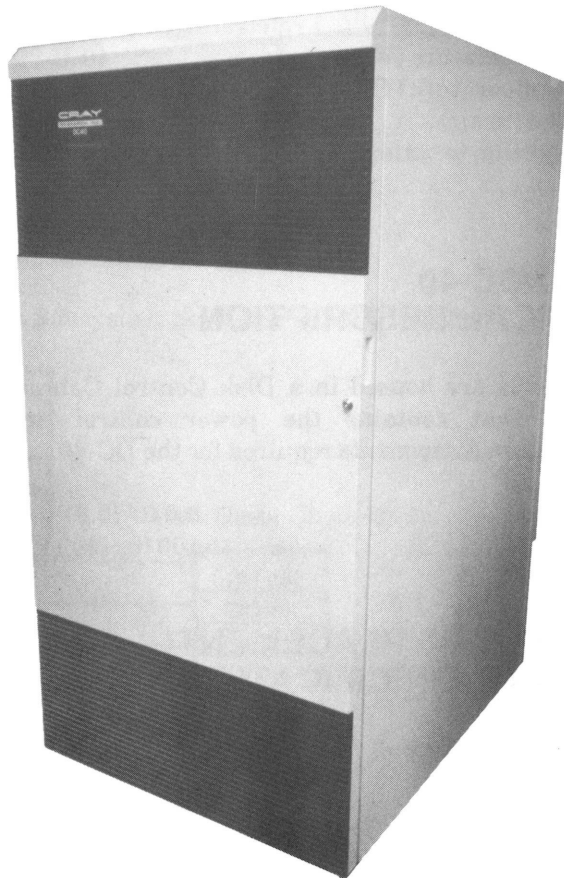
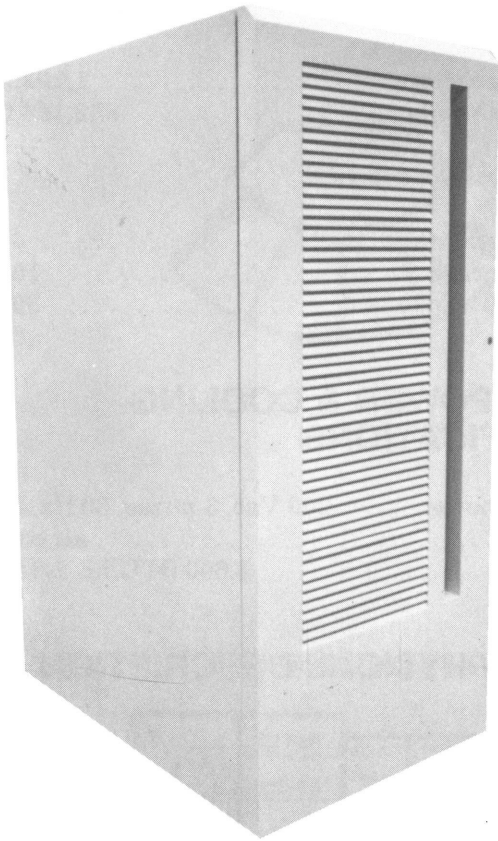


# DS-40 and DS-40D DISK SUBSYSTEMS



**CRAY**  
RESEARCH, INC.

**Specification Sheet**  
**HR-4009**

# DS-40 and DS-40D SPECIFICATIONS

## DC-40 FEATURES

Transfer rate:

- Burst rate ..... 20 Mbytes/s
- Sustained rate ..... 9.6 Mbytes/s

Storage capacity ..... 5,200 Mbytes

## DC-40 POWER & COOLING SPECIFICATIONS

Required power .... 208 Vac, 3-phase, 60 Hz, 60 A  
Cooling ..... water cooled  
..... refrigeration/air cooling  
Water temperature (°F) ..... 40 to 90  
Water temperature (°C) ..... 4.4 to 32.2  
Heat load (to air) ..... 3,054 BTU/hr, 895 W  
Heat rejection to water ..... 24,000 BTU/hr,  
..... 7,643 W

## DCC-2/DC-40 PHYSICAL DESCRIPTION

The DC-40s are housed in a Disk Control Cabinet (DCC-2) that contains the power control and refrigeration components required for the DC-40.

Floor space ..... 8.6 ft<sup>2</sup> (0.81 m<sup>2</sup>)  
Weight ..... 1,100 lbs (499 kg)

## DCC-2/DC-40 PLACEMENT/ CABLING SPECIFICATIONS

Minimum clearance:

- Sides ..... 12 in. (30.5 cm)
- Front ..... 36 in. (91.4 cm)
- Back ..... 36 in. (91.4 cm)

Length of power cable ..... 8 ft (2.4 m)  
Maximum length of data cables ..... 40 ft (12 m)

## DD-40 FEATURES

Transfer rate:

- Burst rate ..... 20 Mbytes/s
- Sustained rate ..... 9.6 Mbytes/s

Total data sectors ..... 1,293,216  
Total data words ..... 662,126,592

Typical position delays:

