

Register your product and get support at
www.philips.com/welcome

CEM2100



EN	User manual	3
PT-BR	Manual do Usuário	25

PHILIPS

Contents

1	Important	4	8	Additional information	21
	Safety	4		Detach the front panel	21
	Notice	4		Replace fuse	21
				Remove the unit	21
2	Your car audio system	6	9	Product information	22
	Introduction	6			
	What's in the box	6			
	Overview of the main unit	7	10	Troubleshooting	23
	Overview of the remote control	8			
3	Get started	9	11	Glossary	24
	Install the car audio	9			
	Install remote control battery	13			
	Turn on	13			
	Set clock	13			
4	Listen to radio	14			
	Tune to a radio station	14			
	Store radio stations in memory	15			
	Tune to a preset station	15			
5	Play audio files	15			
	Play a disc	15			
	Play from USB	16			
	Insert a card	16			
	Play options	16			
	Connect external sound source	17			
6	Adjust sound	18			
	Adjust volume	18			
	Mute	18			
	Turn Dynamic Bass Boost (DBB) on/off	18			
	Turn on/off MAX sound	18			
	Select preset equalizer	18			
	Switch music listening zone	18			
	Other sound settings	18			
7	Adjust system settings	19			
	Turn beep sound on/off	19			
	Turn demo mode on/off	19			
	Dimmer	19			
	Dance	20			
	Rear Aux	20			
	Reset	20			

1 Important

Safety

- Read and understand all instructions before you use your apparatus. If damage is caused by failure to follow instructions, the warranty does not apply.
- This apparatus is designed for negative ground (earth) 12 V DC operation only.
- To ensure safe driving, adjust the volume to a safe and comfortable level.
- Improper fuses can cause damage or fire. When you need to change the fuse, consult a professional.
- Use only the supplied mounting hardware for a safe and secure installation.
- To avoid short circuit, do not expose the apparatus, remote control or remote control batteries to rain or water.
- Never insert objects into the ventilation slots or other openings on the apparatus.
- Clean the apparatus and frame with a soft, damp cloth. Never use substances such as alcohol, chemicals or household cleaners on the apparatus.
- Never place any objects other than discs into the apparatus.
- Never use solvents such as benzene, thinner, cleaners available commercially, or anti-static sprays intended for discs.
- Visible and invisible laser radiation when open. Avoid exposure to beam.
- Risk of damage to the apparatus screen! Never touch, push, rub or strike the screen with any object.



Caution

- Use of controls or adjustments or performance of procedures other than herein may result in hazardous radiation exposure or other unsafe operation.

- The apparatus shall not be exposed to dripping or splashing.
- Do not place any sources of danger on the apparatus (e.g. liquid filled objects, lighted candles).

Notice



**Be responsible
Respect copyrights**

The making of unauthorized copies of copy-protected material, including computer programs, files, broadcasts and sound recordings, may be an infringement of copyrights and constitute a criminal offence. This equipment should not be used for such purposes.



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

This apparatus includes this label:



Recycling



Your product is designed and manufactured with high quality materials and components, which can be recycled and reused.

When you see the crossed-out wheel bin symbol attached to a product, it means the

product is covered by the European Directive 2002/96/EC:



Never dispose of your product with other household waste. Please inform yourself about the local rules on the separate collection of electrical and electronic products. The correct disposal of your old product helps prevent potentially negative consequences on the environment and human health.

Your product contains batteries covered by the European Directive 2006/66/EC, which cannot be disposed of with normal household waste.

Please inform yourself about the local rules on separate collection of batteries. The correct disposal of batteries helps prevent potentially negative consequences on the environment and human health.



This product complies with the radio interference requirements of the European Community.

Environmental information

All unnecessary packaging has been omitted. We have tried to make the packaging easy to separate into three materials: cardboard (box), polystyrene foam (buffer) and polyethylene (bags, protective foam sheet.)

Your system consists of materials which can be recycled and reused if disassembled by a specialized company. Please observe the local regulations regarding the disposal of packaging materials, exhausted batteries and old equipment.

Any changes or modifications made to this device that are not expressly approved by Philips Consumer Lifestyle may void the user's authority to operate the equipment.

2011 © Koninklijke Philips Electronics N.V. All rights reserved.

Specifications are subject to change without notice. Trademarks are the property of Koninklijke Philips Electronics N.V. or their respective owners. Philips reserves the right to change products at any time without being obliged to adjust earlier supplies accordingly.

2 Your car audio system

Congratulations on your purchase, and welcome to Philips! To fully benefit from the support that Philips offers, register your product at www.philips.com/welcome.

Introduction

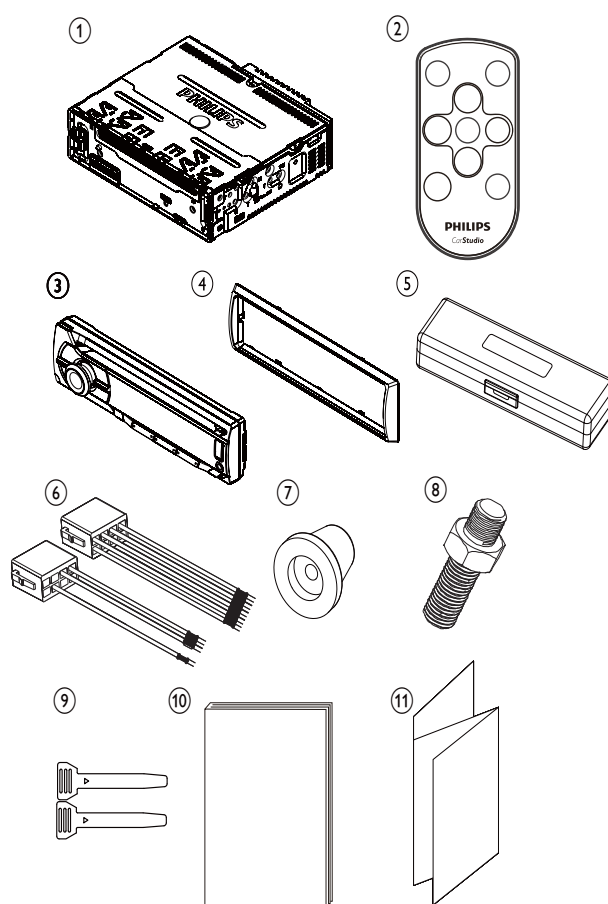
With the in-car audio system, you can enjoy your drive while listening to:

