TEAC

CD-Rewritable Drive
8x8x32

① disc tray

② headphone jack

③ volume control
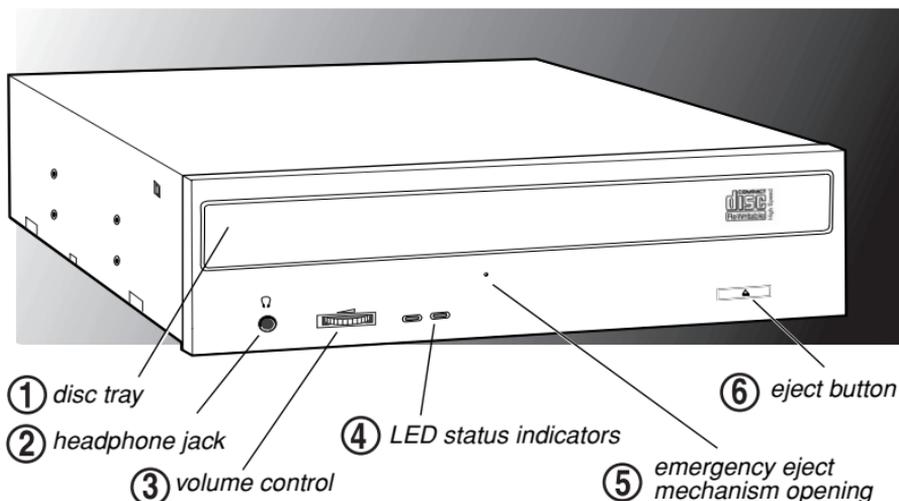
④ LED status indicators

⑤ emergency eject mechanism opening

⑥ eject button

Introduction

The TEAC CD-RW Drive can write to CD-R discs at a maximum of 8X speed, re-write to CD-RW discs at 8X speed, and read CD-ROM discs at 32X speed. (It is also capable of operating at slower speeds, if preferred.) CD-R discs enable you to create audio or data discs for permanent archival storage. They cannot be overwritten. You can overwrite CD-Rewritable (CD-RW) discs, typically up to 1,000 times.

The TEAC CD-RW Drive is designed for use in IBM PC or compatible computers. It features a 5.25-inch standard chassis and a powered tray for convenient disc loading.

Recommended System Requirements

❑ IBM PC-compatible computer, Pentium II 300MHz or higher

❑ CD-ROM drive with DAE support for disc-to-disc audio recording

❑ One available 5.25-inch drive bay

❑ 64MB of RAM

❑ A hard drive that meets or exceeds the following minimum specifications:

   ❑ 1GB hard disk space (or more)

   ❑ 1.2MB/second data transfer rate (or faster)

   ❑ 12ms average access time (or less)

❑ Sufficient hard disk space for software installation (see the documentation for the recording software)

❑ Windows 95/98/Me/2000-Professional and NT 4.0

Front Panel

① **disc tray:** Use the disc tray to load CDs into the drive. You can open the tray by pressing the eject button or by using the emergency eject mechanism. You can close the tray by pressing the eject button.

> *Note: We strongly recommend that you do not push the tray in to close it. Please press the eject button to eject or retract the tray.*

② **headphone jack:** You can connect headphones or external speakers to this jack to listen to an audio CD being played on your TEAC drive. Use a 3.5 mm stereo mini-plug. For external speakers, connect a stereo adapter to split the output into separate cables for the left and right channels. Such adapters convert a male stereo mini-jack to two female phono jacks.

③ **volume control:** Use the volume control to adjust the volume. Turn the control right to increase the volume, left to decrease. (Lower the volume before you start a CD-ROM audio program to protect your hearing and the audio speakers.)

④ **LED indicators:** The drive features two LED indicator lights on the front panel. Various operations are indicated as per the following table:
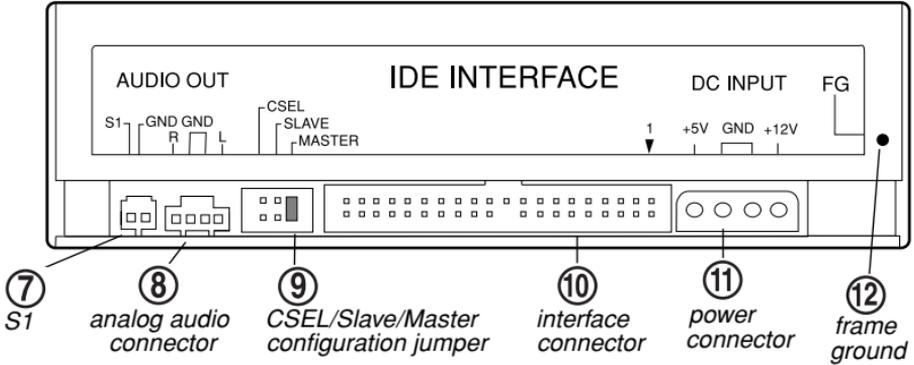
Operation	Right LED	Left LED
At tray loading	*green LED flashes*	*off*
At tray eject	*green LED flashes*	*off*
During write/erase	*off*	*green LED flashes*
During audio play	*green LED flashes*	*off*
During seek/data transfer	*green LED lights*	*off*

