

Connecting Multiple Blue Pill Panels

Tutorials on different workflows for connecting multiple Blue Pill panels

- [Raw Panel Mode or Using One Blue Pill Panel as the Main Unit](#)
- [Sharing Device Cores Across Different Blue Pills](#)

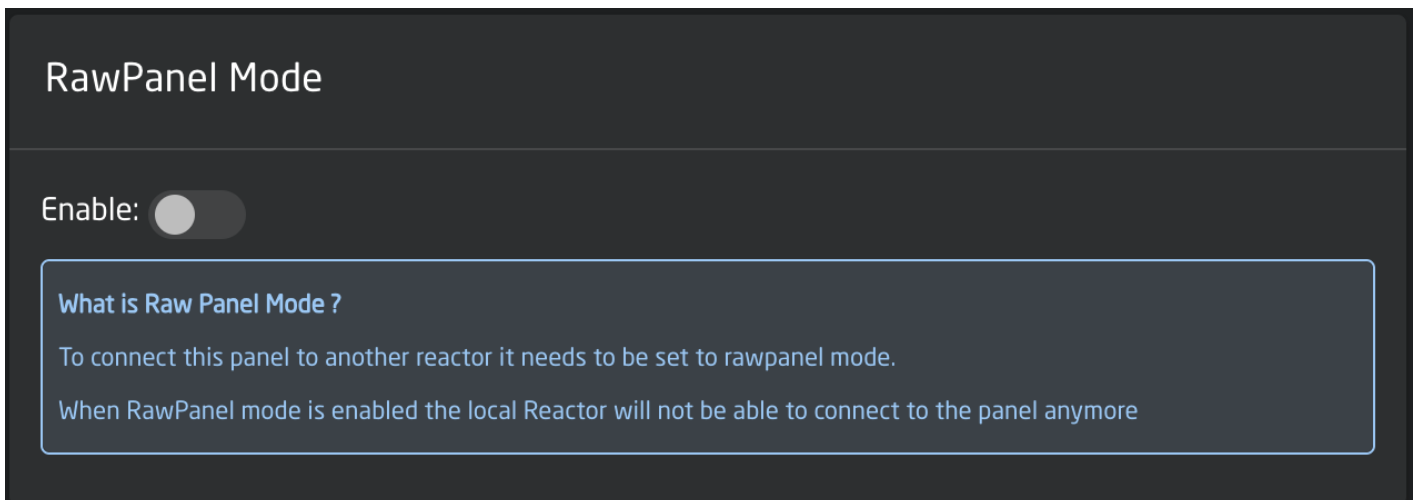
Raw Panel Mode or Using One Blue Pill Panel as the Main Unit

There are a couple of workflows that require the panel to be set into Raw Panel Mode. This is mainly used if you are having a 3rd party program take control of the Skaarhoj Panel in a custom integration or if you are connecting multiple Skaarhoj Panels with one panel set as the main unit.

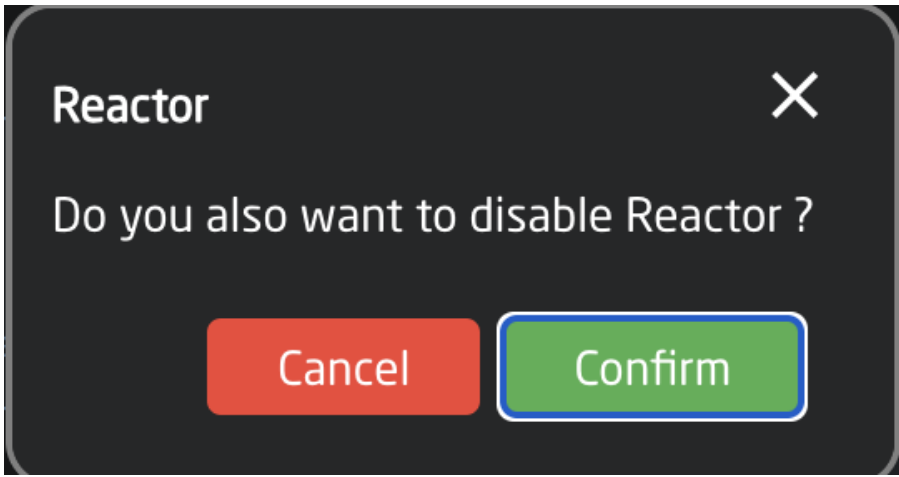
New Method

Starting with System Manager version 1.0.6, it is now possible to set a Blue Pill device into 'Raw Panel Mode' on the Settings Page.

