Panasonic®

Operating Instructions
DVD Home Theater Sound System

Model No. **SC-PT550**
SC-PT850
SC-PT850W

The illustration shows SC-PT550 for Continental Europe.

Before connecting, operating or adjusting this product, please read the instructions completely. Please keep this manual for future reference.
Your unit may not look exactly the same as illustrated.

The player plays DVD-Video marked with labels containing the region number or "**ALL**".

Region	Number
Continental Europe, the Middle East, South Africa, Saudi Arabia and Kuwait	2
Southeast Asia and Thailand	3
Australia and N.Z.	4

Example: **For Continental Europe**

② **ALL** **²³₅**

Wireless system	page **11**
Wireless surround speaker connection for SC-PT850W.	
USB connection for MP3 players	page **37**

DVD AUDIO / VIDEO™ / **DVD** VIDEO™   **disc** DIGITAL VIDEO   **RAM** COMPATIBLE PLAYER   **HDMI**™ HIGH-DEFINITION MULTIMEDIA INTERFACE   VIErA Link

Dear customer

Thank you for purchasing this product.
For optimum performance and safety, please read these instructions carefully.

> **Operations in these instructions are described mainly with the remote control, but you can perform the operations on the main unit if the controls are the same.**

Unless otherwise indicated, all illustrations shown are of SC-PT550 for Continental Europe.

System	SC-PT550	SC-PT850	SC-PT850W
Main unit	SA-PT550	SA-PT850	SA-PT850
Front speakers	SB-HF550	SB-HF550	SB-HF550/※4SB-HF850
Center speaker	SB-HC550	SB-HC550	SB-HC550
Surround speakers	※2SB-HS550/※3SB-HS850	SB-HS850	SB-HS850/※4SB-HS851
Subwoofer	SB-HW550	SB-HW550	SB-HW550
Wireless system	–	–	※1SE-FX65
Digital transmitter	–	–	※1SH-FX65T

※1 For Southeast Asia, Thailand, the Middle East, South Africa, Saudi Arabia, Kuwait, Australia and N.Z.

※2 For Continental Europe, Australia and N.Z.

※3 For Southeast Asia, Thailand, the Middle East, South Africa, Saudi Arabia and Kuwait

※4 For Australia and N.Z.

Caution for AC Mains Lead

(For Saudi Arabia and Kuwait)
("GS" 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 ⒶSⓉ 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.

Figure A	Figure B
	Fuse cover
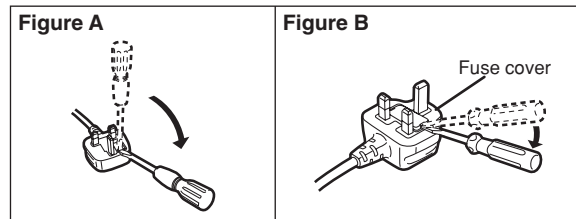
2. Replace the fuse and close or attach the fuse cover.

Figure A	Figure B
Fuse (5 ampere)	Fuse (5 ampere)
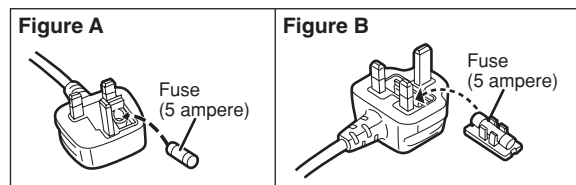
> **For Southeast Asia, Thailand, the Middle East, South Africa, Saudi Arabia and Kuwait**
> THIS UNIT IS INTENDED FOR USE IN TROPICAL CLIMATES.

> **For Continental Europe, Australia and N.Z.**
> THIS UNIT IS INTENDED FOR USE IN MODERATE CLIMATES.

SUOMI

VAROITUS!

LAITTEEN KÄYTTÄMINEN MUULLA KUIN TÄSSÄ KÄYTTÖOHJEESSA MAINITULLA TAVALLA SAATTAA ALTISTAA KÄYTTÄJÄN TURVALLISUUSLUOKAN 1 YLITTÄVÄLLE NÄKYMÄTTÖMÄLLE LASERSÄTEILYLLE.

TÄMÄ LAITE ON TARKOITETTU KÄYTETTÄVÄKSI LEUDOSSA ILMASTOSSA.

VAROITUS:

VÄHENNÄ TULIPALON, SÄHKÖISKUN TAI LAITTEISTON VAHINGOITTUMISEN VAARAA
- **TÄTÄ LAITETTA EI SAA ALTISTAA SATEELLE, KOSTEUDELLE, ROISKEILLE TAI TIPPUVILLE NESTEILLE. LAITTEEN PÄÄLLE EI SAA MYÖSKÄÄN ASETTAA MITÄÄN NESTEELLÄ TÄYTETTYÄ ESINETTÄ, KUTEN MALJAKKOA.**
- **KÄYTÄ VAIN SUOSITELTUJA LISÄVARUSTEITA.**
- **ÄLÄ IRROTA KANTTA (TAI TAUSTAA). SISÄLLÄ EI OLE KÄYTTÄJÄN HUOLLETTAVISSA OLEVIA OSIA. HUOLLON SAA SUORITTAA VAIN AMMATTITAITOINEN HENKILÖKUNTA.**

VAROITUS!

- **ÄLÄ ASENNA TAI LAITA TÄTÄ LAITETTA KABINETTITYYPPISEEN KIRJAKAAPPIIN TAI MUUHUN SULJETTUUN TILAAN, JOTTA TUULETUS ONNISTUISI. VARMISTA, ETTÄ VERHO TAI MIKÄÄN MUU MATERIAALI EI HUONONNA TUULETUSTA, JOTTA VÄLTETTÄISIIN YLIKUUMENEMISESTA JOHTUVA SÄHKÖISKU- TAI TULIPALOVAARA.**
- **ÄLÄ PEITÄ LAITTEEN TUULETUSAUKKOJA SANOMALEHDELLÄ, PÖYTÄLIINALLA, VERHOLLA TAI MUULLA VASTAAVALLA ESINEELLÄ.**
- **ÄLÄ ASETA PALAVAA KYNTTILÄÄ TAI MUUTA AVOTULEN LÄHDETTÄ LAITTEEN PÄÄLLE.**
- **HÄVITÄ PARISTOT LUONTOA VAHINGOITTAMATTOMALLA TAVALLA.**

Pistorasia tulee asentaa laitteen lähelle helppopääsyiseen paikkaan.
Verkkojohdon pistokkeen on oltava aina helposti käytettävissä.
Tämä laite voidaan kytkeä kokonaan irti verkkovirrasta irrottamalla verkkojohdon pistoke pistorasiasta.

NORSK

ADVARSEL!

**DETTE PRODUKTET ANVENDER EN LASER. BETJENING AV KONTROLLER, JUSTERINGER ELLER ANDRE INNGREP ENN DE SOM ER BESKREVET I DENNE BRUKSANVISNING, KAN FØRE TIL FARLIG BESTRÅLING.
DEKSLER MÅ IKKE ÅPNES, OG FORSØK ALDRI Å REPARERE APPARATET PÅ EGENHÅND. ALT SERVICE OG REPARASJONSARBEID MÅ UTFØRES AV KVALIFISERT PERSONELL.**

DETTE APPARATET ER BEREGNET TIL BRUK UNDER MODERATE KLIMAFORHOLD.

ADVARSEL:

FØLG NEDENSTÅENDE INSTRUKSER FOR Å REDUSERE RISIKOEN FOR BRANN, ELEKTRISK STØT OG SKADE PÅ PRODUKTET:
- **DETTE APPARATET MÅ IKKE UTSETTES FOR REGN, FUKTIGHET, DRYPP ELLER SPRUT, OG INGEN VÆSKEFYLTE GJENSTANDER, SOM F.EKS. VASER, MÅ PLASSERES PÅ APPARATET.**
- **BRUK KUN ANBEFALT TILBEHØR.**
- **IKKE FJERN DEKSELET (ELLER BAKSIDEN); APPARATET INNEHOLDER INGEN DELER SOM KAN SKIFTES ELLER REPARERES AV BRUKEREN. OVERLAT TIL KVALIFISERTE SERVICETEKNIKERE Å UTFØRE SERVICE.**

ADVARSEL!

- **APPARATET MÅ IKKE PLASSERES I EN BOKHYLLE, ET INNEBYGGET KABINETT ELLER ET ANNET LUKKET STED HVOR VENTILASJONSFORHOLDENE ER UTILSTREKKELIGE. SØRG FOR AT GARDINER ELLER LIGNENDE IKKE FORVERRER VENTILASJONSFORHOLDENE, SÅ RISIKO FOR ELEKTRISK SJOKK ELLER BRANN FORÅRSAKET AV OVERHETING UNNGÅS.**
- **APPARATETS VENTILASJONSÅPNINGER MÅ IKKE DEKKES TIL MED AVISER, BORDDUKER, GARDINER OG LIGNENDE.**
- **PLASSER IKKE ÅPEN ILD, SLIK SOM LEVENDE LYS, OPPÅ APPARATET.**
- **BRUKTE BATTERIER MÅ KASSERES UTEN FARE FOR MILJØET.**

Strømuttaket må befinne seg i nærheten av utstyret og være lett tilgjengelig.
Støpslet på strømkabelen må være klart til bruk.
Når dette apparatet skal kobles helt fra strømnettet (AC), må støpslet på strømkabelen trekkes ut av stikkontakten.

ENGLISH

GETTING STARTED

CLASS 1
LASER PRODUCT

LUOKAN 1 LASERLAITE
KLASS 1 LASER APPARAT
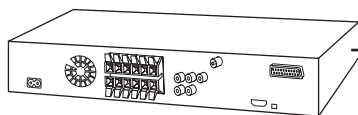
(Side of product)

CAUTION	–	LASER RADIATION WHEN OPEN. DO NOT STARE INTO BEAM.	FDA 21 CFR / Class II
CAUTION	–	CLASS 1M VISIBLE AND INVISIBLE LASER RADIATION WHEN OPEN. DO NOT VIEW DIRECTLY WITH OPTICAL INSTRUMENTS.	IEC60825-1 +A2! Class 1M
VARNING	–	KLASS 1M SYNLIG OCH OSYNLIG LASERSTRÅLNING NÄR DENNA DEL ÄR ÖPPNAD. BETRAKTA EJ STRÅLEN DIREKT GENOM OPTISKT INSTRUMENT.	
FORSIGTIG	–	SYNLIG OG USYNLIG LASERSTRÅLING KLASS 1M, NÅR LÅGET ER ÅBENT. UNDGÅ AT SE LIGE PÅ MED OPTISKE INSTRUMENTER.	
VARO!	–	AVATTAESSA OLET ALTTIINA LUOKAN 1M NÄKYVÄÄ JA NÄKYMÄTÖNTÄ. LASERSÄTEILYÄ. ÄLÄ KATSO OPTISELLA LAITTEELLA SUORAAN SÄTEESEEN.	
VORSICHT	–	SICHTBARE UND UNSICHTBARE LASERSTRAHLUNG KLASSE 1M, WENN ABDECKUNG GEÖFFNET. NICHT DIREKT MIT OPTISCHEN INSTRUMENTEN BETRACHTEN.	
ATTENTION	–	RAYONNEMENT LASER VISIBLE ET INVISIBLE, CLASSE 1M, EN CAS D'OUVERTURE. NE PAS REGARDER DIRECTEMENT A L'AIDE D'INSTRUMENTS D'OPTIQUE.	
注意	–	ここを開くと可視及び不可視レーザ光が出ます。ビームを見たり、触れたりしないでください。	
注意	–	打开时有可见及不可见激光辐射。避免光束照射。 GB7241.1-2001/3B 类	RQLXS0075

Inside of product
Tuotteen sisällä
Produktets innside

CAUTION:
Change the voltage setting to suit the AC voltage in your area. (➡ page 12).
Note that the unit will be seriously damaged or fail to operate correctly if this setting is not made correctly.

-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.
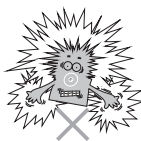
Safety precautions

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.

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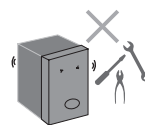
Do not attempt to repair this unit by yourself. If sound is interrupted, indicators fail to light, smoke appears, or any other problem that is not covered in these instructions occurs, disconnect the AC mains lead and contact your dealer or an authorized service center. Electric shock or damage to the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

🔗 Table of contents

🎵 Accessories

✓ Please check and identify the supplied accessories.

☐ **1 Remote control**

For Continental Europe
PT550 (N2QAYB000093)

For Southeast Asia, Thailand, the Middle East, South Africa, Saudi Arabia and Kuwait
PT550 (N2QAYB000094)

For Australia and N.Z.
PT550 PT850W (N2QAYB000095)

For Continental Europe
PT850 (N2QAYB000095)

For Southeast Asia, Thailand, the Middle East, South Africa, Saudi Arabia and Kuwait
PT850W (N2QAYB000096)

☐ **2 Remote control batteries**

☐ **1 FM indoor antenna**
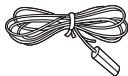
☐ **AC mains leads**
PT550

For Continental Europe, Southeast Asia, Thailand, the Middle East, South Africa, Saudi Arabia and Kuwait

For Saudi Arabia and Kuwait
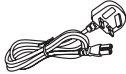
For Australia and N.Z.

PT850

For Continental Europe

PT850W

For Southeast Asia, Thailand, the Middle East and South Africa

For Saudi Arabia and Kuwait
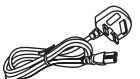
For Australia and N.Z.

☐ **Speaker stands**

For Continental Europe, Australia and N.Z.,
PT550   2 Stands
2 x stands with short cables

For Southeast Asia, Thailand, the Middle East, South Africa, Saudi Arabia and Kuwait
PT550   4 Stands
2 x stands with short cables
2 x stands with long cables

PT850 4 Stands
PT850W 4 Stands
2 x stands with short cables
2 x stands with long cables

☐ | For Continental Europe, Australia and N.Z. |
| --- |
| PT550   2 Bases |

For Southeast Asia, Thailand, the Middle East, South Africa, Saudi Arabia and Kuwait
PT550   4 Bases

PT850   4 Bases
PT850W 4 Bases

☐ | For Continental Europe, Australia and N.Z. |
| --- |
| PT550   8 Screws |

For Southeast Asia, Thailand, the Middle East, South Africa, Saudi Arabia and Kuwait
PT550   16 Screws

PT850 PT850W 16 Screws

☐ **Speaker cables**

For Continental Europe, Australia and N.Z.
PT550
1 x short cable
2 x long cables

For Southeast Asia, Thailand, the Middle East, South Africa, Saudi Arabia and Kuwait
PT550
1 x short cable

PT850 PT850W
1 x short cable

☐ **1 Video cable**

For Southeast Asia, Thailand, the Middle East, South Africa, Saudi Arabia, Kuwait, Australia and N.Z.

☐ **1 Auto speaker setup microphone**

For Australia and N.Z.
PT550

For Continental Europe
PT850

For Southeast Asia, Thailand, the Middle East, South Africa, Saudi Arabia, Kuwait, Australia and N.Z.
PT850W

☐ **1 Sheet of speaker cable sticker**
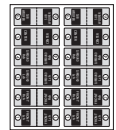
🔊 Placement of speakers

Setup example

Place the front, center, and surround speakers at approximately the same distance from the seating position.
The angles in the diagram are approximate.

PT550 [*1]

1	2	3	4
FRONT (L, R)	SURROUND (L, R)	CENTER	SUBWOOFER
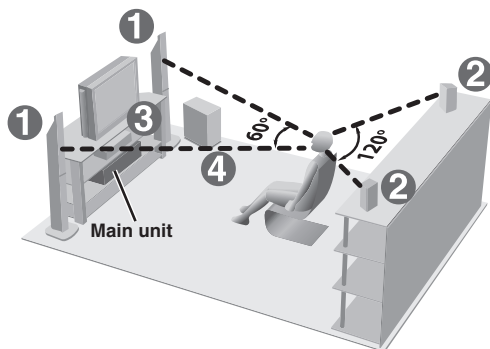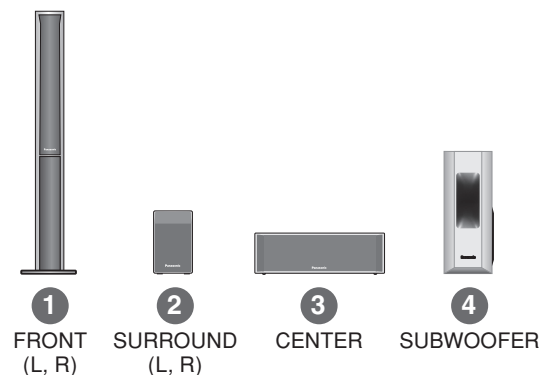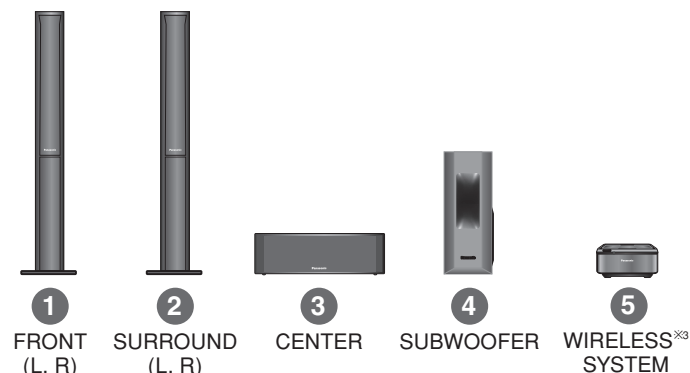
Do not use a front speaker as a surround speaker or vice versa. Verify the type of speaker with the label on the rear of the front speaker.
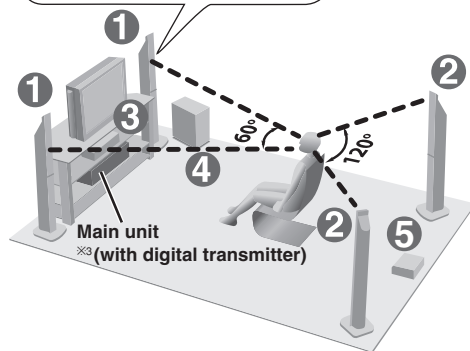
Main unit

PT550 [*2] PT850 PT850W

1	2	3	4	5
FRONT (L, R)	SURROUND (L, R)	CENTER	SUBWOOFER	WIRELESS[*3] SYSTEM

Main unit
[*3](with digital transmitter)

[*1] For Continental Europe, Australia and N.Z.

[*2] For Southeast Asia, Thailand, the Middle East, South Africa, Saudi Arabia and Kuwait

[*3] PT850W

Do not use the wireless system or the digital transmitter in a metal cabinet or bookshelf.

Avoiding interference

To avoid interference, maintain the following distances between the wireless system and other electronic devices that use the same radio frequency (2.4 GHz band).

Wireless system

Place the wireless system within approximately 10 m from the main unit.
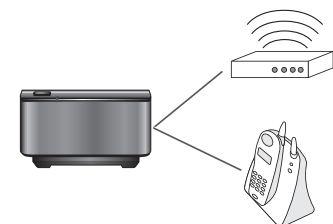
Wireless LAN: approx. 2 m

Cordless phone and other electronic devices: approx. 2 m

The wireless system will automatically seek a clear channel if any of these other devices interfere with its communication. When this happens, the wireless link indicator ("W1") flashes on the main unit, and there is a brief interruption in audio coming from the surround speakers.

This is the normal operation of the product working to assure the best possible performance of your home theater system.

If the interference persists, try moving the other devices to another location outside the range of the wireless system or move the wireless system nearer to the main unit.

• **Use only supplied speakers**
  Using other speakers can damage the unit, and sound quality will be negatively affected.
• Place speakers on flat secure bases. Take proper precautions to prevent the speakers from falling if you cannot set them up on an even surface.
• Placing speakers too close to floors, walls, and corners can result in excessive bass. Cover walls and windows with thick curtains.

Main unit
• Keep your speakers at least 10 mm away from the system for proper ventilation.
• To allow for proper ventilation and to maintain good airflow around the main unit, position it with at least 5 cm of space on all sides.
• Do not block the ventilation holes of the main unit.

CAUTION!
• Do not stand on the base. Be cautious when children are near.
• Refrain from holding the speaker's net.
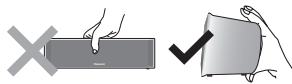
Center speaker
• Vibration caused by the center speaker can disrupt the picture if it is placed directly on the television. Put the center speaker on a rack or shelf.
• To prevent the speakers from falling, do not place directly on top of the television.

Subwoofer
• Place to the right or left of the television, on the floor or a sturdy shelf so that it will not cause vibration. Leave a space of 30 cm from the television.

Note
• 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 the speakers are reverberating due to a record player, a microphone (except For Continental Europe, Australia and N.Z.), noise from FM broadcasts, or continuous signals from an oscillator, test disc, or electronic instrument.
  – When adjusting the sound quality.
  – When turning the unit on or off.

If irregular coloring occurs on your television
The front and center speakers are designed to be used close to a television, but the picture may be affected with some televisions and setup combinations.

If this occurs, turn the television off for about 30 minutes.
The television's demagnetizing function should correct the problem. If it persists, move the speakers further away from the television.

Caution
• **The main unit and supplied speakers are to be used only as indicated in this setup. Failure to do so may lead to damage to the amplifier and/or the speakers, and may result in the risk of fire. Consult a qualified service person if damage has occurred or if you experience a sudden change in performance.**
• **Do not attempt to attach these speakers to walls using methods other than those described in this manual.**

PT550

For Southeast Asia, Thailand, the Middle East, South Africa, Saudi Arabia, Kuwait, Australia and N.Z.

