

# MACROM

English



## M-DVD61CH

6 DISC DVD CHANGER

# INSTRUCTION MANUAL

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## 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 IN CARS WITH A 12VOLT NEGATIVE GROUND.**

(Check with your dealer if you are not sure.) Failure to do so may result in fire, etc.

#### **BEFORE WIRING, DISCONNECT THE CABLE FROM THE NEGATIVE BATTERY TERMINAL.**

Failure to do so may result in electric shock or injury due to electrical shorts.

#### **DO NOT SPLICE INTO ELECTRICAL CABLES.**

Never cut away cable insulation to supply power to other equipment.

Doing so will exceed the current carrying capacity of the wire and result in fire or electric shock.

#### **DO NOT INSTALL IN LOCATIONS WHICH MIGHT HINDER VEHICLE OPERATION, SUCH AS THE STEERING WHEEL OR GEARSHIFT.**

Doing so may obstruct forward vision or hamper movement etc. And result in serious accident.

#### **DO NOT USE BOLTS OR NUTS IN THE BRAKE OR STEERING SYSTEMS TO MAKE GROUND CONNECTIONS.**

Bolts or nuts used for the brake or steering system ( or any other safety-related system), or tanks should NEVER be used for installations or ground connections.

Using such parts could disable control of the vehicle and cause 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 functions. Failure to do so may result in an accident.

**DO NOT ALLOW CABLES TO BECOME ENTANGLED IN SURROUNDING OBJECTS.**

Arrange wiring and cables in compliance with the manual to prevent obstructions when driving. Cables or wiring that obstruct or hang up on places such as the steering wheel, gear lever, brake pedals, etc. Can be extremely hazardous

**DO NOT DAMAGE PIPE OR WIRING WHEN DRILLING HOLES**

When drilling holes in the chassis for installation, take precautions so as not to contact, damage or obstruct pipes, fuel lines, tanks or electrical wiring. Failure to take such precautions may result in fire.

**MAKE THE CORRECT CONNECTIONS**

Failure to make the proper connections may result in fire or product damage.

**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.

**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.



## **CAUTION**

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

### **ARRANGE THE WIRING SO IT IS NOT CRIMPED OR PINCHED BY A SHARP EDGE.**

Route the cables and wiring away from moving parts (like the seat rails) or sharp or pointed edges. This will prevent crimping and damage to the wiring. If wiring passes through a hole in metal, use a rubber grommet to prevent the wire's insulation from being cut by the metal edge of the hole.

### **USE SPECIFIED ACCESSORY PARTS AND INSTALL THEM SECURELY.**

Be sure to use only the specified accessory parts. Use of other than designated parts may damage this unit internally or may not securely install the unit in place. This may cause parts to become loose resulting in hazards or product failure.

### **DO NOT INSTALL IN LOCATIONS WITH HIGH MOISTURE OR DUST.**

Avoid installing the unit in locations with high incidence of moisture or dust. Moisture or dust that penetrates into this unit may result in product failure.

### **INSERT WITH THE CORRECT BATTERY POLARITY.**

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

### **HAVE THE WIRING AND INSTALLATION DONE BY EXPERTS.**

The wiring and installation of this unit requires special technical skill and experience. To ensure safety, always contact the dealer where you purchased this product to have the work done.

### **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

## Temperature

Be sure the temperature inside the vehicle is between +70° C (+158° F) and -10° C (+14° F) before turning your unit on.

## Proper Handling

Do not drop the disc while handling. Hold the disc so you will not leave fingerprints on the surface. If the surface is scratched, it may cause the pickup to skip.  
Do not affix tape, paper, or gummed labels on the disc. Do not write on the disc.

## Keep your discs clean

Fingerprints, dust, or soil on the surface could cause the pickup to skip. For routine cleaning, wipe the playing surface with a clean, soft cloth from the center of the disc to the outer edge. If the surface is heavily soiled, dampen a clean, soft cloth in a solution of mild neutral detergent before cleaning the disc.

## Disc accessories

Various disc accessories for protecting the surface of the disc and improving sound quality are available on the market.

However, many of them will increase the thickness and/or diameter of the disc. Using such accessories may place the disc beyond the specified size limitation and cause the changer to malfunction. Because of the high precision electronics of this unit and the highly stable mechanism, these accessories are not necessary and therefore not recommended for use with discs placed in this unit.

## Caution for new discs

When a newly purchased disc is inserted into the changer magazine, the disc may fail to play after initial loading. This is caused by small bumps around the center hole and outside of the disc, which prevent stable loading into the correct position. To remove the bumps, rub the inside edge of the hole and outside edge of the disc with a ball point pen or other such instrument, then insert the disc again.

## Damaged disc

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

## Storage

When not in use, place your discs in their individual cases and store them in a cool place away from the sun, heat and dust.