- FM or AM (MW) radio
- Audio from CD or MP3 disc
- Audio from USB devices
- Audio from SD/SDHC card
- Audio from other external devices

The unit supports the following media format:



- ④ Trim plate
- ⑤ Carrying case for front panel
- ⑥ ISO male connector
- ⑦ Rubber cushion
- ⑧ Screw x 1 pc
- ⑨ Disassembly tools x 2 pcs
- ⑩ User manual
- ⑪ Quick start guide

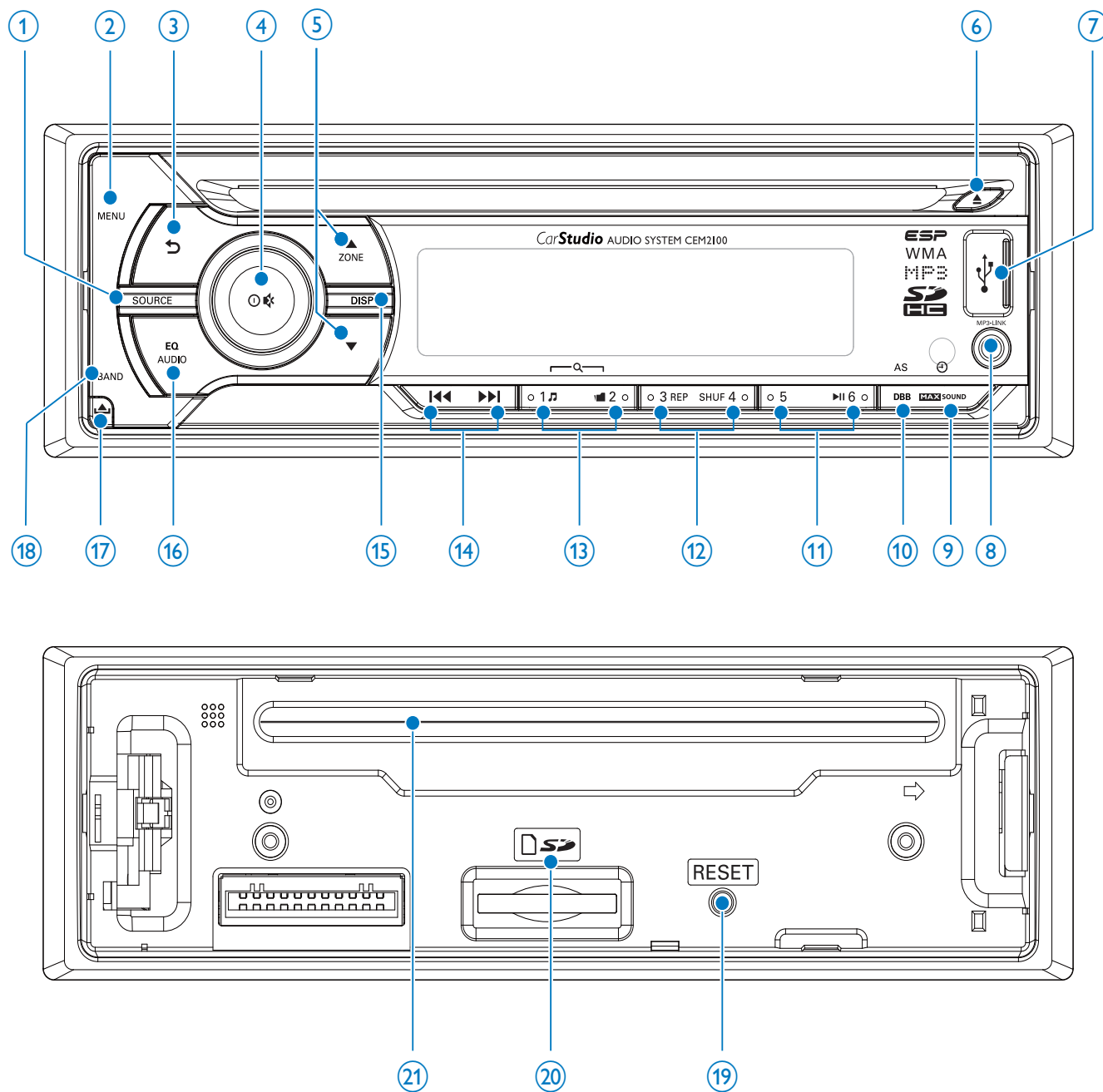


What's in the box

Check and identify the contents of your package:

- ① Main unit (with a sleeve)
- ② Remote control
- ③ Front panel

Overview of the main unit



① SOURCE

- Select audio source.

② MENU

- Access system menu.

③ ↶

- Return to previous menu.

④ ① / 🔊

- Turn the unit on or off.
- Confirm selection.
- Mute or unmute sound.
- Rotate to adjust volume.

⑤ ZONE ▲ / ▼

- Select tuner band.

- Select MP3/WMA folder.
- Switch music listening zone.

⑥ ▲

- Eject disc.

⑦ ➡

- USB socket.

⑧ **MP3 LINK**

- Connect external audio device.

⑨ **MAX SOUND**

- Turn on or off Maximizing volume.
- View clock.

⑩ **DBB**

- Turn on or off Dynamic Bass Boost (DBB) sound.
- Access to tuner auto store.

⑪ ▶||

- Select preset radio station No.6.
- Start play.
- Pause or resume play.

⑫ **REP / SHUF**

- Select preset radio station No.3/4.
- Access to repeat play.
- Access to shuffle play.

⑬ 🎵 / 📁

- Select preset radio station No.1/2.
- Search for track/folder.

⑭ ⏮ / ⏭

- Tune for radio station.
- Skip/search for track.
- Fast backward/forward playback.

⑮ **DISP**

- Display current status.
- Select the dimmer high or low.

⑯ **EQ / AUDIO**

- Select equalizer (EQ) setting.

- Access audio setting menu.

⑰ ▲

- Unlock the panel.

⑱ **BAND**

- Select tuner band.

