

C 542

**COMPACT
DISC PLAYER**

C 542

**COMPACT
DISC PLAYER**

SERVICE MANUAL

NAD

SAFETY INFORMATION

CAUTION

CAUTION - INVISIBLE LASER RADIATION WHEN OPEN AND INTERLOCKS DEFEATED. AVOID EXPOSURE TO BEAM.

ADVARSEL - USYNLIG LASERSTRÅLING NÅR DEKSEL ÅPNES OG SIKKERHEDSLÅS BRYTES. UNNGÅ EKSPONERING FOR STRÅLEN.

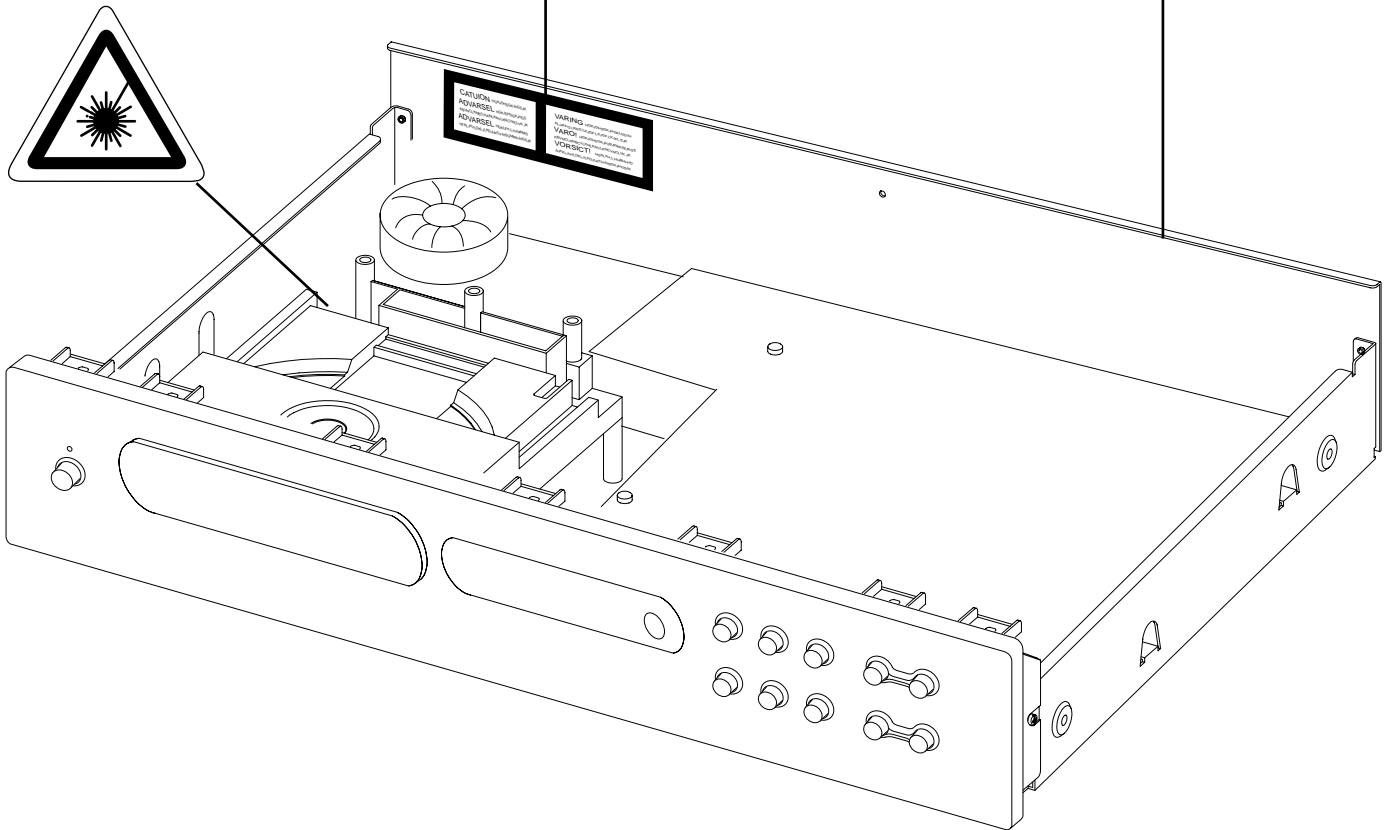
ADVARSEL - USYNLIG LASERSTRÅLING VED ÅBNING, NÅR SIKKERHEDSAFBRYDERE ER UDE AF FUNKTION. UNDGÅ UDSÆTTELSE FOR STRÅLING.

VARING - OSYNLIG LASERSTRÅLNING NÅR DENNA DEL ÄR ÖPPNAD OCH SPÄRRAR ÄR URKOPPLADE. STRÅLEN ÄR FARLIG.

VARO! - AVATTAESSA JA SUOJALUKITUS OHITETTAESSA OLET ALTTIINA NÄKTMÄTÖNTÄ LASERSÄTEILYLLE. ÄLÄ KAISO SÄTEESEEN.

VORSICHT! - UNSICHTBARE LASERSTRAHLUNG TRITTT AUS, WENN DECKEL GEÖFFNET UND WENN SICHERHEITVERRIEGELUNG ÜBERBRÜCKT IST. NICHT DEM STRAHL AUSSETZEN.

**CLASS 1
LASER PRODUCT**



The lightning flash with arrowhead, within an equilateral triangle is intended to alert the user of the presence of uninsulated "dangerous voltage" within the product's enclosure; that may be of sufficient magnitude to constitute a risk of electric shock to persons.



The exclamation point within an equilateral triangle is intended to alert the user of the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

THIS DEVICE COMPLIES WITH PART 15 OF THE FCC RULES. OPERATION IS SUBJECT TO THE FOLLOWING TWO CONDITIONS:-
(1) THIS DEVICE MAY NOT CAUSE HARMFUL INTERFERENCE, AND
(2) THIS DEVICE MUST ACCEPT ANY INTERFERENCE RECEIVED, INCLUDING INTERFERENCE THAT MAY CAUSE UNDESIRED OPERATION.

SERVICE SAFETY PRECAUTIONS

1. Replacing the fuses

CAUTION: FOR CONTINUED PROTECTION AGAINST THE RISK OF FIRE REPLACE ONLY WITH SAME TYPE OF FUSE.

| Reference No | | Part Number | Description |
|--------------|-----------------|-------------|---------------------------|
| M507 | *AH \triangle | 5120-0052-0 | FUSE T1.6A 250V 5x20MM |
| M507 | *C \triangle | 5120-0050-0 | FUSE T1.6A 250V 5x20MM |
| M512, M513 | *AH \triangle | 5120-0020-0 | FU T1A 250V UL/CSA 5x20MM |
| M512, M513 | *C \triangle | 5120-0018-0 | FU T1A 250V SEMKO/VDE |
| M514 | *AH \triangle | 5120-0026-0 | FU T315MA L 250V UL/CSA |
| M514 | *C \triangle | 5120-0027-0 | FU T315MA L 250V |

NOTE:

<*AH > : USA, CANADIAN MODEL ONLY.

<*C > : EUROPEAN MODEL ONLY.

2. Safety check out

(Only U.S.A. model)

Before returning the product to the customer, make leakage current or resistance measurements to determine that exposed parts are acceptably insulated from the supply circuit.

Parts marked with the symbol \triangle are critical with regard to the risk of fire and electric shock. Replace only with parts recommended by the manufacturer.

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SPECIFICATIONS

| | |
|---------------------------------|---|
| Disc Capacity | One Disc, 120 or 80 mm |
| Decoding | BURR-BROWN Delta Sigma 24bit |
| Digital Filter | 8 Times oversample |
| Analog Filter | 4 pole active |
| Frequency Response | +/- 0.5 dB, 5Hz - 20kHz |
| De-Emphasis Error | +/- 0.3 dB |
| THD (at 0 dB, 1kHz) | 0.002% |
| Intermodulation Distortion | < - 100 dB |
| (19 + 20 kHz) | |
| Dynamic Range | 96 dB |
| Linearity | +/- 0.5 dB, 0 dB to -80 dB |
| Signal / Noise Ratio (A-Weight) | ≥100 dB, De-Emphasis on ≥100 dB, De-Emphasis off |
| Channel Separation 1kHz | >90 dB |
| 10 kHz | >80 dB |
| Wow and Flutter | Unmeasurable (Quartz Crystal Accuracy) |
| Output Impedance | 200 Ω |
| Output Level at 0 dB | 2.2 V rms |
| Digital Error Correction | IRC with double error correction in C1 and C2 |
| Digital Code Output | Sony / Philips Serial data format |
| Power Consumption | 12W |

CONTROLS

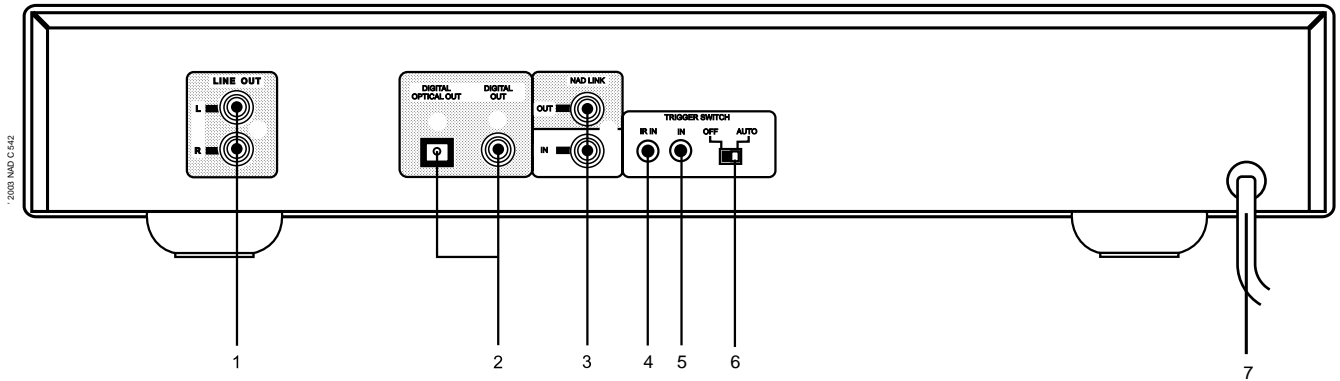
Play / Pause, Stop, Random, Skip (< >), Scan (< >), Open, Time, Repeat.

PHYSICAL SPECIFICATIONS

| | |
|--|--------------------|
| Dimensions (Width x Height x Depth) | 435 x 80 x 285 mm |
| Net weight | 4 kg (8.8 lbs) |
| Shipping weight | 5.1 kg (11.22 lbs) |

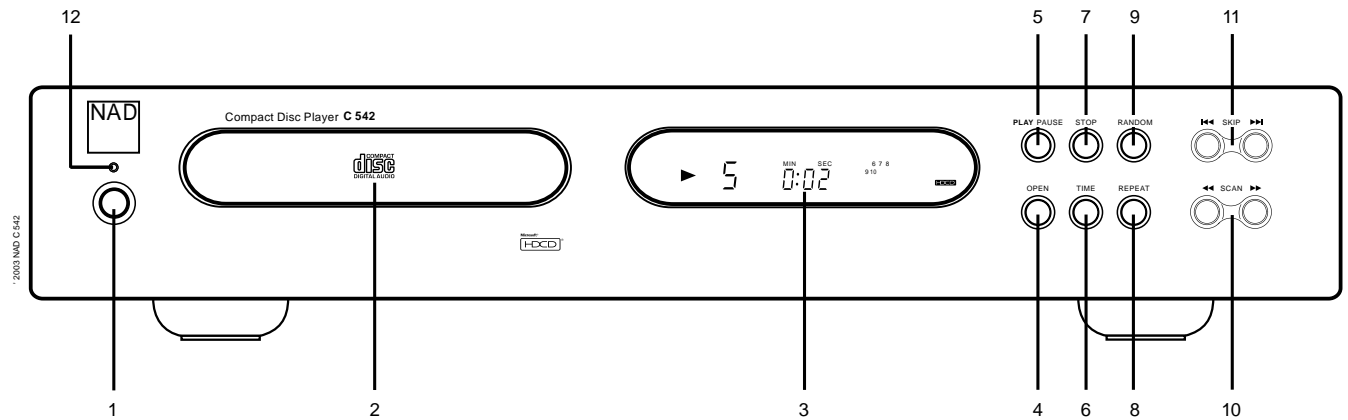
REAR PANEL / FRONT PANEL

REAR PANEL



- | | |
|-------------------------------------|-------------------|
| 1. LINE OUT | 5. TRIGGER IN |
| 2. DIGITAL OPTICAL & COAXIAL OUTPUT | 6. TRIGGER SWITCH |
| 3. NAD LINK IN / OUT | 7. AC LINE CORD |
| 4. IR INPUT | |

FRONT PANEL



- | | |
|-------------------|-------------------------------------|
| 1. POWER ON / OFF | 7. STOP |
| 2. DISC DRAWER | 8. REPEAT |
| 3. DISPLAY | 9. RANDOM |
| 4. OPEN | 10. SCAN Back (◀◀) / Forward (▶▶) |
| 5. PLAY / PAUSE | 11. SKIP Back (◀◀◀) / Forward (▶▶▶) |
| 6. TIME | 12. STANDBY LED |

DISASSEMBLY INSTRUCTIONS

1. Remove machine screws M 4.0 x 6.0 (① to ④) from the side panels.
Remove tapping screw 3.0 x 8.5 (⑤) from the back panel.
Refer to **Figure No.1**.

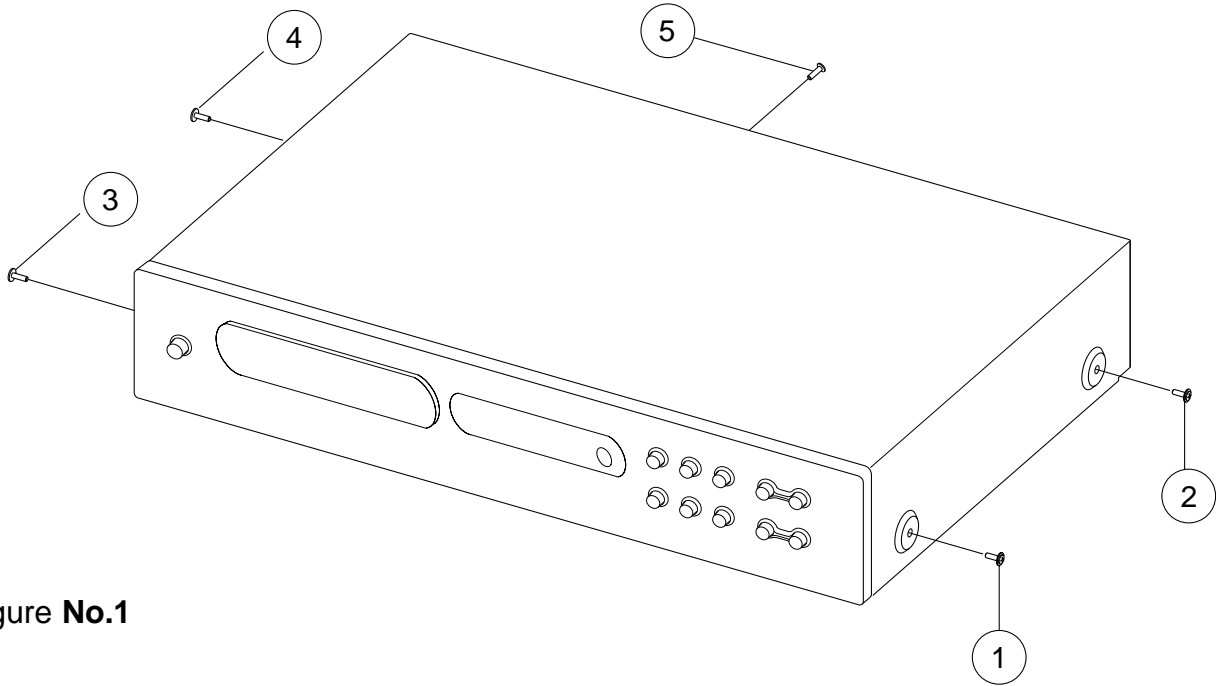


Figure No.1

2. Pull both sides of the TOP COVER slightly outwards (⑥) and tilt approx. 35° and then remove in the direction as indicated by the arrow (⑦). Refer to **Figure No.2**.

