

# yamakawa™

## MOBILE DVD PLAYER

### MODEL : MP-28



# User Manual

## V1.0

# FEATURES

## ■ POWER

- Operating voltage :  $12V \begin{matrix} +20\% \\ -10\% \end{matrix}$  DC  
Low power consumption design.

## ■ COMPATIBILITY

This DVD player can play the following discs:  
DVD, CD, VCD, DVCD, HDCD, MP3, CD-R, CD-RW.

## ■ SYSTEM FUNCTIONS

### ● VIDEO OUTPUT SYSTEM

System AUTO , NTSC or PAL switchable.

## ■ ADDITIONAL VIDEO FEATURES

Multi-angle, multi-view, multi-audio function  
Multi-level forward and backward motion  
Resume stop and repeat function

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## **SAFETY PRECAUTIONS**

This digital versatile disc (DVD) video player uses 12V <sup>+20%</sup><sub>-10%</sub> DC.  
For future reference, record the model and serial number  
(located on the case of the DVD player) in the space provided.

### **CAUTION:**

THIS DVD VIDEO PLAYER IS A CLASS I LASER PRODUCT.  
USE OF CONTROLS OR ADJUSTMENTS OR PERFORMANCE OF PROCEDURES OTHER  
THAN THOSE SPECIFIED HEREIN MAY RESULT IN HAZARDOUS RADIATION EXPOSURE.  
AS THE LASER BEAM USED IN THIS DVD VIDEO PLAYER IS HARMFUL TO THE EYES,  
DO NOT ATTEMPT TO DISASSEMBLE THE CABINET.  
REFER SERVICING TO QUALIFIED PERSONNEL ONLY.

**WARNING : class I laser product - Avoid Long Term viewing of Direct Laser Radiation.**

### **WARNING OF DEW FORMATION**

Dew may form on the pickup lens in the following conditions.

- Immediately after a heater has been turned on.
- In a steamy or very humid room.

When the unit is suddenly moved from a cold environment to a warm one.

If dew forms inside this unit, it may not operate properly.

In this case, turn on the power and wait about 2 or 3 hours for the dew to evaporate.

When the unit is used under low temperatures,

the pick up lens might warm up very fast and dew will form.

In this case, turn on the power and wait a while for the dew to evaporate.



## Precautions



### Warning

This symbol means important instructions.  
Failure to heed them can result in serious injury or death.

**Do not disassemble or alter this unit.** Doing so may result in an accident, fire or electric shock.

**Keep small objects such as battery out of the reach of children.**  
If swallowed, consult a physician immediately.

**Use the correct ampere rating when replacing fuses.**  
Failure to do so may result in fire or electric shock.

**Use only in cars with a 12 VOLT negative ground.**(Check with your dealer if you are not sure.) Failure to do so may result in fire, etc.

**Do not operate any function that takes your attention away from safely driving your vehicle.** Any function that requires your prolonged attention should only be performed after coming to a complete stop. Always stop the vehicle in a safe location before performing these function. Failure to do so may result in an accident.

**Do not watch video while driving.** Watching the video may distract the driver from looking ahead of the vehicle and cause an accident.

**Keep the volume at a level where you can still hear outside noise while driving.** Failure to do so may result in an accident.

**Use this product for mobile 12V applications.** Use for other than its designed application may result in fire, electric shock or other injury.

**Do not place hands, fingers or foreign objects in insertion slots or gaps.** Doing so may result in personal injury or damage to the product.

**Do not block vents or radiator panels.** Doing so may cause heat to build up inside and may result in fire.



### Caution

This symbol means important instructions.  
Failure to heed them can result in injury or property damage.

**Insert with the correct battery polarity.** When inserting the battery, be sure to observe proper polarity(+ and- )as instructed. Rupture of the battery may cause fire or personal injury.

**Halt use immediately if a problem appears.** Failure to do so may cause personal injury or damage to the product. Consult a professional mobile video installer.



## Precautions

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### Temperature

Be sure the temperature inside the vehicle is between +55°C(+131°F) and -5°C(+23°F) before turning your unit on.

---

### Moisture condensation

You may notice the CD playback sound wavering due to condensation. If this happens remove the disc from the player and wait an hour for the moisture to evaporate.

---

### Damaged disc

Do not attempt to play cracked, warped, or damaged discs. Playing a bad disc could severely damage the playback mechanism.