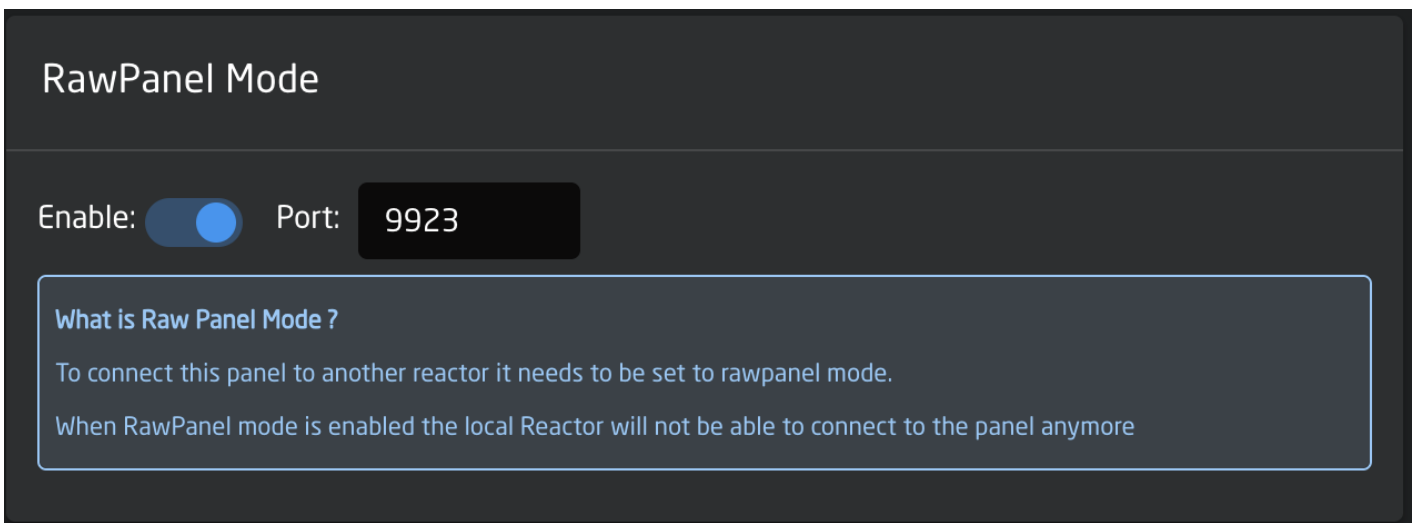
Enabling the Raw Panel Mode toggle on the Settings page does the same as step 3 in the Old Method for setting it up. After Enabling.



Once enabling, you are given the option to disable the Reactor Package. In most workflows this is what you will want to do.



After it is enabled, you can set the specific port you need. Our default communication port for Raw Panel Mode is 9923.

