# **Panasonic**



Operating Instructions

# **CD Stereo System**

Model No. SC-PM38DB

#### SUPPLIED ACCESSORIES



Please check and identify the supplied accessories.

Use numbers indicated in parentheses when asking for replacement parts. (Product numbers correct as of February 2009. These may be subject to change.)

□ 1 x Remote control



(N2QAYB000389)

□ 2 x Remote control batteries



☐ 1 x AC mains lead



(K2CZ3YY00005)

□ 1 x FM indoor antenna



or



(RSA0007-M)

(RSAX0002)

□ 1 x DAB "T" antenna



(N1EADY000001)

□ 1 x Antenna plug adaptor



(K1YZ02000013)

#### Note

"EB" on the packaging indicates the United Kingdom.

#### Dear customer

Thank you for purchasing this product. Before connecting, operating or adjusting this product, please read the instructions completely. Please keep this manual for future reference.

These operating instructions are applicable to the following system.

System	SC-PM38DB	
Main unit	SA-PM38DB	
Speakers	SB-PM48	

Operations in these instructions are described using remote control, but you can do the operations with the main unit if the controls are the same.

Your unit may not look exactly as illustrated.

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#### Caution for AC mains lead

For your safety, please read the following text carefully.

This appliance is supplied with a moulded three pin mains plug for your safety and convenience.

A 5-ampere fuse is fitted in this plug.

Should the fuse need to be replaced please ensure that the replacement fuse has a rating of 5-ampere and that it is approved by ASTA or BSI to BS1362.

Check for the ASTA mark ® or the BSI mark ® on the body of the fuse.

If the plug contains a removable fuse cover you must ensure that it is refitted when the fuse is replaced. If you lose the fuse cover the plug must not be used until a replacement cover is obtained.

A replacement fuse cover can be purchased from your local dealer.

#### **CAUTION!**

IF THE FITTED MOULDED PLUG IS UNSUITABLE FOR THE SOCKET OUTLET IN YOUR HOME THEN THE FUSE SHOULD BE REMOVED AND THE PLUG CUT OFF AND DISPOSED OF SAFELY. THERE IS A DANGER OF SEVERE ELECTRICAL SHOCK IF THE CUT OFF PLUG IS INSERTED INTO ANY 13-AMPERE SOCKET.

If a new plug is to be fitted please observe the wiring code as stated below.

If in any doubt please consult a qualified electrician.

#### **IMPORTANT**

The wires in this mains lead are coloured in accordance with the following code:

Blue: Neutral, Brown: Live.

As these colours may not correspond with the coloured markings identifying the terminals in your plug, proceed as follows:

The wire which is coloured Blue must be connected to the terminal which is marked with the letter N or coloured Black or Blue.

The wire which is coloured Brown must be connected to the terminal which is marked with the letter L or coloured Brown or Red.

WARNING: DO NOT CONNECT EITHER WIRE TO THE EARTH TERMINAL WHICH IS MARKED WITH THE LETTER E, BY THE EARTH SYMBOL & OR COLOURED GREEN OR GREEN/YELLOW.

#### THIS PLUG IS NOT WATERPROOF-KEEP DRY.

#### Before use

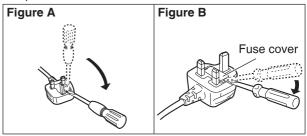
Remove the connector cover.

#### How to replace the fuse

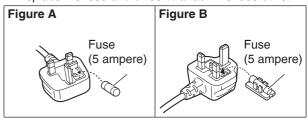
The location of the fuse differ according to the type of AC mains plug (figures A and B). Confirm the AC mains plug fitted and follow the instructions below.

Illustrations may differ from actual AC mains plug.

1. Open the fuse cover with a screwdriver.



2. Replace the fuse and close or attach the fuse cover.



#### ■ Sales and Support Information

**Customer Care Centre** 

- For customers within the UK: 0844 844 3852
- For customers within the Republic of Ireland: 01 289 8333
- Visit our website for product information
- E-mail: customer.care@panasonic.co.uk

#### Direct Sales at Panasonic UK

- For customers: 0844 844 3856
- Order accessory and consumable items for your product with ease and confidence by phoning our Customer Care Centre

Monday-Thursday 9:00am-5:30pm, Friday 9:30am-5:30pm

(Excluding public holidays)

- Or go on line through our Internet Accessory ordering application at <a href="https://www.panasonic.co.uk">www.panasonic.co.uk</a>.
- · Most major credit and debit cards accepted.
- All enquiries transactions and distribution facilities are provided directly by Panasonic UK Ltd.
- It couldn't be simpler!
- Also available through our Internet is direct shopping for a wide range of finished products, take a browse on our website for further details.

Interested in purchasing an extended guarantee? Please call 0870 240 6284 or visit our website www.panasonic.co.uk/guarantee.

# Information for Users on Collection and Disposal of Old Equipment and used Batteries



These symbols on the products, packaging, and/or accompanying documents mean that used electrical and electronic products and batteries should not be mixed with general household waste.

For proper treatment, recovery and recycling of old products and used batteries, please take them to applicable collection points, in accordance with your national legislation and the Directives 2002/96/EC and 2006/66/EC.

By disposing of these products and batteries correctly, you will help to save valuable resources and prevent any potential negative effects on human health and the environment which could otherwise arise from inappropriate waste handling.

For more information about collection and recycling of old products and batteries, please contact your local municipality, your waste disposal service or the point of sale where you purchased the items.

Penalties may be applicable for incorrect disposal of this waste, in accordance with national legislation.



# For business users in the European Union

If you wish to discard electrical and electronic equipment, please contact your dealer or supplier for further information.

#### [Information on Disposal in other Countries outside the European Union]

These symbols are only valid in the European Union. If you wish to discard these items, please contact your local authorities or dealer and ask for the correct method of disposal.



# Note for the battery symbol (bottom two symbol examples):

This symbol might be used in combination with a chemical symbol. In this case it complies with the requirement set by the Directive for the chemical involved.



