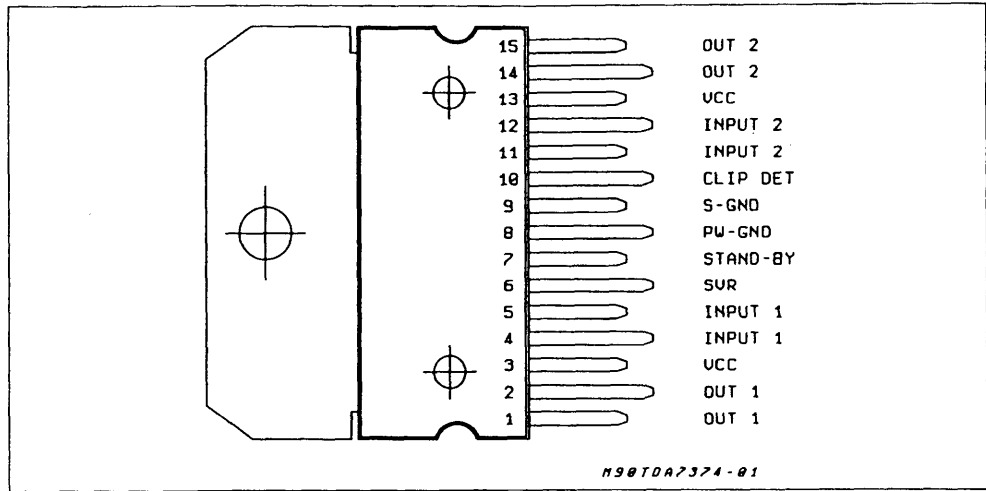
- 24W04C6** 8pin
- 35098A** 8pin
- L2722** 8pin
- LM258** 8pin
- TCA0372DPI** 8pin
- MC45581DT** 8pin
- TC35098AP** 8pin
- TDA8579T/N1** 8pin
- HEF4013BT** 14pin
- HEF4053BT** 16pin
- SAA6579T** 16pin
- HEF4052BT** 16pin
- TEA6330T/V1** 20pin
- TDA8808T/C3** 28pin
- TDA8809/C2** 28pin
- MSM5165AL** 28pin
- TEA6320** 32pin
- MSM6307GS** 32pin
- TEA6822T** 56pin



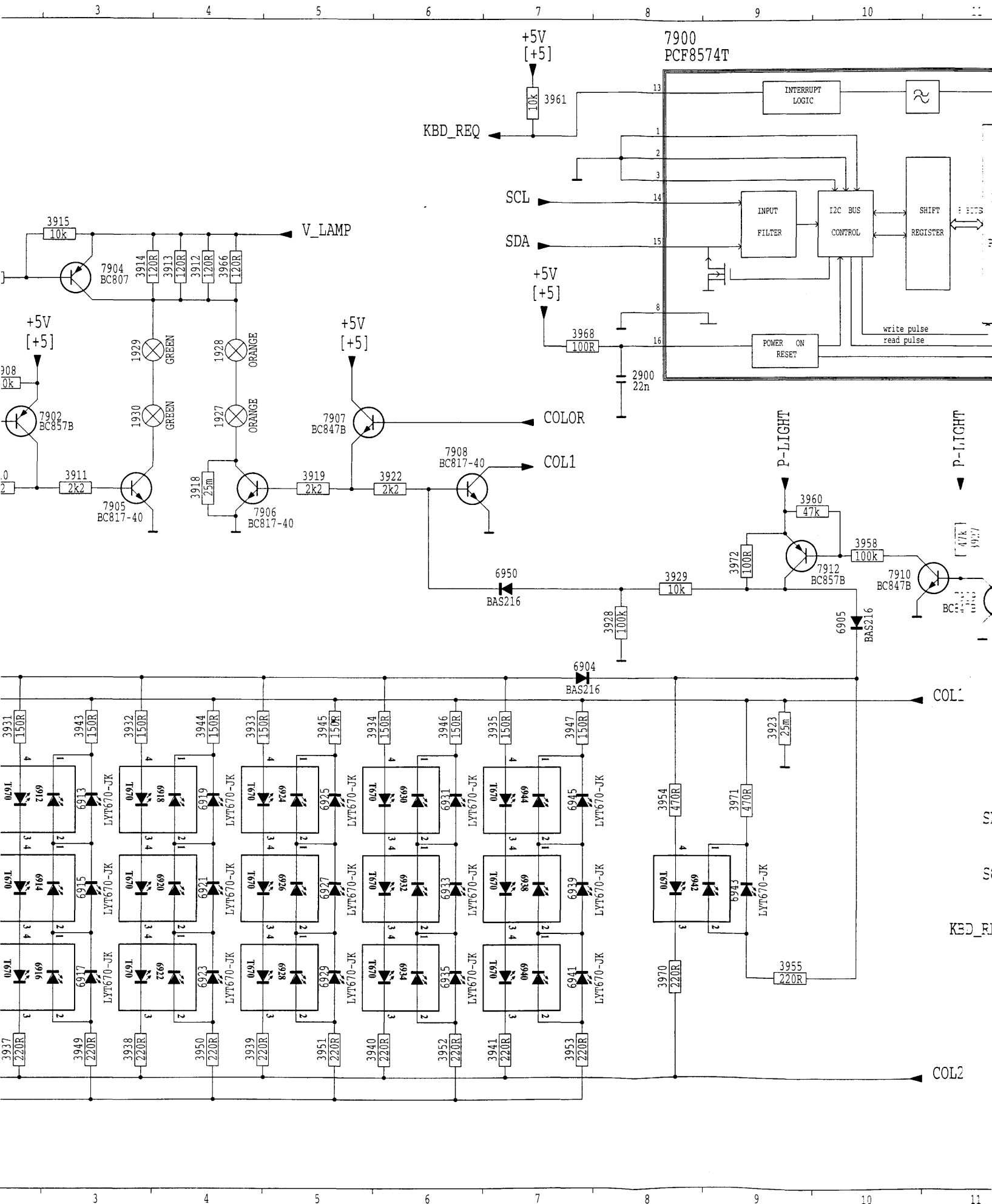
7602 TDA 7374

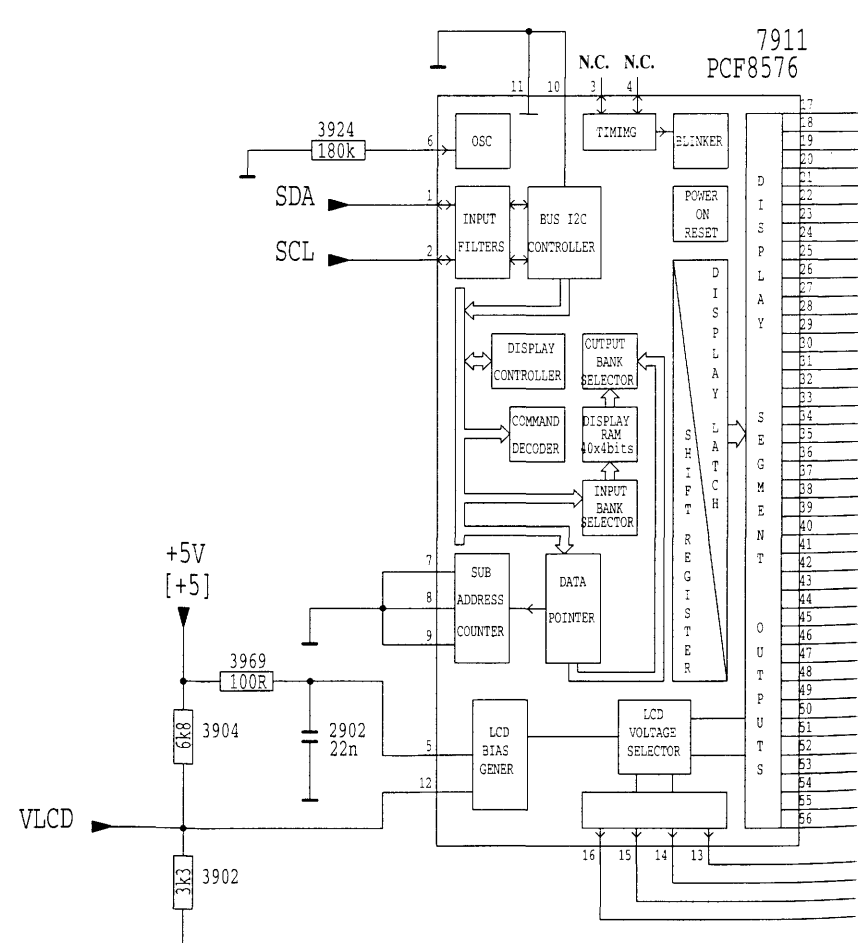
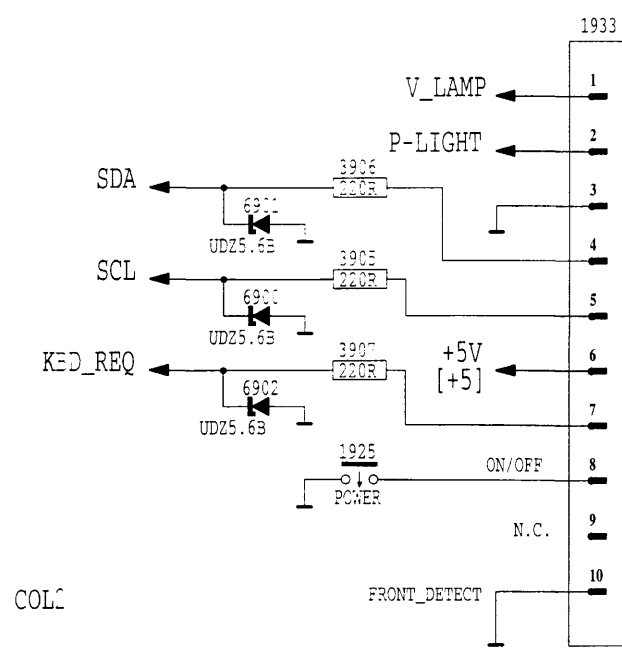
