

# Panasonic®



**MP3 CD Player/Weather Band Receiver SiriusXM-Ready**

Model: **CQ-5109U**

## Operating Instructions



**((SiriusXM))**  
READY

**MP3**



- Please read these instructions (including “Limited Warranty” and “Customer Services Directory”) carefully before using this product and keep this manual for future reference.

# 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.



**Warning**

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 not operate the system while driving.**

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 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.

- ❑ **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.

- ❑ **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 Servicenter.

- ❑ **Do not use the unit when it is out of order.**

If the hole is out of order (no power, no sound) or in an abnormal state (has foreign matter in it, is exposed to water, is smoking, or smells), turn it off immediately and consult the store where you purchased it.

- ❑ **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.

- ❑ **Any NOAA broadcast weather report, including current and forecasts, may not reflect your actual weather conditions at your exact time and location. You should always pay attention to your actual weather conditions to make safe decisions accordingly.**

**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.**

- ❑ **Keep accessories out of reach of infants.**

Accessories can be ingested, so keep them out of the reach of infants. If an infant ingests accessories, please seek immediate medical attention.



## 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.

- ❑ **To ensure safety, never attempt to preset stations while you are driving.**

- ❑ **Depending upon the transmission condition of electro-magnetic waves, the geographical reasons and/or the weather conditions, you may not receive the NOAA radio partially or at all.**

- ❑ **Make sure that your weather radio can receive properly before driving, especially, before use in a critical condition.**

- ❑ **Set the volume level to low enough before the AUX connection is completed.**

Failure to observe this, the loud noise may come out and damage your speakers and your hearing. Direct connection of the speaker/headphone output of an external device without any attenuator may distort sound or damage the connected external device.

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 or an authorized Panasonic Servicenter. Panasonic is not liable for any problems resulting from your own installation of the unit.

- ❑ **Follow the instruction 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)**

# Safety Information (continued)



## Caution

**THIS PRODUCT IS A CLASS I 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.**

**The following applies only in the U.S.A.**

### **Part 15 of the FCC Rules**

#### **FCC Warning:**

This device complies with Part 15 of the FCC Rules for Radio Receiver. Operation is subject to the condition that this device may not cause harmful interference. Any unauthorized changes or modifications to this equipment may void the user's authority to operate this device.

# Accessories

- 1. Operating Instructions..... 1
- 2. NOAA Weather Radio Brochure ..... 1
- 3. Installation hardware ..... 1 set (→ page 30)

# 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.

## Customer Services Directory

### Customer Services Directory (United States and Puerto Rico)

Obtain Product Information and Operating Assistance; locate your nearest Dealer or Servicenter; purchase Parts and Accessories; or make Customer Service and Literature requests by visiting our Web Site at:

<http://www.panasonic.com/support>

or, contact us via the web at:

<http://www.panasonic.com/contactinfo>

You may also contact us directly at:

1-800-211-PANA (7262),

Monday-Friday 9 am-9 pm; Saturday-Sunday 10 am-7 pm, EST.

For hearing or speech impaired TTY users, TTY : 1-877-833-8855

### Accessory Purchases:

#### (United States and Puerto Rico)

Purchase Parts, Accessories and Instruction Books online for all Panasonic Products by visiting our Web Site at:

<http://www.pasc.panasonic.com>

or, send your request by E-mail to:

[npcparts@panasonic.com](mailto:npcparts@panasonic.com)

You may also contact us directly at:

1-800-332-5368 (Phone) 1-800-237-9080 (Fax Only) (Monday-Friday 9 am to 8 pm, EST.)

Panasonic Services Company

20421 84th Avenue South, Kent, WA 98032

(We accept Visa, MasterCard, Discover Card, American Express, and Personal Checks)

For hearing or speech impaired TTY users, TTY : 1-866-605-1277

## Limited Warranty

### Limited Warranty

#### (For USA and Puerto Rico Only)

PANASONIC AUTOMOTIVE SYSTEMS COMPANY OF AMERICA,  
DIVISION OF PANASONIC CORPORATION OF NORTH AMERICA  
776 HIGHWAY 74 SOUTH, PEACHTREE CITY, GA 30269

### PANASONIC AUTO PRODUCTS

#### LIMITED WARRANTY

#### LIMITED WARRANTY COVERAGE

If your product does not work properly because of defects in materials and workmanship.

Panasonic Automotive Systems Company of America (referred to as "the warrantor") will, for the length of the period indicated in the chart below, which starts with the date of original purchase ("warranty period"), at its option either (a) repair your product with new or refurbished parts, or (b) replace it with a new or refurbished product. The decision to repair or replace will be made by the warrantor.

Categories	Parts	Labor
Audio Components (except items listed below)	One (1) Year	One (1) Year
Speakers	One (1) Year	Not Applicable
Defective Car Audio Speakers under warranty must be exchanged at the place of purchase. Contact your Dealer for details.		
Accessories (in exchange for defective items)	Ninety (90) Days	Not Applicable

During the "Labor" warranty period, there will be no charge for labor. During the "Parts" warranty period, there will be no charge for parts. You must carry-in or mail-in your product prepaid during the warranty period. If non-rechargeable batteries are included, they are not warranted. This warranty only applies to products purchased and serviced

in the United States or Puerto Rico. This warranty is extended only to the original purchaser of a new product which was not sold "as is". A purchase receipt or other proof of the original purchase date is required for warranty service.

### CARRY-IN OR MAIL-IN SERVICE

For Carry-In or Mail-In Service in the United States and Puerto Rico, call 1-800-211-PANA (7262) or visit

Panasonic Web Site: <http://www.panasonic.com>

### LIMITED WARRANTY LIMITS AND EXCLUSIONS

This warranty ONLY COVERS failures due to defects in materials and workmanship, and DOES NOT COVER normal wear and tear or cosmetic damage. The warranty ALSO DOES NOT COVER damages which occurred during shipment, failures which are caused by products not supplied by the warrantor, failures which result from accident, misuse, abuse, neglect, bug infestation, mishandling, misapplication, alteration, faulty installation, set-up adjustment, maladjustment of consumer control, improper maintenance, improper antenna, inadequate signal reception or pickup, power line surge, improper voltage supply, lightning, modification, commercial use (such as use in hotels, offices, restaurants, or other business uses) or rental use of the product, or service by anyone other than the technician from Factory Servicenter or other authorized service centers, or damage that is attributable to acts of God.

**THERE ARE NO EXPRESS WARRANTIES EXCEPT AS LISTED UNDER "LIMITED WARRANTY COVERAGE". THE WARRANTOR IS NOT LIABLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES RESULTING FROM THE USE OF THIS PRODUCT, OR ARISING OUT OF ANY BREACH OF THIS WARRANTY.** (As examples, this excludes damages for lost time, cost of having someone remove or re-install an installed unit if applicable, travel to and from the seviceir, and loss of media, data or other memory contents. The items listed are not exclusive, but are for illustration only.) **ALL EXPRESS AND IMPLIED WARRANTIES, INCLUDING THE WARRANTY OF MERCHANTABILITY, ARE LIMITED TO THE PERIOD OF THE LIMITED WARRANTY.**

Some states do not allow the exclusion or limitation of incidental or consequential damages, or limitations on how long an implied warranty lasts, so the exclusions may not apply to you.

This warranty gives you specific legal rights and you may also have other rights which vary from state to state. If a problem with this product develops during or after the warranty period, you may contact your dealer or Servicenter. If the problem is not handled to your satisfaction, then write to warrantor's Consumer Affairs Department at the addresses of the warrantor.

**PARTS AND SERVICE WHICH ARE NOT COVERED BY THIS LIMITED WARRANTY ARE YOUR RESPONSIBILITY.**

### Customer's Record

Model

No.

Serial

No.

Dealer's

No.

Code

No.

Dealer's

Address

Date of

Purchase

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# Features

## Front AUX terminal

Your mobile audio player and other devices are connectable to this unit without any difficulty.

## Sound control

### **SQ (Sound Quality)**

You have four preset modes (FLAT, ROCK, POP and VOCAL).

## SiriusXM Satellite Radio

SiriusXM Satellite Radio service requires a subscription and the purchase of a SiriusXM Connect Vehicle Tuner. For information on SiriusXM Satellite Radio service or tuner activation please call 1-866-635-2349 or visit [siriusxm.com](http://siriusxm.com).

