

1HOME CRESTRON HOME INTEGRATION DRIVER MANUAL

PLATFORM DRIVER V23.3102.0000

SKD 23.0000.0041

Reference: [1HOME](#)

1 - DISCLAIMER

1.1 - The 1Home Crestron Home Integration Driver allows seamless connectivity between the 1Home platform and Crestron Home systems. This driver enables enhanced control and monitoring of supported devices within the Crestron Home ecosystem, leveraging the latest SDK capabilities to provide a robust and user-friendly experience.

1.2 SUPPORTED FEATURES IN THIS VERSION:

1. Supported Devices

List all devices that can be managed by the driver, grouped by their functionality:

- **Lighting Devices:**
 - `lightonoff`: Supports on/off functionality.
 - `lightdim`: Allows dimming control.
 - `lightct`: Supports color temperature adjustment.
 - `lightcolor`: Supports full-color control.
- **Power Outlets:**
 - `socketonoff`: On/off control for sockets.
- **Climate Control Devices:**
 - `thermostat`: Manage heating and cooling setpoints, system modes.
 - `roomairconditioner`: Control air conditioners with fan and temperature settings.
- **Window and Door Controls:**
 - `windowcovering`: Open/close and tilt control for window coverings.
 - `doorlock`: Lock/unlock functionality.
 - `garagedoor`: Open/close and status monitoring.
- **Sensors:**
 - `sensorcontact`: Contact sensors (e.g., doors, windows).
 - `sensortemperature`: Temperature sensors.
 - `sensorhumidity`: Humidity sensors.
 - `sensorlight`: Ambient light sensors.
 - `sensoroccupancy`: Occupancy detection.
- **Trigger Devices:**
 - `pushbutton`: Generic push-button support.
 - `pulsetrigger`: Trigger for specific events.
 - `scenetrigger`: Scene management and activation.

1.3 - HARDWARE REQUIRED:

Crestron Home 4 Series Processors only: [DIN-AP4-R / MC4-R / CP4-R / PC4-R](#)

1.4 - SOFTWARE REQUIRED:

[Crestron Home OS 4 Series Processors Only](#)

-- accessibility to the 1Home Server will be required whilst [1Home will require Crestron Firmware](#) for the integration.

-- [CONTACT 1HOME FOR PRODUCT PURCHASE WITH LATEST FIRMWARE](#) -- support@1home.io

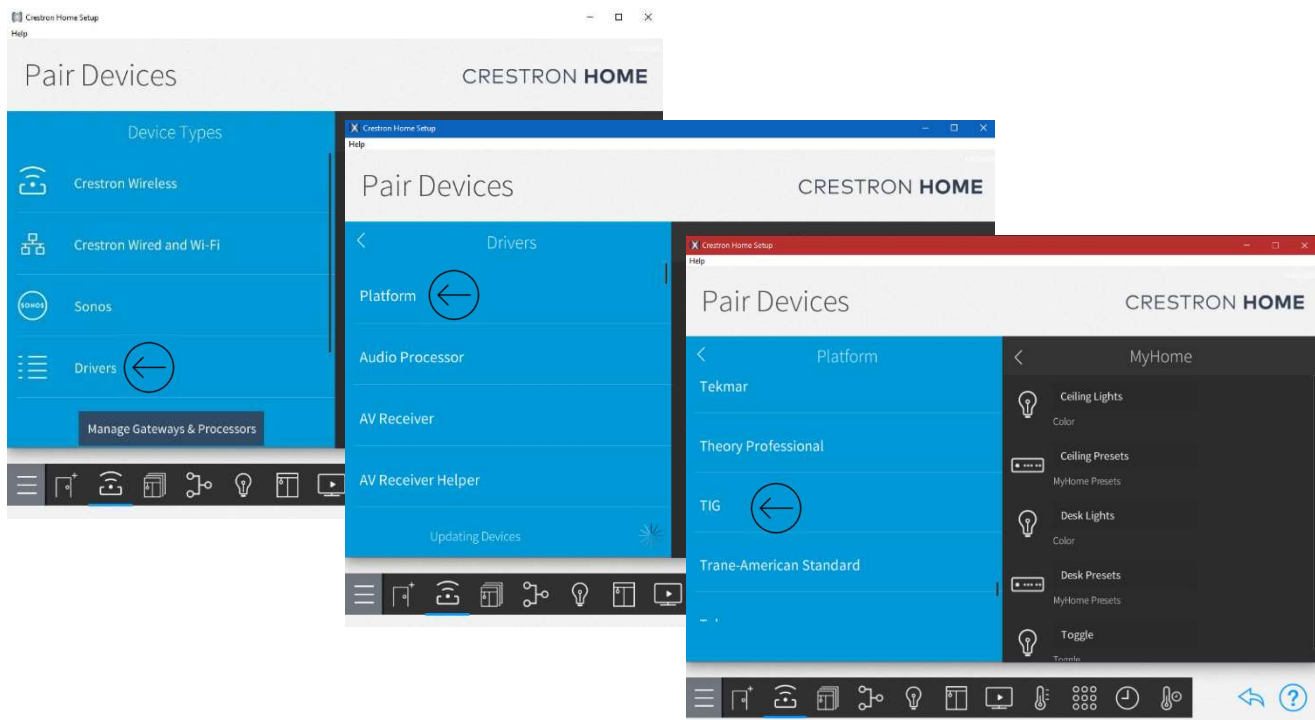
1.5 - NETWORK TOPOLOGY:

Ensure that port 80 is accessible from the Processor to facilitate necessary standard communications.