CAUTION	<ul> <li>CLASS 1M INVISIBLE LASER RADIATION WHEN OPEN.</li> <li>DO NOT VIEW DIRECTLY WITH OPTICAL INSTRUMENTS. IEO60825-1 +A2/ Class 1M</li> </ul>
VARNING	<ul> <li>KLASS 1M OSYNLIG LASERSTRÄLNING NÄR DENNA DEL ÄR ÖPPNAD.</li> <li>BETRAKTA EJ STRÄLEN DIREKT GENOM OPTISKT INSTRUMENT.</li> </ul>
FORSIGTIG	<ul> <li>USYNLIG LASERSTRÄLING KLASSE 1M, NÄR LÄGET ER ÅBENT.</li> <li>UNDGÅ AT SE LIGE PÅ MED OPTISKE INSTRUMENTER.</li> </ul>
VARO!	<ul> <li>AVATTAESSA OLET ALTTIINA LUOKAN 1M NÄKYMÄTÖNTÄ LASERSÄTEILYÄ.</li> <li>ÄLÄ KATSO OPTISELLA LAITTEELLA SUORAAN SÄTEESEEN.</li> </ul>
VORSICHT	<ul> <li>UNSICHTBARE LASERSTRAHLUNG KLASSE 1M, WENN ABDECKUNG GEÖFFNET.</li> <li>NICHT DIREKT MIT OPTISCHEN INSTRUMENTEN BETRACHTEN.</li> </ul>
ATTENTION	<ul> <li>RAYONNEMENT LASER INVISIBLE, CLASSE 1M, EN CAS D'OUVERTURE.</li> <li>NE PAS REGARDER DIRECTEMENT À L'AIDE D'INSTRUMENTS D'OPTIQUE.</li> </ul>
注意	<ul><li>ここを開くと不可視レーザ光が出ます。</li><li>ビームを見たり、触れたりしないでください。</li></ul>
注意	- 打开时有不可见激光辐射。避免光束照射。 GB7241.1-2001/3B 类 RQLXS0071

Inside of product

# Placement of speakers



Speakers are designed identically so that no left or right channel orientation is necessary.

#### Use only the supplied speakers.

The combination of the main unit and speakers provide the best sound. Using other speakers can damage the unit and sound quality will be negatively affected.

#### Note

- Keep your speakers at least 10 mm away from the system for proper ventilation.
- These speakers do not have magnetic shielding. Do not place them near televisions, personal computers or other devices easily influenced by magnetism.
- To avoid damage to the speakers, do not touch the speaker cones if you have taken the nets off.
- You can damage your speakers and shorten their useful life if you play sound at high levels over extended periods.
- Reduce the volume in the following cases to avoid damage.
  - When playing distorted sound.
  - When adjusting the sound quality.
  - When turning the unit on or off.

#### CAUTION

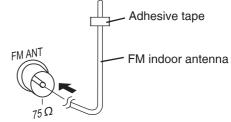
- Use the speakers only with the recommended system. Failure to do so can damage the amplifier and speakers, and can cause fire.
   Consult a qualified service person if damage occurs or if a sudden change in performance is apparent.
- Do not attach these speakers to walls or ceilings.

#### Making the connections

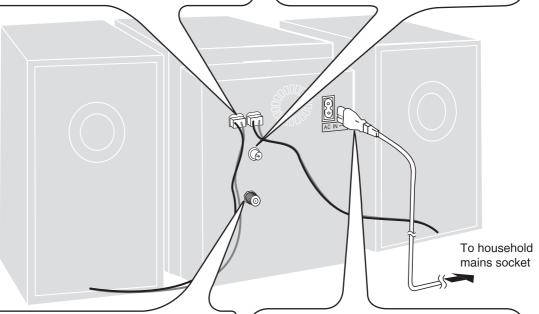
Connect the AC mains lead only after all the other connections have been made.

# Connect the speaker cables.

Connect the FM indoor antenna.



Tape the antenna to a wall or column, in a position with the least amount of interference.

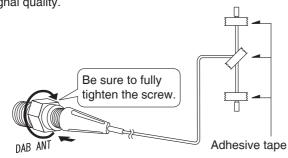


#### Connect the DAB "T" antenna.

The cross bar of the T should be kept firmly stretched.

Find a position with good reception.

There is a function on the unit to check signal quality.



#### For best reception

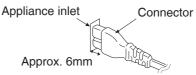
A DAB outdoor antenna is recommended (⇒ page 5).

#### Connect the AC mains lead.

# READ THE CAUTION FOR THE AC MAINS LEAD ON PAGE 2 BEFORE CONNECTION.

The included AC mains lead is for use with this unit only. Do not use it with other equipment. Do not use an AC mains lead from other equipment.

#### Insertion of connector

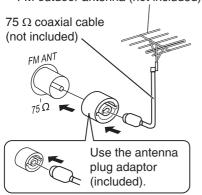


Even when the connector is perfectly inserted, depending on the type of inlet used, the front part of the connector may jut out as shown in the drawing. However there is no problem using the unit.

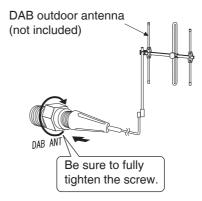
#### **Optional antenna connections**

#### FM outdoor antenna

FM outdoor antenna (not included)



#### DAB outdoor antenna



- Never use an outdoor antenna during a lightning storm.
- You can connect the FM outdoor antenna for better reception. Please consult your dealer for installation.
- Disconnect the FM indoor antenna if an FM outdoor antenna is installed.
- Please refer to DAB function on page 9.

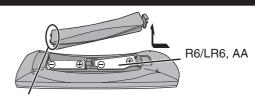
# Preparing the remote control

#### **■** Batteries

- Use a manganese dry battery or an alkali dry battery.
- Insert so the poles (+ and –) match those in the remote control.
- Remove if the remote control is not going to be used for a long period of time.
- · Store in a cool, dark place.
- Do not heat or expose to flame.
- Do not leave the batteries in an automobile exposed to direct sunlight for a long period of time with doors and windows closed.
- Mishandling of batteries in the remote control can cause electrolyte leakage, which may cause a fire.

#### **■** Use

Aim at the remote control sensor, avoiding obstacles, at a maximum range of 7 m directly in front of the unit. Refer to page 6 for remote control signal sensor position.



Place this side in before the other side

#### Do not:

- mix old and new batteries;
- use different types of batteries at the same time;
- take apart or short-circuit;
- attempt to recharge alkaline or manganese batteries;
- use batteries if their covering has been peeled off.

#### CAUTION

Danger of explosion if battery is incorrectly replaced. Replace only with the same or equivalent type recommended by the manufacturer. Dispose of used batteries according to the manufacturer's instructions.

#### **DEMO function**



When the unit is first plugged in, a demonstration of its functions may be shown on the display.

If the demo setting is off, you can show a demonstration by selecting "DEMO ON".

