Register your product and get support at

www.philips.com/welcome

CED228/58

EN **User manual**

PHILIPS

Contents

1 Important

Safety

- Read and understand all instructions before you use the apparatus. If damage is caused by failure to follow instructions, the warranty does not apply.
- Use of controls or adjustments or performance of procedures other than herein may result in hazardous radiation exposure or other unsafe operation.
- This unit is designed for negative ground (earth) 12 V DC operation only.
- To reduce the risk of traffic accident, do no watch video during driving.
- 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.
- Never place any objects other than discs into the disc tray/slot.
- Visible and invisible laser radiation when open. Avoid exposure to beam.
- Risk of damage to the screen! Never touch, push, rub or strike the screen with any object.
- Never use solvents such as benzene, thinner, cleaners available commercially, or anti-static sprays intended for discs.
- Clean the apparatus with soft, damp cloth. Never use substances such as alcohol, chemicals or household cleaners on the apparatus.

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.

DivX®

"DivX, DivX" Certified, and associated logos are trademarks of DivX, Inc. and are used under license.
Offical DivX® Certified product. Plays all versions of DivX® video (including DivX® 6) with standard playback of DivX® media files.

DOLBY DIGITAL

Manufactured under license from Dolby Laboratories.
"Dolby" and the double-D symbol are trademarks of Dolby Laboratories.
Other trademarks and trade names are those of their respective owners.
This apparatus includes this label:

CLASS 1 LASER PRODUCT

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.)

English

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.
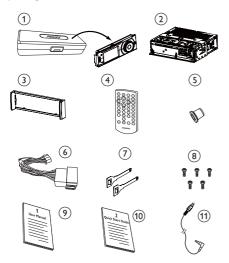
Introduction

With the in-car audio system, you and your passengers can enjoy:
- DVD, VCD or DivX video
- Music CDs
- FM or AM (MW) radio
- MP3/WMA audio from discs, USB devices and SD/MMC cards
- Audio from external devices
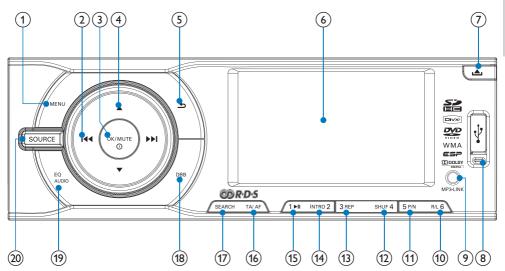
What's in the box
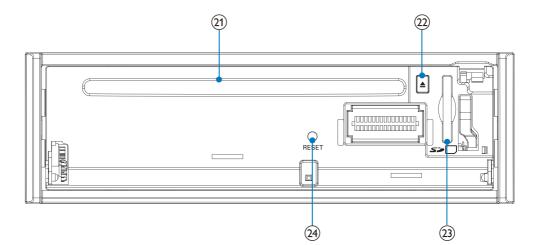
Check and identify the contents of your package:

(a) Front panel carry case (includes front panel)

(b) Car audio system

(c) Trim plate

(d) Remote control

(e) Rubber cushion

(f) Standard connector

(g) Removal keys x 2 pcs

(h) Screws M5x6 mm x 5 pcs

(i) User manual

(j) Installation guide

(k) MP3-link cable

Overview of the main unit

a **MENU**
   - Access the system menu.

b **I◀◀ / ▶▶I**
   - Tune for radio station.
   - Skip/search for track.

c **OK/MUTE ⏻**

   - Turn the unit on or off.
   - Turn mute on or off.
   - Adjust volume.
   - Confirm selection.

d **▲ / ▼**
   - Select tuner band.
   - Select folder.

(5) ⏎
- • Return to previous menu.
- • Stop searching.
- • Disable screen saver.

(6) **Screen**

(7) ⏏
- • Unlock the front panel.

(8) **USB socket**

(9) **External equipment audio-in socket**

(10) **R/L, 6**
- • Select preset station no. 6.
- • Select audio channel.

(11) **5, P/N**
- • Select preset station no. 5
- • Select video output format.

(12) **SHUF, 4**
- • Turn random play on or off.
- • Select preset station no. 4

(13) **3, REP**
- • Select repeat play mode.
- • Select preset station no. 3

(14) **INTRO, 2**
- • Turn scan play on or off.
- • Select preset station no. 2

(15) **1, ▶ II**
- • Start play.
- • Pause or resume play.
- • Select preset station no. 1

(16) **TA/AF**
- • Enable TA/AF function.

(17) **SEARCH**
- • Select tuner band.
- • Store radio station automatically.

(18) **DBB**
- • Turn on or off Dynamic Bass Boost (DBB) sound.
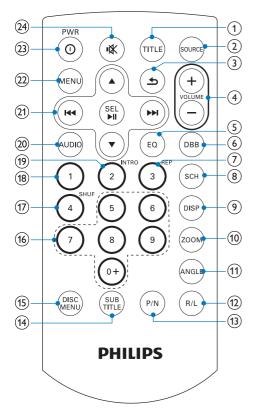
(19) **EQ/AUDIO**
- • Select equalizer (EQ) setting.
- • Access audio setting menu.

(20) **SOURCE**
- • Select audio source.

