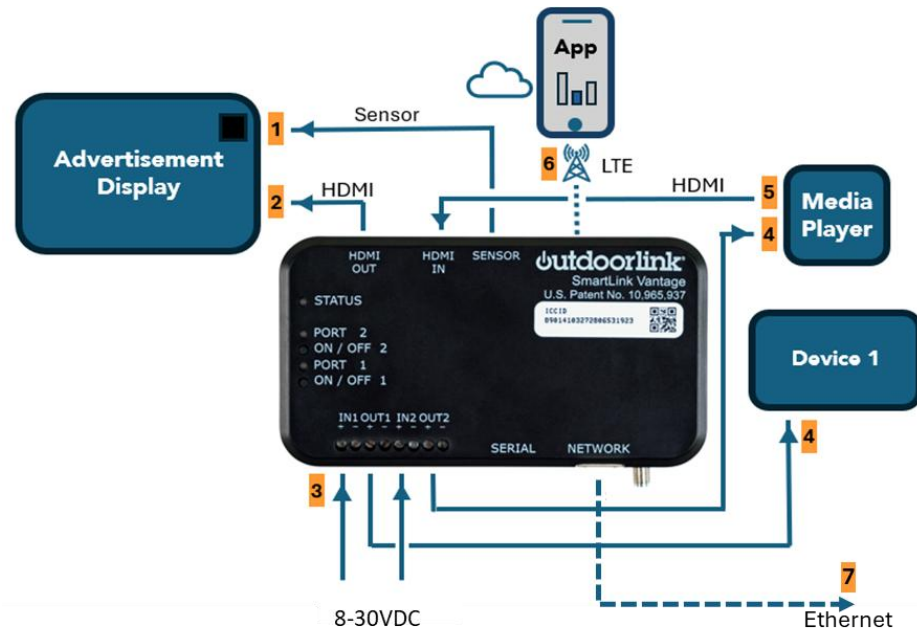


# Outdoorlink® INSTALLATION GUIDE Vantage Controller

## OVERVIEW

This document explains how to install the Outdoorlink® Vantage controller. Review and adhere to all applicable local electrical codes prior to installation. For detailed technical information refer to the Vantage technical data sheet.



### Connection Diagram

Connection	Details	App
1	Micro USB Ribbon Cable Sensor	<b>Alarms:</b> No Sensor, No Video Out, Stuck Video
2	HDMI Out	<b>Alarms:</b> No Video
3	8-28VDC (+/-) IN1 supply. Powers the device.	<b>Alarms:</b> Loss of Power, Power Restored, Bad Neutral
4	Accessory Device 1+2 DC Power Supply	<b>Control:</b> On-Off, Schedule Power, Power and Alarm History
		<b>Alarms:</b> No Current, No Voltage
5	HDMI In	<b>Control:</b> Screen Capture
		<b>Alarms:</b> No Video
6	Cellular Connection	<b>Control:</b> Remote device configuration and monitoring
7	Ethernet Connection	<b>Control:</b> Secondary communication channel for remote device control

# INSTALLATION

## PRE-INSTALLATION

- Ensure your power source is 8 to 30 VDC.
- Each relay is rated at 5A / 100VA
- 26 to 14 AWG wiring

## Screen Monitoring Configuration

1. Connect an HDMI cable from the media player to HDMI In (5)
2. Connect an HDMI cable from HDMI Out (2) to the Display
3. Connect the Vantage Color Sensor from the Vantage Sensor Port (1) to a corner of the display.
  - a. The color sensor can be mounted on any corner of the display with the sensor cable routed behind the display.
  - b. The bezel mounted sensor can be slid between the bezel of the monitor and the screen without needing additional adhesive.
  - c. If the screen does not have a bezel there are additional sensor options that can be stuck to the screen with adhesive tape.
4. Connect the provided power supply to IN1 ±
  - a. If the Vantage will be used to control the Media Player or other external device see the External Device Install instructions below.
5. Power on the Vantage, Media Player, and Display.
6. Verify that content from the Media Player is being shown on the Display. If content is not being shown follow the steps in the troubleshooting section below.
7. With the Vantage powered on, verify that the controller connects to the cellular network. If the Status Light does not begin to rapidly blink (multiple blinks per second) after 10 minutes of being powered on, follow the steps in the troubleshooting section below.