---

### Maintenance

If you have problems, do not attempt to repair the unit yourself. Consult a professional mobile video installer.

---

### Never attempt the following

Do not grip or pull out the disc while it is being pulled back into the player by the automatic reloading mechanism.

Do not attempt to insert a disc into the unit when the unit power is off.

---

### Inserting discs

Your player accepts only one disc at a time for playback. Do not attempt to load more than one disc.

Make sure the label side is facing up when you insert the disc.

Playing a disc while driving on a very bumpy road may result in skips.

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### Irregular shaped discs

Make sure the discs you use in this unit do not have any irregularities.

The outer and inner edges should be round and smooth. Use of irregularly shaped discs may cause damage to the mechanism.

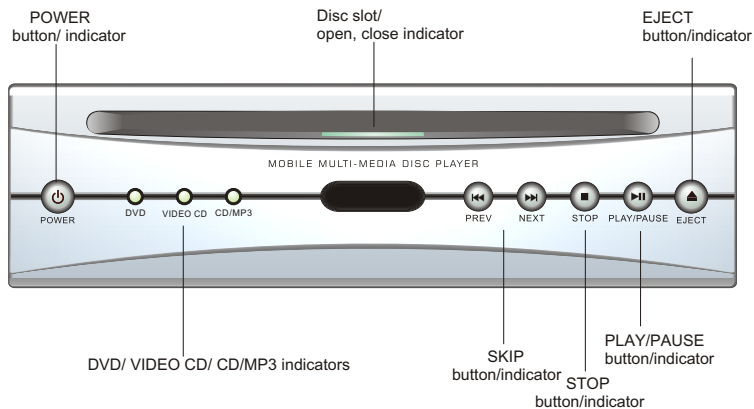
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### Installation location

Make sure the unit will not be installed in a location subjected to:

- Direct sun and heat
- High humidity and water
- Excessive dust
- Excessive vibrations

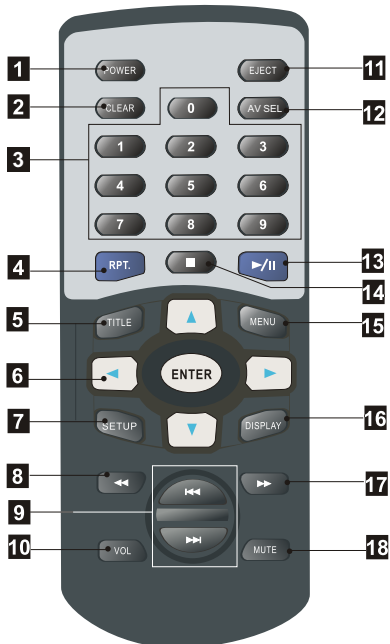
## Front panel



| The button |  |
|------------|---|
| POWER      | Power on/off by pressing this button  |
| EJECT      | To eject a disc   |
| ▶          | Play/Pause  |
| ■          | To stop playback  |
| ◀ ▶        | To locate previous/next chapter or track  |

# Identification of controls

## Remote Control



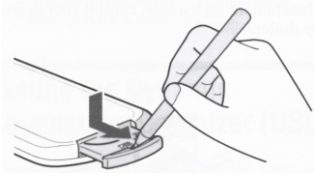
- 1** POWER on/off button
- 2** CLEAR button  
to clear the wrong number you entered
- 3** Number button  
Used to input numbers
- 4** RPT. button  
to play repeatedly
- 5** TITLE button  
to locate a specific title chapter or track
- 6** Joy stick and ENTER button
- 7** SETUP button  
to change the default settings
- 8** << >> To change the playback speed
- 17** >> << To change the playback speed
- 9** >>> To locate next chapter or track  
<<< To locate previous chapter or track
- 10** VOL < > button  
**6** to control the volume
- 11** EJECT button to eject the disc
- 12** AV SEL button, not available to this unit
- 13** >|| Button Playing/Pausing
- 14** ■ Button to stop playback
- 15** MENU Button  
to locate a specific title chapter or track
- 16** DISPLAY button to display the disc status  
Or GOTO button to locate a location  
by entering its corresponding track number,  
chapter number or time
- 18** MUTE Button  
playing with no sound



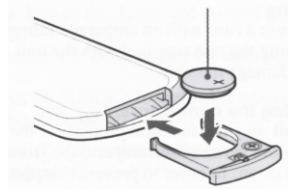
## When using remote control

### Preparing the remote control

Insert battery (3V, CR2025) into the remote control.  
Make sure the + side of the battery faces up before closing the cover.



