

## ENHANCED COUNTDOWN TIMER – V10.0

**IMPORTANT NOTE:** the Enhanced Countdown Timer driver is inspired from the original Countdown Timer driver written by Control4, with enhancements created by Domosapiens Inc.

**SUPPORT:** this enhanced driver is supported by DriverCentral (DO NOT CALL CONTROL4 FOR SUPPORT ON THIS DRIVER). For support please go to <https://help.drivercentral.io/>. Give a detailed description of the problem and also include the version number of the driver and the version of Control4 OS that you are using.

## ORIGINAL CONTROL4 COUNTDOWN TIMER V38 DOCUMENTATION

This driver enables countdown timed control of a device. It is an alternative to the relay driver included by default in My Drivers. The device is controlled by a relay.

**Note** this driver is designed for devices where a countdown time is always used. It does not provide an 'on permanently' option. If you require this functionality, use one of the other timer drivers. These also allow association with a light switch and fan speed controller if appropriate.

Each press of the icon cycles through the list of duration options. Set the duration options as comma-delimited minutes in the driver's "Countdown Times" property.

To turn the system off, either continue to cycle through the options until Off is shown or wait 5 seconds from the last option selected and the next press of the icon will turn the timer off.

Events fire when the timer reaches each of the timed countdowns. You can use these with custom programming as required.

You can also connect the driver to a relay. The relay connection can be found on the connections tab.

In each room where you want the timer to appear select the room and page in Composer and add make the timer visible.

Keypad button link connections are available. Toggle cycles through the time choices.

The LED will indicate if the button has been pressed to select the next time ("Pressed LED Color"), if the timer is running ("On LED Color"), or if the device is off ("Off LED Color"). Colors can be customized for each of these states.

## DRIVER ENHANCEMENTS BY DOMOSAPIENS INC.

The following enhancements have been added:

1. Countdown units may now be 'Seconds', 'Hours' or 'Days' in addition to 'Minutes'.
2. A specific time of day may be specified for triggering when 'Days' are used.
3. A new optional UI facility is provided to cancel the countdown and/or cycle the times again while running.

4. A new programming command and a keypad connection are available to Cancel countdown.
5. UI feedback is provided when the countdown actually starts.
6. A new 'Countdown Cancel' event is triggered when the countdown is cancelled (instead of the normal 'Countdown Off').
7. A new 'Countdown Start' event is available.
8. By default, countdowns are restarted automatically upon Director reboot or driver update. This may be modified via a property.
9. A new MINUTES\_LEFT variable is continuously updated during countdown.
10. A new output CONTACT\_SENSOR is activated when the countdown is running.

The Countdown units may now be specified in Seconds, Hours or Days instead of the default Minutes. If using Seconds, the minimum allowed value is 5 seconds, and the countdown starts 5 seconds after the final time is selected using the Experience button. If using Hours or Days, the available interval entries are different and selected to best fit the units.

The driver has a new optional Enhanced Experience Button interface (specify via the property). This adds the ability for the user to cancel the countdown and/or cycle through the available choices after the countdown has started. Additional feedback is also available to indicate that countdown has started (a Check mark). The usual process is as follows:

1. The countdown is stopped, the Experience Button shows '0' and the unit selected.
2. The user presses the Experience Button until the desired countdown value is shown.
3. After a 2-second delay, the countdown is started (Check mark is displayed)
4. There is an additional 3-second delay to allow changing the delay selection. The countdown is restarted if necessary.
5. When that 3-second delay expires, the Check mark disappears, and any further press of the Experience Button is managed as per the 'Enhanced Experience Button' property:
  - a. 'Legacy: Turn Off when 5 seconds or more have elapsed' – the button press will immediately stop the Countdown and fire the Off event.
  - b. 'Press shows Cancel – second press required' – Cancel is shown for 3 seconds. Pressing the button again during that time immediately cancels the countdown and fires the Cancel event (instead of the Off event). If the button is not pressed, countdown simply continues.
  - c. 'Press shows Cycle Up – second press required' – an Up Arrow is shown for 3 seconds. Pressing the button again (once or multiple times) during that time allows the user to adjust the countdown delay and the countdown is restarted if required. If the button is not pressed, countdown simply continues.
  - d. 'Press shows Cancel then Cycle Up – second press required' is a combination of the 2 previous steps.

An option is also available to cancel the timer via a programming command (and trigger the 'Cancel' event instead of the 'Off' event). Similarly, an Action allows to easily cancel the timer from within Composer.

**Note:** the 'Cancel' function is not available with the keypad 'Toggle' connection but rather with the new keypad 'Cancel' connection.

A new 'Countdown Started' event is triggered whenever the countdown starts. If the Countdown is later modified, the 'Countdown Modif' event is triggered.

A new property is added to Resume upon Restart and Update (important in the context of DriverCentral's Automatic Updates). If this is set to 'Yes' (the default) and at least one partial countdown unit is remaining from the original countdown based on the original ending time, the timer is restarted. This applies only to 'Minutes', 'Hours' and 'Days', as 'Seconds' countdowns are never resumed.

An example illustrates this:

1. Units: Hours, Resume upon Restart: Yes
2. Timer started at 12:30 for 3 hours (it would normally end at 15:30)
3. Power failure occurs at 13:00 and controller comes back at 14:00
4. The timer is restarted at 14:00 for 2 hours (original remaining time of 1:30 is rounded up)

If 'Yes' is selected, and a countdown was running before the disruption, its 'Off' event will be triggered upon restart, even if the countdown is not resumed due to its time being elapsed. Other options are also available to further customize 'Yes', but their 'Off' event is not triggered if the countdown is not resumed.

**Note:** It may take a few minutes after a countdown is started for the Restart information to be stored by Director and a Restart to be performed properly.

#### **HISTORY LOG:**

- Version 38: Control4 driver this driver is inspired by/derived from (2019.04.25)
- Version 10.0.0: Enhanced driver – ability to Cancel, units expanded to Seconds, Hours and Days, ability to resume after reboot, new events (2021.05.29)
- Version 10.0.1: Fixed – timers were not surviving two consecutive reboots (2021.06.29)
- Version 10.0.2: Fixed – Off event was sometimes fired erroneously upon restart (2021.07.21)