Status Light Indicators:

**No light** - Controller is not powered

**Slow blink** – Controller is not connected to cellular network and is searching for network connection.

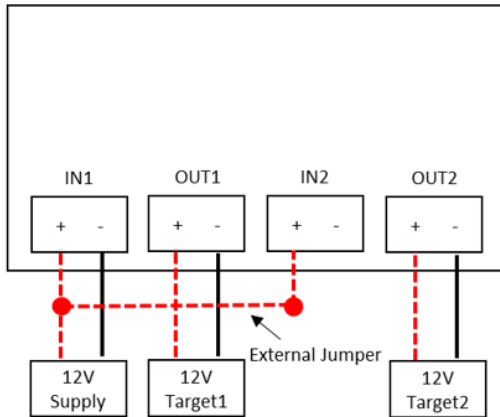
**Rapid blink** – Controller is connected to cellular network.

**Extremely Rapid blink** – Controller is connected to the ethernet network.

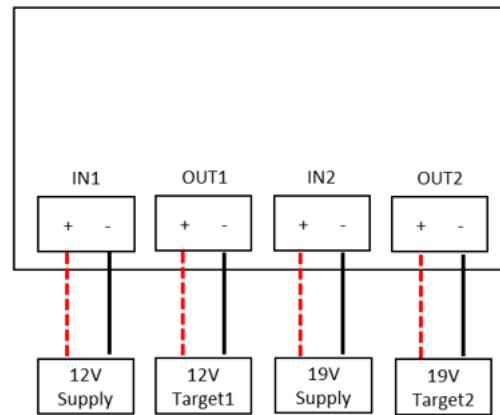
8. Once content is shown correctly follow the Calibration Instructions below to calibrate the sensor for proper monitoring.

## External Device Configuration

Single Supply w/ 2 Target Devices



Dual Supply w/ 2 Target Devices



**CAUTION: Follow all applicable electrical codes and safety procedures.**

1. Refer to the wiring diagrams above for configuration options. IN1 and IN2 are independent relays allowing them each to support different voltages within the Vantage operating range.
  - a. *Note: IN1 must be used to power the Vantage but it supports any voltage within the Vantage operating range. If OUT1 is used to power an external device the power supply for that device should be used in place of the supply provided with the Vantage.*
2. Once the external devices are connected use Port 1 and Port 2 buttons to manually activate the relays to ensure the wiring is correct and the external devices are working as expected.

Port 1 and 2 LED Light Indicators:

**Solid light** – target device is connected and drawing current.

**Blinking light** – target device not drawing current.

**No light** – port is off.

## Calibration

Use one of the two methods described below to put the device into calibration mode. Once the device enters calibration mode the Outdoorlink logo will appear in the middle of the screen and a green square will begin cycling through each of the corners searching for the sensor. Once the device finds the selected sensor it will automatically resize the sensor to fit behind the sensor shroud and save the calibrated value to the device memory and web application. The calibration procedure will take about 30s and will automatically return to the content once calibration is completed.

## Using the App

1. From the Structure Dashboard use the Device Details menu to select Configure Sensors. See the Portal Application Quick Setup section below if the device has not already been added to the structure dashboard.
2. Press the Calibrate button for the desired sensor to start the calibration routine.
  - a. Pressing the Calibrate All button will calibrate the all sensor to the same value using the sensor plugged into the lowest sensor hub port if one is being used.

# Outdoorlink Vantage Controller Installation Guide

## Using the Device Push Buttons

1. Press and hold the ON/OFF 1 and ON/OFF 2 buttons simultaneously for 10 seconds to enter calibration mode.

## Sensor Hub

The Vantage can optionally be paired with a Vantage Sensor Hub to increase the number of sensors and sensor types supported by a single vantage. Using a Vantage Sensor Hub the vantage can support a combination of up to 9 color, temperature/humidity, or intrusion sensors. Sensors can be named for alarm and tracking purposes.