1) Open the cover,  
pull the cover as illustrated

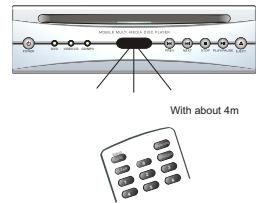


2) Insert cell (3V), Close the cover

### Operating with the remote control

This section shows you how to use the remote control. Point the remote control at the remote sensor and press the buttons.

The remote range: about 4m from the front of the remote sensor.  
(Is) off axis: more than 30° in each direction of the front of the remote sensor.



Do not expose the remote sensor of the DVD player and the remote control to a strong light source such as direct sunlight or other illumination. If you do so, you may not be able to operate the DVD player via the remote control.

#### Notes on battery

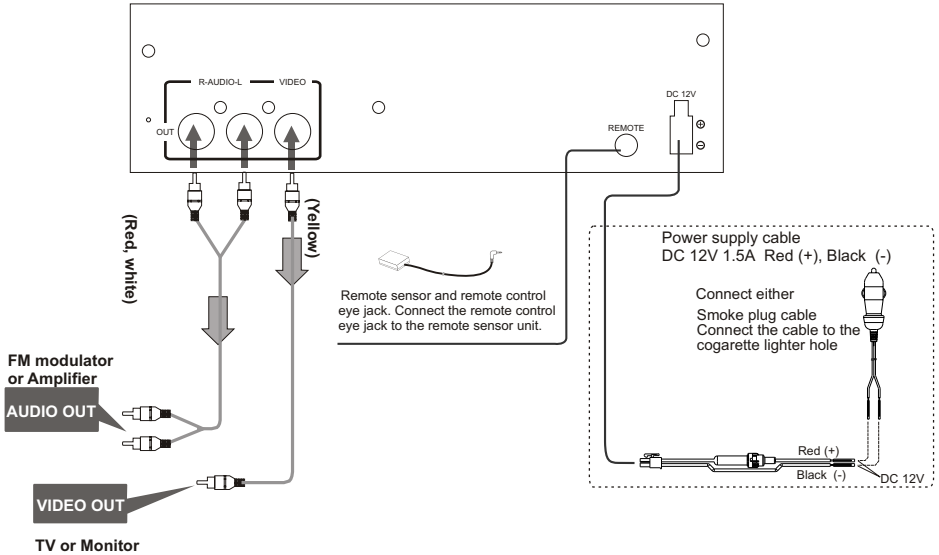
To operate the remote control correctly, follow the instructions below.

Do not insert cell into the remote control in the wrong direction.  
Do not charge, heat, open, or short-circuit the cell. Do not throw cell into a fire.  
If the remote control does not function correctly or if the operating range becomes reduced, replace the cell with new one.

#### Notes on 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 near an extremely hot or humid place.  
Do not spill water or put anything wet on the remote control.  
Do not disassemble the remote control.

# Connections



## NOTE

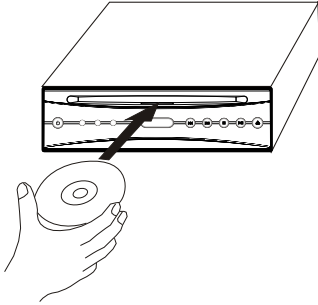
- 1 Refer to the owner's manual for " the connected monitor " as well.
- 2 Refer to the owner's manual of the connected equipment for additional information.
- 3 When you connect the DVD player to other equipment, be sure to turn off the power .
- 4 If you place the DVD near a tuner or radio, the radio broadcast sound might be distorted. In this case, place the DVD player away from any other tuner or radio.
- 5 The output sound of the DVD player has a wide dynamic range. Be sure to adjust the receiver's volume to a moderate listening level. Otherwise, the speakers may be damaged by a sudden high output.
- 6 Turn off the amplifier before you connect or disconnect the DVD player's power leads. If you leave the amplifier power on, the speakers may be damaged.

### Loading and unloading a disc

Turn on the power before loading and unloading discs.

