

USB External Hard Drive Installation Guide

USB 2.0 and 1.1

**Windows &
Macintosh**

disk capacities ranging from

500GB

through

40GB

model numbers ranging from

HD3U-500

through

HD3U-40

TEAC[®]

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Safety Precautions

TEAC Hard Drives (HD) are high-precision electronic devices. Do not use them in any manner other than as specified in this manual. Please read this manual in its entirety before you begin the installation procedure. Use of controls, adjustments, or performance of procedures other than those specified herein may result in hazardous radiation exposure.

To prevent fire or shock, do not expose the unit to moisture or rain.

To prevent electrical shock, do not attempt to disassemble the hard drive. Refer servicing to authorized personnel.

A user who changes or modifies the unit or operating procedures specified herein without express written approval by the manufacturer will void user authority to operate the equipment.

Specifications and features are subject to change without notice or obligation.

FCC Radio Frequency Interference Regulations

Warning: This equipment generates, uses, and can radiate radio frequency energy and if not installed and used in accordance with the instructions contained in this manual, may cause harmful interference to radio and television communications. This equipment has been tested and found to comply with the limits for a Class B digital device pursuant to Subpart J of Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. However, there is no guarantee that interference will not occur in a particular installation. To ensure compliance with FCC rules, the cable that connects the unit to the computer must be a shielded interface cable.

Note: Connecting this device to peripheral devices that do not comply with Class B requirements or using an unshielded peripheral cable could result in interference to radio or television reception. To ensure that the use of this product does not contribute to interference, use a shielded interface cable.

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 may try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Move the device and the receiver further apart.
- Connect the equipment to an electrical outlet on a different circuit than the receiver.
- Consult the dealer or an experienced audio television technician.

Also, the following booklet may prove helpful: *How to Identify and Resolve Radio-TV Interference Problems*. It is available from the U.S. Government Printing Office, Washington, D.C. 20402, stock number 004-000-00345-4.

The user is cautioned that any changes or modifications not expressly approved by TEAC America, Inc. could void the user's warranty.

Copyright and Trademark Information

This manual is copyright © 2005 by TEAC America, Inc.

- TEAC is a trademark of TEAC Corporation.
- IBM PC is a registered trademark of International Business Machines Corporation.
- Windows, Windows 95, Windows 98SE, Windows Me, Windows 2000 Professional, Windows XP and Windows NT are trademarks or registered trademarks of Microsoft Corporation.
- Apple and Macintosh are registered trademarks of Apple Computer, Inc.
- All other trademarks and registered trademarks are the property of their respective owners.

© Copyright 2005 TEAC America, Inc. All rights reserved. TEAC America, Inc. reserves the right to modify product offerings or specifications without advance notice. No part of this publication may be produced in any format without the express written permission of TEAC America, Inc.

Registration Information

There is no need to register any portion of this kit. Refer to “Technical Support” on page 13 if you wish to contact TEAC.

Product Warranty Information

This TEAC Hard Drive features a one year warranty from the date of purchase. Please keep your receipt as proof of purchase. Refer to “Limited Warranty” on page 14 for warranty information.

About This Guide

This guide, the *TEAC USB Hard Drive Installation Guide*, explains how to install and operate TEAC USB 2.0/1.1 external hard drives (all capacities). This guide is divided into the following main sections:

Introduction: This section introduces the USB hard drive and describes recommended system requirements and shipping package contents.

Connecting the Hard Drive: This section explains how to connect the USB hard drive to your computer.

Installing the Driver Software: This section explains how to install the appropriate driver software (Windows 98 only) from the included CD-ROM.

Specifications: This appendix provides technical specifications for the TEAC USB Hard Drives.

Technical Support: This appendix provides technical support listings for TEAC in North America.

Introduction

Thank you for purchasing the TEAC External USB 2.0/1.1 Hard Drive kit.

TEAC USB hard drives are external peripheral devices designed for use with IBM PC (or compatible) or Macintosh computers that feature a USB (Universal Serial Bus) port, version 2.0 or 1.1.

TEAC USB hard drives are compatible with USB 2.0 for high speed performance. The hard drives are also backward compatible with USB 1.1.

The USB hard drives are available in capacities ranging from 40GB to 500GB. The connection and installation procedure is the same for all configurations.

