Control Programming LLC

Release Notes

CPLLC Logic Oscillator

Version 5.00 · November 2, 2026

Product	CPLLC Logic Oscillator (Crestron Home extension)
Version	5.00
Release date	November 2, 2026
Where to find it	Drivers › Logic › Control Programming LLC › Oscillator
Requires	Crestron Home OS 4.12 or later, and the CPLLC License Manager 5.00 or later
Licensing	A Logic Oscillator license key (cpllc.net/product/logic-oscillator) or a CPLLC site license key (cpllc.net/product/site-license)

Overview

The CPLLC Logic Oscillator steps through up to 10 settings on a timer. The installer gives each setting a name, an icon and a number of seconds. Start runs the first setting's event and shows it on the tile; after its seconds the next setting takes over, and after the last one it goes back to the first, over and over until Stop. A sequence on each setting's event decides what happens at that step, so the Oscillator can cycle lights, colors, scenes or anything else a sequence can do. Touching the tile starts and stops it. It is for logic only: it reads and drives no hardware by itself.

Capabilities

Capability	What it does
Up to 10 timed settings	Each setting is one entry, name|icon|seconds, in Setting 01 – 10. A setting left blank is skipped.
Runs in a loop	Start runs the first setting named, then each in turn for its own seconds; after the last it starts again at the first, until Stop.

Capability	What it does
An event for each setting	Each setting runs its own “Pressed <name>” event as it starts, so a sequence acts on that step.
Start and Stop	Start and Stop are sequence actions, and Started and Stopped are events, so other sequences can run the Oscillator and follow it.
Tile start and stop	Touching the tile starts the Oscillator when it is stopped and stops it when it is running. The tile has no control page.
Shows the current setting	While it runs, the tile shows the current setting’s icon and name; when stopped it reads Stopped.
Enable and disable	Extension Disable stops a running Oscillator and shows Disabled on the tile; while disabled, the tile, Start and Stop do nothing. Extension Enable makes it usable again, stopped.
Starts stopped	After the processor or the extension restarts, the Oscillator is stopped and the tile reads Stopped; Start it again from the tile or a sequence.
Live changes	Installer options take effect as soon as OK is pressed in Setup, with no reload; a running Oscillator uses the new settings from its next step. Debug output turns on and off while the processor runs.

What’s New in 5.00

- First release, built on the CPLLC 5.0 shared libraries.

Installing

Add it from Drivers › Logic › Control Programming LLC › Oscillator, enter its license key (or leave it blank on a site with a CPLLC site license), and enter the settings. It needs the CPLLC License Manager 5.00 or later on the processor.

Then add a sequence to each setting’s “Pressed <name>” event for what that step should do, and start the Oscillator from the tile or from a sequence’s Start action.

Installer Options

A new Oscillator comes with four settings, shown in the example below; change or clear them as needed.

Option	Description
Obtain License Key	Opens CPLLC.net, where license keys and site licenses can be purchased.
Enter License Key	The Logic Oscillator license key. Leave blank when the site has a CPLLC site license.

Option	Description
Tile Icon	The tile's icon while the Oscillator is stopped (default icStop), by its name in the Crestron Home icon library.
Page Header Text	The tile's text before any setting has run (default Oscillator).
Setting 01 – 10	One setting as name|icon|seconds: parameter 1 is the setting name, parameter 2 is the icon, parameter 3 is the seconds (e.g. Red|icRemoteButtonRed|10). Seconds may have decimals; a value below 1, or missing, is 1 second. Leave it blank when the setting is not used. Give each setting a different name: its event and Select Setting use it.

The examples in this document come from this set-up:

Option	Example value
Setting 01	Red|icRemoteButtonRed|10
Setting 02	Green|icRemoteButtonGreen|15
Setting 03	Blue|icRemoteButtonBlue|5
Setting 04	Yellow|icRemoteButtonYellow|1
Setting 05 – 10	blank (not used)

Sequences

The Logic Oscillator adds these actions to Crestron Home sequences.

Action	Description
Start	Starts the Oscillator at the first setting. Does nothing when it is already running.
Stop	Stops the Oscillator. Does nothing when it is already stopped.
Select Setting	Runs the setting chosen from the list once, as the tile would show it, without starting, stopping or retiming the Oscillator.
Extension Enable / Extension Disable	Enables or disables the extension. Disabling stops a running Oscillator (Stopped runs) and shows Disabled on the tile; while disabled, touching the tile, Start and Stop do nothing. Enabling leaves it stopped.

