



Acorn Multimedia Expansion Unit



- Dual speed CD-ROM drive
- Supports both standard and double speed operation.
- State-of-the-art technology, providing insurance against future obsolescence.
- Expandable enclosure, providing a solution for all your multimedia requirements
- Two expansion bays, one 5.25" and one 3.5", enabling easy addition of Magneto Optical drives, hard disc drives, and an additional CD-ROM
- Pre-amplifier automatically mixes the various possible sound sources.

The addition of certain devices in the expansion bays may require an upgrade to the power supply within the unit. There may be a charge for this. Please contact Cumana Limited, Pines Trading Estate, Broad Street, Guildford, Surrey, GU3 3BH,

Tel: 0483 503121 for details of upgrade availability and pricing.



Connectors

Rear	● 2 SCSI connectors (50 way centronics) ● IEC power out (2A) ● 4 pairs phono connectors – computer input – pre-amp mixed out – CD-ROM direct out (one pair for fitted device, up to one additional device)
Front	● mixed headphone out (*) ● volume control ● on/off switch
Internal	● 2 5.25" front through-mounting drive bays (one fitted with supplied CD-ROM drive) ● 1 3.5" internal drive bay

Modes and Block Length Supported

Modes	● CD-Digital Audio, CD-ROM (Mode 1 and Mode 2) ● CD-ROM XA (Mode 2, Form 1 and Form 2) ● CD-I (Mode 2, Form 1 and Form 2) ● CD-I Ready ● CD-Bridge and PhotoCD (Single and Multiple session)
Block length	● CD-ROM Mode 1: 2352, 2340, 2048, 1024 and 512 Bytes ● CD-ROM Mode 2: 2352 and 512 Bytes ● CD-DA: 2448, 2368 and 2352 Bytes ● CD-XA: 2646, 2352 and 2048 Bytes

Data/Audio Capacity (120mm diameter disc)

User data capacity(1MBytes=1000×1024 Bytes)	● > 656 MBytes, Mode 1 ● > 748 MBytes, Mode 2
Playing time	● 74 minutes and 42 seconds

Transfer Rate

User bytes/sec (sustained) (1KBytes=1024 Bytes)	● 300 KBytes, Mode 1 (Double) ● 150 KBytes, Mode 1 (Normal) ● 342.2 KBytes, Mode 2 (Double) ● 171.1 KBytes, Mode 2 (Normal)
Blocks/sec	● 150 (Double), 75 (Normal)
SCSI interface:	
– Burst rate asynchronous	● 2.5 MBytes/sec
– synchronous	● 4 MBytes/sec

Rotational Speed and Average Latency

Rotational speed	● –530 to 230 rpm, (Normal), Variable ● –1060 to 460 rpm, (Double), Variable
Average latency	● –55 to 130 msec, (Normal), Variable ● –27.5 to 65 msec, (Double), Variable

Access Time (Including Latency)

Full stroke (first to last block)	● 520 msec, (Double, typical) ● <900 msec, (Double, max) ● 550 msec (Normal, typical) ● <950 msec, (Normal, max)
Random (block to block)	● 295 msec, (Double, typical) ● <550 msec (Double, max) ● 360 msec (Normal, typical) ● <600 msec (Normal, max)

SCSI Buffer Memory

	● This drive has a FIFO ring buffer managed by Controller
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Standard memory size	● 256 KBytes
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Spin Up, Spin Down and Eject Time

Spin up time	● 1.5 sec, typical ● 10.0 sec, max
Spin down time	● 0.5 sec, typical ● 3.0 sec, max
Eject time	● 2.2 sec, typical ● 7.0 sec, max

User Error Rates

Measured with 5 retries maximum	
ECC on at Mode 1	● <10-12 Block/bit (Double) ● <10-15 Block/bit (Normal)
ECC off at Mode 1, Mode 2	● <10-9 Block/bit (Double) ● <10-12 Block/bit (Normal)

(*) Fitted CD-ROM drives also have direct output headphone socket and tied volume control

Additional software interfaces may be required

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