

# Panasonic

WMA MP3 CD Player/Receiver

Model: **CQ-C8803N**



**Operating Instructions**  
**Bedienungsanleitung**  
**Manuel d'instructions**  
**Gebruiksaanwijzing**  
**Bruksanvisning**  
**Manuale di istruzioni**  
**Manual de Instrucciones**  
**Brugsvejledning**  
**Инструкция по эксплуатации**



**WMA**

**MP3**



- Please read these instructions carefully before using this product and keep this manual for future reference.
- Bitte lesen Sie diese Bedienungsanleitung vor der Verwendung dieses Produktes aufmerksam durch und bewahren Sie sie danach für spätere Nachschlagzwecke sorgfältig auf.
- Prière de lire ces instructions attentivement avant d'utiliser le produit et garder ce manuel pour l'utilisation ultérieure.
- Leest u deze instructie alstublieft zorgvuldig door voor u dit product in gebruik neemt en bewaar deze handleiding voor later gebruik.
- Läs igenom denna bruksanvisning noga innan produkten tas i bruk. Spara bruksanvisningen för framtida behov.
- Si prega di leggere attentamente queste istruzioni prima di usare questo prodotto e di conservare questo manuale per usi futuri.
- Lea con atención estas instrucciones antes de utilizar el producto y guarde este manual para poderlo consultar en el futuro.
- Læs venligst denne brugsvejledning grundigt, inden dette produkt tages i brug og gem den til senere konsultation.
- Перед началом эксплуатации просим прочитать настоящую инструкцию внимательно и хранить ее на пользование на будущее.

# Safety Information

■ Read the operating instructions for the unit and all other components of your car audio system carefully before using the system. They contain instructions about how to use the system in a safe and effective manner. Panasonic assumes no responsibility for any problems resulting from failure to observe the instructions given in this manual.

■ This manual uses pictographs to show you how to use the product safely and to alert you to potential dangers resulting from improper connections and operations. The meanings of the pictographs are explained below. It is important that you fully understand the meanings of the pictographs in order to use this manual and the system properly.



**This pictograph intends to alert you to the presence of important operating instructions and installation instructions. Failure to heed the instructions may result in severe injury or death.**



**Caution**

**This pictograph intends to alert you to the presence of important operating instructions and installation instructions. Failure to heed the instructions may result in injury or material damage.**

## Warning

**Observe the following warnings when using this unit.**

- ❑ **The driver should neither watch the display nor operate the system while driving.**  
Watching the display or operating the system will distract the driver from looking ahead of the vehicle and can cause accidents. Always stop the vehicle in a safe location and use the parking brake before watching the display or operating the system.
- ❑ **Use the proper power supply.**  
This product is designed for operation with a negative grounded 12 V DC battery system. Never operate this product with other battery systems, especially a 24 V DC battery system.
- ❑ **Keep batteries and insulation film out of reach of infants.**  
Batteries and insulation film can be ingested, so keep them out of the reach of infants. If an infant ingests a battery or insulation film, please seek immediate medical attention.
- ❑ **Protect the Deck Mechanism.**  
Do not insert any foreign objects into the slot of this unit.
- ❑ **Do not disassemble or modify the unit.**  
Do not disassemble, modify the unit or attempt to repair the product yourself. If the product needs to be repaired, consult your dealer or an authorized Panasonic Service Centre.
- ❑ **Do not use the unit when it is out of order.**  
If the unit is out of order (no power, no sound) or in an abnormal state (has foreign objects in it, is exposed to water, is smoking, or smells), turn it off immediately and consult your dealer.
- ❑ **The remote control unit should not lie about in the car.**  
If the remote control unit lies about, it could fall on the floor while driving, get wedged under the brake pedal, and lead to a traffic accident.
- ❑ **Refer fuse replacement to qualified service personnel.**  
When the fuse blows out, eliminate the cause and have it replaced with the fuse prescribed for this unit by a qualified service engineer. Incorrect replacement of the fuse may lead to smoke, fire, and damage to the product.

**Observe the following warnings when installing.**

- ❑ **Disconnect the lead from the negative (–) battery terminal before installation.**  
Wiring and installation with the negative (–) battery terminal connected may cause electrical shock and injury due to a short circuit.  
Some cars equipped with the electrical safety system have specific procedures of battery terminal disconnection.  
**FAILURE TO FOLLOW THE PROCEDURE MAY LEAD TO THE UNINTENDED ACTIVATION OF THE ELECTRICAL SAFETY SYSTEM RESULTING IN DAMAGE TO THE VEHICLE AND PERSONAL INJURY OR DEATH.**
- ❑ **Never use safety-related components for installation, grounding, and other such functions.**  
Do not use safety-related vehicle components (fuel tank, brake, suspension, steering wheel, pedals, airbag, etc.) for wiring or fixing the product or its accessories.
- ❑ **Installing the product on the air bag cover or in a location where it interferes with airbag operation is prohibited.**
- ❑ **Check for piping, gasoline tank, electric wiring, and other items before installing the product.**  
If you need to open a hole in the vehicle chassis to attach or wire the product, first check where the wire harness, gasoline tank, and electric wiring are located. Then open the hole from outside if possible.
- ❑ **Never install the product in a location where it interferes with your field of vision.**
- ❑ **Never have the power cord branched to supply other equipment with power.**
- ❑ **After installation and wiring, you should check the normal operation of other electrical equipment.**  
The continuation of their using in abnormal conditions may cause fire, electrical shock or a traffic accident.
- ❑ **In the case of installation to an airbag-equipping car, confirm warnings and cautions of the vehicle manufacturer before installation.**
- ❑ **Make sure the leads do not interfere with driving or getting in and out of the vehicle.**
- ❑ **Insulate all exposed wires to prevent short circuiting.**

## Caution

**Observe the following cautions when using this unit.**

- ❑ **Keep the sound volume at an appropriate level.**  
Keep the volume level low enough to be aware of road and traffic conditions while driving.
- ❑ **Do not insert or allow your hand or fingers to be caught in the unit.**  
To prevent injury, do not get your hand or fingers caught in moving parts or in the disc slot. Especially watch out for infants.
- ❑ **This unit is designed for use exclusively in automobiles.**
- ❑ **Do not operate the unit for a prolonged period with the engine turned off.**  
Operating the audio system for a long period of time with the engine turned off will drain the battery.
- ❑ **Do not expose the unit to direct sunlight or excessive heat.**  
Otherwise these will raise the interior temperature of the unit, and it may lead to smoke, fire, or other damage to the unit.
- ❑ **Do not use the product where it is exposed to water, moisture, or dust.**  
Exposure of the unit to water, moisture, or dust may lead to smoke, fire, or other damage to the unit. Make especially sure that the unit does not get wet in car washes or on rainy days.

**Observe the following cautions when installing.**

- ❑ **Refer wiring and installation to qualified service personnel.**  
Installation of this unit requires special skills and experience. For maximum safety, have it installed by your dealer. Panasonic is not liable for any problems resulting from your own installation of the unit.
- ❑ **Follow the instructions to install and wire the product.**  
Not following the instructions to properly install and wire the product could cause an accident or fire.
- ❑ **Take care not to damage the leads.**  
When wiring, take care not to damage the leads. Prevent them from getting caught in the vehicle chassis, screws, and moving parts such as seat rails. Do not scratch, pull, bend or twist the leads. Do not run them near heat sources or place heavy objects on them. If leads must be run over sharp metal edges, protect the leads by winding them with vinyl tape or similar protection.
- ❑ **Use the designated parts and tools for installation.**  
Use the supplied or designated parts and appropriate tools to install the product. The use of parts other than those supplied or designated may result in internal damage to the unit. Faulty installation may lead to an accident, a malfunction or fire.
- ❑ **Do not block the air vent or the cooling plate of the unit.**  
Blocking these parts will cause the interior of the unit to overheat and will result in fire or other damage.

- ❑ **Do not install the product where it is exposed to strong vibrations or is unstable.**  
Avoid slanted or strongly curved surfaces for installation. If the installation is not stable, the unit may fall down while driving and this can lead to an accident or injury.
- ❑ **Installation Angle**  
The product should be installed in a horizontal position with the front end up at a convenient angle, but not more than 30°.  
The user should bear in mind that in some areas there may be restrictions on how and where this unit must be installed. Consult your dealer for further details.
- ❑ **Wear gloves for safety. Make sure that wiring is completed before installation.**
- ❑ **To prevent damage to the unit, do not connect the power connector until the whole wiring is completed.**
- ❑ **Do not connect more than one speaker to one set of speaker leads. (except for connecting to a tweeter)**

**Observe the following cautions when handling the battery for the remote control unit.**

- Use only specified battery (CR2025).
- Match the polarity of the battery with the (+) and (–) marks in the battery case.
- Replace dead battery as soon as possible.
- Remove the battery from the remote control unit when not using it for an extended period of time.
- Insulate the battery (by placing them in a plastic bag or covering them with vinyl tape) before disposal or storage.
- Dispose of the battery according to the local regulations.
- Do not disassemble, recharge, heat or short the battery. Do not throw a battery into a fire or water.

### **In case of battery leakage**

- Thoroughly wipe the battery liquid off the battery case and insert new battery.
- If any part of your body or clothing comes into contact with battery liquid, wash it with plenty of water.
- If battery liquid comes into contact with your eyes, wash them with plenty of water and get immediate medical attention.

## Label Indications and Their Locations

### CAUTION

**LASER RADIATION WHEN OPEN. DO NOT STARE INTO BEAM.**

### ⚠ Caution

**THIS PRODUCT IS A CLASS 1 LASER PRODUCT. USE OF CONTROLS OR ADJUSTMENTS OR PERFORMANCE OF PROCEDURES OTHER THAN THOSE SPECIFIED HEREIN MAY RESULT IN HAZARDOUS RADIATION EXPOSURE.**

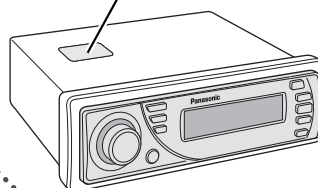
**DO NOT OPEN COVERS AND DO NOT REPAIR BY YOURSELF. REFER SERVICING TO QUALIFIED PERSONNEL.**

### Do not take apart this unit or attempt to make any changes yourself.

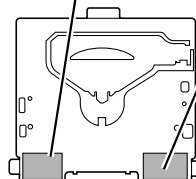
This unit is a very intricate device that uses a laser pickup to retrieve information from the surface of compact discs. The laser is carefully shielded so that its rays remain inside the cabinet.

Therefore, never try to disassemble the player or alter any of its parts since you may be exposed to laser rays and dangerous voltages.

## CLASS 1 LASER PRODUCT



CAUTION - LASER RADIATION WHEN OPEN. AVOID EXPOSURE TO BEAM.	VAROITUS - LASER-SÄTEILYVAARA AVATTAESSA. VARO ALTISTUMISTA SÄTEELLE.
VORSICHT - LASERSTRAHLUNG. WENN GEÖFFNET, VERMEIDEN SIE EIN AUSSETZEN GEGENÜBER DEM LASERSTRAHL.	FÖRSIKTIGHET - LASERSTRÅLNING I ÖPPNAT LÄGE. UNDVIK ATT UTSÄTTAS FÖR STRÅLEN.
ATTENTION - RAYONNEMENT LASER SI OUVERT, EVITER TOUTE EXPOSITION AU FAISCEAU.	ADVARSEL - LASERSTRÅLING. UNNGÅ EKSPONERING FOR STRÅLEN VED ÅPNING.
ADVARSEL - LASER UDSEENDES NÅR DER ER ÅBNET. UNDGÅ UDSETELSE FOR STRÅLER.	ВНИМАНИЕ - ЛАЗЕРНОЕ ИЗЛУЧЕНИЕ ПРИ ОТКРЫТИИ. ИЗБЕЖАТЬ ВОЗДЕЙСТВИЯ ЛАЗЕРНОГО ИЗЛУЧЕНИЯ.



Deck Ass'y (Upper Side)

# Before Reading These Instructions

Panasonic welcomes you to our constantly growing family of electronic products owners.

