American Lighting Spektrum+ Installation and Usage Guide

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Contents

(Proluxe by) American Lighting is dedicated to providing top-quality lighting for smart home integration. Now fully compatible with Control4, the award winning Spektrum+ Smart Lighting System gives users the power to paint their home in color and light, all with the touch of a button. Light up your home with RGBW and RGB+TW downlights, tape lights, neon strip lights, outdoor landscape and sconce lights, as well as smart bulbs in standard lamp sizes like A19 and BR30. With the Spektrum+ Gateway-E, use Control4 to create schedules, make custom programs, and control everything from color selection to brightness.

This free driver enables Control4 OS 3.4.0 or later to communicate with American Lighting's range of products using the Spektrum+ Gateway

Note This solution is cloud based and as such requires an active internet connection for operation.

Features

- Bi-directional control and feedback
- Cloud based integration
- Import of all American lighting and PIR Sensors from the customer account
- On / Off control
- Brightness control
- Color Temperature control
- RGB Color control
- Advanced Lighting Scene Support
- Color Wheel Support
- Preset Control, including support for Dim-To-Warm/Color Fade

Important Information

- This solution is cloud based and as such requires an active internet connection for operation.
- Lights must be linked to a Spektrum+ Gateway for control via Control4
- Not all commands are exposed. However, most commands are accessible using read/write variables via programming or by combining drivers
- RGB + CCT mode is not supported in Control4

Disclaimer

This driver relies on American's Lighting Cloud server and as such uptime of this this driver cannot be guarenteed. Do not utilise this driver for any safety systems.

Requirements / Limitations

- Controller must be running OS 3.4.0 or later.
- Control4 HC Series Controllers are not supported
- All devices must be linked to a Spektrum+ Gateway
- This driver package requires Internet for operation
- Changes in Combined RGBTW Mode in the Spektrum Mobile App may not be reflected in realtime in Control4. Control4 does not have an API to handle RGBTW consistently.
- Setting Brightness to 0 in the Spektrum Mobile App for RGB or RGBTW module may cause Control4 (and Spektrum+ Mobile App in some circumstances) to switch color to white when increasing Brightness via Control4
- Control4 Token may become invalid and require manual re-authentication by the installer if Controller is offline for a period of 1 month or longer.
- Each American Lighting Mobile Account must be bound to only 1 Primary C4 controller/installation at a time. If multiple C4 controllers are required, each must have their own American Lighting Mobile login
- Smooth ramping is not supported. Ramping is only supported for BUTTON_LINK's
- Due to limitations of Control4 which affects general usability, Simultaneous RGB+CCT mode is not supported. Control4 does not provide a colorpicker allowing simultaneous operation
- In Control4 OS 3.4.0, when using Dim-To-Warm, Control-Control brightness adjustment in the Composer interface may shift to the incorrect color.

Quick Start Guide

1. Ensure your C4 controller is running OS 3.4.0 or later.
2. Set up Spektrum lights using the Spektrum mobile app
    1. All lights must also be linked to a American Lighting Spektrum+ Gateway using the mobile app . Failure to correctly link the lights correctly will prevent Control4 from operating the lights
    2. Android: https://play.google.com/store/apps/details?id=com.americanlighting.spektrum
    3. IOS: https://apps.apple.com/us/app/spektrum-smart-lighting/id1508096350
3. Install American Lighting Spektrum Agent. Keep in mind, Agents are available under the AGENT section of Composer after installing, not System Design (or System Design Search).
4. Go to the Authorisation URL provided by the Agent and authorise the agent.
5. Select the Auto Setup Action to automatically set up the driver

Setting up Sensor Driver

The Spektrum Sensor Driver can be used for general occupancy control using the Spektrum+ Motion Sensor. Installers must use Control4 programming to trigger on motion or utilise the connections to integrate directly with other drivers.

Settings

Actions
Shared

- Display Communication Logs: Display communication connectivity information and a token fingerprint for troubleshooting
- Display Diagnostics: Runs basic Diagnostics and displays output to Lua Console for troubleshooting purposes
- Display Status: Displays the Known Server status and display status of the device

Agent

- Auto Setup: Automatically adds all Spektrum devices to the Control4 project
- Force Renew Token: Forces the Token to be renewed. This should generally not be required. Performing this action requires the installer to log in again manually.
- Display Known Devices: Display all known Spektrum devices in the Lua Console
- Get Latest Devices And Device Status: Retrieves the latest device information from the server
- Purge Known Devices: Wipes the list of known devices from Control4. This should generally not be required
- Refresh Device Variables: Retrieves the specifications of the devices from the server. This should generally not be required unless features have been added to the device firmware

Events
Agent

- Server Disconnected: Fired when the server is disconnected
- Server Connected: Fired when the server is connected
- Real Time Notifications Disconnected: Fired when Real Time communications are no longer possible. This means that changes to the device state made by external input devices such as PIR's or the Spektrum Mobile App may not be reflected in Control4 until the next poll
- Real Time Notifications Connected: Fired when Real Time communications are possible.