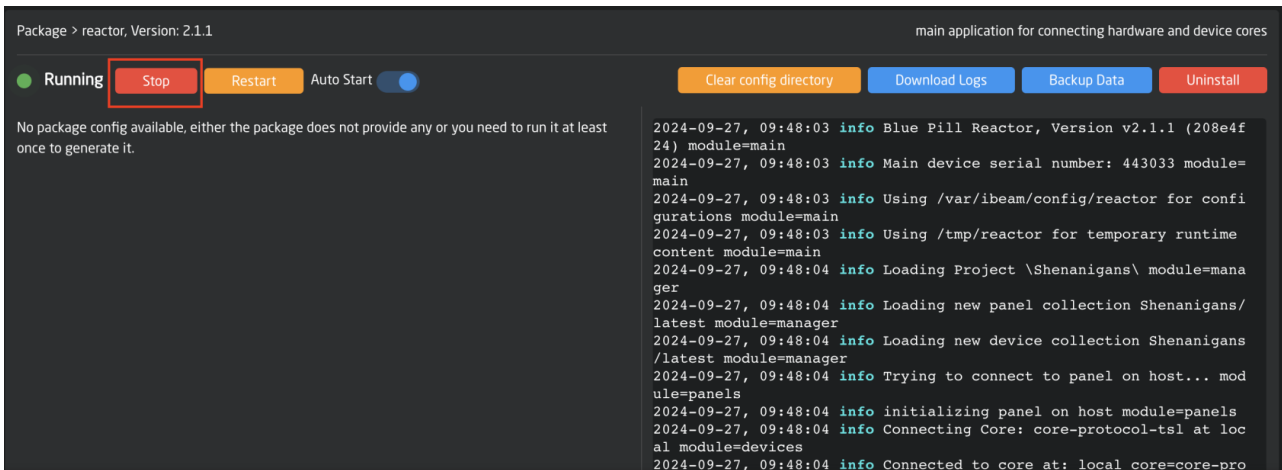


Old Method

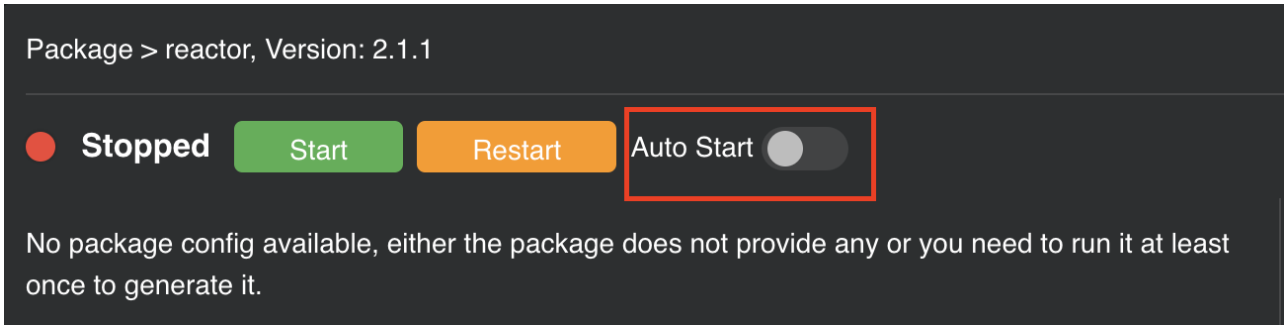
To set up multiple Blue Pill Inside units to work in a group together, it is necessary to change some settings in the connected panels to allow them to be controlled by the main Blue Pill panel.

The connected unit needs the following changes:

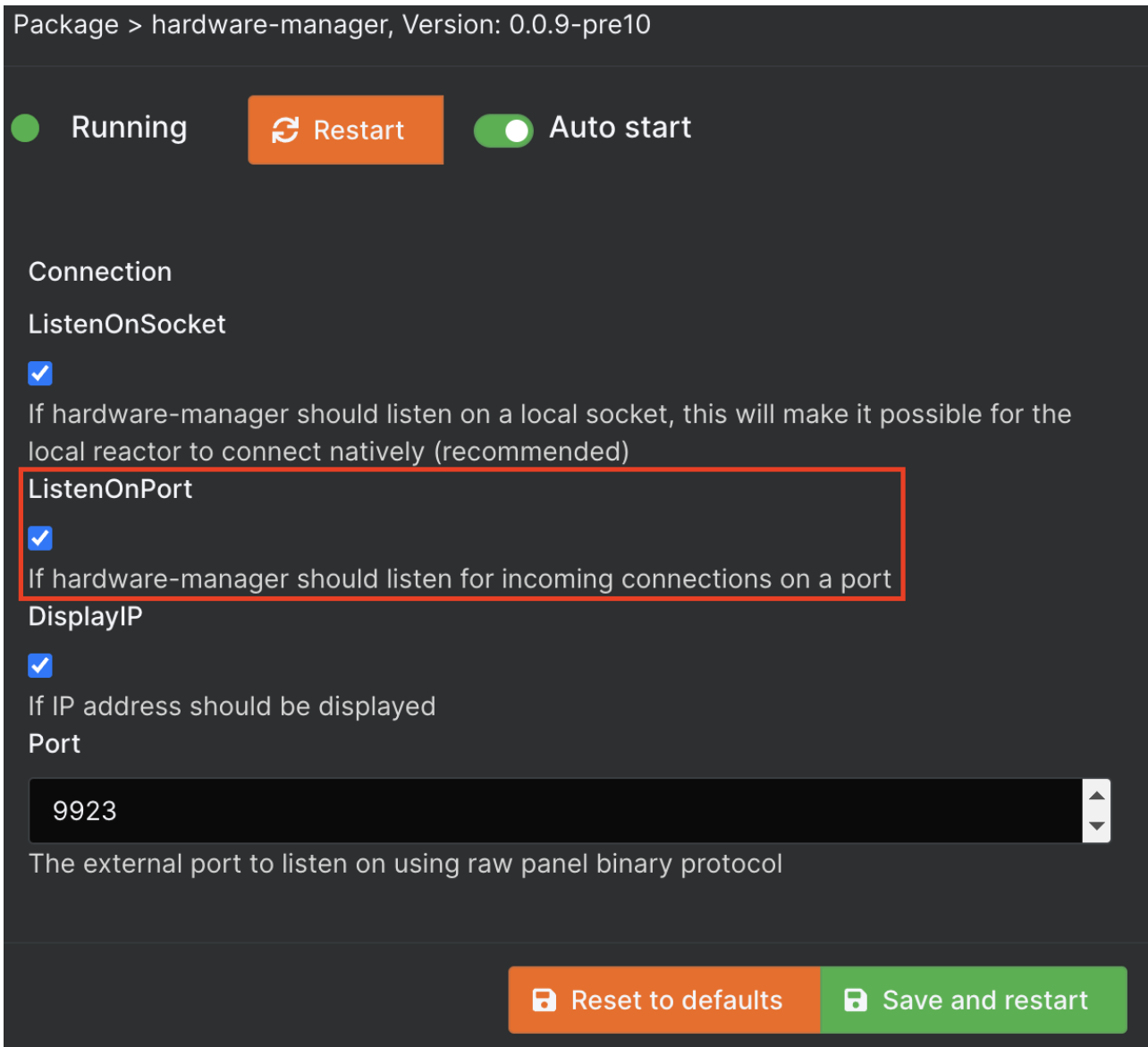
1. Stop Reactor



2. Disable Auto-Start



3. Enable Listen on Port in Hardware Manager



4. Save and restart

5. Add as normal panel to the main BP/BPI

Please Note, turning off Reactor will limit the page selections to Package and Settings. All other pages are part of the Reactor firmware package.

Sharing Device Cores Across Different Blue Pills

For some workflows it may be necessary to have a package running on a one Blue Pill and use it on another.

Example 1: You are controlling and Atem, and are on a different continent, the latency would probably not work well over the distance with Atem's own protocol, so you use the Blue Pill, then the Blue Pill to Blue Pill communication does handle latency better.

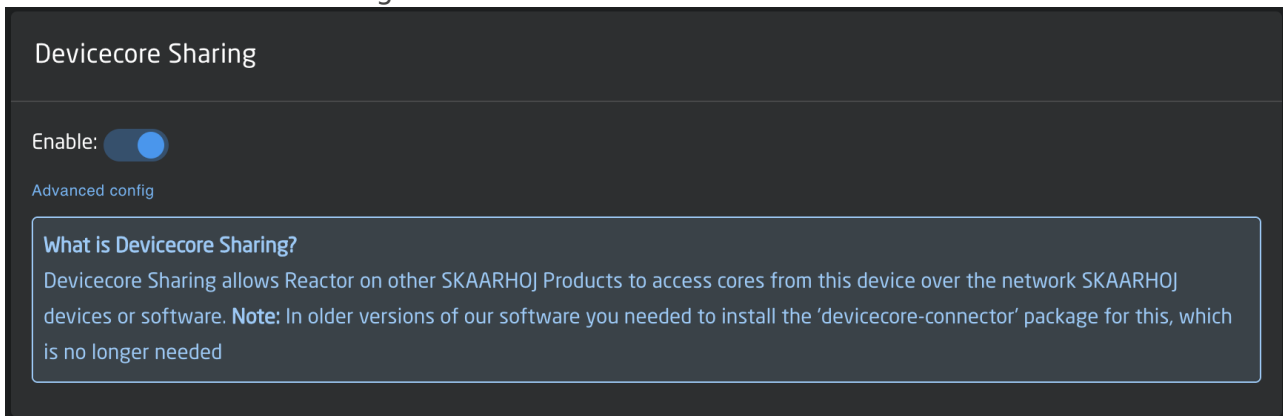
Example 2: When using a Blue Pill connected to a camera with a USB cable, you have to run the cores locally as they need serial access, but you probably want a central instance of reactor controlling all of them.

