

The illustrations show SC-PM33DB

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

#### Note:

"EB" on the packaging indicates the United Kingdom.

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.

Unless otherwise indicated, illustrations in the operating instructions are of SC-PM33DB.

Your unit may not look exactly as illustrated.

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# **Panasonic**

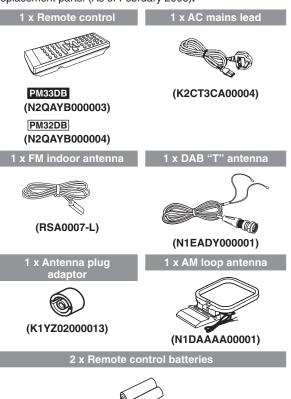
**Operating Instructions** 

# **CD Stereo System**

Model No. SC-PM33DB SC-PM32DB

## SUPPLIED ACCESSORIES

Please check and identify the supplied accessories. Use numbers indicated in parentheses when asking for replacement parts. (As of February 2006).





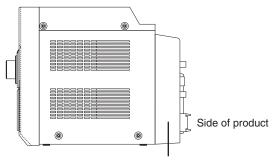
## Dear customer

Thank you for purchasing this product.

For optimum performance and safety, please read these instructions carefully.

These operating instructions are applicable to the following system.

System	SC-PM33DB	SC-PM32DB
Main unit	SA-PM33DB	SA-PM32DB
Speakers	SB-PM33DB	SB-PM3





CAUTION	CLASS 1M INVISIBLE LASER RADIATION WHEN OPEN. DO NOT VIE DIRECTLY WITH OPTICAL INSTRUMENTS. IEC60825-1+A2/ Class 1	W
VARNING	. KLASS 1M OSYNLIG LASERSTRÅLNING NÄR DENNA DEL ÄR ÖPPNA BETRAKTA EJ STRÅLEN DIREKT GENOM OPTISKT INSTRUMENT.	D.
FORSIGTIG	. USYNLIG LASERSTRÅLING KLASSE 1M, NÅR LÅGET ER ÅBENT. UNDGÅ AT SE LIGE PÅ MED OPTISKE INSTRUMENTER.	
VARO	. AVATTAESSA OLET ALTTIINA LUOKAN 1M NÄKYMÄTÖNTÄ LASERSÄTEILY ÄLÄ KATSO OPTISELLA LAITTEELLA SUORAAN SÄTEESEEN.	Ä.
ATTENTION	RAYONNEMENT LASER INVISIBLE, CLASSE 1M, EN CAS D'OUVERTURE. NE PAS REGARDER DIRECTEMENT À L'AIDE D'INSTRUMENTS D'OPTIQUE	IE.
VORSICHT	UNSICHTBARE LASERSTRÄHLUNG KLASSE 1M, WENN - ABDECKUNG GEÖFFNET. NICHT DIREKT MIT OPTISCHEN INSTRUMENTEN BETRACHTEN. RQLVS00	35

Inside of product

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 or the mains plug or an appliance coupler shall remain readily operable.

THIS UNIT IS INTENDED FOR USE IN MODERATE CLIMATES.

#### - If you see this symbol -

# Information on Disposal for Users of Waste Electrical & Electronic Equipment (private households)



This symbol on the products and/or accompanying documents means that used electrical and electronic products should not be mixed with general household waste.

For proper treatment, recovery and recycling, please take these products to designated collection points, where they will be accepted on a free of charge basis. Alternatively, in some countries you may be able to return your products to your local retailer upon the purchase of an equivalent new product.

Disposing of this product correctly 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. Please contact your local authority for further details of your nearest designated collection point.

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

This symbol is only valid in the European Union.

If you wish to discard this product, please contact your local authorities or dealer and ask for the correct method of disposal.

#### ■ Sales and Support Information (For the United Kingdom and Republic of Ireland)

**Customer Care Centre** 

- For UK customers: 08705 357357
- For Republic of Ireland customers: 01 289 8333
- Visit our website for product information
- E-mail: <u>customer.care@panasonic.co.uk</u>

## Direct Sales at Panasonic UK

- Order accessory and consumable items for your product with ease and confidence by phoning our Customer Care Centre Monday-Friday 9:00am-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.

# **Caution for AC Mains Lead**

# (For United Kingdom) ("EB" area code model only)

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  $\mbox{$\widehat{\circledast}$}$  or the BSI mark  $\mbox{$\widehat{\heartsuit}$}$  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  $\frac{1}{2}$  OR COLOURED GREEN OR GREEN/YELLOW.

THIS PLUG IS NOT WATERPROOF—KEEP DRY.

## Before use

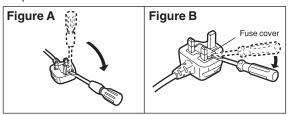
Remove the connector cover.

#### How to replace the fuse

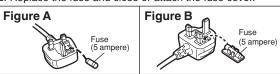
The location of the fuse differ according to the type of AC mains plug (figures A and B). Confirm the AC mains plug fitted and follow the instructions below.