#### Press and hold [■, –DEMO].

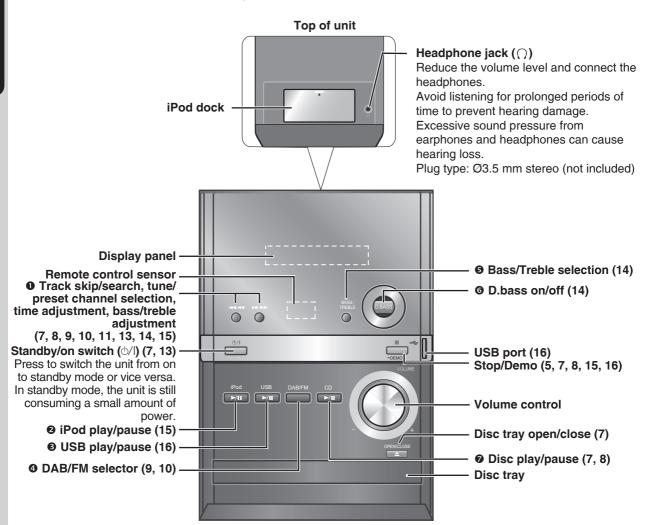
The display changes each time the button is held down.

→ DEMO OFF → DEMO ON —

While in standby mode, select "DEMO OFF" to reduce power consumption.

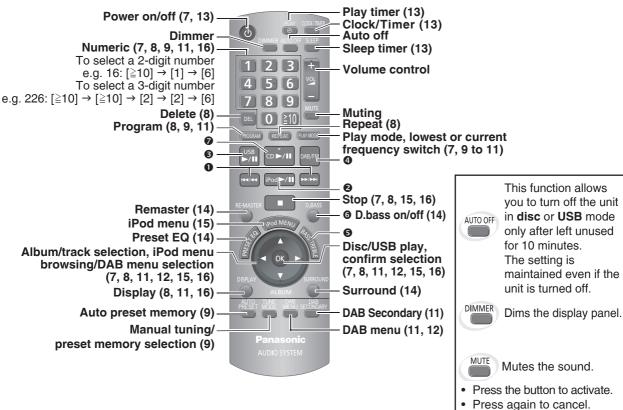
#### Main unit

Refer to the numbers in parentheses for page reference.



#### Remote control

Buttons such as **1** function the same as the controls on the main unit.



#### **Discs**

# Basic play



- 1 Press [७] to turn the unit on.
- 2 Press [♣, OPEN/CLOSE] to open the disc tray and then load the disc. Press [♠, OPEN/CLOSE] again to close the tray.



- 3 Press [CD ►/II] or [OK] to start play.
- 4 Adjust the volume.

То	Action
stop the disc	Press [■].
pause play	Press [CD ►/II]. Press again to resume play.
skip tracks	Press [I◀◀/◀◀] or [▶▶/▶▶I].
search through tracks	Press and hold [I◀◀/◀◀] or [▶▶/▶▶I] during play or pause.
skip album	Press [▲,▼] in the play mode. Press [▲,▼] once and then the numeric buttons in the stop mode.

#### Play Mode function



- Press [CD ►/II].
- 2 Press [PLAY MODE] to select the desired mode.

Mode	To play	
1-TRACK	one selected track on the disc.  Press the numeric buttons to	
	select the track.	
1-ALBUM 1ALBUM MP3	one selected album on the disc. Press $[\blacktriangle, \blacktriangledown]$ to select the album.	
RANDOM	a disc randomly.	
1-ALBUM RANDOM 1ALBUM RND MP3	all tracks in one selected album randomly. Press [▲,▼] to select the album.	

#### Note

- During RANDOM or 1-ALBUM RANDOM play, you cannot skip to tracks that have been played.
- The current play mode is cleared when you open the disc tray.

#### CD

 During RANDOM play, you can search backward or forward only within the current track.

## **Display function**



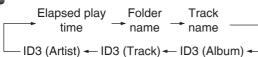
This function allows you to display the information of the current track.

Press [DISPLAY] repeatedly during play or pause mode.



► Elapsed play time → Remaining play time -

## MP3



#### Note

- · Maximum number of displayable characters: approximately 30
- This unit supports ver. 1.0 & 1.1 ID3 tags. Text data that is not supported will not be displayed.
- ID3 is a tag embedded in MP3 tracks to provide information about the track.

## Advanced play

#### Repeat play



You can repeat program play or other selected play mode.

#### CD MP3

Press [REPEAT] before or during play.

"ON REPEAT" and "" are displayed.

#### To cancel

Press [REPEAT] again.

"OFF REPEAT" is displayed and "\(\bigcirc\)" is cleared.

#### Program play



This function allows you to program up to 24 tracks.

#### CD

- Press [CD ►/II] and then [II].
- Press [PROGRAM]. 2
- 3 Press the numeric buttons to select your desired

Repeat this step to program other tracks.

4 Press [CD ►/II] to start play.

# MP3

- Press [CD ►/II] and then [II].
- Press [PROGRAM].
- Press [▲,▼] to select your desired album.
- Press [I◀◀/◀◀] or [▶▶/▶▶] once and then the numeric buttons to select your desired track.
- Press [OK].

Repeat steps 3 to 5 to program other tracks.

Press [CD ►/II] to start play.

То	Action	
cancel program mode	Press [PROGRAM] in the stop mode.	
replay the program	Press [PROGRAM] then [CD ►/▮ ▮].	
check program contents	Press [I◄◄/◄◄] or [►►/►►] when "PGM" is displayed in the stop mode.  To check while programming, press [PROGRAM] twice after "PGM" appears, then press [I◄◄/◄◄] or [►►/►►].	
add to the program	Repeat step 3 in the stop mode.  MP3 Repeat steps 3 to 5 in the stop mode.	
clear the last track	Press [DEL] in the stop mode.	
clear all programmed tracks	Press [ ] in the stop mode.  "CLR ALL" is displayed. Within 5 seconds, press the button again to clear all tracks.	

#### Note

- · When you try to program more than 24 tracks "PGM FULL" appears.
- The program memory is cleared when you open the disc tray.

#### CD

• During program play, you can search backward or forward only within the current track.

#### Note

This unit can play MP3 files and CD-DA format audio CD-R/RW that have been finalised.

#### CD

- This unit can access up to 99 tracks.
- It may not be able to play some CD-R/RW depending on the condition of the recording.
- · Do not use irregularly shaped discs.
- Do not use discs with labels and stickers that are coming off or with adhesive exuding from under labels and stickers.
- · Do not attach extra labels or stickers on the disc.
- Do not write anything on the disc.

