ADVANCED LIGHTING EXTENDER DRIVER

This Advanced Lighting Extender driver is used to directly control blinds, relays and simulate contacts as well as relays (virtual) from Advanced Lighting Scenes, providing powerful new capabilities to Control4 Advanced Lighting. You may control this driver's virtual light in Scenes et use it to control a Target Blind, setting it to the same level as the light (several options are provided). This works both ways and a blind movement via its own driver will be captured by this driver and the virtual light level will be modified accordingly.

In addition, with its **extensive ALS Reports**, this driver may be used to **document** all elements of Advanced Lighting Scenes in a Project (something that Composer does not yet provide), as well as produce a comprehensive Cross Reference list of Scenes, Lights and Rooms.

INSTRUCTIONS

- Use the free trial period or activate the driver at any time by assigning to this project the license you purchased from the DriverCentral website (requires the DriverCentral cloud driver). You may use multiple copies of this driver in your project.

- Select the *Extender Types*. While the Relays and Contacts are always available, you may select to control or not a Target Blind. The word **Blind** is used generically to designate all types of Blind, Shades, Curtains, etc., as supported by Control4. Other Extender Types may become available in the future.

- If appropriate, select the Target Blind. The driver will command the blind to Open or Close or, if it supports it, to move to any given % position requested by an Advanced Lighting Scene via this driver's virtual light. The driver will also monitor this blind for any movements which will then be mirrored to the driver's virtual light. Specify the *Blind Operation* and *Mirrored Light Operation* properties as appropriate.

- Connect Contacts and/or Relays as required. For connected Control Relays, set their operation with the *Control Relay Operation* property. For connected Contacts, set their characteristics using the corresponding *Contact n Is* property.

- Virtual Relays may be used to set Control4 motorization icons as if they were connected to a physical relay, or as input to other drivers in the project.

- When a Target Blind is specified, the Action 'Print Target Blind Data' may be useful for troubleshooting.

PROPERTIES

- **Cloud Status** displays the status of the DriverCentral license or trial.

- **Automatic Updates** may be set to yes to allow for DriverCentral updates.

- **Driver Version** displays the version of this driver.

- **Driver Information** displays various status messages about the driver.

- **Debug Mode** turns Debug Mode Off or On (with output to the Lua Output window).

- **Debug Duration in Minutes** sets the duration of Debug On.

- **Extender Types** allows activating the Target Blind selection. Otherwise, only Relays and Contacts are used to extend Advanced Lighting Scenes via this driver's virtual light. In this latter case, you may select the lighting control model (Dimmer or Switch).

- *****NEW***** **Control Relay Operation** specifies how the two Control Relays operate. The default is CLOSED with the light is ON at specified %. The other option (Pulsed) accommodates setups where you need to pulse an input contact on the lighting device to turn it ON and pulse another contact to turn it OFF.

- *****NEW***** **Relay Pulse Length in Milliseconds** specifies the duration of pulses when Control Relay Operation requires it.

- **Select Target Blind** allows the selection of the Target Blind. This blind receives changes to this driver's virtual light as blind commands and is monitored for any movements which are then mirrored to this driver's virtual light.

- **Blind Operation** allows you to reverse the correspondence between the virtual light and the Target Blind. Control4 usually considers a fully open blind to be at 100% (in other words, 100% of the outdoor light is coming in), but your project may require a reversed approach.

- **Mirrored Light Operation** allows you to specify how the virtual light will respond to blind movements, as some blinds will provide their final feedback only when they stop moving, which may take quite some time. See the section on **TARGET BLIND, RELAYS AND CONTACTS OPERATION** below**.**

- **Contact n Is** specifies how a command to this driver's virtual light will influence the corresponding Contact. This Contact may then be used as input to other drivers.

Informational Properties

- **Current Light Level** displays the current level of the driver's virtual light. This light is used to trigger the Target Blind as well as the Relays and Contacts.

- **Current Target Blind Position** displays the current state and position of the selected Target Blind.

- **Current Relays** displays current state of the Control Relays.

- **Current Virtual Relays** displays current state of the Virtual Relays.

- **Current Contacts** displays the current state of the Contacts.

TARGET BLIND, RELAYS AND CONTACTS OPERATION

The concept of this driver is to enhance Advanced Lighting Scenes by providing a link to other types of devices in the project. While some of these links (but certainly not all) are possible via programming, this driver provides a much cleaner and powerful approach. You may designate a Target Blind to be controlled and monitored. The driver then gets all the blind's characteristics (including if it supports levels). You may then use this driver's virtual light in any Advanced Lighting Scene, along with any other Loads and the Brightness requested in the Scene will be forwarded as a position to the Target Blind. If the Target Blind does not support levels, the virtual light is switched to a non-dimming light and its ON/OFF commands in the Scene will translate to UP or DOWN commands to the Target Blind (ON is UP and OFF is DOWN, unless reversed by the *Blind Operation* property).

The driver also monitors the Target Blind for any movement and ensures the virtual light level then matches the blind's position. This allows Advanced Lighting Scenes containing a reference to this driver's virtual light to become Active or Inactive, as appropriate based on the Scene specifications and this driver's options.

In addition to controlling a blind, the driver's virtual light will control Output Contacts, as well as Relays which may activate Control4 physical relay ports. Output Contacts may be used as input to other drivers in your project (view them as input Contact Sensors or zones from a security system, for example). Relays may be used to control external devices (third-party or high power lights, gates, etc.) directly from Advanced Lighting Scenes. If a physical Control4 relay connected to this driver is toggled externally, the virtual light will mirror such new state (this is not supported when 'Pulse' Operation is selected).

SUPPORT

For support on this driver please go to DriverCentral Support. Give a detailed description of the problem and include the version number of the driver as well as the Control4 OS version you are using.

AUTO UPDATE

This driver is updated with fixes and new features from time to time. To ensure your project uses the latest version, set the Automatic Updates property of the driver to On.

CHANGELOG

10.0.0	April 13, 2024	Initial Release
10.0.1	April 14, 2024	Minor issues fixed
10.1.1	April 24, 2024	Added Virtual Relays; Light model when Relays and Sensors only
10.1.3	April 28, 2024	Minor issue fixed with light following blind
11.0.0	September 15, 2024	Added action to print extensive ALS Reports
12.0.0	April 15, 2026	Added 'Pulse' Control Relay Operation, minor issues fixed