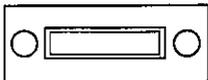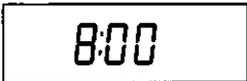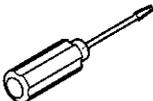# Panasonic ®

Removable Face High-Power CD Player/Receiver

CQ-DP400EU
Operating Instructions

Please read these instructions completely before operating this unit.

Panasonic welcomes you to our ever growing family of electronic product owners. We know that this product will bring you many hours of enjoyment. Our reputation is built on precise electronic and mechanical engineering, manufactured with carefully selected components and assembled by people who take pride in their work. Once you discover the quality, reliability, and value we have built into this product, you too will be proud to be a member of our family.

❏ Use This Equipment Safely

When Driving

Keep the volume level low enough to be aware of road and traffic conditions.

When Car Washing

Do not expose the equipment, including the speakers and CDs, to water or excessive moisture. This could cause electrical shorts, fire, or other damage.

When Parked

Parking in direct sunlight can produce very high temperatures inside your vehicle. Give the interior a chance to cool down before switching the unit on.

Use the Proper Power Supply

This equipment is designed to operate off a 12 volt, negative ground battery system (the normal system in a North American car.)

Protect the Compact Disc Mechanism

Avoid insertion of any foreign matters to the slot of the compact disc.
Failure to observe this may cause malfunction due to precise mechanism of this unit.

Use Authorized Servicenters

Do not attempt to disassemble or adjust this precision equipment. Please refer to the Servicenter list included with this product for service assistance.

Find the model number and serial number on either the back or bottom of the unit. Please record them in the space below and retain this booklet as a permanent record of your purchase to aid in identification in case of theft.

MODEL NUMBER ___**CQ-DP400EU**___ SERIAL NUMBER _____

DATE PURCHASED _____ FROM _____

CQ-DP400EU

Contents

❏ Laser Products (This page describes the standard in only United States.)

> **Caution:**
> This product utilizes a laser.
> Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

Laser products:
Wave Length 780 nm
Laser Power No hazardous radiation is emitted with safety protection.

● **Label indications and their locations**

Certification label

Front

Identification label
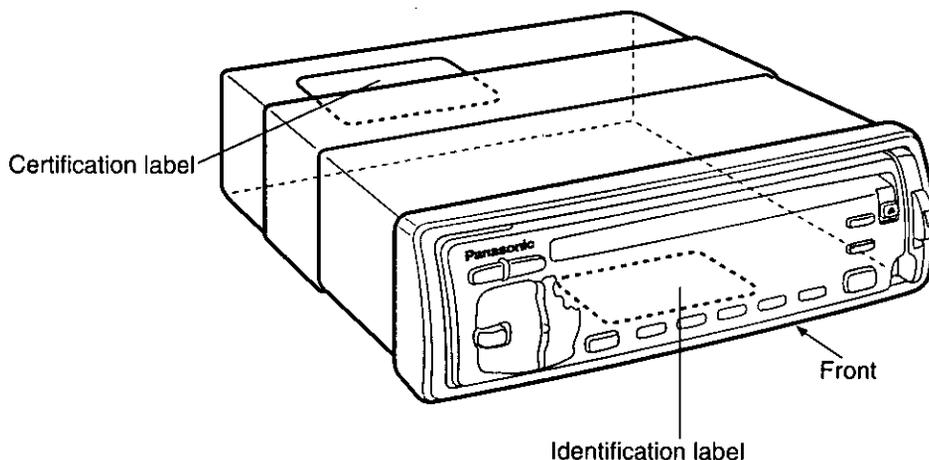
Certification Label

Product complies with DHHS Rules 21 CFR, Subchapter J in effect as of date of manufacture.
Dalian Matsushita Communication Industrial Co., Ltd.
Dalian, China

MANUFACTURED

Identification Label

Model No.
N° De Modèle **CQ-DP400EU**

⊣⊢	▷▣	▭	⊕
12V	4~8Ω	10A	⏚

Manufactured by Dalian Matsushita Communication Industrial Co., Ltd. Dalian China
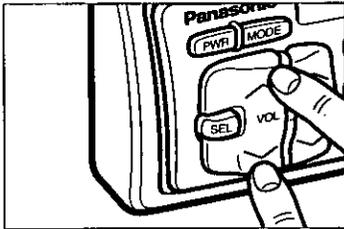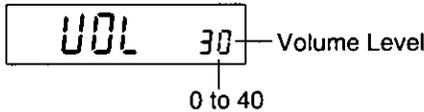Made in China

Power and Sound Controls
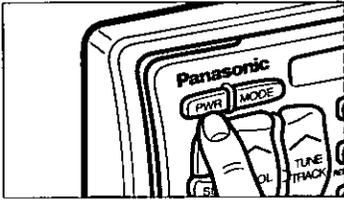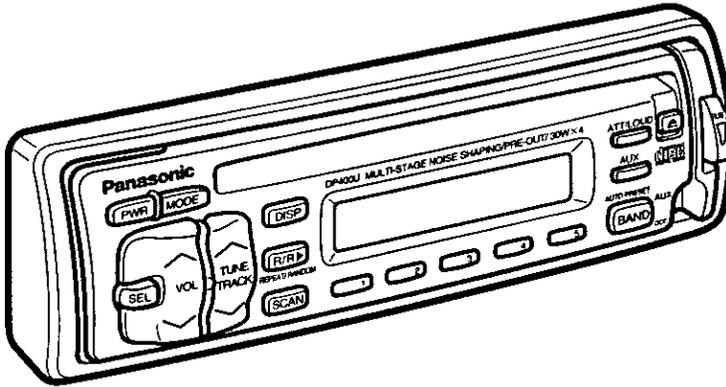
Power

If the car is not already running, turn the key in the ignition until the accessory indicator lights.
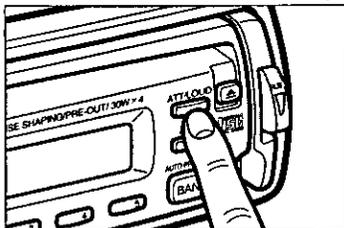Press PWR to switch on the power.

Volume

● Press "VOL ∧" or "VOL ∨" to increase or decrease volume.
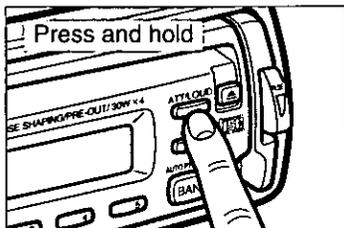
$$UOL \quad 30 \text{—Volume Level}$$

0 to 40

● Press "VOL ∧" or "VOL ∨" for more than a half second to change numeric levels on the display rapidly.

Attenuator

● Press ATT/LOUD. Volume will decrease to about 1/10 of its previous level.
● Press ATT/LOUD again to deactivate when listening at normal volume.

ATT

Tone Enhancement

● Press and hold ATT/LOUD for more than 2 seconds to enhance bass and treble tones when listening at low or medium volume.
● Press and hold ATT/LOUD for more than 2 seconds again to deactivate when listening at higher volumes.