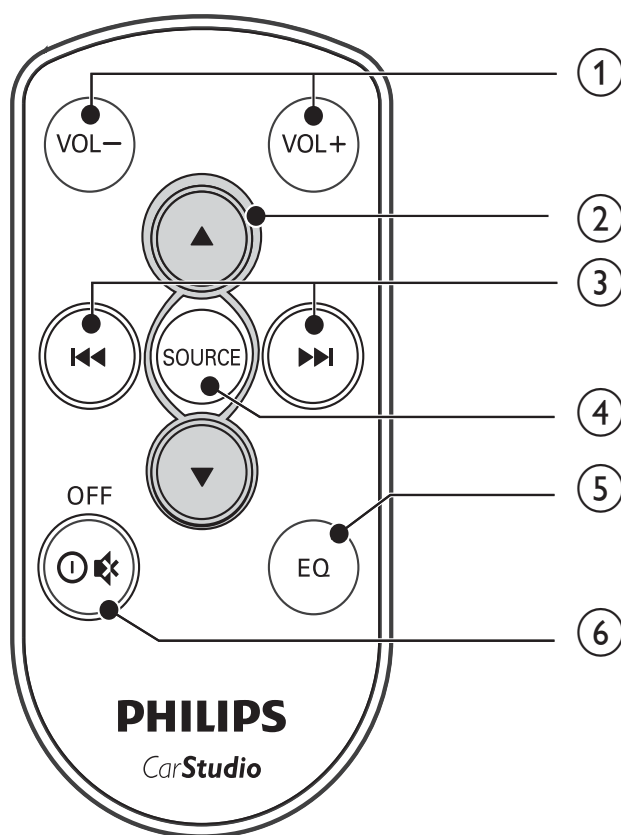
⑲ **RESET**

- Restore default settings.

⑳ **SD card slot**

㉑ **Disc slot**

Overview of the remote control






① **VOL +/-**

- Adjust volume.

② ▲ / ▼

- Select tuner band.
- Scroll up/down menu.
- Select MP3/WMA folder.

- ③ 
 - Tune to a radio station
 - Skip track.
 - Fast backward/forward playback
- ④ **SOURCE**
 - Select audio source.
- ⑤ **EQ**
 - Select equalizer (EQ) settings.
- ⑥ **OFF /  / **
 - Turn the unit on or off.
 - Mute or restore volume.

3 Get started



Caution

- Use the controls only as stated in this user manual.

Always follow the instructions in this chapter in sequence.

If you contact Philips, you will be asked for the model and serial number of your apparatus. The model number and serial number are on the bottom of your apparatus. Write the numbers here:

Model No. _____

Serial No. _____

Install the car audio

These instructions are for a typical installation. However, if your car has different requirements, make the corresponding adjustment. If you have any questions regarding installation kits, consult your Philips car audio dealer.



Caution

- This unit is designed for negative ground (earth) 12V DC operation only.
- Always install this unit in the car dashboard. Other locations can be dangerous as the rear of the unit heats up during use.
- To avoid short-circuit: before you connect, ensure that the ignition is off.
- Ensure that you connect the yellow and red power supply leads after all other leads are connected.
- Ensure that all loose leads are insulated with electrical tape.
- Ensure that the leads do not get caught under screws or in parts that will move (e.g. seat rail).
- Ensure that all ground (earth) leads are run to a common ground (earth) point.
- Use only the supplied mounting hardware for a safe and secure installation.
- Improper fuses can cause damage or fire. When you need to change the fuse, consult a professional.

Note on the power supply lead (yellow)

- When you connect other devices to this apparatus, ensure that the rating of the car circuit is higher than the total fuse value of all the connected devices.

Notes on speaker connection

- Never connect speaker wires to the metal body or chassis of the car.
- Never connect speaker wires with stripes to one another.

Connection: for cars with ISO connectors

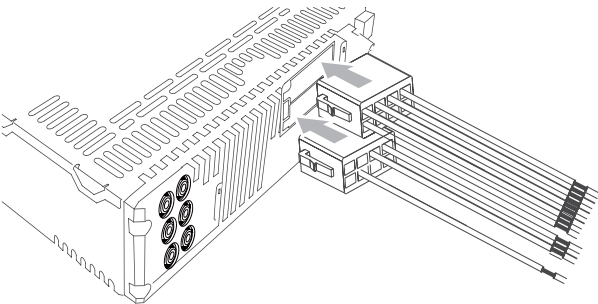
Caution

- Ensure that all loose leads are insulated with electrical tape.

Note

- Consult a professional to connect CEM2100 as instructed below.

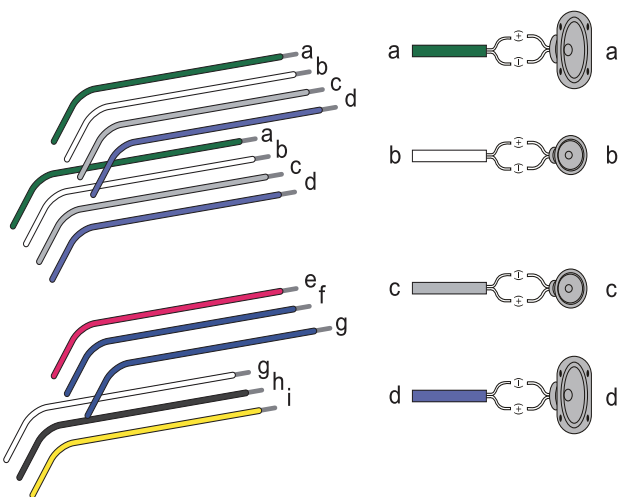
- 1** Connect the supplied male connector to the unit.



- 2** Check the car's wiring carefully and connect them to the the supplied male connector.

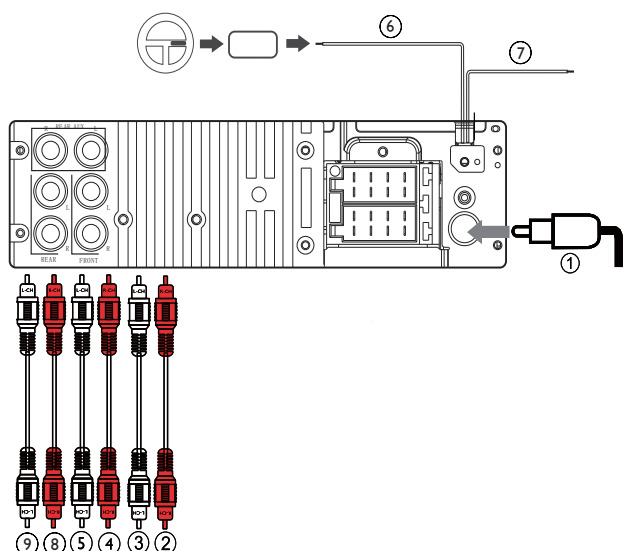
Note

- Risk of danger! Please consult a professional to perform the below steps!