2.0 - ADDING 1HOME CRESTRON HOME INTEGRATION DRIVER EXTENSION TO CH

The 1Home Platform extension will be found under the following location on the CH configurator software:

Device Types > Drivers > Platform > TIG > 1HOME



2.1 - CONFIGURING 1HOME CRESTRON HOME INTEGRATION DRIVER EXTENSION

Upon installing the driver, you will be prompted to enter the IP address of the 1HOME Server. Valid inputs should be within the IP range, such as "192.168.10.2", The Port is default 80, and further an App Token from 1Home would need to be pasted into CH in the Password field, Username can be left blank.

The screenshot shows the 1HOME web interface with the 'Integrations' menu selected. A 'Crestron' configuration window is open, prompting the user to enter TCP/IP settings. The settings table is as follows:

TCP/IP settings	Value
IP Address of 1Home	192.168.10.2
IP Port	80
User Name	This is Blank, Below Password is your API Key
Password	*****

Below the table, there is a checkbox for 'Requires Authentication:' which is checked.

The 'Crestron Settings' dialog shows the 'App Token' section. It instructs the user to copy the token and paste it into their Crestron Home configuration tool. The token is: `9a58c19e-d328-43c5-a148-98d232c56a0d`. There are 'Copy' and 'Revoke' buttons. Below the token, the 'Current Callback URL' is listed as: `http://192.168.10.14:3001/callback/`.

After the Driver has been added, Navigate to Managed Platforms, where you will find all Imported devices created in 1Home on CH

The screenshot shows the 'Pair Devices' screen in the Crestron Home Setup application. On the left, under 'Device Types', there are options for 'Crestron Wireless', 'Crestron Wired and Wi-Fi', 'Sonos', and 'Managed Platforms'. On the right, under '1Home', there are several device categories: '1Home', 'All Lights', 'All Shutters', 'All TH', and 'DM'. A bottom navigation bar contains various icons for home automation controls.

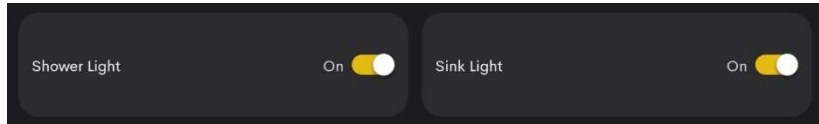
This screenshot shows a more detailed view of the 'Pair Devices' screen, specifically for a 'Dining Room'. The left pane shows a list of device types with plus signs to add them: 'All shutters', 'Dining Room Light Sensor', 'KNX Scene 1', and 'Non-essential sockets'. The right pane shows a list of specific devices for the 'Dining Room': 'Ambient Light', 'Color Light', 'Dim Light', 'Main Light', and 'Occ'.

Devices can further be added here to each Room, devices will show with icons per device type with the room name and type identifier.

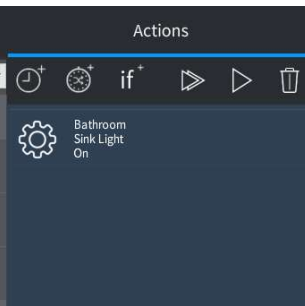
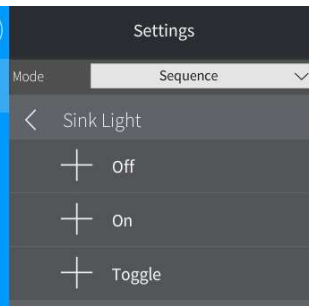
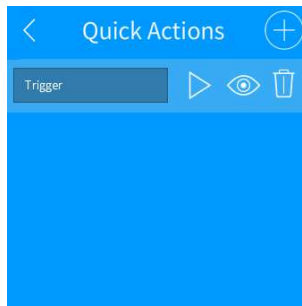
Lighting Devices

1. lightonoff:

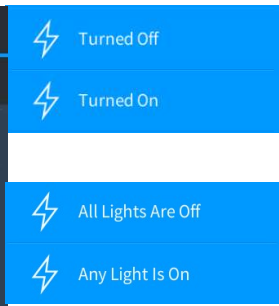
- Provides basic control to turn lights on or off.
- Ideal for simple lighting systems without advanced features like dimming or color adjustment.