## 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.

## 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

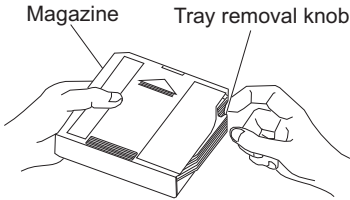
# Before Operation

## Handling the magazine

Turn the power on before loading and unloading discs.

## Loading discs

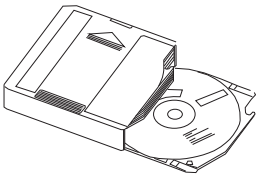
- 1 Pull the tray removal knob with your finger and draw the disc tray out of the magazine. Be careful not to drop the disc.



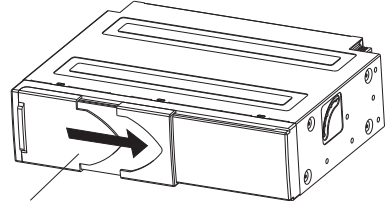
## NOTE

*Do not remove the disc tray from the magazine. When the disc tray is pulled out from the magazine, do not pull it out with excessive force. Doing so will cause breakdown.*

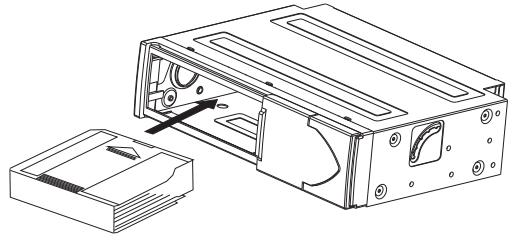
- 2 Set discs in the disc tray with the labelled side facing up. Set one disc in the tray at a time (up to 6 discs). Be careful not to drop the disc. After loading the discs, press the disc tray fully into the magazine until it closes and a click is heard.



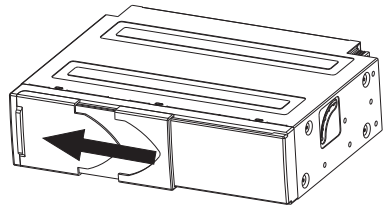
- 3 Grasp the sliding door knob and slide the door fully to the right.



- 4 Check to make sure the magazine is in the proper direction (top/bottom and front/back), then push it in fully until a click is heard and the magazine is locked in place.



- 5 After inserting the magazine, grasp the tap of the sliding door and slide the door all the way to the left until it locks with a "click."

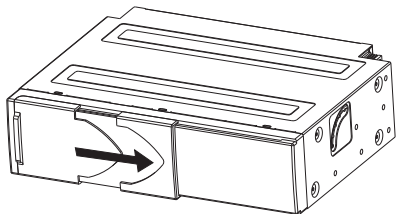


## Notes

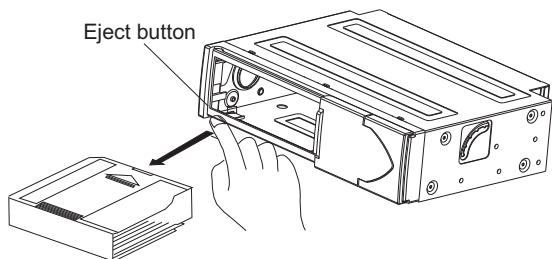
When the magazine is inserted, a check of the disc inside the magazine is performed automatically.

## Removing discs

- 1 Grasp the sliding door knob and slide the door fully to the right.

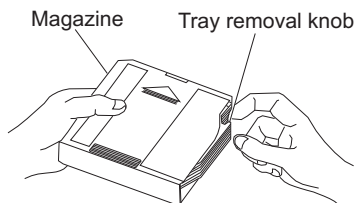


- 2 Press the eject button to eject the magazine, then remove the magazine.



Note: while power is off, press the Eject button long, the Eject button illuminates and the magazine ejects.

- 3 Pull the tray removal knob with your finger and draw the disc tray out of the magazine. Pay attention to the disc's signal surface when removing discs.



### NOTE

Do not remove the disc tray from the magazine. When the disc tray is pulled out from the magazine, do not pull it out with excessive force. Doing so will cause breakdown.

## Cautions on using the magazine

This product's magazine is used exclusively for this product. CD changer magazines (included magazines or accessories) cannot be used with the product.

Disc trays for CD changer magazines cannot be used with this product's magazine.

Such trays can be inserted for reasons of structure, but using them may damage this product. Never use disc trays for CD changer magazine.

Do not forcibly remove the magazine.

Only one disc can be inserted per slot.

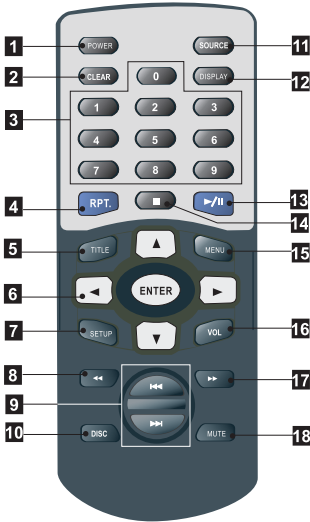
Attempting to inset two or more discs will result in damage.