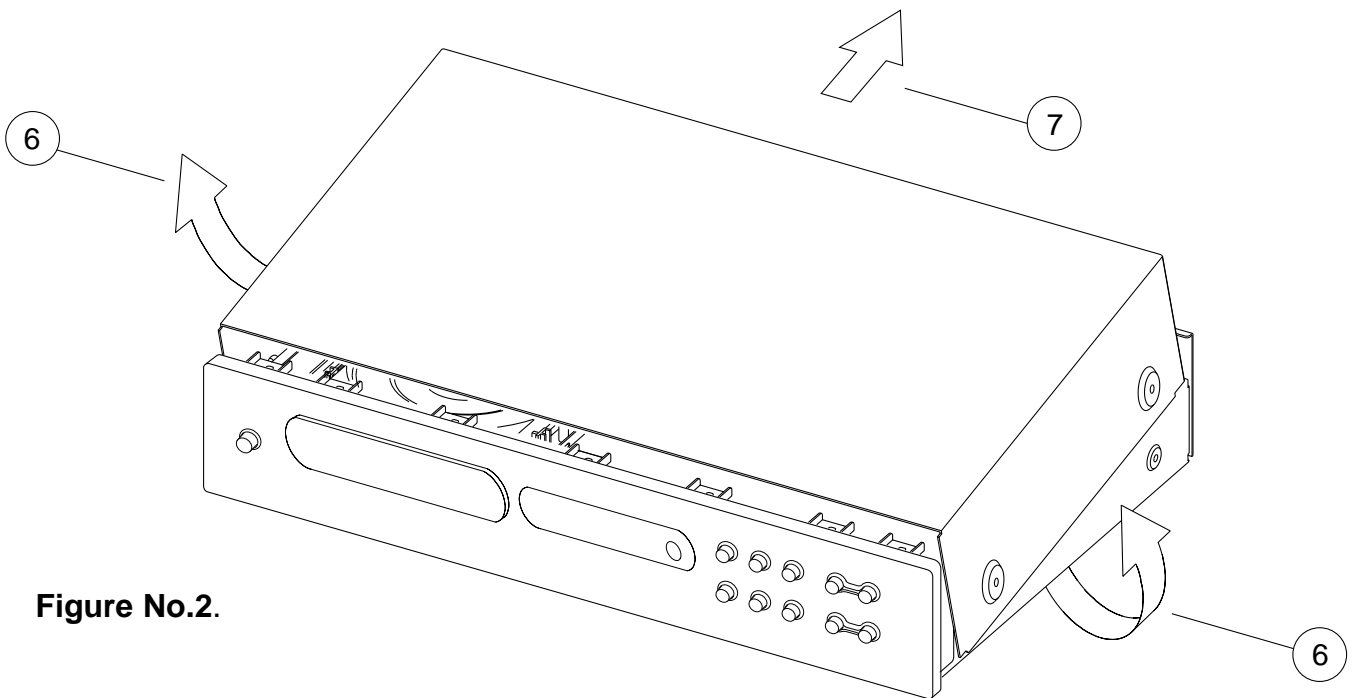
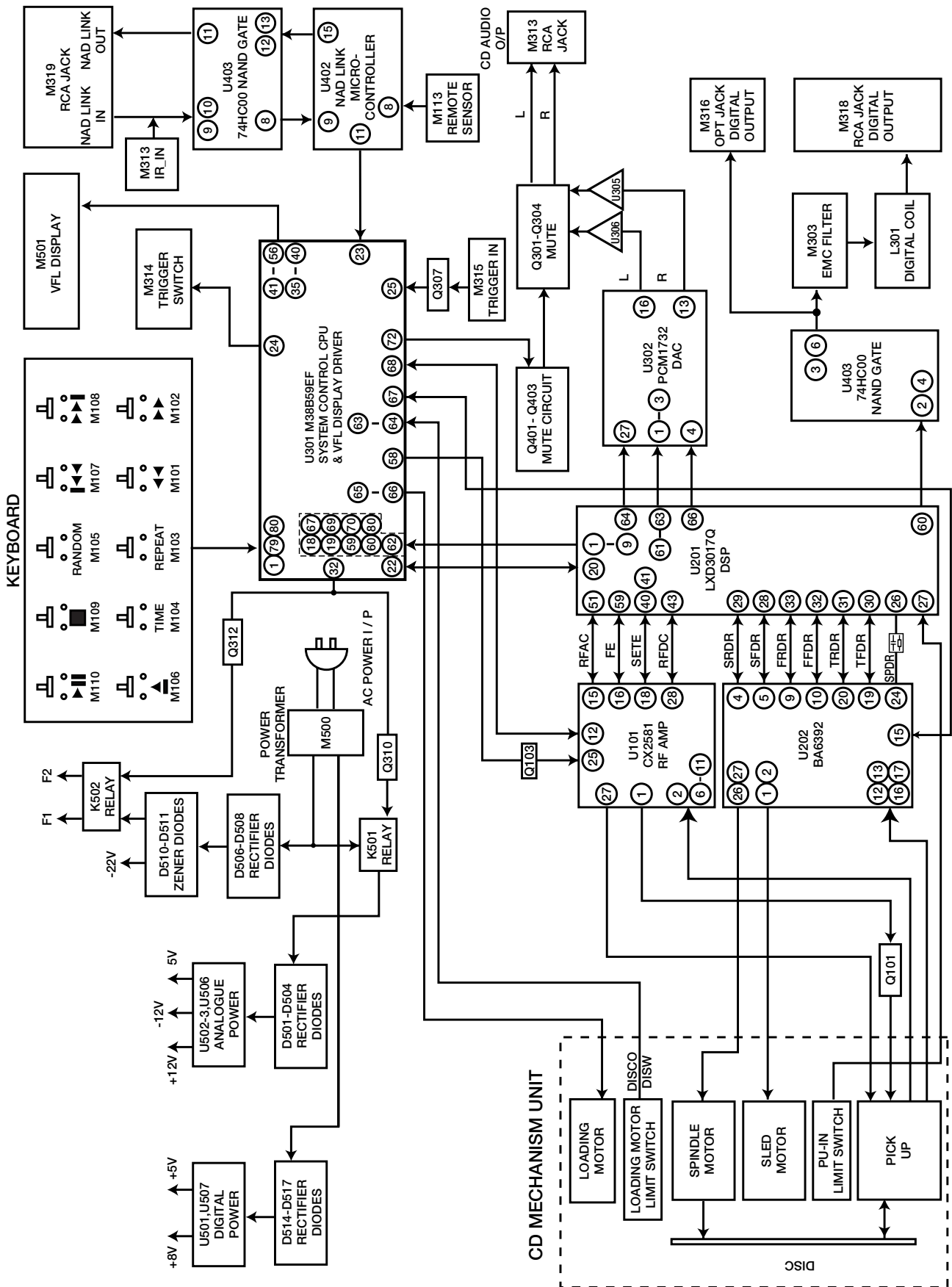


Figure No.2.

BLOCK DIAGRAM



IMPORTANT NOTES

INSTRUCTION FOR HANDLING OPTICAL SYSTEM BLOCK PICK-UP

Electrostatic breakdown of the laser diode in the optical system block may occur due to a potential difference caused by electrostatic charge accumulated on clothing, human body, etc. A ground must be provided as follows to prevent any electrostatic charge during unpacking or repair work.

1. Ground for Human Body

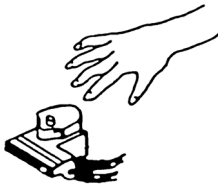
Be sure to wear a ground band (1M ohm) that is properly to remove any static electricity that may be charged on the body.

2. Ground for Work Bench

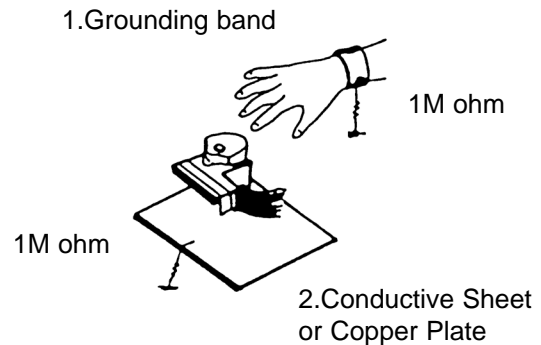
Be sure to place a conductive sheet (1M ohm) or copper plate with proper grounding on the work bench or other surface on which the pick-up is to be placed.

3. Because the static electricity charge on the clothing does not discharge through the body grounding band, do not let clothing to get in contact with the pick-up unit.

INCORRECT



CORRECT



NOTE: Laser diodes are so susceptible to damage from static electricity that even if a static discharge does not ruin the diode, it can shorten its life or cause it to work improperly.

PRECAUTIONS FOR CHECKING BEAM EMISSION

The laser beam of this unit is focused on the reflecting surface of the objective lens in the optical system block. Therefore, keep your eyes at least 12 inches (30 cm) away from the objective lens when the laser diode is **ON**. (Operation Check Method for Laser Diode and Focus Search Function.)

When the **POWER** switch is turned **ON** after the chucking plate is removed, observe the objective lens and confirm that the following operations are performed properly.

(The optical system should be at the lead-in area position when it is checked at this time.)

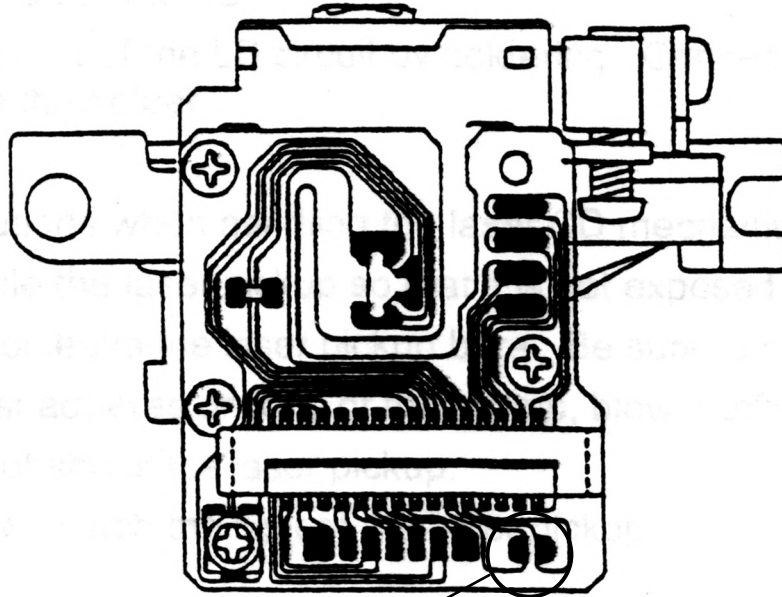
- (1) The laser should be at the innermost position after the chucking plate is removed.
- (2) The diffused light of the laser beam can be seen when the **POWER** switch is turned **ON**.
- (3) Vertical (up and down) movement of the objective lens (2 or 3 times) will take place.

PRECAUTIONS WHEN CHANGING LASER PICK-UP

When removing the pick-up assembly, short circuit the PCB tracks on the optical block as show in the drawing in order to protect the pick-up before removal.

NOTE: Replacement pick-up assemblies are supplied with the PCB pattern already protected.

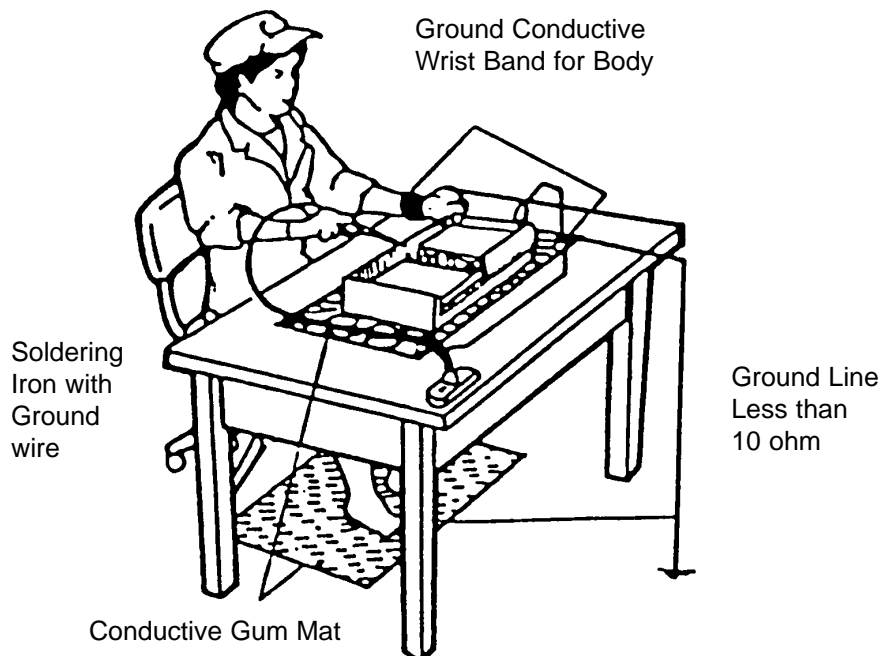
DO NOT REMOVE THE SHORT CIRCUITS UNTIL YOU HAVE FINISHED FITTING THE PICK-UP.



