

# Thank you for purchasing the **RMD602**



# MP3/USB/SD/MMC Player, with FM/MW Tuner

Operating Instructions

# **Safety Precautions**

Thank you for purchasing this product. Please read through these operating instructions so you will know how to operate your model properly. After you have finished reading the instructions, keep this manual in a safe place for future reference.

Only connect the unit to a 12-volt power supply with negative grounding.



Never install this unit where the operation & condition for safety driving is restrained.



Never use the video display function in the front when driving to prevent the violation of laws & regulations and also to reduce the risk of traffic accident except using for rear view video camera.



To ensure safe driving, please adjust the volume to a safe & comfort level in case of emergency situations.

Never expose this unit, amplifier, and speakers to moisture or water for preventing electric sparks or fires.



Please don't change the fuse on the power cord without professional guidance, using improper fuse may cause damage to this unit or even cause fire.



Please power off this unit at once and send it back to the after-sales service center or the dealer/distributor you purchased from if one of the following symptoms is found:



- (a). No audio output;
- (b). No image output;
- (c). Water or other obstacle enters the unit:
- (d). Smoking;
- (e). Peculiar smell.

To provide a clear demonstration and an alternative for easy understanding of the operation of this unit, graphic illustration was used. However, this illustration is not necessary printed as the actual image found on the unit.

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# **Features**

#### WMA and MP3 Compatibility

It is possible to playback WMA and MP3 files.

#### About WMA

The unit can playback WMA data.

Windows Media and the Windows logo are trade marks or registered trademarks of Microsoft Corporation in the United States and/or other countries.

This unit may not operate correctly depending on the application used to encode WMA files.

#### About MP3

Supply of this product only conveys a license for private, non-commercial use and does not convey a license nor imply any right to use this product in any commercial (i.e.revenuegenerating) realtime broadcasting (terrestrial, satellite, cable and/or any other media), broad-casting/streaming via internet, intranets and/or other networks or in other electronic content distribution systems, such as payaudio or audio-on-dem and applications. An independent license for such use is required. For details, please visit http://www. mp3licensing.com.

# **Button Operation Explanations**

Some frequent operations

1) Move cursor







# Mote:

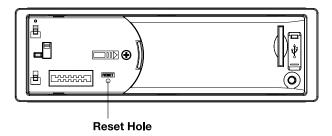
In Setting mode, the VOL knob has the same function as the ▲ / ▼ button to select setting items.

#### 2) Confirm



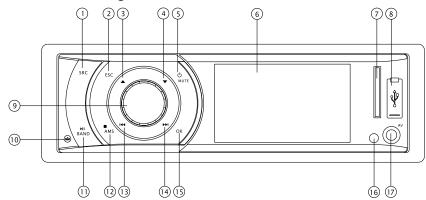


# Press the deput button to open the panel.



# **Panel Controls**

#### Power on/off: Press (1) to turn on/off the unit.

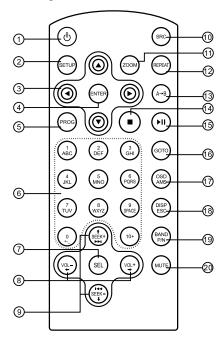


- 1. Short press to select playing mode:
  - Radio
  - USB (when USB inserted)
  - SD (when SD/MMC inserted)
  - AV (front audio & video input. External peripheral devices can be connected with the unit.)
  - Long press to return to main source menu when in any mode, then use navigate button to select the desired mode, and press OK button to confirm.
- Cancel source select menu and return to previous menu
- 3. Press to navigate up among option items (in MP3/WMA mode)
  - Play the previous preset radio station (in Radio mode)
- 4. Press to navigate down among option items (in MP3/WMA mode)
  - Play the next preset radio station (in Radio mode)
- 5. Power on/off (press and hold more than 2 seconds)
  - Mute
- 6. 3 inch TFT display
- 7. SD card slot
- 8. USB port
- 9. Rotate the knob to adjust volume level
  - Press to select audio/video Setting, and rotate the knob to adjust level.
  - Press more than 2 seconds to Setting menu.
- 10. Panel open
- 11. Play/Pause (in MP3/WMA modes)
  - Band switch: FM1-FM2-FM3-MW1-MW2 (in Radio mode)

