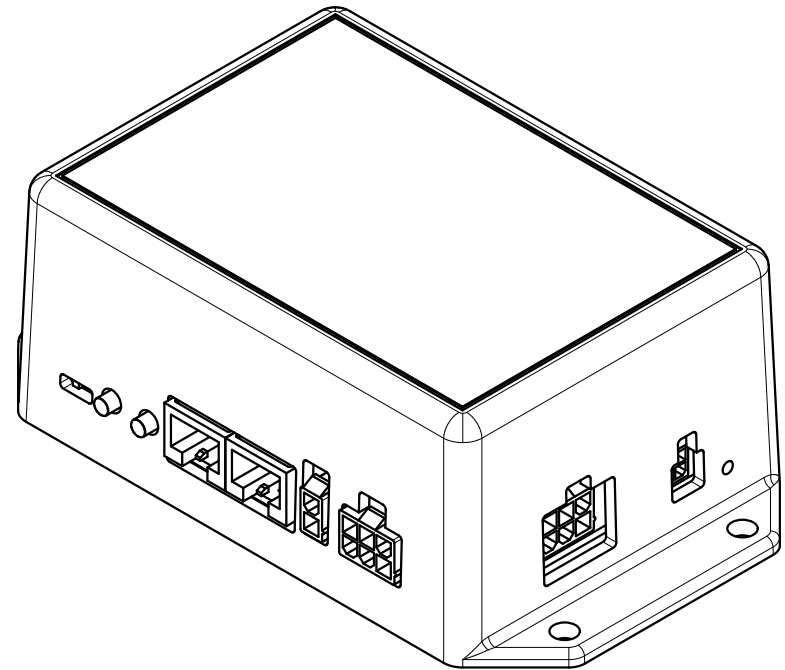


# NEXUS<sub>21</sub>

TECHNOLOGY IN MOTION

## Universal Control Hub



### **NOTE:**

**If your Lift Installation Instructions show any other type of control, ignore those steps and use the ones contained in this manual.**

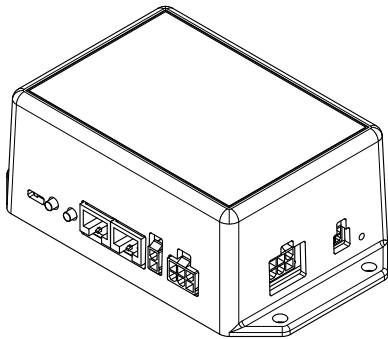
# Table of Contents

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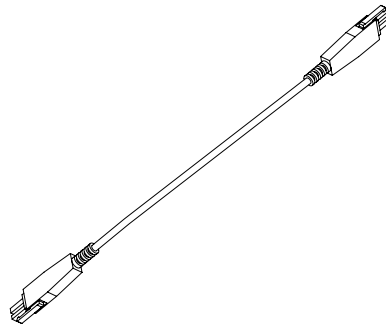
|                                           |                |
|-------------------------------------------|----------------|
| <b>Parts &amp; Hardware List</b>          | <b>Page 3</b>  |
| <b>Warranty &amp; Return Policies</b>     | <b>Page 4</b>  |
| <b>General Information &amp; Overview</b> | <b>Page 6</b>  |
| <b>Setup</b>                              | <b>Page 10</b> |

# Parts List

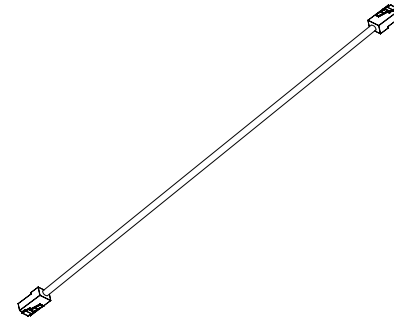
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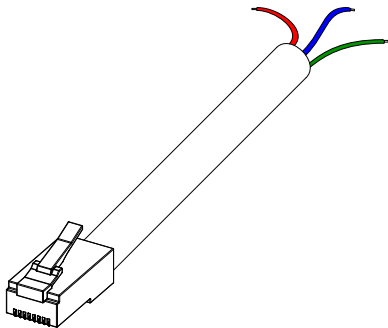
**Universal Control Hub**