Never remove the tray from the magazine.



# Identification of controls

## Remote Control

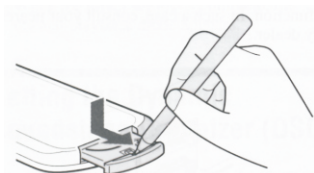


- 1** POWER on/off button
- 2** CLEAR button  
to clear the wrong number you entered.
- 3** Number button  
Used to input numbers and  
To select the disc by pressing 1~6 button
- 4** REPEAT. button  
To play repeatedly
- 5** TITLE button  
to locate a specific title chapter or track
- 6** Joy stick and ENTER button
- 7** SETUP button  
to change the default settings
- 8** ◀◀  
**17** ▶▶ To change the playback speed
- 9** ▶▶ To locate next chapter or track  
◀◀ To locate previous chapter or track
- 10** Disc button  
To turn on/off the DISCS MENU
- 11** SOURCE to select different sources  
( DISC changer or AUX)
- 12** DISPLAY button to display the disc status  
Or GOTO button to locate a location  
by entering its corresponding track number,  
chapter number or time
- 13** ▶/|| Button to pause/play playback
- 14** ■ Button to stop playback
- 15** MENU Button  
to locate a specific title chapter or track
- 16** VOL button  
To Adjust the sound setting  
Press VOL until the item you want to adjust  
appears, then change Volume by pressing  
◀▶  
When the setting item of VOLUME appears  
you can change the volume of each channel  
Press ▲▼ button to select channels and  
press ◀▶ to change volume.
- 18** MUTE Button  
playing with no sound

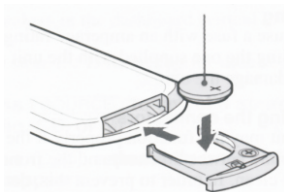
## When using remote control

### 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

Point the remote control at the remote sensor within about 2 meter and press the buttons.

Do not expose the remote sensor of the unit 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 unit 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.

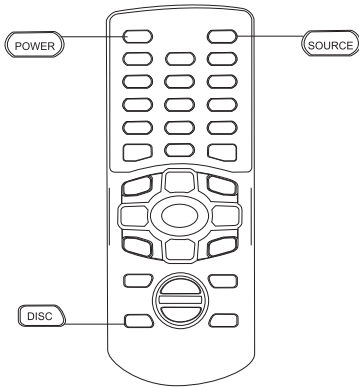
Do not drop or give the remote control a shock.

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.

# Quick Guide



## Turning the power on and off

- 1 Press the POWER button of the remote control. The power turns off.
- 2 To turn the power on, press the POWER button again.

## SOURCE

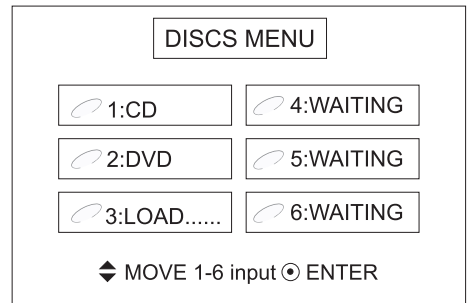
Select DISC CHANGER or AUX input by pressing the SOURCE button.

Connect	SOURCE
Using AUDIO and VIDEO IN, connect the DVD video player to a VTR, TV/VTR combination or video selector.	AUX

## Selecting the disc

The unit detects the disc(DVD, Video CD, CD) automatically and starts playback. You can select the tray to play as below, even it is checking the tray.

- 1 Press the DISC button to turn on/off the DISCS MENU.
- 2 Move the highlight to the tray number you want to play and press ENTER.
- 3 Or Select the disc by pressing the number keys(TRAY1~6) directly.



Note: For CDs and VCDs, if repeat is OFF, there will be an automatic changeover to the next disc after the disc finishes playing. For DVD, discs will not be switched even if repeat is OFF.

In some modes like ◀◀, ▶▶, ◀◀◀ or ▶▶▶, disc will not be switched also.

## Play Position Memory Function

- Even if you turn power off or switch the ignition Key to OFF during playback or change the video source, playback will continue from the point where playback stopped when the power is turned ON again. The play position memory is released if the magazine is removed or the disc is changed.

**Tips** DVD VCD CD MP3 These indicate the discs for which the function can be used.

DVD :You can use this function with DVD discs.

VCD :You can use this function with VIDEO CDs.

MP3 :You can use this function with MP3 discs .

CD :You can use this function with CDs .