Protective soldering place
for laser diode

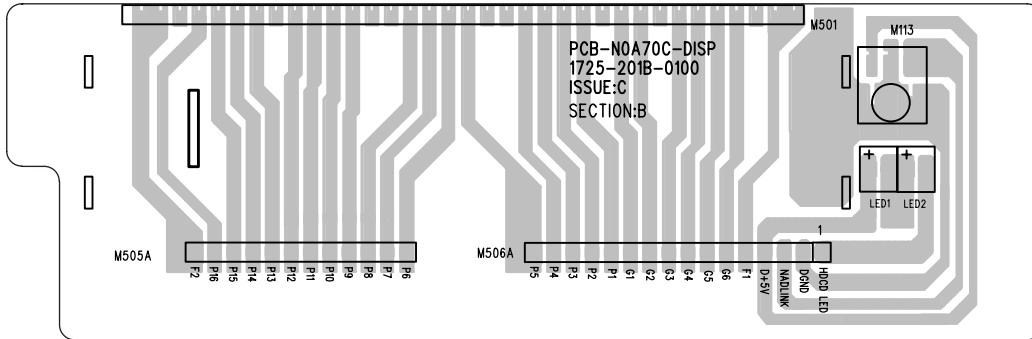
Caution:

Laser diodes are extremely susceptible to damage from static electricity. Even if a static discharge does not ruin the diode, it can shorten its life or cause it to work improperly. When replacing the pick-up, use a conductive mat, a grounded soldering iron, and so on, to protect the laser diode from static damage.