Illustrations may differ from actual AC mains plug.

Open the fuse cover with a screwdriver.



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



## 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

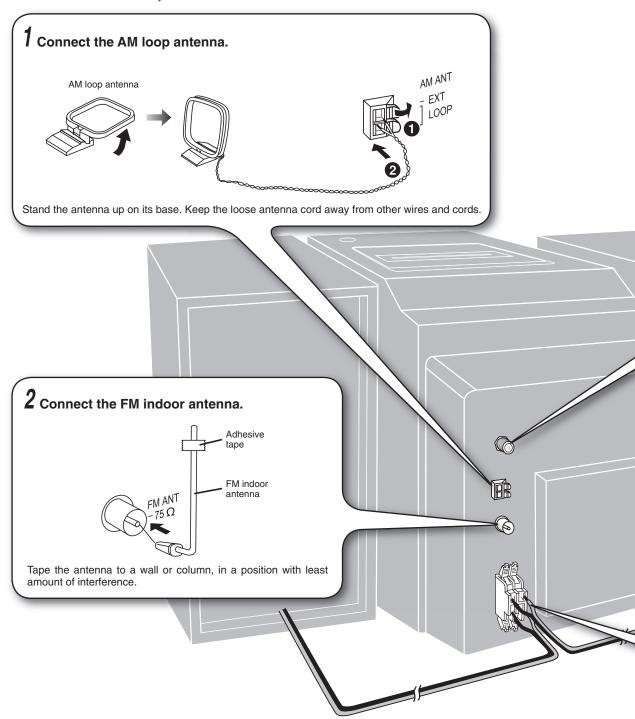
- Keep your speakers at least 10 mm away from the system for proper ventilation.
- These speakers do not have magnetic shielding. Do not place them near televisions, personal computers or other devices easily influenced by magnetism.
- · You cannot take the front net off the speakers.

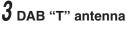
#### Caution

- 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.

# Step 1 - Making the connections

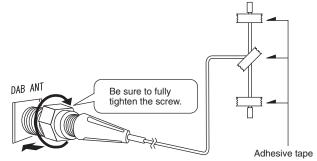
Connect the AC mains lead only after all other connections have been made.





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 (refer to page 6).

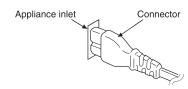
# 4 Connect the AC mains lead.

READ THE CAUTION FOR THE AC MAINS LEAD ON PAGE 3 BEFORE CONNECTION.

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

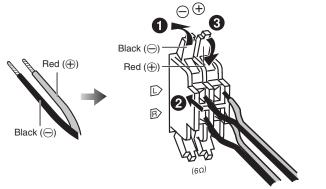
## Insertion of connector

To household



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.

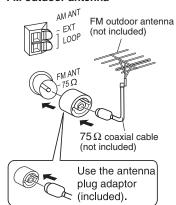
# $oldsymbol{5}$ Connect the speaker cables.



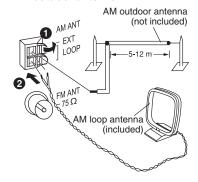
Incorrect connection can damage the unit.

## **Optional antenna connections**

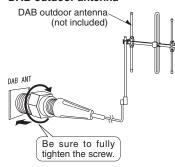
## FM outdoor antenna



#### AM outdoor antenna

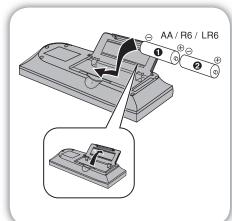


#### DAB outdoor antenna



- 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.
- Connect the AM outdoor antenna without removing the AM loop antenna. Run 5 to 12 m of vinyl-covered wire horizontally along a window or other convenient location.

# $Step\ 2$ - Inserting batteries into the remote control



#### ■ Batteries

- 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 use rechargeable type batteries.
- Mishandling of batteries in the remote control can cause electrolyte leakage, which may cause a fire.

#### Do not:

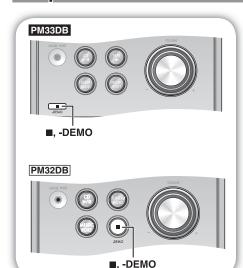
- mix old and new batteries:
- · use different types of batteries at the same time;
- · heat or expose to flame;
- take apart or short-circuit:
- attempt to recharge alkaline or manganese batteries;
- use batteries if their covering has been peeled off.