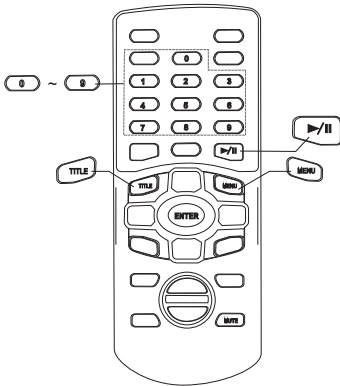
## About this owner's manual

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.

# Quick Guide



## 1 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.

### ① Press ENTER button.

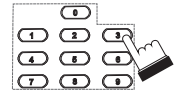
Playback starts.

#### 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.



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.

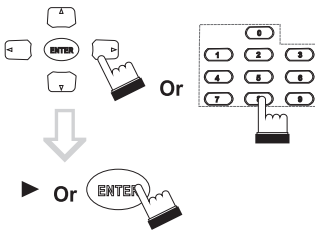
#### DVD menu

Use the Joystick to select the desired item, then press ENTER or ► button.  
Or press the number keys(0~9)

### ② Playing/pausing



During playback press ►|| to pause playback. Press ►|| again to resume playback.



## 2 Tuning the sound on and off



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

### Tips



#### Using the Number keys

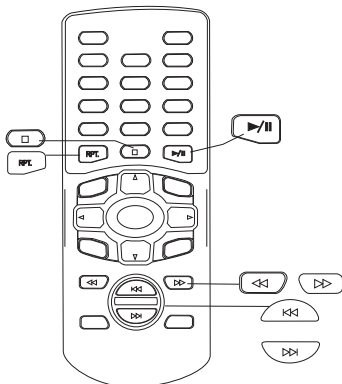
This describes use of the Number keys.

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.

# Quick Guide



## 2 Fast-forwarding/ fast-reversing

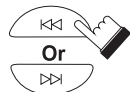
During playback press  
**<<I (fast-reverse) or >>I (fast-forward)**

Each time you press the <<I or >>I button, the playback speed changes to multi-level normal speed or normal speed.

## 3 Finding the beginning of chapters or tracks

### ① During playback press <<I or >>I

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



>>I: Press this to start playback from the beginning of the next chapter or track.

<<I: Press this to start playback from the beginning of the previous chapter or track.

Note: Some DVDs do not have chapters.

### Supplementary explanation

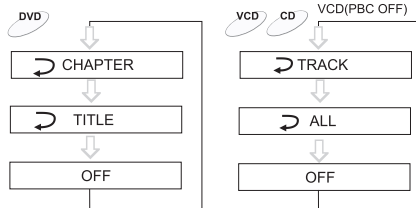
**Chapters** are divisions of movies or musical selections on DVDs.

**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.



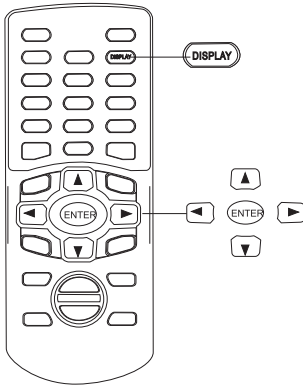
#### • To cancel the PRE-STOP function

Either press **■** again in the PRE-STOP mode, eject the disc 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.

# Convenient Functions



## 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.

DVD	
1/1	1. Title
5/16	2. Chapter
0:25:16	3. Time
1.ENG D D 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 ▲▼◀▶.

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

▲ Move 0-9 Input ◀▶ ENTER

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

▲ Move 0-9 Input ◀▶ ENTER

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

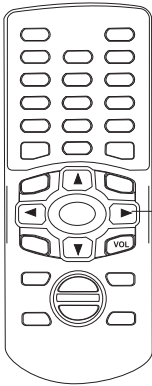
## 2 playing CD or MP3

A menu appears on the screen while playing Audio CD.

CD MP3	
Audio CD	
List	Program
F1/71 Track1	[+]
F1/72 Track2	[+]
F1/73 Track3	[-]
F1/74 Track4	[-]
F1/75 Track5	
F1/76 Track6	
▶ 0:08:10 F1/72/12	

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.

# Convenient Functions



## Adjusting the sound setting

DVD VCD CD MP3

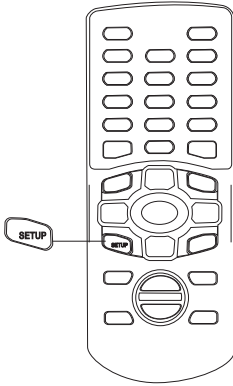
The sound settings can be changed to suit your personal preferences and usage.



