

# DVD Mini Hi-Fi System

FWD20

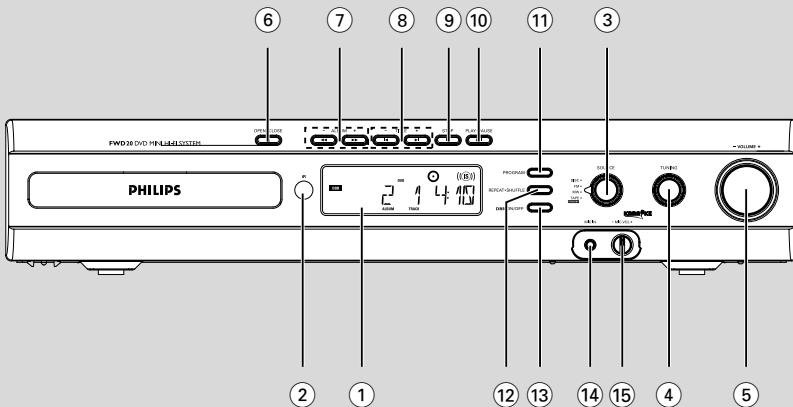
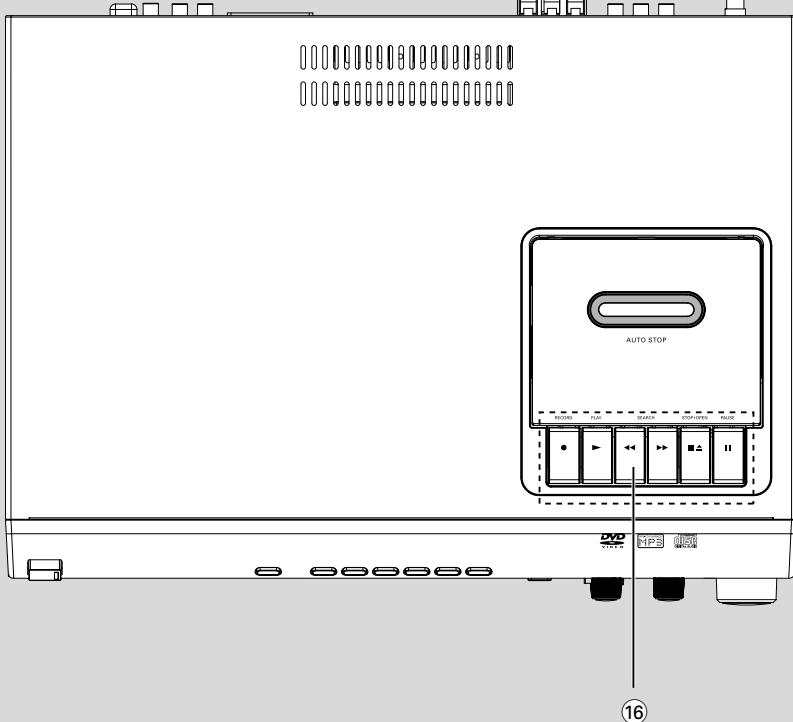
User manual

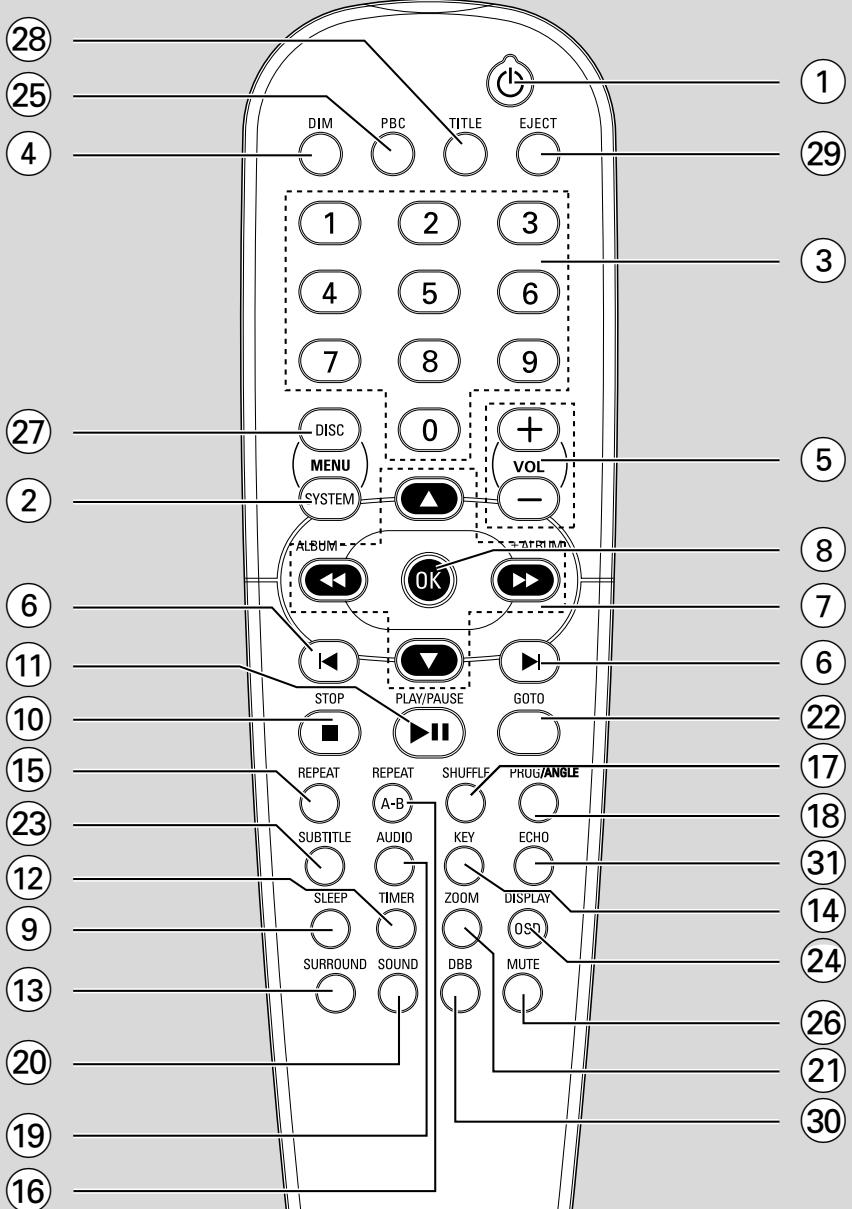


**PHILIPS**

## **CAUTION**

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





**PHILIPS**

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## Features

Your DVD Mini System with 5.1-channel full digital amplifier creates the same dynamic sound qualities that you find in full-fledged cinemas and incorporates some of the best features in home theater technology.

Other features include:

### Built-in Dolby Digital decoder and stereo.

### Additional Component Connections

Lets you connect other audio and audio/visual components to the system so you can use the system's surround sound speakers.

### Night Mode

Lets you compress the dynamic range, reducing the difference in loudness between sounds in Dolby Digital mode.

### Parental Control (rating level)

Lets you set a rating level so that your children cannot watch a DVD that has a rating higher than you set.

## Discs for playback

### Your DVD System will play:

- Digital Video Discs (DVDs)
- Video CDs (VCDs)
- Super Video CDs (SVCDs)
- Digital Video Discs + Rewritable (DVD+RW)
- Compact Discs (CDs)
- Picture (Kodak, JPEG) files on CDR(W)
- Supported MP3-CD format.
- Max. title/album name –12 characters
- Max. title number plus album is 255.
- Max. nested directory is 8 levels.
- The max. album number is 32.
- The max. MP3 track number is 999.
- Supported sampling frequencies for MP3 disc: 32 kHz, 44.1 kHz, 48 kHz.
- Supported Bit-rates of MP3 disc are: 32, 64, 96, 128, 192, 256 (kbps).



The following formats can't be supported

- The files like \*.VMA, \*.AAC, \*.DLF, \*.M3U, \*.PLS, \*.WAV,
- Non-English Album/Title name
- The discs recorded under Joliet format

### Region Codes

DVDs must be labeled for **ALL** region or for **Region 3** in order to play on this DVD system. You cannot play discs that are labeled for other regions.



### Notes:

- For mixed mode discs, only one mode will be selected for playback according to the recording format.
- If you are having trouble playing a certain disc, remove the disc and try a different one. Improperly formatted discs will not play on this system.

## Supplied accessories

- Composite video cable (yellow)
- Component video cables (red/blue/green)
- Audio cables (white, red)
- MW loop antenna
- Remote Control with two AA batteries
- This instruction booklet and a Quick Start Guide.