- 12. Preset scan (press briefly, in Radio mode)
  - Auto preset (press more than 2 seconds, in Radio mode)
  - Stop (in MP3/WMA mode)
- Search the previous station manually, and each press to seek step by step (press briefly, in Radio mode).
  - Search the previous station automatically (press more than 2 seconds, in Radio mode).
  - Press to search the previous track or chapter (in MP3/WMA mode).
  - Fast backward by 2, 4, 8, 20 step (press more than 2 seconds, in MP3/WMA mode).
  - Press to navigate left among option items
- Search the next station manually, and each press to seek step by step (press briefly, in Radio mode).
  - Search the next station automatically (press more than 2 seconds, in Radio mode).
  - Search the next track or chapter (in MP3 / WMA mode).
  - Fast forward by 2, 4, 8, 20 step (press more than 2 seconds,in MP3/WMA mode).
  - Press to navigate right among option items
- 15. Confirm operation
  - Stop auto seeking (in Radio mode).
- 16. Remote sensor
- 17. AV in

# **Remote Controls**

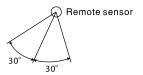
#### Press () to turn on/off the unit.



- 1. Power on/off
- 2. Setup
- 3. Menu cursor
- 4. Enter
- 5. Program
- 6. Digit area
- 7. Select Audio/Video Setting, then rotate the knob to adjust level.
- 8. Volume
- 9. Radio tune
  - Track skip/seek
- 10. Source switch
- 11. Zoom
- 12. Repeat
- 13. Repeat A-B
- 14. Stop/Return
- 15. Play/Pause
- 16. Goto search
- 17. OSD: On screen display
  - AMS: Search and store stations automatically
- 18. DISP: Display time/clock (Video mode)
  - ESC: Return to previous menu
- 19. Video system PAL/NTSC/AUTO
  - Radio band (in Radio mode)
- 20. Mute

# **Remote Control Operating Range**

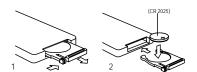
The remote control can operate within a distance of  $3\sim5m$ .



# Replacing the lithium battery

When the range of operation of the card remote control becomes short or no function, replace the lithium battery with a new one. Make sure the battery polarity replacement is correct.

- 1. Pull out the battery holder while pressing the stopper.
- Insert the button-type lithium battery with the (+) mark facing upward. Insert the battery holder into the remote control.



# Warning

- Store the battery where children cannot reach. If a child accidentally swallows the battery, consult a doctor immediately.
- Do not recharge, short, disassemble or heat the battery or dispose it in a fire.
- Do not leave the battery with other metallic materials. Otherwise, the battery may start to give off heat, crack or catch fire.
- When throwing away or saving the battery, wrap it in tape and insulate.

# **Basic Operations**

#### Turn on/off the Power

- Press (b) to turn on the unit.
   The unit goes back to the last status after power on.
- 2. Press ① more than two secnonds to power off.

#### Mute

Press the (I) button to cut the sound.

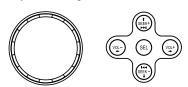


- Doing the operation above again or adjusting volume will release muting.
- Mute icon appears on the TFT during muting.

# **Adjust the Volume**

Rotate the knob on the panel or press VOL +/- on the remote control to increase or decrease the volume.

The adjustable range of volume is 0 to 39.



# **Playing Source Selection**

#### Method 1

Short press the **SRC** button on the panel or remote control to cycle through all the available sources.

#### Method 2

In any mode, long press the **SRC** button on the panel or remote control to enter main source menu, then use navigate button to select the desired mode, and press **OK** to confirm.







- When some devices are not ready, they cannot be selected.
- You should stop switching when the playing source you desired has been selected and wait for some seconds, the unit will auto enter the playing source mode you have selected.

# When Parking Brake Applied

- If 'PRK SW' cable is connected to hand brake switch, the video display of the TFT monitor will be controlled by driving status, system setup and input video sources.
- When the car is moving ahead, if the video file is played, the screen appears "WARNING: Engage Parking Brake to View Video". The above warning screen will prevent the driver watching images. The passengers at the rear seats can watch normally.

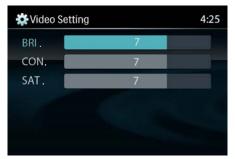
# When Reverse Driving

If the rear view video camera is connected, the unit automatically switches to CAMERA source during reverse driving. The unit returns to the original work mode after the reverse driving is done.

# **Rotary Knob Menu**

- 1. Rotate the knob to adjust volume level.
- 2. Short press to access the Audio & Video Setting menu.





Each press the knob to change the AUDIO mode: EQ/Bass/Treble/Balance/Fader, and rotate the knob to adjust level.

Each press the knob to change the VIDEO mode: Bright/Contrast/Saturation, and rotate the knob to adjust level.

