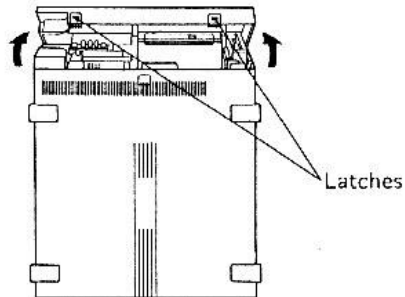
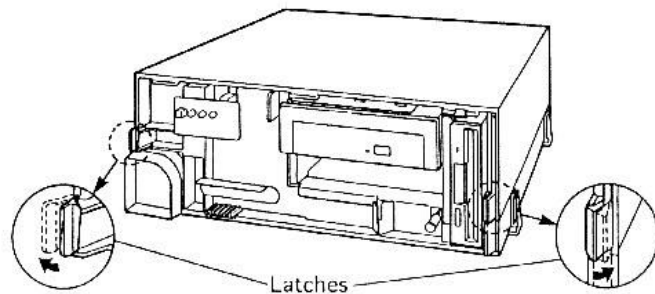


Installation

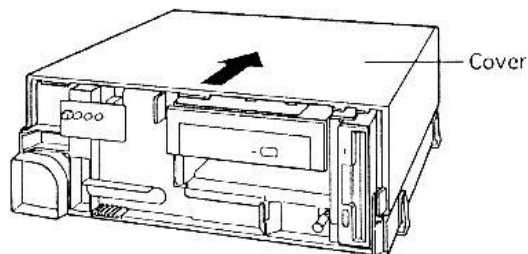
2. Still pressing the latches, remove the front panel.



3. Press the latches on the sides of the personal computer outwards.



4. With the latches pressed outwards, push the cover towards the rear panel and remove it.



NOTE:

On some personal computers the cover is attached with screws. In this case, remove the screws to remove the cover.

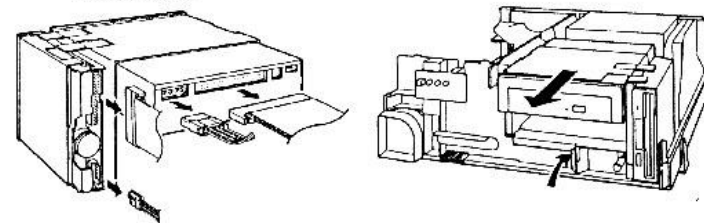
Installation

Removing the floppy disk drive

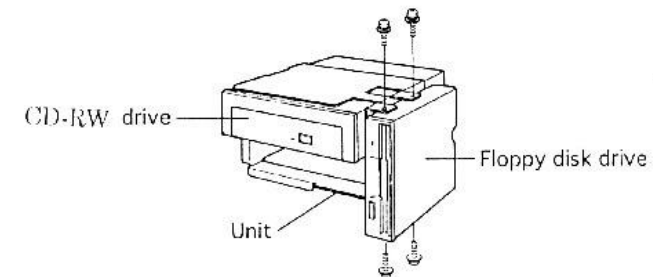
NOTE:

On some personal computers the CD-RW drive can be installed without removing the floppy disk drive. Here we describe how to remove the floppy disk drive if necessary.

1. Remove all cables connected to the floppy disk drive and CD-RW drive. Mark the cables as you remove them.
2. Press in the direction of the arrow and remove the floppy disk drive and CD-RW drive units.



3. Remove the four screws, then remove the floppy disk drive from the unit. Keep the screws.

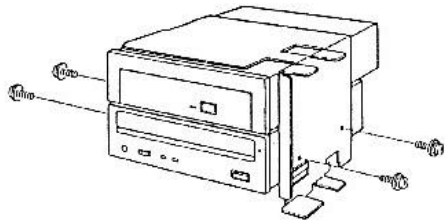


Mounting the CD-RW drive on the unit

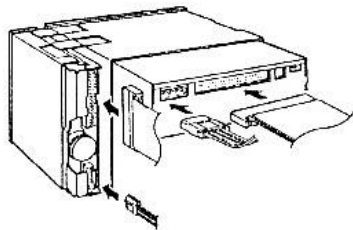
1. Have four screws ready. Use screws 3 mm in diameter and 4±0.5 mm in length. Here are 12 screw holes on the CD-RW drive. Refer to the dimensions diagram.
2. Insert the CD-RW drive into the empty drive bay.

