

ioctl VIDIOC_ENUMOUTPUT

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\linux-master\Documentation\userspace-api\media\v4l\linux-master) (Documentation) (userspace-api) (media) (v4l) vidioc-enumoutput.rst, line 2)

Unknown directive type "c.namespace".

```
.. c:namespace:: V4L
```

Name

VIDIOC_ENUMOUTPUT - Enumerate video outputs

Synopsis

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Unknown directive type "c.macro".

```
.. c:macro:: VIDIOC_ENUMOUTPUT
```

```
int ioctl(int fd, VIDIOC_ENUMOUTPUT, struct v4l2_output *argp)
```

Arguments

fd

File descriptor returned by `c:func:open()`.

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Unknown interpreted text role "c.func".

argp

Pointer to struct `c:type:v4l2_output`.

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Unknown interpreted text role "c.type".

Description

To query the attributes of a video outputs applications initialize the `index` field of struct `c:type:v4l2_output` and call the `ref:VIDIOC_ENUMOUTPUT` with a pointer to this structure. Drivers fill the rest of the structure or return an `EINVAL` error code when the index is out of bounds. To enumerate all outputs applications shall begin at index zero, incrementing by one until the driver returns `EINVAL`.

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Unknown interpreted text role "c.type".

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api) (media) (v4l)vidioc-enumoutput.rst, line 34); [backlink](#)

Unknown interpreted text role "ref".

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Unknown directive type "tabularcolumns".

```
.. tabularcolumns:: |p{4.4cm}|p{4.4cm}|p{8.5cm}|
```

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Unknown directive type "c:type".

```
.. c:type:: v4l2_output
```

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Unknown directive type "flat-table".

```
.. flat-table:: struct v4l2_output
   :header-rows: 0
   :stub-columns: 0
   :widths:      1 1 2
```

- * - `__u32`
 - `__index`
 - Identifies the output, set by the application.
- * - `__u8`
 - `__name` [32]
 - Name of the video output, a NUL-terminated ASCII string, for example: "Vout". This information is intended for the user, preferably the connector label on the device itself.
- * - `__u32`
 - `__type`
 - Type of the output, see :ref:`output-type`.
- * - `__u32`
 - `__audioset`
 - Drivers can enumerate up to 32 video and audio outputs. This field shows which audio outputs were selectable as the current output if this was the currently selected video output. It is a bit mask. The LSB corresponds to audio output 0, the MSB to output 31. Any number of bits can be set, or none.

When the driver does not enumerate audio outputs no bits must be set. Applications shall not interpret this as lack of audio support. Drivers may automatically select audio outputs without enumerating them.

For details on audio outputs and how to select the current output see :ref:`audio`.

- * - `__u32`
 - `__modulator`
 - Output devices can have zero or more RF modulators. When the `__type` is `V4L2_OUTPUT_TYPE_MODULATOR` this is an RF connector and this field identifies the modulator. It corresponds to struct `c:type: v4l2_modulator` field `__index`. For details on modulators see :ref:`tuner`.
- * - :ref:`v4l2_std_id` <v4l2-std-id>
 - `__std`
 - Every video output supports one or more different video standards. This field is a set of all supported standards. For details on video standards and how to switch see :ref:`standard`.
- * - `__u32`
 - `__capabilities`
 - This field provides capabilities for the output. See :ref:`output-capabilities` for flags.
- * - `__u32`
 - `__reserved` [3]

- Reserved for future extensions. Drivers must set the array to zero.

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Unknown directive type "tabularcolumns".

```
.. tabularcolumns:: |p{7.5cm}|p{0.6cm}|p{9.2cm}|
```

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Unknown directive type "flat-table".

```
.. flat-table:: Output Type
:header-rows: 0
:stub-columns: 0
:widths:      3 1 4

* - ``V4L2_OUTPUT_TYPE_MODULATOR``
  - 1
  - This output is an analog TV modulator.
* - ``V4L2_OUTPUT_TYPE_ANALOG``
  - 2
  - Any non-modulator video output, for example Composite Video,
    S-Video, HDMI. The naming as ``_TYPE_ANALOG`` is historical,
    today we would have called it ``_TYPE_VIDEO``.
* - ``V4L2_OUTPUT_TYPE_ANALOGVGAOVERLAY``
  - 3
  - The video output will be copied to a :ref:`video overlay <overlay>`.
```

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Unknown directive type "tabularcolumns".

```
.. tabularcolumns:: |p{6.4cm}|p{2.4cm}|p{8.5cm}|
```

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Unknown directive type "flat-table".

```
.. flat-table:: Output capabilities
:header-rows: 0
:stub-columns: 0
:widths:      3 1 4

* - ``V4L2_OUT_CAP_DV_TIMINGS``
  - 0x00000002
  - This output supports setting video timings by using
    ``VIDIOC_S_DV_TIMINGS``.
* - ``V4L2_OUT_CAP_STD``
  - 0x00000004
  - This output supports setting the TV standard by using
    ``VIDIOC_S_STD``.
* - ``V4L2_OUT_CAP_NATIVE_SIZE``
  - 0x00000008
  - This output supports setting the native size using the
    ``V4L2_SEL_TGT_NATIVE_SIZE`` selection target, see
    :ref:`v4l2-selections-common`.
```

On success 0 is returned, on error -1 and the `errno` variable is set appropriately. The generic error codes are described at the [ref: Generic Error Codes <gen-errors>](#) chapter.

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Unknown interpreted text role "ref".

EINVAL

The struct `:c:type:`v4l2_output`` index is out of bounds.

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Unknown interpreted text role "c:type".