#### EQ: USER/FLAT/POP/ROCK/CLASSIC/ JAZZ

The Equalizer function applies preset sound effects to the unit's audio output signal. Turn the rotary encoder to select from the following equalizer options: USER, FLAT, POPULAR, ROCK, CLASSIC, JAZZ. With the equalizer function activated, if bass or treble is adjusted, the EQ Mode will revert to "USER". When the equalizer function is activated, the most recently selected bass/treble levels cannot be adjusted. When the equalizer function is not active, the unit will return to the most recently selected bass and treble levels.

3. Press the knob more than 2 seconds to enter Setting mode, then Use ◀/▶, ▲/▼ and OK key to select setting items.

#### **General Setting**



#### BEEP: ON/ OFF

The beep tone feature allows the selection of an audible beep tone to be heard each time the menu is accessed.

#### LOUDNESS: ON/OFF

When listening to music at low volumes, this feature will selectively boost certain bass and treble frequencies.

#### TIME MODE

12 HOUR MODE: the clock displays in the type of 12 hours such as 11:18 AM.
24 HOUR MODE: the clock displays in the type of 24 hours such as 20:18.

#### TIME ADJUST

Press ◀/▶ or ▲/▼ key to set hour and minute. Each time you press ◀/▶ to select one segment of the clock display:

Hour-Minute

As you select segments of the clock display the segment selected will be highlighted. Then you can press ▲ / ▼ to put a clock right.

#### PARKING: ON/OFF (optional)

When it is in Parking "On" mode, if you play the video file, the screen will show "WARNING: Engage Parking Brake to View Video".

#### MIRROR: ON/OFF

This option allows for selection of a mirror image view when a rear view backup camera (sold separately) is connected to the CAMERA IN input on the back of the radio. Turn the rotary encoder to select "On" or "Off".

# **Rotary Knob Menu**

# **Video Setting**



#### TV SYSTEM: NTSC/PAL/AUTO

Select the TV system in the setting menu.

#### TV TYPE: 4:3PS/4:3LB/16:9

Select TV type to watch wide screen movies. 4:3 Pan Scan: For 4:3 TV, left and right edges will be cut.

4:3 Letter Box: For 4:3 TV, black bars will appear on top and bottom.

16:9: For 16:9 wide screen TV.

#### **DEFAULT: RESTORE**

If this item is selected, the unit will return to original setting.

#### **BRIGHTNESS**

Set the brightness of the video output with  $\blacktriangle/\blacktriangledown$  from 00 to 16.

#### **CONTRAST**

Set the contrast of the video output with  $\blacktriangle/\blacktriangledown$  from 00 to 16.

#### HUE

Set the hue of the video output with ▲/▼ from 00 to 16.

#### SATURATION

Set the saturation of the video output with  $\blacktriangle/\blacktriangledown$  from 00 to 16.

#### Language Setting



#### OSD LANGUAGE

Select one language that you are familiar with to display system menu.

# Radio Setting



#### LOC\_DX: LOC/DX

Choose radio distant or local.

DX: Stations with strong and weak signals can be broadcast.

LOCAL: Only station with strong signal can be broadcast.

#### STEREO MONO: STEREO/MONO

Choose FM mono/stereo.

# **Radio Mode**

# Accessing Radio Mode

Press the SRC button on the front panel or remote control to switch to the Radio source.



- 1. Source Indicator
- 2. Current Preset Channels
- 3. Time/Clock
- 4. AM/FM Band
- 5. Radio Station Frequency
- 6. EQ Indicator

#### Selecting a Band

Press BAND once or more to select FM1-FM2 - FM3 - AM1 - AM2.

Display shows wave band, frequency, and preset station number if already stored.

# Selecting a Station

Press the ▶▶I or I◄◀ tuning button to tune to another station.

# **Tuning**

#### - AUTO SEEK

Press the ▶▶I or I◄◀ buttons to seek the next/ previous station automatically.

#### - MANUAL SEEK

Press and hold the **>>I** or **I** <</li>
buttons to enter. manual tuning mode. Press the buttons again to move the radio frequency number up or down one step.



During manual seeking, if the pause between two operating steps is longer than 5 seconds, press the ▶▶I or I◄◀ buttons, the unit will enter auto seeking.

#### **Preset Mode**

Six numbered preset buttons store and recall stations for each band. The stored stations (P1-P6) for the current band can be viewed on the screen.