#### Using DualDisc

The "CD" sides of DualDisc do not meet the CD-DA standard so it may not be possible to play them on this unit.

#### MP3

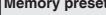
Files are treated as tracks and folders are treated as albums.

- This unit can access up to 999 tracks, 255 albums and 20 sessions.
- Files must have the extension: ".MP3" or ".mp3"
- Disc must conform to ISO9660 level 1 or 2 (except for extended formats).
- . To play in a certain order, prefix the folder and file names with the 3-digit numbers in the order you want to play them.

# Using the FM radio

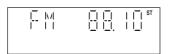
#### Manual tuning







- Press [DAB/FM] to select "FM".
- 2 Press [TUNE MODE] to select "MANUAL".
- 3 Press  $[ \blacktriangleleft 4 / \blacktriangleleft 4 ]$  or  $[ \triangleright \triangleright / \triangleright \triangleright 1 ]$  to select the frequency of the required station.



"ST" is displayed when a stereo FM broadcast is being received.

#### To tune automatically

Press  $[\mathbb{A} / \mathbb{A}]$  or  $[\mathbb{A} / \mathbb{A}]$  for a moment until the frequency starts changing rapidly. The unit begins auto tuning, stopping when it finds a station.

- Auto tuning may not function when there is excessive interference.
- To cancel auto tuning, press [I◀◀/◀◀] or [▶▶/▶▶I] once again.

#### To improve FM sound quality



Press and hold [PLAY MODE] to display "MONO".

#### To cancel

Press and hold [PLAY MODE] again until "MONO" disappears.

- MONO is also cancelled if the frequency is changed.
- Turn off "MONO" for normal listening.

#### **Memory preset**

Up to 30 stations can be set in the FM band.

#### Preparation

Press [DAB/FM] to select "FM".

# **Automatic presetting**



- Press [PLAY MODE] to switch between "LOWEST" or "CURRENT" frequency.
- 2 Press [AUTO PRESET] to start presetting.

#### Manual presetting



- Press [TUNE MODE] to select "MANUAL".
- 2 Press [I◀◀/◀◀] or [▶▶/▶▶|] to tune to the required station.
- 3 Press [PROGRAM].
- 4 Press numeric buttons to select a channel. The station occupying a channel is erased if another station is preset in that channel.
- 5 Repeat steps 2 to 4 to preset more stations.

## Selecting a preset station



Press numeric buttons to select the channel. OR

- 1 Press [TUNE MODE] to select "PRESET".
- 2 Press [◄◄/◄◄] or [▶▶/▶▶] to select the channel.

#### DAB

DAB stands for digital audio broadcasting. It is a new form of radio that is broadcast digitally. Unlike regular analogue broadcasting, digital radio deteriorates less, and is thus able to provide quality sound close to that of a disc.

#### **DAB** structure

#### **Bands**

There are two types of DAB bands, "BAND III" (Receivable in this unit) and "L BAND" (Not broadcast in the United Kingdom, and not receivable on this unit).

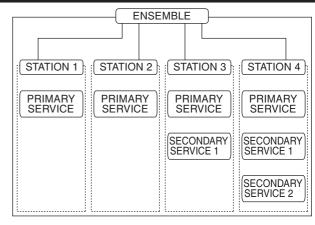
#### **Frequencies**

There are 41 frequencies on BAND III. Among those frequencies, 7 are used in the United Kingdom (current as of February, 2009).

#### Ensemble, station and service

The number of stations that make up one frequency differ between DAB and analogue radio. Analogue stations all broadcast on different frequencies, even if it is the same company doing the broadcasting. With DAB however, it is possible to broadcast a number of stations on the same frequency.

In DAB terminology, a group of stations on the same frequency is called an ensemble.



As shown in the diagram, an ensemble consists of a group of stations which have primary services, they can also have secondary services. This means, for example, that commentary on sports events from different areas can all be broadcast at once.

## DAB reception method on this unit

Depending on the region there is a difference between broadcast frequency and stations broadcast along the same frequency. For this reason, a memory of receivable stations should first be created and then selected from those memorized stations as the reception method.

#### DAB Auto Scan

This function searches for currently receivable stations and inputs them into unit memory.

When DAB is selected for the first time, this function starts automatically.

#### **Note**

Even if the station is stored into memory, some stations may not broadcast depending on the time of day etc. If this occurs, "NO SERVICE" is displayed.

#### Station Memory Updating

When there is a station name change, or a new station begins broadcasting, the unit memory is automatically updated when:

- The previous station name is displayed by selecting "STATION TUNE".
- One of the stations already broadcasting on the same frequency with the new station is displayed by selecting "STATION TUNE".

#### Note

- Deleting stations that are no longer broadcasting is not automatic. If you want to delete a station, perform Auto scan again and the new memory is created.
- When a new frequency begins broadcasting, stations on the new frequency are not automatically added to memory. Perform Auto scan to add them to memory. Also, you may need to change the Auto scan range if the new frequency is outside the factory set Auto scan range ( page 12).

#### **STATION TUNE**

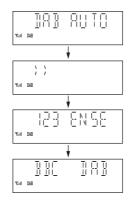
You can select stations from the memory created as shown on page 9 in alphanumeric order. You can easily select your favourite stations by using presets (➡ page 11).

#### **DAB** operation



1 Press [DAB/FM] to enter DAB mode.

The unit comes on.



If you are selecting DAB for the first time, "DAB Auto Scan..." is displayed, stations that are currently receivable are memorized.

When a frequency is tuned the ensemble corresponding to the frequency is displayed.

The station first in alphanumeric order is broadcast.

#### Note

"SCAN FAILED." appears if no stations are memorized. If this occurs, adjust the antenna and try Auto scanning or change the Auto scan frequency range (→ page 12).

2 Press [PLAY MODE] to select "STATION TUNE". Each time you press the button:

"STATION TUNE" → "PRESET TUNE"

3 Press [I◀◀/◀◀] or [▶►/▶▶] to select a station.
The station name changes in alphanumeric order.

#### **DAB Auto scan**



Press and hold [PLAY MODE] until "DAB Auto Scan" appears.

When a frequency is tuned by Auto scanning on this unit, the ensemble corresponding to the frequency is displayed for approximately 2 seconds.

#### Note

- When updating memory with Auto scan, preset stations are not erased or changed.
- When a frequency cannot be received, the previous memory is restored.
- Total stations received is displayed for approximately 2 seconds.

#### **Presetting**

#### **Presetting channel**



Up to 20 channels can be set.

