



Savvio SCSI Installation Guide

ST973401LC, ST936701LC

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Handling precautions/Electrostatic discharge protection

- Disc drives are fragile. Do not drop or jar the drive. Handle the drive only by the edges or frame.
- Drive electronics are sensitive to static electricity. Keep the drive in its antistatic container until you are ready to install it. Wear a wrist strap and cable connected to ground. Discharge static from all items near or that will contact the drive. Never use an ohmmeter on any circuit boards.
- Turn off the power to the host system during installation (not necessary if you are using a hot-plug backplane).
- Always use forced-air ventilation when operating the drive.
- Use caution when troubleshooting a unit that has voltages present.
- Do not disassemble the drive; doing so voids the warranty.
- Return the entire drive for depot service if any part is defective.
- Do not apply pressure or attach labels to circuit board or drive top.

Electromagnetic compliance

See Safety and Regulatory Agency Specifications, part number 75789512.

Drive characteristics

	ST973401LC	ST936701LC
Formatted capacity	73.4 Gbytes	36.7 Gbytes
Total # of data blocks	143,374,744 (88BB998h)	71,687,372 (445DCCCh)
Cylinders (user accessible)	51,052	51,052
Heads	4	2
Disc rotation ± 5%	10,009 RPM	10,009 RPM
Operating voltages	+5V +12V	+5V +12V
Typical operating current (amps)	0.74 0.43	0.69 0.47

What you need

- Screwdriver and four M3 x .5 metric drive mounting screws
- Forced-air ventilation to provide adequate drive cooling
- Backplane host system or enclosure that supports SCA 80-pin connectors.

Note. To operate at LVD transfer rates, you need a backplane that supports LVD devices.

Multimode interface

This drive can operate in single-ended (SE) or low voltage differential (LVD) mode. This multimode capability provides backwards compatibility so you can use it with or without an LVD-capable host adapter or backplane. The primary benefits of LVD technology include faster transfer rates and improved device connectivity.

Note. To operate at Ultra2 rates or faster in LVD mode, all devices on the same bus must be running in LVD mode. If you add any SE device to the bus, all devices on that bus operate in SE mode.

Caution. Do not mix LVD drives on the same bus with high voltage differential (HVD) devices—drive damage may occur.

Installation instructions

Savvio™ drives have an industry-standard 80-pin Single Connector Attachment (SCA) connector. Drives with these connectors are designed to be installed in a host system that uses a backplane. In such systems, there are no cables and the drive options, including SCSI IDs, are set either through the host interface or on the backplane. There are no jumpers on the drive that you can use to set the SCSI ID or other drive options. Check your system's documentation to determine how to configure the drive in your particular system. The backplane must provide the SCSI termination for each drive.

1. Mount the drive in the carrier or tray

LC drives are designed to be attached to a carrier or tray and inserted into the host system without I/O or power cables.

Savvio drives provide 4 mounting holes on the bottom of the drive, 2 mounting holes on each side of the drive, and 2 mounting holes on the end of the

drive. Refer to the host system's documentation to determine which holes to use to mount the drive in the carrier or tray.

Use M3 x .5 metric screws. Do not over-tighten or force the screws.

You can mount the drive in any orientation.

2. Format the drive

The drive has been *low level* formatted at the factory. You do not need to perform another low level format on this drive unless you decide to perform certain diagnostics through the host adapter. If you do decide to perform a low level format, do not abort the format as this is likely to make the drive inoperable. A low level format, with verify turned on, will typically take two hours.

Protect against power failure or other power interruptions during the format.

- Turn on DC power to the host system.
- Boot the system from a system floppy, CD, or from a previously installed hard disc drive if there is one.
- Format the drive.

Caution. Formatting a drive erases all user data. Be sure that you understand this principle before formatting any hard disc drive. It is not necessary to format a drive that previously has been used to store data, unless your intention is to erase all user data. Seagate® is not responsible for lost user data.

Savvio disc drives are designed to operate with a variety of operating systems. Please refer to your system or host enclosure manual for information about formatting and setting up the drive.

Troubleshooting

- **Drive does not spin up.** Ensure that the host system is supplying power to the drive's SCA 80-pin connector and that the drive is fully inserted into the host system's backplane connector.
- **Computer does not seem to recognize the drive.** Verify that the drive is enabled by the SCSI host adapter setup utility.

Seagate support services

For online information about Seagate products, visit www.seagate.com or e-mail your disc questions to DiscSupport@Seagate.com.

If you need help installing your drive, consult your dealer first. If you need additional help, call a Seagate technical support specialist. Before calling, note your system configuration and drive model number.

Africa	+1-405-324-4714	Netherlands	00 800-47324283
Australia	1800-14-7201	New Zealand	0800-443988
Austria	0 800-20 12 90	Norway	00 800-47324283
Belgium	00 800-47324283	Poland	00 800-311 12 38
China*	800-810-9668	Spain	00 800-47324283
Denmark	00 800-47324283	Sweden	00 800-47324283
France	00 800-47324283	Switzerland	00 800-47324283
Germany	00 800-47324283	Singapore	800-1101-150
Hong Kong	800-90-0474	Taiwan*	00-800-0830-1730
Hong Kong†	001-800-0830-1730	Thailand	001-800-11-0032165
India	1-600-33-1104	Turkey	00 800-31 92 91 40
Indonesia	001-803-1-003-2165	United Kingdom	00 800-47324283
Ireland	00 800-47324283	USA/Canada/	1-800 SEAGATE or
Italy	00 800-47324283	Latin America	+1-405-324-4700
Japan	0034 800 400 554	Other European	
Malaysia	1-800-80-2335	countries	+1-405-324-4714
Middle East	+1-405-324-4714		

*Mandarin

†Cantonese

Warranty. Contact your place of purchase or our web site (www.seagate.com).

Return Merchandise Authorization (RMA). Before returning the drive, verify that it is defective. Seagate Worldwide customer service centers are the only facilities authorized to service Seagate drives. Contact nearest center for return procedures and trade regulations.

Shipping the drive

Back up the data before shipping. Seagate assumes no responsibility for data lost during shipping or service. Shipping drive in an unapproved container voids the warranty. Pack the drive with original box and packing materials. Use no other materials. This prevents electrical and physical damage in transit.

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