Screen Controller

USER MANUAL

DA-LITE.
A brand of legrand

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PRODUCT DESCRIPTION

The Screen Controller box is an accessory for Da-Lite motorized projection screens and controls. This Screen Controller box allows remote control of a screen or control through a TCP/IP connection, VPI (Video Projector Interface), Dry Contact & RS232 Communication.

The Screen Controller interface box is configured to supply every control configuration you might need for your projection screen or control. The control box is defined as an IOT (Internet Of Things) device. The Screen Controllerbox is a 1 for 1 controller. It can only be used to control (1) Da-Lite motorized projection screen or external control device.

INCLUDED IN THE PACKAGE

Screen Controller

PoE+ Power Injector
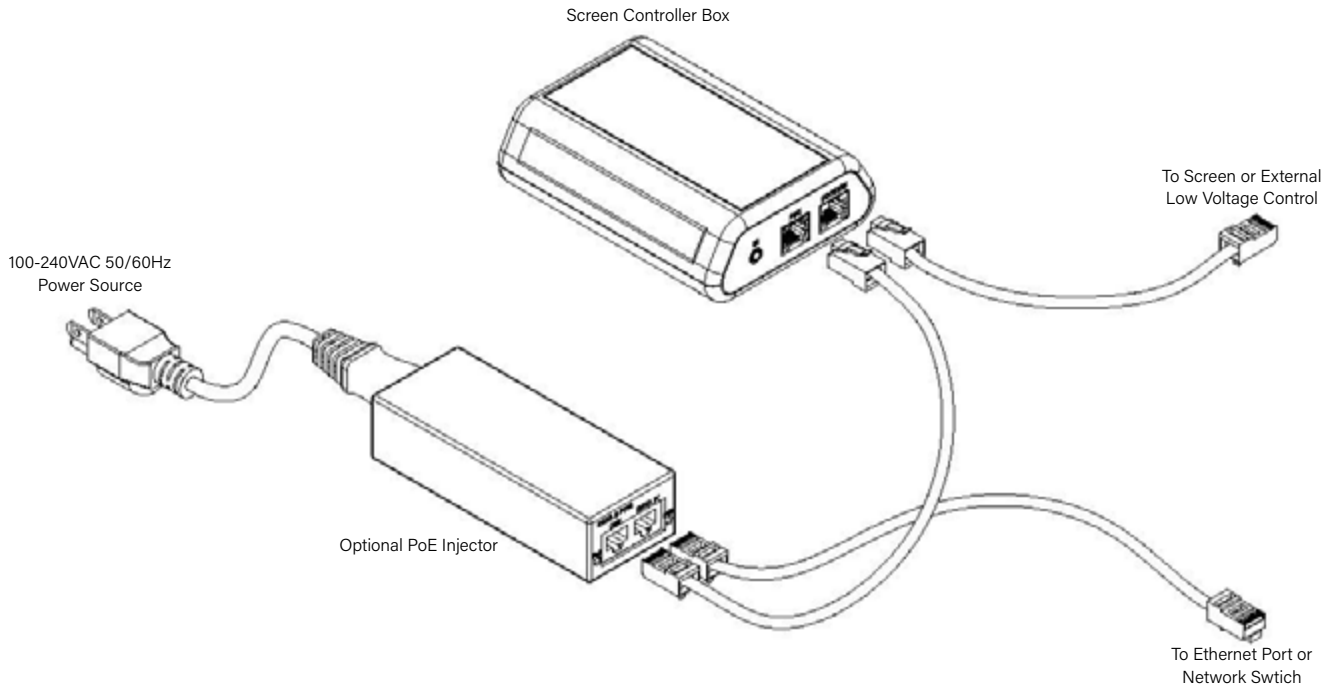
AC Power Cord

PoE+ Power Injector Optional

An RF (BLE) Remote or IR Remote and Receiver may also be included depending on kit ordered.