# Storing Stations

- Auto storing
- 1. Select a band (if needed).
- 2. Press AMS briefly to scan the preset station P1 - P6 for 5 seconds each.
- 3. Hold AMS more than 2 seconds, the 6 strongest available stations will be automatically saved in the preset button (numbers 1-6).
- Manual Storing
- 1. Select a band (if needed), then select a station.
- 2. Press and hold a preset button (numbers 1-6) on the front panel or remote control.
- 3. The preset number and station is displayed and highlighted.

# Recalling a Station

- 1. Select a band (if needed).
- 2. Press a front panel or remote control preset button (numbers 1-6) to select the corresponding stored station.

#### 1. Load SD/MMC Card

Insert the SD/MMC card into the slot, with the front side at left.

The unit will play the music automatically and the LCD will show CARD.



#### 2. Take out SD/MMC Card

Press **SRC** button and switch to non CARD mode, slightly press SD/MMC card, take out the card when it pops out.



#### 3. Load USB Equipment

Open the rubber cap, insert the USB into the connector and the unit will play the music in the USB storer automatically, and the LCD will show USB.



# 4. Take out USB Equipment

Press **SRC** button and switch to non USB mode, then take off the USB stick, close the rubber cap.



#### **USB/SD/MMC Notes**

USB functions (flash memory type) MP3 music play

- 1. SD/MMC card support
- USB flash memory 2 in 1 (SD/MMC) support
- 3. FAT 12/FAT 16, FAT 32 is possible
  - FAT 12/16 (dir: 180 support, file: 1500 support)
  - FAT 32 (dir: 180 support, file: 1500 support)
- 4. Tag (id3 tag ver 2.0)
  - Title/artist/album: 30 byte support
- 5. Multi card reader not support
- 6. USB 1.1 support
  USB 2.0 support

(it can not support USB 2.0 speed. Just, get the same speed with USB 1.1)



#### Note:

Not all kinds of USB devices are compatible with the unit.

# **Accessing USB/SD Card Mode**

To play files from an SD or USB that is already inserted, choose the CARD or USB source. The playback screen is indicated below:



- 1. Source Indicator
- 2. Current Track/Total Track
- 3. Name of the Song Display
- 4. Audio Folder
- 5. Picture Folder
- 6. Video Folder

# File Type Supported

Audio file: MP3(\*.mp3), WMA(\*.wma)

Video file:

MP4 (\*.avi, DIVX3.11/4.0/5.0/6.0)

MPEG 1 (\*.dat)

Picture file: JPEG (\*.jpg)

MP3 file:

ISO 9660 or ISO 9660 + Joliet format - Max.

30 characters.

Max. nested directory is 8 levels.

The max. album number is 99.

The max. length of each track is 99 minutes 59 seconds.

Supported sampling frequency for MP3: 8KHz to 48KHz (44.1KHz preferably).

Supported bit-rates of MP3 are: 32 - 320 kbps (128 kbps preferably).

# File NOT Supported

\*.AAC, \*.DLF, \*.M3U, \*.PLS, MP3 PRO files and files with DRM.

# Audio/Picture/Video File Playback

When AUDIO/PICTURE/VIDEO file is played, Category/Folder/File list will be displayed on the screen, and file/folder name being played will be displayed on top. Current selected item will be highlighted.

The list lets you see the list of track titles or folder names. If you select a folder on the list, you can view its contents.

#### For Audio Files

- 1. Press ESC to return to playlist menu.
- Use ▲ / ▼ to select AUDIO folders.
- Press OK, ►II on the front panel or ENTER on the remote control to display all available audio file folders.
- Use ◄ / ➤ to enter file list and use ▲ / ▼ to select desired file, press OK, ►II on the front panel or ENTER on the remote control to start play.
- 5. During the file playing, press will enter power on logo, then press ►II to return.

#### For Picture files

- Press ESC to return to playlist menu.
   Use ▲ / ▼ to select PICTURE folders.
- 3. Press OK, ►II on the front panel or ENTER on the remote control to display all available picture file folders.
- 4. Use 
  ✓ / ► to enter file list and use ▲ / ▼ to select desired file, press OK, ►II on the front panel or ENTER on the remote control to slide show the pictures, and press PROG to select picture showing style.
- 5. During the file playing, press to stop and return to the sub-root.

#### For Video files

- 1. Press ESC to return to playlist menu.
- 2. Use ▲ / ▼ to select W VIDEO folders.
- 3. Press OK, ▶II on the front panel or ENTER on the remote control to display all available video file folders.
- 4. Use 
   / ▶ to enter file list and use ▲ / ▼ to select desired file, press OK, ►II on the front panel or **ENTER** on the remote control to start play.
- 5. During the file playing, press to stop and return to the sub-root.



