

Vaio Picturebook Motion Eye Camera Driver

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This driver enable the use of video4linux compatible applications with the Motion Eye camera. This driver requires the "Sony Laptop Extras" driver (which can be found in the "Misc devices" section of the kernel configuration utility) to be compiled and installed (using its "camera=1" parameter).

It can do at maximum 30 fps @ 320x240 or 15 fps @ 640x480.

Grabbing is supported in packed YUV colorspace only.

MJPEG hardware grabbing is supported via a private API (see below).

Hardware supported

This driver supports the 'second' version of the MotionEye camera :)

The first version was connected directly on the video bus of the Neomagic video card and is unsupported.

The second one, made by Kawasaki Steel is fully supported by this driver (PCI vendor/device is 0x136b/0xff01)

The third one, present in recent (more or less last year) Picturebooks (C1M* models), is not supported. The manufacturer has given the specs to the developers under a NDA (which allows the development of a GPL driver however), but things are not moving very fast (see <http://r-engine.sourceforge.net/>) (PCI vendor/device is 0x10cf/0x2011).

There is a forth model connected on the USB bus in TR1* Vaio laptops. This camera is not supported at all by the current driver, in fact little information if any is available for this camera (USB vendor/device is 0x054c/0x0107).

Driver options

Several options can be passed to the meye driver using the standard module argument syntax (<param>=<value> when passing the option to the module or meye.<param>=<value> on the kernel boot line when meye is statically linked into the kernel). Those options are:

```
System Message: WARNING/2 (D:\onboarding-resources\sample-onboarding-resources\linux-master\Documentation\admin-guide\media\linux-master) (Documentation) (admin-guide) (media)meye.rst, line 55)
```

Cannot analyze code. No Pygments lexer found for "none".

```
.. code-block:: none

    gbuffers:      number of capture buffers, default is 2 (32 max)

    gbufsize:      size of each capture buffer, default is 614400

    video_nr:      video device to register (0 = /dev/video0, etc)
```

Module use

In order to automatically load the meye module on use, you can put those lines in your /etc/modprobe.d/meye.conf file:

```
System Message: WARNING/2 (D:\onboarding-resources\sample-onboarding-resources\linux-master\Documentation\admin-guide\media\linux-master) (Documentation) (admin-guide) (media)meye.rst, line 69)
```

Cannot analyze code. No Pygments lexer found for "none".

```
.. code-block:: none

    alias char-major-81 videodev
    alias char-major-81-0 meye
    options meye gbuffers=32
```

Usage:

System Message: WARNING/2 (D:\onboarding-resources\sample-onboarding-resources\linux-master\Documentation\admin-guide\media\linux-master (Documentation) (admin-guide) (media)meye.rst, line 78)

Cannot analyze code. No Pygments lexer found for "none".

```
.. code-block:: none

    xawtv >= 3.49 (<http://bytex.org/xawtv/>)
        for display and uncompressed video capture:

            xawtv -c /dev/video0 -geometry 640x480
            or
            xawtv -c /dev/video0 -geometry 320x240

    motioneye (<http://popies.net/meye/>)
        for getting ppm or jpg snapshots, mjpeg video
```

Bugs / Todo

- 'motioneye' still uses the meye private v4l1 API extensions.