



Thank you for purchasing the
RMD602BT



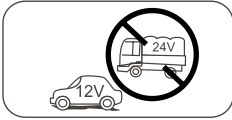
**MP3/USB/SD/MMC Player,
with FM/MW Tuner**

Operating Instructions

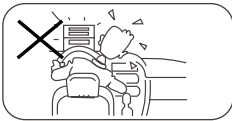
Safety Precautions

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.

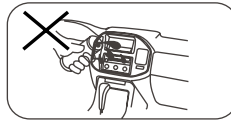


Never use the video display function in the front when driving to prevent the violation of laws & regulations and also to reduce the risk of traffic accident except using for rear view video camera.

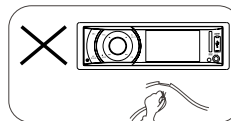


To ensure safe driving, please adjust the volume to a safe & comfort level in case of emergency situations.

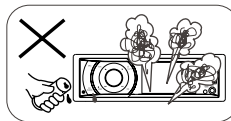
Never expose this unit, amplifier, and speakers to moisture or water for preventing electric sparks or fires.



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.

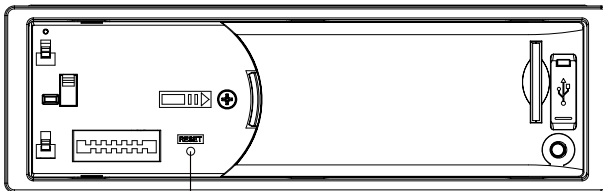
Windows Media and the Windows logo are trade marks or registered trademarks of Microsoft Corporation in the United States and/or other countries.

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. revenue-generating) 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 pay-audio or audio-on-dem and applications. An independent license for such use is required. For details, please visit <http://www.mp3licensing.com>.

Press the  button to open the panel.

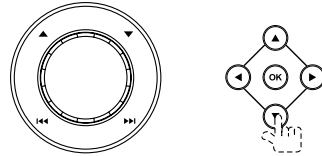


Reset Hole

Button Operation Explanations

Some frequent operations

1) Move cursor




Note:

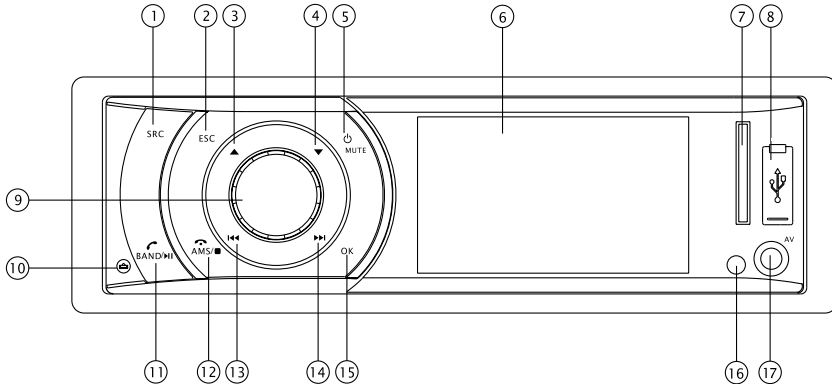
In Setting mode, the VOL knob has the same function as the \blacktriangle / \blacktriangledown button to select setting items.

2) Confirm



Panel Controls

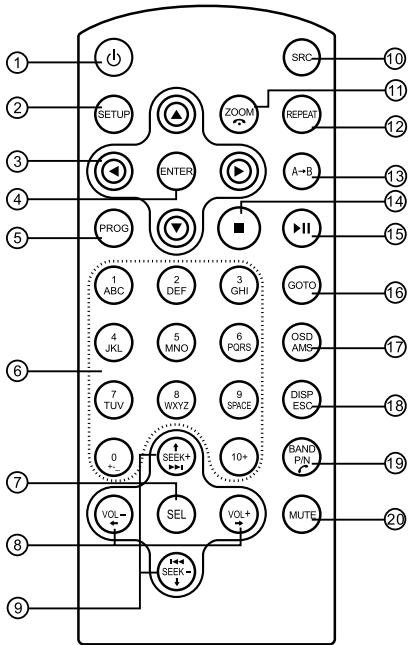
Power on/off: Press  to turn on/off the unit.