(((♪   **Set your surround free!**
**Optional Panasonic wireless accessory (example: SH-FX65)**

You can enjoy surround speaker sound wirelessly when you use the optional Panasonic wireless accessory (example: SH-FX65).
For details, please refer to the operating instructions for the optional Panasonic wireless accessory.

🔊 **Preparing the remote control**

❶ Insert so the poles (+ and –) match those in the remote control.
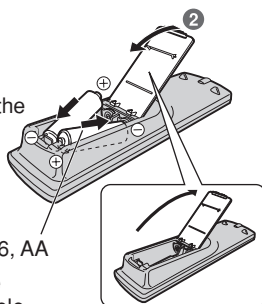
R6/LR6, AA

• Do not use rechargeable type batteries.

Do not:
• mix old and new batteries.
• use different types of batteries at the same time.
• heat or expose batteries to flame.
• take apart or short circuit the batteries.
• attempt to recharge alkaline or manganese batteries.
• use batteries if the covering has been peeled off.

Mishandling of batteries can cause electrolyte leakage which can severely damage the remote control.

Remove the batteries if the remote control is not going to be used for a long period of time. Store in a cool, dark place.

■ **Use**
Aim at the remote control signal sensor (➡ page 16), avoiding obstacles, at a maximum range of 7 m directly in front of the unit.

🔊 Speaker assembly

Preparation
- To prevent damage or scratches, lay down a soft cloth and perform assembly on it.
- For assembly, use a Phillips-head screwdriver.
- There is no difference between the right and left speakers and stands.
- For optional wall mount (➡ page 10).

Make sure you have all the indicated components before starting assembly, setup, and connection.

| PT550 ※1 | 2 Front speakers | PT550 ※1 | 2 Stands (with cable) | PT550 ※1 | 2 Bases | PT550 ※1 | 8 Screws |

| PT550 ※2 | 2 Front speakers and 2 Surround speakers | PT550 ※2 | 4 Stands | PT550 ※2 | 4 Bases | PT550 ※2 | 16 Screws |

PT850 / PT850W

- 2 x stands with short cables: For front speakers
- 2 x stands with long cables: For surround speakers
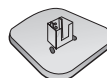
※1 **For Continental Europe, Australia and N.Z.**

※2 **For Southeast Asia, Thailand, the Middle East, South Africa, Saudi Arabia and Kuwait**

1
❷ ❹ ❶ ❸ Tighten securely. ❺ Slide into the groove.

2
❷ ❶ Position the cable between the ridges. Leave about 80 mm ❹ Insert the wire fully. +: White −: Blue **Push!** ❺ Press into the groove. ❸ Tighten securely.
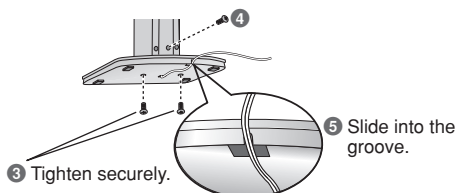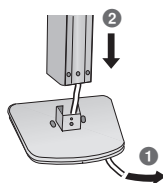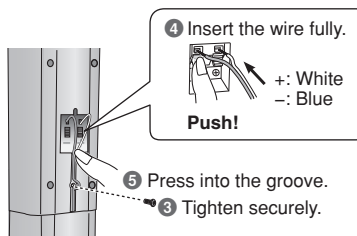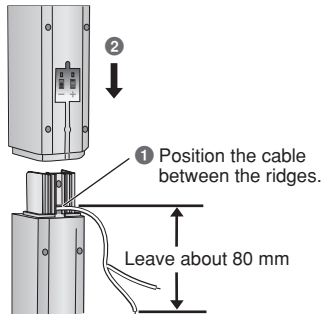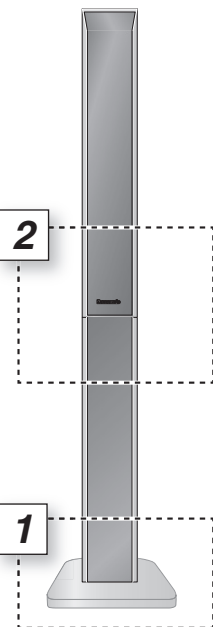
Speaker assembly option
Thread the speaker cable through the base.
Leave about 100 mm
You can remove and use the cable from the stand. To reattach the cable (➡ page 10).
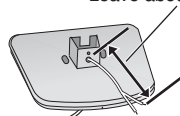
Attach the speaker.
❷ Insert the wire fully. +: White −: Blue **Push!** ❸ Press into the groove. ❶ Tighten securely.
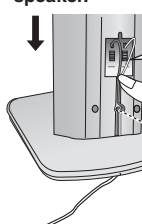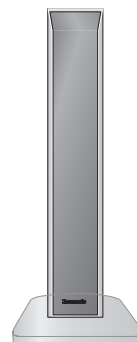
■ Preventing the speakers from falling
- You will need to obtain the appropriate screw eyes to match the walls or pillars to which they are going to be fastened.
- Consult a qualified housing contractor concerning the appropriate procedure when attaching to a concrete wall or a surface that may not have strong enough support. Improper attachment may result in damage to the wall or speakers.

String (not included) Thread from the wall to the speaker and tie tightly.
Approx. 150 mm
Screw eye (not included) **Wall**
Rear of the speaker

RQTX0038

9
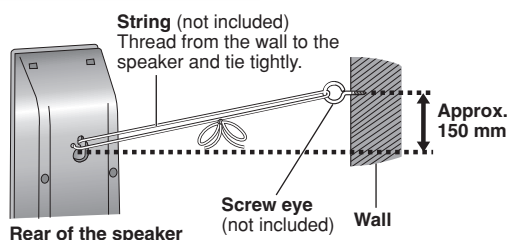
Speaker installation options

■ Attaching to a wall

You can attach all of the speakers (except subwoofer) to a wall.

• The wall or pillar on which the speakers are to be attached should be capable of supporting 10 kg per screw. Consult a qualified building contractor when attaching the speakers to a wall. Improper attachment may result in damage to the wall and speakers.

① Drive the screw (not included) into the wall

At least 30 mm

Ø4.0 mm

Ø7.0 to 9.4 mm

Wall or pillar

4.0 to 6.0 mm
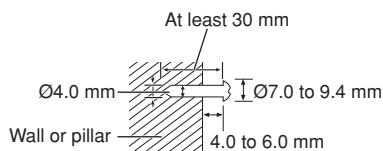
② Fit the speaker securely onto the screw(s) with the hole(s).

※ **Front/Surround speakers**
Attach to a wall without the base and stand.

Center speaker

190 mm

384 mm
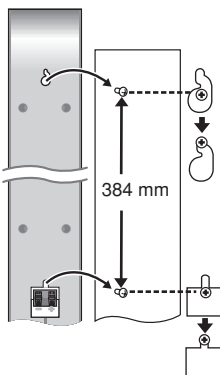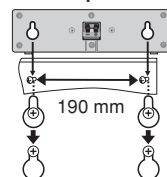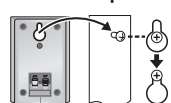
Surround speaker

※ Front and Surround speakers:

PT850 PT850W

PT550 For Southeast Asia, Thailand, the Middle East, South Africa, Saudi Arabia and Kuwait

Front speakers:

PT550 For Continental Europe, Australia and N.Z.

■ Fitting speaker stands (not included)
(For center and satellite surround speakers)

Ensure the stands meet these conditions before purchasing them.
Note the diameter and length of the screws and the distance between screws as shown in the diagram.

• The stands must be able to support over 10 kg.
• The stands must be stable even if the speakers are in a high position.

Example: **Center speaker**

Metal screw holes
For attaching to speaker stands

5 mm, pitch 0.8 mm

Plate thickness plus 7 mm to 10 mm

60 mm

Speaker stand
(not included)

■ Reattach the speaker cable

① Insert the cable from the bottom.

Leave about 80 mm

② Pull out the cable through the hole.
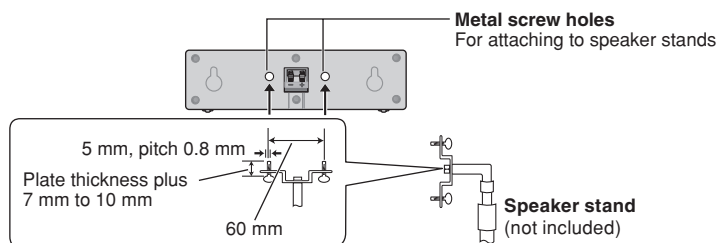
🔊 Wireless system connection PT850W
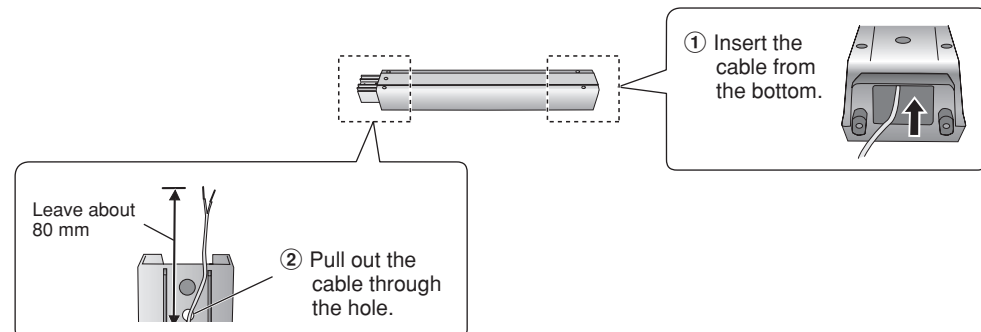
Connect the surround speaker cables to the wireless system

Rear panel of this unit

Do not insert the wires beyond the wire insulation (➡ page 12).
+: White
−: Blue

Click!

④ SURROUND (R)

③ SURROUND (L)

SURROUND Rch ④

SURROUND Rch ④

SURROUND Lch ③

SURROUND Lch ③
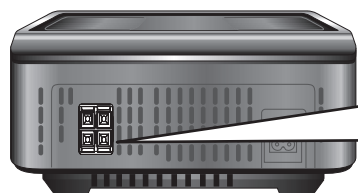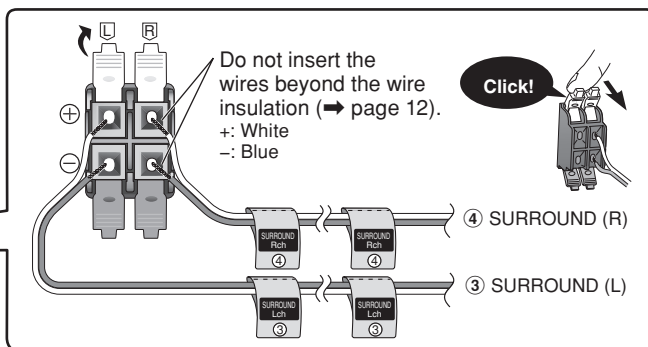
Connecting the wireless system to the power supply
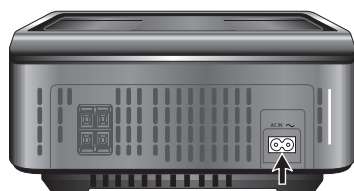
Rear panel of this unit

AC mains lead

➔ To household mains socket

Conserving power
The wireless system consume a small amount of power when it is in off mode (approx. 0.3 W). To save power when it is not to be used for a long time, unplug it from the household mains socket.

Connecting the digital transmitter

PT850W

For Southeast Asia, Thailand, the Middle East, South Africa, Saudi Arabia, Kuwait, Australia and N.Z.

Insert the digital transmitter into the slot.
• Do not insert or remove while the main unit is on.

Digital transmitter
Insert fully until you hear a click.

DIGITAL TRANSMITTER
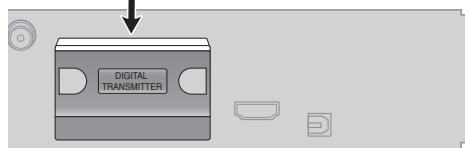
Rear panel of this main unit

PT550

For Southeast Asia, Thailand, the Middle East, South Africa, Saudi Arabia, Kuwait, Australia and N.Z.

Remove the digital transmitter cover before installing any optional Panasonic wireless accessory.
• Replace the cover when the digital transmitter is not in use.

Digital transmitter cover

PUSH   PUSH

Push!   DIGITAL TRANSMITTER   **Push!**

Rear panel of this main unit
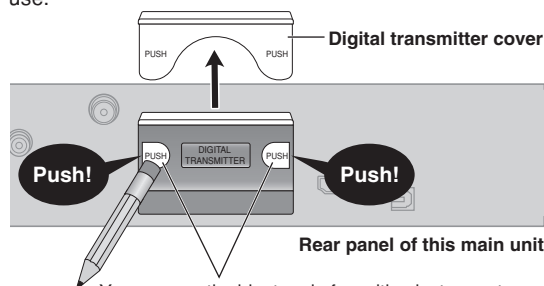
You can use the blunt end of a writing instrument to push here until the cover pops out.

The illustration shows the wireless system for SH-FX65.

AUTO OPERATION ON/OFF indicator

The indicator lights red when the wireless system is turned on and lights green when the wireless link is activated.
When the wireless link is inactive for a long time, it turns red.

Front panel of this unit

Unit on/off button [￣ I, ■⏻]
Use this button to turn the wireless system on and off.

￣ I: The unit is on.
■⏻: The unit is off.

Simple setup

Making the connections

The illustration shows **PT550** for Continental Europe

Connect the AC mains lead only after all other connections have been made.
• Ensure that you have the complete accessories before making the connections.

Conserving power
The main unit consumes a small amount of power, even when it is standby mode (approx. 0.8 W). To save power when the unit is not to be used for a long time, unplug it from the household mains socket. You will need to reset some memory items after plugging in the unit.

Before connecting the AC mains lead, set the voltage.

For Southeast Asia, Thailand, the Middle East, South Africa, Saudi Arabia and Kuwait

110-127V   220-240V
VOLT ADJ
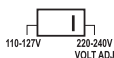
Change the voltage selector to the appropriate position for the area in which this system is used.

Connect to the power supply.

For Saudi Arabia and Kuwait

BE SURE TO READ THE NOTE ON AC MAINS LEAD ON PAGE 2 BEFORE CONNECTION.

Note

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

Connect to the antenna.

■ **FM indoor antenna**
Tape the antenna where reception is the best.

Adhesive tape

FM ANT (75Ω)

SPEAKERS

COMPONENT VIDEO OUT
PB   Y

FM ANT (75Ω)

AV

AUX

PR

AC IN ∼

HDMI AV OUT   OPTICAL IN

SUBWOOFER (6Ω) CENTER (6Ω) FRONT (3Ω) SURROUND (3Ω)

To household mains socket
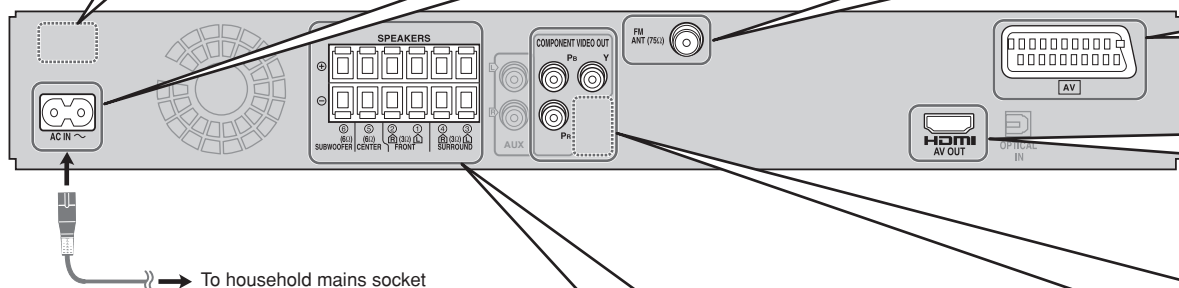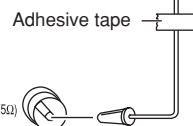
Connect to the speakers.

Attach the speaker-cable stickers to make connection easier.
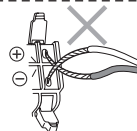
Be careful not to cross (short-circuit) or reverse the polarity of the speaker wires as doing so may damage the speakers.
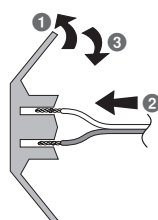
⊕
⊖

Speaker-cable sticker

Do not insert the wires beyond the wire insulation.

CENTER ⑤   CENTER ⑤

Insert the wire fully.

FRONT Rch ②   FRONT Rch ②   ② FRONT (R)

FRONT Lch ①   FRONT Lch ①   ① FRONT (L)

− +
Push!
⑤ CENTER

SUB WOOFER ⑥   SUB WOOFER ⑥

SURROUND Rch ④   SURROUND Rch ④   ④ SURROUND (R)

⊕
⑥ ⑤ ② ① ④ ③
⊖

SURROUND Lch ③   SURROUND Lch ③   ③ SURROUND (L)

PT850W
Connect the surround speaker cables to the wireless system (➡ page 11).

+: White
−: Blue

⑥ SUBWOOFER
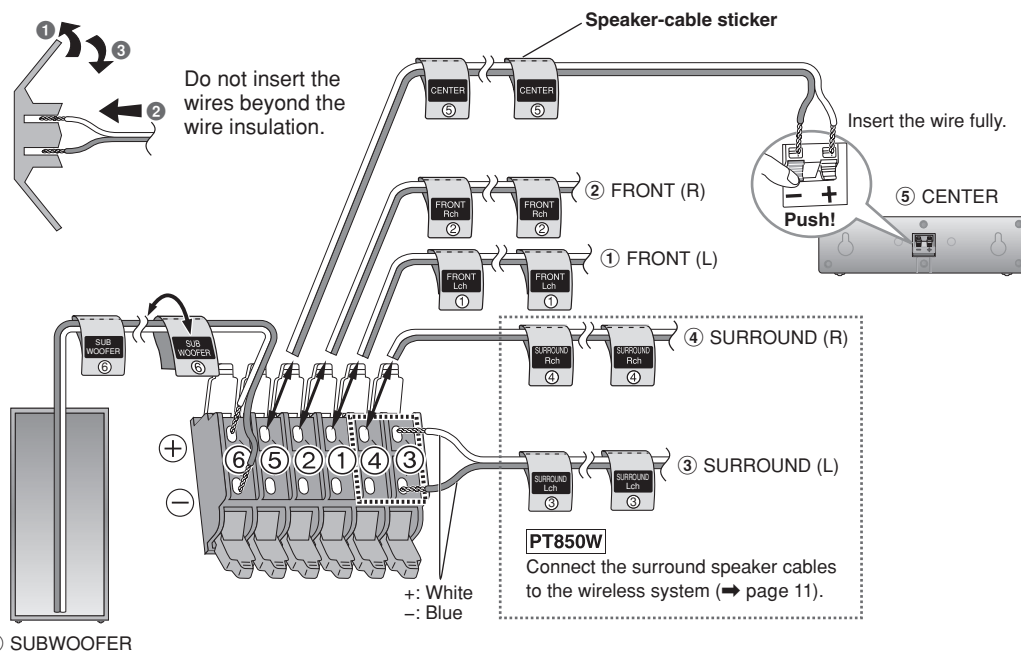
Connect to the various television terminals.

- Do not connect the unit through a video cassette recorder.
- Due to copy guard protection, the picture may not be displayed correctly.
- Turn the television off before connecting, and refer to the television's operating instructions.

For Continental Europe

■ Television with SCART terminal

Television
(not included)

SCART cable
(not included)
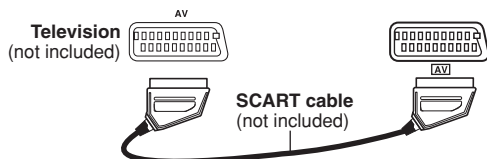
Using the SCART (AV) terminal

To improve picture quality, you can change the video signal output from the SCART (AV) terminal from "Video" to either "S-Video" or "RGB" to suit the type of television you are using. Select "S-Video/YPbPr" or "RGB/No Output" from QUICK SETUP (➡ page 14). Set "Video Mode" to "Off" (➡ page 28, "HDMI" tab).

This connection will also enable you to play audio from your television through your home theater system. Refer to "Operating other equipment" (➡ page 36).

■ Television with an HDMI terminal

HDMI-compatible television
(not included)

AV IN

HDMI cable (not included)

AV OUT
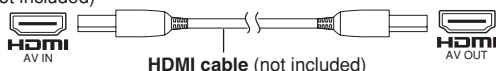
Use the HDMI connection to enjoy higher quality audio and video with a single cable.
- Set "Video Mode" to "On" and "Audio Output" to "On" (➡ page 28, "HDMI" tab).
- Set "Video Output Mode" (➡ page 24, Picture Menu).

VIERA Link ("HDAVI Control")

If your Panasonic television is a VIERA Link compatible television, you can operate your television synchronising with home theater operations or vice versa (➡ page 39).

Note
- Make the extra audio connection (➡ page 36) when you use "HDAVI Control" function.
- It is recommended that you use Panasonic's HDMI cable. [Recommended part number: RP-CDHG15 (1.5 m), RP-CDHG30 (3.0 m), RP-CDHG50 (5.0 m), etc.]
- Non-HDMI-compliant cables cannot be utilised.

For Southeast Asia, Thailand, the Middle East, South Africa, Saudi Arabia, Kuwait, Australia and N.Z.

■ Television with a VIDEO IN terminal

Television
(not included)

VIDEO IN

Video cable
(included)

COMPONENT VIDEO OUT
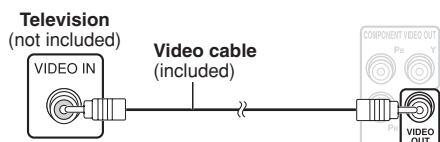
VIDEO OUT

■ Television with COMPONENT VIDEO IN terminals

Video cables
(not included)

COMPONENT VIDEO IN

Y

PB

PR

COMPONENT VIDEO OUT

Television
(not included)
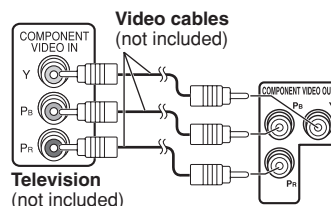
Using the COMPONENT VIDEO OUT terminals

These terminals can be used for either interlaced or progressive output. Connection using these terminals outputs the color difference signals (P_B/P_R) and luminance signal (Y) separately in order to achieve high fidelity in reproducing colors.