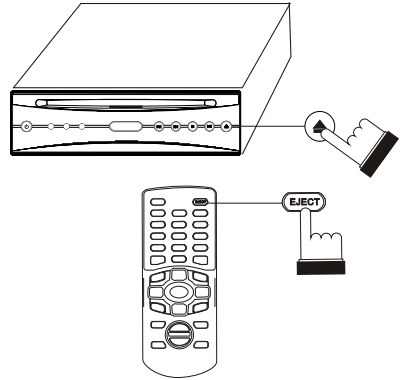
#### 1 Insert the disc with the side containing words diagrams facing upwards.

Once the disc is partially inserted, it is drawn in automatically. Playback starts.



#### 2 Unloading disc

Press EJECT button, the disc is automatically ejected.



#### Notes:


If wrong disc, upside-down discs or dirty discs have been inserted, "DISC" is displayed.


Remove the disc.


Do not put any objects other than discs into the disc slot, doing so may cause the player to malfunction.


#### Tips

    These indicate the discs for which the function can be used.

 :You can use this function with DVD discs.

 :You can use this function with MP3 discs .

 :You can use this function with VIDEO CDs.

 :You can use this function with CDs .

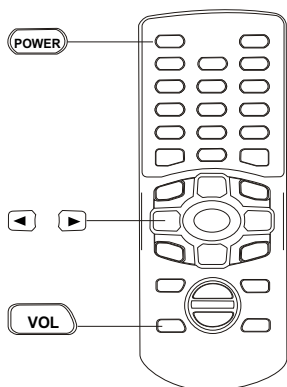
#### About this owner's manual

This owner's manual explains the basic instructions of this DVD player. Some DVD discs are produced in a manner that allows specific or limited operation during playback.


As such, the DVD player may not respond to all operating commands. This is not a defect in the DVD player. Refer to the instruction notes of discs.


"⊘" may appear on the screen during operation.

A "⊘" means that the operation is not permitted by the DVD player or the disc.



## 1 Turning the power on and off

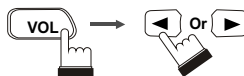
Press  **POWER** button  
The power turns on.

To turn the power off, Press  **POWER** button again.

### Play Position Memory Function

If you turn power off by pressing the **POWER** on the remote control during playback, playback will continue from the point where playback stopped when the power is turned ON again. The play position memory is released if the disc is removed.

## 2 Adjusting the volume



Press the **VOL** button first, then press  or  button to decrease or increase the volume.

## 3 Tuning the sound on and off

During playback press **MUTE**, no sound is played. Press Mute to resume normal playback with sound.

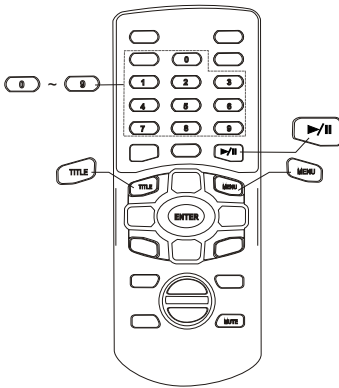


## Playing a disc



### Caution

With some DVDs, certain operations are disabled. Such operations are not possible on such DVDs. The DVD functions described in this manual are not supported by all instructions for details on the features supported. Fingerprints on a disc may adversely affect playback. If a problem occurs, remove the disc and check for fingerprints on the playback side. Clean the disc if necessary. When using the remote control, be careful to pressing multiple buttons at the same time may cause erroneous operation.



## Playing a disc



## VCD menu

Use the number keys(0~9) to select the desired item.

① Press ▶ button.

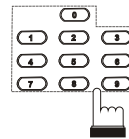


Playback starts.

### If a menu screen appears



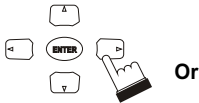
On DVDs and video CDs with playback control (PBC), menu screen may appear automatically. If this happens, perform the operation described below to start playback.



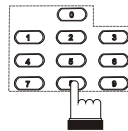
Note: For many discs, the menu screen can also be displayed by pressing MENU or TITLE.

### DVD menu

Use the Joystick or the number keys(0~9) to select the desired item.



Or



Note: The menu screen does not appear when the PBC function is turned off. If this is the case press MENU to turn on the PBC function.

In PBC off mode, you can use the number keys to input the desired track also.

② Playing/pausing



During playback press ▶/|| to pause playback. Press ▶/|| again to resume playback.

Note: For some discs it is not possible to select items for the menu to menu screen using the number buttons (0~9).