Installation

3. Fasten the CD-RW drive in place using the screws.



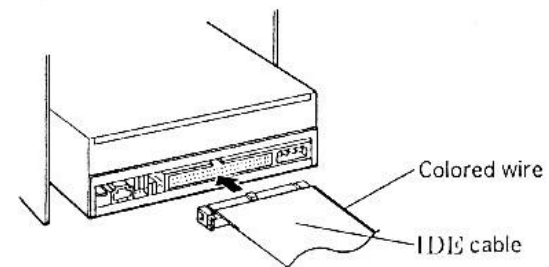
4. Remount the floppy disk drive using the same screws as before.
5. Fasten the unit onto which the CD-RW drive has been mounted onto the personal computer.
6. Connect the cables to the floppy disk drive and CD-RW drive as before.



Installation

Connecting the IDE cable

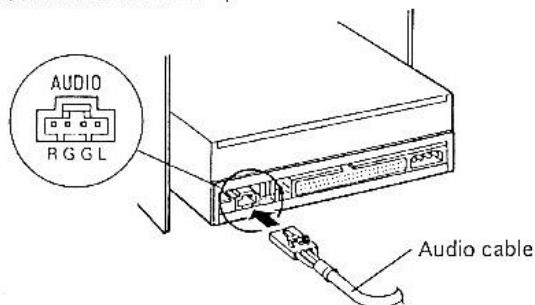
1. Connect the IDE cable to the CD-RW drive



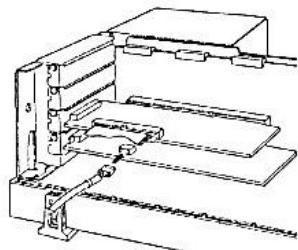
Installation

Connecting the audio cable

1. Install the sound board in an expansion slot.
2. Connect the audio cable to the CD-RW drive. Insert the audio cable firmly.

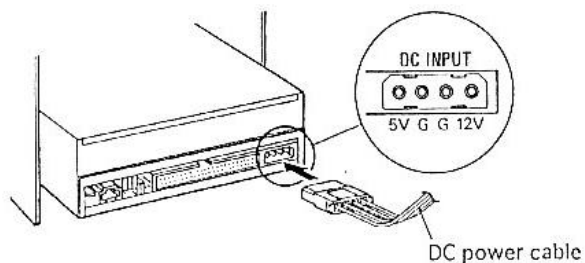


3. Insert the audio cable into the audio connector on the installed sound board.



Connecting the DC power cable

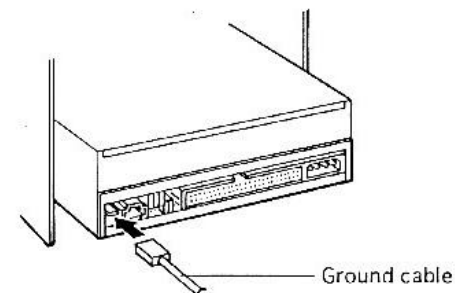
Insert the DC power cable from the personal computer into the CD-RW drive DC connector.



Installation

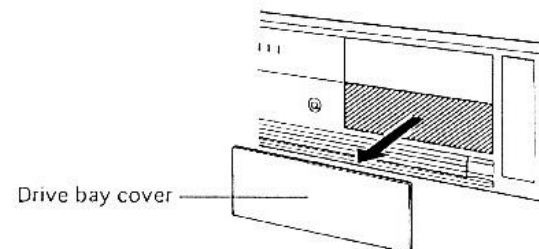
Connecting the ground cable

Use the ground cable when the CD-RW drive does not directly touch the personal computer's metal frame. Connect the ground cable between this terminal and the personal computer's metal frame.