(21) **Disc slot**

(22) ⏏
- • Eject disc.

(23) **SD/MMC card slot**

(24) **RESET**
- • Restore default settings.

Overview of the remote control

a **TITLE**
  - Access or exit DVD title menu.

b **SOURCE**
  - Select connected device.

c **↰**
  - Return to previous menu.
  - Disable screen saver.

d **VOLUME +/-**
  - Adjust volume.

e **EQ**
  - Select equalizer (EQ) setting.

f **DBB**
  - Turn on or off Dynamic Bass Boost (DBB) sound.

g **3, REP**
  - Select repeat play mode.
  - Select preset station no. 3

h **SCH**
  - Store radio station automatically.

i **DISP**
  - Display play information.

j **ZOOM**
  - Enlarge or reduce picture or active image size.

k **ANGLE**
  - Select a difference angle/version of the current DVD scene.

l **R/L**
  - Select audio channel.

m **P/N**
  - Select video output format.

n **SUBTITLE**
  - Select DVD or DivX subtitle language.

o **DISC MENU**
  - Return to DVD main menu.

p **5/6/7/8/9/0+**
  - Select track or preset radio station.

q **SHUF, 4**
  - Turn random play on or off.
  - Select preset station no. 4.

r **1**
  - Select preset station no. 1

s **INTRO, 2**
  - Turn intro play on or off.
  - Select preset station no. 2

t **AUDIO**
  - Access audio setting menu.

u **Navigation buttons**
  - **I◀◀ / ▶▶I**
    Tune for radio station.

Skip/search for track.
- ▲ / ▼
    Select tuner band.
    Select folder.
- **SEL/ ▶Ⅱ**
    Confirm selection.
    Start play.
    Pause or resume play.

㉒ **MENU**
- Access system menu.

㉓ ⏻ **PWR**
- Turn the unit on or off.

㉔ 🔇
- Mute or unmute audio.

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) 12 V 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.
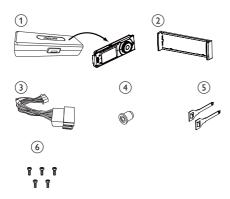
Note on the power supply lead (yellow)

- 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.

Overview of parts

These are the supplied parts needed to connect and install this unit.
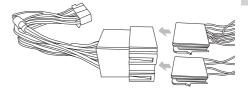
a **Carry case with front panel stored inside**

b **Trim plate**

c **Standard connector**

d **Rubber cushion**

e **Removal keys x 2 pcs**

f **Screw x 5 pcs**

Connect wires: ISO connectors

> ⚠ **Caution**
>
> - Ensure that all loose leads are insulated with electrical tape.
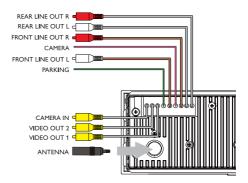
1 Pull out the ISO connectors from the car dashboard and connect them to the bigger end of the supplied standard connector.

2 Connect the other end of supplied standard connector to the unit.

3 Do the other connections, if applicable.

REAR LINE OUT R
REAR LINE OUT L
FRONT LINE OUT R
CAMERA
FRONT LINE OUT L
PARKING

CAMERA IN
VIDEO OUT 2
VIDEO OUT 1
ANTENNA

Connect wires: without ISO connectors
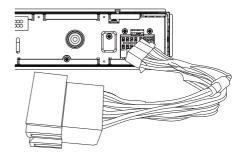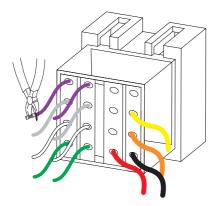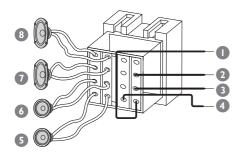
⚠ **Caution**

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

1 Cut off the bigger end of the supplied standard connector.
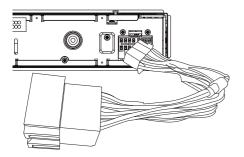
2 Check the car's wiring carefully, then connect them to the standard connector.
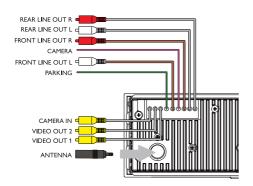
Connector	Connect to
1 Black wire	**A metal surface of the car** First connect the black ground (earth) lead, then connect the yellow and red power supply leads.
2 Yellow wire	**The +12V car battery which is live at all times**.
3 Orange/ white wire	**Illumination switch**
4 Red wire	**The +12V power terminal which is live in the accessory (ACC) position of the ignition switch** If there is no accessory position, connect to the +12V car battery terminal that is always live. Be sure to connect the black ground (earth) lead to a metal surface of the car first.
5 Green and green/black wires	**Left speaker (Rear)**
6 White and white/black wires	**Left speaker (Front)**
7 Gray and gray/black wires	**Right speaker (Front)**
8 Purple and purple/ black wires	**Right speaker (Rear)**
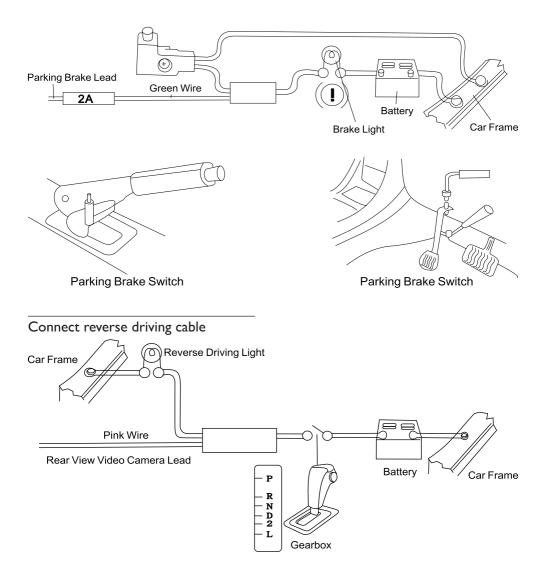
3 Connect the supplied standard connector to the unit.

