



# Diamond Max 40

The new DiamondMax<sup>m</sup> 40 series, with a top-end capacity of 40 GB, features an average seek time of sub-9.0 ms, a fast 2 MB 100 MHz SDRAM cache buffer and UltraDMA 66 interface to ensure maximum data throughput. These capacity leaders employ Maxtor's unique DualWave<sup>™</sup> multi-processor controller for a 10x boost in host command processing speed. As a result, the DiamondMax 40 series is an ideal choice for consumers working with large files, including audio and video applications. As with the existing DiamondMax line, the new series include enhancements to Maxtor's innovative ShockBlock<sup>™</sup> and MaxSafe<sup>™</sup> feature set for added reliability and superior protection from shock and damage. No matter how large your application, the new DiamondMax<sup>™</sup> 40 series has the performance and capacity you need.

## 5,400 RPM

**3.5-INCH** Performance HARD DRIVES

Capacities up to 40 GB

Designed for High-end Desktops and Workstations

#### **FEATURES:**

Fast ATA/Enhanced IDE compatible

Digital Signal Processor (DSP)-Based Architecture

> UltraDMA 66 Data Transfer Rate

2 MB SDRAM Cache Buffer

< 9.0 ms Seek Time

No Quibble® Service and Support





**Win 100 Hardware** DiamondMax 4320 (17.2 GB) *Windows Magazine*, June 1999

**MODEL** 

CAPACITY

**SERIES** 

**HFADS** 

DISKS



CRN Test Center Recommended DiamondMax 6800 (27.2 GB) Computer Reseller News, April 1999

93073U6

DM 40

30,735 MB

6

93652U8

DM 36

36,529 MB

8



Recommended List

DiamondMax Plus 5120 (20.4 GB)

Windows Magazine, August 1999

92049U4

DM 40

20,490 MB

4

92739U6

DM 36

27,396 MB

6





91024U2

DM 40

10,245 MB

2

Editor's Choice Award DiamondMax Plus 2500 (10.0 GB) DiamondMax 2880 (11.5 GB) Storage Review, Summer 1998

91369U3

DM 36

13,698 MB

3



## Maxtor's DiamondMax 40 series delivers outstanding performance including:

- 5,400 RPM spin speed
- 10.2 GB of storage per disk
- < 9.0 ms average seek
- 2 MB cache buffer
- Fast data transfer rates (up to 66 MB/sec)
- · 3-year warranty





## **MaxSafe**



### PERFORMANCE SPECIFICATIONS

94098U8

DM 40

40,980 MB

8

Seek Times (typical)	
Track to Track	1 ms
Average	< 9.0 ms
Maximum	< 20 ms
Average Latency	5.55 ms
Rotation Speed (± 0.1%)	5,400 RPM
Controller Overhead	< 0.3 ms
Start Time (0 - drive ready)	7.3 sec typical

#### DATA TRANSFER RATES

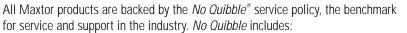
To/From Interface	up to 66.7 MB/sec
To/From Media on DM 40 Series	up to 36.9 MB/sec
To/From Media on DM 36 Series	up to 34.2 MB/sec

#### DRIVE CONFIGURATION

Integrated Controller	ATA-5/UDMA 66
Buffer Size	2 MB
Buffer Type	SDRAM
Data Zones per Surface	16
Bytes per Sector/Block	512

#### RELIABILITY SPECIFICATIONS

Start/Stop Cycles	50,000 (minimum)
Component Design Life	5 years (minimum)
Data Errors (non-recoverable)	< 1 per 10 <sup>14</sup> bits read
Annual Return Rate (ARR)	<1%



- Advance replacement in 2 business days
- MaxFax™ 24-hour automated technical support
- · Maxtor's commitment to total customer satisfaction
- Phone technicians available Monday-Friday

For more information or to talk to a customer support representative, call: (U.S. and Canada) 800-2MAXTOR. Available 5 A.M.–5 P.M. (PT) Mon–Fri; (Europe) +353 1 204 1111. Available 9:30 A.M.–6 P.M. (CET) Mon–Thurs and 9:30 A.M.–5 P.M. (CET) Fri; (Asia/Pacific) 800-481-6788. Available 8 A.M.–5:30 P.M. (GMT+8) Mon–Fri; or visit our homepage on the Internet at http://www.maxtor.com.

#### POWER REQUIREMENTS (TYPICAL)

91826U4

DM 36

18,264 MB

4

MODE	12V±10%	5 <b>V</b> ±5%	Power
Spin-up (peak)	2100 mA	275 mA	
Seek	740 mA	420 mA	11.0 W
Read/Write	295 mA	440 mA	5.7 W
Idle	230 mA	380 mA	4.7 W
Standby	20 mA	220 mA	1.3 W

#### **ENVIRONMENTAL LIMITS**

## **Acoustics** Idle mode

TEMPERATURE	
Operating	5° C - 55° C
Non-operating, Storage	-40° C - 71° C

#### RELATIVE HUMIDITY (NON-CONDENSING)

Operating, Non-operating, Storage	5% - 95%
Maximum Wet Bulb	30° C

#### ALTITUDE (RELATIVE TO SEA LEVEL)

	Operating	-200 - 10,000 fee	ł
Ī	Non-operating	-200 - 40,000 fee	ŧ

#### VIBRATION \* \*

Non-operating, random

Operating, random, no errors	10 - 45 Hz at 0.004 G2/Hz
	48 - 62 Hz at 0.008 G2/Hz

65 - 300 Hz at 0.004 G2/Hz 301 - 500 Hz at 0.0006 G2/Hz 10 - 2,000 Hz at 4.1 Grms, no damage

3.1 bel (average sound power)

Operating, swept sine (1 octave per minute)
5 - 20 Hz
0.049" double amplitude
21 - 300 Hz
1.0 G peak amplitude

#### **S**носк\*\*

Operating Mechanical Shock	30 Gs, 2 ms, no errors
Non-operating Mechanical Shock	250 Gs, 2 ms, no damage

<sup>\*\*</sup>Without non-recoverable errors.

#### PHYSICAL DIMENSIONS

Height	1.02 in	2.59 cm
Length	5.78 in	14.67 cm
Width	4.00 in	10.20 cm
Weight	1.30 lbs	0.59 kg