#### ■ 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 7 for remote control signal sensor position.

# Step 3 - 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.

 $\rightarrow$  DEMO OFF  $\rightarrow$  DEMO ON -

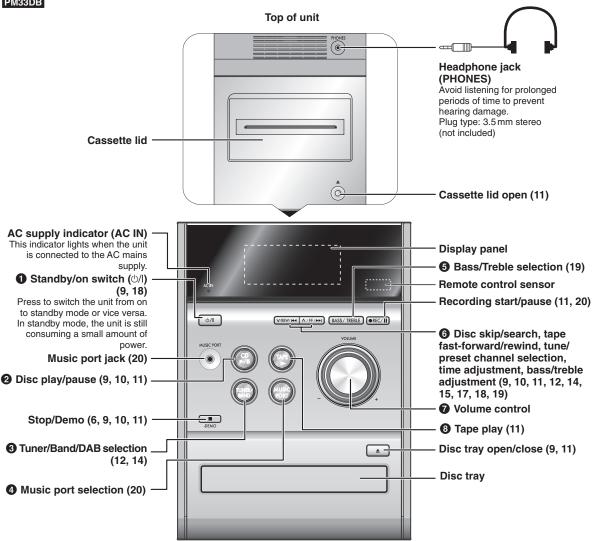
While in standby mode, select "DEMO OFF" to reduce power consumption.

# Overview of controls

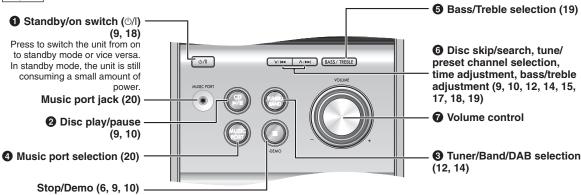
## Main unit

Refer to the numbers in parentheses for page reference.

## PM33DB



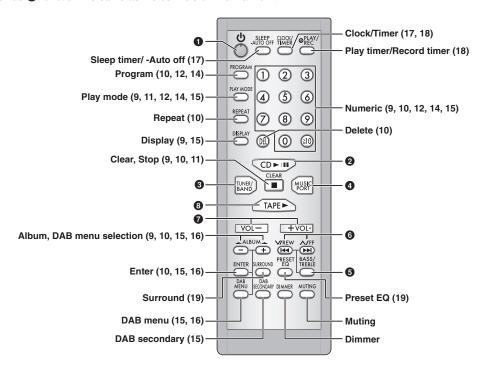
## PM32DB



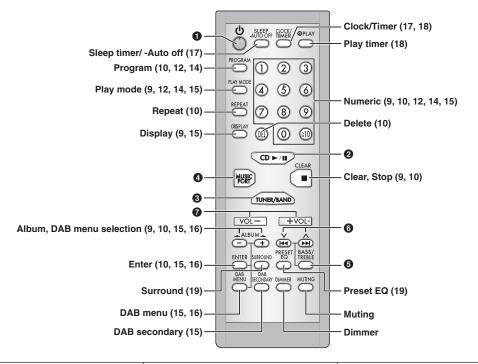
## Remote control

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

## PM33DB



## PM32DB





This function allows you to turn off the unit in disc or tape mode only after left unused for 10 minutes.

The setting is maintained even if the unit is turned off.



Dims the display panel.

Mutes the sound.



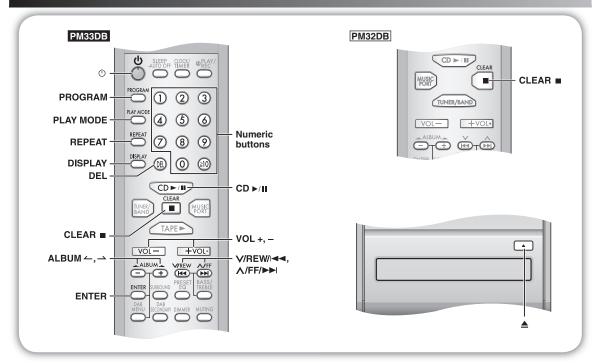
Long press of [DISPLAY] key will switch to fast text scrolling.

This function allows you to scroll the display setting faster than current setting.

· Press and hold untill the "AUTO OFF" indicated.

· Press and hold again to cancel.

- - · Press again to cancel.
- · Press the button to activate.
- · Long press again to turn OFF fast text scrolling.



## **Basic play**



- 1 Press [0] to turn the unit on.
- 2 Press [≜] to open the disc tray and then load the disc. Press [≜] again to close the tray.



- ? Press [CD ►/II] to start play.
- ▲ Adjust the volume.

То	Action
stop the disc	Press [ ■ ].
pause play	Press [CD ▶/II]. Press again to resume play.
skip tracks	Press [√/REW/I◄◄] or [/√FF/▶►I].
search through tracks	Press and hold [V/REW/I◄◄] or [/VFF/▶►I] during play or pause.
skip album	Press [ALBUM ← or →] in the play mode.  Press [ALBUM ← or →] once and then the numeric buttons in the stop mode.

## **Play Mode function**



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

Mode	To play
1-TRACK 1TR	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 [ALBUM ← or →] to select the album.
RANDOM	a disc randomly.
1-ALBUM RANDOM 1ALBUM RND MP3	all tracks in one selected album randomly.  Press [ALBUM ← or →] 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 change a disc or 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.

CD

Elapsed play time → Remaining play time —

MP3

- 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**

## **Direct access play**

This function allows you to start play from a specific track.