# General Information

## Environmental information

Any 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 specialised company. Please observe the local regulations regarding the disposal of packaging materials, exhausted batteries and old equipment.

## Care and safety information

### Avoid high temperatures, moisture, water and dust

- Do not expose the system, batteries or discs to humidity, rain, sand or excessive heat (caused by heating equipment or direct sunlight). Always keep disc trays closed to avoid dust buildup on the lens.
- No objects filled with liquids, such as vases, shall be placed on the apparatus.
- No naked flame sources, such as lighted candles, should be placed on the apparatus.
- The apparatus shall not be exposed to dripping or splashing.

### Avoid condensation problem

- The lens may cloud over when the player is suddenly moved from cold to warm surroundings, making it impossible to play a disc. Leave the player in the warm environment until the moisture evaporates.

### Do not block the vents

- Do not operate the system in an enclosed cabinet and allow about 10 cm (4 inches) of free space all around the player for adequate ventilation.
- The ventilation should not be impeded by covering the ventilation openings with items, such as newspapers table-cloths, curtains, etc.

### Cleaning the cabinet

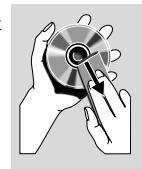
- Use soft cloth slightly moistened with a mild detergent solution. Do not use a solution containing alcohol, spirits, ammonia or abrasives.

### Cleaning discs

- To clean a CD, wipe it in a straight line from the center towards the edge using soft and lint-free cloth. A cleaning agent may damage the disc.
- Write only on the printed side of a CDR(W) and only with a soft felt-tipped pen.
- Handle the disc by its edge. Do not touch the surface.

### Cleaning the disc lens

- After prolonged use, dirt or dust may accumulate at the disc lens. To ensure good playback quality, clean the disc lens with Philips CD Lens Cleaner or any commercially available cleaner. Follow the instructions supplied with cleaner.

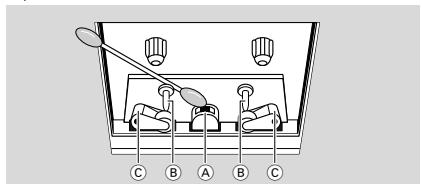


### Finding a suitable location

- Place the player on a flat, hard, stable surface.
- Install this unit near the AC outlet and where the AC power plug can be reached easily.

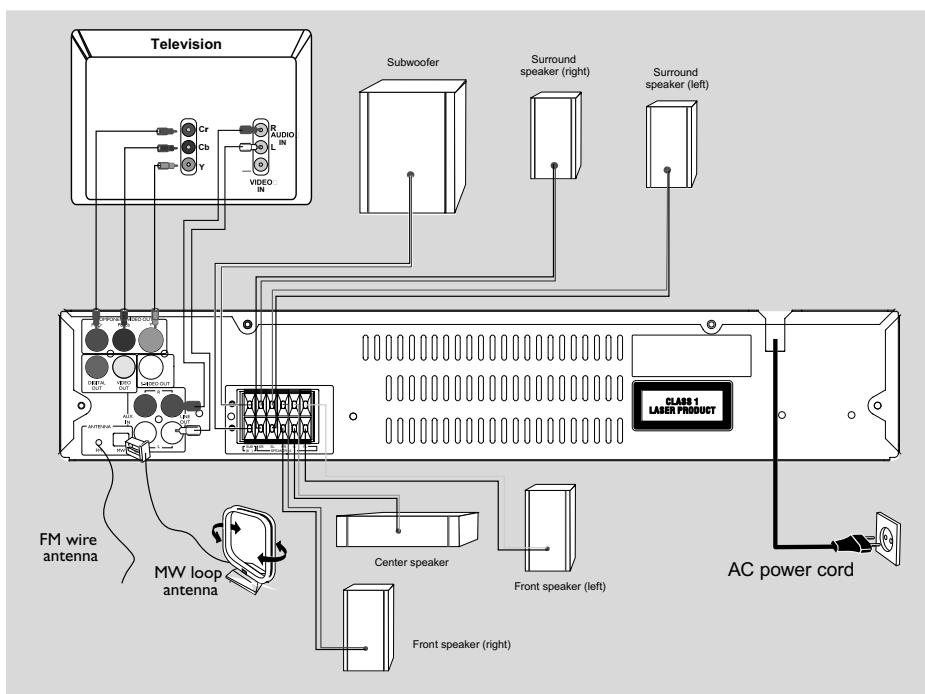
### Cleaning the head and the tape paths

- To ensure good recording and playback quality, clean the head (A), the capstan(s) (B), and pressure roller(s) (C) after every 50 hours of tape operation.
- Use a cotton swab slightly moistened with cleaning fluid or alcohol.
- You also can clean the head by playing a cleaning tape once.



### Demagnetising the head

- Use a demagnetising tape available at your dealer.

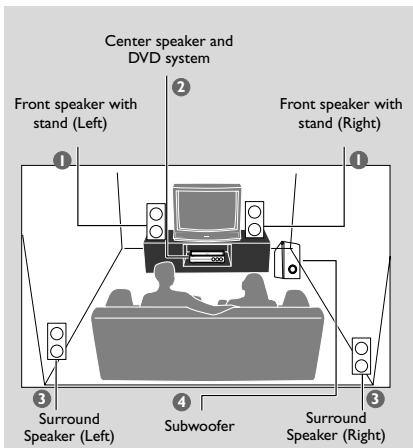


### IMPORTANT!

- The type plate is located at the rear of the system.
- Before connecting the AC power cord to the wall outlet, ensure that all other connections have been made.
- Never make or change any connections with the power switched on.

To avoid overheating of the system, a safety circuit has been built in. Therefore, your system may switch to Standby mode automatically under extreme conditions. If this happens, let the system cool down before reusing it (not available for all versions).

### Step 1: Placing the speakers and subwoofer



# Connections

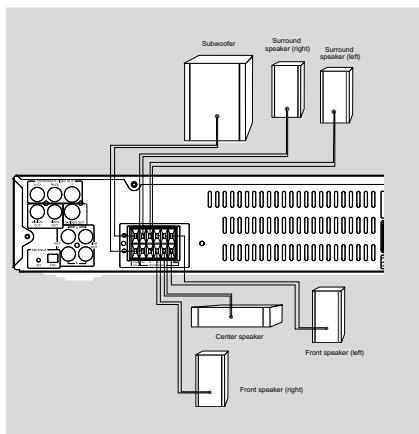
For best possible surround sound, all the speakers (except subwoofer) should be placed at the same distance from the listening position.

- 1 Place the front left and right speakers at equal distances from the TV and at an angle of approximately 45 degrees from the listening position.
- 2 Place the center speaker above the TV or the DVD system so that the center channel's sound is localized.
- 3 Place the rear speakers at normal listening ear level facing each other or hang on the wall.
- 4 Place the subwoofer on the floor near the TV.

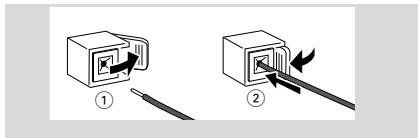
**Notes:**

- To avoid magnetic interference, do not position the front speakers too close to your TV.
- Allow adequate ventilation around the DVD system.

## Step 2: Connecting speakers



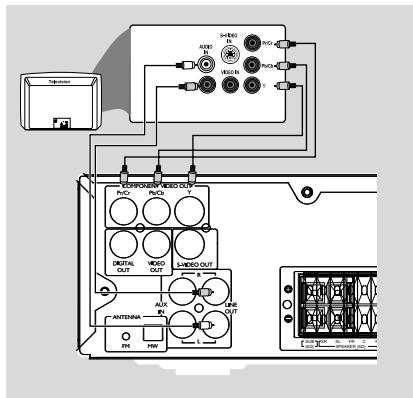
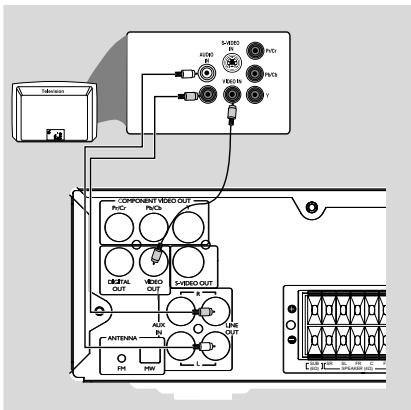
Connect the speaker wires to the SPEAKER terminals by matching the color and silkscreen, coloured (marked) wire to “+” and black (unmarked) wire to “-”. Fully insert the stripped portion of the speaker wire into the terminal as shown.