- 1 Press [◄◄/◄◄] or [▶►/▶►] to select a station.
- 2 Press [PROGRAM].
- 3 Press the numeric buttons to select a channel.
- 4 To preset more stations, press [PLAY MODE] to select "STATION TUNE" and then repeat steps 1 to 3.

#### Note

You cannot preset stations when the station is not broadcasting or when you are selecting a secondary service.

#### Selecting a preset channel



- 1 Press [PLAY MODE] to select "PRESET TUNE".
- 2 Press [I◄◄/◄◄] or [►►/►►] or numeric buttons to select a channel.

# Listening to the secondary service SECONDARY



Press the [DAB SECONDARY] to select the secondary service.

"□" is displayed if there is a secondary service broadcast.

The secondary services are selected each time the button is pressed. The primary service is returned to after the last secondary service.

## **Display**



#### Press [DISPLAY] to select the display.

The information scroll through the display. Each time you press the button:

#### Dynamic label

(information about the broadcast)

# PTY display

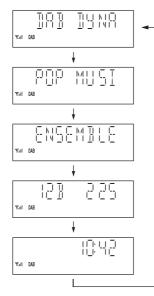


# Ensemble label

(the name of the ensemble)

#### Frequency display





# Turning automatic clock adjustment function on



To adjust the time information during DAB broadcasting and automatic time adjustment.

- 1 Press [DAB MENU] to enter menu mode.
- Within 10 seconds, press [▲,▼] to select "AUTO CLOCK ADJ." and then press [OK].



3 Within 10 seconds, press [▲,▼] to select "ON ADJUST" and then press [OK].

Select "OFF ADJUST" to turn the automatic clock adjustment function off.

To exit
Press [DAB MENU] again.

# Checking the DAB signal quality



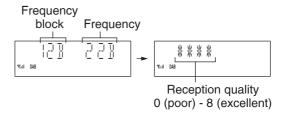
To improve reception by adjusting the antenna while monitoring signal quality on the display.

1 Press [DAB MENU] to enter menu mode.

"SCAN FAILED." appears if no stations are memorized. If this occurs, adjust the antenna and try Auto scanning or change the Auto scan frequency range. ( $\Rightarrow$  page 12)

2 Within 10 seconds, press [▲,▼] to select "SIGNAL QUALITY" and then press [OK].

3 Press [▲,▼] to select the frequency.



To exit
Press [DAB MENU] again.

#### Note

In order to enjoy the new stations after adjusting the antenna, it is necessary to perform Auto scanning and update the station memory.

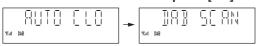
# Changing the Auto scan frequency range



Only the frequencies currently used in the UK as of February 2009 on BAND III are Auto scanned ("United Kingdom", factory setting).

Select "ALL BAND III" when you want to store stations on other frequencies to memory.

- 1 Press [DAB MENU] to enter menu mode.
- 2 Within 10 seconds, press [▲,▼] to select "DAB SCAN MODE" and then press [OK].



3 Within 10 seconds, press [▲,▼] to select "UNITED KINGDOM" or "ALL BAND III" and then press [OK].



Auto scan begins automatically after the change has been made.

# To exit Press [DAB MENU] again.

#### Note

When the "DAB SCAN MODE" is changed, the DAB preset channels are erased and if the DAB play timer has been set the timer switches to off.

#### **ALL BAND III Frequency**

Frequency block	Frequency (MHz)
5A	174.928
5B	176.640
5C	178.352
5D	180.064
6A	181.936
6B	183.648
6C	185.360
6D	187.072
7A	188.928
7B	190.640
7C	192.352
7D	194.064
8A	195.936
8B	197.648
8C	199.360
8D	201.072
9A	202.928
9B	204.640
9C	206.352
9D	208.064
10A	209.936

rrequency		
Frequency block	Frequency (MHz)	
10N	210.096	
10B	211.648	
10C	213.360	
10D	215.072	
11A	216.928	
11N	217.088	
11B	218.640	
11C	220.352	
11D	222.064	
12A	223.936	
12N	224.096	
12B	225.648	
12C	227.360	
12D	229.072	
13A	230.784	
13B	232.496	
13C	234.208	
13D	235.776	
13E	237.488	
13F	239.200	

Shaded areas are frequencies used currently as of February 2009 in the "United Kingdom".

# Using the timer

## Setting the clock

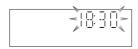


This is a 24-hour clock.

1 Press [CLOCK/TIMER] to select "CLOCK".

Each time you press the button:

2 Within 5 seconds, press [I◀◀/◀◀] or [►►/►►I] to set the time.



3 Press [CLOCK/TIMER] again to confirm.

#### Displaying the clock

Press [CLOCK/TIMER] to display the clock for a few seconds.

#### Note

The clock may lose or gain minutes over a period of time. Readjust as necessary.

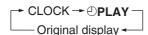
# Using the play timer



You can set the timer to come on at a certain time to wake you up.

#### Preparation

- · Turn the unit on and set the clock.
- Prepare the music source (disc, radio, USB or iPod source) and set the volume.
- 1 Press [CLOCK/TIMER] repeatedly to select play timer.



2 Within 5 seconds, press [I◀◀/◀◀] or [►►/►►] to set the starting time.



- 3 Press [CLOCK/TIMER] to confirm.
- 4 Repeat steps 2 and 3 to set the finishing time.



#### To activate the timer

5 Press [⊕, PLAY] turn on play timer.

→ ⊕**PLAY**→ No display (off) –

6 Press [७] to turn off the unit.

То	Action
change the settings	Repeat steps 1 to 4 and 6.
change the source or volume	<ol> <li>Press [①, PLAY] to clear the timer indicator from the display.</li> <li>Make changes to the source or volume.</li> <li>Perform steps 5 and 6.</li> </ol>
check the settings (when the unit is on or in standby mode)	Press [CLOCK/TIMER] repeatedly to select OPLAY.
cancel	Press $[\mathbb{O}, PLAY]$ to clear the timer indicators from the display.

#### Note

- The play timer will start at the preset time, with the volume increasing gradually to the preset level.
- The timer comes on at the set time every day if the timer is on.
- The unit must be in the standby mode for the timer to function.
- If you turn the unit off and on again while a timer is functioning, the finish time setting will not be activated.

# Using the sleep timer



This function enables you to turn off the unit automatically after the set time.

Press [SLEEP] repeatedly to select your desired time



#### To cancel

Press [SLEEP] to select "OFF".

#### Changing the remaining time

Press [SLEEP] to show the remaining time, and press [SLEEP] again to select your desired time.