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.
2. 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)
- Dial/Receive call (press briefly, in BT mode)
12. - Preset scan (press briefly, in Radio mode)
 - Auto preset (press more than 2 seconds, in Radio mode)
 - Stop (in MP3/WMA mode)
 - Terminate call (in BT mode)
13. - 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
14. - 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

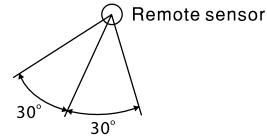
Press  to turn on/off the unit.



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
 - Terminate call (in BT mode)
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)
 - Dial/Receive call (in BT mode)
20. Mute

Remote Control Operating Range

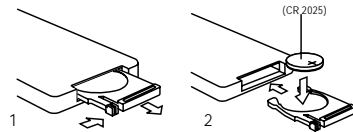
The remote control can operate within a distance of 3~5m.



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.
2. 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

1. Press  to turn on the unit.
The unit goes back to the last status after power on.
2. Press  more than two seconds to power off.

Mute

Press the  button to cut the sound.



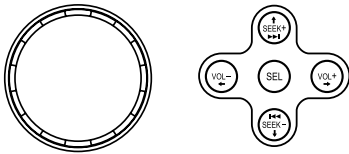
Note:

- 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.



Note:

- 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

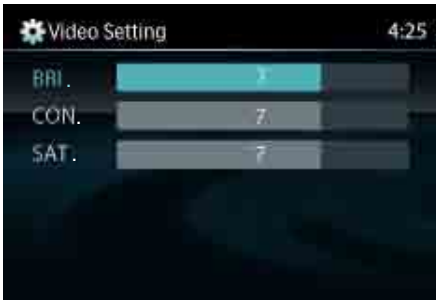
1. If 'PRK SW' cable is connected to hand brake switch, the video display of the TFT monitor will be controlled by driving status, system setup and input video sources.
2. When the car is moving ahead, if the video file is played, the screen appears "WARNING: Engage Parking Brake to View Video". The 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 ▲/▼ from 00 to 16.

CONTRAST

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

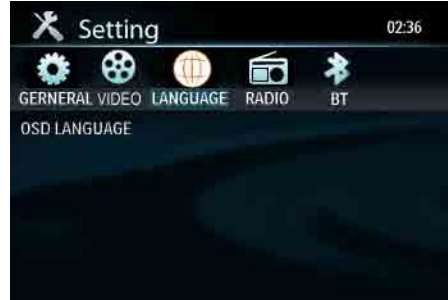
HUE

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

SATURATION

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

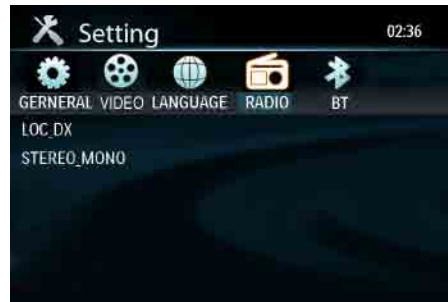
Language Setting



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.

Rotary Knob Menu

BT Setting



PAIR: ON/OFF

Set pairing ON/OFF. If select ON, to return to BT main menu.

AUTO CONNECT: ON/OFF

After disconnecting with your mobile phone, the built-in Bluetooth will send connection order automatically in 20s if you have set the 'AUTO CONNECT' to 'ON'.

AUTO ANSWER: ON/OFF

The built-in Bluetooth changes the work mode to phone mode automatically and displays the calling number when one call is coming in.

The built-in Bluetooth will put through the call automatically if you have set the 'AUTO ANSWER' option to 'ON', whereas you should put through the call manually.

RESET: ON

Clear the system and return the unit to default operation.

VERSION

Display the BT software version.

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 **▶▶** or **◀◀** tuning button to tune to another station.