**Notes:**

- For optimal sound performance, use the supplied speakers.
- Do not connect more than one speaker to any one pair of +/- speaker terminals.
- Do not connect speakers with an impedance lower than the speakers supplied. Please refer to the SPECIFICATIONS section of this manual.

### Step 3: Connecting TV set



#### IMPORTANT!

- You only need to make one video connection from the following options, according to the capabilities of your TV system.
- Component Video connection provides higher picture quality. These options must be available on your TV set.
- Connect the system directly to the TV set.

#### Using Video In jack (CVBS)

- 1 Use the composite video cable (yellow) to connect the system's **VIDEO OUT** jack to the video input jack (or labeled as A/V In, Video In, Composite or Baseband) on the TV set.
- 2 To hear the sound of this DVD Player through your TV, use the audio cables (white/red) to connect **LINE OUT (L/R)** jacks of the DVD Player to the corresponding AUDIO IN jacks on the TV.

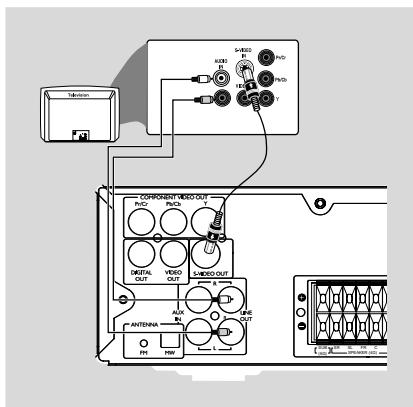
#### IMPORTANT!

- To set the **VIDEO OUT (put)** to 'Cr Cb Y', see **Setting video preference**.

#### Using component Video In jack (Cr Cb Y)

- Use the component video cables (red/blue/green) to connect the system's **Cr Cb Y** jacks to the corresponding Component video input jacks on the TV set.
- To hear the sound of this DVD Player through your TV, use the audio cables (white/red) to connect **LINE OUT (L/R)** jacks of the DVD Player to the corresponding AUDIO IN jacks on the TV.

# Connections



## IMPORTANT!

- If the picture is distorted, check the Video Output setting. Make sure it is set to 'S-Video'. (See Setting video preference).

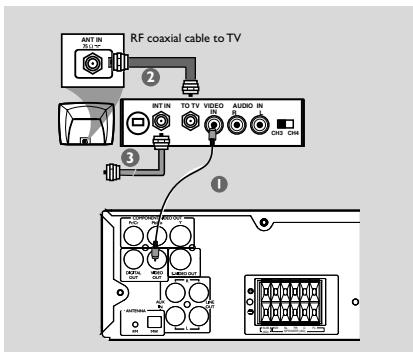
## Using S-Video In jack

- Use the S-Video cable (not supplied) to connect the system's **S-VIDEO OUT** jack to the S-Video input jack (or labeled as Y/C or S-VHS) on the TV set.
- To hear the sound of this DVD Player through your TV, use the audio cables (white/red) to connect **LINE OUT (L/R)** jacks of the DVD Player to the corresponding AUDIO IN jacks on the TV.

## Using an accessory RF modulator

### IMPORTANT!

- If your TV only has a single Antenna In jack (labeled as 75 ohm or RF In), you will need an RF modulator in order to view DVD playback on the TV. See your electronics retailer or contact Philips for details on RF modulator availability and operations.

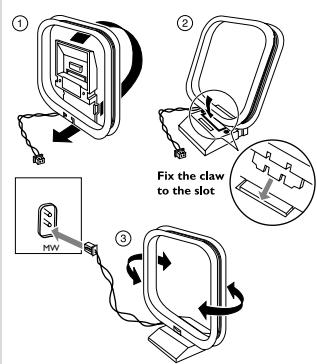


- Use the composite video cable (yellow) to connect the DVD system's **VIDEO OUT** jack to the video input jack on the RF modulator.
- Use an RF coaxial cable (not supplied) to connect ANTENNA OUT or TO TV jack on the RF modulator to the Antenna IN jack on the TV.
- Connect the Antenna or CableTV service signal to the ANTENNA IN or RF IN jack on the RF modulator. (It may have been connected to your TV previously. Disconnect it from the TV.)

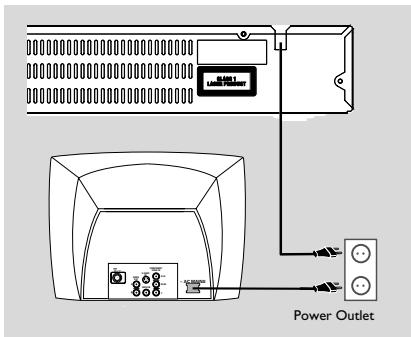
## Step 4: Antenna Connection

### MW Antenna

Connect the supplied MW loop antenna to the "MW" terminal. Adjust the position of the antenna for optimal reception.



## Step 5: Connecting the power cord



### IMPORTANT!

**Never make or change any connection with the power switched on.**

After everything is connected properly, plug in the AC power cord to the power outlet.

- Position the antenna as far as possible from a TV, VCR or other radiation source.

### FM Antenna

It is unnecessary to connect the FM pigtail antenna since it is fixed to the main unit.

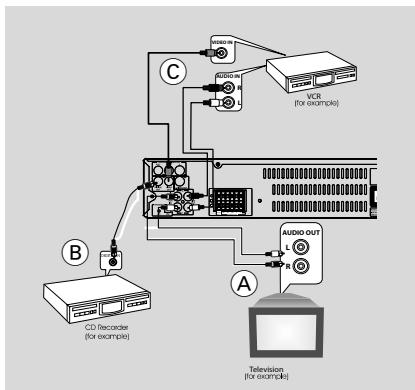
- Adjust the FM antenna for optimal FM stereo reception.

# Connections

## Additional: Connecting additional equipment

### IMPORTANT!

- Some discs are copy-protected. You cannot record the disc through a VCR or digital recording device.
- When making connections, make sure the colour of cables matches the colour of jacks.
- Always refer to the owner's manual of the other equipment for complete connection and usage details.



## Viewing and listening to the playback of other equipment **(A)**

- Connect the system's **AUX IN (R/L)** jacks to the **AUDIO OUT** jacks on the other audio/visual device (such as a TV, VCR, Laser Disc player or cassette deck).

Before starting operation, turn the **SOURCE** control knob to the **DISC** position without inserting any disc into the disc compartment in order to activate the input source.

## Recording (digital) **(B)**

- Connect the system's **DIGITAL OUT** jack to the **DIGITAL IN** jack on a digital recording device (such as DTS-Digital Theatre compatible, with Dolby Digital decoder). Before starting operation, set the **DIGITAL OUT** according to the audio connection. (See "DIGITAL OUT".)

## Using the VCR for recording DVDs **(C)**

- Connect one of the system's **VIDEO** jacks to the corresponding **VIDEO IN** jack and **LINE OUT (R/L)** jacks to the **AUDIO IN** jacks on the VCR. This will allow you to make analogue stereo (two channel, right and left) recordings.

## Controls on the system

### ① Display screen

- to view the current status of the system.

### ② iR sensor

- infrared sensor for remote control.

### ③ SOURCE

- to select the respective sound source : DISC (\*AUX), FM, MW or TAPE (STANDBY).

### ④ TUNING

- In FM or MW mode, to tune to a lower or higher radio frequency.

### ⑤ VOLUME -/+

- to increase or decrease the volume.

### ⑥ OPEN•CLOSE ▲

- to open or close the disc tray.

### ⑦ ALBUM -/+ ◀◀ ▶▶

for MP3/Picture-CD

skips to the beginning of a current/previous/subsequent album.

for DVD/VCD/CD

to fast reverse/forward the disc.  
for MP3-CD .... (press and hold) to fast reverse/forward the disc.

### ⑧ TITLE -/+ ▲, ▶

- In DISC mode, to select the previous or next chapter or track.

### ⑨ STOP ■

- In DISC mode, to stop playback or to clear a program.

### ⑩ PLAY•PAUSE ▶II

- to start or interrupt playback.

### ⑪ PROGRAM

- to program disc tracks (for VCD/CD/MP3-CD only).

### ⑫ REPEAT•SHUFFLE

- to select different repeat or shuffle playback modes: Repeat Track, Repeat All, Shuffle On, Shuffle Repeat All and Shuffle Repeat Off.

### ⑬ DBB ON/OFF

- enhances the bass

### ⑭ MIC IN

- Plug in the microphone jack here.