⑤ **emergency eject mechanism:** If the eject button fails, you can *turn off the power to the CD-RW drive* and insert a small, thin rod (such as a straightened paper clip) into the emergency eject mechanism opening and press firmly to eject the disc.

> *Caution: Do not attempt to use the emergency eject mechanism when either the Power or Busy indicator is lit or you may seriously damage the disc or the CD-RW Drive.*

⑥ **eject button:** Press this button to open or close the disc tray. (Some CD-ROM titles disable the manual eject button and rely on software commands to eject the disc. Refer to the documentation for these titles for more information.)

Rear Panel

⑦ *S1* ⑧ *analog audio connector* ⑨ *CSEL/Slave/Master configuration jumper* ⑩ *interface connector* ⑪ *power connector* ⑫ *frame ground*

⑦ **S1:** Reserved for factory use only.

⑧ **analog audio output connector:** You can use an audio cable to connect this connector to the audio input connector on a sound card. Pin assignments are described below:

Pin Number	Audio Signal
1	Left signal
2	Ground
3	Ground
4	Right signal

⑨ **CSEL/Slave/Master configuration jumper:** The CD-RW Drive includes three pairs of jumper pins on the rear panel that allow you to set the drive to CSEL, Slave, or Master mode.

⑩ **interface connector:** Use an IDE interface ribbon cable to connect the CD-RW drive to an IDE interface in your computer.

⑪ **power connector:** Connect the power connector to the +5VDC and +12VDC power sources. The +5VDC terminal is on the left as you face the rear panel; the +12VDC terminal is on the right. The two center terminals are ground terminals.

⑫ **FG:** Frame ground. This is a ground connection for the CD-RW Drive.

Configuring the CD-RW Drive

The Master/Slave/CSEL jumper configuration of your TEAC CD-RW drive will depend on whether or not you have an IDE CD-ROM/DVD drive installed in your system. The following section will guide you through most typical system configurations.

jumper set to CSEL *jumper set to Slave* *jumper set to Master (default)*
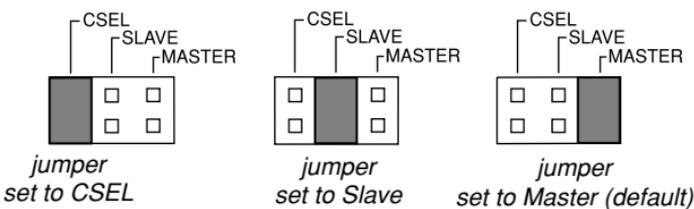
Installing the CD-RW Drive

This section explains how to install the TEAC CD-RW Drive into an IBM PC or compatible personal computer. Follow the steps below and refer to your computer documentation for information specific to your system.

1. **Turn off the power to the computer system and any external devices connected to it.**

2. **Touch the exposed metal frame of the computer to ground yourself.**

   This will prevent damage to the computer or CD-RW drive that may be caused by a discharge of static electricity.

3. **Remove your computer's cover, faceplate, or 5.25-inch bay cover, as well as mounting clips, screws, and retaining brackets.**

   Note: If you have a SCSI CD-ROM drive or no IDE CD-ROM/DVD drive installed in your system, continue with Step 4. If you have an IDE CD-ROM/ DVD drive installed in your system, skip step 4 and continue with Step 5.

4. **If you have a SCSI CD-ROM drive or no IDE CD-ROM/DVD drive installed on your system, do the following:**

   4a) Confirm that the jumper on the rear panel of the CD-RW drive is configured to its default setting of Master.

   4b) Slide the CD-RW drive into the empty 5.25-inch drive bay. Install the CD-RW drive in your personal computer in a horizontal orientation (within ±10° of horizontal). The eject button should be located on the right side of the unit. Secure the drive using 3x5mm mounting screws.

