

## 7" LCD TV WITH AM/FM STEREO RADIO



MODEL:SV7TV

**Owner's Manual** 

THE USER'S MANUAL OR INSTRUCTION MANUAL FOR AN INTENTIONAL OR UNINTENTIONAL RADIATOR SHALL CAUTION THE USER THAT CHANGES OR MODIFICATIONS DOES NOT EXPRESSLY APPROVED BY THE PARTY RESPONSIBLE FOR COMPLIANCE COULD VOID THE USER'S AUTHORITY TO OPERATE THE EQUIPMENT.

## Contents

Thank you for purchasing this product.

- \* Please read this owner's manual carefully for a through understanding of how the monitor works before connecting, operating or adjusting this product.
- \* Please keep this manual in a handy place for future use.

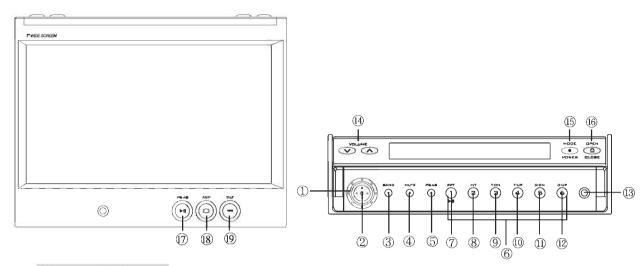
Precautions ·····1
The Monitor Operations 2
The Remote Control Operations 3~4
Basic Operations ······5~7
System Menu Settings ······8~9
Radio Operations ·····10~11
TV Operations ·····12
CD Changer Operations ······13~14
DVD Changer Operations15
Navigation Operations16
Rear View Camera Operations ······17
Troubleshooting Guide18
Cautions19
Installation ——————————————20
Wire Connection21
Connection for AV Equipments22
Specifications23

## **MARNING**

For your safety, the driver should not watch the TV or operate the controls while driving. Please note that watching and operating the TV while driving are prohibited by law in some countries. Also keep the volume to a level at which external sounds can be heard while driving.

- 1. TV broadcast reception
  - When receiving the TV broadcasts, the strength of the signals changes since the car is moving, so in some cases it may not be possible to receive clear pictures.
- \* TV signals are strongly linear, so reception is affected by buildings, mountains and other obstacles.
- \* Such external factors such as electric train lines, a high voltage lines, and signal devices may disturb the picture or cause noise.
- \* If the reception is poor, switch to a station with good reception.
- 2. When the temperature of the unit falls such as during winter, the monitor screen will become darker than usual. Normal brightness will return after using the monitor for a while.
- 3. This unit uses a precision mechanism. Even in the event that trouble arises, never open the case, disassemble the unit, or lubricate the rotating parts. Consult your supplier.
- 4. Any changes or modifications to this product not approved by the supplier could void the warranty and will violate FCC approval.

## The Monitor Operations



#### Names of the Buttons

- 1. JOG [▲]: ①Use to automatically seek radio/TV station upward on radio/TV mode.
  - ②Use to select the items when the menu appears on the monitor.
  - JOG [▼]: ①Use to automatically seek radio/TV station downward on radio/TV mode.
    ②Use to select the items when the menu appears on the monitor.
  - JOG [▶]: ①Use to manually tune radio/TV station upward on radio/TV mode.
    - ②Use to select the items when the menu appears on the monitor.
  - JOG [◄]: ①Use to manually tune radio/TV station downward on radio/TV mode. ②Use to select the items when the menu appears on the monitor.
- 2. MENU: Use to show or erase the menu.
- 3. BAND: Use to select radio/TV band.
- 4. MUTE: Use to mute on/off.
- 5. PS/AS
  - PS (Preset Scan): Press the button shortly to prescan the radio stations in each preset buttons on radio mode.
  - AS (Auto Store): Press the button more then 2 seconds to autostore the radio/TV stations on radio/TV mode.
  - ▶ II (Play/Pause): Press to play or pause the DVD disc.
- 6. PRESET(1,2,3,4,5,6 Button): Use to store the radio station in each button.
- 7. RPT (Repeat): Use to repeat the track or the disc on CDC mode.
- 8. INT (Intro Scan): Use to sacn each track on CDC mode.
- 9. T-DN (Track Down): Use to search the track downward on CDC mode.
- 10. T-UP (Track Up): Use to search the track upward.
- 11. D-DN (Disc Down): Use to select the disc downward in the CD changer.
- 12. D-UP (Disc Up): Use to select the disc downward in the CD changer.
- 13. SENSOR: Remote Control infrared sensor.
- 14. VOLUME UP/DOWN: Use to adjust the sound volume.
- 15. MODE/POWER
  - MODE: Press the button shortly to select the mode.
  - POWER: Press the button more than 2 seconds to turn the power on/off.
- 16. OPEN/CLOSE: Use to open or close the monitor.
- 17. PS/AS (Preset Scan/Auto Store): the same function with the button 5: PS/AS.
- 18. ASPECT: Press the button to switch the picture mode.
- 19. TILT: Press to adjust the tilt position.

