Control Programming LLC

Release Notes

CPLLC Bromic Smart-Heat Link Platform

Version 5.00 · November 16, 2026

Product	CPLLC Bromic Smart-Heat Link Platform (Crestron Home platform)
Version	5.00
Release date	November 16, 2026
Where to find it	Drivers › Platform › Bromic › Smart-Heat Link
Requires	Crestron Home OS 4.12 or later, and a Bromic Smart-Heat Link wired to one of the processor's own RS-232 ports
Licensing	A Bromic Smart-Heat Link Platform license key (cpllc.net/product/bromic-platform) or a CPLLC site license key (cpllc.net/product/site-license), entered in the platform's Enter License Key, or a site license key once in the CPLLC License Manager

Overview

The CPLLC Bromic Smart-Heat Link Platform brings Bromic patio heaters into Crestron Home through a Bromic Smart-Heat Link. The Smart-Heat Link stands in for Bromic's remotes: each heater paired to a remote number and channel follows what the Link sends. The platform drives the Link over RS-232 and adds each remote to Crestron Home as a device of its own, with a page of buttons the installer names (such as 100%, 75%, 50%, 25%, Dim Up, Dim Down and Off), each sending its channel. Every button press can run a Crestron Home sequence, and sequences can press any button by name.

Capabilities

Capability	What it does
RS-232 control	The Smart-Heat Link is driven at 19200 baud, 8 data bits, no parity, 1 stop bit, from one of the processor's own COM ports.

Capability	What it does
A device per remote	Each Bromic remote number the installer lists is a device of its own in Crestron Home, placed in any room.
Buttons the installer names	Up to 10 buttons per remote, each with its text, its icon and the channel it sends. A button left blank is not shown.
Last button pressed	The remote's tile shows the last button pressed: its icon and its text.
Sequences	Each button raises its own "Pressed <text>" event, and the Select Button action presses a button by name.
Nothing sent at start-up	After a restart or reload the tiles show the last button pressed again, but nothing is sent: each heater stays as it is.
Live changes	Debug output turns on and off while the processor runs.

What's New in 5.00

- Rebuilt on the Crestron Home SDK V2 and the CPLLC 5.0 shared libraries, with a new Bromic library.
- One Remotes option lists the remote numbers (such as 1-3 or 1,2,5) in place of Number of Remotes and each remote's Remote ID.
- Up to 10 buttons per remote, each entered as text|icon|channel, in place of seven fixed function and channel pairs.
- Each button press raises its own event for sequences.
- Nothing is sent to the heaters after a restart or reload.
- Its own license key, or a CPLLC site license key, licenses the platform by itself, so the CPLLC License Manager is no longer required; it is still the convenient place to enter a site license key once for every CPLLC driver.

Programming the Smart-Heat Link

Before Crestron Home can work a heater, the Smart-Heat Link has to learn the buttons of that heater's Bromic controller. Bromic has this done from a PC, before the Link is wired to the processor. Bromic's Smart-Heat Link Installation Guide and Protocol Tool have the full details; this section is the short version, with how it maps to the platform.

You will need:

- The Smart-Heat Link and a 5 VDC, 500 mA power supply (not supplied by Bromic): red is +5 V, black is ground. Reversed polarity damages the Link.
- An RS-232 cable (DB9 male to DB9 female), and a PC with a COM port or a USB to RS-232 adapter (install its driver first).
- A serial program that sends hex, such as Docklight, set to 19200 baud, 8 data bits, no parity, 1 stop bit, no flow control.

- The heater's controller installed by the electrician and working with its own Bromic remote. If the remote doesn't work the heater, the Link can't learn it: fix the controller and remote first.
- The PC and Link within 30 m (100 ft) of the controller.

Then, for each controller:

Step	What to do
1. Choose an ID	Give the controller its own ID, from 1 to 50. No two controllers share one. This ID is the remote number entered in the platform's Remotes option.
2. Start learning	Open the remote's back cover (a flat screwdriver in the recesses on each side of the bottom) and press P3. The controller beeps continuously while it is learning.
3. Press the remote	Within 5 seconds, press button 1 on the remote.
4. Send the code	1 to 5 seconds later, send that button's code from the PC (see the table below). The Link answers 54 06 5A when the code was learned; any other answer is an error.
5. Repeat	Repeat steps 2 to 4 for each button: buttons 1 to 4 for an On/Off controller, 1 to 7 for a Dimmer controller.
6. Test	Send button 1 and check that the heater comes on (some heaters take up to 2 minutes to show heat), then send Off (button 7, or button 2 on an On/Off controller) and check that it goes off.