1	Green/black strip	Left speaker (Rear)
2	White/black strip	Left speaker (Front)
3	Gray/black strip	Right speaker (Front)
4	Purple/black strip	Right speaker (Rear)
e	Red	Ignition key +12V DC when ON/ACC
f	Blue	Motor/electric antenna relay control lead
g	Blue/white	Amplifier relay control lead
h	Black	Ground
i	Yellow	To the +12V car battery which is energized at all times

- 3** Connect the antenna and amplifier as illustrated, if applicable.



	Connector	Connect to
1	ANTENNA	Antenna
2	FRONT LINE OUT R (Socket)	Front right speaker
3	FRONT LINE OUT L (Socket)	Front left speaker
4	REAR LINE OUT R (Socket)	Rear right speaker
5	REAR LINE OUT L (Socket)	Rear left speaker
6	OE REMOTE (Purple)	OE Remote
7	TEL MUTING (Blue)	To cellular phone system
8	REAR AUX LINE OUT R (Socket)	Rear Aux right
9	REAR AUX LINE OUT L (Socket)	Rear Aux left



Tip

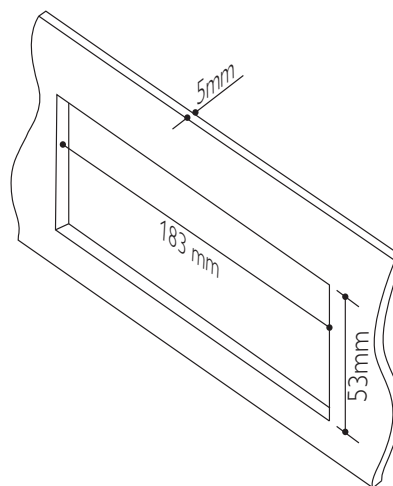
- The pin arrangement for the ISO connectors depends on the type of vehicle you drive. Be sure to make proper connections to prevent damage to the unit.

Mount into the dashboard

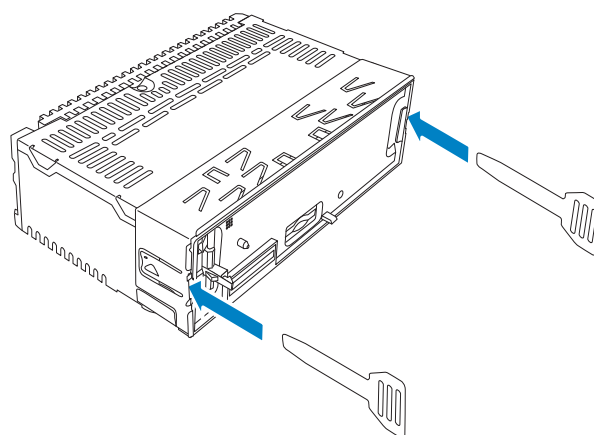
- 1 If the car does not have an on-board drive or navigation computer, disconnect the negative terminal of the car battery.

- If you disconnect the car battery in a car that has an on-board drive or navigation computer, the computer may lose its memory.
- If the car battery is not disconnected, to avoid short-circuit, ensure that the bare wires do not touch each other.

- 2 Ensure that car dashboard opening is within these measurements:



- 3 Remove the mounting sleeve with the supplied disassembly tools.

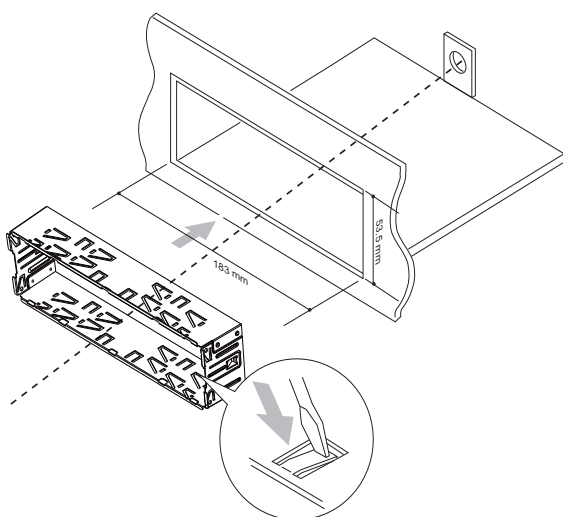


- 4 Install the sleeve into the dashboard and bend the tabs outward to fix the sleeve.

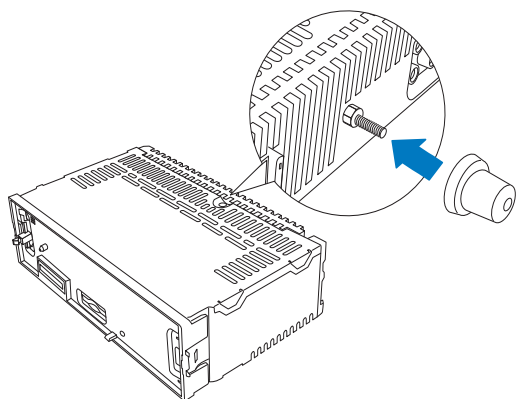


Note

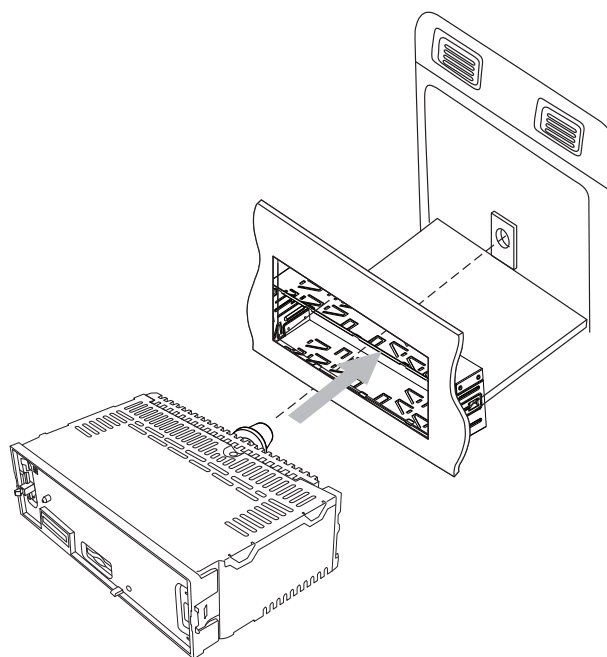
- If the unit is not fixed by sleeve but by the supplied screws, skip this step.