#### Notes

- \* Function of the button 5 [▶II],7,8,9,10.11 and 12 are only for our 6 disc CD changer control.
- \* Function of the button 5 [►II] also works only for our 10 disc DVD changer control.
- \* The function of the button 5.PS/AS is the same with the button 17.PS/AS function.

## The Remote Control Operations

## Names of the Buttons

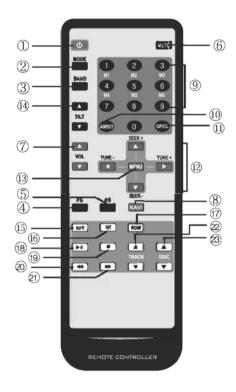
- 1. POWER ON/OFF
- 2. MODE
- 3. BAND
- 4. PS (Preset Scan)
- 5. AS (Auto Store)
- 6. MUTE
- 7. VOLUME UP/DOWN
- 8. NAVIGATION
- 9. PRESET
- 10. ASPECT
- 11. OPEN/CLOSE
- 12.



- 13. MENU
- 14. TILT UP/DOWN
- 15. REPEAT
- 16. INTRO SCAN
- 17. RANDOM
- 18. PLAY/PAUSE
- 19. STOP
- 20. FAST REWIND
- 21. FAST FORWARD
- 22. TRACK UP/DOWN
- 23. DISC UP/DOWN



- $\star$  Button 15~23 works only for our 6 disc CD changer.
- \* Button 18. PLAY/PAUSE works only for our 10 disc DVD changer.



## The Functions of the Buttons

The functions of the buttons on the remote control are same with the one on the unit.

THE UNIT

1. JOG



- 2. MENU
- 3. BAND
- 4. MUTE
- 5. PS/AS

PS (PRESET SCAN) AS (AUTO STORE)

- 6. PRESET
- 7. RPT (REPEAT)
- 8. INT (INTRO SCAN)
- 9. T-DN (TRACK DOWN)
- 10. T-UP (TRACK UP)
- 11. D-DN (DISK DOWN):
- 12. D-UP (DISK UP)
- 13. SENSOR
- 14. VOLUME UP/DOWN
- 15. MODE/POWER

MODE POWER

- 16. OPEN/CLOSE
- 17. PS/AS

PS (PRESET SCAN) AS (AUTO STORE)

- 18. ASPECT
- 19. TILT

NONE

NONE

NONE

NONE

NONE

THE REMOTE CONTROL

12.



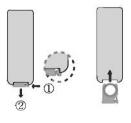
- 13. MENU
- 3. BAND
- 6. MUTE
- 4. PS (PRESET SCAN)
- 5. AS (AUTO STORE)
- 18. PLAY/PAUSE
- 9. PRESET
- 15. REPEAT
- **16. INTRO**
- 22. TRACK DOWN
- 22. TRACK\_UP
- 23. DISC DOWN
- 23. DISC UP
- 7. VOLUME UP/DOWN
- 2. MODE
- 1. POWER
- 11.OPEN/CLOSE
- 4. PS (PRESET SCAN)
- 5. AS (AUTO STORE)
- 10. ASPECT
- 14. TILT UP/DOWN
  - 8. NAVIGATION
- 17. RANDOM
- 19. STOP
- 20. FAST REWIND
- 21. FAST FORWARD

## Replacing the battery for the remote control

- 1. Slide and hold the hooker (1) in the figure) of the battery cover to in the direction of the arrow.
- Slide the battery cover downward holding the hooker in the direction of the arrow.
- 3. Insert the battery (CR2025 3V) with  $\oplus$  face up.
- 4. Close the battery cover.

#### Notes

- \* Do not use metal tweezers to hold the battery to prevent short-circuit.
- \* Do not dispose of batteries into fire or flames.
- \* Dispose of spent batteries in compliance with all applicable.



## Turning On the Power

Press the [MODE/POWER] button shortly to switch on the unit.

## Notes

When the unit is off, pressing the [OPEN/CLOSE] button will turn on the power and the monitor will automatically open.

## Turning Off the Power

Press the [MODE/POWER] button for more than 2 seconds again to switch off the unit.

## Notes

- \* When the monitor is open, pressing the [OPEN/CLOSE] button will turn off the power and the monitor will automatically close.
- \* When the monitor is open, pressing the [MODE/POWER] button for more than 2 seconds will turn off the power. But the monitor will not close. Press the [OPEN/CLOSE] button to close the monitor.
- \* When the monitor is open, pulling out the car key (ACC OFF) will turn off the power and close monitor automatically.

## Selecting a Mode

- 1. Press the [MODE/POWER] button shortly to change the mode of operation.
- 2. Each time you press that button, the mode changes in the following order.