4 Do the other connections, if applicable.

REAR LINE OUT R
REAR LINE OUT L
FRONT LINE OUT R
CAMERA
FRONT LINE OUT L
PARKING

CAMERA IN
VIDEO OUT 2
VIDEO OUT 1
ANTENNA

Connect parking brake cable

Parking Brake Lead

Green Wire

2A

Brake Light

Battery

Car Frame

Parking Brake Switch

Parking Brake Switch

Connect reverse driving cable

Car Frame

Reverse Driving Light

Pink Wire

Rear View Video Camera Lead

P
R
N
D
2
L

Gearbox

Battery

Car Frame
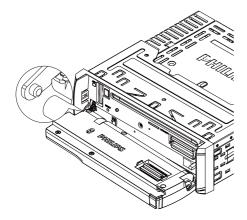
Attach the front panel
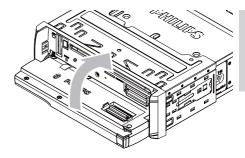
1 Attach the trim plate.

2 Insert the left side of the panel in the chassis until it is correctly engaged.

3 Press the right side of the panel until the mechanism locks it into place.

4 Close the front panel.
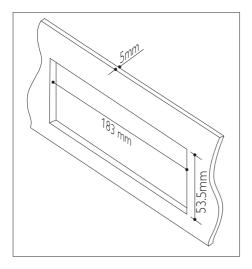
Mount in the dashboard

Note
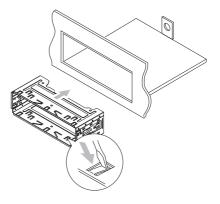
- For proper operation of the DVD player, the chassis must be mounted within 20 degree horizontal. Ensure that the unit is mounted within this limitation.

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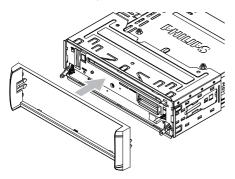- If you disconnect the car battery in a car that has an on-board drive or navigation computer, the computer may lost its memory.
- If the car battery is not disconnected, to avoid short-circuit, ensure that bare wires do not touch each other.

2 Ensure that car dashboard opening is within these measurements:
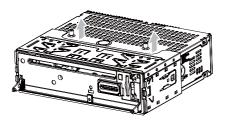
3 Remove the two transport screws on the top of the unit.

4 Remove the mounting sleeve with the removal keys.

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

- If the unit is not fixed by sleeve but by the supplied screws, skip this step.
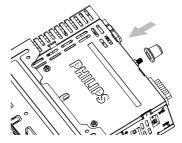
6 Place the rubber cushion over the end of the bolt.

7 Slide the unit into the dashboard until a click sound is heard.

8 Reconnect the negative terminal of the car battery.

Install remote control battery

> **⚠ Caution**
>
> - Risk of explosion! Keep batteries away from heat, sunshine or fire. Never discard batteries in fire.
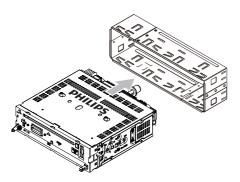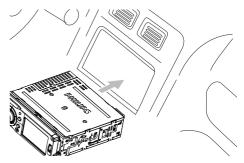> - Risk of decreased battery life! Never mix different brands or types of batteries.
> - Risk of product damage! When the remote control is not used for long periods, remove the batteries.
> - Perchlorate Material - special handling may apply. See www.dtsc.ca.gov/hazardouswaste/perchlorate.
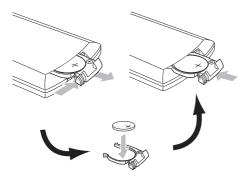
For first-time use:
1 Remove the protective tab to activate the remote control battery.

To replace the remote control battery:
1 Open the battery compartment.
2 Insert <00_RC_Battery_Quantity> <00_RC_Battery_Type> batteries with correct polarity (+/-) as indicated.

Close the battery compartment.

Turn on

1 Press the ⏻ knob to turn on the unit.
   ↳ The unit plays the last listened program: DVD, Tuner, USB or SD/MMC Card (if there is USB device or SD/MMC card connected).

- To turn off the unit, press the ⏻ knob for more than 2 seconds.
- When the unit is idle for over 3 minutes, it goes to standby mode and displays screen saver.

Select display language

English is the default language for screen display. You can change the display language.

1 Press **MENU**.
   ↳ The main menu is displayed.

2 On the remote control, press the navigation buttons to select **[SETTINGS]**, then press **SEL** to confirm.
   ↳ The setting menu is displayed.

