ioctl VIDIOC_G_FREQUENCY, VIDIOC_S_FREQUENCY

> **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-frequency.rst`, line 2)**
>
> Unknown directive type "c:namespace".
>
> ```
> .. c:namespace:: V4L
> ```

Name

VIDIOC_G_FREQUENCY - VIDIOC_S_FREQUENCY - Get or set tuner or modulator radio frequency

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-g-frequency.rst`, line 18)**
>
> Unknown directive type "c:macro".
>
> ```
> .. c:macro:: VIDIOC_G_FREQUENCY
> ```

```
int ioctl(int fd, VIDIOC_G_FREQUENCY, struct v4l2_frequency *argp)
```

> **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-frequency.rst`, line 22)**
>
> Unknown directive type "c:macro".
>
> ```
> .. c:macro:: VIDIOC_S_FREQUENCY
> ```

```
int ioctl(int fd, VIDIOC_S_FREQUENCY, const struct v4l2_frequency *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-g-frequency.rst`, line 30); *backlink***
> >
> > Unknown interpreted text role "c:func".

`argp`

> Pointer to struct :c:type:`v4l2_frequency`.
>
> > **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-frequency.rst`, line 33); *backlink***
> >
> > Unknown interpreted text role "c:type".

Description

To get the current tuner or modulator radio frequency applications set the `tuner` field of a struct :c:type:`v4l2_frequency` to the

respective tuner or modulator number (only input devices have tuners, only output devices have modulators), zero out the `reserved` array and call the :ref:`VIDIOC_G_FREQUENCY <VIDIOC_G_FREQUENCY>` ioctl with a pointer to this structure. The driver stores the current frequency in the `frequency` field.

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-frequency.rst`, **line 38);** *backlink*

Unknown interpreted text role "c:type".

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-frequency.rst`, **line 38);** *backlink*

Unknown interpreted text role "ref".

To change the current tuner or modulator radio frequency applications initialize the `tuner`, `type` and `frequency` fields, and the `reserved` array of a struct :c:type:`v4l2_frequency` and call the :ref:`VIDIOC_S_FREQUENCY <VIDIOC_G_FREQUENCY>` ioctl with a pointer to this structure. When the requested frequency is not possible the driver assumes the closest possible value. However :ref:`VIDIOC_S_FREQUENCY <VIDIOC_G_FREQUENCY>` is a write-only ioctl, it does not return the actual new frequency.

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-frequency.rst`, **line 46);** *backlink*

Unknown interpreted text role "c:type".

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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 "tabularcolumns".

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

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-frequency.rst`, **line 56)**

Unknown directive type "c:type".

```
.. c:type:: v4l2_frequency
```

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Unknown directive type "flat-table".

```
.. flat-table:: struct v4l2_frequency
    :header-rows:  0
    :stub-columns: 0
    :widths:       1 1 2
```

```
*  -  __u32
   -  ``tuner``
   -  The tuner or modulator index number. This is the same value as in
      the struct :c:type:`v4l2_input` ``tuner`` field and
      the struct :c:type:`v4l2_tuner` ``index`` field, or
      the struct :c:type:`v4l2_output` ``modulator`` field
      and the struct :c:type:`v4l2_modulator` ``index``
      field.
*  -  __u32
   -  ``type``
   -  The tuner type. This is the same value as in the struct
      :c:type:`v4l2_tuner` ``type`` field. The type must be
      set to ``V4L2_TUNER_RADIO`` for ``/dev/radioX`` device nodes, and
      to ``V4L2_TUNER_ANALOG_TV`` for all others. Set this field to
      ``V4L2_TUNER_RADIO`` for modulators (currently only radio
      modulators are supported). See :c:type:`v4l2_tuner_type`
*  -  __u32
   -  ``frequency``
   -  Tuning frequency in units of 62.5 kHz, or if the struct
      :c:type:`v4l2_tuner` or struct
      :c:type:`v4l2_modulator` ``capability`` flag
      ``V4L2_TUNER_CAP_LOW`` is set, in units of 62.5 Hz. A 1 Hz unit is
      used when the ``capability`` flag ``V4L2_TUNER_CAP_1HZ`` is set.
*  -  __u32
   -  ``reserved``\ [8]
   -  Reserved for future extensions. Drivers and applications 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 `tuner` index is out of bounds or the value in the `type` field is wrong.

EBUSY
: A hardware seek is in progress.