
About the DDS4 External DAT Drive

The DDS4 drive is a wide (16-bit), SCSI, Digital Audio Tape (DAT) drive with a 68-pin high-density connector. It works with Indy®, Indigo2™, Indigo2 Impact™, Silicon Graphics® O2®, Silicon Graphics® Octane® workstations, and Silicon Graphics® Onyx® servers.

The drive's capacity is 20 gigabytes or, with compression enabled, 40 gigabytes. It ships with data compression off, to be compatible with data tapes that were written on earlier DAT drives. For information on enabling compression, see the release note that comes with this drive.

The following topics are covered in this note:

- "Installing the External DAT Tape Drive" on page 1
- "Using the Correct Cable: O2 and Octane Workstations" on page 2
- "Using the Correct Cable: Indy, Indigo2, and Indigo2 Impact Workstations" on page 2
- "Mixing 16-Bit Wide (Ultra) and 8-Bit Narrow (Fast) SCSI Devices" on page 3
- "Configuring and Using the Drive" on page 3
- "Manufacturer's Regulatory Declarations" on page 3
- "Product Support" on page 7

Installing the External DAT Tape Drive

For complete information on installing the external DAT drive, see your workstation owner's guide for instructions on installing external SCSI devices. The owner's guide includes cable length restrictions and other important facts about your workstation's SCSI buses.

On an O2 workstation, the owner's guide is available online through IRIS InSight™. From the Toolchest, choose Help > Online Books > SGI_EndUser > O2 Hardware Reference Guide. If the book has been removed from the system disk, you can reinstall it from the IRIX® base operating system CD that came with the O2 workstation.

The owner's guides for all recent workstations are available in the SGI Technical Publication Library. If you have access to the Internet, you can view them at <http://techpubs.sgi.com/library>.

Using the Correct Cable: O2 and Octane Workstations

If the DDS4 drive is the only SCSI device attached to the workstation, use a 68-pin SCSI-3 to 68-pin cable and the 68-pin active terminator that comes with the device.

Caution: Using other types of cables or terminators can result in data loss.

For the second and each additional 16-bit wide SCSI device, use a 68-pin to 68-pin cable. Attach the active terminator shipped with the device to the last wide SCSI device on the daisy chain.

Using the Correct Cable: Indy, Indigo2, and Indigo2 Impact Workstations

If this is the first and only SCSI device attached to the workstation, use a high-density 50-pin to high-density 68-pin SCSI cable and the 68-pin active terminator that comes with the device.

Caution: Using other types of cables or terminators can result in data loss.

For the second and each additional 16-bit wide SCSI device, use a 68-pin to 68-pin cable. Attach the active terminator shipped with the device to the last wide SCSI device on the daisy chain.

Note: The DDS4 DAT drive will automatically shift to narrow mode of operation when connected to a narrow SCSI bus.

Mixing 16-Bit Wide (Ultra) and 8-Bit Narrow (Fast) SCSI Devices

If you wish to mix 16-bit wide and 8-bit narrow devices on the same SCSI bus, you must place the wide devices as a group closest to the workstation, and place the narrow devices at the end of the daisy chain. See your workstation's owner's guide for complete cabling instructions, including cable restrictions.

Configuring and Using the Drive

To configure the drive, turn on the drive first, then turn on the workstation and log in. From the Toolchest choose System > System Manager > Hardware & Devices > Removable Media Devices. If you have a root password set, you are prompted for it. Follow the instructions on the screen to configure the drive.

For more information on configuring external devices, see the online *Personal System Administration Guide*. To locate the online books, from the Toolchest, choose Help > Online Books > SGI_EndUser > Personal System Administration Guide.

Manufacturer's Regulatory Declarations

Caution: This device has several governmental and third-party approvals, licenses, and permits. Do not modify this product in any way that is not expressly approved by SGI. If you do, you may lose these approvals and your governmental agency authority to operate this device.

The device conforms to several national and international specifications and European Directives listed on the Manufacturer's Declaration of Conformity. The CE insignia displayed on each device is an indication of conformity to the European requirements.

