

OnStream SC30/SC50

Digital Tape Drive



Installation Guide

Hardware and Software Installation Guide

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Introduction

Congratulations on your selection of a new OnStream[™] SCSI Digital Tape Drive. At 30GB or 50 GB capacities, you can back up the hard disks of most PC servers or workstations on a single cartridge.

We have partnered with leading backup software companies in order to provide you with virtually effortless management and protection of your critical information. Whether you're a small /medium sized business, managing a departmental server, or a high-performance desktop user, we have a complete, dependable data protection solution with the performance, reliability, and pricing necessary to meet the most demanding storage needs.

For your Windows NTTM server needs, the OnStream Digital Tape Drive is compatible with ARCserve[®] *IT*TM from Computer Associates and Backup ExecTM from Seagate Software. Included with your Digital Tape Drive is the innovative OnStream EchoTM software for workstations which enables gigabytes of extra "drag-and-drop" storage, completely automatic daily backup, and effortless organization of files on removable media.

OnStream's Digital Tape Drives deliver a unique level of reliability for your mission-critical installations through ADRTM technology. This technological breakthrough delivers exceptional transfer rates and data reliability while maximizing media life and minimizing audible noise. Your OnStream Digital Tape Drive gives you the unique blend of capacity, performance, reliability, value, and convenience needed to handle your ever-growing storage requirements.

✓ The SC50 can read and write both 30 GB and 50 GB ADR cartridges. The SC30 uses 30 GB ADR cartridges only.

Scope of this Installation Guide

This *Installation Guide* takes you through the process of installing your OnStream SC30/SC50 Digital Tape Drive and Echo software in detail. If you have installed a SCSI hard drive or CD drive in your computer before, much of the material presented in this guide may be familiar to you. Important information that you should pay attention to, regardless of your level of experience, is indicated by this symbol:





Note: If you have not previously installed a SCSI hard drive or CD drive in your computer, you should carefully read and follow all of the instructions presented in this guide to make sure that you install your OnStream SC30/SC50 Digital Tape Drive properly.

By following the instructions presented in this guide, you will learn how to:

Locate all of the items needed to install your OnStream SC30/SC50 Digital Tape
Drive and software
Set the SCSI ID jumper on your OnStream SC30/SC50 Digital Tape Drive
Install your OnStream SC30/SC50 Digital Tape Drive in your server or
workstation
Install your server backup software or OnStream Echo workstation software

Online User Guides

A complete software user guide is supplied in Adobe® AcrobatTM (PDF) format on the Installation CD-ROM. If you need more information while installing or using the drive or software, refer to the appropriate user guide.

To access the user guides on the CD-ROM:

- 1. **Insert the OnStream Installation CD-ROM** into your computer's CD drive.
- 2. When the OnStream CD Setup program starts, click Read Online User Guides.



Note: If the OnStream CD Setup program does not start automatically, click the **Start button** on your Windows Taskbar, click **Run**, type **d:\setup.exe**, replacing **d:** with the letter assigned to your CD-ROM drive, and click **OK**.

- 3. **Select the document** you want to view or print.
- ✓ Documents on CD-ROM require AcrobatTM Reader to view and print. If you do not have Acrobat Reader installed on you computer, the OnStream CD Setup program automatically installs it for you.

About the Getting Started Guide

The printed *Getting Started Guide* takes you through the process of installing your OnStream SC30/SC50 Digital Tape Drive and Echo software and also includes basic software operating instructions. In most cases, this guide provides all the information necessary to install and use your OnStream Digital Tape Drive. The *Getting Started Guide* does not, however, provide detailed explanations of the installation process. Use this *Installation Guide* instead when you need a complete, detailed explanation of any installation issue.

About the OnStream Echo™ Software User Guide

The OnStream EchoTM software *User Guide* is included as a separate Adobe Acrobat file on the OnStream SC30/SC50 Installation CD-ROM.

Items Needed for Installation

Make sure you have all the items shown in Figure 1.



Figure 1: Contents of OnStream SC30/SC50 package



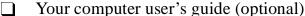
Note: OnStream has taken every precaution to ensure that your OnStream SC30/SC50 Digital Tape Drive is packaged to prevent any damage during shipment and handling. If you do find that the contents are damaged in any way, contact your supplier immediately.

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Please keep the box and packing material from your OnStream SC30/SC50 drive. Should you need to return the drive for service or repair, use the original packaging. OnStream cannot accept responsibility for damage that occurs during shipment. The original packaging is the safest way to make sure that the drive is delivered undamaged.

Other Necessary Items

Medium phillips screwdriver



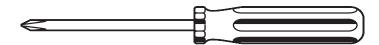


Figure 2: Tools needed for installation

System Requirements

Before installing your OnStream SC30/SC50 Digital Tape Drive and Echo software, make sure your computer meets these minimum requirements:

- ✓ 486 or Pentium[®] processor*
- ✓ Microsoft[®] Windows 95, Windows 98, or Windows NTTM
- ✓ A CD-ROM, CD-R, CD-RW, or DVD drive
- ✓ At least 32 MB of RAM (Random Access Memory)
- \checkmark An empty $5^{1/4}$ -inch drive bay
- ✓ SCSI controller card**
- ✓ 50 MB of free hard drive space for OnStream Echo software (Other supplier's software may have different space requirements.)
 - *To play high bit-rate streaming video, a 200MHz or faster Pentium[®] processor is recommended.
 - **If your computer does not have a SCSI controller card, you must install one before continuing. Contact your computer supplier for information.

