Service Manual

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## Technical Specifications

### Playback System
- **DVD Video**
- **Video CD & SVCD**
- **CD**
- **MP3-CD**
- **CD-R, CD-RW**
- **DVD+R, DVD+RW**

### Video Performance
- **CVBS**
  - TVpp --- 75Ω
e- **RGB (SCART)**
  - 0.7Vpp into 75 ohm

### Audio Format
- **Digital**
  - Mpeg/AC-3/DTb
  - PCM
  - MP3 (ISO 9660)
- **Compressed Digital**
  - 16, 20, 24 bits
  - fs: 44.1, 48, 96 kHz
  - 24, 32, 56, 64, 96, 128
  - bit rate: fs: 16, 22.05
  - 24, 32, 44.1, 48 kHz
- **Analog Sound Stereo**

### Audio Performance
- **DA Converter**
  - 24-bit
- **Signal-Noise (1kHz)**
  - 100dB
- **Dynamic range (1kHz)**
  - >90dB
- **DVD**
  - fs: 48 kHz
  - 4Hz-44kHz
  - DVD: 4Hz-44kHz
  - SVCD: 4Hz-22kHz
  - CD: 4Hz-20kHz
  - CDVCD: 4Hz-20kHz

### TV Standard
- **PAL/50Hz**
- **NTSC/60Hz**
- **Number of lines**
  - DVD: 525
  - Playback: 525
  - Multistandard: PAL/NTSC

### Connections
- **Start Output**
  - Euroconnector
- **Video Output**
  - Cinch
- **Audio Output (L+R)**
  - Cinch
- **Digital Output**
  - 1 coaxial
  - IEC60958 for CD/DA / LPCM/ MPEG1
  - IEC1937 for MPEG 2, Dolby
  - Digital and DTs

### Cabinet
- **Dimensions (w x d x h)**
  - 360 x 285 x 43 mm
- **Weight**
  - Approximately 2.2 Kg

### Power Consumption
- **Power consumption in Standby mode**
  - <1W

### Specifications subject to change without prior notice

## Maintenance

### Cleaning the Cabinet
- Use a soft cloth slightly moistened with a mild detergent solution. Do not use a solution containing alcohol, spirits, ammonia or abrasives.

### Cleaning Discs
- When a disc becomes dirty, clean it with a cleaning cloth. Wipe the disc from the center out.
  - Do not wipe in a circular motion.
- Do not use solvents such as benzine, thinner, commercially available cleaners, or antistatic spray intended for analog records.
2. Safety Instructions, Warnings, Notes, and Service Hints

2.1 Safety Instructions

2.1.1 General Safety

Safety regulations require that during a repair:

- Connect the unit to the mains via an isolation transformer.
- Replace safety components, indicated by the symbol •, only by components identical to the original ones. Any other component substitution (other than original type) may increase risk of fire or electrical shock hazard.

Safety regulations require that after a repair, you must return the unit in its original condition. Pay, in particular, attention to the following points:

- Route the wires/cables correctly, and fix them with the mounted cable clamps.
- Check the insulation of the mains leads for external damage.
- Check the electrical DC resistance between the mains plug and the secondary side:
  1. Unplug the mains cord, and connect a wire between the two pins of the mains plug.
  2. Set the mains switch to the ‘on’ position (keep the mains cord unplugged!).
  3. Measure the resistance value between the mains plug and the front panel, controls, and chassis bottom.
  4. Repair or correct unit when the resistance measurement is less than 1 MΩ.
  5. Verify this, before you return the unit to the customer/user (ref. UL-standard no. 1492).
  6. Switch the unit ‘off’, and remove the wire between the two pins of the mains plug.

2.1.2 Laser Safety

This unit employs a laser. Only qualified service personnel may remove the cover, or attempt to service this device (due to possible eye injury).

**Laser Device Unit**

- **Type**: Semiconductor laser
- **GaAlAs**
- **Wavelength**: 650 nm (DVD) / 780 nm (VCD/CD)
- **Output Power**: 20 mW (DVD+RW reading) / 0.8 mW (DVD reading) / 0.3 mW (VCD/CD reading)
- **Beam divergence**: 60 degree

**Figure 2-1**

Note: Use of controls or adjustments or performance of procedure other than those specified herein, may result in hazardous radiation exposure. Avoid direct exposure to beam.

2.2 Warnings

2.2.1 General

- All ICs and many other semiconductor components are susceptible to electrostatic discharges (ESD). Careless handling during repair can reduce life drastically. Make sure that, during repair, you are at the same potential as the mass of the set by a wristband with resistance. Keep components and tools at this same potential. Available ESD protection equipment:
  - Complete kit ESD3 (small tablemat, wristband, connection box, extension cable and earth cable) 4822 310 10671.
  - Wristband tester 4822 344 13999.
- Be careful during measurements in the live voltage section. The primary side of the power supply (pos. 1005), including the heatsink, carries live mains voltage when you connect the player to the mains (even when the player is ‘off’!). It is possible to touch copper tracks and/or components in this unshielded primary area, when you service the player. Service personnel must take precautions to prevent touching this area or components in this area. A ‘lightning stroke’ and a stripe-marked printing on the printed wiring board, indicate the primary side of the power supply.
- Never replace modules, or components, while the unit is ‘on’.

2.2.2 Laser

- The use of optical instruments with this product, will increase eye hazard.
- Only qualified service personnel may remove the cover or attempt to service this device, due to possible eye injury.
- Repair handling should take place as much as possible with a disc loaded inside the player.
- Text below is placed inside the unit, on the laser cover shield:

**Figure 2-2**

2.2.3 Notes

**Dolby**

Manufactured under licence from Dolby Laboratories. “Dolby”, “Pro Logic” and the double-D symbol are trademarks of Dolby Laboratories. Confidential Unpublished Works. ©1992-1997 Dolby Laboratories, Inc. All rights reserved.

**Figure 2-3**

**Trusurround**

TRUSURROUND, SRS and symbol (fig 2-4) are trademarks of SRS Labs, Inc. TRUSURROUND technology is manufactured under licence frm SRS labs, Inc.

**Figure 2-4**
2.3 Service Hints

2.3.1 Repair tips

**Switched mode power supply**
The power supply unit has to be replaced in case of failure. The schematic diagram provided in the service manual is only for information and no service parts will be available.

**DVD Loader**
The DVD Loader is a non-repairable unit and in case of failure, it has to be replaced with a complete DVD Loader.

**Mpeg board and Front Display**
The Mpeg board and Front display has to be repaired down to component level.

2.3.2 Change of Software setting

The software setting can be change according to the following procedure:
1. Press “OPEN/CLOSE” button on the front of the player to open the disc tray.
2. Enter the 4-digit code <9> <9> <9> <9> on the remote control.
3. Enter one of the keys below to change the software setting.

