

RAKO DRIVER FOR CRESTRON CUSTOM

Revision: 1.0

Date: 17 February 2023

CRESTRON CUSTOM ONLY

This document describes the configuration of the Rako Driver for Crestron Custom only. For Crestron Home please refer to the specific product for Crestron Home.





SUPPORTED INSTALLATION

The driver is designed to operate a Rako lighting control system from Crestron custom systems, and requires a suitable **Rako HUB** to be included in the Rako system. Additionally, the Rako lighting system must be configured and operational and you will require specific details for the integration, such as room Ids, Channel Ids and so on.

NOTE: The legacy Rako BRIDGE is **NOT** supported – however upgrading is simple.

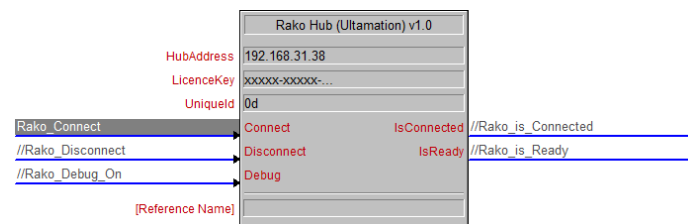
MODULE DESCRIPTION

The complete system is made up of a number of modules.

-  **Rako Hub**
This module is mandatory for each physical hub. More than one hub can be used in larger systems. Each hub module must be assigned a unique “id” which is used to link hub modules to its children (room, channel, RGB) modules. This value is NOT a Rako parameter and can be chosen freely by the Crestron programmer.
-  **Rako Room**
This module is used for general room scene control. Simply identify the unique hub Id, the room number and select a scene to recall. These can be considered equivalent to the scene buttons on a keypad. Scene 0 is equivalent to RoomOff.
-  **Rako Channel**
For single channel dimmers, the channel module provides on/off, fade control and discrete level setting.
-  **Rako RGB**
Similar to the single channel module, this module provides setting and feedback of RGB dimmers.

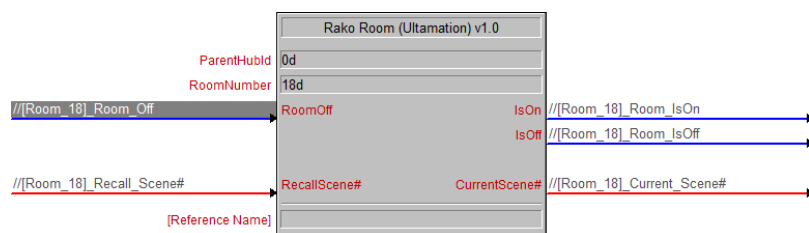
Each module will now be described in more detail.

Rako Hub



HubAddress	Enter the fixed IP address of the hub
LicenceKey	The key purchased against this Crestron processor. Multiple Hubs will use the same key. If this is not a valid key, the module will run for 1 hour and then stop processing commands.
UniqueId	A decimal number that links the hub instance to multiple room/channel/rgb instances
Connect	Pulse this to start communication with the hub
Disconnect	Pulse this to disconnect from the hub (you can safely leave the hub connected)
Debug	Set high to enable Debug output – this is useful when contacting support. Debug info is written to the error log and should not be left enabled.
IsConnected	The module has successfully connected to the hub over IP
IsReady	The module is now able to send commands to the hub.

Rako Room

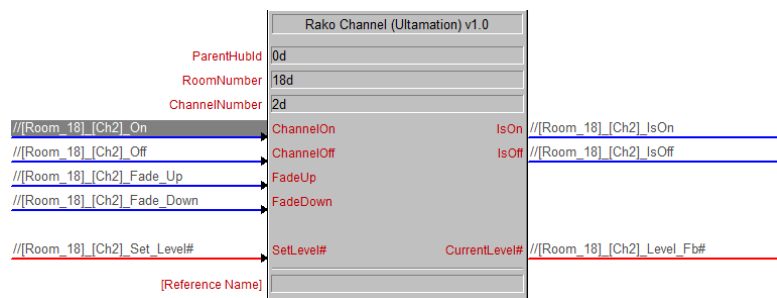


A room module can be added for each room on a given hub. DO NOT ADD a room module for a specific hub more than once!

Feedback is not immediate – rooms and channels are polled periodically, and also shortly after commands have been sent.