Installation is now complete.

- Reinstall the personal computer's cover as before.
- Cut out the drive bay cover on the front panel of the personal computer, then reinstall the front panel as before.



NOTE:

Installation differs depending on the type of personal computer. Follow the instructions in the personal computer's owner's manual to install the CD-RW drive in an empty drive bay.

Installing the Device Driver

The CD-R drive's device driver must be installed in order to use the CD-RW drive. Follow the instructions in the "Installation Manual" of the device driver included with the SCSI board to install the device driver.

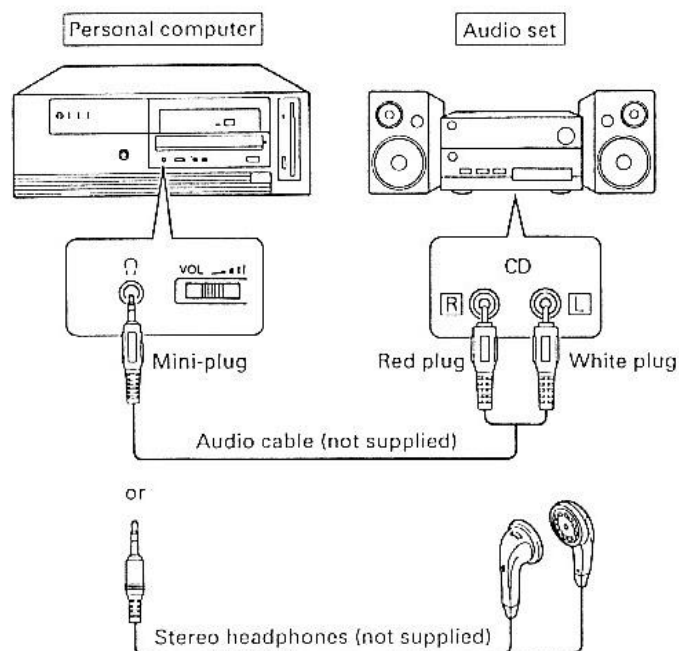
Installation

Connecting to an Audio Set

To play CDs through a stereo amplifier

Connect the cable's stereo mini-plug to the CD-RW drive PHONES jack.

Connect the cable's white plug to the amplifier's CD L (left) jack, the red plug to the R (right) jack.

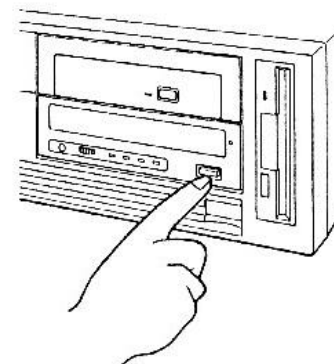


Operation

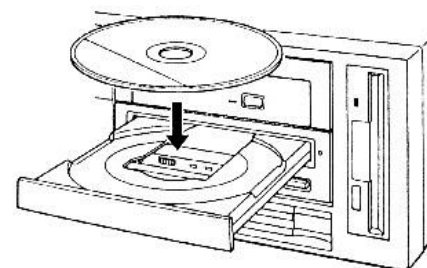
Before using the CD-RW drive check that the CD-R drive's device driver has been installed on the personal computer.

Loading Discs

1. Turn on the power of the personal computer on which the CD-RW drive is installed.
2. Press the EJECT button. The disc tray opens.



3. Load the disc in the center of the disc tray, with the printed side facing up.



4. Press the EJECT button. The disc tray closes.
5. Play the disc. The READ indicator flashes while the TOC (table of contents) is being read, then turns off. The indicator lights during playback. Record data on the disc. The WRITE indicator lights while data is being recorded.

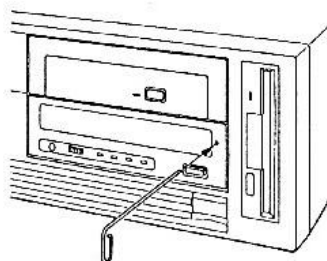
Removing Discs

1. Check that all the indicators are off.
2. Press the EJECT button to open the disc tray.
3. Remove the disc.
4. Press the EJECT button to close the disc tray.