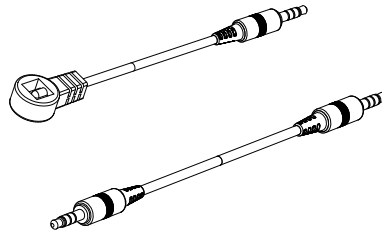
**DC Power Cable**



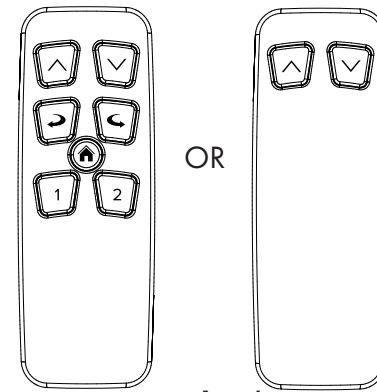
**Ethernet Cable**



**Contact Closure Cable**



**Direct & Indirect IR Cables**



**Handset\***

\* Handset may vary depending on lift system

# 10-Year Full Replacement Warranty

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Nexus 21 products are manufactured to the highest standards of quality and we are proud to provide the industry's longest, most comprehensive warranty: 10 years of full-replacement coverage.\*

Nexus 21's dedicated product-support specialists are ready to assist you with any questions. We ask that our specialists be consulted before any repairs or modifications are attempted, as these may void the product warranty.

---

## How It Works:

### Step 1:

If you experience any problem with a Nexus 21 system, call our Product-Support Team at 1-480-306-5462.

### Step 2:

We'll guide you through some of our basic troubleshooting procedures to help identify any issues. The majority of reported issues are resolved with us on the first call without a need for replacement parts or systems.

### Step 3:

In the event that you do need a replacement part or system, we'll ship it to you right away, along with a prepaid UPS return shipping label and a package for the defective part or system to be returned to our office. Nexus 21 will cover the shipping cost of the replacement part or system within the continental United States and Canada (excludes Hawaii, Alaska and Puerto Rico). Shipping costs for replacement parts or systems shipped internationally will be covered up to a value of \$50. Any additional shipping costs, including applicable duties and taxes, are the responsibility of the customer or receiving party.

---

## The Details:

Nexus 21 warrants all systems to be free from defects in material and workmanship from the date of purchase until the end of the coverage period (shown below). The warranty includes all parts, motorized components, electronics and metal parts. If a Nexus 21 system or part proves to be defective in material or workmanship during the expressed warranty period, Nexus 21 will replace it free of charge. If the exact original purchase product is not available (due to upgraded designs or discontinuation of a model), the defective product will be replaced with a similar product of equal or greater value. The replacement will then be covered by the balance of the time remaining on the customer's original warranty. A Nexus 21 product-support representative will determine whether a part or an entire system should be replaced.

### \* Coverage periods for the warranty are as follows:

#### Residential and Hotel Use

- All Nexus 21 motorized products (except Apex): 10 years
- Apex Motorized Wall Mount: 5 years

#### Commercial and Educational Use

- All Nexus 21 motorized products (except Apex): 5 years
- Apex Motorized Wall Mount: 3 years

The Nexus 21 full-replacement warranty does NOT cover: any product on which the serial number has been defaced, modified or removed; damage, deterioration or malfunction resulting from accident, misuse, neglect, power surges, fire, water, lightning or other acts of nature; unauthorized product modification; failure to follow manufacturer's recommended installation instructions supplied with the Nexus 21 system; repair or attempted repair by anyone not authorized by Nexus 21; causes external to the product such as electric power fluctuations or failure; use of supplies or parts not meeting Nexus 21 specifications or any other cause which does not relate to a product defect.

**PLEASE NOTE:** In order for any warranty claim to be covered fully under the outlined policy we will require the name, company name or contact information for the original purchaser of the product to qualify the claim. If the information requested cannot be supplied to us or located on file, replacement parts or systems may not be covered under warranty.

# Return Policy

---

## Within 30 Days of Delivery:

Customers may return a Nexus 21 product(s) for any reason within 30 days of the date it is received for a full refund of the purchase price. Shipping charges associated with your order are not eligible for refund. To initiate a product-return request, please review the following conditions:

- The product must be unused and complete. Full or partial assembly of the product may void eligibility for return.
- The product must be returned in its original packaging to ensure it is not damaged during shipping.
- Customers must call Nexus 21 and speak with a representative to initiate a return request.
- All returns are subject to an inspection process by a member of Nexus 21 Product Support before a refund is issued.
- Please allow a minimum of 2 weeks from the date the return is received for a refund to be processed.
- Any Nexus 21 product that is received back and deemed unfit for resale or restock upon inspection due to installation or shipping damage will not be eligible for a full refund.
- Customers are responsible for shipping charges to send the product back to us.
- All returns must be processed back to the original form of payment used in the purchase of the item(s).