TEAC USB hard drives are hot-swappable and can achieve data transfer rates of up to 480Mbps/sec when operating in USB 2.0 mode. (See “Specifications” on page 13 for details.)

Minimum System Requirements

- An available USB port (USB version 1.1 or 2.0)

To achieve high speed USB 2.0 performance, your computer must feature a built-in USB 2.0 port. Otherwise, you must install a third-party USB 2.0 PCI controller card (not included in this kit) in your computer.

If you plan to connect the USB hard drive to a USB 2.0 hub, use only a self-powered USB 2.0 hub.

- CD-ROM drive (to install driver software for Windows 98SE only) or Internet access (to download driver software)

PC Compatible

- IBM PC-compatible Pentium II 300MHz computer
- Windows 98SE/Me/2000/XP (Windows 95 and NT 4.0 are not supported)
- 64MB of RAM

Macintosh

- Apple Macintosh G3 (or higher processor) computer
- Mac OS X v10.0 or later (earlier versions not supported)
- 32MB RAM

USB Hard Drive Package Contents

The TEAC USB Hard Drive kit includes the following items (Figure 1).

- TEAC External USB 2.0/1.1 Hard Drive
- CD-ROM containing driver software (required for Windows 98SE only)
- USB 2.0/1.1 interface cable
- 120V AC power adapter and cable
- Vertical support stand
- TEAC USB External Hard Drive Installation Guide* (this booklet)

Note: A USB 2.0 adapter card is not included in this kit.

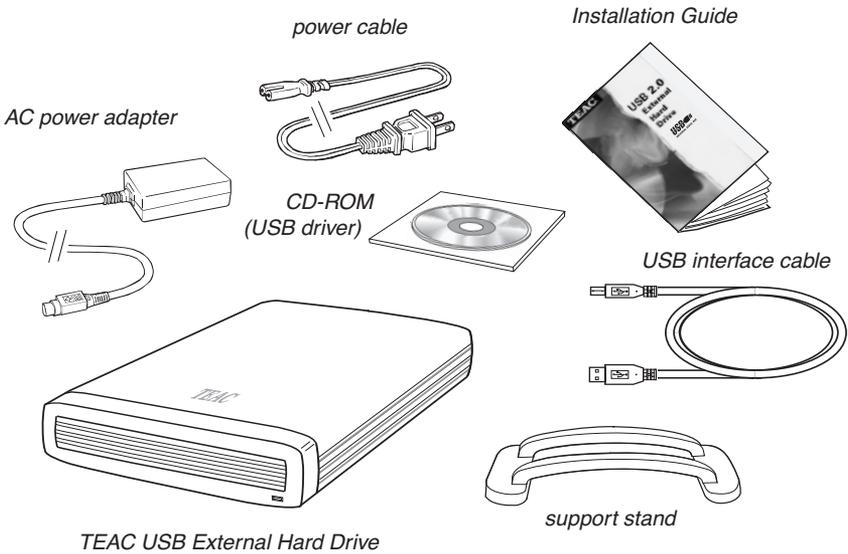


Figure 1. USB Hard Drive Kit Package Contents

Note: If any of the items above is missing from your kit upon purchase, please contact the vendor immediately for a replacement kit.

Front and Rear Panels

Figure 2 illustrates the front and rear panels of the USB hard drive.