**REGION CODE**
- USA ==> 1
- EUROPE ==> 2
- AP ==> 3
- LATAM ==> 4
- INDIA / RUSSIA ==> 5
- CHINA ==> 6

**SUBTITLE 7:** Set to setup configuration of DVD625 / 001
**SUBTITLE 7:** Set to setup configuration of DVD625 / 021
**SUBTITLE 7:** Set to setup configuration of DVD625 / 051

4. The change should effect immediately with information indicated on TV screen.

**Note:** When changing the setup configuration, the change will take immediate effect with the information indicated on the TV screen for a short period and the tray will close automatically and player will go to standby.

2.3.3 Software upgrade via Download disc

Both the application and servo software are delivered in one stack and it can be flashed into the DVD player by means of a CD-ROM disc. The CD-ROM disc has to be made with a CD writer SW.

**Note:**
1. The file name used for writing on the CD-R/RW MUST be in UPPER-CASE. eg: SD542PH.BIN
2. For better and fast reading, add one big garbage file of 50-100MB.

**Software upgrade procedure**
1. Open disc tray on the player.
2. Insert the DOWNLOAD DISC into the player and close disc tray.
3. The upgrading operation will start automatically.
4. The VFD will display the upgrading progress, ‘ERASE...’–>‘WRITE F'–>‘WRITE 0'–> ‘UPGRADE end or the LED will turn ON and OFF)
5. The upgrading will take approximately about 1 minute.
6. Once when the software is upgraded, the disc tray will automatically eject.
7. The player will be restarted automatically and display on VFD will show “NO DISC”.

**Important note:**
Do not power off or interrupt the mains during the upgrading else the player’s flash memory will be erased.

2.3.4 Verify setting

To check that the setting has change successfully.
1. Press “DISPLAY” button on the remote control while disc tray is open.
2. Two lines text will appear on the TV screen. That is how it looks like.

SD542PH-030219-728-001N
SERVO:001FC72 REG:2

4. The change should effect immediately with information indicated on TV screen.

2.3.5 ComPair

There is no ComPair available

2.4 Service Tools

- Test discs
  - Audio signals disc 4822 397 30184
- Torx screwdrivers
  - Set (straight, T2 to T20 4822 395 50145
  - Set (square, T10, T15, T20to T20 4822 395 50132

2.5 Revision Information

Service Manual Version : 1.0
Issue Date : February 21, 2003
Revision Information : N/A
3. Directions for Use

**Functional Overview**

**Front and Rear Panels**

- **STANDBY-ON**: switches DVD ON or to standby mode
- **Disc Tray**: opens/closes the disc tray
- **PLAY/PAUSE**: starts/interrupts playback
- **STOP**: stops playback
- **DISPLAY**: shows the current status of the player

**Audio Out (Left/Right)**
- Connect to audio inputs of an amplifier, receiver or stereo system.

**Main Input**
- Connect to power outlet

**Video Out (CVBS)**
- Connect to a TV with CVBS inputs

**Mains Cord**
- Connect to a receiver with coaxial inputs

**Coaxial Output**
- Connect to a TV with SCART

**TV OUT (VIDEO OUT)**
- Connect to a TV with SCART

---

**Remote Control**

**POWER**
- Switches DVD ON or to standby mode

**0-9 Numerical Key Pad**
- Select numbered items in a menu

**DISPLAY**
- Displays information on TV screen during playback

**SYSTEM MENU**
- Access or exit player's system menu

**STOP**
- Stops playback

**PLAY**
- Starts playback

**PAUSE**
- Pauses playback temporarily

**REPEAT**
- Repeat chapter, track, title, disc

**REPEAT (A-B)**
- Repeat a specific segment

**PREVIEW**
- Preview the content of a track or whole disc

**MUTE**
- Disable or enable sound output

---

**Caution:** Do not touch the inner pins of the sockets on the rear panel. Electrostatic discharge may cause permanent damage to the unit.

**Note:**
- Press “STOP” for about 3 seconds to OPEN or CLOSE disc tray.
Basic Connections

- Please refer to the instruction manuals of your TV, VCR, Stereo System or other devices as necessary to make the best connections.
- Make one of the following connections, depending on the capabilities of your existing equipment.

The following guidelines are options for the best picture and sound quality available on your DVD player.

Picture
1. Use the CVBS Video Output for good picture quality
2. Use SCART Output for best picture quality

Sound
1. Digital audio connections provide the clearest sound. Connect the DVD player’s DIGITAL AUDIO OUT (COAXIAL) to your amplifier or receiver.
2. If digital connections are not possible, connect the DVD player’s Left and Right Audio (white and red) AUDIO OUT to your amplifier, receiver, stereo or TV.

Warning!
- Never make or change connections with the power switched on.
- Connect the DVD player directly to your TV, instead of e.g., a VCR, to avoid distortion because DVD video discs are copy protected.
- Do not connect the DVD player AUDIO OUT to PHONO IN of your amplifier or receiver.

Connecting to a TV
1. Connect the SCART (TV OUT) on the DVD player to the corresponding connector (TV IN) on your TV

Preparation

Connecting to an Audio System
1. You can also listen to the sound of audio CDs and DVD video discs by connecting to an optional stereo system.
2. Connect the Left and Right Audio OUT on the DVD player to the Left and Right AUDIO IN on the stereo system.

Connecting to Optional Equipment

- A digital component with a built in MPEG 2 or Dolby Digital™ decoder allows you to enjoy the surround sound while producing the effect of being in a movie theater or a concert hall.
- The player outputs the surround sound signals from the DIGITAL OUT COAXIAL connectors.

If your receiver has a MPEG 2 or Dolby Digital™ decoder,
1. Connect the COAXIAL DIGITAL AUDIO OUT of the DVD player to the COAXIAL DIGITAL AUDIO IN on your receiver.

Note:
- If the audio format of the digital output does not match the capabilities of your receiver, the receiver will produce a distorted sound or no sound at all.
- To see the selected audio format of the current DVD in the Set-up Menu, refer to “Set-up Menu”.

If your TV has a CVBS Video input connector,
1. Connect the CVBS VIDEO OUT on the DVD player to the CVBS VIDEO IN.
2. Connect the Left and Right Audio OUT on the DVD player to the Left and Right Audio IN on the TV.
Inserting batteries into the Remote Control

1. Open the battery cover by pressing in the tab, then lift off the cover.
2. Insert batteries with the correct polarity as indicated by the + and – symbols inside the battery compartment.
3. Close the cover.

CAUTION!
- Remove batteries if they are exhausted or not to be used for a long time.
- Do not use old and new or different types of batteries in combination.
- Batteries contain chemical substances, so they should be disposed of properly and kept away from children.

Using the Remote Control

- Direct the remote control at the remote sensor of the DVD player.
- Do not drop or give the remote control a shock.
- Do not leave the remote control in extremely hot or humid places.
- Do not spill water or put anything wet on the remote control.