- The description of the component video input terminals depends on the television or monitor (example: Y/P_B/P_R, Y/B-Y/R-Y, Y/C_B/C_R).
- Connect to terminals of the same color.

To enjoy progressive video
- Connect to a progressive output compatible television.
  ① Set "Video Mode" to "Off" (➡ page 28, "HDMI" tab).
  ② Set "Video Output Mode" to "480p" or "576p", and then follow the instructions on the menu screen (➡ page 24, Picture Menu).

For Continental Europe

- Panasonic televisions with 625 (576)/50i·50p, 525 (480)/60i·60p input terminals are progressive compatible. Consult the manufacturer if you have another brand of television.

Performing QUICK SETUP

The QUICK SETUP screen assists you to make necessary settings.

To display the picture from this main unit, switch on the television and change the television's input mode which is connected to this main unit (example : VIDEO 1, AV 1, etc.).

To change your television's input mode, refer to its operating instructions.
• This remote control is able to perform some basic television operations (➡ page 40).

2 Select "DVD/CD".

DVD

1 Switch on the main unit.

3 Shows the QUICK SETUP screen

(Press and hold)

4 Follow the messages and make the setting.
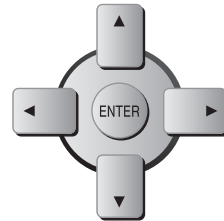
5 Finish the QUICK SETUP.

6 Press to exit.

To change these settings later
Select "QUICK SETUP" in "Others" tab (➡ page 29).

■ Details of settings

Menu language Choose the language for the on-screen messages.	• <u>English</u> • (Language options)※1
TV Type Select to suit the type of television.	• <u>Standard (Direct View TV)</u> • CRT Projector • LCD TV/Projector • Projection TV • Plasma TV
TV Aspect Choose the setting to suit your television and preference.	• <u>4:3</u>: Regular aspect television • 16:9: Widescreen television
Video Out (AV/Component)※2 Choose the video signal format to be output from the SCART (AV) and Component terminal.	• <u>Video/YPbPr</u> • S-Video/YPbPr • RGB/No Output

※1 Language options :

   For Continental Europe, the Middle East, South Africa, Saudi Arabia and Kuwait : Français, Español, Deutsch, Polski, Русский, Česky, Magyar

   For Southeast Asia and Thailand : 中文

   For Australia and N.Z. : Français, Español, Deutsch, Italiano, Nederlands, Svenska, Polski

※2 **For Continental Europe**

• Underlined items in the above table are the factory preset.

🎼 Disc information

Discs that can be played

■ Commercial discs

Disc	Logo	Indicated in these instructions by	Remarks
DVD-Video	DVD VIDEO / DVD VIDEO	DVD-V	High quality movie and music discs.
DVD-Audio[1]	DVD AUDIO	DVD-A	Some DVD-Audio discs contain DVD-Video content. To play DVD-Video content, select "Play as DVD-Video" in Other Menu (➡ page 26).
Video CD	COMPACT disc DIGITAL VIDEO / COMPACT disc SUPER VIDEO	VCD	Music discs with video. Including SVCD (Conforming to IEC62107).
CD	COMPACT disc DIGITAL AUDIO / COMPACT disc DIGITAL AUDIO TEXT	CD	Music discs

■ Recorded discs (○: Playable, ✕: Not playable)

Disc	Logo	Recorded on a DVD video recorder, etc.		Recorded on a personal computer, etc.					Finalizing[7]
		DVD-VR [3]	DVD-V [5]	WMA	MP3	JPEG	MPEG4 [9]	DivX [10, 11]	
DVD-RAM	DVD RAM RAM4.7	○	—	✕	○	○	○	○	Not necessary
DVD-R/RW	DVD R R4.7 / DVD RW	○	○	✕	○	○	○	○	Necessary
DVD-R DL	DVD R R DL	○[4]	○	✕	✕	✕	✕	✕	Necessary
+R/+RW	—	✕	(○)[6]	✕	✕	✕	✕	✕	Necessary
+R DL	—	✕	(○)[6]	✕	✕	✕	✕	✕	Necessary
CD-R/RW[2]	—	—	—	○	○	○	○	○	Necessary[8]

- It may not be possible to play all the above-mentioned discs in some cases due to the type of disc, the condition of the recording, the recording method, or how the files were created (➡ page 30, Tips for making data discs).

[1] **For Continental Europe**
[2] This unit can play CD-R/RW recorded with CD-DA or Video CD format.
  WMA MP3 JPEG This unit also plays HighMAT discs.
[3] Discs recorded on DVD video recorders or DVD video cameras, etc. using Version 1.1 of the Video Recording Format (a unified video recording standard).
[4] Discs recorded on DVD video recorders or DVD video cameras using Version 1.2 of the Video Recording Format (a unified video recording standard).
[5] Discs recorded on DVD video recorders or DVD video cameras using DVD-Video Format.
[6] Recorded using a format different from DVD-Video Format, therefore, some functions cannot be used.
[7] A process that allows play on compatible equipment. To play a disc that is displayed as "Necessary" on this unit, the disc must first be finalized on the device it was recorded on.
[8] Closing the session will also work.
[9] MPEG4 data recorded with the Panasonic SD multi cameras or DVD video recorders [conforming to SD VIDEO specifications (ASF standard)/MPEG4 (Simple Profile) video system/G.726 audio system].
[10] Functions added with DivX ultra are not supported.
[11] Plays all versions of DivX® video (including DivX®6) with standard playback of DivX® media files. Certified to the DivX Home Theater Profile.

Note about using a DualDisc
- The digital audio content side of a DualDisc does not meet the technical specifications of the Compact Disc Digital Audio (CD-DA) format so playback may not be possible.

■ Discs that cannot be played
DVD-RW version 1.0, DVD-ROM, CD-ROM, CDV, CD-G, SACD, Photo CD, DVD-RAM that cannot be removed from their cartridge, 2.6-GB and 5.2-GB DVD-RAM, and "Chaoji VCD" available on the market including CVD, DVCD and SVCD that do not conform to IEC62107.

■ Video systems
- This unit can play PAL and NTSC, but your television must match the system used on the disc.
- PAL discs cannot be correctly viewed on an NTSC television.
- This unit can convert NTSC signals to PAL 60 for viewing on a PAL television (➡ page 28, "NTSC Disc Output" in "Video" tab).

Main unit

Standby/on switch [⏻/I] (18)
Press to switch the unit from on to
standby mode or vice versa. In standby
mode, the unit is still consuming a small
amount of power.

MUSIC PORT jack
Connect an external device **(37)**
`PT550` ※3 `PT850` `PT850W`
Auto speaker setup **(38)**

⏏ OPEN/CLOSE
Open or close the
disc tray **(18)**

►/MEMORY
Disc playback **(18)**,
Memorise the receiving
radio stations **(32)**

■/-TUNE MODE/–FM MODE
Stop playback, Select the tuning mode **(32)**,
Adjust the FM reception condition **(32)**

I◄◄/◄◄, ►►/►►I / ∨ TUNE ∧
Skipping or slow-search play,
Select the radio stations **(32)**

`PT550` ※3
`PT850`
`PT850W`

MUSIC PORT
SETUP MIC

Remote control
signal sensor

Display

VOLUME –, +
Turn the volume
up or down **(18)**
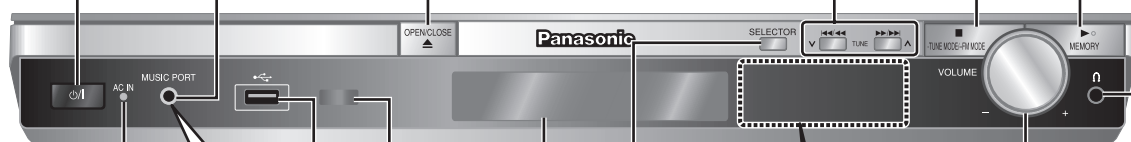
•⟜ USB jack
Connect a USB device **(37)**

MIC VOL

1   MIC   2

MIN   MAX

**For Southeast Asia, Thailand, the Middle
East, South Africa, Saudi Arabia and Kuwait**

MIC jack
Connect a microphone **(34)**
MIC VOL
Adjust the microphone volume **(34)**

AC supply indicator [AC IN]
This indicator lights when the unit
is connected to the AC mains
supply.

SELECTOR (18, 32)

For Continental Europe

⟶ DVD/CD → USB → FM → AV※2 ⟶
└ MUSIC P. ← D-IN (Digital In) ← AUX ←┘

**For Southeast Asia, Thailand, the Middle East,
South Africa, Saudi Arabia, Kuwait, Australia and N.Z.**

⟶ DVD/CD → USB → FM → AUX ⟶
└── MUSIC P. ← D-IN (Digital In) ←──┘
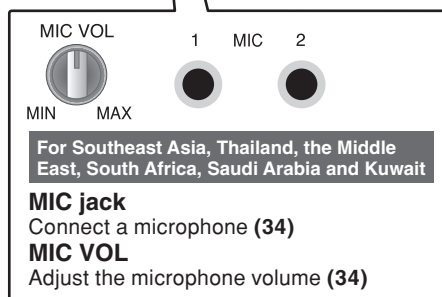
Headphones
(not included)

Headphone plug type:
Ø3.5 mm stereo mini plug
• Reduce the volume before
  connecting.
• Audio is automatically
  switched to 2-channel stereo.
• To prevent hearing damage,
  avoid listening for prolonged
  periods of time.

Remote control

Television operations **(40)**

Switch the main unit on or off **(18)**

Change the television's video input mode **(40)**

Select disc's title numbers and etc.,
Enter numbers **(19)**

Select preset radio stations **(32)**

Show a disc top menu **(19)**
or program list **(19)**

※1 −FUNCTIONS −KARAOKE

Show on-screen menu **(23)**,
※1Karaoke **(34)**

Show the display on the main unit **(19)**,
This function enables you to turn off the unit
automatically after the set time
SLEEP 30 → SLEEP 60 → SLEEP 90
└── OFF ← SLEEP 120 ←──┘
To cancel the timer
Press and hold [−SLEEP] to select "OFF".
To confirm the remaining time
Press and hold [−SLEEP] again.

Adjust the television volume **(40)**

Select the source
DVD: DVD/CD **(14)**
FM (32)
EXT-IN: USB **(37)**, AV※2 **(40)**, AUX **(36)**,
D-IN **(40)**, MUSIC P. **(37)**

Start up and play a disc automatically,
Control both the home theater system and the
television **(39)**

Adjust the volume of the main unit **(34)**

Basic operations for play **(19)**

Show a disc menu or play list **(19)**

Select or confirm menu items on the
television screen **(14)**, Frame-by-frame **(19)**

Return to previous screen **(19)**
Show the Setup menu **(14)**

SW.LEVEL **(33)**

−EQ −SRD ENH **(33)**

C.FOCUS **(33)**

□□ PL II/ S.SRD **(33)**

※1 −SW.LEVEL −ECHO **(33, 35)**

TEST **(34)**

PLAY MODE −CH SELECT **(20, 34)**

Panasonic
THEATER SYSTEM

PT550 ※3 TEST
PT850 −AUTO
PT850W **(34, 38)**

To mute the sound
To cancel
• Press [MUTING] again or adjust the
 volume.
• Muting is cancelled when you switch the
 unit to standby.

※1 **For Southeast Asia, Thailand, the Middle East, South Africa, Saudi Arabia and Kuwait**

※2 **For Continental Europe** "AV" works only when the scart cable is connected (➡ page 13).

※3 **For Australia and N.Z.** (For PT550)

Using the main unit

1 **Power on.**

⏻/|

2 **Select "DVD/CD".**

SELECTOR

3 **Load a disc in the tray.**

OPEN/CLOSE
▲

• Load double-sided discs so the label for the side you want to play is facing up.
• For DVD-RAM, remove the disc from its cartridge before use.

4 **Adjust the volume and start playback.**

VOLUME
− + ⟹ ►⦾ MEMORY

Using the remote control

⏻

DVD

Numeric buttons

CANCEL

|◄◄, ►►|,
∨, ∧, **SKIP**

■, **STOP**

Ⅱ, **PAUSE**

**TOP MENU,
DIRECT NAVIGATOR**

FL DISPLAY

◄◄, ►►,
SLOW/SEARCH

►, **PLAY**

**MENU,
PLAY LIST**

▲, ▼, ◄, ►,
ENTER

-RETURN

Panasonic
THEATER SYSTEM
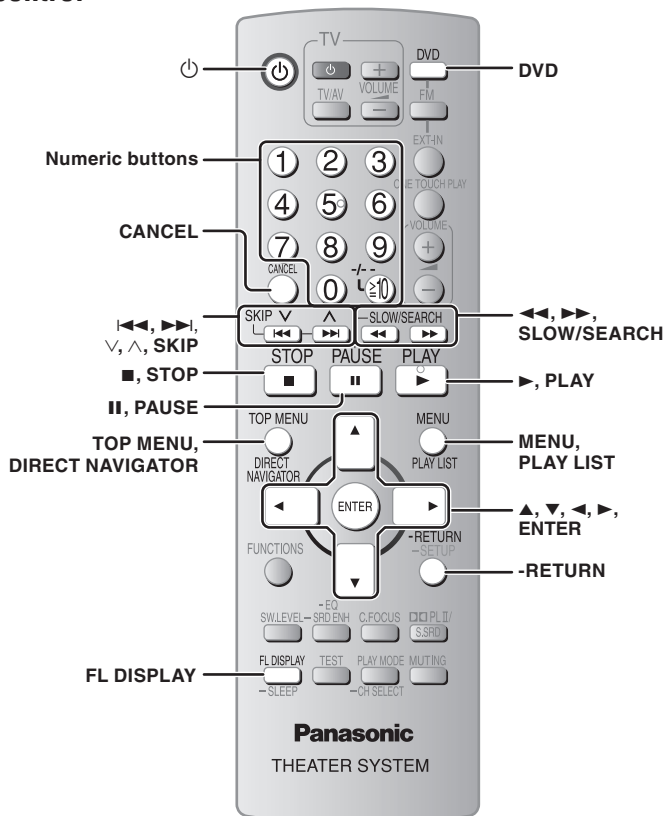
Stop

STOP ■ The position is memorised while "RESUME" is on the display.
- Press [►, PLAY] to resume.
- Press [■, STOP] again to clear the position.

Pause

PAUSE ■ • Press [►, PLAY] to resume playback.

Search (during play)

SLOW/SEARCH ◄◄ ►►
- Play speed increases up to 5 steps.
- Press [►, PLAY] to resume normal playback.

Slow-motion play (during pause)

SLOW/SEARCH ◄◄ ►►
- Play speed increases up to 5 steps.
- **VCD** Slow motion play is for forward direction only.
- Except **MPEG4** **DivX**.
- Press [►, PLAY] to resume normal playback.

Main unit display

FL DISPLAY – SLEEP

DVD-A **DVD-V** **DVD-VR** **WMA** **MP3** **MPEG4** **DivX**
Time display ↔ Information display

JPEG
When Slideshow (➡ page 24) is on:
SLIDE ↔ Information display
When Slideshow (➡ page 24) is off:
PLAY ↔ Information display

Skip

SKIP ∨ ∧ |◄◄ ►►| _____

WMA **MP3** **JPEG** **MPEG4** **DivX**
[▲, ▼]: Group skip
[◄, ►]: Content skip
- This feature does not work during program and random play (➡ page 20).

On-screen item select

Select — ▲ — Confirm
◄ ENTER ►
▼ — Select
Select

Enter numbers

① ② ③
④ ⑤ ⑥
⑦ ⑧ ⑨
⑩ ⓪ ⩾⑩
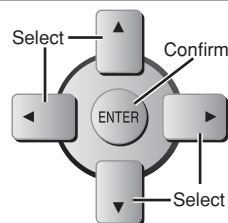
DVD-A **DVD-V** (while stopped) **DVD-VR** **VCD** **CD**
Example: To select 12,
⩾⑩ ⇨ ①, ②

VCD with Playback control (PBC)
Press [■, STOP] and then press the numeric buttons to cancel the PBC functions.

Note
- The numeric buttons that can function depend on the number of tracks on the VCD.

ENTER
WMA **MP3** **JPEG** **MPEG4** **DivX**
Example: To select 123,
①, ②, ③ ⇨ ENTER

Cancel the numbers

CANCEL _____

Disc menus

TOP MENU / DIRECT NAVIGATOR
DVD-A **DVD-V**
Shows a disc top menu.
DVD-VR
Shows the program (➡ page 22).

MENU / PLAY LIST
DVD-V
Shows a disc menu.
DVD-VR
Shows the playlist (➡ page 22).

-RETURN –SETUP
VCD with Playback control (PBC)
Shows a disc menu.

Frame-by-frame (during pause)

▲ ◄ ENTER ► ▼
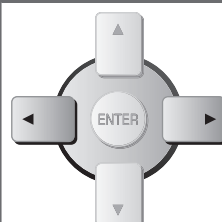
DVD-A (Motion picture part)

DVD-V **DVD-VR** **VCD**
- **VCD** Forward direction only.

Return to previous screen

-RETURN –SETUP _____

Note
- **DISC CONTINUES TO ROTATE WHILE MENUS ARE DISPLAYED.**
Press [■, STOP] when you finish to preserve the unit's motor and your television screen.
- Total title number may not be displayed properly on +R/+RW.

ENGLISH

DISC OPERATIONS

🎵 Advanced play

ENGLISH

DISC OPERATIONS

Displaying current playback condition

FUNCTIONS ⬜ ➪ →Functions Menu → Basics → Details ⌐
(➡ page 23)
└─ Off (No on-screen display) ←

■ Basics
Example: DVD-V

Current playback number | Elapsed play time

Title **1**   Chapter **4**   Time **0:41:23**

Playback condition ➔

Program Playback

Play mode   Current position
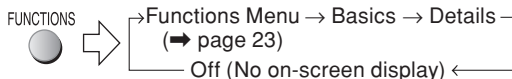
■ Details
Example: DVD-V

■ Details-DVD-Video

Audio information —— Audio   1   --- DTS 3/2.1ch
Subtitle information —— Subtitle   – ---
Angle information —— Angle   1/1
Aspect of current title —— Source Aspect 4:3
Total play time of —— Title Total Time 0:54:28
current title
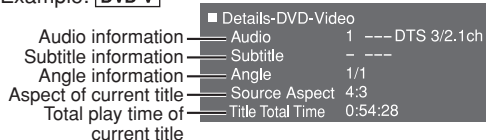
- MPEG4 DivX Video and audio information is not displayed during search.

All group, Program and Random play

DVD-A DVD-V VCD CD WMA MP3 JPEG MPEG4 DivX

PLAY MODE
⬜
– CH SELECT   (during stop)

⬇

Program → Random → Off (Normal play)
└─── All group (DVD-A) ←───┘
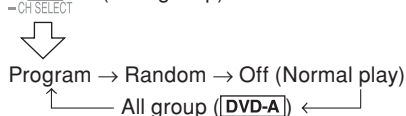
To exit all group, program or random play mode while stopped.

PLAY MODE
⬜
– CH SELECT   (several times)

- Selecting "Play as Data Disc" in Other Menu (➡ page 26) will be effective if the following functions are not available to play WMA, MP3, JPEG, MPEG4 or DivX video contents.
- DVD-V Some items cannot be played even if you have programmed them.
- DVD-A Some discs contain bonus groups. If a password screen appears after selecting a group, enter the password with the numeric buttons to play the bonus group. Refer also to the disc's jacket.

All group play

DVD-A

PLAY
▶

All Group Playback

Press PLAY to start

Program play (up to 32 items)

1 Press the numeric buttons to select the item.
(WMA MP3 JPEG MPEG4 DivX Press [ENTER] to register the selection.)

Example: DVD-V

○ Program Playback

Choose a title and chapter.
No.   Title   Chapter   Time
1   Play
                          Clear
                          Clear all

▲▼◄► to select and press ENTER   PLAY to start
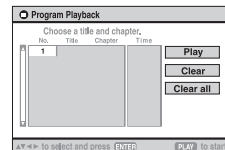
- Repeat this step to program other items.
- To select a 2-digit number
Example: To select 12,

-/- -
⩾10 ➪ 1, 2

WMA MP3 JPEG MPEG4 DivX

1, 2 ➪ ENTER
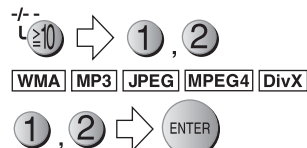
2 PLAY
▶

To select an item using the cursor buttons
Press [ENTER] and [▲, ▼] to select an item, then press [ENTER] again to confirm.

To select all the items
While the "Chapter", "Track" or "Content" field is highlighted, press [▲, ▼] to select "ALL".
Then press [ENTER] again to confirm.

Example: DVD-V

Chapter   Time
⁝ ALL
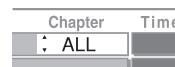
To change the selected program
1. Press [▲, ▼] to select the program number.
2. Press the numeric buttons to change each item. (WMA MP3 JPEG MPEG4 DivX Press [ENTER] to confirm the selection.)

To clear the selected program
1. Press [▲, ▼] to select the program number.
2. Press [CANCEL] (or press [▲, ▼, ◄, ►] to select "Clear" and press [ENTER]).

To clear the whole program
Select "Clear all" with [▲, ▼, ◄, ►] and press [ENTER].
The whole program is also cleared when the unit is turned off, the disc tray is opened or another source is selected.