INSTALLATION

When connecting the Screen Controller box, there are three connections that must be made for proper operation: PoE 30W Min., Ethernet and Screen Connection Control. Once these connections have been made and power is supplied the Screen Controller kit is ready to be used.

Upon a successful connection, the power LED and the status LED on the PoE port of the device will start to blink. The yellow 10/100 Mb Link LED indicates the presence of communication between the Screen Controller box and one or more nodes on the network.

The Screen Controller box by default is designed to be powered by PoE (Power Over Ethernet). If you don't have PoE power source you will need to install the box with the optional PoE power injector to power on the device.

Screen Controller Box

To Screen or External
Low Voltage Control

100-240VAC 50/60Hz
Power Source

Optional PoE Injector

To Ethernet Port or
Network Swtich

NOTE: If connecting All-In-One box to ethernet switch that provides PoE+ power you will not need to connect the PoE Injector shown below. Go straight from switch to PoE port on box.

Network cables not provided. Standard Cat5e or Cat6 patch cables required.

RS-232 WIRING CONFIGURATION

When looking at the back face of the RS-232 PCB box. The RS-232 connection port is on the back left side of the unit.
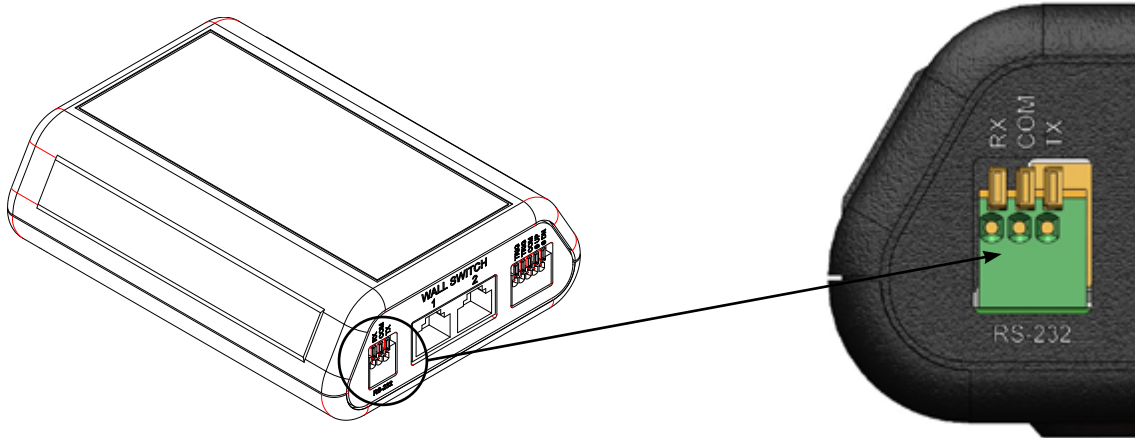
The RS-232 port setting will need to be configured per table below

Baud Rate	38400
Data	8 Bit
Parity	None
Stop	1 Byte
Flow Control	Xon/Xoff

The RS-232 command reference is per table below

Up Command	screen move up
Down Command	screen move down
Stop Command	screen move stop
Preset 1*	screen preset recall 1
Preset 2*	screen preset recall 2