## Notes

\* In case the CD /DVD changer and a rear view camera is not connected to this unit,

Those modes do not appear on the monitor and the mode changes in the following order.

#### Adjusting the Volume

Press the Volume [▼] or [▲] button on any mode to adjust the volume.

The volume level indicated in the monitor from 0 (minimum) to 30 (maximum).

### 

While driving, keep the volume level at which external sounds can be heard.

## Mute On/Off

Each time the [MUTE] button is pressed, mute is turned on and off. "MUTE" is appears on the sub LCD and the monitor when mute is turned on.

## Opening the Monitor

Press the [OPEN/CLOSE] button. The monitor comes out and stand up automatically.

## Notes

\* When the unit is off, pressing the [OPEN/CLOSE] button will turn on the power and the monitor will automatically open.

## 

- \* If the monitor touches an obstacle while it is opening or closing, the monitor will stop moving or close. Close the monitor after removing the obstacle.
- \* Do not touch the monitor when it is opening or closing. Doing so may damage the unit.
- \* To prevent the battery from going dead, operate this unit with the engine running.

## Closing the Monitor

Press the [OPEN/CLOSE] button again to house the monitor.

### Notes

- \* The monitor can be closed only when it is positioned parallel with the front of unit.

  Close the monitor after setting it parallel with the front of unit manually by holding both left and right side of the monitor with hands.
- \* When a picture displays on the monitor, pressing the [OPEN/CLOSE] button will close the monitor. But the sound can still be heard. If you want to turn off the sound, press the [MODE/POWER] button more than 2 seconds to turn off the power and the sound.

#### Adjusting Tilt Angle

Press the [TILT] button to adjust vertical angle of the monitor between 40 and 100 degree.

Each time the [TILT] button is pressed, the tilt angle is adjusted in 1 step, total 7 steps with 6 positions. The adjusted angle is stored in memory.

## Adjusting the Slide Position

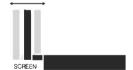
- 1. Press the [TILT] button for more than 2 seconds.
- 2. Each time the [TILT] button is pressed for more than 2 seconds, the monitor slides forward or backward 1 step, total 3 steps with 2 positions. The adjusted position is stored in memory.

### Adjusting the Lateral Viewing Angle

The monitor's left/right viewing angle can be adjusted manually as the picture on the right.

Adjust the angle manually by holding both left and right side of the monitor **with both hands** as the picture.







## Adjusting the Picture Mode (Aspect)

Each time the [ASPECT] button is pressed, the picture mode changes in following order.

FULL -> WIDE -> NORMAL -> FULL

#### Full Mode

The whole image elongates horizontally.

## Wide Mode

The image at right and left ends in a display elongates horizontally.

### Normal Mode

The screen shows a vertical black area at both right and left ends.

In case of normal TV broadcasting (4:3), the image can be shown without being cut or deformed.

## Resetting

- 1. In case of operational errors, press the [RESET] button with a pointed object to restart the operation when the power is on.
- 2. Pressing the [RESET] switch will turn off the power. Press the [MODE/POWER] button to turn power on.
- 3. Pressing the [RESET] button will cause a loss of saved memory. Readjust and reset the system after using RESET.

## Notes

\* In case reset does not solve the problem, consult your dealer.

## System Menu Settings

- 1. Press the center of the [JOG] button on any mode to appear the menu on the monitor.
- 2. Push the JOG [◀] or [▶] button to select one of the following menu.

#### **PICTURE**

**AUDIO** 

SET UP

- 3. Push the JOG [▲] or [▼] to select the Items.
- 4. Push the JOG [▶] or [◄] button to adjust the selected item.
- 5. Press the center of the [JOG] button again to exit the menu.

## Notes

Push the JOG [▲], [▼], [◀] or [▶] button within 10 seconds or the menu will disappear.

## [SET UP MENU]

## Turning Clock On/Off

Select [CLOCK DISP] to select clock on/off.

Push the JOG [▶] or [◄] button to select [ON] or [OFF].

When [ON] is selected, clock displays on both the monitor and sub LCD.

#### Notes

- \* On the radio mode, clock always displays on the monitor even though [OFF] is selected.
- \* Clock on the sub LCD displays only when the power of the unit is off and ACC on.

### Clock Setting

- 1. Select [CLOCK ADJ] to set clock. The monitor shows "CLOCK SETTING".
- 2. Push the JOG [▲] or [▼] button to adjust hour and minute.
- 3. Push the JOG [◀] or [▶] button to adjust hour and minute.
- 4. Push the JOG [▲] or [▼] button to select "OK".
- 5. Push the JOG [◀] or [▶] button to store the clock adjusted.

#### Connecting a Rear View Camera

In case a Rear View Camera is connected to this unit, select [RVC] and [ON].

