

# DIGITAL HOME CINEMA SYSTEM

**THT-120**

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# 1. Safety Precautions

**WARNING:** TO PREVENT FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.

|                                                                                                                                                                            |                                                                                                                                                                                                                 |                                                                                   |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
|                                                                                           | <b>CAUTION</b><br><b>RISK OF ELECTRIC SHOCKS</b><br><b>DO NOT OPEN</b>                                                                                                                                          |  |
| <b>CAUTION :</b> TO REDUCE THE RISK IF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK). NO USER SERVICEABLE PARTS INSIDE.<br>REFER SERVICING TO QUALIFIED SERVICE PERSONNEL. |                                                                                                                                                                                                                 |                                                                                   |
|                                                                                           | THIS SYMBOL IS INTENDED TO ALERT THE USER TO THE PRESENCE OF UNINSULATED "DANGEROUS VOLTAGE" WITHIN THE PRODUCT'S ENCLOSURE THAT MAY BE SUFFICIENT MAGNITUDE TO CONSTITUTE A RISK OF ELECTRIC SHOCK TO PERSONS. |                                                                                   |
|                                                                                           | THIS SYMBOL IS INTENDED TO ALERT THE USER TO THE PRESENCE OF IMPORTANT OPERATING AND MAINTENANCE (SERVICING) INSTRUCTIONS IN THE LITERATURE ACCOMPANYING THE APPLIANCE.                                         |                                                                                   |

**CAUTION**  
TO PREVENT ELECTRIC SHOCK, DO NOT USE THIS POLARIZED AC PLUG WITH AN EXTENSION CORD, RECEPTACLE OR OTHER OUTLET UNLESS THE BLADES CAN BE FULLY INSERTED TO PREVENT BLADE EXPOSURE.

**LASER SAFETY**  
THIS UNIT EMPLOYS A LASER. ONLY QUALIFIED SERVICE PERSONNEL SHOULD REMOVE THE COVER OR ATTEMPT TO SERVICE THIS DEVICE DUE TO POSSIBLE EYE INJURY.

**CAUTION :** USE OF ANY CONTROLS, ADJUSTMENTS, OR PROCEDURES OTHER THAN THOSE SPECIFIED HEREIN MAY RESULT IN HAZARDOUS RADIATION EXPOSURE.

**CAUTION :** TO PREVENT ELECTRIC SHOCK, MATCH WIDE BLADE OF PLUG TO WIDE SLOT, FULLY INSERT.

**ATTENTION :** POUR EVITER LES CHOCS ELECTRIQUES, INTRODUIRE LA LAME LA PLUS LARGE DE LA FICHE DANS LA BORNE CORRESPONDANTE DE LA PRISE ET POUSSER JUSQU'AU FOND.

## Important Safety Instructions

- All the safety and operating instructions should be read before the appliance is operated.
  - The safety and operating instructions should be retained for future reference.
  - All warnings on the appliance and in the operating instructions should be adhered to.
  - All operating and use instructions should be followed.
1. Water and Moisture - The appliance should not be used near water - for example, near a bathtub, washbowl, kitchen sink,

laundry tub, in a wet basement, or near a swimming pool, and the like.

## PORTABLE CART

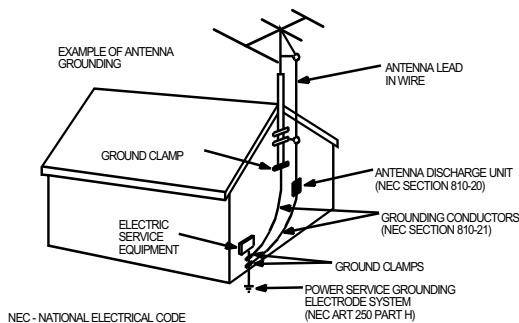


Figure 2

2. Carts and Stands - The appliance should be used only with a cart or stand that is recommended by the manufacturer.
3. An appliance and cart combination should be moved with care. Quick stops, excessive force, and uneven surfaces may cause the appliance and cart combination to overturn.
4. Wall or Ceiling Mounting - The appliance should be mounted to a wall or ceiling only as recommended by the manufacturer.
5. Ventilation - The appliance should be situated so that its location or position does not interfere with its proper ventilation. For example, the appliance should not be situated on a bed, sofa, rug, or similar surface that may block the ventilation openings; or, placed in a built-in installation, such as a bookcase or cabinet that may impede the flow of air through the ventilation openings.
6. Heat - The appliance should be situated away from heat sources such as radiators, heat registers, stoves, or other appliances (including amplifiers) that produce heat.
7. Power Sources - The appliance should be connected to a power supply only of the type described in the operating instructions or as marked on the appliance.
8. Grounding or Polarization - The precautions that should be taken so that the grounding or polarization means of an appliance is not defeated.
9. Power - Cord Protection - Power-supply cords should be routed so that they are not likely to be walked on or pinched by items placed upon or against them, paying particular attention to cords at plugs, convenience receptacles, and the point where they exit from the appliance.
10. Protective Attachment Plug - If the appliance is equipped with an attachment plug having overload protection. This is a safety feature. See Instruction Manual for replacement or resetting of protective device. If replacement of the plug is required, be sure the service technician has used a replacement plug specified by the manufacturer that has the same overload protection as the original plug.
11. Cleaning - The appliance should be cleaned only as recommended by the manufacturer.
12. Power Lines - An outdoor antenna should be located away from power lines.

# 1. Safety Precautions

13. Outdoor Antenna Grounding - If an outside antenna is connected to the receiver be sure the antenna system is grounded so as to provide some protection against voltage surges and built-up static charges. Article 810 of the National Electrical Code, ANSI/NFPA 70, provides information with regard to proper grounding of the mast and supporting structure, grounding of the lead-in wire to an antenna-discharge unit, size of grounding conductors, location of antenna-discharge unit, connection to grounding electrodes and requirements for the grounding electrode. See Figure 1.



14. Non-use Periods - The power cord of the appliance should be unplugged from the outlet when left unused for a long period of time.

15. Object and Liquid Entry - Care should be taken so that objects do not fall and liquids are not spilled into the enclosure through openings.

16. Damage Requiring Service - The appliance should be serviced by qualified service personnel when:

- a) The power-supply cord or the plug has been damaged; or
- b) Objects have fallen, or liquid has been spilled into the appliance; or
- c) The appliance has been exposed to rain; or
- d) The appliance does not appear to operate normally or exhibits a marked change in performance; or
- e) The appliance has been dropped, or the enclosure damaged.

17. Servicing - The user should not attempt to service the appliance beyond that described in the operating instructions.

All other servicing should be referred to qualified service personnel.

## 2. Specifications

### General specifications

|                                    |              |                            |                          |
|------------------------------------|--------------|----------------------------|--------------------------|
| Power supply<br>Voltage ( Option ) | AC 230V 50Hz | Power consumption          | Standby 6Watt            |
|                                    |              |                            | Operating 150Watt        |
|                                    |              | Dimensions (WxDxH)/W eight | 430 x 306 x 55mm/ 6.0 kg |

### Front AmpSection(test with full load)

|                                         |                 |                |
|-----------------------------------------|-----------------|----------------|
| POWER OUTPUT at 10% THD                 | at 1KHz, 8 ohms | 15W            |
| THD(TOTAL HARMONIC DISTORTION)          | at 1KHz, 1W     | 0.2%           |
| INPUT SEN. / Impedance @ 1KHz, 47K ohms | VIDEO, TV/AUX   | 500mV 30mV/47K |
| FREQUENCY RESPONSE                      | at 1KHz, 1W     | 30Hz~30KHz     |
|                                         | at 1KHz, 1W     | 150Hz~30KHz    |
| S/N RATIO, IHF-A WEIGHTED               | VIDEO, TV/AUX   | 72dB           |
| SUBWOOFER TURNOVER FREQUENCY            |                 | 15~180 Hz      |
| CHANNEL SEPARATION                      | 1KHz            | 55dB           |

### Center AmpSection(test with full load)

|                                              |                 |             |
|----------------------------------------------|-----------------|-------------|
| POWER OUTPUT at 10% THD                      | At 1KHz, 8 ohms | 15W         |
| THD(TOTAL HARMONIC DISTORTION)               | At 1KHz, 1W     | 0.14%       |
| S/N RATIO, IHF-A FILTER                      | 1W              | 72dB        |
| FREQUENCY RESPONSE (Dolby Digital) : S small | 1W              | 135Hz~18KHz |

### Rear AmpSection(test with full load)

|                                              |                 |             |
|----------------------------------------------|-----------------|-------------|
| POWER OUTPUT 10% THD                         | At 1KHz, 8 ohms | 15W         |
| THD(TOTAL HARMONIC DISTORTION)               | At 1KHz, 1W     | 0.14%       |
| S/N RATIO, IHF-A FILTER                      | 1W              | 72dB        |
| FREQUENCY RESPONSE (Dolby Digital) : S small | 1W              | 150Hz~30KHz |

### Subwoofer Section(test with full load)

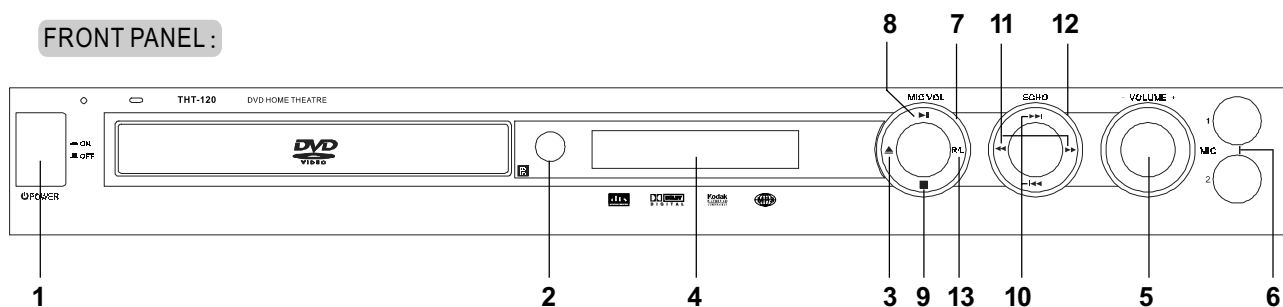
|                         |                  |            |
|-------------------------|------------------|------------|
| POWER OUTPUT at 10% THD | At 100Hz, 8 ohms | 30W        |
| FREQUENCY RESPONSE      | 1W               | 20Hz~150Hz |
| S/N RATIO, IHF-A Weight |                  | 72dB       |

### Video Section(test with full load)

|                                            |                                   |                         |            |
|--------------------------------------------|-----------------------------------|-------------------------|------------|
| Input Sen. / Impedance                     | Composite Video(Video)            | 1Vp-p/75 ohm            | 0.5 dB     |
| Output Level / Impedance<br>Color Bar 100% | Composite 75 ohm                  | 1Vp-p/75 ohm            | 0.5 dB     |
|                                            | S-Video(Y/C) 75 ohm(DVD only)     | 1Vp-p/ 0.286Vp-p        | 0.5 dB     |
|                                            | Component Out(Y / Pb / Pr):Option | 1Vp-p/0.7Vp-p/0.7Vp-p   | 0.5 dB     |
|                                            | G, R, B(S cart) Out : Option      | 0.7Vp-p/0.7Vp-p/0.7Vp-p | 0.5 dB     |
| Frequency Response                         | Ref 500KHz                        |                         | 5Hz~5.7MHz |
| Crosstalk                                  | @ 1MHz                            | 45dB                    | 40dB       |
| S/N Ratio                                  | DVD                               | 60dB                    |            |

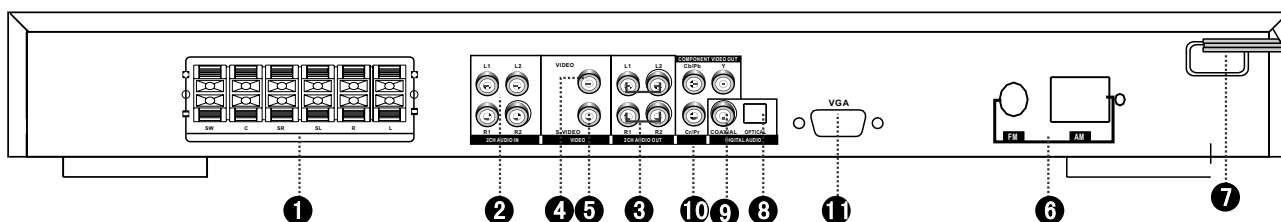
### 3. Location of Users Controls

#### FRONT PANEL :



- |                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p><b>1 POWER</b><br/>Press to switch the power On or Off.</p> <p><b>2 Remote sensor</b></p> <p><b>3 EJECT</b><br/>Press to open/close disc tray.</p> <p><b>4 DISPLAY</b><br/>Gives/Some information on operations, time, etc.</p> <p><b>5 VOLUME</b><br/>Increase/decrease the master volume level.</p> <p><b>6 MICROPHONES (1,2) IN</b><br/>Connect the Karaoke microphone.</p> <p><b>7 MICROPHONES VOLUME</b><br/>Turn to adjust the microphones volumes</p> | <p><b>8 PLAY/PAUSE</b><br/>Press to start or stop temporarily playback.</p> <p><b>9 STOP</b><br/>Press to stop playback.</p> <p><b>10 PREVIOUS / NEXT (◀◀ / ▶▶) (TUNING -/+)</b><br/>In Disc mode, press to skip to next track or previous track.<br/>In tuner mode, press to tuning the lower or higher frequency.</p> <p><b>11 BACK / FORWARD (◀◀ / ▶▶)</b><br/>In Disc mode, press to skip back or forward in the track.</p> <p><b>12 ECHO</b><br/>Increase/decrease the Echo level in Karaoke.</p> <p><b>R/L</b><br/>To select output: Left mono/Right mono/Mix mono/Stereo.</p> |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

#### REAR PANEL :



- |                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p><b>1 SPEAKERS</b><br/>Connect to the supplied speakers.</p> <p><b>2 AUDIO IN (1, 2)</b><br/>Connect to audio output of TV or VCR.</p> <p><b>3 AUDIO OUT</b><br/>Connect to the audio input of an external recording device or amplifier.</p> <p><b>4 VIDEO OUT</b><br/>Connect to TV with video input.</p> <p><b>5 S-VIDEO OUT</b><br/>Connect to TV with S-video input.</p> | <p><b>6 AM / FM ANTENNA</b><br/>Connect to AM loop antenna or FM antenna.</p> <p><b>7 AC LINE CORD</b><br/>Connect to AC outlet.</p> <p><b>8 OPTICAL (DIGITAL / OUT JACK)</b><br/>Connect to an optional amplifier.</p> <p><b>9 COAXIAL (DIGITAL / OUT JACK)</b><br/>Connect to an optional amplifier.</p> <p><b>10 COMPONENT OUT</b><br/>Video component V/PrU/PbY<br/>Connect to an optional amplifier.</p> <p><b>11 VGA</b><br/>Connect to the show terminal with VGA port</p> |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

### 3. Location of Users Controls

**Stereo Audio**

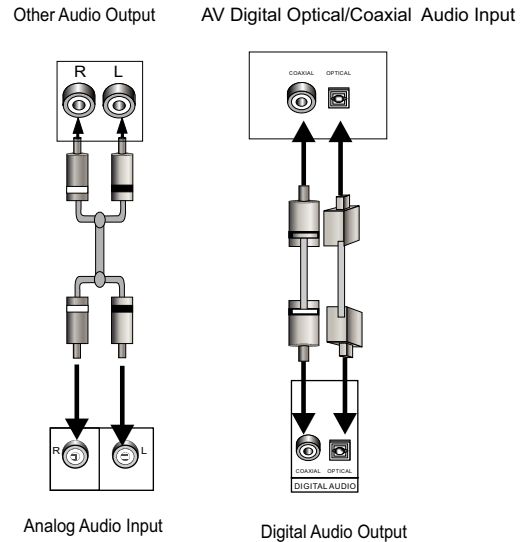
- Use a pair of audio cable (red for right /white for left) to connect the stereo audio input of this unit to the other stereo audio output.

## Coaxial Digital Audio

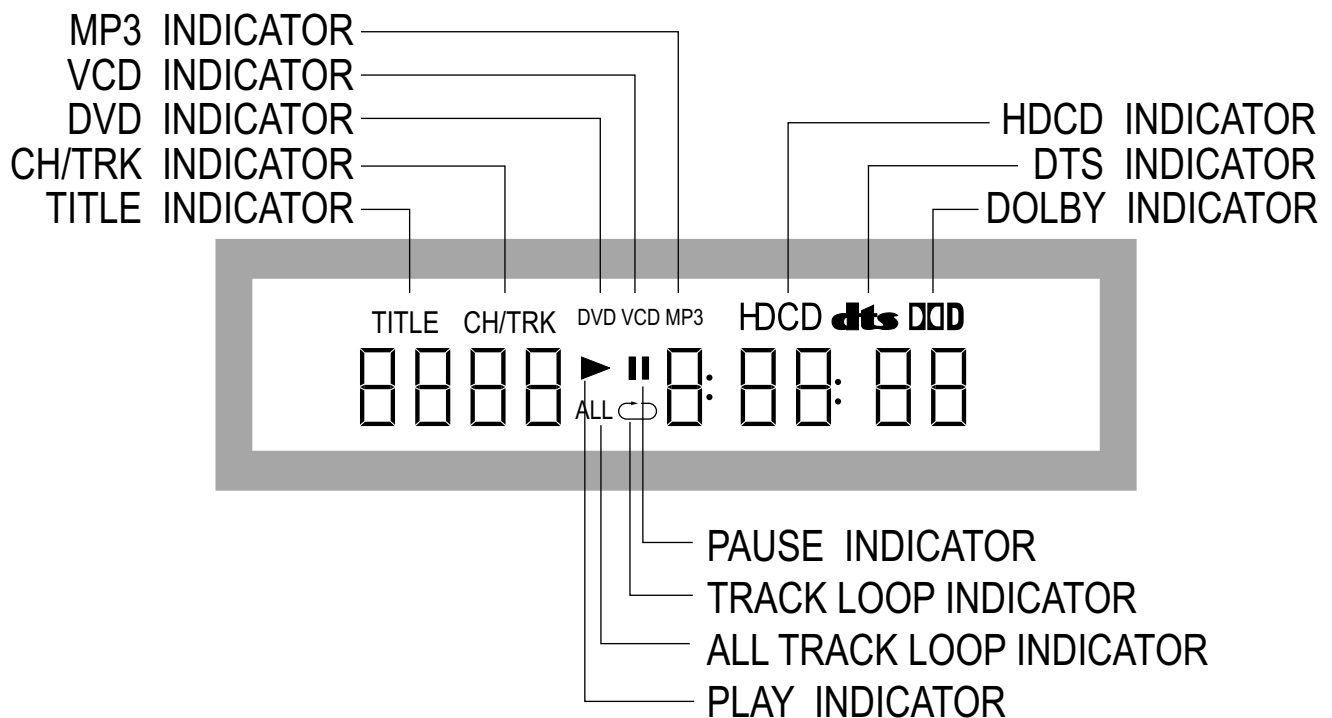
- Use the specified coaxial cable to connect the coaxial output of this unit to the coaxial input of power amplifier.

