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

> **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 18)**
>
> 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()`.
>
> > **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 26); _backlink_**
> >
> > Unknown interpreted text role "c:func".

argp

> Pointer to struct :c:type:`v4l2_output`.
>
> > **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 29); _backlink_**
> >
> > 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.
```

Return Value

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.
>
> > **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 152);** *backlink*
> >
> > Unknown interpreted text role "c:type".