For more information, see "REAR VIEW CAMERA OPERATIONS" in page 17.

#### Connecting the CD Changer

In case our 6 CD changer is connected to this unit, select [CDC] and [CD 6-12].

For more information, see "CD CHANGER OPERATIONS" in page 13.

#### Connecting the DVD Changer

In case our 10 DVD changer is connected to this unit, select [CDC] and [DVD 10].

For more information, see "DVD CHANGER OPERATIONS" in page 15.

#### Connecting a Navigation System

In case a navigation unit is connected to this unit, select [RVC] and [ON].

For more information, see "NAVIGATION OPERATIONS" in page 16.

#### Selecting AM(MW) Reception Area

Select [AREA] and country name to meet AM frequency step for your area.

For more information, see "Selecting area for AM(MW) Reception" in page 10.

#### Selecting Color System

The color system of this unit is set NTSC or PAL. The color system can be switched for your TV / Video source.

- 1. Select [TV SYS] to switch color system.
- 2. Push the JOG [◀] or [▶] button to select [NTSC] or [PAL].

#### Notes

In case the monitor displays in black & white color, select the color system again for your video source.

## [PICTURE MENU]

## Adjusting the Backlight Brightness of the LCD Monitor

- 1. Select [DIMMER] to choose the backlight brightness of the color LCD display.
- 2. Choose from the following options.

AUTO: Automatically adjusted according to the surrounding brightness.

USER: To adjust according to your given value.

STD: To apply standard value.

DAY: Recommended at daytime.

NIGHT: Recommended at nighttime.

## Adjusting the Brightness of Picture

Select [BRIGHT] to adjust the brightness of picture.

## Adjusting the Contrast of Picture

Select [CONTRAST] to adjust the contrast of picture.

## Adjusting the Color Density of Picture

Select [COLOR] to adjust the color density of picture.

## Adjusting the Tint of Picture

Select [TINT] to adjust the tint of picture.

## [AUDIO MENU]

#### Adjusting the Bass Level

Select [BASS] to adjust the bass level.

Each time the JOG [▶] is pushed, the bass level is increased.

Each time the JOG [◀] is pushed, the bass level is decreased.

### Adjusting the Treble Level

Select [TREBLE] to adjust the treble level.

Each time the JOG [▶] is pushed, the treble level is increased.

Each time the JOG [◀] is pushed, the treble level is decreased.

## Adjusting the Balance Level

Select [BALANCE] to adjust the balance level.

Each time the JOG [▶] is pushed, the right channel is emphasized.

Each time the JOG [◀] is pushed, the left channel is emphasized.

#### Adjusting the Fader Level

Select [FADER] to adjust the fader level.

Each time the JOG [▶] is pushed, the front channel is emphasized.

Each time the JOG [◀] is pushed, the rear channel is emphasized.

## Adjusting the Subwoofer Volume

When subwoofer amplifier is connected to subwoofer line out, the subwoofer volume can be adjusted.

Select [SUBWOOFER] to adjust the subwoofer volume level.

Each time the JOG [▶] is pushed, the subwoofer volume is increased.

Each time the JOG  $[ \blacktriangleleft ]$  is pushed, the subwoofer volume is decreased.

Press the [MODE/POWER] button to turn the power on or press the [OPEN/CLOSE] button to open the monitor and turn on the power.

## Selecting the Radio Band

- Press the [MODE/POWER] button repeatedly until the radio mode is selected.
  Both the sub LCD and the monitor displays information on the radio station you
  tuned in.
- 2. Press the [BAND] button to select the radio band. Each time the [BAND] button is pressed, the radio band changes in following order.

## Selecting Area for the AM(MW) reception

This unit is initially set to AM frequency step for your country. In case this is not set for your country, switch it by following steps.

- 1. Press the center of the [JOG] button to appear the menu on the monitor.
- 2. Push the JOG [▶] button to select "SET UP" and the JOG [▼] button to select "AREA".
- 3. Push the JOG [◀] or [▶] button to select the country.

USA: for USA or South America

KOREA: for Korea only

EU : for the countries except USA, South America and Korea

## Seek Tuning

Push the JOG [▲] or [▼] button to automatically seek a station.

Tuning automatically stops at a broadcasting frequency.

## Manual Tuning

Push the JOG [◀] or [▶] button repeatedly until the desired station is selected.

The frequency changes one step at a time.

## Manual Memory

- 1. Tune in the station to be preset with seek tuning or manual tuning.
- 2. Press one of the [PRESET] buttons for more than 2 seconds at which you want to store the selected station.
- 3. The 1-6 [PRESET] buttons can store 6 stations in each band.

FM1: 6, FM2: 6, FM3: 6, AM1: 6, AM2: 6, Total: 30 stations

## Auto Memory

- 1. Press the [BAND] button to select the band for the stations to be preset.
- 2. Press the [PS/AS] button for more than 2 seconds. Stations are automatically stored in the [PRESET] buttons in order of signal strength.
- 3. The 1-6 [PRESET] buttons can store 6 stations in each band.