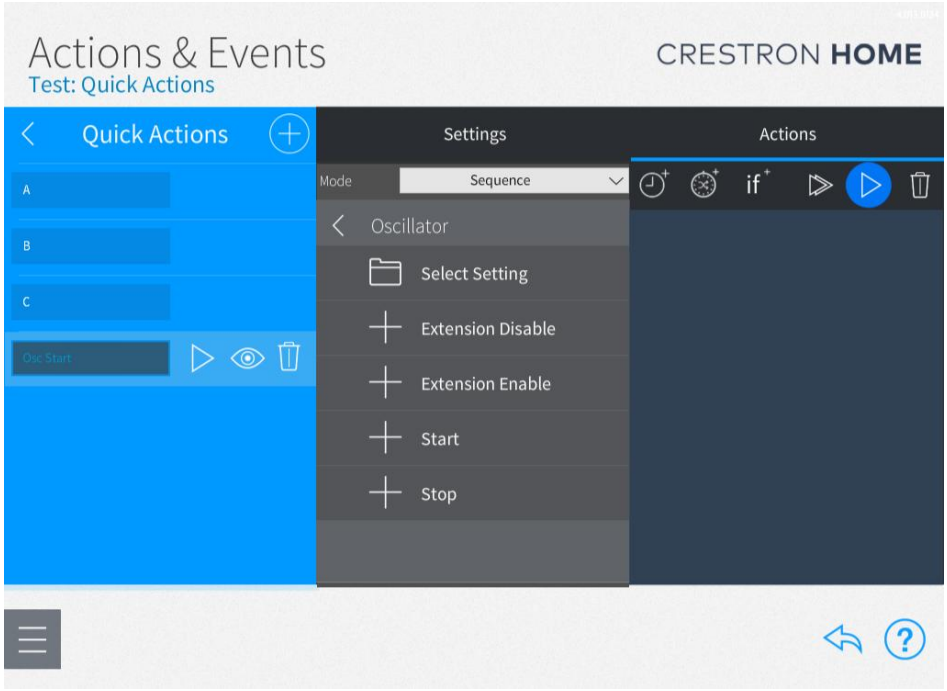
It reports these events, under its name in Customize Actions & Events.

Event	Description
Pressed <name>	One for each setting named (Pressed Red, Pressed Green …): that setting has just started.

Event	Description
Started	The Oscillator started, from the tile or a sequence.
Stopped	The Oscillator stopped.
Extension Enabled / Extension Disabled	The extension was enabled or disabled.

With the example settings, Start runs Pressed Red at once, Pressed Green 10 seconds later, Pressed Blue 15 seconds after that, Pressed Yellow 5 seconds after that, and Pressed Red again 1 second later: one full cycle every 31 seconds.

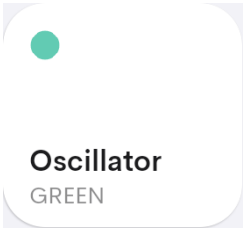
In Setup, the Oscillator's actions are under the extension in a sequence's actions:



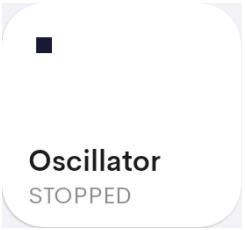
The Oscillator's actions, and Start, Stop, Extension Disable and Extension Enable in a quick action

End-User Experience

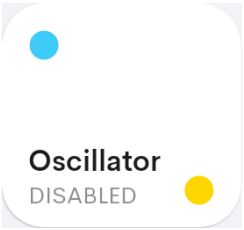
The tile shows the setting that is running: its icon, and its name as the tile's status. Touching the tile starts the Oscillator when it is stopped and stops it when it is running; while stopped the tile shows the Tile Icon and reads Stopped. While the extension is disabled the tile shows Disabled and touching it does nothing.



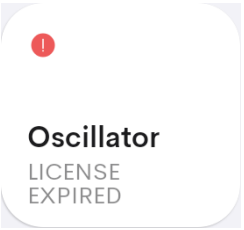
Running (Green)



Stopped



Disabled



License Expired

Without a valid license key or a CPLLC site license, the extension runs for a two-hour grace period after it starts; then it shows License Expired with an alert icon, and the Oscillator stops stepping. Entering a valid key, or adding a site license, clears it without a restart.

Known Limitations

- The Logic Oscillator reads and controls no hardware by itself: sequences on its events act on each step.
- The tile is not shown on the Home screen: Crestron Home does not allow a Home screen tile to be touched to start and stop it.
- Each step lasts at least 1 second. A sequence that takes longer than its step's seconds is still running when the next step's sequence starts.
- A restart of the processor or the extension stops the Oscillator without running Stopped; a sequence that must keep it running after a restart has to Start it again.
- Each setting's event and Select Setting find a setting by its name, so two settings with the same name share one event.
- Renaming a setting changes its event and its entry in Select Setting: sequences on its old name need to be set up again.

Test Environment

Crestron Home 4.013.0134 on a DIN-AP4-R, set up with Crestron Home Setup (XPanel) and used from the Crestron Home app on Android. Adding the extension with the example settings, the timing of each step and the loop back to the first, starting and stopping from the tile, Start, Stop, Extension Disable and Extension Enable from a sequence, a settings change while running, License Expired, and starting stopped after the extension restarts were checked on the processor.

Version History

Date	Version	Changes
2026-11-02	5.00	Initial release

Support

CPLLC Site License

A CPLLC site license is one key per processor, entered in the License Manager, that licenses every CPLLC extension and platform on that processor, current and future, so no product needs a key of its own. See the Site License page. Customers who already own CPLLC license keys can upgrade to a site license on the CPLLC website for the difference.

Company	Control Programming LLC
Contact	Randy Johnson
Email	randy@cpllc.net
Website	https://cpllc.net
Product page	https://cpllc.net/product/logic-oscillator/

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