3 Select **[LANGUAGE]** > **[OSD Lang]**.

4 Select the language, then press **SEL**.
5 Press ⤺ to exit.

Set clock

1 Press **MENU**.

2 Press the navigation buttons to select **[SETTINGS]**, then press **SEL** on the remote control.

3 Select **[System]**, then press ▶▶|.

4 Select **[Time mode]**, then press ▶▶|.
   » The time mode options are displayed:

   - **[12 hour mode]**
   - **[24 hour mode]**

5 Select a mode, then press **SEL**.

6 Press |◀◀ to return to previous menu and select **[Time adjust]**, then press ▶▶|.

7 Press ▲ or ▼ to enter clock, then press **SEL**.

4 Play

Ensure that the disc or device contains playable music/video. (see 'Product information' on page 30)

Note

- For CDs recorded in multiple sessions, only the first session is played.
- This apparatus does not support MP3PRO audio format.
- If any special characters are present in the MP3 track name (ID3) or album name, it may not display correctly on the screen because these characters are not supported.
- Some WMA is protected by Digital Rights Management (DRM), it cannot be played on this apparatus.
- Folders/files exceed the supported limit of this apparatus are not displayed or played.

Load discs

⚠ Warning

- To reduce the risk of traffic accident, do no watch video during driving.

You can play video, audio or images stored on the following discs:
- DVD video, DVD-R, DVD-RW
- VCD
- Audio CD, CD with JPEG files, CD-R, CD-RW

Note

- Ensure that the disc contains playable content.

You can play DVD discs with the following region codes:Press ▲ to open the front panel.

DVD region code	Countries
	Asia Pacific, Taiwan, Korea
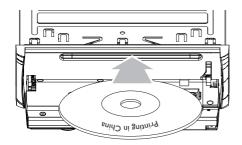
1 Insert the disc into the disc slot with label side facing up.
» Play resumes from the point where it was last stopped.
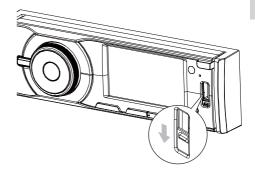
2 To remove the disc, press the ▲ button.
» When the disc is ejected, the unit switches to TUNER mode automatically.

3 Close the front panel.
» After a few seconds, the screen turns on.
• For video discs, if a menu appears: press ▲ or ▼ to select an item, then press ① to start play.
• For discs that contain MP3s, WMAs, or JPEGs: , press ▲ or ▼ to select a folder/track/picture, then press ① to start play.

✱ Tip
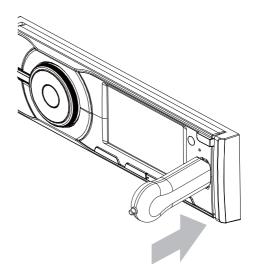
• If the disc is blocked in the disc compartment, press and hold ▲ until the disc comes out.

Insert USB device

1 Slide down the USB socket cover.

2 Insert the USB device into the USB socket.
» The unit starts playing from the USB device automatically.

Remove the USB device

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

Insert SD/MMC card

1 Press ▲ to open the front panel.
2 Insert the SD or MMC card into the card slot.
  » The unit starts playing from the SD/ MMC card automatically.

Remove the SD/MMC 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 SD or MMC card.

Skip/search

During video disc play
- To skip to a specified chapter, press the number buttons on the remote control.
- To skip to the previous/next chapter, press ◄◄ or ►►.
- To search backward/forward rapidly, press ◄◄ or ►► for 3 seconds.
  » **[Backward]** or **[Forward]** is displayed.

  To change search spead, repeatedly press ◄◄ or ►► for 3 seconds
 To resume normal play, press ►❚❚ .

During audio disc play
- To skip to a specified track, press the number buttons on the remote control.
- To skip to track number over 9, press **0** first, then press the number button.
- To skip to the previous/next track, press ◄◄ or ►► .
- To search backward/forward rapidly within the current track, press ◄◄ or ►► for 3 seconds .

DuringMP3/WMA play
- To select a track, press ▲ or ▼ to select a folder, then press ◄◄ or ►► to skip to the previous/next track. Or press the number buttons on the remote control to skip to a specified track.
- To search backward/forward rapidly within the current track, press ◄◄ or ►► for 3 seconds

For picture disc
- To skip to the previous/next picture, press ◄◄ or ►►.

Intro play

For audio tracks, you can play the first 10 seconds of each track.

1 During play, press **INTRO, 2** to select:
  - **[Intro][On]** : After the first 10 seconds of each track have been played, play stops.
  - **[Intro][Off]**: Cancel intro play and start normal play.

Repeat play

For video play

During play, press **3, REP** repeatedly to select:
- **[Rep 1]** : play the current chapter repeatedly.
- **[Rep all]** :play all chapters in the title repeatedly.
- **[Rep off]** : cancel repeat play.

For audio disc play

During play, press **3, REP** repeatedly to select:
- **[Rep 1]**: play the current track repeatedly.
- **[Rep all]**: play all tracks repeatedly.
- **[Rep off]**: cancel repeat play.

