

EKEY BIOMETRICS DRIVER FOR CRESTRON HOME

Revision: 1.02

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LICENCING

Please visit <https://shop.ultamation.com/index.php/product/140-ekey-biometrics-driver-for-crestron-home> to obtain a licence key for your Crestron processor.

CRESTRON HOME ONLY

This document describes the configuration of the eKey Extension Drivers for Crestron Home only. For integration of eKey using the SIMPL programming environment, please refer to Ultamation's specific SIMPL modules and associated documentation (<https://shop.ultamation.com/index.php/hikashop-category-information-menu-129/product/77-ekey-biometrics-enhanced-integration>).



ADDITIONAL READING

Please refer to the Using 3rd Party driver document for instructions on installation and configuration of the driver with Crestron Home.

MODULE DESCRIPTION

The extension module provides integration with the eKey Finger Scanner environment by associating events generated from the eKey system with Crestron Home programmable sequences. A single driver is used to present the communication with the eKey IP interface (CV LAN) which in-turn connects to the eKey installation (e.g. Home, Multi, NetV2).

The following events are supported:

-  Generic "Open"
This action will be triggered whenever the eKey system processes a successful "Open" command (i.e. a finger is successfully recognised). This is the simplest integration, but also the least flexible.
-  User & Finger Recognition
Up to 8 specific "patterns" can be recognised and used to trigger specific logic. Each pattern can describe two pieces of information; a user ID and a finger. The patterns can also use "wildcards" to recognise a finger for any user, or a user presenting any of their enrolled fingers. A wildcard used to represent both user and finger is therefore the same as the generic "open"

INSTALLATION PREREQUISITE

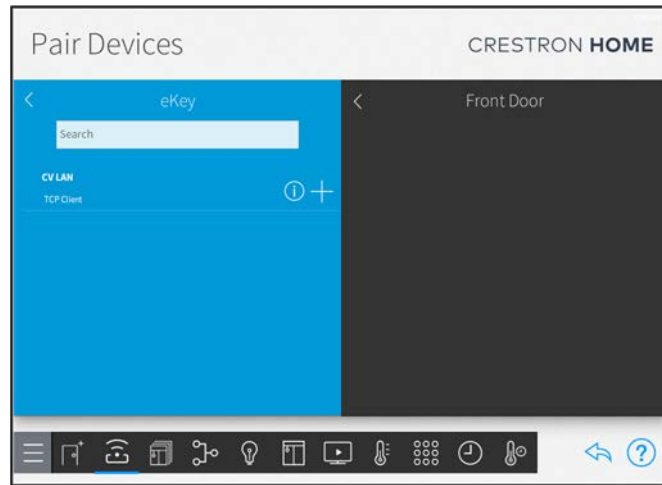
The eKey CV LAN must be configured to point at the Crestron Home processor and configured with a known UDP port. This configuration is not covered in this user guide – please refer to the eKey documentation.

For Net V2 Protocol, only the event **"Switch local relay 1 with day switching"** will send the open command to Crestron Home. Please ensure, if you are using this protocol, that this is the event, to be triggered, inside eKey net admin for the user's finger, PIN Code or RFID.

Adding the eKey Extension Device

After importing the driver, the eKey driver will be found under:

Devices > Access Control > eKey



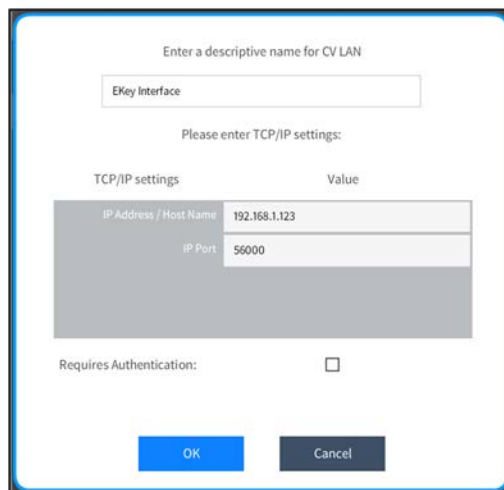
Adding the Tile

Ensure a room is selected, and then click on the '+' against the CV LAN. The room can be ANYWHERE in the system. The room you select will show a tile for the eKey integration which provides indicators of recent communication but is otherwise not required for user operation. For this reason, you may choose to position the eKey driver in a plant or equipment room.

You will be asked to provide a descriptive name for the tile – this can be anything you like – and the IP address of the CV-LAN which will have been set via the eKey configuration tool.

The UDP Port should normally be left at the default value unless you have configured your CV_LAN specifically to use a different control port.

Requires Authentication should be left unchecked.



TCP/IP settings	Value
IP Address / Host Name	192.168.1.123
IP Port	56000

The integration device will be added to your system and you will be asked to enter some more settings.

These settings provide additional information required for the correct function of the eKey integration.

The first field is for entering the licence key to ensure continued operation of the eKey integration. If you do not enter a VALID licence key for your processor, the integration will function for 1 hour and then stop. Informational messages will be added to the processor's error log – please check here if you experience loss of function after an hour.