We endeavor to give you the advantages of precise electronic and mechanical engineering, manufactured with carefully selected components, and assembled by people who are proud of the reputation their work has built for our company. We know this product will bring you many hours of enjoyment, and after you discover the quality, value and reliability we have built into it, you too will be proud to be a member of our family.


The instruction manual consists of 2 books. One is "Operating Instructions" describing the operations of the main unit. The other is "System Upgrade Guidebook" describing the optional devices such as CD changer.

Before Reading These Instructions

English


Safety Information, Before Reading These Instructions

Accessories




**Operating Instructions**  
(YEFM285767)

**Q'ty: 1**




**System Upgrade Guidebook**  
(YEFM262688)

**Q'ty: 1**




**Installation Instructions**  
(YEFM294131)  
(YEFM294132)  
(YEFM294133)

**Q'ty: 1**



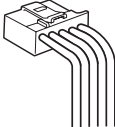
**PAN EUROPEAN GUARANTEE (Warranty Card)**

**Q'ty: 1**



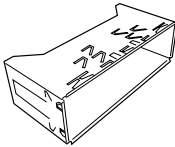
**Remote Control Unit (including a battery)**  
(CR2025)  
(EUR7641010)

**Q'ty: 1**



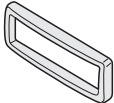
**Power Connector**  
(YGAJ021010)

**Q'ty: 1**



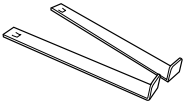
**Mounting Collar**  
(YEFX0217314)

**Q'ty: 1**




**Trim Plate**  
(YEFC051013)


**Q'ty: 1**



**Lock Cancel Plate**




**Mounting Bolt (5 mmø)**



**ISO Antenna adaptor**  
(YEP0FZ5740)

**Q'ty: 1 set**



**Removable Face Plate Case**  
(YEFA134145)

**Q'ty: 1**

**Notes:**

- The number in parenthesis underneath each accessory part name is the part number for maintenance and service.
- Accessories and their parts numbers are subject to modification without prior notice due to improvements.
- Mounting Collar and Trim Plate are mounted on the main unit at shipment.

# Features

## CQ-C8803N

WMA MP3 CD Player/Receiver

### Hands-Free Phone System

Connection of the optional Bluetooth hands-free kit (Hands-Free Kit featuring *Bluetooth*® technology: CY-BT100N) allows users to talk on a handsfree cellular phone if the phone supports Bluetooth.

**Note:** This unit is designed **only for receiving calls**. It cannot send calls.

#### Bluetooth®

The Bluetooth word mark and logo are owned by the Bluetooth SIG, Inc. and any use of such marks by Matsushita Electric Industrial Co., Ltd. is under license. Other trademarks and trade name are those of their respective owners.

### Expansion Module (hub unit)

Connection of the Expansion Module (hub unit, CY-EM100N) allows users to connect up to 4 optional devices shown below.

### Wide array of components for system upgrade

Various optional components allow users to obtain availability of wide range of system upgrade. Upgrading the system delivers relaxed AV space in a car. For further information, refer to the separate **System Upgrade Guidebook**.

#### • DVD Changer

The optional adapter (Conversion Cable for DVD/CD Changer: CA-CC30N) allows you to connect the optional Panasonic DVD changer unit (CX-DH801N).

#### • CD Changer

The optional adapter (Conversion Cable for DVD/CD Changer: CA-CC30N) allows you to connect the optional Panasonic CD changer unit (CX-DP880N).

#### • iPod®

The optional adapter (Direct Cable for iPod: CA-DC300N) allows you to connect the optional iPod series.

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

### Sound Control

#### SQ (Sound Quality)

You have six preset modes (FLAT, ROCK, POP, VOCAL, JAZZ, CLUB). You can customize your settings for these and save them for instant recall.

#### SQ9

This is 9-band equalizer with 62.5, 125, 250, 500, 1 k, 2 k, 4 k, 8 k, and 16 kHz (default). Each band is adjustable between -12 dB and 12 dB in steps of 2 dB.

### Customize

Initially stored moving images and still images are editable to taste. IMAGE STUDIO\* allows you to process images from a digital camera or other devices without difficulty. (⇒ page 36)

\* This software is downloadable from Panasonic Web site (<http://panasonic.co.jp/pas/en/software/customize/index.html>)



### Full Digital CD Receiver

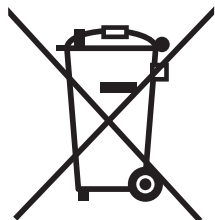
The CQ-C8803N uses Radio DSP for digital conversion and processing of FM/AM signals, and a digital amp to provide amplification of the digital data. With this technology, Panasonic achieves full digital processing of radio and CD signals from input to speaker output. This means faithful reproduction of the original sound.

### Radio DSP

By digitally converting and processing FM/AM broadcast signals, this greatly reduces adjacent interference and multipath distortion.

A radio's IF filter has the job of preventing neighboring broadcast frequencies from interfering with reception of your desired station. Panasonic's Radio DSP uses an advanced algorithm to perform this task with digital control. It maintains the optimum balance between noise suppression and sound quality by automatically adjusting the IF filter bandwidth in response to the changing interference characteristics as you drive.

### 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.



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# Controls Layout

**Note:** This instruction manual explains operations for use with the buttons on the main unit. (Different operations excluded)

## Main Unit

**VOLUME** (⇒ page 13)

**PUSH SEL** Select

(⇒ page 32, 33)

**SRS CS** (⇒ page 16)

**TUNE** (⇒ page 19)

**TRACK** (FILE)

(⇒ page 26, 28)

**P-SET** Preset (⇒ page 19)

**DISC** (⇒ System Upgrade Guidebook)

**FOLDER** (⇒ page 28)

**MENU** (⇒ page 34, 35)

**DIM** Dimmer (⇒ page 15)

**II / ►** Pause/Play

(⇒ page 26, 28)

**BAND** (⇒ page 19)

**SET** (⇒ page 34, 35)

**APM** Auto Preset Memory

(⇒ page 19)

**Eject** (⇒ page 13)

**TILT** (⇒ page 13)

**OPEN** (⇒ page 13)

**TA**  
Traffic Announcement  
(⇒ page 24)

**D-M** Direct Memory  
(⇒ page 21)

**SQ** Sound Quality  
(⇒ page 17)

**MUTE** (⇒ page 13)

**SBC-SW** Super Bass  
Control-Subwoofer  
(⇒ page 18)

**D (DISP)** Display (⇒ page 15)

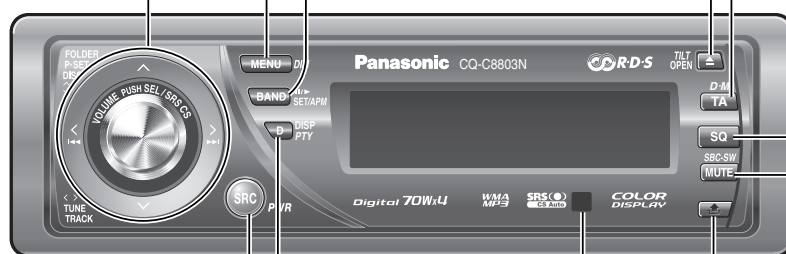
**PTY** Programme Type  
(⇒ page 25)

**Release** (⇒ page 12)

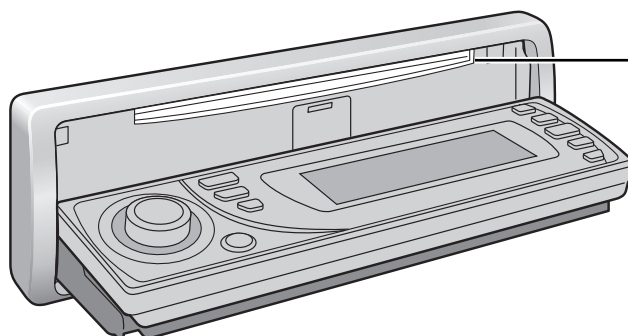
Remote Control Sensor

**SRC** Source (⇒ page 14)

**PWR** Power (⇒ page 12)

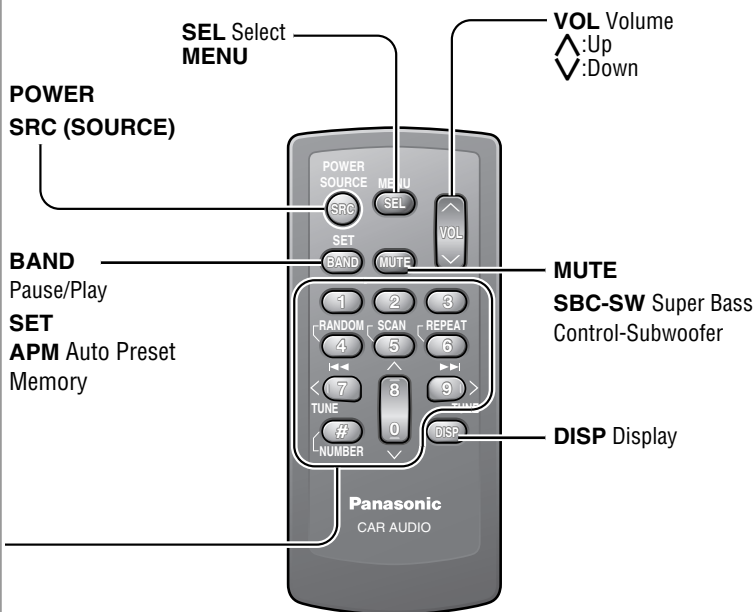
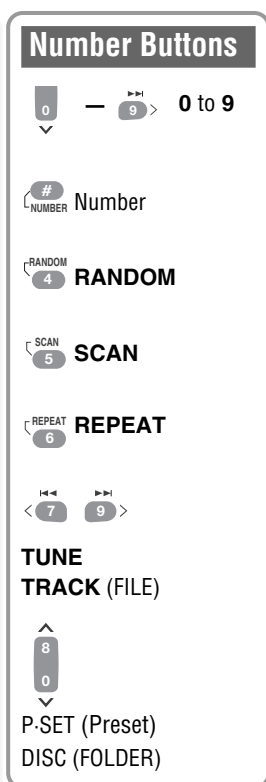


## When Face Plate Opens



Disc slot





Although most of the functions of this unit are executable with both the main unit and remote control, the following functions are excluded.

### Operations executable only with main unit

- Face panel's opening, closing, tilting, and removal actions (⇒ page 13)
- Disc ejection (⇒ page 13)
- Dimmer (⇒ page 15)
- CS AUTO on, off, and adjustment (⇒ page 16)
- SQ on, off, and adjustment (⇒ page 17)
- Direct memory setting and calling (⇒ page 21)
- TA ON/OFF (⇒ page 24)

### Operations executable only with remote control

- Preset station calling with one-touch operation (⇒ page 19)
- Direct access to tracks on CDs (⇒ page 27, 29)
- Random and repeat play with one-touch operation (⇒ page 27, 29)
- Scan playback (⇒ page 27, 29)
- PI seek (⇒ page 23)

# Preparation

## Cancellation of demonstration screen

For the first use, the following screen may appear repeatedly.

**1** Set your car's ignition switch to the ACC or On position.

**2** Press **[SRC]** (**PWR: POWER**).

The demonstration screen appears.



**3** Press **[MENU]** to display the menu display.

For using the remote control, hold down **[SEL]** (**MENU**) for 2 sec. or more.

**4** Press **[<]** or **[>]** to display the **DISPLAY** menu.

**5** Press **[V]** or **[^]** to select "DEMONSTRATION".



**6** Press **[BAND]** (**SET**) to select "OFF".

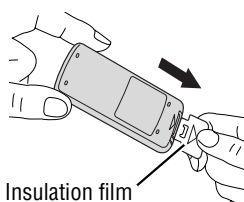
**7** Press **[MENU]**.

For using the remote control, hold down **[SEL]** (**MENU**) for 2 sec. or more.

**Note:** This unit is operable as usual even if the demonstration screen is activated. The demonstration screen automatically appears if no operation is executed for 1 minute.