## Preset Scan

This function is useful when searching the stations stored in each [PRESET] buttons.

- 1. Press the [PS/AS] button shortly. The unit starts scanning each station for 5 seconds sequentially.
- 2. Press the [PS/AS] button shortly again to stop scanning and retain the station currently selected.

## Recalling the Preset Station

- 1. Press the [BAND] button to select the desired band.
- 2. Press one of the [PRESET] button which is preset the desired station.

The TV tuner (Optional) with NTSC system is built in this unit.

## Notes

\* For your safety, this unit turns off the picture when the car is moving. Only the audio can be heard. The picture can only be watched when the parking break is applied. Stop the vehicle in a safe location and apply the parking break to watch the picture.

#### Watching TV

- 1. Press the [MODE] button repeatedly until "TV" mode is selected.
- 2. Press the [BAND] button to select the desired band.
- 3. Push the JOG [▲] or [▼] button to tune in the desired TV station stored, or Press the same [PRESET] number buttons with the TV channel number to be selected.

#### Auto Store

- 1. Press the [MODE] button repeatedly until "TV" mode is selected.
- Press the [BAND] button to select the desired band.
   Each time the [BAND] button is pressed, the TV band switches in following order
   TV1 -> TV2 -> TV3 -> TV1
- 3. Press the center of the [JOG] button to appear the TV mode menu on the monitor.
- 4. Push the JOG [▼] button to select "AUTO STORE".
- 5. Push the JOG [◄] or [▶] button to auto scan and store TV channels. All receivable TV channels are automatically stored in each TV band. The 6 stations with good reception are stored in the [PRESET] buttons on the unit in sequence in each TV band.
- Push the JOG [▲] or [▼] button to recall the desired TV channel auto stored, or Press one of the [PRESET] buttons at which the channels with good reception is preset.

#### Notes

- \* You can also automatically store TV stations by just pressing the [PS/AS] button for more than 2 seconds on TV mode.
- \* The [PRESET M1-M6] buttons on the remote control don't store the TV stations.

## Manual Tuning and Store

- 1. Press the [MODE] button repeatedly until "TV" mode is selected.
- 2. Press the [BAND] button to select the desired band.
- 3. Press the center of the [JOG] button to appear the TV mode menu on the monitor.
- 4. Push the JOG [▼] button to select "CH".
- Push the JOG [◀] or [▶] button to select the desired TV station to be stored.
- 6. Push the JOG [▼] button to select "SKIP-ADD".
- 7. Push the [JOG][◀] or [▶] button to select "ADDED". The selected TV station is stored.

#### Skipping the TV station stored

- 1. Select the desired TV station to be skipped by manual tuning.
- 2. Push the JOG [▼] button to select "SKIP-ADD".
- 3. Push the JOG [◀] or [▶] button to select "SKIPPED". The selected TV station is skipped in memory.

## **CD Changer Operations**

In case our 6 CD changer is connected to this unit, The CDC control menu is automatically displayed on the monitor when CDC mode is selected.

#### Notes

Only when our 6 CD changer is connected to this unit, all the functions can work as shown.

## Setting the 6 Disc CD Changer

- 1. Connect the 8 pin DIN cable in the CD changer gift box to the DIN jack of the unit.
- Press the [MODE] button to select CDC mode. The CDC control menu is automatically displayed on the monitor.
- 3. Push the JOG [▶] button to select "SET UP" and the JOG [▼] button to select "CHANGER".
- 4. Push the JOG [◀] or [▶] button to select "CDC 6-12".
- 5. Push the JOG [▲] and [◄] button to select "CDC". The monitor shows CDC control menu again.
- 6. Push the JOG [▲] or [▼] button to select the item.
- 7. Push the JOG [◀] or [▶] button to select the level of the selected item.

## Operating with the 6 Disc CD Changer

STATUS: This shows the current CD status (Disc check, Seek, Etc).

TIME: This shows playing time of the disc being played.

## Selecting a Disc

- Push the JOG [▲] or [▼] button to select "DISC".
- 2. Push the JOG [◀] or [▶] button to select the disc number.

## Notes

You can select the disc by just pressing the [DISC UP/DOWN] button on the unit or on the remote control.

#### Selecting a Track

- 1. Push the JOG [▲] or [▼] button to select "TRACK".
- 2. Push the JOG [◀] or [▶] button to select the track number of the current disc.

#### Notes

You can select the track by just pressing the [TRACK UP/DOWN] button on the unit or on the remote control.

#### Repeat Play

- Push the JOG [▲] or [▼] button to select "REPEAT".
- 2. Push the JOG [◀] or [▶] button to select "DISC" or "TRACK" or "OFF".

DISC : All the track on the current disc plays repeatedly.