Press the numeric buttons to select and play your desired track.

MP3

- 1 Press [ALBUM ← or →] to select the album.
- 2 Press [∴/FF/►►i] once and then the numeric buttons to select and play your desired track.

For two-digit track, press [≥10] once, and then the two digits. For three-digit track, press [≥10] twice, and then the three digits.

#### Note

This function does not work during any random/program mode.

## Repeat play

You can repeat program play or other selected play mode.



Press [REPEAT] before or during play.

"" is displayed.

#### To cancel

Press [REPEAT] again.

"O" is cleared.

## **Program play**

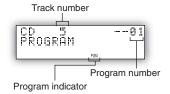
This function allows you to program up to 24 tracks.



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

Repeat this step to program other tracks. Example:





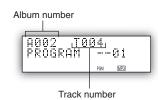
4 Press [CD ▶/II] to start play.

## MP3

- 1 Press [CD ►/II] and then [ ].
- Press [PROGRAM].

Example:

- 3 Press [ALBUM ← or →] to select your desired album.
- 4 Press [∴/FF/►►i] once and then the numeric buttons to select your desired track.



## 5 Press [ENTER].

Repeat steps 3 to 5 to program other tracks.

6 Press [CD ►/II] to start play.

То	Action
cancel program mode	Press [PROGRAM] in the stop mode.
replay the program	Press [PROGRAM] then [CD ▶/III].
check program contents	Press [V/REW/I◄◄] or [/VFF/▶►] when "PGM" is displayed in the stop mode. To check while programming, press [PROGRAM] twice after "PGM" appears, then press [V/REW/I◄◄] or [/VFF/▶►].
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 [CLEAR] in the stop mode. "CLEAR ALL" is displayed. Within 5 seconds, press the button again to clear all tracks.

#### Note

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

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

3-digit numbers in the order you want to play them.

• This unit can access up to 999 tracks, 255 albums and 20 sessions.

• Disc must conform to ISO9660 level 1 or 2 (except for extended

To play in a certain order, prefix the folder and file names with the

#### CD

MP3

 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 finalized.
- 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.

#### CD

- This unit can access up to 99 tracks.
- Choose a CD with this mark:

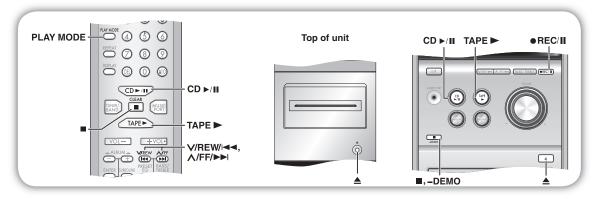


## **Using DualDiscs**

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

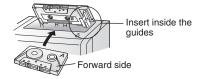
MPEG Layer-3 audio decoding technology licensed from Fraunhofer IIS and Thomson multimedia.

# Cassette tape ( PM33DB only)



## **Basic play**

1 Press [▲] on top of the unit. Insert the cassette.



- Close the lid by hand.
- 3 Press [TAPE ▶] to start play.

To play the other side of the cassette, turn the cassette over.

То	Action
stop tape playback	Press [ ■ ].
start one-touch play	Press [TAPE ▶] when the unit is OFF with the cassette loaded.
fast-forward and rewind	Press [√/REW/I◄◄] or [/√FF/▶▶I] in the stop mode.

#### Note

- Tapes exceeding 100 minutes are thin and can break or get caught in the mechanism.
- Endless tapes can get caught up in the deck's moving parts if used incorrectly.

## **TPS (Tape Program Sensor)**

This function enables you to search the beginning of a track, up to a maximum of 9.

## Press [∨/REW/I◄◄] or [△/FF/▶►I] during play.

Play resumes from the track found.

#### Note

TPS may not function properly:

- · with short silent parts
- · when noise occurs between tunes
- · if silent parts are found within tunes

## Recording

Use normal position tapes.

High position and metal position tapes can be used, but this unit will not be able to record or erase them correctly.

#### Preparation

Wind the leader tape so that recording can begin immediately.

## Recording the radio

- 1 Insert the cassette to be recorded.
- 2 Tune to the required station (refer to page 12).
- 3 Press [● REC/II] to start recording.

## **Recording discs**

- 1 Insert the cassette to be recorded.
- Press [▲] to insert the disc. Press again to close.
- ? Press [CD ►/II] and then [■, -DEMO].
- 4 Press [PLAY MODE] to select your desired mode (refer to page 9).
- 5 Press [● REC/II] to start recording.

## Recording programmed tracks

- 1 Insert the cassette to be recorded.
- 2 Program the tracks you want (refer to page 10).
- 3 Press [● REC/II] to start recording.