- 5** Place the supplied rubber cushion over the end of the mounting bolt.



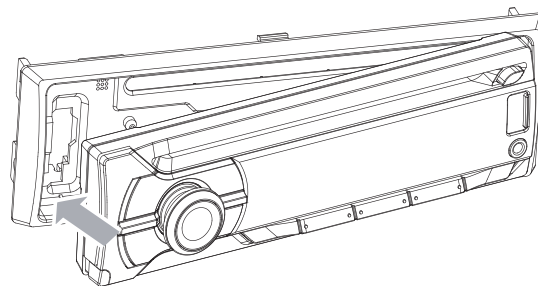
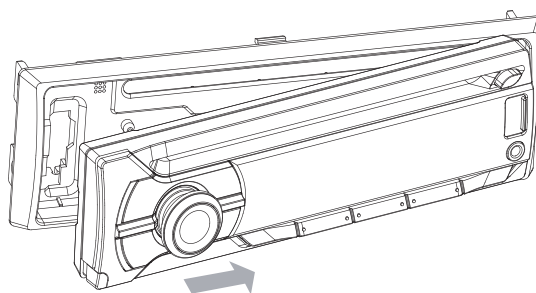
- 6** Slide the unit into the dashboard until you hear a click sound.



- 7** Reconnect the negative terminal of the car battery.

Attach the front panel

- 1** Attach the trim plate.
- 2** Insert the right side of the panel in the chassis until it is correctly engaged.
- 3** Press the left side of the panel until the mechanism locks it into place.



Install remote control battery



Caution

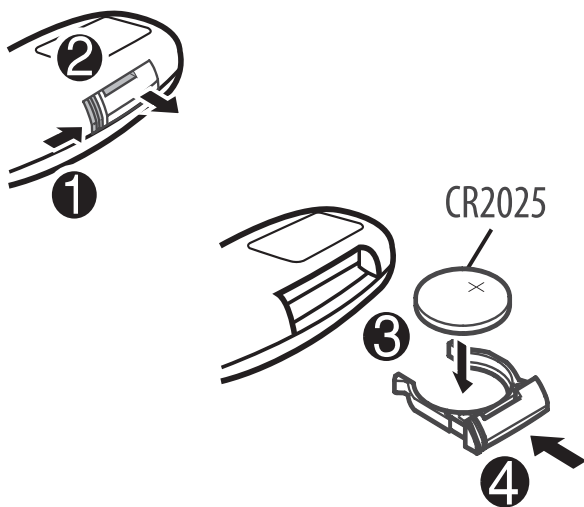
- Risk of explosion! Keep batteries away from heat, sunshine or fire. Never discard batteries in fire.
- Risk of decreased battery life! Never mix different brands or types of batteries.
- Risk of product damage! When the remote control is not used for long periods, remove the batteries.
- Perchlorate Material - special handling may apply. See www.dtsc.ca.gov/hazardouswaste/perchlorate.

For first-time use:

Remove the protective tab to activate the remote control battery.

To replace the remote control battery:

- 1 Open the battery compartment.
- 2 Insert one CR2025 battery with correct polarity (+/-) as indicated.
- 3 Close the battery compartment.



Turn on

To turn on the unit,

- Press **⏻**.

To turn off the unit,

- press and hold **⏻** until the unit is turned off.

Select country/region



Note

- Select correct country/region for this unit, otherwise the unit can not work properly.

- 1 Press **⏻** to turn on the unit.
↳ **[SELECT OPERATING REGION]** is displayed.
- 2 Rotate **⏻** to select an option:
 - **[USA]** (United States)
 - **[LATIN]** (Latin America)
 - **[EUROPE]** (Western Europe)
 - **[RUS]** (Russia)
 - **[M-EAST]** (Middle East)
 - **[ASIA]** (Asia Pacific)
 - **[JAP]** (Japan)
 - **[AUST]** (Australia)
- 3 Press **⏻** to confirm.

Set clock

- 1 Press **MENU** repeatedly until current time is flashed.
- 2 Rotate **⏻** to set hour.
- 3 Press **⏻** to confirm.
- 4 Rotate **⏻** to set minute.
- 5 Press **⏻** to confirm.

Set clock format

- 1 Press **MENU**.
- 2 Press **▲** or **▼** repeatedly until **[CLOCK FORMAT]** is displayed.
- 3 Rotate **⏻** to select a setting:
 - **[CLOCK 12H]**
 - **[CLOCK 24H]**

View clock

In any mode, press and hold **MAX SOUND** until the clock is displayed.

- Press any key to cancel the clock display.

4 Listen to radio

Tune to a radio station

- 1 Press **SOURCE** repeatedly to select radio mode.
 - 2 Press **BAND** or **▲** / **▼** repeatedly to select band: **[FM1]**, **[FM2]**, **[FM3]**, **[AM1]**, or **[AM2]**.
 - 3 Press and hold **◀◀** or **▶▶** until the frequency digit is flashed.
 - 4 Press **◀◀** or **▶▶** to tune to a radio station manually.
 - ↳ The radio station is broadcast.
- To search for a radio station automatically, press **◀◀** or **▶▶**.

Select tuner region

You can select suitable country/region of the radio.

- 1 Press **SOURCE** to select radio mode.
- 2 Press **MENU** repeatedly until **[AREA]** is displayed..
- 3 Rotate **⌚** to select:
 - **[USA]** (United States)
 - **[LATIN]** (Latin America)
 - **[EUROPE]** (Western Europe)
 - **[RUS]** (Russia)
 - **[M-EAST]** (Middle East)
 - **[ASIA]** (Asia Pacific)
 - **[JAP]** (Japan)
 - **[AUST]** (Australia)
- 4 Press **⌚** to confirm.

