

# Wireless Music Center + Station

WACS4500

User manual

Manuel d'utilisation

Manual del usuario



## Important notes for users in the U.K.

### Mains plug

This apparatus is fitted with an approved 13-Amp plug. To change a fuse in this type of plug, proceed as follows:

- 1 Remove fuse cover and fuse.
- 2 Fix the new fuse which should be a BS1362 5-Amp, A.S.T.A. or BSI approved type.
- 3 Refit the fuse cover.

If the fitted plug is not suitable for your socket outlets, it should be cut off and an appropriate plug should be fitted in its place.

If the mains plug contains a fuse, it should have a value of 5 Amp. If a plug without a fuse is used, the fuse at the distribution board should not be greater than 5 Amp.

*Note: The severed plug must be disposed, so as to avoid a possible shock hazard due to it being inserted into another 13-Amp socket.*

### How to connect a plug

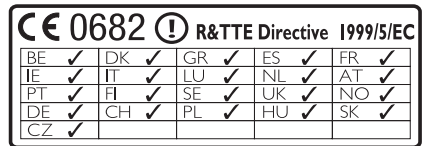
The wires in the mains lead are coloured using the following codes: blue = neutral (N), brown = live (L).

- As these colours may not correspond with the colour markings identifying the terminals in your plug, proceed as follows:
  - Connect the blue wire to the terminal marked N or coloured black.
  - Connect the brown wire to the terminal marked L or coloured red.
  - Do not connect either wire to the earth terminal in the plug, marked E (or e) or coloured green (or green and yellow).

Before replacing the plug cover, make sure that the cord grip is clamped over the sheath of the lead and not simply over the two wires.

### Copyright in the U.K.

Recording and playback of any materials may require consent. See Copyright Act 1956 and The Performer's Protection Acts 1958 to 1972.



**LGPL Library written offer**

This product contains Linux 2.4.27-vrsl, that is made available under the GNU LGPL license version 2.1 (hereafter called "the Library").

Philips Electronics Hong Kong Ltd. hereby offers to deliver or make available, upon request, for a charge no more than the cost of physically performing source distribution, a complete machine-readable copy of the corresponding source code of the Library on a medium customarily used for software interchange.

Please contact:

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Please contact:

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BLC Audio PDCC Development  
5/F., Philips Electronics Building  
5 Science Park East Avenue  
Hong Kong Science Park  
Shatin Hong Kong

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# PHILIPS

## Philips Consumer Electronics

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HK- 0645-WACS4500  
(report No.)

### EC DECLARATION OF CONFORMITY

We,

Philips Consumer Electronics  
(*manufacturer's name*)

Philips, Glaslaan 2, 5616 JB Eindhoven, The Netherlands  
(*manufacturer's address*)

declare under our responsibility that the electrical product:

Philips  
(*name*)

WACS4500 /12 /05  
(*type or model*)

Wireless Music Center & Station  
(*product description*)

to which this declaration relates is in conformity with the following standards:

EN55013 : 2001	EN 300 328 : 2004
EN55020 : 2002	EN 301 489-1 : 2005
EN 55022: 1998	EN 301 489-17: 2002
EN 55024: 1998	EN 50371 : 2002
EN 60065: 2002	IEC Guide 112 : 2000

(*title and/or number and date of issue of the standards*)

following the provisions of R &TTE Directive 1999/5/EC ( incl. 89/336/EEC & 73/23/EEC & 93/68/EEC directives and is produced by a manufacturing organization on ISO 9000 level.

Eindhoven,  
November 9, 2006  
(*place, date*)

Eric Tijssen  
Program Manager  
PCE I-Lab Entertainment Solutions  
(*signature, name and function*)

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# 1. General information

## 1.1 About WACS4500

WACS4500 comprises of a WAC4500 Center and a WAS4500 Station. Up to 5 WAS4500 Stations can be connected to a WAC4500 Center:

You can centrally store up to 1500 audio CDs\* in the 80GB hard disk on WAC4500. All stored music will then be wirelessly streamed from the Center to the connected Stations via Wi-Fi\*\*. Your music enjoyment will no longer be restricted by the location of your CD player or PC, nor the messy wiring. With WACS4500, you will have the freedom to enjoy your favorite music anywhere at home.

\*The available storage capacity is based on the following - 4 minutes per song, 10 songs per CD on the average, MP3 encoding at 128 kbps, while also taking into consideration that the operational software also takes up part of the product's memory.

Hence, the free space available might be at 75 GB or less, depending on the pre-installed firmware, audio CD database and demo tracks.

\*\* Wi-Fi, or IEEE802.11 b/g, is the international leading industry standard for wireless broadband networking. Digital data will be transferred with wider range and bandwidth.

## 1.2 Supplied accessories

### Center's accessories:

- 1 x antenna
- 1 x 1-way remote control with 2 x AA batteries
- 1 x Audio cables
- 1 x Ethernet cable
- 1 x PC Suite CD
- 1 x power cord

### Station's accessories:

- 1 x Stand
- 1 x AC/DC adapter (Philips AY4125 AC/DC adapter)
- 1 x power cord

***This set complies with the radio interference requirements of the European Community.***

***Philips Consumer Electronics, BG Entertainment Solutions, hereby declares that this product WACS4500 is in compliance with the essential requirements and other relevant provisions of Directive 1999/5/EC.***

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

# 1. General information

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## 1.3 Philips on-line support

Products from Philips have been designed and manufactured to the highest quality standards. If your Philips "Connected Planet" product is not working correctly, we recommend that you check the User Manual to verify that your product has been properly connected and configured.

To enhance your home entertainment experience, our Connected Planet support website ([www.philips.com/support](http://www.philips.com/support)) offers you all the information you need to fully enjoy your product as well as the new additions to our exciting range of products.

Please visit: [www.philips.com/support](http://www.philips.com/support) and enter your product name (WACS4500) to view:

- FAQ (Frequently Asked Questions)
- Latest user manuals and PC software manuals
- Firmware upgrade files for WACS4500
- Latest PC software downloads
- Interactive troubleshooting

As it is possible for you to upgrade your product, we recommend that you register your product on [www.club.philips.com](http://www.club.philips.com) so that we can inform you as soon as new and free upgrades are available.

Enjoy your WACS4500!



# 1. General information

## 1.4 Environmental information

All redundant packaging material has been omitted. We have done our utmost to make the packaging easily separable into three mono materials: cardboard (box), polystyrene foam (buffer) and polyethylene (bags, protective foam sheet).

The set consists of materials which can be recycled if disassembled by a specialised company. Please observe the local regulations regarding the disposal of packaging materials, exhausted batteries and old equipment.

### Disposal of your old product

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



**When this crossed-out wheeled bin symbol is attached to a product it means the product is covered by the European Directive 2002/96/EC**

**Please inform yourself about the local separate collection system for electrical and electronic products.**

**Please act according to your local rules and do not dispose of your old products with your normal household waste. The correct disposal of your old product will help prevent potential negative consequences for the environment and human health.**

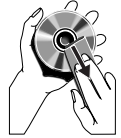
## 1.5 Maintenance

### Cleaning the Set

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

### Cleaning of Discs

- When a disc becomes dirty, clean it with a cleaning cloth. Wipe the disc from the center out.
- Do not use solvents such as benzene, thinner, commercially available cleaners, or antistatic spray intended for analog records.



### Care and Handling for HDD (Hard Disk Drive)

The HDD is a fragile piece of device that is easily prone to damage due to its long recording capacity and high speed operation.

- Do not move the unit while it is switched on.
- Do not remove the AC power plug from the power outlet during operation.
- Do not use the unit in excessively hot or humid places. This may cause condensation to form inside the unit.

If the HDD fails, playback and recording will not be possible. In this case, it will be necessary to replace the HDD unit.

### WARNING!

The HDD is not recommended for permanent storage of recorded contents. We advise that you backup your music library in the Center onto your PC. When necessary, you can still restore your system with these backup files. For details, please refer to the User Manual.

# 1. General information

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## 1.6 Safety information

- Place the set on a flat, firm and stable surface.
- Keep the system, batteries or discs away from excessive moisture, rain, sand or any heat sources, such as heating equipment or direct sunlight.
- Place the set in a location with adequate ventilation to prevent internal heat build-up in your system. Allow at least 10 cm (4 inches) clearance from the rear and the top of the unit and 5 cm (2 inches) from each side.
- Never cover the ventilation openings with items such as newspapers, table-cloths, curtains, etc as this will impede ventilation.
- Never expose the set to water dripping or splashing.
- Never place objects filled with liquids, such as vases, on the set.
- Never place sources of naked flame, such as lighted candles on the set.
- The mechanical parts of the set contain self-lubricating bearings and must not be oiled or lubricated.

### **CAUTION**

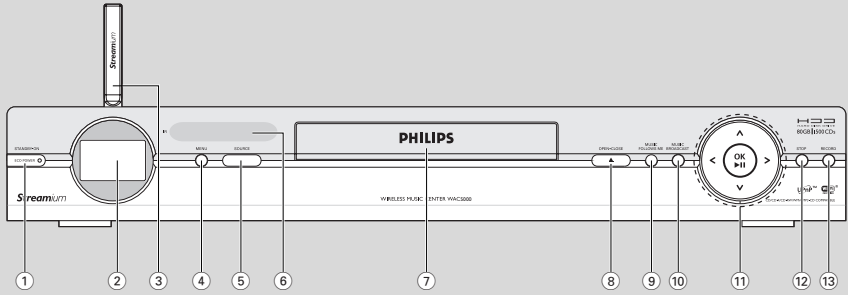
***Visible and invisible laser radiation. If the cover is open, do not look at the laser beam.***

***High voltage! Do not open. You run the risk of getting an electric shock.***

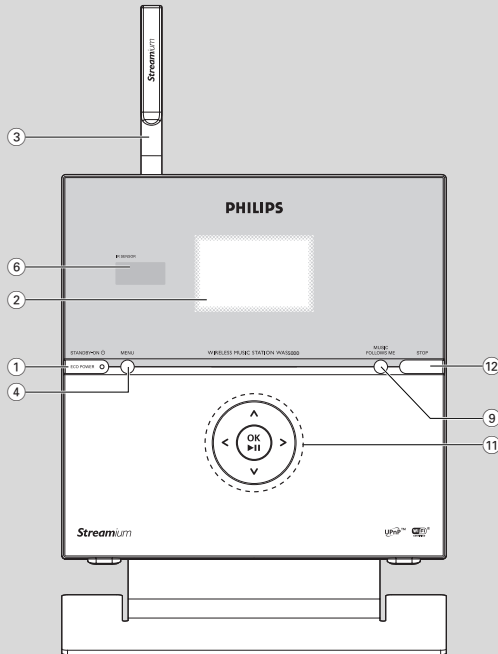
***The set does not contain any user-serviceable parts.***