### ⑯ MIC VOL -/+

- Adjusts the microphone volume level.

### ⑯ Tape Deck Operation

**RECORD** ● .. starts recording.

**PLAY** ▶ ..... starts playback.

**SEARCH** ◀◀▶

.fast

rewinds/winds the tape.

**STOP•OPEN** ■ ▲

stops the tape; opens the tape compartment.

## Controls on the remote control

### ① ⏻

- to switch the system on or to standby mode (for the DISC mode only).

### ② SYSTEM MENU

- to enter or exit the system menu bar.

### ③ Numeric Keypad (0-9)

- to enter a track/title number of the disc.

### ④ DIM (unavailable for this version)

### ⑤ VOL +/-

- to increase or decrease the volume.

### ⑥ ▲, ▶

- In DISC mode, to select the previous or next chapter or track.

### ⑦ ALBUM-/◀◀, ALBUM+/>▶, ▲, ▼

- In DISC mode, to select movement direction in disc contents menu/system menu bar.

– (**ALBUM-/◀◀, ALBUM+/>▶**) for MP3, skips to the beginning of a current/previous/subsequent album.

– (**ALBUM-/◀◀, ALBUM+/>▶**) for DVD/VCD/CD, to fast reverse/forward the disc.

– (▲, ▼) for DVD/VCD, to select a desired slow playback speed forward or backward.

### ⑧ OK

- to exit or confirm the selection.

### ⑨ SLEEP (unavailable for this version)

\* To enter the AUX mode, turn the SOURCE control knob to the DISC position without inserting any disc into the disc compartment.

# Controls

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## ⑩ STOP■

- In DISC mode, to stop playback or to clear a program.

## ⑪ PLAY/PAUSE ▶II

- to start or interrupt playback.

## ⑫ TIMER (unavailable for this version)

## ⑬ SURROUND

- (for DVD/VCD) to select 2.1 or 5.1 channel output or surround off.

## ⑭ KEY

- to change the DVD/VCD key tone level to suit your vocal range.

## ⑮ REPEAT

- to repeat a track/disc.

## ⑯ REPEAT A-B

for CD .....to repeat a specific section within the same track.

for DVD/VCD. to repeat a specific section in a disc.

## ⑰ SHUFFLE

- to play tracks in a random order

## ⑱ PROG/ANGLE

- to program disc tracks (for VCD/CD/MP3-CD only).
- selects a DVD camera angle.

## ⑲ AUDIO

For DVD .....to select the preferred language.  
In karaoke mode...to select the preferred audio mode: Mono Left, Mono Right or Stereo.

## ⑳ SOUND (unavailable for this version)

## ㉑ ZOOM

- to zoom in picture.

## ㉒ GOTO

- to start playback at any chosen time on the disc (for VCD operation with PBC off and not for MP3-CD).

## ㉓ SUBTITLE

- to select the preferred language for subtitle.

## ㉔ DISPLAY (OSD)

- to display information on TV screen during playback.

## ㉕ PBC

- to turn on/off PBC of a VCD (2.0).

## ㉖ MUTE

- to interrupt or resume sound reproduction.

## ㉗ DISC MENU

- to enter or exit the disc contents menu.

## ㉘ TITLE

- to enter the title menu of the disc during DVD playback.

## ㉙ EJECT

- to open or close the disc tray.

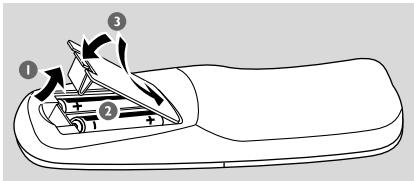
## ㉚ DBB (unavailable for this version)

## ㉛ ECHO (unavailable for this version)

## IMPORTANT!

- Make sure to complete the preparation procedures before operating the system.

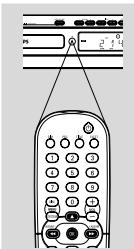
## Step 1: Inserting batteries into the remote control



- ① Open the battery compartment.
- ② Place two batteries (Type R06 or AA) in the compartment with the correct polarity as indicated by "+" and "-" symbols.
- ③ Close the cover.

## Using the remote control to operate the system

- ① In **DISC mode**, point the remote control directly at the remote sensor (iR) on the front panel.
- ② Then select the desired function (for example **◀, ▶**).



## CAUTION!

- Remove batteries if they are exhausted or will not be used for a long time.
- Do not use old and new or different types of batteries in combination.
- Batteries contain chemical substances, so they should be disposed of properly.

## Step 2: Setting language preference

You can select your preferred language settings so that this DVD Mini System will automatically switch to the language for you whenever you load a disc. If the language selected is not available on the disc, the language set by default will be used instead.

Language	Video	Audio	Rating
OSD Menu	English	English	English
Subtitle	English	Fran ais	Espa ol
Audio	English	Espa ol	Portugu s
Menu	English		

- ① In the disc mode, stop playback and press **SYSTEM MENU**.
- ② Press **◀▶/▲▼** keys on the remote control to select your preferred option.
  - Move to **Language** and press **OK** or **▼**.
  - Move to one of the following and press **OK**.

### OSD Menu (On-Screen Display)

Switches the display language on the TV screen.  
Select the language from the displayed list.

### Subtitle (DVD only)

Switches the display language of the subtitle.  
Select the language from the displayed list.

### Audio (DVD only)

Switches the display language of the sound track.  
Select the language from the displayed list.

### Menu (DVD only)

Select the language for the DVD menu.

When the selected language is not recorded in the DVD, one of the recorded languages will be selected automatically (except for OSD).

You can reset all the DVD settings except for Rating.

If the language selected is not available on the disc, the original language designated by each disc will be selected.

- ③ Press **▲▼** to select a language and press **OK**.
- ④ Repeat **steps 2~3** for other settings.

### To remove the menu

Press **SYSTEM MENU**.

# Preparations

## IMPORTANT!

- Make sure you have completed all the necessary connections. (See Connections – Connecting TV set)

## Step 3: Setting video preference

Turn on the TV set and set it to the correct Video-In channel.

- You may go to channel 1 on your TV set, then press the channel button repeatedly until you see the Video In channel.
- Or, you can use the TV remote control to select different video modes.
- Or, set TV to channel 3 or 4 if you are using an RF modulator.

Language	Video	Audio	Rating
TV Shape	4:3 LB	4:3 PS	
TV System	Auto	4:3 LB	
Video out	S-VIDEO	16:9	

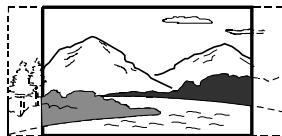
- ① In the disc mode, stop playback and press **SYSTEM MENU**.
- ② Press **◀▶▶▶/▲▼** on the remote control to toggle through the functions and select your preferential option.
  - Move to **Video** and press **OK** or **▼**.
  - Move to one of the following and press **OK**.

### – Setting TV Shape

Select the aspect ratio of the TV to be connected.

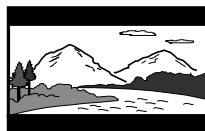
#### 4:3 PS (Pan and Scan mode )

- If you have a conventional TV set and your DVD is not formatted for widescreen viewing, use this setting. A wide picture is displayed on the whole TV screen with a portion automatically cut off.



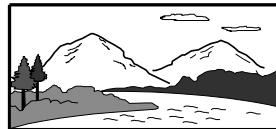
#### 4:3 LB (Letterbox mode )

- If you have a conventional TV set and your DVD is formatted for widescreen viewing, use this setting. A wide picture with bands displayed on the upper and lower portions of the TV screen.



#### 16:9 (Wide screen mode)

- If you have a widescreen TV set, use this setting (you must also set your widescreen TV to "full size") available on a disc, then the disc's own preference will be used.



### Note:

The format you select must be available on the disc. If it is not, the setting for TV Shape will not affect the picture during playback.

## - Setting TV System

Allows you to select the color system matching the connected TV set.

### **NTSC**

– If the connected TV is NTSC system, select this mode. It will change the video signal of a PAL disc and output in NTSC format.

### **PAL**

– If the connected TV is PAL system, select this mode. It will change the video signal of a NTSC disc and output in PAL format.

### **AUTO**

– If the connected TV is multi system, select this mode. The output format will be in accordance with the video signal of the disc.

## - Setting Video Out

– Video out selection enables you to choose the type of video output suitable for your DVD system.

### **S-VIDEO**

– Select **S-VIDEO** if you have connected the S-VIDEO output to your TV using S-VIDEO jack.