Select tuner sensitivity

To receive more radio stations or only stations with strong signal, you can adjust the tuner sensitivity.

- 1 Press **MENU** repeatedly until **[LOCAL]** is displayed.
- 2 Rotate **⌚** to select a setting:
 - **[LOCAL ON]** (local on): Only stations with strong signal can be broadcast.
 - **[LOCAL OFF]** (local off): Stations with strong and weak signals can be broadcast.

Store radio stations in memory

You can store up to 6 stations in each band.

Store stations automatically

- 1 In Radio mode, press and hold **DBB** until **[STORE - -]** is displayed.
- 2 Press **⌚** to confirm.
 - ↳ The six strongest stations of the selected band are saved in preset channel automatically.

Store stations manually

- 1 Tune to a station that you want to store (see 'Tune to a radio station' on page 14).
- 2 Press a numeric button for 3 seconds.
 - ↳ The station is saved in the selected channel.

Tune to a preset station

- 1 Press **BAND** to select band.
- 2 Press a numeric key to select a preset station.

5 Play audio files



Note

- Ensure that the disc or device contains playable files.

Play a disc



Note

- You cannot play CDs encoded with copyright protection technologies.

You can play commercially available audio CDs and these discs:

- CD-Recordables (CD-R)
- CD-Re-writables (CD-RW)
- MP3 CDs
- WMA CDs



Note

- Ensure that the disc contains playable content.

Insert a CD with the printed side facing up.

↳ Play starts automatically.

- To pause CD play, press **▶||**.
- To resume CD play, press **▶||** again.
- To skip to the previous/next track, press **◀◀** or **▶▶**.
- To search backward/forward rapidly within the current track, press **◀◀** or **▶▶** for 3 seconds.

Remove the CD

To take out the CD, press **▲** on the front panel.



Tip

- If the disc is blocked in the disc compartment, press and hold **▲** until the disc comes out.


Play from USB

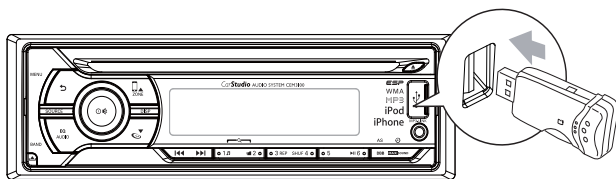


Note

- Ensure that the USB device contains playable music.

Insert the USB device

- 1 Slide the USB socket cover marked  to the left.
- 2 Insert the USB device into the USB socket.
↳ The unit starts playing from the USB device automatically.



Remove the USB device

- 1 Press **⏻** to turn off the unit.
- 2 Remove the USB device.

Insert a card

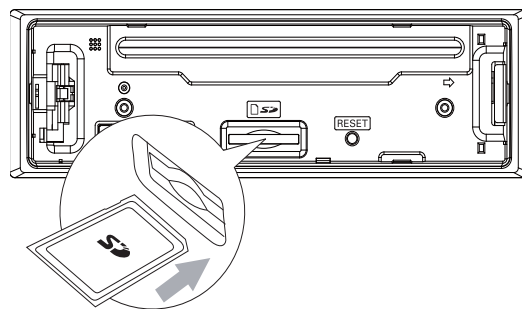


Note

- This unit supports SD and SDHC cards.

- 1 Press **▲** to release the panel.
- 2 Insert the card into the card slot.
- 3 Close the front panel.

- ↳ The unit starts playing from the card automatically.



Remove the card

- 1 Press **⏻** to turn off the unit.
- 2 Press the card until you hear a click sound.
↳ The card is now disengaged.
- 3 Remove the card.

Play options

Search for an MP3/WMA track

Search within the current folder

- 1 Press **🎵**.
↳ The name of the current track is displayed.
- 2 Rotate **⌂** to select another track in current folder.
- 3 Press **⏻** to confirm.

Search in other folder

- 1 Press **📁**.
↳ The name of the current folder is displayed.
- 2 Rotate **⌂** to navigate through all folders.
- 3 Press **⏻** to access the selected folder.
↳ The unit starts playing the first song from the selected folder automatically.



Tip

- To go back to upper level of a folder, press ↶.

View play information

During playing, press **DISP** repeatedly to view:

- Track number and elapsed play time
- Folder
- File
- Album
- Artist
- Title

Repeat play

- 1 During play, press **REP**.
↳ **[REPEAT]** is displayed.
- 2 Rotate **⌚** to select a setting.
 - **[REP TRK]** (repeat one track): play current track repeatedly.
 - **[REP FLD]** (repeat a folder): play all tracks in the current folder repeatedly.
 - **[REP ALL]** (repeat all tracks): play all tracks repeatedly.

Shuffle play

You can play the tracks in random order:

- 1 During play, press **SHUF**.
↳ **[SHUFFLE]** is displayed.
- 2 Rotate **⌚** to select a setting:
 - **[SHUF FLD]**: start random play for all tracks in the current folder.
 - **[SHUF ALL]**: start random play for all tracks.
 - **[SHUF OFF]**: cancel shuffle play.

Connect external sound source


- 1 Connect the external sound source to **MP3 LINK** socket with a 3.5 mm cable.
- 2 Press **SOURCE** repeatedly until **[MP3 LINK]** is displayed.
- 3 Operate the external component (refer to the instructions supplied with the external component).

6 Adjust sound

Adjust volume

Turn  clockwise/counterclockwise to increase/decrease volume.

Mute

You can turn off the sound of your audio. During play, press .

- To resume sound, press  again.

Turn Dynamic Bass Boost (DBB) on/off

- 1 Press **DBB** and the current setting is displayed:
 - ↳ **[DBB ON]**: The Dynamic Bass Boost (DBB) function is on.
 - ↳ **[DBB OFF]**: The DBB function is off.
- 2 Press **DBB** again to change the DBB setting.

Turn on/off MAX sound

- 1 Press **MAX SOUND**.
 - ↳ The current setting displays
 - ↳ **[MAX ON]**: The maximum sound (MAX sound) function is on.
 - ↳ **[MAX OFF]**: The maximum sound function is off.
- 2 Press **MAX SOUND** again to select an option.

Select preset equalizer



- 1 Press **EQ / AUDIO**.