*Only availble on products that use the Da-Lite Smart Motor

PROJECTOR TRIGGER WIRING CONFIGURATION

When a 5-12V signal is received from a projector tigger output (or trigger output from any other device) the screen will move to the down position. When voltage is removed the screen will run to the up position.
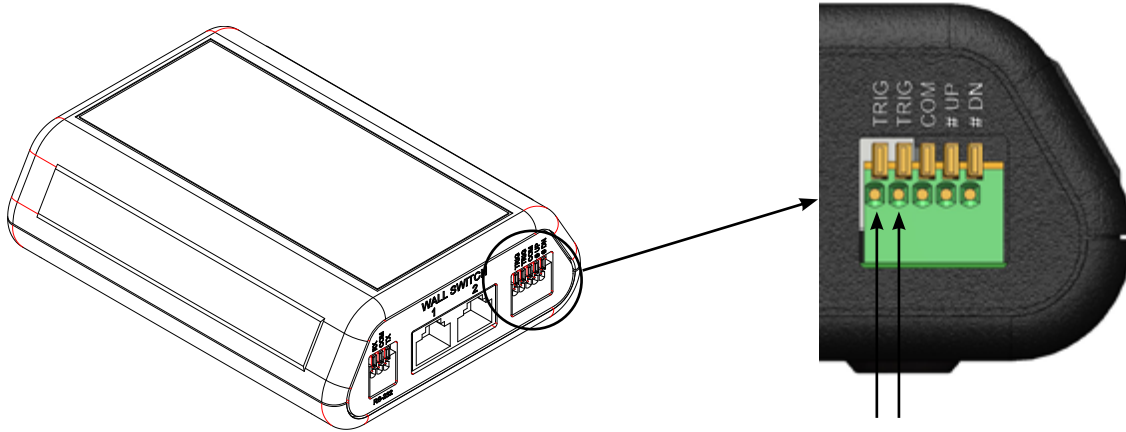
Use 2-conductor 18–24 gauge wire to extend the low voltage connection from the 5 to 12-volt trigger output to the length required to reach the Screen Controller.

NOTE: When extending the low voltage connection from the trigger output polarity does not matter. The wires are interchangeable.

DRY CONTACT WIRING CONFIGURATION
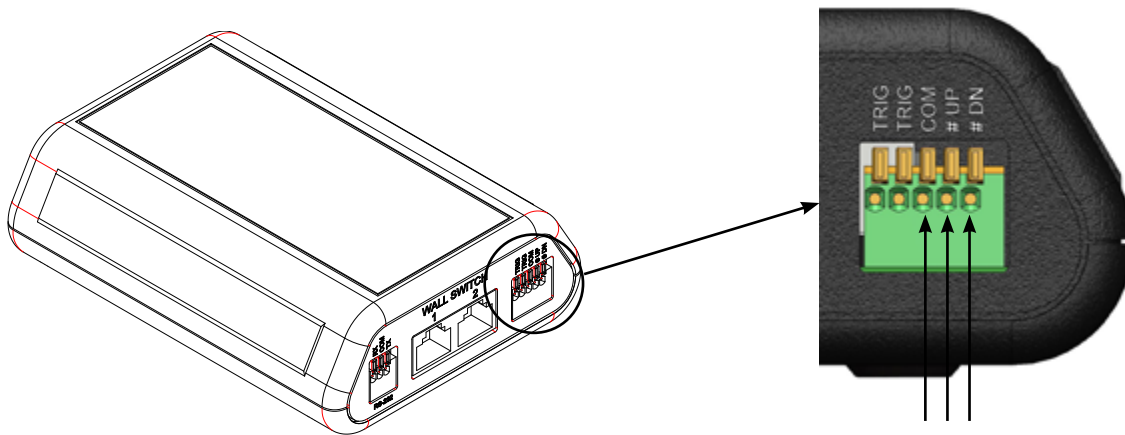
A control panel may be connected to the Screen Controller by using the COM, #UP, and #DN inputs. The control panel must provide a momentary, dry contact closure of at least 1/2 second.

