

**Partner: Axion**  
**Model: DMX**  
**Device Type: Controller**



## GENERAL INFORMATION

**SIMPLWINDOWS NAME:** Axion DMX Lighting

**CATEGORY:** Lighting

**VERSION:** 1.0

**SUMMARY:** These modules integrate an Axion DMX Lighting Controller into a Crestron Control System via TCP/IP.

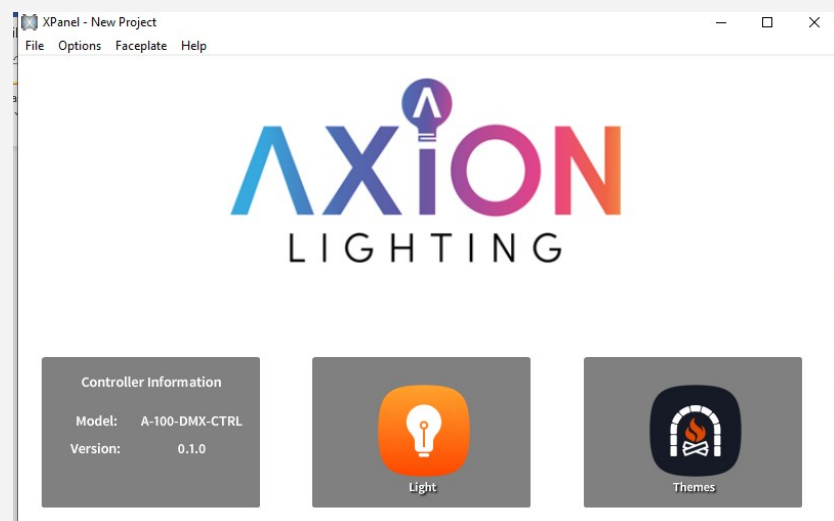
The Axion DMX Lighting Controller enables you to fully control a DMX512 system via IP without the complexity of traditional expensive counterparts. It also delivers a more reliable solution compared to standard consumer Wi-Fi enabled individual lighting options.

### Features

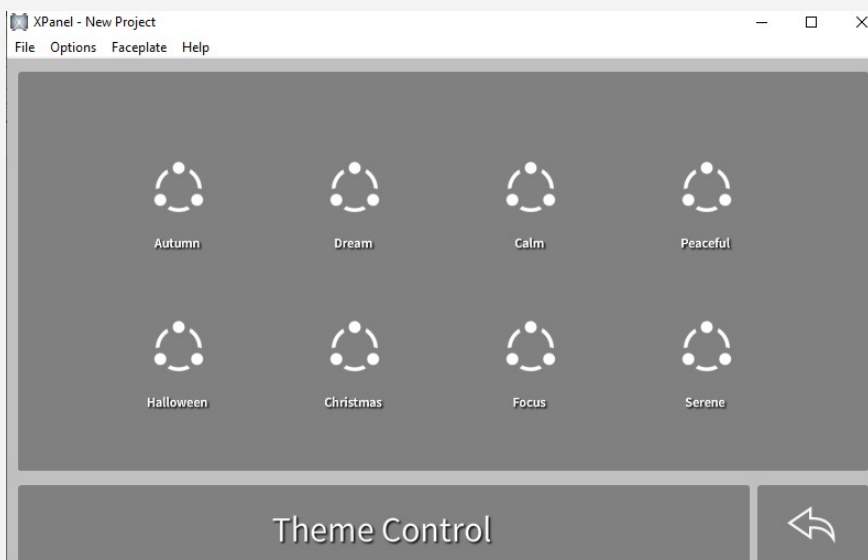
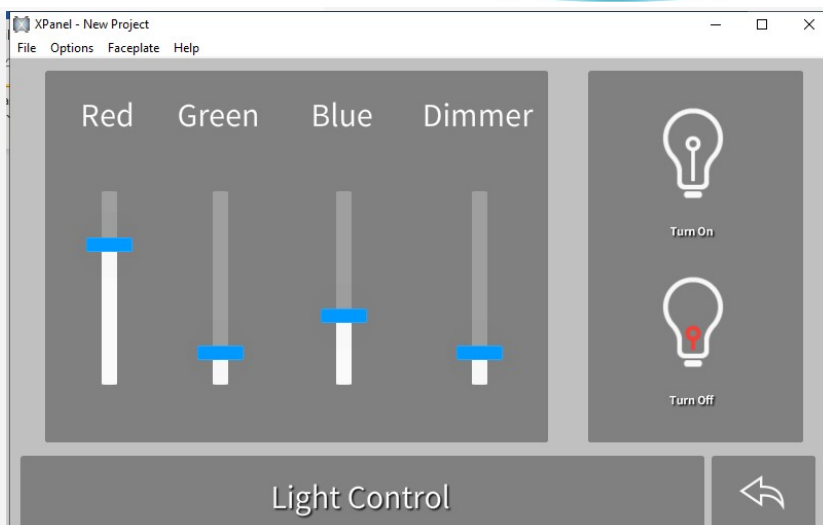
- Compatible with all DMX512 lighting loads, including devices like lasers and smoke machines
- Individually addressable, reliable wired bus supports exact timing and dimming
- Two-way feedback from the device.
- Support for Axion Pixel DMX Decoder