The Protocol Separator MUST match the special character defined in the eKey configuration. The default is '_'. If this character is incorrect, the module will be unable to decode the eKey messages. This character is only relevant if the eKey system is configured to use the "Multi", "Home" or "NetV2" protocols. There is another protocol known as "Rare" which does not require the Protocol Separator. "Rare" is the default protocol for the CV-LAN.

The next series of 8 fields provide a way to assign specific eKey events to actions within Crestron Home. Only valid "Open" actions will be acted upon.

The format is as follows:

<user Id>|<Finger Id>

User IDs are the user numbers assigned when a user is enrolled into the eKey system. For example, if user "Oliver" is assigned to slot 1 in the eKey controller, then specifying 1









on the left side of the pipe (|) will match "Oliver".

You can also use the special asterisk (*) wildcard for the user id. This will match any valid user.

PLEASE NOTE: User ID 1 is reserved for "admin" and IDs 2-100 are reserved "do not use". Normal user IDs will lie in the range 101-999.

Next MUST follow the pipe (|) separator.

Finally, specify a finger you wish to match using the numeric code below.

-  1 = Left Little Finger
-  2 = Left Ring Finger
-  3 = Left Middle Finger
-  4 = Left Index Finger
-  5 = Left Thumb
-  6 = Right Thumb
-  7 = Right Index Finger
-  8 = Right Middle Finger

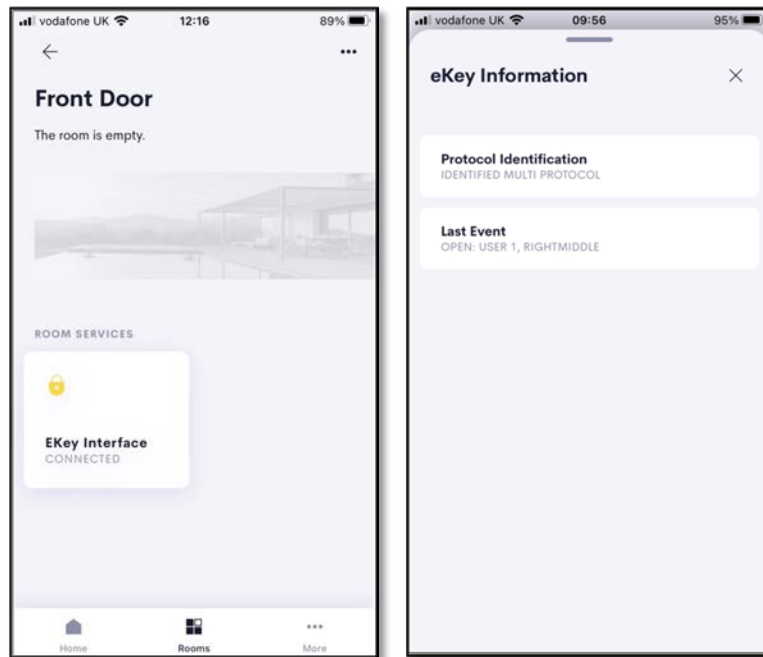
- 🌀 9 = Right Ring Finger
- 🌀 0 = Right Little Finger
- 🌀 P = Pin Code (For Net v2 Protocol Only)
- 🌀 @ = RFID (For Net v2 Protocol Only)
- 🌀 * = Any Finger

Examples:

- 🌀 1|7 = User 1, Right Index Finger
- 🌀 *|5 = Anyone, Left Thumb
- 🌀 104|* = User 104, Any finger
- 🌀 121|P = User 121, PIN Code (For Net v2 Protocol Only)
- 🌀 134|@ = User 134, RFID (For Net v2 Protocol Only)

Leaving a field blank will leave the action unassigned.

Once configured, the Crestron Home UI will show a tile for the eKey system in the room you have configured the device within.



Tapping on the tile will open an informational panel which will indicate the last event received (user id and finger presented) and also explain which protocol has been identified.

The eKey CV LAN can be configured to use Multi, Home, Rare, NetV2 protocols and all are supported. The driver will automatically decipher which protocol is being used.

EVENTS

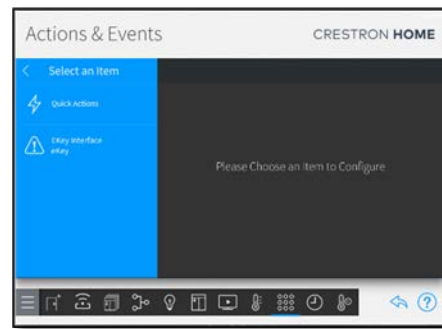
There is no control of the eKey system *from* Crestron Home. Only events from the eKey interface can be used to trigger actions within Crestron Home.

Select the room in which you have added the eKey driver. Then select the eKey device, and assign actions to the available events.

"Finger Verified" is the most generic event which will trigger on ANY "Open" event, regardless of user or finger.

The "Matched Pattern A-H" events are triggered when the pattern matches the specified user/finger. This is described earlier in the document.

The protocol decoding and pattern matching events are logged to the Crestron Home event logger – this, and the processor's error log provide useful information when diagnosing why a particular event does, or does not fire.



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

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.