Random play

1 DVD-A DVD-V WMA MP3 JPEG MPEG4 DivX
Press the numeric buttons to select a group or title. (WMA MP3 JPEG MPEG4 DivX Press [ENTER] to register the selection.)

Example: DVD-V

Random Playback

Choose a title.
Title **1**

▲▼ to select   PLAY to start
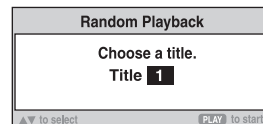
Discs which have multiple groups.
DVD-A

- To enter all groups, press [◄, ►] to select "All" and press [ENTER].
- To deselect a group, press numeric buttons corresponding to the group you want to clear.

2 PLAY
▶

RQTX0038

20

🎵 Playing data discs using navigation menus

Playing data discs

WMA MP3 JPEG MPEG4 DivX

Selecting "Play as Data Disc" in Other Menu (➡ page 26) will be effective if the following functions are not available to play WMA, MP3, JPEG, MPEG4 or DivX video contents.
• Playing HighMAT™ discs (➡ page 22).

Playing items in order (Playback Menu)

1 TOP MENU

DIRECT NAVIGATOR

● Playback Menu	
All	Total 436
Audio	Total 7
Picture	Total 427
Video	Total 2
▲▼ to select and press ENTER	

— MPEG4 and DivX video
— JPEG
— WMA/MP3
— All contents
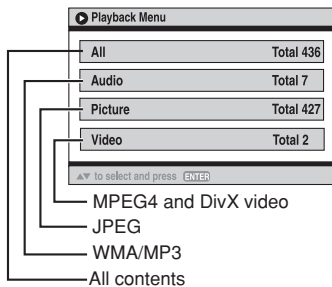
2 **To select "All", "Audio", "Picture" or "Video".**

▲ , ▼ ⇨ ENTER

To exit the screen
Press [TOP MENU].

Playing from the selected item (Navigation Menu)

1 MENU

PLAY LIST

Group and content number currently playing

⊙ Navigation Menu	5 1 JPEG --:--
002 My favorite2\005 Japanese\001 Lady Starfish	

Perfume
├ 001 My favorite1
├ 002 My favorite2
  ├ 001 Brazilian
  ├ 002 Chinese
  ├ 003 Czech
  ├ 004 Hungarian
  ├ **005 Japanese ◄**
  ├ 006 Mexican
  ├ 007 Philippine
  ├ 008 Swedish
  ├ 009 Piano
  └ 010 Vocal

001 Lady Starfish ◄
002 Metal Glue
003 Life on Jupiter
004 Starperson
005 Starperson

Group 005/023   Content 0001/0005
[FUNCTIONS] to display the sub menu   [RETURN] to exit

🎨 : JPEG
🎵 : WMA/MP3
🎞 : MPEG4 and DivX video

Group   Content

2 **To select the group.**

◄ ⇨ ▲ , ▼ ⇨ ENTER

3 **To play content in the group in order.**

ENTER

To start play from the selected content.

▲ , ▼ ⇨ ENTER

To enjoy listening to WMA/MP3 contents while showing a JPEG image on the screen
Select a JPEG file first, and then select audio contents. (The opposite order is not effective.)

To exit the screen
Press [MENU].

■ Using the submenu

1 **While the Navigation Menu is displayed**
FUNCTIONS

2 **To select an item.**

▲ , ▼ ⇨ ENTER

Items shown differ depending on the type of disc.

✓Multi	Groups and contents are displayed
List	Contents only
Tree	Groups only
Thumbnail	Thumbnail images JPEG
Next group	To go to next group WMA MP3
Previous group	To go to previous group WMA MP3
All	WMA/MP3, JPEG, MPEG4 and DivX video
Audio	WMA/MP3 only
Picture	JPEG only
Video	MPEG4 and DivX video only
Help display	To switch between guide messages and the elapsed play time indicator
Find	To search by content or group title (➡ see below)

■ Searching by a content or a group title

Highlight a group title to search the group, or a content title to search its content.

1 **While the submenu is displayed (➡ see above)**
To select "Find".

▲ , ▼ ⇨ | ✱ A | Find |

2 **To select a character.**

▲ , ▼ ⇨ ENTER

• Repeat to enter another character.
• Lower case is also searched.
• Press [◄◄, ►►] to skip between A, E, I, O and U.
• Press [◄] to erase a character.
• Leave the asterisk (✱) when you search for the titles including the character you enter.
• Erase the asterisk (✱) to search for the titles starting with the character you enter. To add the asterisk (✱) again, display the submenu again and select "Find".

3 **To select "Find".**
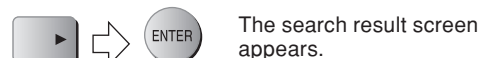
► ⇨ ENTER   The search result screen appears.

4 **To select the content or group.**

▲ , ▼ ⇨ ENTER

ENGLISH

DISC OPERATIONS

Playing HighMAT™ discs

WMA MP3 JPEG

1 TOP MENU

DIRECT
NAVIGATOR

2 **To select the item.**

▲ , ▼ , ◄ , ► ⇨ ENTER

• Repeat this step if necessary.
Example:

Menu: Takes you to the next menu which
shows play lists or another menu

New Playlist Item Long Name Display Te PAGE 1/3 HMW

| Menu1 | Play list1 | Menu2 |
| Play list2 | Menu3 | Play list3 |

◄ PREV   ▲ RETURN   NEXT►
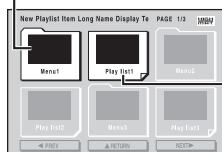
Playlist: Play starts

To change the menu background
Press [FUNCTIONS].
The background changes to the one recorded on the disc.

To exit the screen
Press [■, STOP].

Selecting from the list

1 *During play*

MENU

PLAY LIST

⇨

Playlist ←→ All By Artist ■ ▬

No.   Content title
1 Few times in summer ◄
2 Less and less
3 And when I was born
4 Quatre gymnopedies
5 You've made me sad
6 I can't quit him
7 Evening glory
8 Wheeling spin
9 Velvet Cuppernine
10 Ziggy starfish

▲▼◄► to select.   ENTER to play   RETURN to exit

Playlist
Group
Content
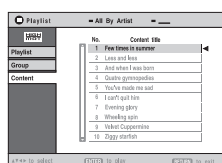
2 **To switch among "Playlist", "Group" and "Content" lists.**

◄ ⇨ ▲ , ▼

3 **To select an item**

► ⇨ ▲ , ▼ ⇨ ENTER

To exit the screen
Press [MENU].

Playing RAM and DVD-R/-RW (DVD-VR) discs

DVD-VR

• Titles appear only if the titles are recorded on the disc.
• You cannot edit programs, playlists and disc titles.

Playing the programs

1 TOP MENU

DIRECT
NAVIGATOR

2 **To select the program.**

▲ , ▼

• Press [►] to show the contents of the program and the disc.

3 ENTER

To exit the screen
Press [DIRECT NAVIGATOR].

Playing a playlist

Applicable only when the disc contains a playlist.

1 MENU

PLAY LIST

2 **To select the playlist.**

▲ , ▼

3 ENTER

To exit the screen
Press [PLAY LIST].

Playing the selected track in the CD Text disc

CD

Titles appear with CD Text disc playback.

1 TOP MENU   MENU

DIRECT   **OR**   PLAY LIST
NAVIGATOR

⇨

CD   🔀 1/23 63 : 00
Disc Title: All By Artist
Disc Artist: Pink Island
Track title: Long John Platinum
Track Artist: SHIPWRECKED

1. ♪ Ashley at Prom
2. ♪ City Penguin
3. ♪ Formura one
4. ♪ Soccer
5. ♪ Baseball
6. ♪ Neanderthal
7. ♪ Cartoons
8. ♪ Tribbles
9. ♪ White Dwarf
10. ♪ Discovery

▲▼ to select and press ENTER   RETURN to exit

2 **To select the track.**

▲ , ▼ ⇨ ENTER

• Press [FUNCTIONS] to show the playback condition and current position.

To exit the screen
Press [TOP MENU] or [MENU].

⚙ Using on-screen menus

2 Select the menu.

Select — Go to the next menu

Return to the previous menu — Confirm

Example: **DVD-V**

☑ Functions		
Title	1/2	✓ 1 English
Chapter	3/10	2 French
Time	0:24:31	3 Spanish
Audio	**1 English**	
Subtitle		
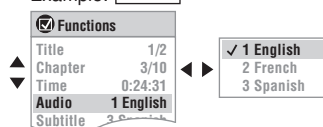
1 Display the "Functions" screen.

FUNCTIONS

3 Make the settings.

Select — Confirm

Example: **DVD-V**

☑ Functions		
Title	1/2	1 English
Chapter	3/10	✓ 2 French
Time	0:24:31	3 Spanish
Audio	1 English	
Subtitle		

4 Press to exit.

-RETURN
-SETUP

Panasonic
THEATER SYSTEM
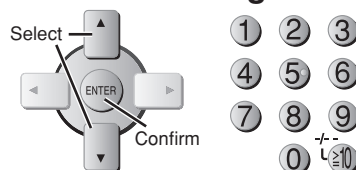
Items shown differ depending on the type of disc as well as the recording format.

Functions Menu

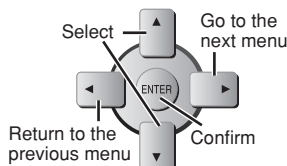| Program Group Title Chapter Track Playlist Content	**To start from a specific item** Example: **DVD-VR** To select program 12 Press the numeric buttons: ①, ② ⇨ ENTER ☑ Functions Program 2/16 — Program Search ↕ 12 Time 0:34:15 Audio	**Audio**	**Signal type/data** LPCM/PPCM/⬚⬚Digital/DTS/MP3/MPEG: Signal type kHz (Sampling frequency)/bit/ch (Number of channels) Example: 3 /2 .1ch 　.1: Low frequency effect 　(not displayed if there is no signal) 　0: No surround 　1: Mono surround 　2: Stereo surround (left/right) 1: Center 2: Front left + Front right 3: Front left + Front right + Center • **DivX** It may take some time for play to start if you change the audio on a DivX video disc. **WMA** **MP3** **To display the current bitrate or sampling frequency**
Time	(Time Slip does not work with +R/+RW discs.) **To skip incrementally or decrementally (Time slip)** (during play) 1. Press [ENTER] twice to show the Time Slip indicator. 2. Press [▲, ▼] to select the time and press [ENTER]. 　• To change the steps quickly, press and hold [▲, ▼]. **To change the elapsed or remaining time display**	**Still Picture**※	**DVD-A** **To switch still pictures**
		Number Select	**VCD** with playback control **To select number** While the disc menu is displayed Press [▲, ▼] ⇨ Press [ENTER] • To change the numbers more quickly, press and hold [▲, ▼].
Video	**MPEG4** **DivX** **To display the pixel number** **DivX** Fps (frame per second) is also displayed.		
		Thumbnail	**JPEG** **To show thumbnail images**
Audio	**DVD-A** **DVD-V** **DivX** (with multiple soundtracks) **To select audio soundtrack** **DVD-VR** **VCD** **DivX** **To select "LR", "L", "R" or "L+R"** **DVD-V** (Karaoke disc) (➡ page 34, Enjoying Karaoke) **To select "ON" or "OFF" for vocals** **To select "OFF", "V2", "V1" or "V1+V2" for different vocal selections** • Read the disc's instructions for details.	**Subtitle**	**DVD-V** **DivX** (with multiple subtitles) **VCD** (SVCD only) **To select subtitle language** • On +R/+RW, a subtitle number may be shown for subtitles that are not displayed. • **DVD-VR** "On" or "Off" appears only with discs that contain subtitle on/off information (Subtitle on/off information cannot be recorded using Panasonic DVD Recorders).

※ **For Continental Europe**

Functions Menu (continued)

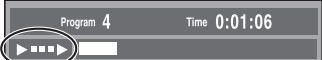|			
Marker (VR)	DVD-VR To recall a marker recorded on DVD-Video recorders Press [▲, ▼] ⇨ Press [ENTER]	**Slideshow**	**To turn the slideshow on/off** **On ↔ Off** **To change the slideshow timing** **1 (Fast) to 5 (Slow)**
Angle	(with multiple angles) **To select a video angle**	**Other Settings**	(➡ see below)
Rotate Picture	**To rotate pictures**		

Other Settings

Play Speed	DVD-A (Motion picture part) DVD-V DVD-VR **To change play speed** – from "x0.6" to "x1.4" • Press [►, PLAY] to resume normal playback. • After you change the speed – Dolby Pro Logic II has no effect. – Audio output switches to 2-channel stereo. – Sampling frequency of 96 kHz is converted to 48 kHz. • This function may not work depending on the disc's recording.
Karaoke[※1]	DVD-V (➡ page 34)

■ Play Menu

Repeat	(Only when the elapsed play time can be displayed.) DVD-A : Off → Track → Group※ DVD-V : Off → Chapter → Title※ DVD-VR : Off → Program → All During playlist play: Off → Scene → Playlist VCD CD : Off → Track → All WMA MP3 MPEG4 DivX : Off → Content → Group※ JPEG : Off → Group※ ※ "All" is displayed during all group (DVD-A),program or random play.
A-B Repeat	Except DVD-VR (Still picture part) JPEG MPEG4 DivX **To repeat a specified section** Press [ENTER] at the starting and ending points. Press [ENTER] again to cancel.
Advanced Disc Review	DVD-V (Except +R/+RW) DVD-VR (Except still picture part) Allows you to browse the disc contents and start playing from the selected position. You can select either "Intro Mode" or "Interval Mode" in "Advanced Disc Review" in the "Disc" tab (➡ page 27). Example: DVD-VR Program 4 Time 0:01:06 ►▪▪▪► Press [►, PLAY] when you find a title or program of your choice. • This may not work depending on the disc and the play position. • DVD-VR This does not work when playing a playlist (➡ page 22).

■ Picture Menu
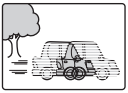
Picture Mode	**Normal**	
	Cinema1	: Mellows images and enhances detail in dark scenes.
	Cinema2	: Sharpens images and enhances detail in dark scenes.
	Animation	: Suitable for animation.
	Dynamic	: Enhances the contrast for powerful images.
	User	: Press [ENTER] to select "**Picture Adjustment**" (➡ see below).
	Picture Adjustment	
	Contrast	: Increases the contrast between light and dark parts of the picture.
	Brightness	: Brightens the picture.
	Sharpness	: Adjusts the sharpness of the edges of horizontal lines.
	Colour (or **Color**)	: Adjusts the shade of the picture's color.
	Gamma	: Adjusts the brightness of dark parts.
	Depth Enhancer	: Reduces the rough noise in the background to give a greater feeling of depth.

Video Output Mode	**To select suitable picture quality with your television**
	(Video recordings will be converted to, and output as, high-definition video.)
	
	When HDMI connection is being used and "Video Mode" (➡ page 28, "HDMI" tab) is set to "On"
	
	      ※**480p/576p/720p/1080p** (progressive)
	      ※**480i/576i/1080i** (interlace)
	• Select a video output with an "✱" mark. The "✱" mark shows that the video output is acceptable with your television.
	• Selecting a video output without an "✱" mark can result in the picture being distorted. If the picture is distorted, press and hold [CANCEL] until the picture is displayed correctly.
	• Output from the COMPONENT VIDEO OUT terminals will be "480i" or "576i".
	
	When HDMI connection is **not** being used and "Video Mode" (➡ page 28, "HDMI" tab) is set to "Off"
	
	      ※**480p/576p** (progressive)
	      ※**480i/576i** (interlace)
	
	When you select "xxx※p" (progressive) and a confirmation screen appears, select "Yes" only if connecting to a progressive output compatible television.
	※ The numbers displayed depend on the disc being played. One of the above numbers is displayed.	

[※1] **For Southeast Asia, Thailand, the Middle East, South Africa, Saudi Arabia and Kuwait**

Other Settings (continued)

■ *Picture Menu (continued)*

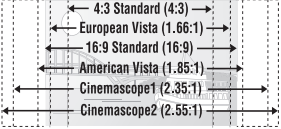|	
Transfer Mode	If you have chosen "xxx×p" (progressive) or "1080i" (interlace) (➡ page 24, "Video Output Mode"), select the method of conversion for progressive output to suit the type of material. • The setting will return to Auto or Auto1 when the disc tray is opened, the unit is turned off or another source is selected. When playing PAL discs or MPEG4 or DivX video contents **Auto** : Automatically detects the film and video content, and appropriately converts it. **Video** : Select when using Auto, and the content is distorted. **Film** : Select this if the edges of the film content appear jagged or rough when Auto is selected. However, if the video content is distorted as shown in the illustration to the right, then select Auto. When playing NTSC discs **Auto1** : Automatically detects the film and video content, and appropriately converts it. **Auto2** : In addition to Auto1, automatically detects film contents with different frame rates and appropriately converts it. **Video** : Select when using Auto1 and Auto2, and the content is distorted.
Source Select	DivX When you select "Auto" the constructing method of the DivX contents is automatically distinguished and output. If the picture is distorted, select "I (Interlace)" or "P (Progressive)" depending on which constructing method was used when the contents were recorded to disc. **Auto** **I (Interlace)** **P (Progressive)**
HD Picture Enhancer	This works when the HDMI connection is being used and "Video Mode" (➡ page 28, "HDMI" tab) is set to "On". **To sharpen the "720p", "1080i" and "1080p" picture quality** **Off ↔ 1 ↔ 2 ↔ 3** (sharpest picture)

HDMI Colour Space (or **HDMI Color Space**)	This works when the HDMI connection is being used and "Video Mode" (➡ page 28, "HDMI" tab) is set to "On".
	
	To select suitable picture colour with your television
	    RGB
	    YCbCr (4:4:4)
	    YCbCr (4:2:2)
	• If the setting above is not compatible with your television, it will not be displayed.
	• "RGB Range" (➡ page 28, "HDMI" tab) is available when "RGB" is selected.

■ **Audio Menu**

Dolby Pro Logic II	(➡ page 33, Dolby Pro Logic II)
Dialogue Enhancer	**To make the dialogue in movies easier to hear** DVD-V (Dolby Digital, DTS, MPEG, 3-channel or higher, with the dialogue recorded in the center channel) DivX (Dolby Digital, 3-channel or higher, with the dialogue recorded in the center channel) **On ↔ Off**

■ **Display Menu**

Information	JPEG : **On ↔ Off**
Subtitle Position	**0 to –60**
Subtitle Brightness	**Auto, 0 to –7**
4:3 Aspect	**To select how to show images made for 4:3 aspect screens on a 16:9 aspect television** **Normal** : Laterally stretches images. **Auto** : Expands 4:3 letterbox images to fill more of the screen. Other images appear in full in the center of the screen. **Shrink** : Images appear in the center of the screen. **Zoom** : Expands to 4:3 aspect ratio. If your television has a similar feature, use it instead for a better effect.
Just Fit Zoom	DVD-A (Motion picture part) DVD-V DVD-VR VCD **To select the appropriate screen size to fit your television screen** **Auto** **4:3 Standard** **European Vista** **16:9 Standard** **American Vista** **Cinemascope 1** **Cinemascope 2** Example: ←— 4:3 Standard (4:3) —→ ←— European Vista (1.66:1) —→ ←— 16:9 Standard (16:9) —→ ←— American Vista (1.85:1) —→ ←— Cinemascope1 (2.35:1) —→ ←— Cinemascope2 (2.55:1) —→ MPEG4 DivX **Standard** (x0.25 full-screen) **Original** (actual recorded size) **Full** (full-screen) • This function may not work depending on the disc's recording.

🎵 *Using on-screen menus (continued)*

Other Settings (continued)

■ *Display Menu (continued)*

Manual Zoom	**To zoom in and out manually** – in 0.01-unit steps from "x1.00" to "x1.60" – in 0.02-unit steps from "x1.60" to "x2.00" – in 0.05-unit steps from "x2.00" to "x4.00" (MPEG4 DivX only) • To change the steps quickly, press and hold [▲, ▼]. • MPEG4 DivX It may not be possible to zoom up to "x4.00" depending upon the connected television and its settings.
Bit Rate Display	DVD-A (motion picture part) DVD-V DVD-VR VCD MPEG4 DivX **On ↔ Off**
GUI See-through	**To make the on-screen menu transparent** **Off, On, Auto**
GUI Brightness	**To adjust the on-screen menu brightness** **–3 to +3**
HDMI Status	Indicates various information when connected with HDMI AV OUT terminal. (➡ see below, Confirming HDMI information)

■ **Other Menu**

Setup	(➡ page 27)
Play as DVD-Video※ or **Play as DVD-Audio**※	**To play DVD-Video contents of DVD-Audio** Select "Play as DVD-Video".
Play as DVD-VR, Play as HighMAT or **Play as Data Disc**	**To use functions for data discs (➡ page 21)** (To play MP3, JPEG, MPEG4 or DivX video contents on DVD-RAM, or to play a HighMAT disc without using HighMAT function) Select "Play as Data Disc".

※ **For Continental Europe**

Confirming HDMI information

Example:

■ **HDMI Status — HDMI is connected.** ————————————— Connection status

HDMI Information

Audio Stream	PCM	— Shows the output signal type.
Max Channel	2ch	— Shows the number of audio channels.
Colour Space	YCbCr (4:4:4)/YCbCr (4:2:2)/RGB	(➡ page 25, HDMI Colour Space)
Video Format	480i/576i/480p/576p 720p/1080i/1080p	(➡ page 24, Video Output Mode)

Note

All possible types of output are displayed.
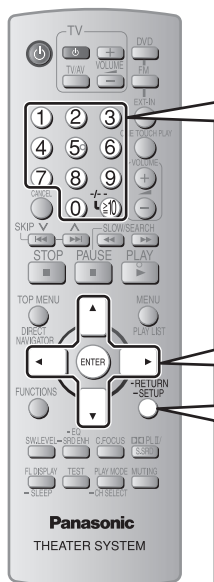• The current output for "Audio Stream", "Video Format" and "Colour Space" (or "Color Space") will be underlined.
  (If you select a video output without an "✳" mark in the "Video Output Mode" in Picture Menu, the selected video format will not be underlined.)
• When "Off" is selected in "Audio Output" (➡ page 28, "HDMI" tab), "– – –" will be displayed in "Audio Stream" and "Max Channel".