   Warning: Do not use mounting screws longer than 3x5mm to secure the CD-RW drive or you may damage the unit.

secure drive with 3x5mm screws
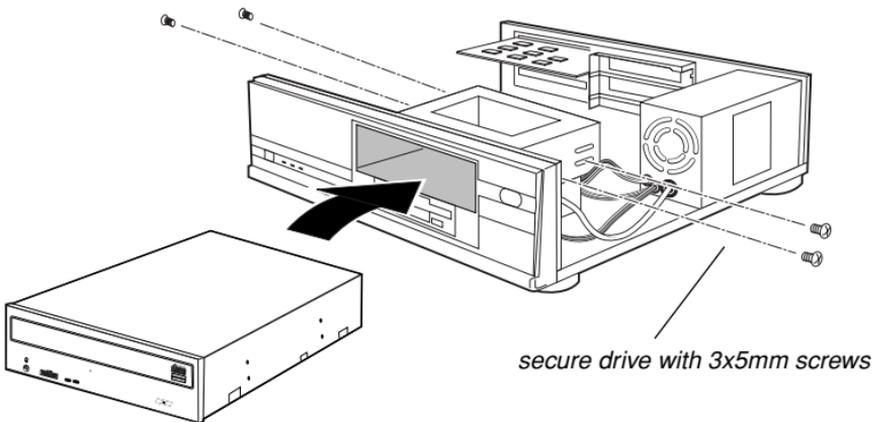
   4c) Locate the secondary IDE connector on your system's motherboard and connect one end of the IDE interface cable.

   Be certain to connect Pin-1 of the interface cable to Pin-1 on the secondary IDE connector on the motherboard. (Pin-1 on interface cable is usually designated by a color strip along one edge of the cable. Also, the interface ribbon cable connector may feature a tab on one side. Insert the cable so that the tab aligns with the notch on the interface connector. Do not use excessive force while trying to insert the cable into position).

4d) Connect the opposite end of the interface ribbon cable to the interface connector on the rear panel of the CD-RW drive.

audio cable

notch

power cable

pin 1

IDE interface ribbon cable

tab
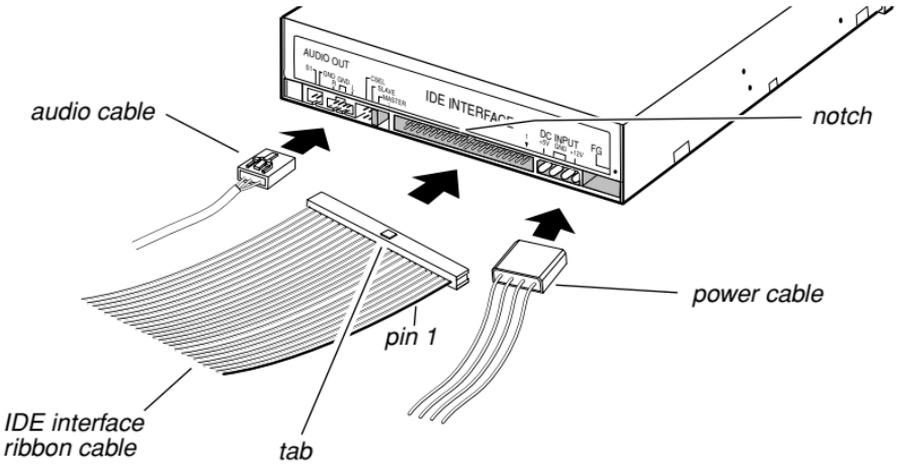
4e) Connect one end of an analog audio cable to the analog audio connector on the rear panel of the CD-RW drive and connect the opposite end to your sound card. **(Go to Step 6.)**

5. If you have an IDE CD-ROM/DVD drive installed on your system, do the following:

Typically, your IDE CD-ROM/DVD drive is connected to the secondary IDE motherboard connector as a Master. In such cases, it is strongly recommended that you connect the CD-RW drive as a Slave drive to the same cable that currently hosts your CD-ROM/DVD drive.

5a) Set the jumper on the rear panel of the CD-RW drive to Slave.

5b) Slide the CD-RW drive into the empty 5.25-inch drive bay. Install the CD-RW drive in your personal computer in a horizontal orientation (within ±10° of horizontal). The eject button should be located on the right side of the unit. Secure the drive using 3x5mm mounting screws.

> *Warning: Do not use mounting screws longer than 3x5mm to secure the CD-RW drive or you may damage the unit.*

5c) Connect the CD-RW to the vacant middle connector on your CD-ROM/DVD interface cable. (If your original cable does not have an available middle connector, you will need to acquire and install a standard IDE cable with three connectors.)

5d) Your CD-ROM/DVD drive probably uses an audio cable that is connected to the computer's sound card. Therefore, there is no need to connect an audio cable to your CD-RW drive. An audio cable is not necessary for recording audio CDs.