## Preparation Before Initial Use

Pull the insulation film out from the backside of remote control gently.



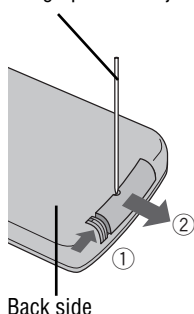
## Battery Replacement

**1** Remove the battery holder with the remote control unit placed on a flat surface.

**①** Stick your thumbnail into the groove, and push the holder in the direction of the arrow, and at the same time.

**②** Pull it out in the direction of the arrow using a tough pointed object.

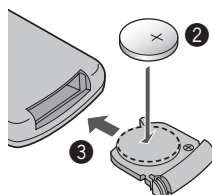
Tough pointed object



Back side

**②** Put a battery in the case with (+) side facing up.

**③** Put the case back.



## Warning

Keep batteries and insulation film out of reach of infants. If an infant ingests a battery, please seek immediate medical attention.

## Cautions

- Remove and dispose of an old battery immediately.
- Do not disassemble, heat or short a battery. Do not throw a battery into a fire or water.
- Follow local regulations when disposing of a battery.
- Improper use of a battery may cause overheating, an explosion or ignition, resulting in injury or a fire.

**Note:** Battery Information:

Battery Type: Panasonic lithium battery (CR2025)  
(Included in the remote control)

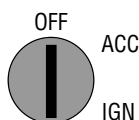
Battery Life: Approximately 6 months under normal use  
(at room temperature)

## Remote Control Preparation

## ACC Setting

**Caution**

Be sure to select **OFF** when your car has no **ACC** position in the ignition switch. Failure to do this could cause the battery to go dead.



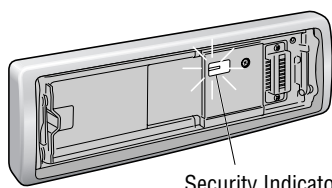
For a ACC-equipped car, select **ON**. (→ page 34) The following functions are available. (default: off)

- The power is turned on automatically when inserting a disc.
- The clock can be displayed even if the power is off. (→ page 15)

## Security Function Setting

The following functions are activated when the Security Function is **ON**. (→ page 34)

- The security indicator lights up when removing the face plate.



Security Indicator

- The alarm sounds and the message appears on the screen to warn you to remove the face plate at ACC off. (The above phenomenon occurs when the ACC setting of the unit is set to **ON** at the ignition key is at the ACC off position or when the ACC setting of the unit is set to **OFF** at the power of the unit is off)

PLEASE REMOVE PANEL

## Other Settings

You may need to set the following depending on the devices to be connected.

**Using Subwoofer**

- Subwoofer level adjustment (→ page 33)
- Subwoofer low pass filter (→ page 33)

**Connecting an AV device (TV, VTR)**

If you connect TV to AUX1 terminal, set the AUX1 setting to TV.

- 1 Press **[SRC]** (SOURCE) to select the AUX1 mode. (→ page 14)

- 2 Press **[MENU]** to display the menu display.  
For using the remote control, hold down **[MENU]** for 2 sec. or more.



- 3 Press **[BAND]** (**SET**) to adjust.

**AUX** : For connection of other than a TV (default)  
**TV** : For connection of a TV

- 4 Press **[MENU]** to confirm the adjustment.

## Clock adjustment

**Notes:**

- Adjust the clock when "NO CT" appears on the display.
- When a broadcast of FM Radio Data System is received, the clock is put right automatically by the Clock Time service. (→ page 22)

- 1 Press **[MENU]** to display the menu display.  
For using the remote control, hold down **[SEL]** (**MENU**) for 2 sec. or more.
- 2 Press **[<]** or **[>]** to display the DISPLAY menu.
- 3 Press **[V]** to select "CLOCK ADJ".
- 4 Press **[BAND]** (**SET**) to confirm the display.

- 5 Adjust the setting value.



**[>]**: Adjusting minutes  
**[<]**: Adjusting hours  
**[^]**: Forward  
**[v]**: Backward



- 6 Press **[BAND]** (**SET**) to confirm the adjustment.
- 7 Press **[MENU]**.  
For using the remote control, hold down **[SEL]** (**MENU**) for 2 sec. or more.

This chapter explains how to turn on or off the power, how to adjust the volume, etc.

## Power On/off (PWR: POWER)

### Power on

Press **[SRC]** (**PWR: POWER**).



### Power off

Hold down **[SRC]** (**PWR: POWER**) until you hear a beep, then release it.

You can remove the face plate to prevent it from being stolen.



### Removing

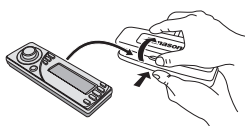
- 1 Turn off the power (→ page 12)
- 2 Press **[⏏]** (Release).  
(The face plate disengages with a click when it is removed.)

The face plate automatically closes after a lapse of 5 seconds while it is open.

The power is automatically turned off while the unit is active.

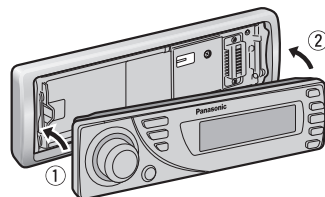


- 3 Put the face plate in the case.



### Mounting

- 1 Slide the left side of the face plate in place.



- 2 Press the right end of the face plate until "click" is heard.

### ⚠ Cautions:

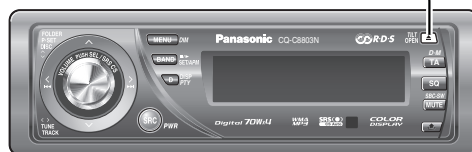
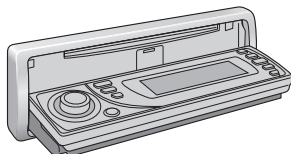
- It is recommended to remove or mount the face plate when the plate is at the closed position. Do not remove or mount the face plate when the plate is in motion.
- This face plate is not waterproof. Do not expose it to water or excessive moisture.
- Do not remove the face plate while driving your car.
- Do not place the face plate on the dashboard or nearby areas where the temperature rises to high levels.
- Do not touch the contacts on the face plate or on the main unit, since this may result in poor electrical contacts.
- If dirt or other foreign substances get on the contacts, wipe them off with clean and dry cloth.
- To avoid damaging the face plate, do not push it down or place objects on it while it is open.

## Face Plate Removing/Mounting (ANTI-THEFT SYSTEM)

## Open/Eject

Press [**▲**] (OPEN).

When a disc is already loaded, the disc will automatically be ejected.



### ⚠ Cautions:

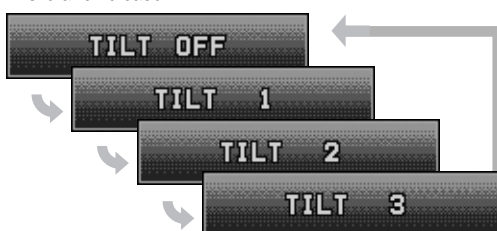
- To avoid damaging the face plate, do not push it down or place objects on it while it is open.
- Do not pinch your finger or hand in the face plate.
- Do not insert foreign objects into the disc slots.
- For the following cases, the face plate automatically closes. Use caution not to catch your finger.
  - After a lapse of 20 seconds
  - When a disc is inserted
  - When the face plate is removed (⇒ page 12)
  - When the power is set to off (at ACC-off)

## Close

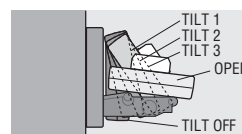
Press [**▲**] (OPEN).

## Tilt

The display angle changes among 4 levels as follows every time you hold down [**▲**] (TILT) for 1 sec. or more and release.

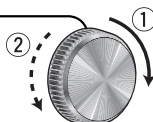


**Note:** The last selected angle is memorized even after turning off the power.



- ① Up
- ② Down

Setting Range: 0 to 40  
Default: 18



### Notes:

- The volume level can be set independently for each source. (For radio, one volume setting for AM (LW/MW), one volume setting for all FMs)
- The volume is not adjustable while an error display is on the monitor. (⇒ page 43)
- This unit memorizes individual volume levels for each source. Make volume adjustments of each source appropriately to prevent large volume fluctuation when the source is changed.

## Volume off (down)

Press [**MUTE**].



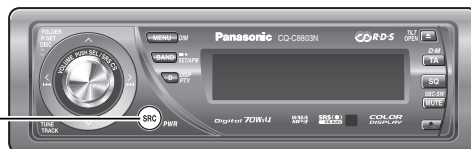
### Cancel

Press [**MUTE**] again.

**Note:** Volume-down range can be specified.  
(⇒ page 34)



The source changes as follows every time [SRC: SOURCE] is pressed.



## Radio

FM1, FM2, FM3, AM (LW/MW) (⇒ page 19)



## Player

When loading CD (⇒ page 26)



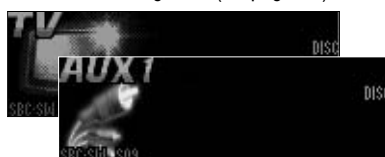
When loading MP3/WMA disc (⇒ page 28)



## AUX 1

Device connected to the AUX terminal of the this unit

When connecting a TV (⇒ page 11)



When connecting other than a TV

## System-up Connector

Device connected to the System-up Connector of the this unit

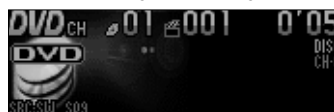
**When optional devices are connected:**

Shift to connected devices

**When an expansion module is connected:**

The devices connected to the ports 1 to 4 are activated in sequence after shifting to AUX2 (devices connected to the AUX terminal of the expansion module).

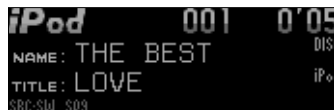
When connecting DVD Changer



When connecting CD Changer



When connecting iPod Player



When connecting Expansion Module



**Note:** For information about connectable devices, refer to the **System Upgrade Guidebook** or the instruction manual for each device.

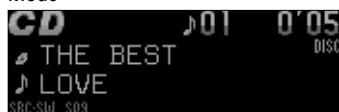
## Display Change (DISP: DISPLAY)

The display changes as follows every time [D] (DISP: DISPLAY) is pressed.

**Note:** The graphic pattern and still image are selectable.  
(→ page 35)

### At power-on:

Mode



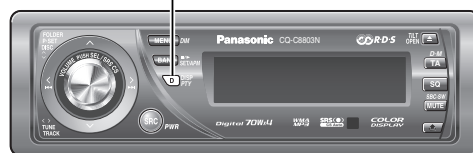
Folder hierarchy (MP3/WMA mode only.)



Ordinary display + graphic pattern



Only graphic pattern



Display Off

All displays disappear in 5 seconds.



Ordinary display + clock



Only still image



Ordinary display + still image



### At power-off:

**Note:** The clock appears only at ACC on setting.

Clock display (default)



Off

## Dimmer Control (DIM: DIMMER)

The dimmer level changes as follows every time you hold down [MENU] (DIM: DIMMER) for 2 sec. or more.

Brighter (default)



Medium



Darker



**Note:** This setting is not adjustable with the remote control.



# Sound Control

This unit is equipped with CS AUTO technology as well as conventional tone adjustment. Select your favorite sound world.

## Sound control

### At CS Auto ON

#### Available items

- Mode selectable from among MUSIC/CINEMA/MONO (⇒ page 16)

#### Adjustable items in audio setting (⇒ page 32)

FRONT-TruBass, REAR-TruBass, SUB.W-TruBass, FRONT-FOCUS, REAR-FOCUS, F-R MIX

### At CS Auto OFF

The following items are available only at CS AUTO off.

#### Available items

- SQ (mode selectable from among FLAT/ROCK/POP/VOCAL/JAZZ/CLUB) (⇒ page 17)
- SQ advanced setting/POSITION (⇒ page 17)
- SBC-SW (⇒ page 18)

#### Adjustable items in audio setting (⇒ page 33)

Bass, Treble, Balance, Fader, Subwoofer level adjustment, Subwoofer Low Pass Filter, High Pass Filter

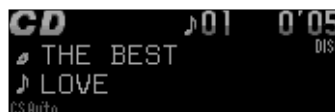
## CS AUTO (Circle Surround Automotive)

CS AUTO allows your car interior to change to a splendid audio room in a moment. Every speaker can be fine-tuned.