TRACK: The selected track on the current disc plays repeatedly.

OFF: REPEAT will be off.

#### Notes

You can repeat the track or the disc by just pressing the [REPEAT] button on the unit or on the remote control. Each time the [REPEAT] button is pressed, the function works as TRACK -> ALL -> OFF -> TRACK.

## Random Play

- 1. Push the JOG [▲] or [▼] button to select "RANDOM".
- 2. Push the JOG [◀] or [▶] button to select "ON" or "OFF".

ON: All the tracks on the current disc will be played in random order.

OFF: Random will be off.

### Notes

You can play the track in random order by just pressing the [RANDOM] button on the remote control.

## Track Scan Play

- 1. Push the JOG [▲] or [▼] button to select "INTRO".
- 2. Push the JOG [◀] or [▶] button to select "ON" or "OFF".

ON: The first 10 seconds of each track of the selected disc plays in succession.

OFF: Intro scan will be off.

#### Notes

You can scan the track by just pressing the [INTRO] button on the unit or on the remote control

## Adjusting the Volume

- 1. Push the JOG [▲] or [▼] button to select "VOLUME".
- 2. Push the JOG [◀] or [▶] button to adjust the level of the volume.

## Pausing Disc Play

Press the [▶ || ] button to pause playback. Press the button again to resume playback.

## Stopping Disc Play

Press the [ ] button on the remote control.

## Fast-forward Play

Press the [▶▶] button on the remote control to search for next play.

## Fast-backward play

Press the [◀◀] button on the remote control to search for previous play.

## **DVD** Changer Operations

In case our 10 DVD changer is connected to this unit, The monitor shows only "DVDC" on the monitor when CDC mode is selected.

## Notes

Only when our 10 DVD changer is connected to this unit, all the functions can work as shown.

## Setting the 10 DVD Changer

- 1. Connect the 8 pin DIN cable to the DIN jack of the unit.
- 2. Connect the video output of the DVD changer only to the video input "V2 IN -VCD" of the unit.
- 3. Press the [MODE] button to select "CDC" mode. The monitor only shows "DVDC"
- 4. Press the center of the JOG button to appear the DVD mode menu on the monitor.
- 5. Push the JOG [▶] button to select "SET UP" and the JOG [▼] button to select "CHANGER"
- 6. Push the JOG [◀] or [▶] button to select "DVDC 10".
- 7. Press the center of the JOG button again to exit the DVD mode menu on the monitor.
- Press the [►II] button to play the DVD disc. Or use the remote control for our 10 disc DVD changer.

## Notes

- \* Be sure to use the remote control for our 10 disc DVD changer to control the DVD changer.
- \* The 10 disc DVD changer must be connected to the 8pin DIN jack of the unit only with the 8 pin DIN cable in our DVD changer gift box.
- \* The video output of DVD changer must be connected only to video input [V1 IN-VCD] of the unit.
- \* To control of the 10 disc DVD changer, see the owner's manual of the DVD changer.

## **Navigation Operations**

## Setting a Navigation System

- 1. Connect a NAVIGATION system only to AV1 or AV2 Input of the unit.
- 2. Press the [MODE] button to select AV1 or AV2 mode that the navigation system is connected.
- 3. Press the center of the [JOG] button to appear the AV mode menu on the monitor.
- 4. Push the JOG [▶] button to select "SET UP" and the JOG [▼] button to select "VIDEO SYS".
- 5. Push the JOG [◀] or [▶] button to select "NTSC".
- 6. Push the JOG [▼] button to select "NAVIGATION".
- 7. Push the JOG [◀] or [▶] button to select "ON".

## Watching the Picture of Navigation

Press the [NAVI] button on the remote control on any mode.

## Notes

- \* In case a navigation system is connected to AV1 or AV2 input, The Monitor shows to "NAVI" instead of AV1 or AV2.
- \* Do not select the AV mode with the [MODE] button which connected with the navigation system. Doing so shows the WARNING picture instead of the navigation picture.

## Rear View Camera Operations

## Setting a Rear View Camera

- 1. Connect the video output of a Rear View Camera only to video input [V1 IN-RVC] of the unit.
- 2. Press the [MODE] button to select "RVC" mode.
- 3. Press the center of the [JOG] button to appear the AV mode menu on the monitor.
- 4. Push the JOG [▶] button to select "SET UP" and the JOG [▼] button to select "RVC".
- 5. Push the JOG [◀] or [▶] button to select "ON".

## Watching a Picture of a Rear View Camera

Set the rear gear on any mode. The monitor shows the rear view camera picture.

## Notes

\* In case "RVC" mode is selected with the [MODE] button, the monitor does not show the rear view camera picture. The monitor shows only the "WARNING" picture.

# Troubleshooting Guide

What might appear to be malfunction in your unit may just be the result of slight misoperation or miswiring. Before calling service, first check the following table for possible problems.