- To select the audio functions as you like:

To	Press VOL button on the remote repeatedly until the item you want to adjust appears on the screen	Press the ◀ ▶ button adjust the setting as you like
TONE	LOUDNESS	ON or OFF
BASS	VOLUME_BASS : 0	The level changes from -7~+7
TREBLE	VOLUME_TREBLE : 0	The level changes from -7~+7
VOLUME	VOLUME_MAIN : 18	VOLUME_MAIN : 0~40
	Press VOL button and the volume setting item appears, then you can use ▲ ▼ button to select channels.  VOLUME_FL : 15 VOLUME_FR : 15 VOLUME_RL : 15 VOLUME_RR : 15	The level changes from 0~15

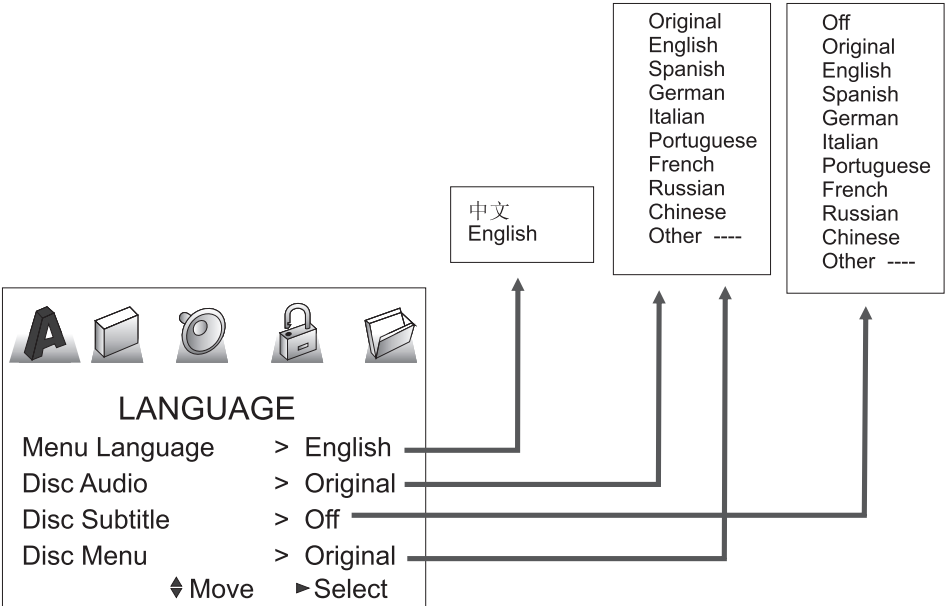
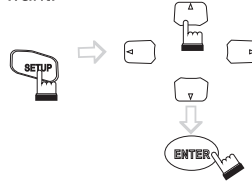
# Default Settings (SET UP)



## 1 Changing the default settings (setup)

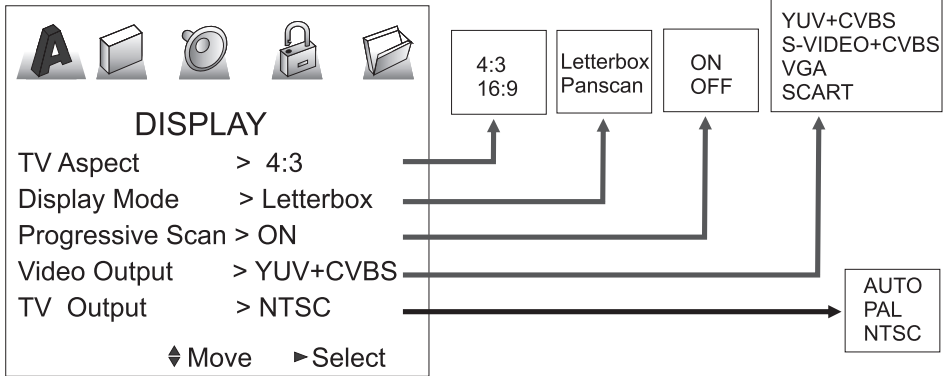
DVD VCD CD MP3

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.





# Default Settings (SET UP)



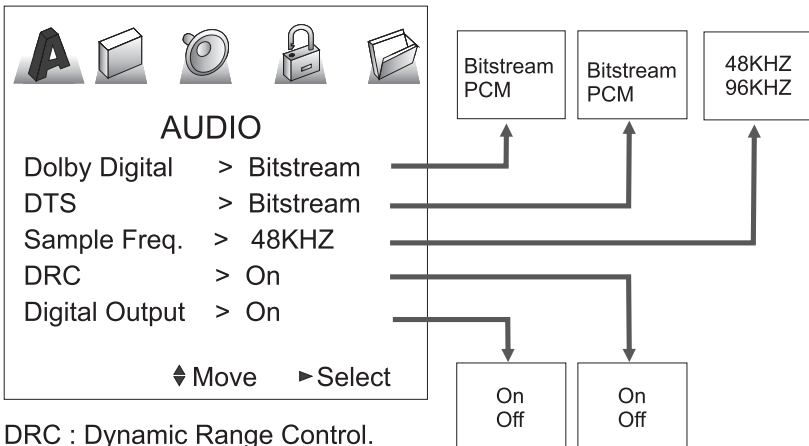
--4:3 LETTERBOX: Select when 4:3 TV is connected displays theatrical images with masking bars above and below the picture.