The codes for ID 1:

Button	Dimmer controller	On/Off controller	Channel	Code for ID 1
1	100%	Channel 1 on	1	54 00 01 00 01 56
2	75%	Channel 1 off	2	54 00 01 00 02 57
3	50%	Channel 2 on	3	54 00 01 00 03 58
4	25%	Channel 2 off	4	54 00 01 00 04 59
5	Dim Up	Not used	5	54 00 01 00 05 5A
6	Dim Down	Not used	7	54 00 01 00 07 5C
7	Off	Not used	8	54 00 01 00 08 5D

Note that Dim Down is channel 7 and Off is channel 8: there is no channel 6. Every code is six bytes: 54, the ID in two bytes, the channel in two bytes, and a checksum, the low byte of the sum of the first five. For ID 2, button 1 is 54 00 02 00 01 57; for ID 10 (0A), Off is 54 00 0A 00 08 66. Bromic's Protocol Tool works out the codes for any ID.

If something goes wrong:

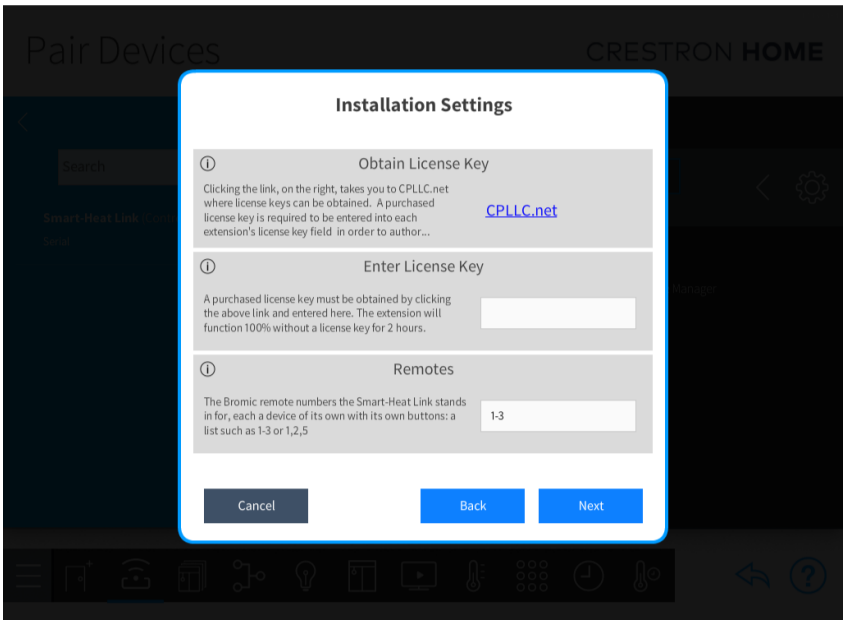
Symptom	What to check
No answer, or FF	The Link's 5 V supply and its polarity, the RS-232 cable, and the PC's COM port and its settings (19200, 8, N, 1).

Symptom	What to check
An answer other than 54 06 5A	The code and its checksum against the table above. Bromic's Protocol Tool lists the error codes.
Learned, but the heater doesn't respond	The controller's power, the distance (30 m / 100 ft at most; metal between them shortens it), and that the Bromic remote still works the controller.
Codes learned wrongly	Bromic's Protocol Tool has a Delete All command that clears every learned code; then program the controllers again.
Works from the PC but not from Crestron Home	The COM port chosen under Control (below), the remote number in the Remotes option (the controller's ID), and each button's channel (1, 2, 3, 4, 5, 7 or 8, as in the table).

Installing

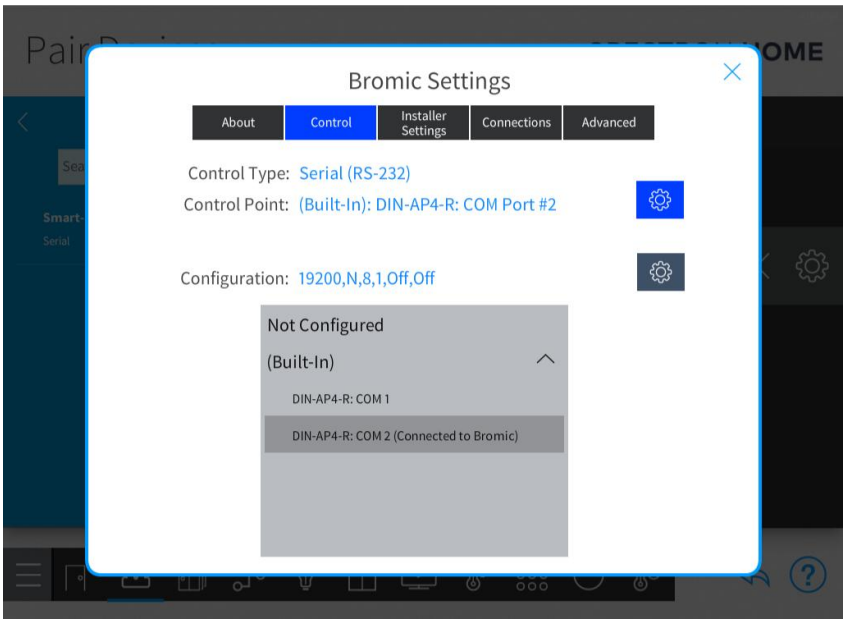
Once every controller is programmed (above), move the Smart-Heat Link's RS-232 cable from the PC to one of the processor's own COM ports.