Name Screen 1		Port #1	CALIBRATE	SHOW WATERMARK
Color Sensor				
X 0	Y 0	Size 16	Threshold 2790	
Name Screen 2		Port #4	CALIBRATE	SHOW WATERMARK
Color Sensor				
X 0	Y 1049	Size 31	Threshold 3425	
Name		Port #5		
Intrusion Sensor				
Name		Port #7		
Temp & Humidity Sensor				
Temp High (°F) 140	Temp Low (°F) 32	Temp Hysteresis (°F) 58		
Humidity High 95	Humidity Low 0	Humidity Hysteresis 5		
Name		Port #8		
Temp & Humidity Sensor				
Temp High (°F) 140	Temp Low (°F) 32	Temp Hysteresis (°F) 58		
Humidity High 95	Humidity Low 0	Humidity Hysteresis 5		

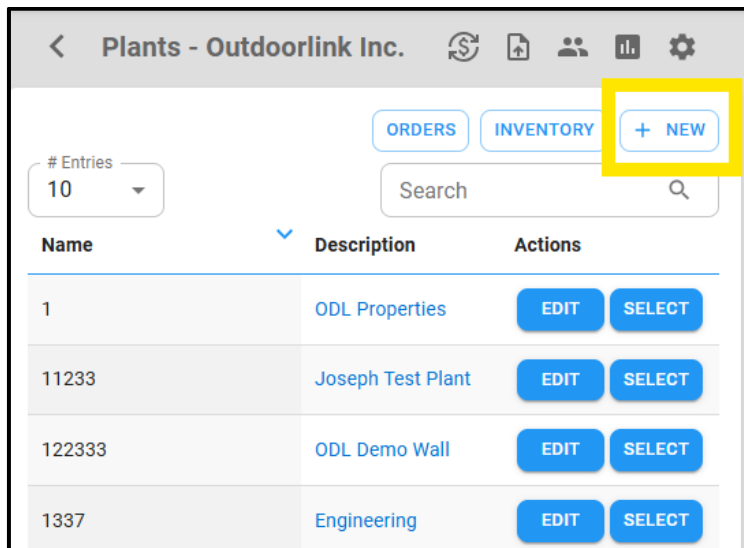
# Outdoorlink Vantage Controller Installation Guide

## PORTAL APPLICATION QUICK SETUP

For more detailed Portal user instructions refer to the Outdoorlink® Portal User Guide located [here](#) or at <https://outdoorlinkinc.com/documentation>.

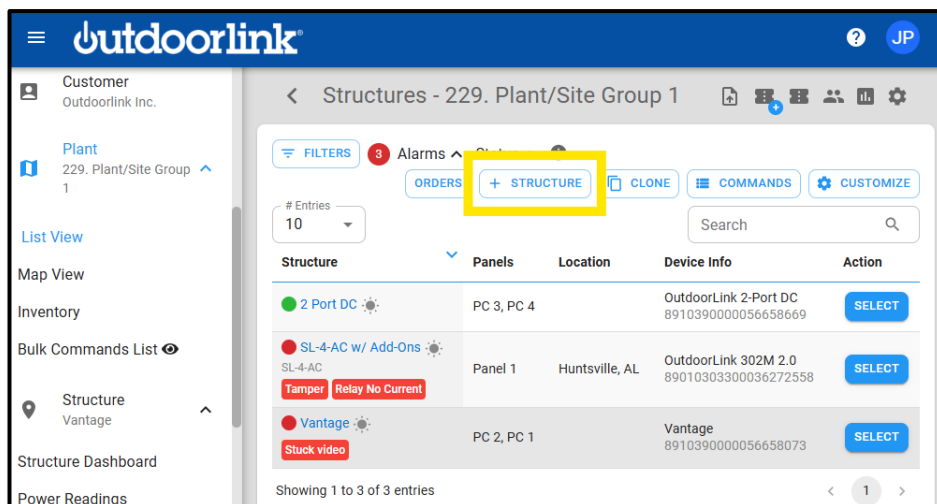
Log into the Portal application via a web connection at <https://portal.outdoorlinkinc.com/> or download the iOS or Android app.