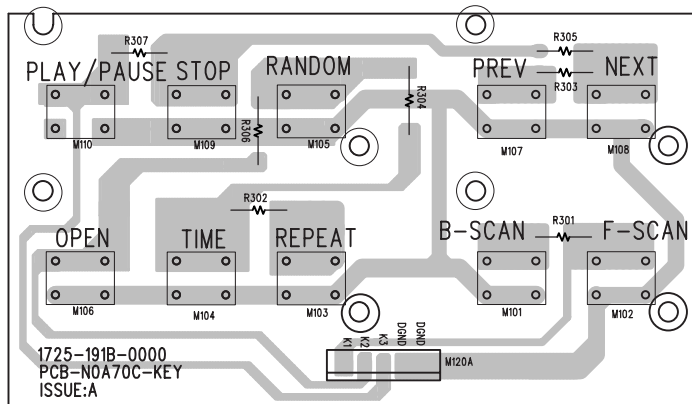


PCB LAYOUT

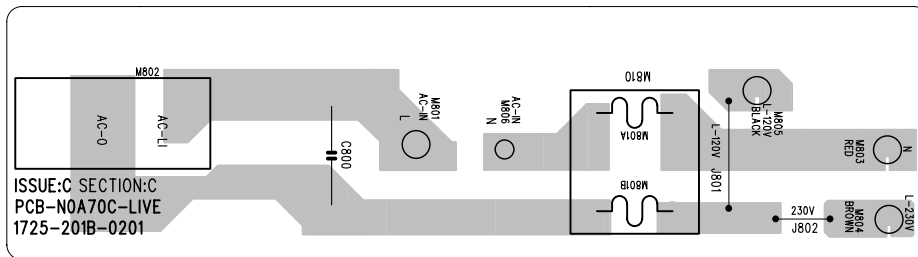
DISPLAY BOARD



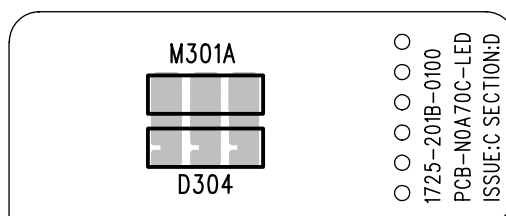
KEY BOARD



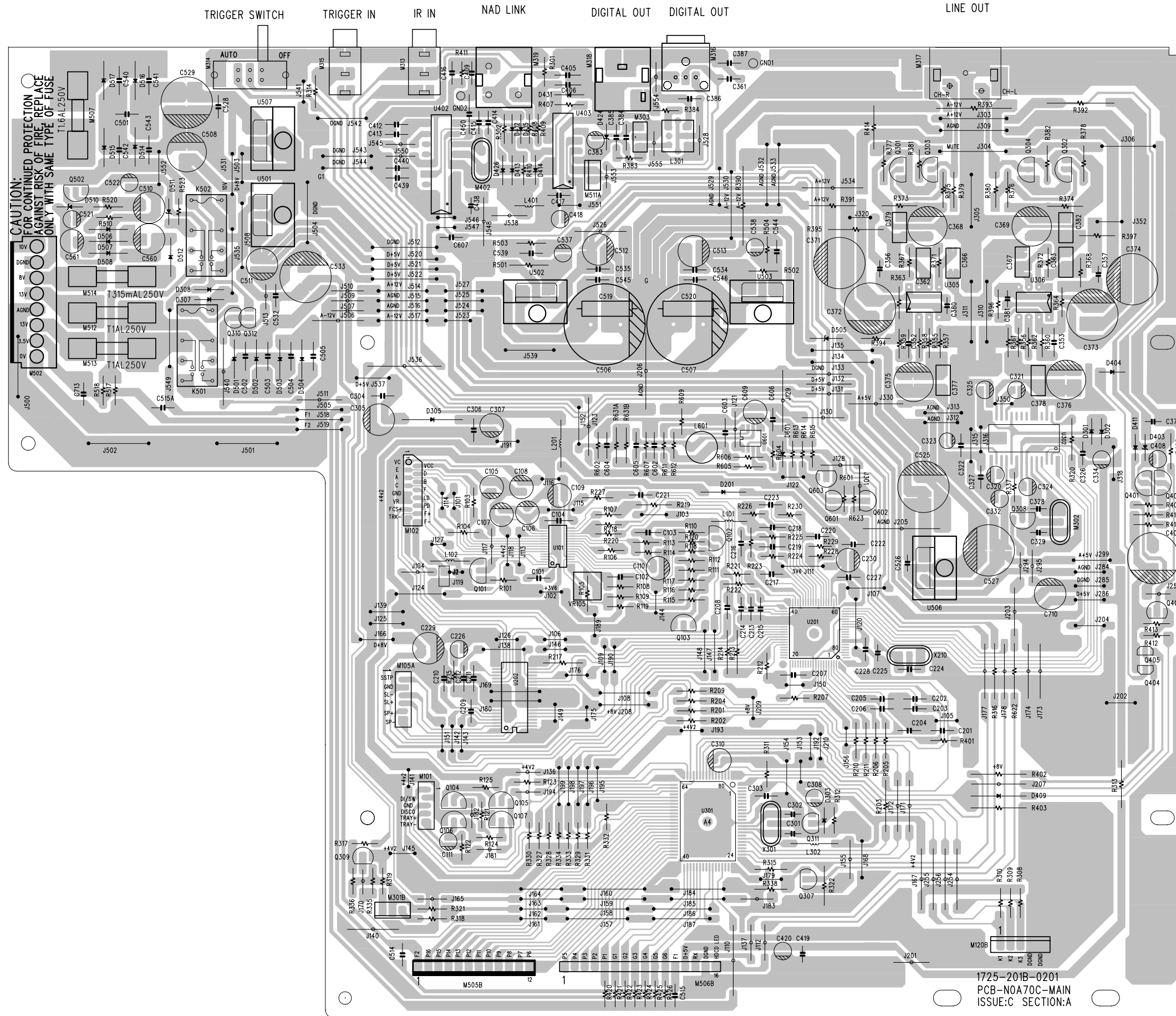
LIVE BOARD



LED BOARD

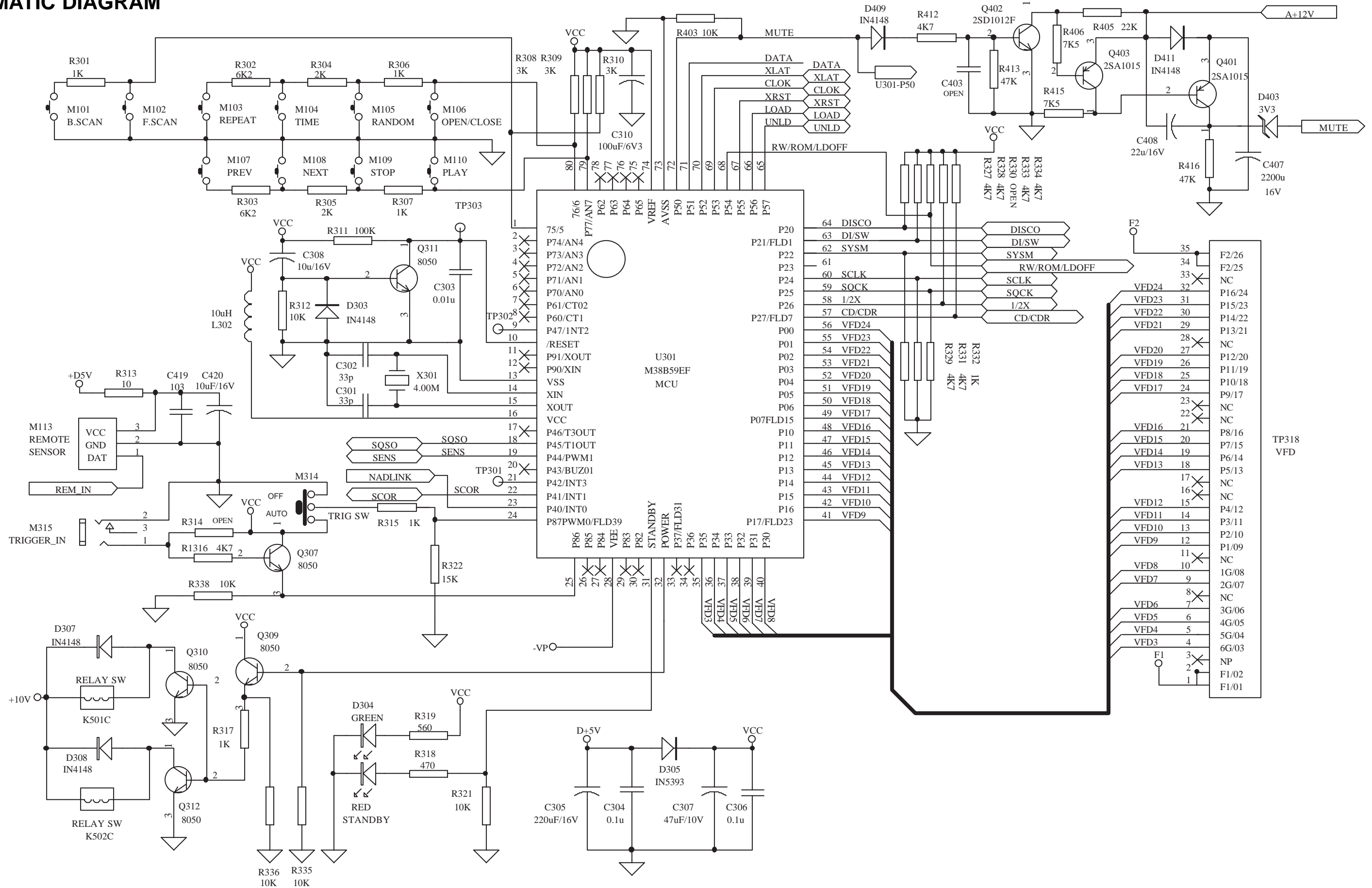


MAIN BOARD

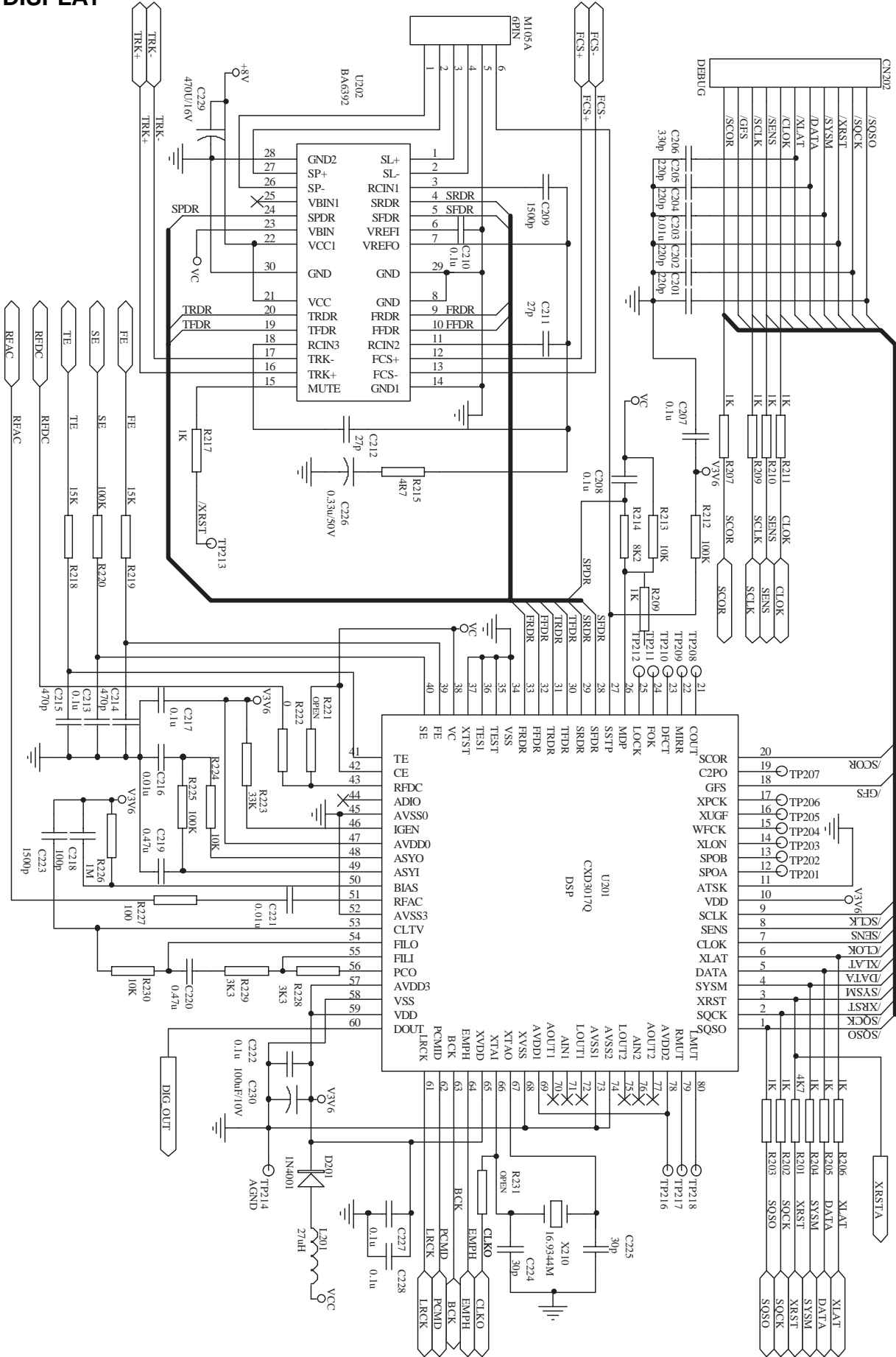


SCHEMATIC DIAGRAM

MCU

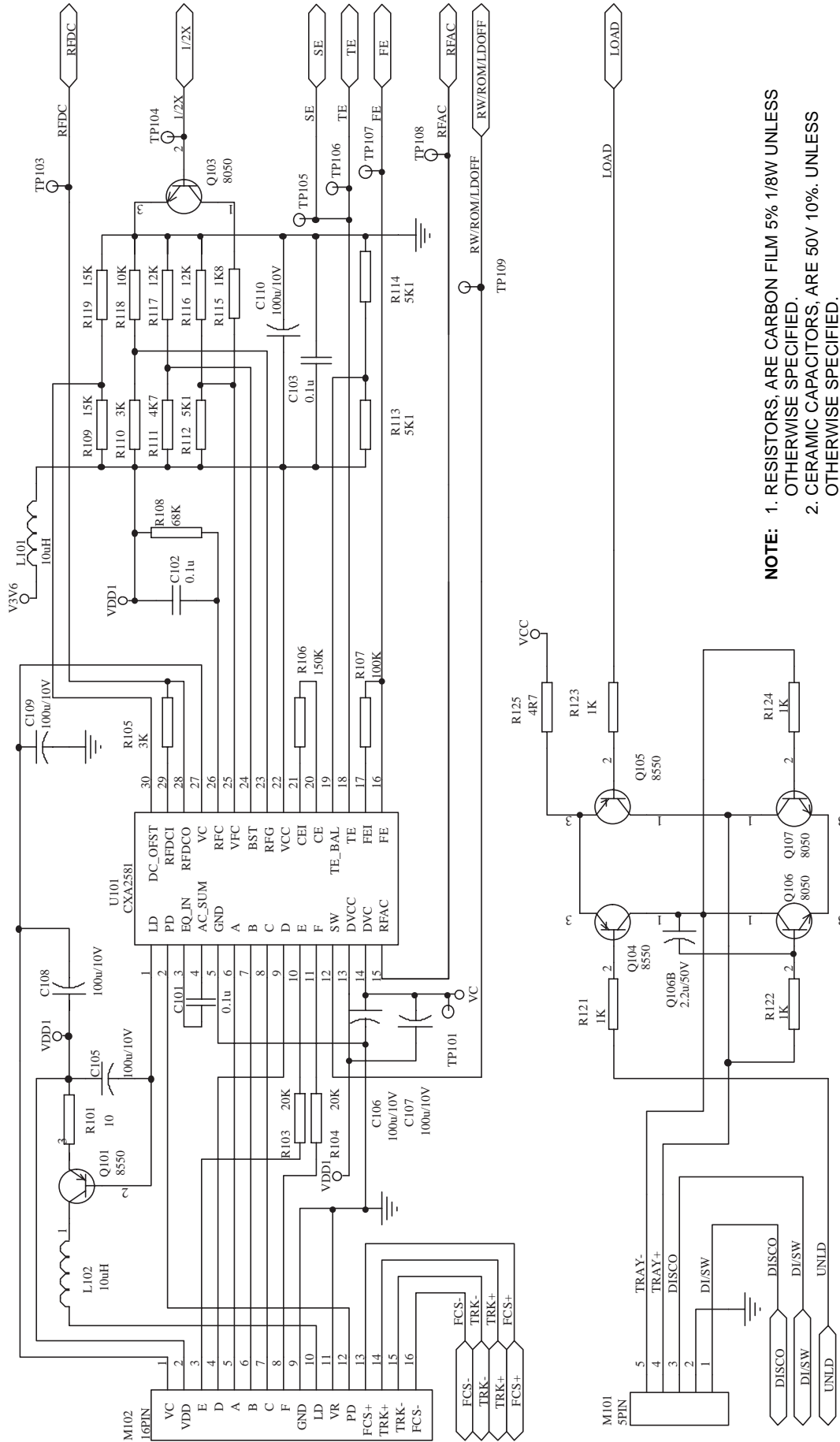


DISPLAY



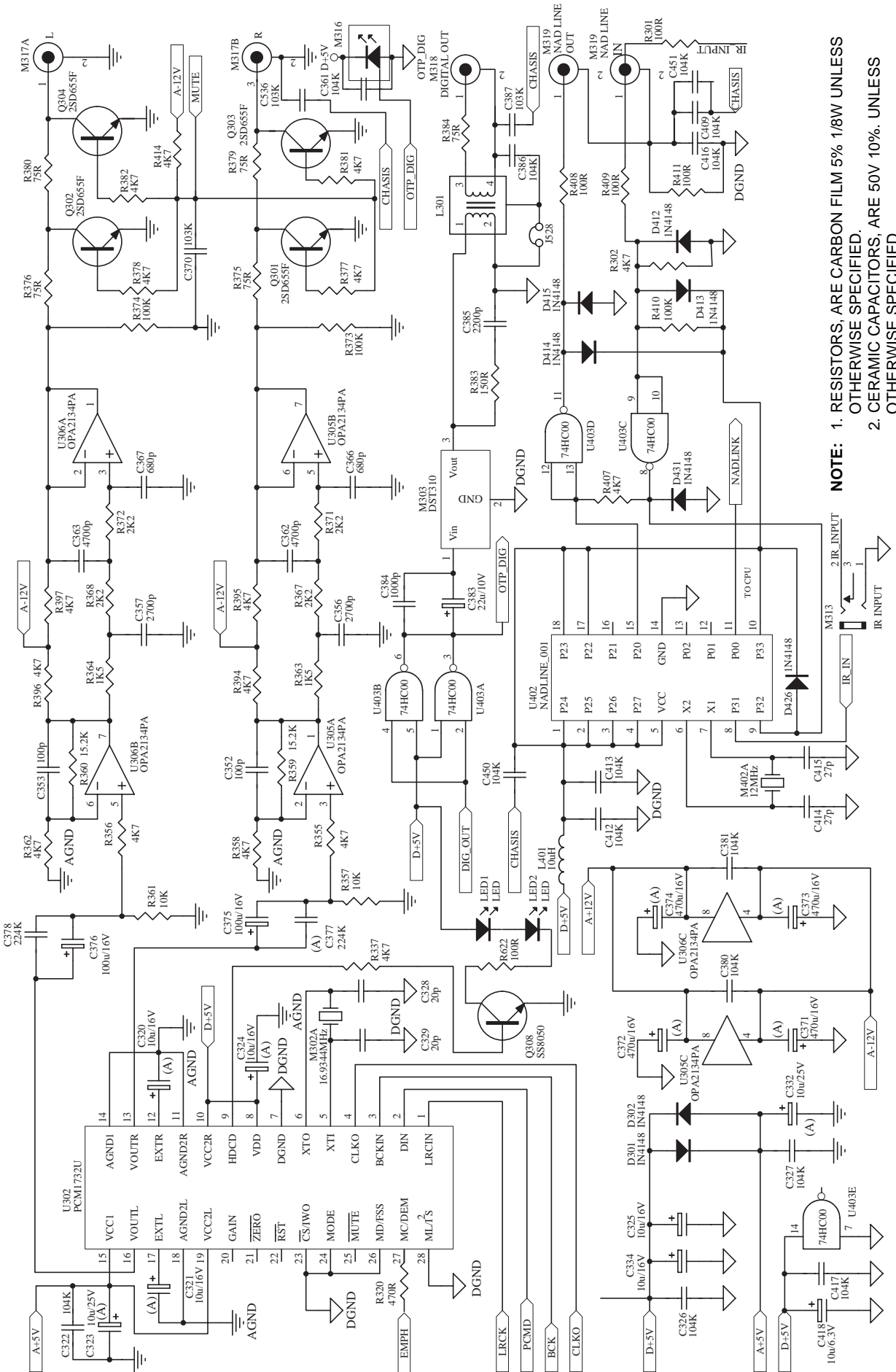
NOTE: 1. RESISTORS ARE CARBON FILM 5% 1/8W UNLESS OTHERWISE SPECIFIED.
 2. CERAMIC CAPACITORS, ARE 50V 10% UNLESS OTHERWISE SPECIFIED.

RF AMP



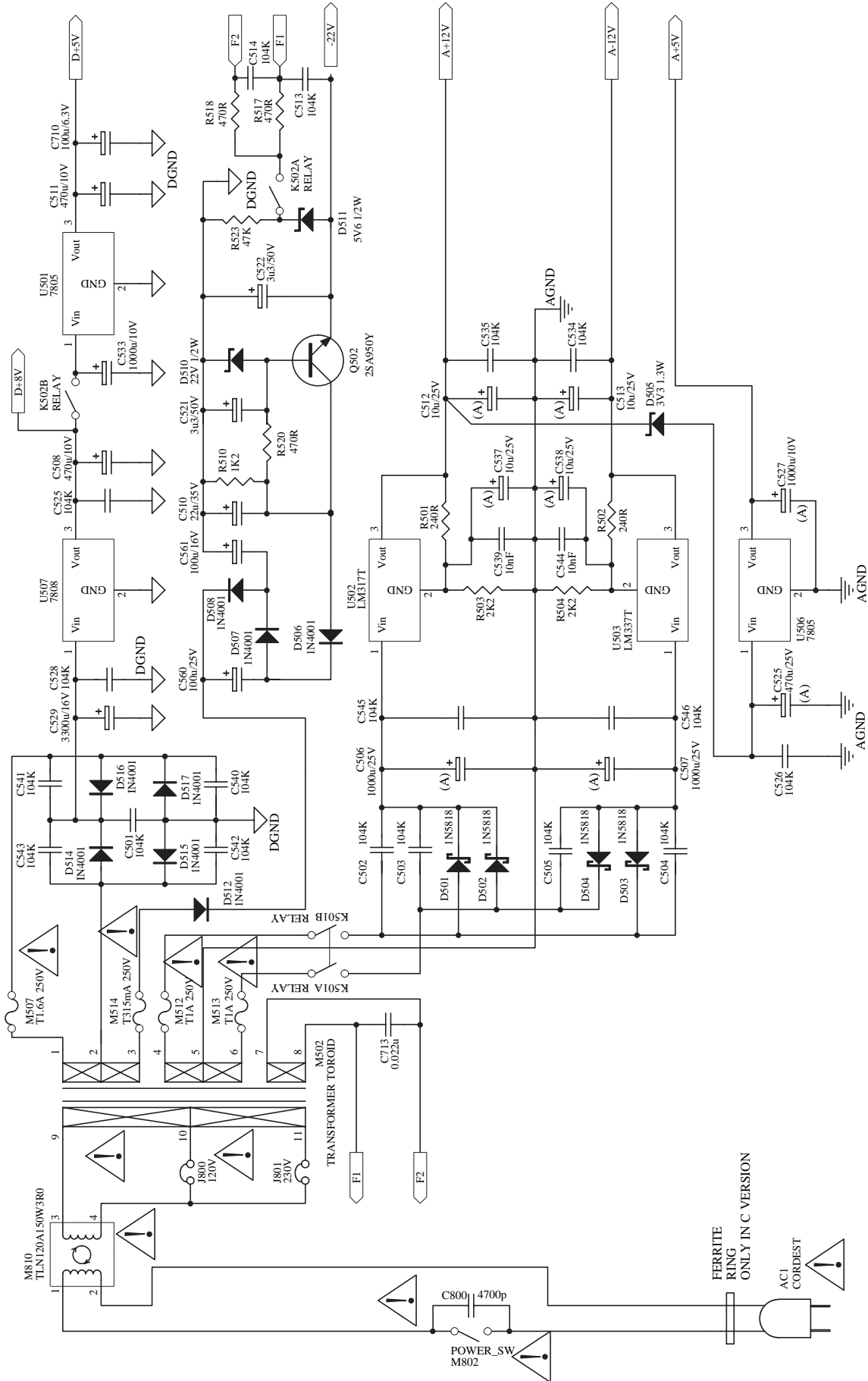
NOTE: 1. RESISTORS, ARE CARBON FILM 5% 1/8W UNLESS OTHERWISE SPECIFIED.
 2. CERAMIC CAPACITORS, ARE 50V 10%. UNLESS OTHERWISE SPECIFIED.

DAC



NOTE: 1. RESISTORS, ARE CARBON FILM 5% 1/8W UNLESS OTHERWISE SPECIFIED.
 2. CERAMIC CAPACITORS, ARE 50V 10%. UNLESS OTHERWISE SPECIFIED.

POWER

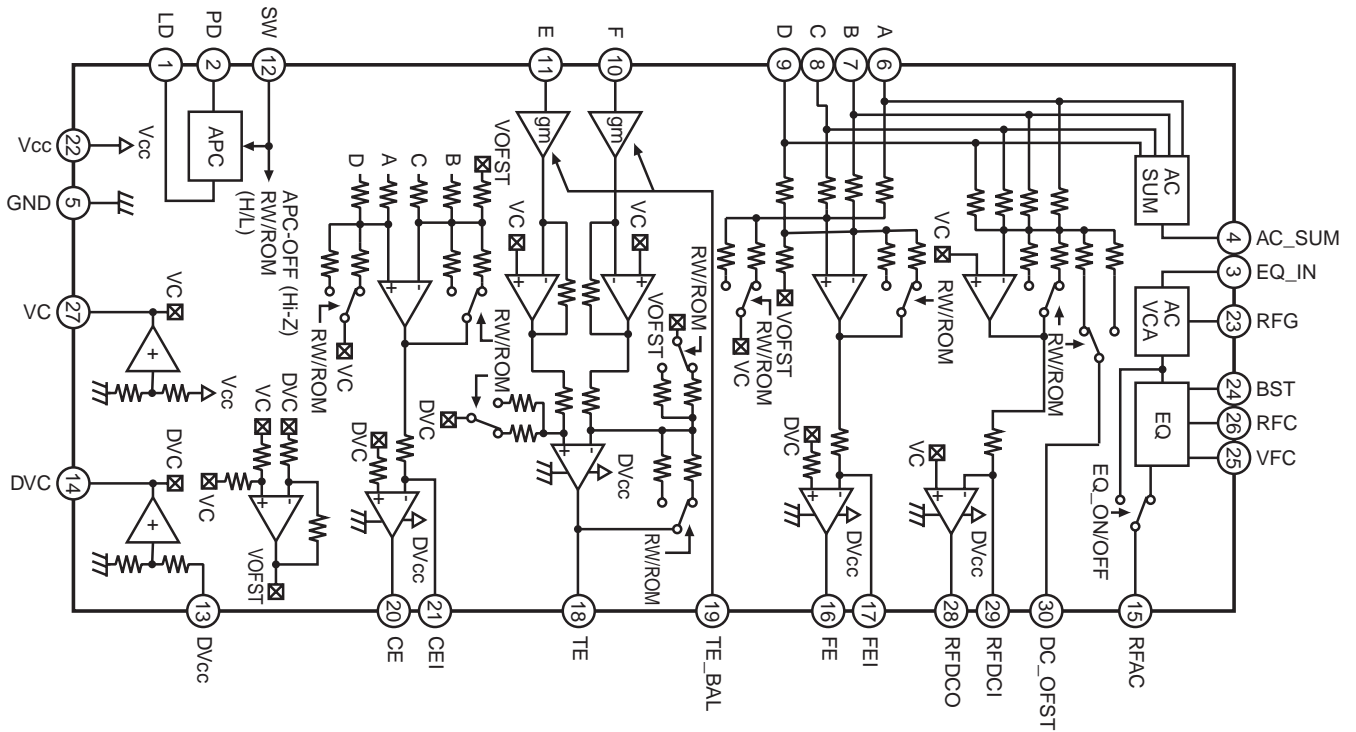


NOTE: 1. RESISTORS, ARE CARBON FILM 5% 1/8W UNLESS OTHERWISE SPECIFIED.
 2. CERAMIC CAPACITORS, ARE 50V 10%. UNLESS OTHERWISE SPECIFIED.