Changing the player settings

Setup

Tab	Item	Setting
Disc	Audio	English
Video	Subtitle	Automatic
Audio	Menus	English
HDMI	Advanced Disc Review	
Display		Intro Mode
Others	Ratings	Level 8

▲▼◄► to select and press ENTER   RETURN to exit
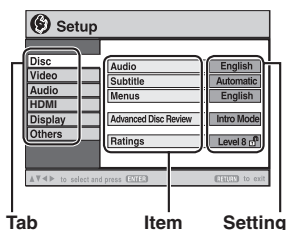
- If you have not performed QUICK SETUP (➡ page 14), the QUICK SETUP screen appears.

1 Display the Setup menu.

-RETURN
-SETUP

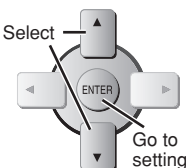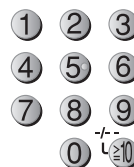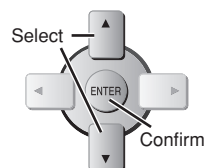(Press and hold)

2 Select the tab.

Select
Go to item

3 Select the item.

Select
Go to setting

4 Make the settings.

Select
ENTER
Confirm

① ② ③
④ ⑤ ⑥
⑦ ⑧ ⑨
⓪ ⩾10

5 Press to exit.

-RETURN
-SETUP

Panasonic THEATER SYSTEM
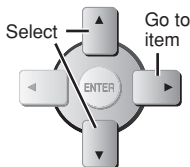
- The settings remain intact even if you switch the unit to standby.
- Underlined items are the factory settings in the following table.

QUICK SETUP enables successive settings of the items in the shaded area.

Player settings

■ "Disc" tab

Audio Choose the audio language.	• <u>English</u>	• (Language options)※1	• Original※2	• Other ✱✱✱✱※3
Subtitle Choose the subtitle language.	• <u>Automatic</u>※4	• English	• (Language options)※1	• Other ✱✱✱✱※3
Menus Choose the language for disc menus. Changing the menu language in QUICK SETUP also changes this setting.	• <u>English</u> • (Language options)※1 • Other ✱✱✱✱※3			
Advanced Disc Review (➡ page 24)	• <u>Intro Mode</u>: Reviews each title or program. • Interval Mode: Reviews not only each title or program but also each 10-minute interval within a title or program.			
Ratings Set a ratings level to limit DVD-Video play.	Setting ratings (When level 8 is selected) • <u>8 No Limit</u> • 1 to 7 • 0 Lock All: To prevent play of discs without rating levels.			
	Changing ratings (When level 0 to 7 is selected) • Unlock Player • Change Password • Change Level • Temporary Unlock			
	When you select your ratings level, a password screen is shown. Follow the on-screen instructions. **Do not forget your password.** A message screen will be shown if a DVD-Video disc exceeding the ratings level is inserted in the unit. Enter your password and then follow the on-screen instructions.			

※1 Language options :

For Continental Europe, the Middle East, South Africa, Saudi Arabia and Kuwait : French, Spanish, German, Polish , Russian, Czech and Hungarian

For Southeast Asia and Thailand : Chinese

For Australia and N.Z. : French, Spanish, German, Italian, Dutch, Swedish and Polish

※2 The original language designated on the disc is selected.
※3 Input a code number referring to the table (➡ page 44).
※4 If the language selected for "Audio" is not available, subtitle appears in that language (if available on the disc).

QUICK SETUP enables successive settings of the items in the shaded area.

Player settings (continued)

■ "Video" tab

TV Aspect Choose the setting to suit your television and preference.	• 4:3 Pan&Scan: Regular aspect television (4:3) The sides of the widescreen picture are cut off so it fills the screen (unless prohibited by the disc).
	• 4:3 Letterbox: Regular aspect television (4:3) Widescreen picture is shown in the letterbox style.
	• 16:9: Widescreen television (16:9)
TV Type Select to suit the type of television.	• Standard (Direct View TV) • CRT Projector • LCD TV/Projector • Projection TV • Plasma TV
Time Delay When connected with a Plasma display, adjust if you notice the audio is out of sync with the video.	• 0ms • 20ms • 40ms • 60ms • 80ms • 100ms
Video Out (AV/Component)※11 Choose the video signal format to be output from the SCART (AV) and Component terminal.	• Video/YPbPr • S-Video/YPbPr • RGB/No Output
Still Mode Specify the type of picture shown when paused.	• Automatic ※5• Field: The picture is not blurred, but picture quality is lower. ※5• Frame: Overall quality is high, but the picture may appear blurred.
NTSC Disc Output Choose PAL 60 or NTSC output when playing NTSC discs (➡ page 15, Video systems).	• PAL60: When connected to a PAL television. • NTSC: When connected to an NTSC television. (**For Southeast Asia and Thailand** : "NTSC" is the factory preset.)

Picture/Video Output
Change the video signal format to be output for JPEG, MPEG4 and DivX video if picture output is not smooth during playback.
	※6 ※8• Automatic • PAL
	  • NTSC/PAL60: Output will depend on "NTSC Disc Output" setting (➡ see above)
	※7• NTSC/PAL60: Output will depend on "NTSC Disc Output" setting (➡ see above)
	  • PAL

■ "Audio" tab

Dolby Digital ※10	• Bitstream • PCM	Select to suit the type of equipment you connected to the HDMI AV OUT terminal (➡ page 13).
DTS Digital Surround ※10	• Bitstream • PCM	Select "Bitstream" when the equipment can decode the bitstream (digital form of multi-channel data). Otherwise, select "PCM".
MPEG ※9 ※10	• PCM • Bitstream	(If the bitstream is output to the equipment without a decoder, high levels of noise can be output and may damage your speakers and hearing.)
Dynamic Range Compression	• Off • On: Adjust for clarity even when the volume is low by compressing the range of the lowest sound level and the highest sound level. Convenient for late night viewing. (Only works with Dolby Digital)	
Speaker Settings (➡ page 29) Set the delay time for your center and surround speakers	• Center: 0.0/1.0/2.0/3.0/4.0/5.0 ms • Surround (L/R): 0.0/5.0/10.0/15.0 ms	

■ "HDMI" tab

RGB Range Set "HDMI Colour Space" to "RGB" (➡ page 25, Picture Menu).	• Standard • Enhanced: When the black and white images are not distinct.
Video Mode (This setting is irrelevant when connected through the VIDEO OUT terminal).	• On: When connected through the HDMI AV OUT terminal. Video is output from the HDMI terminal. Video is also output from the COMPONENT VIDEO OUT terminal, but only in 480i or 576i (interlace). When connected through the SCART (AV) terminal, RGB signal is not output. • Off: When connected through the COMPONENT VIDEO OUT or SCART (AV) terminal. Video is output from the COMPONENT VIDEO OUT or SCART (AV) terminal according to the setting of the "Video Output Mode" (➡ page 24, Picture Menu) or SCART (AV) terminal according to the setting of the "Video Out (AV/Component)" in the "Video" tab (➡ see above). Video is also output from the HDMI AV OUT terminal, but only in 480p/576p (progressive).
Audio Output	• On: When audio output is from the HDMI AV OUT terminal. (Depending on the capabilities of the connected equipment, audio output may differ from the audio settings of the main unit.) • Off: When audio output is not from the HDMI AV OUT terminal. (The audio is output using the settings of the main unit.)
VIERA Link ("HDAVI Control")	• On: The VIERA Link "HDAVI Control" function is available (➡ page 39). • Off

Player settings (continued)

■ "Display" tab

Menu Language	※6 • <u>English</u> • Français • Español • Deutsch • Polski • Русский • Česky • Magyar ※7 • <u>English</u> • 中文 ※8 • <u>English</u> • Français • Español • Deutsch • Italiano • Nederlands • Svenska • Polski
On-Screen Messages	• <u>On</u> • Off
Background during Play Select background during JPEG, MPEG4 and DivX video playback.	• <u>Black</u> • Grey (or • Gray)

■ "Others" tab

FL Dimmer Change the brightness of the unit's display.	• <u>Bright</u> • Dim • Auto: The display is dimmed, but brightens when you perform some operations.
DivX Registration Displays the unit's registration code.	You need this registration code to purchase and play DivX Video-on-Demand (VOD) content. (➡ page 31, "About DivX VOD content")
QUICK SETUP	• <u>Yes</u> • No
Re-initialise Setting (or Re-initialize Setting) This returns all values in the Setup menus to the default settings.	• Yes: The password screen is shown if "Ratings" (➡ page 27) is set. Please enter the same password. After "INIT" on the display disappears, turn the unit off and on again. • <u>No</u>

※5 Refer to "Frame still and field still" (➡ page 45, Glossary).

※6 **For Continental Europe, the Middle East, South Africa, Saudi Arabia and Kuwait**

※7 **For Southeast Asia and Thailand**

※8 **For Australia and N.Z.**

※9 **For Continental Europe, the Middle East, South Africa, Saudi Arabi, Kuwait, Australia and N.Z.**

※10 When audio is output from HDMI AV OUT terminal, and the connected equipment does not support the item selected, the actual
output will depend on the performance of this connected equipment.

※11 **For Continental Europe**

Changing the delay time of the speakers

Effective when playing multi-channel audio
(Center and surround speakers only)
For optimum listening with 5.1-channel sound, all the
speakers, except for the subwoofer, should be the
same distance from the seating position. If you have
to place the center or surround speakers closer to the
seating position, adjust the delay time to make up for the
difference.

🔲 : Actual speakers position

⬜ : Ideal speakers position

ⓐ ⓑ ⓒ : Primary listening distance

Circle of constant primary listening distance

Approximate room dimensions
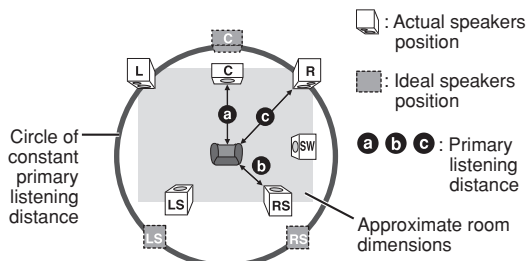
If either distance ⓐ or ⓑ is less than ⓒ, find the
difference in the table and change to the recommended
setting.

ⓐ Center speaker	
Difference (Approx.)	Setting
30 cm	1.0 ms
60 cm	2.0 ms
90 cm	3.0 ms
120 cm	4.0 ms
150 cm	5.0 ms

ⓑ Surround speaker	
Difference (Approx.)	Setting
150 cm	5.0 ms
300 cm	10.0 ms
450 cm	15.0 ms

■ To enter the speaker setting

1 Press [▲, ▼] to select the delay time box and press [ENTER].

2 Press [▲, ▼] to adjust the delay time and press [ENTER].

Center delay time

Exit

Surround delay time
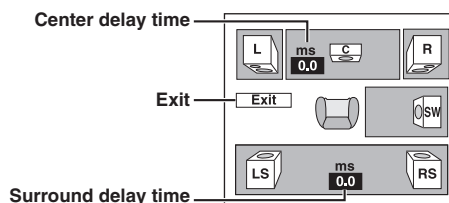
■ To finish the speaker setting

Press [◄] to select "Exit" and press [ENTER].

Note

When you change the surround speaker setting for Dolby Digital,
the setting also changes for Dolby Pro Logic II.
Example: the settings for MUSIC are the same as those for Dolby
Digital.

Dolby Digital	Dolby Pro Logic II	
	MUSIC	MOVIE
0 ms	0 ms	10 ms
5 ms	5 ms	15 ms
10 ms	10 ms	20 ms
15 ms	15 ms	25 ms

Tips for making data discs

- When there are more than eight groups, the eighth group onwards will be displayed on one vertical line in the menu screen.
- There may be differences in the display order on the menu screen and computer screen.
- This unit cannot play files recorded using packet write.

DVD-RAM
- Discs must conform to UDF 2.0.

DVD-R/RW
- Discs must conform to UDF bridge (UDF 1.02/ISO9660).
- This unit does not support multi-session. Only the default session is played.

CD-R/RW
- Discs must conform to ISO9660 level 1 or 2 (except for extended formats).
- This unit supports multi-session but if there are many sessions it takes more time for play to start. Keep the number of sessions to a minimum to avoid this.

Naming folders and files

Files are treated as contents and folders are treated as groups on this unit.
At the time of recording, prefix folder and file names. This should be with numbers that have an equal number of digits, and should be done in the order you want to play them (this may not work at times). Files must have the extension (➡ see below).

Example: MP3
root
001group
001track.mp3
002track.mp3
003track.mp3
002group
001track.mp3
002track.mp3
003track.mp3
004track.mp3
003group
001track.mp3
002track.mp3
003track.mp3

WMA (Extension: ".WMA" or ".wma")
- Compatible compression rate: between 48 kbps and 320 kbps.
- You cannot play WMA files that are copy-protected.
- This unit does not support Multiple Bit Rate (MBR).

MP3 (Extension: ".MP3" or ".mp3")
- Compatible compression rate: between 32 kbps and 320 kbps.
- This unit does not support ID3 tags.
- Compatible sampling rates:
  – DVD-RAM, DVD-R/RW: 11.02, 12, 22.05, 24, 44.1 and 48 kHz
  – CD-R/RW: 8, 11.02, 12, 16, 22.05, 24, 32, 44.1 and 48 kHz

JPEG (Extension: ".JPG", ".jpg", ".JPEG" or ".jpeg")
- JPEG files taken on a digital camera that conform to DCF Standard (Design rule for Camera File system) Version 1.0 are displayed. Files that have been altered, edited or saved with computer picture editing software may not be displayed.
- This unit cannot display moving pictures, MOTION JPEG and other such formats, and still pictures other than JPEG (Example: TIFF), or play pictures with attached audio.

MPEG4 (Extension: ".ASF" or ".asf")
- You can play MPEG4 data [conforming to SD VIDEO specifications (ASF standard)/MPEG4 (Simple Profile) video system/G.726 audio system] recorded with Panasonic SD multi cameras or DVD video recorders with this unit.
- The recording date may differ from that of the actual date.

DivX (Extension: ".DIVX", ".divx", ".AVI" or ".avi")
- You can play all versions of DivX® video (including DivX®6) [DivX video system/MP3, Dolby Digital or MPEG audio system] with standard playback of DivX® media files. Functions added with DivX Ultra are not supported.
- DivX files greater than 2 GB or have no index may not be played properly on this unit.
- This unit supports all resolutions up to maximum of 720 x 480 (NTSC)/720 x 576 (PAL).
- You can select up to eight types of audio and subtitles on this unit.
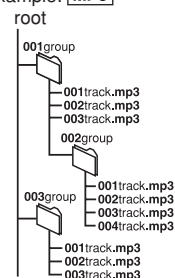
Disc handling precautions

- Do not attach labels or stickers to discs. This may cause disc warping, rendering it unusable.
- Do not write on the label side with a ball-point pen or other writing instrument.
- Do not use record cleaning sprays, benzine, thinner, static electricity prevention liquids or any other solvent.
- Do not use scratch-proof protectors or covers.
- Do not use the following discs:
  – Discs with exposed adhesive from removed stickers or labels (rented discs, etc).
  – Discs that are badly warped or cracked.
  – Irregularly shaped discs, such as heart shapes.

■ **To clean discs**
- Wipe with a damp cloth and then wipe dry.
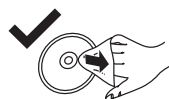
⚙ About DivX VOD content

DivX Video-on-Demand (VOD) content is encrypted for copyright protection. In order to play DivX VOD content on this unit, you first need to register the unit.

Follow the online instructions for purchasing DivX VOD content to enter the unit's registration code and register the unit. For more information about DivX VOD, visit www.divx.com/vod.

∎ Display the unit's registration code
(➜ page 29, "DivX Registration" in "Others" tab)

⚙ Setup
DivX Registration
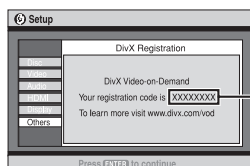
DivX Video-on-Demand
Your registration code is [XXXXXXXX] ——— 8 alphanumeric characters
To learn more visit www.divx.com/vod

Press [ENTER] to continue

• We recommend that you make a note of this code for future reference.
• After playing DivX VOD content for the first time, another registration code is then displayed in "DivX Registration". Do not use this registration code to purchase DivX VOD content. If you use this code to purchase DivX VOD content, and then play the content on this unit, you will no longer be able to play any content that you purchased using the previous code.
• If you purchase DivX VOD content using a registration code different from this unit's code, you will not be able to play this content. ("Authorization Error" is displayed.)

∎ Regarding DivX content that can only be played a set number of times

Some DivX VOD content can only be played a set number of times. When you play this content, the remaining number of plays is displayed. You cannot play this content when the number of remaining plays is zero. ("Rented Movie Expired" or "Rental Expired" is displayed.)

When playing this content
• The number of remaining plays is reduced by one if
  – you press [⏻] or press and hold [–SETUP].
  – you press [■, STOP]. (Press [❚❚, PAUSE] to pause play.)
  – you press [⏮, ⏭] (skip) or [◀◀, ▶▶] (slow/search) etc. and arrive at another content or the start of the content being played.
• The Resume function (➜ page 19, Stop) will not work.

🎙 Using the radio

Manual tuning

1 To select "FM".

SELECTOR
(main unit)   **OR**   FM
(remote control)

2 To select "MANUAL".

-TUNE MODE–FM MODE
(main unit)

3 To select the frequency.

∨ [TUNE] ∧
(main unit)   **OR**   SLOW/SEARCH
◄◄ ►►
(remote control)

Press and hold [∨ TUNE ∧] until the frequency starts scrolling to start automatic tuning. Tuning stops when a station is found.

Presetting the channel

Up to 30 stations can be set for FM.

1. **While listening to the radio broadcast**
   Press [ENTER].
2. **While the frequency and "PGM" are flashing on the display**
   Press the numeric buttons to select a channel.
   • To select a 2-digit number
     Example: To select 12,
     ≧10 ⇨ 1 , 2 $\fbox{CH 12}$
   • Alternatively, press [∨, ∧], then press [ENTER].
   The station occupying a channel is erased if another station is preset to that channel.

Selecting the preset channels

1 To select "FM".
FM

2 To select the channel.

1 **TO** ≧10

• Alternatively, press [∨, ∧].
• To perform the step on the main unit, first press [-TUNE MODE] to select "PRESET", and then press [∨ TUNE ∧] to select the channel. When a stereo FM broadcast is being received, "ST" lights in the display.

ST
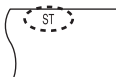
If noise is excessive in FM

Main unit only
Press and hold [−FM MODE] to display "MONO".
Press and hold [−FM MODE] again to cancel the mode. The mode is also cancelled when you change the frequency.

Automatic presetting

1 To select "FM".

SELECTOR
(main unit)   **OR**   FM
(remote control)

2 Press and hold.

►○ MEMORY
(main unit)   **OR**   ENTER
(remote control)

Release the button when "FM AUTO" is displayed.

The tuner tunes to the lowest frequency and starts to preset all the stations it can receive into the channels in ascending order.
• "SET OK" is displayed when the stations are set, and the radio tunes to the last preset station.
• "ERROR" is displayed when automatic presetting is unsuccessful. Preset the channels manually (➡ see left).

RDS broadcasting

For Continental Europe

The unit can display the text data transmitted by the radio data system (RDS) available in some areas.
If the station you are listening to is transmitting RDS signals, "RDS" will light up on the display.

When "FM" is selected

FUNCTIONS ⇨ PS (factory preset) → PTY → FREQ

PS : Program service
PTY : Program type
FREQ : Frequency display

PTY displays			
NEWS	VARIED	FINANCE	COUNTRY
AFFAIRS	POP M	CHILDREN	NATIONAL
INFO	ROCK M	SOCIAL A	OLDIES
SPORT	M-O-R- M※	RELIGION	FOLK M
EDUCATE	LIGHT M	PHONE IN	DOCUMENT
DRAMA	CLASSICS	TRAVEL	TEST
CULTURE	OTHER M	LEISURE	ALARM
SCIENCE	WEATHER	JAZZ	

※ "M-O-R- M"=Middle-of-the-Road music

Note

RDS displays may not be available if reception is poor.

🎵 Using sound effects

- The following sound effects may not be available or have no effect depending on the type of source, disc as well as recording format or, when headphones are used.
- You may experience a reduction in sound quality when these sound effects are used with some sources. If this occurs, turn the sound effects off.
- It is not possible to turn on Surround Enhancer, EQ and Super Surround at the same time.

Enhancing the sound from the center speaker: Center Focus

This applies to discs where the dialogue is recorded in the center channel.
You can make the sound of the center speaker seem like it is coming from within the television.

C.FOCUS ⟹ C FOCUS ON ↔ C FOCUS OFF

- This also works when Dolby Pro Logic II is turned on.

Adjusting the amount of bass: Subwoofer level

You can adjust the amount of bass. The unit automatically selects the most suitable setting according to the type of playback source.

SW.LEVEL
⇩

- **DVD-V** **DVD-VR**
SUB W 4 (factory preset) → SUB W 1
↑————SUB W 3 ← SUB W 2 ←┘
- **When another source is selected**
SUB W 2 (factory preset) → SUB W 3
↑————SUB W 1 ← SUB W 4 ←┘

- **When AV, AUX or Digital In source is selected**
For Continental Europe

SUB W 1 (factory preset) → SUB W 2
↑————SUB W 4 ← SUB W 3 ←┘
- **When another source is selected**
For Continental Europe

SUB W 2 (factory preset) → SUB W 3
↑————SUB W 1 ← SUB W 4 ←┘

- To check the current setting, press [SW.LEVEL].
- The setting you make is retained, and recalled every time you play the same type of source.

