

ioctl CEC_ADAP_G_PHYS_ADDR and CEC_ADAP_S_PHYS_ADDR

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\linux-master\Documentation\userspace-api\media\cec\linux-master) (Documentation) (userspace-api) (media) (cec) cec-ioc-adap-g-phys-addr.rst, line 2)

Unknown directive type "c:namespace".

```
.. c:namespace:: CEC
```

Name

CEC_ADAP_G_PHYS_ADDR, CEC_ADAP_S_PHYS_ADDR - Get or set the physical address

Synopsis

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Unknown directive type "c:macro".

```
.. c:macro:: CEC_ADAP_G_PHYS_ADDR
```

```
int ioctl(int fd, CEC_ADAP_G_PHYS_ADDR, __u16 *argp)
```

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Unknown directive type "c:macro".

```
.. c:macro:: CEC_ADAP_S_PHYS_ADDR
```

```
int ioctl(int fd, CEC_ADAP_S_PHYS_ADDR, __u16 *argp)
```

Arguments

fd

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

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argp

Pointer to the CEC address.

Description

To query the current physical address applications call `ref:ioctl CEC_ADAP_G_PHYS_ADDR <CEC_ADAP_G_PHYS_ADDR>` with a pointer to a `__u16` where the driver stores the physical address.

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To set a new physical address applications store the physical address in a `__u16` and call `ref:ioctl CEC_ADAP_S_PHYS_ADDR <CEC_ADAP_S_PHYS_ADDR>` with a pointer to this integer. The `ref:ioctl CEC_ADAP_S_PHYS_ADDR <CEC_ADAP_S_PHYS_ADDR>` is only available if `CEC_CAP_PHYS_ADDR` is set (the `ENOTTY` error code will be returned otherwise). The `ref:ioctl CEC_ADAP_S_PHYS_ADDR <CEC_ADAP_S_PHYS_ADDR>` can only be called by a file descriptor in initiator mode (see `ref:CEC_S_MODE`), if not the `EBUSY` error code will be returned.

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To clear an existing physical address use `CEC_PHYS_ADDR_INVALID`. The adapter will go to the unconfigured state.

If logical address types have been defined (see `ref:ioctl CEC_ADAP_S_LOG_ADDRS <CEC_ADAP_S_LOG_ADDRS>`), then this `ioctl` will block until all requested logical addresses have been claimed. If the file descriptor is in non-blocking mode then it will not wait for the logical addresses to be claimed, instead it just returns 0.

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A `ref:CEC_EVENT_STATE_CHANGE <CEC-EVENT-STATE-CHANGE>` event is sent when the physical address changes.

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The physical address is a 16-bit number where each group of 4 bits represent a digit of the physical address a.b.c.d where the most significant 4 bits represent 'a'. The CEC root device (usually the TV) has address 0.0.0.0. Every device that is hooked up to an input of the TV has address a.0.0.0 (where 'a' is $\hat{a} \% 1$), devices hooked up to those in turn have addresses a.b.0.0, etc. So a topology of up to 5 devices deep is supported. The physical address a device shall use is stored in the EDID of the sink.

For example, the EDID for each HDMI input of the TV will have a different physical address of the form a.0.0.0 that the sources will read out and use as their physical address.

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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master\Documentation\userspace-api\media\cec\linux-master) (Documentation) (userspace-api) (media) (cec) cec-ioc-adap-g-phys-addr.rst, line 79); [backlink](#)

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The `ref:ioctl CEC_ADAP_S_PHYS_ADDR <CEC_ADAP_S_PHYS_ADDR>` can return the following error codes:

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ENOTTY

The `CEC_CAP_PHYS_ADDR` capability wasn't set, so this ioctl is not supported.

EBUSY

Another filehandle is in exclusive follower or initiator mode, or the filehandle is in mode `CEC_MODE_NO_INITIATOR`.

EINVAL

The physical address is malformed.