## Optical output

- Use the Specified optical cable to connect the digital optical output of this unit to the optical input of power amplifier.

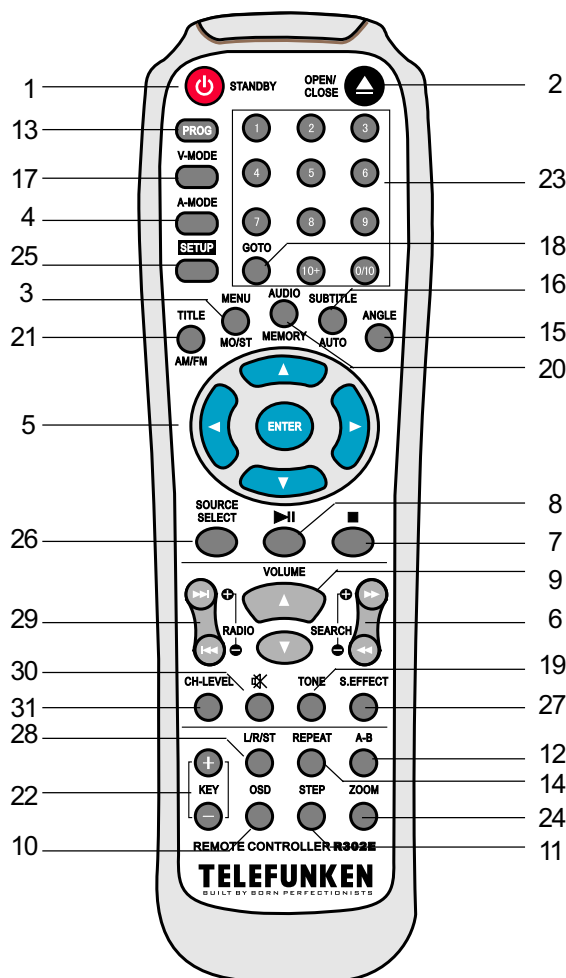


- **Display**



## 3. Location of Users Controls

### Remote controller



#### 1. STANDBY

Press to switch the power On or Off.

#### 2. OPEN/CLOSE

Open or close the disc tray.

#### 3. MENU - MO/ST

Switch the PBC function to On or Off (Video CD 2.0).

In DVD mode, returns to Main Menu page.

In tuner mode, press to select FM Stereo or Mono

#### 4. A-MODE

Press to select Audio mode (stereo out/5.1 ch).

#### 5. ▲ / ▼ / ◀ ▶ / ENTER

Select and confirm your selection

#### 6. BACKWARD and FORWARD (◀◀ / ▶▶)

In disc mode, press to search fast reverse or fast forward.

In tuner mode, press to search manually radio stations.

#### 7. STOP

Press to stop playback.

#### 8. PLAY/PAUSE (▶/||)

Press to start or stop temporarily playback.

#### 9. VOLUME ▲ / ▼

Increase or decrease the master volume level.

#### 10. OSD

Display the information about the playing disc.

#### 11. STEP

In disc mode, press to start frame advance.

#### 12. A-B

Press to repeat a section of a disc

#### 13. PROG

Press to set a program play.

#### 14. REPEAT

Press to repeat one chapter ,title or all

#### 15. ANGLE

Press to change a angle

#### 16. SUBTITLE / AUTO

Press to select a desired subtitle language.

In tuner mode, press to search radio stations.

#### 17. V-MODE

Press to select the Video Mode (YUV/P\_YUV/RGB/ P\_RGB)

#### 18. GOTO

Press to set quick search function.

#### 19. TONE

Press this button, to select Low, Medium or High Tones.

#### 20. AUDIO / MEMORY

Press to select the audio language and audio channel,

In tuner mode, press to memorize Radio stations.

#### 21. TITLE / AM-FM

Display the title menu,

In tuner mode, to change AM-FM Band Function.

#### 22. KEY (+/-)

Press to change the audio tone

#### 23. NUMBER KEYS (0-9/10+)

Select the items or setting directly.

#### 24. ZOOM

Press to zoom in or out the playing picture.

#### 25. SETUP

Enter or exit the setup menu.

#### 26. SOURCE SELECT

Press to select the source mode.

#### 27. S. EFFECT

Press to select the preset equalizer mode

(Room, Hall, Bathroom, Cave, Arena, Church).

#### 28. L/R/ST

To select output: Left mono/Right mono/Mix mono/Stereo.

#### 29. PREV & NEXT (◀◀ / ▶▶)

In Disc mode, press to skip to next track or previous track.

In tuner mode, press to tuning the lower or higher preset

radio station.

#### 30. MUTE

Press to mute all of the sound.

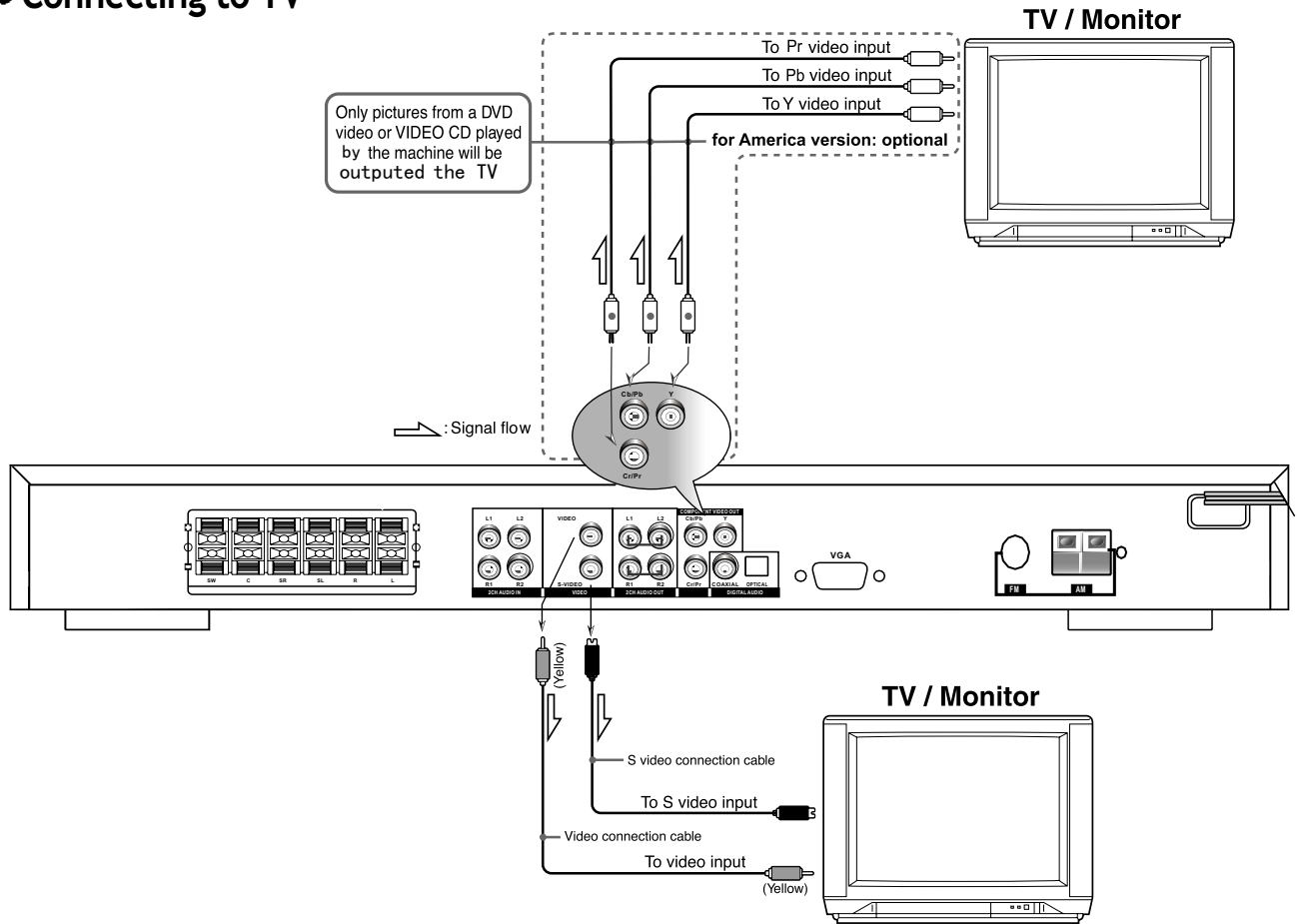
#### 31. CH-LEVEL

Press to change the level of each speaker.