Enhancing the surround sound effect: Surround Enhancer

Automatically adjusts each speaker to enhance the surround sound effect of multi-channel audio. When playing two-channel audio, the audio of the L/R front speakers is also output through the rest of the speakers creating a surround sound effect.

– EQ
– SRD ENH ⟹ SRD ENH ON ↔ SRD ENH OFF

(Press and hold)

Changing the sound quality: Equalizer Mode (EQ)

– EQ
– SRD ENH ⟹

HEAVY : Adds punch to rock.
CLEAR : Clarifies higher sounds.
SOFT [*1] : For background music.
FLAT : Cancel (no effect is added). (factory preset)

- To check the current setting, press [-EQ].
- You can adjust the volume of the surround speakers to get the best surround effect (➡ page 34, Adjusting the volume of each speaker: Speaker level adjustments).
- It is not possible to turn on EQ and Surround Enhancer at the same time.

Enhancing the stereo sound: Super Surround

□□PL II/
S.SRD ⟹

Movie : Use this mode when playing movie software.
Music : Adds surround effects to stereo sources.
Off : Cancel

- This works only in FM, AV [*2], Music P. and AUX mode.
- Super Surround and EQ can be turned on simultaneously.

Enhancing the stereo sound: Dolby Pro Logic II

Except **DivX**
Dolby Pro Logic II is an advanced decoder that derives 5-channel surround (Left and Right Front, Center, Left and Right Surround) from stereo sound sources, whether or not it has been specifically Dolby Surround encoded.

□□PL II/
S.SRD ⟹

Movie : Movie software, recorded in Dolby Surround.
Music : Stereo sources
Off : Cancel

- This works only in DVD/CD, USB and Digital In mode.
- "□□PLII" lights when there is an effect.
- This does not work when audio is output from HDMI AV OUT terminal.

[*1] **For Continental Europe** Factory preset when AV, AUX or Digital In source is selected.
[*2] **For Continental Europe**

🎛 *Using sound effects (continued)*

Adjusting the volume of each speaker: Speaker level adjustments

This is one of the ways to get appropriate surround effects.

Preparation

DVD

1 **While stopped and no on-screen display is shown To output a test signal.**

TEST

L: Front left   C: Center
R: Front right   RS: Right surround
LS: Left surround
• There is no output from SW (subwoofer) channel.

2 **To set the volume level normally used for listening.**

VOLUME
+
−

3 **To adjust the speaker level for each speaker.**

▲   **OR**   ▼

• Adjust the speaker levels to the same level as the front speakers.
C, RS, LS: −6 dB to +6 dB

To stop the test signal
Press [TEST] again.

To adjust speaker level during play
[Effective when playing multi-channel audio or when Dolby Pro Logic II is on.]

1. **Press and hold [−CH SELECT] to select the speaker.**
   L → C → R → RS → LS → SW

   SW: Subwoofer
   • You can adjust SW only if the disc includes a subwoofer channel.
   • "SW" does not appear on the display and is not adjustable when "□□PLII" is lit.
   • "S" appears on the display when "MOVIE", "MUSIC" is selected with Super Surround (➡ page 33).
   In this case, you can adjust both surround speaker levels at the same time using [▲, ▼].
   S: −6 dB to +6 dB

2. **Press [▲] (increase) or [▼] (decrease) to adjust the speaker level for each speaker.**
   C, RS, LS, SW: −6 dB to +6 dB
   (L, R: Only the balance is adjustable.)
   • To adjust the balance of the front speakers, while "L" or "R" is selected, press [◄, ►].

🎤 Enjoying karaoke

For Southeast Asia, Thailand, the Middle East, South Africa, Saudi Arabia and Kuwait

Preparation

1 **Lower the microphone volume to "MIN".**

2 **Connect the microphone to the jack.**
Use a dynamic microphone.
Microphone plug type: Ø6.3 mm monaural (not included).

Note

• If a strange noise (howling) is emitted during use, move the microphone away from the speakers, or turn down the microphone volume.
• When you are not using the microphone, disconnect it from the microphone jack, and turn down the microphone volume level to "MIC MIN".
• While karaoke mode is turned on, multi channel signals will be down-mixed to 2 channel signals.

Enjoying karaoke with karaoke DVD and VCD

DVD-V   VCD

1 **Start playback.**

PLAY
►

2 **To display the karaoke menu on the television.**

−FUNCTIONS
−KARAOKE

(Press and hold)

3 **Make the selection.**

▲ , ▼ ⇨ ◄ , ►

🎵 Karaoke Settings		
Karaoke Mode	◄ Off	On
Key Control	# 0	− ♩ +
Vocal Cancel		Off
Audio		Off
Karaoke Mode		
▲▼ to select ◄► to adjust		RETURN to exit
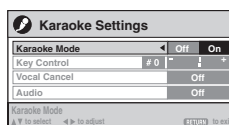
4 **Adjust the volume and sing along** (➡ page 35)**.**

Enjoying karaoke with other sources

This works only in USB mode.

1 Start play.
Refer to (➡ page 37) for Optional USB connection and operation.

2 To display the karaoke menu on the television.

─FUNCTIONS
─KARAOKE

(Press and hold)

3 Make the selection

▲ , ▼ ⇨ ◄ , ►

Example: WMA/MP3

Karaoke Settings		
Karaoke Mode	Off	On
Key Control	# 0 − ⌐ +	
Vocal Cancel	Off	
Audio	– – –	
Karaoke Mode		
▲▼ to select ◄► to adjust	RETURN to exit	
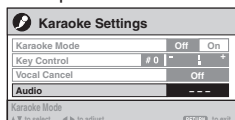
• Audio mode does not work

4 Start singing (➡ see below, Mic volume adjustment).

Mic volume adjustment

Main unit only

Adjust the microphone volume.

MIC VOL

MIN   MAX

Adding an echo effect

─SW.LEVEL
─ECHO

(Press and hold)

⇩

ECHO OFF → ECHO 1 → ECHO 2
└─── ECHO 4 ← ECHO 3 ←─┘

The effect increases with the level.
• Echo does not work if MIC is not inserted.

Key Control function

Karaoke Settings		
Karaoke Mode	Off	On
Key Control	◄ ♭-3 − ⌐ + ►	
Vocal Cancel	Off	
Audio	Off	
Key Control		
▲▼ to select ◄► to adjust	RETURN to exit	
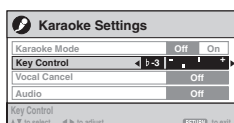
♭: Lowers the pitch
#: Raises the pitch
You can choose a level between −6 and +6

Vocal Cancel function

Use this function on stereo sources to block out the vocals so you can sing along to the music.

Karaoke Settings		
Karaoke Mode	Off	On
Key Control	♭-3 − ⌐ +	
Vocal Cancel	◄ On ►	
Audio	Off	
Vocal Cancel		
▲▼ to select ◄► to adjust	RETURN to exit	

⇩
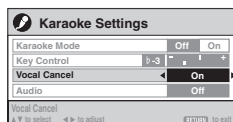
Vocal Cancel Off → Vocal Cancel On
      ↑_____|

This function is not suitable for the following sources.
• Monaural recordings
• Classical music or works performed by a limited number of instruments
• Chorus works or duets

Audio mode

DVD-V (Karaoke discs)
Solo
Off : No vocal
On : Vocal

Duet
Off :   No vocal
V1+V2 : Vocal 1 and 2
V1 :   Vocal 1
V2 :   Vocal 2
• Choose "Off" for karaoke.
• Choose "V1" or "V2" to duet with the player.

VCD and other sources
Television displays are shown in parentheses ( ).
AUDIO L R (LR): Left channel sound is heard from the left speaker and right channel sound is heard from the right speaker — vocal and accompaniment
AUDIO L (L): Only left channel sound — no vocal
AUDIO R (R): Only right channel sound — vocal
AUDIO L+R (L+R): Left channel sound is mix with the right channel sound and the mixed signal is output through the left and right speakers respectively

• Select no vocal for karaoke.
• Vocal and no vocal may be reversed.

ENGLISH

OTHER OPERATIONS

Operating other equipment

Optional antenna connection

Use the outdoor antenna if radio reception is poor.

FM outdoor antenna
(Using a television antenna)

FM ANT
(75Ω)

**Rear panel of
this main unit**

FM outdoor antenna
(not included)

75 Ω
coaxial cable
(not included)
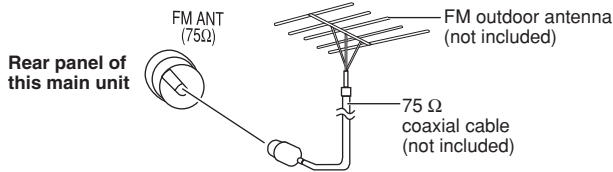
• Disconnect the FM indoor antenna.
• The outdoor antenna should be installed by a
  competent technician.

Note

• Disconnect the outdoor antenna when the unit is
  not in use.
• Do not use the outdoor antenna during a lightning
  storm.

Optional connection for set top box, cable TV box or video cassette recorder

For Continental Europe

Set top box
(not included)

AV OUT

Television
(not included)

AV1

AV2

**Rear panel of
this main unit**

AV

SCART cable (not included)
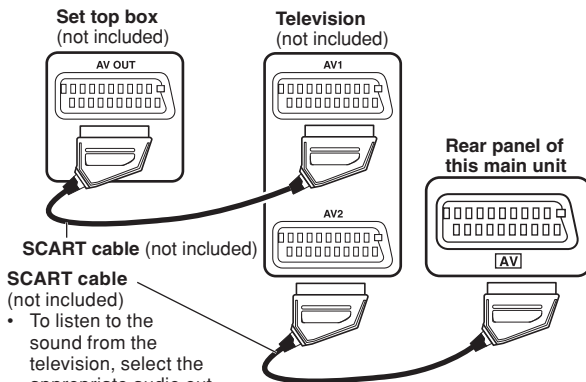
SCART cable
(not included)
• To listen to the
  sound from the
  television, select the
  appropriate audio out
  (example: Monitor) on
  the television.

Sound from the television
• Press [EXT-IN] (➡ page 40) to select the "AV" audio input on the
  remote control.

**For Southeast Asia, Thailand, the Middle East, South Africa,
Saudi Arabia, Kuwait, Australia and N.Z.**

To your cable TV service or television antenna

RF cable
(not included)

Audio cable
(not included)

RF IN

RF IN

RF OUT

Television
(not included)

AUDIO
OUT

AUDIO
IN

L

R

**Rear panel of
this main unit**

COMPONENT VIDEO OUT
P$_B$ Y

**Cable TV
box or video
cassette
recorder**
(not included)

VIDEO OUT

VIDEO IN

AUX

P$_R$

VIDEO
OUT

Video cable
(included)
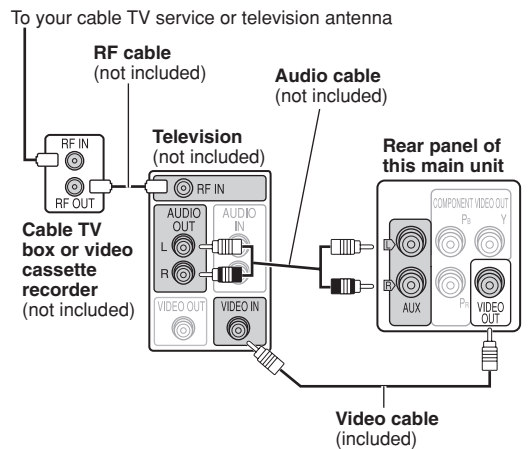
Optional audio connection for video cassette recorder or television

Press [EXT-IN] (➡ page 17) to select "AUX" as the source to operate the audio input.

For Continental Europe

**This audio connection will enable you to play audio from
your video cassette recorder or television through your
home theater system.**
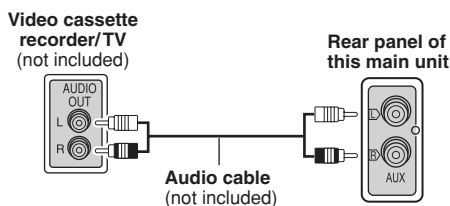
**Video cassette
recorder/TV**
(not included)

AUDIO
OUT

L

R

**Rear panel of
this main unit**

Audio cable
(not included)

**For Southeast Asia, Thailand, the Middle East, South Africa,
Saudi Arabia, Kuwait, Australia and N.Z.**

**This audio connection will enable you to play audio from
your television through your home theater system.**

Television
(not included)

Audio cable
(not included)

RF IN

AUDIO
OUT

AUDIO
IN

L

R

VIDEO OUT

VIDEO IN

COMPONENT VIDEO OUT
P$_B$ Y

AUX

P$_R$

VIDEO
OUT

**Rear panel of
this main unit**

Video cable
(included)
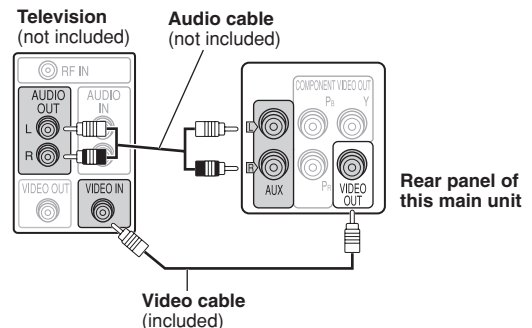
Optional Music Port connection and operation

The Music Port allows you to connect and enjoy music from an external device (example: MP3 player) through your home theater system.

Preparation
To avoid distorted sound, make sure that any equalizer function of your external device is turned off.

1 **Reduce the volume and connect the external device (not included).**
Plug type: Ø3.5 mm stereo mini plug

External device
(not included)
Reduce the volume before connecting.

2 **To select "MUSIC P.".**

EXT-IN
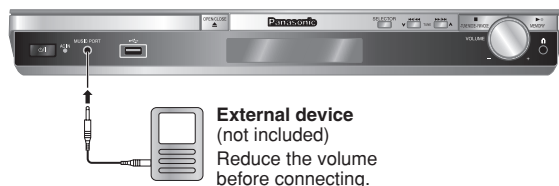
USB → AV※ → AUX → D-IN (Digital In)
MUSIC P. ←
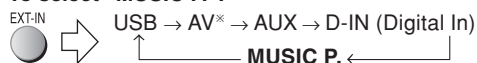
3 **Adjust the external device volume to a normal listening level, and then adjust the volume of the main unit.**

VOLUME
−　　+

• You can enjoy surround sound when you turn on Super Surround (MOVIE, MUSIC) (➡ page 33).

Optional USB connection and operation

WMA MP3 JPEG MPEG4

The USB connectivity enables you to connect and play tracks or files from USB mass storage class devices. 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 USB device is not recognised by this unit.

1 **Connect the USB mass storage device (not included).**

USB enabled device
(not included)
It is not recommended to use a USB extension cable. The device connected via the cable will not be recognised by this unit.
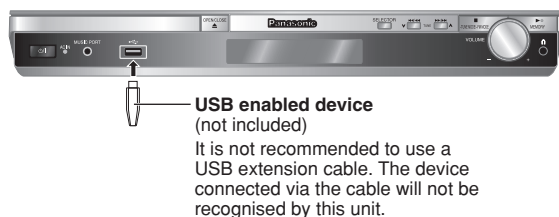
2 **To select "USB" as the source, press several times.**

EXT-IN

USB → AV※ → AUX → D-IN (Digital In)
MUSIC P. ←

※ **For Continental Europe**
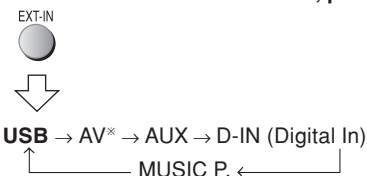
Example:

● Playback Menu	USB
All	Total 98
Audio	Total 58
Picture	Total 28
Video	Total 12
▲▼ to select and press ENTER	

3 **Adjust the volume of the main unit.**

VOLUME
−　　+

4 **Begin playback by selecting the track from the USB mass storage device.**

To return to the previous screen
Press [-RETURN]

For other operating functions, they are similar as those described in "DISC OPERATIONS" (➡ page 18 to 31).

Optional USB connection and operation (continued)

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 Formats

	File name	File extension
Still pictures	JPG	.jpg .jpeg
Music	MP3 WMA	.mp3 .wma
Video	MPEG4※	.asf

※ For Panasonic D-Snap/DIGA

Note
• CBI (Control/Bulk/Interrupt) is not supported.
• Digital Cameras that use PTP protocol or which require additional program installation when connected to a PC are not supported.
• A device using NTFS file system is not supported.
  [Only FAT 12/16/32 (File Allocation Table 12/16/32) file system is supported].
• Depending on the sector size, some files may not work.
• It will not operate with Janus enabled MTP (Media Transfer Protocol) devices.
• Maximum folder: 400 folders
• Maximum file: 4000 files
• Maximum file name: 44 characters
• Maximum folder name: 44 characters
• Only one memory card will be selected when connecting a multi-port USB card reader. Typically the first memory card inserted.

Adjusting the Speaker output level automatically: Auto speaker setup

For Australia and N.Z.
PT550

For Continental Europe
PT850

For Southeast Asia, Thailand, the Middle East, South Africa, Saudi Arabia, Kuwait, Australia and N.Z.
PT850W

The speaker level settings can be optimized to accommodate your room's listening conditions so that you can enjoy the ideal surround sound experience. Using the supplied setup microphone, the main unit adjusts the balance of the front speakers, and the volume level of the center and surround speakers automatically.

Keep as quiet as possible during the Auto speaker setup. Loud voices, air-conditioning noise, or excessive wind current may lead to incorrect settings. The speakers output loud test signals during the setup.

Preparation
• Turn off the television before starting the Auto speaker setup.
• Make sure that "DVD/CD" is selected as the source and there are no discs in the tray.
• Ensure that headphones are disconnected.
• Speakers with wireless system, ensure that the speakers are linked to the main unit.
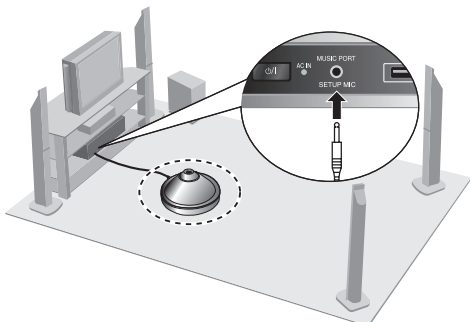
1 **While stopped**
Connect the setup microphone.

2 **Place the microphone at actual seating position.**
(At ear level when seated).

3 **To start the setup.**

TEST
−AUTO

(Press and hold)

⬇

AUTO SPEAKER SETUP → CENTER → RIGHT ┐
    COMPLETE ← LEFT ← SRD L ← SRD R ←┘

• The test signal is output from each speaker.
• "COMPLETE" is displayed when Auto speaker setup is completed.

To cancel the setup.

TEST
−AUTO

(Press and hold)

• "CANCEL" will be displayed if Auto speaker setup is canceled.

Note
• Audio settings will be restored to default if the Auto speaker setup is canceled.
• Please refer to the Troubleshooting guide if there is any error message.

Using the VIERA Link "HDAVI Control™"

What is VIERA Link "HDAVI Control"?

VIERA Link "HDAVI Control" is a convenient function that offers linked operations of this unit, and a Panasonic television (VIERA) under "HDAVI Control". You can use this function by connecting the equipment with the HDMI cable. See the operating instructions for connected equipment for operational details.
VIERA Link "HDAVI Control", based on the control functions provided by HDMI which is an industry standard known as HDMI CEC (Consumer Electronics Control), is a unique function that we have developed and added. As such, its operation with other manufacturers' equipment that supports HDMI CEC cannot be guaranteed.
This unit supports "HDAVI Control 2" function.
The TV with "HDAVI Control 2" function enables the following operation:
VIERA Link Control only with TV's remote control (for "HDAVI Control 2") (➡ see right)

"HDAVI Control 2" is the newest standard (current as of February, 2007) for Panasonic's HDAVI Control compatible equipment. This standard is compatible with Panasonic's conventional HDAVI equipment.

Preparation
- Confirm that the HDMI connection (➡ page 13) has been made.
- ※1 Confirm that the scart cable is not connected.
- Set "VIERA Link" to "On" (➡ page 28, "HDMI" tab).
- To complete and activate the connection correctly, turn on all VIERA Link "HDAVI Control" compatible equipment and set the television to the corresponding HDMI input mode for the home theater system.

- Whenever the connection or settings are changed, reconfirm the points above.

One Touch Play

You can turn on the home theater system and television, and start playing the disc in the play position with a single press of a button.

ONE TOUCH PLAY

Theater speakers will be automatically activated (➡ see below).
- This function also works if you press [▶, PLAY] on the home theater remote control during home theater standby mode.

Note
- Playback may not be immediately displayed on the television. If you miss the beginning portion of playback, press [|◀◀] or [◀◀] to go back to where playback started.

Auto input switching

- When you switch the television input to:
  - TV tuner mode, the home theater system will automatically switch to "AUX"※ or "D-IN"※.
  - HDMI input mode for the home theater system, the home theater system will automatically switch to "DVD/CD" if it is in "AUX"※ or "D-IN"※ mode.
- When you start disc play, the television will automatically switch to the HDMI input mode for the home theater system.
- ※ To toggle the mode that this function works with, press [–SETUP] while the main unit is in "AUX" or "D-IN" mode.
  - The default setting is "AUX".

Speaker control

You can select whether audio is output from the home theater system or the television speakers by using the television menu settings. For details, refer to the operating instructions of your television.