IC BLOCK DIAGRAM

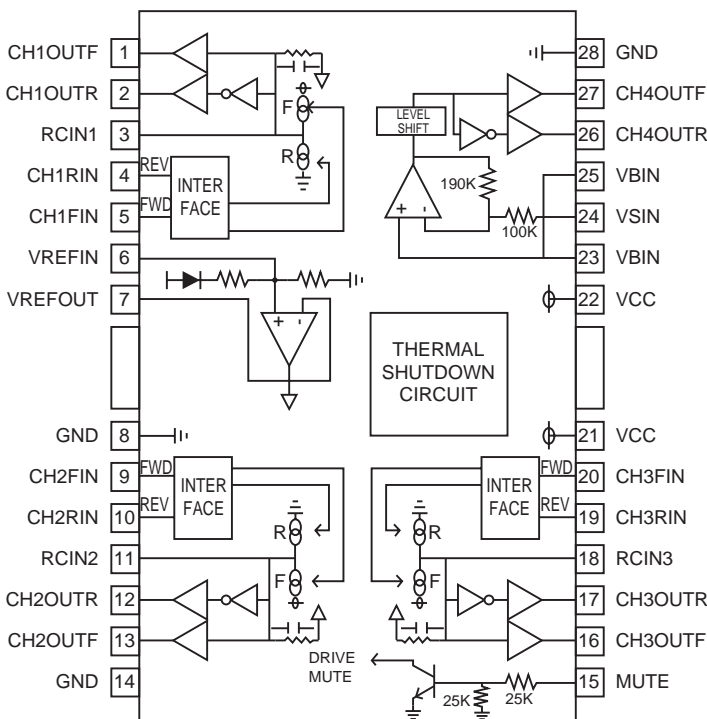
MAIN BOARD

U101: CXA2581N



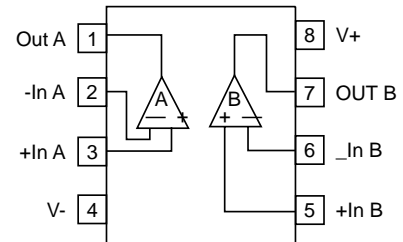
MAIN BOARD

U202: BA6392FP



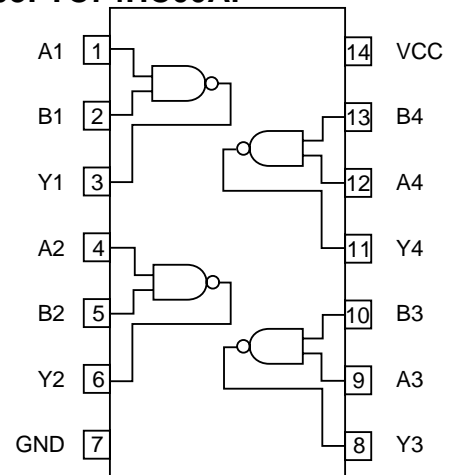
MAIN BOARD

U305, U306: OPA2134

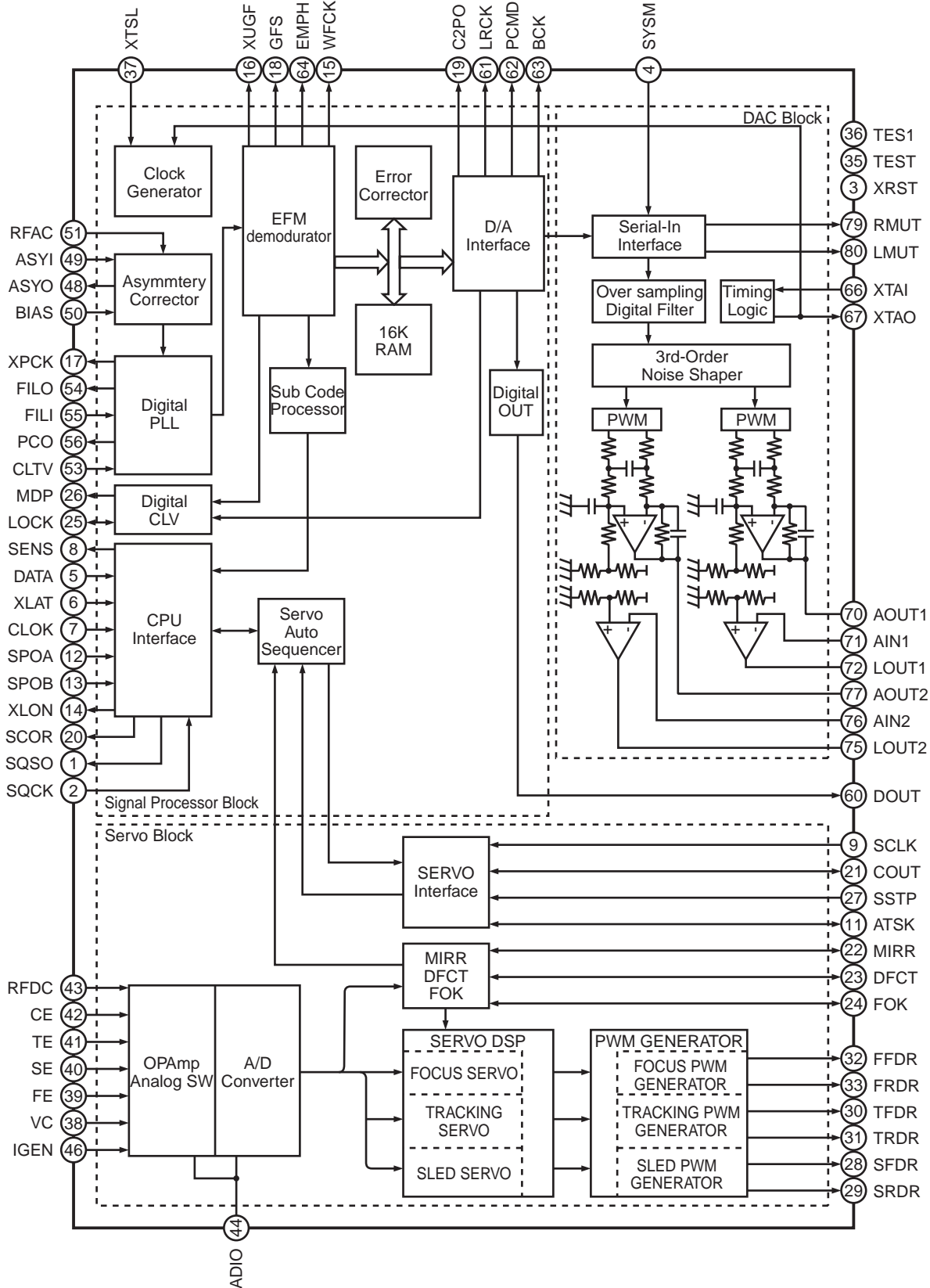


MAIN BOARD

U403: TC74HC00AP

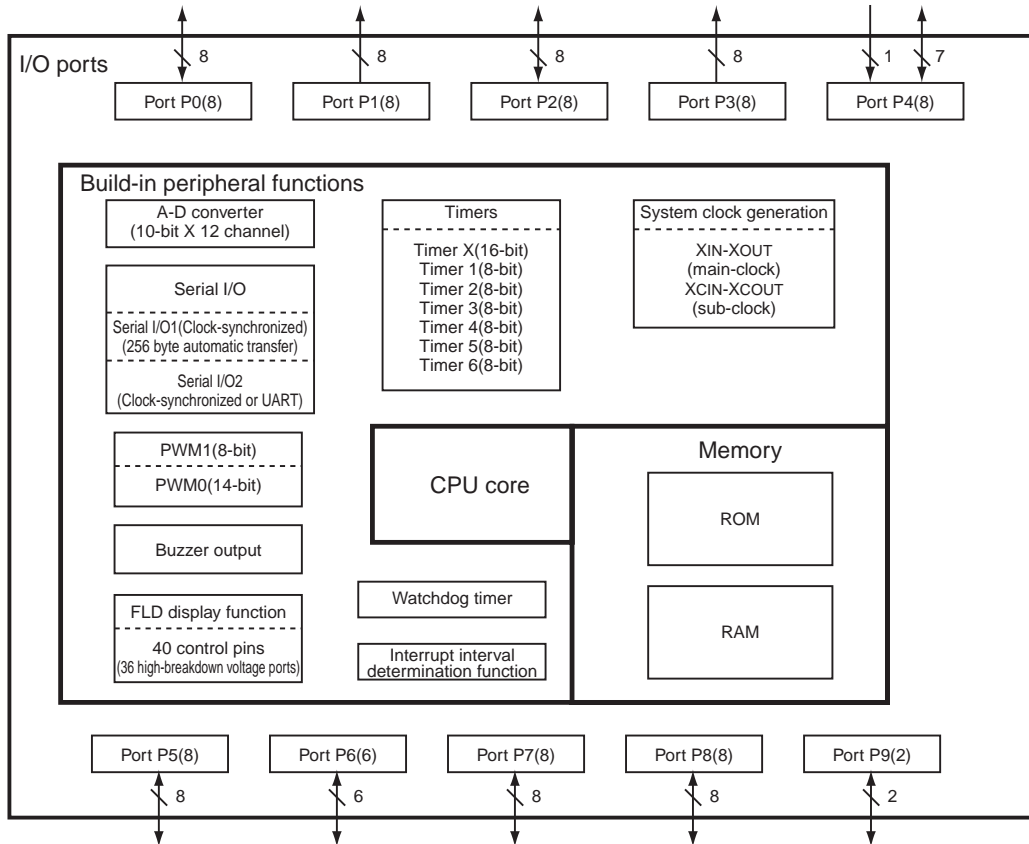
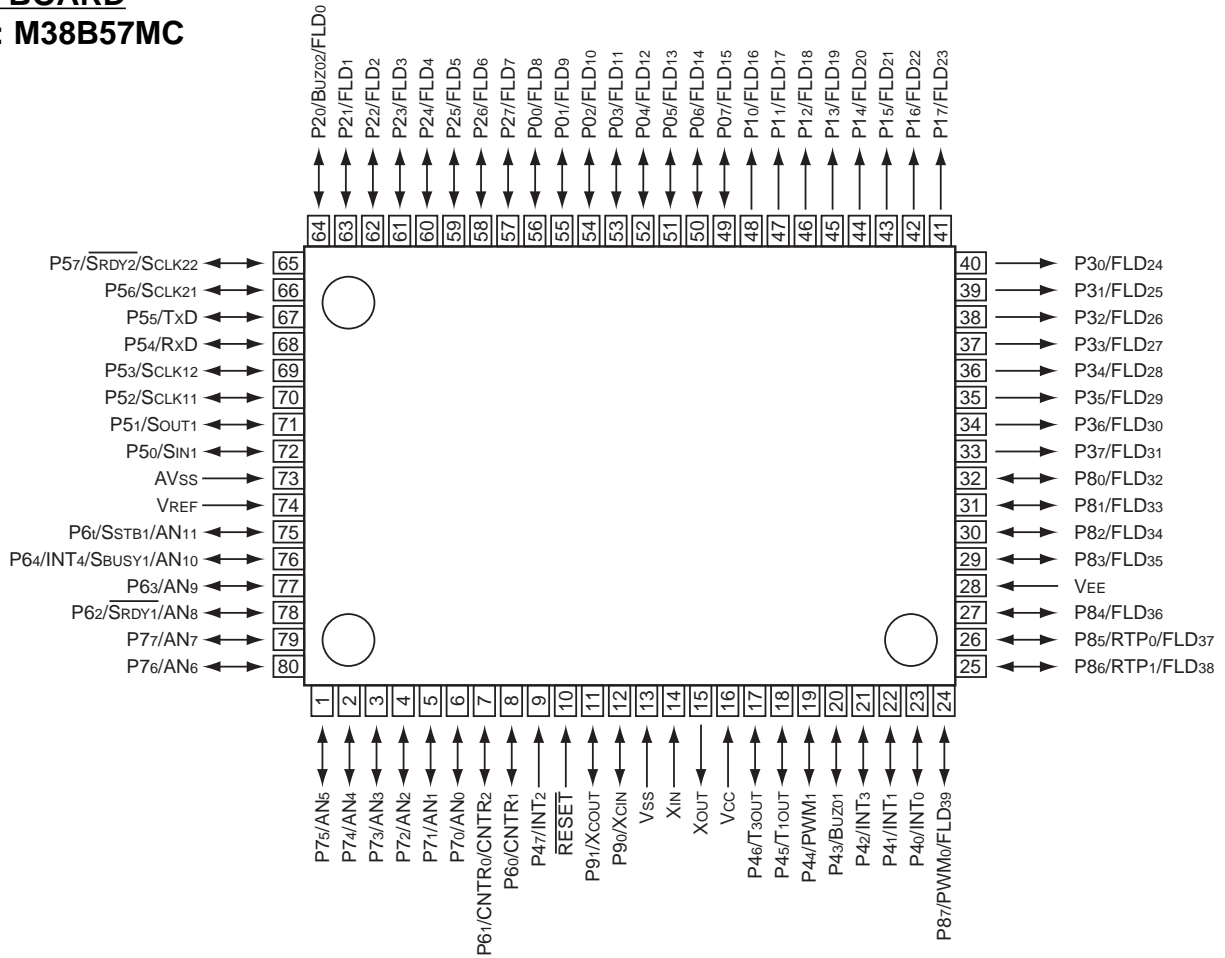


