NAME

hp – RP04/RP05/RP06 moving-head disk

DESCRIPTION

The files $rp0 \dots rp7$ refer to sections of the RP04/RP05/RP06 disk drive 0. The files $rp10 \dots rp17$ refer to drive 1, etc. This is done since the size of of a full pack is over 100,000 blocks and internally the system is only capable of addressing 65536 blocks. Also since the disk is so large, this allows it to be broken up into more manageable pieces.

The origin and size of the sections on each drive are as follows:

section	start	length
0	0	11286
1	27	53504
2	155	53504
3	283	53504
4	27	65535
5	184	65535
6	341	29260
7	unassigned	

The start address is a cylinder address, with each cylinder containing 418 blocks. For the RP06 drives, this table in the system must be changed to allow full addressing. It is unwise for all of these files to be present in one installation, since there is overlap in addresses and protection becomes a sticky matter.

The rp files access the disk via the system's normal buffering mechanism and may be read and written without regard to physical disk records. There is also a "raw" interface which provides for direct transmission between the disk and the user's read or write buffer. A single read or write call results in exactly one I/O operation and therefore raw I/O is considerably more efficient when many words are transmitted. The names of the raw RP files begin with rrp and end with a number which selects the same disk section as the corresponding rp file.

In raw I/O the buffer must begin on a word boundary, and counts should be a multiple of 512 bytes (a disk block). Likewise *seek* calls should specify a multiple of 512 bytes.

FILES

/dev/rp*, /dev/rrp*