Tuning

- AUTO SEEK

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

- MANUAL SEEK

Press and hold the **▶▶** or **◀◀** buttons to enter manual tuning mode. Press the buttons again to move the radio frequency number up or down one step.

Note:

During manual seeking, if the pause between two operating steps is longer than 5 seconds, press the **▶▶** or **◀◀** 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

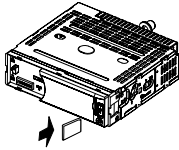
1. Select a band (if needed).
2. Press a front panel or remote control preset button (numbers 1-6) to select the corresponding stored station.

USB/SD/MMC/MP3 Playback

1. Load SD/MMC Card

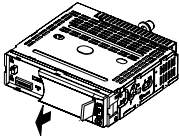
Insert the SD/MMC card into the slot, with the front side at left.

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



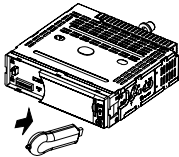
2. Take out SD/MMC Card

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



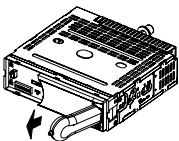
3. Load USB Equipment

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
2. 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)

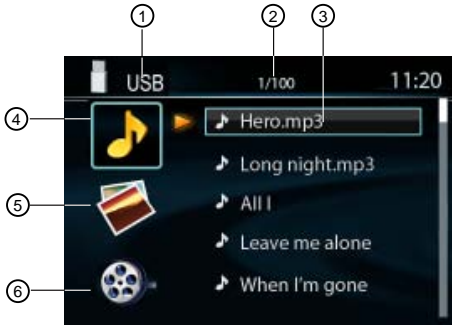
Note:

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

USB/SD/MMC/MP3 Playback

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.
2. Use **▲ / ▼** to select  AUDIO folders.
3. Press **OK, ►||** on the front panel or **ENTER** on the remote control to display all available audio file folders.
4. Use **◀ / ▶** to enter file list and use **▲ / ▼** to select desired file, press **OK, ►||** 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 **►||** to return.

USB/SD/MMC/MP3 Playback

For Picture files

1. Press **ESC** to return to playlist menu.
2. Use **▲/▼** to select  PICTURE folders.
3. Press **OK, ►** 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, ►** 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  VIDEO folders.
3. Press **OK, ►** 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, ►** 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.



Note:

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	B	C	D	E	F
0				0	@	P	´	p			■	°	À	Ð	à	đ
1			!	1	A	Q	a	q			i	±	Á	Ñ	á	ñ
2			"	2	B	R	b	r			ç	²	Â	Ó	â	õ
3			#	3	C	S	c	s			£	³	Ã	Ö	ã	ö
4			\$	4	D	T	d	t			¤	´	Ä	Ø	ä	ø
5			%	5	E	U	e	u			¥	µ	Å	Ö	å	ö
6			&	6	F	V	f	v			!	¶	Æ	Ö	æ	ö
7			'	7	G	W	g	w			§	·	Ç	X	ç	÷
8			(	8	H	X	h	x			¸	†	È	Ø	è	ø
9			)	9	I	Y	i	y			©	¹	É	Ü	é	ü
A			.	:	J	Z	j	z			ª	º	Ê	Û	ê	û
B			+	:	K	[	k	{			«	»	Ë	Ü	ë	ü
C			,	<	L	\	l	|			¼	½	Ì	Ù	ì	ù
D			-	=	M	]	m	}			½	¾	Í	Ý	í	ý
E			.	>	N	^	n	~			¾	¾	Î	Þ	î	þ
F			/	?	O	_	o	■			—	—	Ï	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.



