COMPACT DISC Recordable/ReWritable & DVD-ROM DRIVE

MP9120A

SPECIFICATIONS

(Preliminary)

RICOH Company, Ltd.

May 2, 2000

DRC-603-807

(May 2, 2000) I - 1 (Preliminary)

NOTICE

This equipment has been tested and found to comply with the limits for a Class B digital device , pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates , uses and can radiate radio frequency energy and , if not installed and used in accordance with the instructions , may cause harmful interference to radio communication.

However , there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception , which can be determined by turning the equipment off and on , the user is encouraged to try to correct the interference by one or more of the following measures :

- ---Reorient or relocate the receiving antenna.
- ---Increase the separation between the equipment and receiver.
- ---Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- ---Consult the dealer or an experienced radio / TV technician for help.

FCC WARNING

Changes or modification not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

CAUTION

Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

- a) Pay careful attention not to let the invisible laser beam emitted from the optical pickup enter into your eyes.
- b) When you find a troubled state of the component in the optical pickup containing the laser diode, change to the specified new optical pickup. Do not open the optical pickup housings.

Akustischer Geräuschpegel

Dieser Drucker überschreitet einen Geräuschpegel von 70 dB (A) während dem Betrieb nicht.

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Declaration of Conformity

"The Product complies with the requirements of the EMC Directive 89/336/EEC and the Low Voltage Directive 73/23/EEC."

Revision History

| No. | Revised Data | Revision | Contents | Description | Page |
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I. OUTLINE

1. Overview

The CD-Recordable/CD-ReWritable/DVD-ROM drive, the MP9120A, can write and read various data in a CD-R disc and also a CD-RW disc which can be rewritten the data recorded once. It is not concern about failure in writing that is one of concern over the usual CD-R, because it is possible to try to write again.

The MP9120A drive has 12X CD-R recording, 10X CD-RW rewriting and a 32X (maximum speed) CD-reader.

In addition, the MP9120A drive has a 8X DVD-ROM-reader.

2. Features

- Examining laser power by APC (Auto Power Control) on real time when reading, realizes high reliability of writing without fluctuating laser power to fluctuation of the temperature.
- 2) An improved anti-heat design means that no cooling fan is needed.
- 3) Easy-to-use tray model.
- 4) Uses the world standard E-IDE (ATAPI) interface.
- 5) Can read data at 32X speed (4.8MB/sec. Data transfer rate) and write data at 12X speed (1.8MB/sec. Data transfer fate).
 - * CD-RW disc is 10X speed write. DVD-ROM disc is 8X speed read.
- 6) Supports packet write for easy writing to CD-R and CD-RW discs.

II. CONSTRUCTION AND INSTALLATION

1. Basic Construction

The CD Recordable/Rewritable/DVD-ROM Drive: MP9120A consists of following parts. The CD Recordable/Rewritable/DVD-ROM Drive's configuration and Connector are shown below;

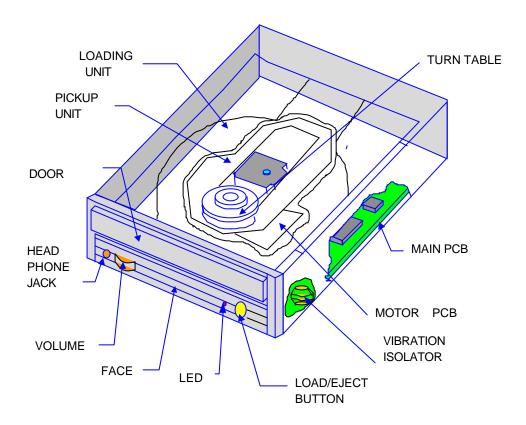


Fig. II - 1 Drive configuration

2. Connector

The Connectors are located as shown below. The function of each parts are also described below.

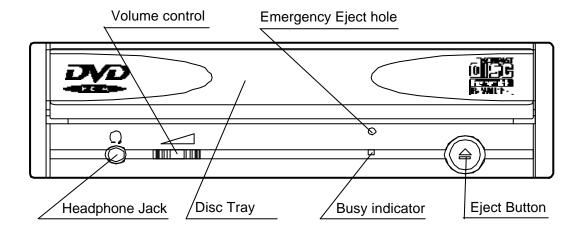


Fig. II - 2 Front

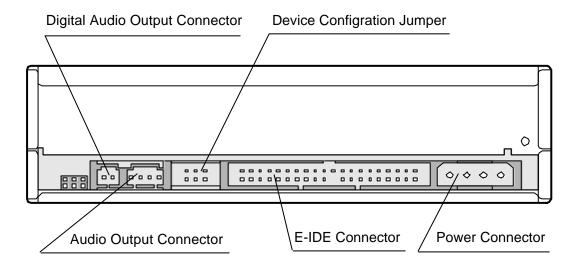


Fig. II - 3 Back

2.1. Disc Tray

This is the tray for the disc. Place the disc on the ejected disc tray, then lightly push the tray (or push the eject button) and the CD will be loaded.

! - Don't use force to pull out or push in the disc tray. This might cause damage to the loading section of the drive.

2.2. Eject Button

This is the button used to eject or bring in the disc tray.

2.3. Busy indicator

When the disc tray or disc is being accessed, the light shines or flashes orange. Even when a disc is loaded or a disc is not being accessed, the light go out. When a illegal disc is loaded or some hardware trouble occurs, the indicator blinks.

2.4. Headphone Jack

This jack is for connecting headphones or mini-speakers.

2.5. Volume control

This is used to adjust the output volume of the headphone jack. It can't be used to adjust the output volume for the audio output connectors on the rear panel.

2.6. Emergency Eject hole

When the drive can not eject the Disc Tray because of power failure, pushing the Emergency Eject hole of the Front Panel by the thin pole make drive be able to eject the Disc Tray.

! - This function is only for emergency case. Do not use thes function in usual case to prevent from mechanical damage.

2.7. Power Connector

Used to connect to the host computer's power supply (DC 5V / 12V)

! - Be careful not to reverse the poser connector when attaching it. A reversed connection may cause damage to the equipment (not covered by the warranty).

2.8. E-IDE Connector

Use a 40 pin double-end flat E-IDE cable to connect to the E-IDE interface.

! - Connecting or disconnecting connectors while power is on may result in a short circuit, causing damage to the equipment. When connecting or disconnecting connectors, make sure to turn off the power beforehand.

2.9. Audio Output Connector

Used to connect to the sound card. (Analog signal.)

2.10. Digital Audio Output

Used to connect to the sound card. (Digtal signal.)

2.11.Device Configration Jumper

Used when selecting the Device Configration of E-IDE. Don't use jumpers to change anything besides the Device Configration, but keep the drive as initially set("Master" position). Configration changes become valid after power is turned off, then on again.

! - Installing jumper pins besides the ones for Device Configration settings may be the cause of damage or abnormal drive operation.

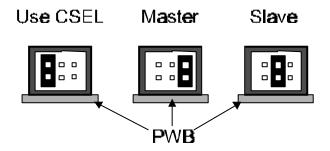


Fig. II - 4 Device Configration Jumper

The Device Configration Jumper will be set to Master as factory setting.

(May 2, 2000) I - 11 (Preliminary)

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