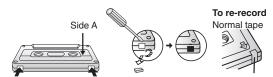
## Other basic operations

То	Action
stop recording	Press [ ■ ].
stop recording temporarily	<ol> <li>Press [● REC/II].</li> <li>Press again to resume recording.</li> </ol>
record on the other side of the tape	Turn the cassette over and press [● REC/II].
erase a recorded sound	<ol> <li>Insert the cassette to be recorded.</li> <li>Press [TAPE ▶] and then [■, -DEMO].</li> <li>Press [● REC/II].</li> </ol>

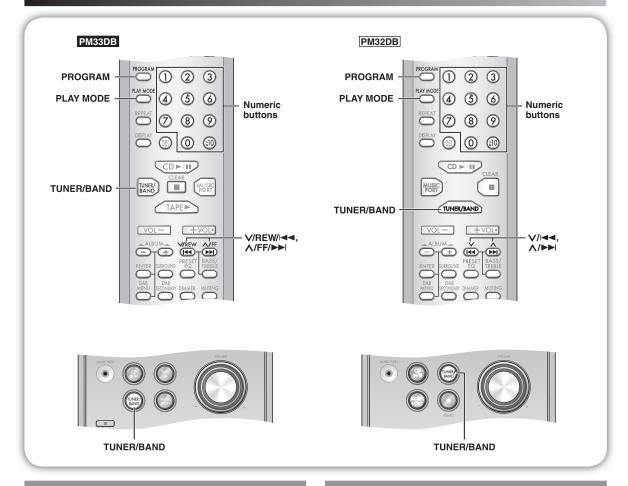
Your attention is drawn to the fact that recording prerecorded tapes or discs or other published or broadcast material may infringe copyright laws.

## **Erasure prevention**

The illustration shows how to remove the tabs to prevent recording. To record on the tape again, cover as shown.



RQTV0123



## Manual tuning

- 1 Press [TUNER/BAND] to select "FM" or "AM".
- Press [PLAY MODE] to select "MANUAL".
- 3 Press [√/REW/!◄◄] or [√/FF/▶►] to select the frequency of the required station.



" \$T" is displayed when a stereo FM broadcast is being received.

#### To tune automatically

Press [√/REW/I◄◄] or [√/FF/▶▶] 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 [√/REW/I◄◄] or [√/FF/►►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 15 stations can be set in both the FM and AM bands.

## Preparation

Press [TUNER/BAND] to select "FM" or "AM".

## **Automatic presetting**

Press and hold [PROGRAM] to start presetting.

#### Manual presetting

- 1 Press [PLAY MODE] to select "MANUAL".
- 2 Press [√/REW/I◄◄] or [√/FF/▶▶I] to tune to the required station.
- 3 Press [PROGRAM].
- **4** Press the 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 the numeric buttons to select the channel. For channels 10 to 15 press [≥10], then the two digits.

#### OR

- 1 Press [PLAY MODE] to select "PRESET".
- 2 Press [√/REW/i◄◄] or [√/FF/▶►i] 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

#### **Band**

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).

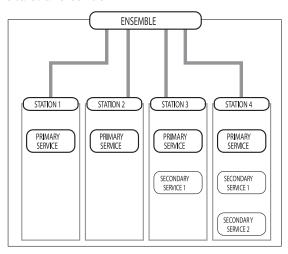
#### **Frequencies**

There are 41 frequencies on BAND III. Among those frequencies, 7 are used in the United Kingdom (current as of February, 2006).

## 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:

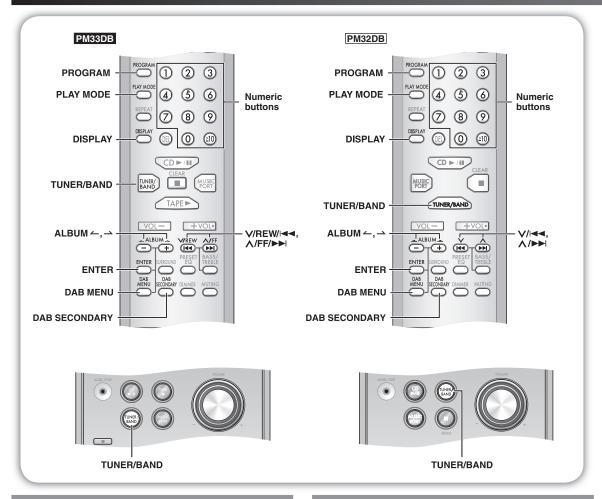
- The previous station name is displayed by selecting "STATION TUNE".
- One of the stations already broadcasting on the same frequency with the new station is displayed by selecting "STATION TUNE".

#### 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 that 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 (refer to page 16).

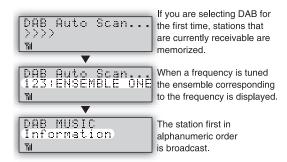
## STATION TUNE

You can select stations from the memory created as shown above in alphanumeric order. You can easily select your favorite stations by using presets (refer to page 14).



## **DAB** operation

**1** Press [TUNER/BAND] to enter DAB mode. The unit comes on.



## Note

"Scan Failed." appears if no stations are memorized. If this occurs, adjust the antenna and try Auto scaning.

