

ioctl VIDIOC_ENCODER_CMD, VIDIOC_TRY_ENCODER_CMD

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-encoder-cmd.rst, line 2)

Unknown directive type "c:namespace".

.. c:namespace:: V4L

Name

VIDIOC_ENCODER_CMD - VIDIOC_TRY_ENCODER_CMD - Execute an encoder command

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-encoder-cmd.rst, line 18)

Unknown directive type "c:macro".

.. c:macro:: VIDIOC_ENCODER_CMD

```
int ioctl(int fd, VIDIOC_ENCODER_CMD, struct v4l2_encoder_cmd *argp)
```

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Unknown directive type "c:macro".

.. c:macro:: VIDIOC_TRY_ENCODER_CMD

```
int ioctl(int fd, VIDIOC_TRY_ENCODER_CMD, struct v4l2_encoder_cmd *argp)
```

Arguments

fd

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

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argp

Pointer to struct `c:type:v4l2_encoder_cmd`.

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Description

These ioctls control an audio/video (usually MPEG-) encoder. `VIDIOC_ENCODER_CMD` sends a command to the encoder,

VIDIOC_TRY_ENCODER_CMD can be used to try a command without actually executing it.

To send a command applications must initialize all fields of a struct `:c:type: v4l2_encoder_cmd` and call `VIDIOC_ENCODER_CMD` or `VIDIOC_TRY_ENCODER_CMD` with a pointer to this structure.

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The `cmd` field must contain the command code. Some commands use the `flags` field for additional information.

After a STOP command, `:c:func: read()` calls will read the remaining data buffered by the driver. When the buffer is empty, `:c:func: read()` will return zero and the next `:c:func: read()` call will restart the encoder.

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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-encoder-cmd.rst, line 51`; [backlink](#)

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A `:c:func: read()` or `:ref: VIDIOC_STREAMON <VIDIOC_STREAMON>` call sends an implicit START command to the encoder if it has not been started yet. Applies to both queues of mem2mem encoders.

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A `:c:func: close()` or `:ref: VIDIOC_STREAMOFF <VIDIOC_STREAMON>` call of a streaming file descriptor sends an implicit immediate STOP to the encoder, and all buffered data is discarded. Applies to both queues of mem2mem encoders.

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These ioctls are optional, not all drivers may support them. They were introduced in Linux 2.6.21. They are, however, mandatory for stateful mem2mem encoders (as further documented in `:ref: encoder`).

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Unknown directive type "tabularcolumns".

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

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Unknown directive type "c:type".

```
.. c:type:: v4l2_encoder_cmd
```

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Unknown directive type "flat-table".

```
.. flat-table:: struct v4l2_encoder_cmd
   :header-rows: 0
   :stub-columns: 0
   :widths:      1 1 2

   * - u32
     - ``cmd``
     - The encoder command, see :ref:`encoder-cmds`.
   * - u32
     - ``flags``
     - Flags to go with the command, see :ref:`encoder-flags`. If no
       flags are defined for this command, drivers and applications must
       set this field to zero.
   * - u32
     - ``data`` [8]
     - Reserved for future extensions. Drivers and applications must set
       the array to zero.
```

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Unknown directive type "tabularcolumns".

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Unknown directive type "flat-table".

```
.. flat-table:: Encoder Commands
   :header-rows: 0
   :stub-columns: 0
   :widths:      3 1 4

   * - ``V4L2_ENC_CMD_START``
     - 0
     - Start the encoder. When the encoder is already running or paused,
       this command does nothing. No flags are defined for this command.
```

For a device implementing the :ref:`encoder`, once the drain sequence is initiated with the ``V4L2_ENC_CMD_STOP`` command, it must be driven to completion before this command can be invoked. Any attempt to invoke the command while the drain sequence is in progress will trigger an ``EBUSY`` error code. See :ref:`encoder` for more details.

- * - ``V4L2_ENC_CMD_STOP``
 - 1
 - Stop the encoder. When the ``V4L2_ENC_CMD_STOP_AT_GOP_END`` flag is set, encoding will continue until the end of the current *Group Of Pictures*, otherwise encoding will stop immediately. When the encoder is already stopped, this command does nothing.

For a device implementing the :ref:`encoder`, the command will initiate the drain sequence as documented in :ref:`encoder`. No flags or other arguments are accepted in this case. Any attempt to invoke the command again before the sequence completes will trigger an ``EBUSY`` error code.

- * - ``V4L2_ENC_CMD_PAUSE``
 - 2
 - Pause the encoder. When the encoder has not been started yet, the driver will return an ``EPERM`` error code. When the encoder is already paused, this command does nothing. No flags are defined for this command.
- * - ``V4L2_ENC_CMD_RESUME``
 - 3
 - Resume encoding after a PAUSE command. When the encoder has not been started yet, the driver will return an ``EPERM`` error code. When the encoder is already running, this command does nothing. No flags are defined for this command.

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Unknown directive type "tabularcolumns".

```
.. tabularcolumns:: |p{6.6cm}|p{2.2cm}|p{8.5cm}|
```

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Unknown directive type "flat-table".

```
.. flat-table:: Encoder Command Flags
   :header-rows: 0
   :stub-columns: 0
   :widths:      3 1 4
```

- * - ``V4L2_ENC_CMD_STOP_AT_GOP_END``
 - 0x0001
 - Stop encoding at the end of the current *Group Of Pictures*, rather than immediately.

Does not apply to :ref:`encoder`.

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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EBUSY

A drain sequence of a device implementing the :ref:`encoder` is still in progress. It is not allowed to issue another encoder command until it completes.

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EINVAL

The `cmd` field is invalid.

EPERM

The application sent a PAUSE or RESUME command when the encoder was not running.