Precautions

Your OnStream SC30/SC50 Digital Tape Drive is a precision electromechanical device. Like all computer equipment, it requires reasonable care in its installation and use.

Read this <i>Installation Guide</i> carefully and keep it for future reference.
Before you install your OnStream SC30/SC50 Digital Tape Drive, make sure it
is not exposed to excessive heat, strong electromagnetic fields generated by
devices such as microwave ovens, or placed near high current electrical devices
Keep the drive in its anti-static bag to avoid dust contamination and static
damage before it is installed.

Do not spill any liquids on your OnStream SC30/SC50 Digital Tape Drive.
Attempting to remove the cabinet from your OnStream SC30/SC50 Digital Tape
Drive voids your warranty.
Do not drop, jolt, or expose your OnStream SC30/SC50 Digital Tape Drive to
excessive force.
Installing your OnStream SC30/SC50 Digital Tape Drive requires that you
remove the cover from your computer when indicated. Before removing the
cover from your computer, make absolutely certain that the computer and all
peripherals (e.g. a printer) are all turned off and unplugged at the wall outlet.



Caution! Unplug your computer and all attached devices when instructed.

Static electricity can destroy sensitive electronic devices. Your OnStream SC30/SC50 Digital Tape Drive is sealed, and upon being correctly installed in your computer, is grounded to prevent damage from static electricity. Do not touch any of the components inside the drive. Handle your OnStream SC30/SC50 Digital Tape Drive using the anti-static bag in which is it packed as much as possible.



Attention! Observe precautions for handling static-sensitive devices.

Your OnStream SC30/SC50 Digital Tape Drive

This section describes the front and rear panel layouts of your OnStream SC30/SC50 Digital Tape Drive.

Front panel

The front panel of your OnStream SC30/SC50 Digital Tape Drive is shown in Figure 3.



Figure 3: OnStream SC30/SC50 front panel

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- 1. ADR cartridge slot
- 2. Cartridge eject button
- 3. Drive activity indicator:
- ✓ Solid green: Read/write in progress
- ✓ Slow flash: Reposition in progress
- ✓ Fast flash: Error condition. May be self-correcting.

Rear panel

The rear panel of your OnStream SC30/SC50 Digital Tape Drive is shown in Figure 4.

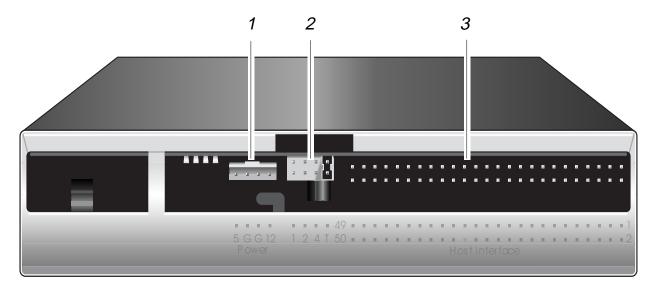


Figure 4: OnStream SC30/SC50 rear panel

- 1. **Power connector**: Connects to a power cable inside your computer.
- 2. **SCSI ID pins:** There are four sets of jumpers that select the SCSI ID and termination for your OnStream SC30/SC50 Digital Tape Drive.
- 3. **SCSI Connector**: This is the connector through which your computer communicates with and transfers data to and from your OnStream SC30/SC50 Digital Tape Drive. Connects to a SCSI cable inside your computer.

Installing your OnStream SC30/SC50 Digital Tape Drive

Your new OnStream SC30/SC50 Digital Tape Drive is not difficult to install. Just follow the instructions in this section.

Setting the SCSI ID Jumper

Each device on a SCSI cable, commonly called a SCSI Chain, must have its own SCSI ID number. The SCSI controller typically uses SCSI ID 7, while the other SCSI devices use any of the remaining IDs. Your OnStream Digital Tape Drive can use SCSI IDs 0 through 7. The last device on the SCSI chain also requires termination.

Your OnStream Digital Tape Drive is set at the factory to SCSI ID 4 with the termination jumper on. This SCSI ID is commonly used for tape devices and should work in most installations. If the factory settings are appropriate for your installation, skip this section.

If another device on your computer's SCSI Chain is already using ID 4, you must select an unused SCSI ID for your OnStream Digital Tape Drive. If your OnStream Digital Tape Drive is not the last device on the SCSI chain, remove the termination jumper.

To select a different SCSI ID, follow these steps:

- 1. Choose a SCSI ID number not used by any other device on your computer's SCSI Chain for your OnStream Digital Tape Drive.
- 2. **Locate** the SCSI ID jumper pins on the back panel of your OnStream Digital Tape Drive as shown in Figure 5.