--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.

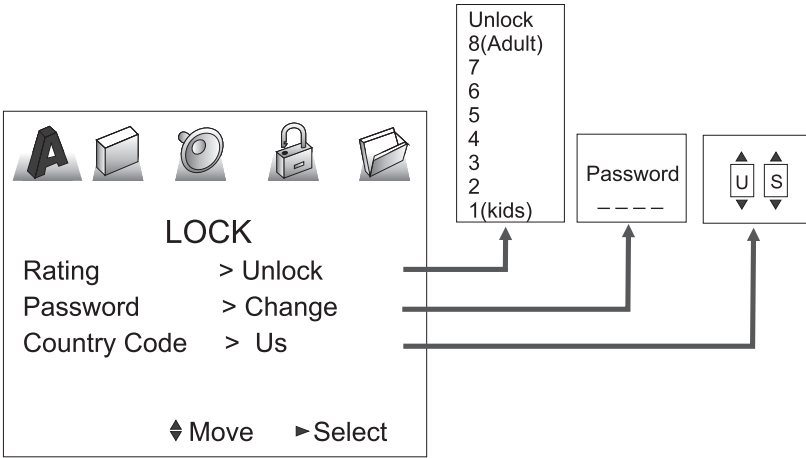


--16:9 WIDE: Select when a 16:9 wide TV is connected.



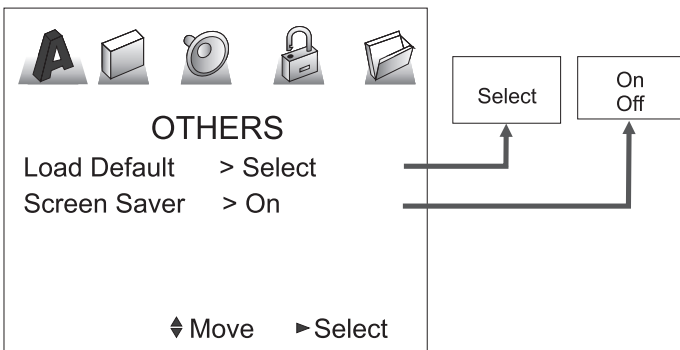
DRC : Dynamic Range Control.

# Default Settings (SET UP)



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.



# Installation and connections

Before installing or connecting the unit, please read the following and pages 1, 2, 3, 4 Of this manual thoroughly for proper use.

## WARNING

### **DO NOT DISASSEMBLE OR ALTER**

Doing so may result in an accident, fire or electric shock.

### **KEEP SMALL OBJECTS SUCH AS BATTERY OUT OF THE REACH OF CHILDREN.**

Swallowing them may result in serious injury. If swallowed, consult a physician immediately.

### **USE THE CORRECT AMPERE RATING WHEN REPLACE FUSES.**

Failure to do so may result in fire or electric shock.

### **USE ONLY IN CARS WITH A 12 VOLT NEGATIVE GROUND**

(Check with professional mobile video installer, if you are not sure.) Failure to do so may result in fire, etc.

### **BEFORE WIRING, DISCONNECT THE CABLE FROM THE NEGATIVE BATTERY TERMINAL.**

Failure to do so may result in electric shock or injury due to electrical shorts.

### **DO NOT SPLICE INTO ELECTRICAL CABLES.**

Never cut away cable insulation to supply power to other equipment. Doing so will exceed the current carrying capacity of the wire and result in fire or electric shock.

### **DO NO ALLOW CABLES TO BECOME ENTANGLED IN SURROUNDING OBJECTS.**

Never cut away cable insulation to supply power to other equipment. Doing so will exceed the current carrying capacity of the wire and result in fire or electric shock.

### **DO NO ALLOW CABLES TO BECOME ENTANGLED IN SURROUNDING OBJECTS.**

Arrange wiring and cables in compliance with the manual to prevent obstructions when driving. Cables or wiring that obstruct or hang up on places such as the steering wheel, gear lever, brake pedals, etc. can be extremely hazardous.

### **DO NOT DAMAGE PIPE OR WIRING WHEN DRILLING HOLES.**

When drilling holes in the chassis for installation, take precautions so as not to contact, damage or obstruct pipes, fuel lines, tanks or electrical wiring. Failure to take such precautions may result in fire.

### **MAKE THE CORRECT CONNECTIONS.**

Failure to make the proper connections may result in fire or product damage.

### **DO NOT USE BOLTS OR NUTS IN THE BRAKE OR STEERING SYSTEMS TO MAKE GROUND CONNECTIONS.**

Bolts or nuts used for the brake or steering systems (or any other safety-related system), or tanks should NEVER be used for installations or ground connections. Using such parts could disable control the vehicle and cause fire etc.

### **DO NOT BLOCK VENTS OR RADIATOR PANELS.**

Doing so may cause heat or build up inside and may result in fire.

