

Hard Drive: MICROPOLIS: 4421 AV 2050MB 3.5"/SL SCSI2 FAST

4 4 2 1 A V MICROPOLIS

NO MORE PRODUCED

Native | Translation

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-
Form                3.5"/SLIMLINE          Cylinders    4050 |   |   |
Capacity form/unform 2050/          MB          Heads        7 |   |   |
Seek time / track   8.8/ 1.1 ms          Sector/track  |   |   |
Controller          SCSI2 SI/FAST/AV      Precompensation
Cache/Buffer        KB                    Landing Zone
Data transfer rate  7.200 MB/S int          Bytes/Sector  512
                   10.000 MB/S ext SYNC
Recording method    PRML                    operating | non-
operating

```

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```

-
Supply voltage      5/12 V          Temperature *C    50 |   -40 65
Power: sleep        W          Humidity          %   |
standby            W          Altitude          km   |
idle               7.5 W       Shock             g    10 |   60
seek               8.2 W       Rotation          RPM   5400
read/write         W          Acoustic          dBA   37
spin-up            W          ECC              Bit  126BIT REED SOLOMON,ON

```

THE...

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MTBF              h    650000
Warranty Month    60
Lift/Lock/Park   YES    Certificates      AV PERFORMANCE ENHAN,ISO9000

```

Layout

MICROPL. 4421AV JUMPER SETTING

```

+-----+
|                                               |XX
|                                               |XX
XX                Component Side              |XX
XX Option         Board No. 134302            |XX
XX Jumper                                                |XX J1

```

```

XX Block |XX
XX J2 |XX
XX |XX
| 1 |XX
| |XX
++ |XX
++LED |XX
| |XX
| |XX1
| |XX
| |XX J1A
| |XX
+-----+ 1

```

Jumpers

MICROPL. 4421 AV JUMPER SETTING

Jumper Setting

=====

x = Factory default

Option Jumper Block

```

          +---+---+---+---+---+---+---+---+---+---+---+---+
LED++- - |27|25|23|21|19|17|15|13|11|09|07|05|03|01|
-----+---+ | | | | | | | | | | | | | +-----
          + |28|26|24|22|20|18|16|14|12|10|08|06|04|02|
          +-+---+---+---+---+---+---+---+---+---+---+---+
RESERVED --+ | | | | | | | | | | | | | +--- Remote LED
W4 -----+ | | | | | | | | | | | | | +----- ID0
W3 -----+ | | | | | | | | | | | | | +----- ID1
W2 -----+ | | | | | | | | | | | | | +----- ID2
W1 -----+ | | | | | | | | | | | | | +----- RESERVED
PTY -----+ | | | | | | | | | | | | | +----- SP0
WP -----+ | | | | | | | | | | | | | +----- SP1

```

Single-Ended Configuration Options

SCSI ID

SCSI ID	ID2	ID1	ID0	Jumpers	Up to eight devices (the host and seven targets) can be attached to the SCSI Bus.
0	OPEN	OPEN	OPEN	ID jumpers ID0, ID1 and ID2	
1	OPEN	OPEN	CLOSED	are used to assign one of	
2	OPEN	CLOSED	OPEN	eight SCSI ID bits (0-7) to	
3	OPEN	CLOSED	CLOSED	the drive.	
4	CLOSED	OPEN	OPEN		
5	CLOSED	OPEN	CLOSED	In multiple-device systems,	
6	CLOSED	CLOSED	OPEN	each drive must have its own	
x 7	CLOSED	CLOSED	CLOSED	unique ID.	

SP0/SP1 Spindle Control Option

SP0 CLOSED

SP1 OPEN Spindle motor starts when START UNIT command is received.

SP0 OPEN (default)

SP1 OPEN Spindle motor starts at power-on.

SP0/SP1 Spindle Delay Option

SP1 CLOSED

SP0 OPEN Spindle start-up is delayed based on SCSI ID (12 seconds per ID).

SP1 OPEN (default)

SP0 OPEN Spindle motor starts at power on.

WP Write Protect Option

WP CLOSED Drive is write protected.

WP OPEN Drive is not write protected. (default)

PTY Bus Parity Check Option

PTY CLOSED Drive neither generates nor detects parity.

OPEN Drive generates parity and has parity detection enabled. (default)

W1/W2/W3 Bus Termination Power Option

W1 CLOSED (default)

Drive provides terminator power.

W2 CLOSED

Host system provides terminator power (via J1).

W3 CLOSED

Drive provides terminator power (via J1) to the BUS.

W4 Interface Termination

W4 INSTALLED Drive provides termination for the interface lines; i.e., onboard termination is electrically enabled.

x OMITTED Drive does not provide termination for the interface lines; i.e., onboard termination is electrically disabled.

Remote LED

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

General

AV

What is an AV Drive?

Today's demanding digital video and audio applications require disk drives to sustain a pre-determined minimum data transfer rate. Any interruptions in this data rate are detrimental to AV applications that require constant delivery of data at 30 frames per second minimum. In standard drives utilized for data processing requirements, the error correction and thermal calibration methods employed are not optimized for continuous delivery of data. These routine housekeeping tasks will procedure gaps in the data stream as long as 850 ms, resulting in jumps, gaps, and stutters in motion and sound when used in most AV applications.

(MICROPOLIS 10/96)