You can toggle the CS AUTO function on and off every time you hold down **[VOLUME]** (**SRS CS**) for 2 sec or more.

**Note:** If you enable CS AUTO, the following functions are automatically disabled:

SQ, POSITION, BASS/TREBLE, BALANCE/FADER, SUBWOOFER LEVEL, LPF, HPF, SBC-SW



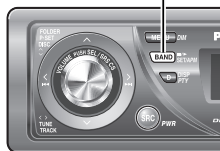
Lights when CS AUTO is activated.

You can make a fine adjustment to CS AUTO.

- 1 Set the CS AUTO mode to on.
- 2 Hold down **[SQ]** for 2 sec. or more to display the audio menu display.



- 3 Press **[BAND]** (**SET**) to adjust.



- 4 Press **[D]** (**DISP: DISPLAY**) to confirm the adjustment.

### CS AUTO MODE

Three-dimensional natural sound field is reproduced with clarity in response to sound.

**MUSIC** : Music

(default in other than the AM mode)

**CINEMA** : Cinema

**MONO** : Monaural (default in the AM mode)

## CS AUTO Setting (CS AUTO Menu Display)



is a trademark of SRS Labs, Inc.

CS Auto technology is incorporated under license from SRS Labs, Inc.

The equalizer curve is selectable from among preset 6 types (FLAT, ROCK, POP, VOCAL, JAZZ, and CLUB) depending on your listening category.

**Note:** SQ is not changeable when CS AUTO is enabled. (→ page 16)

## SQ changeover

The SQ category is changed every time **[SQ]** (SOUND QUALITY) is pressed.

**Note:** Setting of SQ, bass/treble and volume are influenced one another. If the influence mentioned above causes distortion to the audio signal, readjust bass/treble or volume. (→ page 33)



Lights when SQ is activated.

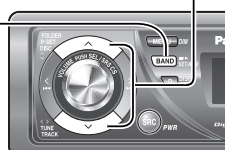
SQ is adjustable in accordance with your taste.

- 1 Hold down **[SQ]** (SOUND QUALITY) for 2 sec. or more when CS AUTO is disabled.



- 2 Press **[^]** or **[v]** to select a function to be adjusted.

- 3 Press **[BAND]** (**SET**) to adjust.



- 4 Adjust the setting value.
- 5 Press **[D]** (**DISP: DISPLAY**) to confirm the adjustment.



## SQ ADJUSTMENT (SQ9)

(Band: 62.5, 125, 250, 500, 1 k, 2 k, 4 k, 8 k, and 16 kHz (default), Setting range: -12 dB to 12 dB, in 2 dB steps) You can make a fine adjustment to the currently selected SQ presetting in each type.



**[<|>]:** Frequency band selection

**①②:** Frequency selection

**[^][v]:** Level up/down



**Note:** If you hold down **[BAND]** for 2 sec. or more, the presetting that is called up can be turned into the default.

## POSITION

You can make the optimal sound field in accordance with your seat.



**[<|>]:** Selection

**OFF** ( ): Disabled (default)

**FR** ( ): Right side of front seat

**FL** ( ): Left side of front seat

**F-ALL** ( ): Both sides of front seat

**R-ALL** ( ): Both sides of rear seat

## Substitutional Subwoofer (SBC-SW: SUPER BASS CONTROL-SUBWOOFER)

The rear speaker can be used as a substitutional subwoofer when a subwoofer is not connected.

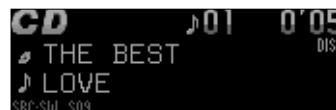
Holding down **[MUTE] (SBC-SW)** for 2 sec. or more toggles SBC-SW on and off.  
Off (default)



On

### Notes:

- If ON is selected, the settings of subwoofer level adjustment and subwoofer low pass filter are activated. (⇒ page 33)
- SBC-SW is not changeable when CS AUTO is enabled. (⇒ page 16)



Lights when SBC-SW is activated.

This chapter explains how to listen to the radio.

1 Press **[SRC]** (SOURCE) to select the radio mode.

2 Press **[BAND]** to select a band.



#### Notes:

- For tuning in on only stations whose receiving conditions are good in the station search, set LOCAL to ON. (⇒ page 20)
- For reducing noise when a receiving FM stereo wave is weak, set MONO to ON. (⇒ page 20)



3 Select a station.

### Frequency adjustment

**[<]** (TUNE): Lower

**[>]** (TUNE): Higher

**Note:** Hold down for 0.5 sec. or more and release for station search.

### Preset station selection

**[V]** (P-SET: PRESET): Lower preset number

**[^]** (P-SET: PRESET): Higher preset number

**Note:** Direct selection can be executed with **[1]** to **[6]** buttons on remote control.

Up to 6 stations can be preset in AM (LW/MW), FM1, FM2, and FM3 respectively.

Preset stations can be simply called up by pressing **[^]** (P-SET) or **[V]** (P-SET).

#### Notes:

- Direct selection can be executed with **[1]** to **[6]** buttons on remote control.
- You can switch between 6 and 18 for FM presetting stations. (EACH BAND/ALL BAND)

### Auto Preset Memory (APM)

Stations with good receiving conditions automatically preset.

1 Select a band.

2 Hold down **[BAND]** (APM) for 2 sec. or more.



The preset stations under best receiving conditions are received for 5 sec. each after presetting the stations (SCAN). To stop scanning, press **[^]** or **[V]**.

#### Notes:

- New stations overwrite existing saved stations.
- Only RDS stations will be saved at default setting (AF ON). To select non RDS stations too, set AF OFF. (⇒ page 24)

### Manual station preset

1 Tune in to a station.

2 Hold down **[^]** or **[V]** for 2 sec. or more.

3 Select a preset number by pressing **[^]** or **[V]**.

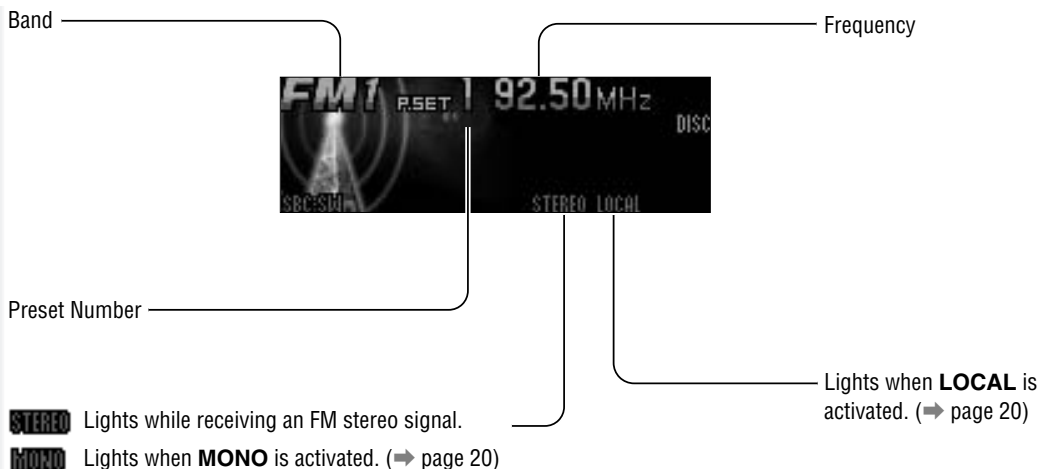
**Note:** If **[BAND]** is pressed while receiving an FM station, FM broadcasting is changeable among FM 1 to FM 3.

4 Hold down **[BAND]** (SET) for 2 sec. or more to determine the selection.

#### Notes:

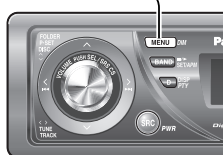
- In step 2, a station can be registered by holding down the numeric button **[1]** to **[6]** for 2 sec. or more.
- To stop presetting stations, press **[D]** (DISP: DISPLAY).
- The operation above allows users to replace the current station with the station preset in the selected number while selecting a preset station.

## Radio Mode Display

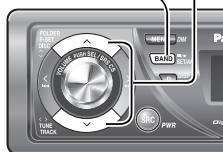


In the AM mode, only AUDIO FILTER and LOCAL can be selected.

- 1 Press **[MENU]** to display the menu display.  
For using the remote control, hold down **[SEL](MENU)** for 2 sec. or more.



- 2 Press **[^]** or **[v]** to select a mode to be adjusted.
- 3 Press **[BAND]** (**SET**) to adjust.
- 4 Press **[MENU]** to confirm the adjustment.  
For using the remote control, hold down **[SEL] (MENU)** for 2 sec. or more.



FUNCTION	F M	DISPLAY
MONO	-	OFF
LOCAL	-	OFF
AUDIO FILTER	-	MID

### MONO (Monaural)

Noise reduction when the signal strength decreases

- OFF** : Receiving in stereo (default)
- ON** : Receiving in mono and reducing the noise level

### LOCAL

Setting when searching for a station

- OFF** : Searching even for a relatively low-intensity radio wave station (default)
- ON** : Searching only for a high-intensity radio wave station

### AUDIO FILTER (IF)

IF filter setting for noise suppression

- WIDE** : Wide range
- MID** : Middle range (default)
- NARROW** : Narrow range

### PRESET

You can select 6 or 18 stations for FM presetting with the use of APM.

- ALL BAND** : Presets 6 stations to FM1 to FM3 respectively, that is, 18 stations in total at the same time. This function is useful for presetting more than 6 stations. (default)

### EACH BAND

Presets 6 stations with good reception to the selected band from FM1 to FM3. This function is useful for presetting stations in different areas in different bands.

### D-M SET

(⇒ page 21)

## Radio Menu Display

You can register frequencies via an FM transmitter integrated in a mobile audio device. Then, you can call up those frequencies with a single touch of button from the CD mode, changer mode, etc. (default: FM 87.50 MHz)

## Frequency setting

- 1 Receive an FM broadcast station via your FM transmitter. (⇒ page 19)
- 2 Press **[MENU]** to call up the menu screen.
- 3 Press **[^]** or **[V]** to select "D-M SET".
- 4 Press **[BAND]** to register the frequency.
- 5 Press **[MENU]** to resume the normal mode.

**Note:** If there is something wrong with treble sound, activate the radio audio filter according to your equipment. (⇒ page 21)



## Listening to an FM station via an FM transmitter

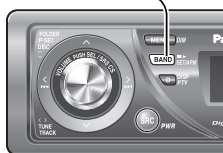
Hold down **[TA]** (D-M) for 2 sec. or more.

- 1 Press **[MENU]** to display the menu display.

For using the remote control, hold down **[SEL](MENU)** for 2 sec. or more.



- 2 Press **[BAND]** (**SET**) to adjust.



- 3 Press **[MENU]** to confirm the adjustment.

For using the remote control, hold down **[SEL](MENU)** for 2 sec. or more.



## RADIO AUDIO FILTER

You can select the reception status (band) of FM stations registered on D-M.

**THROUGH** : Off (default)

**HC 1** : High cut level 1

**HC 2** : High cut level 2 (same processing at receiving an FM station)

# Radio Data System (RDS) in FM Broadcasting

Useful functions such as **AF**, **TA**, **PTY**, etc. are available in the RDS (Radio Data System)-ready areas.

Some FM stations are broadcasting added data compatible with RDS. This radio set offers convenient functions using such data.

RDS service availability varies with areas. Please understand if RDS service is not available in your area, the following service is not available, either.

The following functions are available when receiving RDS stations.

## AF (Alternative Frequency)



The following functions are available when the AF mode is active (⇒ page 24).