Process:

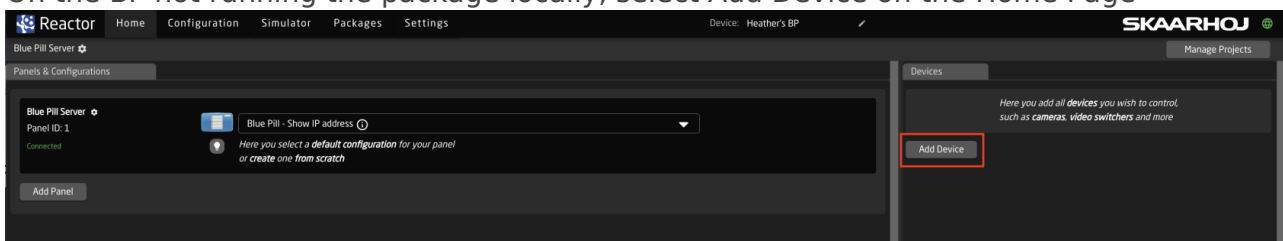
To connect two Blue Pill devices when a device core/package is running on one but not the other:

Instructions are compatible with System Manager v1.0.11 and above. For older System Manager methods, please see Old Method instructions at the end of the article.

1. Navigate to the Settings Page on the BP running the needed package locally.
2. Enable Device Core sharing



3. On the BP not running the package locally, select Add Device on the Home Page



4. Search for shared core, selecting the specific core on the panel that you are looking to connect to.

Please note, the shared core will not come up if searching by the Device Core name, only by the Device Name which is Shared Core. Selecting the specific shared core will bring in all individual devices connected to by that core on the remote Blue Pill device.

Select Device To Add

Discover Devices Add Manually

Show Concepts

Devices found on the network Searching for devices...

share

Device Name	IP	Device Core	Description	Actions
Shared Devicecore	192.168.10.164	core-skaarhoj-flowgrid:0	Device core provided by 192.168.10.164:8502	Select
Shared Devicecore	192.168.11.228	Kessler Crane	Device core provided by 192.168.11.228:8502	Select
Shared Devicecore	192.168.11.22	core-skaarhoj-piplayer:0	Device core provided by 192.168.11.22:8502	Select
Shared Devicecore	192.168.8.143	BMD ATEM	Device core provided by 192.168.8.143:8502	Select
		Canon XC	Device core provided by 192.168.8.143:8502	Select
		Panasonic PTZ	Device core provided by 192.168.8.143:8502	Select
		Visca PTZ	Device core provided by 192.168.8.143:8502	Select

5. After adding the desired remote core it should show in the Device Core name the IP address it is connecting to the core from.

Devices

BMD ATEM @ 192.168.8.143 ⚙️

ATEM 2 M/E Production Studio 4K (configured by remote core)

⚙️

Address: 192.168.10.240

Device ID: 1

Connected Test

Add Device


6. If it is not possible to autodiscover the shared core, it can be added manually by adding the device to be controlled.