To add a new plant/site group Click **+ New** in the top right corner of the customer dashboard, then input plant/site group name and description.



In the customer dashboard click **SELECT** next to the newly created site group.

To create a new structure click **+ STRUCTURE** (should this be site or structure), then input the structure details.

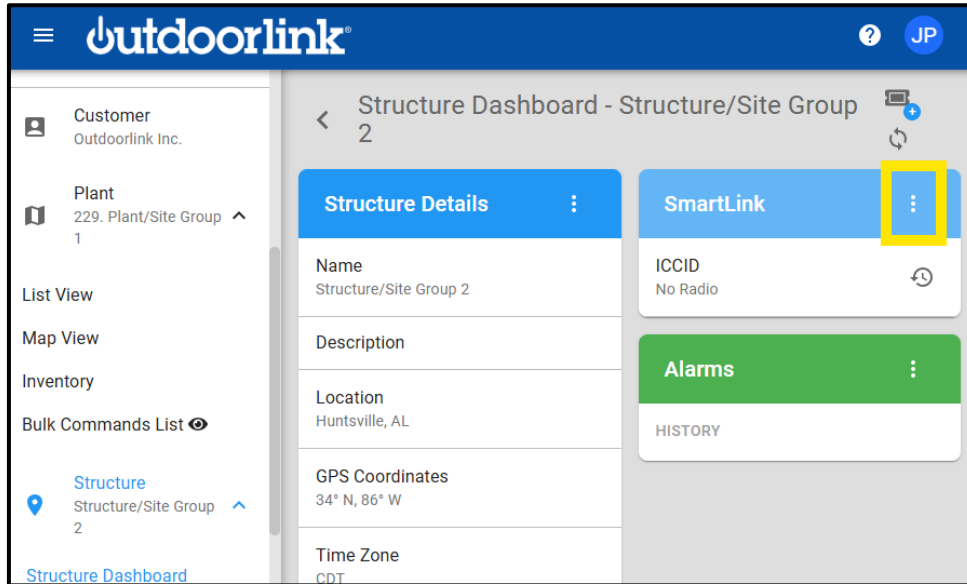


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In the plant/site group dashboard select the newly created structure.

Click the **three dots** in the top right of the SmartLink window. Click **Add Unit**, then input (or scan) the 19 digit **ICCID number** located on the front of the vantage controller. Click **VALIDATE**.

**Note: The mobile app can be used to scan in the ICCID from the QR code.**



## 1. ALARM VERIFICATION

Ensure advertisements are displaying and cycling before enabling and testing alarms.

### Alarm Descriptions

The following sections describe the different types of Vantage alarms and the common resolutions.

#### Non-Clearable Alarms

These alarms will clear automatically when they are resolved on the structure. They cannot be cleared automatically by the user.

Name	Description	Resolution
<b>Offline</b>	The unit has been unable to check-in to the Outdoorlink portal for at least 2 days.	This can be due to a local network outage, poor signal quality, or loss of power.  Verify that the unit has power and the status light is blinking. Contact Outdoorlink support for further troubleshooting.
<b>Loss of Power</b>	The unit has lost power.	This can be due to a local power outage, blown power supplies, or loose connections.  Measure the voltage across IN1 on the unit and ensure that it is within the operating voltage range.

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<b>Relay # No Current</b>	The unit has detected low power consumption for Relay # during a scheduled on time.	<p>This can be due to a failing load device or loose connections.</p> <p>Measure the voltage across the output terminals of the unit to ensure the external device is receiving the correct voltage.</p> <p>Ensure the external device is on and functioning properly.</p>
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### **Clearable Alarms**

These alarms can be cleared by the user. If the issue still persists at the structure the alarm will be reasserted.