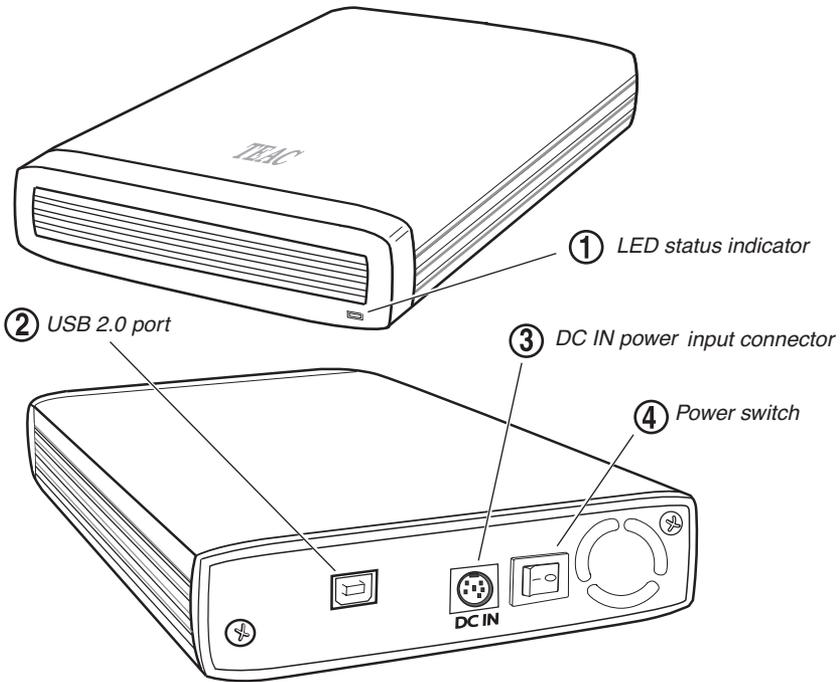


Figure 2. Front and Rear Panels

- ① **LED status indicator:** Lights up (green) at power on. Flashes (orange) during data read and write operations.
- ② **USB 2.0 port:** Connect the included USB interface cable to this USB connector. (The other end of the USB cable connects to a USB 2.0/1.1 port on your computer. See “Connecting the USB Hard Drive to an IBM PC-Compatible or Macintosh System” on page 5.)
- ③ **DC IN power connector:** Connect the included power cord to this input connector. Plug the other end into an AC power outlet. (For more information, see “Connecting the USB Hard Drive to an IBM PC-Compatible or Macintosh System” on page 5).

Note: To ensure proper operation, use only the original AC power adapter and cord with your TEAC USB hard drive.

- ④ **Power switch:** Turns the power on or off.

Connecting the USB Hard Drive

This section explains how to connect the USB hard drive to an IBM PC-compatible or Macintosh computer. It also explains how to install the driver software (Windows 98 only).

Drive Orientation

Position your USB hard drive horizontally on a stable, flat surface. The TEAC logo should face up.

Alternatively, you can use the included vertical support stand to position the USB hard drive in a vertical orientation to save desktop space (Figure 3).

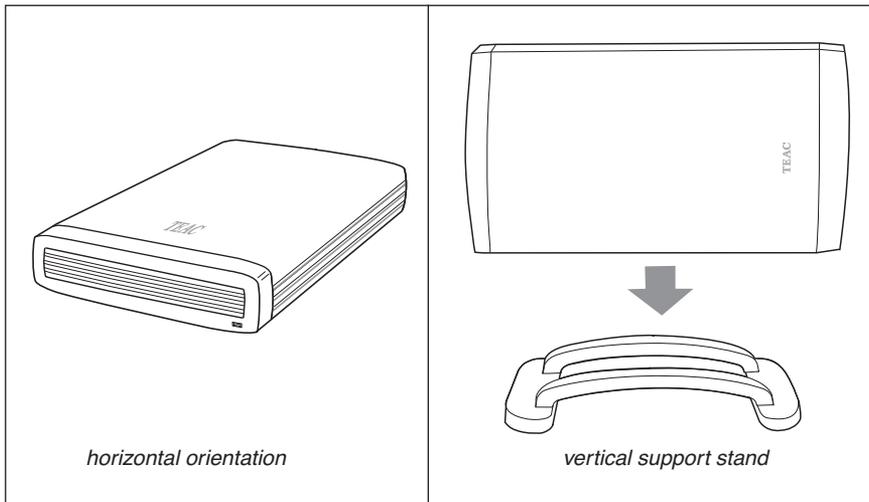


Figure 3. Hard Drive Orientation

Connecting the USB Hard Drive to an IBM PC-Compatible or Macintosh System

Note: The following steps (1-8) apply to both IBM PC-compatible and Macintosh systems.

1. Turn off the power to your USB hard drive.
2. Turn on the power to your computer.
3. Insert the power cable plug into the DC IN input connector on the rear panel of the USB hard drive (Figure 4 and Figure 5).