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

"STATION TUNE"  $\longleftrightarrow$  "PRESET TUNE"

**3** Press [√/REW/i◄◄] or [√/FF/▶►i] 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**

## To Preset

Up to 20 channels can be set.

- 1 Press [∨/REW/I◄◄] or [∧/FF/▶►I] to select a station.
- Press [PROGRAM].
- 3 Press the numeric buttons to select a channel.

#### 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" Each time you press the button:

"STATION TUNE" ←→ "PRESET TUNE"

2 Press [√/REW//◄◄] or [√/FF/►►I] or numeric buttons to select a channel.

## Listening to the secondary service

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

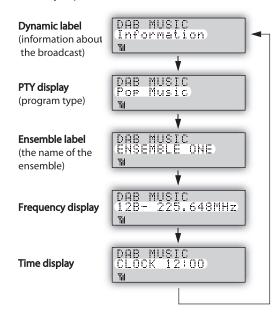
" is displayed if there is a secondary service broadcast.

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.

Each time you press the button:



# 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.
- 2 Within 10 seconds, press [ALBUM ← or →] to select "AUTO CLOCK ADJ." and then press [ENTER].



**3** Within 10 seconds, press [ALBUM ← or →] to select "ADJUST ON" and then press [ENTER].



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

To cancel 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.

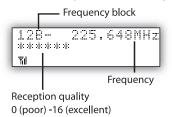
#### Note

"Scan Failed." appears if no stations are memorized. If this occurs, adjust the antenna and try Auto scaning.

2 Within 10 seconds, press [ALBUM ← or →] to select "SIGNAL QUALITY" and then press [ENTER].



? Press [ALBUM \( \sigma \) or \( \sigma \) to select the frequency.



## To cancel 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 2006 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 [ALBUM ← or →] to select "DAB SCAN MODE" and then press [ENTER].



Within 10 seconds, press [ALBUM ← or →] to select "United Kingdom" or "ALL BAND III" and then press [ENTER].



Auto scan begins automatically after the change has been made.

## To cancel 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.

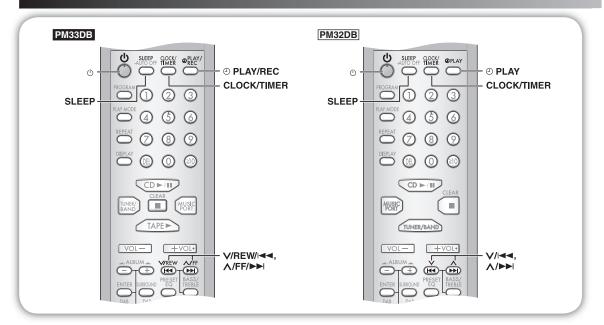
## ALL BAND III Frequency

ALL DAIND I
Frequency
(MHz)
174.928
176.640
178.352
180.064
181.936
183.648
185.360
187.072
188.928
190.640
192.352
194.064
195.936
197.648
199.360
201.072
202.928
204.640
206.352
208.064
209.936

rrequericy	
Frequency	Frequency
block	(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 2006 in the "United Kingdom".

## **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 [√/REW//◄◄] or [√/FF/▶▶i] to set the time.



3 Press [CLOCK/TIMER] again to confirm.



## Displaying the clock

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

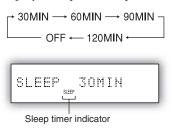
#### Note

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

## 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.

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

## Using the play or record timer

## Record timer is only applicable for PM33DB.

You can set the timer to come on at a certain time to wake you up (play timer) or to record from the radio or music port source (record timer).

#### Preparation

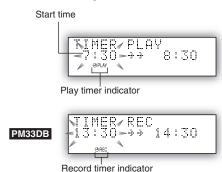
Turn the unit on and set the clock (refer to page 17).

Timer	Action
Play timer	Prepare the music source you want to listen to; cassette, disc, radio or music port source, and set the volume.
Record timer	Check the cassette's erasure prevention tabs (refer to page 11), insert the cassette (refer to page 11) and tune to the radio station (refer to page 12) or select the music port source (refer to page 20).

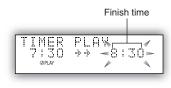
1 Press [CLOCK/TIMER] repeatedly to select your desired timer.



2 Within 5 seconds, press [√/REW/i◄◄] or [√/FF/▶►i] 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/REC] to turn on your desired timer.



6 Press [b] to turn off the unit.

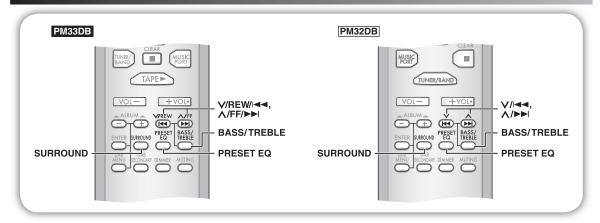
The unit must be off for the timers to operate.