Switching On

1. Be sure that the DVD player has been correctly connected to the TV and audio equipment.
2. Switch on the TV and DVD player.
3. Set the TV to the correct Video in channel (eg. EXT1, EXT2, AV1, AV2, AUDIO/VIDE0, etc. Please refer to your TV owner's manual for details.)
4. The player display lights and the default screen appears on the TV.
5. If you are using an external equipment (eg. audio system or receiver), turn it on and select the appropriate input source for the DVD player output. Refer to the equipment owner's manual for detail.

Smart Power On/Off

When in STOP or NO DISC mode, the DVD player will switch to standby mode after 15 minutes without any operations for saving energy. It is easily reactivated by pressing the POWER or PLAY key on the remote control or the STANDBY/ON button on the front panel.

Basic Playback

1. Press STANDBY/ON on the front panel to turn on the DVD player.
2. Press OPEN/CLOSE on the front panel to open disc loading tray.
3. Place the chosen disc in the tray with the label facing up.
4. Press OPEN/CLOSE again to close the tray.
5. After recognizing the disc, the player begins to playback automatically.

Notes:
- DVDs may have a region code. Your player will not play discs that have a region code different from the region code of your player.
- If the Disc Lock is set to LOCK and the disc inserted is not authorized, the 6-digit code must be entered and/or the disc must be authorized (see 'Disc Lock').

Operations

Slow Motion

1. To get a slow motion effect during playback, press ± or •
2. Press ± or • again, you can get different playback forward/backward speeds.
3. Press PLAY to return to normal playback.

Audio control during playback

MUTE DVD VCD CD SBCD

1. Press the MUTE key to disable the sound output.
2. Press the MUTE key again to deactivate mute.

Audio Channel Selection

VCD CD SBCD

1. Super VCD has two different audio channels which are used for playing karaoke or the audio language selection. (For instance, you can choose one channel for only the music background of the song while you play the karaoke.)
2. Press the AUDIO key on the remote control to select the audio channels you want.
3. VCD has only one stereo audio channel you can select STEREO, LEFT MONO, RIGHT MONO or MIX-MONO by pressing the AUDIO key on the remote control.
4. STEREO: Output the left and right audio channels of the disc through the left and right audio sockets accordingly.
5. LEFT MONO: Output the left audio channels of the disc through the left and right audio sockets.
6. RIGHT MONO: Output the right audio channels of the disc through the left and right audio sockets.
7. MIX-MONO: Each of the audio sockets can output the same audio effect as stereo.

Notes: If you choose digital audio output and set DIGITAL OUTPUT to AUX, you can not select LEFT MONO and RIGHT MONO with the AUDIO key.
**Operation**

**OSD (On-Screen Display)**

- DVD: Press the DVD button to display the menu on the screen.
- VCD, SVCD: Press the VCD button to display the menu on the screen.

**Title Selection**

1. Press ▲ or ▼ to highlight the title number you want to play.
2. Press ▶ to select the highlighted title.

**Chapter Selection**

1. Press ▲ or ▼ to highlight the chapter number you want to play.
2. Press ▶ to select the highlighted chapter.

**Time Search**

1. Press ▲ to highlight the time display area.
2. Press ▶ to select the highlighted time.

**Video and Audio CDs**

To repeat a sequence in a track:

1. Press REPEAT A-B at your chosen starting point.
2. Press REPEAT A-B again at your chosen ending point.
3. Repeat sequence begins.

To exit, press REPEAT A-B.

**5 Disc Resume**

- DVD, VCD, SVCD: The player can resume playback of the last 5 discs, even if the disc was ejected or the power was switched off.
- Load one disc, which is one of the last 5 discs.
- Press PLAY when the disc is recognised to resume playback.
- If the information of this disc has been stored in the memory of the DVD player, it will be played back from the stop point last time.

**Special DVD Features**

**Playing a Title, DVD**

- A DVD may have one or more titles. This depends on the content (a movie, video clip, a drama series, etc.) on the disc.
- After you load a disc, information about the content shown on the screen waiting for your selection.
- You can also press the TITLE button on the remote control to turn back to the title menu during playback.
- Press the OK button to continue.

**Playing a Chapter, DVD**

- When you have selected a title, it may include one or more chapters.
- Any time you want to watch another chapter during playback, press DISC MENU to turn back to the chapter menu (if disc has chapter menu).
- Press the appropriate numerical key or ▲ or ▼ to select the chapter you want to watch.
- Press OK to confirm.
- After a chapter has been selected, you can also press the ◄ or ► key to make a change.

**Camera Angle, DVD**

- Some discs contain scenes which have been shot simultaneously from various angles.
- The DVD player allows you to select the desired camera angle.
- Press the ANGLE button on your remote control.
- Press the RETURN button to exit the menu during the playback.

**Subtitles, DVD, SVCD**

- Press SUBTITLE repeatedly to select the different subtitles.
- Press SUBTITLE for about 2 seconds to switch subtitle on or off.
- The function will be activated, only if the DVD or SuperVCD is recorded with multi-subtitles.

**Special VCD & SVCD Features**

**Playback Control (PBC)**

PBC function allows you to enter the index menu which is used to select a track after loading the VCD & SVCD disc.

If you want to activate the function during the playback or after pressing the STOP key twice,

1. Press the DISC MENU button on the remote control to set the PBC on.
2. Use the ◄ or ► key to select the page you want.
3. Press the OK button to confirm.

**Changing the Audio Language, DVD**

- Press AUDIO repeatedly to select the different languages.
- The function will be activated, only if the DVD is recorded with multi-language audio tracks.

**Directions for Use**

EN 9
Operation

Prevent Function
- Press the PREVIEW key to enter previewing menu.
- Press ▲▼ key to highlight TRAC DIGEST, DISC INTERVAL, or TRACK INTERVAL.
- Press OK key to open one option.
- After you enter the menu of any digest type, → To quit preview function. Press ▲▼ key to highlight EXIT and press OK to confirm.
- → To return to the previewing menu for selecting the other digest type. Press ▲▼ key to highlight MENU and press OK to confirm.

Track Digest
This function will minimize the picture of every track in order to display every six of those tracks on the screen to help you know the content of every track on the disc.
- To choose the desired track, please press ▲▼ key to highlight the second line and input your selected track number next to “SELECT.”
- Select the others from the current six by pressing the ▲▼ key to open the previous or next page.
- Press the OK key to confirm.

Disc Interval
This function is used to divide a disc into six parts by regular interval and display them on one page to help you preview the whole disc.

To choose the desired track, please press ▲▼ key to highlight the second line and input your numerical selection next to “SELECT.”
- Press the OK key to confirm.