LOUD

Note: This unit is equipped with an anti-volume-blast circuit which serves as an automatic volume level adjuster so that you will not be deafened with sudden loud volume.
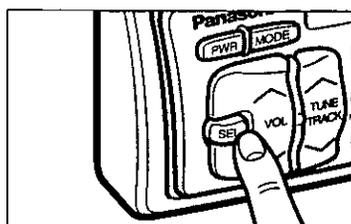This system operates as follows. When PWR is switched on, the volume level is low. After that, the volume level gradually returns to its previous level prior to switching off the unit.
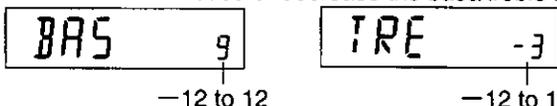
Power and Sound Controls continued
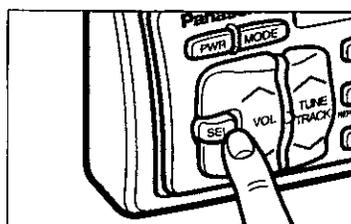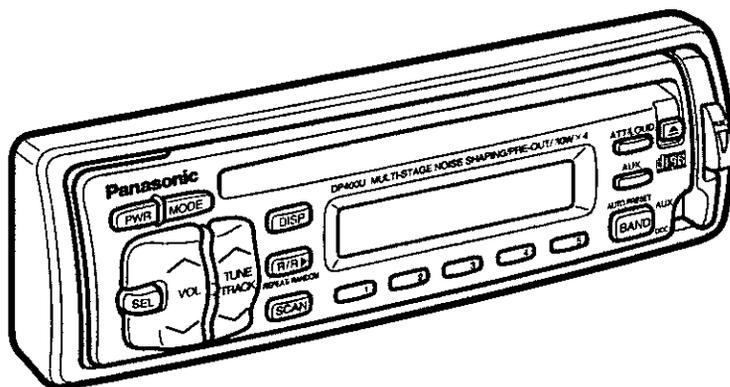
Changing Audio Modes

Press SEL to switch the audio mode in the following order.

VOLUME ➡ BASS ➡ TREBLE
⬆ ⬇
FADER ⬅ BALANCE

Bass and Treble

• Press SEL to select the BASS (TREBLE) mode. Press "VOL ∧" or "VOL ∨" to increase or decrease the bass/treble response.

BAS 9		TRE -3
−12 to 12		−12 to 12

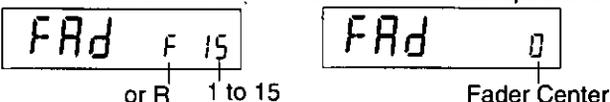• Press "VOL ∧" or "VOL ∨" for more than a half second to change numeric levels on the display rapidly.

Balance

• Press SEL to select the BALANCE mode. Press "VOL ∧" or "VOL ∨" to shift the sound volume to the right or left speakers.

BAL R 15		BAL 0
or L 1 to 15		Balance Center

• Press "VOL ∧" or "VOL ∨" for more than a half second to change numeric levels on the display rapidly.

Fader

• Press SEL to select the FADER mode. Press "VOL ∧" or "VOL ∨" to shift the sound volume to the front or rear speakers.

FAd F 15		FAd 0
or R 1 to 15		Fader Center

• Press "VOL ∧" or "VOL ∨" for more than a half second to change numeric levels on the display rapidly.

Note; When a control mode (BAS/TRE/BAL/FAd) is selected but no operation is made within 5 seconds (2 seconds at volume mode), the display will return to the normal operation (Radio, CD) mode. In such a case, press SEL again to select the control mode.
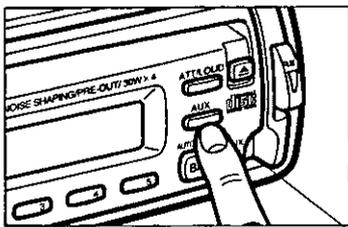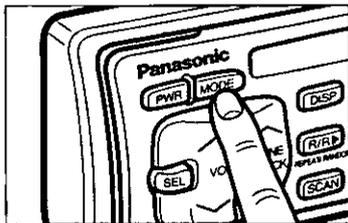
Selecting Auxiliary Source

① Press AUX to select AUX Input mode.

```
 ┌─────────────────────┐
 │   ├┐┌┐  ┌            │
 │   ┤├┤├┤ │┌┐          │
 │   ┛┘┘ └ ┘ ┘          │
 └─────────────────────┘
```
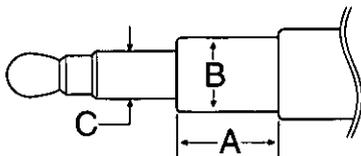
AUX Jack

② Connect the auxiliary equipment (an optional DCC player deck or any other appropriate equipment) to the AUX Jack.
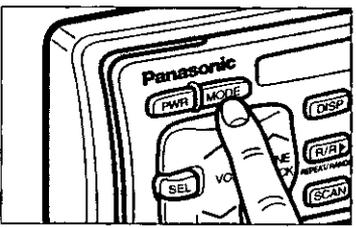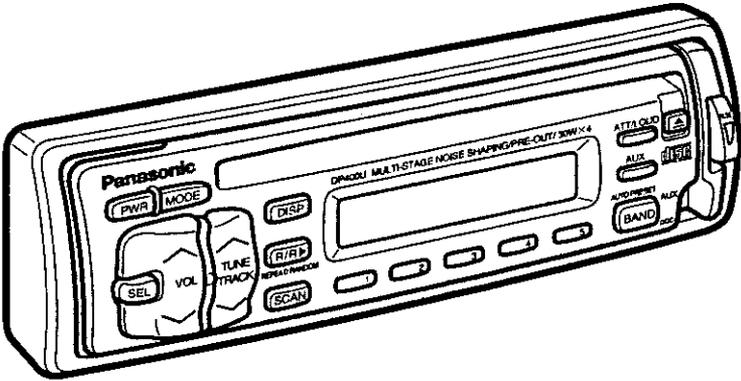
To resume the previous mode, press AUX or MODE.

Caution:
In order to insert the plug into the "AUX" Jack properly, make sure to use the correct size of the stereo plug shown on the left.
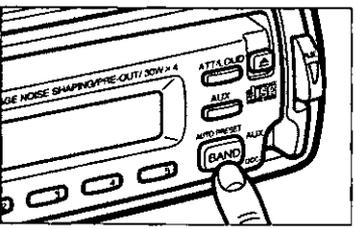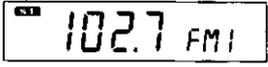
A-MIN1/2" LONG (12mm)
B-MAX2/5" DIA. (10mm)
C-MIN 1/8" DIA. (3.5mm)

Radio Basics

To change Tuner Mode

Tuner mode is selected if the MODE button is pressed while in CD Player or AUX mode.

    ■ 102.7 FM1

Selecting a Band
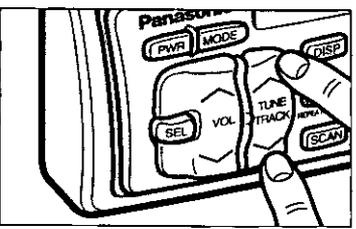
Press BAND to select the bands in the following order.

FM1 ➡ FM2 ➡ FM3 ➡ AM
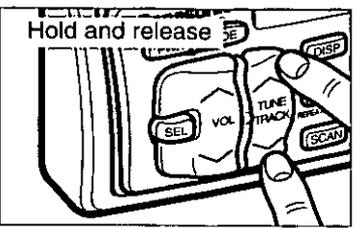
"ST" indicator lights if the station is broadcasting in stereo.

Manual Tuning

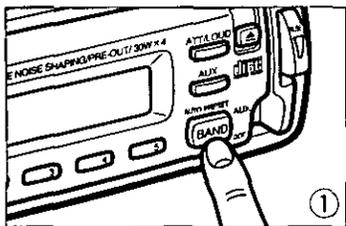Press "∧TUNE" or "∨TUNE" to move to a higher or lower frequency.