Home Cinema
Theater speakers are active.
- When the home theater system is in standby mode, changing the television speakers to theater speakers in the television menu will automatically turn the home theater system on and select "AUX"※ or "D-IN"※ as the source.
- The television speakers are automatically muted.

※1 **For Continental Europe**

- You can control the volume setting using the volume or mute button on the TV's remote control. (The volume level is displayed on the main unit's FL display.)
- To cancel muting, you can also use the home theater remote control (➡ page 17).
- If you turn off the home theater system, television speakers will be automatically activated.

TV
Television speakers are active.
- The volume of the home theater system is set to "0".
  - This function works only when "DVD/CD", "USB", "AUX"※ or "D-IN"※ is selected as the source on the home theater system.
- Audio output is 2-channel audio.

- When switching between the theater and television speakers, the TV screen may be blank for several seconds.
- ※ To toggle which input source the main unit will automatically switch to, press [–SETUP] while the main unit is in "AUX" or "D-IN" mode.
  - The default setting is "AUX".

Power off link

When the television is turned off, the home theater system goes into standby mode automatically.

- This function works only when "DVD/CD", "USB", "AUX"※ or "D-IN"※ is selected as the source on the home theater system.
- When the television is turned on, the home theater system does not turn on automatically. (Power on link is not available.)
- ※ For "AUX" or "D-IN" mode, power off link can be set to work with one or the other. To toggle the mode that this function works with, press [–SETUP] while the main unit is in "AUX" or "D-IN" mode.
  - The default setting is "AUX".

Note
Only the home theater system turns off when you press [⏻] for shutting it down. Other connected equipment compatible with VIERA Link "HDAVI Control" stay on.

VIERA Link Control only with TV's remote control (for "HDAVI Control 2")

You can control the disc menus of the home theater system with the TV's remote control when using the "DVD/CD" or "USB" source. When operating the TV's remote control, refer to the below illustration for operation buttons.

1. Select the theater operation menu by using the television menu settings.
   (For details, refer to the operating instructions of your television.)
   - The home theater system will automatically switch to "DVD/CD" if it is in "AUX"※ or "D-IN"※ mode.
   - ※ To toggle the mode that this function works with, press [–SETUP] while the main unit is in "AUX" or "D-IN" mode.
     - The default setting is "AUX".

2. Select the desired item.
   - **"TOP MENU"** : Shows a disc top menu (➡ page 19, 21) or program list (➡ page 22).
   - **"MENU"** : Shows a disc menu (➡ page 19, 22) or play list (➡ page 22).
   - **"Control Panel"** : The basic operations for discs are available.
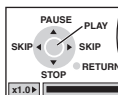
Note
- Depending on the menu, some button operations cannot be performed from the TV's remote control.
- "Control Panel" can be selected directly by using a button on the TV's remote control (e.g. [OPTION]).

ENGLISH

OTHER OPERATIONS

Operating the television

You can use the remote control to operate a Panasonic television.
Aim the remote control at the television.

To switch the television on or off
⏻

To switch the television's video input mode
TV/AV

Adjust the volume
+
VOLUME
−

To play audio from your television through your home theater system

Preparation
Connect your equipment referring to "Connect to the various television terminals" (➡ page 13).

Press [EXT-IN] to select "AV※"/"AUX" as the source. Then reduce the volume on the television to its minimum, and control the volume on this main unit.

> **Note**
> • The remote control may not work properly with some models.
> • You can enjoy 5.1-channel surround sound when you turn on Super Surround (MOVIE, MUSIC) (➡ page 33).

Operating the cable TV box, digital broadcasting or satellite receiver

This unit can decode the surround signals received through cable TV box, digital broadcasting or satellite broadcasts. Refer to your equipment's operating instructions for details. Only Dolby Digital and PCM can be played with this connection.

Rear panel of this main unit

To DIGITAL OUT

OPTICAL IN

Optical digital audio cable (not included)
• Do not bend sharply when connecting.
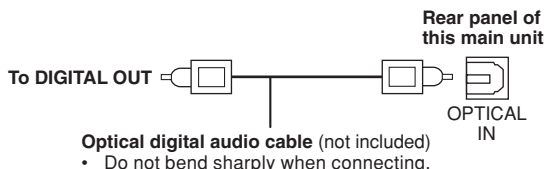
To select "D-IN" (Digital In) as the source, press several times.

EXT-IN

USB → AV※ → AUX → **D-IN** (Digital In)
↑————— MUSIC P. ←————
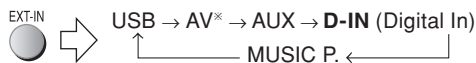
When you select "D-IN" as the source, you can select the following sound effects. (These functions only work with Dolby Digital or PCM, excluding Audio Mode, which only works with Dolby Digital Dual Mono.)

PCM FIX Mode
Press and hold [►].
(remote control)
PFIX ON: Select when receiving only PCM signals.
PFIX OFF (factory preset): Select when receiving Dolby Digital and PCM signals.

Dynamic Range Compression
Press and hold [◄].
DRC ON: Adjusts for clarity even when the volume is low by compressing the range of the lowest sound level and the highest sound level. Convenient for late night viewing. (Only works with Dolby Digital)
DRC OFF (factory preset)

Audio Mode
Press and hold [▲].
AUDIO ST, AUDIO L, AUDIO R ("AUDIO L" and "AUDIO R" only appear when the signal is Dolby Digital Dual Mono.)

Dolby Pro Logic II (➡ page 33)
Press [◱◱PLII].

> **Note**
> Audio that is input through the OPTICAL IN terminal cannot be output through the HDMI terminal.

Changing the main unit and remote control

The remote control and main unit are factory-set to "REMOTE 1" mode.
If your remote control affects other equipment during operation, you can switch to operate in "REMOTE 2" mode.

To switch to "REMOTE 2" mode

1 While pressing and holding [►►/►►I] on the main unit
②

"REMOTE 2" appears on the main unit display.

2 To operate in "REMOTE 2" mode

ENTER + ②

(Press and hold for 2 seconds)

To return to "REMOTE 1" mode
Perform steps 1 and 2 but use [1] instead of [2] for both steps. ("REMOTE 1" appears on the main unit during step 1.)

The remote control cannot work with the main unit if their modes are different.
"REMOTE 1" or "REMOTE 2" appears on the main unit display when you operate the remote control.
• If "REMOTE 1" appears (The main unit is in "REMOTE 1" mode.)
  Press and hold [ENTER] and [1] on the remote control for at least 2 seconds.
• If "REMOTE 2" appears (The main unit is in "REMOTE 2" mode.)
  Press and hold [ENTER] and [2] on the remote control for at least 2 seconds.

> **Note**
> You can still operate a television using the remote control (➡ see above) even after switching the mode.

※ **For Continental Europe**

ENGLISH

OTHER OPERATIONS

🐾 Troubleshooting guide

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

■ Power

		Page
No power.	• Insert the AC mains lead securely.	12
The unit is automatically switched to the standby mode.	• The Sleep timer was working and had reached the set time limit.	17

■ Unresponsive or inoperable function

No response when any buttons are pressed.	• This unit cannot play discs other than the ones listed in these operating instructions.	15
	• The unit may not be operating properly due to lightning, static electricity or some other external factor. Turn the unit off and then back to on. Alternatively, turn the unit off, disconnect the AC mains lead, and then reconnect it.	—
	• Condensation has formed: Wait 1 to 2 hours for it to evaporate.	—
No response when remote control buttons are pressed.	• Check that the batteries are installed correctly.	8
	• The batteries are depleted. Replace them with new ones.	8
	• Aim the remote control at the remote control signal sensor and operate.	16
No picture or sound.	• Check the video or speaker connection.	—
	• Check the power or input setting of the connected equipment and the main unit.	—
	• Check that the disc has something recorded on it.	—
You have forgotten your ratings password. Reset all the settings to Factory Preset.	• While stopped and "DVD/CD" is the source, press and hold [■] on the main unit and [≧10] on the remote control until "Initialised" (or "Initialized") disappears from the television. Turn the unit off and on again. All settings will return to the default values.	—
The VIERA Link function does not respond.	• Depending on the condition of the home theater system or the connected equipment, it may be necessary to repeat the same operation so that the function can work correctly.	39
Other products respond to the remote control.	• Change the remote control operating mode.	40

■ Specific operation undesirable or unexpected

It takes time before play starts.	• Play may take time to begin when an MP3 track has still picture data. Even after the track starts, the correct play time will not be displayed. This is normal. `MP3`	—
	• This is normal on DivX video. `DivX`	—
Folders on a data CD are not displayed correctly. `WMA` `MP3` `JPEG` `MPEG4` `DivX`	• Folders deeper than the eighth layer are displayed as the eighth layer.	—
A menu screen appears during skip or search. `VCD`	• This is normal for Video CDs.	—
Playback control menu does not appear. `VCD` with playback control	• Press [■, STOP] twice and then press [▶, PLAY].	—
The program and random play functions do not work. `DVD-V`	• These functions do not work with some DVD-Videos.	—
Scenes are skipped intermittently. `DVD-V` `DVD-VR`	• If you change the volume or sound effects during Advanced Disc Review, the function continues without the on-screen display. Cancel the function.	24
Selecting audio soundtrack "2" does not change the audio. `DVD-A`	• Even if a second soundtrack is not recorded, two numbers are normally shown.	—
Play does not start.	• This unit may not play WMA and MPEG4 that contains still picture data.	—
	• If playing DivX VOD content, refer to the homepage where you purchased the DivX VOD content. (Example: www.divx.com/vod) `DivX`	—
	• If a disc contains CD-DA and other formats, proper playback may not be possible.	—
Play restarts from the beginning when the soundtrack is changed. `DVD-A`	• This is normal for DVD-Audio.	—

■ Subtitle

Subtitle position is wrong.	• Adjust the position. ("Subtitle Position" in Display Menu)	25
No subtitles.	• Display the subtitles. ("Subtitle" in Functions Menu)	23
	• Subtitles may not be displayed depending on the disc. `DivX`	23
Subtitles overlap the closed captions.	• Clear the subtitles.	23

ENGLISH

REFERENCE

■ A-B repeat | | Page

| Point B is automatically set. | • The end of an item becomes point B when it is reached. | — |

■ Menus

| The Setup menu cannot be accessed. | • Select "DVD/CD" as the source.
• Cancel program and random play. | —
20 |

■ Sound abnormal or improper

Sound is distorted.	• Noise may occur when playing WMA. • When using the HDMI output, audio may not be output from other terminals.	— —
Effects do not work.	• Some audio effects do not work or have less effect with some discs. • Dolby Pro Logic II does not work if you have changed the play speed.	— —
Humming is heard during play.	• An AC mains lead or fluorescent light is near the main unit. Keep other appliances and cables away from the main unit (and wireless systems).	—
No sound	• There may be a slight pause in sound when you change the play speed. • Audio may not be output due to how files were created. `DivX` • `PT850W` Ensure that the wireless system is connected to the mains socket, and "W1" is displayed on the main unit's display. • Audio may not be heard when more than 4 devices are connected with HDMI cables. Reduce the number of connected devices. • When using the HDMI connection, ensure that "Audio Output" in the "HDMI" tab is set to "On".	— — 11 — 28

■ Picture abnormal or unviewable

The picture on the television is not displayed correctly or disappears.	• The unit and television are using different video systems. 　※1 Use a multi-system or NTSC television. 　※2 Use a multi-system or PAL television. • The system used on the disc does not match your television. 　– PAL discs cannot be correctly viewed on an NTSC television. 　– This unit can convert NTSC signals to PAL 60 for viewing on a PAL television ("NTSC Disc Output" in "Video" tab). • Ensure that the unit is connected directly to the television, and is not connected through a video cassette recorder. • Mobile telephone chargers can cause some disturbance. • If you are using an indoor television antenna, change to an outdoor antenna. • The television antenna wire is too close to the unit. Move it away from the unit. • Change "Source Select" in Picture Menu. `DivX` • Picture may not be seen when more than 4 devices are connected with HDMI cables. Reduce the number of connected devices. • When using HDMI output, the video signal is progressive. Use other video connections if your television is not compatible with progressive video. • If the picture is distorted or not displayed when using HDMI output, press and hold [CANCEL] until the picture is displayed correctly. (The output will return to "480p"or "576p".) • When using the COMPONENT VIDEO OUT terminal, ensure that progressive output is not selected when the connected television is not progressive compatible. Press and hold [CANCEL] until the picture is displayed correctly. (The output will return to "480i" or "576i".) • When using SCART (AV) terminal, set "Video mode" in the "HDMI" tab to "Off".	— — 28 36 — — — 25 — 13 — 13 28
Picture stops. `DivX`	• Picture may stop if the DivX files are greater than 2 GB.	—
Picture size does not fit the screen.	• Change "TV Aspect" in the "Video" tab. • Use the television to change the aspect. If your television does not have that function, change "4:3 Aspect" in Display Menu. • Change the zoom setting. ("Just Fit Zoom" or "Manual Zoom" in Display Menu)	28 25 25, 26
Menu is not displayed correctly.	• Restore the zoom ratio to "x 1.00". ("Manual Zoom" in Display Menu) • Set "Subtitle Position" in Display Menu to "0". • Set "4:3 Aspect" in Display Menu to "Normal".	26 25 25
Auto zoom function does not work well.	• Turn off television zoom function. • Use the other preset aspect ratios or manual adjustment. • Zoom function may not work well, especially in dark scenes and may not work depending on the type of disc.	— 26 —
When playing PAL disc, picture is distorted.	• Set "Transfer Mode" in Picture Menu to "Auto".	25

※1 **For Southeast Asia and Thailand**

※2 **For Continental Europe, the Middle East, South Africa, Saudi Arabia, Kuwait, Australia and N.Z.**

■ Progressive video

		Page
There is ghosting when progressive or HDMI output is on.	• This problem is caused by the editing method or material used on DVD-Video, but should be corrected if you use interlaced output. Set "Video Output Mode" in Picture Menu to "480i" or "576i". (Alternatively, press and hold [CANCEL] to switch to "480i" or "576i".)	24
	• Disable the HDMI AV OUT connection and use other video connections. Make the settings in the following order:	
	1 Set "Video Mode" in the "HDMI" tab to "Off".	28
	2 Set "Video Output Mode" in Picture Menu to "480i" or "576i". (Alternatively, press and hold [CANCEL] to switch to "480i" or "576i".)	24
Pictures not in progressive output.	• Select "480p" or "576p" in "Video Output Mode" in Picture Menu.	24
	• The unit's VIDEO OUT or SCART (AV) terminal outputs an interlaced signal even if "PRG" is displayed.	13
Closed captions not displayed.	• When HDMI or progressive output is on, closed captions will not be displayed.	—

■ Unit displays

The display is dark.	• Select "Bright" in "FL Dimmer" in the "Others" tab.	29
"NO PLAY"	• You inserted a disc the unit cannot play; insert one it can.	15
	• You inserted a blank disc.	—
	• You inserted a disc that has not been finalized.	—
"NO DISC"	• You have not inserted a disc; insert one.	—
	• You have not inserted the disc correctly; insert it correctly.	18
"OVER CURRENT ERROR"	• The USB device is drawing too much power. Switch to DVD/CD mode, remove the USB and turn the unit off.	—
"F61"	• Check and correct the speaker cable connections. If this does not fix the problem, consult the dealer.	12
"F76"	• There is a power supply problem. Consult the dealer.	—
"DVD U11"	• Disc may be dirty. Wipe it clean.	30
"ERROR"	• Incorrect operation performed. Read the instructions and try again.	—
"DVD H □ □" **"DVD F □ □ □"** □ stands for a number.	• Trouble may have occurred. The numbers following "H" and "F" depend on the status of the unit. Turn the unit off and then back on. Alternatively, turn the unit off, disconnect the AC mains lead, and then reconnect it.	—
	• If the service numbers fail to clear, note the service number and contact a qualified service person.	—
PT850W **"W1" is flashing.**	• There is no link between the main unit and the wireless accessory. Check that the wireless accessory is plugged in the mains socket.	11
	• Ensure that the digital transmitter is fully inserted into the slot of the main unit.	11
"D.MIX" is flashing. DVD-A	• Down-mixing is the process of remixing the multiple-channel audio found on some discs into two-channels. The disc contains single-channel or multiple-channel signals which may not be reproduced authentically.	—
"U70 □" □ stands for a number. The actual number following "U70" will depend on the state of the main unit.	• The HDMI connection acts unusually. – The connected equipment is not HDMI-compatible. – The HDMI cable is too long. – The HDMI cable is damaged.	— — — —
"REMOTE 1" or "REMOTE 2"	• Match the modes on the main unit and remote control. Depending on the number being displayed ("1" or "2"), press and hold [ENTER] and the corresponding numbered button ([1] or [2]) for at least 2 seconds.	40
"NO MIC" PT850 PT850W PT550 For Australia and N.Z.	• MIC not inserted. Check whether MIC is plugged in properly in to the "SETUP MIC" jack.	38
"NOISY" PT850 PT850W PT550 For Australia and N.Z.	• Excessive ambient noise in the room.	—
"ERROR" PT850 PT850W PT550 For Australia and N.Z.	• Center output not within the proper range. Check for proper connection and adjust the position of the center speaker.	—
	• Headphone inserted. Remove the headphone connected.	16
	• Auto speaker setup turned off abnormally.	—
	• DVD is not in the STOP condition. Remove all discs loaded.	—
	• Karaoke Mic inserted. Remove the Karaoke Mic.	—
	• Volume is muted. Turn off the mute.	17

■ USB

The USB drive or its contents cannot be read.	• The USB drive format or its contents is/are not compatible with the system.	37
	• The USB host function of this product may not work with some USB devices.	—
	• USB devices with storage capacity of more than 32 GB may not work in some instances.	—
Slow operation of the USB device.	• Large file size or high memory USB device takes longer time to read and display on the TV.	—

■ Television displays

		Page
"◌"	• The operation is prohibited by the unit or disc.	—
"Cannot play group xx, content xx" "Cannot display group xx, content xx"	• You are trying to display an incompatible group or content.	—
"Group xx, content xx is protected"	• You are trying to play a protected group or content. You cannot play it.	—
"Check the disc"	• This disc may be dirty.	—
"This disc may not be played in your region"	• Only DVD-Video discs that include or have the same region number as the one on the rear panel of this unit can be played.	Cover page
No on-screen display.	• Select "On" in "On-Screen Messages" in the "Display" tab.	29
"Authorization Error" [DivX]	• You are trying to play the DivX VOD content that was purchased with a different registration code. You cannot play the content on this unit.	31
※1 "Rental Expired" [DivX] ※2 "Rented Movie Expired" [DivX]	• The DivX VOD content has zero remaining plays. You cannot play it.	31
"Due to copyright protection, audio cannot be output from HDMI" [DVD-A]	• If you connect to equipment that does not support CPPM (➡ page 45, Glossary), audio from a CPPM copy-protected DVD-Audio disc cannot be output from the HDMI AV OUT terminal.	—
Main unit's screen saver remains.	• When using the HDMI connection, audio/video information is continually transferred between the main unit and the television regardless of which source has been selected on the main unit. This is normal.	—

■ Listening to the radio

Distorted sound or noise is heard. "ST" flickers or does not light.	• Adjust the position of the FM antenna. • Use an outdoor antenna.	— 36
A beat sound is heard.	• Turn the television off or move it away from the unit.	—

※1 **For Southeast Asia and Thailand**

※2 **For Continental Europe, the Middle East, South Africa, Saudi Arabia, Kuwait, Australia and N.Z.**

Language code list

Abkhazian:	6566	Danish:	6865	Italian:	7384	Norwegian:	7879	Swedish:	8386
Afar:	6565	Dutch:	7876	Japanese:	7465	Oriya:	7982	Tagalog:	8476
Afrikaans:	6570	English:	6978	Javanese:	7487	Pashto, Pushto:	8083	Tajik:	8471
Albanian:	8381	Esperanto:	6979	Kannada:	7578	Persian:	7065	Tamil:	8465
Ameharic:	6577	Estonian:	6984	Kashmiri:	7583	Polish:	8076	Tatar:	8484
Arabic:	6582	Faroese:	7079	Kazakh:	7575	Portuguese:	8084	Telugu:	8469
Armenian:	7289	Fiji:	7074	Kirghiz:	7589	Punjabi:	8065	Thai:	8472
Assamese:	6583	Finnish:	7073	Korean:	7579	Quechua:	8185	Tibetan:	6679
Aymara:	6589	French:	7082	Kurdish:	7585	Rhaeto-Romance:	8277	Tigrinya:	8473
Azerbaijani:	6590	Frisian:	7089	Laotian:	7679	Romanian:	8279	Tonga:	8479
Bashkir:	6665	Galician:	7176	Latin:	7665	Russian:	8285	Turkish:	8482
Basque:	6985	Georgian:	7565	Latvian, Lettish:	7686	Samoan:	8377	Turkmen:	8475
Bengali; Bangla:	6678	German:	6869	Lingala:	7678	Sanskrit:	8365	Twi:	8487
Bhutani:	6890	Greek:	6976	Lithuanian:	7684	Scots Gaelic:	7168	Ukrainian:	8575
Bihari:	6672	Greenlandic:	7576	Macedonian:	7775	Serbian:	8382	Urdu:	8582
Breton:	6682	Guarani:	7178	Malagasy:	7771	Serbo-Croatian:	8372	Uzbek:	8590
Bulgarian:	6671	Gujarati:	7185	Malay:	7783	Shona:	8378	Vietnamese:	8673
Burmese:	7789	Hausa:	7265	Malayalam:	7776	Sindhi:	8368	Volapük:	8679
Byelorussian:	6669	Hebrew:	7387	Maltese:	7784	Singhalese:	8373	Welsh:	6789
Cambodian:	7577	Hindi:	7273	Maori:	7773	Slovak:	8375	Wolof:	8779
Catalan:	6765	Hungarian:	7285	Marathi:	7782	Slovenian:	8376	Xhosa:	8872
Chinese:	9072	Icelandic:	7383	Moldavian:	7779	Somali:	8379	Yiddish:	7473
Corsican:	6779	Indonesian:	7378	Mongolian:	7778	Spanish:	6983	Yoruba:	8979
Croatian:	7282	Interlingua:	7365	Nauru:	7865	Sundanese:	8385	Zulu:	9085
Czech:	6783	Irish:	7165	Nepali:	7869	Swahili:	8387		

🎛 Glossary

CPPM (Content Protection for Prerecorded Media)
A copy protection system used for DVD-Audio files. This unit supports CPPM.

