

**NAME**

"IO::Async::Timer" – base class for Notifiers that use timed delays

**DESCRIPTION**

This module provides a subclass of IO::Async::Notifier for implementing notifiers that use timed delays. For specific implementations, see one of the subclasses:

- IO::Async::Timer::Absolute – event callback at a fixed future time
- IO::Async::Timer::Countdown – event callback after a fixed delay
- IO::Async::Timer::Periodic – event callback at regular intervals

**CONSTRUCTOR****new**

```
$timer = IO::Async::Timer->new( %args )
```

Constructs a particular subclass of IO::Async::Timer object, and returns it. This constructor is provided for backward compatibility to older code which doesn't use the subclasses. New code should directly construct a subclass instead.

mode => STRING

The type of timer to create. Currently the only allowed mode is `countdown` but more types may be added in the future.

Once constructed, the `Timer` will need to be added to the `Loop` before it will work. It will also need to be started by the `start` method.

**METHODS****is\_running**

```
$running = $timer->is_running
```

Returns true if the `Timer` has been started, and has not yet expired, or been stopped.

**start**

```
$timer->start
```

Starts the `Timer`. Throws an error if it was already running.

If the `Timer` is not yet in a `Loop`, the actual start will be deferred until it is added. Once added, it will be running, and will expire at the given duration after the time it was added.

As a convenience, `$timer` is returned. This may be useful for starting timers at construction time:

```
$loop->add( IO::Async::Timer->new( ... )->start );
```

**stop**

```
$timer->stop
```

Stops the `Timer` if it is running. If it has not yet been added to the `Loop` but there is a start pending, this will cancel it.

**AUTHOR**

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