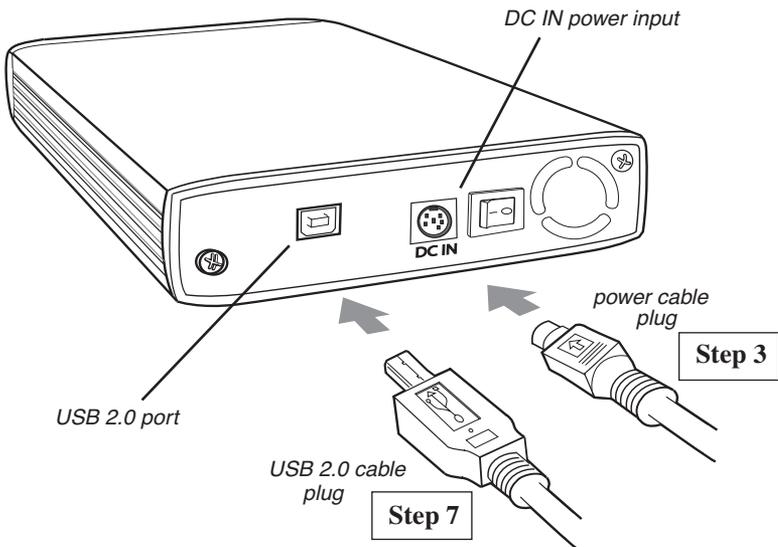


Figure 4. Connecting USB and Power Cables to External USB Hard Drive

4. Insert the power cable's female connector into the AC power adapter block (Figure 5 on page 6).
5. Plug the other end of the power cable into an AC outlet (Figure 5 on page 6).

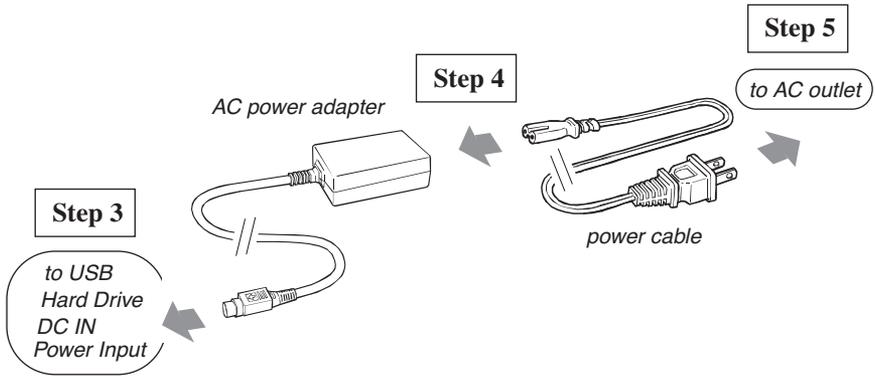


Figure 5. Connecting the Power Adapter and Cable

6. **Connect the wider plug of the included USB 2.0 cable to a USB port on your computer (Figure 6).**



Figure 6. Connecting to USB Port on Computer

7. **Connect the other end of the USB 2.0 cable to the USB 2.0 port on the rear panel of the USB hard drive (Figure 4 on page 5).**

Note: If you are connecting the cable to a USB 2.0 hub, use a USB hub that features an AC power adapter. Connect the cable directly to a USB 2.0 port on the computer or USB hub. Do not connect the cable to a USB connector on the keyboard.

8. **Turn on the power switch on the USB hard drive.**

Confirm that the Power LED on the USB hard drive lights up.

Note: If you have an IBM PC-compatible, continue with the “Installing the Driver Software” on page 7. If you have a Macintosh system, continue with “Macintosh System Installation” on page 11.

Installing the Driver Software

Installation of the TEAC-provided driver depends on the Windows version in your IBM-compatible computer. This driver is required only for Windows 98SE. For Windows Me/2000/XP, the built-in USB driver is loaded automatically.

Installing the Driver Software on Windows Computers

Windows Me/2000/XP

1. **Connect the USB hard drive to your computer and turn on the power switch on the USB hard drive (as explained in “Connecting the USB Hard Drive to an IBM PC-Compatible or Macintosh System” on page 5).**

Windows Me/2000/XP automatically detects and identifies the new device as a “USB Mass Storage Device” and installs the appropriate drivers. (There is no need to load the driver CD-ROM for Windows Me/2000/XP.)

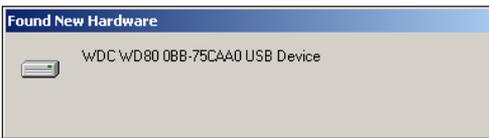


Figure 7. Found New Hardware Panel

(If Windows displays a Hardware Update Wizard, click the Recommended option, then click Next to proceed.)