ACTIONS:

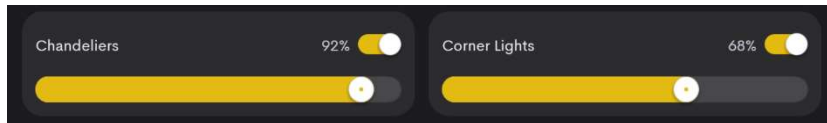


EVENTS:

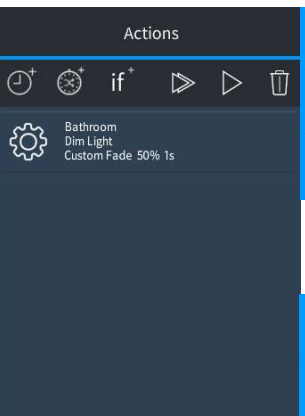
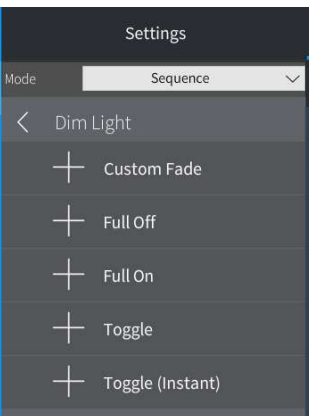
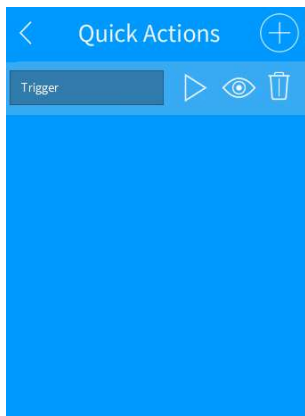


2. lightdim:

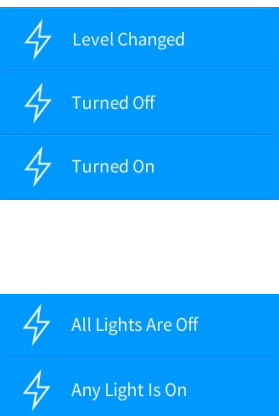
- Allows for dimming control to adjust the brightness of lights.
- Supports smooth transitions and level settings within a defined brightness range.



ACTIONS:

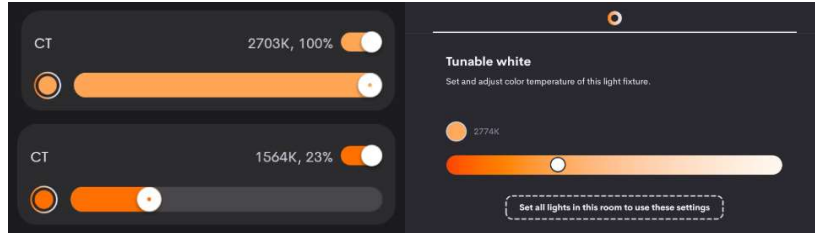


EVENTS:



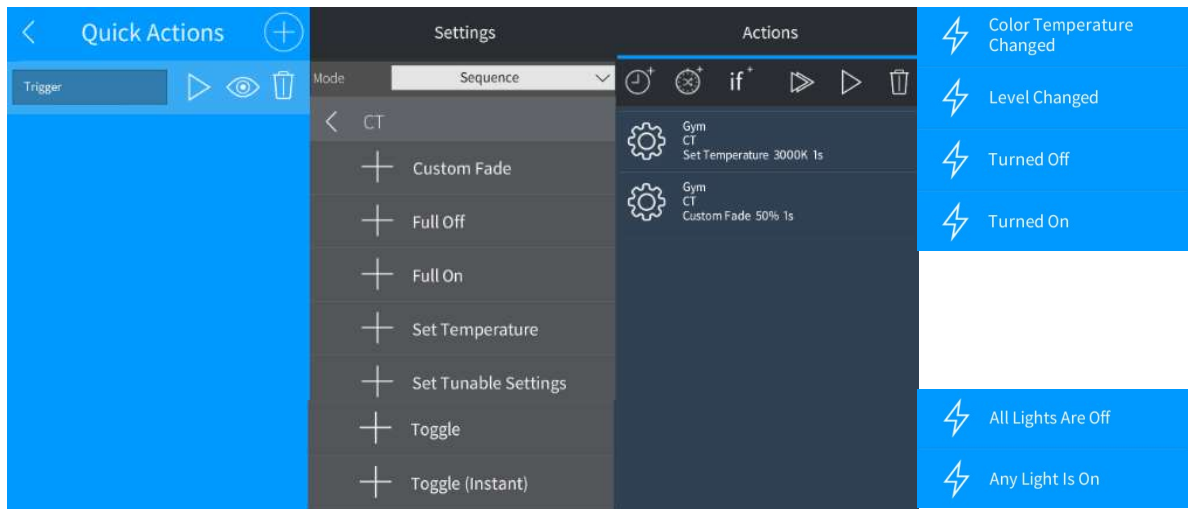
3. **lightct:**

- Supports adjusting the color temperature of lights, ranging from warm to cool tones.
- Enables fine-tuning of ambiance using Kelvin temperature scales.