### **Cr Cb Y**

– Select **Cr Cb Y** if you have connected the video output to your TV using Pr/Cr Pb/Cb Y jack.

## To remove the menu

Press **SYSTEM MENU**.

## To resume playback

Press **PLAY•PAUSE ▶II** on the set or **PLAY/PAUSE ▶II** on the remote.

# Disc Operations

## IMPORTANT!

- This system is designed for regular discs. Therefore, do not use any accessories such as disc stabiliser rings or disc treatment sheets, etc., as offered on the market, because they may jam the disc mechanism.
- Do not move the system during playback. Doing so may damage the system.
- DVD discs and players are designed with regional restrictions. Before playing a disc, make sure the disc matches the regional code of your player.
- According to the format requirement of DVD or VCD, some operations may be different or restricted.

## Playing discs

- 1 Connect the power cord of the DVD mini system and turn the **SOURCE** control knob to select **DISC**.
- 2 Power on the TV system.  
→ You should see the blue Philips DVD background screen on the TV.
- 3 Press **OPEN•CLOSE ▲** (or **EJECT** on the remote) to open the disc tray.  
→ Make sure the disc label is facing up.  
→ For double-sided disc, make sure to load side to be played facing up.
- 4 Press **OPEN•CLOSE ▲** (or **EJECT** on the remote) to close the disc tray.  
→ "LOADING" will be displayed.
- All discs can play automatically. For discs with Table Of Contents, a menu may appear on the TV screen. When the menu is displayed, press **◀▶/▶/▲/▼** keys on the remote to highlight your selection and press **OK** to confirm. To select a play option, press **numeric keys (0-9)**.  
→ If a disc menu shows on the TV screen, see "Using the disc menu".  
→ If the disc is locked by parental control, you must enter your four-digit password (See **Changing the password**).
- Press **PLAY•PAUSE ▶II** (or **PLAY/Pause ▶II** on the remote) to start playback.

## For MP3-CD only

- Load an MP3-CD in the disc tray.  
→ The number of total tracks will be shown on the TV screen (you can press **▶** on the remote to turn pages), and then playback starts from the first track.

### Notes:

- To ensure good system performance, wait until disc reading is completed before proceeding.

## Using the disc menu

For disc with Table Of Contents, a menu may appear on the TV screen once you load the disc.

### To select a playback feature or item

- Press **◀▶/▶/▲/▼** or **numeric keys (0-9)** on the remote control, then press **PLAY•PAUSE ▶II** (or **PLAY/Pause ▶II** or **OK** on the remote) to start playback.

### Skipping to another title (track) / chapter

- Press **TITLE -/+◀/▶** repeatedly during playback to skip backward or forward. Each press will take the disc to the beginning of the previous or next title (track) / chapter.

### Note:

- If the player has been set to repeat chapter (track), pressing this button will replay the same chapter (track) from its beginning.

### To go directly to any title (track) / chapter (Not for DVD)

- Use the **numeric keys (0-9)** to enter the number of the desired title (track)/chapter and then press **OK**.

### Shuffle play mode

In this mode, all tracks in the current directory will be played once in a random order.

- 1 Press **SHUFFLE** to play in a shuffle order.
- 2 Press **SHUFFLE** repeatedly to select the following:  
**SHUFFLE ON** → **SHUFFLE OFF**

- ③ Playback starts automatically.

### In shuffle playback mode:

- Press **TITLE + ▶** to select another track in a shuffle order.  
④ Press **STOP ■** to stop shuffle playback.

### To cancel Shuffle mode:

- Press **SHUFFLE** repeatedly to select SHUFFLE OFF.

#### Notes:

- In FM, MW or TAPE mode, this button does not function.
- When the disc tray is opened, the Shuffle function will be cancelled automatically.
- The Shuffle playback mode is not available for DVD.

### Repeat play mode

In this mode, all tracks in the current directory will be played repeatedly

For DVD - repeat chapter / title.

Press **REPEAT** repeatedly to select Repeat Chapter; → Repeat Title → Repeat Off.

For CVD, SVCD, VCD (with PBC off) / CD / MP3-CD - repeat track or disc.

Press **REPEAT** repeatedly to select the following:

Repeat Track → Repeat All → Repeat Off

### Repeating a section within a chapter/track (not for MP3 and Picture CD)

You can play a specific section in a chapter/track repeatedly.

- ① Press **REPEAT A-B** at your chosen start point.
- ② Press **REPEAT A-B** again at your chosen end point.  
→ The passage will now repeat continuously.
- ③ To resume normal play, press **REPEAT A-B** again.

### Programming favorite tracks

You can play the contents of the disc in the order you want. At most 20 tracks can be stored.

- ① Load the desired disc on the disc tray.
- ② While playback is stopped, press **PROGRAM (PROG/ANGLE** on the remote) to enter program mode.  
→ A program input menu appears on the TV screen.
- ③ Use the **numeric keys (0-9)** to input the track number in the order you want.
- ④ Press **OK** to store the track.
- ⑤ Repeat step 3 to store other tracks.
- ⑥ Press **PROGRAM (PROG/ANGLE** on the remote) again to finish programming.
- ⑦ Press **PLAY+PAUSE ▶II** on the set or **PLAY/PAUSE ▶II** on the remote to play the program.
- ⑧ To exit the program mode, press **STOP ■** twice.

#### Notes:

- This function is not available for DVD discs.
- If you open the disc compartment, the program will be cleared.

### Playing in slow motion mode

#### For DVD/VCD

- ① Press **▲/▼** on the remote control repeatedly to select the required slow motion speed:  
**▶ 1/2 → ▶ 1/4 → ▶ 1/6 → ▶ 1/8 → PLAY.**  
**◀ 1/2 → ▲ 1/4 → ▲ 1/6 → ▲ 1/8 → PLAY**  
**▶ = slow forward**  
**◀ = slow reverse**

#### Note:

- This function is not available for MP3 and CD.

# Disc Operations

## Fast search

- ① Press **ALBUM -/+ <>>>** to fast reverse or forward the disc.
- ② For MP3-CD, press and hold **ALBUM -/+ <<** **>>** on the set for a while to fast reverse or forward the disc .

## For DVD/VCD

(reverse): **<< X2 → << X4 → << X8 → << X20 → PLAY**

(forward): **>> X2 → >> X4 → >> X8 → >> X20 → PLAY**

## For CD/MP3

(reverse): **<< X2 → PLAY**

(forward): **>> X2 → PLAY**

- ② To resume normal play, press **PLAY•PAUSE ▶II** (or **PLAY/PAUSE ▶II** on the remote)..

## Moving to another title (track) / chapter

Some discs may contain more than one title or chapter. If the disc has a title or chapter menu recorded on it, you can start playback from the selected item.

- ① Use **numeric keys (0-9)** to select a desired title/chapter number.
- ② Press **OK** to start playback.

### Notes:

- Selecting a title or chapter might not be possible on certain discs.

## GOTO

This function allows you to start playback at any chosen time on the disc.

- ① Press **GOTO** during playback.  
→ A window appears on the TV for you to input time and track number.

## For DVD

### Search

Time

Title/Chapter

## For CD/VCD/SVCD

### Search

Time

Track

- ② User the **numeric keys (0-9)** to input the time, from which playback will start. Press **OK** to confirm.
- ③ Press **▼** and then use the **numeric keys (0-9)** to input the desired track number. Press **OK** to confirm.

### Notes:

- In the repeat all mode, you can search a desired time point.
- This function is not available for MP3.
- It is impossible to set time and track number at the same time.

## Zooming in

- ① Press **ZOOM** on the remote control to change the following zooming scale:  
For DVD/VCD: X1 → X2 → OFF  
For picture disc: X1 → X2 → X3 → OFF
- ② To pan through the enlarged image, press **◀▶/▲▼** buttons on the remote to move the zoomed picture left, right, up or down.
- ③ To exit **ZOOM** mode, press **ZOOM** to select "OFF".

## Special VCD/SVCD features

### Playback control (PBC)

PBC playback allows you to play Video CD interactively, following the menu on the display.

- To deactivate **PBC**, press **PBC** in the stop mode.
- If PBC OFF, press **PLAY•PAUSE ▶II** (or **PLAY/PAUSE ▶II** on the remote) to start playback.
- If PBC ON, the PBC menu (if available) will appear on the TV screen for selection.
- Use the **numeric keys (0-9)** to enter your choice.

