NAME

sg_read_buffer − send SCSI READ BUFFER command

SYNOPSIS

sg_read_buffer [−−*help*] [−−*hex*] [−−*id=ID*] [−−*length=LEN*] [−−*mode=MO*] [−−*offset=OFF*]
[−−*raw*] [−−*readonly*] [−−*verbose*] [−−*version*] *DEVICE*

DESCRIPTION

Sends a SCSI READ BUFFER command to the *DEVICE*, and if there is a response either decodes it, prints
it in hexadecimal or sends it in binary to stdout. If a response is received for a "descriptor" mode then, in
the absence of −−*hex* and −−*raw*, it is decoded. Response for non−descriptor modes are output in hexadec-
imal unless the −−*raw* option is given.

OPTIONS

Arguments to long options are mandatory for short options as well.

−h, **−−help**

output the usage message then exit. If used multiple times also prints the mode names and their
acronyms.

−H, **−−hex**

output the response in hexadecimal. When given twice the response is output in hex with the cor-
responding representation in ASCII to the right of each line.

−i, **−−id**=*ID*

this option sets the buffer id field in the cdb. *ID* is a value between 0 (default) and 255 inclusive.

−l, **−−length**=*LEN*

where *LEN* is the length, in bytes, that is placed in the "allocation length" field in the cdb. The de-
fault value is 4 (bytes). The device may respond with less bytes.

−m, **−−mode**=*MO*

this option sets the mode field in the cdb. *MO* is a value between 0 (default) and 31 inclusive. Al-
ternatively an abbreviation can be given. See the MODES section below. To list the available
mode abbreviations use an invalid one (e.g. '−−mode=xxx'). As an example, to fetch the read buf-
fer descriptor give '−−mode=desc' .

−o, **−−offset**=*OFF*

this option sets the buffer offset field in the cdb. *OFF* is a value between 0 (default) and $2**24−1$.
It is a byte offset.

−r, **−−raw**

if a response is received then it is sent in binary to stdout.

−R, **−−readonly**

open the *DEVICE* read−only (e.g. in Unix with the O_RDONLY flag). The default is to open it
read−write.

−v, **−−verbose**

increase the level of verbosity, (i.e. debug output).

−V, **−−version**

print the version string and then exit.

MODES

Following is a list of READ BUFFER command settings for the MODE field. First is an acronym accepted
by the *MO* argument of this utility. Following the acronym in square brackets are the corresponding deci-
mal and hex values that may also be given for *MO*. The following are listed in numerical order.

hd [0, 0x0]

Combined header and data (obsolete in SPC−4).

vendor [1, 0x1]
>   Vendor specific.

data [2, 0x2]
>   Data.

desc [3, 0x3]
>   Descriptor: yields 4 bytes that contain an offset boundary field (1 byte) and buffer capacity (3 bytes).

echo [10, 0xa]
>   Read data from echo buffer (was called "Echo buffer" in SPC−3).

echo_desc [11, 0xb]
>   Echo buffer descriptor: yields 4 bytes of which the last (lowest) 13 bits represent the echo buffer capacity. The maximum echo buffer size is 4096 bytes.

en_ex [26, 0x1a]
>   Enable expander communications protocol and Echo buffer. Made obsolete in SPC−4.

err_hist [28, 0x1c]
>   Error history. Introduced in SPC−4.

NOTES
All numbers given with options are assumed to be decimal. Alternatively numerical values can be given in hexadecimal preceded by either "0x" or "0X" (or has a trailing "h" or "H").

EXIT STATUS
The exit status of sg_read_buffer is 0 when it is successful. Otherwise see the sg3_utils(8) man page.

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REPORTING BUGS
Report bugs to ‹dgilbert at interlog dot com›.

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SEE ALSO
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