ACTIONS:

EVENTS:



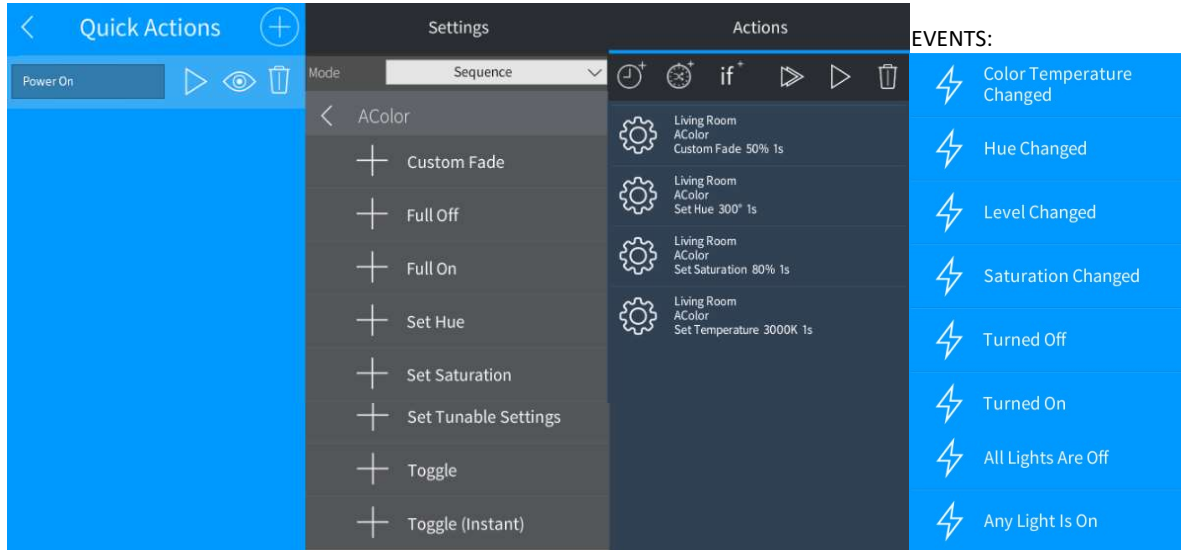
4. **lightcolor:**

- Offers full RGB color control for lighting, enabling custom color settings.
- Also supports brightness and color temperature adjustments for a comprehensive lighting experience.



lightcolor:

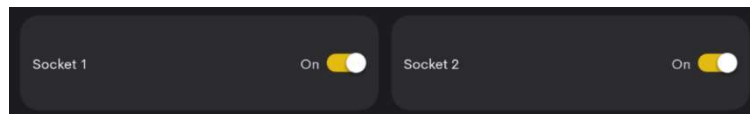
ACTIONS:



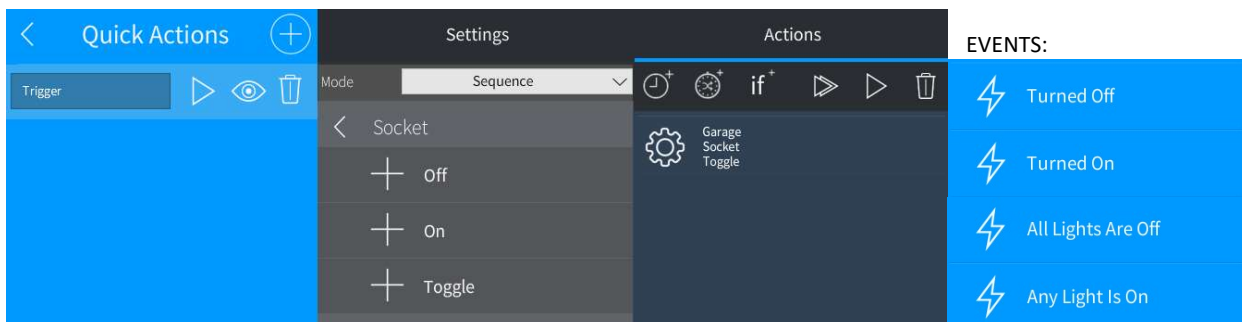
Power Outlets

5. **socketonoff:**

- Enables on/off control for connected electrical devices.
- Suitable for managing power outlets and simple electrical devices.