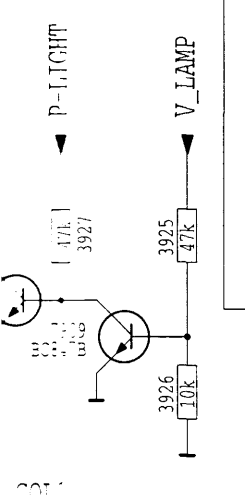
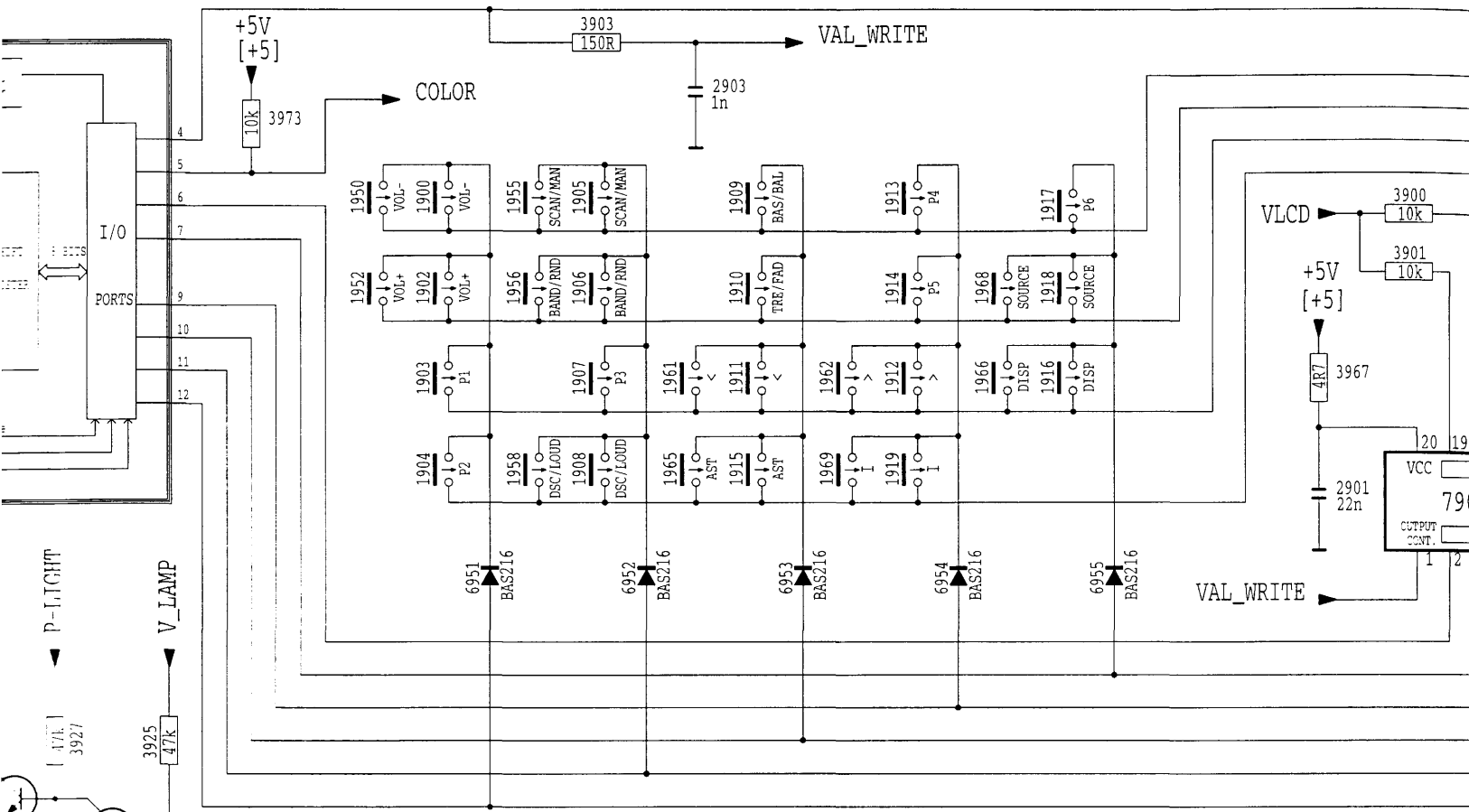
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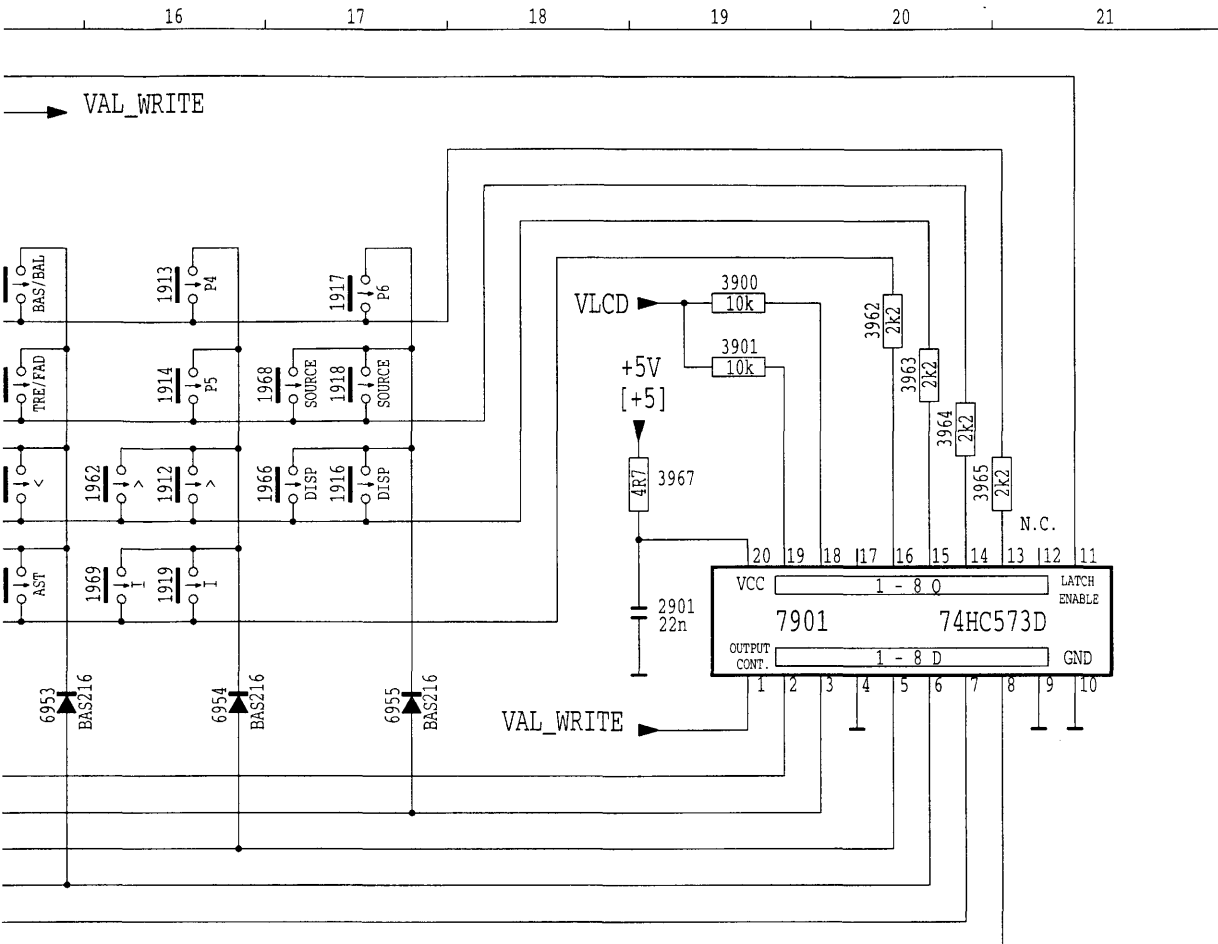
PIN CONNECTION (Top view)



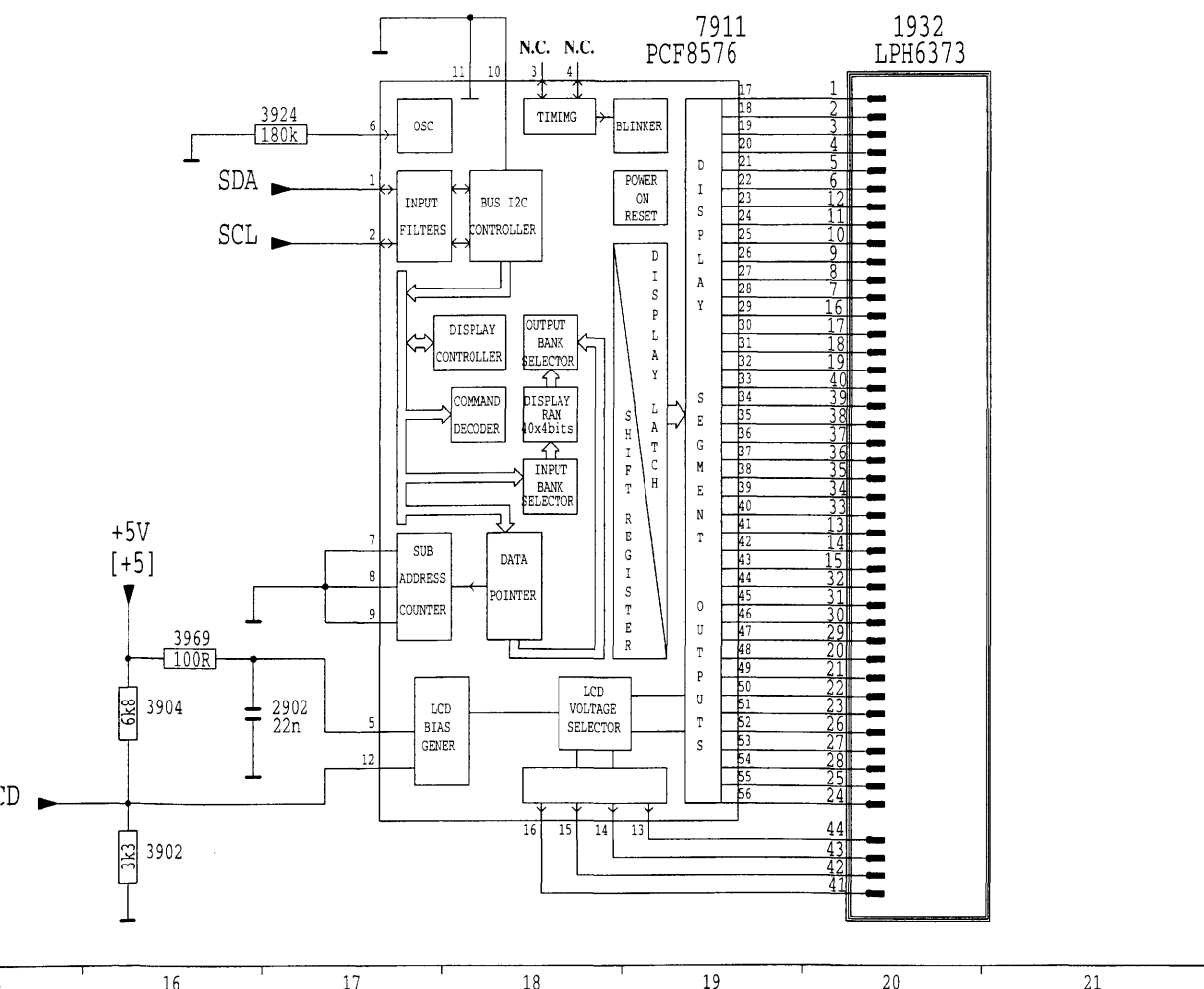
LE UNIT (FRONT PCB)







| | | | |
|------|-----|------|-----|
| 1900 | B13 | 6902 | I12 |
| 1902 | B13 | 6904 | F17 |
| 1903 | C13 | 6905 | F10 |
| 1904 | C13 | 6906 | G1 |
| 1905 | B14 | 6907 | G2 |
| 1906 | B14 | 6908 | H1 |
| 1907 | C14 | 6909 | H2 |
| 1908 | C14 | 6910 | I1 |
| 1909 | B15 | 6911 | I2 |
| 1910 | B15 | 6912 | G2 |