The screenshot shows a dark-themed dialog box titled "Select Device To Add" with a close button (X) in the top right corner. At the top, there are two tabs: "Discover Devices" and "Add Manually", with "Add Manually" being the active tab. To the right of the tabs is a toggle switch labeled "Show Concepts" which is currently turned on. Below the tabs is a section titled "Manual add devices" containing a table. The table has four columns: "Device Name", "Device Core", "Description", and "Actions". The rows are as follows:

Device Name	Device Core	Description	Actions
Remote	Remote or Unknown	Connects to the remote device, eg a device managed by a different bluepill	Select
CR-N500	Canon XC	Canon CR-N500 PTZ	Select
CR-N300	Canon XC	Canon CR-N300 PTZ	Select
CR-N700	Canon XC	Canon CR-N700 PTZ	Select
CR-N100	Canon XC	Canon CR-N100 PTZ	Select

The "Select" button for the CR-N500 device is highlighted with a red rectangular box.

7. Setting the proper device details for the device.



CR-N500

Canon CR-N500 PTZ

Active

Name

Device Id

Model Id

Description

IP
The IP for the camera

Port
The port for the camera

Username
The Username for the Canon device, Note all advanced system settings needs and Admin level user and password to work

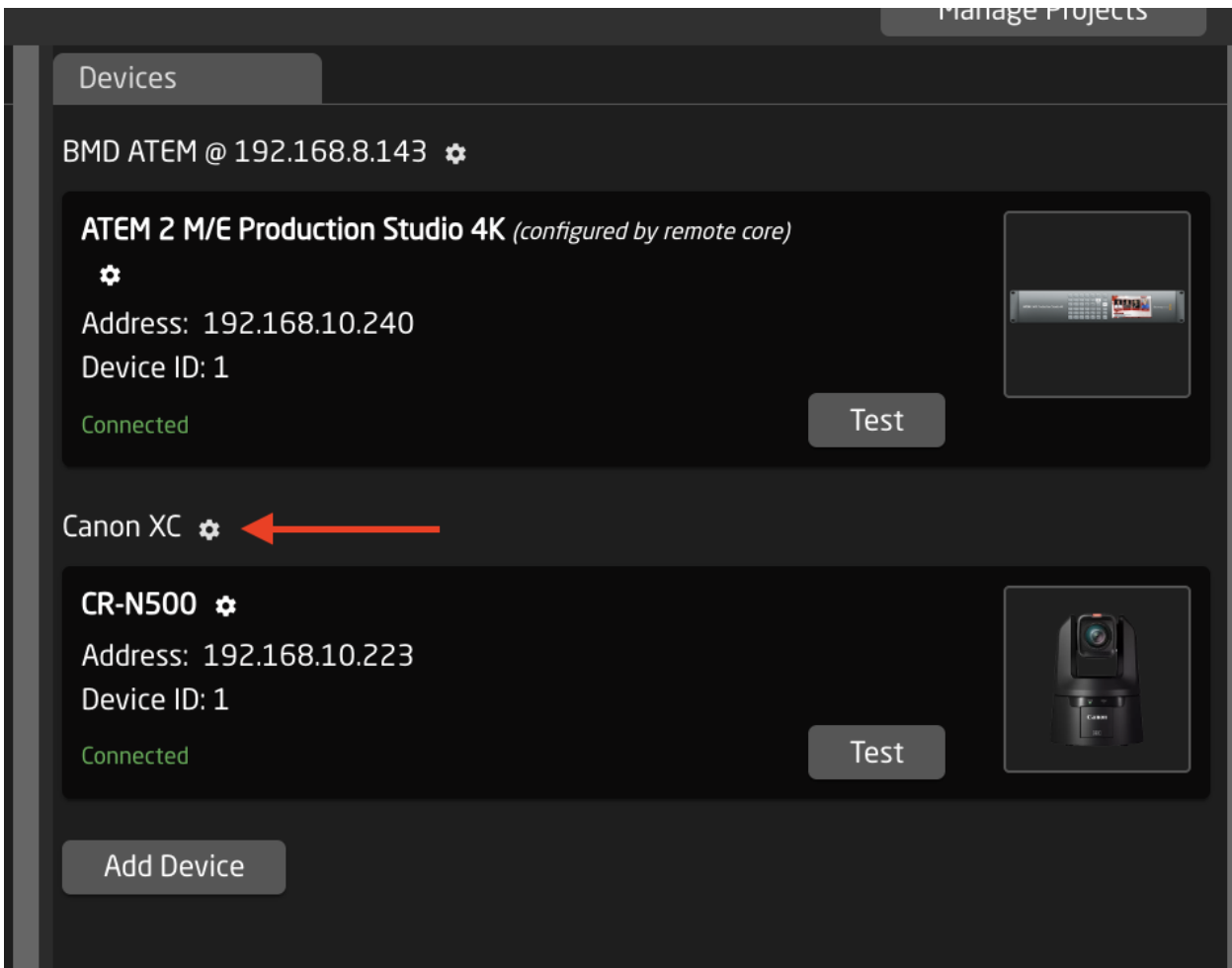
Device Password
The password that is set on the device