#### Note

The play and sleep timer can be used together. The sleep timer always has priority. Be sure not to overlap timer settings.

# **Using sound effects**

## Selecting sound effects

You can change the sound effect by selecting Preset EQ or adjusting the bass or treble effect.

#### **Preset EQ**



Press [PRESET EQ] repeatedly to select your desired setting.

Setting	Effect
HEAVY	Adds punch to rock
CLEAR	Clarifies higher frequencies
SOFT	For background music
VOCAL	Adds gloss to vocals
FLAT	No effect

#### Bass or treble



Enables you to enjoy the lower or higher pitch sound.

1 Press [BASS/TREBLE] repeatedly to select your desired setting.

Setting	Effect
BASS	For lower pitch sound
TREBLE	For higher pitch sound

#### 2 Press [◄◄/◄◄] or [▶▶/▶▶] to adjust the level.

#### Note

The tone level can be varied within -4 to +4.

# **Enjoying surround sound**



Enables you to add natural width and depth to the stereo sound.

#### To activate

Press [SURROUND] to display " !!! " indicator.

#### To cancel

Press [SURROUND] again to clear "!!!!" indicator.

#### Note

- Surround sound is less discernible when listening through headphones.
- If interference in FM stereo reception increases, cancel the surround sound effect.

## **Enhancing the bass**



Enables you to enjoy the powerful bass effect.

Press [D.BASS] to turn the D.BASS function on/off.

#### Note

The actual effect depends on the music source.

# Re-master–Enjoying more natural sound



#### MP3

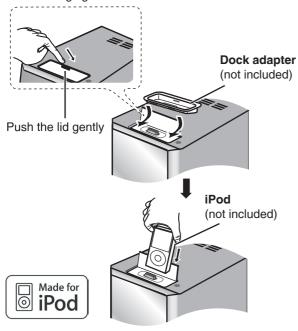
Digital remaster is effective on CD (MP3) and USB Analogue remaster is effective on iPod

This feature reproduces the frequencies lost during recording to give you a sound closer to the original. Press [RE-MASTER] during play to select "ON RE-MASTER".

Each time you press the button:
 ON RE-MASTER ←→ OFF RE-MASTER

#### **iPod**

- 1 Open the lid of the Built-in Dock for iPod.
- 2 Insert the suitable dock adapter for your iPod.
- 3 Insert your iPod into the dock.
  - Reduce the volume of the main unit to minimum before connecting/disconnecting the iPod.
  - Hold the main unit when connecting/disconnecting the iPod.
  - Recharging starts when the iPod is inserted.



#### Note

It is recommended to use the dock adapter from Apple.

# Playing the iPod





#### Preparation

Confirm the iPod connection. (→ above)

- ① Press [iPod ►/II] to play the iPod.
- ② Adjust the volume of the main unit.

	Remote control	Main unit
To display iPod menu (During play/pause)	Press [iPod MENU].	_
To select contents from iPod menu (During play/pause)	Press [▲,▼] followed by [OK].	_
To pause track	Press [iPod ►/▮] or [▮].	Press [iPod ►/III] or [II].
To skip a track (During play/pause)	Press [I◀◀/◀◀] or [▶▶/▶▶I].	Press [I◀◀/◀◀] or [▶▶/▶▶].
To search the current track (During play/pause)	Press and hold [I◀◀/◀◀] or [▶▶/▶▶].	Press and hold [I◀◀/◀◀] or [▶▶/▶▶I].

#### Note

When you select another source or turn the main unit off, the iPod turns off.

#### Charging the iPod

- iPod will start recharging regardless of whether this unit is in On or Standby condition.
- "IPOD \*" will be shown on the main unit's display during iPod charging in main unit standby mode.
- Check iPod to see if the battery is fully recharged.
- If you are not using iPod for an extended period of time after recharging has completed, disconnect it from main unit, as the battery will be depleted naturally. (Once fully recharged, additional recharging will not occur.)
- iPod will not charge when the main unit is in USB mode.

## Compatible iPod

Name	Memory size
iPod touch 2nd generation	8 GB, 16 GB, 32 GB
iPod nano 4th generation (video)	8 GB, 16 GB
iPod classic	120 GB
iPod touch 1st generation	8 GB, 16 GB, 32 GB
iPod nano 3rd generation (video)	4 GB, 8 GB
iPod classic	80 GB, 160 GB
iPod nano 2nd generation (aluminum)	2 GB, 4 GB, 8 GB
iPod 5th generation (video)	60 GB, 80 GB
iPod 5th generation (video)	30 GB
iPod nano 1st generation	1 GB, 2 GB, 4 GB
iPod 4th generation (colour display)	40 GB, 60 GB
iPod 4th generation (colour display)	20 GB, 30 GB
iPod 4th generation	40 GB
iPod 4th generation	20 GB
iPod mini	4 GB, 6 GB

Compatibility depends on the software version of your iPod.

iPod is a trademark of Apple Inc., registered in the U.S. and other countries.

#### USB mass storage class device



The USB connectivity enables you to connect and play MP3 tracks from USB mass storage class. Typically, USB memory devices. (Bulk only transfer)

#### Preparation

Before connecting any USB mass storage device to the unit, ensure that the data stored therein has been backed up.

It is not recommended to use a USB extension cable. The device connected via the cable will not be recognised by this unit.



- 1 Reduce the volume and connect the USB mass storage device.
- 2 Press [USB ►/II] or [OK] to start play.

То	Action
pause play	Press [USB ▶/II]. Press again to resume play.
stop play	Press [■].  "RESUME" is displayed. The position is memorized.  Press [USB ►/II] to resume.  Press [■] again to clear the position.
skip track	Press [ <b>◄</b> , <b>▶</b> ].
skip album	Press [▲,▼] in the play mode. Press [▲,▼] once and then the numeric buttons in the stop mode.

## **Display function**



Press [DISPLAY] repeatedly during play or pause mode.

For other operating functions, they are similar to those described in "Discs" ( $\Rightarrow$  page 7 and 8).

#### Compatible devices

Devices which are defined as USB mass storage class:

- · USB devices that support bulk only transfer.
- USB devices that support USB 2.0 full speed.

#### Supported format

Files must have the extension ".mp3" or ".MP3".