### Tips



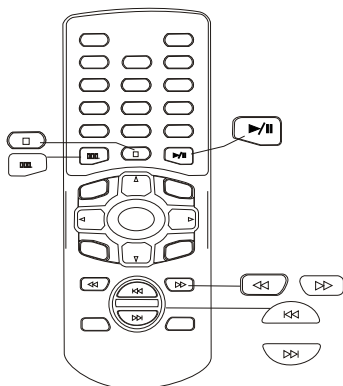
#### Using the Number keys

This describes use of the Number keys.

To input 16: Press the 1 button and then press the 6 key.

To input 28: Press the 2 key and then press the 8 key.

To input 108: Press the 1 key and then press the 0 and 8 button.



## 2 Fast-forwarding/ fast-reversing

**During playback press**  
**◀◀ (fast-reverse) or ▶▶ (fast-forward)**

Each time you press the ◀◀ or ▶▶ button, the playback speed changes to multi-level normal speed or normal speed.

## 3 Chapter/track/title repeat playback

① **During playback press ◀◀ or ▶▶**

The chapter/track switches each time the button is pressed, and playback of the selected chapter/track starts.

- ▶▶: Press this to start playback from the beginning of the next chapter or track.
- ◀◀: Press this to start playback from the beginning of the previous chapter or track.

Note: Some DVDs do not have chapters.

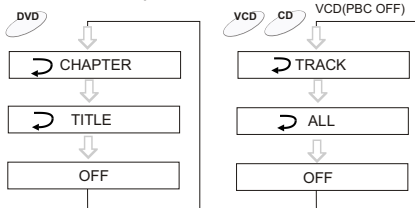
### Supplementary explanation

**Chapters** are divisions of movies or musical selections on DVDs.  
**Tracks** are divisions of movies or musical selections on video and audio CDs.

## 4 Chapter/track/title repeat playback

**During playback, Press RPT.**

The repeat mode switches each time the button is pressed.



## 1 Stopping playback

Press the stop button during playback to stop playback.

Press **■** during playback.

### Tips

- Using the **PRE-STOP** function.

When the PRE-STOP function is used, the position at which playback is stopped is stored in the memory, and playback resumes from that position.

- ① Press **■** once during playback.

■ is displayed.

- ② Press **▶** in the PRE-STOP mode.

Playback starts from the position at which it was stopped.

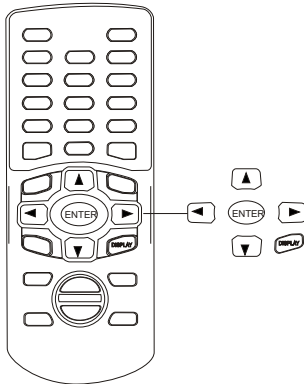
- To cancel the **PRE-STOP** function

Either press **■** again in the PRE-STOP mode, eject the disc or turn the power to clear the memory. Playback will start at the beginning of the disc.

### Notes:

- For some discs, the position at which playback was stopped may not be accurate.

## Displaying the disc status



### Displaying the disc status

Press ▲▼ button to move the cursor to the item, and press ◀▶ button to select the item you want, then press ENTER to input.

## 1 Playing DVD or VCD

Use the procedure described below to display the status (title number, chapter number, etc.) of the currently playing DVD on the screen.

### During playback, press DISPLAY.



The playback status appears on the screen.

|                   |                          |
|-------------------|--------------------------|
| 1/1               | 1. Title                 |
| 5/16              | 2. Chapter               |
| 0:25:16           | 3. Time                  |
| 1.ENG<br>D<br>2/0 | 4. Audio                 |
| 1.ENG             | 5. Subtitle              |
| 1/1               | 6. Angle                 |
| Normal            | 7. Sound: Normal, 3D SUR |

▲ Move 0-9 Input ◀▶ ENTER

1. Locating a specific location by entering the track number, the chapter number or the time (by pressing the number button, input the hours first, followed by the minutes, then the seconds.)
2. Switching the Audio language, Subtitle and Angle included on the disc by ▲▼◀▶.

|         |         |                               |
|---------|---------|-------------------------------|
| PBC OFF | 2/15    | 1. Track                      |
|         | 0:08:16 | 2. Time                       |
|         | Stereo  | 3. Audio: Stereo, Left, Right |
|         | Normal  | 4. Sound: Normal, 3D SUR      |