**Note:** This unit is not compatible with the following Sirius or XM satellite radio components:  
Sirius receiver (SIRPAN1/SC-C1)  
Sirius Interface Adaptor (CA-PANSC1U/CA-LSR01U)  
XM receiver (XMD1000/CNP2000UC)  
XM Adapter Cable (XMDPAN110/CNPPAN1)

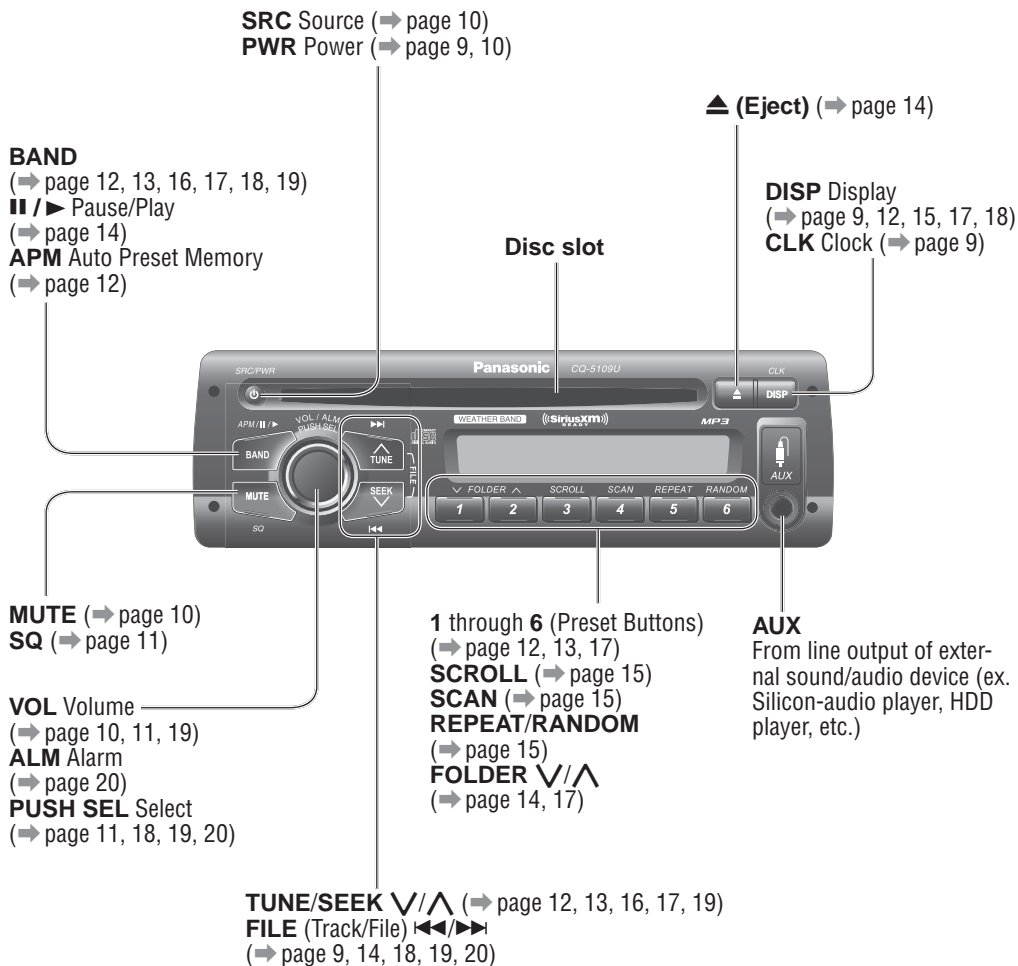
### **About SiriusXM**

Everything worth listening to is on SiriusXM, getting over 130 channels, including the most commercial-free music, plus the best sports, news, talk and entertainment. A SiriusXM Tuner and Subscription are required. For more information, visit [www.siriusxm.com](http://www.siriusxm.com)

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# Controls Layout





# Preparation

## First time power on

- 1 Turn the key in the ignition until the accessory indicator lights.
- 2 Press **[PWR]** (Power).

## Clock adjustment

The 12-hour (AM/PM) system is used for the clock adjustment.

- 1 Press **[CLK]** (Clock).

 (Clock display)

- 2 Hold down **[CLK]** for more than 2 seconds.

 Hour blinks

\*Indicator for AM or PM time

- 3 Adjust the hour.

**[▶▶]** : Sets ahead.

**[◀◀]** : Sets back.

 Hour entered

- 4 Press **[CLK]**.

 Minute blinks

- 5 Adjust the minute.

**[▶▶]** : Sets ahead.

**[◀◀]** : Sets back.

 Minute entered

- 6 Press **[CLK]**.

 Completed

### Notes:

- Clock can not be adjusted when the unit is power off, to perform clock setting when the unit is power on.
- When "NO DISC" is displayed, the clock can not be adjusted.
- "CLK ADJ" is displayed when the clock is not adjusted.
- Hold down **[▶▶]** or **[◀◀]** to change numbers rapidly.
- When you want to readjust the time, repeat steps 2 to 6.

## Clock Display at Power Off

Press **[DISP]** to change the display.

 Display off

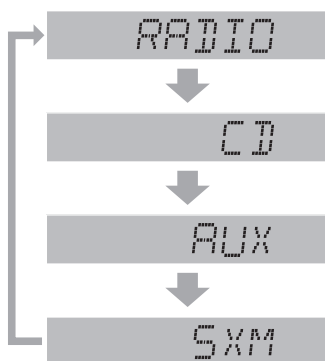


 Clock display

# General

## Source selection

The source changes as follows every time **[SRC]** (Source) is pressed.



**Radio**  
FM, AM, WB (⇒ page 12)

**Disc player**  
CD, MP3 (⇒ page 14)

**AUX**  
When device connected to the front AUX terminal of this unit  
(The sound of connected device is output from car speaker.)

**SiriusXM satellite radio control**  
When the optional SiriusXM Connect Vehicle Tuner is connected to this unit, this source mode is selectable and the SAT (Satellite radio) indicator lights to indicate the connection/communication between head unit and SiriusXM Connect Vehicle Tuner is established. (This indicator lights even in the other source mode)  
SiriusXM satellite radio control (⇒ page 16)  
**Note:** When this unit is not connected with the optional SiriusXM Connect Vehicle Tuner, this source mode is skipped and cannot be selected.



### Power

Turn the key in the ignition until the accessory indicator lights.

**Power on:** Press **[PWR]** (Power).

WELCOME

**Power off:** Hold down **[PWR]** for more than 1 second.

### Volume

Turn **[VOL]** (Volume) clockwise to increase volume, and counterclockwise to decrease volume.

VOL 18

Volume level (0 to 40)  
(default:18)



### Mute

Press **[MUTE]** to mute the sound completely.

**MUTE** lights.

Press again to cancel.

# Sound Controls

## SQ (Sound Quality)

SQ is a function that can call up various sound types at the touch of button in accordance with your listening music type.

Hold down **[SQ]** for more than 2 seconds to select the sound type as follows:

**Note:** Settings of SQ, bass and treble are influenced one another. If such an influence causes distortion to the audio signal, readjust bass/treble or volume.



**(FLAT)** flat frequency response: does not emphasize any part. (default)



**(ROCK)** speedy and heavy sound: exaggerates bass and treble.



**(POP)** wide-ranged and deep sound: slightly emphasizes bass and treble.



**(VOCAL)** clear sound: emphasizes middle tone and slightly emphasizes treble.



## Audio modes (Bass/Treble/Balance/Fader)

**1** Push **[SEL]** (Select) to select the audio mode in sequence.

**2** Turn **[VOL]** (Volume) clockwise or counter-clockwise to change each level or select a setting.

**VOL 18** (Volume)  
(Setting Range: 0 to 40, default: 18)



**BASS** (Bass)  
(Setting Range: -12 dB to +12 dB by 2 dB, default: 0 dB)

**BAS+ 6dB**  
①: Increased  
②: Decreased

**TREBLE** (Treble)  
(Setting Range: -12 dB to +12 dB by 2 dB, default: 0 dB)

**TRE+ 6dB**  
①: Increased  
②: Decreased

**BALANCE** (Balance)  
(Setting Range: 15 levels each and 0 (center), default: CNT)

**BAL L 15**  
①: Right enhanced  
②: Left enhanced

**FADER** (Fader)  
(Setting Range: 15 levels each and 0 (center), default: CNT)

**FAD F 15**  
①: Front enhanced  
②: Rear enhanced

**Note:** If no operation takes place for more than 5 seconds in audio mode (2 seconds in volume mode), the display returns to the regular mode.



## Caution

To ensure safety, never attempt to preset stations while you are driving.

### Band

Press **[BAND]** to change the band.



**ST (FM stereo) indicator**  
lights while receiving an FM stereo signal.

### Display Change

Press **[DISP]** (display) to switch to the clock display.

FM1 87.9 4 Radio mode display

FM1 8:15 AM Clock display



### Frequency adjustment

**[TUNE/SEEK ▲]**: Higher

**[TUNE/SEEK ▼]**: Lower

**Note**: Hold down for more than 0.5 seconds and release for station search.

### Preset station selection

Press the corresponding preset button **[1]** through **[6]** to tune in a preset station.