Seek Tuning

Hold and release

Press and hold "∧TUNE" or "∨TUNE" for more than a half second, then release. The radio automatically stops on the next station.
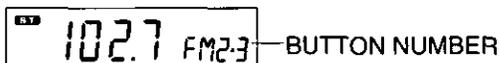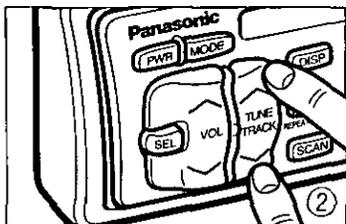
Preset Station Setting

Up to 20 stations can be preset in the station memory as follows;

| FM1	FM2	FM3	AM
5 stations	5 stations	5 stations	5 stations

Manual Station Preset

① Press BAND to select a desired band.

② Use manual or seek tuning to find a station that you want to program into memory.

③ Press and hold one of the station selector buttons 1 through 5 until the display blinks.

Repeat the process to set other stations for the FM1 to AM bands.

```
102.7  FM2·3 ── BUTTON NUMBER
```

Note: You can change the memory setting by repeating the above procedure.
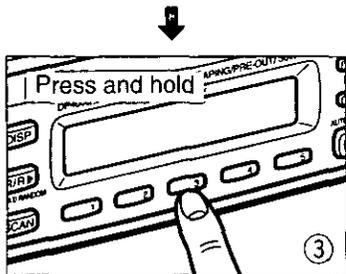
Tuning in a Preset Station

Press any of the buttons 1 through 5 to tune in the station preset by the above steps ① to ③.
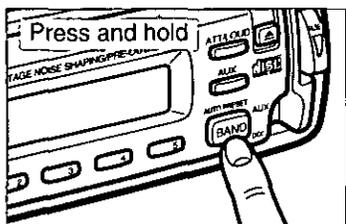
Auto Station Preset

Select a band and press and hold BAND(AUTO PRESET) for more than 2 seconds.

● The five strongest available stations will be automatically set in memory on preset buttons 1 through 5.

● Once set, the preset stations are sequentially scanned for 5 seconds.

● Press the appropriate preset button for the station you want to hear.
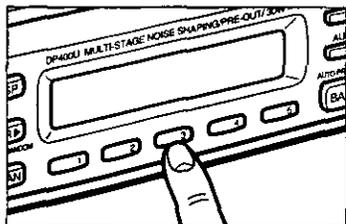
CAUTION: For safety reasons, do not attempt to program while driving.

Compact Disc Player Basics

Mode Selection

While the CD is playing, press MODE to switch to the tuner mode and vice verse.

CD Player ←——→ Tuner

To start the CD Player

Insert the disc and playback starts automatically. .

$$L\ O\ R\ d\ ^\circ$$
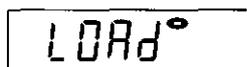
"LOAd" will be displayed until the disc is loaded. Play starts from first track.

$$L\ O\ R\ d\ ^\circ$$ ——→ $$O\ O\ l\ ^\circ$$ ◄——TRACK

Note: While the disc is inserted, " ● " indicator will light.
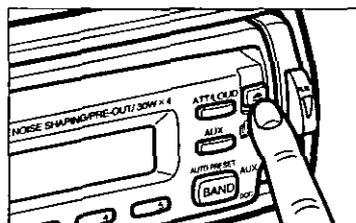
Ejecting a Disc

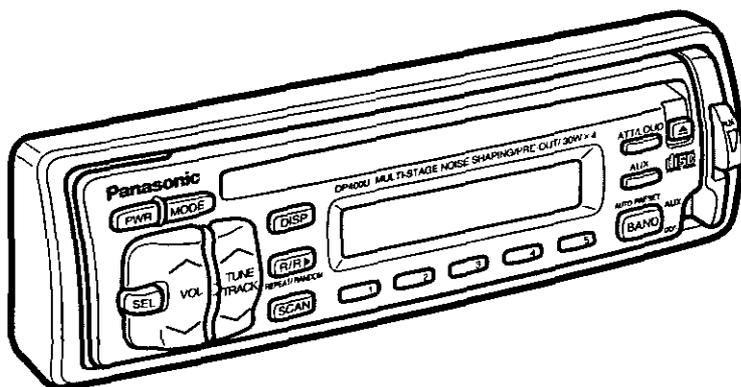Press "▲" to stop CD play, and the disc will quietly eject from the CD slot. (During disc ejection, "EJ" will be displayed.)
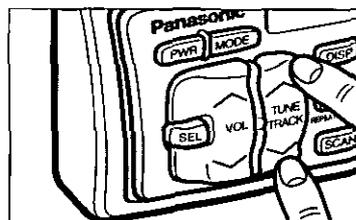
Selecting a Track

Press "TRACK ∧" once to go to the next track. Press repeatedly to step forward through all the tracks.
Press "∨ TRACK" once to play from the beginning of the track you are listening to. Press twice to play the previous track. Press repeatedly to step backward through all the tracks.
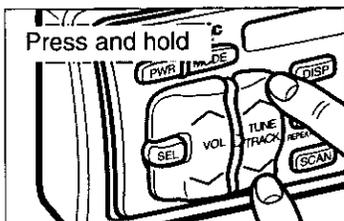
Press and hold

Searching a Track

Press and hold "TRACK ∧" or "∨ TRACK" for more than a half second to activate fast forward or reverse through a track. Press "TRACK ∧" or "∨ TRACK" again to end the search mode.
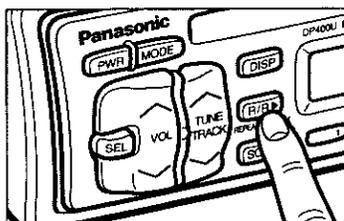
Repeating a Track

Press R/R▶ to repeat the current selection. "REPEAT" indicator will light.
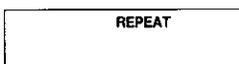
REPEAT

The current selection will continue to repeat until you press R/R▶ again.
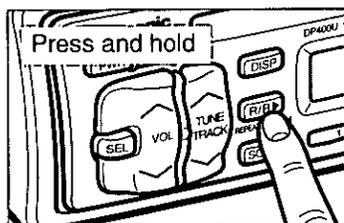
Press and hold

Random Selection

Press and hold R/R▶ for more than 2 seconds. "RANDOM" indicator will light. A random selection of music is played from all available tracks.

RANDOM

To turn off the random play feature, press and hold R/R▶ again for more than 2 seconds.
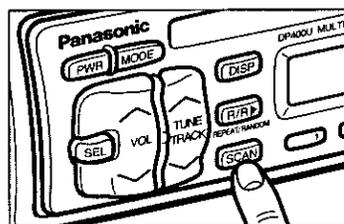
Scanning a Disc

Press SCAN. The display will blink and the first 10 seconds of each track on the disc play in order.

0'02
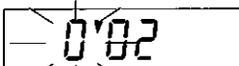
To stop scanning and continue with the current track, press SCAN again.