1. Use 3-conductor 20-24 gauge wire to connect the control panel to the Screen Controller.
2. A momentary closure across the COM and #UP inputs will be an "up" command.
3. A momentary closure across the COM and #DN inputs will be a "down" command.
4. A momentary closure across the COM, #UP and #DN inputs will be a "stop" command.
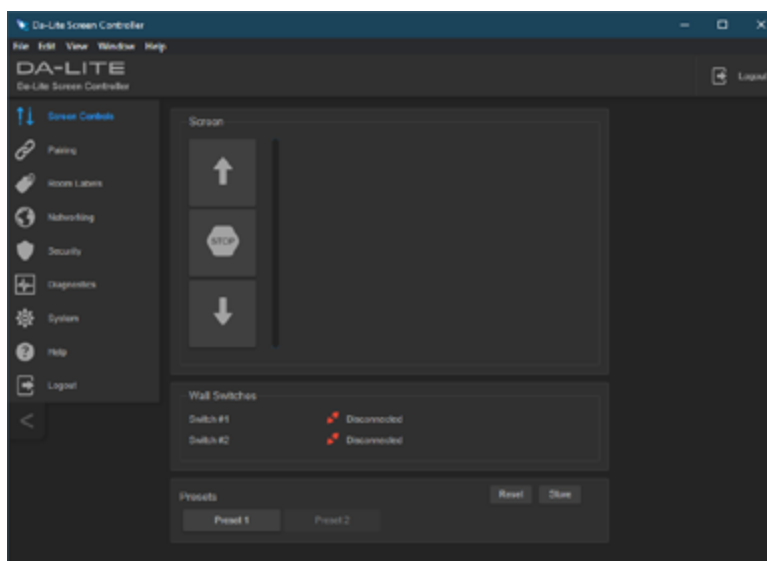
INITIAL DEVICE SETUP AND SYSTEM ADMINISTRATION TASKS

The Screen Controller box has a web interface used for initial device set-up, administrative control and operation. When the unit is shipped from the factory, there is no admin password and the administrative controls are not available. This is also true if a factory reset is performed on the device. This returns the device to a "like new" state. Initial device setup includes setting the admin password and any additional tasks that may be required. After initial device setup is complete, you will need to complete system administration task to define how the device behaves as an element of your network.

Browser Support:

- Chrome®

- FireFox®

- Microsoft® Edge and Internet Explorer®

- Safari®

Testing was conducted using the browser version that was available at that time. Other browsers (including older versions of the ones in this list) are likely to work also.


INITIAL DEVICE SETUP PROCESS OVERVIEW

The sequence of tasks for initial device setup and system administration differs somewhat, depending on the method below that is used.

- **Locate and setup the Screen Controller using the Vaddio Deployment Tool** - This tool is available as a free download at https://info.legrandav.com/VaddioDeploymentTool. The tool scans the network for Vaddio & Da-Lite devices, lists them by model and IP address, identifies all devices that are not setup, provides the controls to complete the initial device setup. It will also provide links to each device's web interface.

- **Access the web interface directly** - The classic method. Discover the Interface box's IP address and browse to its web interface.

INITIAL DEVICE SETUP USING THE VADDIO DEPLOYMENT TOOL

The Vaddio Deployment Tool simplifies provisioning and system administration for the Interface box.
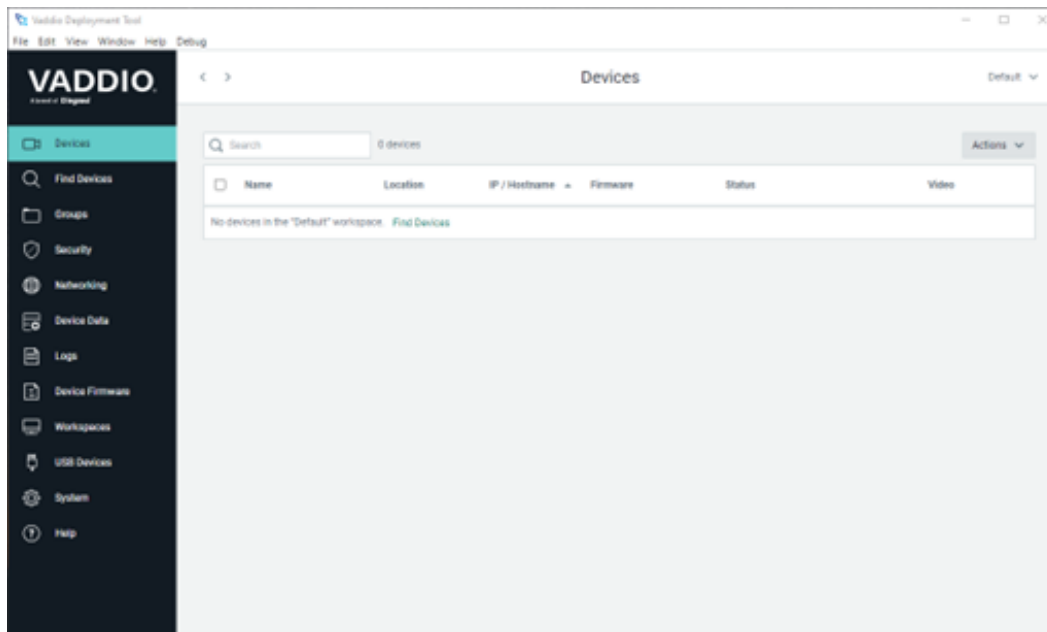
The Vaddio Deployment Tool makes your tasks easier in the following manner:

- Easily scans your network for devices - no more complicated procedures for discovering device's IP addresses.
- View scan results as a dashboard; easily identify unprovisioned and unauthenticated devices.
- Provision new devices or update device firmware from the dashboard.
- Import or export device configurations, reboot, or restore a device to factory defaults from its detail page.
- Access device's web interface directly.
- Change a device's admin password from its detail page.
- Organize devices into groups - for example, by product type or physical location.

NOTE: Be sure you have the current version of the Vaddio Deployment Tool. If it notifies you that an update is available, install the update. This ensures that you have access to the full capabilities of the tool.
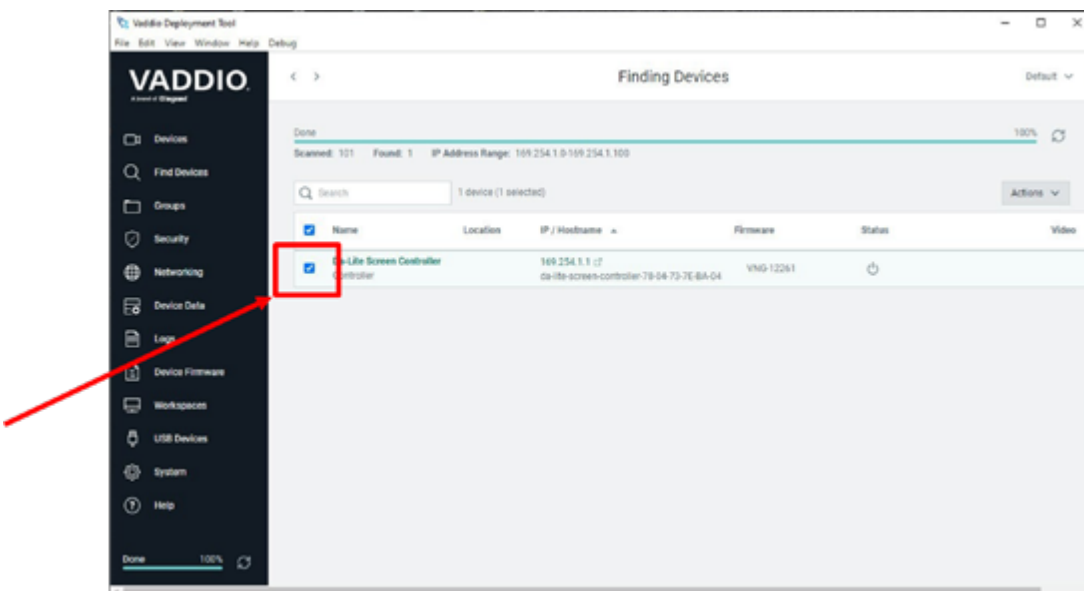
INITIAL DEVICE SETUP USING THE VADDIO DEPLOYMENT TOOL

To complete the initial device setup with the Vaddio Deployment Tool:

1. Download and install the Vaddio Deployment Tool if you have not done so already, then open it.

2. Power up the Interface box and other devices if you have not done so already.

3. On the Find Devices page, click Scan. If the scan does not locate the devices you are setting up, your computer may be on a different subnet. Return to the Find Devices page and click Advanced and specify the appropriate portion of the network to scan.