↳ Current Equalizer setting is displayed.

- 2 Press **EQ / AUDIO** again to select a preset EQ setting:
 - **[OPTIMAL]** (optimal)
 - **[FLAT]** (flat)
 - **[POP]** (pop)
 - **[USER]** (user)
 - **[TECHNO]** (techno)
 - **[ROCK]** (rock)
 - **[CLASSIC]** (classic)
 - **[JAZZ]** (jazz)



Switch music listening zone

Philips' innovative Zone technology enables driver or passengers to enjoy music with the best speakers balance and experience more vivid spacial effect as the artist is intended to create. You can switch the music listening zone from driver to passengers for the best speaker sound settings in car.

- 1 Press **ZONE**.
 - ↳ The current setting is displayed.
- 2 Rotate  /  to select a setting:
 - **[ALL]**
 - **[FRONT-L]** (Front left)
 - **[FRONT-R]** (Front right)
 - **[FRONT]**

Other sound settings

You can also adjust the preset **EQ / AUDIO** settings.

- 1 Press **EQ / AUDIO** for 3 seconds.
- 2 Press  or  repeatedly to select the item to be adjusted:
 - **[BAS]** (bass) range: -7 to +7.
 - **[TRE]** (treble) range: -7 to +7.




- **[BAL]** (balance) range: 12L to 12R.
(L=left speaker, R=right speaker)
- **[FAD]** (fader) range: 12R to 12F.
(R=rear speaker, F=front speaker)

3 Rotate  to select a value.




7 Adjust system settings

Turn beep sound on/off




Each time you press a button, the unit beeps. You can turn off/on this beep sound.

- 1 Press **MENU**.
- 2 Press  or  repeatedly until **[BEEP]** is displayed.
- 3 Rotate  to select a setting:
 - **[BEEP ON]**: Turn on the beep sound.
 - **[BEEP OFF]**: Turn off the beep sound.

Turn demo mode on/off

- 1 Press **MENU**.
- 2 Press  or  repeatedly until **[DEMO]** is displayed.
 - ↳ The screen shows current Demo mode setting.
- 3 Rotate  to select a setting:
 - **[DEMO ON]** : Turn on the demo mode. When the unit is idle for more than 120 seconds, all functions are displayed.
 - **[DEMO OFF]** : Turn off the demo mode.

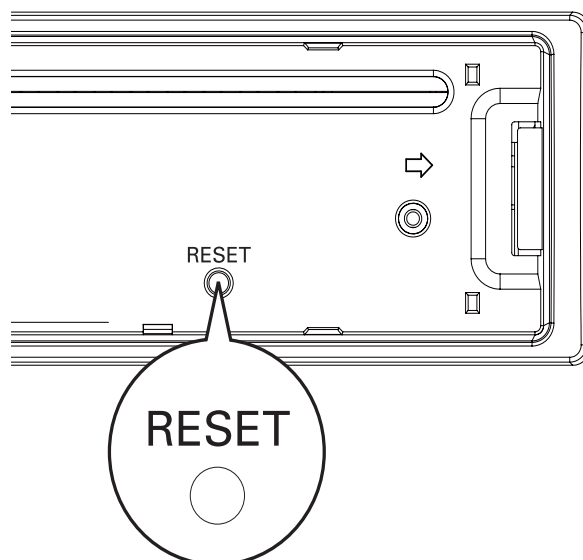
Dimmer

- 1 Press **MENU**.
- 2 Press  or  repeatedly until **[DIMMER]** is displayed.
- 3 Rotate  to select a setting:
 - **[DIMM HIGH]** (dimmer high)
 - **[DIMM LOW]** (dimmer low)

Dance

You can turn on or off the spectrum on the LCD display.

- 1 Press **MENU**.
- 2 Press **▲** or **▼** repeatedly until **[DANCE]** is displayed.
- 3 Rotate **⌚** to select a setting:
 - **[DANCE ON]** :Turn on the spectrum.
 - **[DANCE OFF]** :Turn off the spectrum.



Rear Aux

- 1 Press **MENU**.
- 2 Press **▲** or **▼** repeatedly until **[TEL MUTE]** is displayed.
- 3 Rotate **⌚** to select a setting:
 - **[NORMAL]** : Mute the telephone, **[MUTE]** is displayed.
 - **[REAR AUX]** : Mute the telephone, **[PHONE IN]** is displayed.



Note

- To support telephone call with this unit, connect **TEL MUTING** wire to your hands-free kit and audio out jack to the **REAR AUX** in jack of the unit.

Reset


You can reset the unit to its default setting.

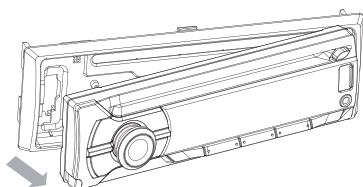
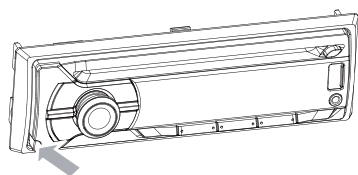
- 1 Detach the front panel. (see 'Detach the front panel' on page 23)
- 2 Press the reset button by using a ball-point pen or a similar tool.
 - ↳ Preset adjustments such as preset channels and sound adjustments are erased.

8 Additional information

Detach the front panel

You can detach the front panel to deter theft.

- 1 Press  to release the panel.
- 2 Pull the panel towards you to disengage it from the chassis.



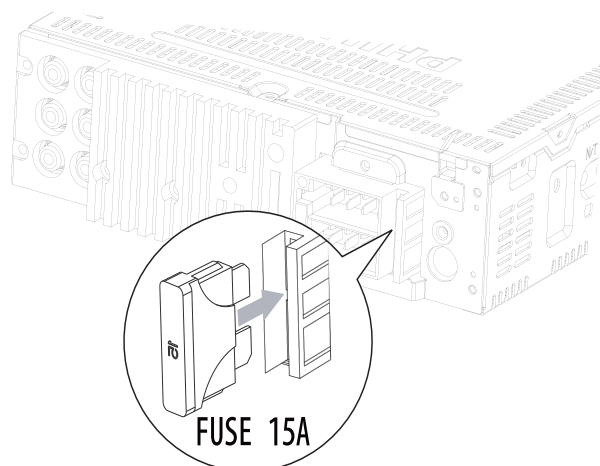
- 3 Store the panel in the supplied carrying case to protect it from dirt or damage.