ACTIONS:



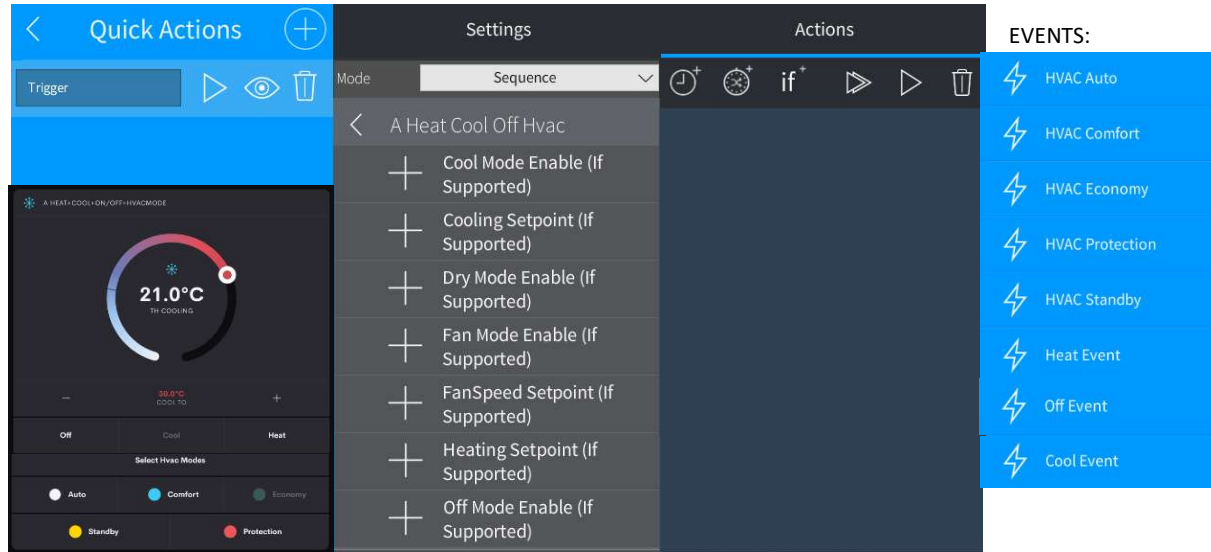
Climate Control Devices

6. thermostat:

Manages heating and cooling setpoints. (Events for Thermostat and Aircon will populate given the configuration done on 1Home)

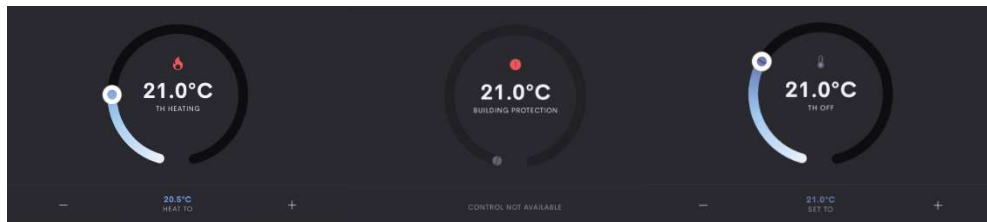
- Supports modes such as auto, heat, and cool, and HVAC Modes for fine control over room temperature.

ACTIONS:

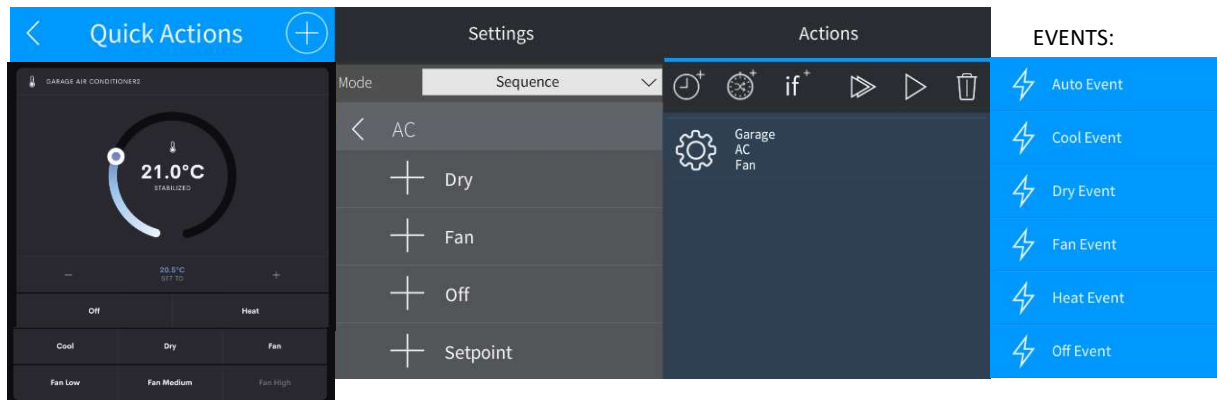


7. roomairconditioner:

- Controls air conditioning units, including fan speed and operational modes (cool, heat, fan, dry).
- Provides real-time monitoring and adjustments for comfort.