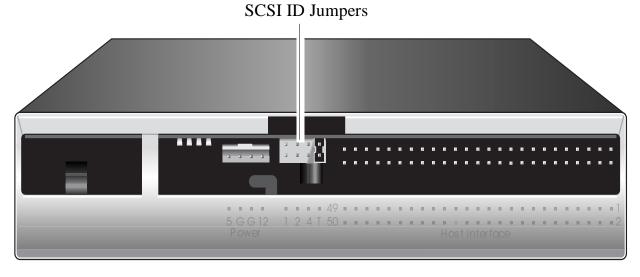


Figure 5: SCSI ID jumper pins on the back panel of your OnStream Digital Tape Drive

- 3. Push the jumper(s) onto the necessary pins to set your OnStream Digital Tape Drive to use the selected SCSI ID.
- ✓ The table below shows how to set the jumpers to select the necessary SCSI ID. The examples are all shown without the termination jumper.

SCSI ID	Example	Pin numbers						
SCSI ID		1	2	4	T			
0	* * * *	Ι	_	_	*			
1	8:::	X	_	_	*			
2	8::	_	X	_	*			
3	88 ::	X	X	_	*			
4**	1.781	-	_	X	*			
5	8 8	X	_	X	*			
6	88:	_	X	X	*			
7***	222:	X	X	X	*			

Notes:

X = jumper,

- = no jumper

Installing the Hardware

Now that you have set the SCSI ID, you can install your OnStream Digital Tape Drive. In this section, you will:

Install your OnStream Digital Tape Drive drive in an empty $5\frac{1}{4}$ -inch drive bay
Connect the SCSI and power cables

☐ Secure your OnStream Digital Tape Drive in its bay

To install your OnStream SC30/SC50 Digital Tape Drive, follow these steps:

1. **Shut down** Windows.

^{*} Remove the jumper from the Termination pins if your OnStream Digital Tape Drive is *not* the last or only device on the SCSI chain.

^{**} SCSI ID 4 is the factory default setting.

^{***} SCSI ID 7 is usually reserved for the SCSI controller card.

- 2. **Turn OFF** your computer.
- 3. **UNPLUG** your computer power cable from the wall outlet. **UNPLUG** the power cable for all attached devices, such as a printer, from the wall outlet as well.

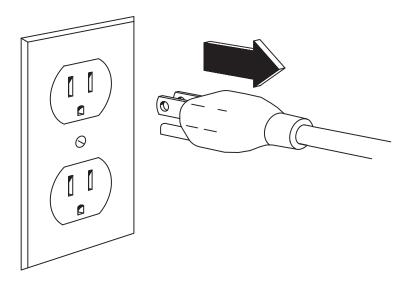


Figure 6: Unplug your computer and all attached devices!



Caution! Unplug your computer and all attached devices before performing the next step!

4. **Remove your computer's cover** as described in your computer user's manual.

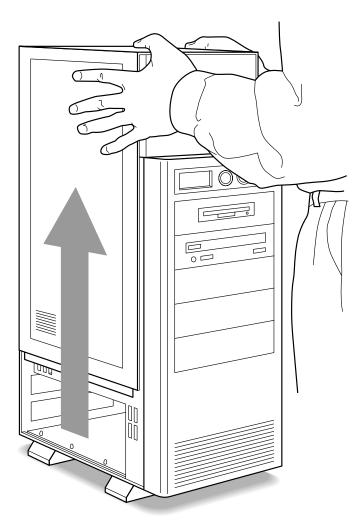


Figure 7: Remove your computer's cover

- ✓ The wide variety of computer cabinets makes it impossible to describe in detail the process of removing your specific computer cover. Refer to your computer user's guide for detailed instructions.
- 5. **Remove the cover** from an empty $5^{1/4}$ -inch drive bay as described in your computer user's manual.

6. To help you with the vertical alignment of your OnStream Digital Tape Drive, two spacer rails are included. If desired, attach the spacer rails by sliding them onto the bottom left and right edges as shown in Figure 8.

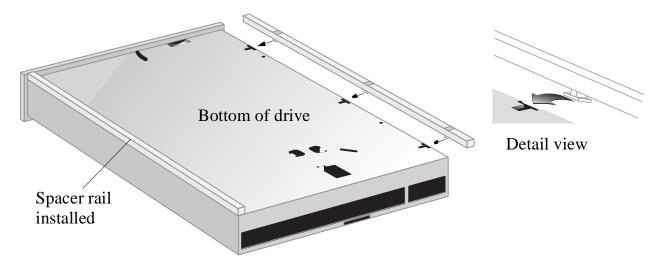


Figure 8: Slide spacer rails onto bottom of drive (optional)

7. **Slide** your OnStream SC30/SC50 Digital Tape Drive into the empty drive bay as shown in Figure 9. You can mount your OnStream SC30/SC50 Digital Tape Drive horizontally or vertically as necessary.