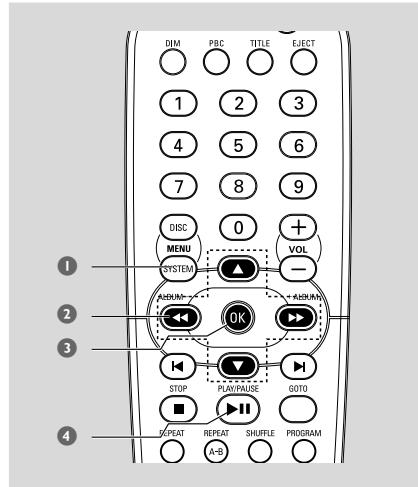
#### Note:

– This function is only available for VCD.

# DVD Menu Operations

## Using the system menu

To enter the system menu, you should stop playback first.



- ① In stop mode, press **SYSTEM MENU**.
- The menu bar will appear across the top of the TV set screen.

Language	Video	Audio	Rating
OSD Menu	English	English	
Subtitle	English	Français	
Audio	English	Español	
Menu	English	Português	

- ② Press the **◀▶/▲▼** on the remote control to navigate in the menu.
- Press **◀▶** to move through the menu bar.
- Press **▼** to enter the selection.
- ③ Press **OK** to confirm the selection.
- ④ Press **PLAY•PAUSE ▶II** (or **PLAY/PAUSE ▶II** on the remote) to resume playback.

## Setting language preference

See "Preparations-Step 3: Setting language preference".

### To select preferred language (DVD only)

When you press **AUDIO** on the remote control, the channels being played will be displayed on the TV screen.

For example, in the Dolby Digital format, multiple signals ranging from monoral to 5.1 channel can be recorded on a DVD. The number of channels may vary depending on the actual DVD.

### To display the subtitle (DVD only)

For DVDs recorded in multiple languages, you can change the subtitle language during playback, or turn on or off the subtitle display whenever you want.

For example, you can select the language you understand and turn the subtitle on for better understanding.

Press **SUBTITLE** repeatedly on the remote control during playback.

Each time you press the button, the language will change.

#### Notes:

- For some DVDs, you may not be able to change the subtitle languages even if multilingual subtitles are recorded in the disc.
- If your desired language is not set in the disc, you cannot select the languages via this function.

## Setting video preference (DVD only)

See "Preparations-Step 3: Setting video preference".

## Setting audio

To set Priority, see “Mixed-mode disc”

To set Digital Out and PCM 48 KHz

Language	Video	Audio	Rating
Digital Out	PCM		
PCM 48KHz	Off		
Priority	CD		
Night Mode	Off		

- In stop mode, select **Audio** from the menu bar, and then press **OK**.
- Press **▶▶** and **▼** on the remote to select PCM or ALL.

Select **ALL** if you have connected the digital output to a multifunctional decoder receiver.

Select **On** for **PCM 48K** if the external component is incapable of processing 96KHz digital signal input, and then convert the standard signal with the sampling rate of 48KHz.

## Night Mode - turning On / Off

### Off

Select this when you want to enjoy the surround sound with its full dynamic range.

### On

Select this to level out the volume. High volume output will be softened and low volume output will be brought upward to an audible level. This feature is only available for movies with Dolby Digital mode.

Language	Video	Audio	Rating
Digital Out	PCM		
PCM 48KHz	Off		
Priority	CD		
Night Mode	Off		

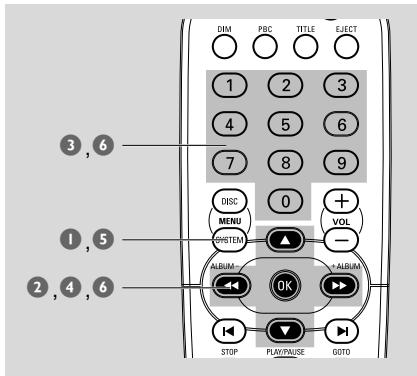
To remove the menu

Press **SYSTEM MENU**.

## IMPORTANT!

- Some operations may be different or restricted according to the disc format. Refer to the jacket or care of the disc you are playing.

## Setting Rating



Some DVDs may have a parental level assigned to the complete disc or to certain scenes on the disc. This feature lets you set a playback limitation level. The rating levels are from 1 to 8 and are country specific. You can prohibit the playing of certain discs that are not suitable for your children or have certain discs played with alternative scenes.

- In stop mode, press **SYSTEM MENU**.
- Use **◀◀▶▶/▲▼** on the remote control to navigate in the menu.
- Move to **RATING** and press **OK**.

Language	Video	Audio	Rating
Password	-----	-----	1.kid Safe 2.G 3.PG 4.PG-13 5.PG-R 6.R 7.NC-17 8. Adult
Rating	8. Adult		
Load Factory	Reset		

- Use the **numeric keys (0-9)** to enter the four-digit code.
- Press **▲▼** to select a rating level between 1-8 and press **OK**.
- DVDs rated above the level you select will not play unless you enter your four-digit password or choose a higher level rating.

# DVD Menu Operations

- 5 Press **SYSTEM MENU** again to cancel the menu.

## Rating explanations

**8 ADULT** – material for adults only; viewed only by adults due to graphic sexual scenes, violence, or language.

**7 NC-17** – No children under age 17; not recommended for children under age 17.

**6 R** - Restricted.

**5 PG-R** – Parental Guidance – Restricted; recommended that parents restrict children under 17 from viewing or allow them to view only when supervised by a parent or adult guardian.

**4 PG 13** – Material is unsuitable for children under age 13.

**3 PG** – Parental Guidance suggested.

**2 G** – General Audience; recommended as acceptable for viewers of all ages.

**1 KID SAFE** - Suitable for children.

- 6 Enter or re-enter your 4-digit password using the **numeric keys (0-9)**, and then press **OK**.

The lock icon is closed and the parental control setting is completed.

## To deactivate the rating control function

Enter your 4-digit password using the **numeric keys (0-9)**, and then press **OK**.

The lock icon is opened and the parental control setting is turned off.

- 1 At step 6, enter your 4-digit password using the **numeric keys (0-9)**, and then press **OK**.

- 2 Enter a new 4-digit password using the **numeric keys (0-9)**, and then press **OK**.

## To play discs of rating control (DVD only)

- 1 Insert the disc and press **DISC** to enter the disc mode.

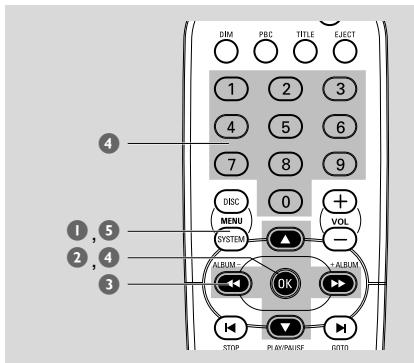
→ The rating display appears.

- 2 Enter a new 4-digit password using the **numeric keys (0-9)**, and then press **OK**.

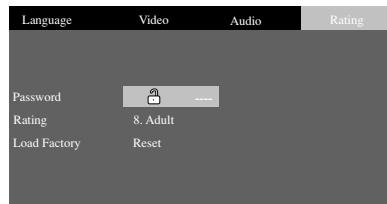
→ Playback starts.

## To change the password

You can change the four-digit code used as Password.



- In the stop mode, press **SYSTEM MENU**.
- Select **RATING** and then press **OK**.
- Press **◀▶/▲▼** on the remote control to navigate in the menu.



- Use the **numeric keys (0-9)** to enter your four-digit code, and then press **OK**.  
→ The password supplied by default is 1234.  
→ If you forget the four-digit code, press **STOP** four times, the system will change back to the default password.
- Go to "Password" and enter your new code. Then, enter the same code again to confirm.

## To remove the menu

Press **SYSTEM MENU** again.

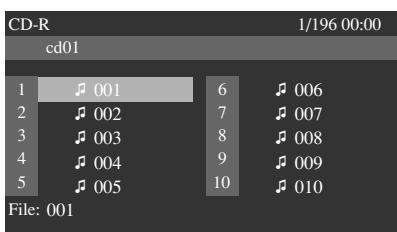
## Playing MP3 / picture disc (Kodak, JPEG)

### IMPORTANT!

- You have to turn on your TV set and set to the correct Video In channel.

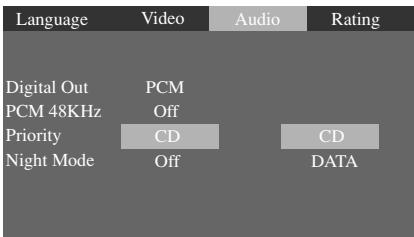
### MP3 / picture disc

- ① Load an MP3/Picture disc.
- ② Playback will start automatically.  
→ The album menu will appear on the TV screen.