ACTIONS:



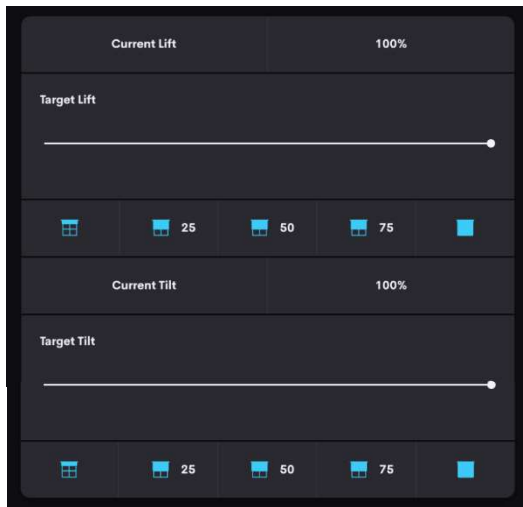
Window Controls

8. windowcovering:

- Enables opening, closing, and tilt control for blinds or shades.
- Offers precise adjustments for privacy and light control.



ACTIONS:

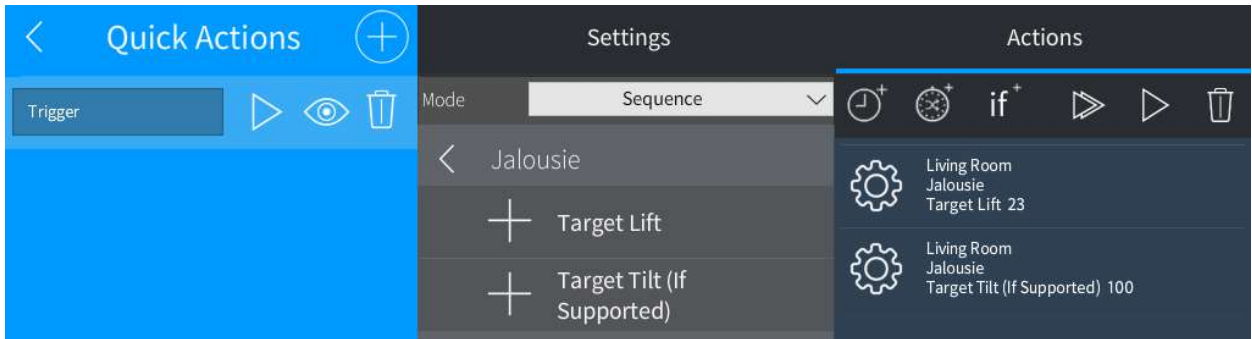


EVENTS: LIFT

- ⚡ Lift 0% Open
- ⚡ Lift 1-33%
- ⚡ Lift 34-66%
- ⚡ Lift 67-99%
- ⚡ Lift 100% Closed
- ⚡ Lift -> Closing
- ⚡ Lift -> Opening
- ⚡ Lift -> Stopped

EVENTS: IF TILT IS SUPPORTED

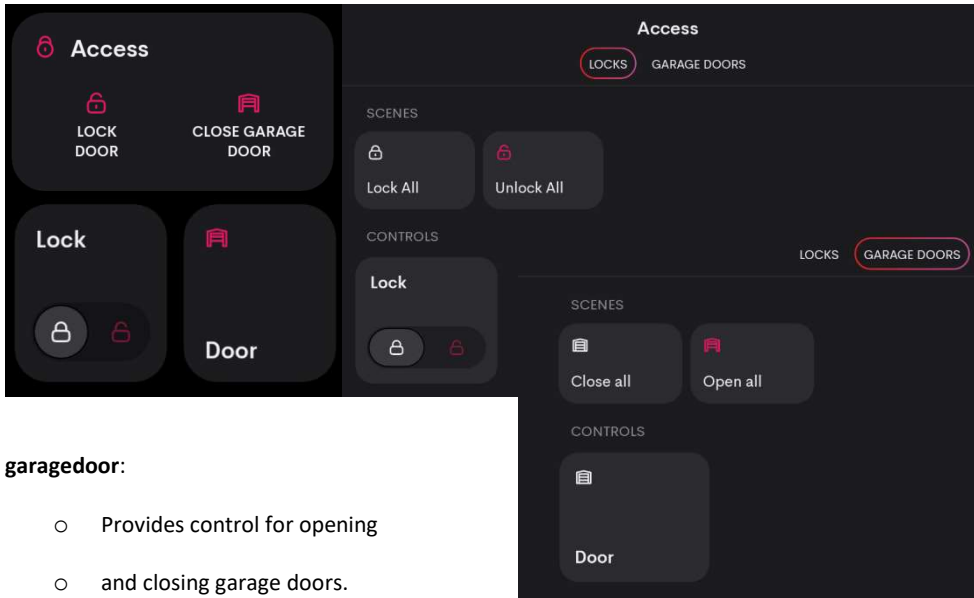
- ⚡ Lift 0% Open (Jalousie Only)
- ⚡ Lift 1-33% (Jalousie Only)
- ⚡ Lift 34-66% (Jalousie Only)
- ⚡ Lift 67-99% (Jalousie Only)
- ⚡ Lift 100% Closed (Jalousie Only)
- ⚡ Lift -> Closing (Jalousie Only)
- ⚡ Lift -> Opening (Jalousie Only)
- ⚡ Lift -> Stopped (Jalousie Only)