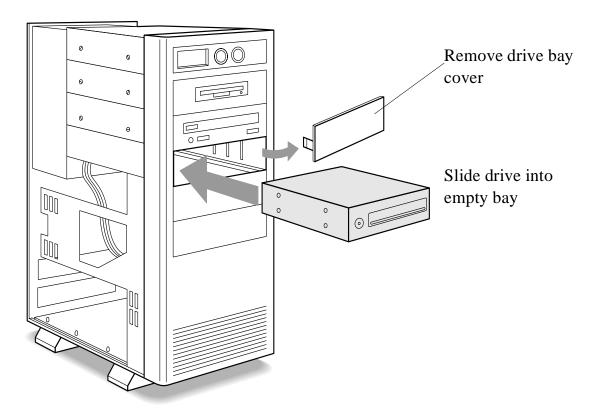


Figure 9: Slide your OnStream SC30/SC50 Digital Tape Drive into an empty drive bay.

Connecting the Cables

Connect the power and SCSI cables to your OnStream Digital Tape Drive before securing it in the drive bay. You may need to slide the drive to the front or back of the drive bay to connect the cables.

Connecting the Power Cable

1. **Locate a spare power connector** inside your computer. If you are having difficulty locating a power connector, find your computer's power supply and follow the bundle of wires that come out of it. Your OnStream Digital Tape Drive requires a small power connector like the one shown in Figure 10.

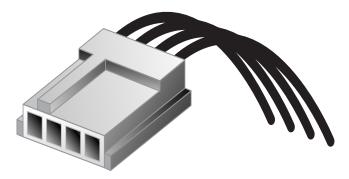


Figure 10: Power connector required for your OnStream Digital Tape Drive

- ✓ Power connectors have 4-pins, are usually white plastic, and have two black wires, one red wire, and one yellow wire.
- 2. **Connect** the power cable to the power connector on the back of your OnStream Digital Tape Drive as shown in Figure 12.

Using the Power Splitter Cable

If there is no free power connector in your computer or if the free power connector in your computer does not fit the connector on the back of your OnStream Digital Tape Drive, use the supplied power splitter cable.

- 1. **Locate** a spare power connector in your computer or disconnect the power connector from another device, such as a CD-ROM drive.
- 2. **Connect the supplied power splitter cable** to the power connector.

3. **Connect the larger connector** on the splitter cable to the device from which you just removed the computer power cable (if applicable).

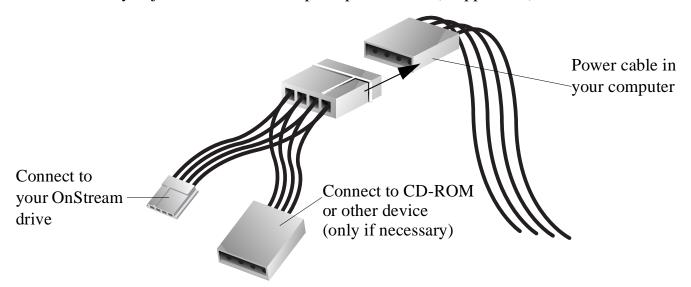


Figure 11: Connecting the power splitter cable

4. **Connect the smaller connector** on the splitter cable to the power connector on the back of your OnStream Digital Tape Drive as shown in Figure 12.

Connecting the SCSI Cable

The SCSI cable is a ribbon cable (wide and flat), usually gray, with a colored stripe on one edge. The easiest way to locate a SCSI cable in your computer is to look for the cable attached to your SCSI controller.

✓ Your computer user's guide should show you exactly where the SCSI controller is located in your computer. If you are installing a new SCSI controller for your OnStream Digital Tape Drive, do so now.

1. **Locate** the SCSI cable included with your OnStream Digital Tape Drive.

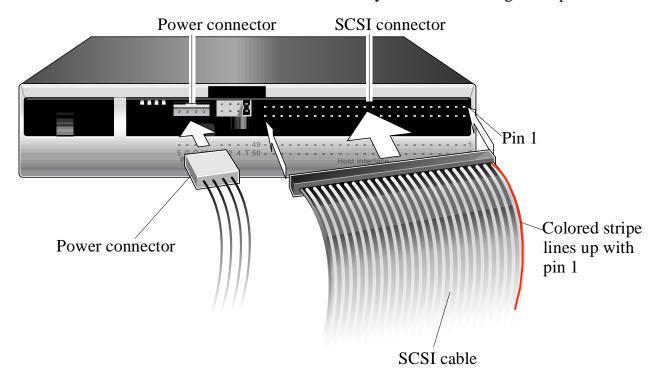


Figure 12: Attach power and SCSI cables to drive

- 2. **Connect** one end of the SCSI cable to your SCSI controller, aligning the color stripe on the cable with Pin 1 on the controller connector.
- 3. **Connect the SCSI cable's other connector** to the SCSI connector on the back of your OnStream Digital Tape Drive as shown in Figure 12.
- ✓ Make sure that the SCSI cable's color stripe is aligned with Pin 1 on your OnStream Digital Tape Drive as shown in Figure 12.