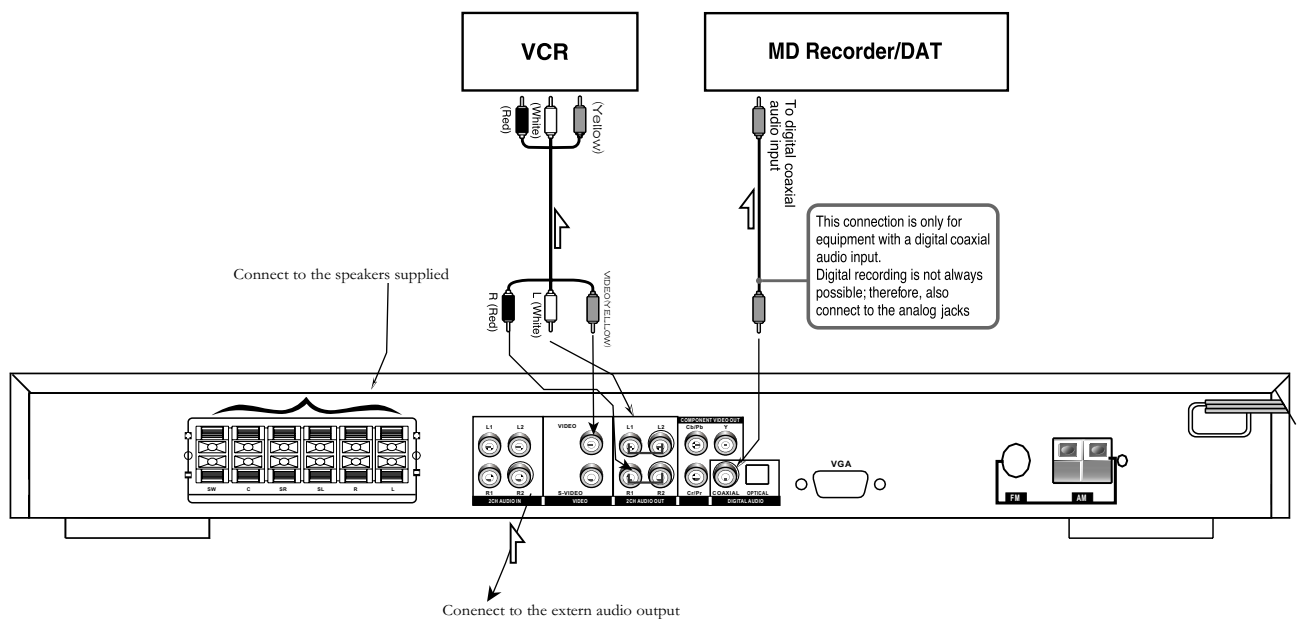
□□□□

## 4. Connecting to Equipment

### ● Connecting to TV



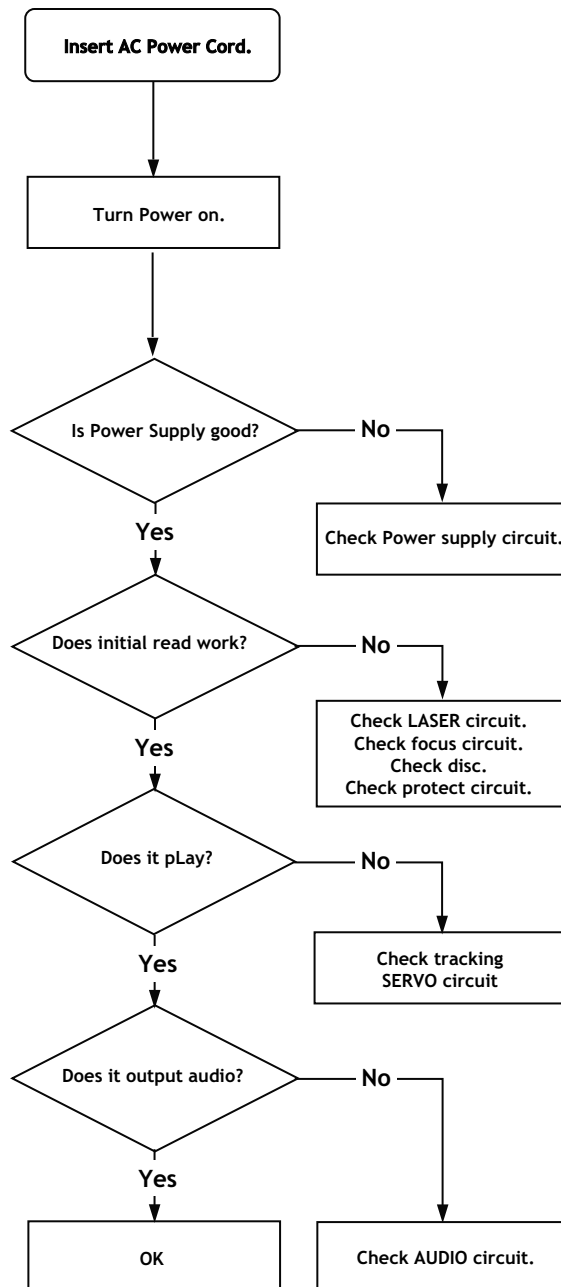
### ● Connecting to AUDIO & VIDEO





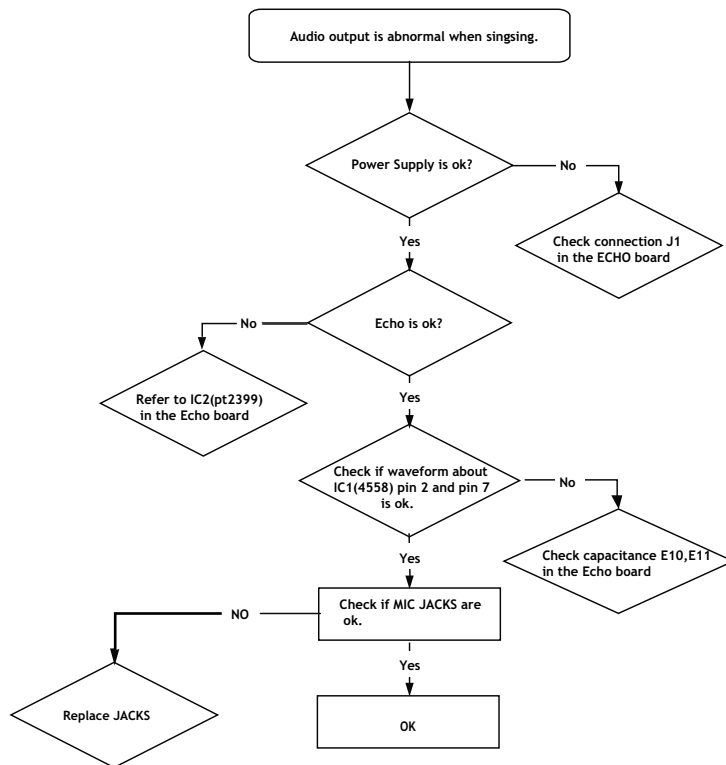
## 5. Trouble Shooting Guide

### ● Basic Operating

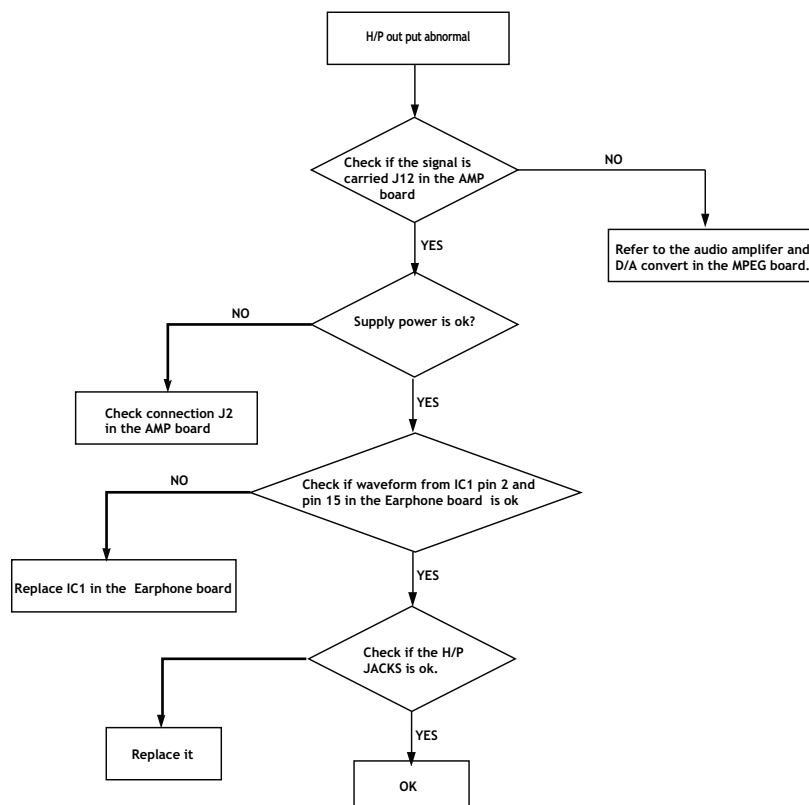


# 5. Trouble Shooting Guide

## ● Karaoke Circuit

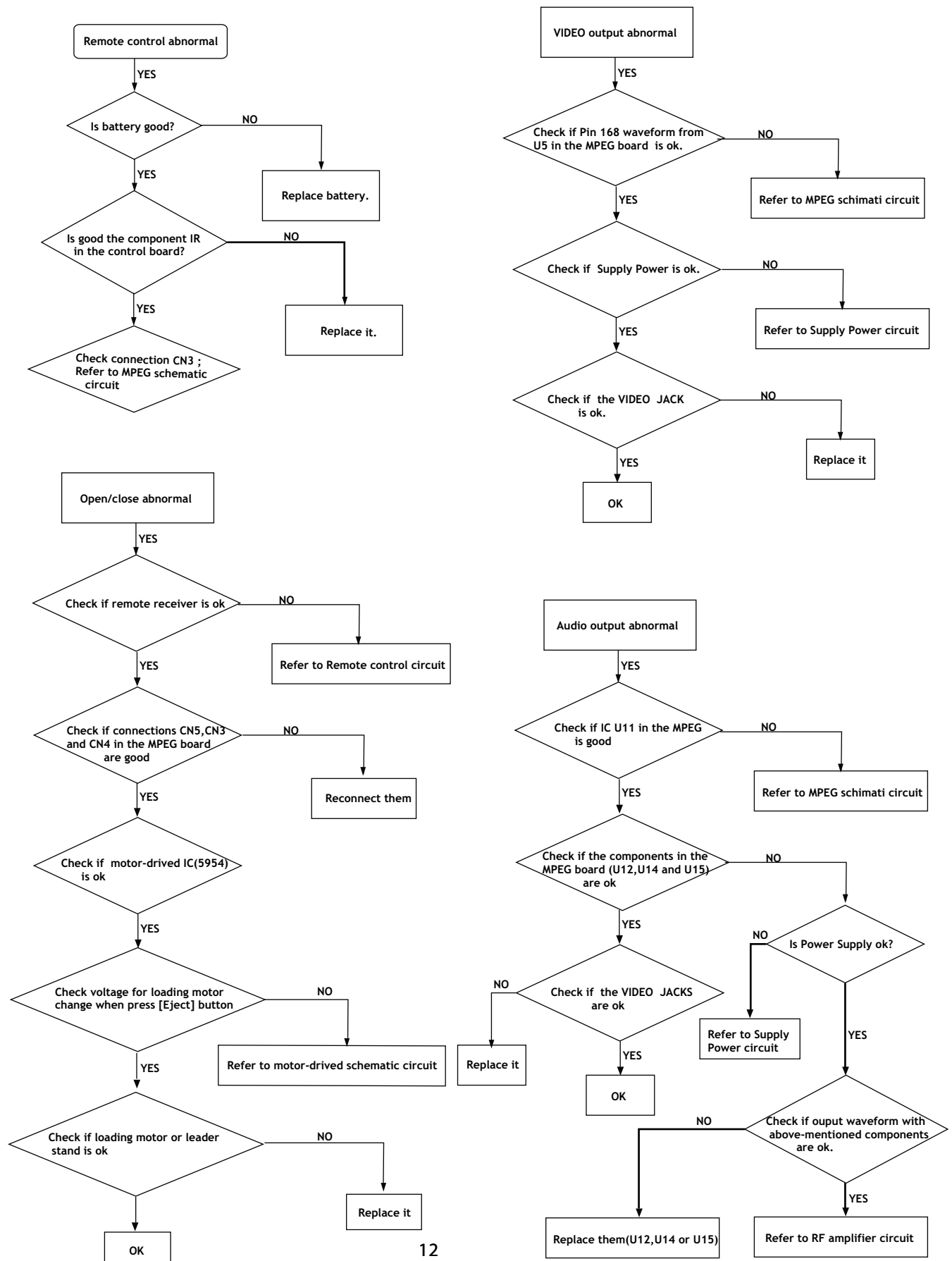


## ● Earphone output circuit(Only fit to the mechine with earphone output function )



# 5. Trouble Shooting Guide

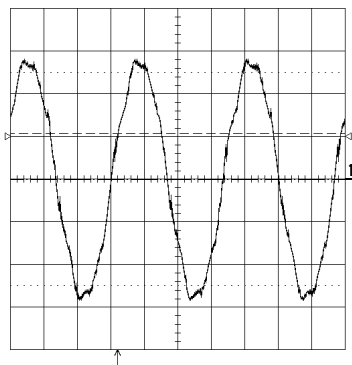
## ● DVD Block



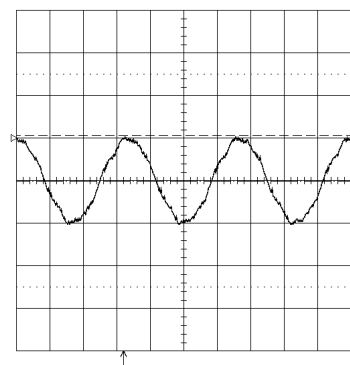
## 7. Waveforms of Major Check Method

### ※ TEST POINT : DVD TEST DISC “MDVD-W111 TRACK2 COLOR BAR”

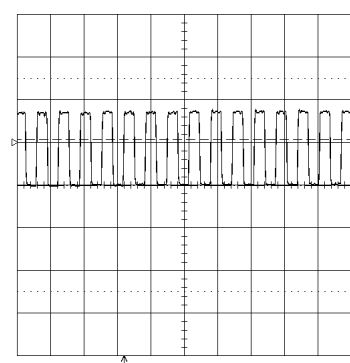
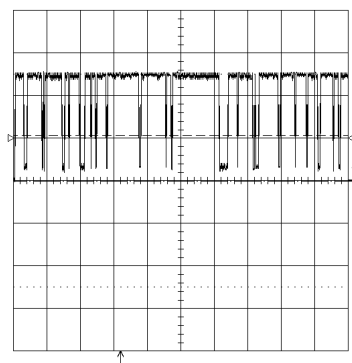
● Audio Out Signal waveform



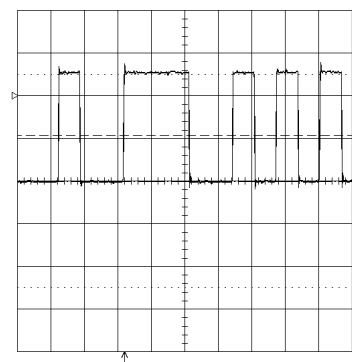
● DAC Output Signal waveform



● Optical Output Audio Data Signal waveform ● L/R Clock Data waveform During Normal Play



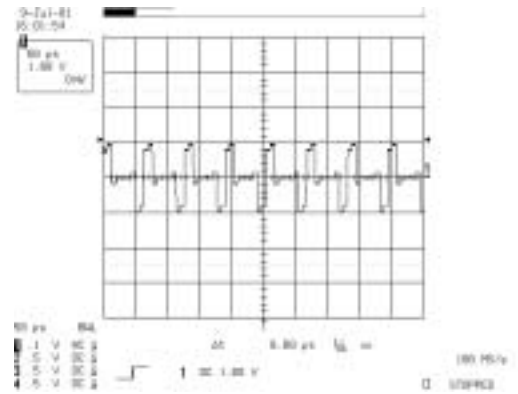
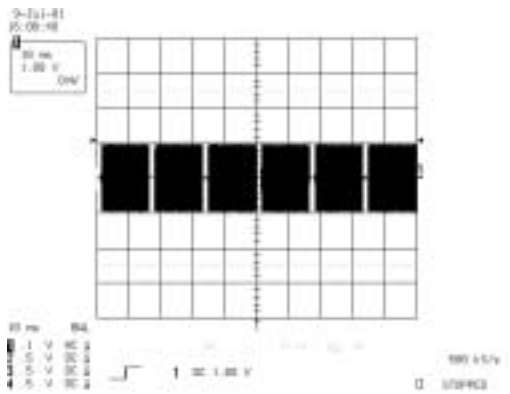
● Serial Data Output waveform During Normal Play



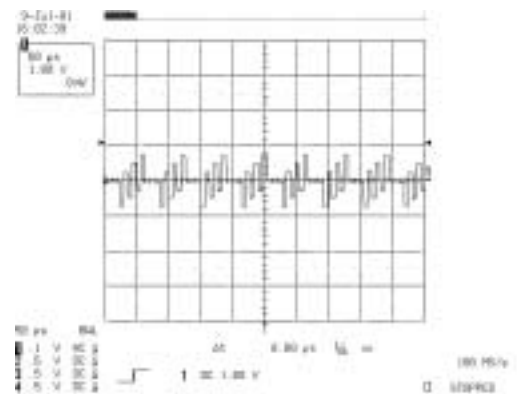
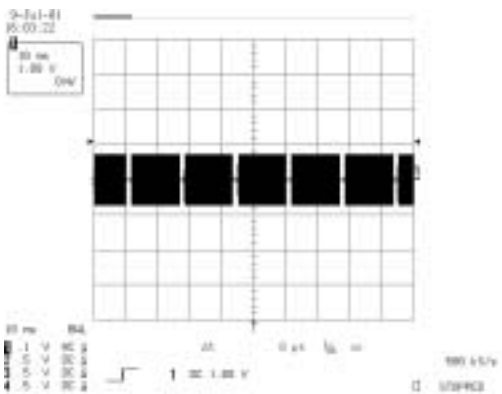
## 7. Waveforms of Major Check Method

### ※ TEST POINT : DVD TEST DISC “MDVD-W111 TRACK2 COLOR BAR”

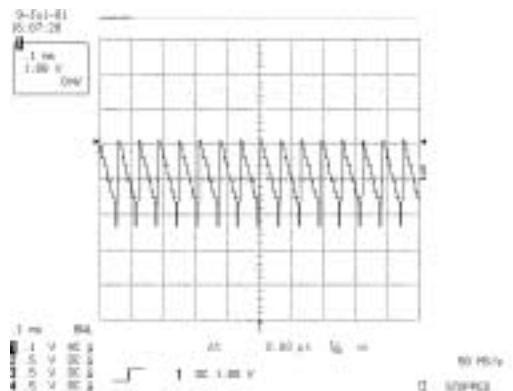
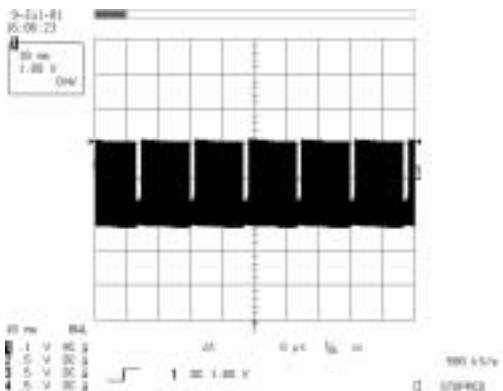
#### ● Pr Output Data Waveform in Component Output



#### ● Pb Output Data Waveform in Component Output

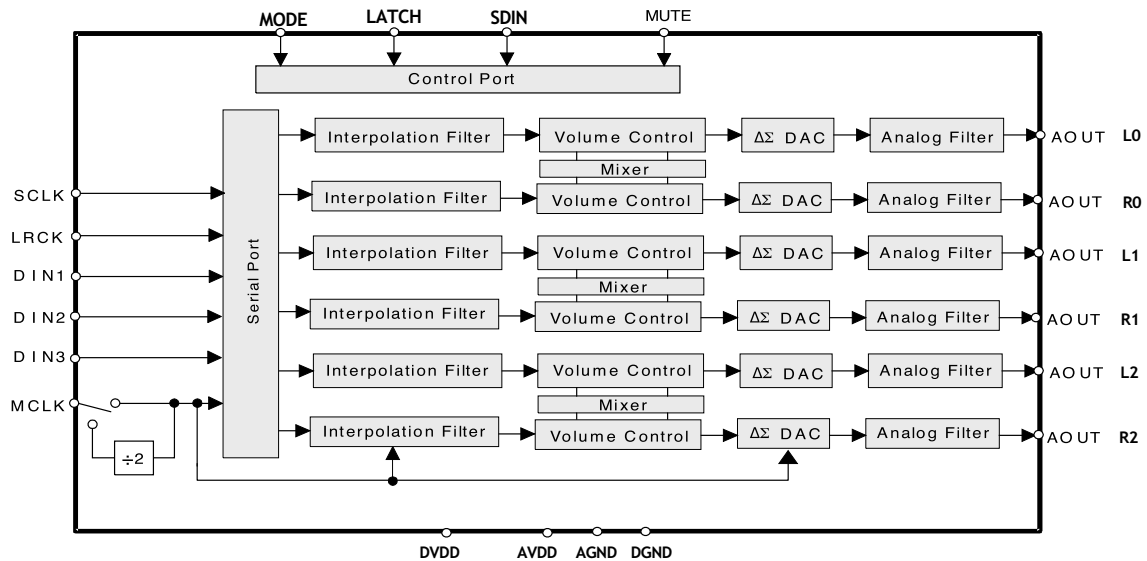


#### ● Y Output Data Waveform in Component Output



## 8. Internal Block Diagram of ICs

### • DA1196



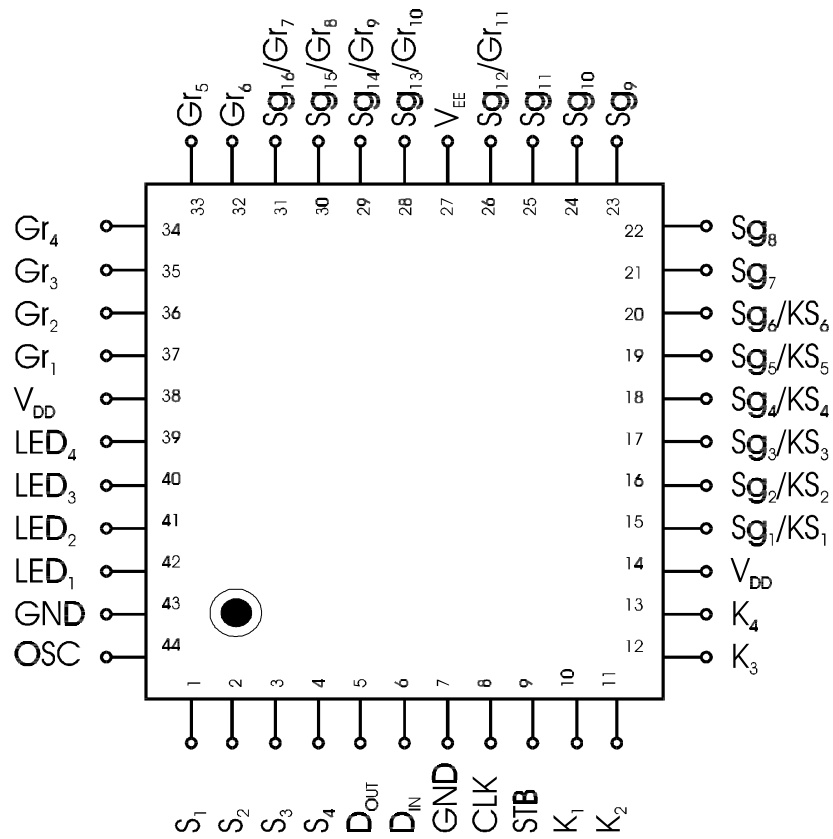
|                     |        |    |    |        |                  |
|---------------------|--------|----|----|--------|------------------|
|                     | DVDD   | 1  | 28 | AVDD2  |                  |
| Master Clock        | MCLK   | 2  | 27 | OUT0R  | Analog Output R0 |
| Bit Clock           | BCLK   | 3  | 26 | GR0    |                  |
| Left/Right Clock    | LRCLK  | 4  | 25 | OUT0L  | Analog Output L0 |
| Serial Data Input 1 | DIN0   | 5  | 24 | AGND2  |                  |
| Serial Data Input 2 | DIN1   | 6  | 23 | OUT 1R | Analog Output R1 |
| Serial Data Input 3 | DIN2   | 7  | 22 | GR1    |                  |
| MODE Control        | MODE   | 8  | 21 | OUT1L  | Analog Output L1 |
| Mute Control        | MUTE   | 9  | 20 | AGND1  |                  |
|                     | LRCLK2 | 10 | 19 | OUT2R  | Analog Output R2 |
| Digital Ground      | DGND   | 11 | 18 | GR2    |                  |
| LATCH CONTROL       | LATCH  | 12 | 17 | OUT2L  | Analog Output L2 |
| Serial Clock        | SCLK   | 13 | 16 | CAP    |                  |
|                     | SDIN   | 14 | 15 | AVDD1  |                  |

### • PT2399

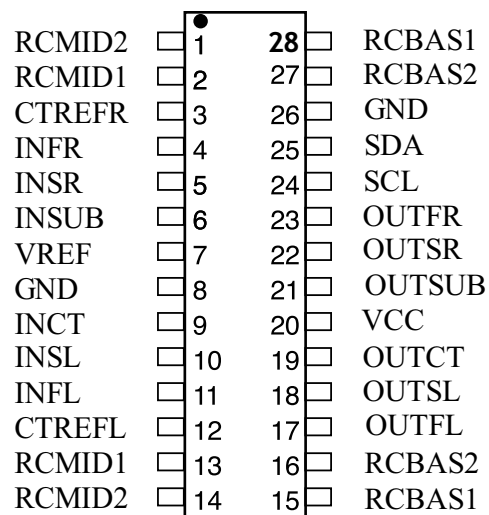
|        |    |    |        |  |
|--------|----|----|--------|--|
| RCMID2 | 1  | 28 | RCBAS1 |  |
| RCMID1 | 2  | 27 | RCBAS2 |  |
| CTREFR | 3  | 26 | GND    |  |
| INFR   | 4  | 25 | SDA    |  |
| INSR   | 5  | 24 | SCL    |  |
| INSUB  | 6  | 23 | OUTFR  |  |
| VREF   | 7  | 22 | OUTSR  |  |
| GND    | 8  | 21 | OUTSUB |  |
| INCT   | 9  | 20 | VCC    |  |
| INSL   | 10 | 19 | OUTCT  |  |
| INFL   | 11 | 18 | OUTSL  |  |
| CTREFL | 12 | 17 | OUTFL  |  |
| RCMID1 | 13 | 16 | RCBAS2 |  |
| RCMID2 | 14 | 15 | RCBAS1 |  |

## 8. Internal Block Diagram of ICs

### ●PT6312



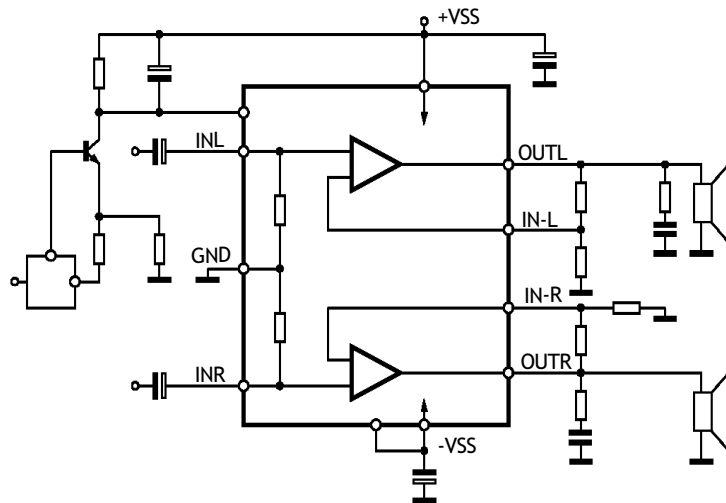
### ●PT2322



## PT2323

|      |   |    |    |   |      |
|------|---|----|----|---|------|
| L1   | □ | 1  | 28 | □ | R1   |
| L2   | □ | 2  | 27 | □ | R2   |
| L3   | □ | 3  | 26 | □ | R3   |
| L4   | □ | 4  | 25 | □ | R4   |
| FLI  | □ | 5  | 24 | □ | LPFI |
| FRI  | □ | 6  | 23 | □ | LPFO |
| CTI  | □ | 7  | 22 | □ | FLO  |
| SUBI | □ | 8  | 21 | □ | FRO  |
| SLI  | □ | 9  | 20 | □ | CTO  |
| SRI  | □ | 10 | 19 | □ | SUBO |
| MIXO | □ | 11 | 18 | □ | SLO  |
| VCC  | □ | 12 | 17 | □ | SRO  |
| REF  | □ | 13 | 16 | □ | SCL  |
| GND  | □ | 14 | 15 | □ | SDA  |