For MP3/WMA play

During play, press **3, REP** repeatedly to select:
- **[Rep 1]** : play the current track repeatedly.
- **[Rep dir]** : play all tracks in the current folder repeatedly.
- **[Rep all]**: play all tracks repeatedly.
- **[Rep off]** : cancel repeat play.

Random play

You can play audio tracks in random order.

1 During play, press **SHUF, 4** to select:
- **[Shuffle all] :** starts random play for all tracks.
- **[Shuffle dir]**: starts random play in current folder.
- **[Shuffle off]** : cancel random play.

Select subtitle language

For DVD or DivX discs that contain two or more subtitle languages.

1 During play, press **SUBTITLE** on the remote control repeatedly until the language is selected.

Select audio language

For video discs that contain two or more audio channels.

1 During play, press **R/L** on the remote control repeatedly until the language is selected.

Select audio mode

When you play VCDs/CDs, you can select an audio mode (R/L/Stereo).

1 Press **R/L** repeatedly until the audio mode is selected.

Select video output format

The default video output format has been chosen according to format that is broadcast in your country. If the picture looks unusual, change the video output.

1 Press **P/N** repeatedly to select:
- **[NTSC]**: used in the United States, Canada, Japan, Mexico, the Philippines, South Korea, Taiwan, and some other countries.
- **[PAL]**: used in most of the Western European countries (except France), Australia, and some other countries.
- **[Auto]**: The correct format is set automatically. Select this option if you are not sure which format should be selected.

Zoom

For DVDs, VCDs and picture CDs, you can zoom in and out for video images or pictures.

1 Press **ZOOM** on the remote control repeatedly to select rate.
- **[Zoom]** is displayed.

2 When the video image or picture is enlarged, press the navigation buttons to pan through it.

5 Listen to radio

Tune to a radio station

1 Press **SOURCE** to select Tuner.

2 Press and hold ▲ or ▼ to select band.
  ↳ **[FM]** or **[AM]** is displayed.

3 Press ◄◄ or ►►I to tune to a radio station manually.
  • To search for radio station automatically, press ◄◄ or ►►I for 3 seconds.

Store radio stations in memory

You can store up to 6 stations in each band.

Store stations automatically

1 Press **SEARCH**.
  ↳ The six strongest stations of the selected band are saved in preset channels 1-6 automatically.

> ✳ **Tip**
>
> • During first time use, **[Press SEARCH key]** is displayed.

Store stations manually

1 Tune to the station that you want to store.

2 Press one of the numbered buttons **1** to **6** for over 2 seconds.
  ↳ The station is saved in the selected channel.

Tune to a preset station

1 Press and hold ▲ or ▼ to select band.

2 Press ▲ / ▼ or the number button **1** to **6** to select the preset station.

Select stereo/mono broadcasting

For stations with weak signals: to improve the reception, change to monoaural sound.

1 Press **MENU**.
  ↳ The main menu is displayed.

2 Press the navigation buttons to select **[SETTINGS]**, then press **SEL** to confirm.
  ↳ The setting menu is displayed.

3 Press the navigation buttons to select **[Radio] > [Stereo_mono],** then press ▶▶.

- • **[STEREO]**: stereo broadcast.
- • **[MONO]**: mono broadcast.

4 Press the navigation buttons to select an option, then press ① to confirm.

5 Press ◢ to exit.

Select tuner sensitivity

Before you start to search for radio stations, you can select tuner sensitivity.

1 Press **MENU**.

2 Press the navigation buttons to select **[SETTINGS]**, then press ① .

3 Press the navigation buttons to select **[Radio]** > **[Loc_Dx]** then press ▶▶.

- • **[LOC]** (local): Only stations with strong signals can be broadcast.
- • **[DX]** (distance): Stations with strong and weak signals can be broadcast.

4 Press the navegation buttons to select an option, then press ① to confirm.

5 Press ◢ to exit.

Play with RDS

The RDS (Radio Data System) function operates only in areas with FM stations broadcasting RDS signals. If you tune to an RDS station, an RDS icon and the station name are displayed.

Activate AF/TA/REG/CT functions

1 Press and hold **MENU**.
  ↳ The setting menu is displayed.

2 Press the navigation buttons to select **[Radio] > [LOC_DX] >[DX]**, then press ① to select an option.

- • TA (traffic announcement): allows you to receive traffic announcements automatically no matter what source you are listening to.
- • AF (alternate frequency): automatically searches for a different station when the tuner cannot get a good reception.
- • REG (regional radio): sets AF tuning region.
- • CT (clock time): synchronizes the clock of the unit with that on the RDS station.

3 Turn ① to select **[ON]**, then press ① to confirm.

Search for an RDS station by PTY information

The PTY (program type) function lets you find similar programming by genre, and the radio starts searching for stations broadcasting in the selected category.
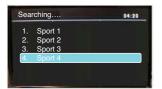
1 Press and hold **SEARCH**.
   ↳ The PTY menu is displayed.