***Modification of the product could result in hazardous EMC radiation or other unsafe operations.***

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



Wireless Music Center WAC4500



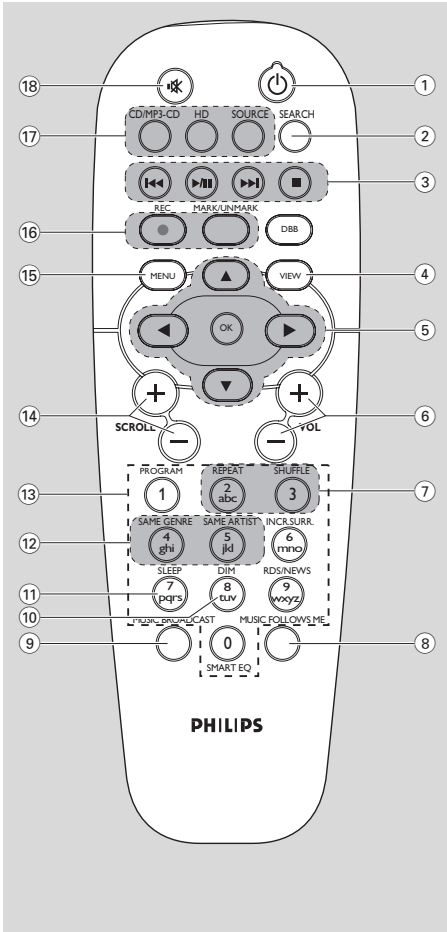
Wireless Music Station WAS4500

## 2. Controls

### 2.1 Controls on The Center and The Station *(Top and front panels)*

- ① **STANDBY-ON/ ECO POWER**
  - press briefly to switch on the set or put it on standby mode;
  - press and hold to switch the set to power-saving mode or on
  - **Green indicator:** lights up in green when the set is switched on
  - **Red indicator:** lights up in red when the set is switched to standby mode or power-saving mode
- ② **Display**
  - shows status of the set
- ③ **Wi-Fi antenna**
- ④ **MENU**
  - enters or exits setup menu
- ⑤ **SOURCE**
  - selects sound source: HD (hard disk), CD or UPnP.
  - **In standby mode:** switches the set on and selects sound source: HD, CD or UPnP.
- ⑥ **IR**
  - sensor for the infrared remote control
  - Helpful hint:**
    - *Always point the remote control towards this sensor.*
- ⑦ **CD door** *(Center only)*
- ⑧ **OPEN-CLOSE▲** *(Center only)*
  - opens/closes the CD door.
- ⑨ **MUSIC FOLLOWS ME**
  - **HD:** moves music playback from Center to Station, or from Station to Center
- ⑩ **MUSIC BROADCAST** *(Center only)*
  - **HD:** broadcasts music from the Center to the Station

- ⑪ ◀ / ▶ / ▲ / ▼
  - navigation controls (left, right, up, down) for scrolling through the option lists
  - ◀
  - **HD/CD/UPnP:** returns to previous option lists
  - ▲ / ▼
  - **HD/CD/UPnP:** skips/searches tracks/passage backward/forward (in playback screen); fast scrolling in option lists
  - ▶
  - confirms selection
- OK**
  - starts or pauses playback
- ⑫ **STOP**
  - stops playback or recording
- ⑬ **RECORD**
  - **CD:** starts to record onto the hard disk



## 2.2 Remote control


















- ①
  - press briefly to switch on the set or to put it on standby mode;
  - press and hold to switch the set to power-saving mode
- ② **SEARCH**
  - searches by keywords
- ③
  - skips/searches tracks/passage backward/forward (in playback screen)
- **Text entry:** deletes the input before cursor
- starts or pauses playback
- stops playback or recording
- ④ **VIEW**
  - toggles between playback screen and previous option list
- ⑤
  - navigation controls (left, right, up, down) for scrolling through the option lists
  - Returns to previous option lists
  - **Text input:** moves the cursor backward
  - Skips/searches tracks/passage backward/forward (in playback screen); fast scrolling in option lists
  - confirms selection
  - **Text entry:** confirms input and moves the cursor forward
- OK**
  - Confirm selection
  - Starts playing
- ⑥ **VOL +, -**
  - adjusts the volume level
- ⑦ **REPEAT**
  - selects continuous playback
- SHUFFLE**
  - selects random playback

## 2. Controls

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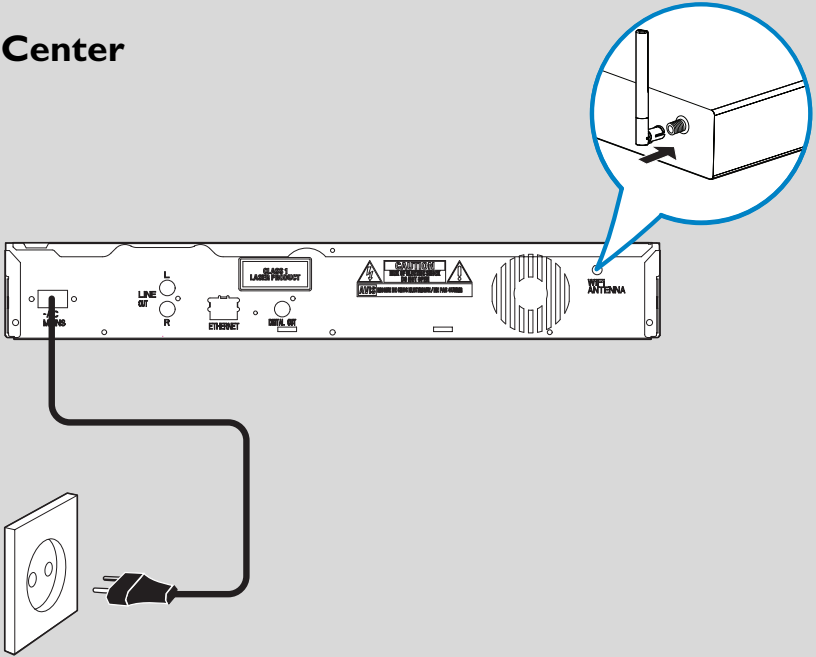
- ⑧ **MUSIC FOLLOWS ME**
  - HD: moves music playback between Center and Station
- ⑨ **MUSIC BROADCAST** (*Center only*)
  - HD: broadcasts music from Center to Station
- ⑩ **DIM**
  - changes the display brightness
- ⑪ **SLEEP**
  - adjusts, displays or switches off the sleep timer
- ⑫ **SAME GENRE**
  - HD: plays all the tracks of current Genre
- SAME ARTIST**
  - HD: plays all the tracks of current Artist
  - HD: enable Wireless Range Extender (refer to Extender's manual for details)
- ⑬ **Alphanumeric keys**
  - for text entry
- ⑭ **SCROLL ▲ / ▼**
  - scrolls the display screen upward or downward
- ⑮ **MENU**
  - enters or exits setup menu
- ⑯ **REC** (*Center only*)
  - CD: starts to record onto the hard disk
- MARK/UNMARK** (*Center only*)
  - Selects or deselects tracks to be recorded
- ⑰ **CD/MP3-CD**
  - selects CD source
  - **In standby mode:** switches on the set and selects the CD source.
- HARDDISK (HD)**
  - selects HD (hard disk) source
  - **In standby mode:** switches on the set and selects the HD source
- SOURCE**
  - selects UPnP source
  - **In standby mode:** switches the set on and selects UPnP source
- ⑱ **MUTE**
  - temporarily switches off the sound

### 2.3 Icons on LCD display

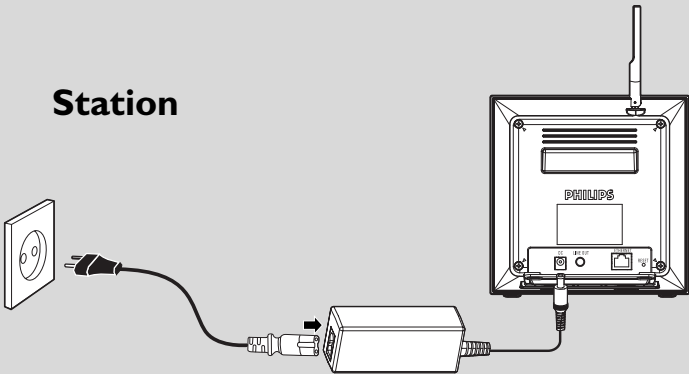
Icon	Description	Icon	Description
	Client connected		Repeat all
	Client not connected		Repeat 1
	Music		Shuffle
	UPnP		Music Broadcast
	CD mode		Music follow me
	HD mode		Mute
	Recording mode		Sleep
	Transferring mode		WiFi connected
			Both WiFi and Ethernet connected

# 3. Installation

## Center



## Station





## IMPORTANT!


- Before you decide where and how to place both the Center and Station, try the Wi-Fi connection and rear connections to find a suitable location.

### 3.1 Setting up Wi-Fi connection between Center and Station

Wi-Fi connection starts automatically when you power up both the WAC4500 Center and WAS4500 Station

- 1 The first time you set up a Wi-Fi connection, place the Center and Station side by side on a flat and firm surface.
- 2 a. Connect the Center to power supply  
b. Connect the Station to power supply  
→ Auto installation/connection starts  
→ HD screen appears on the Center  
→ HD screen appears on the Station when the Station is connected to the Center
- 3 Unplug the Center and Station. Relocate as desired.

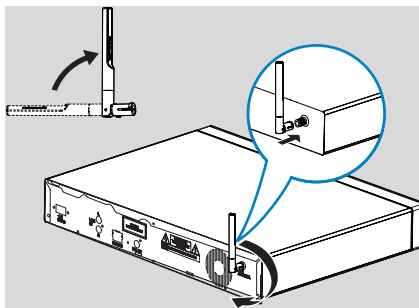
## IMPORTANT!

- Make sure that you have already powered up the Center before powering up the Station.
- Avoid installing between thick walls. The Center and Station should never be blocked by 2 or more walls.
- Avoid placing the system near to large metal objects.
- For better Wi-Fi reception, turn the Wi-Fi antenna, or adjust the location of the Center and Station.
- Always press and hold **STANDBY-ON**  to switch the set to **ECO POWER** (power-saving mode) before removing its power plug.

## WARNING:

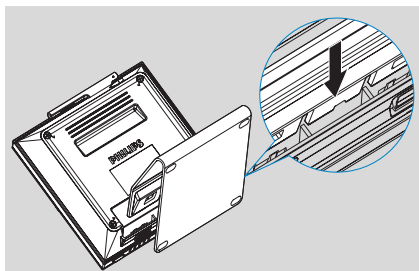
- Never make or change connections with the power supply switched on.
- Install your Center and Station near the AC outlet and where the AC power plug can be reached easily.

### 3.2 Mounting the Wi-Fi antenna onto Center



- 1 As shown, insert the L-shaped antenna into the socket **Wi-Fi ANTENNA**
- 2 Press and screw the antenna clockwise till it is secured in place.

### 3.3 Mounting the stand onto Station



- 1 Align the stand's slots as shown
- 2 Push down the stand till it is locked into place

## Helpful hints:

- Once mounted, the stand is undetachable.

# 3. Installation

## 3.4 Connecting Center to an audio system

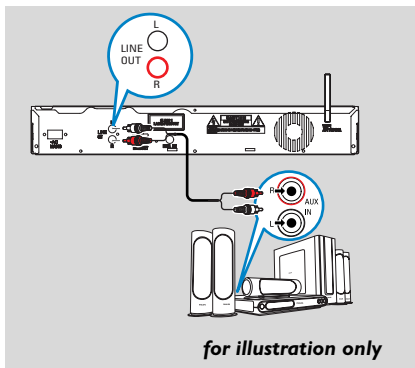
You can easily connect WAC4500 Center to your existing home audio systems, such as the audio/video receiver, home cinema system, mini/micro system, multimedia speaker boxes (with built-in amplifier) and audio amplifiers.

WAC4500 Center is provided with two sets of output terminals, LINE OUT and DIGITAL OUT. Select one of them according to your needs. For better sound output, use DIGITAL OUT if it is available on the connected device.

### LINE OUT

#### On Center:

- 1 Insert the red plug of the red/white audio cables (supplied) to the red socket LINE OUT R and the white plug to the white socket LINE OUT L



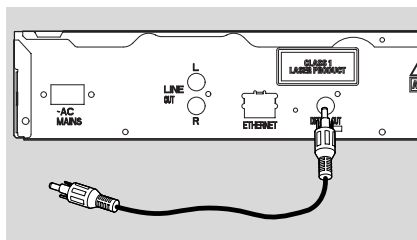
#### On home audio system

- 2 Connect the other end of the audio cables to the AUX IN (or AUDIO IN) terminals of the audio system, red plug to the red socket AUX IN R and white plug to the white socket AUX IN L
- 3 Select AUX mode

### DIGITAL OUT

#### On Center

- 1 Insert the plug of digital audio cables (not supplied) to the DIGITAL OUT socket



#### On home audio system

- 2 Connect the other end of the digital audio cables to the DIGITAL IN terminal of the audio system
- 3 Select the Digital Input mode (such as DI) in the connected audio system

#### Helpful hints:

- Always refer to the user manual of other equipment for details.