Track Interval
This function is used to divide a single track into six parts by regular intervals and display them on one page to help you preview the selected track.
- To choose the desired track, please press ▲▼ key to highlight the second line and input your numerical selection next to “SELECT.”
- Press the OK key to confirm.

Picture CD & MP3 Playback

This player can playback JPEG format pictures and MP3 files on a personally recorded CD-R/RW disc, or commercial CD, and is compatible with Kodak Picture CD.
- Playback pictures or songs one by one automatically.
- Album and track selection.
- Repeat (disc / album / track / picture).
- Select any music or pictures from the disc to playback them together.
- Maximum number of files within one folder is 500
- Maximum files Programmable is 100.
- MP3 Maximum supported bitrate is 256kbs or 80KHz of variable bitrate mode.
- JPEG Maximum supported resolution is 3072 x 2048 (for baseline JPEG pictures), or 2000 x 1500 (for progressive JPEG pictures).

General Operation
- If you choose WITH MENU in the Setup Menu (Please refer to the MP3 & JPEG navigator below), the Picture CDMP4 CD menu will be shown on the screen before playback.
- At any time during playback, press DISC MENU to return to the menu for Selection/Repeat/Shuffle/Single playback.
- Both columns on every page of the menu contain six files or folders, you can press ▲▼ key to highlight either of the columns and then press ▲▼ key to open the next or previous six files or folders.

MP3 & JPEG Navigator
To select a different playback method, follow the steps below.
1. At STOP mode, press the SYSTEM MENU key to open the setup menu.
2. Press the ▲▼ key to highlight PREVIOUS.
3. Press OK to open the MP3/JPEG menu.
4. Press the ▲▼ key to highlight the MP3/JPEG NAV menu.
5. Press the ▲▼ key to enter the menu.
6. Press the ▲▼ key to highlight the WITHOUT MENU, WITH MENU item.
- WITHOUT MENU: automatically playback all files in accordance date sequence.
- WITH MENU: playback files in the selected folder.
7. Press the OK key to confirm your selection.

Play Mode
Auto Playback
If you choose WITHOUT MENU, the DVD player will automatically playback Picture CD/MP3 CD in sequence when it is loaded.
Playback Selection
- One way is to press the number of your favourite file at any time during playback.
- Another way is to select via the menu (after pressing STOP).
1. Press DISC MENU to open the Picture CDMP3 CD menu.
2. When the menu appears on the screen, press the ▲▼ key to select the folder you want and press the OK to open it.
3. Press the ▲▼ to enter the file list.

4. Press the ▲▼ key to highlight one option, or press its number.
- You also can press ▲▼ to go to the next or previous page.
5. Press OK key to confirm.
- The playback will start from this selected file to the last in this folder.

Repeat / Shuffle / Single Playback
- When the Picture CDMP4 CD menu is shown on the screen, Press REPEAT key repeatedly, the button beside PLAY MODE will display different option.
- SINGLE: The file plays once.
- REPEAT ONE: For JPEG files, the current picture remains on the screen, For MP3 music, the selected song plays repeatedly.
- REPEAT FOLDER: All files in the folder play repeatedly.
- SHUFFLE: All files are played randomly.
- If you press REPEAT key during playback, the option will be displayed on the screen accordingly.

Program Playback
- When the Picture CDMP4 CD menu is shown on the screen, Press DISC MENU key.
- The left column is the original files and the right one is the programmed files.

To select one file, → You can also press ▲▼ or ▼ to open the next six files to choose.
Directions for Use

Picture CD & MP3 Playback

3. Press OK or PLAY key to add the selected file from the left column to the right column.
   ➤ The maximum is 100 files.
4. Press STOP key to remove the programmed file from the right column.
5. Highlight one file of the right column and press OK key, then the programmed files will start playing back.

Special JPEG Features

Function Introduction
Picture CD is a disc with a collection of JPEG format pictures, and all extension filenames should end with "JPG". The CD can be recorded on any computer and pictures may be from digital cameras or scanners. If the customers prefer, they can make this CD become a Digital Album.

You can choose any general function introduced in GENERAL OPERATION besides, you also can:
   ➤ Display the thumbnails of 12 pictures.
   ➤ Zoom the picture.
   ➤ Rotate the picture.
   ➤ Flip the picture vertically or horizontally.
   ➤ Scan pictures by different effects.

Preview Function
This function shows the content of the current folder or the whole disc.
1. Press the STOP key during playback of JPEG pictures. You will see the thumbnails of 12 pictures on the screen.

2. Press [ ] or [ ] key to display the other pictures on the next or previous page.
3. Press the [ ▲ ] key to highlight one of them and press OK key to playback or.
   Move the cursor to highlight SLIDE SHOW on the bottom of the page to start playback from the first picture on the current page.
4. Press DISC MENU to go to the Picture CD/MP3 CD menu.

Zoom picture
   ➤ During playback, press ZOOM key to display the picture with different scales.
   ➤ Press the [ ▲ ] key to view the rest of the zoomed picture.

Playback with multi-angles
When displaying one picture on TV screen:
   ➤ Press the [ ▲ ] key to get different effects:
   ➤ Key flip the picture vertically.
   ➤ Key flip the picture horizontally.
   ➤ Key rotate the picture anti-clockwise.
   ➤ Key rotate the picture clockwise.

Scan Effect
   ➤ Press ANGLE key repeatedly to choose different scan effects.

Special MP3 Features

Function Introduction
"MP3" stands for "MPEG Audio Layer 3" and is a part of the MPEG standard. A CD can store up to 10 hours of MP3 audio, which is nearly 10 times as much as an Audio CD. Each song is recorded as a file. You can choose any general function introduced in GENERAL OPERATION. You can also choose different playback speeds.

Playback Speed Control
Press RETURN/11 key to switch to MP3/NV mode.
   ➤ Press [ ▲ ], you can get different playback speeds.
   ➤ You also can press [ ▲ ] or [ ▼ ] to change the tracks.

JPEG and MP3 simultaneous playback
Firstly playback MP3 music according to the instructions introduced in playback selection, then press RETURN key to switch to MP3/NV mode. Follow the steps below:

1. Press the SYSTEM MENU key to enter the setup menu.
2. Press the [ ▲ ] key to choose the GENERAL SETUP.
3. Press the OK key to confirm selection.

OSD language
This option is to select a language for information displayed on TV screen.

1. Press the [ ▲ ] key to highlight OSD LANGUAGE in the GENERAL SETUP menu.
2. Enter its submenu by pressing the [ ▼ ] key.
3. Move the cursor by pressing the [ ▲ ] key to highlight the selected language.
4. Press the OK key to confirm.
5. Press the [ ▼ ] key to return to the GENERAL SETUP menu.