### Auto preset memory (APM)

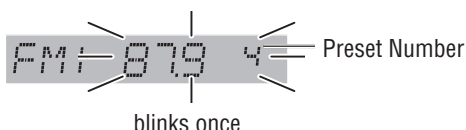
Press and hold **[APM]** (Auto Preset Memory) for more than 2 seconds.

- The 6 stations with good reception will be automatically saved in the memory under preset buttons **[1]** through **[6]**.
- Once set, the preset stations are sequentially scanned for 5 seconds each.
- Press one of the buttons **[1]** through **[6]** to stop sequentially scan.

**Note**: New stations overwrite existing saved stations.

### Manual preset memory

- 1 Use manual or seek tuning to find a station.
- 2 Press and hold one of the preset buttons **[1]** through **[6]** until the display blinks once.



**Note**: New stations overwrite existing saved stations.

## Tuning in a weather band station

- 1 Press **[BAND]** to select WB (Weather Band). (➡ page 12)
- 2 Press any of the buttons **[1]** through **[6]** to monitor the preset station.

**Note:** The weather band (CH1-6) has been pre-set. CH7 is selected by pressing **[TUNE▲]** or **[TUNE▼]**.

## Weather Band Stations

National Weather Radio Broadcasts from over 380 locations throughout the U.S. on seven VHF/FM frequencies.

Tune to weather band to receive continuous weather information 24 hours a day on one of the following frequencies.

1. 162.550 MHz
2. 162.400 MHz
3. 162.475 MHz
4. 162.425 MHz
5. 162.450 MHz
6. 162.500 MHz
7. 162.525 MHz

**Note:** Further and updated information about the National Weather Radio station listing, please visit the web site:

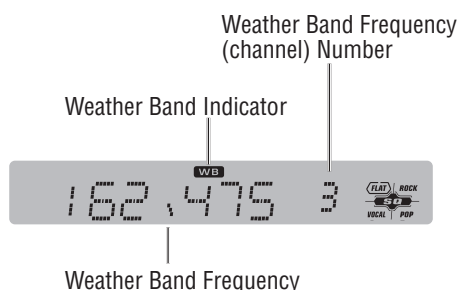
<http://www.nws.noaa.gov/nwr/nwrbro.htm>

Occasionally the frequency of an existing or planned station must be changed because of unexpected radio frequency interfere with adjacent NOAA weather Radio Stations and/or with other Government or commercial Operations within the area. If you have a question concerning NOAA Weather Radio, please contact your nearest National Weather Service Office.



## Warning

Any NOAA broadcast weather report, including current and forecasts, may not reflect your actual weather conditions at your exact time and location. You should always pay attention to your actual weather conditions to make safe decisions accordingly.



# CD/MP3 Player



## Caution

- Do not insert a disc when the **DISC** indicator lights.
- This unit does not support 8 cm {3"} discs.
- Do not use irregularly shaped discs. (⇒ page 28)
- Do not use discs that have a seal or label attached.
- Do not insert foreign matter into the disc slots.
- This unit does not support WMA disc playback.
- Refer to the section on "Notes on CD-Rs/RWs" (⇒ page 28).
- Refer to the section on "Notes on MP3". (⇒ page 26)
- This unit does not support a MIX mode CD (⇒ CD containing both CD-DA and compressed audio data). In case of using such a CD, problems may occur such as anacoustic playback.

## Pause

Press [**II / ▶**] (Pause/Play)

Press again to cancel.

## Disc loading/ejection

### Loading

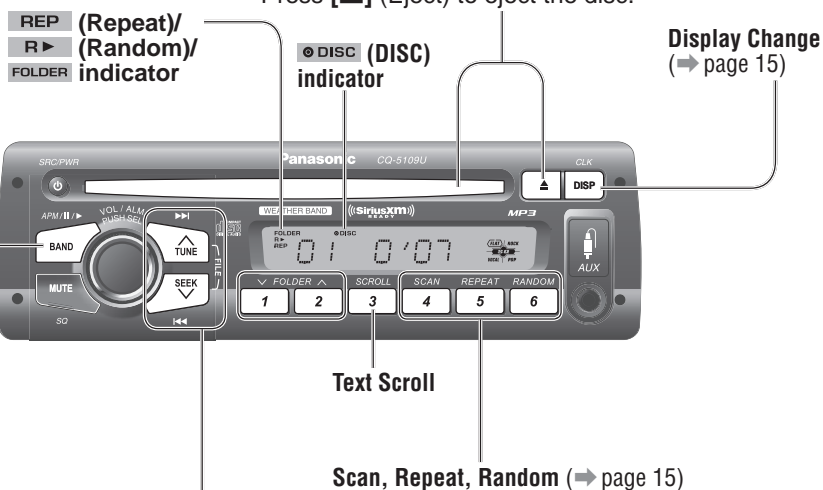
Load a disc in with the printed side facing up.

#### Notes:

- The power will be turned on automatically when a disc is loaded.
- Playback will start automatically after the player recognized the loaded disc as an ordinary music CD or MP3 disc.

### Ejection

Press [**▲**] (Eject) to eject the disc.



## Track/File selection

[**FILE ▶▶**]: Next track/file

[**FILE ◀◀**]: Back to the beginning of the current track/file.  
Back to the previous track/file.  
(press twice)

**Note** : Hold down for fast forward/reverse. Release to resume the regular play.

## Folder selection (MP3)

[**FOLDER ▲**]: Next folder

[**FOLDER ▼**]: Preceding folder

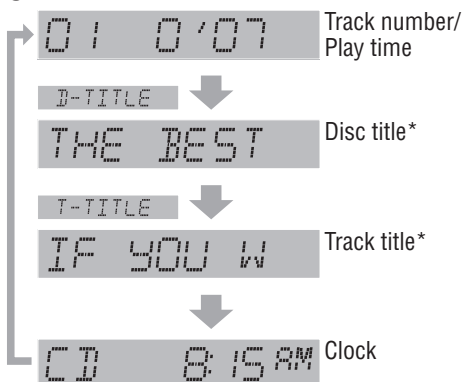
## Display change

Press **[DISP]** (Display) to change the display.

### Notes:

- For scrolling text, press **[SCROLL]**.
- "NO TEXT" is displayed when there is no information on the disc.

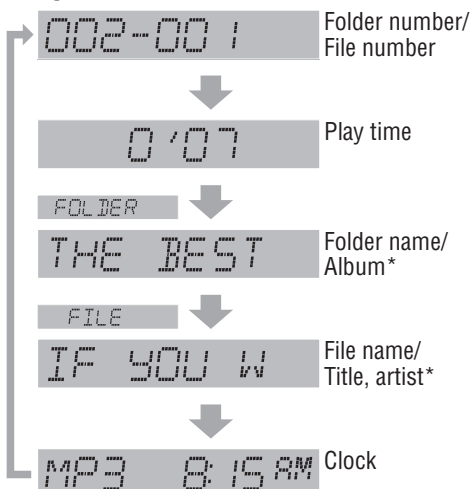
### CD-DA



#### \* CD TEXT Display

Disc title and Track title name are displayed.

### MP3



#### \* ID3 Tag ON/OFF

Hold down **[SCROLL]** for more than 2 seconds.

**TAG ON:** album title and song title/artist name are displayed.

**TAG OFF:** folder name/file name are displayed. (Default)

## Scan, repeat, random

### Scan play

The first 10 seconds of each track/file is played in sequence.

Press **[SCAN]**. Track/file number blinks.

Press again to cancel.

### Folder scan play (MP3)

From the next folder, the first 10 seconds of the first file in each folder is played in sequence.

Hold down **[SCAN]** for more than 2 seconds.

**FOLDER** lights and folder number blinks.

Hold down again to cancel.

### Repeat play

The current track/file is repeated.

Press **[REPEAT]**. **REP** lights.

Press again to cancel.

### Folder repeat play (MP3)

The current folder is repeated.

Hold down **[REPEAT]** for more than 2 seconds. **REP**, **FOLDER** lights.

Hold down again to cancel.

### Random play

All the available tracks/files are played in a random sequence.

Press **[RANDOM]**. **R▶** lights.

Press again to cancel.