Removing Discs in Emergencies

Use the following procedure to forcibly remove a disc should the EJECT button not function due to power failure or software problems.

1. Get a steel paper clip or the like.
Straighten the paper clip.
2. Insert the paper clip into the emergency eject hole and push in with force. The disc tray pops out.
3. Pull the disc tray out and remove the disc.
4. Push the disc tray back in.



Cautions on Use

⚠ CAUTION!

- **Do not look directly at the laser beam.**
Looking directly at the laser beam may result in loss of vision. 
 - **Do not use warped or cracked discs.**
Do not use cracked or warped discs or discs that have been repaired with glue. Discs turn at high speeds inside the drive, so cracked, warped or repaired discs may break apart and fly out, resulting in injury. 
 - **Do not touch internal parts.**
Do not take the drive apart or attempt to modify it. Doing so may damage it. 
 - **Do not touch connectors.**
If the CD-RW drive connectors are touched, grease or static electricity from your fingers may result in faulty contacts or malfunction. Also be careful not to touch the personal computer's connectors when connecting or disconnecting cables. 
 - **Do not connect and disconnect cables repeatedly.**
Doing so will place excessive loads on the connectors and may damage them. Only connect and disconnect cables when necessary.
- To prevent damage:**
- Do not subject to shocks or vibrations.
 - Do not let liquids, metal objects or other foreign substances get inside the drive.
 - Do not use the drive at a slant.
 - Do not move the drive with a disc inside it.

Place of use

- Avoid using the drive in the following types of places:
 - Places subject to high temperatures or rapid temperature changes
 - Places exposed to direct sunlight
 - Places where vibrations are strong
 - Non-level surfaces

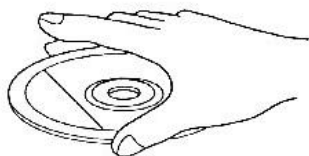
Cautions on Use

Cleaning

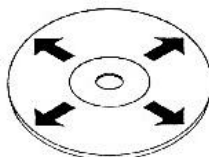
- To clean dirt off the drive, wipe gently with a soft, dry cloth or a cloth to which water or a diluted neutral detergent has been applied.
- Note that using benzene, thinner or other volatile chemicals could result in deformation or discoloration.

Cautions on Handling Discs

- Hold discs in such a way as to not touch the side on which nothing is printed.



- Do not write or stick pieces of paper or labels on discs.
- Use a soft cloth to wipe dust, dirt or fingerprints off the side of the disc on which nothing is printed.
- When wiping discs, always do so starting from the inside and moving towards the edge.



- Do not use benzene, thinner, analog record cleaners or anti-static agents on discs. Doing so may damage them.
- Store discs in their cases.
Do not set discs in places exposed to direct sunlight or high temperatures.

Specifications

Discs

Recording:	CD-R discs (conforming to Orange Book standards, Part 2)
Playback:	CD-ROM, CD-ROM XA and CD-DA discs
Diameter:	12 cm or 8 cm
Linear speed:	1.2 m/s to 1.4 m/s

Recording/playback speed

Recording:	Normal and double speed
Playback:	Normal, double and quadruple speed

Signal transfer rate

Normal speed :	150kB/s		
X2 speed	: 300kB/s	X8 speed	: 1200kB/s
X4 speed	: 600kB/s	X12 speed	: 1500kB/s

Connectors

Interface connector:	50-pin,
DC connector:	4-pin, +5V, +12V
Audio connector:	4-pin

Audio

Output terminal:	3.5 mm stereo mini-jack
Output level:	70 mV (1 kHz, -20 dB)

Loading method: Tray loading

Dimensions: (WxDxH) 146 x 188.5 x 41.3 mm

Weight: 1040 g

- Note that for improvement purposes, specifications and design are subject to change without notice.