



# **DM-4 Real-time Storage Chassis**

## **Installation and User Manual**

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## ***About This Manual***

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This manual is intended to serve the following purposes:

- \* to provide an overview of the DM-4 Real-Time Storage Chassis
- \* to act as a guide for hardware installation
- \* to act as a reference for the operator

It is suggested that you periodically check the Conduant web site for the most recent application notes, and technical bulletins.

If you are unable to locate the information you need, please feel free to contact us by e-mail or phone.

## About the DM-4 Real-Time Storage Chassis

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Thank you for purchasing a Conduant DM-4 Real-Time Storage Chassis. The chassis is designed specifically for use with the StreamStor real-time recording system. The StreamStor system consists of a controller card that typically plugs into a PCI, CompactPCI or PXI bus, high performance disk drives, device drivers, software development tools, and additional utility software. The DM-4 chassis incorporates 4 SerialATA disk drives and includes the power supply and cooling fans to support these drives.

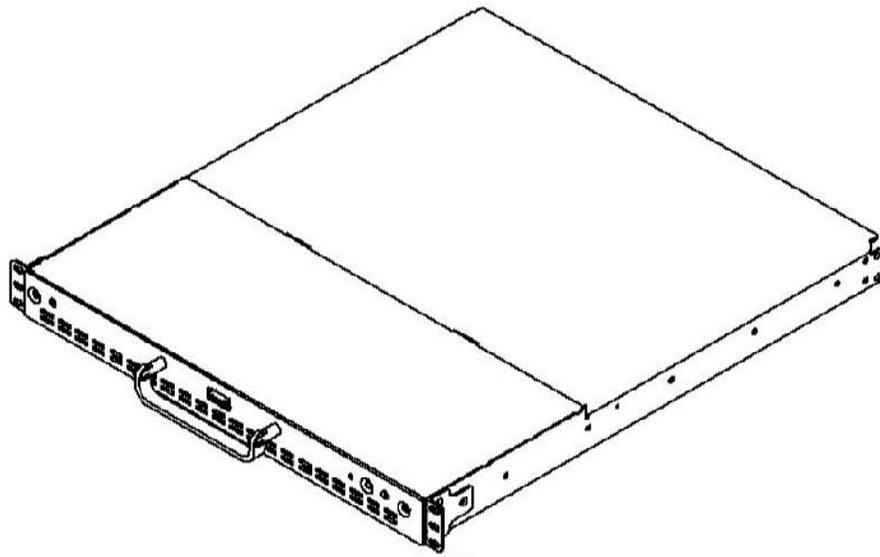


Figure 1

The DM-4 is designed to be mounted in an EIA equipment rack either above or below the chassis housing the StreamStor controller. The interface cable is front panel mounted to simplify installation in PXI or CompactPCI applications.

## Components

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The DM-4 Storage Chassis generally consists of the following components:

- 1U Storage Chassis
- StreamStor SATA-4 Interface cable
- AC Power cord
- User Manual

 **CAUTION:** *Please read the entire installation section before starting to install the DM-4 chassis. This manual assumes that the user is knowledgeable and comfortable with basic computer cabling, power connections, and rack mount systems. If you are unsure as to how to proceed, please contact Conduant support.*

## Unpacking / Handling

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Carefully inspect all shipping packages for any sign of damage. In particular, look for wrinkled or bent corners, holes, or other signs of bad handling or abuse. If you notice any damage to the packaging, immediately open the boxes and inspect the contents for damage. Pay close attention to the components near the area where the packing material was damaged. Report any damage to the carrier and Conduant immediately.

### **Disk Drives**

Hard disk drives such as those that have been included with your system are susceptible to excess shock and careless handling. Please observe the following handling precautions:

- \* Allow the chassis to reach room temperature BEFORE installing it. This may take several hours depending on shipping conditions. Disk drive damage can occur if the system is powered while the drives are at temperature extremes.
- \* Do not drop, jar or bump the chassis. Even setting the chassis on a hard surface too roughly can damage the recording surfaces, heads, or other mechanical components inside the disk drives.
- \* Never disconnect/connect the interface cable while power is on (LED Green).

## Planning Your Installation

The DM-4 chassis is designed to install into a standard 19" EIA equipment rack. Airflow for cooling the disk drives and power supply is supplied by rear mounted fans that move air through the front panel and out the rear panel. The installation must supply adequate clearance to avoid impeding this airflow path. The system also requires clearance for the front SS4 interface cable and rear clearance for the AC power cord.