▲ Move 0-9 Input ◀▶ ENTER

|        |         |                               |
|--------|---------|-------------------------------|
| PBC ON | PBC     | 1. PBC                        |
|        | 0:08:16 | 2. Time                       |
|        | Stereo  | 3. Audio: Stereo, Left, Right |
|        | Normal  | 4. Sound: Normal, 3D SUR      |

▲ Move 0-9 Input ◀▶ ENTER

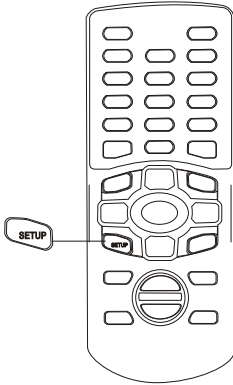
The time for accessing specific locations is available only within the current track of the Video CD.

## 2 playing CD or MP3

A menu appears on the screen while playing Audio CD.

|                   |         |  |
|-------------------|---------|--|
| Audio CD          |         |  |
| List              | Program |  |
| 0071 Track1       | +       |  |
| 0072 Track2       | +       |  |
| 0073 Track3       | -       |  |
| 0074 Track4       | +       |  |
| 0075 Track5       |         |  |
| 0076 Track6       |         |  |
| ▶ 0:08:10 0072/12 |         |  |

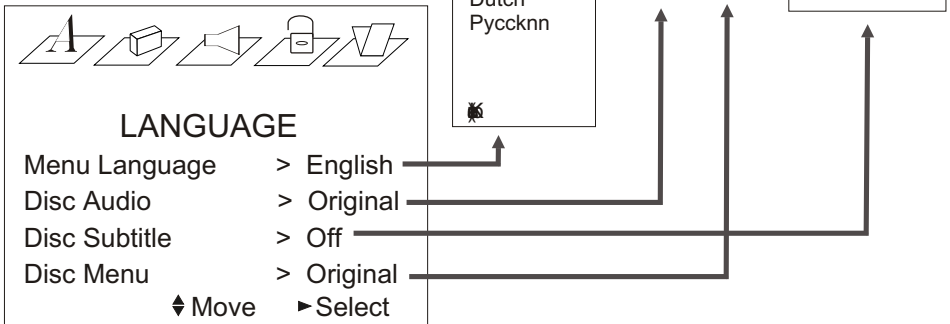
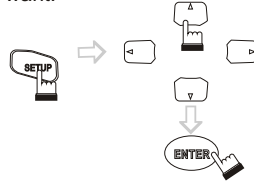
Using ▲▼◀▶ buttons to select the track you want to program, then move to the cursor to the items to add track you selected or add all tracks, also you can delete the track/ all tracks on the program list.



# 1 Changing the default settings(setup)

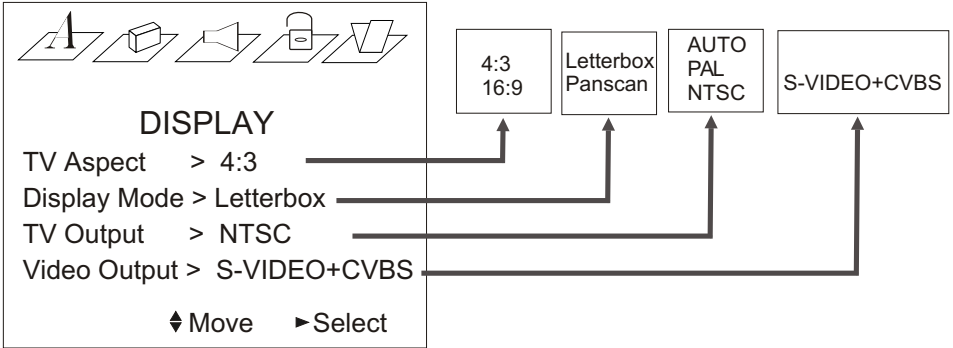


Press SETUP.  
 The setting menu appears.  
 Press joystick button to move the cursor to the item, then press ENTER to select the item you want.