### Folder random play (MP3)

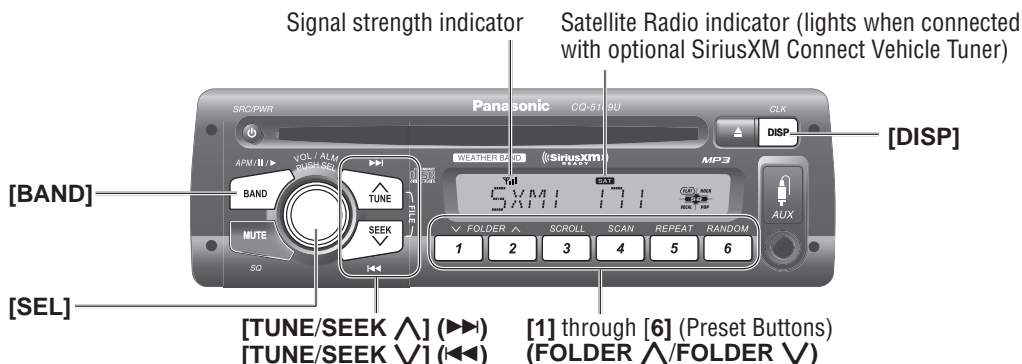
All the available files in current folder are played in a random sequence.

Hold down **[RANDOM]** for more than 2 seconds. **R▶**, **FOLDER** lights.

Hold down again to cancel.



# SiriusXM Satellite Radio Control



## Connecting SiriusXM Tuner

Connect the optional SiriusXM Connect Vehicle Tuner. Refer to the installation instructions included with the SiriusXM receiver and the figure on page 34 of this manual.

## Getting started

A SiriusXM subscription (sold separately) is required to receive programming. You can subscribe by calling SiriusXM listener care or by going on line - see below for details.

### 1 Check the Radio ID.

- Write down the Radio ID from your SiriusXM Connect Vehicle Tuner.
- To show the Radio ID on the display, tune to channel 0. (Refer to "Channel Selection".)

**XR57T6DC** Radio ID display (example)

### 2 Activate the SiriusXM Satellite Radio by calling or going on-line:

- Web site: <http://www.siriusxm.com/subscriptions>
- Phone number: 1-800-967-2346

**Note:** The Radio ID does not use the letter I, O, S, or F.

## Band selection

Press **[BAND]** to change the band.



## Channel selection

**[TUNE/SEEK ^]:** Next available/subscribed channel

**[TUNE/SEEK v]:** Preceding available/subscribed channel

Hold down for seek forward/reverse.

**Note:** "CH LOCKD" is displayed if a channel is selected that has been locked by the parental lock setting, follow the procedure next on "Channel unlocking" to unlock the channel.

## Channel unlocking (passcode entry)

To receive a channel locked by a parental lock, a passcode needs to be entered after tuning to the channel. (Refer to page 19 for parental lock setting.)

### 1 Tune to a channel locked by a parental lock.

**CH LOCKD**



**LK CODE?**



**CODE** [ ] [ ] [ ] [ ]

### 2 Press **[▶▶]** or **[◀◀]** to select a number.

**CODE** [ ] [ ] [ ] [ ]

### 3 Press **[BAND]** to shift to the right adjacent digit.

**CODE** [ ] [ ] [ ] [ ]

A digit where entry is determined is indicated as "\*".

#### 4 Repeat the steps 2 and 3 to enter a 4-digit number code.

When a 4-digit number code is correctly entered and **[BAND]** is finally pressed, the all locked channels are unlocked and start to be received. (Once turns ACC ON/OFF, the channels return to previous locked status)

##### Notes:

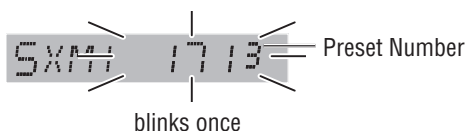
- If a wrong number code is entered when selects a locked channel, "WRONG CODE" is displayed and returns to Channel 1.
- If 10 seconds elapse before determining the entry of the number code, "TIME OUT" is displayed and returns to previous channel.
- To exit the passcode entry, press **[DISP]** and returns to previous channel.
- To change the parental lock passcode, refer to page 19 for setting.

### Channel preset

Up to 6 channels can be preset in SXM1 to SXM3 respectively.

1 Use manual or seek tuning to tune into a channel.

2 Press and hold one of the preset buttons **[1]** through **[6]** until the display blinks once.



**Note:** New channels overwrite existing saved channel after this procedure.

### Preset channel selection

Press the corresponding preset button **[1]** through **[6]** to tune in a preset channel.

### Selection by category

#### Category setting

You can toggle the category selection mode ON and OFF every time you press and hold **[BAND]** for more than 2 seconds. If the category is set to ON, the unit operates as follows for each button:

##### Notes:

- When category is set to ON, the letter "c" is displayed followed by channel number.
- When category selection mode is active, as indicated by "c", the preset buttons are disabled. Turn off category selection mode to re-enable the preset buttons.

### Category selection

**[FOLDER ^]**: Next category

**[FOLDER v]**: Preceding category

### Channel selection

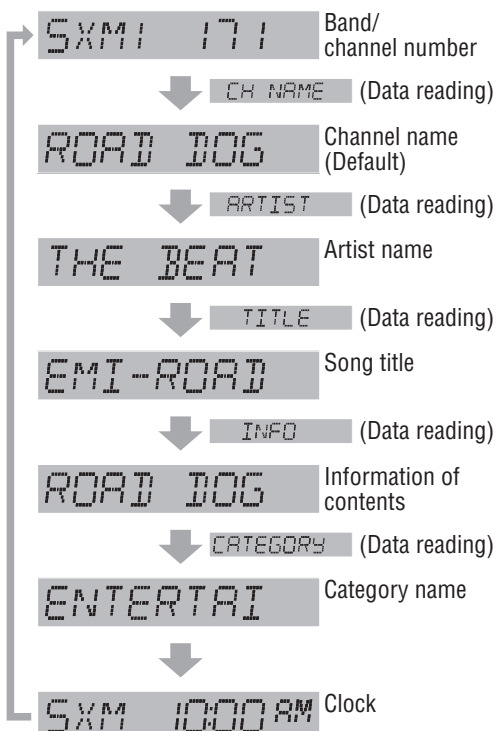
**[TUNE/SEEK ^]**: Next available/subscribed channel in current category

**[TUNE/SEEK v]**: Preceding available/subscribed channel in current category

**Note:** The simulate category of "All Channel" is selectable in category selection.

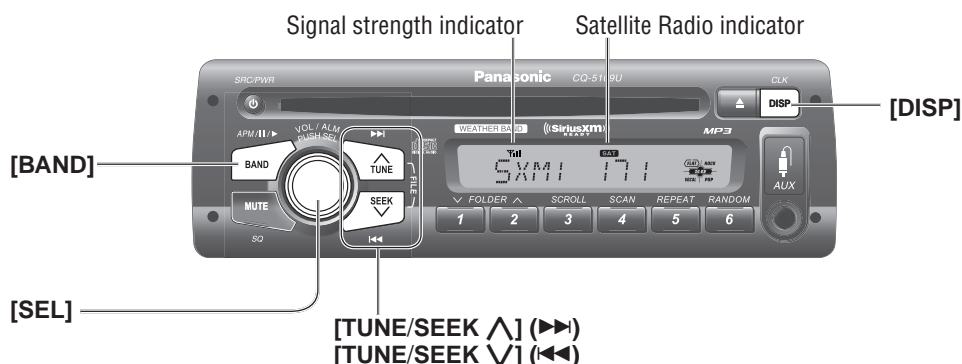
### Display change

Press **[DISP]** (Display) to change the display of different metadata information.



**Note:** "----" is displayed when there is no information on the selected channel.

# SiriusXM Satellite Radio Control (continued)



## System control mode selection

SXM 171

SiriusXM radio display

Press and hold **[SEL]** for more than 2 seconds to open SXM function setting screen.

SXM FUNC

SiriusXM function setting mode

**Note:** See below "Function settings" for its inside setting.

Turn **[SEL]** to open alarm time setting screen.

ALM ADJ

Alarm time setting mode

**Note:** Refer page 20 and follow its steps from **2** to **6** to set alarm time if needed.

Turn **[SEL]** back to SXM function setting screen.

## Function settings

### Channel direct selection mode

A channel is directly selected with the channel number entry.

- 1 Press and hold **[SEL]** for more than 2 seconds to open SXM function setting screen.

SXM FUNC

- 2 The radio automatically enters the SXM direct channel selection mode after 2 seconds when entering the SXM function setting screen.

D TUNING

Channel direct selection mode

- 3 Press **[▶▶]** or **[◀◀]** to select a number.

CH 1

- 4 Press **[BAND]** to enter the next digit.

CH 10

- 5 If necessary, repeat steps **3** and **4** to enter more digits of the channel number.

- 6 Press **[SEL]** when done entering the channel number digits and the radio tunes to the desired channel.

#### Notes:

- "CH UNAVL" is displayed when the requested channel is not valid. Visit [www.siriusxm.com](http://www.siriusxm.com) to see the list of channels available.
- "CH UNSUB" is displayed when the requested channel is not part of the current subscription package. Visit [www.siriusxm.com](http://www.siriusxm.com) for information on subscription packages.