| 1911 | C15 | 6913 | G3 |
| 1912 | C16 | 6914 | H2 |
| 1913 | B16 | 6915 | H3 |
| 1914 | B16 | 6916 | I1 |
| 1915 | C15 | 6917 | I3 |
| 1916 | C17 | 6918 | G4 |
| 1917 | B17 | 6919 | G4 |
| 1918 | B17 | 6920 | H4 |
| 1919 | C16 | 6921 | H4 |
| 1920 | C16 | 6922 | I1 |
| 1921 | I12 | 6923 | I4 |
| 1922 | D4 | 6924 | G5 |
| 1923 | D4 | 6925 | G5 |
| 1924 | D3 | 6926 | G5 |
| 1925 | D3 | 6927 | H5 |
| 1926 | F20 | 6928 | H5 |
| 1927 | G14 | 6929 | I5 |
| 1928 | G14 | 6930 | I5 |
| 1929 | B13 | 6931 | G6 |
| 1930 | B13 | 6932 | G6 |
| 1931 | B14 | 6933 | H6 |
| 1932 | B14 | 6934 | H6 |
| 1933 | C15 | 6935 | I6 |
| 1934 | C15 | 6936 | I6 |
| 1935 | C17 | 6937 | H7 |
| 1936 | C17 | 6938 | H7 |
| 1937 | B17 | 6939 | I7 |
| 1938 | B17 | 6940 | I7 |
| 1939 | C16 | 6941 | I7 |
| 1940 | C16 | 6942 | H8 |
| 1941 | C8 | 6943 | H8 |
| 1942 | C8 | 6944 | G7 |
| 1943 | A15 | 6945 | G7 |
| 1944 | B19 | 6946 | E7 |
| 1945 | B19 | 6947 | D13 |
| 1946 | J16 | 6948 | D14 |
| 1947 | A14 | 6949 | D15 |
| 1948 | I16 | 6950 | D16 |
| 1949 | H12 | 6951 | D17 |
| 1950 | H12 | 6952 | A8 |
| 1951 | H12 | 6953 | D19 |