Door Lock and Garage Controls

9. doorlock:

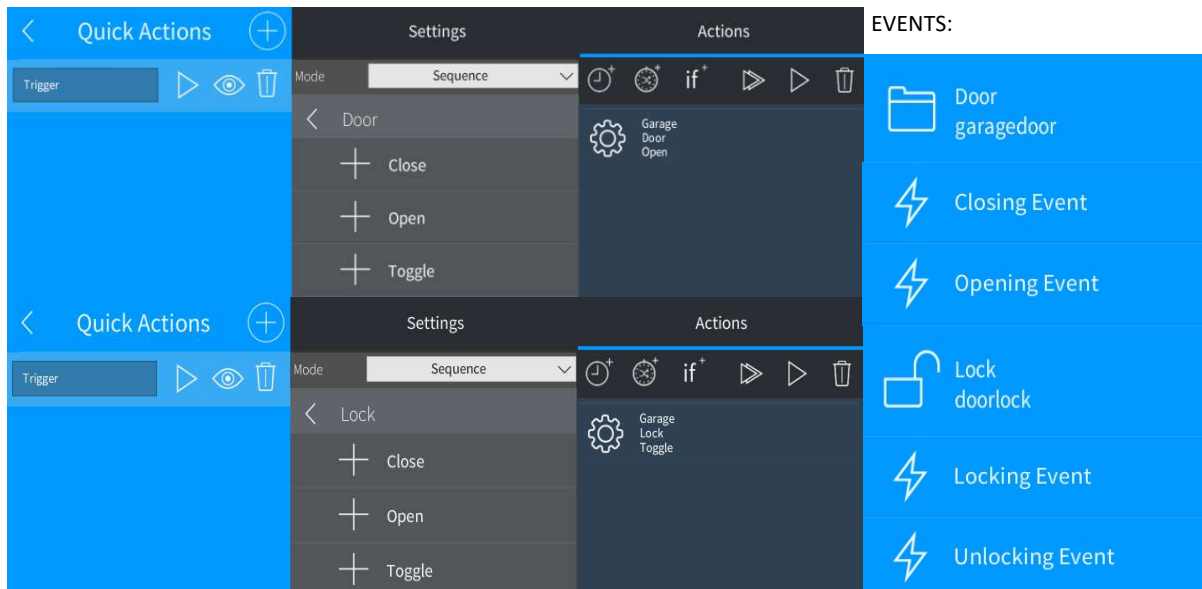
- Provides functionality to lock or unlock doors.
- Supports secure access and status monitoring.



10. garagedoor:

- Provides control for opening
- and closing garage doors.
- Includes status monitoring to ensure safety and proper operation.

ACTIONS:



Sensors

11. sensorcontact:

- Detects the opening and closing state of doors, windows, or other contact points.
- Useful for security and automation triggers.

EVENTS:

The screenshot shows a blue interface for 'Window Contact sensorcontact'. On the left, there is a black box with 'Contact Sensor OPEN' and a folder icon. To the right, the text 'Window Contact sensorcontact' is displayed. Further right, there are two event counts: 'Close (1)' and 'Open (0)', each preceded by a lightning bolt icon.

12. sensortemperature:

- Monitors ambient temperature.
- Often integrated into HVAC systems or standalone for monitoring purposes.

EVENTS:

The screenshot shows a dark interface for 'Lucy's Room Temperature'. A large circular gauge displays '25°C TEMPERATURE Moderate'. To the right, a blue list of events includes: '0C Freezing', '1 to 10C Cold', '11 to 25C Moderate', '26 to 35C Warm', '36C to 45C Hot', '46C Above', and '-10C Freezing', each with a lightning bolt icon.

13. sensorhumidity:

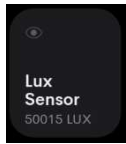
- Tracks humidity levels in the environment.
- Useful for climate control and air quality monitoring.

EVENTS:

The screenshot shows a dark interface for 'Lucy's Room Humidity'. A large circular gauge displays '53% HUMIDITY Moderately Low'. To the right, a blue list of events includes humidity ranges from 'Humidity 0-10%' to 'Humidity 90-100%', each with a lightning bolt icon.

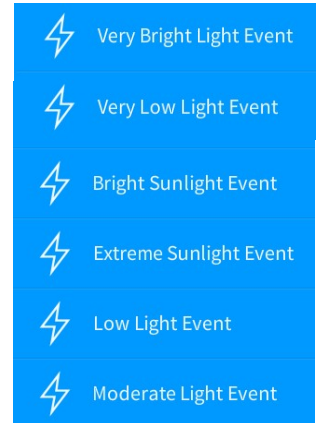
14. **sensorlight:**

- Measures ambient light levels - Automation based on lighting conditions using Lux measurements.