Manufacturer's Declaration of Conformity

Table 1 FCC Declaration of Conformance Class B

Trade Name	SGI
Product	External DAT drive
Model Number	SDT11000/SGI
Date of Conformance	7/97
Responsible Party	Sony Technology Center San Diego
Address	DSM Division 16450 West Bernardo Drive San Diego, CA 92127
Telephone	(858) 942-4290

This equipment complies with 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.

Note: 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 communications. 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.

Caution: The user is cautioned that changes or modifications to the equipment not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Electromagnetic Emissions

This device complies with the Class B limits of Part 15 of the FCC Rules. Operation is subject to the following two conditions:

- This device may not cause harmful interference.
- This device must accept any interference received, including interference that may cause undesired operation.

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

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

この装置は、情報処理装置等電波障害自主規制協議会（VCCI）の基準に基づくクラス B 情報技術装置です。この装置は、家庭環境で使用することを目的としていますが、この装置がラジオやテレビジョン受信機に近接して使用されると、受信障害を引き起こすことがあります。
取扱説明書に従って正しい取り扱いをして下さい。

Radio and Television Interference

The equipment described in this guide generates and uses radio frequency energy. If it is not installed and used in accordance with the instructions in this guide, it can cause radio and television interference.

You can determine whether your system is causing interference by turning it off. If the interference stops, it was probably caused by the workstation or one of the peripherals. To tell if the interference is caused by one of the peripherals, try disconnecting one peripheral at a time to see if the interference stops. If it does, that peripheral is the cause of the interference.

If your workstation does cause interference to radio or television reception, try to correct the interference by using one or more of the following suggestions:

- Turn the television or radio antenna until the interference stops.
- Move the workstation to one side or the other of the radio or television.
- Move the workstation farther away from the radio or television.
- Plug the workstation into an outlet that is on a different circuit from the radio or television. (That is, make certain the workstation and the radio or television are on circuits controlled by different circuit breakers or fuses.)
- For additional information, check the FCC Web site at <http://www.fcc.gov/cib/Publications/tvibook.html>

Shielded Cables

The device is FCC-compliant under test conditions that include the use of shielded cables between the workstation and its peripherals. Your workstation and any peripherals you purchase from SGI have shielded cables. Shielded cables reduce the possibility of interference with radio, television, and other devices. If you use any cables that are not from SGI, make sure they are shielded. Telephone cables do not need to be shielded.

Electrostatic Discharge

SGI designs and tests its products to be immune to the effects of electrostatic discharge (ESD). ESD is a source of electromagnetic interference and can cause problems ranging from data errors and lockups to permanent component damage.

It is important that while you are operating your workstation you keep all the covers and doors, including the plastics, in place. The shielded cables that came with the workstation and its peripherals should be installed correctly, with all thumbscrews fastened securely.

An ESD wrist strap is included with some products, such as memory and graphics upgrades. The wrist strap is used when installing these upgrades to prevent the flow of static electricity, and it should protect your system from ESD damage.

Product Support

SGI provides a comprehensive range of product support for its products. If you are in North America and would like support for your SGI supported products, contact the Technical Assistance Center at 1-800-800-4SGI or your authorized service provider. If you are outside North America, contact the SGI subsidiary or authorized distributor in your country.

© 2000 Silicon Graphics, Inc. All rights reserved. The contents of this document may not be copied or duplicated in any manner, in whole or in part, without the prior written permission of Silicon Graphics, Inc.

Silicon Graphics, Indigo, IRIS, IRIX, O2, Octane, and Onyx are registered trademarks and Indigo2, Indigo2 Impact, and IRIS InSight are trademarks of Silicon Graphics, Inc. Indy is a registered trademark used under license in the U.S. and owned by Silicon Graphics, Inc., in other countries worldwide.

About the DDS4 External DAT Drive

The DDS4 drive is a wide (16-bit), SCSI, Digital Audio Tape (DAT) drive with a 68-pin high-density. It works with Indy, Indigo2, Indigo2 IMPACT, O2, OCTANE workstations, and Onyx servers.