2. **When the installation is complete, restart your computer.**

Windows displays an icon for the USB hard drive in the My Computer panel (Figure 8). The USB hard drive is preformatted as a single FAT32 partition and is ready for use.

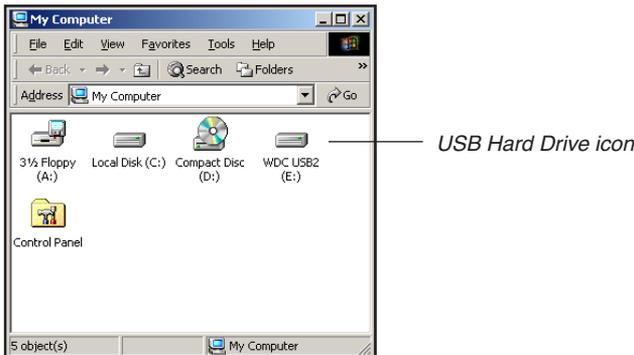


Figure 8. Windows “My Computer” Panel

Windows 98SE (Second Edition)

Note: If your computer runs Window 98SE, you must install the drivers from the included CD-ROM disc. Follow the steps below.

1. **Insert the included CD-ROM Driver Installation disc into your computer's CD-ROM drive.**
2. **Connect the USB cable to the USB port on your computer (Figure 6 on page 6).**

Windows detects the new device and displays an Add New Hardware Wizard panel (Figure 9).



Figure 9. Add New Hardware Wizard

3. **Click the Next button.**

Windows displays the following Add New Hardware Wizard panel (Figure 10).



Figure 10. Search for Best Driver

4. **Select the option Search for the best driver for your device, then click the Next button (Figure 10).**

Windows displays the following Add New Hardware Wizard panel (Figure 11).



Figure 11. Select Specify a Location

5. **Select only the Specify a location option, then click the Browse button (Figure 11).**

The Hardware Wizard displays the Browse for Folder panel (Figure 12).

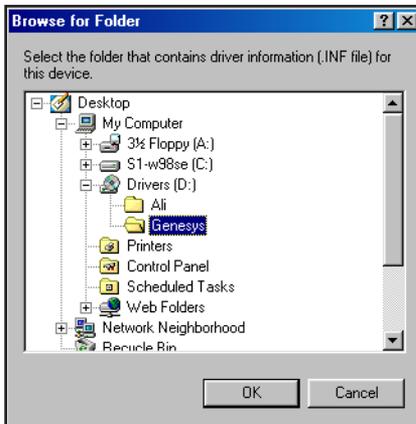


Figure 12. Select Genesys Folder

6. **In the Browse for Folder panel, select the Drivers CD-ROM disc. Click to highlight the Genesys folder, and then click the OK button (Figure 12).**

The Hardware Wizard panel is displayed.

7. Click the Next button to load the drivers from the Genesys folder.

The Hardware Wizard locates the drivers on the CD-ROM disc and displays the following panel (Figure 13).



Figure 13. Ready to Install the Driver

8. Click the Next button (Figure 13).

The Hardware Wizard installs the appropriate driver and displays the following panel (Figure 14).



Figure 14. Completing Driver Installation

9. Click the Finish button to complete the installation (Figure 14).

When the installation is complete, Windows displays an icon for the USB hard drive in the My Computer panel (Figure 8 on page 7). The USB hard drive was preformatted as a single FAT32 partition and is now ready for use.

Macintosh System Installation

Note: Mac OS X Version 10.0 is the minimum OS requirement for using the TEAC USB hard drive with a Macintosh computer. (Earlier versions of the Mac OS are not supported.)

1. **Connect the USB hard drive to your computer, then turn on the power to the USB hard drive.**

(Refer to “Connecting the USB Hard Drive to an IBM PC-Compatible or Macintosh System” on page 5).

The Macintosh automatically detects the USB hard drive and displays the icon for the USB hard drive on your Macintosh desktop (Figure 15).

It may take a couple of minutes to mount the USB hard drive on your desktop the first time you connect it to the system. Do not disconnect the USB hard drive, or cut the power to the USB hard drive, during this process.