The DM-4 chassis has been designed for rack mount applications and only requires 1U (1.75") of vertical space for installation. In a typical configuration, the chassis is mounted at the front using the removable rack mount ears. Rear supports are recommended but are not supplied. Chassis dimensions are detailed in figures 2-4.

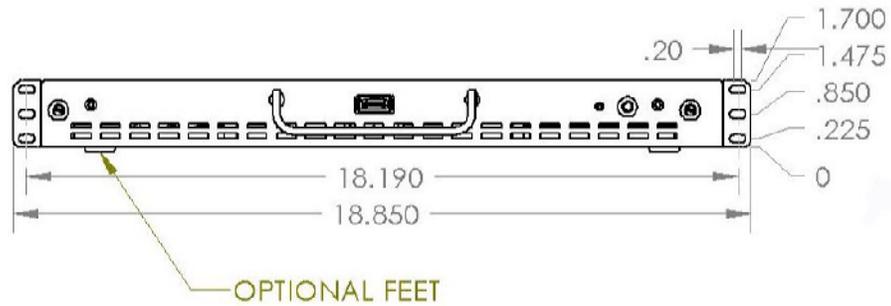


Figure 2

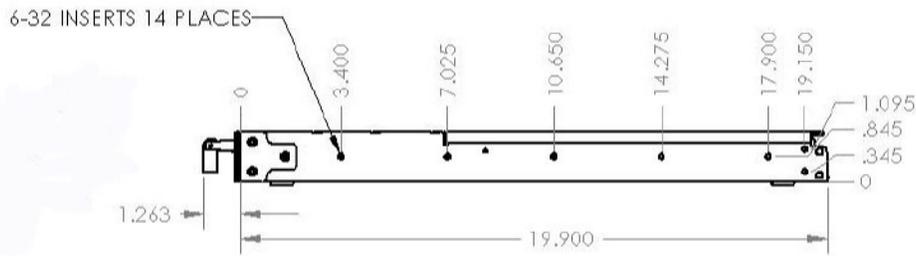


Figure 3

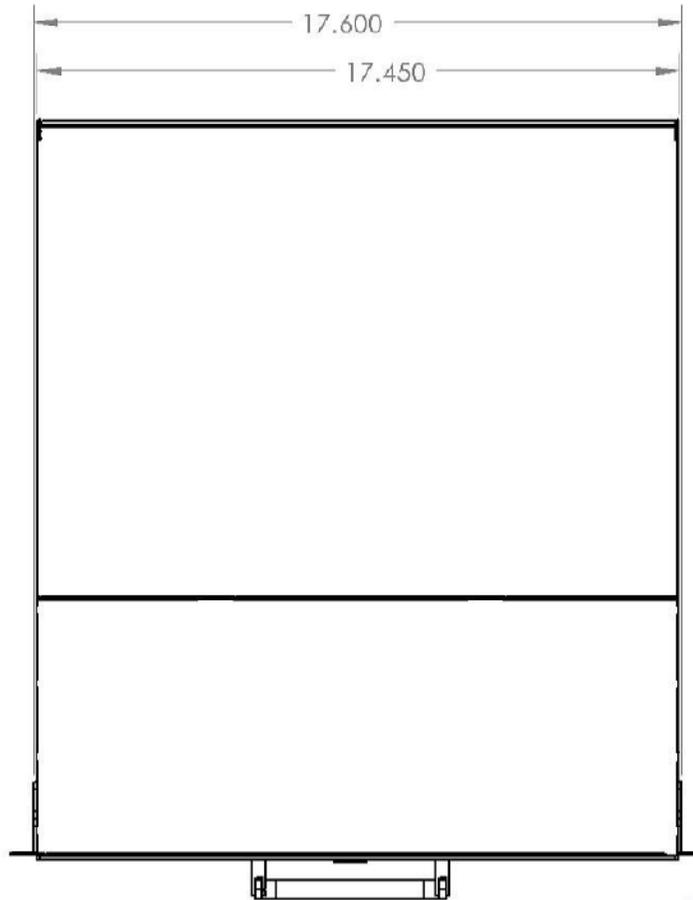


Figure 4

Adhesive backed rubber feet are also included with the system to provide a surface for tabletop or stacked installation. Simply remove the adhesive cover from the foot and apply the pads in the 4 recessed areas on the bottom of the DM-4 chassis.