Securing your OnStream SC30/SC50 Digital Tape Drive in your Computer

1. **Secure** your OnStream SC30/SC50 Digital Tape Drive to the drive bay with the **four screws supplied** as shown in Figure 13. Use two screws on either side of the drive.

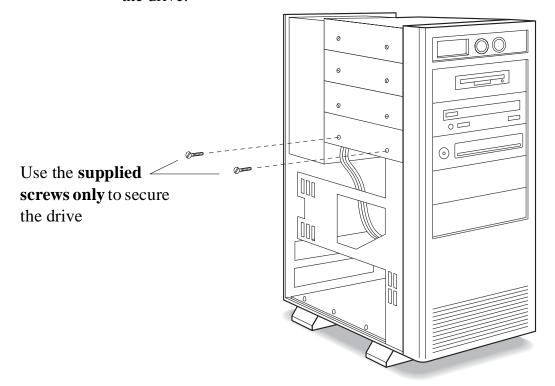


Figure 13: Securing your OnStream Digital Tape Drive in its drive bay



Caution! Use only the screws supplied with your OnStream SC30/SC50 Digital Tape Drive. Other screws may be too long and could damage your new drive. Do not overtighten the screws.

- 2. **Replace** your computer's cover.
- 3. **Plug in** your computer and any other devices you unplugged earlier.
- 4. **Fill out and mail** the Product Registration Card. Doing so *extends your limited warranty for an extra year* and ensures that you receive product update announcements and other useful information.

Installing the Software

Your OnStream SC30/SC50 Digital Tape Drive is almost ready to use. Just follow the server or workstation software installation instructions below.

Installing your Server Backup Software

If you installed your OnStream SC30/SC50 Digital Tape Drive on a server, install your server backup software and skip to the next section. Refer to your server backup software user documentation for complete installation instructions.

Installing OnStream Echo for your Workstation

If you installed your OnStream Digital Tape Drive on a workstation, all you have to do is install the OnStream Echo software.

To install the OnStream Echo software, follow these steps:

- 1. **Turn ON your computer** and allow it to boot.
- 2. **When your computer starts,** Windows may detect that new hardware, your OnStream SC30/SC50 Digital Tape Drive, has been installed. If this happens, you will see a dialog box like the one shown below. Press **Cancel** and continue to the next step.



Figure 14: Windows New Hardware Found dialog box: Press Cancel

- ✓ OnStream Echo installs the driver for your OnStream SC30/SC50 Digital Tape Drive later.
- 3. **Insert** the OnStream Installation CD-ROM into your CD drive. The OnStream CD Setup program starts automatically.



Note: If the OnStream CD Setup program does not start automatically, click the **Start button** on your Windows Taskbar, click **Run**, type **d:\setup.exe**, replacing **d:** with the letter assigned to your CD-ROM drive, and click **OK**.

- 4. When the OnStream CD Setup program prompts you to select your drive type, click the SC30 or SC50 radio button.
- 5. **Press** the **Install OnStream Echo** button.

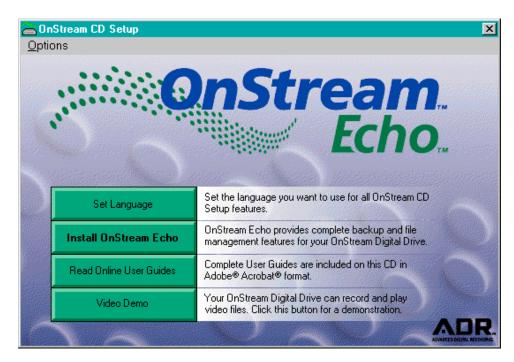


Figure 15: OnStream CD Setup main window

- 6. **Follow** all on-screen instructions.
- 7. **When installation is complete,** restart your computer.



Note: To get started using OnStream Echo right away, refer to the *Getting Started Guide*. For complete operating instructions, refer to the *OnStream Echo User Guide* on the Installation CD-ROM.

Using OnStream ADR Cartridges

Your OnStream SC30/SC50 Digital Tape Drive uses Advanced Digital Recording (ADR) technology to ensure the security of your data and to achieve high cartridge capacities. Only ADR cartridges can be used in your OnStream SC30/SC50 Digital Tape Drive.

In this section, you will:

Remove the plastic shipping plate from your OnStream SC30/SC50 Digital Tape Drive.
Insert an OnStream ADR cartridge into your OnStream SC30/SC50 Digital Tape Drive.
Remove an OnStream ADR cartridge from your OnStream SC30/SC50 Digital Tape Drive.



Note: Do not touch the front edge of the OnStream ADR cartridge. Fingerprints can damage the tape and drive wheel. Refer to Figure 16 for a picture of an OnStream ADR cartridge.

Inserting an OnStream ADR Cartridge into the Drive

- 1. **Press the eject button** on the left side of your OnStream SC30/SC50 Digital Tape Drive's front panel as shown in Figure 16.
- ✓ The cartridge door opens.



Note: Your OnStream SC30/SC50 Digital Tape Drive is shipped with a plastic plate that prevents the read/write heads from being damaged during shipment and installation. You must remove this plate before inserting a cartridge into the drive.