TDA7269/TDA7265

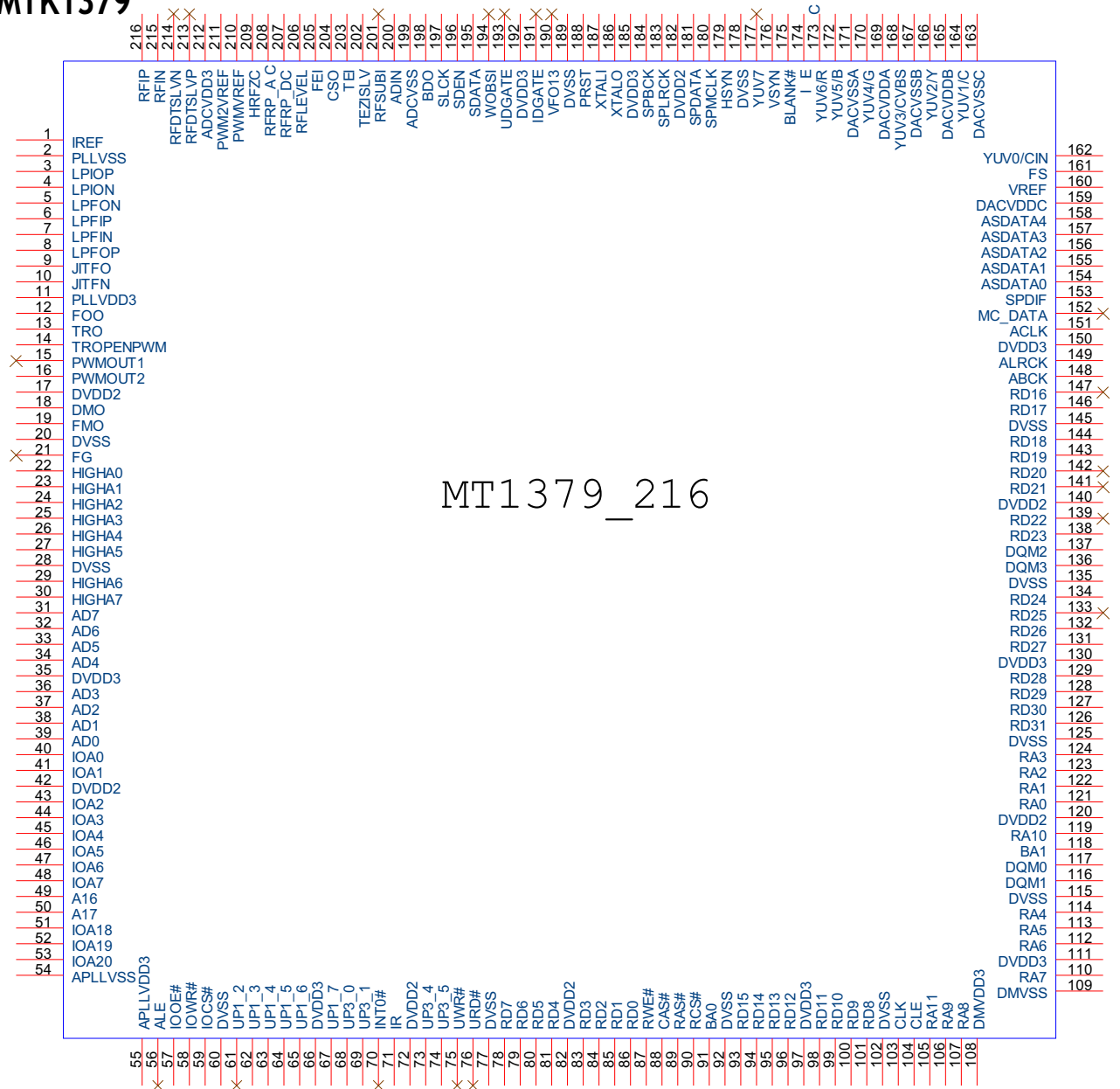




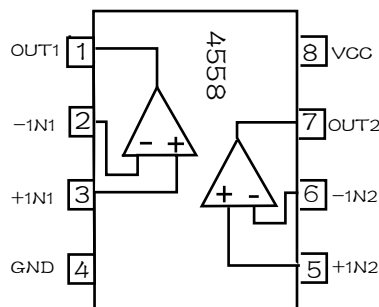


## 8. Internal Block Diagram of ICs

### ● MTK1379

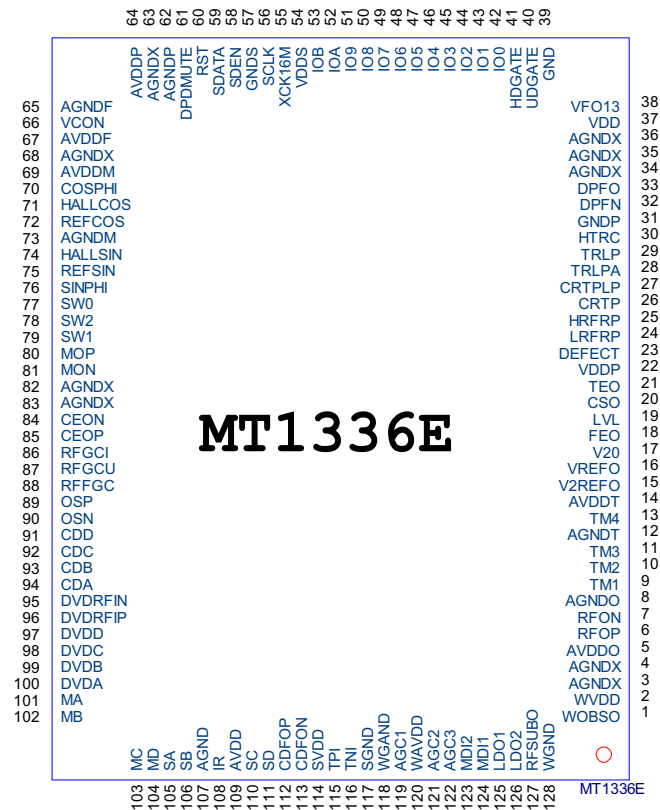


### ● NJM4558

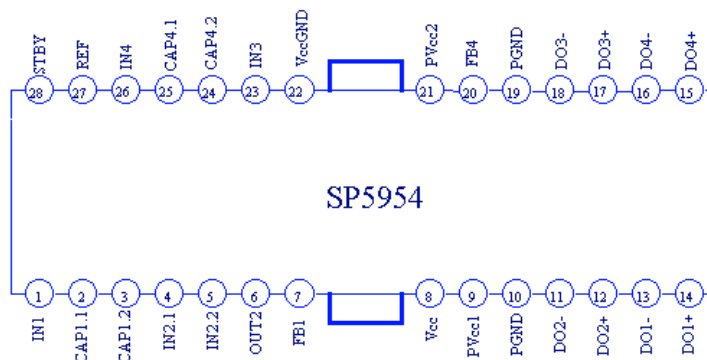


## 8. Internal Block Diagram of ICs

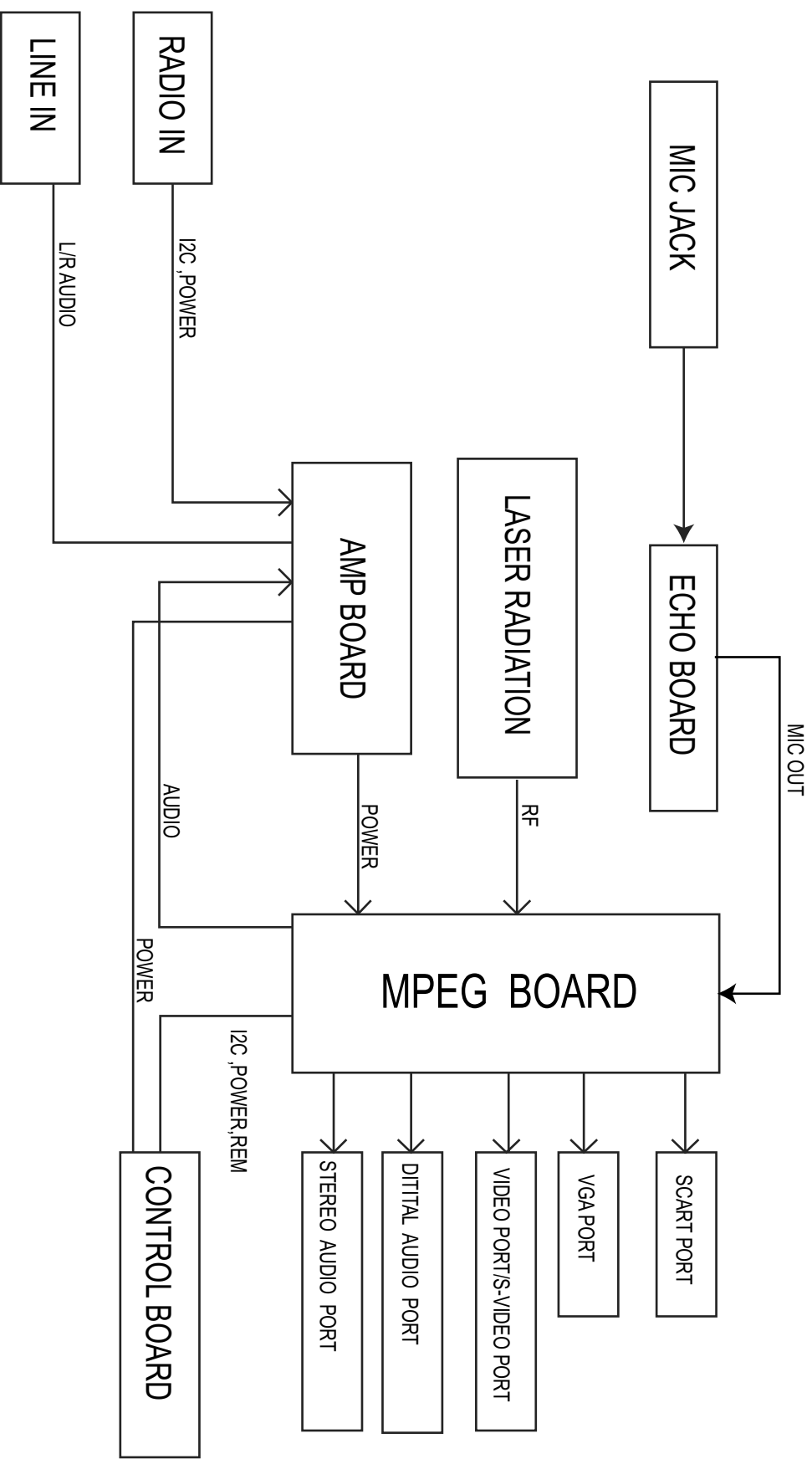
### ● MT1336E



### ● BA5954



# THT-120 SCHEMATIC DIAGRAM



● MPEG SCHEMATIC CIRCUIT

VTREK1379AM6-5.1

MISSIONRIGHT MT1379E (LQFP218) AAMP DVD Board for sony khm310

- 1 INDEX & POWER, RESET

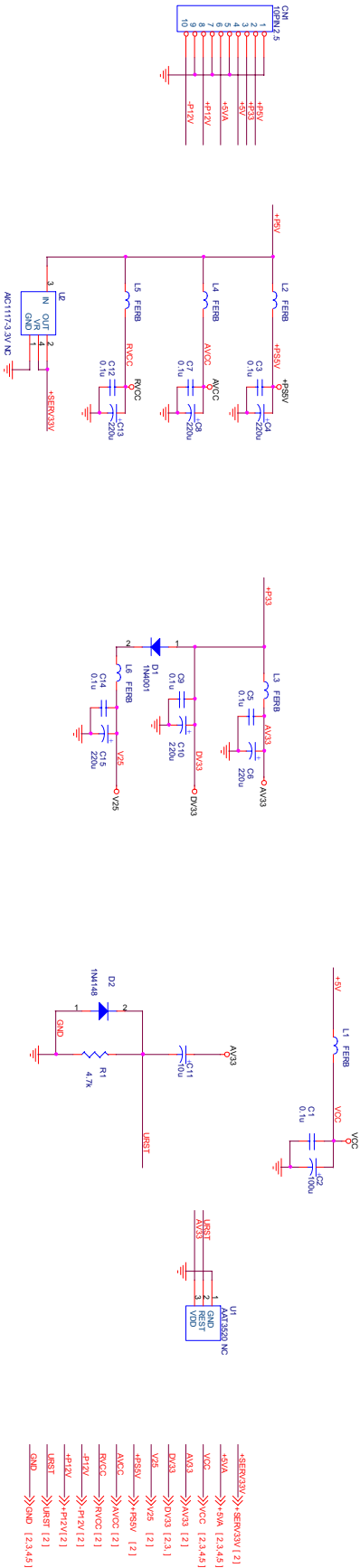
2 RF / SERVO - MT1336E

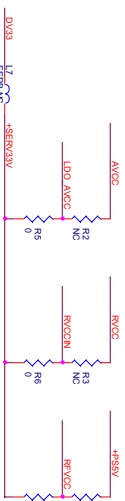
3 MPEG - MT1379E

4 MEMORY , SDRAM , VIDEO FILTER AND OUTPUT

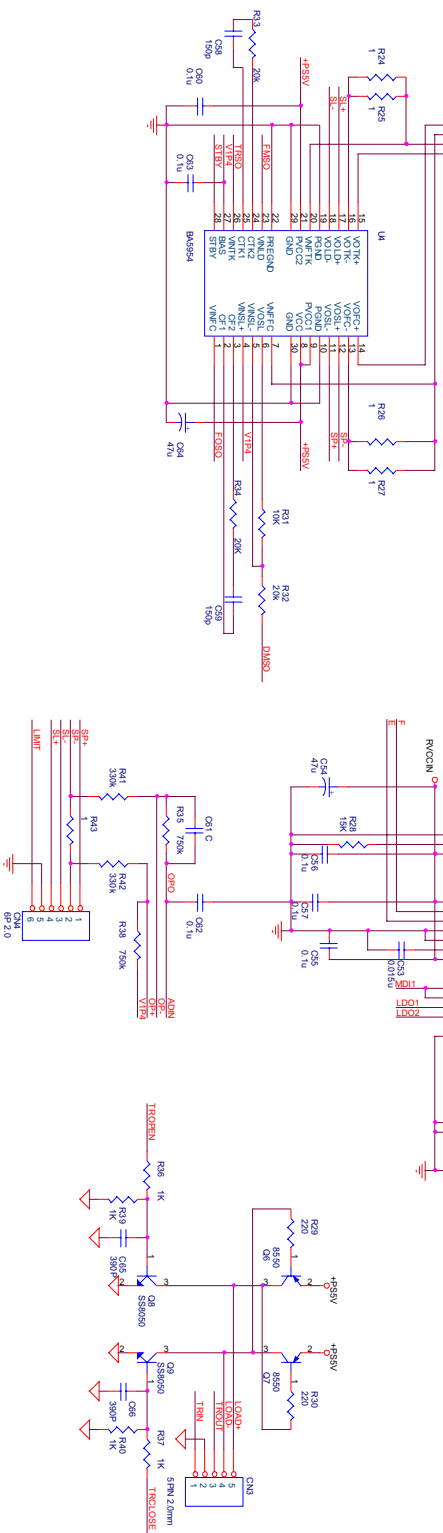
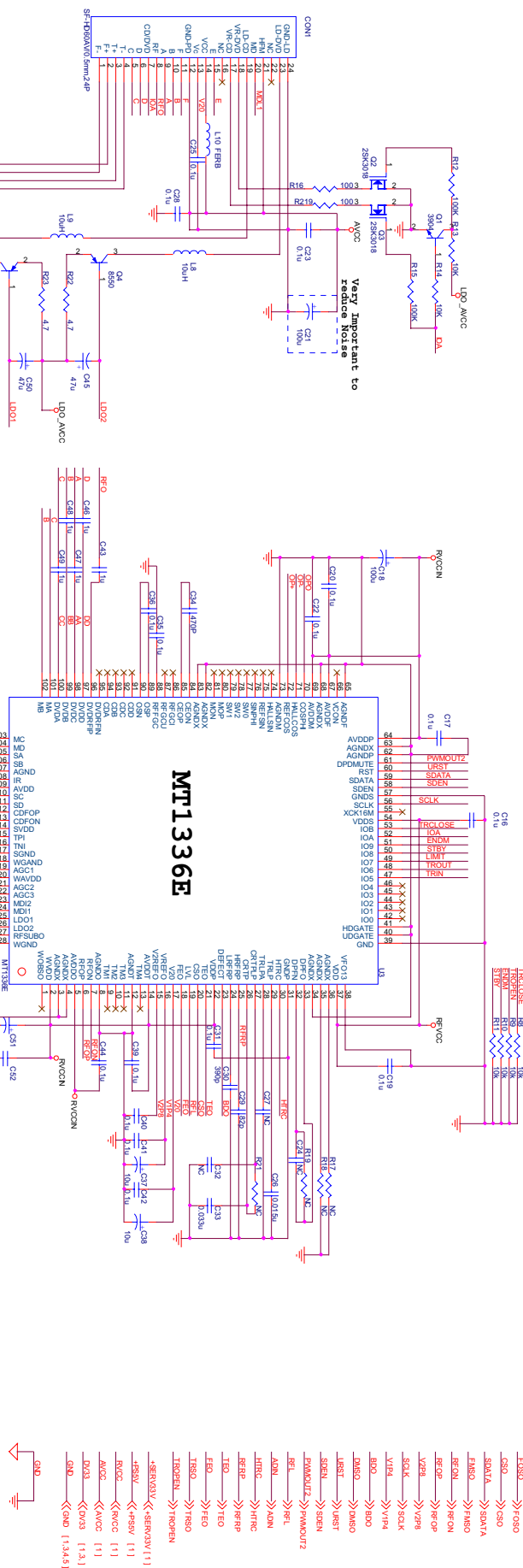
| NAME | TYPE         | DEVICE                 |
|------|--------------|------------------------|
| VCC  | Digital 5V   | SUPPLY                 |
| RVCC | Servo 5V     | MT1336E                |
| AVCC | RF 5V        | PICUP HEADER           |
| V33  | Digital 3.3V | SDRAM, Flash, VideoDAC |
| DV33 | Digital 3.3V | MT1379E                |
| AV33 | Servo 3.3V   | MT1379E                |
| V25  | Digital 2.5V | MT1379E                |
| +5VA | Audio 5V     | Audio DAC              |
| +5VU | Video 5V     | Video filter           |

| NAME | TYPE                |
|------|---------------------|
| GND  | Digital Ground      |
| SGND | Servo Analog Ground |
| AGND | Audio Ground        |
| VGND | Video Ground        |