## Other basic operations

То	Action
change the settings	Repeat steps 1 to 4 and 6.
change the source or volume	Press [ PLAY/REC] to clear the timer indicator from the display.     Make changes to the source or volume.     Perform steps 5 and 6.
check the settings (when the unit is on or in standby mode)	Press [CLOCK/TIMER] repeatedly to select ①PLAY or ①REC.
cancel	Press [@PLAY/REC] to clear the timer indicators from the display.

- The play timer and record timer cannot be used together.
- The play timer will start at the preset time, with the volume increasing gradually to the preset level.
- The record timer will start 30 seconds before the set time, with the volume muted.
- 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.
- If MUSIC PORT is selected as the source when the timer comes on, the system turns on and engages MUSIC PORT as the source. If you wish to playback or record from the portable audio equipment, activate the equipment's play mode and increase the volume. (See the portable audio equipment's instruction manual.)

# Sound adjustment



## **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.

$$\mathsf{HEAVY} \to \mathsf{CLEAR} \to \mathsf{SOFT} \to \mathsf{VOCAL} \to \mathsf{EQ\text{-}OFF}$$

Setting	Effect
HEAVY	Adds punch to rock
CLEAR	Clarifies higher frequencies
SOFT	For background music
VOCAL	Adds gloss to vocal
EQ-OFF	No effect

#### Bass or treble

Enable 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 Within 3 seconds, press [√/REW/i◄◄] or [√/FF/▶▶i] to adjust the level.

#### Note

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

## **Enjoying surround sound**

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

#### To activate

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

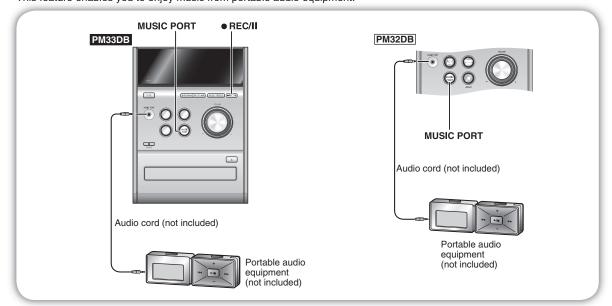
#### To cancel

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

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

## Connecting to a portable audio equipment

This feature enables you to enjoy music from portable audio equipment.



## Playing from portable audio equipment

Switch off the equalizer function (if there is any) of the portable audio equipment before you plug into the MUSIC PORT jack. Otherwise, sound from the speaker may be distorted.

- 1 Plug the audio cord into the MUSIC PORT jack and press [MUSIC PORT].
- 2 Play the portable audio equipment. (See the portable audio equipment's instruction manual.)

#### Note

All peripheral components and cables are sold separately.

## PM33DB

## Recording from portable audio equipment

- 1 Insert the cassette to be recorded.
- Press [MUSIC PORT].
- 3 Play the portable audio equipment.
- 4 Press [● REC/II] to start recording.

## Note

For other recording operations, refer to page 11, "Other basic operations".

# Troubleshooting guide

Before requesting service, make the below checks. If you can't fix the system as described below, or if something not listed here occurs, refer to the enclosed directory to locate an Authorized Service Center convenient to you or contact your dealer.

## Common problems

No sound.	Turn the volume up.  The speaker cords may not be connected properly. Turn the unit off, check and correct the connections and turn the unit on (refer to page 5).
Sounds unfixed, reversed or come from one speaker only.	Check the speaker connections (refer to page 5).
Humming heard during play.	An AC mains lead or fluorescent light is near the cables. Keep other appliances and leads away from this unit's cables.  If possible in your area, turn the AC mains lead's plug or connector over to reverse the lead's polarity.
"ERROR" is displayed.	Incorrect operation performed. Read the instructions and try again.
":" appears on the display.	You plugged the AC mains lead in for the first time or there was a power failure recently. Set the time (refer to page 17).
"F76" is displayed.	Check and correct the speaker cord connections (refer to page 5). Unplug and plug in the AC mains lead, then turn on the unit.  If this does not fix the problem, there is a power supply problem. Consult the dealer.

## Listening to the radio

Noise is heard. The stereo indicator flickers or doesn't light. Sound is distorted.	Use an outdoor antenna (refer to page 6).
A beat sound is heard.	Turn the TV off or separate it from the unit.
A low hum is heard during AM broadcast.	Separate the antenna from other cables and cords.

## Listening to DAB

DAB reception is poor	Keep the antenna away from computers, televisions, other cables and cords. Use an outdoor antennas (refer to page 6).
DATA	Data broadcast being received over the DAB broadcast signal. Cannot be used on this unit.
SCRAMBLE	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 (refer to page 5).
Scan Failed	Stations are not receivable. Check your antenna and try Auto scanning (refer to page 5, 14).
STATION FULL	DAB station memory is full. Use the following method to clear station memory.  1. Press [DAB MENU].  2. Press [ALBUM ← or →] to select "STATION CLEAR".  3. Press [ENTER]. "OK? Push ENTER" is displayed.  4. Press [ENTER].  Station memory is erased and the unit automatically begins Auto scanning.

