Micropolis 4345NS Disk Drive
Ultra SCSI (SCSI-3), Narrow, Single-Ended, Standard 50-Pin Connector
Configuration/Specification Data Sheet

Formatted Capacity

Per Drive	4.55 GB
Bytes per Sector	512
Sectors per Track	Variable
Cylinders	4811

Performance Specifications

Avg. Seek Time (includes settling time)	7.9 msec
Avg. Rotational Latency	4.17 msec
Rotational Speed	7,200 rpm

Data Transfer Rate at Interface

Ultra SCSI	20 MB/sec
Synchronous	10 MB/sec
Asynchronous	5 MB/sec

Internal Data Rate

Inner Zone	76 Mb/sec
Outer Zone	125 Mb/sec

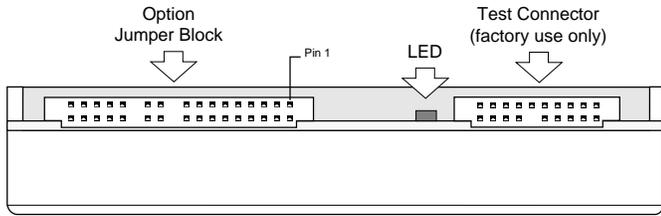|	
MTBF (power-on hours)	650,000 (Office Environment, Class B)
Positioner	Fully balanced rotary voice coil
Parking	Automatic park and lock

General Functional Specifications

Interface	Ultra SCSI (SCSI-3)
Supports Full Common Command Set	Yes
Drivers/Receivers	Narrow, Single-Ended

Power Requirements

+12V ±5% (average)	0.55 A
+12V ±5% (max during start-up)	1.75 A
+5V ±5% (average)	1.10 A

Power Dissipation, typical

Idling	10 Watts (34.1 Btu/hr)
Seeking	12 Watts (41.0 Btu/hr)

Configuration Options

FRONT VIEW

Option
Jumper Block

Pin 1

LED

Test Connector
(factory use only)

Dwg File
50048

OPTION JUMPER BLOCK J2
(Front view of the drive, board up)

Reserved W3 W2 W1 W4 Key Reserved Reserved Key PTY WP SP1 SP0 Reserved SCSI ID (see below) Remote LED+

| 35 | 33 | 31 | 29 | 27 | 25 | 23 | 21 | 19 | 17 | 15 | 13 | 11 | 9 | 7 | 5 | 3 | 1 |
| 36 | 34 | 32 | 30 | 28 | 26 | 24 | 22 | 20 | 18 | 16 | 14 | 12 | 10 | 8 | 6 | 4 | 2 |

Remote LED−
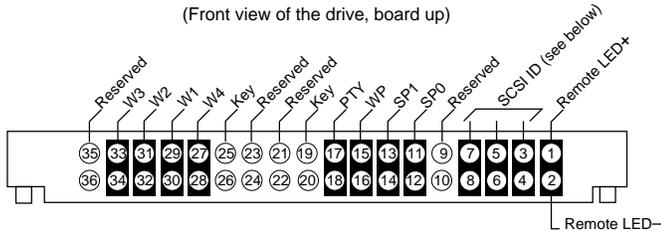
NOTE: Pins 4, 6, 8, 10, 12, 14, 16, 18, 22, and 24 are tied to Ground.

- **SCSI ID**

  Jumpers at Pin 3-4, 5-6, and 7-8 select the SCSI ID. Each SCSI device on one Host Adapter must have a unique SCSI ID (0-7). SCSI ID0 is the Default.

SCSI ID	Pin 7-8	Pin 5-6	Pin 3-4	SCSI ID	Pin 7-8	Pin 5-6	Pin 3-4
0	−	−	−	4	✓	−	−
1	−	−	✓	5	✓	−	✓
2	−	✓	−	6	✓	✓	−
3	−	✓	✓	7	✓	✓	✓

  ✓ = jumper installed

- **Interface Termination** (W4)

  Jumper installed at W4 (Default) - The drive provides termination for the interface lines; onboard termination is electrically *enabled*.

  Jumper omitted at W4 - The drive does not provide termination for the interface lines; onboard termination is electrically *disabled*.

- **Terminator Power** (W1, W2, W3)

  Jumper installed at W1 (Default) - The drive provides terminator power.

  Jumper installed at W2 - The host provides terminator power (via Interface Connector J1A).

  Jumper installed at W3 - The drive provides terminator power (via J1A) to the SCSI Bus.

- **Spindle Control** (SP0)

  Jumper installed at SP0, jumper omitted at SP1 - The spindle motor starts when SCSI 'START UNIT' command is received.

  Jumpers omitted at SP0 (Default) and at SP1 - The spindle motor starts at power-on.

- **Spindle Delay** (SP1)

  Jumper installed at SP1, jumper omitted at SP0 Spindle motor start-up is delayed, based on SCSI ID (12 seconds per SCSI ID).

  Jumpers omitted at SP1 (Default) and at SP0 - The spindle motor starts at power-on.

- **Write Protect** (WP)

  Jumper installed at WP - The drive is write protected.

  Jumper omitted at WP (Default) - The drive is not write protected.

- **BUS Parity Check** (PTY)

  Jumper installed at PTY - The drive neither generates nor detects parity.

  Jumper omitted at PTY (Default) - The drive generates parity and has parity detection enabled.

- **Remote LED**

  Open-collector output - Used to drive a user-supplied LED to indicate the drive is active.