Nexus 21 ships each product encased in custom die-cut foam, which is purpose-engineered for vibration dampening to reduce any risks of shipping damage. It is mandated that all product returns be shipped back to Nexus 21 in their original packaging. If you do not have the original packaging, please contact Nexus 21 Product Support at 1-480-306-5462. A new set of packaging materials can be requested and the cost will be deducted from the refund amount.

---

## After 30 Days

Returns received 30-60 days after the product has been delivered are not eligible for a full refund of the purchase price. All returns accepted back during this time frame will be subject to a **restocking fee of 25% of the original purchase price**. The following conditions apply to any returns received within this stated timeframe:

- The product must be unused and complete. Full or partial assembly of the product may void eligibility for return.
- The product must be returned in its original packaging to ensure it is not damaged during shipping.
- Customers must call Nexus 21 and speak with a representative to initiate a return request.
- All returns are subject to an inspection process by a member of Nexus 21 Product Support before a refund is issued.
- Please allow a minimum of 2 weeks from the date the return is received for a refund to be processed.
- Any Nexus 21 product that is received back and deemed unfit for resale or restock upon inspection due to installation or shipping damage will not be eligible for a full refund.
- Customers are responsible for shipping charges to send the product back to us.
- All returns must be processed back to the original form of payment used in the purchase of the item(s).

Nexus 21 ships each product encased in custom die-cut foam, which is purpose-engineered for vibration dampening to reduce any risks of shipping damage. It is mandated that all product returns be shipped back to Nexus 21 in their original packaging. If you do not have the original packaging, please contact Nexus 21 Product Support at 1-480-306-5462. A new set of packaging materials can be requested and the cost will be deducted from the refund amount.

**Nexus 21 will not accept return requests past 60 days of the product being delivered.**

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## To initiate a Return follow the steps listed below:

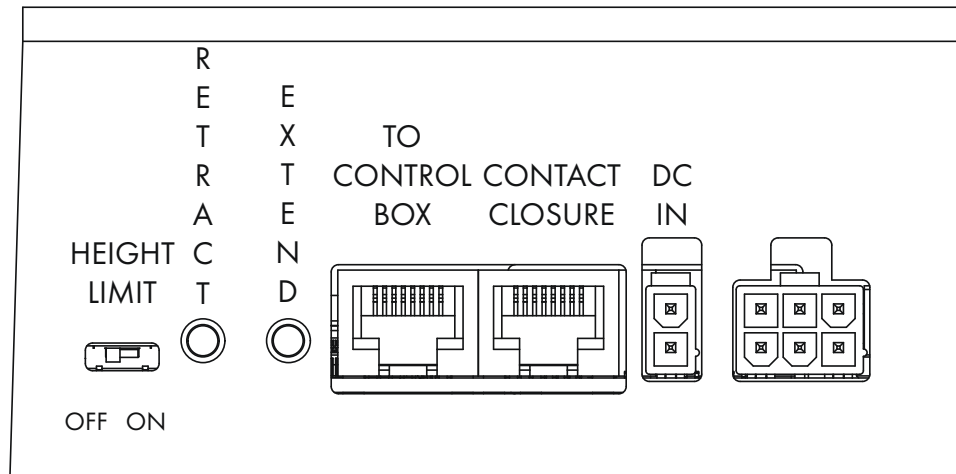
**Step 1:** Call 1-888-981-9919 and request to return your product(s).

**Step 2:** Your Account Manager will provide you with a link to a form for you to fill out digitally.

**Step 3:** Arrange shipment of the product to our office. Emailing the tracking information to support@nexus21.com can expedite the process.

Once your product is received, please allow up to 2 weeks for us to inspect and process your return. You will receive a confirmation email indicating that your return has been successfully processed. Refunds may take 5 - 10 business days depending on your issuing bank.