## Changing the default settings(setup)



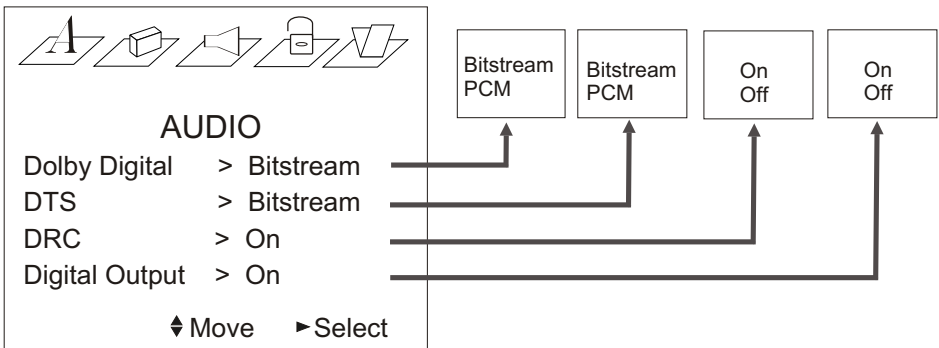
--4:3 LETTERBOX: Select when 4:3 TV is connected displays theatrical images with masking bars above and below the picture.



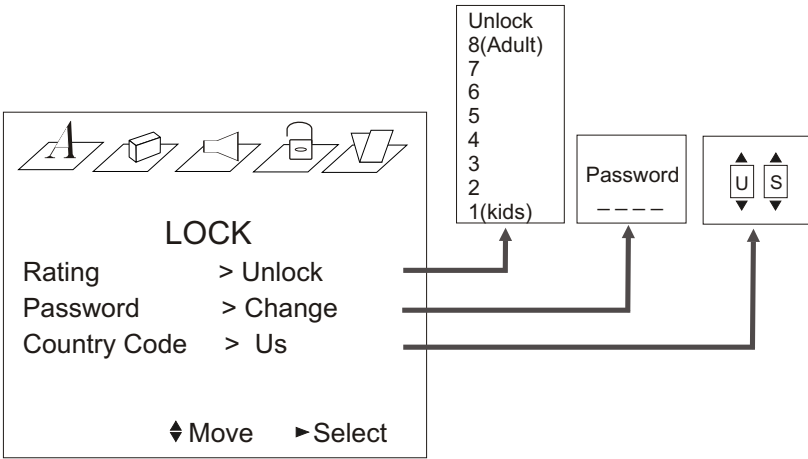
--4:3 PAN-SCAN: Select when a 4:3 TV is connected. Display pictures cropped to fill your TV screen. Either or both sides of the picture are cut off.



--16:9 WIDE: Select when a 16:9 wide TV is connected.

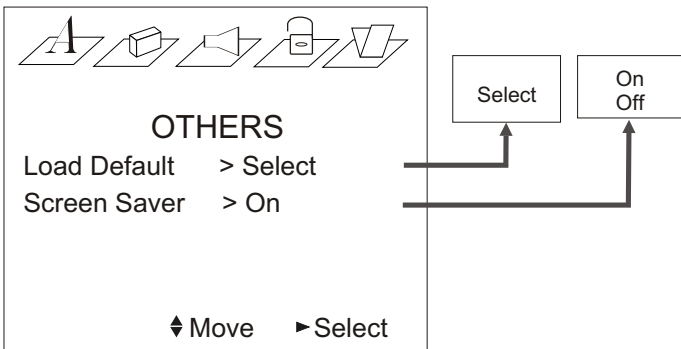


## Changing the default settings(setup)



The player with the default password 3351 . Press the number button to create or change your 4-digital security password to change the rating, input numbers are displayed \* \*. Then, you must enter the correct password or the default password 3351 to change the rating or you can not play DVD disc rated higher than the level you selected.

This is the function of DVD for restricting the viewing age as stipulated by laws in different countries. The way in which viewing is restricted differs from DVD to DVD. Sometimes the DVD can not be played at all, other times certain scenes are skipped, and the other times certain scenes are replaced with other scenes.



## In case of difficulty

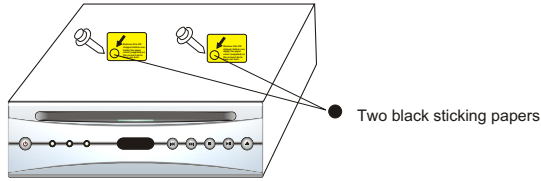
If operation freezes, the screen goes black or the unit should otherwise not function properly, try turning the power off then back on. Alternatively, try the following methods in the order listed until the unit returns to normal playback mode.

Turn the car's ignition OFF and back ON again.