## 3.5 Using AC power

- 1 Make sure that all connections have been made before switching on the power supply
- 2 Connect the AC power cord to the wall socket. This switches on the power supply

When the Center or Station is switched to standby mode, they will still be consuming some power. **To disconnect the system from the power supply completely, remove the power plug from the wall socket.**

### **Helpful hint:**

- Always press and hold STANDBY-ON to switch the set to power-saving mode before removing its power plug.

**The rating label of WAC4500 and WAS4500 is located on the bottom of the sets.**

**For users in the U.K.: please follow the instructions on page 2.**

# 4. Preparation

## 4.1 Using the remote control

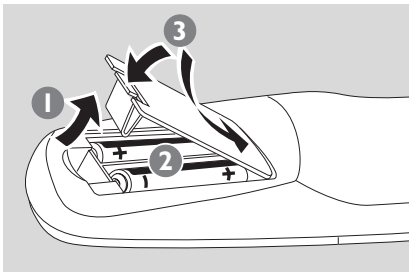
With the supplied remote control, you can operate either the Center or Station.

### IMPORTANT!

- Always point the remote control directly towards the IR sensor on the Center or Station you wish to operate.
- First, select the source you wish to control by pressing one of the source select keys on the remote control (for example CD/MP3-CD, HD, SOURCE).
- Then select the desired function (for example ▶/||, |◀◀/▶▶|).

### 4.1.1 Inserting batteries into the remote control

- 1 Open the battery compartment
- 2 Insert 2 batteries (type R06 or AA) into the remote control with the correct polarity (as indicated by the "+" and "-" symbols inside the battery compartment)



- 3 Replace the compartment door

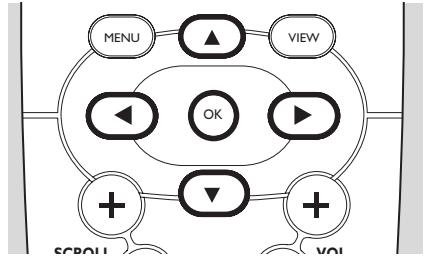
### CAUTION!

- Remove the batteries when they are exhausted or when the remote control will not be used for a long time.
- Do not use old and new or different types of batteries together.
- Batteries contain chemical substances, hence they should be disposed of properly.

## 4.2 Using navigation controls

When selecting options on the set, you often need to use the navigation controls ◀/▶/▲/▼

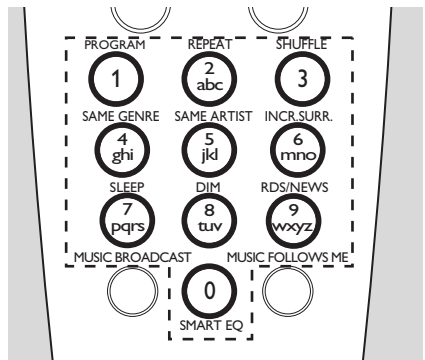
- 1 Press ▲/▼ to highlight an option.
- 2 Enter its submenu by pressing ▶
- 3 Press ◀ to return to the previous option list
- 4 Press OK or ▶ to confirm



## 4.3 Using alphanumeric keys

Use the alphanumeric keys to input letters or numbers.

- 1 When the text box appears, press the alphanumeric keys repeatedly until the desired letter/number appears (maximum 8 characters)



- 2 Press ◀ / ▶ to move the cursor backward / forward

**Helpful hint:**

– You will enter the previous/next option list if the cursor reaches the beginning or end of the text box.

- 3 Press |◀◀ to delete the entry before the cursor.
- 4 Press **OK** to close the text box and move to the next option list.

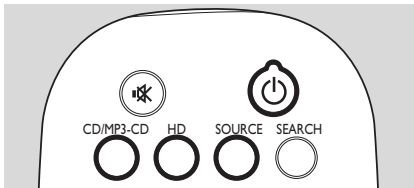
## 5. Basic functions

### 5.1 Switching to standby/on and selecting functions

- 1 When the set is switched on, press **STANDBY-ON/ ECO POWER** to switch it to standby mode (or press  $\odot$  on the remote control)
  - The Red indicator lights up
  - Center: The screen dims. Display shows the connected or previously connected Stations
  - Station: Display shows the connected or previously connected Center
    - The screen will remain empty if no Center is found
- 2 To switch on, press **STANDBY-ON/ ECO POWER** on the set
  - The set switches to the last source selected
  - The Green indicator lights up

**OR**

Press the source button on the remote control (e.g. **CD/MP3-CD, HD, SOURCE**)
- 3 To select functions, press **SOURCE** once or more times (or press **CD/MP3-CD, HD, SOURCE** on the remote control)



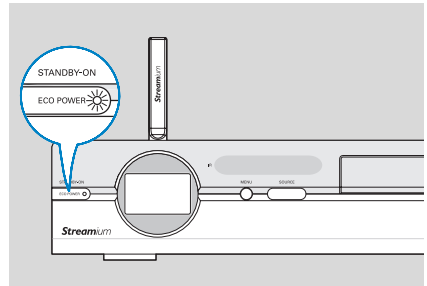
#### Helpful hint:

- CD/MP3-CD source is only available on the Center.

### 5.2 Switching to power-saving mode

In power-saving mode, the set's display and Wi-Fi connection are turned off. The Center's hard disk also stops working. When the Center is switched to power-saving mode, you cannot stream music between the Center and Station or import music from the PC to Center.

- 1 When the set is on, press and hold **STANDBY-ON/ ECO POWER** to switch it to power-saving mode (or press and hold  $\odot$  on the remote control).
  - The Red indicator lights up
  - The display is switched off



- 2 To switch on, press **STANDBY-ON/ ECO POWER**.
  - The set switches to the last source selected

#### Helpful hints:

- In power-saving mode, the networking, sound, display, language, CD recording settings, the tuner presets, and the volume level (maximum: the moderate level) will be retained in the set's memory.
- To protect the hard disk, always switch the Center to standby/power-saving mode before removing its power plug from the wall outlet.

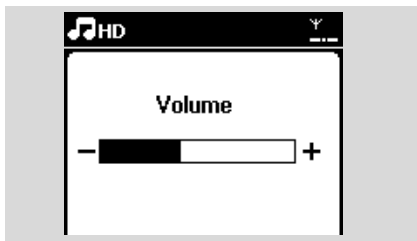
## 5. Basic functions

### 5.3 Auto-standby

When the set has reached the end of playback/recording and remains in the stop position for more than 20 minutes, the set will switch to standby mode automatically to save power.




### 5.4 Volume control

- 1 Check that playback has started
- 2 Adjust the volume with **VOL +/-** buttons on the remote control.  
→ Display shows the volume bar, indicating the volume level



### 5.5 MUTE

During playback, you can temporarily switch off the sound without switching off the set.

- 1 Press  to switch off the sound.  
→ The icon  appears. Playback continues without sound.
- 2 To switch on the sound, press  again or adjust the volume with **VOL +**.  
– You can also switch on the sound by activating **MUSIC BROADCAST** on the Center:



→ The icon  disappears

### 5.6 Display adjustment

You can adjust the backlight and contrast settings of the display.

- 1 Press **MENU** to enter the menu screen
- 2 Use the navigation controls **▲** or **▼** and **▶** to select **Settings**.
- 3 Press **▲** or **▼** and **▶** to select **Display**
- 4 Press **◀** / **▶** / **▲** / **▼** to select your option:

#### Backlight

Press **▲** or **▼** and **▶** to select **On** or **Off**

#### Contrast:

Press **▲** or **▼** to increase or reduce the contrast



#### Helpful hint:

– You can also toggle the Backlight on or off by pressing **DIM** on the remote control.



### 5.7 Selecting languages

- 1 Press **MENU** to enter the menu screen
- 2 Use the navigation controls **▲** or **▼** and **▶** to select **Settings**
- 3 Press **▲** or **▼** and **▶** to select **Language**
- 4 Press **▲** or **▼** and **▶** to select from:  
English, Français, Español, Nederlands, Italiano or Deutsch.

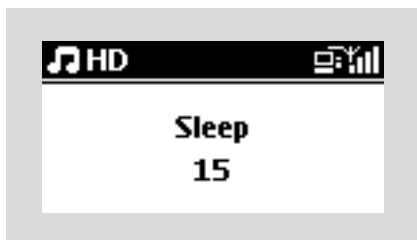
## 5. Basic functions

### 5.8 SLEEP

You can set a certain period of time after which the Center or Station will switch to standby mode.



- 1 On the remote control, press **SLEEP** repeatedly to select the desired time period options (in minutes):
  - The display shows in sequence: **Sleep 15, 30, 45, 60, 90, 120, Off**.
  - Display shows the selected option briefly and returns to its previous status. The icon **Z<sup>2</sup>** appears.



- 2 To view the countdown time to the standby mode, press **SLEEP** again.

To deactivate the sleep timer; press **SLEEP** repeatedly until Sleep Off is displayed.

**or**

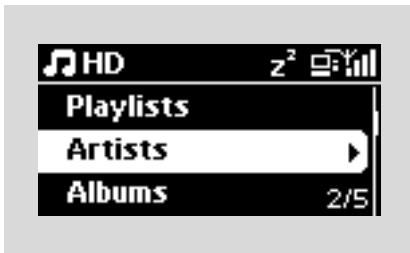
Press **STANDBY-ON/ ECO POWER** to switch the set to standby (or press  $\odot$  on the remote control).



## 6.1 Playing Hard Disk (HD)

Music is centrally stored in the 80GB hard disk on the WAC4500 Center. All the stored music can be streamed and played on the Station via Wi-Fi.

- 1 Check that the set is switched on  
**Station:** also check that the Center is switched on or in standby mode (See **5.Basic functions**)
- 2 Press **SOURCE** once or more times to select HD (or press **HD** on the remote control)  
→ Display shows HD and the categories of your music library: **Playlists**, **Artists**, **Albums**, **Genres**, **All tracks**.



