

## USING 3<sup>RD</sup> PARTY CRESTRON CERTIFIED DRIVERS

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### SUMMARY

Ultamation provides drivers that conform to the Crestron Certified Driver (CCD) Framework, allowing them to be used in a number of contexts that benefit from a "plug-in" architecture.

Where functionality is required that lies beyond the scope offered by CCD, we may be able to assist with a custom driver. Please contact [support@ultamation.com](mailto:support@ultamation.com) with any driver development enquiries.

This document explains how to take an Ultamation CCD driver and employ it within a host system.

At the time of writing, CCD is supported under the following platforms:

-  Crestron Home (previously referred to as either Pyng, OS2 or OS3)
-  SIMPL Windows
-  SIMPL#Pro
-  .AVFramework
-  Crestron Studio

CCD modules are compatible with 3-Series and 4-Series Crestron systems ONLY.

The modules are supplied as a CCD package (.pkg) file, and a separate, driver-specific document will describe the supported capabilities of each driver along with any special notes on installation or usage.

### LICENCING NOTES

Each module is licenced to the host processor. The licence key is tied to the processor serial number and a single key can be used for multiple instances of the module on the same processor.

## IMPORT THE MODULE INTO CRESTRON HOME

Before the module can be configured as a device within Crestron Home, it must be imported into your Crestron Home environment. For 3<sup>rd</sup> party drivers, this process differs from the normal "drivers.crestron.io process", and instead uses a method called "**side loading**".

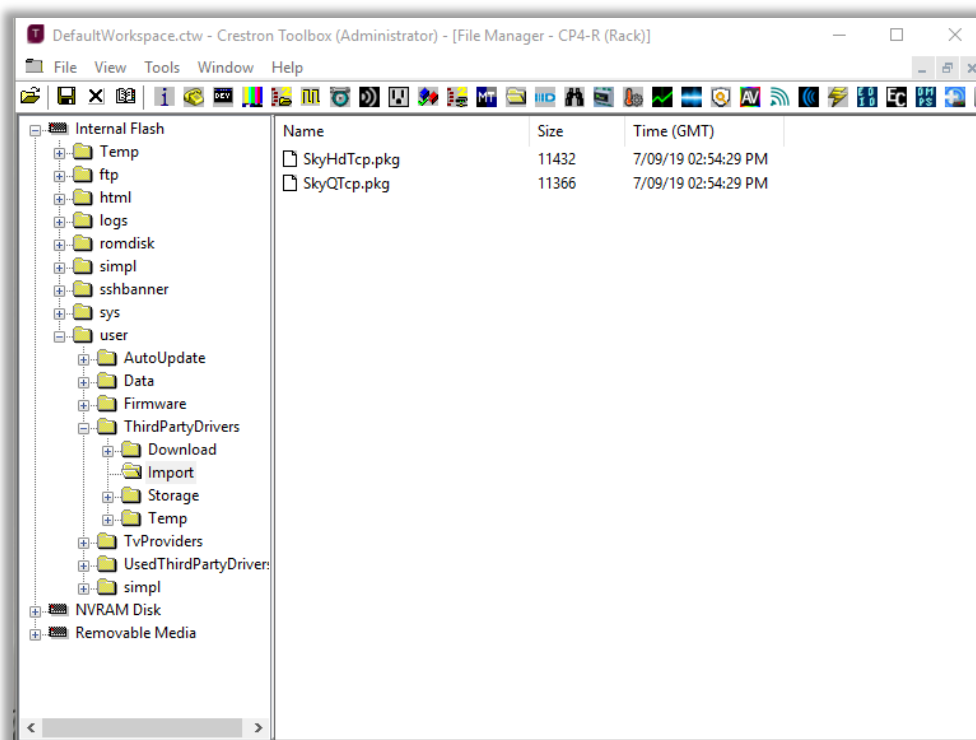
### Side-Load the Driver

You will need to copy the driver package file to your Crestron Home processor. You can use any tool capable of secure file transfer (Crestron Home enforces security, so unsecure FTP is no longer available). We recommend using Filezilla with SFTP, but Crestron Toolbox will work fine, and this document describes the process using Toolbox.

The image below shows the location where any side loaded drivers must be copied to. That is:

**Internal Flash\user\ThirdPartyDrivers\Import**

In this example we show a couple of drivers being copied, ready for import.