## Function settings (continued)

### Parental lock setting mode

This function disables the audience from selecting the locked channel.

- 1 Press and hold **[SEL]** for more than 2 seconds to open SXM function setting screen.

SXM FUNC

- 2 When "D. TUNING" is displayed, press **[SEL]** to select parental lock setting mode.

P-LOCK

(Parental lock setting mode)

- 3 Enter a 4-digit passcode, then press **[BAND]** when finished.

CODE 1 \_ \_ \_

- ① Press **[▶▶]** or **[◀◀]** to select a number.
- ② Press **[BAND]** to shift to the right adjacent digit.  
A digit where entry is determined is indicated as "\*".
- ③ Repeat the steps ① and ② to enter a 4-digit number.

**Note:** (Default: 1111). If you want to initialize the passcode, press and hold **[DISP]** for more than 10 seconds while passcode entry, the 4-digit passcode will return to the default.

- 4 Press **[TUNE/SEEK ▲]** or **[TUNE/SEEK ▼]** to select a channel.

- 5 Press **[BAND]** to switch a select channel to be locked or unlocked.

L-SET 2

unlocked

L-SET 24

locked

**Note:** Channel 0 (CH 0) and Channel 1 (CH 1) can not be locked.

- 6 When done selecting the locked channels, press **[DISP]** to exit the function setting or press **[SEL]** to change the parental lock ON/OFF setting.

### OR

To set parental lock ON/OFF:

- 4 Press **[SEL]** to open lock ON/OFF mode after step 3.

- 5 Turn **[SEL]** to switch between lock ON or OFF.

LOCK ON

(Default)



LOCK OFF

- 6 When done selecting the parental lock ON/OFF setting, press **[SEL]** to exit the function setting mode.

### OR

To change the parental lock passcode:

- 4 Press and hold **[BAND]** for more than 2 seconds after step 3.

NEW CODE

(New code entry mode)

- 5 Enter a new 4-digit code, then press **[BAND]** when finished.

- ① Press **[▶▶]** or **[◀◀]** to select a number.
- ② Press **[BAND]** to shift to the right adjacent digit.  
A digit where entry is determined is indicated as "\*".
- ③ Repeat the steps ① and ② to enter a 4-digit number.

- 6 Repeat step 5 to confirm the new code.

"CODE SET" is displayed for 2 seconds and the new code setting is finished, then returns to channel locked/unlocked setting display.

# Alarm Setting



## Alarm time setting

- 1 Hold down **[ALM]** (Alarm) for more than 2 seconds.

**ALM ADJ** (Alarm time display)

"ALM ADJ" is displayed when the alarm time is not adjusted.

- 2 Hold down **[ALM]** for more than 2 seconds after the above display is shown.

**ALM 12:00 AM** Hour blinks

- 3 Adjust the hour.

**[>>]** : Sets ahead.

**[<<]** : Sets back.

**ALM 8:00 AM** Hour entered

- 4 Push **[ALM]**.

**ALM 8:00 AM** Minute blinks

- 5 Adjust the minute.

**[>>]** : Sets ahead.

**[<<]** : Sets back.

**ALM 8:15 AM** Minute entered

- 6 Push **[ALM]** to complete.

**ALM 8:15 AM** Completed

The alarm is set to ON automatically after complete alarm time setting.

Alarm indicator (🔔) lights.

## Notes:

- The procedure of alarm time setting under SiriusXM radio mode is different with above step 1, refer page 18 for its instructions.
- When the clock (➡ page 9) is not set, perform and complete the alarm time setting, the clock time will set to "PM 1:00" automatically. Please readjust the clock time depending on the actual clock time.
- Hold down **[>>]** or **[<<]** to change numbers rapidly.
- When you want to readjust the alarm time, repeat steps 1 to 6.

## Turning ON/OFF the alarm

- 1 Hold down **[ALM]** for more than 2 seconds.

**ALM 12:00 AM** (Alarm time display)

- 2 Push **[ALM]**.

**ALM OFF** (Alarm ON/OFF setting)

- 3 Turn **[VOL]** (Volume) clockwise or counter-clockwise to select alarm ON or OFF, then push **[ALM]** again to confirm the setting.

(Select alarm ON, 🔔 lights.)

## Notes:

- Before turn ON the alarm, make sure the alarm time is set. Failure to heed this will cause invalid selection of alarm ON.
- Hold down **[ALM]** for more than 2 seconds when the alarm is sounding also turns off the alarm.
- Access of alarm ON/OFF is available by push **[ALM]** in the "Alarm time display".

## Activating snooze

Press any button on this unit when the alarm is sounding.

**SNOOZE**

The alarm will sound again in 9 minutes.

**Note:** If you do not turn the alarm off when the alarm is sounding, the alarm sound will shut off after an hour. (Including the amount of time the alarm was postponed (snooze))

# 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 dealer or an authorized Panasonic Servicenter. 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 for 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 or an authorized Panasonic Servicenter.
- Never try to repair the unit by yourself because it is dangerous to do so.

## Common

Problem	Possible cause ➡ Possible solution
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>
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.</b></p>
Noise	<p>There is an electromagnetic-wave generator such as a mobile phone near the unit or its electrical lines. ➡ <b><i>Keep an electromagnetic-wave generator such as a mobile 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 vehicle, consult your dealer or an authorized Panasonic Servicenter.</i></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 vehicle. ➡ <b>Change the wiring position of the ground lead.</b> ➡ <b>Mount a noise filter on the power supply.</b></p>
Some operations are not executable.	<p>Some operations are not executable in particular modes such as menu mode. ➡ <b><i>Read the operating instructions carefully and cancel the mode. If the unit is still out of order, consult your dealer or an authorized Panasonic Servicenter.</i></b></p>
No sound from speaker(s)	<p>BALANCE/FADER setting is not appropriate. ➡ <b>Readjust BALANCE/FADER.</b></p> <p>There is a break, a short circuit, poor contact or wrong wiring regarding the speaker wiring. ➡ <b>Check the speaker wiring.</b></p>

# Troubleshooting (continued)

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 an authorized Panasonic Servicenter.</b>
Clock time is reset.	➔ Battery cable is not correctly connected. ➔ <b>Connect the battery cable to the terminal that is always active.</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>
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 presetting.</b>

## CD

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>Consult your dealer or an authorized Panasonic Servicenter.</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 or an authorized Panasonic Servicenter.</b>



## MP3

No playback or disc ejected	<p>The disc has unplayable formatted data.            ➔ <b>Check the file format.</b></p>
The CD-R/RWs that are playable on other devices are not playable on this unit.	<p>The playability of some CD-Rs/RWs may depend on the combination of media, recording software and recorder to be used even if these CD-Rs/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 the compressed audio player.</b></p>
Sound skipping or noise	<p>There is a flaw or foreign material on the disc.            ➔ <b>Remove the foreign material, or use a flawless disc.</b></p> <p>Playing VBR (Variable Bit Rate) files may cause sound skipping.            ➔ <b>Play Non-VBR files</b></p>

**Note:** Refer to “Notes on MP3”. (➔ Page 26)

## SiriusXM Satellite Radio Control

Channel unselectable	<p>No contract with Sirius XM Radio Inc.            ➔ <b>Refer to page 16 of this book and the SiriusXM's website to sign up for SiriusXM Radio service.</b></p>
Check antenna	<p>SiriusXM Antenna is disconnected or damaged.            ➔ <b>Make sure the antenna is properly connected to the SiriusXM Connect Vehicle Tuner.</b></p>
No signal	<p>SiriusXM broadcasts unreceivable because of poor receiving conditions.            ➔ <b>Move to an area where SiriusXM broadcasts can be received well.</b></p>
Channel unsubscribed	<p>The channel you have selected is not part of your subscription plan.            ➔ <b>Call SiriusXM Listener Care to subscribe. 1-800-967-2346</b></p>
Channel unavailable	<p>The requested channel is not valid.            ➔ <b>Visit <a href="http://www.siriusxm.com">www.siriusxm.com</a> to see the list of channels available.</b></p>

## Product servicing

If the suggestions in the charts do not solve the problem, we recommend that you take it to your dealer or an authorized Panasonic Servicenter. The product should be serviced only by a qualified technician.