- When receiving conditions become bad, a station with better receiving conditions is automatically tuned in to.
- When executing APM, only RDS stations are selected.
- When calling up a preset station, a best receiving station is selected automatically. (**BSR** Best Stations Research)

**Note:** The AF available range can be adjusted. (⇒ page 24)

## TA (Traffic Announcement)

The following functions are available when the TA mode is active. (⇒ page 24)

- A TP (Traffic program) station is automatically searched for and received at the instant of toggling the TA mode on if you are receiving a non-TP station.
- When executing station search or APM, only TP stations are selected.
- Setting to TA on with the unit in another mode, it will automatically switch to radio mode and output the traffic announcement when the traffic announcement begins. The traffic announcement having finished, the unit will return to the previous mode. (TA Standby Mode)



## PTY (Program Type)



The following functions are available when the PTY mode is active (⇒ page 25).

- The PTY of receiving station appears.
- Programs can be searched for by PTY.

**Note:** PTY language can be selected (⇒ page 25).

## Other functions of RDS

### CT (Clock Time)

The clock is automatically adjusted.

### PS (Program Service Name)

As well as the frequency, the name of the broadcast station appears.

### EON (Enhanced Other Network)

RDS information is updated constantly in response to the current position.



Lights while receiving the EON signal.

### EON-TA

Traffic information from the current and other network stations can be received.

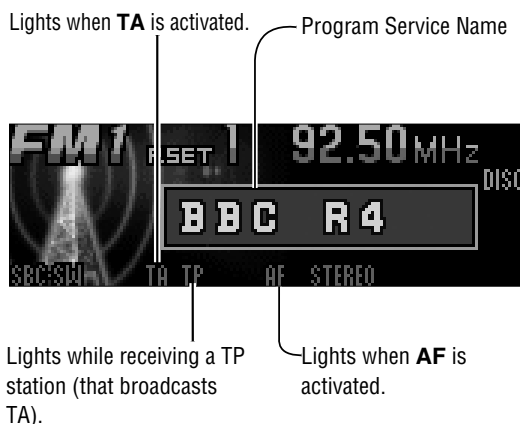
### Emergency Announcement Reception

Emergency announcement automatically appears on the display when it is received.

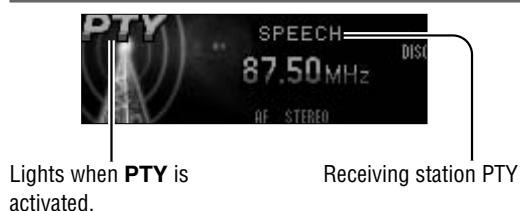




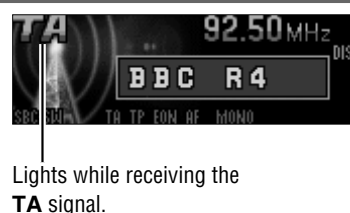
## RDS mode display



## PTY on display



## TA receiving display



## PI Seek

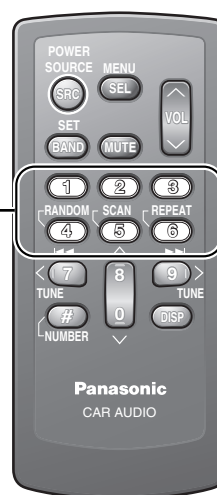
(PI SEEK: PROGRAM IDENTIFICATION SEEK)

### PI Seek (Program Identification Seek)

(only by remote control unit)  
If reception becomes poor when tuning in a preset station, press the same preset number button. The same station with better reception will be searched for. Press the same preset number button again to cancel.



**Note:** For PI Seek, cancel the TA mode first, then execute PI Seek.



# Radio Data System (RDS) in FM Broadcasting

## TA

(TA: TRAFFIC ANNOUNCEMENT)

### TA ON/OFF

Pressing **[TA]** toggles TA on and off.

#### Notes:

- This operation is not adjustable by the remote control.
- Traffic information is available in monaural.
- **Adjust the TA volume only while receiving a TA.**



Lights when **TA** is activated.

## AF/Region Setting (FM Menu Display)

(AF: ALTERNATIVE FREQUENCY/REGION)

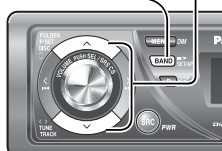
- 1 Press **[MENU]** to display the menu display.

For using the remote control, hold down **[SEL] (MENU)** for 2 sec. or more.



- 2 Press **[^]** or **[V]** to select a mode to be adjusted.

- 3 Press **[BAND]** (**SET**) to adjust.



- 4 Press **[MENU]** to confirm the adjustment.

For using the remote control, hold down **[SEL] (MENU)** for 2 sec. or more.



### AF

Adjusting the AF sensitivity

**ON** : AF on (  lights.) (default)

**OFF** : AF off

### REGION

Setting the AF range

**OFF** : The frequency is changed also for programs outside the region. (default)

**ON** : The frequency is changed only for programs within the region.

## PTY ON/OFF

Holding down **[D] (PTY)** for 2 sec. or more toggles PTY mode on and off.



## Program Search by PTY

Programs can be searched for by use of PTY that has been originally preset.

Press **[^]** or **[v]** to select PTY in the PTY mode.

	Program Type	Contents
1	NEWS	NEWS
2	SPEECH	AFFAIRS, INFO, EDUCATE, DRAMA, CULTURE, SCIENCE, VARIED, WEATHER, FINANCE, CHILDREN, SOCIAL, RELIGION, PHONE IN, TRAVEL, LEISURE, DOCUMENT
3	SPORT	SPORT
4	POP M	POP M
5	CLASSICS	CLASSICS
6	MUSIC	ROCK M, EASY M, LIGHT M, OTHER M, JAZZ, COUNTRY, NATION M, OLDIES, FOLK M

Another station in the same PTY is searched for by pressing **[BAND] (SET)**.



### Notes:

- Direct Access can be executed with **[1]** to **[6]** buttons on remote control.
- When there is no corresponding program type station, "NONE" is displayed.
- A desired PTY appears for 5 seconds.
- Preset contents are changeable.

## Detailed PTY Selection

**1** Press **[<]** or **[>]** to select PTY.

→ SPEECH ↔	MUSIC ↔	NEWS ↔	AFFAIRS ↔
INFO ↔	SPORT ↔	EDUCATE ↔	DRAMA ↔
CULTURE ↔	SCIENCE ↔	VARIED ↔	POP M ↔
ROCK M ↔	EASY M ↔	LIGHT M ↔	CLASSICS ↔
OTHER M ↔	WEATHER ↔	FINANCE ↔	CHILDREN ↔
SOCIAL ↔	RELIGION ↔	PHONE IN ↔	TRAVEL ↔
LEISURE ↔	JAZZ ↔	COUNTRY ↔	NATION M ↔
OLDIES ↔	FOLK M ↔	DOCUMENT ↔	

**2** Press **[BAND] (SET)**.



Search starts.

### Notes:

- To stop searching, press **[BAND] (SET)**.
- When there is no corresponding program type station, "NONE" is displayed.

## PTY Preset Change

Original PTY presets can be changed as you like.

**1** Select a PTY that you would like to pre-set.

**2** Follow the procedure of ordinary presetting. (→ page 19)

## PTY language selection

**Note:** PTY language is selectable only when PTY appears.

**1** Press **[MENU]** to display the menu display.

For using the remote control, hold down **[SEL] (MENU)** for 2 sec. or more.



**2** Press **[BAND] (SET)** to adjust.

- |                     |                     |
|---------------------|---------------------|
| → ENGLISH :English  | → DEUTSCH :German   |
| → ESPAÑOL :Spanish  | → SVENSKA :Swedish  |
| → ITALIANO :Italian | → FRANÇAIS :French  |
| → NEDERLANDS :Dutch | → (Back to ENGLISH) |

**3** Press **[MENU]** to confirm the adjustment.

For using the remote control, hold down **[SEL] (MENU)** for 2 sec. or more.

# CD Player

## Operation Flow

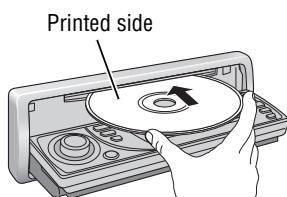
When a disc is already loaded, press **[SRC]** (SOURCE) to select the CD mode.

- 1 Press **[▲]** (**OPEN**) to open the face plate.

When a disc is already loaded (**OPEN** lights), the disc will automatically be ejected.

- 2 Load a disc with the printed side facing up.

The face plate closes automatically, and the unit recognizes the disc and starts playing automatically, too.



**Note:** The panel automatically closes after 20 seconds.



- 3 Select a desired portion.

### Track selection

**[▶▶]** (**TRACK**): Next track

**[◀◀]** (**TRACK**): Preceding track (press twice)

**Note:** Hold down for fast forward/reverse.

### Pause

Press **[BAND]** (**||/▶**).

Press again to cancel.

- 4 Press **[▲]** (**OPEN**) to eject the disc.

## CD Mode Display

Track number

Time



### CD-TEXT display

#### Notes:

- For scrolling text, hold down **[D]** (**DISP: DISPLAY**) for 2 sec. or more.
- "NO TEXT" is displayed when there is no information on the disc.

### Play Mode indicators

Lights when each mode is activated.



Lights when the disc is loaded.

## ⚠ Cautions:

- This unit does not support 8 cm discs.
- Do not use irregularly shaped discs. (⇒ page 44)
- Do not use discs that have a seal or label attached.
- To avoid damaging the face plate, do not push it down or place objects on it while it is open.
- Do not pinch your finger or hand in the face plate when the face plate is in motion.
- Do not insert foreign matter into the disc slots.
- Refer to the section on "Notes on CD/CD Media (CD-ROM, CD-R, CD-RW)" (⇒ page 44).
- This unit does not support a MIX mode CD (a CD containing both CD-DA and MP3/WMA data). In case of using such a CD, problems may occur such as anacoustic playback.

## Random, Repeat Play (CD Menu Display)

(RANDOM, REPEAT)

Random and Repeat play can be set.

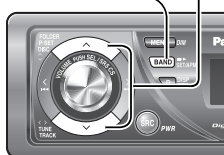
- 1 Press **[MENU]** to display the menu display.

For using the remote control, hold down **[SEL] (MENU)** for 2 sec. or more.



- 2 Press **[^]** or **[V]** to select a mode to be adjusted.

- 3 Press **[BAND]** **(SET)** to adjust.



- 4 Press **[MENU]** to confirm the adjustment.

For using the remote control, hold down **[SEL] (MENU)** for 2 sec. or more.

FUNCTION	C D	DISPLAY
■ RANDOM		- OFF
■ REPEAT		- OFF
■ TEXT		- ON

### RANDOM

**OFF** : Off (default)

**ON** : Random playback

### REPEAT

**OFF** : Off (default)

**ON** : Playing the current track repeatedly

### TEXT (CD-TEXT)

**ON** : Enabled (default)

**OFF** : Disabled

## Play Mode Selection

One-touch operation is available for selecting a track playing style by use of **[RANDOM]** or **[REPEAT]**.

### RANDOM

Press **[RANDOM]**.

Press again to cancel.

### REPEAT

Press **[REPEAT]**.

Press again to cancel.

## SCAN play

You can find your favorite file by playing first 10-sec. of each track.

Press **[SCAN]**.

Press again to cancel.

## Direct Access

A track can be directly selected.

**Example:** track number 5

- 1 Press **[#] (NUMBER)**.

- 2 Press **[5]**.

- 3 Press **[SET]**.



**Note:** To suspend direct selection, press **[DISP]** (DISPLAY).

## Functions Only by Remote Control Unit

# MP3/WMA Player

## Operation Flow

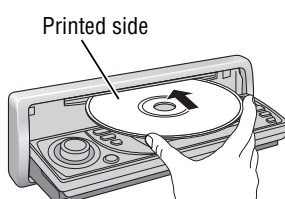
When a disc is already loaded, press **[SRC]** (SOURCE) to select the MP3/WMA mode.

- 1 Press **[▲]** (**OPEN**) to open the face plate.

When a disc is already loaded (**MP3** lights), the disc will automatically be ejected.

- 2 Load a disc with the printed side facing up

The face plate closes automatically, and the unit recognizes the disc and starts playing automatically, too. (It may take several minutes to start for a disc that has a lot of files.)



**Note:** The panel automatically closes after 20 seconds.



- 3 Select a desired portion.