## **General Information & Overview:**



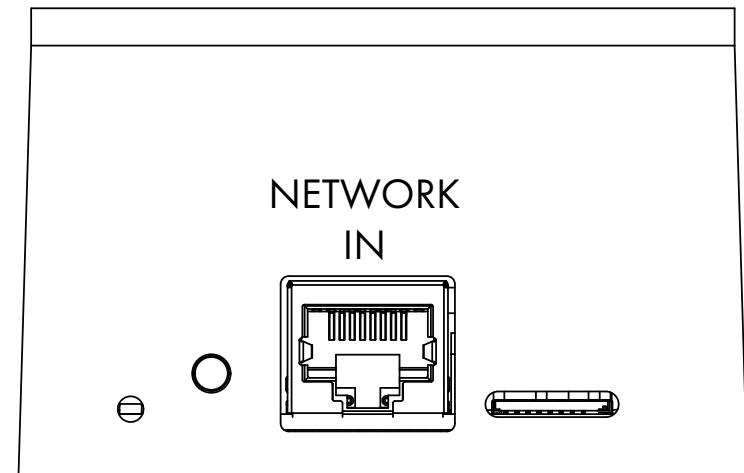
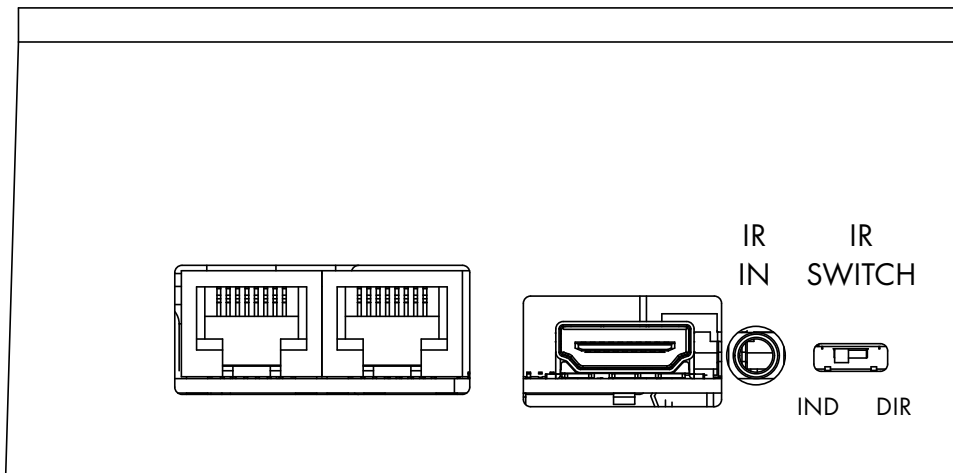
**Height Limit:** This switch is used to set a custom Height Limit on the lift system.

**Retract & Extend:** Used as manual buttons to extend and retract a lift system (lifts with motorized swivel will not function with these buttons).

**To Control Box:** Used to connect the Universal Control Hub to the Control Box for the lift system.

**Contact Closure:** Used to integrate a Control System via dry contact and Normally-Open Relay.

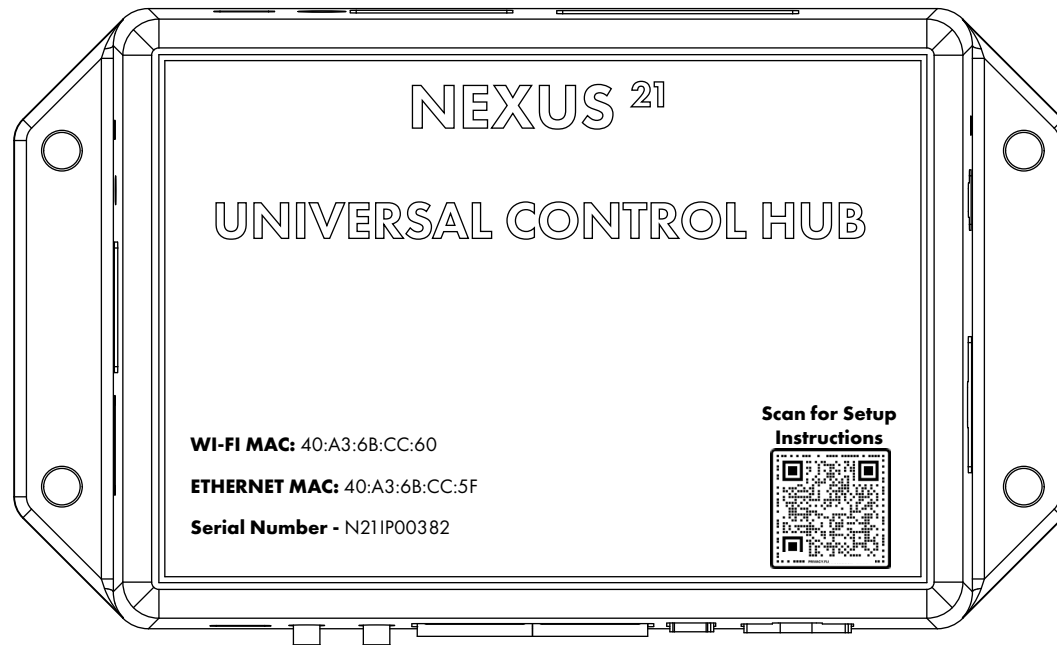
**DC In:** Used to connect the DC Power Cable to the Control Box to power the Universal Control Hub.