A demo project is provided with a sample simpl windows program and vision tools ui that demonstrates how to configure and use these modules with the Axion DMX Lighting Controller. See screenshots below of sample ui.

### GENERAL NOTES:



**Partner: Axion**  
**Model: DMX**  
**Device Type: Controller**



Dynamic Lighting Effects Parameter Reference Table

**Partner: Axion**  
**Model: DMX**  
**Device Type: Controller**


**DMX Decode Mode 2:**

In this mode, you are able to control the dynamic lighting effects by using 3 different addresses.  
 For example, when the DMX start address is set to 001, the address 1 defines the dynamic light effect setting (32 modes), address 2 is for the brightness setting (10 levels), and address 3 is for the speed setting (10 levels).

**• Address 1 of DMX console : dynamic light mode**

1: 0-8	2: 9-16	3: 17-24	4: 25-32	5: 33-40	6: 41-48	7: 49-56	8: 57-64
9: 65-72	10: 73-80	11: 81-88	12: 89-96	13: 97-104	14: 105-112	15: 113-120	16: 121-128
17: 129-136	18: 137-144	19: 145-152	20: 153-160	21: 161-168	22: 169-176	23: 177-184	24: 185-192
25: 193-200	26: 201-208	27: 209-216	28: 217-224	29: 225-232	30: 233-240	31: 241-248	32: 249-255

**• Address 2: Brightness (when address 2<6, the light will turn off)**

1: 0-25 (10%)	2: 26-50 (20%)	3: 51-75 (30%)	4: 76-100 (40%)	5: 101-125 (50%)
6: 126-150 (60%)	7: 151-175 (70%)	8: 176-200 (80%)	9: 201-225 (90%)	10: 226-255 (100%)

**• Address 3: Speed**

1: 0-25 (10%)	2: 26-50 (20%)	3: 51-75 (30%)	4: 76-100 (40%)	5: 101-125 (50%)
6: 126-150 (60%)	7: 151-175 (70%)	8: 176-200 (80%)	9: 201-225 (90%)	10: 226-255 (100%)

**CRESTRON HARDWARE REQUIRED:** 2 or 3 series processor.

**SETUP OF CRESTRON HARDWARE:** N/A

**VENDOR FIRMWARE:** V1.0

**VENDOR SETUP:**

Enter IP address of the controller in the "IP\_Address" parameter field on the hub module.  
 Enter the system password of the controller in the "password" parameter field on the hub module.  
 Enter the poll interval at which the module polls the controller in the "poll interval" parameter field on the lightning module.