2 Turn ① to select a program type, then press ① to start searching.

3 Select a channel.

RDS program types

Item	Program type	Description
1	**NEWS**	News services
2	**AFFAIRS**	Politics and current affairs
3	**INFO**	Special information programs
4	**SPORT**	Sports
5	**EDUCATE**	Education and advanced training
6	**DRAMA**	Radio plays and literature
7	**CULTURE**	Culture, religion and society
8	**SCIENCE**	Science
9	**VARIED**	Entertainment programs
10	**POP M**	Pop music
11	**ROCK M**	Rock music
12	**MOR M**	Light music
13	**LIGHT M**	Light classical music
14	**CLASSICS**	Classical music
15	**OTHER M**	Special music programs
16	**WEATHER**	Weather
17	**FINANCE**	Finance
18	**CHILDREN**	Children's programs
19	**SOCIAL**	Social Affairs
20	**RELIGION**	Religion
21	**PHONE IN**	Phone In
22	**TRAVEL**	Travel
23	**LEISURE**	Leisure
24	**JAZZ**	Jazz Music
25	**COUNTRY**	Country Music
26	**NATION M**	National Music
27	**OLDIES**	Oldies Music
28	**FOLK M**	Folk Music
29	**DOCUMENT**	Documentary
30	**TES**	Alarm Test
31	**ALARM**	Alarm

6 Adjust settings

Adjust sound

Adjust volume

1 Turn ① clockwise/anticlockwise to increase/decrease volume.

Mute

You can turn off the sound of your audio.

1 During play, press **OK/MUTE** ①.
- To turn the sound back on, press **OK/MUTE** ① again.

Toggle Dynamic Bass Boost on/off

1 Press **DBB** for 3 seconds to display the current setting.
» **[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.

Select preset equalizer

You can select preset equalizer:
- **[User]**
- **[Techno]**
- **[Rock]**
- **[Classic]**
- **[Jazz]**
- **[Optimal]**
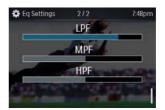- **[Flat]**
- **[Pop]**

Note

- Only when you selected the **[USER]** equalizer, the Bass/Middle/Treble sound value adjusted can be retained.

1 Press **EQ/Audio**.
» The current Equalizer setting is displayed.

2 Press ◄◄ or ►►I to select a preset EQ.

3 You can also adjust below settings:
- **[BAS]** bass range: -7 to +7
- **[MID]** middle range: -7 to +7.
- **[TRE]** treble range: -7 to +7
- **[LPF]** low pass filter range: 60, 80, 100, 200.
- **[MPF]** middle pass filter range: 500, 1K, 1.5K, 2.5K.
- **[HPF]** high pass filter range:10K, 12.5K, 15K, 17.5K.

4 Press ⤺ to exit.

Other sound settings

You can also adjust the front and rear speaker balance, the left and right speaker balance, and subwoofer settings.

1 PresS **MENU**.
  » Below options are displayed:

2 Press the navigation buttons to select [SETTINGS], then press to confirm.

3 Press to select [Audio], then press to confirm.

4 Press ▲ or ▼ repeatedly to select the item to be adjusted:

Options	Sub-menu	Description
EQ setting		See "Select preset equalizer" section.
Audio Setting	**[BAL]**	Adjust balance range: 7L to 7R. (L = left speaker, R = right speaker)
	[FAD]	Adjust fader range: 7R to 7F.
OP mode	**[Line out]**	Select this option in normal use
	[RF Remod]	select this option when using a headphone or other device.

DRC (Dynamic Range Control)		Makes loud sound level softer and soft sound level louder so that you can watch the DVD movies at a low volume, without disturbing others.
Dual Mono	**[Stereo]**/**[Mono R]** /**[Mono L]**/**[Mix mono]**	Select sound channel.

5 Press ◄◄ or ►►l to change value, then press ①.
  • You can also turn ① to select a value.

6 Press ⏎ to exit.

Adjust system settings

1 Press **MENU**.
  » The main menu is displayed.

2 Press the navigation buttons to select **[SETTINGS]**, then press ⏻ to confirm.
  » The settiing menu is displayed.

3 Press the navigation buttons to select **[System]**, then press ►►I.

[Beep]	[On]	Turn on the beep sound. Each time you press a button, the unit beeps. You can turn off/on this beep sound.
	[Off]	Turn off the beep sound.
[Parking]	[On]	Disable DVD watching during driving.
	[Off]	Enable DVD watching during driving.
[Volume preset]	[Last]	Each time you turn on the unit, the volume remains from its previous use.
	[Adjust]	Each time you turn on the unit, the volume is at the preset level.
[Volume value]	0 - 47	Set start volume if ADJ is selected.
[Blackout]	[Off]	Never turn on the screen saver.
	[10s off]	Turn on the screen saver automatically 10 seconds after last operation.
	[20s off]	Turn on the screen saver automatically 20 seconds after last operation.
[Key color]	[Red]	Button backlight turns red.
	[Blue]	Button backlight turns blue.
[Time mode]	[12 hour mode]	
	[24 hour mode]	
[Time adjust]		Set clock.

4 Press the navigation buttons to select an option, then press ⏻ to confirm.

5 Press ⤺ to exit.

Adjust general DVD settings

1 Press **MENU**.

2 Press the navigation buttons to select **[SETTINGS]**, then press ⏻ to confirm.

3 Press the navigation buttons to select **[General DVD]**. then press ►►I to access its submenu.

[TV System]	[NTSC]	Used in the United States, Canada, Japan, Mexico, the Philippines, South Korea, Taiwan, and some other countries.
	[PAL]	Used in the United States, Canada, Japan, Mexico, the Philippines, South Korea, Taiwan, and some other countries.
	[Auto]	The correct format is set automatically. Select this option if you are not sure which format should be selected.