Replace fuse

If the fuse is damaged,

- 1 Check the electric connection.
- 2 Buy a fuse that matches the voltage of the damaged fuse.

- 3 Replace the fuse.



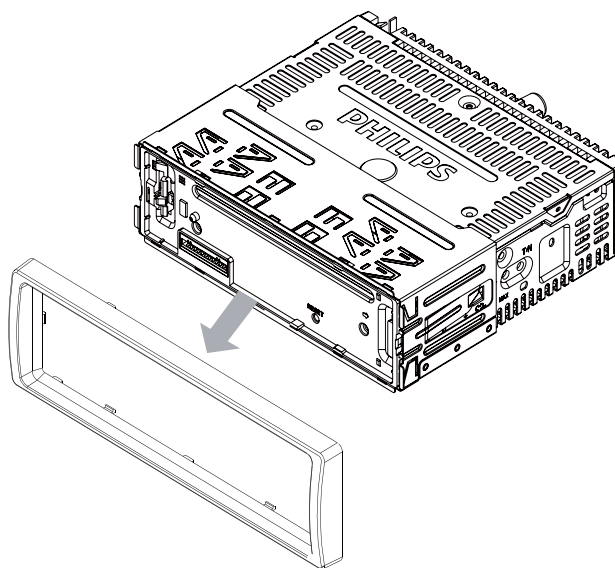
Note

- If the new fuse gets damaged again, there may be an internal malfunction. Consult your Philips dealer.

Remove the unit

You can remove the unit from the dashboard.

- 1 Detach the front panel.
- 2 Pull out the unit by using the disassembly tools.



9 Product information



Note

- Product information is subject to change without prior notice.

Power supply	12 V DC (11 V - 16 V), negative ground
Fuse	15 A
Suitable speaker impedance	4 - 8 Ω
Maximum power output	50 W \times 4 channels
Continuous power output	22 W \times 4 RMS (4 Ω 10% T.H.D.)
Pre-Amp output voltage	2.5V
Aux-in level	500 mV
Dimensions (W \times H \times D)	181.5 \times 52 \times 191.4 mm
Weight	1.47 kg

Radio

Frequency range - FM	87.5 - 108.0 MHz (100kHz per step in auto search and 50kHz per step in manual search)
Frequency range - AM(MW)	522 - 1620 KHz (9 kHz) 530 - 1710 kHz (10 kHz)
Usable sensitivity - FM	8 μ V
Usable sensitivity - AM(MW) (S/N = 20 dB)	30 μ V

Compatible USB devices:

- USB flash memory: USB 1.1 host with interface reading all speed support (1.1, 2.0)

- USB flash players: USB 1.1 host with interface reading all speed support (1.1, 2.0)
- Memory cards (SD/SDHC)

Supported formats:

- USB or memory file format: FAT12, FAT16, FAT32
- MP3 bit rate (data rate): 32-320 Kbps and variable bit rate
- WMA V4,V7,V8,V9 (L1, L2)
- MP3 sampling frequencies: 8-48 kHz
- MP3 Bit-rates: 8~320 (kbps), variable bit rates
- WMA sampling frequencies: 32 kHz, 44.1 kHz, 48 kHz
- WMA Bit-rates: 32~192 (kbps), variable bit rates
- Directory nesting up to a maximum of 8 levels
- Number of albums/ folders: CD maximum 99, USB or memory maximum 99
- Number of tracks/titles: CD maximum 999 (depending on number of album), USB or memory maximum 999
- ID3 tag v2.0 or later

Unsupported formats:

- Empty albums: an empty album is an album that does not contain MP3/ WMA files, and is not be shown in the display.
- Unsupported file formats are skipped. For example, Word documents (.doc) or MP3 files with extension .dlf are ignored and not played.
- AAC, WAV, PCM audio files
- DRM protected WMA files (.wav, .m4a, .m4p, .mp4, .aac)
- WMA files in Lossless format

10 Troubleshooting



Caution

- Never remove the casing of this apparatus.

To keep the warranty valid, never try to repair the system yourself.

If you encounter problems when using this apparatus, check the following points before requesting service. If the problem remains unsolved, go to the Philips web site (www.philips.com/support). When you contact Philips, ensure that your apparatus is nearby and the model number and serial number are available.

No power or no sound.

- Car engine is not on. Turn the car engine on.
- Cable is not correctly connected. Check connections.
- Fuse is burnt. Replace fuse.
- Volume is too low. Adjust volume.
- If the above solutions cannot help, press the RESET button.
- Ensure that the track played is of a compatible format.

Noise in broadcasts.

- Signals are too weak. Select other stations with stronger signals.
- Check the connection of the car antenna.
- Change broadcast from Stereo to mono.

Cannot play disc

- Ensure that the disc label is inserted with the printed side facing up.
- Wipe the disc with fibre cleaning cloth from the centre to the edge in a straight line.
- This disc may be defective. Play another disc.

- Ensure that the CD is a finalised CD/CD-R/CD-RW.
- Ensure that the CD is not encoded with copyright protection technologies.

The CD skips tracks

- Ensure that the CD is not damaged or dirty.
- Ensure that random mode is deactivated.

Disc cannot be ejected

- Press and hold ▲.

Preset stations lost.

- Battery cable is not correctly connected. Connect the battery cable to the terminal that is always live.

Display show ERR-12

- USB data error. Check the USB device.

11 Glossary

M

MP3

A file format with a sound data compression system. MP3 is the abbreviation of Motion Picture Experts Group 1 (or MPEG-1) Audio Layer 3. With the MP3 format, one CD-R or CD-RW can contain about 10 times more data than a regular CD.

S

SD

Secure Digital. A type of memory card with a flash memory.

SDHC

Secure Digital High Capacity (SDHC) is a type of flash memory card based on the SDA 2.00 specification. The SDA 2.00 specification enables SD cards to reach higher capacities from 4GB to 32GB, and growing.

W

WMA (Windows Media Audio)

An audio format owned by Microsoft, is a part of Microsoft Windows Media technology. Includes Microsoft Digital Rights Management tools, Windows Media Video encoding technology, and Windows Media Audio encoding technology.