### Folder selection

**[^]** (**FOLDER**): Next folder

**[v]** (**FOLDER**): Preceding folder

### File selection

**[▶▶]** (**TRACK**): Next file

**[◀◀]** (**TRACK**): Preceding file (press twice)

**Note:** Hold down for fast forward/reverse.

### Pause

Press **[BAND]** (**||/▶**).

Press again to cancel.

- 4 Press **[▲]** (**OPEN**) to eject the disc.

## MP3/WMA Mode Display



### Notes:

- For scrolling text, hold down **[D]** (**DISP**: DISPLAY) for 2 sec. or more.
- "NO TEXT" is displayed when there is no information on the disc.
- ID3/WMA tag information is displayed for the album name and title/artist name.

### Play Mode indicators

Lights when each mode is activated.

**RANDOM**

**REPEAT**

**SCAN**

**F-RANDOM** (Folder Random)

**F-REPEAT** (Folder Repeat)

**F-SCAN** (Folder Scan)

Lights when the disc is loaded.

## Random, Repeat Play (MP3/WMA Menu Display)

(RANDOM, REPEAT)

## Functions Only by Remote Control Unit

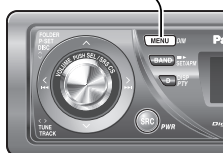
### Notes:

- Refer to the section on "Notes on MP3/WMA" (→ page 30)
- This unit does not support a MIX mode CD (a CD containing both CD-DA and MP3/WMA data). In case of using such a CD, problems may occur such as anacoustic playback.

Random and Repeat play can be set.

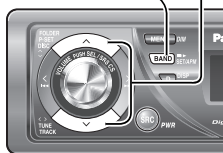
- 1 Press **[MENU]** to display the menu display.

For using the remote control, hold down **[SEL] (MENU)** for 2 sec. or more.



- 2 Press **[^]** or **[v]** to select a mode to be adjusted.

- 3 Press **[BAND]** (**SET**) to adjust.



- 4 Press **[MENU]** to confirm the adjustment.

For using the remote control, hold down **[SEL] (MENU)** for 2 sec. or more.

FUNCTION MP3/WMA DISPLAY		
■ RANDOM	-	OFF
■ FOLDER RANDOM	-	OFF
▼ REPEAT	-	OFF

### RANDOM

**OFF** : Off (default)

**ON** : Random playback (disc)

### FOLDER RANDOM

**OFF** : Off (default)

**ON** : Random playback (folder)

### REPEAT

**OFF** : Off (default)

**ON** : Playing the current file repeatedly

### FOLDER REPEAT

**OFF** : Off (default)

**ON** : Playing the current folder repeatedly.

### TEXT

**FOLDER/FILE** : Folder name/File name (default)

**ALBUM/TITLE** : Album/Title (tag information)

**OFF** : No display

### Play Mode Selection

One-touch operation is available for selecting a file playing style by use of **[RANDOM]** or **[REPEAT]**.

#### RANDOM, REPEAT

Press the button. Press again to cancel.

#### FOLDER RANDOM, FOLDER REPEAT

Hold down the button for 2 sec. or more. Hold down again to cancel.

### SCAN play

You can find your favorite file by playing first 10-sec. of each file.

#### SCAN (All files)

Press **[SCAN]**. Press again to cancel.

### FOLDER SCAN (1st file in each folder)

Hold down **[SCAN]** for 2 sec. or more. Hold down again to cancel.

### Direct Access

A file in the current folder can be directly selected.

**Example:** file number 5

- 1 Press **[#] (NUMBER)**.

- 2 Press **[5]**.

- 3 Press **[SET]**.



#### Notes:

- For folder selection, enter a number after pressing **[#] (NUMBER)** twice.
- To suspend direct selection, press **[DISP]** (DISPLAY).



## What is MP3/WMA?

MP3 (MPEG Audio Layer-3) and WMA (Windows Media™ Audio) are the compression formats of digital audio. The former is developed by MPEG (Motion Picture Experts Group), and the latter is developed by Microsoft Corporation. Using these compression formats, you can record the contents of about 10 music CDs on a single CD media (This figures refer to data recorded on a 650 MB CD-R or CD-RW at a fixed bit rate of 128 kbps and a sampling frequency of 44.1 kHz).

**Note:** MP3/WMA encoding and writing software is not supplied with this unit.

## Points to remember when making MP3/WMA files

### Common

- High bit rate and high sampling frequency are recommended for high quality sounds.
- Selecting VBR (Variable Bit Rate) is not recommended because playing time is not displayed properly and sound may be skipped.
- The playback sound quality differs depending on the encoding circumstances. For details, refer to the user manual of your own encoding software and writing software.

### MP3

- It is recommended to set the bit rate to “128 kbps or more” and “fixed”.

### WMA

- It is recommended to set the bit rate to “64 kbps or more” and “fixed”.
- Do not set the copy protect attribute on the WMA file to enable this unit to play back.



### Caution:

Never assign the “.mp3”, or “.wma” file name extension to a file that is not in the MP3/WMA format. This may not only produce noise from the speaker damage, but also damage your hearing.

## Display Information

### Displayed items

- |                  |                        |
|------------------|------------------------|
| • <b>CD-TEXT</b> | • <b>MP3 (ID3 tag)</b> |
| Disc title       | Album name             |
| Track title      | Title name/artist name |
| • <b>MP3/WMA</b> | • <b>WMA (WMA tag)</b> |
| Folder name      | Album name             |
| File name        | Title name/artist name |

### Displayable characters

- Displayable length of file name/folder name: within 64 characters (Unicoded file and folder names are reduced by half in the number of displayable characters.)
- Name files and folders in accordance with the standard of each file system. Refer to the instructions of writing software for details.
- ASCII character set and special characters in each language can be displayed.

### ASCII character set

A to Z, a to z, digits 0 to 9, and the following symbols:

(space) ! " # \$ % & ' ( ) \* + , - . / : ; < = > ? @ [ \ ] ^ \_ ` { | } ~

### Notes:

- With some software in which MP3/WMA format files have been encoded, the character information may not be displayed properly.
- Undisplayable characters and symbols will be converted into an asterisk (\*).

## Recording MP3/WMA files on a CD-media

- You are recommended to minimize the chances of making a disc that contains both CD-DA files and MP3/WMA files.
- If CD-DA files are on the same disc as MP3 or WMA files, the songs may not play in the intended order, or some songs may not play at all.
- When storing MP3 data and WMA data on the same disc, use different folders for each data.
- Do not record files other than MP3/WMA files and unnecessary folder on a disc.
- The name of an MP3/WMA file should be added by rules as shown in the following descriptions and also comply with the rules of each file system.
- You may encounter trouble in playing MP3/WMA files or displaying the information of MP3/WMA files recorded with certain writing software or CD recorders.
- The file extension “.mp3” or “.wma” should be assigned to each file depending on the file format.
- This unit does not have a play list function.
- Although Multi-session recording is supported, the use of Disc-at-Once is recommended.

### Supported file systems

ISO 9660 Level 1/Level 2, Apple Extension to ISO 9660, Joliet, Romeo

**Note:** Apple HFS, UDF 1.50, Mix CD and CD Extra are not supported.

### Compression formats

(Recommendation: “Points to remember when making MP3/WMA files” on the previous page)

Compression method	Bit rate	VBR	Sampling frequency
MPEG 1 audio layer 3 (MP3)	32 k – 320 kbps	Yes	32, 44.1, 48 kHz
MPEG 2 audio layer 3 (MP3)	8 k – 160 kbps	Yes	16, 22.05, 24 kHz
Windows Media Audio Ver. 2, 7, 8, 9*	32 k – 192 kbps	Yes	32, 44.1, 48 kHz

\* WMA 9 Professional/LossLess/Voice are not supported.

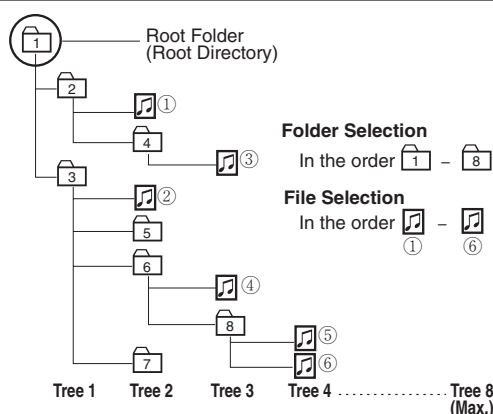
## Folder selection order/file playback order

### Maximum number of files/folders

- Maximum number of files: 511 (files + folders)
- Maximum number of files in one folder: 255
- Maximum depth of trees: 8
- Maximum number of folders: 255 (Root folder is included.)

### Notes:

- You can shorten the duration between data read and playback by decreasing the quantity of files or folders, or the depth of the hierarchy.
- This unit counts the number of folders irrespective of the presence or absence of an MP3/WMA file.
- If the selected folder does not contain any MP3/WMA files, the nearest MP3/WMA files in the order of playback will be played.
- Playback order may be different from other MP3/WMA players even if the same disc is used.
- “ROOT” appears when displaying the root folder name.



### Copyright

It is prohibited by copyright laws to copy, distribute and deliver copyrighted materials such as music without the approval of copyright holder except enjoying yourself personally.

### No warranty

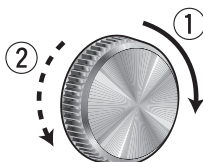
Above description complies with our investigations as of December 2005. It has no warranty for reproducibility and displayability of MP3/WMA.

- 1 Set the CS AUTO mode to on.  
(→ page 16)

- 2 Press **[VOLUME]**  
(**PUSH SEL:**  
**SELECT**) to display the menu display.



- 3 Press **[VOLUME]** (**PUSH SEL:**  
**SELECT**) to select a mode to be adjusted.



- 4 Turn **[VOLUME]** clockwise or counter-clockwise to adjust.

**Note:** If no operation takes place for more than 10 sec. in the audio menu (2 sec. in Main volume adjustment), the display returns to the regular mode.

## Main volume adjustment

(Setting range: 0 to 40, Default: 18)

- ① : Up
- ② : Down



## FRONT-TruBass

(Setting range: Lv 1 to Lv 10 and OFF, Default: Lv 4)

- ① : Up
- ② : Down



## REAR-TruBass

(Setting range: Lv 1 to Lv 10 and OFF, Default: Lv 4)

- ① : Up
- ② : Down



## SUB.W-TruBass

(Setting range: Lv 1 to Lv 10 and OFF, Default: Lv 4)

- ① : Up
- ② : Down



## FRONT FOCUS

(Setting range: Lv 1 to Lv 10 and OFF, Default: Lv 5)

- ① : Up
- ② : Down



## REAR FOCUS

(Setting range: Lv 1 to Lv 10 and OFF, Default: Lv 5)

- ① : Up
- ② : Down



## F-R MIX (Front to Rear Mixing)

(Setting range: Lv 1 to Lv 10 and OFF, Default: Lv 4)

- ① : Up
- ② : Down



### Notes:

- **TruBass®**  
TruBass is an audio technology to which the technique of bass sound reproduction used in pipe organs is electrically applied, and in which an equalizer is not used at all and bass sound from the speakers to be used is richly reproduced.
- **FOCUS®**  
Focus is an audio technology that moves the sound image of playing sound vertically to reproduce the sounds of instruments and voices clearly.

- 1 Set the CS AUTO mode to off.  
(→ page 16)

- 2 Press **[VOLUME]**  
(**PUSH SEL:**  
**SELECT**) to display the AUDIO menu display.



- 3 Press **[VOLUME]** (**PUSH SEL:**  
**SELECT**) to select a mode to be adjusted.



- 4 Turn **[VOLUME]** clockwise or counter-clockwise to adjust.

**Note:** If no operation takes place for more than 10 seconds in the audio menu (2 sec. in Main volume adjustment), the display returns to the regular mode.

