


```

|                                                                 |.X
|                                                                 |XX
|                                                                 |XX
|                                                                 |XX
|                                                                 |XX
|                                                                 |XX
|                                                                 |XX
|                                                                 |
|                                                                 |XX Power
|                                                                 |X1 4-Pin
+-----+

```

Jumpers

SEAGATE ST3096/3120/3144-A DRIVE INSTALLATION GUIDE 36169-001, REV.B

Jumper setting

=====

User Configuration Jumper Block

```

-----
+1--3--5--7--9+
| o o o o o |
| o o o o o |
+2--4--6--8--10+

```

```

+-----+
| o X o o o | Drive is Master.
| o X o o o |
+-----+
+-----+
| o o X o o | Slave Present.
| o o X o o |
+-----+
+-----+
| o o o o X | Active LED. The drive will indicate activity to
| o o o o X | the system front panel via a connector on the
+-----+ host adapter or system motherboard.
+-----+
| o o o x o | Reserved (DO NOT USE)!
| o o o x o |
+-----+
+-----+
| x o o o o | Reserved (DO NOT USE)!
| x o o o o |
+-----+

```

Drive Type Master Slave Present

Only one drive CLOSED OPEN
in system

Drive 1 in a two CLOSED CLOSED
drive system

Drive 2 in a two OPEN OPEN
drive system

Install

SEAGATE ST3096/3120/3144-A DRIVE INSTALLATION GUIDE 36169-001, REV.B

Drive Mounting

=====

Drive Orientation

The drive may be mounted in any orientation. For best results, the drive should be formatted in its final mounting orientation.

Important Note: Using mounting screws larger than specified maximum dimensions could damage the drive.

Bottom Mounting

6-32 UNC screw, 4 places. Maximum length into drive frame: 0.20-inch.

Side Mounting

6-32 UNC screw, 4 places. Maximum length into drive frame: 0.13 inch.

Seagate's ST3144 Family drives can be installed in laptop systems. These computers require qualified or factory trained technicians to perform peripheral upgrades. Be sure to review the terms and conditions for your system warranty before opening the system enclosure. All ST3144 Family drives automatically park their heads at power-down.

Power Connection

Connect a system power cable to the drive power connector. The ST3144 Family drives support both 3-pin and 4-pin DC power connector standards.

Attach AT Interface Cable

Use a 40-pin AT interface connector cable. Pin 20 has been removed on the connector for keying purposes. A dual-drive system will require an 40-pin AT interface daisy-chain cable.

Note: Most cables have a colored stripe down one side to designate the Pin 1 location. Make sure Pin 1 on the interface cable connector is connected to Pin 1 on the drive interface connector and Pin 1 on the host connector.

4-Pin DC Power

```
+-----+ 1 = +12 VDC
|1  2  3  4| 2 = +12 Volts Return
+-----+ 3 = + 5 Volts Return
                4 = + 5 VDC
```

3-Pin DC Power

```
+-----+ 1 = + 5 VDC
|3  2  1| 2 = +12 VDC
+-----+ 3 = Ground
```

Features

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Low-level formatting

Seagate AT Interface drives are low-level formatted at the factory and do not need low-level formatting. If an installed drive is low-level formatted, all user data will be lost. Seagate Technology assumes no liability for lost user data.

Installing the ST3283A

The table below shows the recommended translation geometry for the

ST3144A Family.

Model	MBytes (F)	Cylinders	R/W Heads	Sectors/ Track	CMOS MBytes(F)
ST3096A	89.1	1,024	10	17	85
ST3096A	89.0	836	8	26	85
ST3120A	106.9	1,024	12	17	102
ST3144A	130.7	1,001	15	17	124

Maintenance and repair

Seagate disc drives do not require any preventive maintenance. The head/disc assembly is sealed and does not contain any user-serviceable components. Tampering with the factory seal voids the warranty.

Error Correction

The ST3144 Family drives use 4 bytes of Error Correction Code (ECC) with Read/Write Long commands. Based on the drive type, some systems BIOS will lock for 7 Bytes of ECC. If your system expects 7 bytes of ECC, some drive diagnostics programs will return false drive failures. Contact your system dealer for information on configuring your system to receive 4 bytes of ECC.

Power Management

The ST3144 Family feature four-phase power management with Active, Idle, Standby and Sleep modes. Power management is required for low-power portable systems, and is enabled through a system-dependent set-up procedure.

General

SEAGATE SUPPORT SERVICES

Seagate Technology

Technical Support Services

If you need assistance installing your drive, consult your dealer. Dealers are familiar with their unique system configurations and can help you with system conflicts and other technical issues. If you need additional assistance with your Seagate(r) drive or other

Seagate products, use one of the Seagate technical support services listed below.