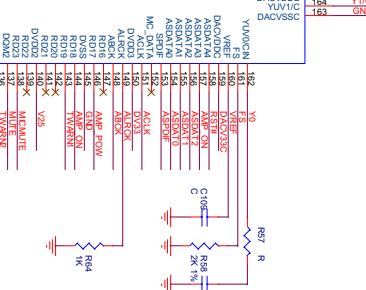
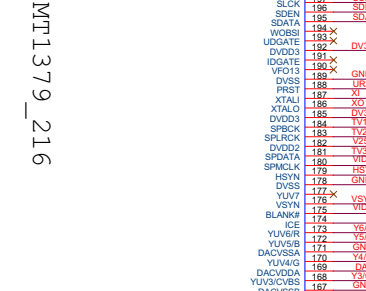
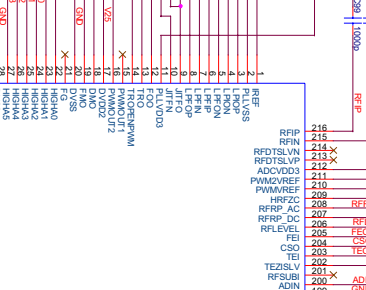
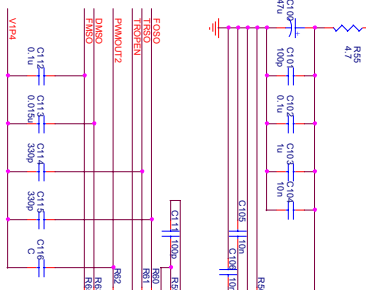
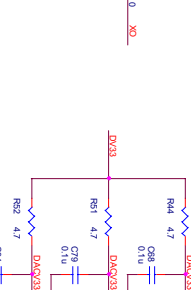
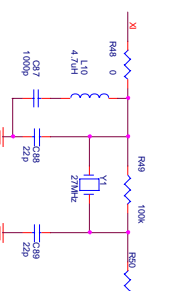
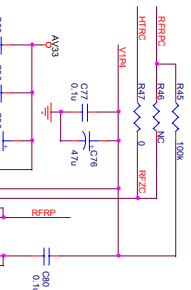
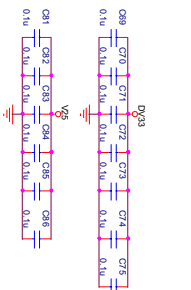




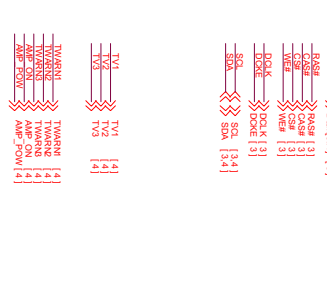
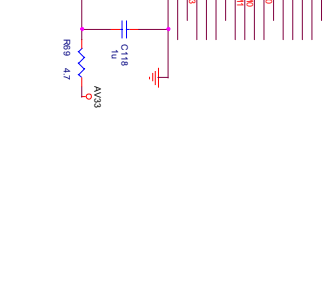
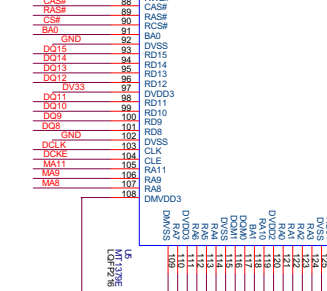
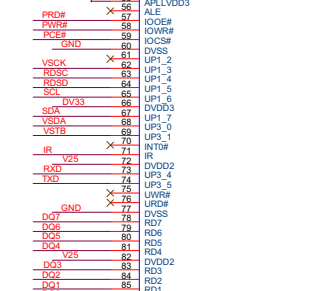
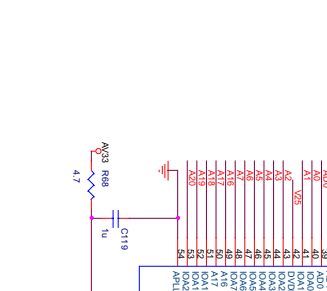
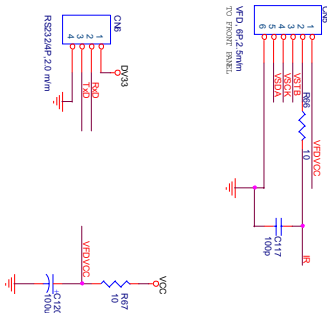
MT1336/76+MT1379 with sony kbm310 PUF.



[2] F030 >> F030  
 [2] C30 >> C30  
 [2] SDATA >> SDATA  
 [2] F040 >> F040  
 [2] R0C0 >> R0C0  
 [2] R0C0 >> R0C0  
 [2] V09 >> V09  
 [2] SC1K >> SC1K  
 [2] V04 >> V04  
 [2] D030 >> D030  
 [2] U01 >> U01  
 [2] P0M0U2 >> P0M0U2  
 [2] R0 >> R0  
 [2] A0N >> A0N  
 [2] H0C >> H0C  
 [2] R0P >> R0P  
 [2] T0 >> T0  
 [2] F0 >> F0  
 [2] T030 >> T030  
 [2] T0C0N >> T0C0N



MT1379\_216



VCC << VCC [1:24:5]  
 A03 << A03 [1]  
 V0 << V0 [1]  
 D03 << D03 [1:3:5]  
 GND << GND [1:34:5]

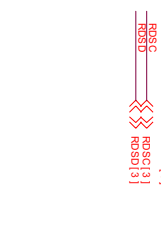
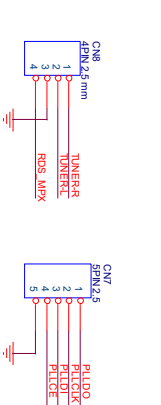
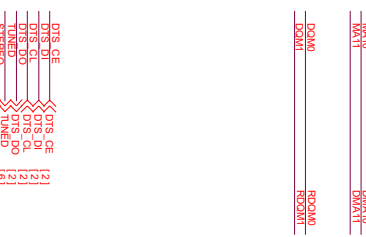
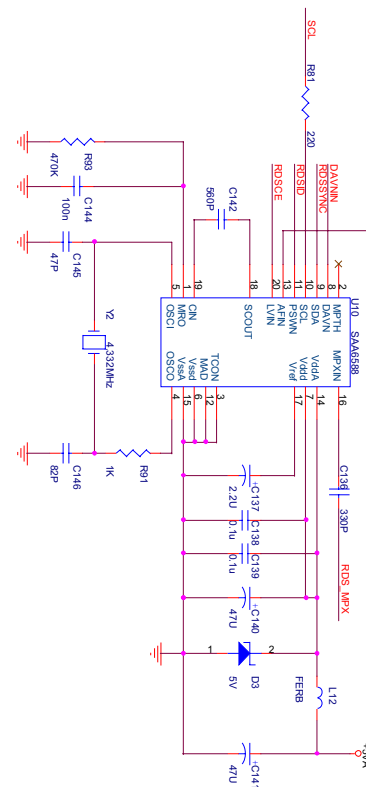
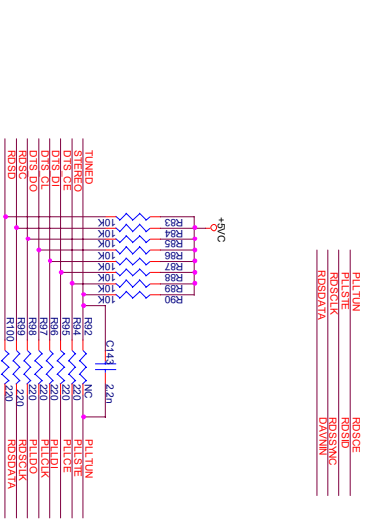
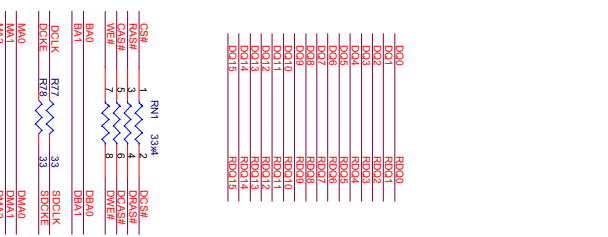
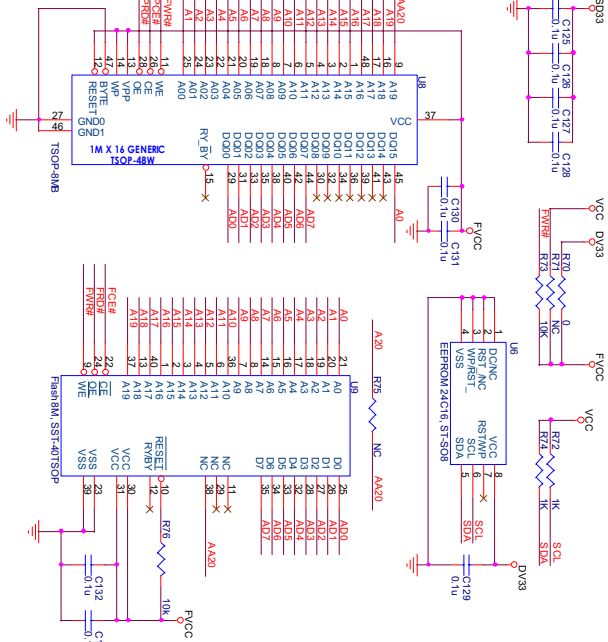
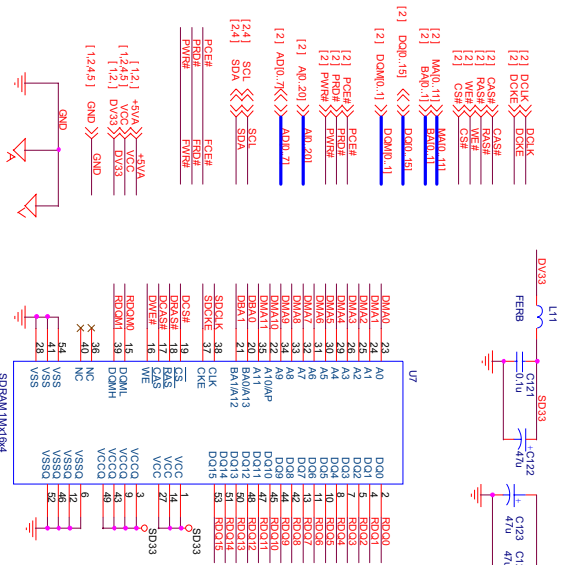
U01 << U01 [1]

F030 << F030 [1]  
 C30 << C30 [1]  
 SDATA << SDATA [1]  
 F040 << F040 [1]  
 R0C0 << R0C0 [1]  
 V09 << V09 [1]  
 SC1K << SC1K [1]  
 V04 << V04 [1]  
 D030 << D030 [1]  
 U01 << U01 [1]  
 P0M0U2 << P0M0U2 [1]  
 R0 << R0 [1]  
 A0N << A0N [1]  
 H0C << H0C [1]  
 R0P << R0P [1]  
 T0 << T0 [1]  
 F0 << F0 [1]  
 T030 << T030 [1]  
 T0C0N << T0C0N [1]

F030 << F030 [1]  
 C30 << C30 [1]  
 SDATA << SDATA [1]  
 F040 << F040 [1]  
 R0C0 << R0C0 [1]  
 V09 << V09 [1]  
 SC1K << SC1K [1]  
 V04 << V04 [1]  
 D030 << D030 [1]  
 U01 << U01 [1]  
 P0M0U2 << P0M0U2 [1]  
 R0 << R0 [1]  
 A0N << A0N [1]  
 H0C << H0C [1]  
 R0P << R0P [1]  
 T0 << T0 [1]  
 F0 << F0 [1]  
 T030 << T030 [1]  
 T0C0N << T0C0N [1]

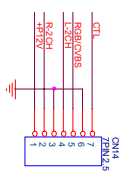
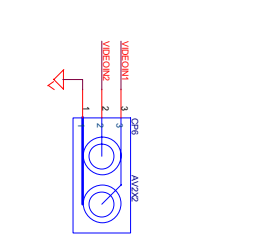
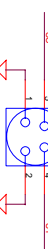
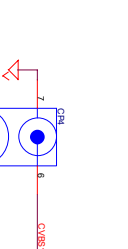
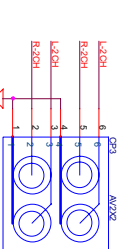
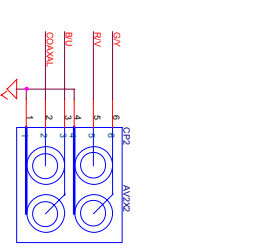
F030 << F030 [1]  
 C30 << C30 [1]  
 SDATA << SDATA [1]  
 F040 << F040 [1]  
 R0C0 << R0C0 [1]  
 V09 << V09 [1]  
 SC1K << SC1K [1]  
 V04 << V04 [1]  
 D030 << D030 [1]  
 U01 << U01 [1]  
 P0M0U2 << P0M0U2 [1]  
 R0 << R0 [1]  
 A0N << A0N [1]  
 H0C << H0C [1]  
 R0P << R0P [1]  
 T0 << T0 [1]  
 F0 << F0 [1]  
 T030 << T030 [1]  
 T0C0N << T0C0N [1]

F030 << F030 [1]  
 C30 << C30 [1]  
 SDATA << SDATA [1]  
 F040 << F040 [1]  
 R0C0 << R0C0 [1]  
 V09 << V09 [1]  
 SC1K << SC1K [1]  
 V04 << V04 [1]  
 D030 << D030 [1]  
 U01 << U01 [1]  
 P0M0U2 << P0M0U2 [1]  
 R0 << R0 [1]  
 A0N << A0N [1]  
 H0C << H0C [1]  
 R0P << R0P [1]  
 T0 << T0 [1]  
 F0 << F0 [1]  
 T030 << T030 [1]  
 T0C0N << T0C0N [1]