Setup Menu

Basic Operation
1. Press SYSTEM MENU in the STOP mode to enter the Setup Menu.
2. Press the OK key to go to the next level submenu or confirm your selection.
3. Press the [ ▲ ] key to enter the submenu or return to the previous menu.
4. Press the [ ▼ ] key to highlight the desired menu.
5. Press SYSTEM MENU to quit the setup menu.
   ➤ When you quit the setup menu, the settings will be stored in the player's memory even if the player is switched to power off.

General Setup menu
Some setting need to be made in this menu. They are: DISC LOCK, PROGRAM, DISPLAY DIM, OSD LANGUAGE and SCREEN SAVER. Follow the steps below:

1. Press the SYSTEM MENU key to enter the setup menu.
2. Press the [ ▲ ] key to choose the GENERAL SETUP.
3. Press the OK key to confirm selection.

Program (not for Picture CD/MP3)
1. To choose PROGRAM, press [ ▲ ] keys.
2. Press the [ ▼ ] key to move the cursor to the field of the submenu to choose the item INPUT MENU. ➤ INPUT MENU Enter the PROGRAM item.
3. Press OK to enter the program page.

1. Input your favorite track
   ➤ Input valid track number by pressing the numerical keys.
2. Press the [ ▲ ] keys to move the cursor to the next selected position.
   ➤ If the track number is more than ten, press [ ▲ ] to open the next page and go on programming, or press [ ▲ ] to highlight NEXT button and then press OK.
3. Repeat these steps to input another track number until the whole program is completed.

Remove a track
1. Press the [ ▲ ] keys to move the cursor to the track you want to remove.
2. Press OK or PLAY key to remove this track from the program menu.

Playback tracks
When programming is completed,
1. Press the [ ▲ ] keys to move the cursor to the START button.
2. Press OK. ➤ DVD player will playback the selected tracks under the program sequence.
**Set up Menu**

**Quit the program playback**
In the PROGRAM menu:
1. Press the ▲▼ keys to move the cursor to the EXIT button.
2. Press the OK key to quit this menu.

**Stop the program playback**
- During playback of the programmed tracks, press STOP key. Then after you press PLAY key, the DVD player will resume normal playback.

**Repeat the program playback**
- During playback of the programmed tracks, press the REPEAT key. The programmed tracks can be played again.

**Display Dim**
The function is used to adjust the brightness of display on the front panel of the DVD player.
1. Press the ▲▼ keys to highlight DISPLAY DIM in the GENERAL SETUP menu.
2. Enter its sub-menu by pressing the ▶ key.
3. Press the ▲▼ keys to highlight 100%/70%/40% item.
4. Press OK to confirm.
5. Press the ◄ key to return to the GENERAL SETUP menu.

**Disc Lock**
When the disc is locked, the player will store its specific code into the memory for future identification. For the next playback, the DVD player will prompt you to enter the password. Then, press OK to load the disc.

**Analog Audio Setup menu**
This menu contains setup options for your analog audio output, such as DOWNMIX, D.R.C. (Dynamic Range Compression) etc. which makes the DVD player reproduce high-quality surround sound.
1. Press SYSTEM MENU.
2. Press the ▲▼ keys to highlight the ANALOG OUTPUT SETUP.
3. Press OK to confirm.

**DOWNMIX**
1. Press the ▲▼ keys to highlight DOWNMIX in the GENERAL SETUP menu.
2. Enter its sub-menu by pressing the ▶ key.
3. Move the cursor by pressing the ▲▼ keys to highlight the selected item.

**D.R.C. (Dynamic Range Compression)**
The DVD player will compress the dynamic range of its sound output for late-night listening.
1. Press SYSTEM MENU.
2. Enter its sub-menu by pressing the ▶ key.
3. Move the cursor by pressing the ▲▼ keys to highlight the selected item.

**Digital Audio Setup menu**
In this menu, you can set up the digital audio output signal from the digital terminals, such as coaxial etc.
1. Press SYSTEM MENU to enter the SETUP menu.
2. Press the ▲▼ keys to choose the DIGITAL OUTPUT SETUP.
3. Press OK.
Directions for Use

**Setup Menu**

**Digital Output**

1. Press the ▲▼ keys to highlight DIGITAL OUTPUT.
2. Enter its submenu by pressing the ► key.
3. Press the ▲▼ keys to highlight the selected item.
   - ALL: Original digital signal is output.
   - PCM ONLY: If your receiver is PCM compatible, or your receiver can not decode MPEG2 Dolby Digital or DTS audio, choose this option.
4. Press OK.
5. Press the ◄ key and return to the DIGITAL OUTPUT SETUP menu.

Note: if DIGITAL OUTPUT is set to ALL, all audio settings except MUTE are invalid.

**LPCM Output**

If you connect the DVD player to a PCM compatible receiver via the digital terminals, such as coaxial etc, you may need to select LPCM OUTPUT.

Discs are recorded at a certain sampling rate. The higher the sampling rate, the better the sound quality.

1. Press the ▲▼ keys to highlight the LPCM OUTPUT.
2. Enter its submenu by pressing the ► key.
3. Move the cursor by pressing the ▲▼ keys to highlight the selected item.
   - 48kHz: Playback disc recorded at the sampling rate of 48kHz.
   - 96kHz: Playback disc recorded at the sampling rate of 96kHz.
4. Press OK.
5. Press the ◄ key to return to the DIGITAL OUTPUT SETUP menu.

**Video Setup menu**

There are items included in VIDEO SETUP menu such as TV TYPE, VIDEO OUTPUT, TV DISPLAY, TV MODE, SMART PICTURE, COLOR SETTING.

**TV Type**

Before viewing the DVD or VCD ensure that the PAL or NTSC setting of the system matches your TV set.

1. Press the ▲▼ keys to highlight TV TYPE in the VIDEO SETUP menu.
2. Enter its submenu by pressing the ► key.
3. Move the cursor by pressing the ▲▼ keys to highlight one option.
4. Press OK.
5. Press the ◄ key to return to the VIDEO SETUP menu.

**NTSC/PAL Conversion**

This player is equipped with a NTSC/PAL conversion feature to convert the video output of the disc to match your TV system. The conversions supported are as follows:

<table>
<thead>
<tr>
<th>Type</th>
<th>Format</th>
<th>Selected mode</th>
</tr>
</thead>
<tbody>
<tr>
<td>DVD</td>
<td>NTSC</td>
<td>NTSC, PAL, NTSC, PAL, NTSC</td>
</tr>
<tr>
<td>VCD</td>
<td>PAL</td>
<td>NTSC, PAL, NTSC, PAL</td>
</tr>
<tr>
<td>DVD</td>
<td>PAL</td>
<td>NTSC, PAL, NTSC, PAL</td>
</tr>
</tbody>
</table>

**Notes:**

- MULTI can only be selected when using a TV that has both the NTSC and PAL systems.
- If you have a multi-standard TV (PAL/NTSC), use the MULTI setting to obtain the best picture quality.

**TV Display**

Select the aspect ratio of the TV to be connected.