SeaFONE at 1-800-SEAGATE (1-800-732-4283)

Seagate's 800 number allows toll-free access to automated self-help services, providing answers to commonly asked questions, troubleshooting tips and specifications for disc drives and tape drives. This service is available 24 hours daily and requires a touch-tone phone. If you need to speak to a technical support engineer, dial this number and listen to the options for technical support. (International callers can also reach this automated self-help service by dialing 408-456-4496).

Seagate Technology online services

Using a modem, you can obtain troubleshooting tips, free utility programs, drive specifications and jumper settings for Seagate's entire product line. You can also download software for installing and analyzing your drive.

SeaNET

You can obtain technical information on Seagate drives, Seagate software and much more over the Internet from Seagate's World Wide Web home page (<http://www.seagate.com>) or Seagate's ftp server (<ftp://ftp.seagate.com>).

You may also send E-mail with your questions to DiscSupport@Seagate.com or TapeSupport@Seagate.com.

SeaBOARD

SeaBOARD is a computer bulletin board system (BBS) that contains information about Seagate's disc and tape drive products and is available 24 hours daily. Set your communications software to eight data bits, no parity and one stop bit (8-N-1). SeaBOARD phone numbers are listed in the following table.

BBS Location Modem number

United States Disc: 408-434-1080; Tape: 408-456-4415

England 44-1628-478011

France 33 1-48 25 35 95

Germany 49-89-140-9331

Singapore 65-292-6973

Thailand 662-531-8111

Australia 61-2-9756-2359

Taiwan 886-2-719-6075

Seagate CompuServe forum

Online technical support for Seagate products is available on CompuServe. To access our technical support forum, type go seagate. This forum provides information similar to that found on SeaBOARD. In addition, you can type questions or browse through previous questions and answers on the forum messages.

Seagate Technology FAX services

SeaFAX

You can use a touch-tone telephone to access Seagate's automated FAX system to receive technical support information by return FAX. This service is available 24 hours daily.

Location Telephone number

United States 1-800-SEAGATE or 408-456-4496

England 44-1628-894084

Australia 61-2-9756-5170

Seagate technical support FAX

You can FAX questions or comments to technical support specialists 24 hours daily. Responses are sent during business hours.

Location FAX number

United States 408-944-9120

England 44-1628-890660

France 33 1-46 04 42 50

Germany 49-89-1430-5100

Australia 61-2-9725-4052

Singapore 65-293-4722

Hong Kong 852-2368 7173

Taiwan 886-2-715-2923

Korea 82-2-556-7294/4251

Seagate technical support

You can talk to a technical support specialist during business hours Monday through Friday for one-on-one technical help. Before calling, note your system configuration and drive model number (STxxxx). There are several technical support phone numbers available for various Seagate products.

Location	Telephone number
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United States	Please dial 1-800-SEAGATE for the specific product telephone number.
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	(6:00 A.M. to 11:15 A.M., 12:30 P.M. to 5:00 P.M., Pacific time, M-F)
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England	44-1628-894083 (10:00 A.M. to 1:00 P.M., 2:00 P.M. to 5:00 P.M., M-F)
France	33 1-41 86 10 86 (9:30 A.M. to 12:30 P.M., 2:00 P.M. to 5:00 P.M., M-F)
Germany	Disc: 49-89-140-9332; (9:30 A.M. to 12:30 P.M., 2:00 P.M. to 4:00 P.M., M-F) Tape: 49-89-140-9333
Australia	61-2-9725-3366 (9:00 A.M. to 5:00 P.M., M-F)
Singapore	65-290-3998 (9:00 A.M. to 12:00 P.M., 2:00 P.M. to 5:00 P.M., M-F)
Hong Kong	852-2368 9918
Taiwan	886-2-514-2237
Korea	82-2-556-8241

SeaTDD 408-944-9121

Using a telecommunications device for the deaf (TDD), you can send questions or comments 24 hours daily and exchange messages with a technical support specialist between 6:00 A.M. to 11:15 A.M. and 12:30 P.M. to 5:00 P.M. (Pacific time) Monday through Friday.

Customer Service Centers

Seagate direct OEM, Distribution, System Integrator and Retail customers should contact your Seagate Service Representative for warranty information. Other customers contact your place of purchase. Seagate offers comprehensive customer support for all Seagate drives. Seagate customer service centers are the only facilities authorized to service Seagate drives. These services are available worldwide.

Location Telephone number FAX number

United States 1-800-468-3472; 405-949-6740

Other Americas

(Canada & Brazil) 405-949-6706; 405-949-6738

Mexico 525-546-6965; 525-546-4888

Europe, Middle

East & Africa 31-2065-43300; 31-2065-34320

Asia Pacific &

Australia 65-485-3595; 65-485-4980

Japan 81-3-5462-2904; 81-3-3462-2979

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