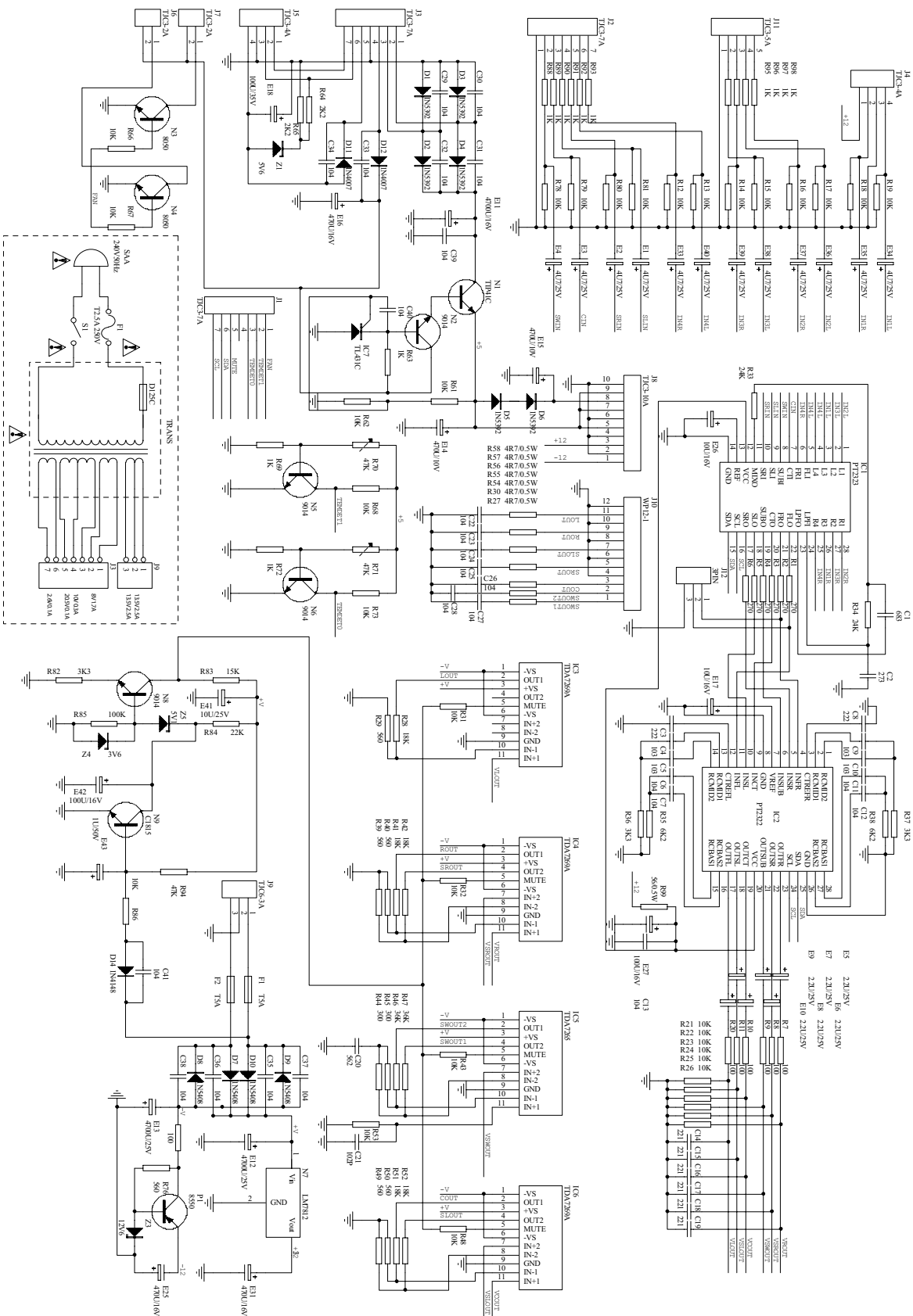




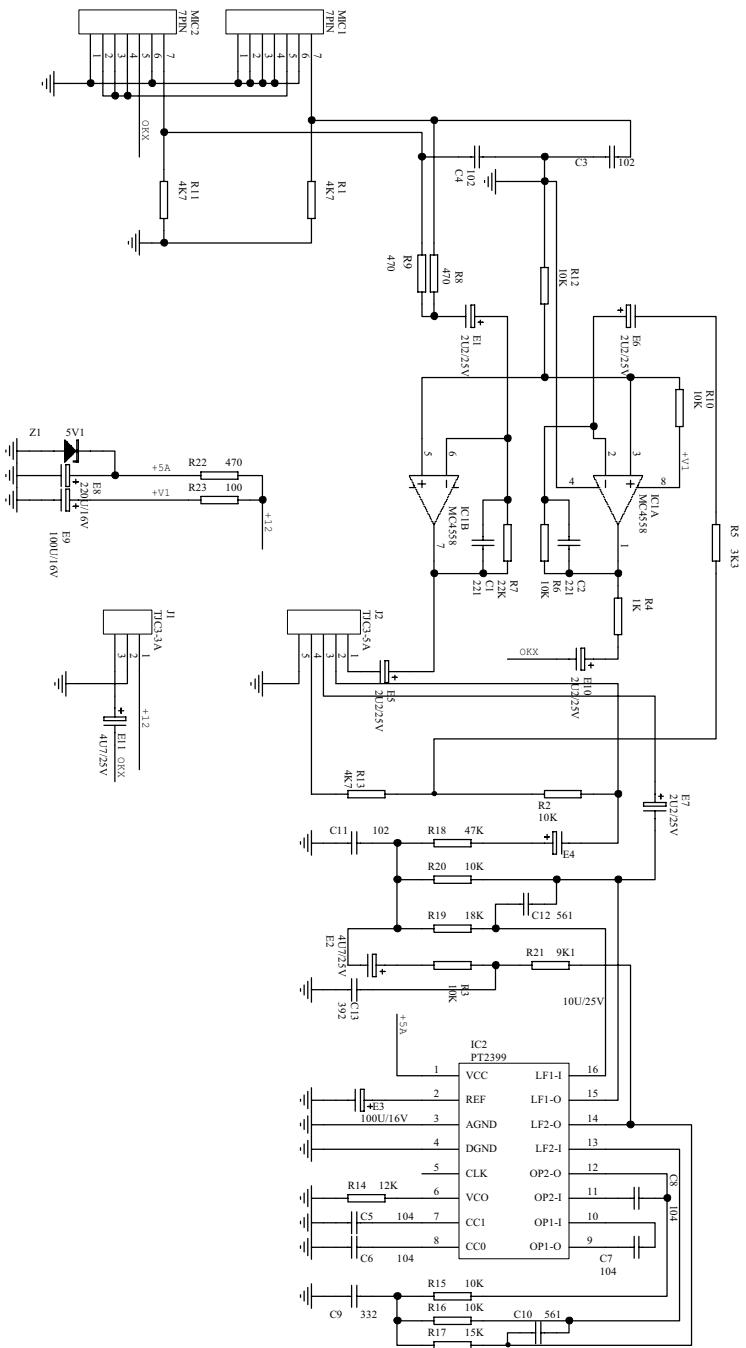


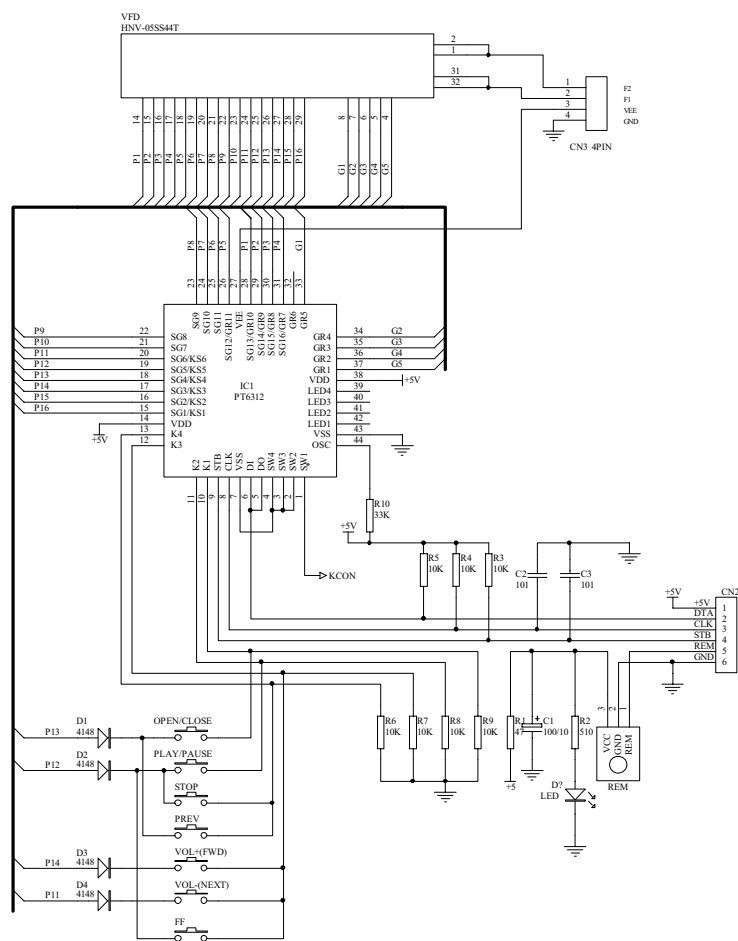


AMP SCHEMATIC CIRCUIT



● Echo Schematic Circuit







# VTREK

## BOM

| No. | Part No.               | Parts Type         | Parts Specification                 | QTY      | Position                                  | Remarks | Item | Grade |
|-----|------------------------|--------------------|-------------------------------------|----------|-------------------------------------------|---------|------|-------|
| 1   | 7.01.2.D317V021        |                    | Parts for control board             |          | No.                                       |         |      |       |
| 2   | 5.01.1.08000001        | wire jumper        | 8mm                                 | 1        | S1                                        |         | I    | C     |
| 3   | 5.01.1.10000001        | wire jumper        | 10mm                                | 1        | S2                                        |         | I    | C     |
| 4   | 5.01.1.20000001        | wire jumper        | 20mm                                | 1        | S3                                        |         | I    | C     |
| 5   | 1.01.1.47R0J051        | carbon resistor    | 47 ,1/4W,±5%                        | 1        | R1                                        |         | I    | B     |
| 6   | 1.01.1.1002J051        | carbon resistor    | 10K,1/4W,±5%                        | 7        | R3~R9                                     |         | I    | B     |
| 7   | 1.01.1.3302J051        | carbon resistor    | 33K,1/4W,±5%                        | 1        | R10                                       |         | I    | B     |
| 8   | 1.04.1.101M0601        | ceramic capa       | 100pF,50V,±20%                      | 2        | C2,C3                                     |         | I    | B     |
| 9   | 1.04.6.107M0201        | Electronic Cap     | 100uF,10V,±20%                      | 1        | C1                                        |         | I    | B     |
| 10  | 1.09.1.01N41481        | diode              | 1N4148                              | 4        | D1~D4                                     |         | I    | B     |
| 11  | 1.15.3.06060501        | touch switch       | 6×6,H=5mm                           | 8        | OPEN/CLOSE,PLAY,NEXT,R/L,FWD,REV,STOP,PRV |         | I    | B     |
| 12  | 1.31.2.00HM8382        | receiver           | HM-838                              | 1        | RE1                                       |         | I    | B     |
| 13  | 1.17.2.0PT63121        | integrated         | PT6312,QFP44                        | 1        | IC1                                       |         | S    | A     |
| 14  | 1.18.1.05SS44T1        | VFD display screen | HNV-05SS44T                         | 1        | VFD1                                      |         | I    | B     |
| 15  | 1.23.1.44012101        | black wire         | 120mm,P/N:161-440-001121            | 1        |                                           |         | S    | B     |
| 16  | 1.23.1.04017101        | black wire         | 170mm,P/N:161-040-001171            | 1        |                                           |         | S    | B     |
| 17  | 1.23.1.66028199        | black wire         | 280mm,P/N:161-660-099281            | 1        |                                           |         | S    | B     |
| 18  | 1.30.2.D317V021        | PCB                | 317CTRL3A.PCB                       | 1        | 231×43mm                                  |         | I    | B     |
| 19  | 7.01.4.D137V021        |                    | Parts for MIC jack board            |          |                                           |         |      |       |
| 20  | 1.21.2.0063518B        | mic jack           | CK6.35-18,silvery white             | 2        | MIC1,MIC2                                 |         | S    | B     |
| 21  | 1.23.1.44050107        | black wire         | 500mm,P/N:161-440-007501            | 1        |                                           |         | S    | B     |
| 22  | 1.30.4.D317V021        | PCB                | D317MICV4.PCB                       | 1        | 36×30mm                                   |         | I    | B     |
| 23  | 7.01.S.D317V022        |                    |                                     |          |                                           |         |      |       |
| 24  | 5.01.1.07500001        | wire jumper        | 7.5mm                               | 1        | S3                                        |         | I    | C     |
| 25  | 1.01.1.1000J031        | carbon resistor    | 100 ,1/8W,±5%                       | 2        | R23, <b>R26</b>                           |         | I    | B     |
| 26  | 1.01.1.2201J031        | carbon resistor    | 2.2K,1/8W,±5%                       | 3        | R8,R9,R24                                 |         | I    | B     |
| 27  | 1.01.1.1001J031        | carbon resistor    | 1K,1/8W,±5%                         | 1        | R4                                        |         | I    | B     |
| 28  | 1.01.1.3301J031        | carbon resistor    | 3.3K,1/8W,±5%                       | 1        | R5                                        |         | I    | B     |
| 29  | 1.01.1.4701J031        | carbon resistor    | 4.7K,1/8W,±5%                       | 3        | R1,R11,R25                                |         | I    | B     |
| 30  | 1.01.1.5601J031        | carbon resistor    | 5.6K,1/8W,±5%                       | 1        | R13                                       |         | I    | B     |
| 31  | 1.01.1.9101J031        | carbon resistor    | 9.1K,1/8W,±5%                       | 1        | R21                                       |         | I    | B     |
| 32  | 1.01.1.1002J031        | carbon resistor    | 10K,1/8W,±5%                        | 7        | R2,R3,R10,R12,R15,R16,R20                 |         | I    | B     |
| 33  | 1.01.1.1202J031        | carbon resistor    | 12K,1/8W,±5%                        | 2        | R14 R17                                   |         | I    | B     |
| 34  | 1.01.1.1802J031        | carbon resistor    | 18K,1/8W,±5%                        | 2        | R7,R19                                    |         | I    | B     |
| 35  | 1.01.1.4702J031        | carbon resistor    | 47K,1/8W,±5%                        | 2        | R18, <b>R27</b>                           |         | I    | B     |
| 36  | 1.01.1.6802J031        | carbon resistor    | 68K,1/8W,±5%                        | 1        | R6                                        |         | I    | B     |
| 37  | 1.01.1.4700J051        | carbon resistor    | 470 ,1/4W,±5%                       | 1        | R22                                       |         | I    | B     |
| 38  | 1.04.1.221M0601        | ceramic cap        | 220pF,50V,±20%                      | 2        | C1,C2                                     |         | I    | B     |
| 39  | 1.04.1.561M0601        | ceramic cap        | 560pF,50V,±20%                      | 2        | C10,C12                                   |         | I    | B     |
| 40  | 1.04.1.104M0601        | ceramic cap        | 0.1uF,50V,±20%                      | 2        | C14,C15                                   |         | I    | B     |
| 41  | 1.04.2.102M0601        | terylene cap       | 1000pF,50V,±20%                     | 3        | C3,C4,C11                                 |         | I    | B     |
| 42  | 1.04.2.332M0601        | terylene cap       | 3300pF,50V,±20%                     | 1        | C9                                        |         | I    | B     |
| 43  | 1.04.2.392M0601        | terylene cap       | 3900pF,50V,±20%                     | 1        | C13                                       |         | I    | B     |
| 44  | 1.04.2.104M0601        | terylene cap       | 0.1uF,50V,±20%                      | 4        | C5-C8                                     |         | I    | B     |
| 45  | 1.04.6.225M0401        | electronic cap     | 2.2uF,25V,±20%                      | 6        | E1,E5,E6,E7,E10,E11                       |         | I    | B     |
| 46  | 1.04.6.475M0401        | electronic cap     | 4.7uF,25V,±20%                      | 2        | E2,E4                                     |         | I    | B     |
| 47  | 1.04.6.107M0301        | electronic cap     | 100uF,16V,±20%                      | 2        | E3,E12                                    |         | I    | B     |
| 48  | 1.04.6.227M0301        | electronic cap     | 220uF,16V,±20%                      | 2        | E8, <b>E13</b>                            |         | I    | B     |
| 49  | 1.04.6.477M0301        | electronic cap     | 470uF,16V,±20%                      | 1        | E9                                        |         | I    | B     |
| 50  | 1.10.1.00510051        | regulator diode    | 5.1V,1/2W                           | 1        | Z1                                        |         | I    | B     |
| 51  | 1.09.1.01N41481        | diode              | 1N4148                              | 3        | <b>Z2,Z3,Z4</b>                           |         | I    | B     |
| 52  | 1.13.1.00090141        | transistor         | 9014,TO-92                          | 1        | Q2                                        |         | I    | B     |
| 53  | 1.17.1.0PT23991        | integrate circuit  | PT2399,DIP16                        | 1        | IC2                                       |         | I    | B     |
| 54  | 1.17.1.00045581        | integrate circuit  | 4558,DIP8                           | 1        | IC1                                       |         | I    | A     |
| 55  | 1.20.2.0TJC34A1        | integrate circuit  | TJC3-4A,2.54mm,4PIN                 | 1        | J3                                        |         | I    | A     |
| 56  | 1.20.2.0TJC35A1        | integrate circuit  | TJC3-5A,2.54mm,5PIN                 | 1        | J2                                        |         | I    | B     |
| 57  | 1.23.1.33380002        | black wire         | 80mm,P/N:161-333-002800             | 1        | connect J1 to CN12 in the mpeg board      |         | I    | B     |
| 58  | <b>1.30.4.D317V061</b> | <b>PCB</b>         | <b>D317V60K.PCB,1.30.4.D317V061</b> | <b>1</b> | <b>70×52mm</b>                            |         | S    | B     |

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|-----|-----------------|-------------------|--------------------------------|----|---------------------------------------------|---|---|---|
| 59  | 7.01.3.D317V021 |                   |                                |    |                                             |   |   |   |
| 60  | 1.01.1.1002J051 | carbon resistor   | 10K,1/4W,±5%                   | 2  | R1,R2                                       |   | I | B |
| 61  | 1.02.B.10306302 | various resistor  | R1212N120F,B10K,F coaxial,20mm | 1  | VR1                                         |   | S | B |
| 62  | 1.02.B.50306302 | various resistor  | R1212N120F,B50K,F coaxial,20mm | 1  | VR2                                         |   | S | B |
| 63  | 1.03.1.02420423 | encoder switch    | 16B-24204,F coaxial,20mm       | 1  | VR3                                         |   | I | B |
| 64  | 1.23.1.55048124 | black wire        | 480mm,P/N:161-550-024481       | 1  | connect J1 to MIC jack board J2             |   | S | B |
| 65  | 1.30.3.D317V021 | PCB               | D317VOLV3.PCB                  | 1  | 112.5×29.5mm                                |   | I | B |
|     |                 |                   |                                |    |                                             |   |   |   |
| 66  | 7.01.D.D303V502 | PCB               |                                |    |                                             |   |   |   |
| 67  | 5.01.1.05000001 | wire jumper       | 5mm                            | 23 | S1~S16,S18~S20,S22,S34,S68,S73              |   | I | C |
| 68  | 5.01.1.07500001 | wire jumper       | 7.5mm                          | 18 | S21,S23~S33,S36,S37,S46,S71,S72,Z2          |   | I | C |
| 69  | 5.01.1.10000001 | wire jumper       | 10mm                           | 13 | S38~S45,S47~S49,S74,S75                     |   | I | C |
| 70  | 5.01.1.12500001 | wire jumper       | 12.5mm                         | 8  | S35,S57-S63                                 |   | I | C |
| 71  | 5.01.1.15000001 | wire jumper       | 15mm                           | 7  | S51~S52,S54~S56,S69,S70                     |   | I | C |
| 72  | 5.01.1.17500001 | wire jumper       | 17.5mm                         | 5  | S53,S64~S67                                 |   | I | C |
| 73  | 1.32.1.50013301 | fuse              | T5.0A/250V,delay type          | 2  | F1,F2;VDE ;attestation code :ECA00985       | * |   | C |
|     |                 |                   |                                |    |                                             |   |   |   |
| 74  | 1.01.1.1002F031 | carbon resistor   | 10K,1/8W,±1%                   | 2  | R61,R62                                     |   | I | B |
| 75  | 1.01.1.04R7J061 | carbon resistor   | 4.7 ,1/2W,±5%                  | 7  | R27,R30,R54~R58                             |   | I | B |
| 76  | 1.01.1.56R0J061 | carbon resistor   | 56 ,1/2W,±5%                   | 1  | R99                                         |   | I | B |
| 77  | 1.01.1.1000J031 | carbon resistor   | 100 ,1/8W,±5%                  | 7  | S17,R7~R11,R20                              |   | I | B |
| 78  | 1.01.1.2700J051 | carbon resistor   | 270 ,1/4W,±5%                  | 6  | R1~R6                                       |   | I | B |
| 79  | 1.01.1.5600J031 | carbon resistor   | 560 ,1/8W,±5%                  | 8  | R29,R39,R40,R44,R45,R49,R50,R76             |   | I | B |
| 80  | 1.01.1.1001J031 | carbon resistor   | 1K,1/8W,±5%                    | 11 | R88~R93,R95~R98,R63                         |   | I | B |
| 81  | 1.01.1.2201J031 | carbon resistor   | 2.2K,1/8W,±5%                  | 2  | R64,R65                                     |   | I | B |
| 82  | 1.01.1.3301J031 | carbon resistor   | 3.3K,1/8W,±5%                  | 2  | R36,R37                                     |   | I | B |
| 83  | 1.01.1.4701J031 | carbon resistor   | 4.7K,1/8W,±5%                  | 1  | R82                                         |   | I | B |
| 84  | 1.01.1.6201J031 | carbon resistor   | 6.2K,1/8W,±5%                  | 2  | R35,R38                                     |   | I | B |
| 85  | 1.01.1.1002J031 | carbon resistor   | 10K,1/8W,±5%                   | 23 | R12~R19,R21~R26,R31,R32,R43,R48,R78~R81,R86 |   | I | B |
| 86  | 1.01.1.1502J031 | carbon resistor   | 15K,1/8W,±5%                   | 1  | R83                                         |   | I | B |
| 87  | 1.01.1.1802J051 | carbon resistor   | 18K,1/4W,±5%                   | 5  | R28,R41,R42,R51,R52                         |   | I | B |
| 88  | 1.01.1.2202J031 | carbon resistor   | 22K,1/8W,±5%                   | 1  | R84                                         |   | I | B |
| 89  | 1.01.1.2402J031 | carbon resistor   | 24K,1/8W,±5%                   | 2  | R33,R34                                     |   | I | B |
| 90  | 1.01.1.3602J031 | carbon resistor   | 36K,1/8W,±5%                   | 1  | R*                                          |   | I | B |
| 91  | 1.01.1.4702J031 | carbon resistor   | 47K,1/8W,±5%                   | 1  | R94                                         |   | I | B |
| 92  | 1.01.1.1003J031 | carbon resistor   | 100K,1/8W,±5%                  | 1  | R85                                         |   | I | B |
| 93  | 1.01.1.1803J031 | carbon resistor   | 180K,1/8W,±5%                  | 1  | R69                                         |   | I | B |
| 94  | 1.01.1.5602J031 | carbon resistor   | 56K,1/8W,±5%                   | 2  | R46~R47                                     |   | I | B |
|     |                 |                   |                                |    |                                             |   |   |   |
| 95  | 1.04.1.104M0601 | ceramic capacitor | 0.1uF,50V,±20%                 | 12 | C6,C12,C13,C22~C28,C39,C40                  |   | I | B |
| 96  | 1.04.1.221M0601 | ceramic capacitor | 220pF,50V,±20%                 | 6  | C14~C19                                     |   | I | B |
| 97  | 1.04.2.683M0601 | terylene cap      | 0.068uF,50V,±20%               | 1  | C1                                          |   | I | B |
| 98  | 1.04.2.273M0601 | terylene cap      | 0.027uF,50V,±20%               | 1  | C2                                          |   | I | B |
| 99  | 1.04.2.104M0601 | terylene cap      | 0.1uF,50V,±20%                 | 2  | C7,C11                                      |   | I | B |
| 100 | 1.04.2.222M0601 | terylene cap      | 2200pF,50V,±20%                | 2  | C3,C8                                       |   | I | B |
| 101 | 1.04.2.103M0601 | terylene cap      | 0.01uF,50V,±20%                | 4  | C4,C5,C9,C10                                |   | I | B |
| 102 | 1.04.2.563M0601 | terylene cap      | 0.056uF,50V,±20%               | 1  | C20                                         |   | I | B |
|     |                 |                   |                                |    |                                             |   |   |   |
| 103 | 1.04.6.105M0601 | electronic cap    | 1uF,50V,±20%                   | 1  | E43                                         |   | I | B |
| 104 | 1.04.6.225M0601 | electronic cap    | 2.2uF,50V,±20%                 | 6  | E5~E10                                      |   | I | B |
| 105 | 1.04.6.475M0401 | electronic cap    | 4.7uF,25V,±20%                 | 12 | E33~E40,E1~E4                               |   | I | B |
| 106 | 1.04.6.106M0301 | electronic cap    | 10uF,16V,±20%                  | 2  | E17,E26                                     |   | I | B |
| 107 | 1.04.6.106M0401 | electronic cap    | 10uF,25V,±20%                  | 1  | E41                                         |   | I | B |
| 108 | 1.04.6.107M0301 | electronic cap    | 100uF,16V,±20%                 | 2  | E27,E42                                     |   | I | B |
| 109 | 1.04.6.107M0501 | electronic cap    | 100uF,35V,±20%                 | 1  | E18                                         |   | I | B |
| 110 | 1.04.6.477M0201 | electronic cap    | 470uF,10V,±20%                 | 2  | E14,E15                                     |   | I | B |
| 111 | 1.04.6.477M0301 | electronic cap    | 470uF,16V,±20%                 | 3  | E16,E25,E31                                 |   | I | B |
| 112 | 1.04.6.478M0301 | electronic cap    | 4700uF,16V,±20%                | 1  | E11                                         |   | I | B |
| 113 | 1.04.6.478M0401 | electronic cap    | 4700uF,25V,±20%                | 2  | E12,E13                                     |   | I | B |
| 114 | 1.04.6.105M0601 | electronic cap    | 1uF,50V,±20%                   | 1  | C21                                         |   | I | B |
|     |                 |                   |                                |    |                                             |   |   |   |
| 115 | 1.10.1.01200051 | regulator diode   | 12V,1/2W                       | 1  | Z3                                          |   | I | B |
| 116 | 1.10.1.00510051 | regulator diode   | 5.1V,1/2W                      | 1  | Z5                                          |   | I | B |
| 117 | 1.10.1.00360051 | regulator diode   | 3.6V,1/2W                      | 1  | Z4                                          |   | I | B |
| 118 | 1.10.1.00560051 | regulator diode   | 5.6V,1/2W                      | 1  | Z1                                          |   | I | B |
| 119 | 1.09.1.01N40071 | diode             | 1N4007                         | 2  | D11,D12                                     |   | I | B |