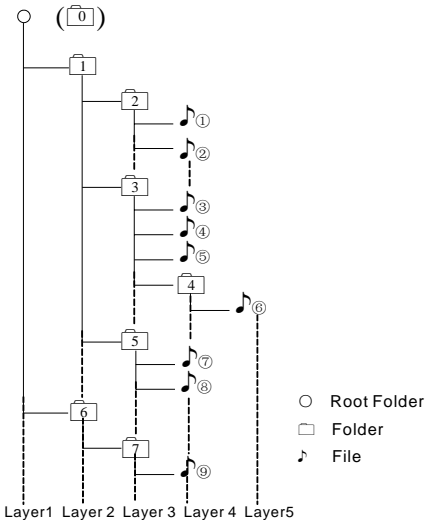
Note:

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

USB/SD/MMC/MP3 Playback

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 ►|| to pause playback.
 - The sound will be muted.
 - Display "PAUSE" in the TV screen.
 - Press ►|| again to continue playback.
- To resume normal play, repeat the operation.

Stop Playback Entirely

During MP3 playback:

1. Press ■ key once stopping the playback and the relevant location is saved, press ►|| to resume the playback from the saved location.
2. Press ■ twice to cease the playback. Press ►|| to start the playback from the very beginning of 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 ▶▶ 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 ►|| 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



Note:

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 → 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 **▶▶** 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 ▲ repeatedly to mirror the picture vertically, and press ▼ repeatedly to mirror the picture horizontally.

ZOOM

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

X2 → X3 → X4 → X1/2 → X1/3 → X1/4 → OFF
 ↑

Accessing Bluetooth Mode

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



Note:

For your safety, avoid talking on the phone as much as possible while driving.

Bluetooth is a wireless transmission way for short distance. The built-in Bluetooth can connect with the mobile phones having Bluetooth function.

After connecting, you can control your mobile phone through the unit.

Pairing

Use this function to establish a connection between the unit and your mobile phone.

Press the knob more than 2 seconds to enter Setting mode, then Use ◀/▶ key to select BT setting item, and use ▲ / ▼, ◀/▶ key to switch the PAIR: ON/OFF options to ON.

Press **ESC** to return to Bluetooth main menu. "WAITING FOR PAIRING" will appear on the screen.



Turn on Bluetooth function of your mobile phone, keep phone within 3 meters to the unit and start to search for Bluetooth devices.

After the name of the Bluetooth module "CALIBER" appears on the pairing list on your mobile phone, you should select it. At this time, a pairing code is required. Enter the pairing code ("1234" by default) and the Bluetooth pairing will process automatically. Some mobile phones may instruct you to select connecting or disconnecting, please select connecting.



Bluetooth Mode

Stop Pairing



You can stop pairing or disconnecting in this following way:

Enter BT Setting menu, switch the PAIR: ON/OFF options to OFF, then press **ESC** to return to Bluetooth main menu. After disconnecting, "NO DEVICE" will appear on the screen and the Bluetooth icon will disappear.

Incoming Phone Waiting (if the mobile phone has this function depending on the type of mobile phone)

In the mode of communication or BT AUDIO (MUSIC PLAYING), if there is a call coming in, the TFT screen will appear "PHONE NUMBER ANSWER?". If you press  key to stop communication you are making, and receiving the incoming phone. If you press  key on to reject the incoming call, and resume the former communication.




Voice Transfer

During talking, press  key to transfer audio from the unit to your mobile phone, and press  key again to transfer audio from your mobile phone to the unit.

Note:


Some mobile phones will transfer audio from the unit to themselves once the incoming call is answered.

BT Audio (if the mobile phone has the A2DP & AVRCP functions)

After pairing successfully, in the mode of Bluetooth main menu, open the audio player of your mobile phone and set the transmit mode to Bluetooth. At this time, the unit screen will appear "MUSIC PLAYING", and the audio will be transferred from the mobile phone to the unit. Some mobile phones may instruct to connect with the unit. After found the Bluetooth device name "SUN-BMA19" on mobile phone, you should select to connect it, and then input the pairing code ("1234" by default). When music playback, you can press  on the remote control to switch to play/pause, and press the  /  key on the



front panel and remote control (if the options are available).

LOG



After pairing successfully, in the mode of Bluetooth main menu, press  key to select dialling history.





1. Missed Call

Making a phone call using missed call history. Press  /  button to search for desired record on the list.

2. Dialed Call

Making a phone call using the dialed number history. Press  /  button to search for desired record on the list.