## Caution

### **USE SPECIFIED ACCESSORY PARTS AND INSTALL THEM SECURELY.**

Be sure to use only the specified accessory parts. Use of other then designated parts may damage this unit internally or may not securely install the unit in place. This may cause parts to become loose resulting in hazards or product failure.

### **DO NOT INSTALL IN LOCATIONS WITH HIGH MOISTURE OR DUST.**

Avoid installing the unit in locations with high incidence of moisture or dust. Moisture or dust that penetrates into this unit may result in product failure.

### **HAVE THE WIRING AND INSTALLATION DONE BY EXPERTS.**

The wiring and installation of this unit requires special technical skill and experience. To ensure safety, always contact the professional mobile video installer to have the work done.

### **ARRANGE THE WIRING SO IT IS NOT CRIMPED OR PINCHED BY A SHARP METAL EDGE.**

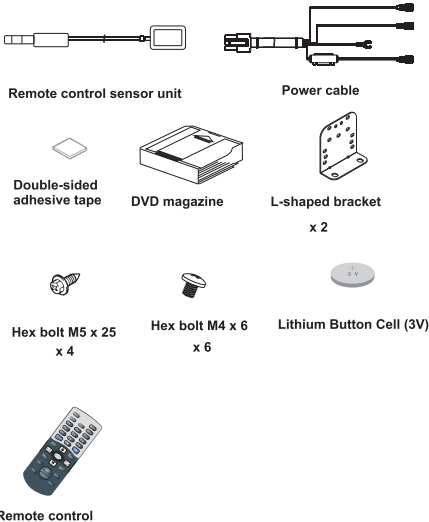
Route the cables and wiring away from moving parts (like seat rails) or sharp or pointed edges. This will prevent crimping and damage to the wiring. If wiring passes through a hole in metal, use a rubber grommet to prevent the wires insulation from being cut by the metal edge of the hole.

## Precautions

- Be sure to disconnect the cable from the (-) battery post before installing this unit. This will reduce any chance of damage to the unit in case of a short-circuit.
- Be sure to connect the color coded leads according to the diagram. Incorrect connections may cause the unit to malfunction or damage the vehicle's electrical system.
- When making connections to the car's electrical system, be aware of the factory installed components (e.g. On-board computer). Do not tap into these leads to provide power for this unit. When connecting the unit to fuse box, make sure the fuse for the intended circuit of the unit has the appropriate amperage. Failure to do so may result in damage to the unit and/or the vehicle.

## Preparation

- 1 Park the vehicle in a flat, safe place. Apply the parking brake, then remove the ignition key.
- 2 Check the included parts and organize the tools.



- 3 Disconnect the battery's minus terminal.

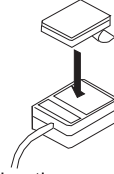
## Mounting

Mounting the remote control sensor unit

### NOTES

- When using a changer controller with a remote control sensor, the external sensor of the changer is not used.
- When the changer is shipped with its controller, the external sensor of the changer is not provided at the time.
- When mounting the unit with double-sided adhesive tape, make sure the mounting surface is dry and free from dirt or grease.

Press the double-sided adhesive tape onto the back of the remote control sensor unit.



Before completing the sensor mounting, make sure the location selected is within the operating range of the remote control. Peel off the backing of the adhesive tape and press the sensor onto the selected mounting location.

## Installation

### Caution

Be careful that the vehicle's cords do not touch the unit. If the cords are in contact with the unit, their sheaths may be damaged due to vibrations generated while the vehicle is running, resulting in short-circuit. Leave enough space when routing wires to prevent contact between the vehicle's wires and the unit.

### Notes

To prevent external noise from entering the audio system.

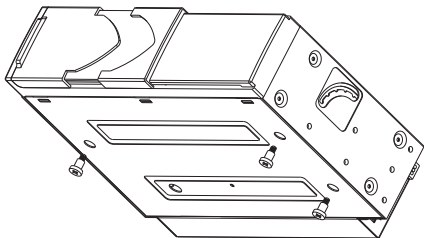
Locate the unit and route the leads at least 10 cm away from the car harness.

Keep the battery power leads as far away from other leads as possible.

Connect the ground lead securely to a bare metal spot (remove any paint, dirt or grease if necessary) of the car chassis.

### ① Remove the shipping keys.

Three keys are mounted to the changer's bottom panel to protect the product during shipment. Be sure to remove these keys before installing the unit. So as not to lose the keys, store them and cover the key holes with the included dust-prevention seals.



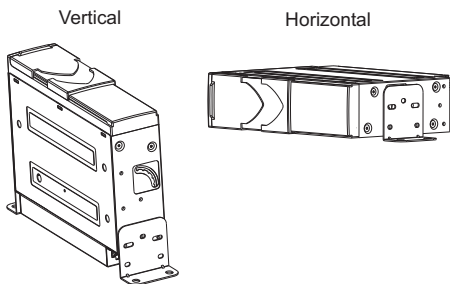
#### NOTES

The eject operation cannot be performed if the keys are mounted when the power is turned on. Turn the power off, then remove the keys.