Commands
Shared

- Change Custom Setting: Manually change device variable.

Properties
Shared

- Driver Version: Version of the Driver
- Control4 MAC Address: MAC Address of the C4 Controller
- Debug Mode: Enable different types of debugging modes for driver.
- Debug Level: Verbosity of debugging. ERROR is the least verbose

Driver Information

- Connection Status: Whether the device is connected to Spektrum Cloud
- Auto-Rename Driver: Automatically renames the driver to match the device name
- Select Device From List: Selects a device from a list of known devices
- Device ID: Spektrum Device ID which the driver is connected to
- Device Name: Spektrum Device Name which the driver is connected to
- Product Name: Spektrum Product Name which the driver is connected to

Agent

- Status: Provides status information about the driver
- Token State: Provides status information about authentication with the server
- Region: Region that the account is located. For most people, this should be set to America. If devices are not discovered, this may need to be changed.
- Authorisation URL: Use this web address to connect Control4 to your Spektrum account
- Authorisation Device Code: Use this code to connect Control4 to your Spektrum account. Must be entered into the Authorisation URL
- Default AutoSetup Room: The default room to use for AutoSetup
- Poll Rate (Seconds): Polls the server on a regular interval to ensure the device states match the server

Driver Information:

- Spektrum Gateways: Displays the number of known Spektrum Gateways which are online
- Spektrum Devices: Displays the total number of input/output Spektrum Devices which are online

Devices:

- Provisioned Spektrum Devices: Displays the state of devices which are known and provisioning state on the Spektrum Server
- Provisioned C4 Drivers: Displays the state of installed Control4 Spektrum devices and provisioning state

Generic

- Power: Power State of the device
- Device Icon: Icon for the driver to use to represent Power state

Codes:

- Power Code: Spektrum variable used to represent Power state

Light

- Server Feedback Delay (ms): Delay between sending commands and updating feedback in the driver. Lower Delays improves consistency with the Spektrum+ Mobile App. Increased delays improves consistency in Control4, however, increases inconsistencies when using the Spektrum + Mobile App in parallel
- Power: Power State of the light
- Brightness: Brightness of the light
- White Temperature: White Temperature of the light (Kelvin)
- Color Mode: Color Mode of the Light. Generally these are white, color, or mix_rgbcw
- Hue / Saturation / Value (Colour): Colour of the light
- Color Temperature (K) - Minimum: Minimum value for the White Temperature
- Color Temperature (K) - Maximum: Maximum value for the White Temperature
- Button Link Ramp Delay (ms): Delay between brightness ramps when using Button links

Sensor

- State: Sensor State of the device
- Device Icon: Icon for the driver to use to represent Sensor state

Announcements:

- Start Detection Announcement: Announcement to play when the sensor is triggered
- Stop Detection Announcement: Announcement to play when the sensor is no longer triggered

Troubleshooting

Some or all lights are working on the Spektrum+ mobile app, however, are not in Control4

- Ensure all lights are linked to a Spektrum+ Gateway using the Spektrum+ mobile app. Control4 communicates to lights via the Spektrum gateway
- Ensure Internet is working correctly. Control4 requires internet to communicate to American Lighting
- Check that the Control4 driver is configured correctly
- Control4 OS 3.4.0 or later must be installed on the controller

Color Wheel is not showing

- Ensure that OS 3.4.0 is installed on the controller
- Ensure all Control4 Touchscreens are running the same version of OS as the controller and all Mobile Control4 devices are operating the latest Control4 application
- Ensure the Light Type Property is set to a mode which supports CCT or Color (Dimmable only or relay only support slider control)

Lights sometimes switch to the incorrect color

- If the Spektrum Mobile App sends commands at the same time as the Control4, commands may interfere leading to incorrect color state
- If Control4 is used exclusively and the connection is unreliable, increase the Server Feedback Delay. This is especially important on high latency connections
- Ensure you are running the latest Control4 OS

On a high latency / unstable connection, the lighting state sometimes is incorrect.

- Particularly on high latency connections (such as medium/high-altitude internet satelite), feedback received may be significantly delayed affecting operation of lights. To improve the consistency of the Control4 interface, it is recommended to increase the Server Feedback Delay within the drivers to higher values (2-4s)
- On particularly unstable connections, control and feedback may be unreliable

FAQ

What devices will this work with?

This driver has been developed and tested to support the following Spektrum devices.

- LIGHT (dimmable + RGB/W devices + On/off)
- SENSORS (Motion, etc)
- GENERIC (Future devices)

All Devices must be linked to a Spektrum+ Gateway to operate via Control4

How does this communicate?

This agent communicates to American Lighting's cloud server which communicates to American Lighting's range of products via their Spektrum+ Gateway

Can I Group Lights in Control4?

At this time (April 2023), Control4 does not provide native Light Load group support of Colorwheel based lights. As an alternative, you can use the [Chowmain Light Group](#) driver to group lights and control as a single light

Support

Contact Details for American Lighting can be found via the following website:

https://americanlighting.com/contact

Change Log

Version 20231016 - 2023-OCT-16
- Initial Release