Figure 15. USB Hard Drive Icon Mounted on Macintosh Desktop

Note: The USB hard drive is preformatted as a FAT32 partition. TEAC recommends that you re-initialize the USB hard drive using the Mac OS X Disk Utility (Figure 16 on page 11).

Re-initializing the USB Hard Drive Using the Apple Disk Utility

1. **In the Disk Utility, click the Erase tab, and highlight the unlabeled disk (Figure 16).**
2. **For the Volume Format option, select Mac OS Extended.**
3. **In the Name field, key in a name for your USB hard drive.**
4. **Click the Erase button, then follow the displayed instructions.**

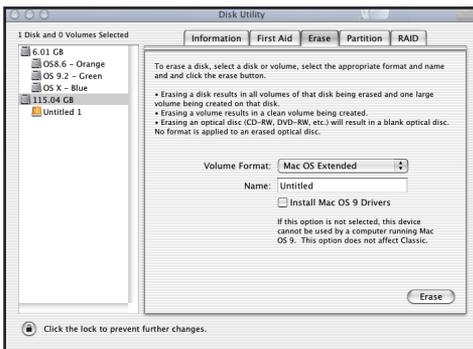


Figure 16. Disk Utility Erase Tab

Disconnecting the USB Hard Drive from a Computer

Caution: Follow the steps below that are appropriate for your computer system before you disconnect the USB hard drive from your computer. Failure to do so may result in loss of data.

Windows

1. **Double-click the Windows “Unplug or Eject Hardware” icon in your system tray.**

Windows displays the Unplug or Eject Hardware panel (Figure 17).

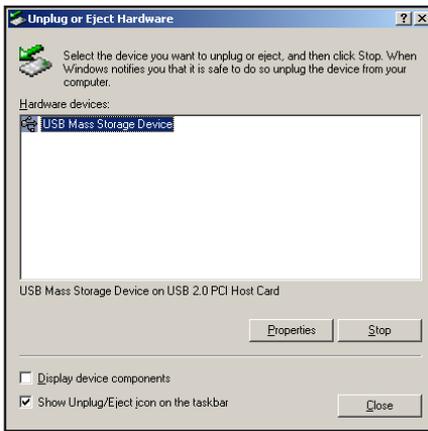


Figure 17. Unplug or Eject Hardware Panel

2. **Select USB Mass Storage Device, then click the Stop button.**

Windows displays a confirmation panel.

3. **Click the OK button to confirm your selection.**

You may now safely disconnect the USB hard drive from your computer.

Macintosh

Drag the icon for the USB hard drive (see Figure 15 on page 11) to the Trash icon on the Macintosh desktop. You may now safely disconnect the USB hard drive from your computer.

Shutting Down the USB Hard Drive

Turn off the power to the USB hard drive only *after* you disconnect the USB hard drive from your computer or have shut down your computer system. Do not turn off the power switch on the USB hard drive while the computer is operating.

Specifications

The following table lists the product specifications for TEAC USB external hard drive.

Models	TEAC USB 2.0/1.1 External Hard Drives Model numbers: HD3U-500, HD3U-400, HD3U-300, HD3U-250, HD3U-200, HD3U-160, HD3U-120, HD3U-80, HD3U-40	
Capacity	HD3U-500: 500GB, HD3U-400: 400GB, HD3U-300: 300GB, HD3U-250: 250GB, HD3U-200: 200GB, HD3U-160: 160GB, HD3U-120: 120GB, HD3U-80: 80GB, HD3U-40: 40GB	
Interface	USB 2.0/USB 1.1	
Data Transfer Rate	<u>USB 2.0</u> 480Mb/sec (high speed) 12Mb/sec (full speed) 1.5Mb/sec (low speed)	<u>USB 1.1</u> n/a 12Mb/sec (full speed) 1.5Mb/sec (low speed)
Access Time	9.5 msec	
Buffer	2MB to 16MB (model dependent)	
Spindle Speed	7200RPM	
MTBF	100,000 POH	
Dimensions	5 $\frac{3}{8}$ inches (W) x 1 $\frac{3}{4}$ inches (H) x 8 $\frac{3}{4}$ inches (D)	
Weight	2.0 lbs	
Power Requirement	120VAC (AC adapter included)	
Installation	Horizontal or vertical in support stand, 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)	
Safety Standards	UL, FCC	
Warranty	One year	

Technical Support

For technical support, please contact the TEAC Service and Support Center:

North America

TEAC America, Inc. (USA)

Technical Support

Telephone: (323) 727-4860 • Fax: (323) 869-8751

Monday - Friday 8:00 a.m. - 5:00 pm PST

<http://www.teac.com/DSPD/techsupport-America.htm>

E-mail: dspdtsg@teac.com

Limited Warranty

This product is warranted by TEAC America, Inc. against defects in materials and workmanship.

