

# ULTAMATION UC-DMX-200 DRIVER FOR CRESTRON HOME

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## CRESTRON HOME ONLY

This document describes the configuration of the UC-DMX-200 Extension Drivers for Crestron Home only. For control of the UC-DMX-200 using the SIMPL programming environment, please refer to the specific SIMPL modules and associated documentation.

## ADDITIONAL READING

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

## MODULE DESCRIPTION

The extension modules provide control of the UC-DMX-200 from the standard Crestron Home user interface via the powerful Extensions Device framework. A single driver is used to present two types of tile which provide quick actions over specific UC-DMX-200 functionality.

-  **Pattern Run/Stop**  
This allows a homeowner to start and stop a specific pattern (previously configured on the UC-DMX-200 using the Ultamation Device Configuration Tool) on a specific pattern generator.

The UC-DMX-200 pattern generators provide a simple way to "play" a colour pattern across 1 or more RGB lighting fixtures, such as subtle colour wash for a feature wall or ceiling coffer.

When the pattern is stopped, the lighting fixtures are all set to "off".

-  **Channel Control**  
This allows a homeowner to turn set a lighting fixture (or any other DMX controlled function) to a given level, and then recall those levels at the touch of a button, or set them or "off".

The tile allows for any number of channels from 1 to 10 and these can be given custom labelling to suit the specific DMX channel use.

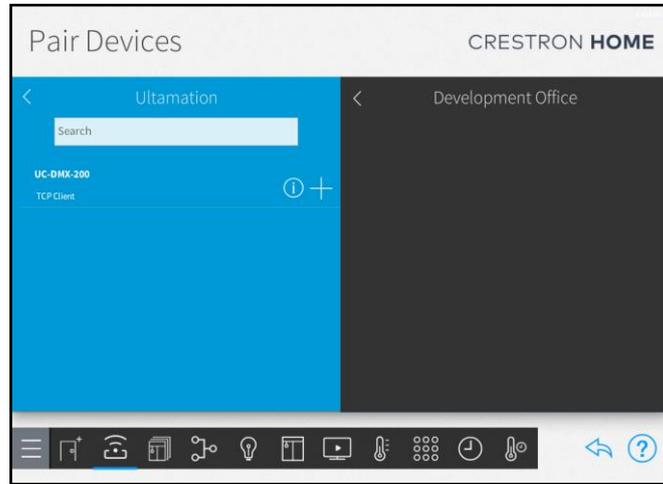
The channel settings can be repeated across a block of DMX channels so that multiple devices can be controlled simultaneously. This does require careful planning of DMX addressing.

Each Extension device will now be described in detail.

## Adding a UC-DMX-200 Extension Device

After importing the driver, the UC-DMX-200 tile will be found under:

Devices > Lighting > Ultamation



### Adding the Tile

Ensure a room is selected, and then click on the '+' against the UC-DMX-200.

You will be asked to provide a descriptive name for the tile – this can be anything you like – and the TCP address of a UC-DMX-200. This should be a fixed address, but multiple UC-DMX-200s are supported on different addresses.

The IP Port should normally be left at the default value unless you have configured your UC-DMX-200 specifically to use a different control port.

Requires Authentication should be left unchecked.

Enter a descriptive name for UC-DMX-200 Pattern

Ocean Wash

Please enter TCP/IP settings:

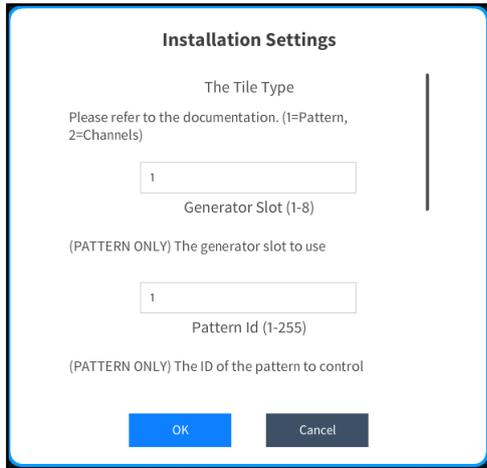
TCP/IP settings	Value
IP Address / Host Name	192.168.x.x
IP Port	13255

Requires Authentication:

OK Cancel

The device will be added to your system and you will be asked to enter some more settings. These settings determine what function the tile will provide and also give the tile "device" (more a virtual device than a physical instance since multiple tiles will, actually,

share the same UC-DMX-200 device) important parameters for either the pattern generator and which stored pattern to recall and run or the channels to control.