#### Note

- CBI (Control/Bulk/Interrupt) is not supported.
- A device using NTFS file system is not supported [Only FAT12/16/32 (File Allocation Table 12/16/32) file system is supported].
- Depending on the sector size, some files may not work.
- This unit can access up to 255 albums (including blank folders) and 2500 tracks.
- The maximum number of tracks in a folder are 999 tracks.
- Only one memory card will be selected when connecting a multiport USB card reader. Typically the first memory card inserted.
- Do not unplug the USB device during reading or playback.
- Disconnect the USB card reader from the unit when you remove the memory card. Failure to do so may cause malfunction to the device.
- When you connect a compatible digital audio player to the USB port, charging may be activated. It will not charge when the unit is switched to standby mode or iPod mode.

# Changing the remote control code

Change the code if you find the remote control unintentionally also controls other equipment.

#### Change the main unit's code

#### Preparation

Ensure disc tray is empty.

Press and hold [CD ►/II] on the main unit and then press and hold [2] (or [1]) on the remote control. "REMOTE 2" (or "REMOTE 1") is displayed.

#### Change the remote control's code

Press and hold [OK] and [2] (or [1]) on the remote control for at least 2 seconds.

If the remote control and main unit are using different codes, a message appears on the main unit's display showing the main unit's current code. Follow the above step to change the remote control's code to match it.

# **Troubleshooting guide**

Before requesting service, make the following checks. If you are in doubt about some of the check points, or if the remedies indicated in the chart do not solve the problem, consult your dealer for instructions.

#### Common problems

Common problems	
No sound.	<ul> <li>Turn the volume up.</li> <li>The speaker cords may not be connected properly. Turn the unit off, check and correct the connections and turn the unit on (⇒ page 4).</li> </ul>
Problem sounds unfixed, reversed or come from one speaker only.	Check the speaker connections (→ page 4).
Humming heard during play.	<ul> <li>An AC mains lead or fluorescent light is near the cables. Keep other appliances and leads away from this unit's cables.</li> <li>If possible in your area, turn the AC mains lead's plug or connector over to reverse the lead's polarity.</li> </ul>
"ERROR" is displayed.	Incorrect operation performed. Read the instructions and try again.
":" appears on the display.	<ul> <li>You plugged the AC mains lead in for the first time or there was a power failure recently.</li> <li>Set the time (⇒ page 13).</li> </ul>
"F76" is displayed.	<ul> <li>Check and correct the speaker cord connections (⇒ page 4).</li> <li>If this does not fix the problem, there is a power supply problem. Consult the dealer.</li> <li>Disconnect the USB device. Turn the unit off and then back on.</li> </ul>

#### Listening to the radio

Noise is heard. The stereo indicator flickers or doesn't light. Sound is distorted.	Use an outdoor antenna (➡ page 5).
A beat sound is heard.	Turn the TV off or separate it from the unit.

# When there is a television set nearby

The picture on the TV disappears or stripes appear on the screen.	<ul> <li>The location and direction of the antenna are incorrect. If you are using an indoor antenna, change to an outdoor antenna (⇒ page 5).</li> <li>The TV antenna wire is too close to the unit. Separate the antenna wire of the TV set from the unit.</li> </ul>
	Set from the unit.

#### Playing discs

The display is wrong or play won't start.	<ul> <li>The disc may be upside down (⇒ page 7).</li> <li>Wipe the disc.</li> <li>Replace the disc if it is scratched, warped, or non-standard.</li> </ul>
	<ul> <li>Condensation may have formed inside the unit due to a sudden change in temperature. Wait about an hour for it to clear and try again.</li> </ul>

#### The remote control

Remote control doesn't	Check that the batteries are inserted correctly (→ page 5).
work.	Replace the batteries if they are worn.

# iPod

iPod does not turn on.	<ul> <li>Verify that the iPod battery is not depleted before connecting it to the unit.</li> <li>Before inserting your iPod into the dock, turn off both the unit and iPod. Power on the unit and select the appropriate source.</li> </ul>
No sound is coming from the speakers.	<ul> <li>The iPod is not correctly inserted into the dock. Turn off the iPod, remove it from the dock connector. Reinsert it and turn it on again.</li> <li>Make sure that iPod is actually playing something.</li> <li>Adjust the volume.</li> </ul>
Music is distorted or the sound level is too low.	Make sure the equaliser function of your iPod is turned off.
Cannot control the iPod from the CD Stereo System.	<ul> <li>Make sure the iPod is inserted properly into the dock.</li> <li>Check the dock connection and make sure that iPod is selected as the source of music. (=&gt; page 15)</li> </ul>
iPod does not charge.	Check all connections. (→ page 15)

# USB

The USB drive or its contents cannot be read.	<ul> <li>The USB drive format or its contents is/are not compatible with the system         (⇒ page 16). The USB host function of this product may not work with some USB devices.</li> <li>USB devices with storage capacity of more than 8 gigabytes may not work in some instances.</li> </ul>
Slow operation of the USB flash drive.	Large file size or high memory USB flash drive takes longer time to read.
"NO PLAY"	<ul><li>Check the content.</li><li>Only MP3 format files can be played.</li></ul>

#### DAB

DAD	
DAB reception is poor	<ul> <li>Keep the antenna away from computers, televisions, other cables and cords.</li> <li>Use an outdoor antennas. (→ page 5)</li> </ul>
DATA	Data broadcast being received over the DAB broadcast signal. Cannot be used on this unit.
SCRAMBLED	The broadcast station being received cannot be accessed.
NO SERVICE	The station is currently not broadcasting.
NO SIGNAL	This station cannot be received. Check your antenna. (→ page 4)
SCAN FAILED	Stations are not receivable. Check your antenna and try Auto scanning.     (⇒ page 4, 10)
STATION FULL	<ul> <li>DAB station memory is full. Use the following method to clear station memory.</li> <li>1. Press [DAB MENU].</li> <li>2. Press [♠,▼] to select "STATION CLEAR".</li> <li>3. Press [OK]. "OK? Push OK" is displayed.</li> <li>4. Press [OK].</li> <li>Station memory is erased and the unit automatically begins Auto scanning.</li> </ul>

# **Specifications**

■ AMPLIFIER SECTION

RMS Output Power Stereo Mode Front Ch (both channel driven)

20 W per channel (4  $\Omega$ ),

1 kHz, 10% THD

Phone jack

Terminal Stereo, 3.5 mm

**■ TUNER SECTION** 

Preset station FM 30 stations

Frequency Modulation (FM)

Frequency range

87.50 MHz to 108.00 MHz

(50 kHz step)

Antenna terminals

75  $\Omega$  (unbalanced)

**■ DAB SECTION** 

**DAB memories** 20 channels

Frequency Band (Wavelength)