To connect the SS4 interface cable simply orient it correctly so that the wide ends of the D shaped interface line up and push it firmly into place. The connector includes latches on each side to provide a secure connection that won't pull off by accident. Disengage the connector by sliding back the black shell to spread the latch hooks on each side and pull straight out.

## Operation

The DM-4 chassis is very simple to operate and requires only an AC power connection and a StreamStor SS4 interface connection to a controller such as the PXI-808 board. The power supply included with the DM-4 is compatible with most major AC power systems around the world and will auto-sense for 100-240VAC @ 50-60 Hz. Please insure that your local power supply meets this requirement. The power cord included with your system is designed for 120V-60Hz AC power connections.

The power supply interface is on the rear panel of the DM-4 and includes a power switch and AC cord receptacle. The switch on the power supply controls delivery of AC power. This power switch is normally left in the on position ( 1 ) for normal operation but should be off when connecting or disconnecting the AC power cord. When the AC power is enabled the system will enter standby mode and light an LED on the front panel (see figure 5). When in standby mode the LED will be red and the disk drives will not have power. Pressing the front panel power switch once (hold in momentarily) will start the drive power-on process. The LED will blink for several seconds and then turn green to indicate that the drives are powered on and ready for StreamStor access.

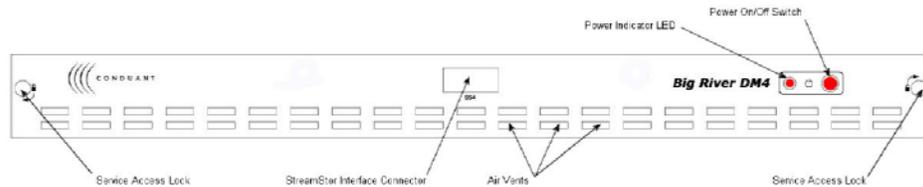


Figure 5

Powering down the system is simply the reverse of the procedure above. When the system is powered (LED green), press the power switch once (hold in momentarily) to switch off power to the drives. The LED will turn RED to indicate that the system is back in the standby state. Note that if the drives are powered off while StreamStor is in a ready state, you must reset the StreamStor card to force the connection between the StreamStor card and the drives to reinitialize. See the StreamStor SDK documentation for more information on resetting the StreamStor controller.

The front panel also includes two service access locks (see figure 5). These locks provide access to the internal drive tray for drive replacement or servicing. The latches require a  $\frac{1}{2}$  to  $\frac{3}{4}$  turn to lock or unlock in the direction indicated.

**CAUTION:** *The drive tray is not intended to be used for customer access. Please contact Conduant support before unlocking or removing the drive service tray to avoid possible voiding of your system warranty.*

## Technical Support

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Conduant wants to be sure that your DM-4 system works correctly and stays working correctly. In the unlikely event, however, that you are unable to get your new system to work properly, or if a working system ceases to function, we will do all that we can to get your system back online.

Solving the problem is largely a matter of data collection and steps that must be taken one at a time. In order for us to better serve you, we ask that you take the time to perform the following steps prior to calling us. This way, you can provide us with the most meaningful information possible that will help us solve the problem.

*Is the problem one that obviously requires replacement parts due to physical damage to the system? If yes, then please gather the information described below and report the problem to tech support, by phone or through the Conduant web site.*

*Have you confirmed that no cabling has been inadvertently disconnected or damaged while working around the equipment?*

*Is the StreamStor card properly seated in the PCI (CPCI/PXI) slot?*

*Do all the systems have good power connections and voltages?*

*Does the confidence test `sscfg.exe` (on Windows) or `ssopen/sstest` (on Linux) run OK?*

*Has the software installation been corrupted? Try re-installing software.*

*Have you checked the Conduant web site for technical bulletins?*

*Have you recently installed a new Linux kernel or compiler or a new Windows Service Pack?*

If the above steps did not resolve the problem, then please initiate a trouble ticket on the support section of the Conduant website at [www.conduant.com](http://www.conduant.com). Please provide as much information as possible about your system and the problem. We will do all that we can to resolve the problem as quickly as possible.

## Contacting Technical Support

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E-mail: [support@conduant.com](mailto:support@conduant.com)

Web: [www.conduant.com](http://www.conduant.com)

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