MAIN BOARD
U201: CXD3017Q

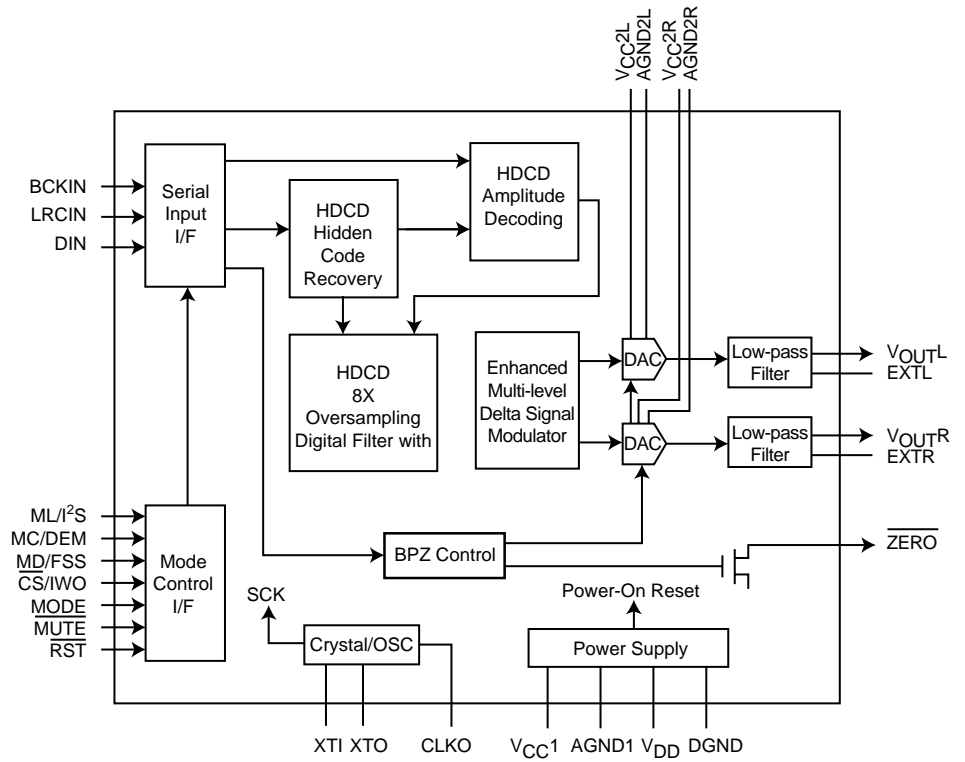
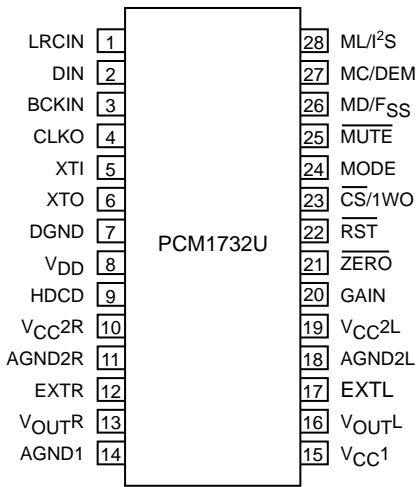


MAIN BOARD

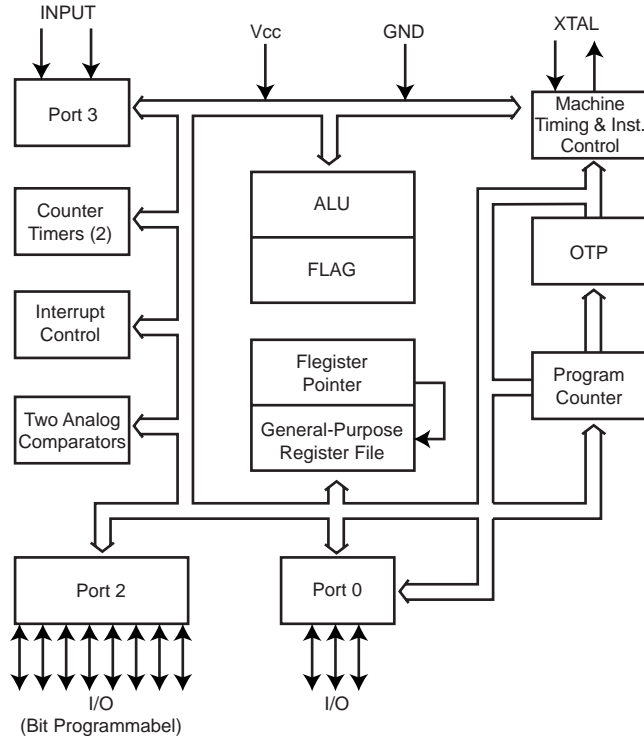
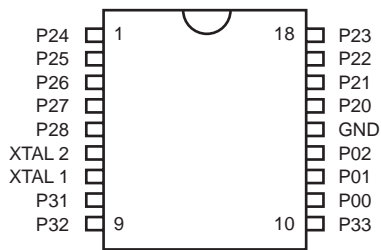
U301: M38B57MC



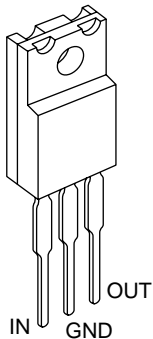
MAIN BOARD
U302: PCM1732



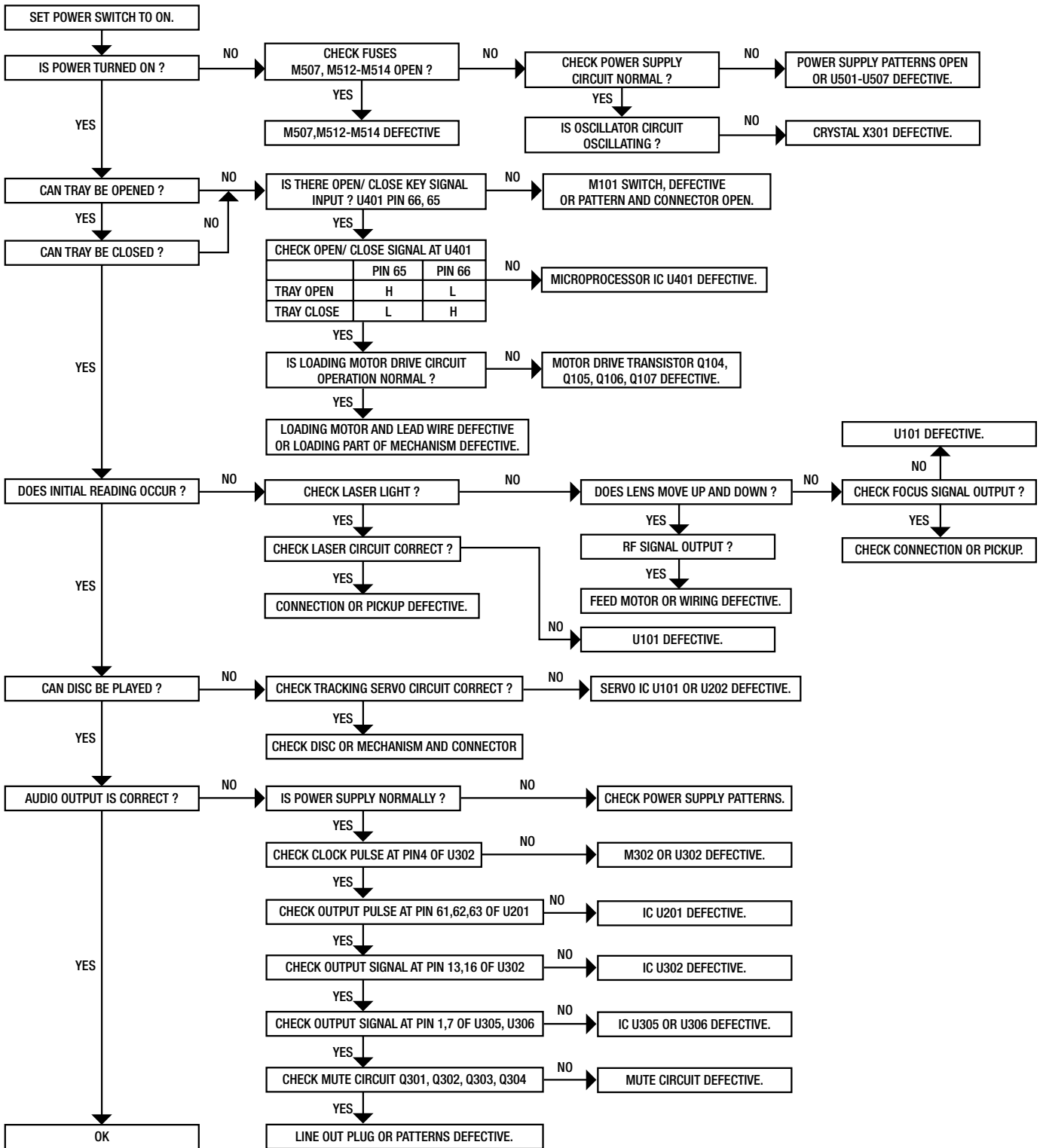
MAIN BOARD
U402: NADLINK (MASKED)



MAIN BOARD
U501, U506, U507: 78XX



TROUBLESHOOTING GUIDE



ELECTRICAL PARTS LIST

| <u>Reference No.</u> | <u>Part No.</u> | <u>Description</u> |
|--|---|--|
| <u>DISP ASSY</u> PC BOARD | PCB-N0A70C-DISP | PCB ASSY DISP N0A70C |
| WIRE M505A M506A | 7009-9620-0 7010-2224-0 | CONN WIRE ASSY 12P 100MM CONN WIRE ASSY AWG28 |
| PC BOARD | 1725-711A-0000 | PCB KEY N0A7XC C542 |
| MISCELLANEOUS 0017 0024 LED1 M113 M501 | 4134-8701-0 4152-4841-1 3700-5810-R 4816-043T-3 2460-1870-0 | HOLDER, VFD CORNER BLACK CUSHION (EL/LCD) LED RED 5X5MM RT IR SENSOR PIC-26043TM2 VFD 6-BT-271GK |
| <u>KEY ASSY</u> PC BOARD | PCB-N0A70C-KEY | PCB ASSY KEY N0A70C |
| RESISTOR R301,R306,R307 R302,R303 R304,R305 | 4701-102J-2 4701-622J-2 4701-202J-2 | RCF 1/8W 1K 5% AT RCF 1/8W 6.2K 5% AT RCF 1/8W 2K 5% AT |
| SWITCH M101-M110 | 5200-3538-0 | SWITCH, TACT SKHHBY 7MM |
| WIRE M120A | 7012-6347-0 | CONNECTOR WIRE ASSY |
| PC BOARD | 1725-191B-0000 | PCB KEY N0A70C |
| <u>LED ASSY</u> PC BOARD | PCB-N0A70C-LED | PCB ASSY LED N0A70C |

| Reference No. | Part No. | Description |
|---|---|--|
| LED D304 | 3700-3517-RG | LED RED/GREEN (L-469HGW) |
| WIRE M301A | 7703-1280-2004 | CONN.ASSY 3P P2.5 L=280 |
| PC BOARD | 1725-201B-0100 | PCB MAIN N0A70C C542 |
| LIVE ASSY PC BOARD *AH *CE | PCB-N0A70C-LIVE PCB-N0A71C-LIVE | PCB ASSY LIVE N0A70C PCB ASSY LIVE N0A71C |
| SWITCH M802 ▲ | 5200-3151-0-01 | POWER SWITCH |
| PC BOARD | 1725-201B-0100 | PCB MAIN N0A70C C542 |
| MISCELLANEOUS C800 ▲ M801,M806 M810 *CE | 8910-0049-0 4132-1071-0 1806-2170-0 | CAP400V 4700P TERMINAL PIN EMI FILTER TLN12UA |
| MAIN ASSY PC BOARD | PCB-N0A70C-MAIN | PCB ASSY MAIN N0A70C |
| CAPACITOR C102,C103,C207,C208,C210, C213,C217,C222,C227,C228, C304,C322,C386,C409,C412, C413,C416,C417,C450,C528 C105-C110,C230 C111 C201,C204 C203,C216,C221 C206 C209,C223 C211,C212,C414,C415 C214,C215 | 150F-104K-2-FC 157C-107M-5-IUE 157F-225M-5-IUNK 150F-221K-2-FC 150F-103K-2-FC 150F-331K-2-FC 153F-152J-5-JM 15CH-270J-5-GG 150F-471K-2-FC | CC 50V 0.1UF 10% AT CE 10V 100μF 20% RL 5X11 CE 50V 2.2μF 20% RL 5X11 CC 50V 220pF 10% AT 3.5x2 CC 50V 0.01μF 10% AT 3.5x2 CC 50V 330pF 10% AT 3.5x2 CM 50V 1500PF 5% RL 5.5x7 CTC 0/60 27pF 5% RL 4x4 CC 50V 470pF 10% AT 3.5x2 |

| Reference No. | Part No. | Description |
|--------------------------|-------------------|--------------------------------|
| C218 | 150F-101K-2-FC | CC 50V 100pF 10% AT 3.5x2 |
| C219,C220 | 150F-474M-5-II | CC 50V 0.47μF 20% RL 5X5 |
| C226 | 157F-334M-5-GMK | CE 50V 0.33μF 20% RL 4x7 |
| C229 | 157D-477M-5-OVK | CE 16V 470μF 20% RL 8x11.5 |
| C303,C370 | 153F-103J-5-IM | CM 50V 0.01μF 5% RL 5X7 |
| C305 | 157D-227M-5-OMK | CE 16V 220μF 20% RL 8x7 |
| C306,C514,C515 | 150F-104K-5-II | CC 50V 0.1μF 10% RL 5x5 |
| C307 | 157C-476M-5-IMK | CE 10V 47μF 20% RL 5X7 |
| C308,C325,C334,C418,C420 | 157D-106M-5-GMK | CE 16V 10μF 20% RL 4x7 |
| C310,C710 | 157B-107M-5-KMK | CE 6.3V 100μF 20% RL 6x7 |
| C320,C321,C323,C324,C332 | 157D-106M-5-IUF3 | CE 16V 10μF 20% RL 5X11 |
| C328,C329 | 15CH-200J-5-GG | CTC 0/60 20pF 5% RL 4x4 |
| C352,C353 | 158F-101J-5-KW | CP 50V 100pF 5% RL 6x12 |
| C356,C357 | 153F-272J-5-JM | CM 50V 2700PF 5% RL 5.5x7 |
| C362,C363 | 153I-472K-9-NL | CM 63V 0.0047μF 10% RB 7.5x6.5 |
| C366,C367 | 158F-681J-5-KW | CP 50V 680pF 5% RL 6x12 |
| C371-C374,C527 | 157D-477M-5-X9F3 | CE 16V 470μF 20% RL 12.5x20 |
| C375,C376 | 157E-107M-5-S5C | CE 25V 100μF 20% RL 10x16 |
| C377,C378 | 153I-224J-9-NL | CM 63V 0.22μF 5% RB 7.5x6.5 |
| C383 | 157C-226M-5-IUK | CE 10V 22μF 20% RL 5X11 |
| C384 | 150F-102K-2-FC | CC 50V 1000pF 10% AT 3.5x2 |
| C385 | 150F-222K-2-GD | CC 50V 0.0022μF 10% AT |
| C387,C419,C539,C544 | 153F-103K-5-IM | CM 50V 0.01μF 10% RL 5x7 |
| C407 | 157D-228M-5-X9E | CE 16V 2200μF 20% RL 12. |
| C506,C507 | 157E-108M-5-5\$F3 | CE 25V 1000μF 20% RL 12.5x20 |
| C508,C533 | 157C-108M-5-S5K | CE 10V 1000μF 20% RL 16x31.5 |
| C510 | 157F-107M-5-OVK | CE 50V 100μF 20% RL 10x16 |
| C511 | 157C-227M-5-OMK | CE 10V 220μF 20% RL 8x7 |
| C512,C513,C537,C538 | 157E-106M-5-IUF3 | CE 25V 10μF 20% RL 5X11 |
| C521 | 157F-226M-5-IUK | CE 50V 22μF 20% RL 5X11 |
| C522 | 157Q-476M-5-LUA | CE 35V 47μF 20% RL 6.5X11 |
| C525 | 157C-108M-5-X&F3 | CE 10V 1000μF 20% RL 12.5x25 |
| C529 | 157D-338M-5-5&K | CE 16V 3300μF 20% RL 16x25 |
| C560 | 157E-107M-5-KUK | CE 25V 100μF 20% RL 6.3x11 |
| C561 | 157D-107M-5-KUK | CE 16V 100μF 20% RL 6.3x11 |
| C713 | 153F-223K-5-LQ | CM 50V 0.022μF 10% RL 6.5x9 |
| COIL | | |
| L101,L102,L302 | 1801-100K-M | COIL 10μH 10% BL7.0 |
| L201 | 1801-270K-M | COIL 27 μH,10%,AL,BL7 |
| L301 | 1802-0450-0 | DIGITAL COIL |
| WAFER/CONNECTOR | | |
| M102 | 2101-1382-0 | CONNECTOR FLEXIBLE 16P |
| M120B | 2102-051S-004 | 5P ST.WAFER |