**16:9** — when you connect a wide screen TV to the DVD player.

**4:3 LETTERBOX** — when you connect a normal TV to the DVD player. Displays a wide picture with bands displayed on the upper and lower portions of the TV screen.

**4:3 PAN SCAN** — when you connect a normal TV to the DVD player. Displays the wide picture on the whole TV screen with a portion automatically cut off.

**Setup the item as follows,**

1. Press the ▲▼ keys to highlight the TV DISPLAY option in the VIDEO SETUP menu.
2. Enter its submenu by pressing the ► key.
3. Move the cursor by pressing the ▲▼ keys to highlight the selected item.
4. Press OK.
5. Press the ◄ key to return to the VIDEO SETUP menu.

Note: PanScan output is not available on all discs.
### Setup Menu

**Smart Picture**

In this menu, you can choose a picture setting from a fixed set of predefined picture settings.

1. Press the ▲▼ keys to highlight SMART PICTURE in the VIDEO SETUP menu.
2. Press the ▶ key to highlight the item of the submenu.
3. Press the ▲▼ keys to choose an item:
   - STANDARD: select a standard picture setting.
   - BRIGHT: make the TV picture bright.
   - SOFT: make the TV picture softer.
   - PERSONAL: achieve the color effect set in the COLOR SETTING menu.
4. Press OK.
5. Press ▶ key to return to the VIDEO SETUP menu.

### Color Setting

In this menu, you can personalize the picture color by adjusting brightness, contrast, hue and saturation.

1. Press the ▲▼ keys to highlight COLOR SETTING in the VIDEO SETUP menu.
2. Press OK to open the submenu.

**Brightness**

1. Press the ▲▼ keys to highlight BRIGHTNESS in the COLOR SETTING menu.
2. Press the ▶ key to open the level bar.
3. Press the ▼ key to decrease the brightness level.
4. Press the ▲ or OK key to return to the COLOR SETTING menu.

**Contrast**

1. Press the ▲▼ keys to highlight CONTRAST in the COLOR SETTING menu.
2. Press the ▶ key to open the level bar.
3. Press the ▼ key to decrease the contrast level.
4. Press the ▲ or OK key to return to the COLOR SETTING menu.

**Hue**

1. Press the ▲▼ keys to highlight HUE in the COLOR SETTING menu.
2. Press the ▶ key to open the level bar.
3. Press the ▼ key to decrease the hue level.
4. Press ▲ or OK key to return to the COLOR SETTING menu.

**Saturation**

1. Press the ▲▼ keys to highlight SATURATION in the COLOR SETTING menu.
2. Press the ▶ key to open the level bar.
3. Press the ▼ key to decrease the saturation level.
4. Press the ▲ or OK key to return to the COLOR SETTING menu.

### Preference Setup menu

There are options included in the PREFERENCE menu such as AUDIO, SUBTITLE, DISC MENU, PARENTAL, PASSWORD, DEFAULT and JPEG NAV.

1. Press the STOP key twice.
2. Press SYSTEM MENU to enter the menu.
3. Highlight the PREFERENCE SETUP by pressing the ▲▼ keys.
4. Press OK to confirm your selection.
5. Press the ▾ key to return to the PREFERENCE menu.

**Audio language**

DVD discs are available with multiple audio languages. Use this option to select the preferred default audio language.

1. Press the ▲▼ keys to highlight AUDIO.
2. Enter the submenu by pressing the ▶ key.
3. Move the cursor by pressing the ▲▼ keys to highlight the selected option.
4. Press OK.
5. Press the ▾ key to return to the PREFERENCE menu.

**Note:** Your DVD disc may not include the audio language which you set in the AUDIO menu. If so, the player will use another audio language instead.
**Subtitle language**

DVD discs are available with multiple subtitle languages. Use this option to select the preferred default subtitle language.

1. Press the ▲▼ keys to highlight SUBTITLE.
2. Enter the submenu by pressing the ► key.
3. Move the cursor by pressing the ▲▼ keys to highlight the selected option.
4. Press OK.
5. Press ◄ key to return to the PREFERENCE menu.

**NOTE:** Your DVD disc may not include the subtitle which you set in the SUBTITLE menu. If so, the player will use another subtitle language instead.

---

**Disc Menu language**

DVD discs are available with multiple disc menu languages. This option is used to select the default disc menu language.

1. Press the ▲▼ keys to highlight DISC MENU.
2. Enter the submenu by pressing the ► key.
3. Move the cursor by pressing the ▲▼ keys to highlight the selected item.
4. Press OK.
5. Press ◄ key to return to the PREFERENCE menu.

**NOTE:** If your DVD disc doesn't include the disc menu language you have set, the player will use another recorded language instead.

---

**Setup Menu**

**Subtitle language**

If you choose OTHERS in AUDIO, SUBTITLE or DISC MENU menu, you can select other languages. Please do as follows.

1. Move the cursor by pressing the ▲▼ keys to highlight OTHERS.
2. Press OK.
3. Input a language code by pressing numerical keys.
4. Please look up the preferred language code in the chapter LANGUAGE CODE, which can be found at the end of this manual.
5. Press OK.

**Password**

This item is used for the parental control and disc lock. Enter your six-digit password when a hint is displayed on the screen.

1. Press the ▲▼ keys to highlight the PASSWORD option.
2. Enter the submenu by pressing the ► key.
3. Press OK to convert the PASSWORD change page.
4. Enter the current six-digit code.
5. If successful, the player will prompt for a new one.
6. After that, enter the new password again to confirm.
7. Press the OK key to return to the PREFERENCE menu.
8. The new 6-digit code will take effect.

**NOTE:**

1. You can change the setup of parental control and load a locked disc with a valid password being entered.
2. If you forget your password, you can enter the default password #42100.

---

**Setup Menu**

**Parental Control**

Movies on DVD may contain scenes which are not suitable for children. Therefore, discs may contain Parental Control information which applies to the complete disc or to certain scenes on the disc. These scenes are rated from 1 to 8, and alternative, more suitable scenes are available on the disc. Ratings are country-dependent. The Parental Control feature allows you to prevent discs from being played by your children or to have certain discs played with alternate scenes.

- VCD, SVCD, CD have no level indication, so parental control function has no effect on those kinds of discs. This applies to most illegal DVD discs.
- You can follow the steps below to setup the parental control:

1. Press ▲▼ to highlight DEFAULT.
2. Highlight RESET by pressing the ► key.
3. Press OK.

**CAUTION:** When this function is activated, all setups will be reset to factory defaults.

**MP3/JPEG Navigator**

This menu allows you to select alternate settings when you playback picture CD and MP3 CD.