Band III (UK Only)

11B to 12D

(218.640 MHz to 229.072 MHz)

Band III (Europe)

5A to 13F

(174.928 MHz to 239.200 MHz)

Intermediate Frequency

1st: 38.912MHz, 2nd: 2.048MHz Frequency range

Sensitivity \*BER 4x10<sup>-2</sup>

Max input power0dBmMin requirement-98dBm

Selectivity

Adjacent channel (Band III) 33dB Far-Off channel (Band III) 45dB

**DAB External Antenna** 

**Terminal** F - Connector (75  $\Omega$ )

**■ CD SECTION** 

Disc played [8 cm or 12 cm]

- (1) CD-Audio (CD-DA)
- (2) CD-R/RW (CD-DA, MP3)
- (3) MP3

Pickup

Wavelength 785 nm Laser power CLASS I (CD)

Audio output (Disc)

Number of channels

FL, FR, 2 channel

**■ USB SECTION** 

Supported audio file format

MP3 (\*.mp3)

Maximum port power 500 mA

■ SPEAKER SECTION

**Type** 2 way, 2 speaker system (Bass reflex)

Speaker(s)

**Output sound pressure** 

80.5 dB/W (1.0 m)

52 Hz to 31 kHz (-16 dB)

0dBm 74 Hz to 27 kHz (-10 dB) -98dBm **Dimensions (W x H x D)** 

145 mm x 226 mm x 197 mm

Mass 1.9 kg

**■ GENERAL** 

**Power supply** 

AC 220 to 240 V, 50 Hz

Power consumption

73 W

Dimensions (W x H x D)

153 mm x 226 mm x 292 mm 2.5 kg

Mass 2
Operating temperature range

0°C to +40°C

Operating humidity range

35 % to 80 % RH (no condensation)

Power consumption in standby mode 0.6 W (approx.)

#### Note

- 1. Specifications are subject to change without notice.
- 2. Total harmonic distortion is measured by the digital spectrum analyser.

#### Maintenance

# If the surfaces are dirty

To clean this unit, wipe with a soft, dry cloth.

- · Never use alcohol, paint thinner or benzine to clean this unit.
- · Before using chemically treated cloth, read the instructions that came with the cloth carefully.

# Safety precautions

#### **Placement**

Set the unit up on an even surface away from direct sunlight, high temperatures, high humidity, and excessive vibration. These conditions can damage the cabinet and other components, thereby shortening the unit's service life.

Place it at least 15 cm away from wall surfaces to avoid distortion and unwanted acoustical effects. Do not place heavy items on the unit.

#### Voltage

Do not use high voltage power sources. This can overload the unit and cause a fire.

Do not use a DC power source. Check the source carefully when setting the unit up on a ship or other place where DC is used.

#### AC mains lead protection

Ensure the AC mains lead is connected correctly and not damaged. Poor connection and lead damage can cause fire or electric shock. Do not pull, bend, or place heavy items on the lead.

Grasp the plug firmly when unplugging the lead. Pulling the AC mains lead can cause electric shock.

Do not handle the plug with wet hands. This can cause electric shock.

#### Foreign matter

Do not let metal objects fall inside the unit. This can cause electric shock or malfunction.

Do not let liquids get into the unit. This can cause electric shock or malfunction. If this occurs, immediately disconnect the unit from the AC mains supply and contact your dealer.

Do not spray insecticides onto or into the unit. They contain flammable gases which can ignite if sprayed into the unit.

#### Service

Do not attempt to repair this unit by yourself. If sound is interrupted, indicators fail to light, smoke appears, or any other problem that is not covered in these instructions occurs, disconnect the AC mains lead and contact your dealer or an authorized service center. Electric shock or damage to the unit can occur if the unit is repaired, disassembled or reconstructed by unqualified persons.

Extend operating life by disconnecting the unit from the AC mains if it is not to be used for a long time.

#### CAUTION!

THIS PRODUCT UTILIZES A LASER.
USE OF CONTROLS OR ADJUSTMENTS OR
PERFORMANCE OF PROCEDURES OTHER THAN
THOSE SPECIFIED HEREIN MAY RESULT IN
HAZARDOUS RADIATION EXPOSURE.
DO NOT OPEN COVERS AND DO NOT REPAIR
YOURSELF. REFER SERVICING TO QUALIFIED
PERSONNEL.

#### **CAUTION!**

- DO NOT INSTALL OR PLACE THIS UNIT IN A BOOKCASE, BUILT-IN CABINET OR IN ANOTHER CONFINED SPACE. ENSURE THE UNIT IS WELL VENTILATED. TO PREVENT RISK OF ELECTRIC SHOCK OR FIRE HAZARD DUE TO OVERHEATING, ENSURE THAT CURTAINS AND ANY OTHER MATERIALS DO NOT OBSTRUCT THE VENTILATION VENTS.
- DO NOT OBSTRUCT THE UNIT'S VENTILATION OPENINGS WITH NEWSPAPERS, TABLECLOTHS, CURTAINS, AND SIMILAR ITEMS.
- DO NOT PLACE SOURCES OF NAKED FLAMES, SUCH AS LIGHTED CANDLES, ON THE UNIT.
- DISPOSE OF BATTERIES IN AN ENVIRONMENTALLY FRIENDLY MANNER.

#### **WARNING:**

TO REDUCE THE RISK OF FIRE, ELECTRIC SHOCK OR PRODUCT DAMAGE.

- DO NOT EXPOSE THIS APPARATUS TO RAIN, MOISTURE, DRIPPING OR SPLASHING AND THAT NO OBJECTS FILLED WITH LIQUIDS, SUCH AS VASES, SHALL BE PLACED ON THE APPARATUS.
- USE ONLY THE RECOMMENDED ACCESSORIES.
- DO NOT REMOVE THE COVER (OR BACK); THERE ARE NO USER SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

THIS UNIT IS INTENDED FOR USE IN MODERATE CLIMATES.

This product may receive radio interference caused by mobile telephones during use. If such interference is apparent, please increase separation between the product and the mobile telephone.

The socket outlet shall be installed near the equipment and easily accessible.

The mains plug of the power supply cord shall remain readily operable.

To completely disconnect this apparatus from the AC Mains, disconnect the power supply cord plug from AC receptacle.

Panasonic Corporation Web Site: http://panasonic.net

**E**n

Pursuant to at the directive 2004/108/EC, article 9(2) Panasonic Testing Centre Panasonic Marketing Europe GmbH Winsbergring 15, 22525 Hamburg, Germany