# Error Display Messages

## CD/MP3

Display	Possible cause ➔ Possible solution
CD -E1-	<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 or an authorized Panasonic Servicenter.</b></p>
CD -E2-	
CD -E3-	
CD -E4-	<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>
NO DISC	<p>No disc in the player. ➔ <b>Insert disc into the disc slot.</b></p>

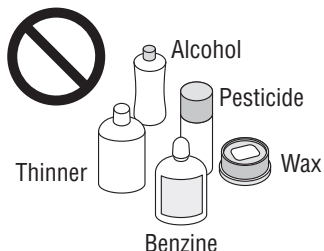
## SiriusXM Satellite Radio Control

CHK TUNR	<p>SiriusXM Connect Vehicle Tuner is not connected. ➔ <b>Make sure the SiriusXM Connect Vehicle Tuner cable is securely connected to the back of the radio</b></p>
SUBSCRIP ↓ UPDATED- ↓ "SEL" TO ↓ CONTINUE ↓ (Return to "SUBSCRIP")	
CHEK ANT	<p>SiriusXM Antenna is disconnected or damaged. ➔ <b>Make sure the antenna is properly connected to the SiriusXM Connect Vehicle Tuner.</b></p>
NOSIGNAL	<p>SiriusXM broadcasts unreceivable because of poor receiving conditions. ➔ <b>Move to an area where SiriusXM broadcasts can be received well.</b></p>
CH UNSUB	<p>The channel you have selected is not part of your subscription plan. ➔ <b>Call SiriusXM Listener Care to subscribe. 1-800-967-2346</b></p>
CH UNAVL	<p>The requested channel is not valid. ➔ <b>Visit <a href="http://www.siriusxm.com">www.siriusxm.com</a> to see the list of channels available.</b></p>

# Maintenance

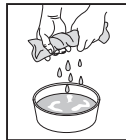
## Cleaning this unit

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



## To remove stubborn stains

- ① Moisten the soft cloth in dishwashing soap diluted with water and wring well.
- ② Wipe lightly. Go over the same surface with a dry cloth.



### Notes:

- Since there is the possibility of water drops getting inside of the unit, do not directly apply cleanser to the surface.
- Do not scratch the screen with your nails or other hard objects. The resulting scratches or marks will obscure the images.



## Caution

If water drops or similar wet substances get inside the unit, it may cause a malfunction.

## Fuse

If the replaced fuse fails, contact your dealer or an authorized Panasonic Servicenter.



## 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 dealer or an authorized Panasonic Servicenter.**

# Notes on MP3

MP3 (MPEG Audio Layer-3) is a format for compressed audio file. These formats allow users to save all the files contained in approximately 10 pieces of existing CDs on one piece of CD-R/RW.

Note: Each of encoding software is not included with this unit.

\*MPEG Layer-3 audio coding technology licensed from Fraunhofer IIS and Thomson.

## Cautions as to compressed audio files

- 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.
- Be sure to put an extension compatible with the format.
- It is recommended to set the bit rate to “128 kbps or more” and “fixed”.

## Compression formats

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
MPEG 2.5 audio layer 3 (MP3)	8 k – 160 kbps	Yes	8, 11.025, 12 kHz



## Caution

Never put an extension indicating compressed audio (such as “.mp3”) to files other than compressed audio files. This may not only produce noise from the speaker damage, but also damage your hearing.

## Cautions as to the display of this unit

### Display Information

- **CD-TEXT**  
Disc title  
Track title
- **MP3**  
Folder name,  
File name
- **MP3 (ID3 tag)**  
Album name,  
Title name/artist  
name

### Displayable characters

- Displayable length of file name/folder name: within 30 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:

- Characters may be garbled depending on encoding software to be used
- Undisplayable characters and symbols will be converted into an asterisk (\*).

## Recording MP3 files on a CD-Media

### Compressed audio file writing

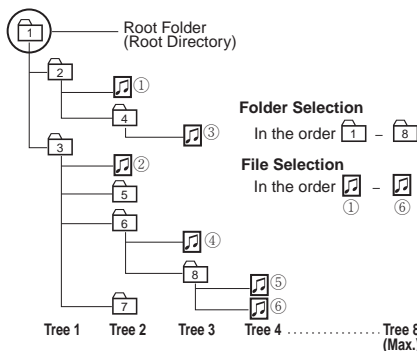
- Do not save an audio file (CD-DA file) and a compressed audio file on the same disc. Failure to observe this may result in difficulty in playing.
- If compressed audio files formatted with two or more types are saved on the same disc, each format shall have a different folder.
- Do not write files other than compressed audio files.
- Playability may depend on the combination of writing software and disc writer to be used.
- This unit does not support the play list function.
- Write files in a disc-at-once manner unless otherwise needed.
- You can shorten the duration between data read and playback by decreasing the quantity of files or folders, or the depth of the hierarchy.

### 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.

### Folder selection order/file playback order



### Maximum number of files/folders

- Maximum number of files: 999
- Maximum number of files in one folder: 255
- Maximum depth of trees: 8
- Maximum number of folders: 256 (Root folder is included.)

#### Notes:

- This unit counts the number of folders irrespective of the presence or absence of a compressed audio file.
- If the selected folder does not contain any compressed audio file, the nearest compressed audio file in the order of playback will play.
- Playback order of this unit may be different from that of other compressed audio players even if the same disc is used
- "ROOT" appears when displaying the root folder name.

## Common

### 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.

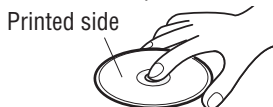
### No warranty

Above description complies with our investigations as of April 2011. It has no warranty for reproducibility and displayability of MP3.

# Notes on Discs

## How to hold the disc

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



## Unusable discs

Do not use discs that fit any of the descriptions given below. Using these discs may damage the discs or cause the unit to malfunction.

- Special discs in a shape which is not round



- Partly or wholly transparent disc



Wholly transparent disc\* Partly transparent disc

\*Wholly semi-transparent disc may not be played back.

- Discs with adhered labels, etc. on them



Disc with adhered stickers or tape

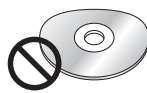
Labels created by a printer



Protective films or sheets

Disc accessories (stabilizers, etc.)

- Damaged or deformed discs



Shoddily made discs

Discs with cracks, scratches or parts missing



Discs with burrs  
Please remove the burrs before use.

## Disc insert

The surfaces of new discs tend to be slippery. Therefore, when using such a disc for the first time, it may not load satisfactorily even when it has been inserted into the unit. At a time like this, insert the disc into the unit as far as it will go until it is loaded properly.

- When inserting a disc into or ejecting and removing it from the unit, insert it straight in or eject and remove it straight out in parallel with the unit. Otherwise, the disc may be scratched or marked in the process.
- When inserting a disc, do not put one disc on another. Failure to observe this may cause the discs to be jammed.

Do not leave discs in the following places:

- Direct sunlight
- Near vehicle heaters
- Dirty, dusty and damp areas
- On seats and dashboards

## 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 in a heavy pen or ballpoint pen.



<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 vehicle for extended periods may damage and make playback impossible.
- The unit may not successfully playback a CD-R/RW that was made by the combination of writing software, a CD recorder (CD-R/RW drives) and a disc if they are incompatible with one another.
- This player does not play CD-R/RW discs if the session is not closed.
- Be sure to observe the handling instructions of CD-R/RW discs.
- This player does not play CD-R/RW discs which contain other than CD-DA or MP3 data.

# Installation Guide



## WARNING

❑ This installation information is designed for professional installers with knowledge of automobile electrical safety systems and is not intended for non-technical, do-it-yourself individuals. It does not contain instructions on the electrical installation and avoidance of potential harm to air bag, anti-theft and ABS braking or other systems necessary to install this product.

Any attempt to install this product in a motor vehicle by anyone other than a professional installer could cause damage to the electrical safety system and could result in serious personal injury or death.

❑ If your car is equipped with air bag and/or anti-theft systems, specific procedures may be required for connection and disconnection of the battery to install this product.

Before attempting installation of this electronic component against the manufacturer's recommendation, you must contact your car dealer or manufacturer to determine the required procedure and strictly follow their instructions.

**FAILURE TO FOLLOW THE PROCEDURE MAY RESULT IN THE UNINTENDED DEPLOYMENT OF AIR BAGS OR ACTIVATION OF THE ANTI-THEFT SYSTEM RESULTING IN DAMAGE TO THE VEHICLE AND PERSONAL INJURY OR DEATH.**

## Overview

This product should be installed by a professional. However, should you decide to install the product against the manufacturer's recommendation, these operating Instructions do not contain electrical installation instructions. You must contact your car dealer or manufacturer for electrical connection instructions to avoid possible damage to your electrical safety systems and resulting injury or death. **(Please refer to the "WARNING" statement above).**

Your next step is to decide where to install the unit. The instructions in these pages will guide you through the remaining steps:

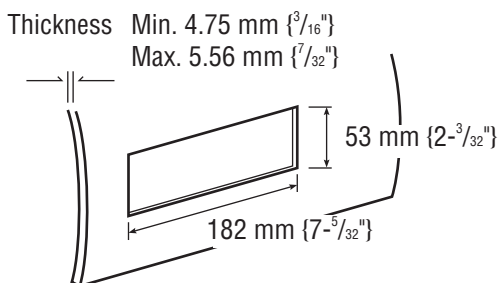
- Identify and label the car wires.
- Connect the vehicle wires to the wires of the power connector.
- Install the unit in the dashboard.
- Check the operation of the unit.