[TV Type]	[4:3 PS]	While playing a full-height picture, the sides of the picture may be trimmed.
	[4:3 LB]	While playing a wide-screen picture, black bars may appear on the top and the bottom of the screen.
	[16:9]	For widescreen display.
[Password]	[Last]	Set password to restrict the play of discs. The default password is 0000.
[Rating]	[1 kid safe]	Acceptable for children.
	[2 G]	Acceptable for general viewers.
	[3 PG]	Parental guidance suggested.
	[4 PG 13]	Unsuitable for children under age 13
	[5 PGR]	Recommend parents to restrict children under 17 to view.
	[6 R]	Restricted. Recommend parent to guide children under 17 to view.
	[7 NC 17]	Unsuitable for children under age 17.
	[8 Adult]	Acceptable for adults only.
[Default]		Restore to default settings.

4 Press the navigation buttons to select an option, then press ⏻ to confirm.

5 Press ⏏ to exit.

Adjust video DVD settings

You can adjust color settings for video output.

1 Press **MENU**.

2 Press the navigation buttons to select [**Settings**], then press ⏻ to confirm.

3 Press the navigation buttons to select **[Videol DVD]**. then press ▶▶ to access its submenu.
  » Below options are displayed:

  [BRIGHTNESS]: 0 to 12.
  [CONTRAST]: 0 to 12.
  [HUE]: -6 to +6.
  [SATURATION]: 0 to 12.
  [SHARPNESS]: 0 to 8.

4 Press the navigation buttons to select an option, then press ⏻ to confirm.

5 Press ⏏ to exit.

Select language

1 Press **MENU**.

2 Press the navigation buttons to select **[SETTINGS]**, then press ⏻ to confirm.

3 Press the navigation buttons to select **[LANGUAGE]** , then press ▶▶.
  » The following options are displayed:

- • **[OSD Lang]**
- • **[Audio Lang]**
- • **[Subtitle lang]**
- • **[Menu lang]**
- • **[DivX [R] VOD]**

4 Press the navigation buttons to select an item, then press ⓞ to confirm.

5 Press ⏎ to exit.

Adjust display settings

You can adjust the color settings of the screen display.

1 Press **MENU**.

2 Press the navigation buttons to select **[SETTINGS]**, then press ⓞ to confirm.

3 Press the navigation buttons to select **[LCD]** , then press ▶▶ to access its submenu.

» Below options are displayed:

[Brightness]: 0 to 12.
[Contrast]: 0 to 12.
[Saturation]: 0 to 12.

4 Press the navigation buttons to select a value, then press ⓞ to confirm.

5 Press ⏎ to exit.

View DivX registration code

DivX is a popular media technology created by DivX, Inc. DivX media files contain highly compressed video with high visual quality that maintains a relatively small file size. DivX files can also include advanced media features like menus, subtitles, and alternate audio tracks. Many DivX media files are available for download online, and you can rent and purchase DivX videos with the DivX VOD (Video on Demand) service. To use this service, you need the DivX VOD registration code of the unit. For more information and instructions, visit www.divx.com/vod.
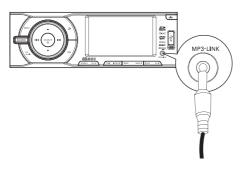
1 Press **MENU**

2 Press the navigation buttons to select **[SETTINGS]**, then press **SEL** to confirm.

3 Press the navegation buttons to select **[Language DVD]** , then press ▶▶.

4 Select **[DivX [R] VOD]**, then press **SEL**.
» The DivX registration code appears

5 Write down the number for future reference.

6 Press ⏎ to exit.

7 Others

Listen to other devices

You can connect an external sound device to the unit.

1 Connect the external sound device to the unit by using a 3.5 mm plug.

2 Press **SOURCE** repeatedly until **[AUX]** is displayed.

3 Operate the device (refer to the instructions supplied with the device).
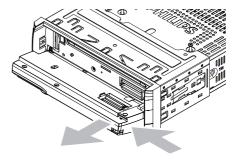
Detach the front panel

The front panel can be detached and taken with you to deter theft.

> **Note**
>
> • Before installing the unit, detach the front panel.

1 Press ▲ to release the panel.

2 Open the panel, then push the right side panel toward the left side to disengage it from the chassis.
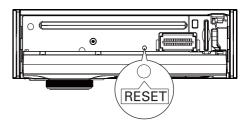
3 Take off the panel and store it in the supplied carry case to protect it from dirt or damage.

Reset

You can reset the unit to its default setting.