**Playlists:** collection of your favorite tracks sorted by the name of the playlists in alphanumeric order

**Artists:** collection of albums sorted by artist name in alphanumeric order

**Albums:** collection of albums sorted by album name in alphanumeric order

**Genres:** collection of albums sorted according to music style

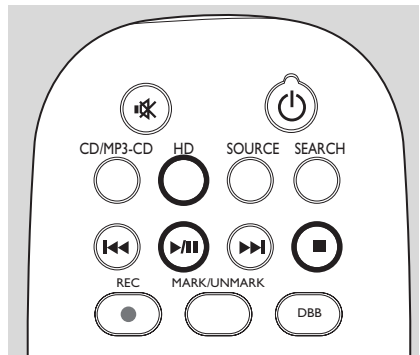
**All tracks:** tracks sorted by track name in alphanumeric order

- 3 Press the navigation controls ▲ or ▼ and ► to select your option

- 4 Press ►|| to start playback
- 5 Press ►|| on a highlighted artist, genre or album to start playback from the beginning of the item  
→ The playback screen appears:  
**on the top:** HD  
**in the middle:** current track name and some track information  
**at the bottom:** elapsed playing time and total playing time



- 5 To pause playback, press ►|| To resume playback, press the button again
- 6 To stop playback, press **STOP** ■

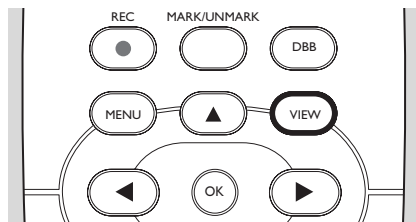


# 6. HD

## 6.2 Selecting and searching

### 6.2.1 Selecting a different option

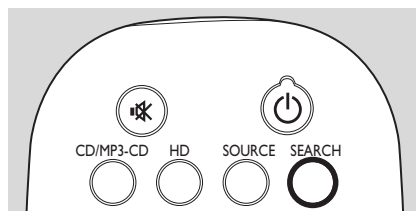
- 1 If necessary, press ◀ repeatedly to enter previous option lists
- 2 Press the navigation controls ▲ or ▼ repeatedly and ▶ to select the option
- 3 Press **VIEW** to return to the playback screen, if necessary



### 6.2.2 Searching by keywords

The keyword should be the first letter or word of the title of the track you wish to search for. By inputting a keyword, you can quickly find all the items containing the word (note that it is case sensitive)

- 1 Use the navigation controls ◀/▶/▲/▼ to enter the desired option list of tracks, albums, artists or playlists
- 2 On the remote control, press **SEARCH**  
→ A text box appears on the display



- 3 Use the **alphanumeric keys** to input the key words (maximum 8 characters)  
(see **4.3 Preparation: Using Alphanumeric Keys**)



- 4 Press **OK** to start searching  
→ Display shows: Searching ... Searching starts from the beginning of current option list  
→ The matched items appear at the top of the list  
→ The option list remains unchanged if no match is found. Searching ... disappears
- 5 Press **STOP** ■ to stop searching

#### Helpful hints:

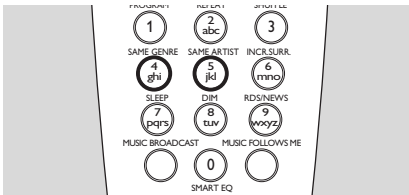
- The searching will also stop when:
  - you select another source
  - you switch off the set
- If no match is found during the keyword search, press ◀ or ▶ on the remote control to find close matches.
- In HD mode, please enter the second level (any folder) to search.

### 6.2.3 Selecting tracks of a particular artist

- During playback, press **SAME ARTIST**  
→ Playback of tracks by the current artist continues after current track.

### 6.2.4 Selecting tracks of a particular genre

- During playback, press **SAME GENRE**  
→ Playback of tracks with the same genre as the current track continues after the current track.

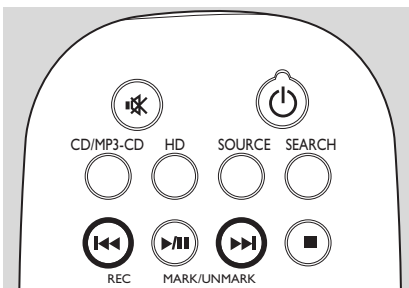


### 6.2.5 Selecting a track in the current album during playback

- In the playback screen, press the navigation controls ▲ or ▼ briefly and repeatedly to select previous or next tracks (or ◀◀ or ▶▶ on the remote control)

### 6.2.6 Finding a passage within the current track during playback

- In the playback screen, press and hold the navigation controls ▲ or ▼ (or ◀◀ or ▶▶ on the remote control)  
→ The track plays at a high speed
- When you recognize the passage you want, release ▲ or ▼ (or ◀◀ or ▶▶ on the remote control)  
→ Normal playback resumes.



### 6.3 Different play modes: REPEAT, SHUFFLE

– plays the current track continuously

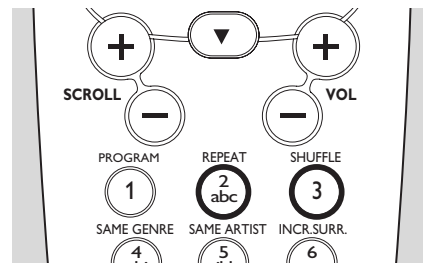
– repeats all the tracks (under current

Artist, Genre or Album)

– repeats all the tracks (under current artist, genre or album) in random order

– tracks (under current artist, genre or album) are played in random order

- During playback, press **REPEAT** or/and **SHUFFLE** once or more times to select play modes
- To return to normal playback, press **REPEAT** or/and **SHUFFLE** repeatedly until the various modes are no longer displayed




# 6. HD

## 6.4 Building music library on the Center

You can build a music library in the hard disk of the Center by recording from CDs, importing from PC and recording from external sources.


### IMPORTANT!

- Recording is permitted only if there is no infringement of copyrights or any other rights of third parties.
- For CDs encoded with copyright protection technologies used by some record companies, recording will be restricted.
- The making of unauthorized copies of copy-protected material, including computer programmes, 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.

 Be responsible  
Respect copyrights

### 6.4.1 Recording from CDs

With WAC4500 Center, you can record audio CD tracks from your CDs and store them as MP3 files in the Center's hard disk. The Gracenote® music recognition service enables your set to look up CD information (including album, artist, genre, track information) from its database. It allows the recorded CD tracks to be properly categorized (for example, under Artists, Albums, Genres or All tracks) and also merged with the existing tracks in the hard disk. To update your Gracenote® music recognition service database, see the manual Connect to your PC.

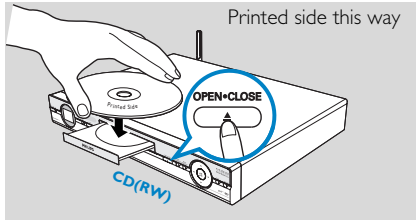
**POWERED BY**  
  
gracenote.

Music recognition technology and related data are provided by Gracenote®. Gracenote is the industry standard in music recognition technology and related content delivery. For more information, visit [www.gracenote.com](http://www.gracenote.com).

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### To record from CD at fast speed (for audio CDs, MP3/WMA CDs)

- 1 Press **OPEN•CLOSE▲** on the set to open the CD compartment.
- 2 Insert a disc with the printed side facing up. Press **OPEN•CLOSE▲** again to close the compartment.

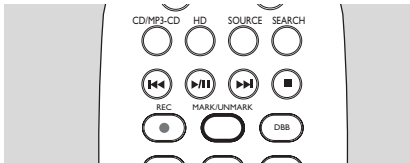


- ➔ Display shows: Reading CD
- ➔ List of tracks appears.
- If it is an MP3/WMA CD, a list of file folders appears. Press ▶ on a highlighted file folder to enter the track list.

- 3 In the track list screen, press **RECORD** (or press **REC** on the remote control)  
→ List of tracks with checkboxes appears



- 4 Press **MARK•UNMARK** to select or deselect the tracks to be recorded
- To select/deselect all tracks, press and hold **MARK•UNMARK**



- 5 Press **RECORD** ● to start recording  
→ Display shows **CD-Rec** and the current album name



(a default album name, e.g. Album\_001, is assigned if the CD track information cannot be found in the Center's Gracenote® music recognition service database)  
→ The Center returns to CD mode when ripping is complete

- 6 To rip another CD, repeat Steps 1-4 again
- 7 To stop recording, press **STOP** ■

#### Helpful hint:

– The WAC4500 Center allows you to look up the latest CD information via the Internet from the online Gracenote® music recognition service database if you are unable to find it in the built-in Gracenote® music recognition service database. See **10.1.1 Gracenote CD Information: To update Gracenote music recognition database.**

#### To record from CD during playback (for audio CDs only)

- 1 During playback, press **RECORD** ● or press **REC** ● on the remote control  
→ Recording and playback start from the current track  
→ Display shows CD-Rec and the current album name



or

- 1 Follow Steps 1-4 under To record from CD at fast speed
- 2 Change the recording speed:
- Press **MENU**
  - Use the navigation controls ▲ or ▼ and ► to enter Settings menu
  - Press ▲ or ▼ and ► select **Rec speed**
  - Press ▲ or ▼ and ► select **Normal speed**
- 3 Press **RECORD** to start recording

#### Helpful hints:

– It takes some time to convert the recorded tracks into MP3 files.  
– If power failure occurs during the conversion, you will lose the tracks that have not been converted. Always switch the set to power-saving mode before removing its power plug (see **5. Basic functions**).

## 6. HD

### To find your recorded tracks

You can find and playback the recorded tracks in Albums

- 1 Select HD source
- 2 In Albums, use the navigation controls ▲ or ▼ and ► to enter the album of recorded tracks
  - Only completely recorded tracks can be found in the Center's hard disk.

#### Helpful hint:

– *By default, the recorded tracks are converted to MP3 files at the rate of 128kbps (near-CD quality). For better sound quality, you can select a higher kbps rate.*

- 1 Enter **Rec quality** menu,
  - a. Press **MENU**
  - b. Use the navigation controls ▲ or ▼ and ► to enter Settings menu.
  - c. Press ▲ or ▼ and ► to select Rec quality
- 2 Press ▲ or ▼ and ► to select from 128kbps, 160kbps, 192kbps, 256kbps, 320kbps.
  - To edit track information, install the supplied Wireless Audio Device Manager (WADM) on your PC. For details, see the manual **Connect to your PC**.

### 6.4.2 Importing from PC

The Wireless Audio Device Manager (WADM) in the by-packed PC installer helps you organize music files on your PC and import them into the WAC4500 Center. For details, see the manual **Connect to your PC**.

## 6.5 Creating Playlist: custom collection of your favorite music

You can create up to 99 playlists consisting of your favorite tracks in the Center's hard disk.

- 1 Press **MENU** to enter the menu screen.
- 2 Press ▲ or ▼ and ► to select **Create Playlist**
  - A new playlist is created (a default album name, e.g. Playlist\_001, is assigned)
  - Display shows: Playlist created. To add tracks, select Add to Playlist



- 3 Use the navigation controls ◀ / ▶ / ▲ / ▼ to highlight the desired track (see **7.3 Selecting and searching**)
- 4 Select Add to Playlist,
  - a. Press **MENU** to enter the menu screen
  - b. Press ▲ or ▼ and ► to select **Add to Playlist**
    - A list of playlists appears
- 5 Press ▲ or ▼ and ► to select the desired playlist
  - Display shows: Track(s) added to playlist
- 6 Repeat Steps 3 to 5 to select and store all desired tracks.

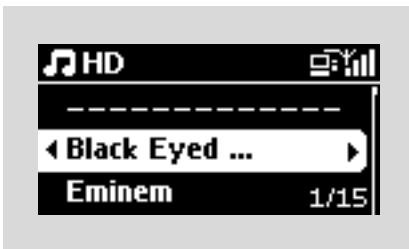
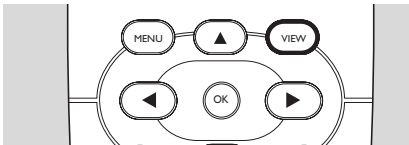
## 6.6 Deleting a playlist, album or track

- 1 Use the navigation controls ◀/▶/▲/▼ to enter a category (Playlist, Artists, Albums, Genres, All tracks)
- 2 If necessary, press ▲ or ▼ and ▶ once or more times to enter the album/track list
- 3 Select Delete Playlist, Delete Album or Delete Track
  - a. Press **MENU**
  - b. Use the navigation controls ▲ or ▼ and ▶ to select Delete Playlist, Delete Album or Delete Track
- 4 Press ▶ to select **Yes**.



## 6.7 Viewing track information

- 1 Press **VIEW** on the remote control once or more times to enter the playback screen.



- 2 Press ▶
  - The display shows the track information (e.g. track name, file type, file size, bit rate of mp3/wma files)



- 3 Press **VIEW** once or more times to return to the playback screen

## 6.8 Backup Your Music Content On Your PC

The Wireless Audio Device Manager (WADM) in the by-packed PC Suite CD allows you to backup contents on the HD to your PC. The backup files on your PC can be subsequently restored to the Center if the files on the HD are lost or corrupted. For details, see the manual Connect to your PC.