| Reference No. | Part No. | Description |
|--|-----------------|--------------------------|
| M301B | 2102-031S-004 | 3 PIN ST. WAFER |
| M502 | 2101-1811-0 | 8P PIN CONNECTOR P=3.96 |
| M505B | 2102-121S-004 | 12P ST.WAFER |
| M506B | 2102-161S-004 | 16P ST WAFER P=2.5 |
| JACK | | |
| M313,M315 | 2113-1743-0 | MONO JACK HTJ-035-12E |
| M317 | 2113-1300-0 | 2P RCA JACK W/R AU |
| M318 | 2113-1170-0 | 1P RCA JACK YL AU |
| M319 | 2113-1121-0 | 2P RCA JACK Y/Y AU |
| CRYSTAL | | |
| M302 | 2300-1910-0 | X'TAL 16.9344MHZ |
| SCREW | | |
| | 2954-2608-3000 | SCREW BT 2.6X8 BLACK |
| | 2954-3008-0000 | TAPPING 3X8MM B-TITE |
| IC | | |
| U101 | 3131-8030-0 | IC CXA2581N ASP FOR CD S |
| U201 | 3131-8000-0 | IC CXD3017Q DSP FOR CD |
| U202 | 3131-8040-0 | IC BA6392FP 4-CHANNEL |
| U301 | 3131-8010-1 | IC M38B57MC MICRO MASK |
| U302 | 3131-9380-0 | IC PCM1732 HDCD DIA |
| U305,U306 | 3131-7620-0 | IC OPA2134PA DIP OP AMP |
| U402 | 3130-9320-0 | IC NADLINK (MASKED) |
| U403 | 3130-4160-0 | IC TC74HC00AP DIGITAL |
| U501,U506 | 3130-2020-3 | IC 7805 REG 5V 1.5A |
| U502 | 3130-5610-0 | IC LM317T+ADJ REGULATOR |
| U503 | 3130-5620-0 | IC LM337T-ADJ REGULATOR |
| U507 | 3130-2790-1 | IC NJM7808FA +8V REG |
| RELAY | | |
| K501,K502 | 4500-0200-1 | RELAY 2P2T BT-12S 12VDC |
| RESISTOR | | |
| J178,R227,R3,R408,R409,R411 | 4701-100J-2 | RCF 1/8W 10R 5% AT |
| R1,R111,R201,R316,R327,R328, R329,R331,R333,R334,R337, R355,R356,R358,R362,R377, R378,R381,R382,R394,R395, R396,R397,R407,R412 | 4711-101A-2 | RMF 1/8W 100R 1% AT |
| R103,R104 | 4711-472A-2 | RMF 1/8W 4.7K 1% AT |
| | 4711-203A-2 | RMF 1/8W 20K 1% AT |

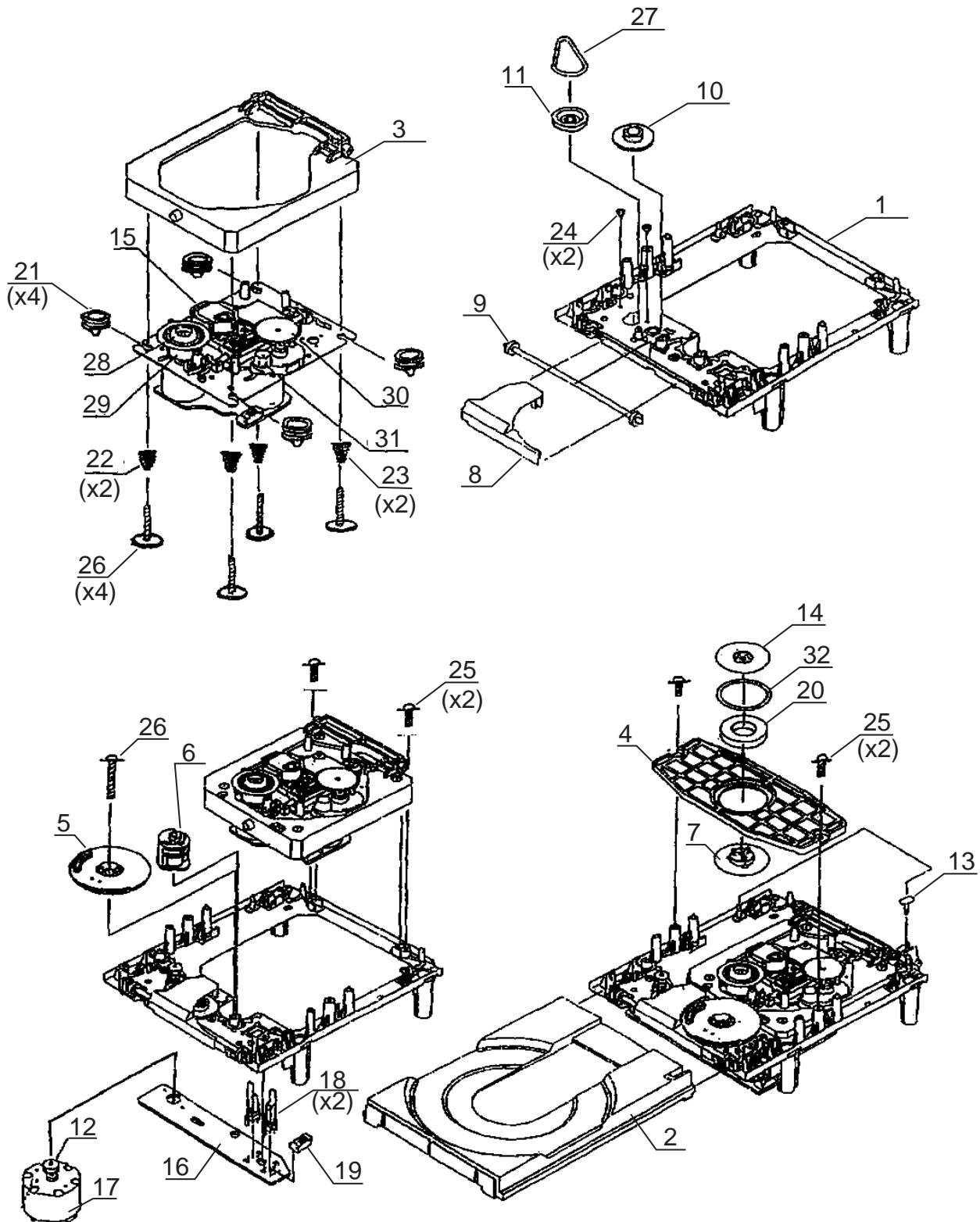
| Reference No. | Part No. | Description |
|---|-----------------|-------------------------|
| R105,R110,R30-R310 | 4711-302A-2 | RMF 1/8W 3K 1% AT |
| R106 | 4711-154A-2 | RMF 1/8W 150K 1% AT |
| R107,R212,R220,R225,R311, R373,R374,R410,R414 | 4711-104A-2 | RMF 100K 1/8W 1% AT |
| R108 | 4711-683A-2 | RMF 1/8W 68K 1% AT |
| R109,R119,R218,R219,R322 | 4711-153A-2 | RMF 1/8W 15K 1% AT |
| R112,R113,R114 | 4711-512A-2 | RMF 1/8W 5.1K 1% AT |
| R115 | 4711-182A-2 | RMF 1/8W 1.8K 1% AT |
| R116,R117 | 4711-123A-2 | RMF 1/8W 12K 1% AT |
| R118,R213,R224,R230,R312, R321,R335,R336,R338,R357, R361,R403 | 4711-103A-2 | RMF 1/8W 10K 1% AT |
| R121-R124,R202-R207, R209-R211,R217,R315,R317, R332,R402 | 4711-102A-2 | RMF 1/8W 1K 1% AT |
| R125,R215 | 4701-4R7J-C | RCF 1/8W 4.7R 5% ATS |
| R214 | 4711-822A-2 | RMF 1/8W 8.2K 1% AT |
| R223 | 4711-333A-2 | RMF 1/8W 33K 1% AT |
| R226 | 4711-105A-2 | RMF 1/8W 1M 1% AT |
| R228,R229 | 4711-332A-2 | RMF 1/8W 3.3K 1% AT |
| R318,R320,R517,R518,R520 | 4711-471A-2 | RMF 1/8W 470R 1% AT |
| R319 | 4711-561A-2 | RMF 1/8W 560R 1% AT |
| R359,R360 | 4711-1522-2 | RMF 1/8W 15.2K 1% AT |
| R363,R364 | 4711-152A-2 | RMF 1/8W 1.5K 1% AT |
| R367,R368,R371,R372,R503,R504 | 4711-222A-2 | RMF 1/8W 2.2K 1% AT |
| R375,R376,R379,R380,R384 | 4711-750A-C | RMF 1/8W 75R 1% ATS |
| R383 | 4711-151A-C | RMF 1/8W 150R 1% ATS |
| R405 | 4711-223A-2 | RMF 1/8W 22K 1% AT |
| R406,R415 | 4711-752A-2 | RMF 1/8W 7.5K 1% AT |
| R413,R416,R523 | 4711-473A-2 | RMF 1/8W 47K 1% AT |
| R501,R502 | 4711-241A-2 | RMF 1/8W 240R 1% AT |
| DIODE | | |
| | 4804-0010-2 | DIODE 1N4001 AT |
| D301-D303,D307,D308,D404, D409,D411-D415,D426,D431 | 4804-1480-2 | DIODE 1N4148 AT |
| D305 | 4805-3930-2 | DIODE 1N5393 200V 1.5A |
| D403 | 4837-3V36-2 | DZ 1/2W +-5% 3.3V TEMIC |
| | 4837-5B61-2 | DZ 1/2W 5.45-5.73 ROHM |
| D501-D504 | 4808-18R0-2 | DIODE 1N5818R-ND AT |
| D505 | 4840-1140-0 | ZD 1.3W 3.3V 5% AT |
| D510 | 4837-22D1-2 | DZ 1/2W 21.52~22.63V |

| Reference No. | Part No. | Description |
|--------------------------|-----------------|--------------------------|
| TRANSISTOR | | |
| Q101,Q104,Q105 | 4860-0060-5 | TR SS8550 C/D SAMSUNG RL |
| Q103,Q106,Q107,Q307-Q312 | 4860-0050-5 | TR SS8050 C/D SAMSUNG RL |
| Q301-Q304 | 4860-1780-5 | TR 2SD655F HFE:600-1200 |
| Q401,Q403 | 4860-0660-5 | TR 2SA1015 (G.R.) RL |
| Q402 | 4851-012F-5 | TR 2SD1012F/G HFE |
| Q404 | 485A-114E-5 | TR DTA114ESA ROHM |
| Q405 | 485C-114E-5 | TR DTC114ES |
| Q502 | 485A-950Y-5 | TR 2SA950-Y HFE 100-200 |
| SWITCH | | |
| M314 | 5200-3171-0-01 | DPDT SLIDE |
| HEATSINK | | |
| U501-U503,U506,U507 | 5400-9130-0 | HEAT SINK FOR 7805 2438- |
| WIRE | | |
| M101 | 7012-6536-0 | CONN WIRE ASSY 5PIN P2.0 |
| M102C | 7012-6232-0 | WIRE CON 16P P=1.0 |
| M105A | 7012-6538-0 | CONN WIRE ASSY 6PIN P2.0 |
| PC BOARD | | |
| | 1725-201B-0100 | PCB MAIN N0A70C C542 |
| MISCELLANEOUS | | |
| GND1 | 4132-1061-0 | SOLDER TAG |
| M302 | 4152-9052-0 | CRYSTAL CUSHION (BOTTOM) |
| M302 | 4152-9042-0 | CRYSTAL CUSHION (TOP) |
| M303 | 2704-0060-0 | EMC FILTER |
| M316 | 4811-F32T-3 | LIGHT TX UNIT GP1F32T |
| M402 | 2703-0190-0 | CR RESONATOR |
| M507,M512,M513,M514 | 4131-9131-0 | FUSE HOLDER 6.5MM PITCH |
| U502,U503 | 2601-2608-0601 | FIBRE WASHER M2.6 0.8T |
| | 2703-0150-1 | CR4.00MHE,CSTLS4M00G55-B |

- NOTE:**
- The components identified by \triangle mark are critical for risk of fire and electrical shock. Replace only with part number specified.
 - <*AH > : USA, Canadian model only.
 - <*C > : European model only.
 - Capacitors : CP-Polystyrene, CM-Mylar, CE-Electrolytic, CC-Ceramic, CTC-NPO.
 - Resistors : RMF-Metal Film, RCF-Carbon Film, RWR-Wirewound Metal Oxide.