Decoder
A decoder restores the coded audio signals on DVDs to normal. This is called decoding.

DivX
DivX is a popular media technology created by DivX, Inc. DivX media files contain highly compressed video with high visual quality that maintains a relatively small file size.

Dolby Digital
This is a method of coding digital signals developed by Dolby Laboratories. Apart from stereo (2-channel) audio, these signals can also be multi-channel audio. A large amount of audio information can be recorded on one disc using this method.

DTS (Digital Theater Systems)
This surround system is used in many movie theaters around the world. There is good separation between the channels, so realistic sound effects are possible.

Dynamic range
Dynamic range is the difference between the lowest level of sound that can be heard above the noise of the equipment and the highest level of sound before distortion occurs.

Film and video
DVD-Videos are recorded using either film or video. This unit can determine which type has been used, then uses the most suitable method of progressive output.
Film: Recorded at 25 frames per second (PAL discs) or 24 frames per second (NTSC discs). (NTSC discs recorded at 30 frames per second as well). Generally appropriate for motion picture films.
Video: Recorded at 25 frames/50 fields per second (PAL discs) or 30 frames/60 fields per second (NTSC discs). Generally appropriate for TV drama programs or animation.

Frame still and field still
Frames are the still pictures that go together to make a moving picture.
There are about 30 frames shown each second.
One frame is made up of two fields. A regular television shows these fields one after the other to create frames.
A still is shown when you pause a moving picture. A frame still is made up of two alternating fields, so the picture may appear blurred, but overall quality is high.
A field still is not blurred, but it has only half the information of a frame still so picture quality is lower.

HDMI (High-Definition Multimedia Interface)
HDMI is a next-generation digital interface for consumer electronic products. Unlike conventional connections, it transmits uncompressed digital video and audio signals on a single cable. This unit supports high-definition video output (720p,1080p) from the HDMI AV OUT terminal. To enjoy high-definition video, a high-definition compatible television is required.

I/P/B
MPEG 2, the video compression standard adopted for use with DVD-Video, codes frames using these 3 picture types.
I: Intra coded picture
This picture has the best quality and is the best to use when adjusting the picture.
P: Predictive coded picture
This picture is calculated based on past I or P-pictures.
B: Bidirectionally-predictive coded picture
This picture is calculated by comparing past and future I and P-pictures so it has the lowest volume of information.

JPEG (Joint Photographic Experts Group)
This is a system used for compressing/decoding color still pictures. If you select JPEG as the storage system on digital cameras, etc., the data will be compressed to 1/10–1/100 of its original size. The benefit of JPEG is less deterioration in picture quality considering the degree of compression.

Linear PCM (Pulse Code Modulation)
These are uncompressed digital signals, similar to those found on CDs.

MP3 (MPEG Audio Layer 3)
An audio compression method that compresses audio to approximately one tenth of its size without any considerable loss of audio quality.

MPEG4
A compression system for use on mobile devices or a network, that allows highly efficient recording at a low bit rate.

Playback control (PBC)
If a Video CD has playback control, you can select scenes and information with menus.

Progressive/Interlaced
The PAL video signal standard has 576 interlaced (i) scan lines, whereas progressive scanning, called 576p, uses twice the number of scan lines. For the NTSC standard, these are called 480i and 480p respectively.
Using progressive output, you can enjoy the high-resolution video recorded on media such as DVD-Video. Your television must be compatible to enjoy progressive video.

Sampling frequency
Sampling is the process of converting the heights of sound wave (analog signal) samples taken at set periods into digits (digital encoding).
Sampling frequency is the number of samples taken per second, so larger numbers mean more faithful reproduction of the original sound.

WMA (Windows Media™ Audio)
WMA is a compression format developed by Microsoft Corporation. It achieves the same sound quality as MP3 with a file size that is smaller than that of MP3.

🔊 Specifications

AMPLIFIER SECTION

PT550

For Continental Europe, Australia and N.Z.

RMS Output Power: Dolby Digital Mode

Front Ch	125 W per channel (3 Ω), 1 kHz, 10 % THD
Surround Ch	125 W per channel (3 Ω), 1 kHz, 10 % THD
Center Ch	250 W per channel (6 Ω), 1 kHz, 10 % THD
Subwoofer Ch	250 W per channel (6 Ω), 100 Hz, 10 % THD
Total RMS Dolby Digital mode power	1000 W

DIN Output Power: Dolby Digital Mode

Front Ch	75 W per channel (3 Ω), 1 kHz, 1 % THD
Surround Ch	75 W per channel (3 Ω), 1 kHz, 1 % THD
Center Ch	145 W per channel (6 Ω), 1 kHz, 1 % THD
Subwoofer Ch	145 W per channel (6 Ω), 100 Hz, 1 % THD
Total DIN Dolby Digital mode power	590 W

For Southeast Asia, Thailand, the Middle East, South Africa, Saudi Arabia, Kuwait

RMS Output Power: Dolby Digital Mode

Front Ch	125 W per channel (3 Ω), 1 kHz, 10 % THD
Surround Ch	125 W per channel (3 Ω), 1 kHz, 10 % THD
Center Ch	250 W per channel (6 Ω), 1 kHz, 10 % THD
Subwoofer Ch	250 W per channel (6 Ω), 100 Hz, 10 % THD
Total RMS Dolby Digital mode power	1000 W

PMPO output power 7500 W

DIN Output Power: Dolby Digital Mode

Front Ch	75 W per channel (3 Ω), 1 kHz, 1 % THD
Surround Ch	75 W per channel (3 Ω), 1 kHz, 1 % THD
Center Ch	145 W per channel (6 Ω), 1 kHz, 1 % THD
Subwoofer Ch	145 W per channel (6 Ω), 100 Hz, 1 % THD
Total DIN Dolby Digital mode power	590 W

PT850

For Continental Europe

RMS Output Power: Dolby Digital Mode

Front Ch	125 W per channel (3 Ω), 1 kHz, 10 % THD
Surround Ch	125 W per channel (3 Ω), 1 kHz, 10 % THD
Center Ch	250 W per channel (6 Ω), 1 kHz, 10 % THD
Subwoofer Ch	250 W per channel (6 Ω), 100 Hz, 10 % THD
Total RMS Dolby Digital mode power	1000 W

DIN Output Power: Dolby Digital Mode

Front Ch	75 W per channel (3 Ω), 1 kHz, 1 % THD
Surround Ch	75 W per channel (3 Ω), 1 kHz, 1 % THD
Center Ch	145 W per channel (6 Ω), 1 kHz, 1 % THD
Subwoofer Ch	145 W per channel (6 Ω), 100 Hz, 1 % THD
Total DIN Dolby Digital mode power	590 W

PT850W

For Southeast Asia, Thailand, the Middle East, South Africa, Saudi Arabia and Kuwait

RMS Output Power: Dolby Digital Mode

Front Ch	125 W per channel (3 Ω), 1 kHz, 10 % THD
Surround Ch[×8]	125 W per channel (3 Ω), 1 kHz, 10 % THD
Center Ch	250 W per channel (6 Ω), 1 kHz, 10 % THD
Subwoofer Ch	250 W per channel (6 Ω), 100 Hz, 10 % THD
Total RMS Dolby Digital mode power	1000 W

DIN Output Power: Dolby Digital Mode

Front Ch	70 W per channel (3 Ω), 1 kHz, 1 % THD
Surround Ch[×8]	70 W per channel (3 Ω), 1 kHz, 1 % THD
Center Ch	150 W per channel (6 Ω), 1 kHz, 1 % THD
Subwoofer Ch	150 W per channel (6 Ω), 100 Hz, 1 % THD
Total DIN Dolby Digital mode power	580 W

For Australia and N.Z.

RMS Output Power: Dolby Digital Mode

Front Ch	250 W per channel (6 Ω), 1 kHz, 10 % THD
Surround Ch[×8]	100 W per channel (4 Ω), 1 kHz, 10 % THD
Center Ch	250 W per channel (6 Ω), 1 kHz, 10 % THD
Subwoofer Ch	250 W per channel (6 Ω), 100 Hz, 10 % THD
Total RMS Dolby Digital mode power	1200 W

DIN Output Power: Dolby Digital Mode

Front Ch	150 W per channel (6 Ω), 1 kHz, 1 % THD
Surround Ch[×8]	70 W per channel (4 Ω), 1 kHz, 1 % THD
Center Ch	150 W per channel (6 Ω), 1 kHz, 1 % THD
Subwoofer Ch	150 W per channel (6 Ω), 100 Hz, 1 % THD
Total DIN Dolby Digital mode power	740 W

FM TUNER, TERMINALS SECTION

Preset Memory	FM 30 stations
Frequency Modulation (FM)	
Frequency range	87.50 to 108.00 MHz (50-kHz step)
Sensitivity	1.8 µV (IHF)
S/N 26 dB	1.4 µV
Antenna terminals	75 Ω (unbalanced)
Digital audio input	
Optical digital input	Optical terminal
Sampling frequency	32 kHz, 44.1 kHz, 48 kHz
Phone jack	
Terminal	Stereo, 3.5 mm jack

Mic jack

For Southeast Asia, Thailand, the Middle East, South Africa, Saudi Arabia and Kuwait

Sensitivity	0.7 mV, 1.2 kΩ
Terminal	Mono, 6.3 mm jack (2 system)
Music Port (Front)	
Sensitivity	100 mV, 1.4 kΩ
Terminal	Stereo, 3.5 mm jack
USB Port	
USB standard	USB 2.0 full speed
Media file format support	MP3 (✽.mp3)
	WMA (✽.wma)
	JPEG (✽.Jpg) (✽.JPEG)
	MPEG4 (✽.asf)
USB device file system	(FAT12) (FAT16) (FAT32)
USB Port power	Max. 500 mA

DISC SECTION

Discs played (8 cm or 12 cm)

(1) **For Continental Europe**
    DVD (DVD-Video, DVD-Audio, DivX[×6, ×7])

(2) **For Southeast Asia, Thailand, the Middle East, South Africa, Saudi Arabia, Kuwait, Australia aand N.Z.**
    DVD (DVD-Video, DivX[×6, ×7])

(3) DVD-RAM (DVD-VR, MP3[×2, ×7], JPEG[×4, ×7], MPEG4[×5, ×7], DivX[×6, ×7])

(4) DVD-R (DVD-Video, DVD-VR, MP3[×2, ×7], JPEG[×4, ×7], MPEG4[×5, ×7], DivX[×6, ×7])

(5) DVD-R DL (DVD-Video, DVD-VR)

(6) DVD-RW (DVD-Video, DVD-VR, MP3[×2, ×7], JPEG[×4, ×7], MPEG4[×5, ×7], DivX[×6, ×7])

(7) +R/+RW (Video)

(8) +R DL (Video)

(9) CD, CD-R/RW [CD-DA, Video CD, SVCD[×1], MP3[×2, ×7], WMA[×3, ×7], JPEG[×4, ×7], MPEG4[×5, ×7], DivX[×6, ×7], HighMAT Level 2 (Audio and Image)]

[×1] Conforming to IEC62107

[×2] MPEG-1 Layer 3, MPEG-2 Layer 3

[×3] Windows Media Audio Ver.9.0 L3
Not compatible with Multiple Bit Rate (MBR)

[×4] Exif Ver 2.1 JPEG Baseline files
Picture resolution: between 160x120 and 6144x4096 pixels
(Sub sampling is 4:0:0, 4:2:0, 4:2:2 or 4:4:4). Extremely long and narrow pictures may not be displayed.

[×5] MPEG4 data recorded with Panasonic SD multi cameras or DVD video recorders
Conforming to SD VIDEO specifications (ASF standard)/MPEG4 (Simple Profile) video system/G.726 audio system

[×6] Plays all versions of DivX® video (including DivX®6) with standard playback of DivX® media files. Certified to the DivX Home Theater Profile.

[×7] The total combined maximum number of recognizable audio, picture and video contents and groups: 4000 audio, picture and video contents and 400 groups.

Pick up

Wavelength (DVD/CD)	662/785 nm
Laser power (DVD/CD)	CLASS 1/CLASS 1M

NORSK

Bølgelengde (DVD/CD)	662/785 nm
Laserstyrke	Ingen farlig stråling sendes ut

Audio output (Disc)

Number of channels	5.1ch (FL, FR, C, SL, SR, SW)

VIDEO SECTION

Video system PAL625/50, PAL525/60, NTSC
Composite video output
  Output level 1 Vp-p (75 Ω)
  For Southeast Asia, Thailand, the Middle East, South Africa, Saudi Arabia, Kuwait, Australia aand N.Z. Pin jack (1 system)
  For Continental Europe Scart jack (1 system)

For Continental Europe

S-video output
  Y output level 1 Vp-p (75 Ω)
  C output level PAL; 0.3 Vp-p (75 Ω)
    NTSC; 0.286 Vp-p (75 Ω)
  Terminal Scart jack (1 system)

Component video output (NTSC: 480p/480i, PAL: 576p/576i)
  Y output level 1 Vp-p (75 Ω)
  PB output level 0.7 Vp-p (75 Ω)
  PR output level 0.7 Vp-p (75 Ω)
  Terminal Pin jack (Y: green, PB: blue, PR: red) (1 system)

For Continental Europe

RGB video output
  R output level 0.7 Vp-p (75 Ω)
  G output level 0.7 Vp-p (75 Ω)
  B output level 0.7 Vp-p (75 Ω)
  Terminal Scart jack (1 system)

HDMI AV output
  Terminal Type A connector (19 pin)

This unit supports "HDAVI Control 2" function.

SPEAKER SECTION

PT850W For Southeast Asia, Thailand, the Middle East, South Africa, Saudi Arabia and Kuwait

PT550 **PT850** Front speakers SB-HF550

Type 1 way, 1 speaker system (Bass reflex)
Speaker unit(s) Impedance 3 Ω
  Full range 6.5 cm Cone type
Input power (IEC) 125 W※ (Max)
Output sound pressure 80 dB/W (1.0 m)
Frequency range 76 Hz to 25 kHz (–16 dB)
    89 Hz to 22 kHz (–10 dB)
Dimensions (W x H x D) 252 mm x 1123 mm x 235 mm
Mass 3.7 kg

For Continental Europe, Australia and N.Z.

PT550 Surround speakers SB-HS550

Type 1 way, 1 speaker system (Bass reflex)
Speaker unit(s) Impedance 3 Ω
  Full range 6.5 cm Cone type
Input power (IEC) 125 W※ (Max)
Output sound pressure 80 dB/W (1.0 m)
Frequency range 95 Hz to 25 kHz (–16 dB)
    120 Hz to 22 kHz (–10 dB)
Dimensions (W x H x D) 92 mm x 142 mm x 95 mm
Mass 0.6 kg

Center speakers SB-HC550

Type 2 way, 2 speaker system (Bass reflex)
Speaker unit(s) Impedance 6 Ω
  1. Full range 6.5 cm Cone type
  2. Full range 6.5 cm Cone type
Input power (IEC) 250 W※ (Max)
Output sound pressure 82 dB/W (1.0 m)
  Cross over frequency 5 kHz
Frequency range 80 Hz to 25 kHz (–16 dB)
    96 Hz to 22 kHz (–10 dB)
Dimensions (W x H x D) 270 mm x 94 mm x 95 mm
Mass 1.3 kg

Subwoofer SB-HW550

Type 1 way, 1 speaker system (Bass reflex)
Speaker unit(s) Impedance 6 Ω
  Woofer 16 cm Cone type
Input power (IEC) 250 W (Max)
Output sound pressure 81 dB/W (1.0 m)
Frequency range 31 Hz to 220 Hz (–16 dB)
    37 Hz to 180 Hz (–10 dB)
Dimensions (W x H x D) 153 mm x 415 mm x 257 mm
Mass 3.6 kg

PT550 **PT850W** For Southeast Asia, Thailand, the Middle East, South Africa, Saudi Arabia and Kuwait

PT850 Surround speakers SB-HS850

Type 1 way, 1 speaker system (Bass reflex)
Speaker unit(s) Impedance 3 Ω
  Full range 6.5 cm Cone type
Input power (IEC) 125 W※ (Max)
Output sound pressure 80 dB/W (1.0 m)
Frequency range 76 Hz to 25 kHz (–16 dB)
    89 Hz to 22 kHz (–10 dB)
Dimensions (W x H x D) 252 mm x 1123 mm x 235 mm
Mass 3.7 kg

For Australia and N.Z.

PT850W Front speakers SB-HF850

Type 2 way, 2 speaker system (Bass reflex)
Speaker unit(s) Impedance 6 Ω
  1. Full range 6.5 cm Cone type
  2. Full range 6.5 cm Cone type
Input power (IEC) 250 W※ (Max)
Output sound pressure 83 dB/W (1.0 m)
  Cross over frequency 5 kHz
Frequency range 79 Hz to 25 kHz (–16 dB)
    95 Hz to 22 kHz (–10 dB)
Dimensions (W x H x D) 252 mm x 1123 mm x 235 mm
Mass 3.8 kg

For Australia and N.Z.

PT850W Surround speakers SB-HS851

Type 1 way, 1 speaker system (Bass reflex)
Speaker unit(s) Impedance 4 Ω
  Full range 6.5 cm Cone type
Input power (IEC) 100 W※ (Max)
Output sound pressure 80 dB/W (1.0 m)
Frequency range 76 Hz to 25 kHz (–16 dB)
    89 Hz to 22 kHz (–10 dB)
Dimensions (W x H x D) 252 mm x 1123 mm x 235 mm
Mass 3.7 kg

WIRELESS TRANSMITTER AND RECEIVER

PT850W

Power supply
  For Southeast Asia, Thailand, the Middle East, South Africa, Saudi Arabia and Kuwait
    AC 110 to 240 V, 50/60 Hz
  For Australia and N.Z. AC 230 to 240 V, 50 Hz
Power consumption
  Tx (SH-FX65T) 1.5 W
  Rx (SE-FX65) 43 W
Dimensions (W x H x D)
  Tx (SH-FX65T) 65 mm x 52 mm x 8.6 mm
  Rx (SE-FX65) 165 mm x 90 mm x 164 mm
Mass Tx (SH-FX65T) 0.02 kg
  Rx (SE-FX65) 0.655 kg
Wireless module
  Frequency range 2.4000 to 2.4835 GHz
  No. of channels 3
RMS output power
  Surround Ch 125 W per channel (3 Ω), 1 kHz, 10% THD
Total RMS power 250 W
DIN output power
  Surround Ch 70 W per channel (3 Ω), 1 kHz, 1% THD
Total DIN power 140 W
Speaker Jack impedance indication 3 Ω to 6 Ω
Operating temperature range +5 °C to +35 °C (+41 °F to +95 °F)
Operating humidity range 5 % to 90 % RH (no condensation)

PT850W For Australia and N.Z.

RMS output power
  Surround Ch 100 W per channel (4 Ω), 1 kHz, 10% THD
Total RMS power 200 W
DIN output power
  Surround Ch 70 W per channel (4 Ω), 1 kHz, 1% THD
Total DIN power 140 W
Speaker Jack impedance indication 3 Ω to 6 Ω

Power consumption in off mode approx. 0.3 W

※8 Power output of the wireless receiver amplifier SE-FX65

ENGLISH

REFERENCE

RQTX0038

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⚙ Specifications (continued)

GENERAL

Power supply

For Continental Europe	AC 230 V, 50 Hz
For Southeast Asia, Thailand, the Middle East, South Africa, Saudi Arabia and Kuwait	AC 110 to 127 V / 220 to 240 V, 50/60 Hz
For Australia and N.Z.	AC 230 to 240 V, 50 Hz

Power consumption

PT550 Main unit	
For Continental Europe, Australia and N.Z.	135 W
PT550 Main unit	
For Southeast Asia, Thailand, the Middle East, South Africa, Saudi Arabia and Kuwait	140 W
PT850 Main unit	135 W
PT850W Main unit	125 W
PT850W Main unit	
For Australia and N.Z.	135 W

Dimensions (W x H x D)

For Continental Europe	430 mm x 60 mm x 363 mm
For Southeast Asia, Thailand, the Middle East, South Africa, Saudi Arabia, Kuwait, Australia and N.Z.	
PT550	430 mm x 60 mm x 364.4 mm
PT850W	430 mm x 64.7 mm x 364.4 mm

Mass	Main unit	approx. 3.5 kg
Operating temperature range		+5 °C to +35 °C (+41 °F to +95 °F)
Operating humidity range		5 % to 90 % RH (no condensation)

Power consumption in standby mode	approx. 0.8 W

※Rating with low-cut filter equipped amplifier

Note

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

⚙ Maintenance

Clean this unit with a soft, dry cloth.
– Never use alcohol, paint thinner or benzine to clean this unit.
– Before using chemically treated cloth, carefully read the instructions that came with the cloth.
– Do not use commercially available lens cleaners as they may cause malfunction. (Cleaning the lens is generally not necessary although this depends on the operating environment.)

Before moving the unit, ensure the disc tray is empty.
Failure to do so will risk severely damaging the disc and the unit.

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.
• 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.

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.

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.

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.

For Wireless system

Product Identification Marking is located on
the bottom of unit.