Clock Basics (The clock system is 12-hours.)
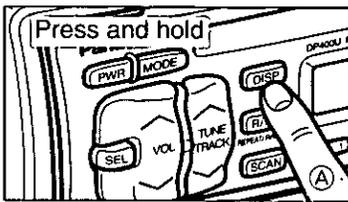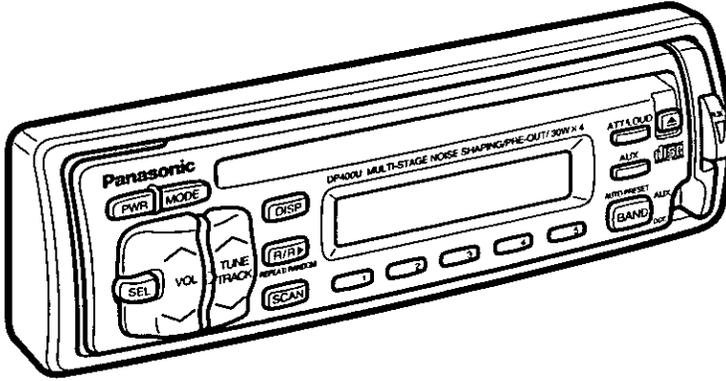
Initial Time Setting

Ⓐ Press and hold DISP for more than 1 second. " AdJ " blinks indicating the time setting mode is activated.

$$- \; \overline{A d J} \; -$$
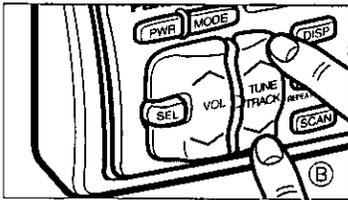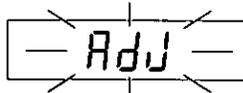
Ⓑ To set hours, press " ∧ TUNE/TRACK".

$$- \; 8{:}00 \; -$$

To set minutes, press " ∨ TUNE/TRACK ".

$$- \; 8{:}15 \; -$$
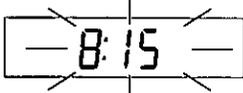
Hold " ∧ " or " ∨ " to change numbers rapidly.
Ⓒ When you have set the time, press DISP.
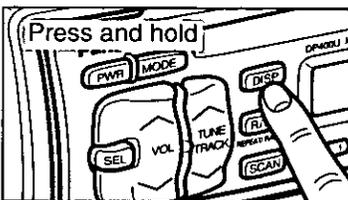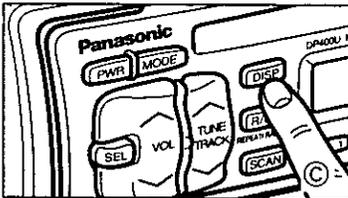
Resetting the Time

When you want to reset the time, press and hold DISP for more than 1 second to activate the time setting mode. Then, repeat step Ⓑ and Ⓒ.
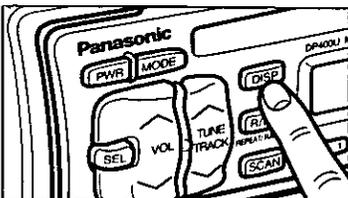
Selecting the Clock Display

Press DISP repeatedly to switch the display between each listening mode (Radio, CD and AUX) and the clock.

CQ-DP400EU

Installation Guide

⚠ WARNING

This installation information is designed for experienced installers and is not intended for non-technical individuals. It does not contain warnings or cautions of potential dangers in attempting to install this product.

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

❏ Overview

This equipment should be installed by a professional. However, if you plan to install this unit yourself, your first step is to decide where to install it. The instructions in these pages will guide you through the remaining steps: (Please refer to "WARNING" statement above).

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

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

CAUTION: This unit will operate with a 12 volt DC negative ground auto battery system only. Do not attempt to use it in any other system. Doing so could cause serious damage.

Before you begin installation, look for the following items included in the packing with your unit.

- **Warranty Card** ...... Fill this out promptly
- **MSC Servicenter Directory** ...... Keep for future reference in case the unit needs servicing
- **Installation Hardware** ...... Needed for in-dash installation

❏ Installation Hardware

No.	Item	Diagram	Qty
①	Mounting Collar		1
②	Plain Washer (5 mmφ)		2
③	Spring Washer (5 mmφ)		2
④	Hex. Nut (5 mmφ)		2
⑤	Rear Support Strap		1
⑥	Hex. Bolt (5 mmφ x 25 mm)		1
⑦	Toothed Lock Washer (5 mmφ)		1
⑧	Mounting Bolt (5 mmφ)		1
⑨	Power Connector		1
⑩	Removable Face Plate Case		1

Installation Guide continued

❏ Required Tools

You'll need a screwdriver, a 1.5 volt AA battery, and the following:

12 V DC TEST BULB	ELECTRICAL TAPE	SIDE-CUT PLIERS

❏ Dashboard Specifications

THICKNESS
MIN. 3/16" (4.75 mm)
MAX. 7/32" (5.56 mm)

2-3/32" (53 mm)

7-5/32" (182 mm)
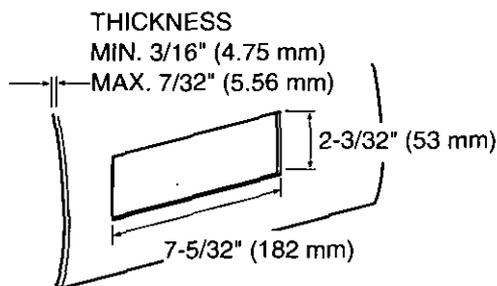
❏ Identify All Leads

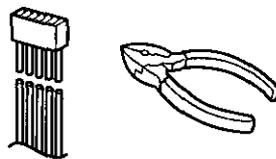The first step in installation is to identify all the vehicle wires you'll use when hooking up your sound system.

As you identify each wire, we suggest that you label it using masking tape and a permanent marker. This will help avoid confusion when making connections later.

Note: Do not connect the power connector to the stereo unit until you have made all connections. If there are no plastic caps on the stereo hooking wires, insulate all exposed leads with electrical tape until you are ready to use them. Identify the leads in the following order.

Power Lead

If your vehicle has a radio or is pre-wired for one :

Cut the connector wires one at a time from the plug (leaving the leads as long as possible) so that you can work with individual leads.

Turn the ignition on to the accessory position, and ground one lead of the test bulb to the chassis.

Touch the other lead of the test bulb to each of the exposed wires from the cut radio connector plug. Touch one wire at a time until you find the outlet that causes the test bulb to light.

Now turn the ignition off and then on. If the bulb also turns off and on, that outlet is the vehicle power lead.

If your vehicle is not wired for an audio unit :
Go to the fuse block and find the fuse port for radio (RADIO), accessory (ACC), or ignition (IGN).

Battery Lead

If your stereo unit has a yellow lead, you will need to locate the car's battery lead. Otherwise you may ignore this procedure. (The yellow battery lead provides continuous power to maintain a clock, memory storage, or other function.)

If your vehicle has a radio or is pre-wired for one:
With the ignition and headlights off, identify the car battery lead by grounding one lead of the test bulb to the chassis and checking the remaining exposed wires from the cut radio connector plug.

If your vehicle is not wired for an audio unit :
Go to the fuse block and find the fuse port for the battery, usually marked BAT.

Speakers

Identify the car speaker leads. There will be two leads for each speaker, usually color coded.

A handy way to identify the speaker leads and the speaker they connect with is to test the leads using a 1.5 volt AA battery as follows.

Hold one lead against one pole of the battery and stroke the other lead across the other pole. You will hear a scraping sound in a speaker if you are holding a speaker lead.
If not, keep testing different lead combinations until you have located all the speaker leads. When you label them, include the speaker location for each.

Antenna Motor
If your vehicle is equipped with an automatic power antenna, identify the vehicle motor antenna lead by connecting one bulb tester lead to the vehicle battery lead and touching the remaining exposed wires from the cut radio connector plug one at a time. You will hear the antenna motor activate when you touch the correct wire.

Antenna
The antenna lead is a thick, black wire with a metal plug at the end.

□ Connect All Leads
Now that you have identified all the wires in the vehicle, you're ready to begin connecting them to the stereo unit wires. The connection diagram on Page 22 shows the proper connections and color coding of the leads.
We strongly recommend that you test the unit before making a final installation.
You can set the unit on the floor and make temporary connections to test the unit. Use electrical tape to cover all exposed wires.