1. Press ▲▼ to highlight MP3/JPEG NAV.
2. Press ► to enter the submenu.
3. Press ▲▼ to highlight WITHOUT MENU or WITH MENU.
4. WITHOUT MENU: playback all pictures or MP3 music in sequence automatically.
5. WITH MENU: playback pictures or MP3 music in the selected folder.

**Default Setup**

If problems occur while setting up the DVD player, the DEFAULT function can be used to reset all options to the factory defaults and all your personal settings will be erased.

1. Press ▲▼ to highlight DEFAULT.
2. Press OK.

**Directions for Use**

25 26
Specifications

**PLAYBACK SYSTEM**
DVD/Video
Video CD & SVCD
CD
PICTURE CD
MP3-CD
CDR, CD-RW
DVD±R, DVD±RW

**VIDEO PERFORMANCE**

<table>
<thead>
<tr>
<th>Format</th>
<th>Ypp</th>
<th>CR</th>
</tr>
</thead>
<tbody>
<tr>
<td>CD</td>
<td>0.7 Vpp</td>
<td>75 omh</td>
</tr>
</tbody>
</table>

**AUDIO PERFORMANCE**

<table>
<thead>
<tr>
<th>Format</th>
<th>Signal-Noise (THD)</th>
<th>Dynamic Range (DNL)</th>
</tr>
</thead>
<tbody>
<tr>
<td>DVD</td>
<td>6.14 kHz</td>
<td>46 dB</td>
</tr>
<tr>
<td>SVCD</td>
<td>6.14 kHz</td>
<td>46 dB</td>
</tr>
<tr>
<td>CD</td>
<td>4.24 kHz</td>
<td>53 dB</td>
</tr>
<tr>
<td>CDVCD</td>
<td>6.14 kHz</td>
<td>46 dB</td>
</tr>
</tbody>
</table>

**TV STANDARD** (PAL/50Hz, NTSC/60Hz)

<table>
<thead>
<tr>
<th>Number of lines</th>
<th>PAL</th>
<th>NTSC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Playback</td>
<td>525</td>
<td>625</td>
</tr>
</tbody>
</table>

**CONNECTIONS**

<table>
<thead>
<tr>
<th>Connector</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>RCA</td>
<td>Line terminal</td>
</tr>
<tr>
<td>Cinch</td>
<td>Line terminal</td>
</tr>
<tr>
<td>Digital</td>
<td>IEC558 for CDDA, IEC657 for MPEG</td>
</tr>
<tr>
<td></td>
<td>IEC537 for MPEG 2, Dolby Digital and DTS</td>
</tr>
</tbody>
</table>

**CABINET**

<table>
<thead>
<tr>
<th>Dimensions (W x D x H)</th>
<th>360 x 280 x 41 mm</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weight</td>
<td>Approximately 2.2 kg</td>
</tr>
</tbody>
</table>

**POWER CONSUMPTION**

<table>
<thead>
<tr>
<th>Mode</th>
<th>Power consumption (in standby mode)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>&lt; 1 W</td>
</tr>
</tbody>
</table>

Troubleshooting

**WARNING**
Under no circumstances should you try to repair the system yourself, as this will invalidate the warranty. Do not open the system as there is a risk of electric shock.

If a fault occurs, first check the points listed below before taking the system for repair. If you are unable to remedy a problem by following these hints, consult your dealer or service center.

<table>
<thead>
<tr>
<th>Problem</th>
<th>Solution</th>
</tr>
</thead>
<tbody>
<tr>
<td>No power</td>
<td>Check if the AC power cord is properly connected.</td>
</tr>
<tr>
<td>No picture</td>
<td>Check if the TV is switched on.</td>
</tr>
<tr>
<td>Distorted picture</td>
<td>Check the video connection.</td>
</tr>
<tr>
<td>Completely distorted picture or black/white picture with DVD or Video CD</td>
<td>Make sure the NTSC/PAL setting at the DVD player matches the video signal of your television. (See NTSC/PAL CONVERSION).</td>
</tr>
<tr>
<td>No sound or distorted sound</td>
<td>Adjust the volume.</td>
</tr>
<tr>
<td>No audio at digital output</td>
<td>Check the digital connections.</td>
</tr>
<tr>
<td>Disc can't be played</td>
<td>Check if the audio format of the selected audio language matches your receiver capabilities.</td>
</tr>
<tr>
<td>No return to start-up screen when disc is removed</td>
<td>Reset the unit by switching the player off, then on again.</td>
</tr>
<tr>
<td>The player does not respond to the remote control</td>
<td>Also the remote control directly at the sensor on the front of the player.</td>
</tr>
<tr>
<td>Buttons do not work</td>
<td>In order to completely reset the player uplug the AC cord from the AC outlet.</td>
</tr>
<tr>
<td>No operating commands during playback</td>
<td>Operations may not be permitted by the disc. Refer to the instructions of the disc.</td>
</tr>
<tr>
<td>DVD Video player cannot read CDs/DVDs</td>
<td>Use a commonly available cleaning CD/DVD to clean the lens before sending the DVD Video player for repair.</td>
</tr>
</tbody>
</table>
4. Dismantling Instructions, and Exploded Views

See exploded view for item numbers.
Figure 4-2 Exploded View
5. Diagnostic Software, Trouble Shooting and Test Instructions

Diagnostic Software reserved. It will be prepared later

5.1 System working procedure for MediaTeK DVD-Player (MT1379 + MT1366)

Power on

1. Initialize related registers (servo, DSP, RISC)
2. Move code related with RISC to SDRAM
3. Reset RISC

Display LOGO

Does tray close?

N

close tray

Yes

Does SLED move to inside?

No

Move to inside

YES

1. Judge if a disc has loaded
2. Jump to related subroutine acc. to the type of disc

No

Do it receive a command to open the tray?

No

1. Key scan or receive RC signal
2. Run the other subroutine

YES

1. Stop play disc, then open tray completely
2. Display picture and information of opening

No

Does it receive the command to close tray?
5.2 Maintenance Flow Chart

Start

Confirm if AC is compatible with the DVD-Player require

Yes

Power on

Volatges in all pins of item 1601 are normal?

Yes

Are DV33 and V25 normal?

Yes

Display LOGO?

Yes

Is Main Clock normal?

Y

Is reset signal normal?

Y

Is signal on FLASH normal?

Y

Is signal on SDRAM normal?

Y

Is input signal of TV encoder normal?

Y

Is output signal of TV encoder normal?

Y

Check the circuit of video filter, amplifying and cables with TV

A

No

Replace extrainal PSU or a transform need

1. Check Cable
2. Replace PSU if Mono PWB is not short, otherwise find out where short first

No

1. Check regulator LD1117 (item7601) and diode 1N4002 (item6604) and peripheral circuit

No

1. Check oscillation circiut.

1. Check reset circiut.

Check peripheral circiut of FLASH

Check peripheral circiut of SDRAM

Check peripheral circiut of TV Encoder

Check peripheral circiut of TV Encoder

No

No

No

No
A

If will the tray close automatically when it is open

N

Signal TROUT and TRIN is correct?