Authentication Type
The authentication method to use when connecting to the device

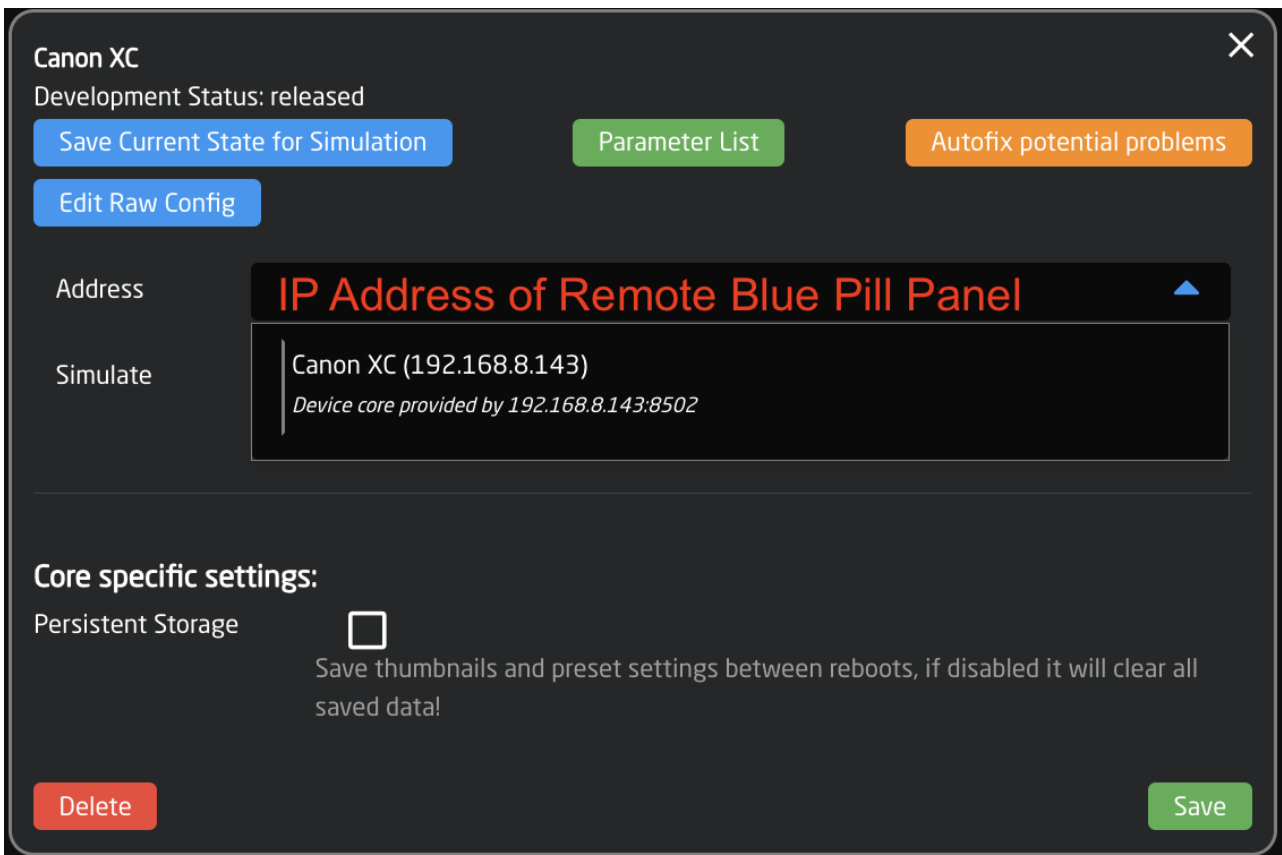
Thumbnail Type
The type of thumbnail to use