- Single track ..... 4 ms
- Average ..... 16 ms
- Full stroke ..... 30 ms

## DD-40 POWER & COOLING SPECIFICATIONS

Required power ... 208 Vac, 3-phase, 60 Hz, 20 A  
Cooling ..... air cooled  
Heat load ..... 8,000 BTU/hr, 2,340 W

## DD-40 PHYSICAL DESCRIPTION

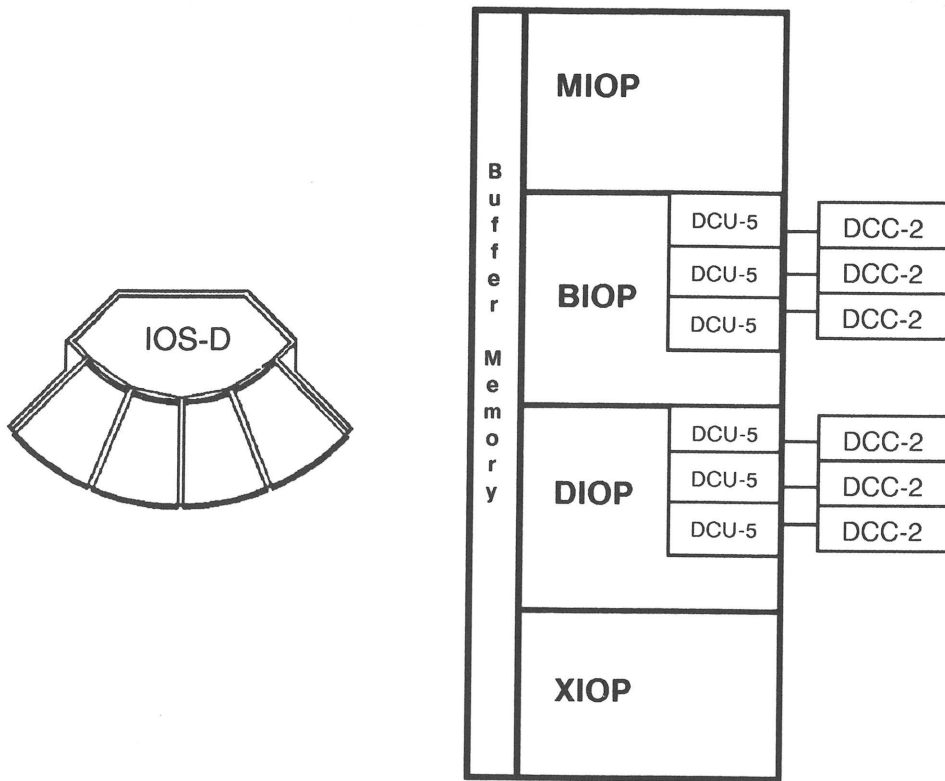
Floor space ..... 7.2 ft<sup>2</sup> (0.68 m<sup>2</sup>)  
Weight ..... 1,150 lbs (522 kg)

## DD-40 PLACEMENT/ CABLING SPECIFICATIONS

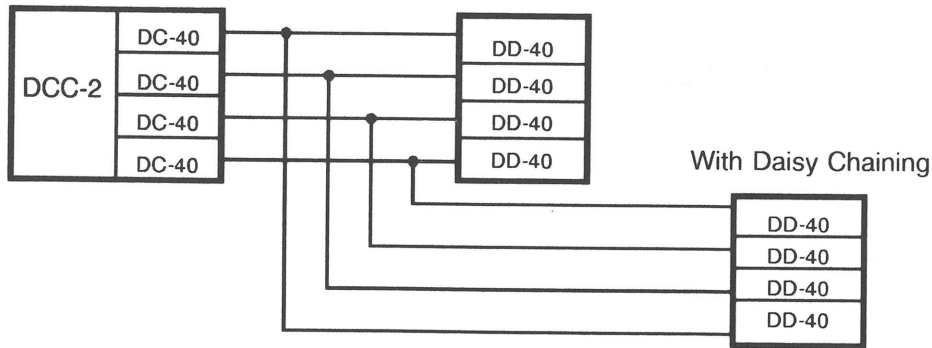
Minimum clearance:

- Sides ..... 1 in. (2.5 cm)
- Front ..... 36 in. (91.4 cm)
- Back ..... 30 in. (76.2 cm)

Length of power cable ..... 6 ft (1.8 m)  
Maximum length of data cables ..... 15 ft (4.5 m)



IOS Model D and DS-40 or DS-40D Disk Subsystem Maximum Configuration



DS-40D Disk Subsystem Maximum Configuration

The DCC-2 contains four DC-40 controllers. The DC-40 is a dual-ported interface with only one port active at a time.

Four Disk Storage Units (DSUs) are connected to the DCC-2 chassis for the DS-40 Disk Subsystem.

Eight DSUs are connected to the DCC-2 chassis for the DS-40D Disk Subsystem, but only four DSUs can be active at one time. This technique is known as daisy chaining and is used to double the capacity of a

single subsystem from 21 Gbytes to 42 Gbytes; doubling the capacity does not double the performance since the data path is set at 9.6 Mbytes/s.

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