**IR In:** Used to integrate a Control System via Direct or Indirect Infrared Control.

**IR Switch:** Switches between Direct and Indirect IR Control.

**Network In:** Used to provide a Wired Ethernet connection to the Universal Control Hub.



If needed, the QR Code on the top of the Universal Control Hub can be scanned for a link to the Controls & Integration page of the Nexus 21 website. There you can obtain a digital copy of this instruction manual, as well as the Nexus 21 IP Scan Tool.

# Setup

This section of the manual will walk you through how to setup the Universal Control Hub with your preferred type of Control.

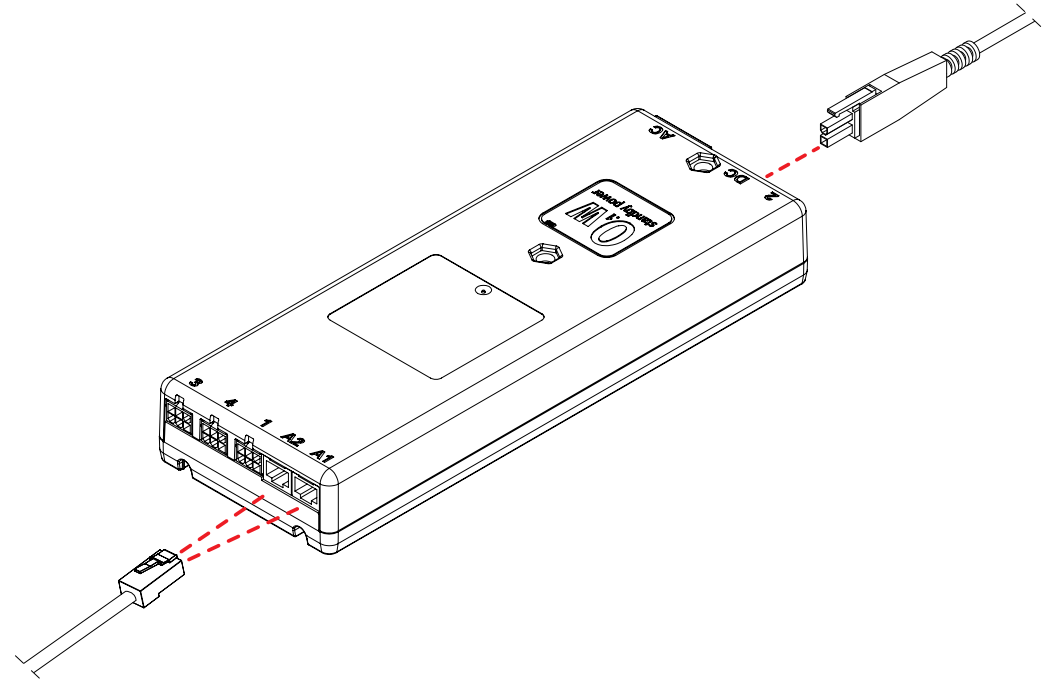
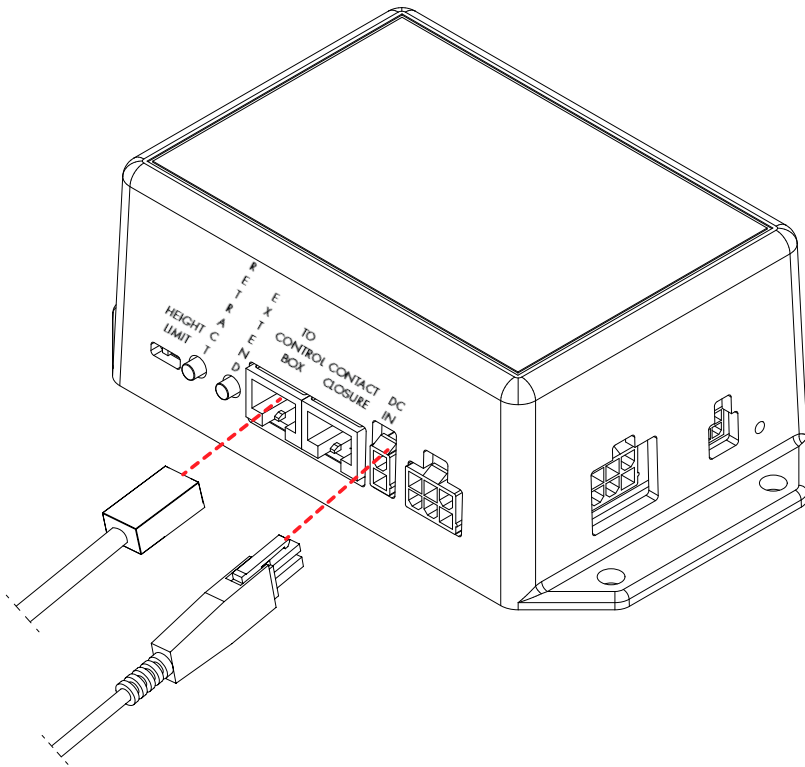
Handset - Page 11