- 1. If the selected folder does not contain any playable track, the track list is not displayed.
- 2. During the folder selecting, press ESC to the upper folder (parent folder). If the uppermost folder is listed. ESC cannot be used.

#### MP3/WMA Notes

MP3 and WMA (Windows Media Audio) music files are digital audio files that are compressed to allow more files to be stored. This unit can play MP3/WMA and video directly from files contained on a SD card or USB Device. Many types of software are available for converting audio files into MP3/WMA formats. This unit can play MP3 (MPEG1, 2, 2.5 Audio Layer 3). However, the MP3 recording media and accepted formats are limited.

#### Entering ID3 Tag

This unit supports ID3 tag version 2.0.

For character codes, refer to the table to the below.

-	0	1	2	3	4	5	6	7	8	9	A	В	C	D	E	F
0				0	@	P		p			-	0	À	Đ	à	đ
1			1	1	Α	Q	a	q			i	±	Á	Ñ	á	ñ
2			"	2	В	R	b	r			¢	2	Â	Ò	â	ò
3			#	3	C	S	C	s			3	3	Ã	Ó	ã	Ó
4			\$	4	D	T	d	t			Ø		Ä	Ô	ā	ô
5			%	5	E	U	е	u			¥	μ	Å	Õ	å	ō
6			&	6	F	٧	f	٧			1	1	Æ	Ö	æ	Ö
7			1	7	G	W	g	W			§		Ç	X	ç	÷
8			(	8	Н	Х	h	х			D	†	È	Ø	è	Ø
9			)	9	1	Y	i	У			0	1	É	Ù	é	ù
Α				:	J	Z	j	z			A	0	Ê	Ú	ê	ú
В			+	;	K	]	k	{			ec	33	Ë	Û	ē	û
C			.,	<	L	1	1	1			7	1/4	1	Ü	ì	ü
D			-	=	M	]	m	}			0	1/2	ĺ	Ý	í	ý
E				>	N	٨	n	~			®	3/4	î	Þ	î	þ
F			1	?	0	_	0				-	i	Ĭ	ß	ï	ÿ

#### **Entering File and Folder Names**

Names using the code list characters are the only file names and folder names that can be entered and displayed. Using any other character will cause the file and folder names to be displayed incorrectly. The unit recognizes and plays only files with the MP3/ WMA extension.

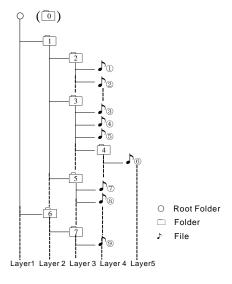


#### Note:

A file name entered with characters not on the code list may not play correctly.

#### **MP3 Playing Order**

When selected for play, files and folders (Folder Search, File Search or Folder Select) are accessed in the order in which they were written to the media. As a result, the order in which they are expected to be played may not match the order in which they are actually played. You may be able to set the order in which MP3/WMA files are to be played by assigning file names beginning with play sequence numbers such as "01" to "99". For example, a medium with the following folder/file hierarchy is subject to Folder Search, File Search or Folder Select as shown below.



The player will only recognize three folder levels and does not display folders containing only other folders. In the example above, the unit will display folders 3, 4, 6, and 8, but not 2 and 7 since they do not contain since they do not contain any tracks directly. Folder 5 is not recognized at all since it is at the fourth level.

#### **Electronic Shock Protection**

- >45 seconds for MP3 recorded at 44.1kHz, 128kbps
- >90 seconds for WMA recorded at 44.1kHz, 128kbps

#### Stop Playback Temporarily

- During playback, press >II to pause playback.
- The sound will be muted.
- Display "PAUSE" in the TV screen.
   Press ►II again to continue playback.

To resume normal play, repeat the operation.

# **Stop Playback Entirely**

During MP3 playback:

- Press key once stopping the playback and the relevant location is saved, press ►II to resume the playback from the saved location.
- Press twice to cease the playback. Press
   It o start the playback from the very beginning the Title page.

#### Select Desired Track

- Press 

  or 

  to skip to the next track.
- Use 1-9 and 0, 10+ buttons on the remote control to select desired track number.

# Fast Forward/Backward During Playback

Press 

or 

or 

for more than 2 seconds once or more to select X2, X4, X8, X20, to fast backward or forward track during playback.

- During the fast forward or backward operation, press III briefly to playback again.
- During the fast forward or backward operation, the volume will be muted.

# Repeat

During playback, press **REPEAT** once or more.