1 Detach the front panel.

2 Press **RESET** by using a ball-point pen or a similar tool.
   ↳ All settings are erased except clock.

Default settings

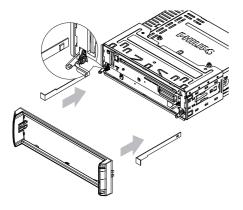| Sound settings		System settings	
Equalizer	User	Source	Tuner, FM1, 87.5
Bass	0	Demo	Off

Middle	0	Blackout	Off
Treble	0	Key color	Blue
Balance	0	Clock	Current time
Fader	0	ESP	45S
LPF	2	Local/ Distance	Distance
MPF	2	Beep	On
HPF	2	Stereo/ Mono	Stereo
		V-Last/Adj	V-Last
		Volume	20
		Subwoofer	OFF
		Subwoofer volume	10
		Pin code	0000
		Auto scroll	On

Remove the unit

To repair or replace the unit, remove it from the dashboard.
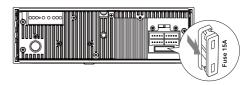
1 Detach the front panel.

2 Remove the unit with the removal keys.

Replace fuse

If there is no power, the fuse may be damaged and need to be replaced.

1 Detach the front panel and take out the unit.

2 Check the electric connection.

3 Buy a fuse that matches the voltage of the damaged fuse (15A)

4 Replace the fuse.

If the fuse gets damaged immediately after it has been replaced, there may be an internal malfunction. In such case, consult your Philips dealer.

Turn on/off the screen backlight

To turn on/off the screen backlight of main unit,

1 Press and hold **SOURCE**.

8 Product information

> **Note**
>
> • Product information is subject to change without prior notice.

General

Power supply	12 V DC (11 V - 16 V), negative ground
Fuse	15 A
Suitable speaker impedance	4 - 8 Ω
Maximum power output	45 W × 4 channels
Continuous power output	22 W × 4 channels (4 Ω 10% T.H.D.)
Pre-Amp output voltage	2.0 V
Subwoofer output voltage	2.0 V (CD play mode)
Aux-in level	500 mV
Dimensions (W × H × D)	188 × 58 × 194 mm
Weight	1.5 kg

Disc player

System	DVD / CD audio / MP3 system
Frequency response	20 Hz - 20k Hz
Signal/noise ratio	>75 dB
Total harmonic distortion	Less than 1%
Channel separation	>55 dB
Video signal format	NTSC/PAL/AUTO
Video output	1 +/- 0.2 V

Tuner

Frequency range - FM	87.5 - 108.0 MHz (100 kHz per step in auto search and 50 kHz per step in manual search)
Frequency range - AM(MW)	522 - 1620 KHz (9 kHz) 530-1710 kHz (10 kHz)
Usable sensitivity - FM	8 uV
Usable sensitivity - AM (MW)	30 uV

LCD

Screen size	3 inches (16:9)
Display resolution	400 × 240 dots
Contrast ratio	350
Brightness	220 cd/m2

Compatible USB devices:

- USB flash memory (USB 2.0 or USB1.1)
- USB flash players (USB 2.0 or USB1.1)
- memory cards (SD / MMC / SDHC)

Supported formats:

- USB or memory file format: FAT16, FAT32
- MP3 bit rate (data rate): 32-320 Kbps and variable bit rate
- WMA v9 or earlier
- Directory nesting up to a maximum of 8 levels
- Number of albums/ folders: maximum 99
- Number of tracks/titles: maximum 999
- ID3 tag v2.0 or later
- File name in Unicode UTF8 (maximum length: 128 bytes)

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
- ISO9660, Joliet
- Maximum title number: 512 (depending on
file name length)
- Maximum album number: 255
- Supported sampling frequencies: 32 kHz,
44.1kHz, 48 kHz
- Supported Bit-rates: 32~256 (kbps),
variable bit rates

9 Troubleshooting

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
• Car engine has not been started. Start the car engine.
• Connections is incorrect.
• Fuse has been damaged. Replace fuse.

No sound
• Volume is too low. Adjust volume.
• Speaker connections is incorrect.

No response to the remote control
• Ensure that the path between the remote control and the unit iis clear from obstacles.
• From a close distance, point the remote control directly at the unit.
• Replace the remote control battery.
• The function does not work. Refer to the instructions.

Disc does not play
• Disc is upside down. Ensure the printed side is upwards.
• Disc is dirty. Clean the disc with a clean, soft, lint-free cloth. Wipe the disc outwards from the center.
• Disc is defective. Try another disc.
• Imcompatible disc is used. Try another disc.
• Disc rating exceeds the restric setting. Change the rating settings to lower one.

• Disc region code is not compatible with the unit. Use disc with proper region code. (see 'Region code' on page 33)

Disc is blocked in the disc compartment
• Press and hold ▲ until the disc comes out.

No image
• Parking brake wire connection is incorrect. Check the parking wiring.

Image flashes or distorted
• Video DVD settings do not match with the DVD. Adjust video DVD settings.
• Video connection is improper. Check the connections.

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.

Preset stations lost.
• Battery cable is not correctly connected. Connect the battery cable to the terminal that is always live.

Fuse is broken
• The Fuse type is incorrect. Replace it with a 15A fuse.
• Speaker wire or power wire is grounded. Check the connections.

Display show ERR-12
• USB/SD/MMC data error. Check the USB device or SD/MMC card.

10 Glossary

M

MMC
MultimediaCard. A type of memory card with a flash memory.

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.

R

Region code
A system that allows discs to be played only in the region designated. This unit only plays discs that have compatible region codes. You can find the region code of your unit on the product label. Some discs are compatible with more than one region (or ALL regions.)

S

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

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.

PHILIPS