## Mixed-mode disc

To play a mixed-mode disc, you need to select the playback priority for CD or data files through the system menu.



- ① Press **SYSTEM MENU** in the stop mode.
- ② Press **▶▶** on the remote to select **Audio** and press **▼** to select **CD** under priority.  
→ The contents in the CD format will be played.

### OR

Press **▶▶** on the remote to select **Audio** and press **▼** to select **Data** under priority.

→ The data contents will be played.

The contents may be MP3 files, Kodak pictures or JPEG pictures.

The default setting is CD.  
MP3:

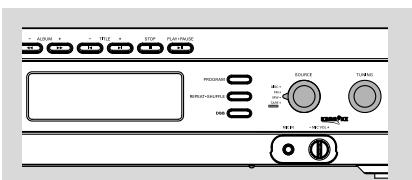
If an MP3 file exists in the disc, the system recognizes the disc as an "MP3 Disc". If only JPEG files exist in the disc, the system recognizes the disc as a "JPEG Disc".

JPEG:

If a JPEG file exists in the disc, the system recognizes the disc as a "JPEG Disc". If only MP3 files exist in the disc, the system recognizes the disc as an "MP3 Disc".

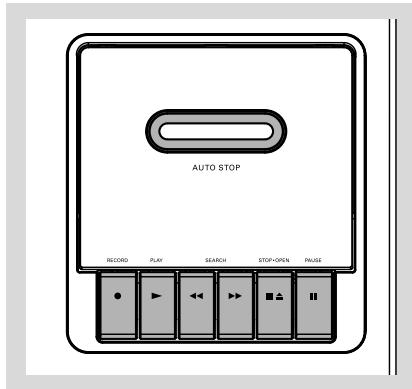
# Other Functions

## Radio reception



- ① Turn the **SOURCE** control knob to select **FM** or **MW** source.
- ② Turn the **TUNING** control knob to tune to a desired radio frequency.

## Tape playback



- ① Turn the **SOURCE** control knob to select **TAPE** source.
- ② Press **STOP-OPEN ■▲** on the top of the DVD player to open the tape door.
- ③ Insert a recorded tape and close the tape door.
- ④ Load the tape with the open side towards the front and the full spool to the left.
- ⑤ Press down **PLAY ▶** on the top of the DVD player to start playback.

### To stop playback

- Press **STOP-OPEN ■▲** again.

## Rewinding/Fast forwarding

- ① Stop playback, press down **SEARCH ◀◀▶▶** on the top of the DVD player.

- ② Press **STOP-OPEN ■▲** to stop rewinding or fast forwarding.

## General information on recording

- For recording, use only NORMAL (IEC type I) tapes on which the tabs have not yet been broken. This deck is not suitable for recording on METAL (IEC IV) type tapes.
- The best recording level is set automatically. Altering the **VOLUME** or **DBB** will not affect the recording in progress.
- At the very beginning and end of the tape, no recording will take place during the 7 seconds when the leader tape passes the recorder heads.
- To protect a tape from accidental erasures, have the tape in front of you and break out the left tab. Recording on this side is no longer possible. If, however, you wish to record over this side again, cover the tabs with a piece of adhesive tape.

### **IMPORTANT!**

**Recording is permissible if copyright or other rights of third parties are not infringed upon.**

## Start recording

- ① Load a recordable tape into the tape deck with the full spool to the left.
- ② Prepare the source to be recorded.  
**DVD/CD/VCD/MP3** – load the disc and start playback from the start point of recording.  
**TUNER** – tune to the desired radio station.  
**AUX** – connect external equipment.
- ③ Press down **RECORD ●**.

## When recording is in progress

- To stop recording, press **STOP-OPEN ■▲**.
- It is not possible to listen to another source.

## Sound control

### Adjusting volume and sound

- 1 Turn the **VOLUME -/+** control knob (or press **VOL +/-** on the remote) to decrease or increase volume on the system.
- 2 Press down **DBB ON/OFF** (or press **DBB** on the remote) to switch bass enhancement on or press it again to release it and switch bass enhancement off.

#### Notes:

- For DTS discs, only sound output through the Digital Out jack is available (no sound output to the speakers).
- When you turn the **VOLUME -/+** control knob or press **VOL +/-** on the remote to adjust the volume level, neither the display panel on the system nor the display on the TV set will show any volume level indication.

### Switching off the volume temporarily (for DISC mode only)

- Press **MUTE**.  
→ "MUTE" is displayed on the display screen and  is displayed on the TV screen.

#### To cancel the MUTE mode:

Press **MUTE** again.

### Selecting surround sound

#### IMPORTANT!

For proper surround sound, make sure the speakers and subwoofer are connected (see Connections-Step 3: Connecting speakers.)

- Press **SURROUND** to select surround or stereo mode.
  - The availability of the various surround sound modes depends on the number of speakers used and the sound available on the disc.
  - The center and surround speakers operate only in Multi-channel surround mode.
  - Stereo broadcasts or recordings will produce some surround channel effects when played in a surround mode. However, monaural (single channel sound) sources will not produce any sound from the rear speakers.

#### Note:

- The surround sound is unavailable for the TUNER/AUX/TAPE source mode.

## Microphone Mixing

Connect microphones (not supplied) to the system to sing along with the music source.

- 1 Connect microphones to **MIC IN** jack.
- 2 Before connecting the microphone, set the microphone level to a lower level to prevent howling sound by turning the **MIC VOL -/+** knob.
- 3 Select **DISC** to start playback.
- 4 Adjust the volume level of the source with the **VOLUME -/+** control (or **VOL +/-** on the remote).
- 5 Start singing or talking through the microphone.
- 6 Press **KEY** on the remote to select key tone if necessary.

#### Notes:

- Keep the microphones away from the speakers to prevent howling.
- Microphone mixing is only available in VCD/DVD mode.

## Key Control

This feature allows you to change the key tone of your vocal range.

- Press **KEY** on the remote control to decrease or increase the vocal key level between -7 and +7.

# Specifications

## AMPLIFIER

Output power .....	30 W RMS (subwoofer)
.....	5x 10W (satellite boxes)
.....	1500 W PMPO
Signal-to-noise ratio .....	≥ 65 dBA
Impedance loudspeakers .....	6 Ω (subwoofer)
.....	5x 4 Ω (satellite boxes)

## DVD PLAYER

Laser Type .....	Semiconductor
Disc Diameter .....	12cm / 8cm
Video Decoding .....	MPEG-2 / MPEG-1
Video DAC .....	10 Bits
Signal System .....	PAL / NTSC
Video S/N.....	56 dB (minimum)
Composite Video Output .....	1.0Vp-p, 75 Ω
S-Video Output .....	Y - 1.0Vp-p, 75 Ω C - 0.286Vp-p, 75 Ω
Audio DAC .....	24 Bits / 96 kHz
Frequency Response .....	4 Hz - 20 kHz (44.1kHz) 4 Hz - 22 kHz (48kHz) 4 Hz - 44 kHz (96kHz)
Digital Output .....	..... SPDIF (Sony Philips digital interface) Coaxial
Number of programmable tracks .....	20
Signal-to-noise ratio .....	≥ 50 dBA
Channel separation .....	≥ 40 dB (1 kHz)
Total harmonic distortion .....	< 0.02% (1 kHz)

## TUNER

FM wave range .....	.....87.5 (± 0.5)–108.5 (± 0.5) MHz
MW wave range .....	.....515 (± 8) – 1646 (± 30) kHz
Sensitivity at 75 Ω	
– mono, 26 dB signal-to-noise ratio .....	2.8 µV
– stereo, 46 dB signal-to-noise ratio .....	61.4 µV
Selectivity .....	≥ 28 dB
Total harmonic distortion .....	≤ 5%
Signal-to-noise-ratio .....	≥ 50 dBA

## TAPE DECK

Signal-to-noise ratio	
Normal tape (type I) .....	50 dBA
Wow and flutter .....	≤ 0.4% DIN

## SPEAKERS

### Front Speakers

System .....	1-way shielded
Impedance .....	4 Ω
Frequency response .....	..... 90 Hz – 20 KHz
Speaker drivers.....	1x 3" full range
Dimensions (w x h x d) .....	..... 95mm x 141 mm x 103 mm
Weight .....	..... 0.62 kg