The drive's capacity is 20 gigabytes or, with compression enabled, 40 gigabytes. It ships with data compression off, to be compatible with data tapes that were written on earlier DAT drives. For information on enabling compression, see the release note that comes with this drive.

The following topics are covered in this note:

- "Installing the External DAT Tape Drive" on page 1
- "Using the Correct Cable: Indy, Indigo2, and Indigo2 IMPACT Workstations" on page 2
- "Mixing 16-Bit Wide (Ultra) and 8-Bit Narrow (Fast) SCSI Devices" on page 2
- "Manufacturer's Regulatory Declarations" on page 3
- "Product Support" on page 7

Installing the External DAT Tape Drive

For complete information on installing the external DAT drive, see your workstation owner's guide for instructions on installing external SCSI devices. The owner's guide includes cable length restrictions and other important facts about your workstation's SCSI buses.

On an O2 workstation, the owner's guide is available online through IRIS InSight. From the Toolchest, choose Help > Online Books > SGI_EndUser > O2 Hardware Reference Guide. If the book has been removed from the system disk, you can reinstall it from the IRIX base operating system CD that came with the O2 workstation.

The owner's guides for all recent workstations are available in the Silicon Graphics Technical Publication Library. If you have access to the Internet, you can view them at <http://techpubs.sgi.com/library/>

Using the Correct Cable: O2 and OCTANE Workstations

If the DDS4 drive is the only SCSI device attached to the workstation, use a 68-pin SCSI-3 to 68-pin cable and the 68-pin active terminator that comes with the device.

Caution: Using other types of cables or terminators can result in data loss.

For the second and each additional 16-bit wide SCSI device, use a 68-pin to 68-pin cable. Attach the active terminator shipped with the device to the last wide SCSI device on the daisy chain.

Using the Correct Cable: Indy, Indigo2, and Indigo2 IMPACT Workstations

If this is the first and only SCSI device attached to the workstation, use a high-density 50-pin to high-density 68-pin SCSI cable and the 68-pin active terminator that comes with the device.

Caution: Using other types of cables or terminators can result in data loss.

For the second and each additional 16-bit wide SCSI device, use a 68-pin to 68-pin cable. Attach the active terminator shipped with the device to the last wide SCSI device on the daisy chain.

Note: The DDS4 DAT drive will automatically shift to narrow mode of operation when connected to a narrow SCSI bus.

Mixing 16-Bit Wide (Ultra) and 8-Bit Narrow (Fast) SCSI Devices

If you wish to mix 16-bit wide and 8-bit narrow devices on the same SCSI bus, you must place the wide devices as a group closest to the workstation, and place the narrow devices at the end of the daisy chain. See your workstation's owner's guide for complete cabling instructions, including cable restrictions.

Configuring and Using the Drive

To configure the drive, turn on the drive first, then turn on the workstation and log in. From the Toolchest choose System > System Manager > Hardware & Devices > Removable Media Devices. If you have a root password set, you are prompted for it. Follow the instructions on the screen to configure the drive.

For more information on configuring external devices, see the online *Personal System Administration Guide*. To locate the online books, from the Toolchest, choose Help > Online Books > SGI_EndUser > Personal System Administration Guide.

Manufacturer's Regulatory Declarations

Caution: This device has several governmental and third-party approvals, licenses, and permits. Do not modify this product in any way that is not expressly approved by Silicon Graphics. If you do, you may lose these approvals and your governmental agency authority to operate this device.

The device conforms to several national and international specifications and European Directives listed on the Manufacturer's Declaration of Conformity. The CE insignia displayed on each device is an indication of conformity to the European requirements.

Manufacturer's Declaration of Conformity

Table 1 FCC Declaration of Conformance Class B

Trade Name	Silicon Graphics, Inc.
Product	External DAT drive
Model Number	SDT11000/SGI
Date of Conformance	7/97
Responsible Party	Silicon Graphics, Inc.
Address	2011 North Shoreline Boulevard, Mountain View, California 94043-1389
Telephone	(650) 933-1071

This equipment complies with 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.

