



BPC-HPLIR

onCue[®] IR Learner & Programmer

Supplemental Guide

Crestron Electronics, Inc.

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BPC-HPLIR: onCue® IR Learner & Programmer

Introduction

The onCue® BPC-HPLIR is a dual-function, handheld tool designed for use with the Crestron® onCue BPC-8 Basic Presentation Controller (sold separately). The BPC-HPLIR is both a full-featured IR Learner, providing the means to learn IR commands from third-party remotes (via the Device Learner tool) and a configuration loader that transfers configuration files created with the onCue BPC-8 Tool directly to the BPC-8.

For more information on the BPC-HPLIR, refer to the BPC-HPLIR DO Guide (Doc. 7195) at www.crestron.com/manuals.

Operation

Checking Device Availability

To develop a configuration program for the BPC-8, first use the onCue BPC-8 Tool to determine whether or not the device to be controlled is already available in the Crestron Database.

From the main screen, click the **Display Devices** tab, and then click **Add**. Select **Crestron database**, and review the Manufacturer dropdown list:

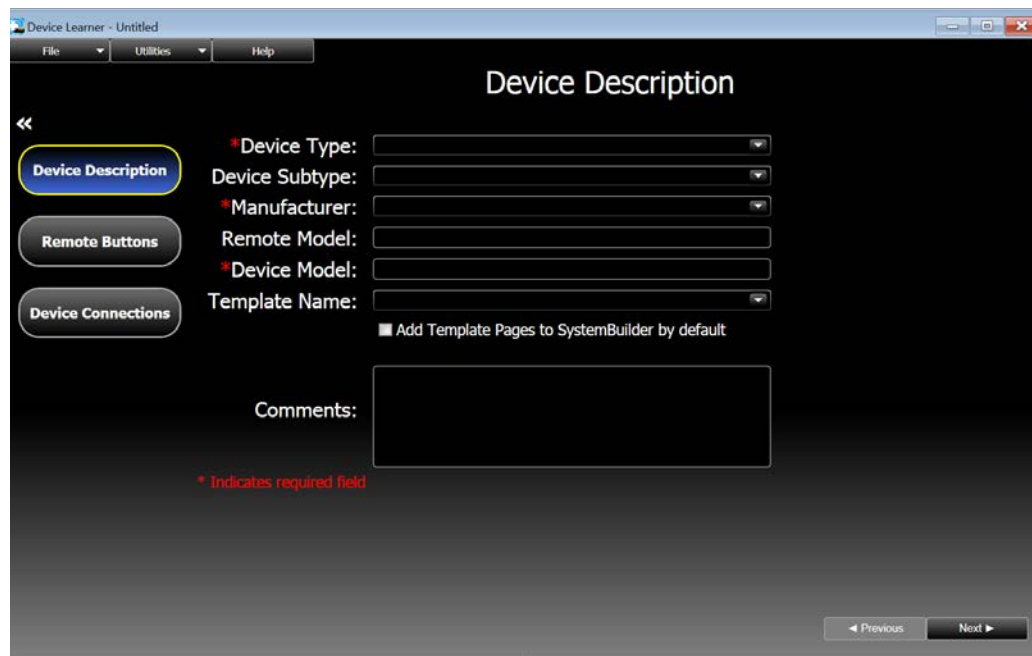
- If the device is available, use the BPC-HPLIR and the onCue BPC-8 Tool to develop a program for the BPC-8. Refer to “Developing onCue BPC-8 Projects” on page 5.
- If the device is not available, use the BPC-HPLIR and the Device Learner tool to create a new IR file and save it to the User Database, and then use the onCue BPC-8 Tool to create the BPC-8 Configuration file. Refer to “Learning Third-Party IR Codes” below.

NOTE: The onCue BPC-8 Tool and the Device Learner programs are included with Crestron Toolbox™ software, which is available for download at the onCue software website (www.crestron.com/oncuesoftware).

Learning Third-Party IR Codes

When used in conjunction with an IR learner such as the Crestron BPC-HPLIR, the Device Learner tool allows users to create and test custom IR driver files and to save the learned files in the User Database. Once saved, the IR driver files can be uploaded to the BPC-HPLIR for subsequent upload to the BPC-8.