## When there is a television set nearby

The picture on the TV disappears or stripes appear on the screen.	The location and direction of the antenna are incorrect. If you are using an indoor antenna, change to an outdoor antenna (refer to page 6).  The TV antenna wire is too close to the unit. Separate the antenna wire of the TV set from the unit.
---	--

## Using the cassette deck

Recording is not possible.	If the erasure prevention tabs have been removed, cover the holes with adhesive tape (refer to page 11).
----------------------------	--

## Playing discs

The display is wrong or play won't start.	The disc may be upside down (refer to page 9). Wipe the disc. Replace the disc if it is scratched, warped, or non-standard. 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.
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## The remote control

Remote control doesn't work.	Check that the batteries are inserted correctly (refer to page 6). Replace the batteries if they are worn.
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# **Specifications**

#### AMPLIFIER SECTION

RMS OUTPUT POWER both channel driven

simultaneously

10 % Total harmonic distortion

PM33DB: 20 W per channel (6  $\Omega$ )
PM32DB: 5 W per channel (6  $\Omega$ )

Input impedance MUSIC PORT 250 mV 12 k $\Omega$ 

Output impedance

**HEADPHONE** 16  $\Omega$  to 32  $\Omega$ 

Phone jack

**Terminal** Stereo, 3.5 mm

Music Port input jack

**Terminal** Stereo, 3.5 mm

**DAB External antenna** 

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

FM TUNER SECTION

AM 15 stations

AM TUNER SECTION

Frequency range 522 kHz to 1629 kHz (9 kHz steps)

Sensitivity S/N 20 dB (at 999 kHz)

**PM33DB**: 1122 μV/m **PM32DB**: 1412 μV/m

**DAB SECTION** 

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 : 2.048 MHz

Sensitivity \*BER 4x10-4

MAX. Input Power 0 dBm Min Requirement -98 dBm

Selectivity

Adjacent Channel (Band III) 33 dB Far-Off Channel (Band III) 45 dB DAB memories 20 channels

CASSETTE DECK SECTION PM33DB

Track system 4-track, 2-channel

Heads

Record/playback Solid permalloy head Erasure Double gap ferrite head

MotorDC servo motorRecording systemAC bias 100 kHzErase systemAC erase 100 kHz

Tape speed 4.8 cm/s

Overall frequency response (+3, -6 dB) at DECK OUT
Normal 35 Hz to 14 kHz
S/N RATIO 47 dB (A weighted)
Wow and flutter 0.09 % (WRMS)

Fast-forward and rewind time

Approx. 120 seconds with C-60 cassette tape

CD SECTION

Disc played [8 cm or 12 cm]

(1) CD-Audio (CD-DA)

(2) CD-R/RW (CD-DA, MP3 formatted disc)

(3) MP3

Sampling frequency

**CD** 44.1 kHz **MP3** 32 kHz, 44.1 kHz, 48 kHz

Bit rate

MP3 32 kbps to 384 kbps

Decoding 16/20/24 bit linear

Pickup

Beam source Semiconductor laser Wavelength 785 nm Laser power CLASS 1

Audio output (Disc)

Number of channels
Frequency response
Wow and flutter
Digital filter
D/A converter

2 channel
20 Hz to 20 kHz (+1, -2 dB)
Below measurable limit
8 fs
MASH (1 bit DAC)

SPEAKER SECTION

Type 1 way, 1 speaker system

Speaker(s)

**FULL RANGE** PM33DB: 10 cm twin cone type 6  $\Omega$ 

**PM32DB**: 10 cm cone type 6  $\Omega$ 

Impedance 6  $\Omega$  Frequency range PM33DB: 51 Hz to 23 kHz (-16 dB)

: 83 Hz to 23 kHz (–16 dB)

**PM32DB**: 61 Hz to 17 kHz (–16 dB)

: 95 Hz to 15 kHz (-10 dB)

Output sound pressure 83 dB/W (1.0 m)
Input power (IEC)
PM33DB: 20 W (max)

**Dimensions (W x H x D)** 139 mm x 227 mm x 136 mm **Mass** 1.3 kg

**GENERAL** 

Power supply AC 230 to 240 V, 50 Hz Power consumption PM33DE:64 W

PM32DB:25 W

**Dimensions (W x H x D)** 165 mm x 227 mm x 327 mm

Mass PM33DB:3.6 kg

PM32DB: 2.8 kg

Operating temperature range +5°C to +35°C

Operating humidity range

5 % to 90 % RH (no condensation)

Power consumption in standby mode 0.8 W

- Specifications are subject to change without notice. Mass and dimensions are approximate.
- 2. Total harmonic distortion is measured by the digital spectrum analyzer.

# 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 power 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 power source if it is not to be used for a long time.

## **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.

## For a cleaner, crisper sound

Clean the heads regularly to assure good quality playback and recording.

Use a cleaning tape (not included).

## 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.

## **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.

#### 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.