If you encounter problems, please consult your nearest professional installer.

Before you begin installation, look for the following items which are packed with your unit.

- Operating Instructions
- Installation hardware .....Needed for Installation.

## Dashboard specifications



## Warning

This unit operates with a 12 V DC negative  $\ominus$  ground auto battery system only. Do not attempt to use it with any other system. Doing so could cause serious damage.



# Installation Guide (continued)

## Preparation



### Warning

If your vehicle is equipped with air bag and/or anti-theft systems, specific procedures may be required for connection and disconnection of the battery to install this product.

Before attempting installation of this electronic component, contact your vehicle dealer or manufacturer to determine the required procedure and strictly follow their instructions.

**FAILURE TO FOLLOW THE PROCEDURE MAY RESULT IN THE UNINTENDED DEPLOYMENT OF AIR BAGS OR ACTIVATION OF THE ANTI-THEFT SYSTEM RESULTING IN DAMAGE TO THE VEHICLE AND PERSONAL INJURY OR DEATH.**

- Disconnect the cable from the negative  $\ominus$  battery terminal (see caution below).
- Remove Mounting Collar ① from the main unit temporarily, which are already mounted at shipment.\*



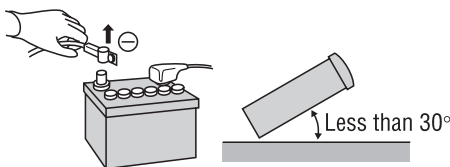
### Caution

Various settings that have been stored in the memory in other on-board equipment (vehicle navigation etc.) may be lost if the battery terminals are disconnected.

Therefore, we recommend to make a record of or to back up the settings before disconnecting the terminals.

After completing installation of the main unit, set the equipment again according to the record.

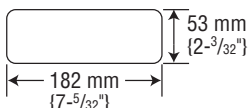
- Unit should be installed in a horizontal position with the front end up at a convenient angle, but not more than  $30^\circ$ .



## Dashboard installation

### Installation Opening

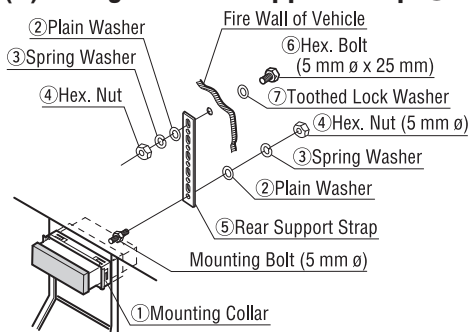
This unit can be installed in any dashboard having an opening as shown below. The dashboard should be 4.75 mm {3/16"} – 5.56 mm {7/32"} thick in order to be able to support the unit.



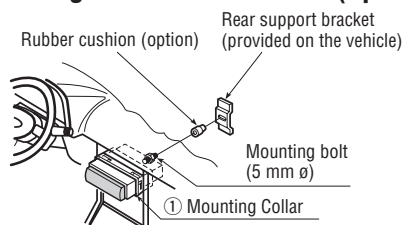
## Installation hardware

No.	Item	Diagram	Q'ty
①	Mounting Collar*		1
②	Plain Washer (5 mm $\phi$ )		2
③	Spring Washer (5 mm $\phi$ )		2
④	Hex. Nut (5 mm $\phi$ )		2
⑤	Rear Support Strap		1
⑥	Hex. Bolt (5 mm $\phi$ x 25 mm)		1
⑦	Toothed Lock Washer (5 mm $\phi$ )		1
⑧	Removal Tool (U-shaped)		2

### (a) Using the rear support strap ⑤



### (b) Using the rubber cushion (option)



## Securing of the main unit

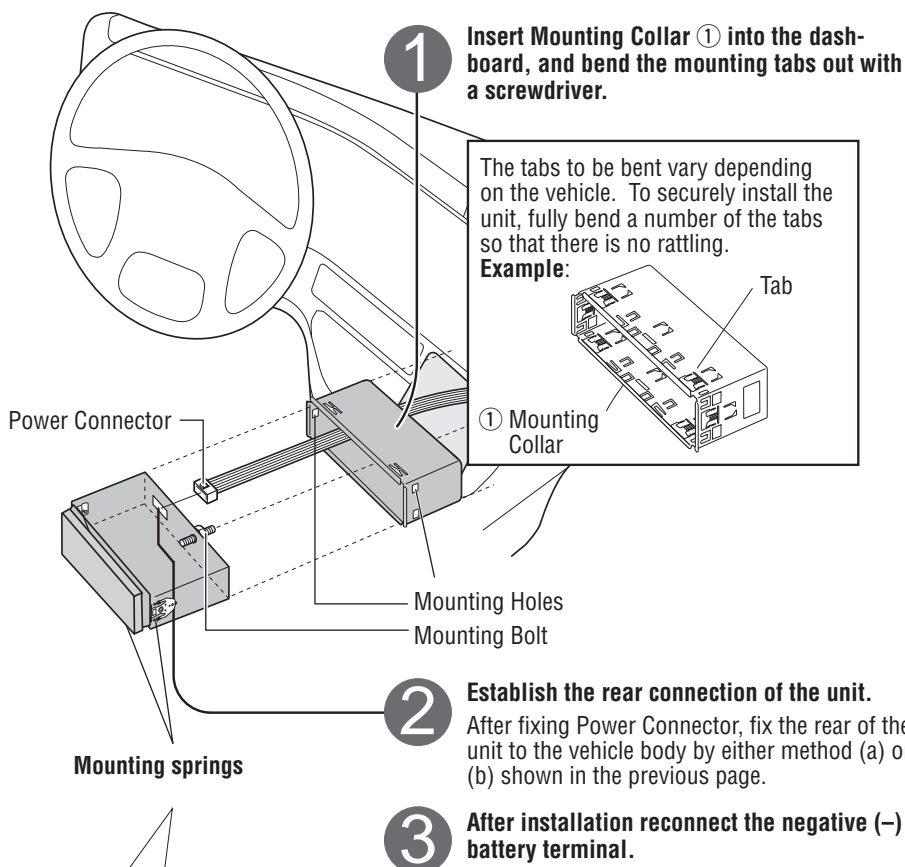


### Caution

- We strongly recommend that you wear gloves for installation work to protect yourself from injuries.
- When bending the mounting tab of the mounting collar with a screwdriver, be careful not to injure your hands and fingers.

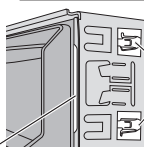
First complete the electrical connections, and then check them for correctness. (➡ page 33)

The included Mounting Collar ① is designed specially for this unit. Do not use it to attach any other model.

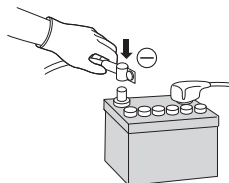


Engage the Mounting Springs in the mounting holes of the Mounting Collar ① firmly.

Mounting Spring



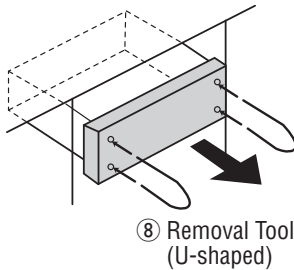
Mounting Hole



# Installation Guide (continued)

## Removing the unit from the vehicle's dashboard

Insert each Removal Tool ⑧ and pull.



⑧ Removal Tool  
(U-shaped)