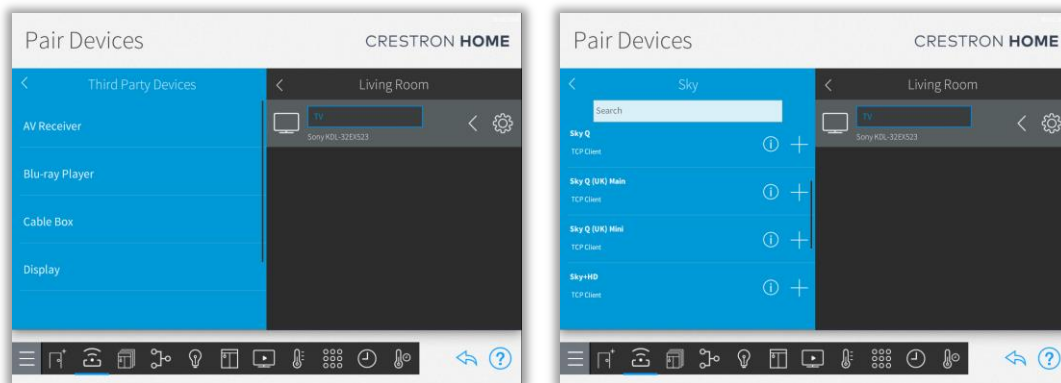
Once the files are copied, the Crestron Home system will automatically import the drivers and rebuild the driver list in the Crestron Home configuration system. This may take a few minutes and, once imported, the driver package files will disappear from the "Import" directory, though you may need to refresh your file system window to see this.

## CONFIGURING THE DRIVER IN CRESTRON HOME

To install a device you must move to the “Pair Devices” section of the Crestron Home configuration, and you must also select a room in which to install the device.

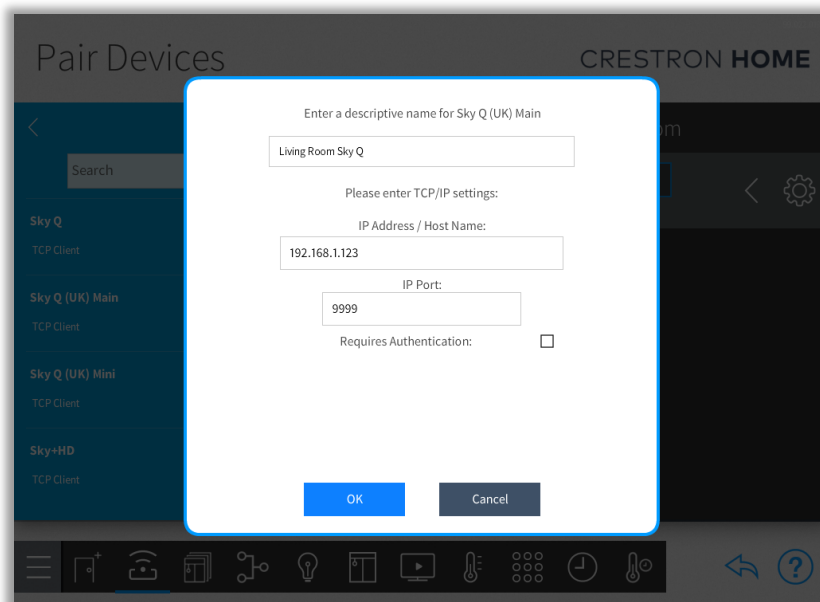
Depending on the type of device you are installing, you will then select “3<sup>rd</sup> Party Devices” and select the appropriate type of device (e.g. Cable Box, AV Receiver, etc.)

The example below shows a 3<sup>rd</sup> Party Cable Box. Select the manufacturer name as the provider and you will see one or more device models listed (image on the right). If they are not present, please check you have imported the driver(s) correctly, or allow 10 minutes for the system to complete the import. Some drivers support a range of models so you may see a collection of device drivers listed from a single package import.

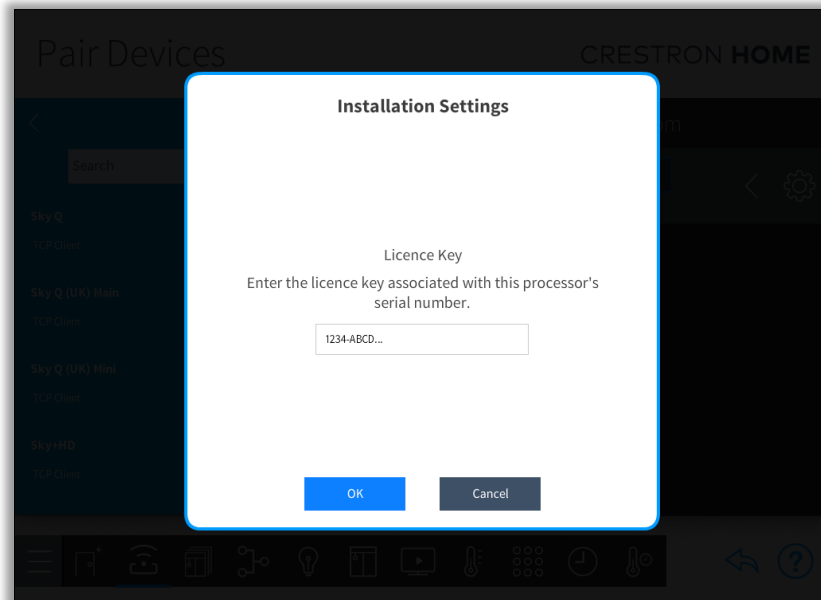


You can check the version of the driver prior to importing by clicking on the “info” button, or click the ‘+’ to add the driver. You will then need to enter some information to configure the device instance.

