



QUICK START GUIDE

The Shade Store™

Control4

INTEGRATION SUPPORT

WIRELESS LINK PRO HUB OVERVIEW



Elevate your Shade Store experience by seamlessly integrating motorized shades with CONTROL4 Smart Home systems. The Wireless Link Pro Hub offers a powerful integration with discrete shade control and two-way communication, providing real-time updates on shade position and battery levels. Featuring both Ethernet (CAT 5) and 2.4GHz wireless connectivity, the Wireless Link Pro Hub ensures smooth home automation integration through an easy-to-access RJ45 port located on the back of the hub. Each hub supports up to 30 shades, making it a versatile solution for any home automation setup.

OVERVIEW:

Control4 Version Required	2.9.0 minimum
Developer	annex4
Initial Release Date	5/28/2019
Last Modified Date	1/24/2025

Note: For support of real time updates the annex4 Link driver is required. You can find the driver at: <https://annex4.link/drivers/link>

HARDWARE INSTALLATION:

- Install all shades/blinds/motors at desired locations
- Connect the Hub to the TSS app
- Connect all shades/blinds/motors to the TSS app

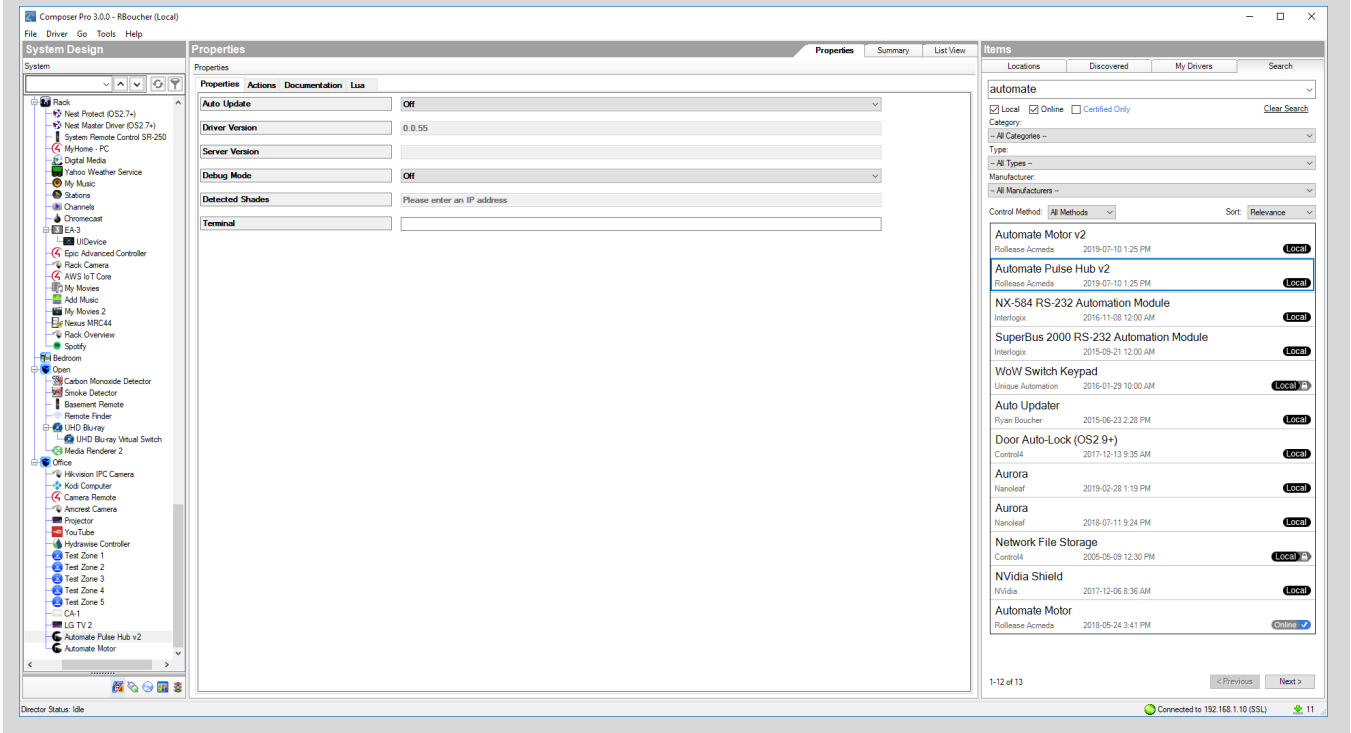
DRIVE INSTALLATION:

1. Place the "Automate Pulse Hub" driver into the project.
2. Navigate to the Connections section and select the Network tab.
3. Enter the IP address of the TSS Pro Hub.
4. Confirm that shades have been detected by looking at the Detected Drivers property.
5. For each shade that the "Automate Pulse Hub" has added to the connections add an "Automate Pulse Shade" driver to the project.
6. Bind the "Automate Pulse Shade" drivers to the "Automate Pulse Hub".
 - a) Once the connection has been bound the driver will automatically populate shade properties.
7. Set the 'Shade Movement Type' to 'Move' or 'Rotate' to determine what the driver should control.
 - a) 'Move' will control basic shade movement.
 - b) 'Rotate' will control the motor rotation.
8. Run the 'Calibrate' action on the shade, this will prepare the driver to calculate the travel times of the shades. By doing this the driver will accurately display ramp rates for a better user experience.
9. Refresh Navigators.

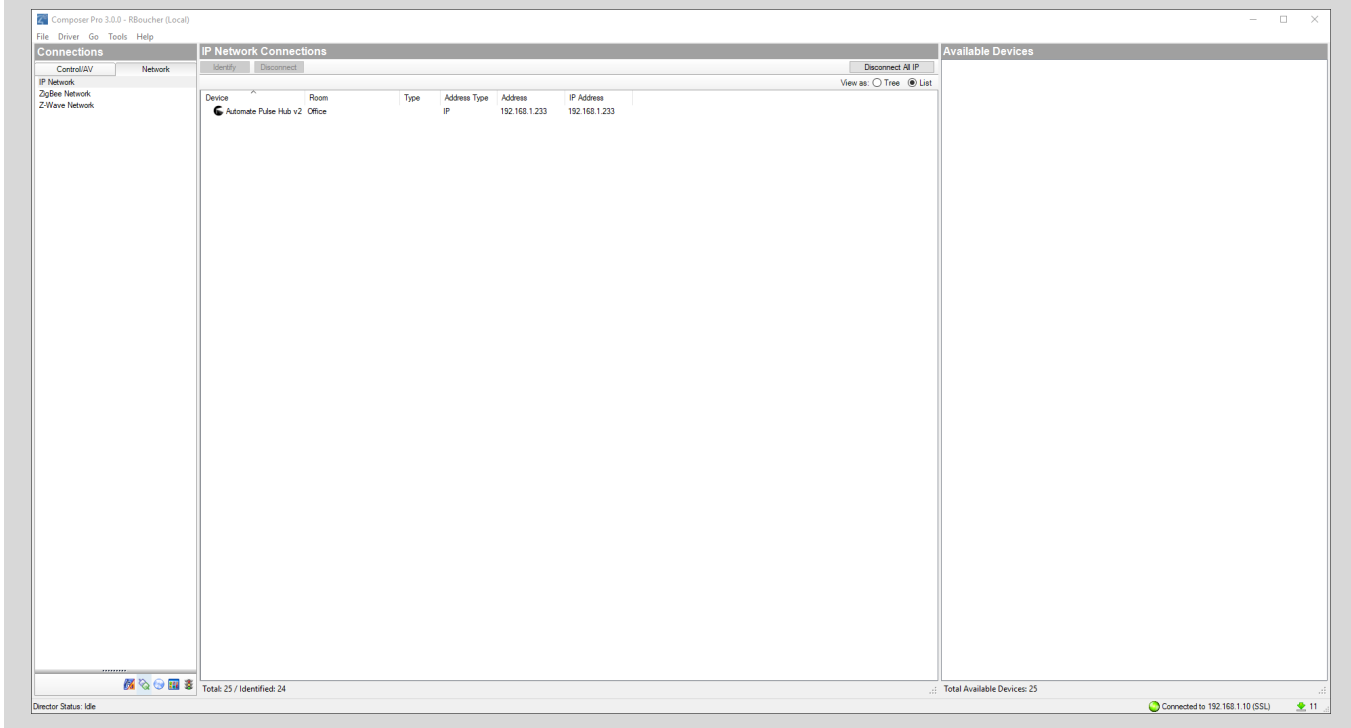
NOTE: Grayed out sections are part of the hub driver installation.



STEP 1: Search the driver via 'Automate Pulse Pro Hub' in the right window panel. Double click to add to a room.



STEP 2: Enter the IP address of the Pro Hub.