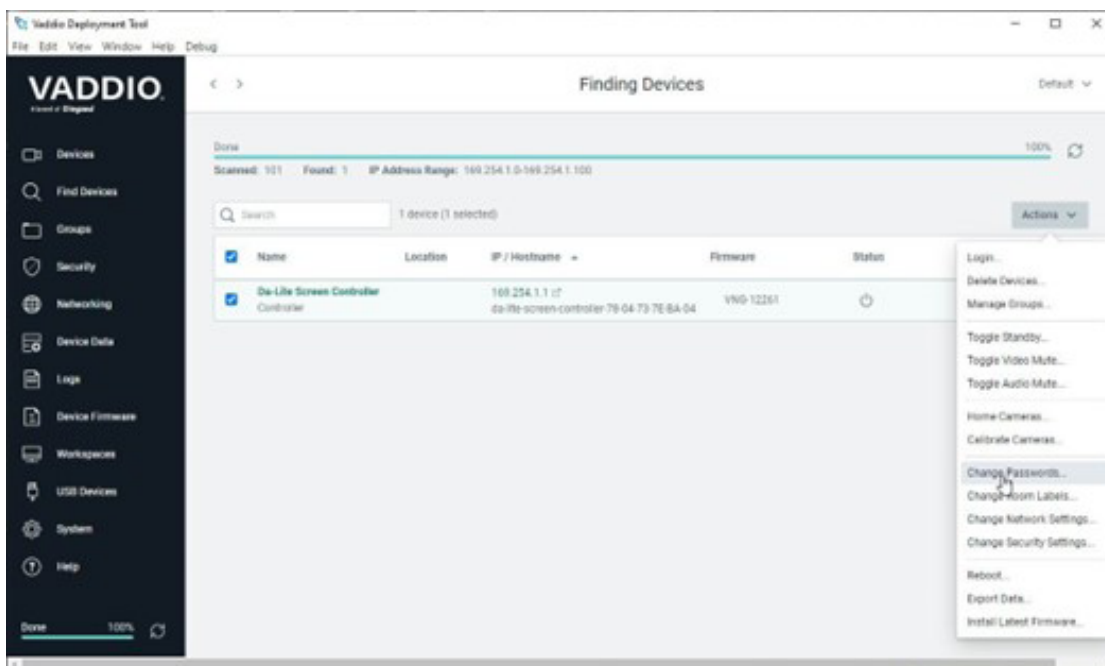4. In the list of equipment that the scan discovers, locate the devices marked Da-Lite Screen Controller.