## Main volume adjustment

(Setting range: 0 to 40, Default: 18)

- ① : Up
- ② : Down



## Bass adjustment

(Setting range: -12 dB to +12 dB, 2 dB Step, Default: Bass 0 dB)

- ① : Up
- ② : Down



## Treble adjustment

(Setting range: -12 dB to +12 dB, 2 dB Step, Default: Treble 0 dB)

- ① : Up
- ② : Down



**Note:** Do not activate SQ and Bass/Treble at same time to avoid causing sound distortion.

## Balance adjustment

(Setting range: L (left) 15 to R (right) 15 and Center, Default: Center)

- ① : Right enhanced
- ② : Left enhanced



## Fader adjustment

(Setting range: R (rear) 15 to F (front) 15 and Center, Default: Center)

- ① : Front enhanced
- ② : Rear enhanced



## Subwoofer level adjustment

(Setting range : mute (-∞), -6 dB to +6 dB, 2 dB Step, Default: 0 dB)

- ① : Up
- ② : Down



## Subwoofer Low Pass Filter

(Setting range: Filter OFF, 60 Hz to 160 Hz, 5Hz Step, Default: 120 Hz)

- ① : Up
- ② : Down



Subwoofer output range  
Other speakers output ranges

## High Pass Filter

(Setting range: Filter OFF, 90 Hz to 225 Hz, 5Hz Step, Default: Filter OFF)

- ① : Up
- ② : Down



# Function Setting

Adjustment to display on the FUNCTION menu

## FUNCTION Menu Display

- 1 Press **[MENU]** to display the menu display.

For using the remote control, hold down **[SEL] (MENU)** for 2 sec. or more.

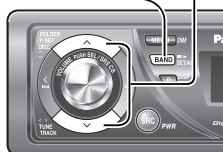


- 2 Press **[<]** or **[>]** to display the FUNCTION menu.



- 3 Press **[^]** or **[v]** to select a function to be adjusted.

- 4 Press **[BAND]** **(SET)** to adjust.



- 5 Press **[MENU]** to confirm the adjustment.

For using the remote control, hold down **[SEL] (MENU)** for 2 sec. or more.

## MUTE KEY

Setting **[MUTE]** buttons' functions

**MUTE** : Volume off (default)

**ATT LV1** : Volume down by 10 steps

**ATT LV2** : Volume down by 5 steps

## EXT.MUTE (External Mute)

Volume adjustment when an interruption such as car navigation signal occurs

**LEVEL 0** : Volume off (default)

**LEVEL 1** : Volume down by 10 steps

**LEVEL 2** : Volume down by 5 steps

**OFF** : No change in volume

(External muting display)



## SECURITY

Setting the security function (→ page 11)

**ON** : ON (default)

**OFF** : OFF

## ACC

Setting depending on your car

**OFF** : ACC not equipped (default)

**ON** : ACC equipped

## Caution

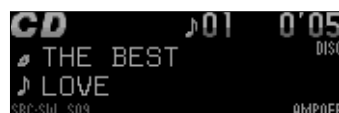
Be sure to select **OFF** when your car has no **ACC** position in the ignition switch. Failure to do this could cause the battery to go dead.

## BUILT-IN AMP

You can toggle the integrated amplifier on and off.

**ON** : Amplifier on (default)

**OFF** : Amplifier off  
(when the external amplifier is used)

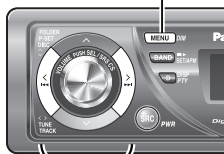


lights when disactivated.

# Display Setting

Adjustment to display on the DISPLAY menu

- 1 Press **[MENU]** to display the menu display.  
For using the remote control, hold down **[SEL] (MENU)** for 2 sec. or more.
- 2 Press **[<]** or **[>]** to display the DISPLAY menu.
- 3 Press **[^]** or **[v]** to select a function to be adjusted.
- 4 Press **[BAND] (SET)** to confirm the display.
- 5 Adjust the setting value.
- 6 Press **[BAND] (SET)**.
- 7 Press **[MENU]** to confirm the adjustment.  
For using the remote control, hold down **[SEL]** **(MENU)** for 2 sec. or more.



## DEMONSTRATION

Switching by **[BAND]**.

**ON** : Demonstration screen at no operation (default)

**OFF** : Regular screen

## GRAPHIC PATTERN

(Setting range: 5 types, Default: All)

Switching by **[<]** or **[>]**

**All**: Sequential display from pattern A to D.

**Pattern A-D**



## STILL IMAGE

(Setting range: 11 types, Default: All)

Switching by **[<]** or **[>]**

**All**: Sequential display from pattern 1 to 10

**No.1-10**



## CLOCK ADJ

**Note:** Adjust the clock when "NO CT" appears on the display.

**[>]**: Adjusting minutes

**[<]**: Adjusting hours

**[^]**: Forward

**[v]**: Backward



**Notes:**

- The graphic pattern and still image are changeable. (⇒ page 36)
- If corrupted data is selected, "DISPLAY FILE INCOMPLETE" appears. (⇒ page 37)

# Customize the Display (Customize Function)

You can edit the moving images and still images that are initially stored in the unit. You also can use the data that is downloaded from the Panasonic Web site and the data that is stored with a digital camera or other devices and processed with exclusive software, IMAGE STUDIO. See "Notes on Customize function" (⇒ page 37) as well.

**Note:** Visit Panasonic Web site (<http://panasonic.co.jp/pas/en/software/customize/index.html>) for details.

## CUSTOMIZE Menu Display

### Preparation:

Put the CD-R/RW that contains data to be customized in hand.

**1** If there is a disc inside, take out the disc.

**2** Press **[SRC]** (**PWR**) to select the CD mode.



**3** Hold down **[PUSH SEL]** for 4 sec. or more to display the menu screen.



**4** Load a CD-R/RW that contains data.

#### Notes:

- It may take time for the unit to identify the CD-R/RW.
- Discs recorded by the packet writing software are not supported.

**5** Select an item to be customized.



**[^][V]:** Select  
**[BAND] (SET):** Confirm

**Note:** To exit the customize menu, hold down **[PUSH SEL]** 4 sec. or more.

### GRAPHIC PATTERN

Moving image (graphic pattern) data (⇒ page 35)

### STILL IMAGE

Still image data (⇒ page 35)

### OPENING MESSAGE

Moving image at power on

### CLOSING MESSAGE

Moving image at power off

**6** Select a file.



**[^][V][<][>]:** Select  
**[BAND] (SET):** Confirm

#### Notes:

- Files are automatically identified by their extensions, and target files are displayed.
- If "**BACK**" is selected, the screen of step 5 appears.

**7** For a moving image file or still image file, select where to save the file.



**[<][>][^][V]:** Select  
**[BAND] (SET):** Confirm

#### Notes:

- New data overwrites existing data.
- If "**BACK**" is selected, the screen of step 6 appears.

**8** Confirm the changed item.



**[<][>]:** Select  
**[BAND] (SET):** Confirm



Customization is performed. Do not turn off the power in mid-operation. (It takes approx. 5 minutes to complete this operation for a 548 kB moving image.) After completion of this operation, the screen of step 5 appears.

**Note:** If "**NO**" is selected, the screen of step 5 appears.

**9** Press **[OPEN]** to eject the disc.

**10** Hold down **[PUSH SEL]** for 4 sec. or more.

The CD mode comes back.



## Note on Download Service

The download service may be suspended or stopped without advance notice. The download service is not available in some areas. Please visit the site below for further information.

**Panasonic Web site:**  
(<http://www.panasonic.co.jp/global/>)

## Notes on IMAGE STUDIO

- This download service is not available in some areas. For details, please access the Panasonic website.
- IMAGE STUDIO is available only by downloading from the address below. It is not bundled with this unit.
- Refer to the downloaded operating manual for how to use IMAGE STUDIO.

## Notes on File

- The customize-specific file is downloadable from the URL below. You can create exclusive files stored with a digital camera or other devices by using exclusive software, IMAGE STUDIO that can be accessed from the same URL.
- Do not change the extension. Otherwise, the data cannot be recognized.

## At Disc Making

- Save only customize-specific data.
- Save all data in the root directory. Files contained in a folder cannot be recognized.
- Follow the table below with regard to the number of files that are saved to a disc. Files beyond the specified capacity are not readable.
- Discs recorded by the packet writing software are not supported.

Type	Extension	Max. number
GRAPHIC PATTERN	.pfm	10
STILL IMAGE	.pfs	15
OPENING MESSAGE	.pfo	5
CLOSING MESSAGE	.pfe	5

## At Customizing

- If customizing is interrupted on account of turning off the power, stopping the engine, removing the face plate or other reasons, you may lose the data. In such a case, try customizing again.
- The default image exists on the Panasonic Web site. If you would like to restore it, download the image from the site.

### Download site:

<http://panasonic.co.jp/pas/en/software/customize/index.html>

## Error Display Messages

### NO FILES DETECTED

No customize-specific data on the disc

- ➔ **Load a disc that contains customize-specific data.**

### CUSTOMIZING FAILED

Customize failed

- ➔ **Check to see whether or not the extension is correct and file contents are appropriate.**

### DISPLAY FILE INCOMPLETE

Intended moving image or still image is damaged.

- ➔ **Customize it again and overwrite the file with new one.**

# Troubleshooting

## If You Suspect Something Wrong

Check and take steps as described below.

If the described suggestions do not solve the problem, it is recommended to take the unit to your nearest authorized Panasonic Service Centre. The product should be serviced only by qualified personnel. Please refer the checking and the repair to professionals. Panasonic shall not be liable for any accidents arising out of neglect of checking the unit or your own repair after your checking.

**Never take measures especially those other than indicated by *italic* letters in "Possible Solution" described below because those are too dangerous for users to handle themselves.**

### Warning

- Do not use the unit in an irregular condition, for example, without sound, or with smoke or a foul smell, which can cause ignition or electric shock. Immediately stop using the unit and consult your dealer.
- Never try to repair the unit by yourself because it is dangerous to do so.

Problem		Possible cause → Possible solution
Common	No power to the unit	<p>The power cord (battery, power and ground) is connected in the wrong way. → <b>Check the wiring.</b></p> <p>Fuse blows out. → <b>Eliminate the cause of fuse blowout and replace the fuse with new one. Consult your dealer.</b></p>
	Sound is not generated.	<p>MUTE is set to ON. → <b>Set MUTE to OFF.</b></p> <p>The wiring of speaker lines are not correct, or a break or poor contact arises. → <b>Check the wiring in accordance with the wiring diagram. (Installation Instructions)</b></p>
	Noise	<p>There is an electromagnetic-wave generator such as a cellular phone near the unit or its electrical lines. → <b>Keep an electromagnetic-wave generator such as a cellular phone away from the unit and the wiring of the unit. In case that noise cannot be eliminated due to the wiring harness of the car, consult your dealer.</b></p> <p>The contact of the ground lead is poor. → <b>Make sure that the ground lead is connected to an unpainted part of the chassis securely.</b></p>
	Noise is made in step with engine revolutions.	<p>Alternator noise comes from the car. → <b>Change the wiring position of the ground lead.</b> → <b>Mount a noise filter on the power supply.</b></p>

## Common (continued)

Problem	Possible cause ➔ Possible solution
Some operations are not executable.	Some operations are not executable in particular modes such as menu mode. ➔ <b>Read the operating instructions carefully and cancel the mode. If the unit is still out of order, consult your dealer.</b>
No sound from speaker(s)	BALANCE/FADER setting is not appropriate. ➔ <b>Readjust BALANCE/FADER.</b> There is a break, a short circuit, poor contact or wrong wiring regarding the speaker wiring. ➔ <b>Check the speaker wiring.</b>
The speaker channels are reversed between right and left.	The speaker wiring is confused between right and left. ➔ <b>Perform the speaker wiring in accordance with the wiring diagram.</b>
The sound field is not clear in the stereo mode. Central sound does not settled.	The plus and minus terminals at right and left channels of speakers are connected reversely. ➔ <b>Perform the speaker wiring in accordance with the wiring diagram.</b>
The power fails unintentionally.	The safety device works. ➔ <b>Consult your dealer, or your nearest Panasonic Service Centre.</b>