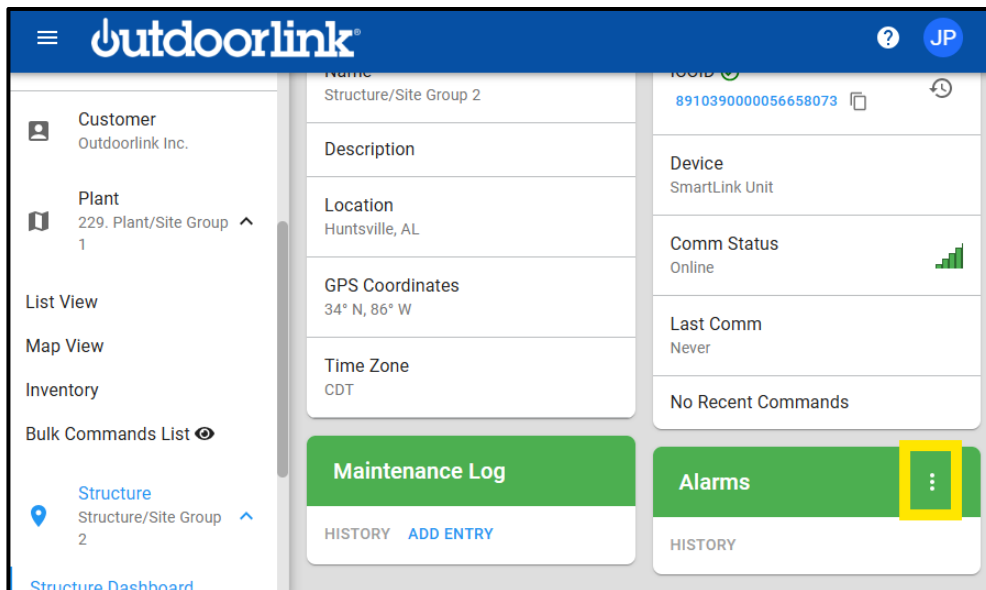
Name	Description	Resolution
<b>Bad Neutral</b>	The unit has detected multiple Loss of Power and Power Restore events within a 24-hour period.	This alarm is typically associated with a bad connection coming from the power supply or a loose power connection to the unit. Ensure all power connections to the unit are secure.
<b>No Voltage – Input 2</b>	No voltage detected on input 2. <i>Note: This is only applicable if output 2 is in use.</i>	Measure the voltage across IN2 on the unit and ensure that it is within the operating voltage range.
<b>No Sensor</b>	The color sensor for the vantage unit is not detected.	<p>Check connection point 1, where the sensor cable inserts into the micro-USB port on the unit.</p> <p>Check connection point 2, where the sensor cable inserts into the micro-USB port on the sensor.</p> <p>Reseat the connection points described above. If the alarm does not clear a replacement sensor and/or sensor cable may be necessary.</p>
<b>No Video</b>	No input video is detected	<p>Check the PC streaming content to the unit. Ensure that it is powered on and not in sleep or idle mode.</p> <p>Check the HDMI cable routing from the PC into the HDMI In port on the unit. Reseat and ensure a proper connection.</p> <p>Ensure that the HDMI cable between the output of the unit and the monitor has shielded twisted pair HDMI signals.</p>
<b>No Display</b>	The output HDMI connection is disconnected	<p>Check the HDMI cable routing from the Monitor into the HDMI Out port on the unit. Reseat and ensure a proper connection.</p> <p><i>Note: Disconnecting the Output HDMI connection is likely to cause a No Video alarm before a No Display alarm because the PC will stop streaming when the monitor is disconnected.</i></p>
<b>No Video Out</b>	No output video is detected	Check the HDMI cable routing from the Monitor into the HDMI Out port on the unit. Reseat and ensure a proper connection.

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		<p>Check that the display is on the correct input.</p> <p>Ensure that HDCP is disabled on the streaming device.</p> <p>Ensure that the sensor installed into the bezel of the display is still properly attached.</p> <p>Ensure that the Vantage unit has been properly calibrated.</p>
<b>Stuck Video</b>	The unit has not detected a change in content in the configured amount of time.	<p>Ensure that the streaming device is still displaying content as expected.</p> <p>Ensure that the sensor installed into the bezel of the display is still properly attached.</p>

### Enable Alarms

Click the **three dots** on the top right of the Alarms widget, then click **Alarm Settings**.

