ioctl VIDIOC_ENUM_DV_TIMINGS, VIDIOC_SUBDEV_ENUM_DV_TIMINGS

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Unknown directive type "c:namespace".

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

Name

VIDIOC_ENUM_DV_TIMINGS - VIDIOC_SUBDEV_ENUM_DV_TIMINGS - Enumerate supported Digital Video timings

Synopsis

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Unknown directive type "c:macro".

```
.. c:macro:: VIDIOC_ENUM_DV_TIMINGS
```

```
int ioctl(int fd, VIDIOC_ENUM_DV_TIMINGS, struct v4l2_enum_dv_timings *argp)
```

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Unknown directive type "c:macro".

```
.. c:macro:: VIDIOC_SUBDEV_ENUM_DV_TIMINGS
```

```
int ioctl(int fd, VIDIOC_SUBDEV_ENUM_DV_TIMINGS, struct v4l2_enum_dv_timings *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_enum_dv_timings`.

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Unknown interpreted text role "c:type".

Description

While some DV receivers or transmitters support a wide range of timings, others support only a limited number of timings. With this ioctl applications can enumerate a list of known supported timings. Call :ref:`VIDIOC_DV_TIMINGS_CAP` to check if it also supports other standards or even custom timings that are not in this list.

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Unknown interpreted text role "ref".

To query the available timings, applications initialize the `index` field, set the `pad` field to 0, zero the reserved array of struct :c:type:`v4l2_enum_dv_timings` and call the `VIDIOC_ENUM_DV_TIMINGS` ioctl on a video node 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 supported DV timings, applications shall begin at index zero, incrementing by one until the driver returns `EINVAL`.

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Note

Drivers may enumerate a different set of DV timings after switching the video input or output.

When implemented by the driver DV timings of subdevices can be queried by calling the `VIDIOC_SUBDEV_ENUM_DV_TIMINGS` ioctl directly on a subdevice node. The DV timings are specific to inputs (for DV receivers) or outputs (for DV transmitters), applications must specify the desired pad number in the struct :c:type:`v4l2_enum_dv_timings` `pad` field. Attempts to enumerate timings on a pad that doesn't support them will return an `EINVAL` error code.

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Unknown interpreted text role "c:type".

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Unknown directive type "c:type".

```
.. c:type:: v4l2_enum_dv_timings
```

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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_enum_dv_timings
    :header-rows:  0
    :stub-columns: 0
    :widths:       1 1 2

    * - __u32
      - ``index``
      - Number of the DV timings, set by the application.
    * - __u32
```

```
      - ``pad``
      - Pad number as reported by the media controller API. This field is
        only used when operating on a subdevice node. When operating on a
        video node applications must set this field to zero.
    * - __u32
      - ``reserved``\ [2]
      - Reserved for future extensions. Drivers and applications must set
        the array to zero.
    * - struct :c:type:`v4l2_dv_timings`
      - ``timings``
      - The timings.
```

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_enum_dv_timings` `index` is out of bounds or the `pad` number is invalid.

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Unknown interpreted text role "c:type".

ENODATA

Digital video presets are not supported for this input or output.