# **MITSUMI**

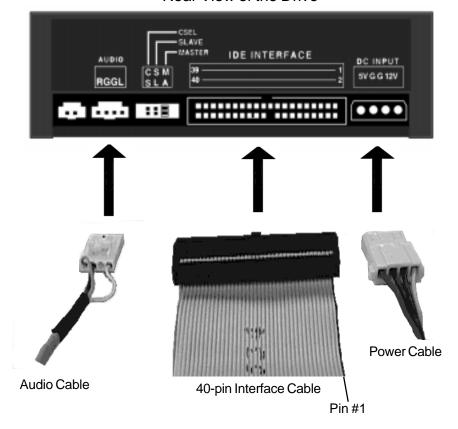
# CR Series CD-R/RW Drives

INSTALLATION MANUAL VERSION 5.1

#### Mitsumi Internal CD-ReWritable Quick Installation Guide

- 1. Start by shutting down the computer along with the monitor and any other peripherals.
- Unplug the power cord from the computer.
- 3. Remove the computer case cover.
- 4. Remove the cover from an empty drive bay.
- 5. Attach mounting rails or brackets to the drive if required.
- 6. Note the pairs of pins on the back of the drive labeled: Master, Slave and Cable Select.
- 7. Note that one of the pairs has a small jumper between them. The factory setting for the jumper is Master. If necessary, move the jumper to Slave if the drive will share an IDE data cable with another drive.
- 8. Slide the drive into the chassis and secure with the mounting screws.
- 9. Align the connector of the 40-pin IDE cable with the pin slot on the drive noting the position of pin 1 and the notch on the connector itself. Gently press the connector into the pin slot making sure it seats completely and firmly.
- 10. Plug the other end of the IDE cable into the IDE Secondary connector located on the motherboard.
- 11. Attach an unused power cable to the back of the drive, with the beveled edge up.
- 12. Plug the audio cable into the audio-out connection on the back of the drive as shown. It should set firmly with a locking tab securing it. Next, connect the other end into an available audio-in connection on the sound card.
- 13. Replace the computer case cover.
- 14. Plug in the power cord, connect other computer peripherals and turn on your computer.
- 15. As the computer turns back on, the Windows™ operating system will automatically recognize the new drive and will make it available for use.
- 16. Insert the Software Installation CD and follow the on-screen instructions for installing the writing software.

#### Rear View of the Drive



**Power Cable -** Supplies power to the CD-R drive from a standard PC AT power supply.

**40-pin Interface Cable -** Connection for 40-pin ribbon IDE interface cable.

**Audio Cable -** Provides stereo audio output to a sound card.

CAUTION: The discharge of static elctricity can damage electronic circuitry. Avoid static discharge by touching a grounded metal object such as the computer case before and during installation of your new drive or by wearing a grounding strap connected to a ground source.

### Mitsumi External CD-ReWritable Quick Installation Guide

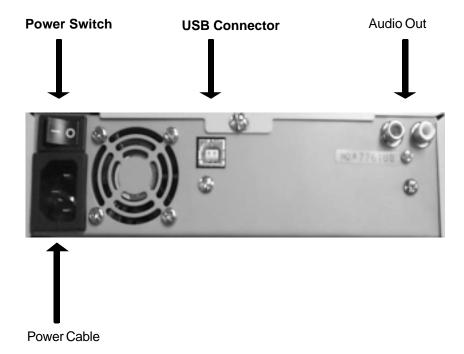
- 1. Using an audio cable, connect your drive to your speakers.
- 2. Next, connect the power cable and plug into a power source.
- Turn the power of the External CD-R/RW Drive on.
- Connect the USB cable to the PC.
- 5. The PC will automatically detect the External CD-R/RW Drive. Click "Next>".
- 6. Check "Search for the best driver for your device" and click "Next>".
- 7. Check "Floppy disk drives". Inset the diskette provided with the External CD-R/RW Drive into the A:\ drive and click "Next>".
- 8. Click "Next>".



9. The device driver will be installed for your External CD-R/RW Drive.



#### Rear View of the Drive



Power Cable - Supplies power to the external CD-R/RW drive .

**USB Connector -** Connection for USB interface cable.

Audio Out - Provides stereo audio output to a speaker.

Power Switch - Power on/off

# **Safety Information**

Please follow all safety warnings and instructions printed in this manual and on the CD-R/RW drive to avoid damaging your drive or harming yourself.



Never attempt to service the drive yourself. No user serviceable parts are inside the unit. Opening or removing the cover can expose you to dangerous voltage levels, laser beams, and other hazards.