- RPT icon will appear on the display.
- For File: Display appears RPT ONE → RPT DIR → RPT ALL → RPT OFF



If you do not select RPT on, when the entire playback has finished, the system will stop. If no other control, after 5 minutes the unit will turn into standby mode.

#### Repeat $A \rightarrow B$

Select desired passage to repeat playback.

- Press A → B once to select starting point.
   Display shows REPEAT A.
- Press A → B again to select ending point.
   Display shows REPEAT A → B, and selected passage start to replay.
- Press A → B once again to exit. Display shows A → B CANCEL.

#### **GOTO**

Goto desired track/chapter or time point directly.

Press **GOTO** button on the remote control, track and time display on top of the screen. Current item is highlighted. Use ◀ / ► to select desired item. Use digit button to select number. Press **ENTER** to confirm.

#### **Program**

- Press PROG to enter program list. Use ▲
   / ▼ or ◄ / ► cursor and digit button to enter number.
- Press ►II to play, or move the cursor to select "PLAY" and press ENTER to play.
- If you want to delete the list, move the cursor to "CLEAR", press ENTER to delete all the list set before.
- Press PROG again to exit program play.

#### **Picture Mirror**

When you view a picture, press ▲ repeatly to mirror the picture vertically, and press ▼ repeatly to mirror the picture horizontally.

#### ZOOM

Press **ZOOM** button, the picture will be zoomed accordingly.

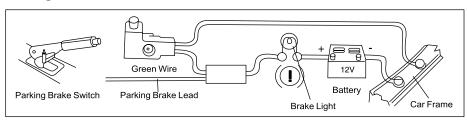
# **Device Connections**

#### Notes of connection

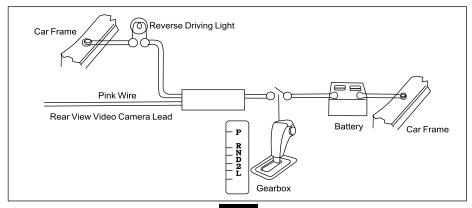
- To avoid short circuit in the electrical system, ensure that the negative battery cable is disconnected before installation.
- To prevent short circuit in the wiring and damaging to this unit, secure all wirings with cable clamp or adhesive tape. Route the wirings in a secured, out of heating place without touching any moving parts such as gear shift, handbrake, and seat rails to prevent the wiring insulation being melted / wore off.
- Never pass the yellow power cord through the installation hole into the engine compartment and connect to the car battery. Otherwise, a high possibility of serious short circuit to the electrical system may be occurred.
- Replacing a new fuse with 15A rating when the old one is broken, using no fuse or fuse with improper rating may cause damage to this unit or even fires.

- If a proper fuse is installed and electrical problems still occur, please contact with any professional car shops for inquiry.
- DO NOT connect other equipments with the car battery to avoid battery overheating.
- Please make sure all the wiring connections & the cables of the Speakers are wellinsulated. Otherwise, this unit may be damaged by short circuit.
- If there is no ACC available, please connect ACC lead to the power supply with a switch.
- If an external power amplifier is connected, please don't connect P.CONT lead to the power lead of the external power amplifier, otherwise, electric spark or other damage may be resulted.
- Never ground the speaker output to prevent the damage to the built-in power amplifier.
- The minimum rating of the speakers connected to this unit is 50W with 4 to 8 impedance.

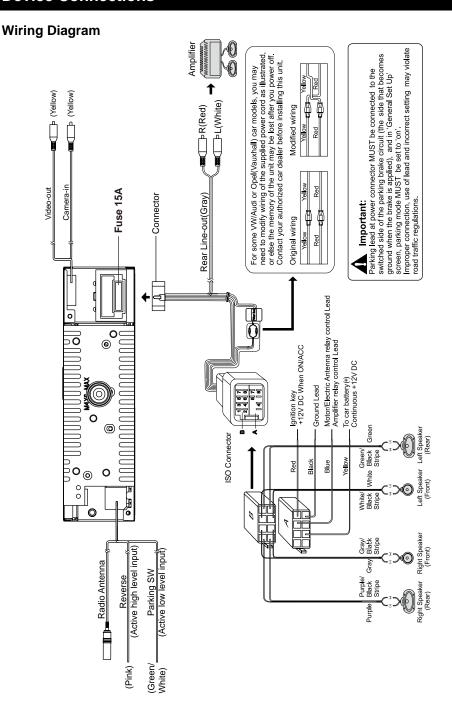
#### **Parking Brake Cable Connections**



# **Reverse Driving Cable Connections**



# **Device Connections**



# **Device Connections**

# **Using the ISO Connector**

- If your car is equipped with the ISO connector, then connect the ISO connectors as illustrated.
- For connections without the ISO connectors, check the wiring in the vehicle carefully before connecting, incorrect connection may cause serious damage to this unit.