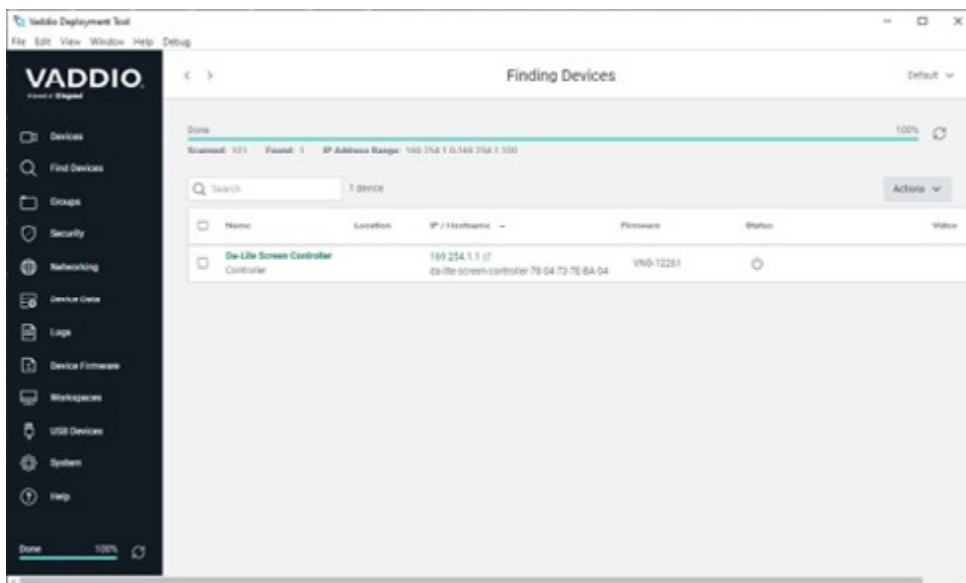
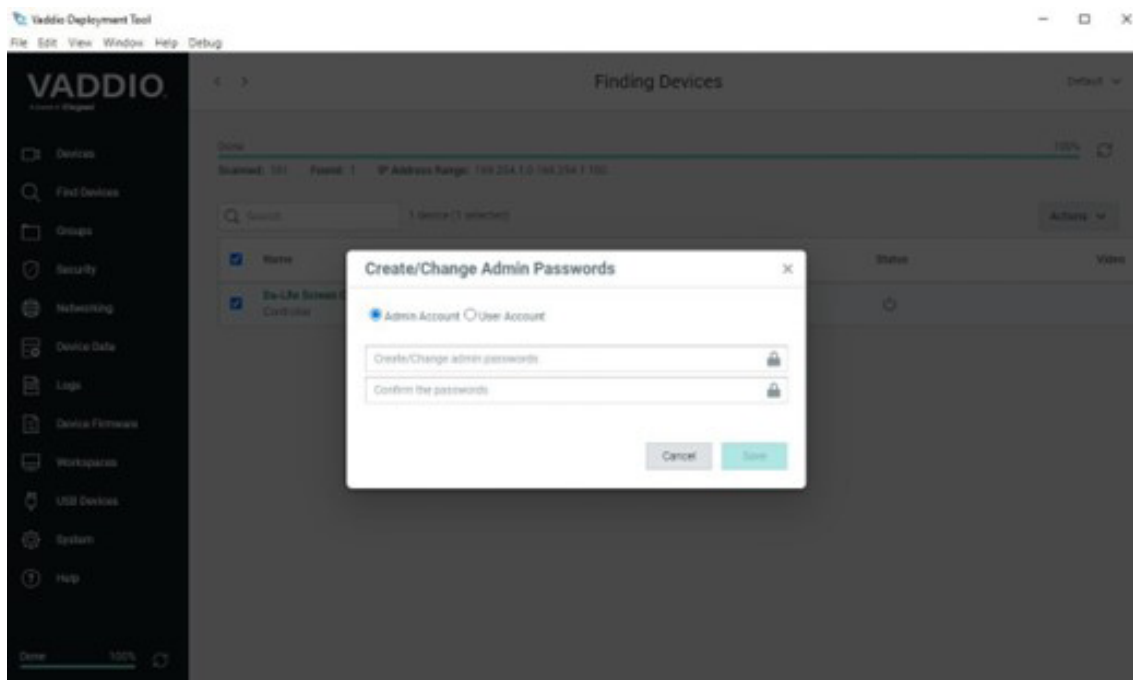5. Select the device by clicking in the check box next to the name.

