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Red Hat Enterprise Linux Release 9.2 Manual Pages on 'sane-umax.5' command

$ man sane-umax.5

sane-umax(5) SANE Scanner Access Now Easy sane-umax(5)

NAME

sane-umax - SANE backend for UMAX scanners

ABOUT THIS FILE

This file only is a short description of the sane-umax backend for sane! For detailed information take a look at sane-umax-doc.html (it is included in the sane source directory and in the xsane(1) online help)!

DESCRIPTION

The sane-umax library implements a SANE backend that provides access to several UMAX-SCSI-scanners and some Linotye Hell SCSI-scanners, paral? lel- and USB-scanners are not (and probably will never be) supported!

I suggest you hold one hand on the power-button of the scanner while you try the first scans!

CONFIGURATION

The configuration file for this backend resides in /etc/sane.d/umax.conf.

Its contents is a list of device names that correspond to UMAX and UMAX compatible scanners. Empty lines and lines starting with a hash mark (#) are ignored. A sample configuration file is shown below:

```
# this is a comment
#
option scsi-maxqueue 4
option scsi-buffer-size-min 65536
```

option scsi-buffer-size-max 131072

option scan-lines 40

option preview-lines 10

option scsi-maxqueue 2

option execute-request-sense 0

option force-preview-bit-rgb 0

option slow-speed -1

option care-about-smearing -1

option calibration-full-ccd -1

option calibration-width-offset -1

option calibration-bytes-pixel -1

option exposure-time-rgb-bind -1

option invert-shading-data -1

option lamp-control-available 0

option gamma-lsb-padded 0

/dev/sge

#scsi Vendor Model Type Bus Channel ID LUN

The following scanner supports lamp control

option lamp-control-available 1

scsi UMAX * Scanner * * * * *

scanner on /dev/scanner does not support lamp control

option lamp-control-available 0

/dev/scanner

execute-request-sense:

values: 0 = disabled, 1 = enabled

default = 0

If set to 1 umax_do_request_sense is called in umax_do_calibra?

tion. This can hang the system (but has been enabled until this

version)

scsi-buffer-size-min, scsi-buffer-size-max:

values: 4096-1048576

default min = 32768, max = 131072

Especially the minimum value is very important. If this value

is set too small the backend is not able to send gamma tables to the scanner or to do a correct color calibration. This may re? sult in strange color effects. If the minimum value is set too large then the backend is not able to allocate the requested SCSI buffer size and aborts with out of memory error. The de? fault is 32KB, for some scanners it should be increased to 64KB.

scan-lines, preview-lines:

values: 1-65535

default: scan-lines = 40, preview-lines = 10

define the maximum number of lines that are scanned into one buffer

force-preview-bit-rgb:

values: 0 = disabled, 1 = enabled

default = 0

set preview bit in rgb real scan

slow-speed, care-about-smearing:

values: -1 = auto, 0 = disabled, 1 = enabled

default = -1

dangerous options, needed for some scanners do not changed these options until you really know what you do, you may destroy your scanner when you define wrong values for this options

calibration-full-ccd:

values: -1 = auto, 0 = disabled, 1 = enabled

default = -1

do calibration for each pixel of ccd instead of selected image

calibration-width-offset:

values: -99999 = auto, > -99999 set value

add an offset width to the calculated with for image/ccd

calibration-bytes-pixel:

values: -1 = disabled, 0 = not set, 1 = 1 byte/pixel, 2 = 2 bytes/pixel

use # bytes per pixel for calibration

exposure-time-rgb-bind:

values: -1 = automatically set by driver - if known, 0 = dis?

abled (own selection for red, green and blue), 1 = enabled (same

values for red, green and blue)

invert-shading-data:

values: -1 = automatically set by driver - if known, 0 = dis?

abled, 1 = enabled

default = -1

invert shading data before sending it back to the scanner

lamp-control-available:

values: 0 = automatically set by driver - if known, 1 = avail?

able

default = 0

gamma-lsb-padded:

values: -1 = automatically set by driver - if known, 0 = gamma

data is msb padded, 1 = gamma data is lsb padded

default = -1

handle-bad-sense-error:

values: 0 = handle as device busy, 1 = handle as ok, 2 = handle

as i/o error, 3 = ignore bad error code - continue sense handler

default = 0

scsi-maxqueue:

values: 1..# (maximum defined at compile time)

default = 2

most SCSI drivers allow internal command queueing with a depth

of 2 commands. In most cases it does not mprove anything when

you increase this value. When your SCSI driver does not support

any command queueing you can try to set this value to 1.

The special device name must be a generic SCSI device or a symlink to

such a device. To find out to which device your scanner is assigned

and how you have to set the permissions of that device, have a look at

sane-scsi(5).

SCSI ADAPTER TIPS

The ISA-SCSI-adapters that are shipped with some Umax-scanners are not

supported very well by Linux (I suggest not to use it), the PCI-SCSI-adapters that come with some Umax-scanners are not supported at all (as far as I know). On other platforms these SCSI-adapters are not sup? ported. So you typically need to purchase another SCSI-adapter that is supported by your platform. See the relevant hardware FAQs and HOWTOs for your platform for more information.

The UMAX-scanners do block the SCSI-bus for a few seconds while scan? ning. It is not necessary to connect the scanner to its own SCSI-adapter. But if you need short response time for your SCSI-harddisk (e.g. if your computer is a file-server) or other SCSI devices, I sug? gest you use an own SCSI-adapter for your UMAX-scanner.

If you have any problems with your Umax scanner, check your SCSI chain (cable length, termination, ...).

See also: sane-scsi(5)

FILES

The backend configuration file:

/etc/sane.d/umax.conf

The static library implementing this backend:

/usr/lib64/sane/libsane-umax.a

The shared library implementing this backend:

/usr/lib64/sane/libsane-umax.so (present on systems that support dynamic loading)

ENVIRONMENT

SANE_DEBUG_UMAX

If the library was compiled with debug support enabled, this en? vironment variable controls the debug level for this backend.

E.g., a value of 128 requests all debug output to be printed.

Smaller levels reduce verbosity: SANE_DEBUG_UMAX values.

Number	Remark
0	print important errors (printed each time)
1	print errors
2	print sense
3	print warnings

4 print scanner-inquiry

5 print information

6 print less important information

7 print called procedures

8 print reader_process messages

10 print called sane-init-routines

11 print called sane-procedures

12 print sane infos

13 print sane option-control messages

Example:

export SANE_DEBUG_UMAX=8

BUGS

X-resolutions greater than 600 dpi sometimes cause problems.

SEE ALSO

sane(7), sane-scsi(5)

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