3. Received Call

Making a phone call using the received call history. Press  /  button to search for desired record on the list.

Music Mode


A2DP

A2DP is short for Advanced Audio Distribution Profile. The mobile phones supporting this function can transmit stereo audio, whereas the ones not supporting this function can transmit mono audio only.

AVRCP

AVRCP is short for Audio/Video Remote Control Profile. The mobile phones supporting this function can control the playback of a Bluetooth audio player.

Bluetooth Mode

In the mode of the music player working, if you want to make a phone call, you can press the number keys on the mobile phone or on the remote control, then press  to dial. At the same time the music player will stop. The TFT screen will appear "DIALLING", after the call received, the voice will be transferred to the unit. When the call ends, the TFT screen will appear "MUSIC PLAYING". Some mobile phone may instruct whether resume to playback.

If there is an incoming phone call, the music player will stop, and the TFT screen will appear "PHONE NUMBER ANSWER?". When the call ends, the TFT screen will appear "MUSIC PLAYER". Some mobile phone may instruct whether resume to playback.

disconnect till the communication ends, and connects your mobile phone and the unit automatically. Some mobile phones maybe require you to perform again the pairing operation.

4. For mobile phone, the Bluetooth device name must be primary symbols or numbers. Otherwise, some unpredictable issues may occur during the Bluetooth devices connecting and making phone call.
5. After paired OK, if no sound produced, please check the Bluetooth stereo audio whether is switched to ON.

General Notes for Bluetooth

1. For N7X, N9X, PHILIPS, Sony Ericsson, SAMSUNG mobile phones, during our test, after the mobile phones appear connection successful, the unit still appear waiting for pairing. At this time you must find the unit's Bluetooth module name "SUN-BMA19" on the pairing list on your mobile phone and select it. In the submenu, select connecting, then the unit will appear pair OK. Otherwise, there is no voice coming out when communicating, though the mobile phone has already displayed pair OK. Some mobile phones, such as PHILIPS, when it playbacks A2DP, you must in its playbaking mode, find the unit's "SUN-BMA19" and reconnect (check your mobile phone whether has the A2DP & AVRCP functions).
2. When pairing, some types of mobile phone can instruct you how to operate, for example, when you make a phone call with the unit, but no voice comes out, it is because the mobile phone voice doesn't be transferred to the unit. The SAMSUNG mobile phone can instruct voice should be transferred to Bluetooth device.
3. Depending on the mobile phone, if private mode is selected, when you make a phone call with the unit, when received, the voice can be transferred to the mobile phone. But sometime the Bluetooth maybe

Device Connections

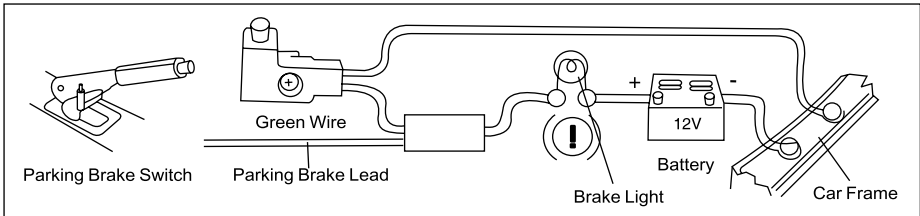
Notes of connection

- 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.

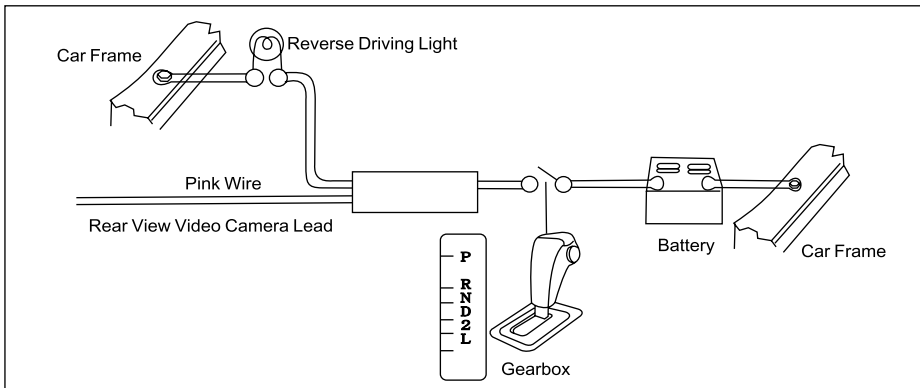
If a proper fuse is installed and electrical problems still occur, please contact with any professional car shops for inquiry.