Do not attempt to open the unit. The laser beam used by the CD-R/RW drive can be harmful to the eyes. All service procedures should be performed by an authorized dealer or distributor.

Note that the noise level of compact disc audio is much lower than that of an analog audio source. Do not attempt to set the speaker sound level by listening to the noise level. Too high a setting can damage your speakers. Begin with the sound level set low, then gradually increase the volume to the desired level.

#### Disclaimer

The vendor shall have no liability or responsibility to the purchaser or any other person for any loss or damage or any special, incidental or consequential damages caused or alleged to be caused directly or indirectly by the product, including, but not limited to, loss of previously or currently written data, any interruption of service, loss of customer goodwill, loss of business, anticipatory profits or consequential damages resulting from the use or operation of the product.

# Federal Communications Commission (FCC) Information

This unit generates and uses radio frequency energy and if it is not installed and used properly in strict accordance with the manufacturer's instructions, it may cause interference with radio and television reception. This unit has been tested and found to comply with the limits for a class B computing device, in accordance with the specifications in Part 15 of the FCC rules which are designed to provide reasonable protection against such interference in a residential installation.

We cannot guarantee, however, that interference will not occur in a particular installation. If this unit does cause interference to radio or television reception, which can be determined by turning the unit off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient the receiving antenna
- Relocate the unit with respect to the receiver
- Move the unit away from the receiver
- Plug the unit into a different outlet so that the unit and the receiver are on different branch circuits

If necessary, consult your dealer or an experienced radio/television engineer for additional suggestions. The booklet "How to Identify and Resolve Radio-TV Interference Problems," Stock No. 004-000-00345-4, may be helpful. This booklet was prepared by the Federal Communications Commission and is available from the U.S. Government Printing Office, Washington, DC 20402.

Changes or modifications not expressly approved by the manufacturer for compliance could void the user's authority to operate the equipment.

# FCC Declaration of Conformity

#### **MITSUMI**

CR-4802TE CR-4802TU CR-4803TE CR-4804TE

The device complies with part 15 of the FCC (U.S.A.) rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

MITSUMI Electronics Corp. 5808 W.Campus Circle Dr. Irving, TX. 75063 Tel. (972)550-7300

#### For customers in Canada

This Class B digital apparatus meets all requirements of the Canadian Interference-Causing Equipment Regulations.

#### Pour les utilisateurs au Canada

Cet appareil numérique de la classe B respecte toutes les exigences du Réglement sur le matériel brouilleur du Canada.

#### **CR-4802TE Specifications**

Supported Disc Formats

CD-ROM Mode 1; CD-DA; CD-i; Video CD; CD-Extra (CD Plus)

CD-ROM XA Mode 2 Form 1 and Form 2; Photo CD

Writing Methods Disc-at-Once, Track-at-Once, Multisession,

**Packet Writing** 

Disc Diameters 12 cm, 8 cm

Interface ATAPI specification SFF-8020i/8080

Data Transfer Rate (Average)

Read: 1200Kbytes/sec (Mode 1), 1400 Kbytes/sec (Mode 2) Write: 600 Kbytes/sec (Mode 1), 700 Kbytes/sec (Mode 2)

IDE Data Transfer Rate (Burst)

11.1 Mbytes/sec (16 bits PIO mode)
13.3 Mbytes/sec (Multiword DMA mode)

Average Access Speeds (including the latency time)

Random 150 ms typical Full Stroke 250 ms typical

Data Buffer Size 2 Mbyte

Audio

Channels 2 channels Sampling Frequency 44.1 kHz

Filtering 4 times over-sampling, digital/analog filters

Quantization 1 bit (16bits linear equivalent)

Volume Control Software, L& R separate volume control

Reliability (MTBF)

Power on hour 50,000 hours

Dimensions and Weight

Width/Height/Depth 148 x 42 x 210 mm Weight 0.9 kgW max.