Cut the connector, connect the colored leads of the power cord to the car battery, as shown in the colour code table below for speaker and power cable connections.





	Function					
Location	Connector A	Connector B				
1		Rear Right (+) - Purple				
2		Rear Right (-) - Purple / Black Stripe				
3		Front Right (+) - Gray				
4	Battery 12V(+)/Yellow	Front Right (-) - Gray / Black Stripe				
5	ANT/Amp control /Blue	Front Left(+) - White				
6		Front Left(-) - White / Black Stripe				
7	ACC+/Red	Rear Left (+) - Green				
8	Ground/Black	Rear Left (-) - Green/ Black Stripe				

# Installation Guide

#### **Preparation**

#### 1. Disconnect battery

Before you begin, always disconnect the battery negative terminal.



#### Mote:

If the unit is to be installed in a car equipped with an on-board drive or navigation computer, do not disconnect the battery cable. If the cable is disconnected, the computer memory may be lost. Under these conditions, use extra caution during installation to avoid causing a short circuit.

#### 2. Remove unit from sleeve

Lift latches on both sides of sleeve to remove half-sleeve from the unit.

# **Mounting Sleeve Installation**

- Slide the mounting sleeve off the chassis.
   If it is locked into position, use the removal tools (supplied) to disengage it.
- 2. Check the dashboard opening size by sliding the mounting sleeve into it.



If the opening is too small, carefully cut or file as necessary until the sleeve easily slides into the opening. Do not force the sleeve into the opening or cause it to bend or bow. Check for sufficient space behind the dashboard for the unit chassis.

This unit can be installed in any dashboard with a suitable 183 mm (W)  $\times$  52 mm (H) opening as shown above. The dashboard should be 4.75 mm - 5.56 mm thick in order to be able to support the unit.

- Locate the series of bend tabs along the top, bottom, and sides of the mounting sleeve. With the sleeve fully inserted into the dashboard opening, bend as many of the tabs outward as necessary to firmly secure the sleeve to the dashboard.
- Place the unit in front of the dashboard opening so the wiring can be brought through the mounting sleeve. Follow the wiring diagram carefully and make certain

# Installation Guide

all connections are secure and insulated with wire nuts or electrical tape. After completing the wiring connections, turn the unit on to confirm operation (vehicle ignition must be on). If the unit does not operate, re-check all wiring until the problem is corrected.

- Make sure the radio is right-side up, then carefully slide the radio into the mounting sleeve until it is fully seated and the spring clips lock it into place.
- Secure the rear of the unit to the car body using the mounting bolt and rubber cushion.
- Test the unit using the "Operation" instructions that follow.

#### Kit Installation

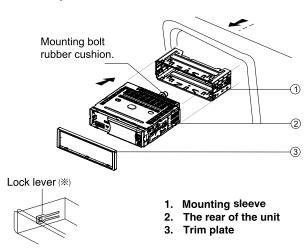
If your vehicle requires the use of an installation kit to mount this unit, follow the instructions included with the installation kit to attach the unit to the mounting plate supplied with the kit.

- Wire and test the unit as outlined in the Mounting Sleeve Installation instructions.
- Install the radio/mounting plate assembly to the sub-dashboard according to the instructions in the installation kit.
- 3. Replace the dashboard trim panel.

#### ISO Installation

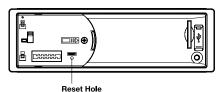
This unit has threaded holes in the chassis side panels which may be used with the original factory mounting brackets of some vehicles to mount the radio to the dashboard. Please consult with your local car stereo shop for assistance on this type of installation.

- Remove the existing factory radio from the dashboard or center console mounting. Save all hardware and brackets as they will be used to mount the new radio.
- Carefully unsnap the plastic frame from the front of the new unit chassis. Remove and discard the frame.
- Remove the factory mounting brackets and hardware from the existing unit and attach them to the new unit. Do not exceed M5 x 9mm maximum screw size. Longer screws may damage components inside the chassis.
- Wire the new unit as outlined in the Mounting Sleeve Installation instructions.
- Mount the new unit assembly to the dashboard or center console using the reverse procedure of step 1.



# **Installation Guide**

#### Reset



The **RESET** button is located behind the front panel and can only be accessed with the front panel opened. Resetting the unit will erase the time and preset memories. It should only be activated upon initial installation after all wiring is complete, or if there is a malfunction of any of the switches on the unit. In these circumstances, pressing the **RESET** button will clear the system and return the unit to default operation.