The example shows that the first, and most important parameter is to define WHAT the tile will do – will it be a pattern or channel control. Depending on what you select here, will determine which of the subsequent parameters you should complete.

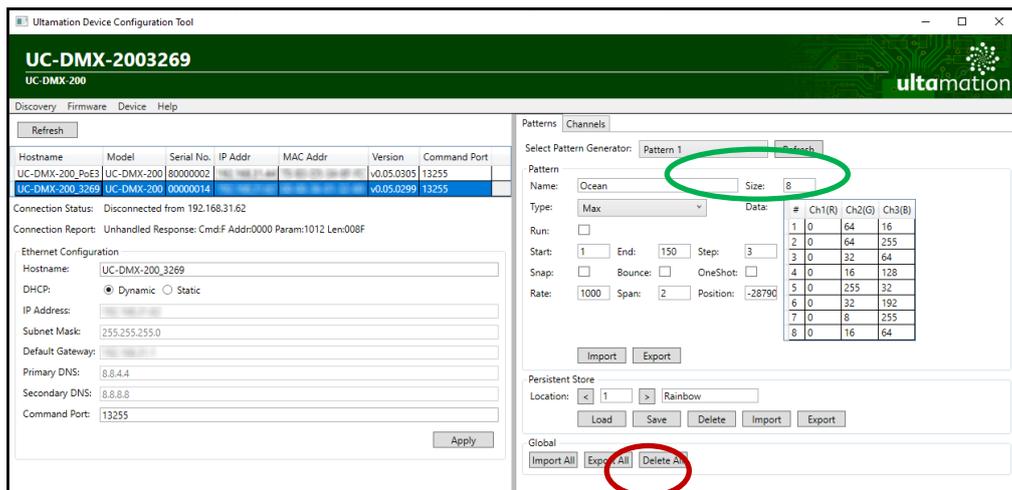
The type will either be "1" for Patterns, or "2" for Channels.

The following parameters are flagged with "PATTERN ONLY" for "CHANNEL ONLY" depending on whether the value is applicable to the pattern, or channel tile type.

In this example we have a pattern tile (Type 1) are we will use pattern "Generator 1" (there are 8 available). The Pattern ID is the next parameter and is set to 1 to load and run "Pattern 1" (up to 255 patterns can be stored on the UC-DMX-200).

The pattern itself is defined on the UC-DMX-200 using the Ultamation Device Configuration Tool as shown below. The tool can be downloaded from the UC-DMX-200 product page.

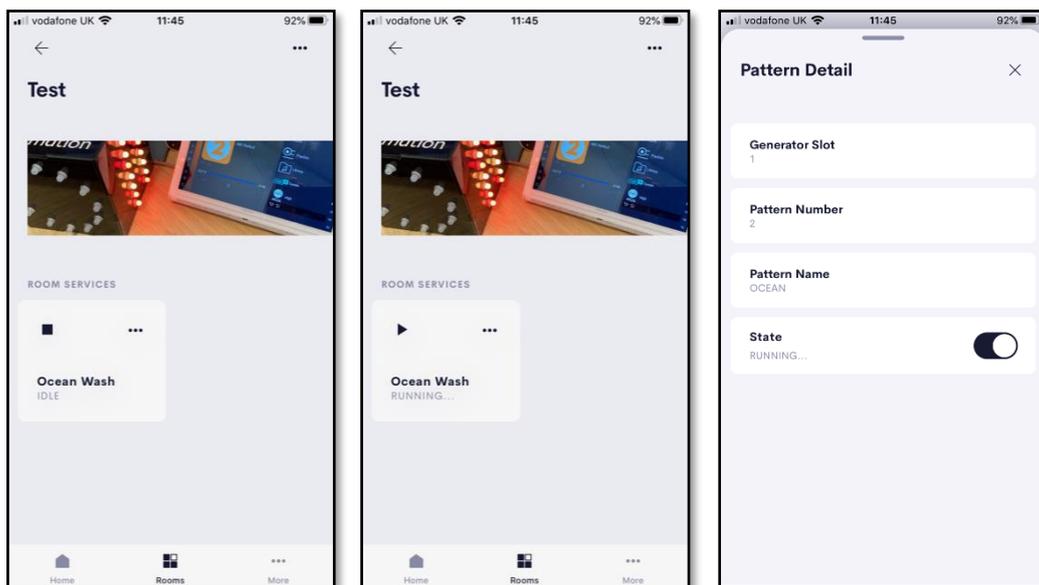
The image below shows two UC-DMX-200 devices have been discovered. We have selected one, and the pane on the right shows the current pattern configuration for "Pattern Generator 1" (green circle). The current pattern is called "Ocean" and can be previewed by pressing the "Run" checkbox.