Add the platform from Drivers › Platform › Bromic › Smart-Heat Link. The CPLLC License Manager is not required. When Setup asks for the control port, choose (Built-In) and press Next; enter the license key (or leave it blank on a site with a CPLLC site license) and the remote numbers, and press Next.



The license and Remotes options

Then choose the COM port: open the platform's settings (its gear in the room), go to Control, expand (Built-In) and pick the port the Link is wired to. Control Point then shows the port, and Configuration 19200,N,8,1.



The COM port, under (Built-In) on the Control tab

Each remote is then listed under Managed Platforms › the platform's name in Pair Devices, ready to be added to a room with its +.

Installer Options

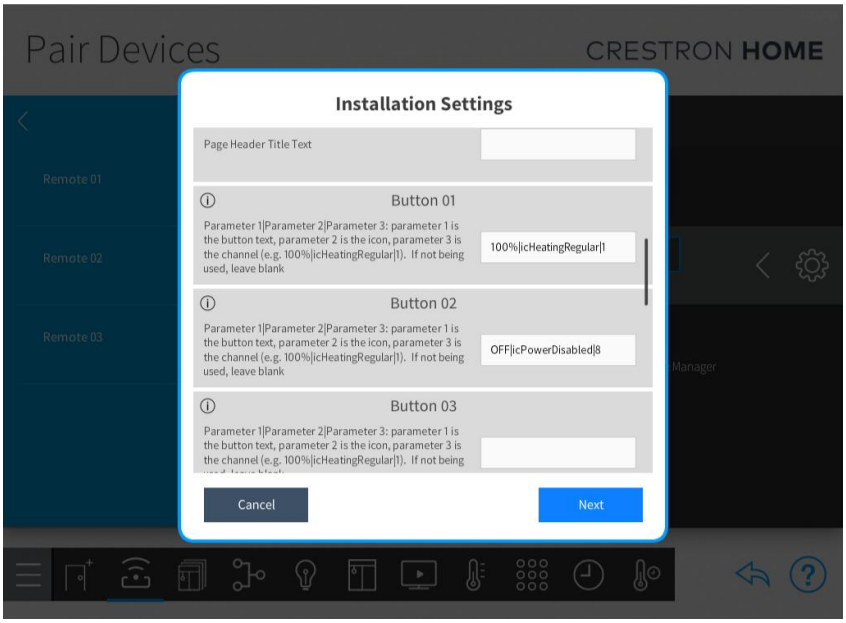
The platform's own options:

Option	Description
Obtain License Key	Opens CPLLC.net, where license keys and site licenses can be purchased.
Enter License Key	The Bromic Smart-Heat Link Platform license key. Leave blank when the site has a CPLLC site license.
Remotes	The Bromic remote numbers the Smart-Heat Link stands in for, each a device of its own: a list such as 1-3 or 1,2,5, up to 50 remotes (default 1-3).

Each remote's options, under that remote in Configure Pro:

Option	Description
Show on Home Screen	Shows the remote's tile on the Home screen (default off).
Show in Room Screen	Shows the remote's tile in its room (default on).
Starting Pin Code	A numeric PIN that must be entered before the buttons are shown. Blank means no PIN (the default).
Seconds Pin Active	How long the buttons stay unlocked after the last touch (default 10 seconds).
Tile Icon	The tile's icon until a button is pressed (default icFavoriteOn).
Page Header Text	The title of the remote's page (Buttons when blank).

Option	Description
Button 01 … Button 10	One button each, entered as text|icon|channel: the button's text, its icon from Crestron's icon list, and the channel it sends, such as 100%|icHeatingRegular|1. A button left blank is not shown; one without a channel number sends nothing.



A remote's buttons, entered as text|icon|channel

Each remote number is a controller's ID from Programming the Smart-Heat Link, and each button's channel is from its code table. For a Dimmer controller:

Option	Value
Button 01	100%|icHeatingRegular|1
Button 02	75%|icHeatingRegular|2
Button 03	50%|icHeatingRegular|3
Button 04	25%|icHeatingRegular|4
Button 05	Dim Up|icArrowUp|5
Button 06	Dim Down|icArrowDown|7
Button 07	Off|icPowerRegular|8

For an On/Off controller, Channel 1 On on 1 and Off on 2, and Channel 2 On on 3 and Off on 4, such as Heater On|icHeatingRegular|1 and Heater Off|icPowerRegular|2. The buttons can be named, ordered and left out as the site needs; only the channel has to match.