**CABLE DIAGRAM:** N/A

**CONTROL:**

<b>CONNECT</b>	D Set HIGH for module to initialize. Set LOW to disable module.
<b>DEBUG</b>	D Set HIGH to enable debugging.
<b>MODE_WHITE</b>	D Set HIGH to set the mode of the light module to white. This will only control the white channel. Only one of these may be set HIGH.
<b>MODE_RGB</b>	D Set HIGH to set the mode of the light module to RGB. This will only control red, green, and blue channels. Only one of these may be set HIGH.
<b>MODE_RGBW</b>	D Set HIGH to set the mode of the light module to RGBW. This will only control red, green, blue, and white channels. Only one of these may be set HIGH.
<b>TURN_ON</b>	D Sets the light on for all associated channels in the configured mode.
<b>TURN_OFF</b>	D Sets the light off for all associated channels in the configured mode.
<b>THEME_SET_&lt;THEME&gt;</b>	D Set HIGH to set the light to a randomized <theme> themed light color. Examples are autumn, dream, calm, peaceful, etc.

**Partner: Axion**  
**Model: DMX**  
**Device Type: Controller**



DYNAMIC_LIGHTING_EFFECT_ACTIVATE	D	[Axion Pixel DMX Decoder Only] After setting all the parameters of the dynamic lighting effect, setting this signal high will activate it.
START_CHANNEL	A	Set to be start channel id for the light strip this module will be controlling. This can either be hardcoded at time of programming or set as a variable to dynamically change the start channel during runtime.
RED_SET_LEVEL	A	Sets the red channel level on the light.
GREEN_SET_LEVEL	A	Sets the green channel level on the light.
BLUE_SET_LEVEL	A	Sets the blue channel level on the light.
WHITE_SET_LEVEL	A	Sets the white channel level on the light.
DIMMER_SET_LEVEL	A	Dims the light using the current levels for all channels.
DYNAMIC_LIGHTING_EFFECT_START_CHANNEL	A	[Axion Pixel DMX Decoder Only] Sets the start channel for the dynamic light effect.
DYNAMIC_LIGHTING_EFFECT_ID	A	[Axion Pixel DMX Decoder Only] Sets the DMX ID value for the dynamic light effect.
DYNAMIC_LIGHTING_EFFECT_BRIGHTNESS	A	[Axion Pixel DMX Decoder Only] Sets the brightness value for the dynamic light effect.
DYNAMIC_LIGHTING_EFFECT_SPEED	A	[Axion Pixel DMX Decoder Only] Sets the speed value for the dynamic light effect.
FROM_HUB	S	Communication path from the hub to the light module.
FROM_LIGHT	S	Communication path from the light to the hub module.

## FEEDBACK:

MODEL_NUMBER	S	Displays the current model number for the hub.
FIRMWARE_VERSION	S	Displays the current firmware version for the hub.
RED_CURRENT_LEVEL	A	Holds the current level for the red channel.
GREEN_CURRENT_LEVEL	A	Holds the current level for the green channel.
BLUE_CURRENT_LEVEL	A	Holds the current level for the blue channel.
WHITE_CURRENT_LEVEL	A	Holds the current level for the white channel.
DIMMER_CURRENT_LEVEL	A	Holds the current level for the dim level for all channels.
TO_HUB	S	Communication path for messages from the light to the hub module.
TO_LIGHT	S	Communication path for messages from the hub to the light module.

**Partner: Axion**  
**Model: DMX**  
**Device Type: Controller**

**PARAMETER:**

<b>device_ip\$</b>	S	IP address of the controller.
<b>system_password\$</b>	S	System password for the controller.
<b>poll_interval</b>	A	Interval at which the module polls in seconds.

**TESTING:**

**OPS USED FOR TESTING:** RMC3 1.501.2867.30341

**SIMPL WINDOWS USED FOR TESTING:** 4.11.06

**DEVICE DB USED FOR TESTING:** 102.05.001.00

**CRES DB USED FOR TESTING:** 77.00.003.00

**SYMBOL LIBRARY USED FOR TESTING:** 1082

**SAMPLE PROGRAM:** Axion DMX Lighting Demo

**REVISION HISTORY:**

v1.1
Support for Axion Pixel DMX Decoder
v1.0
Release