You will need to provide a “friendly” name for the device, and the communications/network settings. For IP drivers, the port will normally be set to a default and should not be changed unless otherwise directed by the driver datasheet.



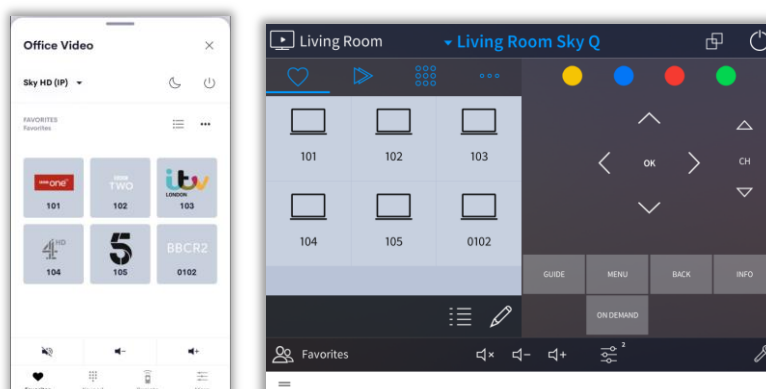
Next, you will be prompted to enter the licence key that you will have received when you purchased the module. This is tied to your SPECIFIC processor serial number (which can be obtained through Toolbox/System Info). If you are configuring using the XPanel, we recommend cutting and pasting the licence key to avoid typos.



If you wish to evaluate the module, you can ignore the licence key entry step and you will be able to use the module for 1 hour after each reboot. However, at the time of writing, because of limitations within Crestron Home, when you come to enter a valid licence key, you will need to remove and re-add the device configuration (NOT THE DRIVER) in order to enter the new licence key.

For some drivers (e.g. Cable Box) there may be additional steps, such as configuring the local TV provider so that you can make use of the channel preset/favourites features of Crestron Home.

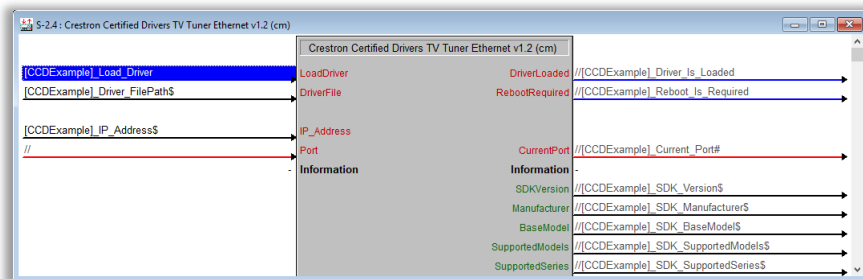
You will need to complete your configuration by assigning the inputs/outputs of the device for your Crestron Home system, and you will now have Crestron control of your device.



## USING THE MODULE WITH SIMPL CCD WRAPPERS

The SIMPL Windows CCD wrappers can also be used to load the device drivers.

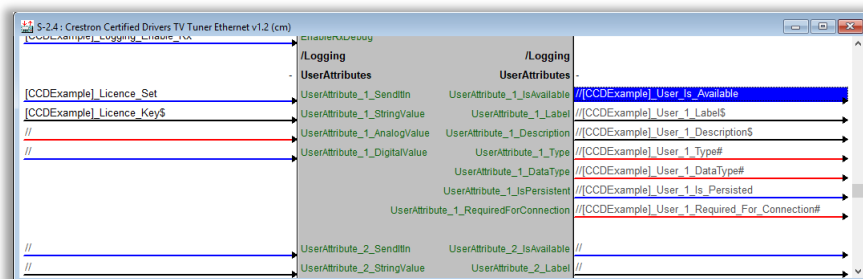
Please follow the instructions provided with the appropriate Crestron CCD device type wrapper module (e.g. Cable Box uses the "TV Tuner Ethernet" module). These are provided as part of the Crestron standard database.



You may need to extract the .DLL file from the .PKG download file in order for the SIMPL wrappers to load the driver. The .PKG can be renamed to .ZIP and unzipped using any standard zip tool (such as the native windows zip support).

Copy the .DLL file to your processor and ensure that the file paths are correct so that the CCD Wrapper module can load the driver. We recommend you follow Crestron's best practice for driver locations which are described in the CCD documentation.

You must provide the licence key to the module in SIMPL. This is accomplished by passing the key string value into User Attribute 1 on the CCD wrapper module.



## SUPPORT

If you have any issues with a driver or installation that are not addressed in this datasheet, please let us know by contacting Ultamation support on [support@ultamation.com](mailto: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.