N

Check the position-switch in LOADER

Y

Signal TRCLOSE & TROPEN correct?

Y

Check the circuit between MT1336 and driver IC (item7603)

N

Signal LOAD+ & LOAD- correct?

Y

Check Motor driver IC (item7603) and peripheral

Y

Check the circuit to connect LOADER

YES

Sledge move to inside automatically when it is outside?

N

Signal STBY on driver IC is high level?

Y

Check the circuit related with STBY

N

Signal FMSO is more than 1.4V?

Yes

Check the circuit related with FMSO

No

Check Motor Driver

N

NO disc on tray

Y

Check the copper trace or cable connect to LOAD ER

B

Have the Loader action to find disc

N

Have FOSO on driver IC any signal?

N

1. Check the signal from MT1379 to Motor Driver

Y

2. Maybe MT1379 is not work

N

Signal F+ & F- correct?

Y

Check the peripheral circuit of Motor driver

N

Check the cable and circuit between Loader and Motor driver (BA5954)
5.

When read disc, Laser ON OK?

N

Laser off

Y

Load a disc?

N

Laser off

Y

Focus On ok?

N

Any signal on pins A B C D E F of MT1366

Y

Signal FEO (pin18 of MT1336) correct?

Y

Check the circuit from Pin18 of MT1336 to Pin205 of MT1379

N

Check the circuit between Loader and MT1336

N

Check the peripheral circuit of MT1336

Y

Check the peripheral circuit of MT1366 and itself.

Disc ID correct?

N

Signal of Pin 19 (RFL) of MT1336 normal?

Y

Check the circuit from Pin19 of MT1336 to Pin206 of MT1379

N

Check MT1379 and its peripheral circuit.

Y

Spindle on OK?

N

DMSO (pin18 of MT1379) normal?

Y

Signal SP+ & SP- correct?

N

Check the peripheral circuit of two transistor (item 7620 & 7621)

Y

Check the connection between spindle driver and BAS945

C
Diagnostic Software, Trouble Shooting and Test Instructions

Track on OK?
- Y: Signal TEO (pin21 of MT1336) normal? (Check MT1336 and its peripheral circuit.)
  - N: Signal TRSO (pin13 of MT1379) normal? (Check the TRSO connection between MT1379 (pin13) and MT1336 (pin26))
    - Y: Signal T+ & T- normal? (Check MT1336 and its peripheral circuit.)
      - Y: Check the connection between OPU and BA5945
      - N: Check the connection between OPU and BA5945
    - N: Check the connection between OPU and BA5945

Disk is READY?
- Y

Audio signal normal?
- Y
- N: Audio DAC receive correct data? (Check connection between MT1379 and Audio DAC)
  - N: Output signal are correct? (Check Audio DAC and its peripheral circuit)
    - Y: Check the circuit of filter, Amplify, and mute etc.
      - Y: Check connection between MT1379 and Audio DAC
      - N: Check connection between MT1379 and Audio DAC and its peripheral circuit

IR, VFD display and Key function ok?
- Y: IR, PT6312 communicate with MT1379 OK?
  - Y: check Remote Control check KEY matrix Check connection of VFD
  - N: Check connection between MT1379 and PT6312 and its peripheral circuit

END
Personal Notes:

Block Diagram

- **RF AMPLIFIER** MT1336
- **MOTOR DRIVER** BA5954
- **MOTOR DRIVER** BA6208
- **MTK MT1379BE** SERVO AND MPEG DECODER
- **VIDEO/AUDIO OUTPUT** CVBS/SCART/COAXIAL
- **2-CH AUDIO DAC** AKM4382

- **RECEIVER**
- **POWER BUTTON**
- **KEYBOARD**

- **Slave Processor** (PT6312)
- **Power Supply**
- **Loader Module**
- **Front Board**

Diagram includes various components and connections, indicating the flow of signals and power throughout the system.
7. Electrical Diagrams

PSU (EPM)
Layout PSU (EPM)

Components Side

Copper Side
Components Side

Copper Side
8. **Alignments**

Not applicable.

9. **Circuit Descriptions, List of Abbreviations, and IC Data**

Not applicable.
<table>
<thead>
<tr>
<th>Part Number</th>
<th>Description</th>
<th>Package</th>
<th>Value</th>
<th>Tolerance</th>
<th>Power Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>4822 051 30008</td>
<td>02 jumper</td>
<td>0603</td>
<td>0.1%</td>
<td>0.062W</td>
<td></td>
</tr>
<tr>
<td>4822 117 13058</td>
<td>470Ω 5% 0.062W</td>
<td>0603</td>
<td>0.1%</td>
<td>0.062W</td>
<td></td>
</tr>
<tr>
<td>4822 051 30109</td>
<td>1015 1% 0.062W</td>
<td>0603</td>
<td>0.1%</td>
<td>0.062W</td>
<td></td>
</tr>
<tr>
<td>4822 117 13608</td>
<td>470Ω 5% 0.062W</td>
<td>0603</td>
<td>0.1%</td>
<td>0.062W</td>
<td></td>
</tr>
<tr>
<td>4822 051 30339</td>
<td>3335 1% 0.062W</td>
<td>0603</td>
<td>0.1%</td>
<td>0.062W</td>
<td></td>
</tr>
<tr>
<td>4822 117 13609</td>
<td>3335 1% 0.062W</td>
<td>0603</td>
<td>0.1%</td>
<td>0.062W</td>
<td></td>
</tr>
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- 0010 | 3141 017 7805 | CAB FRONT D2V250/001 PNT PRT
- 0030 | 3141 017 7803 | LENS WINDOW D2V25/ 001 PRT
- 0040 | 3141 017 77195 | BUTTON TREE D2V25K PNT PRT
- 0050 | 3141 017 77140 | BUTTON POWER D2V25K PNT PRT
- 0207 | 3141 017 78061 | DOOR TRAY ASSY D2V250/001 PRT

### Frame Assy

**Various**

- 0221 | 8204 055 76161 | SPACER LOCKING KGLS-4S B
- 0244 | 3139 243 10680 | CUSHION FOOT

### Front PCB

**Various**

- 0041 | 3141 014 25380 | FTD HOLDER D2V25K
- 1201 | 3141 010 30480 | SOC MPHONE H1F P 3.5 BL R
- 1400 | 3141 010 50220 | VFD 20-0704N (ZEC)
- 1400 | 3141 010 50290 | VFD HNV-07S54ST (SAMSUNG)
- 1401 | 3141 010 21551 | CWAS 0706/07S180 7 WH 26S
- 1402 | 3141 010 21442 | CWAS 0206/02S140 2 WH 26S
- 1403 | 3141 010 21451 | CWAS 0506/05S10G 150 26S
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