This guide will help you isolate the problem if the unit is at fault. Otherwise, make sure the rest of your system is properly connected or consult a professional mobile video installer.





| Symptom                            | Cause   | Remedy   |
|------------------------------------|---|--|
| Unit does not operate.             | Fuse is blown.  | Replace with a fuse of the specified capacity.   |
|                                    | Monitor's power is not turn on.                             | Turn on the monitor's power  |
|                                    | Condensation  | Wait a while(about 1 hour) for the condensation to dry.  |
| Operation is unstable.             | Remote control unit's battery is worn.                      | Replace the remote control unit's battery with new one.  |
|                                    | Remote control sensor or transmitter is dirty.              | Clean the sensor or transmitter.   |
| No picture is produced.            | Monitor's mode is not switched to the mode you want to see. | Switch to the mode you want to see.  |
| Playback does not start.           | Disc is loaded upside-down.                                 | Check the disc and load it with the labeled side facing upward.  |
|                                    | Disc is dirty.  | Clean the disc.  |
|                                    | A disc not able to playback with this unit is loaded.       | Check if the disc is able to be played back.   |
|                                    | Parental lock is set.                                       | Cancel the parental lock or change the rating level.   |
| Picture is unclear or noisy        | Disc is being fast-forwarded or fast-reversed.              | The picture may be slightly disturbed, but this is normal.   |
|                                    | Vehicle's battery power is weak.                            | Check the battery power and wiring. The unit may malfunction if the battery power is under 10.8 volts with a load applied. |
|                                    | Monitor's fluorescent tube is worn.                         | Replace the monitor's fluorescent tube.  |
| Image stops sometimes.             | Disc is scratched.  | Replaced with a non-scratched disc.  |
| No disc                            | No disc is loaded.  | Load a disc.   |
|                                    | Disc is dirty.  | Clean the disc.  |
| Not valid                          | Remote control operation is not possible.                   | For some discs or playing modes, certain operations are not possible. This not a malfunction.                              |
| VIDEO SIGNAL SYSTEM IS NOT CORRECT | PAL( or NTSC) disc is loaded.                               | Change the TV TYPE of the unit(see SET UP).  |
| No sound                           | Select the wrong Audio Out                                  | According to the connection, set right Audio out.  |

## Note

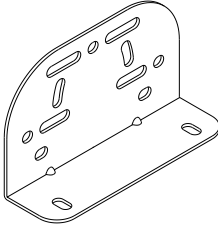


There are 2 mounting screws on the case of the DVD player( as above figure shows) to protect the unit during shipping. You need to remove the sticking papers and screws after unpacking this product. Apply the black sticking papers(supplied)on the screw holes to keep out dust.

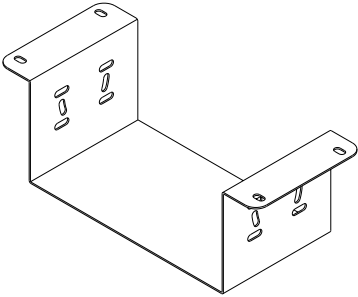
## Specifications

|   |  |   |
|---|--|---|
| <b>Audio</b>  | Audio output(analog):<br><br><br> | 2V  |
| <b>Video</b>  | Video output:<br>  | 1V  |
| <b>Power</b>  | Power requirement:<br>Power consumption:   | 12 <sup>+20%</sup> <sub>-10%</sub> V DC , 1.5A<br>less than 20W         |
| <b>General</b>  | Dimensions(approx.):<br>Weight:<br>Normal operating temperature range:   | 178x50x183mm<br>(w/h/d) incl. Projecting parts<br>1.4Kg<br>23□F to131□F |
| <ul style="list-style-type: none"><li>• Design and specifications are subject to change without notice.</li><li>• The illustrations in this manual may appear different from the actual product due to printing conditions.</li></ul> |  |   |

**INSTALLATION**



Mounting Bracket x 2



Mounting Bracket X 1



Hex bolt M5 x 14  
X 4

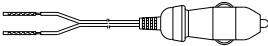


Hex bolt M5 x 6  
X 4

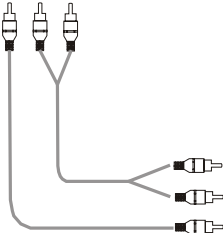
**CABLE**



Power supply cable x 1



Smoke plug cable x 1



Audio/video cable x 1

**REMOTE**



Remote control x 1



Lithium Button Cell (3V) x 1



IR sensor x1