### Center Speaker

System .....	1-way shielded
Impedance .....	4 Ω
Frequency response .....	..... 90 Hz – 20 KHz (within -6dB)
Speaker drivers .....	1 x 3" full range
Dimensions (w x h x d) .....	.95mm x 141 mm x 103 mm
Weight .....	..... 0.62 kg

### Surround Speakers

System ..	1-way (not magnetically shielded design)
Impedance .....	4 Ω
Frequency response .....	..... 90 Hz – 20 KHz
Speaker drivers .....	1 x 3" full range
Dimensions (w x h x d) .....	..... 95mm x 141 mm x 103 mm
Weight .....	..... 0.385 kg

## SUBWOOFER

Subwoofer .....	
..... 1-way (not magnetically shielded design)	
Impedance .....	6 Ω
Frequency response .....	..... 35 Hz – 7 KHz
Speaker drivers .....	1 x 4" woofer
Dimensions (w x h x d) .....	..... 168 mm x 266 mm x 243 mm
Weight .....	..... 2.63 kg

## GENERAL INFORMATION

AC Power .....	220 – 240 V; 50 Hz
Dimensions (w x h x d) .....	436 x 86 x 337 (mm)
Weight (with/without speakers) .....	11.0 / 5.8 kg
Standby power consumption .....	< 15W

**Specifications and external appearance are subject to change without notice.**

**WARNING**

Under no circumstances should you try to repair the system yourself, as this will invalidate the warranty. Do not open the system as there is a risk of electric shock.

If a fault occurs, first check the points listed below before taking the system for repair. If you are unable to remedy a problem by following these hints, consult your dealer or Philips for help.

Problem	Solution
<b>No power.</b>	✓ Check if the AC power cord is properly connected.
<b>"NO DISC" is displayed.</b>	✓ Check if the disc is inserted upside down. ✓ Wait until the moisture condensed at the lens has cleared. ✓ Replace or clean the disc, see "Maintenance". ✓ Use a readable disc or correctly recorded format MP3-CD.
<b>No picture.</b>	✓ Select the appropriate video input mode on the TV set. ✓ Check if the TV set is switched on. ✓ Check the video connection. ✓ Check if the system is securely connected.
<b>Distorted or poor picture.</b>	✓ Sometimes a slight picture distortion may appear. This is not a malfunction. ✓ Clean the disc. ✓ Connect the system to the S-video input of your TV set.
<b>The aspect ratio of the screen cannot be changed even though you have set the TV shape.</b>	✓ The aspect ratio is fixed on the DVD disc. ✓ The aspect ratio may not be changed for some TV systems.
<b>The DVD player does not start playback.</b>	✓ Insert a readable disc. ✓ Check the disc type, color system and region code. ✓ Clean the disc. ✓ Place the disc with the playback side down. ✓ Press <b>SYSTEM MENU</b> to turn off the setup menu. ✓ Cancel the parental control rating function or change the rating level. ✓ Moisture has condensed inside the system. Remove the disc and leave the system turned on for about an hour.
<b>The DVD player does not respond when buttons are pressed.</b>	✓ Disconnect the power plug from the jack, and insert again.

# Troubleshooting

Problem	Solution
<b>The language for the sound or subtitle cannot be changed when playing a DVD.</b>	✓ Multi-language sound or subtitle is not recorded on the DVD. ✓ Changing the language for the sound or subtitle is prohibited on the DVD.
<b>No image is output when a function is selected.</b>	✓ Make sure the component is connected correctly. ✓ Press the correct function button for the input source.
<b>Sound cannot be heard or is of poor quality</b>	✓ Adjust the volume. ✓ Disconnect the headphones. ✓ Check that the speakers are connected correctly. ✓ Check if the stripped speaker wire is clamped. ✓ If the system is in pause, slow motion or fast forward/reverse mode, press <b>PLAY•PAUSE ▶II</b> (or <b>PLAY/Pause ▶II</b> on the remote) to resume the normal play mode. ✓ Make sure the MP3-CD was recorded within 32-256 kbps bit rate with sampling frequencies at 48 kHz, 44.1 kHz or 32 kHz.
<b>Poor radio reception.</b>	✓ If the signal is too weak, adjust the antenna or connect an external antenna for better reception. ✓ Increase the distance between the System and your TV set or VCR.
<b>Recording or playback cannot be made</b>	✓ Clean deck parts, see "Maintenance". ✓ Use only NORMAL tape. ✓ Apply a piece of adhesive tape over the missing tab space. ✓ Check the speaker connections and location.
<b>Left and right sound outputs are reversed.</b>	✓ Point the remote control at the remote control sensor of the unit. ✓ Reduce the distance to the player. ✓ Remove any possible obstacles. ✓ Replace the batteries with new ones. ✓ Check that the batteries are loaded correctly.
<b>The remote control does not function.</b>	✓ Make sure the center and sound speakers are connected correctly. ✓ Press <b>SURROUND</b> to select a correct surround sound setting. ✓ Make sure the source you are playing is recorded or broadcast in surround sound (DTS, Dolby Digital, etc.). ✓ Check all speakers for correct polarity.
<b>There is no sound from the center and surround speakers.</b>	
<b>Low bass response.</b>	

**Analog:** Sound that has not been turned into numbers. Analog sound varies, while digital sound has specific numerical values. These jacks send audio through two channels, the left and right.

**Aspect ratio:** The ratio of vertical and horizontal sizes of a displayed image. The horizontal vs. vertical ratio of conventional TVs. is 4:3, and that of wide-screens is 16:9.

**AUDIO OUT Jacks:** Jacks on the back of the DVD System that send audio to another system (TV set, Stereo, etc.).

**Bit Rate:** The amount of data used to hold a given length of music; measured in kilobits per second, or kbps. Or, the speed at which you record. Generally, the higher the bit rate better the sound quality. However, higher bit rates use more space on a Disc.

**Chapter:** Sections of a picture or a music piece on a DVD that are smaller than titles. A title is composed of several chapters. Each chapter is assigned a chapter number enabling you to locate the chapter you want.

**Component Video Out Jacks:** Jacks on the back of the DVD System that sends high-quality video to a TV set that has Component Video In jacks (R/G/B, Y/Pb/Pr; etc.).

**Disc menu:** A screen display prepared for the selection of images, sound, subtitles, multi-angles, etc recorded on a DVD.

**Digital:** Sound that has been converted into numerical values. Digital sound is available when you use the DIGITAL AUDIO OUT COAXIAL or OPTICAL jacks. These jacks send audio through multiple channels, instead of just two channels as analog does.

**Dolby Digital:** A surround sound system developed by Dolby Laboratories containing up to six channels of digital audio (front left and right, surround left and right and center).

**DTS:** Digital Theater Systems. This is a surround sound system, but different from Dolby Digital. The formats were developed by different companies.

**JPEG:** A still-picture data compression system proposed by the Joint Photographic Expert Group, which features small decrease in image quality in spite of its high compression ratio.

**MP3:** A file format with a sound data compression system, "MPE" is the abbreviation of Motion Picture Experts Group 1 (or MPEG-1) Audio Layer 3. Through the MP3 format, one CD-R or CD-RW can contain about 10 times as much data volume as a regular CD can.

**Multichannel:** DVD is specified to have all sound tracks constitute one sound field. Multichannel refers to a structure of sound tracks having three or more channels.

**Parental control:** A function of the DVD to limit playback of the disc by the age of the users according to the limitation level in each country. The limitation varies from disc to disc; when it is activated, playback will be prohibited if the software's level is higher than the user-set level.

**PCM (Pulse Code Modulation):** A system for converting analog sound signal to digital signal for later processing without data compression.

**Playback control (PBC):** Refers to the signal recorded on video CDs or SVCDs for reproduction control. By using screen menus recorded on a Video CD or SVCD that supports PBC, you can enjoy interactive-type software as well as software having a search function.

**Region code:** A system allowing discs to be played only in preset regions. This unit will only play discs that have compatible region codes. You can find the region code of your unit from the product label. Some discs are compatible with more than one region (or ALL regions).

**S-Video:** Produces a clear picture by sending separate signals for luminance and the color. You can use S-Video only if your TV set has S-Video In jack.

**Sampling Frequency:** Frequency of data sampling when analog data is converted to digital data. Sampling frequency numerically represents how many times the original analog signal is sampled per second.

**Surround:** A system for users to create realistic three-dimensional sound fields full of realism by arranging multiple speakers around the listener.

**Title:** The longest section of a picture or music feature on DVD, music, etc., in video software, or the entire album in audio software. Each title is assigned a title number enabling you to locate the title you want.

**VIDEO OUT jack:** Jack on the back of the DVD System that sends video to TV.