## 6.9 Moving music playback between Center and Stations

You can connect up to 5 Stations to the Center via Wi-Fi network. Via Wi-Fi, music playback can be moved between the Center and Stations. Even in different parts of your home, you and your family will still be able to enjoy and share music with ease.

### 6.9.1 MUSIC FOLLOWS ME

As you move around at home, let the music move with you between the Center and Station or between Stations.

#### On the source unit (Center or Station) where music is playing:

- 1 In HD source, select and play the album or playlist you wish to play on the destination unit (see **6.2: Selecting and searching**)

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### Helpful hints:

- Press **▶||** to interrupt playback if you want the playback to continue from where it has paused on the destination unit.
- The selected play modes (e.g. **REPEAT**, **SHUFFLE**) will be retained on the destination unit (see **6.3 Different play modes: REPEAT, SHUFFLE**).

- 2 Press **MUSIC FOLLOWS ME** to activate

→ The icon  appears

### Helpful hints:

- **MUSIC FOLLOWS ME** will be automatically deactivated if you do not activate **MUSIC FOLLOWS ME** on the destination unit within 5 minutes
- To deactivate **MUSIC FOLLOWS ME**, press **MUSIC FOLLOWS ME** again or press other function keys (e.g. **SLEEP** or **◀|▶|▲|▼**)

### On the destination unit (Center or Station), where the music will continue:

- 3 Check that the destination unit is switched on or is already in standby mode

- 4 Press **MUSIC FOLLOWS ME**

→ Playback of selected music stops on the source unit and continues on the destination unit

→ The icon  disappears

- 5 To stop **MUSIC FOLLOWS ME**, press **STOP ■** on the destination unit

### Helpful hints:

After activating **MUSIC FOLLOWS ME** on the destination unit:

- make sure that the source unit is switched on or is already in standby mode.
- you can select other tracks or source for playback.




## 6.9.2 MUSIC BROADCAST

**MUSIC BROADCAST** allows you to broadcast music from Center to Stations.

### On the Stations

- 1 Check that the Station is switched on or is already in standby mode (see **5. Basic functions**)

### On the Center

- 2 In HD source, select and play the album or playlist that you wish to broadcast to the Stations (see **6.2 Selecting and searching**)
- 3 Press **MUSIC BROADCAST** to activate
- The icon  appears on the Center and Stations. A 5-second countdown starts.



→ **On the Center and Stations:** The selected music starts to play simultaneously after the 5-second countdown.



- 4 To stop **MUSIC BROADCAST**, press **STOP ■** on the Center

### Helpful hints:

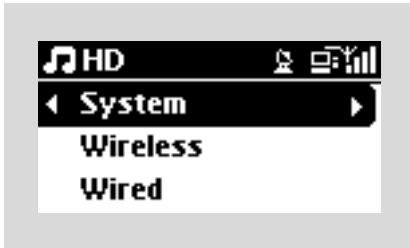
- To exit **MUSIC BROADCAST** on a Station, press **STOP ■** on the Station. To broadcast music to the Station again, press **STOP ■** on the Center, and then activate **MUSIC BROADCAST** on the Center again.



- *MUSIC BROADCAST* will also stop when:
  - the Center is put to standby mode or power-saving mode;
  - the selected album or playlist has reached the end.

## 6.10 Viewing system information

- 1 Select Information on the Center or Station
  - a. Press **MENU** to enter the menu screen
  - b. Press the navigation controls ▲ or ▼ and ► to enter Information menu
 → The display shows: System, Wi-Fi and Ethernet



- 2 Press the navigation controls ▲ or ▼ and ► to select **System**
 → The following information will be shown on the display: the name of the Center or Station, firmware version and free hard disk space (for the Center only)



## 6.11 Editing track information

You can edit track title, Album name etc. on Center with the 1-way remote control.

- 1 Press **SOURCE** to select **HD**
- 2 Press ▲ or ▼ and ► to select the track to be renamed
- 3 Press **MENU**  
→ “**Edit**” is shown on the LCD display
- 4 Press ▲ or ▼ and ► to select **Edit**  
Now you can start editing track information by following the sequence below: Edit track title → Edit Artist name → Edit Album name → Edit Genre name
- 5 Press the following keys on remote control to edit track information:

<b>Alpha-numeric keys</b>	Insert text into the current position.
◀	Move highlight to previous editing position. If it is already at leftmost position, press this button to move to previous screen.
▶	Move highlight to next editing position.
⏏	Press it briefly to delete the current highlight text; press and hold it to delete all text.
<b>OK</b>	Confirm the text and enter next screen

- 6 After completed editing Genre name, the LCD will shows “**Updating...**” first and then “**Update success**” (if succeed) or “**System busy, please edit later**” (if failed).

### Helpful hints:

- If no any key is pressed for 60 seconds, the edit screen will disappear without saving anything.
- The maximum length of editing string is 21-characters.
- If the recorded tracks is not recognized (see User Manual section 6.5.1 Recording from CDs), the display will show “**Album name: xxx, to rename, refer to manual.**” Follow steps above to edit the track information.
- You can also edit album/playlist name when

# 6. HD

*browsing album/playlists list:*

- a. Press **SOURCE** to select **HD**
- b. Press ▲ or ▼ and ► to select the Album or Playlists

c. Follow steps 3-6 above to change the album/playlists name

After applied the new name, all tracks within this album/playlist will have the new album/playlists name

- *You may also use the ▲ or ▼ on Center or remote control to enter text:*

▲	Press it briefly to jump to previous character; press and hold it to fast scroll through the character list
▼	Press it briefly to jump to next character; press and hold it to fast scroll through the character list

# 7. CD (on the Center only)

## 7.1 Discs playback

You will be able to play the following on this system:

- all pre-recorded audio CDs (CDDA)
- all finalized audio CD-Rs and CD-RWs (12cm CD and 8cm 185 or 200 MB CD)
- MP3/WMA-CDs (CD-Rs/CD-RWs with MP3/WMA files)



### IMPORTANT!

- **This system is designed for regular discs. Therefore, do not use any accessories such as disc stabilizer rings or disc treatment sheets, etc.**

### About MP3/WMA

The music compression technology MP3 (MPEG1 Audio Layer 3) and WMA (Windows Media Audio) significantly reduces the digital data of an audio CD, while maintaining the sound quality.

Windows Media Audio® is a registered trademark of Microsoft Corporation.

### Supported formats:

- Disc format ISO9660, Joliet, UDF (created on Adaptec Direct CD v5.0 and Nero Burning ROM UDF v5.5) and multi-session CDs
- MP3 bit rate (data rate): 32-320 Kbps and variable bit rate.
- 12-cm 650Mb and 700Mb CD-R/ CD-RWs
- Directory nesting up to a maximum of 8 levels
- WMA v9 or earlier (max. 192Kbps cbr)

### The system does not play or support the following:

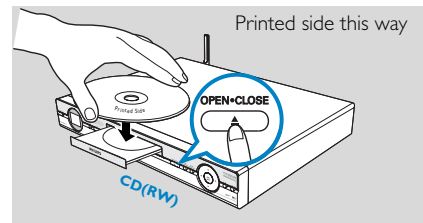
- Empty albums: an empty album is an album that does not contain any MP3/WMA files, and hence will not be shown on the display.
- Non-supported file formats are skipped. This means that e.g. Word documents or MP3 files with .doc and .dlf extension are ignored and will not be played.
- DRM protected WMA files
- WMA files in Lossless or VBR format

### Helpful hints:

- *Make sure that MP3 files end with a .mp3 extension, and WMA files end with a .wma extension.*
- *For DRM protected WMA files, use Windows Media Player 10 (or later) for CD burning/ conversion. Visit [www.microsoft.com](http://www.microsoft.com) for details about Windows Media Player and WM DRM (Windows Media Digital Rights Management).*

## 7.2 Playing discs

- 1 Check that the Center is switched on (See 5. Basic functions).
- 2 Press **OPEN•CLOSE▲** on the set to open the CD compartment.
- 3 Insert a disc with the printed side facing up. Press **OPEN•CLOSE▲** again to close the compartment.
  - Display shows: Reading CD
  - **Audio CD**: the list of tracks appears (track information will appear if it is available from the Gracenote Music Recognition Service database)
  - **MP3/WMA CD**: the list of albums appears.



## 7. CD (on the Center only)

### Helpful hints:

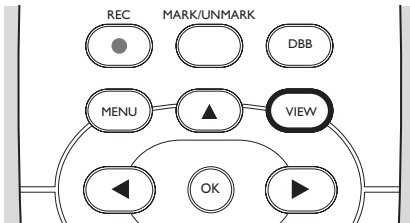
- “Others” is displayed if you have not organized your MP3/WMA files into any albums on your disc.
- “CDDA” is displayed if the disc contains both Audio CD tracks and MP3/WMA files.
- “All tracks” is displayed for a MP3/WMA CD

- 4 Press the navigation controls ▲ or ▼ and ► to select your option
- 5 Press ► || to start playback
  - MP3/WMA CD: Press ► || on a highlighted album to start playback of the album
  - MP3/WMA CD: Press ► || on All tracks to start playback of all the tracks on the disc
- 6 To pause playback, press ► ||. To resume playback, press the button again.
- 7 To stop playback, press **STOP ■**
- 8 To remove the disc, press **OPEN•CLOSE** on the Center

## 7.3 Selecting and searching

### 7.3.1 Selecting a different option

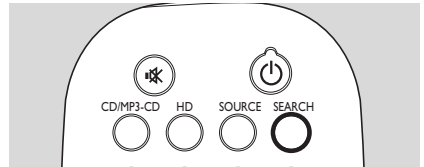
- 1 If necessary, press ◀ repeatedly to enter previous option lists
- 2 Press the navigation controls ▲ or ▼ and ► repeatedly to select the option
- 3 Press **VIEW** to return to the playback screen, if necessary.



### 7.3.2 Searching by keywords

The keyword should be the first letter or word of the title of the track you wish to search for. By inputting a keyword, you can quickly find all the items containing the word (note that it is case sensitive)

- 1 Use the navigation controls ◀/▶/▲/▼ to enter the desired option list of tracks, albums, artists or playlists
- 2 On the remote control, press **SEARCH**  
→ A text box appears on the display



- 3 Use the **alphanumeric keys** to enter the keywords (maximum 8 characters) (see 4.3 **Preparation: Using Alphanumeric Keys**)
- 4 Press **OK** to start searching  
→ Display shows: Searching ... Searching starts from the beginning of the current option list  
→ The matched items appear at the top of the list  
→ The option list remains unchanged if no match is found. Searching ... disappears
- 5 Press **STOP ■** to stop searching

### Helpful hints:

- The searching will also stop when:
  - you select another source
  - you switch off the set
- If no match is found during the keyword search, press ◀◀ or ▶▶ on the remote control to find close matches.

### 7.3.3 Selecting a track in the current album during playback

- 1 In the playback screen, press the navigation controls ▲ or ▼ briefly and repeatedly to select previous or next tracks (or ◀◀ or ▶▶ on the remote control)

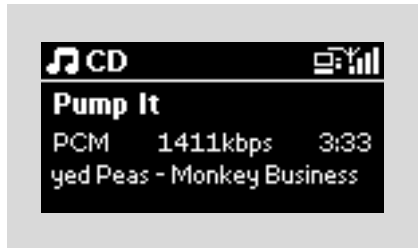
# 7. CD (on the Center only)

## 7.3.4 Finding a passage within the current track during playback

- 1 In the playback screen, press and hold the navigation controls ▲ or ▼ (or ◀◀ or ▶▶) on the remote control  
→ The CD plays at a high speed
- 2 When you recognize the passage you want, release ▲ or ▼ (or ◀◀ or ▶▶) on the remote control  
→ Normal playback resumes.



