

ioctl VIDIOC_G_CTRL, VIDIOC_S_CTRL

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-g-ctrl.rst, line 2)

Unknown directive type "c:namespace".

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

Name

VIDIOC_G_CTRL - VIDIOC_S_CTRL - Get or set the value of a control

Synopsis

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Unknown directive type "c:macro".

```
.. c:macro:: VIDIOC_G_CTRL
```

```
int ioctl(int fd, VIDIOC_G_CTRL, struct v4l2_control *argp)
```

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Unknown directive type "c:macro".

```
.. c:macro:: VIDIOC_S_CTRL
```

```
int ioctl(int fd, VIDIOC_S_CTRL, struct v4l2_control *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_control`.

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Unknown interpreted text role "c:type".

Description

To get the current value of a control applications initialize the `id` field of a struct `c:type:v4l2_control` and call the `ref:VIDIOC_G_CTRL<VIDIOC_G_CTRL>` `ioctl` with a pointer to this structure. To change the value of a control applications initialize the `id` and `value` fields of a struct `c:type:v4l2_control` and call the `ref:VIDIOC_S_CTRL<VIDIOC_G_CTRL>` `ioctl`.

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Unknown interpreted text role "c:type".

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Unknown interpreted text role "ref".

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Unknown interpreted text role "c:type".

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Unknown interpreted text role "ref".

When the `id` is invalid drivers return an `EINVAL` error code. When the `value` is out of bounds drivers can choose to take the closest valid value or return an `ERANGE` error code, whatever seems more appropriate. However, `ref`VIDIOC_S_CTRL` <VIDIOC_G_CTRL>` is a write-only ioctl, it does not return the actual new value. If the `value` is inappropriate for the control (e.g. if it refers to an unsupported menu index of a menu control), then `EINVAL` error code is returned as well.

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Unknown interpreted text role "ref".

These ioctls work only with user controls. For other control classes the `ref`VIDIOC_G_EXT_CTRLS``, `ref`VIDIOC_S_EXT_CTRLS` <VIDIOC_G_EXT_CTRLS>` or `ref`VIDIOC_TRY_EXT_CTRLS` <VIDIOC_G_EXT_CTRLS>` must be used.

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Unknown interpreted text role "ref".

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Unknown interpreted text role "ref".

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Unknown directive type "c:type".

```
.. c:type:: v4l2_control
```

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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 "flat-table".

```
.. flat-table:: struct v4l2_control
  :header-rows: 0
  :stub-columns: 0
  :widths:      1 1 2

  * - __u32
    - ``id``
    - Identifies the control, set by the application.
  * - __s32
    - ``value``
    - New value or current value.
```

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_control`` `id` is invalid or the `value` is inappropriate for the given control (i.e. if a menu item is selected that is not supported by the driver according to [ref:VIDIOC_QUERYMENU <VIDIOC_QUERYCTRL>](#)).

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Unknown interpreted text role "c:type".

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Unknown interpreted text role "ref".

ERANGE

The struct `:c:type:`v4l2_control`` `value` is out of bounds.

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Unknown interpreted text role "c:type".

EBUSY

The control is temporarily not changeable, possibly because another applications took over control of the device function this control belongs to.

EACCES

Attempt to set a read-only control or to get a write-only control.

Or if there is an attempt to set an inactive control and the driver is not capable of caching the new value until the control is active again.