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|     |                 |                     |                                                  |      |                                                                                          |  |   |   |
|-----|-----------------|---------------------|--------------------------------------------------|------|------------------------------------------------------------------------------------------|--|---|---|
| 120 | 1.09.1.01N41481 | diode               | 1N4148                                           | 1    | D14                                                                                      |  | I | B |
| 121 | 1.09.1.01N53921 | diode               | 1N5392                                           | 2    | D5,D6                                                                                    |  | I | B |
| 122 | 1.09.1.01N54081 | diode               | 1N5408                                           | 8    | D1~D4,D7~D10                                                                             |  | I | B |
| 123 | 1.13.1.00090141 | transistor          | 9014,TO-92                                       | 1    | N8                                                                                       |  | I | B |
| 124 | 1.13.1.00080501 | transistor          | 8050,TO-92                                       | 1    | N2                                                                                       |  | I | B |
| 125 | 1.13.1.00085501 | transistor          | 8550,TO-92                                       | 1    | P1                                                                                       |  | I | B |
| 126 | 1.13.1.00C18151 | transistor          | C1815,TO-92                                      | 1    | N9                                                                                       |  | I | B |
| 127 | 1.13.1.0TIP41C1 | transistor          | TIP41C,TO-220                                    | 1    | N1                                                                                       |  | I | B |
|     |                 |                     |                                                  |      |                                                                                          |  |   |   |
| 128 | 1.17.1.00078121 | integrate circuit   | 7812,TO-220                                      | 1    | N7                                                                                       |  | I | A |
| 129 | 1.17.2.0PT23231 | integrate circuit   | PT2323,SOP28                                     | 1    | IC1                                                                                      |  | S | A |
| 130 | 1.17.2.0PT23221 | integrate circuit   | PT2322,SOP28                                     | 1    | IC2                                                                                      |  | S | A |
| 131 | 1.17.1.0TL431C1 | integrate circuit   | TL431C,TO-220                                    | 1    | IC7                                                                                      |  | I | A |
| 132 | 1.17.1.007269A1 | integrate circuit   | TDA7269A                                         | 4    | IC3,IC4,IC5,IC6                                                                          |  | I | A |
|     |                 |                     |                                                  |      |                                                                                          |  |   |   |
| 133 | 1.20.2.0TJC63A1 | jack                | TJC6-3A                                          | 1    | J9,connect to transformer slaver 1                                                       |  | I | B |
| 134 | 1.20.2.0TJC37A1 | jack                | TJC3-7A                                          | 1    | J3,connect to transformer slaver 2                                                       |  | I | B |
| 135 | 1.20.2.0TJC34A1 | jack                | TJC3-4A                                          | 1    | J5                                                                                       |  | I | B |
| 136 | 1.20.2.0TJC35A1 | jack                | TJC3-5A                                          | 1    | J11                                                                                      |  | I | B |
| 137 | 1.20.2.0TJC33A1 | jack                | TJC3-3A                                          | 1    | J12                                                                                      |  | I | B |
|     |                 |                     |                                                  |      |                                                                                          |  |   |   |
| 138 | 1.23.1.77710104 | black wire          | 100mm,P/N:161-777-004101                         | 1    | connect J2 to CN11 in the mpeg board                                                     |  | S | B |
| 139 | 1.23.1.44428102 | black wire          | 280mm,P/N:161-444-002281                         | 1    | connect J4 to radio parts                                                                |  | S | B |
| 140 | 1.23.1.AAA15198 | black wire          | 150mm,P/N:161-AAA-098151                         | 1    | connect J8 CN1 in the mpeg board                                                         |  | S | B |
| 141 | 1.24.1.18010101 | black wire          | 100mm,1007,awg18#,P/N:166-100718-0101            | 1    |                                                                                          |  | S | B |
| 142 | 1.23.1.93310101 | black wire          | 100mm,P/N:161-933-001101                         | 1    | connect J1 to CN9 in the mpeg board                                                      |  | S | B |
|     |                 |                     |                                                  |      |                                                                                          |  |   |   |
| 143 | 1.22.2.00WP1211 | black wire          | WP12-1,(12 double layer holes-black-yellow-blue- | 1    | J10                                                                                      |  | S | B |
| 144 | 5.02.1.02502401 | isinglass insulated | 25×24mm                                          | 4    |                                                                                          |  | C | B |
| 145 | 5.02.1.02502001 | isinglass insulated | 25×20mm                                          | 1    |                                                                                          |  | C | B |
| 146 | 5.03.1.03R00301 | insulated plastic   | 3×6×3mm,PVC washer                               | 5    |                                                                                          |  | C | B |
| 147 | 5.17.1.00000001 | silicon grease      |                                                  | 0.5g | white                                                                                    |  | C | B |
| 148 | 1.30.A.D317V021 | PCB                 | AMP PCB;DV2023B,NO.DV2023-1,181-D303-5           | 1    | 250×90.5mm                                                                               |  | I | B |
|     |                 |                     |                                                  |      |                                                                                          |  |   |   |
| 149 | 2.08.5.D3170002 | heat sink           | dimension drawing:D3317V2SH.DWG,aluminum         | 1    |                                                                                          |  | C | C |
| 150 | 2.20.1.30081221 | screw               | M3×6, white, flat, round                         | 5    | amplifier tube (5)                                                                       |  | C | C |
|     |                 |                     |                                                  |      |                                                                                          |  |   |   |
|     |                 |                     |                                                  |      |                                                                                          |  |   |   |
| 151 | 7.01.G.D303V502 |                     | Parts for Audio board                            |      |                                                                                          |  |   |   |
| 152 | 1.21.5.AV484131 | AV jack             | AV4-8.4-13, up-white, under-red                  | 1    |                                                                                          |  | C | B |
| 153 | 1.23.1.55522105 | black wire          | 220mm,P/N:161-555-005221                         | 1    | Audio board to Amplifier board CN3                                                       |  | S | B |
| 154 | 1.30.G.D303V501 | PCB Audio board     | DV2023AUDIO.PCB,181-D303-544                     | 1    | 25×19mm,NO.DV2023-4                                                                      |  | I | B |
|     |                 |                     |                                                  |      |                                                                                          |  |   |   |
| 155 |                 |                     | Parts for MPEG board                             |      |                                                                                          |  |   |   |
| 156 | 1.23.1.55512193 | wire                | 120mm,P/N:161-555-093121                         | 1    | CN7 connect to receiver main part                                                        |  | S | B |
| 157 | 1.23.1.55530118 | wire                | 300mm,P/N:161-555-018301                         | 1    | CN3(PIN space 2.0mm) to loader                                                           |  | S | B |
| 158 | 1.23.2.66620105 | soft wire           | 200mm,P/N:161-666-005201                         | 1    | CN4(PIN space 2.0mm) to loader                                                           |  | S | B |
| 159 | 1.23.3.QQQ22101 | flat washer wire    | 220mm,24P/0.5mm,P/N:161-QQQ-001221               | 1    | CN2connect to loader                                                                     |  | C | B |
| 160 | 7.05.1.SONY3101 | sony len            | SONY 310                                         | 1    |                                                                                          |  | C | B |
| 161 | 7.05.2.0R310AH1 | loader stand        | RYD-310AH                                        | 1    |                                                                                          |  | C | B |
|     |                 |                     |                                                  |      |                                                                                          |  |   |   |
| 162 | 1.04.A.220J0601 | ceramic capacitor   | 22pF,S0603,±5%,50V                               | 3    | C88,C89,C151                                                                             |  | G | B |
| 163 | 1.04.A.470J0601 | ceramic capacitor   | 47pF,S0603,±5%,50V                               | 1    | C145                                                                                     |  | G | B |
| 164 | 1.04.A.820J0601 | ceramic capacitor   | 82pF,S0603,±5%,50V                               | 2    | C146,C29                                                                                 |  | G | B |
| 165 | 1.04.A.101J0601 | ceramic capacitor   | 100pF,S0603,±5%,50V                              | 15   | C101,C111,C117,C212,C213,C215,C216,C218,C219,C221,C222,C224,C225,C227,C228               |  | G | B |
| 166 | 1.04.A.151K0601 | ceramic capacitor   | 150pF,S0603,±10%,50V                             | 8    | C58,C59,C153,C159,C166,C176,C182,C200                                                    |  | G | B |
| 167 | 1.04.A.331K0601 | ceramic capacitor   | 330pF,S0603,±10%,50V                             | 4    | C114,C115,C136,C206                                                                      |  | G | B |
| 168 | 1.04.A.391K0601 | ceramic capacitor   | 390pF,S0603,±10%,50V                             | 3    | C30,C65,C66                                                                              |  | G | B |
| 169 | 1.04.A.471K0601 | ceramic capacitor   | 470pF,S0603,±10%,50V                             | 1    | C34                                                                                      |  | G | B |
| 170 | 1.04.A.561J0601 | ceramic capacitor   | 560pF,S0603,±10%,50V                             | 1    | C142                                                                                     |  | G | B |
| 171 | 1.04.A.102K0601 | ceramic capacitor   | 1000pF,S0603,±10%,50V                            | 20   | C87,C95,C98,C99,C156,C157,C164,C165,C172,C174<br>C180,C181,C192,C193,C203,C204,C232~C235 |  | G | B |
| 172 | 1.04.A.222K0601 | ceramic capacitor   | 2200pF,S0603,±10%,50V                            | 1    | C143                                                                                     |  | G | B |
| 173 | 1.04.A.103M0601 | ceramic capacitor   | 0.01uF,S0603,±20%,50V                            | 5    | C104,C105,C106,C107,C108                                                                 |  | G | B |
| 174 | 1.04.A.153M0601 | ceramic capacitor   | 0.015uF,S0603,±20%,50V                           | 3    | C26,C53,C113                                                                             |  | G | B |
| 175 | 1.04.A.333Z0601 | ceramic capacitor   | 0.033uF,S0603,+80%/-20%,50V                      | 1    | C33                                                                                      |  | G | B |