- 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 well-insulated. 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

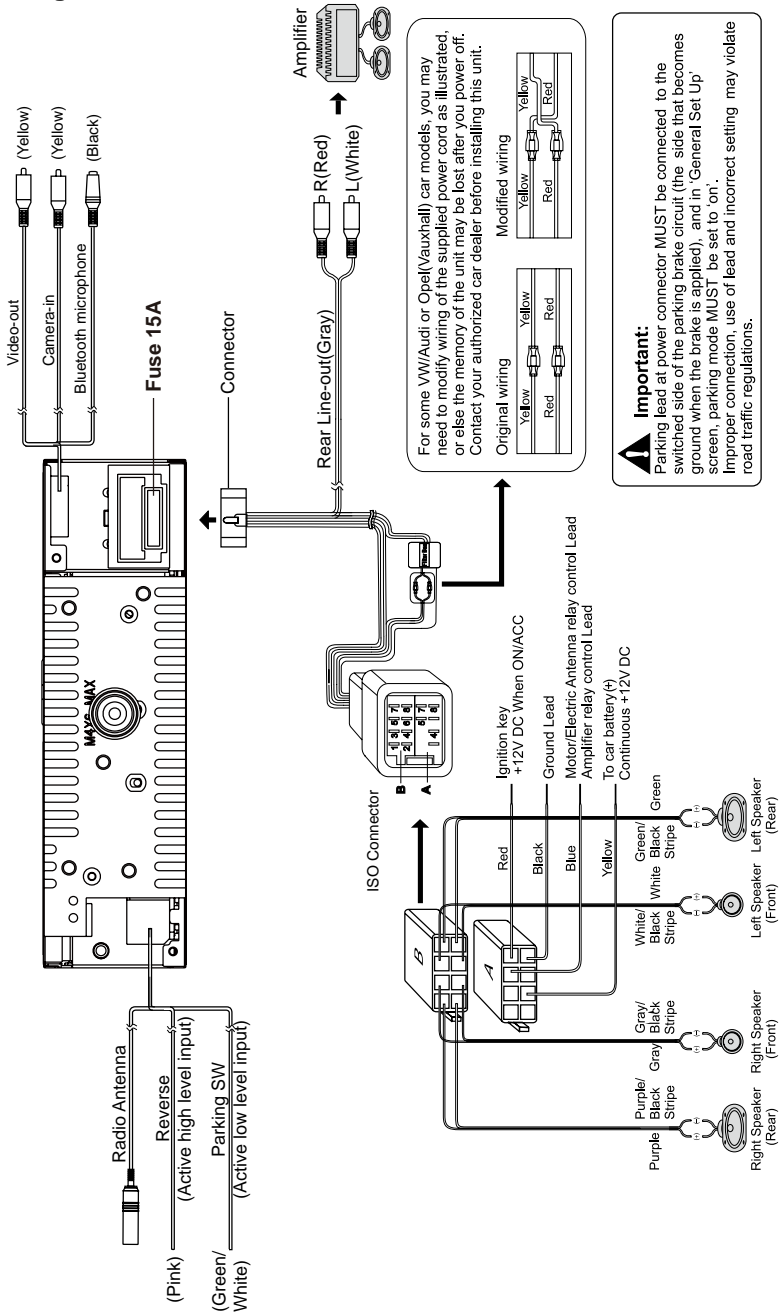


Reverse Driving Cable Connections



Device Connections

Wiring Diagram



Using the ISO Connector

1. If your car is equipped with the ISO connector, then connect the ISO connectors as illustrated.
2. 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.