2. **Locate** the plastic shipping plate on the cartridge transport tray and remove it from the drive.

3. **Slide** the OnStream ADR cartridge gently into the cartridge bay with the arrow facing the drive and the cartridge's metal plate down.

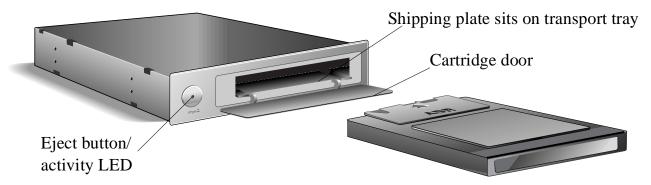


Figure 16: Inserting an OnStream ADR cartridge

✓ When you insert a cartridge, the drive's cartridge transport mechanism grips and loads the cartridge, much like a VCR does. The drive then takes a few seconds to wind the tape to the main directory.



Caution! ADR 50 GB cartridges are longer than ADR 30 GB cartridges, preventing the cartridge door from closing completely. Do not attempt to pull an ADR 50 GB cartridge out of the drive!

Removing a Cartridge from the Drive

- 1. **Press the eject button** on the left side of your OnStream SC30/SC50 Digital Tape Drive's front panel as shown in Figure 16. The cartridge door opens and ejects the cartridge.
- ✓ It may take a few seconds to eject an OnStream ADR cartridge. Your OnStream Digital Drive must finish the current file copy operation and update the cartridge directory before ejecting the cartridge.
- 2. **Remove** the cartridge immediately.
- ✓ After a few seconds the cartridge door closes automatically. **Do not press on the door while it is open.**

How to use OnStream ADR Cartridges

Tape Rotation Makes Sense

When defining the best tape rotation strategy for your needs, the key thing to consider is how often your data changes. The following are some explanations of typical tape rotation strategies.

6-Tape Rotation

For data that changes more frequently, you may want to use a 6-tape rotation strategy. The simplest way to manage a 6-tape strategy is to use five tapes Monday through Friday and label the sixth tape "Off-Site". Then, every Monday make a total backup onto the Monday tape. The rest of the week you make incremental backups to the corresponding tape. At the end of the week, make

another total backup using the Off-Site tape. And of course, remember to store the Off-Site tape in a secure location when you are not using it for backup.

10-Tape Rotation

The 10-tape rotation strategy works best if you need to keep track of weeks or months of data. It is basically an extension of the 6-tape rotation strategy except that you label the 6th tape "Off-Site Week 1", the 7th tape "Off-Site Week 2", the 8th tape "Off-Site Week 3" and the 9th tape "Off-Site Week 4." Label the 10th tape "Off-Site Monthly" and you are set. By using a different off-site tape each week, and yet another at the end of the month, you can build a complete history of data, just in case you need it.

Adding additional monthly tapes, one for each quarter of the year or for each month, further enhances the data security of your tape rotation schedule.

Archiving — Beyond Backup

the read/write heads and drive wheel.

In addition to backup, you will also want to consider implementing a solid archiving strategy. That way you can clean up your hard drives and still have access to all of your old data, just in case you need it. And a good archiving strategy helps you get more out of your hard drives and can even delay that costly upgrade.

Taking Care of your OnStream Digital Tape Drive & OnStream ADR Cartridges

Your OnStream SC30/SC50 Digital Tape Drive and ADR cartridges are very durable, but should not be subjected to harsh treatment. To ensure long drive and cartridge life, please observe these recommendations:

Use *only* OnStream ADR cartridges in your OnStream SC30/SC50 Digital Tape

Drive.
 Do not touch the tape or drive wheel, both of which are located on the front edge of the cartridge. Fingerprints can damage the tape.
 Clean your OnStream SC30/SC50 Digital Tape Drive once a month. Use only OnStream ADR cleaning cartridges in your OnStream SC30/SC50 Digital Tape

Drive. Other types of cleaning cartridges may fit in the drive, but can damage

Troubleshooting

This table provides solutions to some problems that may occur.

Symptom	Possible Cause	Solution
The drive does not respond.	 Power or SCSI cable is not connected properly. Power or SCSI cable is damaged. 	 Make sure the power and SCSI cables are firmly attached to the drive connectors. Check the power and SCSI cables for damage.
The drive does not respond or behaves erratically.	1. The drive has a SCSI ID conflict with another device.	1. Make sure that the SCSI ID jumper is set to an ID not used by any other device on the SCSI Chain.
Cannot access the drive.	1. The drive has a SCSI ID conflict with another device.	1. Make sure that the SCSI ID jumper is set to an ID not used by any other device on the SCSI Chain.

✓ If your backup operations are taking longer than expected and your computer is generally sluggish while a backup is in progress, you may be running an antivirus program that has real-time scanning enabled. This could be the cause of your computer's sluggish performance. To improve performance, simply disable real-time scanning in your anti-virus application. For information on how to do this, please consult your anti-virus software manual.