This pattern can be stored to a pattern location using the "Persistent Store" in the lower section – in this case "Pattern Slot 1" (red circle).

**PLEASE NOTE:** The UC-DMX-200 can only handle a limited number of TCP connections. This can occasionally lead to difficulty in configuring the device via the Configuration Tool. In such cases, you may need to restart the Configuration Tool. Alternatively, restart the UC-DMX-200 and connect using the Configuration Tool before Crestron Home re-establishes a connection.

Once configured, the Crestron Home UI will show a tile both in the room you have configured the device within and on the main home panel.



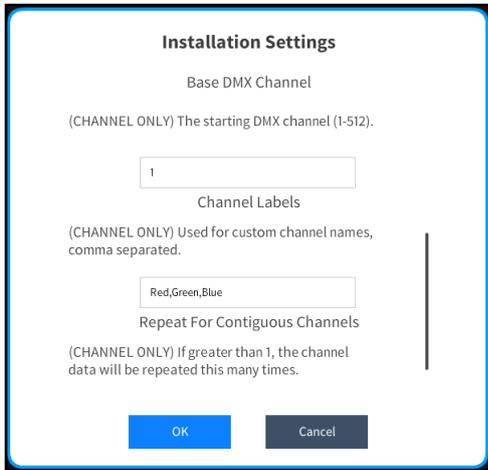
Tapping on the tile in a room will activate or stop the pattern. Pressing on the '...' icon will take you to the pattern information page which also provides a toggle to switch the pattern on and off.

### A Note on Multiple Patterns on a Single Generator

Each generator for the UC-DMX-200 can only run a single pattern at a time (though they can be overlaid for some interesting effects). If you configure multiple tiles that target the same pattern generator, each tile will act like an interlock. If you run a pattern with one tile, this will stop any pattern from any other tiles assigned to the same generator, and these tiles will say "IN USE" rather than "IDLE".

## Channels Control

For controlling one or more (up to 10) consecutive DMX channels in a block, follow the same procedure as adding a pattern control tile, but this time, select "2" for the Tile Type.



In this case, the essential parameters are:  
 Base DMX channel – this is the starting channel for the control,