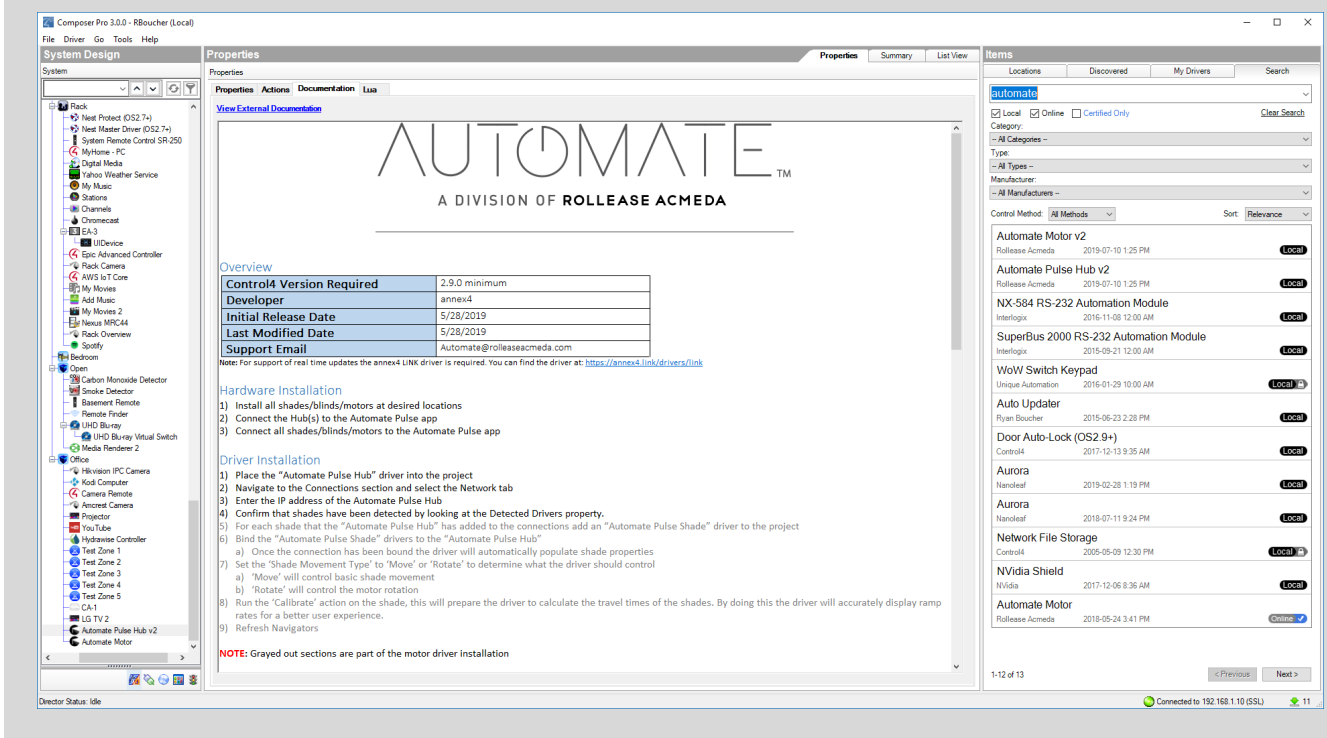
STEP 3: The properties of the driver and discovered shade (5WE).

The screenshot shows the 'Properties' tab for the 'Automate Motor v2' driver. The 'Auto Update' is set to 'Off', 'Driver Version' is '0.0.55', 'Server Version' is empty, 'Debug Mode' is 'Off', 'Detected Shades' is 'EPF', and 'Terminal' is empty. The 'Items' tab on the right lists discovered devices, including 'Automate Motor v2', 'Automate Pulse Hub v2', 'NX-584 RS-232 Automation Module', 'SuperBus 2000 RS-232 Automation Module', 'WoW Switch Keypad', 'Auto Updater', 'Door Auto-Lock (OS2.9+)', 'Aurora', 'Aurora', 'Network File Storage', 'NVidia Shield', and 'Automate Motor'.

STEP 4: Connect to the shade (5WE) to an 'Automate Motor' endpoint.

The screenshot shows the 'Control & Audio Video Connections' tab. It displays a table of connections for the 'Automate Pulse Hub v2' device. The table has columns for Name, Type, Connection, Input/Output, and Connected To. The connections listed are 'LINK REVEAL' (Control) and 'Office - Roller - EPF' (Control). Below the table, there is a section for 'AUTOMATE_SHADE Input Devices' with a table showing the 'Automate Motor' device connected to the 'Automate Pulse Hub v2'.

STEP 5: Documentation available on the Composer Pro.



This driver is an Interface Controller for the Pro Hub. It allows IP control over TSS shades from CONTROL4.