- 2 Press ▶  
→ The display shows the track information (e.g. track name, file type, file size, bit rate of mp3/wma files).

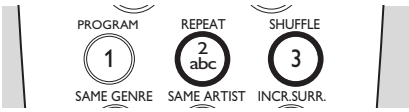


- 3 Press **VIEW** once or more times to return to the playback screen.

## 7.4 Different play modes: REPEAT, SHUFFLE

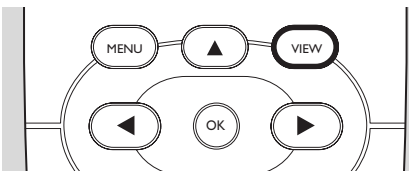
- ▶ — plays the current track continuously
- ◀▶ — repeats all the tracks (under current Album)
- ◀▶ — repeats all the tracks (under current album) in random order
- ◀▶ — all tracks (under current album) are played in random order

- 1 During playback, press **REPEAT** or/ and **SHUFFLE** once or more times to select play modes
- 2 To return to normal playback, press **REPEAT** or/ and **SHUFFLE** repeatedly until the various modes are no longer displayed



## 7.5 Viewing track information

- 1 Press **VIEW** on the remote control once or more times to enter the playback screen.



## 8. UPnP

### 8.1 UPnP (Universal Plug and Play)

UPnP is a standard which connects multiple devices with each other and enables them to work seamlessly.

For those users who are familiar with UPnP-enabled devices, WACS4500 brings additional benefits to enrich wireless music streaming experience.

For those who are not so familiar with UPnP-enabled devices, please visit [www.upnp.org](http://www.upnp.org) for details.

#### 8.1.1 About UPnP\*

In addition to the music library in the Center, an UPnP-enabled device can also serve as a music library.

The music collection on the UPnP-enabled device can be played on the Center or Station, wirelessly or through an Ethernet cable (supplied).

You can also play the Center's music library on the UPnP-enabled device.

Thus expanding your home music network.

\*Universal Plug and Play (UPnP™) builds on standard networking technologies and provides standardized protocols for a wide variety of home and small business devices. It allows easy interoperability of all the devices supporting the networking technologies.

#### 8.1.2 About the UPnP-enabled device

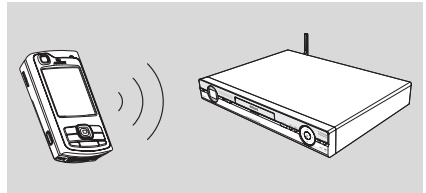
The UPnP device can be a PC or other devices running UPnP software. To use the UPnP device with the Center or Station,

- 1 Connect the Center or Station to the UPnP device's network (see **8.2 Connecting to the UPnP device**)
- 2 To play the music library of your UPnP device on the Center or Station, check that the UPnP server software is properly installed and enabled on the device (e.g. Philips Media Manager in the by-packed PC Suite CD, Musicmatch®, Window Media Connect®)
- 3 To play the Center's music library on the UPnP device, check that the UPnP device is able to receive music from other UPnP-enabled devices

### 8.2 Connecting to the UPnP device

When connecting to the UPnP device's network, you have the following options:

- 1 Connect wirelessly or through an Ethernet cable
  - 2 Connect both the Center and Station, Center only or Station only
- For more information on the connection, see **9**.  
**Network setting:** Connecting to external Wi-Fi network and Connecting to external wired network



#### Important:

- It may take a longer time to connect other UPnP clients to Philips Wireless Music Center than to connect a Philips Wireless Music Station to Philips Wireless Music Center.

### 8.3 UPnP playback

#### Important:

- You can only stream music files in MP3 or WMA format when WACS4500 is in UPnP mode. You cannot stream video or picture contents.

During UPnP playback, some playback features in the Wi-Fi network on the Center will be unavailable, including Music Broadcast, Music Follows Me, Same Artist, Same Genre, Creating/Deleting Playlist and recording.

#### 8.3.1 Playing music from the UPnP device

- 1 Check that the UPnP device is switched on.
  - Switch off the firewall running on the UPnP-enabled PC during UPnP playback
- 2 Check that the Center or Station is connected to the UPnP device's network (see **9.5 Network setting:** Viewing connection status)
- 3 On the Center or Station, press **SOURCE** on the remote control to select UPnP mode

- The display on the set shows a list of connected UPnP devices (up to 4 UPnP devices).
- Server not found appears if there is no UPnP device found in the network



**Important:**

- If you cannot find your desired UPnP server on the network, please refresh Center's UPnP mode by going to other mode (press **SOURCE** key).

- 4 Use the navigation controls ▲ or ▼ and ► to select your desired UPnP device
  - The music library of the UPnP device appears on the Center or Station as it does on the UPnP device
- 5 On the Center or Station, play UPnP device's music library in the same way as you play Hard Disk (HD) (see **6. HD**).



### 8.3.2 Playing music from Center

- 1 Check that the Center is switched on or already in standby mode.
- 2 Check that the UPnP device is connected to the Center (see **9.5 Network setting: Viewing connection status**)
  - The Center's music library appears on the UPnP enabled device as it does on the Center
- 3 Use the function keys on the UPnP device to play Center's music library

# 9. Network setting

You can add WACS4500 Center and/or Station to your existing home network. Set your network according to your needs as follows:

Type	What you want	Go to
Simple Network Setting	Adding Additional Station to the Center	Section <b>9.1</b>
	Connecting to PC for configuration and management	See <b>Connect to PC section A1</b>
	Connecting to internet for Gracenote Internet service	See <b>10.Gracenote CD Information</b>
Advanced Network Setting	Connecting to external Wi-Fi network	Section <b>9.2</b>
	Connecting to external wired network	Section <b>9.3</b>
Expert Network Setting	Connecting to two different networks	Section <b>9.4</b>

## 9.1 Adding Additional Station to the Center

Up to 5 Stations can be connected to the WACS4500 Center. When adding a Station to the Center's Wi-Fi network, you can play the Center's music library on the Station or move music playback between the Center and Stations (see **6. HD**). To add a Station to the Center's Wi-Fi network, proceed as follows:

### On the Center

- ① Check that WACS4500 Center is in HD source
- ② Select **Add New Station**
  - a. Press **MENU** to enter the menu screen
  - b. Press the navigation controls **▲** or **▼** and **▶** to enter Station Mgmt menu
  - c. Press **▲** or **▼** and **▶** to select **Add New Station**

→ You will enter Installation Mode. Searching for the new station starts

→ Playback stops on the previously associated Station if you are playing the HD source.



### Helpful hints:

– If there are 5 stations connected, **Add New Station** option will not present. In this case, please delete a station first, and then to add new stations

### On Stations

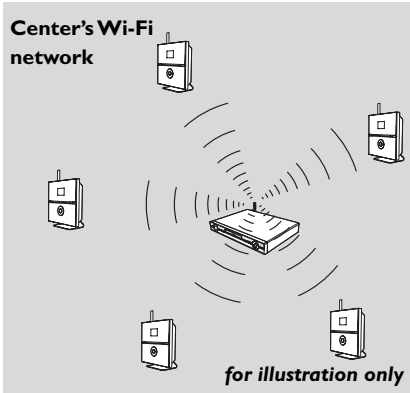
- ③ Enter Installation Mode
  - a. Remove the power plug of the Stations, and then connect them to the power supply again  
→ Connecting to Center appears
  - b. On the remote control, press **MENU** to enter Installation Mode  
→ HD screen appears if the Station is connected to the Center  
→ The Center and the Stations are now in the same Wi-Fi network.

### On the Center

- ④ Press **STOP** ■ when all the Stations are found.







## 9.1.1 Deleting a Station

- 1 Check that the WAC4500 Center is in HD source
- 2 Select Delete Station.
  - a. Press **MENU** to enter the menu screen.
  - b. Press the navigation controls **▲** or **▼** and **▶** to enter Station Mgmt menu.
  - c. Press **▲** or **▼** and **▶** to select Delete Station  
→ The list of connected Stations will be displayed on the Center
- 3 Press **▲** or **▼** and **▶** to select the Station you wish to delete.
- 4 Press **▲** or **▼** and **▶** to select **Yes**.

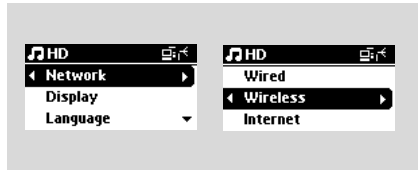
## 9.2 Connecting to external Wi-Fi network

The external Wi-Fi network can be a single PC or a PC network.  
To connect the Center or Station to an external Wi-Fi network, start the add networking procedures on the Center or Station respectively.

For music playback within the external network, see **8.3 UPnP**: UPnP playback.

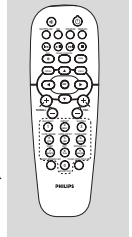
### 9.2.1 Network setting on Center

- 1 On the Center, search for networks
  - a. Press **MENU** to enter the menu screen
  - b. Press the navigation controls **▲** or **▼** and **▶** to enter Settings, followed by Network and Wireless.
  - c. Press **▶** to continue.



- The display shows: Searching for Networks
- The list of networks appears
- The display shows: Network Not Found if no network is found

- 2 a. Select the network where your desired UPnP device is located.  
b. Press **▶** to continue
- 3 If you already know the WEP/WPA key for the Wi-Fi network:
  - a. Use the 1-way remote control to enter the WEP or WPA key
  - b. Press **OK** to confirm



1-way remote control



If there is no WEP/WPA key for the Wi-Fi network:

Press **OK** to skip

**Helpful hint:**

- For WEP/WPA key setting, always refer to the Access Point's user manual.

- 4 Select **Automatic**.

**Helpful hint:**

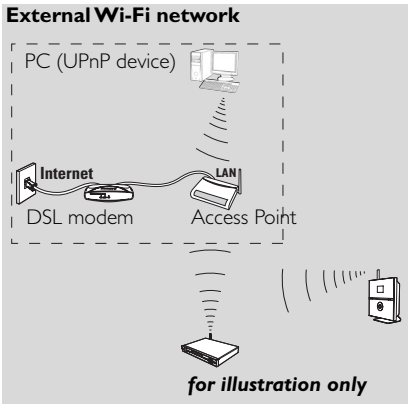
- You can also select Static and assign an IP address as prompted using the alphanumeric keys.

# 9. Network setting

- 5 As prompted, select **Yes** to apply the settings
  - The Center is connected to the external Wi-Fi network
  - The Stations might be disconnected from the Center's Wi-Fi network

### Helpful hint:

- To add Stations to the Center's Wi-Fi network, follow the steps under Adding Additional Station to Center's Wi-Fi network.
- If you change the WEP/WPA key after you have added the WACS4500 into your home network, the connection between the WACS4500 and your home network will be lost. In this case, please restart both WACS4500 Center and Station in order to refresh the IP update.



**Applicable cases:** Has Wi-Fi network (AP/Wireless router) in home already.

### 9.2.2 Network setting on Station

- 1 On the Station, search for networks
  - a. Press **MENU** to enter the menu screen
  - b. Press the navigation controls **▲** or **▼** and **▶** to enter **Settings** followed by **Network** and **Wireless**
  - c. Press **▶** to continue
    - The display shows: Searching for Networks
    - The list of networks appears
    - The display shows: Network Not Found if no network is found
- 2 Follow Steps 2 to 4 under the above Network setting on Center
- 3 As prompted, select **Yes** to apply the settings
  - The Station is connected to the external Wi-Fi network

→ The Station will be disconnected from the Center's Wi-Fi network

### 9.3 Connecting to external wired network

The external wired network can be a single PC, a PC network, the Center or a Station

Both the Center and Station can access the wired and wireless network at the same time. Using the supplied Ethernet cable, you can connect the Center or a Station separately to a wired network while maintaining its Wi-Fi connection (e.g. the Wi-Fi connection between the Center and Stations or the Wi-Fi connection with an external network). In this way, you can play the wired network's music library only on the Center or on a single Station (UPnP playback). At the same time, you can still enjoy all the music playback features on the Center's Wi-Fi network.