IMPORTANT : Connect the red power lead last, after you have made and insulated all other connections.

Ground
Connect the black ground lead of the power connector to the metal vehicle chassis.

Speakers
Connect the speaker wires. See the wiring diagram below for the proper hookups. Follow the diagram carefully to avoid damaging the speakers and the stereo unit.

The speakers used must be able to handle more than 30 watts of audio power. If using an optional audio amplifier, the speakers should be able to handle the maximum amplifier output power. Speakers with low input ratings can be damaged.

Speaker impedance should measure 4 - 8 ohms, which is typically marked on most speakers. Lower or higher impedance speakers will affect output and can cause both speaker and stereo unit damage.

CAUTION : Never ground the speaker cords. For example, do not use a chassis ground system or a three-wire speaker common system. Each speaker must be connected separately using parallel insulated wires. If in doubt about how your car's speakers are wired, please consult with your nearest professional installer.

CORRECT
No Common Ground
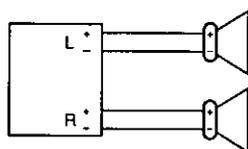
INCORRECT
Common Chassis Ground
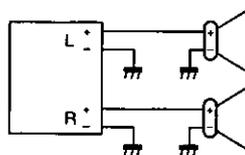
INCORRECT
Speaker Common
(common earth lead)

Installation Guide continued

Motor Antenna
Connect the vehicle motor antenna lead to the blue motor antenna relay control lead.

Battery
Connect the yellow battery lead to the correct radio wire or to the battery fuse port on the fuse block.

Antenna
Connect the antenna by plugging the antenna lead into the antenna receptacle.

Equipment
Connect any optional equipment such as amplifier, according to the instructions furnished with the equipment. Keep about 12 inches (30 cm) of distance between the speaker cords/amplifier unit and the antenna/antenna extension cord. Read the operating and installation instructions for any equipment you will connect to this unit.

Power
Connect the red power lead to the correct vehicle radio wire or to the appropriate fuse port on the fuse block.

If the stereo unit functions properly with all these connections made, disconnect the wires and proceed to the final installation.
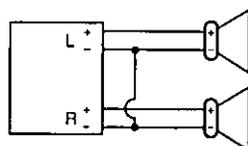
❏ Final Installation

Lead Connections
Connect all wires, making sure that each connection is insulated and secure. Bundle all loose wires and fasten them with tape so they won't fall down later. Now insert the stereo unit into the mounting collar.

Congratulations! After making a few final checks, you're ready to enjoy your new auto stereo system.

❏ Final Checks
1. Make sure that all wires are properly connected and insulated.
2. Make sure that the stereo unit is securely held in the mounting collar.
3. Turn on the ignition to check the unit for proper operation.

If you have difficulties, consult your nearest authorized professional installer for assistance.

❏ Installation Procedures

1. Secure the Mounting Collar ①.

Insert Mounting Collar ① into the car's dashboard, and bend mounting tabs out with a screwdriver.

① Mounting Collar

Dashboard

Mounting Tab

Screwdriver
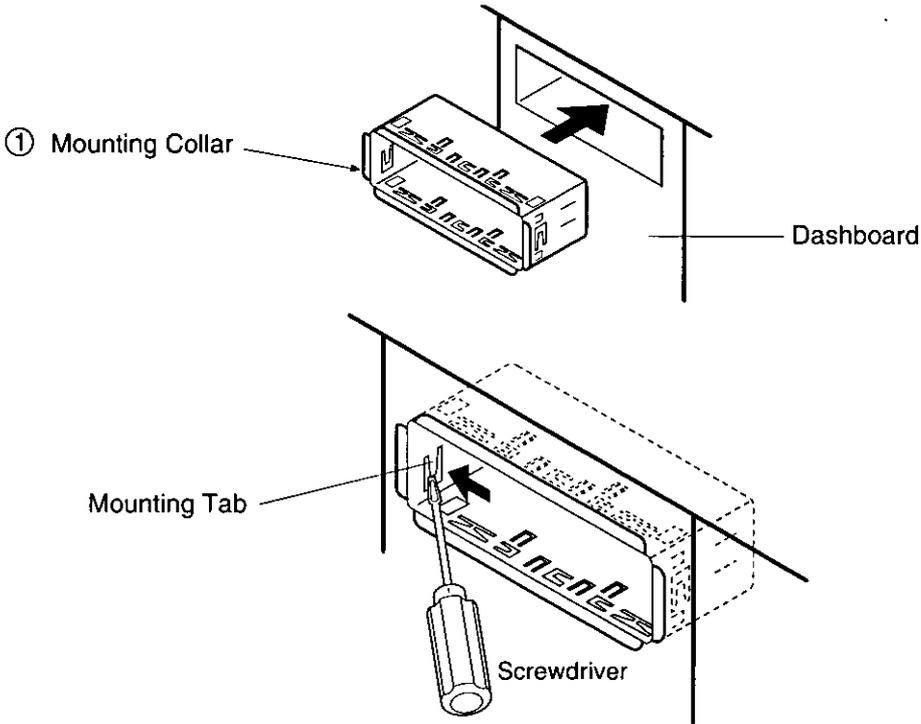
2. Secure the rear of the unit.

a) Check the electrical connection by referring to this operating instructions.
b) Connect the Mounting Bolt ⑧, using a suitable wrench.

⑧ Mounting Bolt
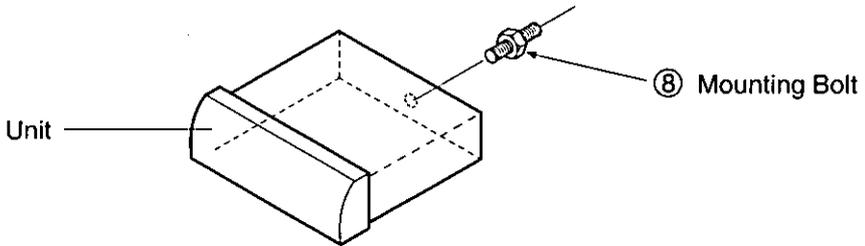
Unit

c) Insert the unit into Mounting Collar ① and push it in until "click" is heard.
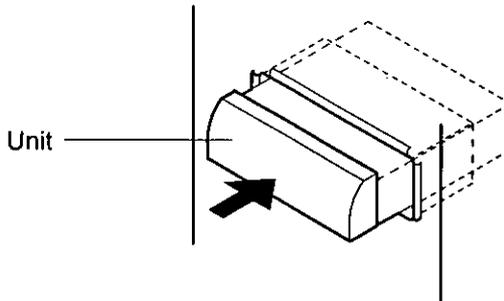
Unit

d) Secure the rear of the unit to the car by either of the two recommended methods on the next page.

Installation Guide continued

■ Using the Rear Support Strap ⑤

Affix one end of the Rear Support Strap ⑤ to the rear of the unit, and the other end to the Fire Wall of Car, or some other metallic area.