Missing IP
Development status: beta

8. Click into the Device Core Details for the device.

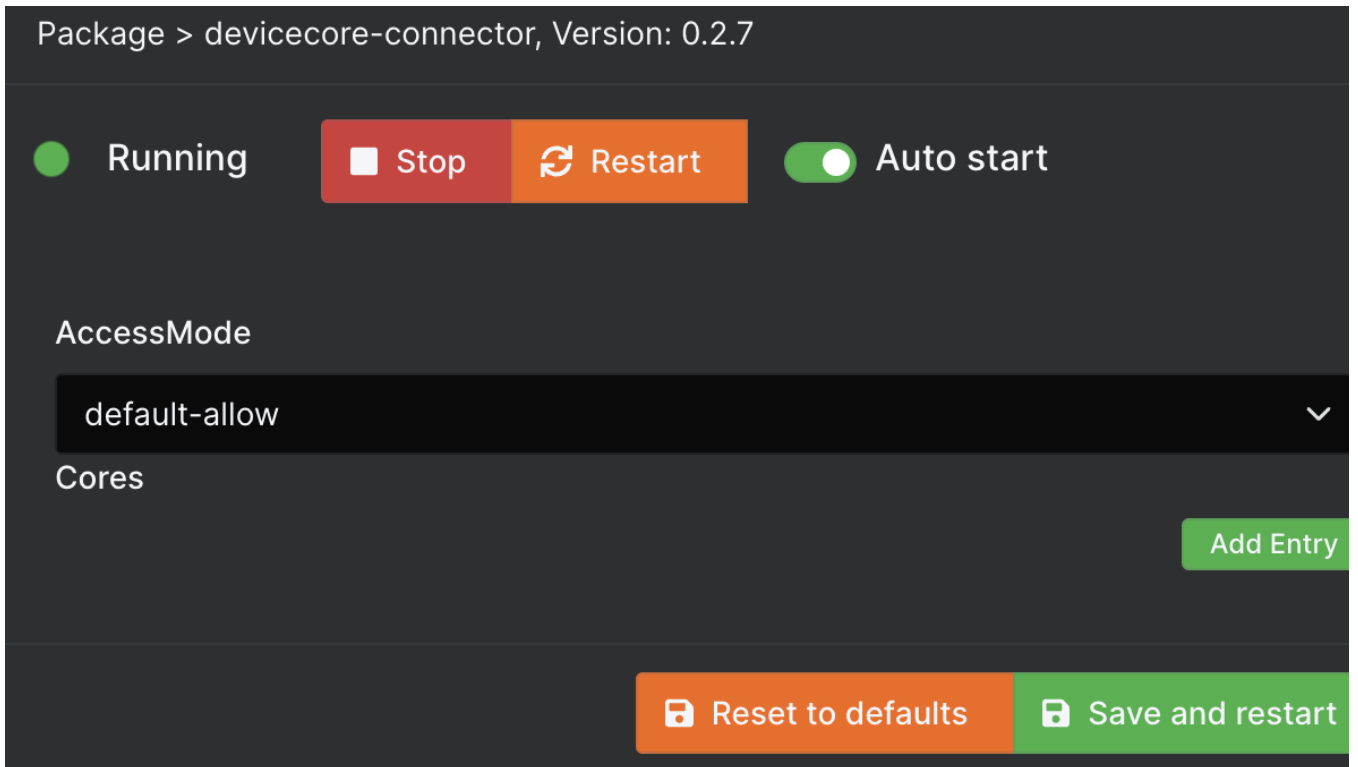


9. Enter the IP address of the remote Blue Pill that will be hosting the device core locally. Or select it from the drop down if it appears.



Old Method (Pre System Manager v1.0.11)

1. Install DeviceCore-Connector package on the BP running the needed package locally.
2. AccessMode= default-allow



All other steps are the same as the current method.