MECHANISM EXPLODED VIEW

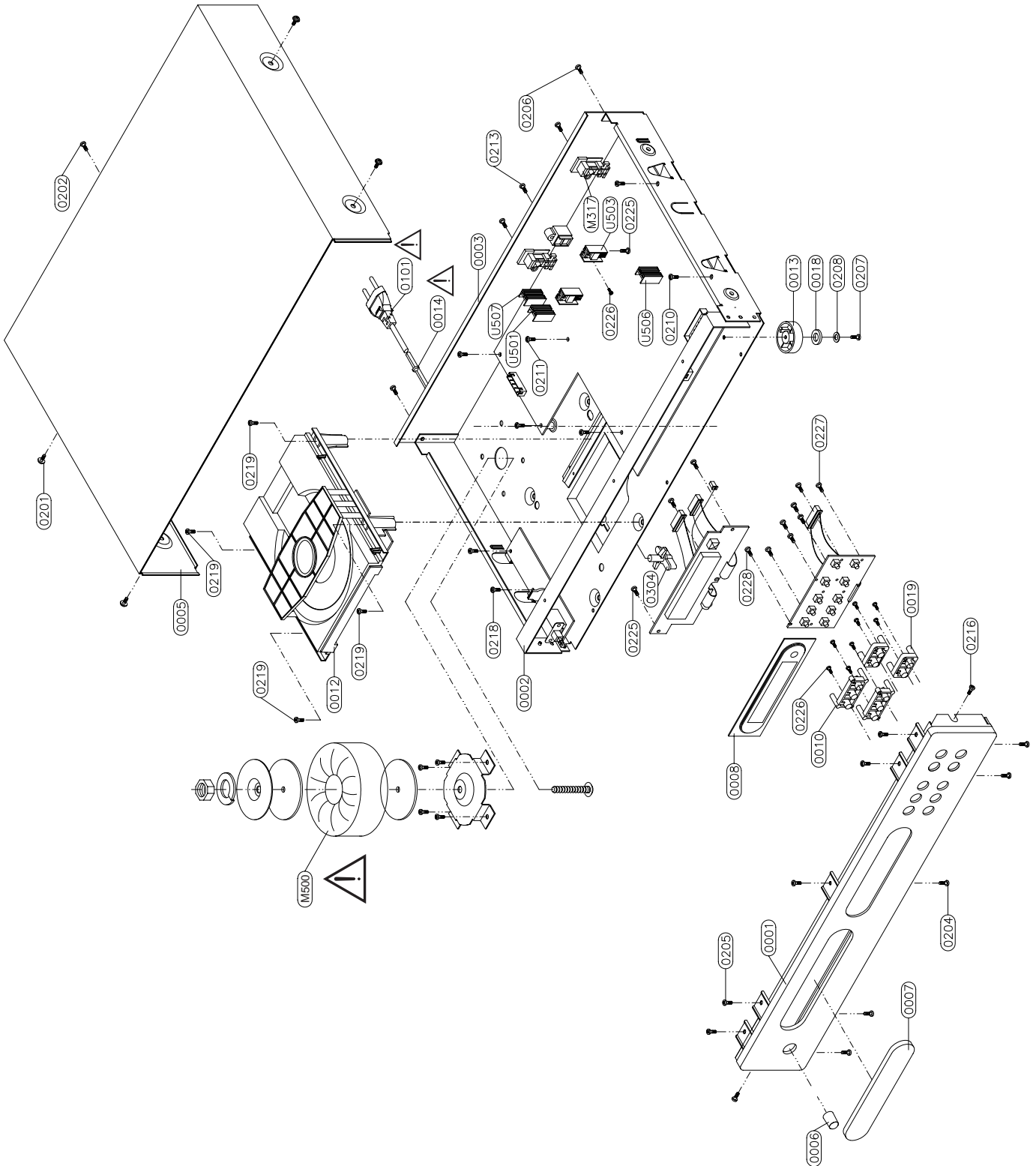
WSL-2130CCM



MECHANISM EXPLODED VIEW PARTS LIST


| Item | Part No. | Description | Qty |
|-------------|-----------------|----------------------------|------------|
| 1 | 4102-9000-0 | Outside Main Chassis | 1 |
| 2 | 4102-9001-0 | Tray | 1 |
| 3 | 4102-9002-0 | Subchassis | 1 |
| 4 | 4102-9003-0 | Chucking Plate | 1 |
| 5 | 4102-9004-0 | Drive Gear | 1 |
| 6 | 4102-9005-0 | Control Cam | 1 |
| 7 | 4102-9006-0 | Chucking Pulley | 1 |
| 8 | 4102-9007-0 | Gear Cover | 1 |
| 9 | 4102-9008-0 | Tray Gear | 1 |
| 10 | 4102-9009-0 | Intermediate Gear | 1 |
| 11 | 4102-9010-0 | Loading Pulley | 1 |
| 12 | 4102-9011-0 | Motor Pulley | 1 |
| 13 | 4102-9012-0 | SW Pin | 1 |
| 14 | 4102-9013-0 | Chucking Yoke | 1 |
| 15 | 4102-9014-0 | Optical Pickup Unit | 1 |
| 16 | 4102-9015-0 | Loading PWB | 1 |
| 17 | 4102-9016-0 | Motor RF-500TB-14415 | 1 |
| 18 | 4102-9017-0 | Leaf Switch | 1 |
| 19 | 4102-9018-0 | Connector pin (5P) | 1 |
| 20 | 4102-9019-0 | Magnet | 1 |
| 21 | 4102-9020-0 | Insulator | 4 |
| 22 | 4102-9021-0 | Coil Spring (Front) | 2 |
| 23 | 4102-9022-0 | Coil Spring (Rear) | 2 |
| 24 | 4102-9023-0 | Screw-Motor M2.6x2.5 | 2 |
| 25 | 4102-9024-0 | Screw M2.6x7 | 2 |
| 26 | 4102-9025-0 | Screw Washer Based M2.6x16 | 4 |
| 27 | 4102-9026-0 | Rubber Belt | 1 |
| 28 | 4102-9027-0 | Center Ring | 1 |
| 29 | 4102-9028-0 | Turn Table | 1 |
| 30 | 4102-9029-0 | Gear (A) | 1 |
| 31 | 4102-9030-0 | Motor Gear | 1 |
| 32 | 4102-9031-0 | Damper | 1 |


EXPLODED VIEW



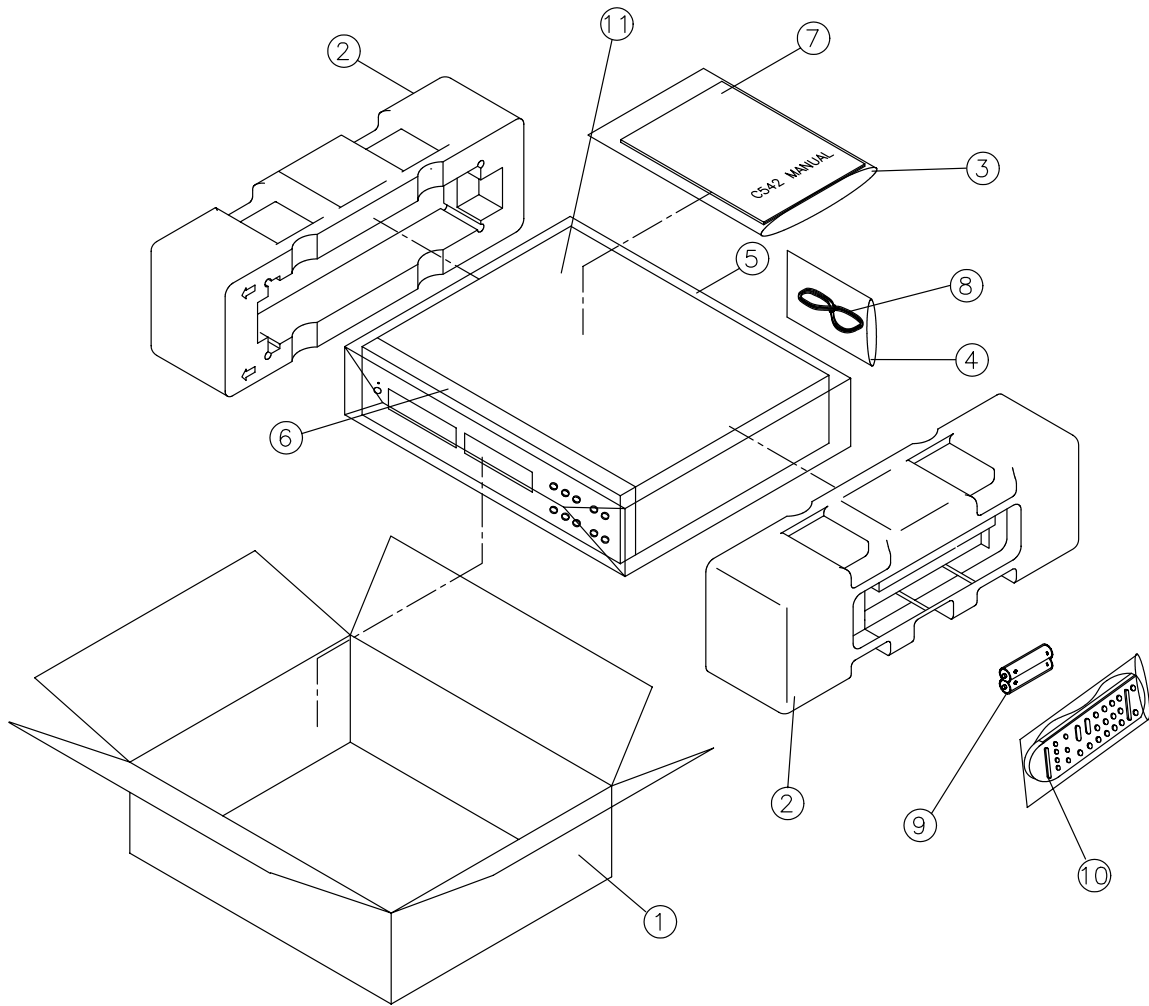
EXPLODED VIEW PARTS LIST

| Item | Part No. | Description |
|----------------------------------|-----------------|--------------------------|
| 0001 *AH GREY/*CE GREY | 1466-5103-0 | FASCIA BLACK (C542) |
| 0001 *AH TI/*CE TI | 1466-5104-1 | FASCIA SILVER (C542) |
| 0002 | 1402-3783-2 | STRAP (C542) |
| 0003 *AH GREY/*AH TI | 1402-3526-1 | CHASSIS C542(AH) |
| 0003 *CE GREY/*CE TI | 1402-3527-1 | CHASSIS C542(C) |
| 0005 *AH GREY/*CE GREY | 1402-3531-0 | TOP COVER BLACK (C542) |
| 0005 *AH TI/*CE TI | 1402-3532-0 | TOP COVER SILVER (C542) |
| 0006 *AH GREY/*CE GREY | 2442-1002-0 | POWER BUTTON BLACK |
| 0006 *AH TI/*CE TI | 2442-1003-0 | POWER BUTTON SILVER |
| 0007 *AH GREY/*CE GREY | 4154-4192-1 | CD DOOR BLACK (C521BEE) |
| 0007 *AH TI/*CE TI | 4154-4194-1 | CD DOOR SILVER (C521BEE) |
| 0008 | 3716-4318-0 | WINDOW LENS C542 |
| 0010 *AH GREY/*CE GREY | 2444-1203-0 | BUTTON TRIO BLACK |
| 0010 *AH TI/*CE TI | 2444-1204-0 | BUTTON TR10 TITANIUM |
| 0013 | 4157-0501-1 | RUBBER FOOT |
| 0014 \triangle | 4151-9461-0 | STRAIN RELIEF BUSHING |
| 0018 | 4152-4641-1 | CUSHION FOOT W/RUBBER WA |
| 0019 *AH TI/*CE TI | 2444-1904-0 | DUO BUTTON TITANIUM |
| 0019 *AH GREY/*CE GREY | 2444-1903-0 | DUO BUTTON BLACK |
| 0024 | 3714-5706-0 | LED LENS (412) CLEAR SAN |
| 0027 | 4104-3721-0 | TRANSFORMER BRACKET |
| 0101 *AH GREY/*AH TI \triangle | 7009-3100-2 | AC CORD 18AWGX2 |
| 0101 *CE GREY/*CE TI \triangle | 7009-3110-0 | AC CORD (SEMKO) |
| 0102 *CE GREY/*CE TI | 1808-0130-0 | FERRITE CODE D19XT10 |
| 0201 *AH TI/*CE TI | 2900-4006-2010 | SCM PW M4X6 RECESS WHITE |
| 0201 *AH GREY/*CE GREY | 2900-4006-3010 | M4X0.5PX6MM W/FLAT |
| 0202 *AH TI/*CE TI | 2954-3010-4000 | ST SCREW 3X10 BH |
| 0202 *AH GREY/*CE GREY | 2954-3008-3000 | T3X8MM SELF TAPPING |
| 0204 | 2954-3008-3000 | T3X8MM SELF TAPPING |
| 0205 | 2954-3008-0000 | TAPPING 3X8MM B-TITE |
| 0206 | 2954-3008-3000 | T3X8MM SELF TAPPING |
| 0207 | 2954-3008-3000 | T3X8MM SELF TAPPING |
| 0208 | 2842-3367-0 | METAL WASHER |
| 0209 | 2900-4006-3010 | M4X0.5PX6MM W/FLAT |
| 0210 | 2954-3008-0000 | TAPPING 3X8MM B-TITE |

| Item | Part No. | Description |
|--|-----------------|--------------------------|
| 0211 | 2904-3006-0000 | SCREW M3X6 |
| 0213 | 2954-3008-3000 | T3X8MM SELF TAPPING |
| 0216 | 2954-3008-0000 | TAPPING 3X8MM B-TITE |
| 0218 | 2954-3008-0000 | TAPPING 3X8MM B-TITE |
| 0219 | 2904-3006-3000 | SCREW M3X6 BINDING (BLK) |
| 0225 | 2954-3008-0000 | TAPPING 3X8MM B-TITE |
| 0226 | 2954-2006-0000 | TAPPING SCREW 2X6 |
| 0227 | 2954-2608-0000 | SCREW BT 2.6X8 |
| 0228 | 2600-4008-0973 | FLAT WASHER M4X0.8X9.7 |
| | 2601-3004-0801 | FIBRE WASHER |
| 0230 | 2954-3008-0000 | TAPPING 3X8MM B-TITE |
| 0301 | 4151-9411-0 | CUSHION 130X10X1MM |
| 0304 | 1463-160B-1 | CD TRANSIT LOCK (ED) |
| 0309 | 3100-5101-0 | PC SHEET 50X7X0.25 |
| 0311 | 4152-0241-0 | PAD CORK 15X12X3MM GRAY |
| 0315 | 3100-5101-0 | PC SHEET 50X7X0.25 |
| 0316 | 4154-1371-0 | PC SHEET 14X260X0.5 THK |
| 0500 *AH GREY/*AH TI | 3000-4290-0 | LABEL, BLANK 45X10 |
| 0500 *AH GREY/*AH TI | 3005-0360-2 | RIBBON 60MMX600M TEC |
| 0501 | 3009-1689-0 | CD LASER LABEL YELLOW |
| 0502 | 3000-4205-0 | LABEL, CD WARNING |
| M500  | 1806-2512-0 | TRANSFORMER N0870C I/P |

- NOTE:**
- The components identified by  mark are critical for risk of fire and electrical shock. Replace only with part number specified.
 - <*AH > : USA, Canadian model only.
 - <*C > : European model only.

PACKING DIAGRAM



| ITEM | PART NO. | DESCRIPTION | Q'TY |
|------|---------------|--------------------------|------|
| 1. | 1435-8401-0-2 | CARTON BOX C542 | 1 |
| 2. | 1490-3783-2 | POLYFORM ENDCAP | 2 |
| 3. | 1497-1062-0 | POLYBAG MANUAL | 1 |
| 4. | 1497-1302-0 | POLYBAG | 1 |
| 5. | 1497-1332-1 | POLYBAG | 1 |
| 6. | 1497-1432-0 | EPE BAG (412) | 1 |
| 7. | 4301-7073-0 | INSTRUCTION MANUAL | 1 |
| 8. | 2103-7302-1 | RCA PLUG (MALE) | 1 |
| 9. | 4060-0530-0 | GREENCELL 3A SIZE GP24G2 | 2 |
| 10. | 8912-0038-0 | REMOTE CONTROL C521BEE | 1 |
| 11. | 1405-2520-0 | WHITE PAPER | 1 |

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SERVICE MANUAL

C 542

COMPACT
DISC PLAYER

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TORONTO