DRIVE FOR THE MOTOR:

SUPPORTED FEATURES:

- Drag and drop installation
- Easy calibration of shade travel time
- Control of motor rotation and shade movement

PROPERTIES:

Property	Description
Auto Update	Enables or disables real time updates of the driver from annex4 For support of this property the annex4 Link driver is required
Driver Version	The current version of the driver
Server Version	The server version of the driver For support of this property the annex4 Link driver is required
Debug Mode	Reports information to the log and Lua output window
Modes	
Debug	Reports the data being moved around
Trace	Reports the flow of the driver
Info	Reports basic pieces of information
Warning	Reports any small issues that arise
Error	Reports any large issues that arise
Fatal	Reports issues that cause the driver to fail

Shade Movement Type	'Move' to control shade movement 'Rotate' to control motor rotation
Shade Address	The address of the shade
Shade Type	The motor type operating the shade
Shade Speed	The speed in rotations per minute
Reverse Operation	Reverse the UI level displayed
Open Travel Time	The time it takes for the shade to go from closed to opened in milliseconds
Close Travel Time	The time it takes for the shade to go from opened to closed in milliseconds
Current Motor Level	The current level of the motor, this is the opposite of what is shown in Control4. A motor level of 30 is displayed as 70 in Control4.
Current UI Level	The current level that Control4 is displaying

ACTIONS:

Action Name	Description
Stop	Stops the shade
Jog	Jogs the shade open
Open	Opens the shade
Close	Closes the shade
Calibrate	Create bindings for paired shades on the serial connection
Identify	Moves all other shades to 'Open' and sets this shade to '50' This allows a dealer to quickly identify a shade
Get Shade Info	Forces the driver to retrieve the shade information to update properties
Update Now	Updates the driver to the latest version

CONNECTIONS:

Control Name	Connection Type	Description
Automate Pulse Hub	AUTOMATE_SHADE	The communication binding that lets the shade relay commands to the hub driver
Open Button Link	BUTTON_LINK	Click to open, push to start opening, release to stop
Close Button Link	BUTTON_LINK	Click to close, push to start closing, release to stop
Toggle Button Link	BUTTON_LINK	Click to toggle, push to start the toggle, release to stop
Stop Button Link	BUTTON_LINK	Click to stop

FOR THE HUB:

SUPPORTED FEATURES:

- Simple installation of the hub driver by connecting the network connection;
- Automatically calculates the travel time of the motors accurate to within 50ms;

PROPERTIES:

Property	Description														
Auto Update	Enables or disables real time updates of the driver For support of this property the annex4 Link driver is required														
Driver Version	The current version of the driver														
Server Version	The server version of the driver. For support of this property the annex4 Link driver is required.														
Debug Mode	Reports information to the log and Lua output window														
	<table> <tr> <th colspan="2">Modes</th></tr> <tr> <td>Debug</td><td>Reports the data being moved around</td></tr> <tr> <td>Trace</td><td>Reports the flow of the driver</td></tr> <tr> <td>Info</td><td>Reports important pieces of information</td></tr> <tr> <td>Warning</td><td>Reports any small issues that arise</td></tr> <tr> <td>Error</td><td>Reports any large issues that arise</td></tr> <tr> <td>Fatal</td><td>Reports issues that cause the driver to fail</td></tr> </table>	Modes		Debug	Reports the data being moved around	Trace	Reports the flow of the driver	Info	Reports important pieces of information	Warning	Reports any small issues that arise	Error	Reports any large issues that arise	Fatal	Reports issues that cause the driver to fail
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Serial Number	The serial number of the hub
MAC Address	The mac address of the hub
Detected Shades	Lists the addresses of all shades discovered on the hub
Terminal	Allows the dealer to manually send commands to the TSS hub.
	Commands should be formatted with a starting "!" and an ending ";"
	Responses will show in the property shortly after the command is sent

ACTIONS:

Action Name	Description
Retrieve Shades	Create bindings for paired shades on the serial connection
Clear Shades	Clear the bindings created for shades on the serial connection
Close All	Closes all shades
Open All	Opens all shades
Calibrate All	Informs each motor endpoint to calibrate its motor travel times
Update Now	Updates the driver to the latest version