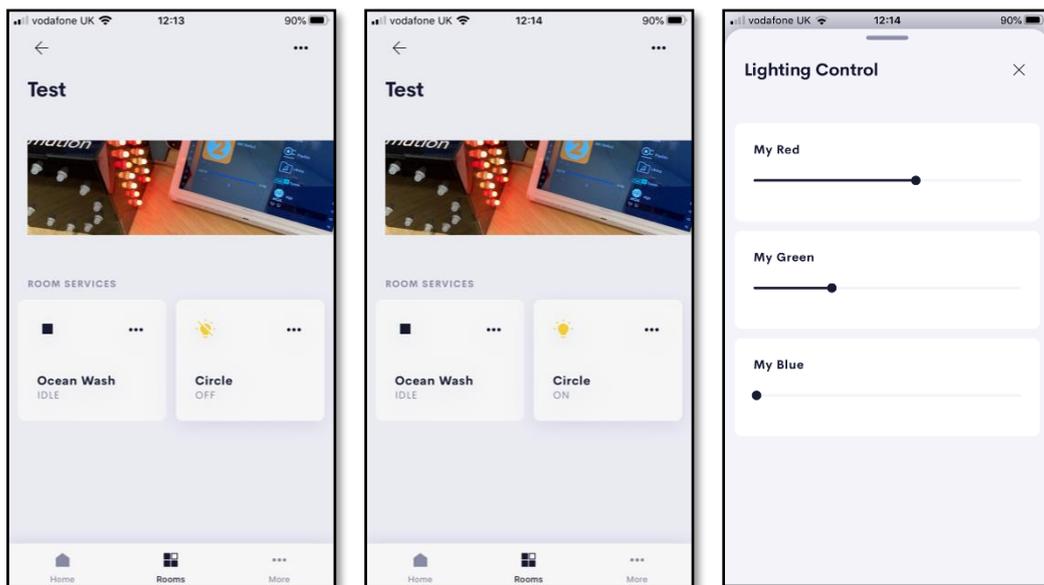
Channel Labels – Enter a comma separated list of channel labels, such as "White" or "Red,Green,Blue" or even "Wheel Speed,Sparkle,Intensity" depending on what your DMX device requires.

Repeat – The final parameter is the channel "Repeat". This defaults to a single fixture, but can be increased to provide control of multiple, adjacent, fixtures. For this to work, each fixture MUST be addressed at the next available channel.

For example, if you have 4 RGB fixtures with the first addressed at address 21, the 2<sup>nd</sup> MUST have address 24, the 3<sup>rd</sup> address 27 and the fourth address 30. This will allow a single tile to control all 4 fixtures as a single block, while a pattern generator could play a colour sequences across them individually.

You can also define tiles which overlap.

Once configured, a tile will be displayed in the assigned room within the Crestron Home UI as shown below.



## QUICK ACTIONS & SEQUENCES

A number of functions are exposed to sequences via Crestron Home's quick actions.

The functions are different depending on whether a tile is configured as a pattern or a channel controller.

### Pattern Tiles

-  Run Default Pattern  
This allows you to trigger the pattern defined for the tile on the predefined generator. This is equivalent to pressing the tile to "Run".
-  Run Pattern  
Like "Run Default Pattern" this action will trigger a pattern to run on the pre-defined generator, but this time, you can specify any stored pattern slot. This means you can run many different patterns in sequences without needing to define every one as a tile.
-  Stop Pattern  
This is equivalent to pressing the tile to "Stop" and will also set all pattern channels to 0.

### Channel Tiles

-  All Channels Off  
This sets all channels in the tile preset to 0. This will also stop any pattern that overlaps with the channel range, to ensure a running pattern doesn't restore channel values. This is equivalent to pressing the channel to "Off".
-  Recall Channel Preset  
This will set the channel range to the values stored under the tile. This is equivalent to pressing the tile to "On".
-  Set Channels (Percent)  
This is a special action that can be used to set the channels to specific values, defined as percentages. This action requires a parameter called "Channel Values" which should be a comma separated list of channel values. E.g. 100,0,0 would, if applied to a collection of RGB fixtures, set the sequence of channels to full red. The second parameter is a repeat count, which will duplicate the channel levels across consecutive channels.
-  Set Channels (Absolute)  
This is a special action that can be used to set the channels to absolute values. This should be used where you need to set a specific value on a DMX channel – for things such as modes. This action requires a parameter called "Channel Values" which should be a comma separated list of channel values. E.g. 1,2,3. The range for each value should be an integer in the range 0-255.

## SUPPORT

If you have any issues with a driver or installation 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

This module (including software, images and any, and all other associated assets distributed as part of the download package) is copyright Ultamation Ltd but is provided free of charge for use with the UC-DMX-200 hardware device. It is ONLY compatible with the Ultamation UC-DMX-200 Ethernet DMX controller.

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.