### Helpful hint:

- For some wired routers, a "Cross Link" Ethernet cable should be used instead of the normal "Straight" Orange cable provided in the box.

### 9.3.1 Network setting on Center

- 1 Check that the device is switched on and the firewall (if applicable) is switched off.
- 2 Connect the supplied Ethernet cable to the Ethernet ports on the device and the Center.
- 3 On the Center, search for networks
  - a. Press **MENU** to enter the menu screen
  - b. Press the navigation controls **▲** or **▼** and **▶** to enter **Settings**, followed by **Network** and **Wired**
  - c. Press **▶** to continue.



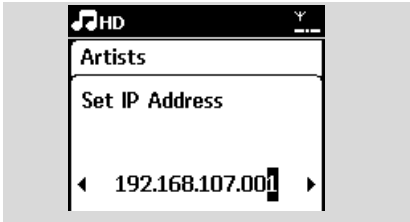
- 4 If you are using a DHCP\*-enabled Access Point select **Automatic**

# 9. Network setting

\*DHCP stands for Dynamic Host Configuration Protocol. It is a protocol for assigning dynamic IP addresses to devices on a network.

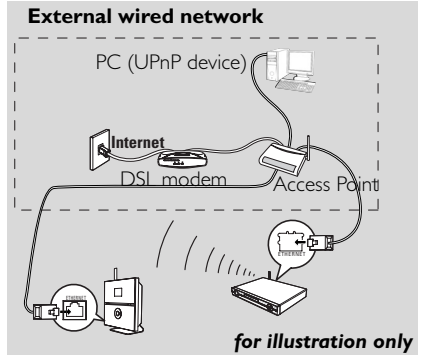
### If there is no DHCP

Select Static and assign an IP address and subnet mask as prompted using the alphanumeric keys (see 4.3 Preparation: Using Alphanumeric Keys).



- 5 As prompted, select **Yes** to apply the settings  
→ The Station is connected to the external wired network

→ On the display, the icon is changed to

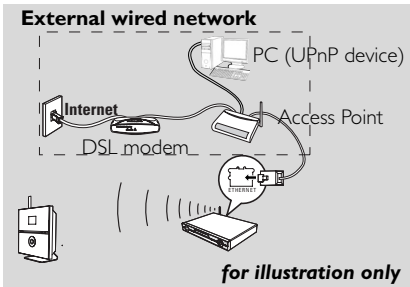


**Applicable cases:** Has wired network (Hub/Switch/Router) in home already.

### Helpful hint:

- You can connect the Center or Station directly to your PC using the supplied Ethernet cable and the Wireless Audio Device Manager (WADM) in the by-packed PC Suite CD. For details, see the manual Connect to your PC.

- 5 As prompted, select **Yes** to apply the settings  
→ The Center is connected to the external wired network  
→ On the display, the icon is changed to



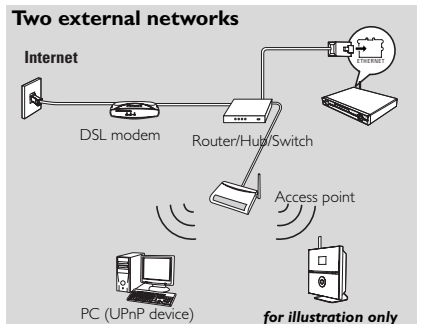
**Applicable cases:** Has wired network (Hub/Switch/Router) in home already.

### 9.3.2 Network setting on Station

- 1 Check that the device is switched on and the firewall (if available) is switched off
- 2 Connect the supplied Ethernet cable to the Ethernet ports on the device and the Station
- 3 On the Station, search for networks
  - a. Press **MENU** to enter the menu screen
  - b. Press the navigation controls **▲** or **▼** and **▶** to enter **Settings**, followed by **Network** and **Wired**
  - c. Press **▶** to continue.
- 4 Follow Step 4 in the above Network setting On Center

### 9.4 Connecting to two different networks

WACS4500 can be added into two different networks via wired and wireless network port. Please refer to **the advanced network setting** section. But you must be careful that the IP addresses of the two network ports cannot be in one subnet.



**Applicable cases:** Has two networks

# 9. Network setting

## IMPORTANT!

- Once the WAC4500 Center is added into the Wi-Fi network, all Wi-Fi Ad-Hoc connections with the WAC4500 will be shut down.

Once a WAS4500 Station is added into the Wi-Fi wireless network, the Wi-Fi wireless connection of this WAS4500 to the WAC4500 will be shut down.

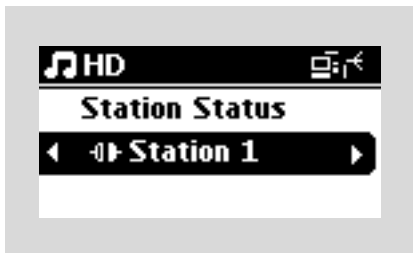
However WAC4500 may still maintain its Wi-Fi ad-hoc connection with other WAS4500 stations.

- WACS4500 cannot shadow the IP of the network device that is not activated. Please be careful of the IP address setting to avoid IP address conflict between the wired and Wi-Fi ports.

## 9.5 Viewing connection status

### 9.5.1 Viewing Station status on the Center's Wi-Fi network

- 1 Check that the Center is in HD source
- 2 Select **Station Status**
  - a. Press **MENU** to enter the menu screen
  - b. Press the navigation controls ▲ or ▼ and ► to enter Station Mgmt menu
  - c. Press ▲ or ▼ and ► to select **Station Status**→ A list of connected Stations or previously connected Stations is displayed on the Center.



- 3 Press ► to view the connection information.

### 9.5.2 Viewing the connection with external network

- 1 Check that the Center or Station is in HD source
- 2 Select Information on the Center or Station
  - a. Press **MENU** to enter the menu screen
  - b. Press the navigation controls ▲ or ▼ and ► to enter Information menu.→ The display shows: System, Wi-Fi and Ethernet
- 3 Press the navigation controls ▲ or ▼ and ► to select Wi-Fi or Ethernet



In Wi-Fi: information about the Wi-Fi settings on the set.

In Ethernet: information about the Ethernet settings on the set.

# 10. Gracenote CD Information

The Gracenote music recognition service enables the set to look up CD track information (including album, artist, genre, track information) from its built-in database. It allows the recorded CD tracks to be properly categorized (for example, under Artists, Albums, Genres or All tracks) and also be merged with the existing tracks in the hard disk.

## 10.1 Gracenote music recognition database

A 800 MB CD database (contains 800,000 most popular CDs) is embedded in every WACS4500 Center for quick look-up on track information. An update file that contains newly released CDs is available quarterly on [www.club.philips.com](http://www.club.philips.com) for download.

### 10.1.1 To update Gracenote music recognition database

- 1 Use your PC to register your product on [www.club.philips.com](http://www.club.philips.com) and go to "Show Upgrades & Support" page to download Gracenote Music recognition database update. Note that the updates are posted quarterly and each update is independent of each other; i.e. a later update could be installed without an earlier update.
- 2 After storing the file on your PC, you can either burn a CD with the update file using your favorite CD burning software and drop the CD into the WACS4500 Center for automatic update, or you can use WADM's Gracenote update option if you have connected your PC to WACS4500 Center.

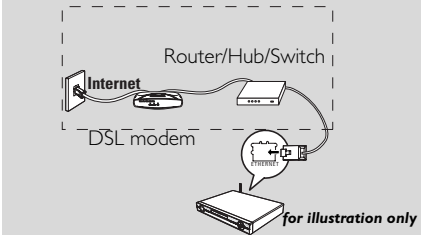
## 10.2 Gracenote Internet Query

If the CD track information of your new CD disc cannot be displayed on the WACS4500, the quickest and surest solution is to look it up from the internet by following steps below.

### 10.2.1 Connecting to the Internet

- 1 Check that you have connected the Center to an Access Point or Router with Internet access or connect the Center to an ADSL modem with internet access directly

### External wired network



#### Helpful hint:

– Make sure that no dial-up, user name or password is required for the Internet access.

- 2 Set DNS and Gateway
- If you are using a **DHCP\*** enabled Access Point, Router or ADSL modem, the DNS and Gateway can be got automatically, so you need only to set the Center to Automatic (DHCP) mode by following steps below:  
\*DHCP stands for **D**ynamic **H**ost **C**onfiguration **P**rotocol. It is a protocol for assigning dynamic IP addresses to devices on a network.

**On your PC**, carry out the following steps:

- a. Press **MENU**
- b. Press **▲** or **▼** and **▶** to select **Settings**  
→ **Network** → **Wired**
- c. Press **▶** to continue
- d. Press **▲** or **▼** and **▶** to select **Automatic (DHCP)**.

- If there is no **DHCP**, set the DNS and Gateway manually by following steps below:

```
cmd C:\WINDOWS\system32\cmd.exe
Microsoft Windows XP [Version 5.1.2600]
(C) Copyright 1985-2001 Microsoft Corp.
C:\Documents and Settings\enh50257>ipconfig/all
```

d. Write down the DNS and Gateway of the current connection

```
Adapter Wireless Network Connection 3:
Connection-specific DNS Suffix . : SME
Description . . . . . : Intel(R) PRO/Wireless 2200
Physical Address. . . . . : 00-12-F0-BC-0D-04
Dhcp Enabled. . . . . : Yes
Autoconfiguration Enabled . . . : Yes
IP Address. . . . . : 192.168.3.148
Subnet Mask . . . . . : 255.255.255.0
Default Gateway . . . . . : 192.168.3.1
DHCP Server . . . . . : 192.168.3.1
DNS Servers . . . . . : 192.168.3.1
Lease Obtained. . . . . :
Lease Expires . . . . . :
For illustration only
```

# 10. Gracenote CD Information

## On the Center

- a. Press **MENU** to enter the menu screen
- b. Press **▲** or **▼** and **▶** to enter **Settings**  
→ **Network** → **Wired**
- c. Press **▶** to continue
- d. Set DNS
  - 1) Enter the DNS server you wrote down in Step 3
  - 2) Press **OK** to confirm
  - 3) Press **OK** to skip Set DNS2

### **Helpful hint:**

– *If necessary, follow Steps 1) to 2) above to set a secondary DNS server in Set DNS2*

- e. Set Gateway
  - 1) Enter the Gateway you wrote down in Step 3
  - 2) Press **OK** to confirm
- f. Set proxy

If you are using a proxy server to visit websites, enable Proxy and proceed with the proxy setting as prompted, then press **OK** to confirm

Otherwise, press **OK** to skip

- 3 Choose to apply the settings as prompted  
→ **Settings will change. Connection to station could be lost** appears.

---

## 10.2.2 Looking up CD track information

When the internet connection is made, insert the CD disc that you want to look for its information into the CD loader on the Center. Searching start immediately. It will search from local Gracenote CD database firstly. If can't find the CD track information, online searching will then start. The searching results will be shown on the Center's display.

### **Helpful hint:**

If the internet query failed due to failure in internet connection, the error message "**Check the internet setup for CD Database on-line**" will appear. Check if your internet connection is correct (see 10.2.1 above)

# 11. Firmware Upgrade

## 11.1 Upgrading firmware

The supplied PC Installer CD Wireless Audio Device Manager (WADM) helps you get the upgrades for WACS4500 Center and Station.