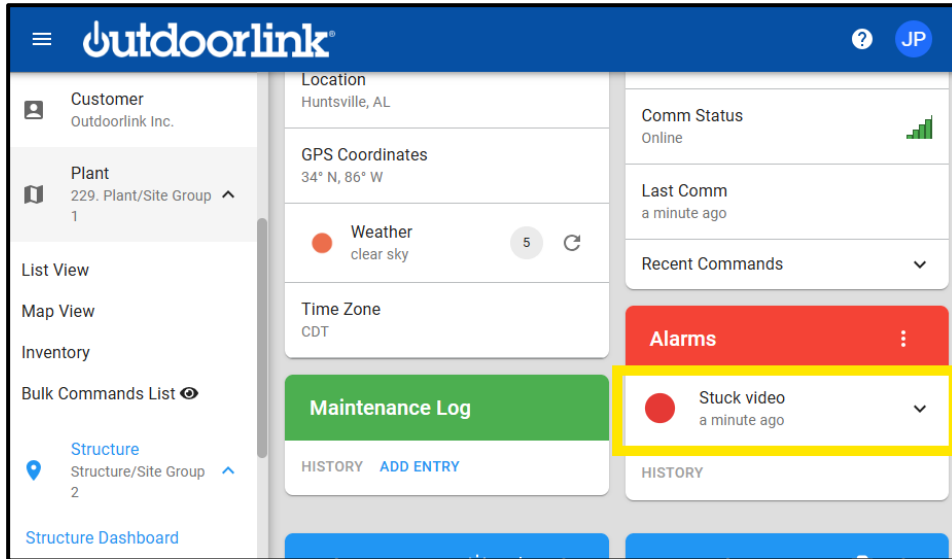


In the Clearable Alarms window select **No sensor, No display, No video, No Video out, Stuck video**, then click **Save Settings** under the Non-Clearable Alarms window.

### Verify Stuck Video

Verify Stuck Video Alarm is functioning by pausing the advertisement cycling so that the displayed image does not change. Wait ~ 2 minutes. A stuck video alarm should appear on the structure dashboard in the Alarms window.

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Once you have verified that the stuck video alarm functions resume advertisement scrolling and clear the alarm by clicking the **dropdown arrow** next to the alarm. Click **CLEAR**.

## Verify No Video Alarm

Verify no video alarm is functioning by disconnecting the HDMI IN cable on the controller. Wait 2 minutes. A “No video” alarm should appear on the structure dashboard in the Alarms window.

Once you have verified that the no video alarm functions reconnect the media player HDMI cable to the HDMI IN connection on the controller. The unit should auto clear the alarm within 2 minutes once the sensor detects content has been restored on the display.

## Verify No Video Out Alarm

Verify no Video out alarm is functioning by turning off the display. Wait 2 Minutes. A “No video out” alarm should appear on the structure dashboard in the Alarms window.

Once you have verified that the no video out alarm works, turn on the display. The unit should auto clear the alarm within 2 minutes once the sensor detects content has been restored on the display.

## Verify No Sensor

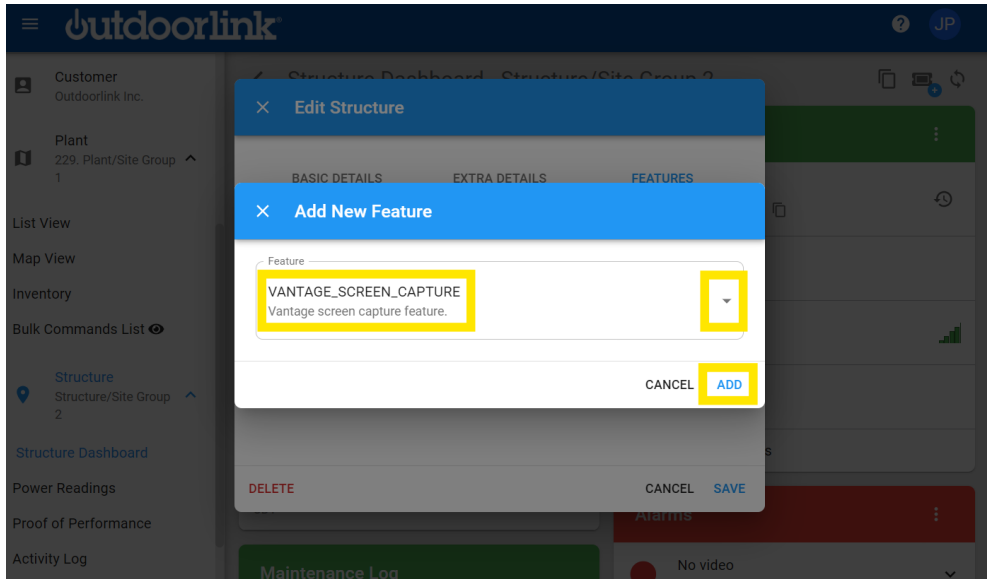
Verify no Sensor alarm is functioning by disconnecting the display sensor from the SENSOR port on the controller. . A “No Sensor” alarm should appear on the structure dashboard in the Alarms window within 30 seconds.