LENGTH OF WARRANTY – This warranty will be effective for both labor and parts, and this warranty will be effective for one (1) year from the date of original purchase.

WHO MAY ENFORCE THE WARRANTY - This warranty is valid only in the United States, and enforceable only by the original purchaser. This warranty is not valid outside the United States.

WHAT IS NOT COVERED BY THIS WARRANTY

1. Damage to or deterioration of the external cabinet.
2. Damage resulting from accident, misuse, abuse, or neglect.
3. Damage resulting from failure to follow instructions contained in your user's manual.
4. Damage occurring during shipment of the product (claims must be presented to the carrier).
5. Damage resulting from repair or attempted repair by anyone other than TEAC Service Department.
6. Damage resulting from modification or attempted modification of product not authorized by TEAC.
7. Damage resulting from causes other than product defects, including lack of technical skill, competence, or experience of the user.
8. Damage to any unit that has been altered or on which the serial number has been defaced, modified or removed.
9. Damage or malfunction resulting from installation and cabling.
10. For wireless configurations, TEAC cannot be responsible for interference or operation in locations that restrict range.
11. Damage to or from interconnected network equipment.
12. Data integrity or loss of data.

HOW YOU CAN GET WARRANTY SERVICE – Please contact the TEAC service department for a Return Authorization number before shipping unit(s) to TEAC. Information required for R/A request should include your name and/or company name, telephone number, TEAC model, version and serial number(s). Return Authorization (R/A) number must be clearly marked on the outside of each carton shipped to TEAC. Return merchandise must be packed in original shipping containers or otherwise packed adequately to prevent damage in shipment. You are responsible for all risk of damage to or loss of merchandise in transit to TEAC. TEAC reserves the right to reject any merchandise that is not packaged and/or marked as instructed herein. You must pay any shipping charges if it is necessary to ship the product for service. However, if the necessary repairs are covered by the warranty, we will pay the return shipping charges to any destination within the United States. Whenever warranty service is required, you must present a copy of the original dated sales receipt as proof of warranty coverage. Please contact us at the addresses listed at the end of this warranty statement.

WHAT TEAC WILL PAY FOR – We will pay all labor and material expenses for items covered by the warranty. Payment of shipping charges is discussed in the next section of this warranty.

LIMITATION OF IMPLIED WARRANTIES

ANY IMPLIED WARRANTIES, INCLUDING WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, ARE LIMITED IN DURATION TO THE LENGTH OF THIS WARRANTY.

EXCLUSION OF DAMAGES

TEAC'S LIABILITY FOR ANY DEFECTIVE PRODUCT IS LIMITED TO REPAIR OR REPLACEMENT OF THE PRODUCT, AT TEAC'S OPTION. TEAC SHALL NOT BE LIABLE FOR DAMAGES BASED UPON INCONVENIENCE, LOSS OF USE OF THE PRODUCT, LOSS OF TIME, INTERRUPTED OPERATION OR COMMERCIAL LOSS, LOST PROFITS OR ANY OTHER DAMAGES, WHETHER INCIDENTAL, CONSEQUENTIAL, PUNITIVE OR OTHERWISE. SOME STATES DO NOT ALLOW LIMITATIONS ON HOW LONG AN IMPLIED WARRANTY LASTS AND/OR DO NOT ALLOW THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE ABOVE LIMITATIONS AND EXCLUSIONS MAY NOT APPLY TO YOU. THIS WARRANTY GIVES YOU SPECIFIC RIGHTS, AND MAY VARY FROM SOME OF THE RIGHTS PROVIDED BY LAW. THESE RIGHTS MAY VARY FROM STATE TO STATE.

To contact the TEAC Service Center in the United States:

Telephone: 1-323-727-7694 or 1-323-727-7616
Fax: 1-323-727-7606
E-mail: dssvce@teac.com

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