### ② Install the L-shaped bracket.

- 1 Determine the position and angle installation.
- 2 Referring to step ③, change the position of the springs according to the angle of installation.
- 3 Install the L-shaped bracket according to the angle of installation. Fasten it in place using the Hex bolts(M5x6)

Example of installation using attached L-shaped bracket.



### ③ Change the position of the springs.

With this product, the positions of the built-in anti-vibration springs must be changed according to the angle of installation. The product will not provide the regular resistance to vibration if the anti-vibration springs are not in the correct positions or if the left and right springs are in different positions.

The anti-vibration springs can be placed at "H" or "V" angle.

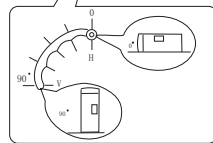
The springs are set to the "H" angle upon shipment from the factory. To change this angle, follow the instructions given below.

1. Change the position of the springs using a finger.



2. Stick on the left and right side surface cover labels.

Be sure to apply the cover labels after setting the position of the springs so as to protect the interior of the product from dust or dirt which may cause malfunction.

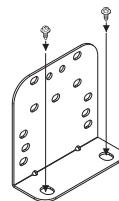


3. Check the position of the springs. Make a final check of the position of the springs using the five small holes in the left and right side surface cover labels.

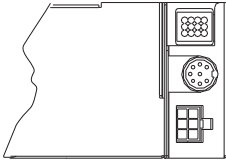
#### NOTES

To prevent external noise from entering the audio system.

- Don't connect the ground of the changer to the car chassis. Please connect the changer to the vehicle with the L-shaped bracket, hex bolts, adhesive tape and insulating pad like the figure shows.
- Peel off the adhesive tapes and press the tape onto the bottom of L-shaped bracket.



# Connections



- ➔ AV WIRE
- ➔ IP BUS
- ➔ POWER CABLE

## AV WIRE

### Audio out

This terminal is used to audio channels output(R-R,R-L,F-R,F-L).

### Video output/ Coaxial Connector

This connectors of VIDEO1 and VIDEO2 are used in combination with the video inputs of another product(AV head unit or TV monitor). This connector of COAXIAL is used to connect coaxial type digital audio input.

### Audio/Video inputs Connector(AUX)

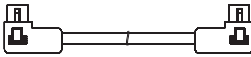
This connectors of Audio and Video are used in combination with the audio/video outputs of another product.

### Remote Control Sensor Connector(supplied for Stand Alone only)

When using the STAND ALONE mode, Connect this connector to the remote control sensor unit. When using the head unit, the remote control sensor of the head unit can be used.

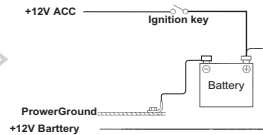
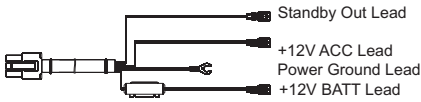


## IP BUS WIRE



When using the head unit, connect this connector to the head unit by cable.

## POWER CABLE



### Standby Out Lead

This lead is used in combination with the other product(like Amplifier) with a remote control input lead.

### +12V ACC Lead

Connect this lead to an open terminal on the vehicle's fuse box or another unused power source which provides(+12V) only when the ignition is turned on or in the accessory position.

### +12V Battery Lead

Connect this lead to the positive(+)(12V) post of the vehicle's battery.

### Power Ground Lead

Connect this lead to a good chassis ground on the vehicle. Make sure the connection is made to bare metal and is securely fastened .

## Others

### 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.

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 turn off automatically if the battery is weak.
	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 Output of the unit(see SET UP).
No sound	Select the wrong Audio Out	According to the connection, set right Audio out.

# Others

## Specifications

<b>Audio</b>	Audio output(analog): Audio output(coaxial): Signal-to-noise ratio: Dynamic range: Distortion:	$2 \pm 0.2V$ 100k $\Omega$ 0.5V 75 $\Omega$ more than 90dB more than 85dB less than 0.1%
<b>Video</b>	Video output: Resolution:	$1 \pm 0.2V$ 75 $\Omega$ more than 500 line
<b>Power</b>	Power requirement: Power consumption:	12 <sup>+20%</sup> <sub>-10%</sub> V DC less than 25W
<b>General</b>	Dimensions(approx.):  Weight:  Normal operating temperature range:	255x65x198mm (w/h/d) incl. Projecting parts 2.5Kg -10°C(+14°F) TO+70° C(+158° 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>		

## Operating from the head unit

The changer can also be operated from the head unit.

Refer to the manual of the head unit.

Note that some of the functions can not be operated from the changer.

Make sure to Disconnect the battery's minus terminal while connecting the changer to the head unit.