#### Fuse

When replacing a fuse, make sure the new fuse is the correct type and amperage. Using an incorrect fuse could damage the radio.

# Reconnect Battery

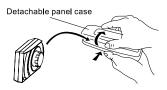
When wiring is complete, reconnect the battery negative terminal.

# Anti-Theft System

This unit is equipped with a detachable panel. Panel can be detached and taken with you, helping to deter theft.

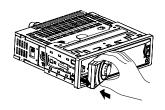
# **Removing the Panel**

- 1. Switch off the power of the unit.
- 2. Press  $\triangle$  button to flip down the panel.
- 3. At an angle hold the panel to pull it out.
- 4. Place the panel into the case and take it with you when you leave the car.



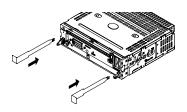
# **Installing the Panel**

- Hold the panel and ensure the panel faces toward you, and set the right side of the panel in the panel bracket.
- 2. Press the left side of the panel until it locks.



# Removing the Unit

- 1. Remove the panel and the trim plate.
- Remove the trim ring by firmly grasping one side and pulling.
- Insert the removal keys straight back until they lock, then pull the radio out. If the removal keys are inserted at an angle, they will not lock properly and will not release the unit.



# Troubleshooting

If you suspect something is wrong, immediately switch power off. Immediately stop using it and call the store where you purchased it. Never try to repair the unit yourself because it is dangerous to do so.

Problem	Possible cause	Solution					
General							
The unit will not switch on.	Car ignition is not on. Cable is not properly connected. Fuse is burnt.	Turn your car key in the ignition. Check cable connection. Replace fuse with a new fuse of the same capacity.					
No sound	Volume is set at minimum or the mute function is on.	Check the volume or switch the mute function off.					
The unit or screen does not function normally.	The unit system is unstable.	Press the RESET button.					
TUNER mode							
Unable to receive stations.	The antenna is not connected properly.	Connect the antenna properly.					
Poor quality reception of radio station.	The antenna is not fully extended or it is broken.	Fully extend the antenna and if broken, replace it with a new one.					
Preset stations are lost.	The battery cable is not properly connected.	Connect the permanent live on the unit to the permanent live on the vehicle.					
USB/SD/MMC mode							
Unable to insert USB device or SD/MMC card.	The memory card or USB device has been inserted the wrong way round.	Insert it the other way around.					
The USB device or SD/ MMC card cannot be read.	NTFS format is not supported.	Check that the USB/SD/MMC file system is in FAT or FAT32 format. Due to different formats, some models of USB storage devices or MP3 players may not be read.					
Remote control							
The remote control is not working or does not work properly	The batteries are low or empty.	Change the batteries.					

# **Specifications**

#### General

Power supply: 12VDC (11V-16V), Test voltage 14.4V, negative ground

Maximum power output: 75W x 4 channels

Continuous power output: 20W x 4 channels ( $4\Omega$  10% T.H.D.)

Suitable speaker impedance: 4-8ohm

Pre-Amp output voltage: 2.0V (Play mode: 1KHz, 0dB,  $10K\Omega$  load)

Fuse: 15A

Dimensions (WxHxD): 178 x 50 x 166mm

Weight: 1.7kg Aux-in level: ≥500mV

#### 3 Inch (4:3) TFT LCD

 Display resolution (dot)
 960(W)×240(H)

 Active area (mm)
 60.00×45.00

 Screen size (inch)
 3.0 (Diagonal)

 Dot pitch (mm)
 0.0625 x 0.1875

 Central ratio
 200

Contrast ratio 300
Brightness 350nits

#### FM Stereo Radio

Frequency range: 87.5-108.0MHz (Europe) 87.5-107.9MHz (America)

Usable sensitivity: 8dB<sup>µ</sup>

Frequency response: 30Hz-15KHz
Stereo separation: 30dB(1KHz)
Image response ratio: 50dB
IF response ratio: 70dB

Signal/noise ratio: 700B

# AM(MW) Radio

Frequency range 522-1620KHz (Europe) 530-1710KHz (America)

Usable sensitivity (S/N=20dB) 30dB

# Components

Mounting sleeve 1 Machine screws M5x6 mm 4 Mounting bolt (50 mm) 1 Wire connector 1 Removable face plate case 1 Trim plate 1 Removal key 2 Operating Instructions 1 Rubber cushion 1 Remote control 1



Specifications and the design are subject to change without notice due to improvements.