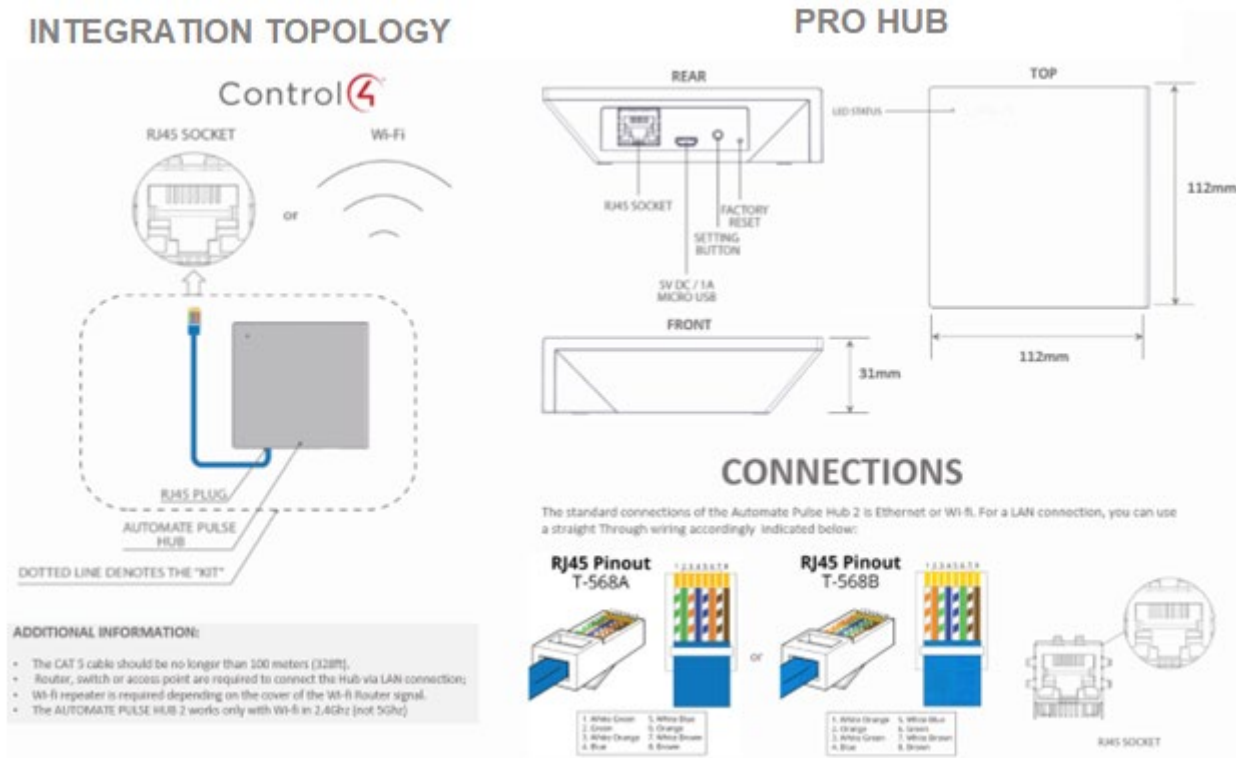
CONNECTIONS:

Control Name	Connection Type	Description
<Room>:<Shade>:<Address>	AUTOMATE_SHADE	The communication binding for a shade endpoint driver
Link Reveal	LINK_REVEAL	This connection is used for annex4's notification and display type devices. By using this binding, you can get notifications on display type devices with minimal programming.

COMMONS MISTAKES:

- Entering the wrong IP address in the "IP Address" configuration line.
 - If you're failing to discover devices double check this!

CONTROL4 SYSTEM CONNECTION:



FREQUENTLY ASKED QUESTIONS

Q. No Pro Hub detected.

A. Make sure that your Pro Hub is connected to the correct network and get an IP Address available and still communicating with the network using the TSS App.

Q. Shade limits are not set properly.

A. Calibrate shade limits with your TSS remote before setting the appropriate open and close time within CONTROL4 SYSTEM.

Q. Shade is not moving at all.

A. Make sure the selected Pro Hub is the correct Pro Hub for the shade to be controlled. Confirm the correct bindings are set in the CONTROL4 System connections tab between the Pro Hub and Shade drivers.

Q. I have multiple Pro Hubs, what do I do?

A. Load two Automate Pulse Pro Hub drivers. After selecting "Retrieve Hubs" located in the driver actions tab, you will see different Pro Hubs - select the desired one.

Q. I don't see any shade bindings in the Pro Hub driver?

A. Select "Retrieve Shades" located in the driver actions tab.

Q. How do I scan for available Pro Hubs?

A. Once the Pro Hub is properly connected via the Ethernet cable or Wireless network, navigate to the Automate Pulse Hub Properties page within Composer. Select "Retrieve Hubs" located in the driver actions tab.

Q. We get unexpected responses from the CONTROL4 system, or "?" symbols

A. Ensure that all connections using the ethernet port or Wi-Fi are working properly. The missed connection has been known to yield unwanted or unexpected results.

SUPPORT RESOURCES:

For further assistance, contact your retailer, visit our website: www.theshadestore.com