Device Learner Main Screen



The screenshot shows the 'Device Learner - Untitled' application window. The main area is titled 'Device Description' and contains a form with the following fields and controls:

- A left sidebar with three buttons: 'Device Description' (highlighted), 'Remote Buttons', and 'Device Connections'.
- A 'Device Type:' dropdown menu with a red asterisk indicating it is a required field.
- A 'Device Subtype:' dropdown menu.
- A 'Manufacturer:' dropdown menu with a red asterisk indicating it is a required field.
- A 'Remote Model:' text input field.
- A 'Device Model:' text input field with a red asterisk indicating it is a required field.
- A 'Template Name:' dropdown menu.
- A checkbox labeled 'Add Template Pages to SystemBuilder by default'.
- A 'Comments:' text area.
- A red asterisk at the bottom left with the text '* Indicates required field'.
- 'Previous' and 'Next' navigation buttons at the bottom right.

The following paragraphs provide an overview of the functions available via the Device Learner tool. For detailed instructions, refer to the emdedded Device Learner help file.

Standard Operations

Create New IR Files

1. Select **File > New**.
2. Click **Device Description**, and then enter details about the device to be controlled in the respective fields.
3. Click **Remote Buttons** to configure buttons and corresponding standard commands. This list of buttons will be based on the device entered in step two.

Learn Remote Button Functions

1. Position the BPC-HPLIR and IR remote as shown below.

Positioning the BPC-HPLIR and IR remote



NOTE: The components should be positioned close to each other on a level surface and should not move.

2. Click **Remote Buttons** in the Device Learner tool.
3. On the remote buttons table, either click the desired button (to multiselect, press the **Ctrl** or **Shift** key) and click **Learn**, or click **Learn All** to learn all the buttons in the table.
4. Following the prompts given by the “Learn IR” dialog box, press the specified button on the remote for about one second.

NOTE: Depending on the function, the button may need to be pressed and released twice. If the button is multicode, press and release the button multiple times.

5. Press and release the button as prompted until the button is learned. The dialog box shows a green circle icon next to the button name when the button is learned.
6. If learning multiple or all buttons, click **Next** to continue to the next button. Buttons can be skipped or cycled between by clicking **Next** and **Previous**.
7. Click **Close** when all buttons have been learned. Repeat the above steps for any additional buttons that need to be learned.
8. Once finished, select **File > Save** to save the file to the user database.

Edit Existing IR Files

Select **File > Open from Database** to open an IR file from the Crestron Database or User Database.

Select **File > Open from File** to open an IR file from the computer.

NOTE: The onCue BPC-8 interface module (BPC-IMC-8) does not support simultaneous IR and RS-232 control (for example, an IR driver cannot be stacked together with a 1-way serial driver). However, multiple IR drivers are supported. For more information, refer to the embedded BPC-8 Tool help file.

Advanced Operations

Remote Button Operations

The **Remote Buttons** screen enables controls to add custom buttons, to remove buttons, to sort buttons by category or name, and to format the button label text.

The following operations are accessed by right-clicking on a particular button:

Convert IR Pulse Type

An IR command can be converted from **Pulse and Hold** to **Pulse Only** (and vice versa). This conversion adjusts the header and repeater sections of the IR command to convert the selected button from repeating to nonrepeating (and vice versa).

Set Minimum Repeats

The minimum repeats section (under **Button Details**) guarantees that a **Pulse and Hold** IR command is transmitted the specified number of times, even if the button that triggers the command is released quickly.