| 1952 | D12 | 6954 | D19 |
| 1953 | D12 | 6955 | D20 |
| 1954 | D12 | 6956 | C20 |
| 1955 | D12 | 6957 | C20 |
| 1956 | D12 | 6958 | C20 |
| 1957 | D12 | 6959 | C20 |
| 1958 | D12 | 6960 | C20 |
| 1959 | D12 | 6961 | C20 |
| 1960 | D12 | 6962 | C20 |
| 1961 | D12 | 6963 | C20 |
| 1962 | D12 | 6964 | C20 |
| 1963 | D12 | 6965 | C20 |
| 1964 | D12 | 6966 | C20 |
| 1965 | D12 | 6967 | C20 |
| 1966 | D12 | 6968 | C20 |
| 1967 | D12 | 6969 | C20 |
| 1968 | D12 | 6970 | C20 |
| 1969 | D12 | 6971 | C20 |
| 1970 | D12 | 6972 | C20 |
| 1971 | D12 | 6973 | C20 |
| 1972 | D12 | 6974 | C20 |
| 1973 | D12 | 6975 | C20 |
| 1974 | D12 | 6976 | C20 |
| 1975 | D12 | 6977 | C20 |
| 1976 | D12 | 6978 | C20 |
| 1977 | D12 | 6979 | C20 |
| 1978 | D12 | 6980 | C20 |
| 1979 | D12 | 6981 | C20 |



| | | | |
|------|-----|------|-----|
| 1980 | D19 | 6982 | E10 |
| 1981 | D19 | 6983 | E10 |
| 1982 | D19 | 6984 | E10 |
| 1983 | D19 | 6985 | E10 |
| 1984 | D19 | 6986 | E10 |
| 1985 | D19 | 6987 | E10 |
| 1986 | D19 | 6988 | E10 |
| 1987 | D19 | 6989 | E10 |
| 1988 | D19 | 6990 | E10 |
| 1989 | D19 | 6991 | E10 |
| 1990 | D19 | 6992 | E10 |
| 1991 | D19 | 6993 | E10 |
| 1992 | D19 | 6994 | E10 |
| 1993 | D19 | 6995 | E10 |
| 1994 | D19 | 6996 | E10 |
| 1995 | D19 | 6997 | E10 |
| 1996 | D19 | 6998 | E10 |
| 1997 | D19 | 6999 | E10 |
| 1998 | D19 | 7000 | E10 |
| 1999 | D19 | 7001 | E10 |
| 2000 | D19 | 7002 | E10 |
| 2001 | D19 | 7003 | E10 |
| 2002 | D19 | 7004 | E10 |
| 2003 | D19 | 7005 | E10 |
| 2004 | D19 | 7006 | E10 |
| 2005 | D19 | 7007 | E10 |
| 2006 | D19 | 7008 | E10 |
| 2007 | D19 | 7009 | E10 |
| 2008 | D19 | 7010 | E10 |
| 2009 | D19 | 7011 | E10 |
| 2010 | D19 | 7012 | E10 |