Power Supply

DC +5V +5V +/-5%, 2.00A max. @ 8x full stroke DC +12V +12V +/-5%, 2.80A max. @ 8x full stroke

**Environmental Conditions** 

Operating: 5~40°C, 20 to 85% RH non-condensing Storage: -20~60°C, 10 to 95% RH non-condensing

# **CR-4802TU Specifications**

Supported Disc Formats

CD-ROM Mode 1 and 2; CD-DA; CD-i; Video CD; CD-Extra (CD Plus) CD-ROM XA Mode 2 Form 1 and Form 2; Photo CD (read), CD UDF

Writing Methods Disc-at-Once, Track-at-Once, Multisession,

**Packet Writing** 

Disc Diameters 12 cm, 8 cm

Interface USB Interface

Data Transfer Rate (Maximum)

Read: 1200KB/s (8X speed)
Write: 600 KB/s (4X speed)
Rewrite: 300 KB/s (2X speed)

Average Access Speed

Random 200 ms typical (8X speed)

Data Buffer Size 2 MB

Audio

Channels 2 channels Sampling Frequency 44.1 kHz

Filtering 4 times over-sampling, digital/analog filters

Quantization 1 bit (16bits linear equivalent)

Volume Control Software, L& R separate volume control

Loading Mechanism

Power tray

Installation Orientation

Horizontal

Lifetime (MTBF)

50,000 POH

External Dimensions

7.6" wide x 2.1" high x 9.9" deep [194 (W)x 53.5 (H) x 255.70 (D) mm]

Weight

5.01 lbs. [2.27kg]

Power Supply

AC110-240V(50Hz-60Hz)

**Environmental Conditions** 

Operating: 5~40°C, 20 to 85% RH non-condensing Storage: -20~60°C, 10 to 95% RH non-condensing

# **CR-4803TE Specifications**

Supported disc formats

CD-ROM Mode 1; CD-DA; CD-i; Video CD; CD-Extra (CD plus)

CD-ROM XA Mode 2 Form 1 and Form 2; Photo CD

Writing Methods Disc-at-Once, Track-at-Once, Multisession,

**Packet Writing** 

Disc diameters 12 cm, 8 cm

Interface ATAPI specification SFF-8020i/8080

Data transfer rate

Read:(MAX) 3000 Kbytes/sec (Mode 1), 3500 Kbytes/sec (Mode 2) Write:(average) 600 Kbytes/sec (Mode 1), 700 Kbytes/sec (Mode 2)

(Compatible only with 2x speed recording for CD-RW disc)

IDE Data transfer rate (Burst)

16.6 Mbytes/sec (16 bits PIO mode) 16.6 Mbytes/sec (Multiword DMA mode)

Average Access speeds (including the latency time)
Random 135 ms typical
Full Stroke 220 ms typical

Data Buffer Size 2 Mbyte

Audio

Channels 2 channels Sampling Frequency 44.1 kHz

Filtering 8 times over-sampling, digital/analog filters

Quantization 1 bit

Volume Control Software, L& R separate volume control

Reliability (MTBF)

Power on hour 50,000 hours

Dimensions and weight

Width/Height/Depth 148 x 42 x 210 mm Weight 0.9 kgW max.

Power Supply

DC +5V +5V +/-5%, 2.00A max. @ 20x full stroke DC +12V +/-5%, 2.90A max. @ 20x full stroke

**Environmental conditions** 

Operating 5~40°C, 20 to 85%RH non-condensing Storage: -20~60°C, 10 to 95%RH non-condensing

# **CR-4804TE Specifications**

Supported disc formats

CD-ROM Mode 1; CD-DA; CD-i; Video CD; CD-Extra (CD plus)

CD-ROM XA Mode 2 Form 1 and Form 2; Photo CD

Writing Methods Disc-at-Once, Track-at-Once, Multisession,

**Packet Writing** 

Disc diameters 12 cm, 8 cm

Interface ATAPI specification SFF-8020i/8080

Data transfer rate

Read:(MAX) 3600 Kbytes/sec (Mode 1), 4200 Kbytes/sec (Mode 2) Write:(average) 600 Kbytes/sec (Mode 1), 700 Kbytes/sec (Mode 2)

IDE Data transfer rate (Burst)

16.6 Mbytes/sec (16 bits PIO mode) 16.6 Mbytes/sec (Multiword DMA mode)

Average Access speeds (including the latency time)
Random 135 ms typical
Full Stroke 220 ms typical

Data Buffer Size 2 Mbyte

Audio

Channels 2 channels Sampling Frequency 44.1 kHz

Filtering 8 times over-sampling, digital/analog filters

Quantization 1 bit

Volume Control Software, L& R separate volume control

Reliability (MTBF)

Power on hour 50,000 hours

Dimensions and weight

Width/Height/Depth 148 x 42 x 210 mm Weight 0.9 kgW max.

Power Supply

DC +5V +5V +/-5%, 2.00A max. @ 20x full stroke DC +12V +/-5%, 2.90A max. @ 20x full stroke

Environmental conditions

Operating 5~40°C, 20 to 85%RH non-condensing Storage: -20~60°C, 10 to 95%RH non-condensing