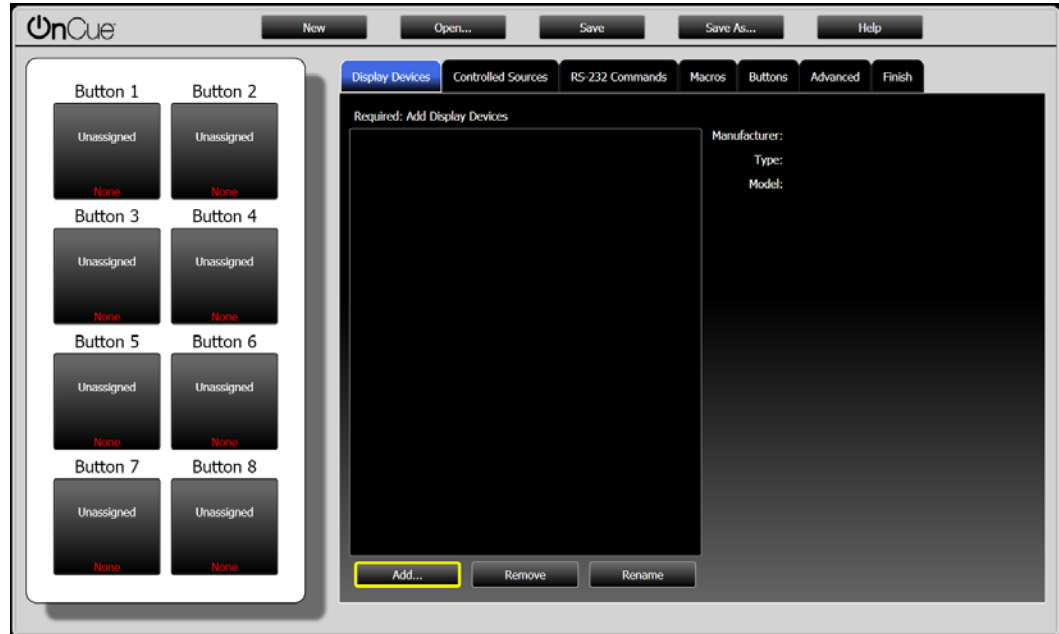
Pronto .CCF Data Format

IR codes can be learned by directly entering the data in CCF format.

Developing onCue BPC-8 Projects

Use the Crestron Toolbox onCue BPC-8 Tool to create projects for the onCue BPC-8 Basic Presentation Controller.

onCue BPC-8 Tool Main Screen



The following paragraphs provide an overview of the functions available via the onCue BPC-8 Tool. For detailed instructions, refer to the embedded onCue BPC-8 Tool help file.

Create, Open, and Save Projects

Launching the onCue BPC-8 Tool automatically creates a new, blank project.

The buttons across the top of the tool have the following functions:

- **New:** Creates a new project when an existing project is already open.
- **Open:** Opens an existing project.
- **Save:** Saves the current project.
- **Save As:** Saves the current project in a different directory or under a new name.
- **Help:** Accesses the BPC-8 Tool help file.

Display Devices

Use the **Display Devices** tab to add IR-controlled display devices to the project. The onCue BPC-8 Tool can access the Crestron Database and/or the User Database.

Controlled Sources

Use the **Controlled Sources** tab to add IR-controlled devices to the project.

RS-232 Commands

Use the **RS-232 Commands** tab to specify the commands that will be sent to the serial device.

NOTE: The BPC-8 supports one-way RS-232 communication with one serial device via the RS-232 port on the unit.

Macros

Use the **Macros** tab to create macros that can be assigned to button presses via the **Buttons** tab. A macro consists of up to five actions separated by optional delays.

Buttons

Use the **Buttons** tab to assign actions to buttons. An “action” is a command (IR or RS-232) or macro that is triggered when the button is pressed.

Advanced

Use the **Advanced** tab to add password protection and auto timeout capabilities for the display device.

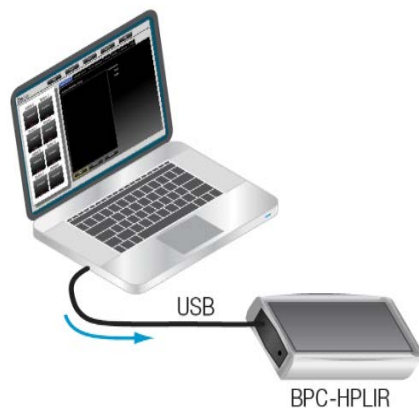
NOTE: These functions should be added only if the display device supports discrete Power On and Power Off commands (instead of a single command, such as Power, that toggles the power state).

Finish

Use the **Finish** tab to transfer the configuration file to the onCue BPC-HPLIR and BPC-8 units:

1. Connect the BPC-HPLIR to the computer via a USB cable as shown below.

Connecting the BPC-HPLIR and computer



2. Click **Load Configuration** to BPC-HPLIR to load the configuration file onto the BPC-HPLIR.

Transferring to the BPC-8

Once the desired configuration file is loaded onto the BPC-HPLIR via the included USB cable, it can be transferred to a BPC-8 unit by completing the following steps:

1. Remove the clear plastic dust cover from the fiber-optic cable connector, and insert the connector into the small IR port on the lower right side of the BPC-8 faceplate (see the illustration below). Hold the cable securely in position.

Connecting the BPC-HPLIR to the BPC-8



2. Press the **TRANSFER** button on the BPC-HPLIR. The green **LOAD** LED lights. Keep the fiber-optic cable in place until the **LOAD** LED turns off.
3. When the file is transferred successfully, the BPC-8 backlight flashes several times.

NOTE: If the file is not transferred successfully, the Button 1 LED (upper left) on the BPC-8 blinks several times. If this situation occurs, press the **TRANSFER** button again until the transfer succeeds. Wait at least one second between presses.

4. Repeat this process for each BPC-8 that supports identically equipped rooms.

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