Duniela la ca	Danaible Course	Onlocking
Problem	Possible Cause	Solution
The power does not turn on.	The fuse has blown.	After checking for short circuits in the wires, replace the fuse with one having the same rating.
	No ACC position on vehicle ignition.	Connect the same wire to the ignition as the battery wire.
Nothing happens when the buttons are pressed.	The computer chip in the unit is not functioning normally.	Press the reset button on the unit.
The monitor does not open / close.	The parking brake is not engaged.	For safety reasons, the monitor does not open while the vehicle is moving. Engaging the parking brake.
No television/video image appears.	The unit is not connected to the parking brake detection switch.	Make proper connections according to "wire connection".
	The parking brake is not engaged.	For safety reasons no television/video images are displayed while the vehicle is moving. Engaging the parking brake will cause images to be clisplayed.
Television/video image appears black - white.	The color system is set incorrectly.	Please switch to correct color system from menu.
The screen is dark.	The unit is a location where temperature is low.	If the temperature of the monitor drops, the screen may appear darker when power is first turned on due to the characteristics of a liquid crystal panel. Wait a while Normal brightness will return.
AM/FM radio reception is poor and/or there is noise.	The TV antenna and vehicle's radio antenna are to close.	Separate the two antennas as far as possible. Turn off the main unit.
	The car antenna is not extended.	Pull the antenna out all the way.
	The antenna control wire is not connected.	Connect the wire correctly, referring to the section on "connections".
No sound can be heard, or the volume is low.	Attenuator is turned on.	Turn off Attenuator.
	The fader or balance settings are set all the way to one side.	Reconnect the input/output wires or the wiring harness correctly.
	The input/output wires or wiring harness are connected in correctly.	Reconnect the input/output wires or the wiring harness correctly.
The sound quality is poor or distorted.	One of the speaker wires is being pinched by a screw in the car.	Reset the fader and/or balance settings.
	The speakers are not wired correctly.	Reconnect the speaker wires so that each output terminal is connected to a different speaker.

## Warning Screen

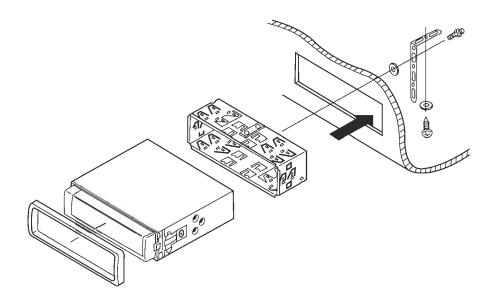
The monitor only shows the warning picture on TV mode when driving to prevent traffic accidents that may be caused while watching the screen. Only the audio can be heard. Watching and operating the TV while driving are prohibited by the law in some countries. Stop the car in a safe location and apply the parking break to watch the picture.

## 

- 1. When the inside of the car is very cold and the player is used soon after switching on the heater, moisture may form on the disc (DVD/CD/MD) or the optical parts of the player and proper playback may not be possible. If moisture forms on the disc (DVD/CD/MD), wipe it off with a soft cloth. If moisture forms on the optical parts of the player, do not use the player for about one hour. The condensation will disappear naturally allowing normal operation.
- 2. Driving on extremely bumpy roads which cause severe vibration may cause the sound to skip.
- 3. This unit uses a precision mechanism. Even in the event that trouble arises, never open the case, disassemble the unit, or lubricate the rotating parts.
- 4. TV broadcast reception
  When receiving the TV broadcasts, the strength of the signals changes since the car is moving, so in some cases it may not be possible to receive clear pictures.
- \* TV signals are strongly linear, so reception is affected by buildings, mountains and other obstacles.
- \* Such external factors such as electric train lines, a high voltage lines, and signal devices may disturb the picture or cause noise.
- \* If the reception is poor, switch to a station with good reception.
- 5. This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to consult the dealer or an experienced Radio/TV technician for help.