② Plain Washer

③ Spring Washer

④ Hex. Nut

Fire Wall of Car

⑥ Hex. Bolt

⑦ Toothed Lock Washer

④ Hex. Nut

③ Spring Washer

② Plain Washer

⑤ Rear Support Strap

⑧ Mounting Bolt

① Mounting Collar
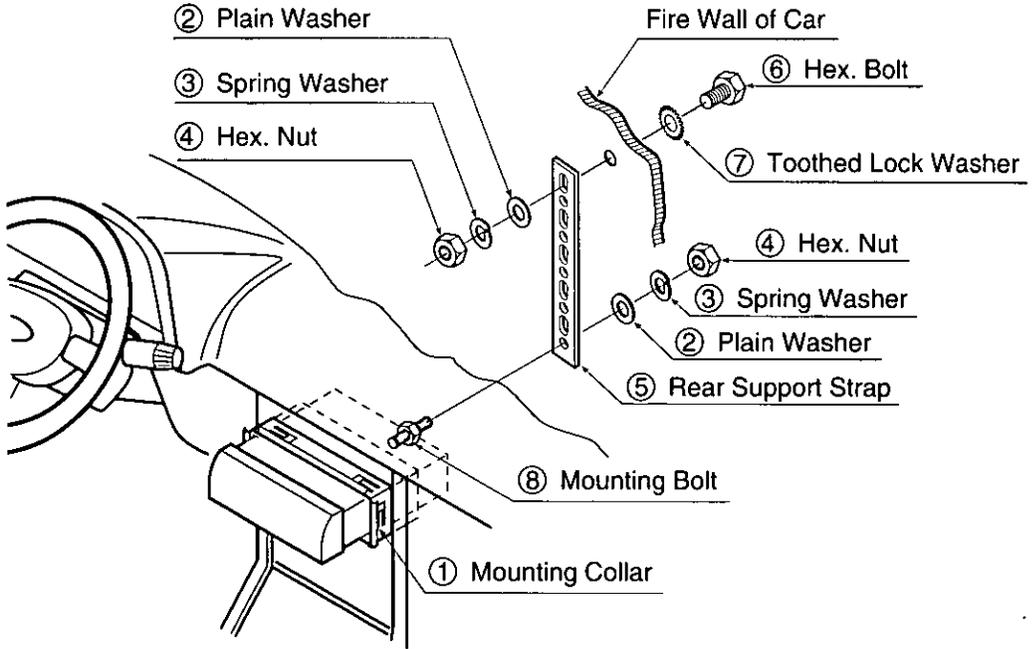
■ Using the Rubber Cushion (Optional)

(If there is an existing Rear Support Bracket on the Fire Wall of Car.)

Cover Mounting Bolt ⑧ on the rear of the unit with Rubber Cushion (Optional), and mount it into the existing Rear Support Bracket.

Rear Support Bracket
(existing on the car)

Rubber Cushion (Optional)

⑧ Mounting Bolt

① Mounting Collar

18

CQ-DP400EU
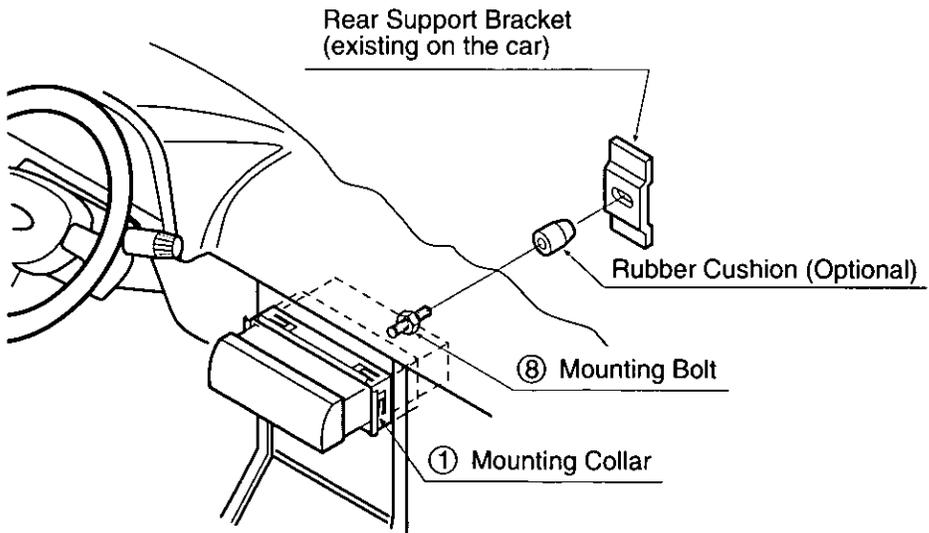
3. Plug the Power Connector ⑨.

⑨ Power Connector
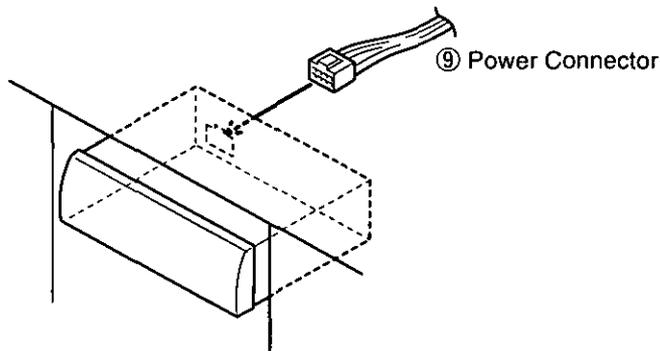
4. After installation reconnect the negative (−) battery terminal.

To Remove the Unit

a) Remove the removable face plate. (See page 20.)
b) Remove the trim plate with a screwdriver as shown in the figure.

Trim Plate

SECURITY

Screwdriver

❶

❷
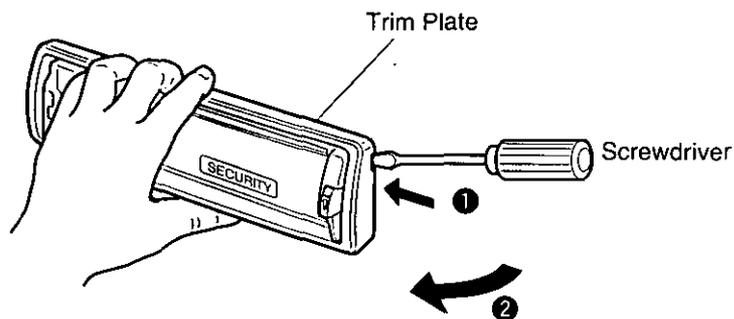
c) Pull out the unit while pushing the lock lever using a screwdriver .
d) Remove the unit pulling with both hands.

Lock Lever

Screwdriver
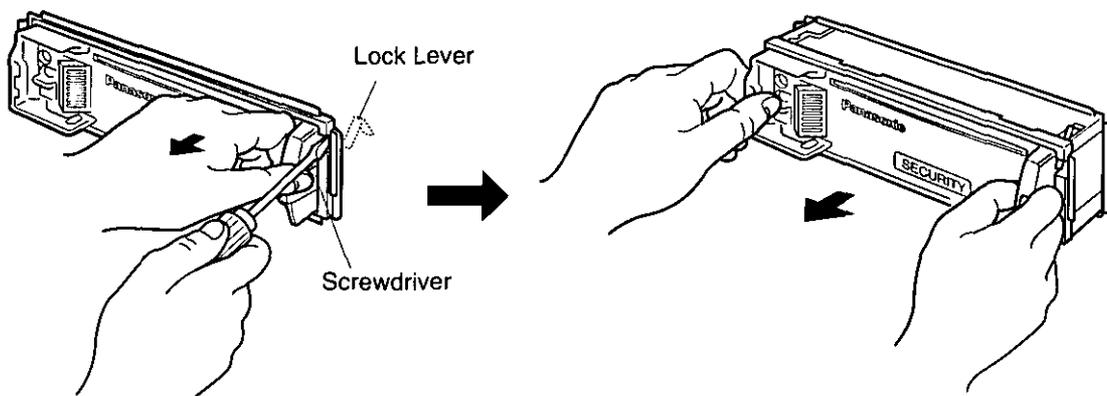
Installation Guide continued

Anti-Theft System

This unit is equipped with a removable control unit. By removing this unit when the vehicle is unattended the radio becomes totally inoperable.
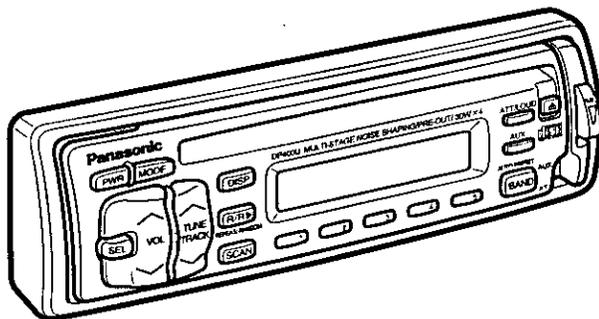
To Remove the Removable Face Plate
① Switch off the power.
② Slide down the release button (▽). The removable face plate will be released.