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Customer Support

OnStream is committed to providing the best possible customer support. Whether you need help with product selection or you simply need an answer to a question on installation or operation of your OnStream drive, our service and technical support professionals are ready to help.

North America Product & Sales Information

5 days a week, 12 hours a day 800-759-4621

Technical Support

7 days a week, 24 hours a day 877-234-3246North American Headquarters

OnStream, Inc. 1951 South Fordham Street Longmont, CO 80503 USA

Tel: (303) 772-9000 Fax: (303) 772-9001

www.onstream.com/contact

Europe

European Headquarters OnStream B.V. Lodewijkstraat 1 5652 AC Eindhoven The Netherlands Tel: +31.40.2724358

Fax: +31.40.2723101

Technical Specifications

Tape

Capacity Compressed*/Native SC30: 30/15GB

SC50: 50/25GB (ADR 50GB cartridge)

Media compatibility 30GB and 50GB (SC50 only) ADR cartridges avail-

able from OnStream, Inc., and Verbatim® Corp.

Format ADR Tape width 8mm

Number of tracks 192 Aerial density (MB per inch²) 43.6

Media type CoFe₂O₃ tape, ADR servo signal

Performance

Data transfer rate (native) 2MB/sec Seek speed 60 ips

Read/write speed 11-44 ips, continuously variable

Reliability

Random bit error rate 1:10¹⁹

Error correction Reed-Solomon double layer C1 (72,66,7), C2 (76,

64, 13)

MTBF 200,000 hours

Approvals CE, FCC Class B, UL, CSA

Power Requirements

Voltage 5VDC±5% 12VDC±10%

Power consumption 12W nominal

Environmental

Operating temperature 50° F -104° F/10° C - 40° C Humidity, operational 30% to 80% noncondensing

Shock 5.0G peak for 11ms, half sine without data loss

Vibration 0.5G, 5 to 500Hz in all directions

Physical

Weight 1.25 lbs/0.57kg

Front panel controls Eject button, drive active LED: green

Interface Fast narrow SCSI-2

Connections DC power in, 50-pin header SCSI

Jumper settings Dimensions Tape insertion Warranty SCSI ID, Termination
1.6 x 5.8 x 7.0 in/42 x 147 x 178 mm
Automatic motorized tape loader
2 years (additional year granted with product regis-

tration)

Regulatory Notices

FCC Notice

This device complies with the limits for a Class B digital device, pursuant to Part 15 of the FCC 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.

For Canada

This digital apparatus does not exceed the Class B limits for radio noise emissions from digital apparatus set out in the radio interference-causing equipment standard entitled *Digital Apparatus*, ICES-003 of Industry Canada.

Cet appareil numérique respecte les limites de bruits radioélectriques applicables aux appariels numériques de Classe B préscrites dans la norme sur le matériel brouiller: *Appariels Numériques*, NMB-003 édictée par l'Industrie Canada.

For Europe

This product complies with the EMC directives 89/336/EEG, EN55022, EN50081-1 and EN50082-1 (CE Marking).



Approvals

Γh	İS	proc	luct	comp	lies	with	n the	fol	lowin	g sa	fety	direct	ives:

□ Europe: IEC950
□ USA: UL1950
□ Canada: c-UL

CALus UL Listed

^{*} Compressed capacities are based on a 2:1 compression ratio using backup software. The capacity, backup speed, and transfer rates will vary with file and system configuration.

Safety Notices

To prevent electric shock during installation, you must ensure that your OnStream SC30/SC50 Digital Tape Drive is not exposed to moisture or excessive humidity. It is imperative that you follow all safety instructions given below.



Electric Shock Hazard!

- 1. Personnel should be warned that potentially lethal voltages exist on and around computer power supplies. All measures should be taken to prevent inadvertent exposure to these voltages. Only remove the computer's cover after all power is removed from the computer and all its peripherals and the main power plugs are removed from the wall outlet or other supply. Do not reconnect the power until the computer is fully re-assembled.
- 2. Read all instructions before using your OnStream SC30/SC50 Digital Tape Drive.
- 3. Adhere to all safety warnings on printed your OnStream SC30/SC50 Digital Tape Drive and in this manual.
- 4. Grounding and polarization This device is designed only to operate from a D.C. power supply in the computer, which is generated from alternating current from a line outlet. Ensure that adequate grounding is provided on the computer power supply.
- 5. If the computer's AC power plug is fitted with a fuse, ensure a manufacturer's recommended fuse of the correct rating is used.
- 6. Do not overload a main power outlet with an excessive number of devices.
- 7. Ensure the device, including the computer, is situated well away from sources of heat such as radiators, stoves etc.
- 8. Ventilation this product is designed to operate within a computer and does not require any extra forced ventilation.
- 9. Do not attempt to service this product yourself. Any modifications not expressly authorized by the manufacturer may void the warranty. Refer all servicing to qualified service personnel authorized by the manufacturer or supplier.