- 1 Register your Philips Wireless Music Center with [www.club.philips.com](http://www.club.philips.com)
- 2 Download the firmware upgrade files and store them on your PC
- 3 Place **Center** and **Station(s)** side by side on a flat and firm surface
- 4 Connect **Center** and **Station(s)** to power supply
  - **HD** screen appears on **Center**
  - **HD** screen appears on **Station(s)** when the Station is connected to Center
- 5 Connect **Center** to your PC via the supplied ethernet cable.
- 6 Install and launch WADM (see **Connect to your PC** section B)



- 7 Click to enter the **Firmware upgrade** sub-menu
- 8 As prompted, click **Browse** and indicate the location where you kept the firmware upgrade files on PC
- 9 Click **Apply** to start upgrading firmware

### On Philips Wireless Music Center:

- The display shows "**Updating firmware, please wait...**"
- **Center** will reboot itself during the installation process
- When **Center** returns to **HD** screen, the installation is completed

### Then, on Philips Wireless Music Station:

- Installation starts automatically
- When **Station** returns to **HD** screen, the installation is completed

### IMPORTANT!

- On Philips Wireless Music Center/Station:**
- **Never interrupt the firmware upgrading before its completion.**
- **Before finishing the installation, never operate other functions.**

## 11.2 Restoring previous firmware

After the Center's firmware is upgraded, you can restore it to its previous version as desired.

- 1 On Center, select HD mode and then, select Restore firmware
  - a. Press **MENU** to enter the MENU screen
  - b. Press the navigation controls **▲** or **▼** and **▶** to enter Settings, Firmware and Restore firmware one by one.
- 2 Press **▶** to select **Yes**  
After upgrading or restoring the Center's firmware, you need to re-establish the Wi-Fi connection between Center and Stations.

## 11.3 Re-establish Wi-Fi network of Center and Stations

- 1 On Center, select HD mode and then enter Installation Mode
  - a. Press **MENU** to enter the MENU screen
  - b. Press the navigation controls **▲** or **▼** and **▶** to enter Station Mgmt menu
  - c. Press **▲** or **▼** and **▶** to select **Add New Station**
    - Searching for Stations starts
- 2 On Stations, enter Installation Mode
  - a. Remove the power plug of Stations and then, connect them to the power supply again
    - Connecting to Center appears
  - b. On the remote control, press **MENU** to enter the selection screen of Installation Mode and Select Server
  - c. Press the navigation controls **▲** or **▼** and **▶** to enter Installation Mode
    - The Stations start to connect Center
- 3 Press **STOP ■** on Center when all the Stations are found

# 12. Reset

## 12.1 Reset

If desired, you can restore the Center or Station to their default settings (including the network settings).

### Helpful hint:

- Restoring to default settings does not delete any stored music tracks

### When to reset the Center or Station:

- Resetting the Center or Station helps to re-establish the Wi-Fi connection between the Center and Station.
- Change the way the Center or Station connects to an external Wi-Fi/wired network.

- 1 Check that the set is switched on (see **5. Basic functions**).
- 2 Press **MENU** to enter the menu screen
- 3 Press the navigation controls ▲ or ▼ and ► to enter Settings followed by Restore settings.



- 4 Press ► to select **Yes**  
→ The set is rebooted. Language selection screen appears.
- 5 Select your desired language: English, Français, Español, Nederlands, Italiano or Deutsch  
→ The set enters Installation Mode  
→ The search for Center or Stations starts. The Wi-Fi connection is being re-established

### If the Center is reset and Stations are not reset:

- 6 On the Stations, enter Installation Mode
  - a. Remove the power plug of the Stations and connect them to the power supply again  
→ Connecting to Center appears
  - b. On the remote control, press **MENU** to

enter Installation Mode

- c. Press the navigation controls ▲ or ▼ and ► to enter Installation Mode  
→ The Stations start to connect to the Center

### If a Station is reset and the Center is not:

- 7 On the Center, select HD mode and enter Installation Mode
  - a. Press **MENU** to enter the menu screen
  - b. Press the navigation controls ▲ or ▼ and ► to enter Station Mgmt menu
  - c. Press ▲ or ▼ and ► to select **Add New Station**  
→ Searching for Stations starts

### If both the Center and Stations are reset:

- 8 Select language and then enter installation mode.
- 9 Press **STOP** ■ on the Center when all the Stations are found.

### Helpful hint:

- After restoration to default settings, the network mode will go back to Ad-Hoc mode.



# 13. Troubleshooting

## WARNING

Never 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 resolve a problem by following these hints, consult your dealer or Philips for help.

Problem	Solution
<p><b>During the first-time setup, the display on the Station shows “Searching for Center”.</b></p>	<ul style="list-style-type: none"><li>✓ Check that you have placed the Center and Station side by side on a flat and firm surface.</li><li>✓ Check that you have connected the Center to the power supply.</li><li>✓ When adding a new station, check that the center is in Installation mode (see <b>9. Network setting: Adding Additional Station</b> to the Wi-Fi network on the Center).</li><li>✓ Turn off the wireless Access Point nearby if you encounter difficulty connecting the Center and Station.</li></ul> <p>If you are playing the set, stop playback and take the appropriate measures as follows:</p> <ul style="list-style-type: none"><li>✓ Keep the Center or Station at least 3 meters away from such devices.</li><li>✓ Use the WEP/WPA key when connecting the Center and Station to an existing wireless PC network. To set WEP/WPA key, connect Center/Station to your PC using Philips Wireless Audio Device Manager (WADM) in the by-packed PC Suite CD. In WADM's Device configuration, enter the Wireless Network sub-menu, and in Device Wireless Authentication Type, select WEP or WPA.</li><li>✓ Change the operating channel of the Center and Station when connecting them to an existing wireless PC network. To change channels, connect the Center/Station to your PC using Philips Wireless Audio Device Manager (WADM) in the by-packed PC Suite CD. In WADM's Device configuration, enter the SSID of your Wireless Network, and select Ad-hoc mode. See the manual Connect to your PC and the WADM help file.</li><li>✓ If possible, change the operating channels of the other Wi-Fi devices at your home.</li><li>✓ Turn the devices in different directions to minimize interference.</li></ul>

### I get interference on my wireless (Wi-Fi) link between the Center and Station.

The WACS4500 operates in the 2.4GHz radio frequency spectrum. Many other household/IT devices also operate in this frequency spectrum, for example: microwave ovens, Dect phones, bluetooth devices like bluetooth headphones, computer mouse, wireless routers, cordless phones, Wi-Fi compatible printers, PDAs. These devices can interfere with the Wi-Fi link between the Center and Station, resulting in interference such as pause during playback, slow response to your operation, etc. The severity of interference varies depending on the extent of radiation from the device and the strength of Wi-Fi signals in that position.

# 13. Troubleshooting

Problem	Solution
<p><b>The remote control does not function properly</b></p>	<ul style="list-style-type: none"><li>✓ Reduce the distance between the remote control and the set.</li><li>✓ Insert the batteries with their polarities (+/- signs) aligned as indicated.</li><li>✓ Replace the batteries.</li><li>✓ Point the remote control directly towards the IR sensor:</li></ul>
<p><b>The WAC4500 Center's screen is stuck in a menu or shows no response for a long period of time (2-5 minutes).</b></p>	<ul style="list-style-type: none"><li>✓ Please first try to press STANDBY-ON/ECO POWER to go to power saving mode. If the problem persists, suggest to restart the power (unplug and re-plug) to reset the WACS4500 Center.</li></ul>
<p><b>“No Disc”/ “Cannot read CD” is displayed</b></p>	<ul style="list-style-type: none"><li>✓ Insert a suitable disc.</li><li>✓ Check if the disc is inserted with graphic printed side facing you</li><li>✓ Wait for the moisture condensation on the lens to clear</li><li>✓ Replace or clean the disc, see <b>1.5 Maintenance</b>.</li><li>✓ Use a finalized CD-RW or CD-R.</li></ul>
<p><b>Sound cannot be heard or is of poor quality.</b></p>	<ul style="list-style-type: none"><li>✓ Adjust the volume.</li><li>✓ Switch off MUTE.</li></ul>

Problem	Solution
<b>The disc skips tracks</b>	<ul style="list-style-type: none"><li>✓ Replace or clean disc</li><li>✓ Switch off SHUFFLE</li></ul>
<b>Sound skips during MP3/WMA playback</b>	<ul style="list-style-type: none"><li>✓ The MP3/WMA file may be made at a compression level exceeding 320kbps. Use a lower compression level to rip audio CD tracks.</li><li>✓ Replace or clean disc.</li></ul>
<b>Some WADM functions cannot be used</b>	<ul style="list-style-type: none"><li>✓ Your anti-virus software might affect the running of the WADM. Turn off your anti-virus software temporarily.</li></ul>
<b>I edited ID3 tags in WADM, but the screen does not show the updated ID3 tags. What shall I do?</b>	<ul style="list-style-type: none"><li>✓ Go to <b>File&gt;Refresh Content</b> to refresh the WADM.</li><li>✓ Restart WADM.</li></ul>
<b>Upgrading Station wirelessly failed.</b>	<ul style="list-style-type: none"><li>✓ Upgrade the Station via ethernet cable following steps below:<ol style="list-style-type: none"><li>1. Connect the Station to your PC via the supplied ethernet cable and power on the Station.</li><li>2. Download the firmware upgrade file specified for station.</li><li>3. Launch WADM and click Firmware upgrade.</li><li>4. Follow the on-screen information to complete the rest steps.</li></ol></li></ul>
<b>Backup function cannot work anymore.</b>	<ul style="list-style-type: none"><li>✓ This is because the previously backed up file was deleted in Windows explorer. Never delete the file this way. If you want to delete the back up file, please use WADM to manage. If the backup file is accidentally deleted, please find out the file named YOURMAC.inx by using your Explorer's search tool and then delete it. Only after that you can do backup again.</li></ul>
<b>I have problem installing WADM or after installation, I cannot launch WADM</b>	<ul style="list-style-type: none"><li>✓ Please make sure your Operating System is either Windows 2000 with service pack 4 and above, or Windows XP.</li><li>✓ Please check if your PC has virus.</li><li>✓ Please make sure your PC has Microsoft Windows Media Player installed.</li></ul>

# 13. Troubleshooting

Problem	Solution
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**I have done all the steps described in Connect to PC guide to connect my WACS4500 to my home wireless network, but the Center and Station are still not connected to each other.**

- ✓ On the center, please go to Menu -> Information -> Wireless -> Status, check that the Center has been changed from Ad-Hoc to Infrastructure mode, also check that the SSID, WEP key or WPA key matches the setup of your wireless home network. Please do the same on the station.
- ✓ Try to change the SSID on your router to a more unique name if it is too generic, as your neighbors might be using a router with the same SSID.
- ✓ **WACS4500** supports wireless and wired connection at the same time. There is a chance that your wireless IP address and wired IP address are on the same subnet and this will confuse WACS4500. Suggest to change the DHCP range of your wireless router so that the wireless IP received by WACS4500 is on a different subnet from its wired IP.
- ✓ You may have forgotten to set up the wireless network settings on the station. If you have not done so, please follow C1 in Connect to PC Guide on how to set up the Station to join the network.
- ✓ Try to change the channel of your home network settings in the router.
- ✓ On your router, suggest to use WPA key instead of WEP key. When using WEP as your encryption key, please set all 4 keys to be the same.
- ✓ Make sure that the Turbo mode of your wireless router is switched off, if your router has this function.

**I see the message "Check the internet setup for CD Database on-line" even though I am sure that the WACS4500 is connected to my home wireless network with internet connection.**

- ✓ Please go to Menu->Network->Internet to check if your DNS server is correctly set up. Also make sure that you have set up proxy server if your home wireless network needs a proxy server for internet connection.
- ✓ There is a chance that you are already successfully connected to Gracnote online, but your CD is not in their database.



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