SLIDE DOWN
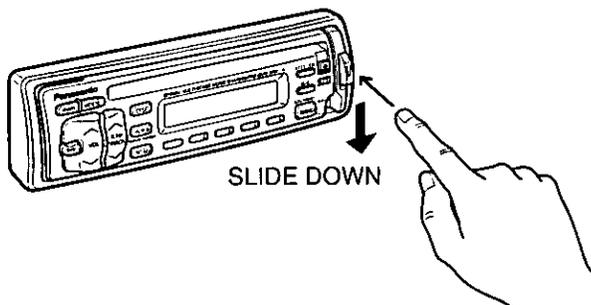
Fig.1

③ Remove the removable face plate by pulling on the right side of the unit. Place the removable face plate in a supplied case.

Main Unit

Contacts

SECURITY

Fig.2

CQ-DP400EU
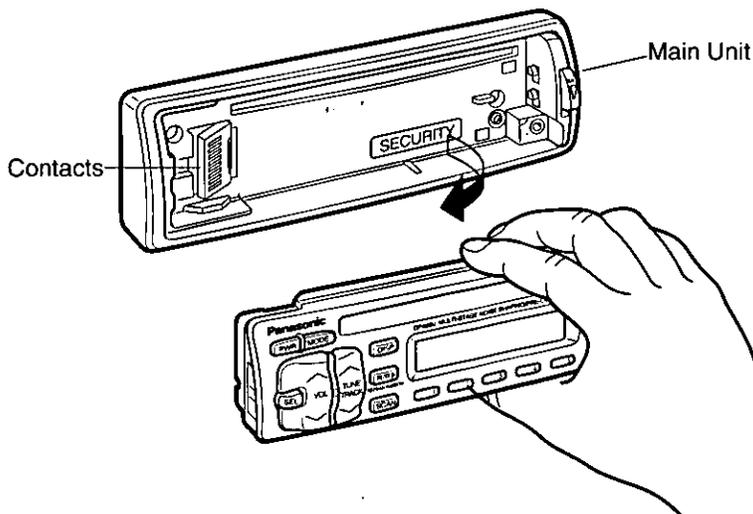
④ As shown in Fig.3, insert the removable face plate with the arrow pointing toward the removable face plate case until you hear a "click". Keep the removable face plate in the case. Then, you can bring the plate safely.

⑩ Removable Face Plate Case
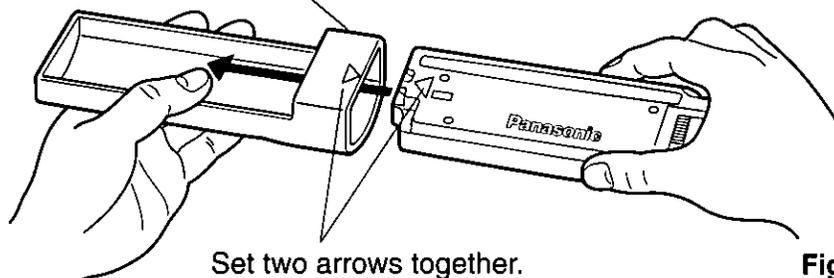
Set two arrows together.   **Fig.3**

To install the Removable Face Plate

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

Plastic Tab

Removable Face Plate

Fig.4

Cutout
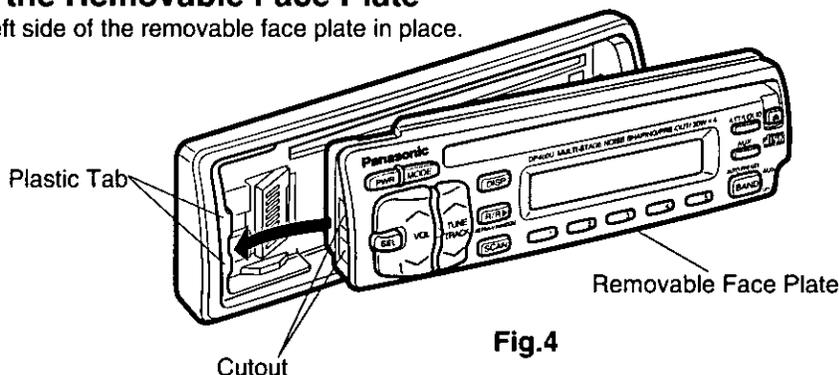
② Press the right end of removable face plate until it locks in place.
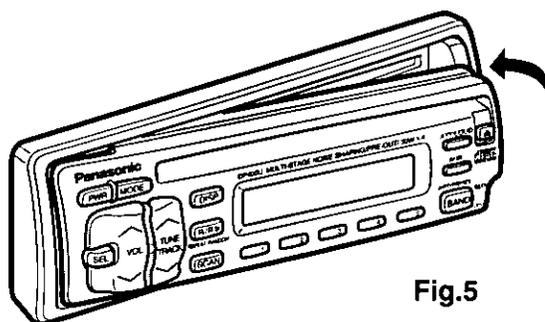
Fig.5

Caution:

1. Before removing the removable face plate, make sure the power is off.
2. This removable face plate is not water-proof. Do not expose it to water or excessive moisture.
3. Do not remove the removable face plate, while driving your car.
4. Do not place the removable face plate on the dashboard or nearby areas where the temperature rises to high levels.
5. Do not touch the contacts on the removable face plate or on the main unit, since this may result in poor electrical contacts.
6. If dirt or other foreign substances get on the contacts, wipe them with a clean, dry cloth.

Installation Guide continued

Caution:
- To prevent damage to the unit, be sure to follow the connection diagram below.
- Remove the covering of the leads about 5 mm long from their end before connecting.
- 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 car chassis. Bundle all cables and keep cable terminals free from touching any metal parts.

CQ-DP400EU

⑨ Power Connector

L(White)
R(Red)

ANTENNA

BATTERY LEAD
(Connect to car battery)

POWER
(+12V DC, negative ground only)

GROUND
(Connect to a clean, bare metallic part of your vehicle.)

MOTOR ANTENNA RELAY CONTROL
(moves antenna up and down)

PREAMP OUT CONNECTOR (Rear)

BATTERY — Yellow
Fuse(10A)
ACC — Red
Resistor (1kΩ)
Black

Noise Filter

Dark Blue

White w/Black Stripe

SPEAKER LEAD

Gray w/Black Stripe

Violet w/Black Stripe

FRONT SP   REAR SP

White   Gray   Green w/Black Stripe   Green   Violet

(−) (+)   (−) (+)   (−) (+)   (−) (+)

LEFT SPEAKER (FRONT)   RIGHT SPEAKER (FRONT)   LEFT SPEAKER (REAR)   RIGHT SPEAKER (REAR)

CQ-DP400EU

Special Notes

❏ Notes on Compact Discs

USE ONLY DISCS CARRYING THIS LABEL

COMPACT
disc
DIGITAL AUDIO

● Handle discs carefully.
● Keep discs clean.
● Do not scratch or place stickers on discs.
● Do not bend discs.
● Keep discs in their cases when not using them.
● Do not place discs:
    1. In direct sunlight.
    2. In dirty, dusty or damp areas.
    3. Near the vehicle heater.
    4. On the seats or dashboard.