Location	Function	
	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

Preparation

1. Disconnect battery

Before you begin, always disconnect the battery negative terminal.

Note:

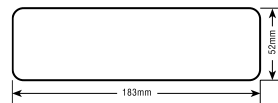
If the unit is to be installed in a car equipped with an on-board drive or navigation computer, do not disconnect the battery cable. If the cable is disconnected, the computer memory may be lost. Under these conditions, use extra caution during installation to avoid causing a short circuit.

2. Remove unit from sleeve

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

Mounting Sleeve Installation

1. 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) x 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.

3. 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.
4. 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.

5. 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.
6. Secure the rear of the unit to the car body using the mounting bolt and rubber cushion.
7. Test the unit using the "Operation" instructions that follow.

Kit Installation

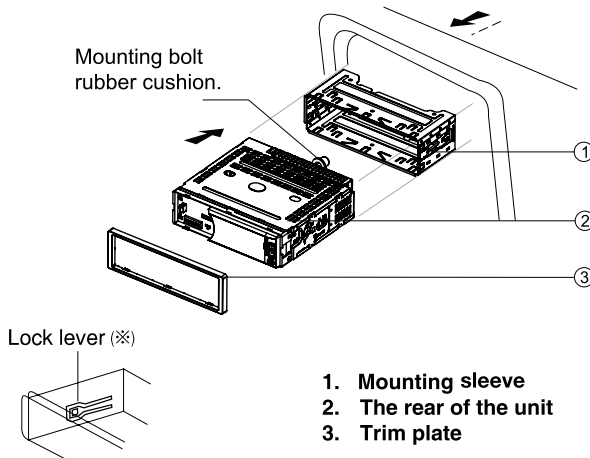
If your vehicle requires the use of an installation kit to mount this unit, follow the instructions included with the installation kit to attach the unit to the mounting plate supplied with the kit.

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

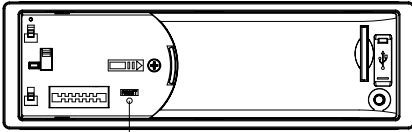
ISO Installation

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.

1. 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.
2. Carefully unsnap the plastic frame from the front of the new unit chassis. Remove and discard the frame.
3. 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.
4. Wire the new unit as outlined in the Mounting Sleeve Installation instructions.
5. Mount the new unit assembly to the dashboard or center console using the reverse procedure of step 1.



Reset



Reset Hole

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

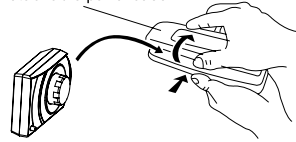
When wiring is complete, reconnect the battery negative terminal.

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

Removing the Panel

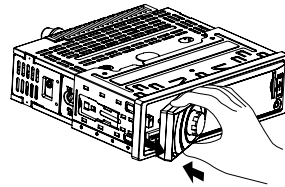
1. Switch off the power of the unit.
2. Press  button to flip down the panel.
3. At an angle hold the panel to pull it out.
4. Place the panel into the case and take it with you when you leave the car.

Detachable panel case



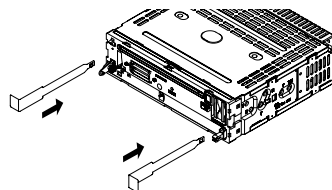
Installing the Panel

1. 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.
2. Remove the trim ring by firmly grasping one side and pulling.
3. 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 (4Ω 10% T.H.D.)
Suitable speaker impedance:	4-8ohm
Pre-Amp output voltage:	2.0V (Play mode: 1KHz, 0dB, 10KΩ 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
Contrast ratio	300
Brightness	350nits

FM Stereo Radio

Frequency range:	87.5-108.0MHz (Europe) 87.5-107.9MHz (America)
Usable sensitivity:	8dBμ
Frequency response:	30Hz-15KHz
Stereo separation:	30dB(1KHz)
Image response ratio:	50dB
IF response ratio:	70dB
Signal/noise ratio:	>55dB

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



Note:

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