Sequences

Each remote brings to Crestron Home sequences, under its name in Customize Actions & Events, a “Pressed <text>” event for each button it shows, raised whenever that button is pressed from the page, a sequence or the tile, and the Select Button action, which presses one of its buttons by name.

Each remote adds these actions:

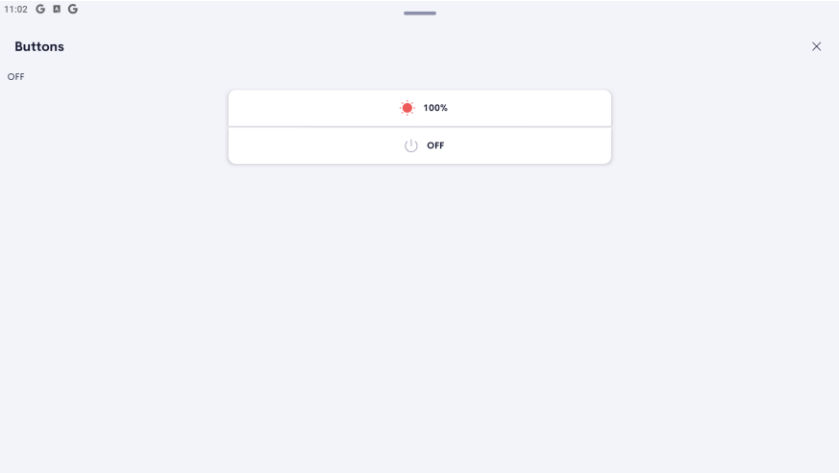
Action	Description
Select Button	Presses the button chosen from the list of button texts, as a touch on the page does: the heater channel is sent the button’s command, its Pressed event runs and the tile shows it.
Extension Enable / Extension Disable	Enables or disables the remote’s tile. A disabled tile shows Disabled and ignores its buttons.

and reports these events:

Event	Description
Pressed <text>	The button was pressed: from the page, by Select Button, or again after a restart.
Extension Enabled / Extension Disabled	The remote’s tile was enabled or disabled.
Pin Locked / Pin UnLocked	The PIN keypad locked again, or the right PIN was entered (with a Starting Pin Code set).

End-User Experience

The platform has no tile of its own. Each remote appears in its room as a tile showing the last button pressed; touching it opens the remote’s page, with one button per entry the installer made. Pressing a button sends its channel to the Smart-Heat Link, and the tile and the page’s subtitle follow it.



A remote’s page in the Crestron Home app

Without a valid license key or a CPLLC site license, the remotes run for a two-hour grace period after the platform starts; then they show License Expired and ignore their buttons. Entering a valid key, or adding a site license, clears it without a restart.

Known Limitations

- The Smart-Heat Link reports nothing about the heaters: Crestron Home shows the last button pressed, not what a heater is doing, and a change made with a Bromic remote doesn't show.
- The settings of the earlier (2.00) version are not carried over: it was built on an earlier Crestron SDK. Remove it, add this platform, and enter the remotes and their buttons again.
- Not yet tried with a Smart-Heat Link in the CPLLC lab: the packets were checked on the processor's COM port.

Test Environment

Crestron Home 4.013.0134 on a DIN-AP4-R, set up with Crestron Home Setup and used from the Crestron Home app on Android. The platform was added with remotes 1-3 on the processor's COM 2 at 19200,N,8,1; each remote was listed under Managed Platforms and Remote 01 added to a room with a 100% and an Off button. Each press sent its packet for remote 1 (54 00 01 00 01 56 for channel 1, 54 00 01 00 08 5D for channel 8), raised its Pressed event and set the tile. An upgrade from one build to the next kept the remote's buttons and its last button pressed, and sent nothing.

Version History

Date	Version	Changes
2026-11-14	5.00	Built on the latest CPLLC libraries
2026-11-08	5.00	Listed under every kind of device it adds (Additional Device Categories); on the latest CPLLC shared libraries
2026-11-06	5.00	On the latest CPLLC shared libraries; the License Manager is no longer required; tables of actions and events
2026-11-04	5.00	Rebuilt on the Crestron Home SDK V2 and the CPLLC 5.0 libraries: one Remotes option, up to 10 buttons per remote entered as text|icon|channel, an event per button, and nothing sent at start-up
2023-04-04	2.00	First release, on the earlier Crestron SDK

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.

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Product page	https://cpllc.net/product/bromic-platform/

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