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OnStream Warranty

1. DATA STORAGE PRODUCT WARRANTY

- 1.1. Express Warranty. OnStream warrants to the End User of the Data Storage Product (the "Product") that, for the two (2) year period commencing on the date the Product was purchased (the "Warranty Period"), the Product shall be free from defects in materials, parts and workmanship under normal use and conditions. This warranty may be extended an additional year if the End User completes the registration card and sends it to OnStream. This warranty applies to hardware components packaged with the Product and does not apply to software contained in or included with the Product. Such software is warranted as provided herein or in the Software License Agreement packaged with the Product, as applicable. OnStream is not responsible for any damage to or loss of any programs, data, or other information stored on any media or any part of a Product. This warranty does not apply to consumables (such as batteries) supplied with the Product. OnStream makes no warranty to resellers, dealers or other distributors of the Products.
- 1.2. Remedies for Breach of Warranty. In the event of a breach of the foregoing warranty, OnStream will, in its sole discretion and at its cost, repair the non-conforming Product, replace the non-conforming Product with a new or reconditioned Product or refund of the purchase price for the Product. Any new or reconditioned Product provided pursuant to this paragraph is warranted as provided herein for the remainder of the original Warranty Period. The End User agrees to pay freight charges for Products returned to OnStream and to otherwise comply with OnStream's then-current return materials authorization (RMA) policy, including without limitation shipping the Product to OnStream in its original packaging or equivalent packaging. OnStream shall not be responsible for damage or loss during shipment to OnStream. THE REMEDY SET FORTH IN THIS PARAGRAPH SHALL BE THE END USER'S SOLE AND EXCLUSIVE REMEDY FOR BREACH OF THE FOREGOING WARRANTY.
- 1.3. Voiding of Warranty. The express warranty set forth above shall not apply to failure of the Product if the Product has been subjected to: (i) Physical abuse, misuse, improper installation, abnormal use, power failure, or use not consistent with the operating instructions provided by OnStream; (ii) Modification or repair by any party in any manner other than approved by OnStream including, but not limited to, tempestizing, ruggedizing, and/or militarizing Products; (iii) Fraud, tampering, unusual physical or electrical stress, unsuitable operating or physical conditions, negligence or accidents; (iv) Removal or alteration of the Product serial number tag; or (v) Improper packaging of Product returns.
- 1.4. Warranty Disclaimers. THE EXPRESS WARRANTIES HEREIN ARE GIVEN FOR THE PRODUCT IN LIEU OF ALL OTHER WARRANTIES, WHETHER WRITTEN, ORAL, EXPRESS OR IMPLIED, INCLUDING ANY

WARRANTY OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR NONINFRINGEMENT OF THIRD PARTY RIGHTS. NO PERSON (INCLUDING WITHOUT LIMITATION, ONSTREAM EMPLOYEES, AGENTS OR DISTRIBUTORS) IS AUTHORIZED TO MAKE ANY OTHER WARRANTY OR REPRESENTATION CONCERNING THE PRODUCT OTHER THAN AS EXPRESS WARRANTY SET FORTH ABOVE. IF THE DISCLAIMER OF ANY IMPLIED WARRANTY IS NOT PERMITTED BY LAW, THE DURATION OF ANY SUCH IMPLIED WARRANTY IS LIMITED TO NINETY (90) DAYS FROM THE DATE OF DELIVERY. SOME JURISDICTIONS DO NOT ALLOW THE EXCLUSION OF IMPLIED WARRANTIES OR LIMITATIONS ON HOW LONG AN IMPLIED WARRANTY MAY LAST, SO SUCH LIMITATIONS OR EXCLUSIONS MAY NOT APPLY TO THE END USER. THIS WARRANTY GIVES THE END USER SPECIFIC LEGAL RIGHTS AND THE END USER MAY ALSO HAVE OTHER RIGHTS WHICH VARY FROM JURISDICTION TO JURISDICTION.

<u>2. LIMITATION OF LIABILITY.</u> IN NO EVENT SHALL ONSTREAM BE LIABLE TO THE END USER OR ANY THIRD PARTY FOR ANY INDIRECT, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES IN CONNECTION WITH OR ARISING OUT OF THIS AGREEMENT OR THE SALE OR USE OF THE PRODUCT (INCLUDING BUT NOT LIMITED TO LOSS OF PROFIT, USE, DATA, OR OTHER ECONOMIC ADVANTAGE), HOWEVER IT ARISES, WHETHER FOR BREACH OF THIS AGREEMENT, INCLUDING BREACH OF WARRANTY, OR IN CONTRACT OR IN TORT (INCLUDING NEGLIGENCE), OR STRICT LIABILITY, EVEN IF ONSTREAM HAS BEEN PREVIOUSLY ADVISED OF THE POSSIBILITY OF SUCH DAMAGE AND EVEN IF A LIMITED REMEDY SET FORTH IN THIS AGREEMENT FAILS OF ITS ESSENTIAL PURPOSE. IN NO EVENT SHALL ONSTREAM'S LIABILITY TO THE END USER OR ANY THIRD PARTY EXCEED THE PRICE PAID FOR THE PRODUCT. Because some jurisdictions do not allow the exclusion or limitation of liability for consequential or incidental damages, the above limitations may not apply to the End User.