**Note:** Do not lose Removal Tools. They will be needed to remove the unit from the vehicle's dashboard.

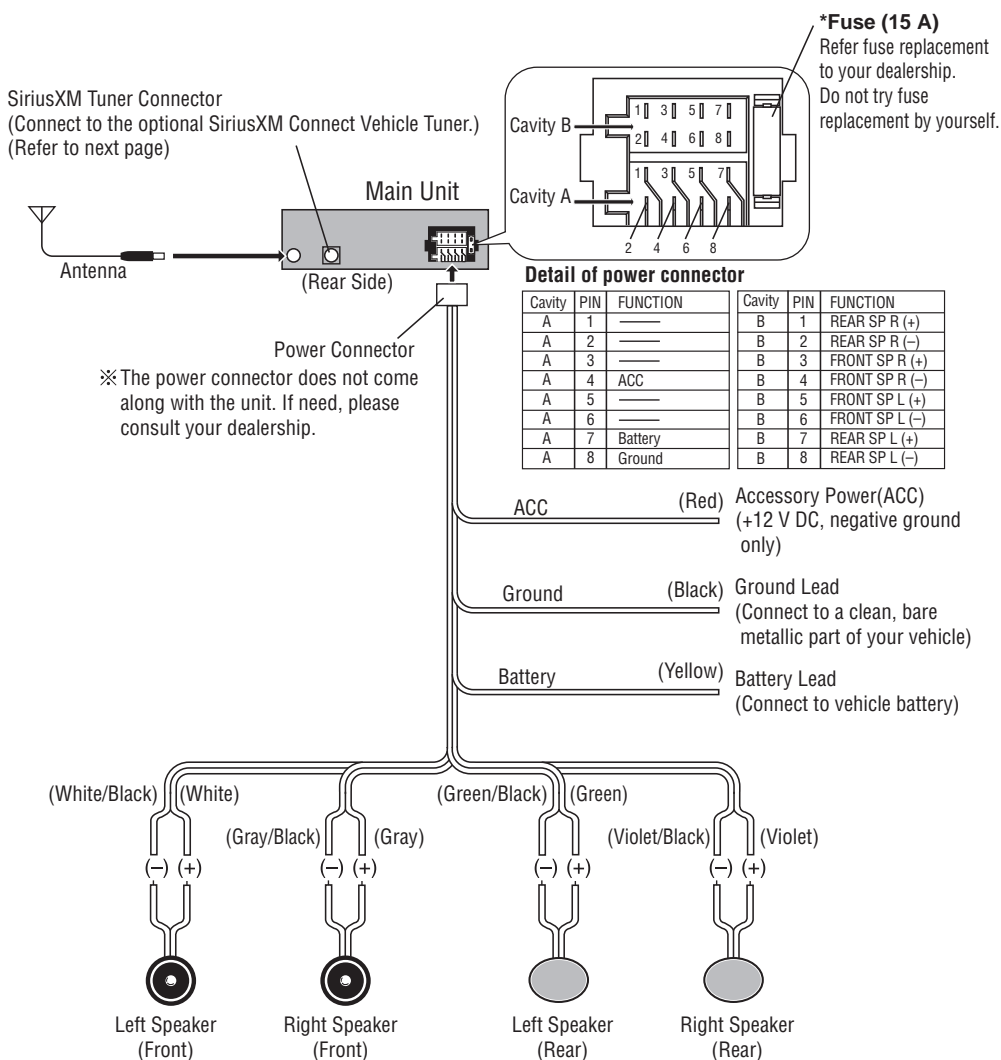
# Electrical Connections



## Caution

- This wiring information is for experienced technical individual, for safety reason, please your dealer wire this connection.
- This product is designed to operate with a 12 V DC, negative  $\ominus$  ground battery system.
- To prevent damage to the unit, be sure to follow the connection diagram below.
- Do not insert the power connector into the unit until the wiring is completed.
- Be sure to insulate any exposed wires from a possible short-circuit from the vehicle chassis. Bundle all cables and keep cable terminals free from touching any metal parts.
- Remember, if your vehicle has a drive computer or a navigation computer, the data of its memory maybe erased when the battery terminals are disconnected.

## Wiring diagram



# Electrical Connections (continued)

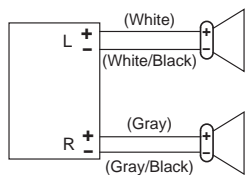
## Speaker Connections



### Caution

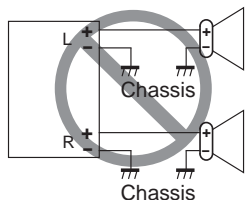
Please follow the instructions given below. Failure to do so will cause damage to the unit and speakers.

#### <Right>

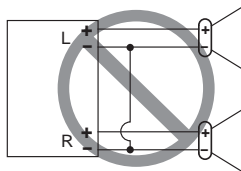


- Use ungrounded speaker only.
- The maximum speaker input should be 45 W or more. (If used with the optional power amplifier, the speaker input should be higher than the maximum amplifier output.)
- The speaker impedance should be 4 – 8  $\Omega$ .
- This unit uses the BTCL circuit, so each speaker should be connected separately using parallel vinyl insulated cords.
- The speaker cords and the power amplifier unit should be kept away (about 30 cm apart) from the antenna and antenna extension cord.

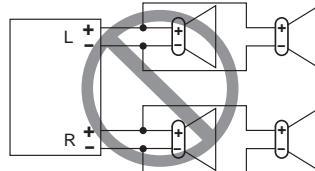
#### <Wrong>



- Never connect the speaker cord to the body of the car.

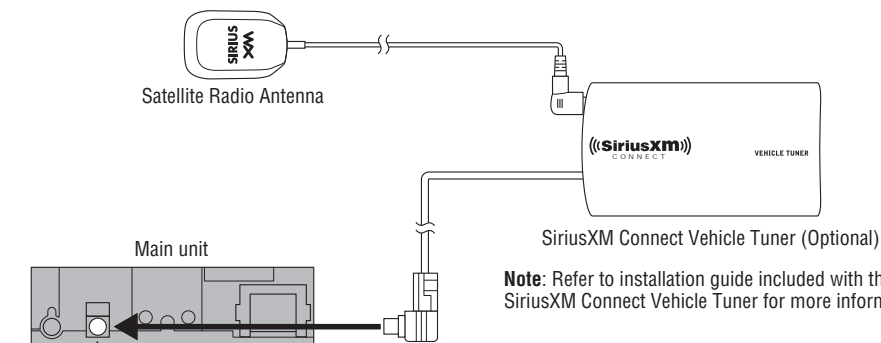


- Do not use a 3-wire type speaker system having a common earth lead.



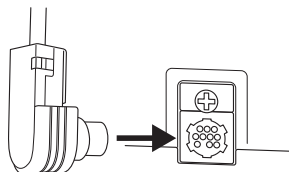
- Do not connect more than one speaker to one set of speaker leads.

## Connection with optional SiriusXM Connect Vehicle Tuner



**Note:** Refer to installation guide included with the SiriusXM Connect Vehicle Tuner for more information.

#### Direction when connection



**Note:** Please notice the cable direction for correct connection.

# Specifications

## General

Power Supply:	12 V DC (11 V – 16 V), test Voltage 14.4 V, Negative $\ominus$ ground
Current consumption:	Less than 2.5 A (CD mode, 0.5 W 4-speaker)
Maximum Power Output:	45 W $\times$ 4 channels at 400 Hz, Volume Control maximum
Tone adjustment range:	
Bass:	$\pm 12$ dB at 100 Hz
Treble:	$\pm 12$ dB at 10 kHz
Power Output:	18 W per channel into 4 $\Omega$ , 40 to 30 000 Hz at 3 % THD
Suitable Speaker	
Impedance:	4 – 8 $\Omega$
Dimensions (W $\times$ H $\times$ D):	178(W) $\times$ 50(H) $\times$ 160(D) mm {7" $\times$ 1-15/16" $\times$ 6-5/16"}
Weight:	1.4 kg {3 lbs. 1 oz.}

## Front AUX Input

Input impedance:	10 k $\Omega$
Maximum input level:	2.0 V
Connector:	3.5 mm $\varnothing$ stereo mini pin
Input sensitivity:	200 mVrms

## FM Stereo Radio

Frequency Range:	87.9 – 107.9 MHz
Usable Sensitivity:	12 dBf (1.1 $\mu$ V/ 75 $\Omega$ , S/N 30 dB)
50 dB Quieting Sensitivity:	17 dBf (1.8 $\mu$ V/ 75 $\Omega$ )
Frequency Response:	30 – 15 000 Hz $\pm$ 3 dB
Alternate Channel Selectivity:	75 dB
Stereo Separation:	35 dB at 1 kHz
Signal/Noise Ratio:	70 dB (Mono)

## AM Radio

Frequency range:	530 kHz – 1 710 kHz
Usable sensitivity:	28 dB/ $\mu$ V (25 $\mu$ V, S/N 20 dB)

## Weather Band Radio

Frequency range:	162.400 – 162.550 MHz
Usable sensitivity:	3 dB/ $\mu$ V (S/N 20 dB)
Signal/Noise Ratio (40 dB/ $\mu$ V):	50 dB

## CD Player

Sampling Frequency:	8 times oversampling
DA Converter:	1 bit DAC System
Pick-Up Type:	Astigma 3-beam
Light Source:	Semiconductor laser
Wavelength:	790 nm
Frequency Response:	20 – 20 000 Hz ( $\pm$ 1 dB)
Signal to Noise Ratio:	96 dB
Wow and Flutter:	Below measurable limits
Channel Separation:	75 dB

Above specifications comply with EIA standards.

**Note:** Specifications and the design are subject to modification without notice due to improvements in technology.

Power Output:  
16 W RMS  $\times$  4 Channels at 4  $\Omega$  and  $\leq$  1% THD+N  
Signal to Noise Ratio:  
85 dBA (reference: 1 W into 4  $\Omega$ )



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YFM264C241ZB PTW0411-2061 Printed in Taiwan