ParentHubId	A decimal number that links the room instance to a specific hub instance – this MUST match the UniqueID in the hub module
RoomNumber	The Rako room ID. Only use once!
RoomOff	Turn the room off (this is the same as selecting scene 'o')
RecalScene#	Pass a number to select a configured scene
IsOn	High if any channel in the room is not 0
IsOff	High if all channels in the room are 0
CurrentScene#	The currently selected scene number

Rako Channel

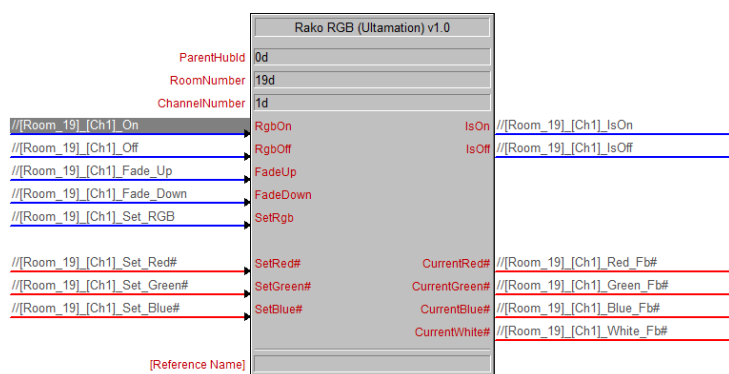


A channel module is used for fine grained control of single channels.

ParentHubId	A decimal number that links the channel instance to a specific hub instance – this MUST match the UniqueID in the hub module
RoomNumber	The Rako room ID for this channel
ChannelNumber	The Rako channel ID – Only use once!
ChannelOn	Turn on the channel – the channel will turn on to the values last set with SetLevel#.
ChannelOff	Turn off the channel
FadeUp	Press and hold to raise the channel level
FadeDown	Press and hold to lower the channel level
SetLevel#	Full scale value (0-65535) to set the channel level
IsOn	High if the channel level not 0
IsOff	High if the channel level is 0
CurrentLevel#	The current level value (0-65535)

Please Note: because of scaling/resolution, the "SetLevel" value may not match the "CurrentLevel" exactly.

Rako RGB



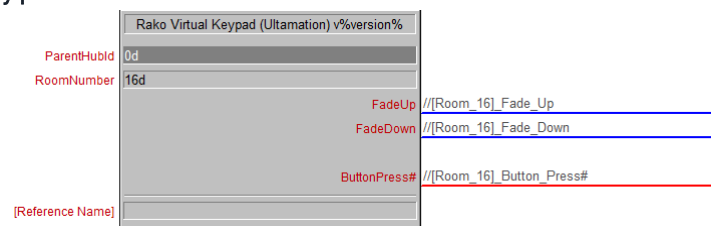
As for Rako Channel – this module controls a collection of channels as an RGB(W) fixture.

There are some functional differences – Fade Up/Down can be configured to run colour patterns on the RGB dimmer.

Setting the analog values for Red/Green/Blue DO NOT trigger a command – you must also pulse "SetRgb" to set the chosen level.

CurrentWhite# is only for feedback and is automatically calculated by Rako.

Rako Virtual Keypad



The virtual keypad module can be used to capture physical button presses from Rako keypads. Each keypad will be configured for a specific Room ID so the Virtual Keypad module is also assigned a Room ID.

Only ONE Virtual Keypad can be added to the program for each Room.

ParentHubId	A decimal number that links the channel instance to a specific hub instance – this MUST match the UniqueID in the hub module
RoomNumber	The Rako room ID for this channel
FadeUp_Raise	Goes high while the physical raise button is pressed.
FadeDown_Lower	Goes high while the physical lower button is pressed.
ButtonPress#	Emits the scene button number when pressed (0 = off)

SUPPORT

If you have any issues with a driver or installation please let us know by contacting Ultamation support on support@ultamation.com and please include as much detail about your issue as possible, such a recent processor error log.

Licence verification messages are posted to the error log, so please ensure you have checked this.

LICENCE

This module (including software, images and any and all other associated assets distributed as part of the purchased download package) is licenced on a PER PROCESSOR basis.

A licence key is generated at the point of purchase and is linked at that time to specific information that MUST be provided at the time of purchase. A purchase should not be completed without correct information as refunds cannot be issued for errors or changes made to details following purchase.

The licence key for each device will be delivered via email along with links to download the module. There is no physical delivery.

The module is provided without any warranty with respect to the reliability of the controlled device or changes to device protocol. We will endeavour, through best efforts, to maintain the module's functionality and any bug fixes will be provided free-of-charge. Additional functionality may be released as a variation of this module and this will be a separate, purchasable, product.