Label

Do not touch the under-side of the disc.

Do not bend.

Disc Cleaning
Use a dry, soft cloth to wipe the surface. If the disc is soiled, use a soft cloth slightly dampened with isopropyl (rubbing) alcohol. Never use solvents such as benzine, thinner, conventional record cleaner, or household cleaners as they may mar the surface of the disc.

Wipe the disc from center to outside direction.

❏ A Caution on New Discs

A new disc may have rough spots on its inner and outer edges. These rough edges may cause the CD player to reject the disc. Remove these rough edges by rubbing the inner and outer edges with a pen or pencil as shown at right.

Rough spots on outer edge
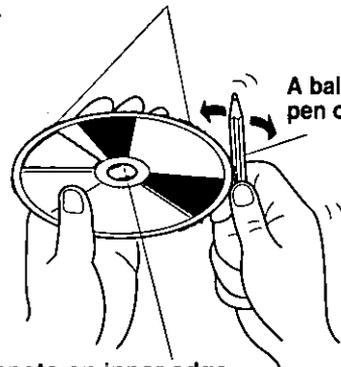
A ball-point pen or pencil

Rough spots on inner edge

Troubleshooting

❏Maintenance

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

❏When Something Doesn't Work

Check the charts on page 25 possible causes and solutions to any problem you might be experiencing. Some simple checks or minor adjustments may eliminate the problem.

❏Product Servicing

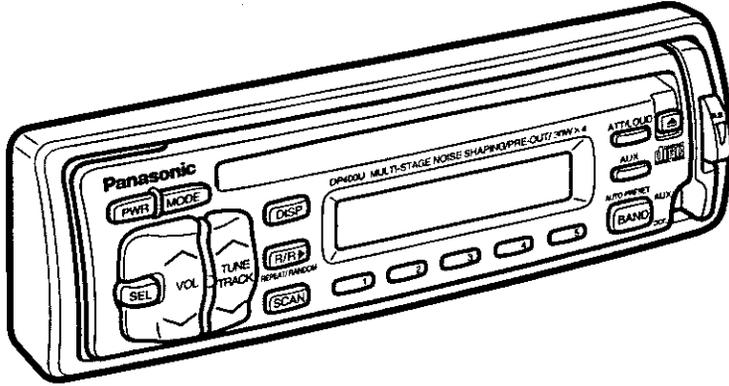If the suggestions in the charts don't solve the problem, we recommend that you take it to your nearest authorized MSC Servicenter. The unit should be serviced only by a qualified technician.

❏Replacing the Fuse

Use fuses of the same specified rating (10 amps). Using different substitutes or fuses with higher ratings, or connecting the unit directly without a fuse, could cause fire or damage to the stereo unit.

If the replacement fuse fails, contact your nearest MSC Servicenter for service.

❏Error Display Messages

	Displays when the compact disc is dirty or upside down. The disc ejects automatically. But, the disc may eject automatically, even if this error message is not displayed.
	Displays when compact disc is scratched. The disc ejects automatically. But, the disc may eject automatically, even if this error message is not displayed.
	Displays when the compact disc stops operating for some reason. Please turn off the car engine (ACC off) and remove the fuse from yellow lead for 1 minute. Then reinstall the fuse.

CQ-DP400EU

???? !
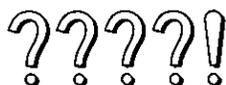
□Troubleshooting Tips

PROBLEM	POSSIBLE CAUSE	PROBABLE SOLUTION
Unit won't turn on.	Dead vehicle battery. Ignition not on. Bad power line connection. Fuse burned out.	Charge vehicle battery. Turn ignition to On or Accessory. Check connections. Replace fuse.
Radio has static.	Antenna not hooked up. Close to high power lines.	Hook up antenna. Move away from high power lines.
Radio memory buttons don't work.	Not holding buttons down long enough.	Press and hold buttons for more than 2 seconds.
No sound can be heard even if the disc is properly loaded.	The compact disc is inverted.	Insert the disc with label side facing up.
	The compact disc is very dirty.	Try to clean the compact disc by instructions of disc cleaning.
	The temperature inside the car is more than 140°F (60°C).	Give the interior a chance to cool down before using the unit.
	Excessive moisture.	Wait for a while before using the unit.
	Wiring connection is not properly done.	Confirm all wiring connection such as power cord, speaker cords, etc.
	Volume control is at "minimum" position.	Adjust the volume control to the proper level.
	Fuse of amplifier is blown out.	Replace the fuse with the correct rating.
Sound distorted due to vibration.	Installation method is bad.	Fix the unit securely.
Inverted sound (Left/Right connections).	The speaker cords are inverted.	Check the speaker cords.
No sound from front or rear speakers.	The fader control is set on the wrong position.	Adjust the fader control of the unit correctly.
Sound distorted sometimes.	The compact disc may be defective.	Try to replace the disc with another one.
	The compact disc is dirty.	Try to clean the compact disc by instructions of disc cleaning.
A compact disc is sometimes ejected. (Display shows "E1", an error message.)	The pickup lens is dirty.	Clean the lens. (Use CD lens cleaning disc.)

Specifications

General

Power Supply	: 12 V DC (11 V - 16 V), Test Voltage 14.4 V, Negative ground
Maximum Power Output	: 30 W x 4 channels at 400 Hz, Volume Control maximum
EIA Power Output	: 11W per channel into 4 ohms, 20 to 30,000 Hz, at 1 % THD
Tone Action	: Bass; ±12 dB at 100 Hz, Treble; ±12 dB at 10 kHz
Pre-Amp Output Voltage	: 1.4 V(CD Play Mode; 1 kHz 0 dB)
Output Impedance	: 600 Ω
Current Consumption	: Less than 1.7 A (CD Play Mode)
Dimensions Main Unit (W x H x D)	: 7"x 1-15/16" x 5-7/8" (178 x 50 x 150 mm)
Weight Main Unit	: 3 lbs. 12 oz (1.7 kg)

AM Radio

Frequency Range	: 530 - 1,710 kHz
Useable Sensitivity	: 25 dB/μV (25 μV, S/N 20 dB)

FM Stereo Radio

Frequency Range	: 87.9 - 107.9 MHz
Useable Sensitivity	: 13.2 dBf. (1.25 μV, 75 Ω)
50 dB Quieting Sensitivity	: 15.2 dBf. (1.6 μV, 75 Ω)
Frequency Response	: 30 - 15,000 Hz ± 3 dB
Capture Ratio	: 1.5 dB
Alternate Channel Selectivity	: 75 dB
Stereo Separation	: 42 dB at 1,000Hz
Image Response Ratio	: 75 dB
IF Response Ratio	: 100 dB
Signal/Noise Ratio	: 70 dB

CD Player

Sampling Frequency	: 32 times oversampling
DA Converter	: MASH•1bit/4 DAC System
Error Correction System	: Panasonic Super Decoding Algorithm
Pick-Up Type	: Astigma 3-beam
Light Source	: Semiconductor laser
Wavelength	: 780 nm
Frequency Response	: 20 Hz to 20,000 Hz, ± 1 dB
Signal/Noise Ratio	: 97 dB
Total Harmonic Distortion	: 0.01 % (1,000Hz)
Wow and Flutter	: Below measurable limits
Channel Separation	: 75 dB

* Above specifications comply with EIA standards.

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

CQ-DP400EU

Memorandum

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