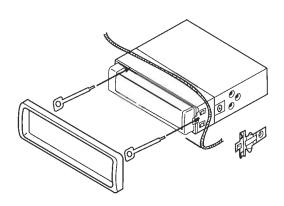
## Installing the Unit

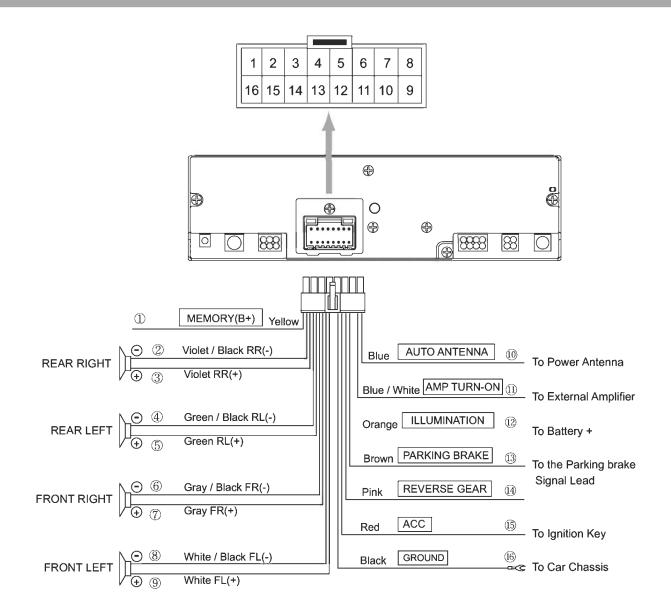
- 1. Place the universal mounting bracket (Half Sleeve) into the instrument panel and bend each stopper of the mounting bracket inward by a screwdriver.
- 2. Insert the unit into the mounting bracket until it locks after connecting the wires.
- 3. Mount the outer escutcheon so that all the hooks are looked.



## Removing the unit

- 1. Unfasten the hex nut when the rear of the unit has been secured with it.
- 2. Remove the outer escutcheon.
- 3. Insert the 2 keys as the figure between the spring and the mounting bracket, then pull the unit out.
- \* Keep the 2 keys in safe. You cannot remove the unit without it.

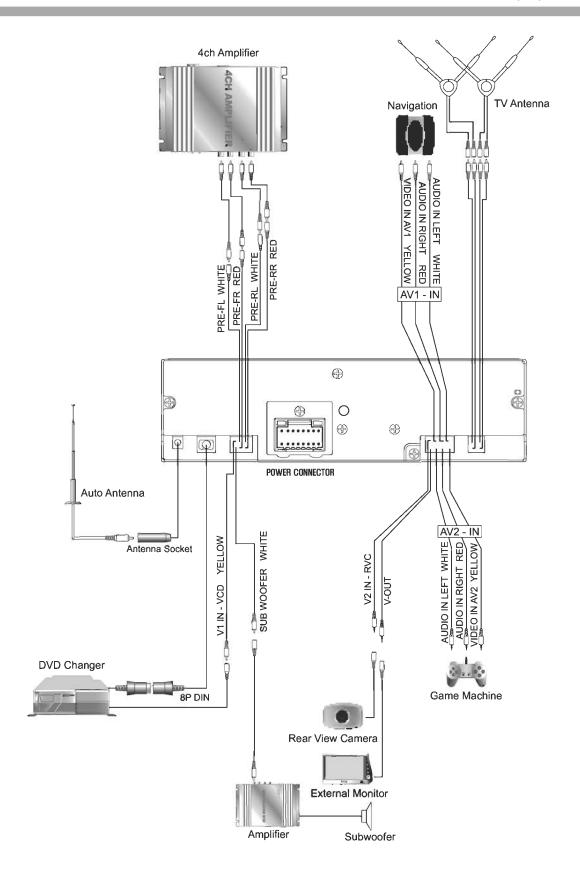




## Notes

- 1. Be sure that the PARKING SENSOR WIRE must be grounded or opened. If it is connected to ACC (B+). The unit can be damaged.
- 2. Do not ground the POWER ANTENNA wire. If it is grounded, the unit can be damaged.

# Connection for AV Equipments



The specifications are subject to change without notice.

### Monitor Unit

Operating voltage: 12V DC (11 to 15V)
Consumed current: Less than 3A

Operational temperature range: -10°C to +60°C

Dimension: 178(W) x 50(H) x 175(D)

Weight: 2.0kg

## Audio Section

Rated Output: 23W x 4ch (1KHz, 1%, 4 $\Omega$ ) Maximum output power: 45W x 4ch Compatible Speaker impedance: 4 $\Omega$  Pre-AMP output voltage: 4V Max Pre-AMP output impedance: 60 $\Omega$ 

#### Monitor Section

Picture size: 7 inch Wide (17.7cm)

15.4(W) x 87(H)mm

Display system: Transparent TFT LCD panel Number of pixels 336.960 pixels (480H x 234V)

Back lighting: Cold tube Video system: PAL or NTSC

## AV Input / Output Section

Video: 1Vp-p (75Ω) Audio: 500mVrms

## FM Stereo Radio Section

Frequency Range: U.S. Standard: 87.9 ~ 107.9 MHz

Outside U.S.: 87.5 ~ 108 MHz Usable sensitivity: 6dB (S/N=30dB)

Stereo separation: 29dB

S/N ratio: 50dB

#### AM Radio Section

Frequency range: U.S. Standard: 530~1710kHz

Outside U.S.: 531~1629kHz Usable sensitivity: 33dB (S/N=20dB)

Image rejection ratio: 50dB

#### TV tuner Section (Optional)

Color System: NTSC

Channel selection system: PLL frequency synthesizer system

TV system & Channel coverage: NTSC-M:(VHF)2-13ch / (UHF) 14-83ch