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|     |                 |                   |                            |    |                                                                                                                                                                                                                                                                               |  |   |   |
|-----|-----------------|-------------------|----------------------------|----|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|---|---|
| 176 | 1.04.A.104Z0601 | capacitor         | 0.1uF,S0603,+80%/-20%,50V  | 85 | C1,C3,C5,C7,C9,C12,C14,C16,C17,C19,C20,C22,C23<br>C25,C28,C31,C35,C36,C39~C42,C44,C52,C55~C57<br>C60,C62,C63,C68~C75,C77,C79~C86,C92~C94,C97<br>C102,C110,C112,C121,C125~C133,C138,C139,C144<br>C147,C149,C160,C170,C183,C185~C187,C194<br>C196~C198,C205,C208,C210,C229~C231 |  | G | B |
| 177 | 1.04.A.474Z0601 | capacitor         | 0.47uF,S0603,+80%/-20%,50V | 2  | C134,C135                                                                                                                                                                                                                                                                     |  | G | B |
| 178 | 1.04.A.105Z0601 | capacitor         | 1uF,S0603,+80%/-20%,50V    | 8  | C43,C46,C47,C48,C49,C103,C118,C119                                                                                                                                                                                                                                            |  | G | B |
|     |                 |                   |                            |    |                                                                                                                                                                                                                                                                               |  |   |   |
| 179 | 1.01.6.0000J021 | resistor          | 0 ,S0603,±5%,1/10W         | 19 | R5-R7,R47,R48,R62,R70,R154,R155,R185,R188,R194,R198,R204,R209,R212,R214,R218                                                                                                                                                                                                  |  | G | B |
| 180 | 1.01.6.01R0J021 | resistor          | 1 ,S0603,±5%,1/10W         | 5  | R24,R25,R26,R27,R43                                                                                                                                                                                                                                                           |  | G | B |
| 181 | 1.01.6.04R7J021 | resistor          | 4.7 ,S0603,±5%,1/10W       | 9  | R22,R23,R44,R51,R52,R55,R68,R69,R178                                                                                                                                                                                                                                          |  | G | B |
| 182 | 1.01.6.10R0J021 | resistor          | 10 ,S0603,±5%,1/10W        | 3  | R50,R66,R67                                                                                                                                                                                                                                                                   |  | G | B |
| 183 | 1.01.6.33R0J021 | resistor          | 33 ,S0603,±5%,1/10W        | 12 | R77,R78,R102,R103,R105,R107<br>R109,R111 R113,R129,R130,R184                                                                                                                                                                                                                  |  | G | B |
| 184 | 1.01.6.75R0F021 | resistor          | 75 ,S0603,±1%,1/10W        | 7  | R187,R189,R197,R199,R208,R211,R201                                                                                                                                                                                                                                            |  | G | B |
| 185 | 1.01.6.1000J021 | resistor          | 100 ,S0603,±5%,1/10W       | 4  | R16,R181,R182,R219                                                                                                                                                                                                                                                            |  | G | B |
| 186 | 1.01.6.2200J021 | resistor          | 220 ,S0603,±5%,1/10W       | 10 | R29,R30,R81,R94,R95,R96,R97,R98,R99,R100                                                                                                                                                                                                                                      |  | G | B |
| 187 | 1.01.6.5600J021 | resistor          | 560 ,S0603,±5%,1/10W       | 1  | R58                                                                                                                                                                                                                                                                           |  | G | B |
| 188 | 1.01.6.4700J021 | resistor          | 470 ,S0603,±5%,1/10W       | 2  | R142,R145                                                                                                                                                                                                                                                                     |  | G | B |
| 189 | 1.01.6.1001J021 | resistor          | 1K,S0603,±5%,1/10W         | 21 | R36,R37,R39,R40,R54,R64,R72,R74,R91,R118,R125<br>R134,R148,R149,R164,R173,R196<br>R200,R203,R207,R210                                                                                                                                                                         |  | G | B |
| 190 | 1.01.6.2201J021 | resistor          | 2.2K,S0603,±5%,1/10W       | 3  | R165,R190,R192                                                                                                                                                                                                                                                                |  | G | B |
| 191 | 1.01.6.3301J021 | resistor          | 3.3K,S0603,±5%,1/10W       | 6  | R117,R124,R132,R147,R163,R172                                                                                                                                                                                                                                                 |  | G | B |
| 192 | 1.01.6.4701J021 | resistor          | 4.7K,S0603,±5%,1/10W       | 15 | R1,R104,R106,R108,R110,R112,R120,R127,R137,R139,R144,R153,R167,R170,R176                                                                                                                                                                                                      |  | G | B |
| 193 | 1.01.6.6801J021 | resistor          | 6.8K,S0603,±5%,1/10W       | 1  | R161                                                                                                                                                                                                                                                                          |  | G | B |
| 194 | 1.01.6.8201J021 | resistor          | 8.2K,S0603,±5%,1/10W       | 1  | R56                                                                                                                                                                                                                                                                           |  | G | B |
| 195 | 1.01.6.1002J021 | resistor          | 10K,S0603,±5%,1/10W        | 32 | R8~R11,R13,R14,R31,R63,R73,R76,R79,R80<br>R83~R90,R101,R114,R116,R121,R123,R131<br>R146,R162,R168,R171,R174,R177                                                                                                                                                              |  | G | B |
| 196 | 1.01.6.1502J021 | resistor          | 15K,S0603,±5%,1/10W        | 2  | R28,R65                                                                                                                                                                                                                                                                       |  | G | B |
| 197 | 1.01.6.1802J021 | resistor          | 18K,S0603,±5%,1/10W        | 7  | R53,R61,R115,R122,R128,R141,R158                                                                                                                                                                                                                                              |  | G | B |
| 198 | 1.01.6.3902J021 | resistor          | 39K,S0603,±5%,1/10W        | 1  | R169                                                                                                                                                                                                                                                                          |  | G | B |
| 199 | 1.01.6.2002J021 | resistor          | 20K,S0603,±5%,1/10W        | 4  | R32,R33,R34,R60                                                                                                                                                                                                                                                               |  | G | B |
| 200 | 1.01.6.2702J021 | resistor          | 27K,S0603,±5%,1/10W        | 1  | R82                                                                                                                                                                                                                                                                           |  | G | B |
| 201 | 1.01.6.1003J021 | resistor          | 100K,S0603,±5%,1/10W       | 14 | R12,R15,R45,R49,R119,R126,R136<br>R166,R175 ,R150~R152,R179,R180                                                                                                                                                                                                              |  | G | B |
| 202 | 1.01.6.3303J021 | resistor          | 330K,S0603,±5%,1/10W       | 2  | R41,R42                                                                                                                                                                                                                                                                       |  | G | B |
| 203 | 1.01.6.4703J021 | resistor          | 470K,S0603,±5%,1/10W       | 1  | R93                                                                                                                                                                                                                                                                           |  | G | B |
| 204 | 1.01.6.7503J021 | resistor          | 750K,S0603,±5%,1/10W       | 3  | R35,R38,R59                                                                                                                                                                                                                                                                   |  | G | B |
| 205 | 1.01.6.1004J021 | resistor          | 1M,S0603,±5%,1/10W         | 1  | R140                                                                                                                                                                                                                                                                          |  | G | B |
| 206 | 1.01.9.33R0J011 | resistor          | 33 ,S0603,±5%,1/16W,8P     | 2  | RN1,RN2                                                                                                                                                                                                                                                                       |  | G | B |
| 207 | 1.14.3.2SK30181 | MOS FET           | 2SK3018,SOT-23             | 2  | Q2,Q3                                                                                                                                                                                                                                                                         |  | G | B |
| 208 | 1.20.5.0024PIN1 | jack              | 24pin,0.5mm                | 1  | CN2                                                                                                                                                                                                                                                                           |  | G | B |
| 209 |                 |                   |                            |    |                                                                                                                                                                                                                                                                               |  |   |   |
| 210 | 1.17.2.MTK13361 | integrate circuit | MT1336,UQ128AR             | 1  | U3                                                                                                                                                                                                                                                                            |  | G | A |
| 211 | 1.17.2.0BA59541 | integrate circuit | BA5954,HSOP28              | 1  | U4(permit to replace with BA5654)                                                                                                                                                                                                                                             |  | G | A |
| 212 | 1.17.2.MTK13791 | integrate circuit | MT1379,LQFP216             | 1  | U5                                                                                                                                                                                                                                                                            |  | G | A |
| 213 | 1.17.2.0024C161 | integrate circuit | EEPROM,24C16,SOP-8         | 1  | U6                                                                                                                                                                                                                                                                            |  | G | A |
| 214 | 1.17.2.SD1M1641 | integrate circuit | SDRAM,1M×16×4,TSOP-54      | 1  | U7                                                                                                                                                                                                                                                                            |  | G | A |
| 215 | 1.17.2.029F8001 | integrate circuit | 8M FLASH,29F800,SOP48      | 1  | U8                                                                                                                                                                                                                                                                            |  | G | A |
| 216 | 1.17.2.0WM87461 | integrate circuit | WM8746,SSOP-28             | 1  | U11(permit to replace with DA1196)                                                                                                                                                                                                                                            |  | G | A |
| 217 | 1.17.2.00045581 | integrate circuit | 4558,SOP-8                 | 3  | U12,U14,U15                                                                                                                                                                                                                                                                   |  | G | A |
|     |                 |                   |                            |    |                                                                                                                                                                                                                                                                               |  |   |   |
| 218 | 1.04.6.225M0401 | electronic cap    | 2.2uF,±20%,25V,5mm×11mm    | 1  | C137                                                                                                                                                                                                                                                                          |  | I | B |
| 219 | 1.04.6.106M0401 | electronic cap    | 10uF,±20%,25V,5mm×11mm     | 24 | C11,C37,C38,C67,C78,C91,C152,C154<br>C155 C158,C161~C163,C167,C169,C171<br>C178,C179 C189,C190,C201,C202,C207,C209                                                                                                                                                            |  | I | B |
| 220 | 1.04.6.476M0401 | electronic cap    | 47uF,±20%,25V,5mm×11mm     | 17 | C18,C45,C50,C51,C54,C64,C76,C90<br>C96,C100 C122~C124,C140,C141,C148,C150                                                                                                                                                                                                     |  | I | B |
| 221 | 1.04.6.107M0301 | electronic cap    | 100uF,±20%,16V,5mm×11mm    | 7  | C2,C21,C120,C184,C188,C191,C195                                                                                                                                                                                                                                               |  | I | B |
| 222 | 1.04.6.227M0301 | electronic cap    | 220uF,±20%,16V,6.3mm×11mm  | 6  | C4,C6,C8,C10,C13,C15                                                                                                                                                                                                                                                          |  | I | B |
| 223 | 1.04.6.477M0301 | crystal           | 470uF,±20%,16V,6.3mm×11mm  | 1  | C199                                                                                                                                                                                                                                                                          |  | I | B |
| 224 | 1.27.1.27020102 | crystal           | 27MHz                      | 1  | Y1                                                                                                                                                                                                                                                                            |  | I | B |
| 225 | 1.09.1.01N40011 | diode             | 1N4001                     | 1  | D1                                                                                                                                                                                                                                                                            |  | I | B |
| 226 | 1.09.1.01N41481 | diode             | 1N4148                     | 5  | D2,D4~D7                                                                                                                                                                                                                                                                      |  | I | B |

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|     |                 |                         |                                                  |       |                                                                           |   |   |   |
|-----|-----------------|-------------------------|--------------------------------------------------|-------|---------------------------------------------------------------------------|---|---|---|
| 227 | 1.06.1.03506001 | magnetic ball           | 3.5×6mm                                          | 19    | L1~L7,L11~L16,L23~L28                                                     |   | I | B |
| 228 | 1.05.2.1R8K0001 | inductance              | 1.8uH,±10%                                       | 6     | L17~L22                                                                   |   | I | B |
| 229 | 1.05.2.4R7K0001 | inductance              | 4.7uH,±10%                                       | 1     | L10                                                                       |   | I | B |
| 230 | 1.05.2.100K0001 | inductance              | 10uH,±10%                                        | 2     | L8,L9                                                                     |   | I | B |
| 231 | 1.13.1.00039041 | transistor              | 3904,TO-92                                       | 11    | Q1,Q10~Q12,Q14,Q15,Q17,Q20,Q24,Q26,Q30                                    |   | I | B |
| 232 | 1.13.1.00039061 | transistor              | 3906,TO-92                                       | 2     | Q28,Q13                                                                   |   | I | B |
| 233 | 1.13.1.00085501 | transistor              | 8550,TO-92                                       | 8     | Q4~Q7,Q16,Q18,Q19,Q32                                                     |   | I | B |
| 234 | 1.13.1.00080501 | transistor              | 8050,TO-92                                       | 3     | Q8,Q9,Q21                                                                 |   | I | B |
|     |                 |                         |                                                  |       |                                                                           |   |   |   |
| 235 | 1.20.2.0TJH34A1 | jack                    | TJH3-4A,2.0mm,4pin                               | 1     | CN6                                                                       |   | I | B |
| 236 | 1.20.2.0TJH35A1 | jack                    | TJH3-5A,2.0mm,5pin                               | 1     | CN3                                                                       |   | I | B |
| 237 | 1.20.2.0TJH36A1 | jack                    | TJH3-6A,2.0mm,6pin                               | 1     | CN4                                                                       |   | I | B |
| 238 | 1.20.2.0TJC33A1 | jack                    | TJC3-3A,2.54mm,3pin                              | 1     | CN12                                                                      |   | I | B |
| 239 | 1.20.2.0TJC34A1 | jack                    | TJC3-4A,2.54mm,4pin                              | 1     | CN8                                                                       |   | I | B |
| 240 | 1.20.2.0TJC35A1 | jack                    | TJC3-5A,2.54mm,5pin                              | 2     | CN7,CN13                                                                  |   | I | B |
| 241 | 1.20.2.0TJC36A1 | jack                    | TJC3-6A,2.54mm,6pin                              | 1     | CN5                                                                       |   | I | B |
| 242 | 1.20.2.0TJC37A1 | jack                    | TJC3-7A,2.54mm,7pin                              | 3     | CN10,CN11,CN14                                                            |   | I | B |
| 243 | 1.20.2.0TJC39A1 | jack                    | TJC3-9A,2.54mm,9pin                              | 1     | CN9                                                                       |   | I | B |
| 244 | 1.20.2.TJC310A1 | jack                    | TJC3-10A,2.54mm,10pin                            | 1     | CN1                                                                       |   | I | B |
| 245 | 1.21.8.TOTX1781 | optical jack            | TOTX178                                          | 1     | CP1                                                                       |   | I | A |
| 246 | 1.21.5.048413A1 | AV jack                 | AV4-8.4-13A,                                     | 1     | CP2                                                                       |   | I | B |
| 247 | 1.21.5.048413A2 | AV jack                 | AV4-8.4-13A,                                     | 1     | CP3                                                                       |   | I | B |
| 248 | 1.21.5.0AV10011 | AV jack                 | AV-1-001                                         | 1     | CP4                                                                       |   | I | B |
| 249 | 1.21.9.0VGA15P1 | VGA jack                | VGA 15P                                          | 1     | CP5                                                                       |   | I | B |
| 250 | 1.30.1.M1379007 | PCB                     | MTK1379 receiver for sony khm310 rev.x           | 1     | SIZE:200×95mm                                                             |   | I | A |
| 251 | 7.02.1.T939SHI1 | radio parts             | T-939SHI,NO:3FAJ 904                             | 1     | inlcude FM and AM antenna                                                 |   | C | B |
|     |                 |                         |                                                  |       |                                                                           |   |   |   |
|     |                 |                         | Assemble                                         |       |                                                                           |   |   |   |
| 252 | 1.25.2.15012752 | power wire              | round 2 pins VDE spec,line 1.5M, conductor 2×0.7 | 1     | VDE standard, with VDE certification                                      | * |   | A |
| 253 | 5.09.1.D303V011 | clip of power cable     | clip for big cable                               | 1     |                                                                           |   | C | C |
| 254 | 1.07.3.11003501 | transformer             | TF-2023V,110W,230V/50HZ                          | 1     | NEMKO; attestation code : ECA00985                                        | * |   | C |
| 255 | 2.20.1.80409021 | screw                   | M8×40, six angle                                 | 1     |                                                                           |   | C | C |
| 256 | 2.21.1.08R00101 | screw                   | M8, six angle                                    | 1     |                                                                           |   | C | C |
| 257 | 2.22.1.08R20801 | flat washer             | outside 17, inside 8.2, thickness 0.8mm          | 1     |                                                                           |   | C | C |
| 258 | 2.22.2.08R21501 | spring washer           | inside 8.2, thickness 1.5mm                      | 1     |                                                                           |   | C | C |
| 259 | 2.18.1.00020231 | cover transformer       |                                                  | 1     |                                                                           |   | C | C |
| 260 | 5.15.1.00020231 | transformer plastic mat |                                                  | 2     |                                                                           |   | C | C |
|     |                 |                         |                                                  |       |                                                                           |   |   |   |
| 261 | 1.15.2.00A101D1 | key switch              | power switch,P12 AC250V 5/80A T85                | 1     | NEMKO; attestation code : ECA00985                                        | * |   | C |
| 262 | 5.06.1.25040001 | heat shrink tube        | 25×40mm                                          | 0.04m |                                                                           |   | C | C |
| 263 | 5.06.1.05005001 | heat shrink tube        | 5×50mm                                           | 0.1m  |                                                                           |   | C | C |
| 264 | 1.32.1.25013201 | fuse                    | T3.15A,250V,delay type                           | 1     | VDE ;attestation code :ECA00985                                           | * |   | C |
| 265 | 1.33.3.10000001 | fuse tube set           | with connected 100mm longth wire                 | 1     |                                                                           |   | C | C |
| 266 | 4.12.6.000T25A1 | sticker                 | T3.15A                                           | 1     |                                                                           |   | C | C |
|     |                 |                         |                                                  |       |                                                                           |   |   |   |
| 267 | 7.03.5.D317V031 | front panel set         | a set of front panel parts THT-120               |       |                                                                           |   | C | B |
| 268 | 2.02.5.D317500A | bottom                  | refer to file named D317V0ABC.DWG                | 1     |                                                                           |   | C | C |
| 269 | 2.03.5.D3176003 | rear panel              | refer to file named D317VA2RC.DWG                | 1     |                                                                           |   | C | C |
| 270 | 2.04.5.D317400A | cover                   | refer to file named D317V0ATC.DWG                | 1     |                                                                           |   | C | C |
| 271 | 2.06.1.D3170001 | panel stand             | D317V1FS.DWG                                     | 1     |                                                                           |   | C | C |
| 272 | 2.06.3.D3170001 | MIC washer              | refer to file named D317V1MS.DWG                 | 1     |                                                                           |   | C | C |
| 273 | 2.16.2.0TUNKEN1 | front panel logo        | TELEFUNKEN                                       | 1     |                                                                           |   | C | C |
|     |                 |                         |                                                  |       |                                                                           |   |   |   |
| 274 | 2.20.1.30047221 | screw                   | M3×4,white                                       | 2     | left and right sides with front pane(2)                                   |   | C | C |
| 275 | 2.20.1.30042221 | screw                   | M3×4,white,flat,round                            | 3     | rear panel(3)                                                             |   | C | C |
| 276 | 2.20.1.30061221 | screw                   | M3×6,white,flat,round                            | 5     | decoder board(2),MIC board(3)                                             |   | C | C |
| 277 | 2.20.1.30062221 | screw                   | M3×6,white,flat,round                            | 17    | bottom(3),cover(8),copper column fitted MIC board (3), fixuped MIC board  |   | C | C |
| 278 | 2.20.1.30162221 | screw                   | M3×16,white,flat,round                           | 4     |                                                                           |   | C | C |
| 279 | 2.20.2.40101222 | screw                   | ST4×10,black,flat,round                          | 4     |                                                                           |   | C | C |
| 280 | 2.20.2.30061231 | screw                   | BT3×6,white,flat                                 | 1     |                                                                           |   | C | C |
| 281 | 2.20.2.30081231 | screw                   | BT3×8,white, 5.2,flat                            | 19    | control board(8),volumn board(4),power switch(2),panel board stand(4),MIC |   | C | C |
| 282 | 2.20.2.30081232 | screw                   | ST3×8,black,flat                                 | 9     | decoder board(4),input jack(1),output jack(2),receiver(2)                 |   | C | C |
| 283 | 3.17.1.05000101 | holder                  | H=5mm,                                           | 2     |                                                                           |   | C | C |
| 284 | 2.15.1.3R026001 | copper column           | M3×26mm                                          | 3     |                                                                           |   | C | C |
| 285 | 5.04.1.03080001 | nelon strip             | 3×80mm                                           | 10    |                                                                           |   | C | C |
| 286 | 5.05.1.20080401 | square sponge mat       | 20×8×4mm                                         | 3     |                                                                           |   | C | C |

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|     |                 |                   |                                              |   |                     |  |   |   |
|-----|-----------------|-------------------|----------------------------------------------|---|---------------------|--|---|---|
| 287 | 5.05.2.15R00501 | round sponge mat  | 15×5mm,rigidity 30°                          | 4 |                     |  | C | C |
| 288 | 3.17.3.10001101 | plastic holder    | 11×10mm                                      | 4 |                     |  | C | B |
| 289 | 8.05.1.D317V031 | DVD player        | THT-120                                      | 1 |                     |  | C | B |
|     |                 |                   |                                              |   |                     |  |   |   |
| 290 |                 |                   | Packing Material                             |   |                     |  |   |   |
| 291 | 7.11.1.D317V031 | speaker           | a set of THT-120 speaker with connecttd wire | 1 |                     |  | P | B |
| 292 | 1.26.1.12010001 | AV cable          | 1.2m                                         | 1 |                     |  | P | B |
| 293 | 4.05.1.2023H551 | spume             | a set of spume ;ADVD-2023-H55                | 1 |                     |  | P | B |
| 294 | 4.06.1.18013012 | spume             | 180×130×123mm                                | 1 |                     |  | P | C |
| 295 | 4.06.1.29014012 | spume             | 290×140×12mm                                 | 1 |                     |  | P | C |
| 296 | 4.02.1.D317V031 | color box         | THT-120,485×285×450mm                        | 1 |                     |  | P | C |
| 297 | 4.07.3.26018001 | airproof bag      | 260×180mm                                    | 2 |                     |  | P | C |
| 298 | 4.07.2.65075001 | bearl bag         | 5C×650×750mm                                 | 1 |                     |  | P | C |
| 299 | 4.10.E.D317V031 | english manual    | TELEFUNKEN THT-120,cover marked with logo    | 1 |                     |  | P | C |
| 300 | 4.12.2.D317V031 | serial no. sticke | TELEFUNKEN THT-120                           | 2 |                     |  | P | C |
| 301 | 4.11.E.D317V031 | warrenty card     | TELEFUNKEN THT-120                           | 1 |                     |  | P | C |
| 302 | 4.07.9.0603102C | transparency bag  | 2C×60×310mm                                  | 1 |                     |  | P | C |
| 303 | 8.50.1.00R30229 | remote controler  | R302E,logo marked :TELEFUNKEN                | 1 | pack in plastic bag |  | P | B |
| 304 | 9.05.1.D317V031 | The unit          | TELEFUNKEN THT-120                           | 1 |                     |  | P | B |
| 305 |                 |                   |                                              |   |                     |  |   |   |

Item:I=Parts to insert S=Parts to weld C=Parts to Assemble P=Parts for packing

Importance Grade: the importance of the parts to the effect of the whole unit's quality

A=Very Important B=Important C=Common

The supplier of the A Grade must pass the ISO.