Once you have verified that the no sensor alarm works, clear the alarm. Reconnect the sensor. The unit should auto clear the alarm within 2 minutes once the sensor is detected.

## Screenshot Verification

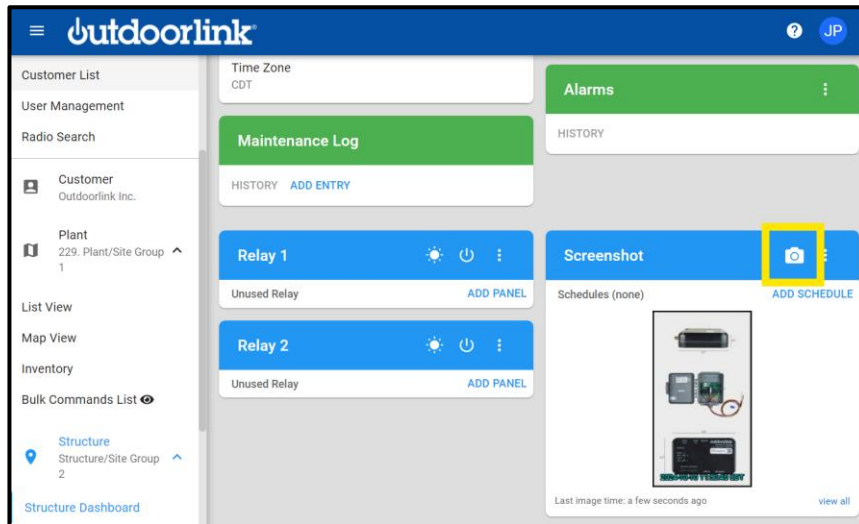
To enable screenshots navigate to the **structure dashboard**. Click the **3 dots** at the top right of the Structure Details window. Click **Edit Structure**. Click the **FEATURES** tab. Click **ADD** next to Feature Licenses. Click the **drop down arrow**. Select **VANTAGE\_SCREEN-CAPTURE**, then click **ADD**.

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Ensure the **radio button** is set to enabled next to the VANTAGE\_SCREEN\_CAPTURE under the Feature Licenses.

Take a screenshot to verify the correct installation. In the structure dashboard click on the **camera icon** in the screenshot window, then click **TAKE PICTURE**. The picture will display in the screenshot window.



**Vantage installation is now complete.**

## Portal Operation

For detailed Portal instructions see the Portal User Guide on the Outdoorlink website.  
<https://outdoorlinkinc.com/documentation/>

# Troubleshooting

## Cellular Communications

If the controller is installed inside of a metal or location where it is not able to connect to the cellular network when closed it may require an external antenna to be routed outside of the enclosure.

The Vantage has two antenna modes: internal and external. By default, it is set to internal mode when shipped.

- To enter external antenna mode, press and hold the PORT 1 button for 5 seconds.
- The STATUS LED light will rapidly blink for five seconds and no blink for one second if the device is in external antenna mode and connected to a cellular network.
- To exit external antenna mode, press and hold PORT 1 for ~ 5 seconds. You should observe the blink pattern change to a constant blink with no pause.
- Contact ODL support if you are still experiencing issues.