## Radio

Poor reception or noise	Antenna installation or wiring of antenna cable is faulty. ➔ <b>Check whether the antenna mounting position and its wiring are correct. In addition, check to see whether the antenna ground is securely connected to the chassis.</b> No power is supplied to the antenna amplifier (when using a film antenna, etc.). ➔ <b>Check the wiring of the antenna battery lead.</b>
FM Stereo broadcast is received only in mono.	The MONO mode is active. ➔ <b>Cancel the MONO mode.</b>
Only strong signal stations can be received.	The LOCAL mode is active. ➔ <b>Cancel the LOCAL mode.</b>
The number of auto preset stations is less than 6.	The number of receivable stations is less than 6. ➔ <b>Move to an area where receivable stations number is maximum, and try pre-setting.</b>
Preset stations cannot be stored.	The contact of the battery lead is poor, or the battery lead is not always powered. ➔ <b>Make sure that the battery lead is connected securely, and preset stations again.</b>

Problem	Possible cause ➡ Possible solution
PS does not appear even if an RDS station is tuned in to. ("NO PS" appears.)	A PS code cannot be received for the reason of bad receiving conditions, etc. ➡ <b>A PS code appears if it is received. Wait for a while until conditions change.</b>
Receiving programs differs from PTY that was already set up.	When the station changed between programs, the unit could not receive the PTY code. ➡ <b>An appropriate programme is searched for and tuned in to after receiving a corresponding PTY code. Therefore, wait for a while.</b>
"NONE" appears when selecting PTY.	Any specified PTY programs cannot be received. There is no desired programme being broadcast in your area. ➡ <b>Select another PTY, or wait until a desired programme starts.</b>
The clock time (CT) is not accurate.	The unit received a station broadcasting time that is not appropriate for you, or the unit is receiving a station that does not broadcast time. ➡ <b>Receive a station broadcasting time that is appropriate for your area, or adjust CT manually.</b>
An AF station cannot be received even if AF indicator lights.	There is little difference in receiving conditions between the current station and AF stations. Update of the AF list ended in failure. ➡ <b>Wait until the AF list is successfully updated. For unstable reception, tune in to a stable station by the hand.</b>

## CD

Problem	Possible cause ➡ Possible solution
No playback or disc ejected	The disc is inserted upside down. ➡ <b>Insert a disc correctly.</b>
	There is a flaw or foreign material on the disc. ➡ <b>Remove the foreign material, or use a flawless disc.</b>
Sound skipping or noise	There is a flaw or foreign material on the disc. ➡ <b>Remove the foreign material, or use a flawless disc.</b>
Sound skipping due to vibration	The unit is not sufficiently secured. ➡ <b>Secure the unit to the console box.</b>
	The unit is tilted at over 30° in the front-to-end direction. ➡ <b>Make the angle 30° or less.</b>
Disc unejectable	Something such as a peeled label obstructs the disc coming out. ➡ <b>Press and hold the [▲] (OPEN) for more than 2 seconds when the face plate is open (disc forced ejection). In case that the disc forced ejection does not work, consult your dealer.</b>
	The microcontroller in the unit operates abnormally due to noise or other factors. ➡ <b>Unplug the power cord and plug it again. In case the unit is still out of order, consult your dealer.</b>

## MP3/WMA

No playback or disc ejected	The disc has unplayable formatted data. ➡ <b>Refer to the description about MP3/WMA for playable sound data except CD-DA (i.e. music CD).</b>
The CD-R/RWs that are playable on other devices are not playable on this unit.	The playability of some CD-R/RWs may depend on the combination of media, recording software and recorder to be used even if these CD-R/RWs are playable on other devices such as a PC. ➡ <b>Make CD-R/RWs in different combination of media, recording software and recorder after referring to the description about MP3/WMA.</b>
Sound skipping or noise	There is a flaw or foreign material on the disc. ➡ <b>Remove the foreign material, or use a flawless disc. For MP3/WMA, refer to the description about MP3/WMA.</b>
	Playing VBR (Variable Bit Rate) files may cause sound skipping. ➡ <b>Play Non-VBR files.</b>

## Remote control unit

Problem	Possible cause ➡ Possible solution
<p>No response to pressing buttons</p>	<p>The battery is inserted in the wrong direction. A wrong battery is inserted. ➡ <b><i>Insert a correct battery in the correct direction.</i></b></p>
	<p>The battery is weak. ➡ <b><i>Replace the battery with new one.</i></b></p>
	<p>The aiming direction of the remote control unit is wrong. ➡ <b><i>Aim the remote control unit at the sensor of the unit and press buttons.</i></b></p>
	<p>The sensor is exposed to direct sunlight. (The remote control unit may not be operable when the sensor is exposed to direct sunlight. In such a case, the system is not faulty.) ➡ <b><i>Block off sunlight to the sensor.</i></b></p>

# Error Display Messages

CD/MP3/WMA

Display	Possible cause ➡ Possible solution
<div>CD E 1</div> <div>CD E 2</div> <div>CD E 3</div>	<p>The disc is dirty, or is upside down. ➡ <b>Check the disc.</b></p> <p>The disc has scratches. ➡ <b>Check the disc.</b></p> <p>No operation by some cause. ➡ <b>Unplug the power cord and plug it again. In case the unit is still out of order, consult your dealer.</b> (➡ Installation Instructions)</p>
<div>CD E 4</div>	<p>The player for some reason cannot read the file you are trying to play. (File recorded in an unsupported file system, compression scheme, data format, file name extension, damaged data, etc.) ➡ <b>Select a file that the player can read. Check the type of data recorded on the disc. Create a new disc if necessary.</b></p>
<div>PROTECTED</div> <div>(After 5 seconds)</div> <div>↓</div> <div>To next file automatically</div>	<p>A WMA file can be copyrighted. ➡ <b>The file protected by copyright is not playable.</b></p>
<div>NO DISC</div>	<p>No disc.</p>

**Note:** Refer to the **System Upgrade Guidebook** for error messages regarding optional products.

English

Troubleshooting, Error Display Messages

# Notes on Discs

## Notes on CD/CD Media (CD-ROM, CD-R, CD-RW)

If you use commercial CDs, they must have either of these labels shown at right. Some copy-protected music CDs are not playable.



### How to hold the disc

- Do not touch the underside of the disc.
- Do not scratch on the disc.
- Do not bend the disc.
- When not in use, keep disc in the case.

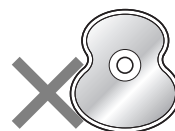
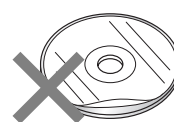
Printed side



### Do not use irregularly shaped discs.

### Do not leave discs in the following places:

- In direct sunlight
- Near car heaters
- Dirty, dusty and damp areas
- On seats and dashboards



Labels created by a printer    Irregularly shaped discs

### Disc cleaning

Use a dry, soft cloth to wipe from the center outward.

### Do not attach any seals or labels to your discs.

### Do not write on the disc label with a ballpoint pen or other hard-point pens.

<Correct>



<Wrong>



## Notes on CD-Rs/RWs

- You may have trouble playing back some CD-R/RW discs recorded on CD recorders (CD-R/RW drives), either due to their recording characteristics or dirt, fingerprints, scratches, etc. on the disc surface.
- CD-R/RW discs are less resistant to high temperatures and high humidity than ordinary music CDs. Leaving them inside a car for extended periods may damage and make playback impossible.
- Some CD-R/RWs can not be played back successfully thanks to incompatibility among writing software, a CD recorder (CD-R/RW drive) and the discs.
- This player cannot play the CD-R/RW discs if the session is not closed.
- This player cannot play the CD-R/RW discs which contains other than CD-DA or MP3/WMA data.
- Be sure to observe the instructions of CD-R/RW disc for handling it.

# Maintenance

## Cleaning the Unit

Your product is designed and manufactured to ensure the minimum of maintenance. Use a soft cloth for routine exterior cleaning. Never use benzine, thinner, or other solvents.

## Fuse

If the fuse blows out, consult your dealer, or your nearest authorized Panasonic Service Centre.

### ⚠ Warning

- Use fuses of the same specified rating (**15 A**). Using substitutes or fuses with higher ratings, or connecting the unit directly without a fuse could cause fire or damage to the unit. **If the replaced fuse fails, contact your nearest authorized Panasonic Service Centre.**



# Specifications

English

Notes on discs, Maintenance, Specifications

## General

<b>Power Supply</b>	DC 12 V (11 V – 16 V), Test Voltage 14.4 V, Negative Ground
<b>Tone Controls (Bass/Treble)</b>	Bass: $\pm 12$ dB at 80 Hz, Treble: $\pm 12$ dB at 6 kHz
<b>Equalizer Center Frequency</b>	62.5, 125, 250, 500, 1 k, 2 k, 4 k, 8 k, 16 k (default) (Hz)
<b>Variable Range of Equalizer</b>	– 12 dB to 12 dB (2 dB step)
<b>Current Consumption</b>	Less than 2.5 A (CD mode, 0.5 W 4-Speaker)
<b>Maximum Power Output</b>	70 W x 4 (at 1 kHz)
<b>Power Output</b>	40 W x 4 (DIN 45 324, at 4 $\Omega$ )
<b>Speaker Impedance</b>	4 – 8 $\Omega$
<b>Pre-amp output voltage</b>	5 V (CD mode, 1 kHz, 0 dB)
<b>Subwoofer-output voltage</b>	5 V (CD mode, 1 kHz, 0 dB)
<b>Pre-amp output impedance</b>	60 $\Omega$
<b>Subwoofer-output impedance</b>	60 $\Omega$
<b>Dimensions (Main Unit)</b>	178(W) x 50(H) x 155(D) mm
<b>Weight (Main Unit)</b>	1.7 kg

## CD Player

<b>Sampling Frequency</b>	8 times oversampling
<b>DA Converter</b>	4 DAC System
<b>Pick-Up Type</b>	Astigma 3-beam
<b>Light Source</b>	Semiconductor laser
<b>Wavelength</b>	790 nm
<b>Frequency Response</b>	20 Hz – 20 kHz ( $\pm 1$ dB)
<b>Signal to Noise Ratio</b>	96 dB
<b>Total Harmonic Distortion</b>	0.01 % (1 kHz)
<b>Wow and Flutter</b>	Below measurable limits
<b>Channel Separation</b>	86 dB (2 V)

## Radio

<b>FM Stereo Radio</b>	
<b>Frequency range</b>	87.5 MHz – 108 MHz
<b>Usable sensitivity</b>	8 dB/ $\mu$ V (S/N 30 dB)
<b>Frequency Response</b>	30 Hz – 15 kHz ( $\pm 3$ dB)
<b>Alternate channel selectivity</b>	75 dB (IF: MID)
<b>Stereo separation</b>	40 dB (at 1 kHz)
<b>Image response ratio</b>	75 dB (IF: MID)
<b>IF response ratio</b>	100 dB (IF: MID)
<b>Signal to noise ratio</b>	62 dB
<b>AM (MW) Radio</b>	
<b>Frequency Range</b>	531 kHz – 1 602 kHz
<b>Usable Sensitivity</b>	25 dB/ $\mu$ V (S/N 20 dB)
<b>AM (LW) Radio</b>	
<b>Frequency Range</b>	153 kHz – 279 kHz
<b>Usable Sensitivity</b>	32 dB/ $\mu$ V (S/N 20 dB)

### Notes:

- Specifications and design are subject to modification without notice due to improvements.
- Some figures and illustrations in this manual may be different from your product.

## Sales and Support Information

For UK and Ireland customers only.

### Customer Care Centre

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

### Direct Sales at Panasonic UK

- Order accessories and consumable items for your product with ease and confidence by phoning our Customer Care Centre Monday - Thursday 9:00am - 5:30pm, Friday 9:30am - 5:30pm. (Excluding public holidays).
- Or go on line through our Internet Accessory ordering application at [www.panasonic.co.uk](http://www.panasonic.co.uk).
- Most major credit and debit cards accepted.
- All enquiries, transactions and distribution facilities are provided directly by Panasonic UK Ltd.
- It couldn't be simpler!
- Also available through our Internet is direct shopping for a wide range of finished products, so take a browse on our website for further details.

**Matsushita Electric Industrial Co., Ltd.**

Web Site : <http://www.panasonic.co.jp/global/>