6. Connect the power cable to the power connector on the rear panel of the CD-RW drive.

Insert the power cable plug in the correct orientation into the power connector. The plug is shaped so that it can be easily inserted in only one orientation; do not force the plug into the connector. The +5v terminal is on the left as you face the rear of the panel; the +12v terminal is on the right. The two center terminals are ground terminals.

7. Re-install your computer's cover, faceplate, or bay cover.

8. Start your system.

Notes:

- The IDE CD-RW drive is a true Plug-N-Play device; therefore, it will be detected automatically by Windows 95/98/Me/2000-Professional. There is no need to install any drivers.

- Windows NT 4.0 Users:

  Windows NT 4.0 does not support the Plug-N-Play feature. Therefore, confirm that the IDE CD-ROM DRIVE ATAPI version 1.2 driver is installed. If not, open the Control Panel, double click "SCSI Adapters," click the "Drivers" tab, then click the "Add" button. At the "Select a SCSI Adapter Option" window, select "IDE CD-ROM DRIVE (ATAPI Ver 1.2)." Click "Install" and follow the instructions on screen.

- The drive is recognized by the operating system as a typical CD-ROM drive. Once you confirm that you can read (play) data discs from the CD-RW drive, install the premastering software to enable recording to CD-R and CD-RW discs.

- The premastering software is to be purchased separately.

Recommended Software

Before you can record data onto CD-R or CD-RW discs using your TEAC CD-RW Drive, you must first install pre-mastering or packet-writing software onto your computer's hard disk. TEAC recommends the following applications for Windows 95/98/Me/2000-Professional and NT:

- ❏ **Adaptec Easy CD Creator, Version 4.02d or higher:** A full-featured premastering software application that enables you to create audio CDs and data CDs.
- ❏ **Adaptec DirectCD, Version 3.01d or higher:** A "drag & drop" software application that allows you to read and write to your CD-RW as if it were a standard floppy or removable hard drive. It also provides the tools necessary to format the media.

Note: The above mentioned software packages are part of the Easy CD Creator Deluxe Software Suite from Adaptec. Please ensure the appropriate version is purchased.

For more information, refer to the documentation that accompanies the software.

Recommended Media

For optimum performance, use 74 or 80-minute, 8X speed rated blank CD-R and CD-RW media from TEAC or the following manufacturers:

Disc Type	Manufacturer
CD-R	*Taiyo Yuden*
	Mitsui Toatsu Chemical
	Mitsubishi (Verbatim)
	Ricoh
	TDK Electronics
	Kodak
	Fuji Film
	Hitachi (Maxell)
	Pioneer
	Sony
	Maxell
	PVC

Disc Type	Manufacturer
CD-RW	*Mitsubishi (Verbatim)*
	Ricoh

Note: Additional TEAC media may be purchased online at www.shopteac.com.

Specifications

Model	CD-W58 E
Interface	*IDE/ATAPI*
Transfer Rate	*Write: 8X (1.2MBps)* *Rewrite: 8X (1.2MBps)* *Read: 32X maximum (4.8MBps)*
Digital Audio Extraction Rate	*8X speed*
Access Time	*80 msec (1/3 Stroke)*
Buffer Size	*2MB*
Write Methods	*Track At Once; Disk At Once; Multi-Session; Incremental*
Write Verification	*Running Optimum Power Control to dynamically adjust laser write power*
Logical Recording Format	*IS09660, UDF & CDR-FS Packet Write*
CD Formats Supported	*CD-DA; CD-ROM Mode-1, CD-ROM XA Mode-2 (Form-1 and 2); Multi-session PhotoCD; CD-ROM XA; CD-R; CD-RW; CD-I; Video CD; CD Extra/CD Plus, CD Text.*
Disc Loading	*Power Tray (caddy not required)*
Front Panel	*Built-in Headphone Jack, Dual Status LEDs, Volume Control Knob, and Power Eject Button*
MTBF	*100,000 POH*
Dimensions	*5.75"(W) x 1.63"(H) x 7.56"(D)*
Weight	*2.65 lbs.*
Power Supplies	*+5VDC, +12VDC*
Analog Audio *Headphone* *Line-Out*	*0.65 ± 0.3Vrms at 32Ω* *0.78 ± 0.3Vrms at 47KΩ*
Headphone Jack	*3.5mm diameter stereo mini-headphone jack*
Installation	*Horizontal, plus or minus 10°*
Operating Temperature	*5° C to 40° C (41° F to 104° F)*
Storage Temperature	*-30° C to 60° C (-22° F to 140° F)*
Operating Humidity	*20% to 80% (non-condensing)*
Storage Humidity	*10% to 80% (non-condensing)*
Safety Standards	*UL, CSA, TUV*

Technical Support

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