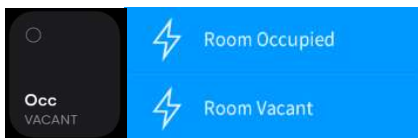
- Low 0-10 // Dim 11-50 // Moderate 51-200 // Bright 201-1000
- Very Bright 1001-5000 // Sunlight 5001-10000 // Extreme 10001 - inf

EVENTS:



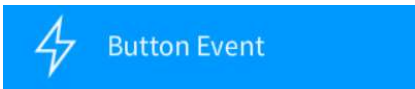
15. **sensoroccupancy:**

- Detects motion or presence in a room.
- Useful for security systems and energy-saving automation.



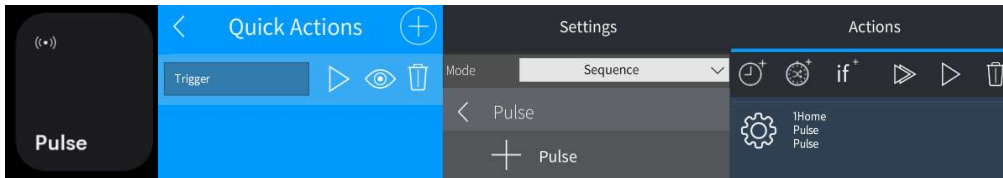
16. **pushbutton:**

- Provides functionality for manual triggers through virtual buttons. (One Way – 1Home to Crestron)

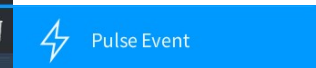


17. **pulsetrigger:**

- Used to trigger specific events or actions.
- Ideal for momentary actions or temporary states.

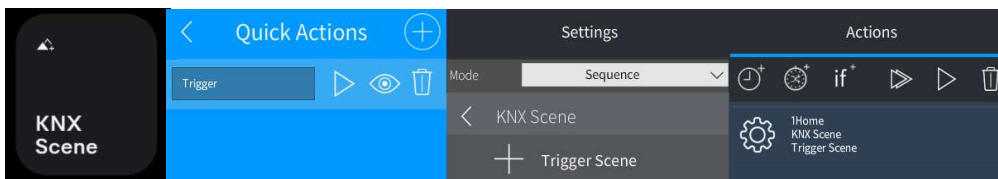


EVENTS:



18. **scenetrigger:**

- Enables activation of predefined scenes or automation routines.
- Useful for quickly setting multiple devices to a desired state.



EVENTS:



Release Notes

Version: Platform Driver V23.3102.0000

Tested on: 1Home Firmware v3.1.0-crestron.4

New Features

1. Comprehensive Device Support:

- Full integration with Crestron Home for a wide range of devices, including:
 - Lighting: On/Off, Dimming, Color Temperature, and RGB Color Control.
 - Climate Control: Thermostats and Air Conditioners with advanced mode and setpoint adjustments.
 - Window and Door: Door locks and window coverings.
 - Sensors: Contact, Temperature, Humidity, Light, and Occupancy.
 - Triggers: Push Button, Pulse Trigger, and Scene Trigger.
 - Garage Controls: Garage door open/close and status monitoring.

2. Enhanced Device Management:

- Automatic detection and dynamic initialization of devices.
- Real-time status updates for device attributes such as online state, readiness, and error conditions.

3. Error Handling and Logging:

- Robust logging of unsupported operations and device errors.
- Seamless error state propagation to the Crestron Home App.

4. Scene Management:

- Support for creating and activating scenes using the scenetrigger device type.
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Improvements

- Optimized device initialization to ensure faster deployment and integration within Crestron Home.
 - Improved user feedback through detailed logs and error messages for unsupported configurations.
 - Stability enhancements to handle dynamic device attribute updates in real-time.
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For Driver Related Issues:

Please Email Support with a Detailed Explanation of the issue, add as much detail as possible when describing the issue, with screenshots, per device and per functionality used on the device when the issue occurs, the information can be sent to either the support groups.

-- driversupport@tig.eu

-- support@1home.io

1. Attribute Dependencies:

- Some devices require minimum attributes to function properly. Missing attributes are logged during initialization but may affect functionality.

2. Delayed State Transitions:

- In certain scenarios, there might be a slight delay in reflecting online/offline or ready states in the Crestron Home App.
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Compatibility

- Fully compatible with 1Home Firmware v3.1.0-crestron.2.
 - Designed to work seamlessly within the Crestron Home ecosystem.
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Notes

- Ensure all devices are updated to their latest firmware to avoid compatibility issues.
- For optimal performance, test the driver in a controlled environment before deployment.