## NAME

rp – RP-11/RP03 moving-head disk

## DESCRIPTION

The files  $rp0 \dots rp7$  refer to sections of the RP03 disk drive 0. The files  $rp10 \dots rp17$  refer to drive 1, etc. This is done since the size of a full pack is 81200 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	7600
1	38	36200
2	219	36200
3	40	65535
4	22	36200
5	203	40600
6-7	unassigned	

The start address is a cylinder address, with each cylinder containing 200 blocks. 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\*