6. Select "Actions" drop down list and scroll down and select "Change Passwords".

7. Create the admin password and select "Save".

The device can now be accessed through the administrative web interface to complete system administration and other configuration tasks.

INITIAL DEVICE SETUP MANUAL ACCESS

If you do not use the Vaddio Deployment Tool, you will need to complete the initial device set-up manually, which requires you to discover the device's IP address and browse to the device's web interface.

If the device is at 169.254.1.1

The device's default IP address is 169.254.1.1. When it is at this address, it has not been configured with an IP address or received one automatically. This usually means one of these things:

- The device is not connected to the network – check the cable connected to the Network/PoE+ port.
- The network does not automatically assign IP addresses, and you need to configure the device for the network.

To communicate directly with the device, connect your computer's network port directly to the DATA IN port of the device's mid-span power injector and browse to the device's IP address using HTTPS. This will generate some warnings from your browser. You do not need to disconnect other devices.

After completing the initial device set-up, you will need to configure the device with a static IP address.

Work with your network administrator.

Configuring a Static IP Address for a Device Currently at 169.254.1.1

By default, the device is set to DHCP, and will receive an IP address automatically if your network assigns IP addresses. However, if no DHCP server is available to automatically assign an address, the device uses its default IP address of 169.254.1.1. Other devices may default to the same IP address. If you install more than device on this network, you must follow this procedure to prevent IP address conflicts.

Caution
Consult your IT department before editing network settings. Errors in network configuration can make the device inaccessible from the network. Do not change DHCP/Static addressing, IP address, subnet mask, or gateway unless you are very familiar with the characteristics and configuration of the network where you install the device.

To access the device's Networking page after initial device setup:

1. Leave the device connected as for initial device setup.

2. Log in to the web interface as admin, if you have not done so already.

3. On the Networking page, set IP Address to Static; then enter the IP address, subnet mask, and gateway as directed by the network specialist. You will need to log in again after saving your changes.

The device is now ready to be connected to the network.
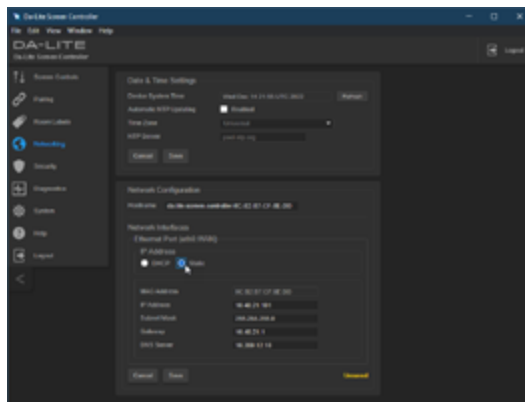
RF (BLE) REMOTE PAIRING

Note: The BLE remote is optional and may not be included depending on the kit that was ordered.
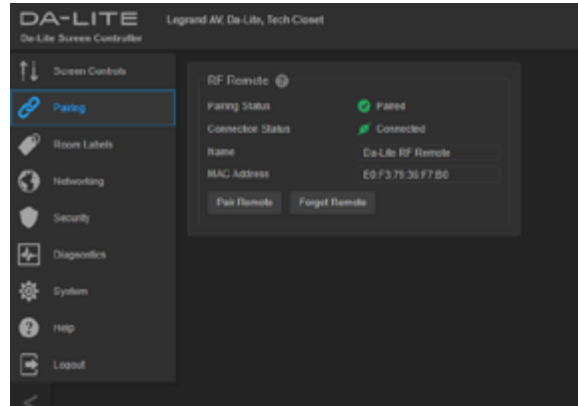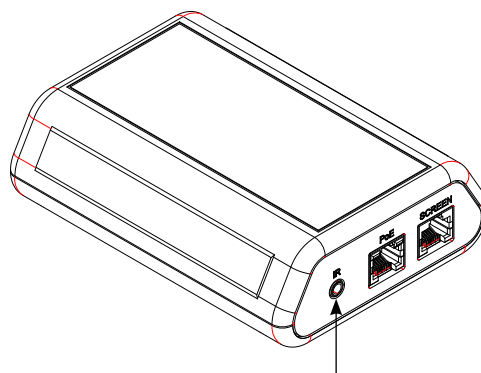

Pairing Steps

1. Log into the web interface as admin.*

2. On the Pairing page, click the Pair Remote button.

3. Press any button on the BLE remote.

4. Pairing Stutus will update to "Paired" and the Connection Status to "Connected". Your remote is now ready to use.

If the device is not connected to the network you will need connect your computer's network port directly to the DATA IN port of the device's mid-span power injector and browse to the device's IP address (169.254.1.1) using HTTPS. This will generate some warnings from your browser. You will need to perform the initial setup and create an admin password if you have not done so already.

IR REMOTE

Note: The IR remote is optional and may not be included depending on the kit that was ordered.

Plug the IR receiver eye in to the 3.5mm port labelled "IR" on the Screen Controller.