Note: 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 communications. 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.

Caution: The user is cautioned that changes or modifications to the equipment not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Electromagnetic Emissions

This device complies with the Class B limits of Part 15 of the FCC Rules. Operation is subject to the following two conditions:

- This device may not cause harmful interference.
- This device must accept any interference received, including interference that may cause undesired operation.

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

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

This device complies with Class B electromagnetic emissions limits of C.I.S.P.R. Publication 22, Limits and Methods of Measurement of Radio Interference Characteristics of Information Technology Equipment; Germany's BZT Class B limits for Information Technology Equipment; and with Japan's VCCI Class 2 limits.

この装置は、情報処理装置等電波障害自主規制協議会（VCCI）の基準に基づくクラス B 情報技術装置です。この装置は、家庭環境で使用することを目的としていますが、この装置がラジオやテレビジョン受信機に近接して使用されると、受信障害を引き起こすことがあります。
取扱説明書に従って正しい取り扱いをして下さい。

Radio and Television Interference

The equipment described in this guide generates and uses radio frequency energy. If it is not installed and used in accordance with the instructions in this guide, it can cause radio and television interference.

This equipment has been tested and complies with the limits for a Class B computing device in accordance with the specifications in Part 15 of FCC rules. These specifications are designed to provide reasonable protection against such interference in an industrial or office installation. However, there is no guarantee that the interference will not occur in a particular installation. This system is not certified for home use.

You can determine whether your system is causing interference by turning it off. If the interference stops, it was probably caused by the workstation or one of the peripherals. To tell if the interference is caused by one of the peripherals, try disconnecting one peripheral at a time to see if the interference stops. If it does, that peripheral is the cause of the interference.

If your workstation does cause interference to radio or television reception, try to correct the interference by using one or more of the following suggestions:

- Turn the television or radio antenna until the interference stops.
- Move the workstation to one side or the other of the radio or television.
- Move the workstation farther away from the radio or television.
- Plug the workstation into an outlet that is on a different circuit from the radio or television. (That is, make certain the workstation and the radio or television are on circuits controlled by different circuit breakers or fuses.)
- For additional information, check the FCC web site at <http://www.fcc.gov/Bureaus/Compliance/WWW/tribook.html>

Shielded Cables

The device is FCC-compliant under test conditions that include the use of shielded cables between the workstation and its peripherals. Your workstation and any peripherals you purchase from Silicon Graphics have shielded cables. Shielded cables reduce the possibility of interference with radio, television, and other devices. If you use any cables that are not from Silicon Graphics, make sure they are shielded. Telephone cables do not need to be shielded.

Electrostatic Discharge

Silicon Graphics designs and tests its products to be immune to the effects of electrostatic discharge (ESD). ESD is a source of electromagnetic interference and can cause problems ranging from data errors and lockups to permanent component damage.

It is important that while you are operating your workstation you keep all the covers and doors, including the plastics, in place. The shielded cables that came with the workstation and its peripherals should be installed correctly, with all thumbscrews fastened securely.

An ESD wrist strap is included with some products, such as memory and graphics upgrades. The wrist strap is used when installing these upgrades to prevent the flow of static electricity, and it should protect your system from ESD damage.

Product Support

Silicon Graphics provides a comprehensive range of product support for its products. If you are in North America and would like support for your Silicon Graphics supported products, contact the Technical Assistance Center at 1-800-800-4SGI or your authorized service provider. If you are outside North America, contact the Silicon Graphics subsidiary or authorized distributor in your country.

© 1997, Silicon Graphics, Inc. All rights reserved.

Silicon Graphics and Indy are registered trademarks, and Indigo2, Indigo2 IMPACT, IRIS InSight, IRIX, O2, and OCTANE are trademarks of Silicon Graphics, Inc. Centronics is a registered trademark of Centronics Data Computer Corporation.