IR - Page 12

Contact Closure - Page 13

Wired IP - Page 14

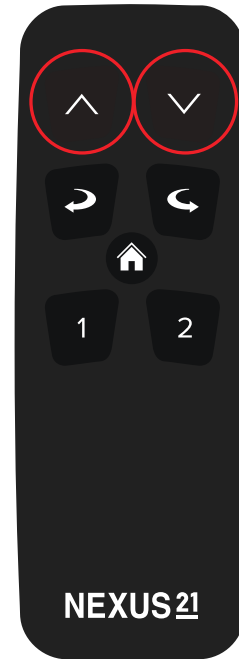
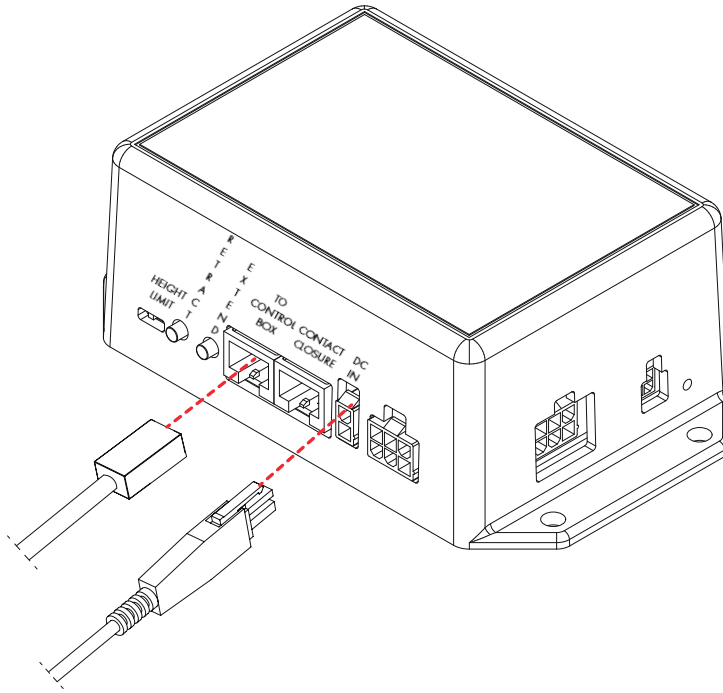
Wireless IP - Page 16



**1a.** Connect the provided DC Power Cable to either of the DC Ports on your Control Box.

**1b.** Connect one end of the provided Ethernet Cable to the “To Control Box” Port on the Universal Control Hub, and the other end to either Port A1 or A2 on your Control Box.

## Handset Setup:

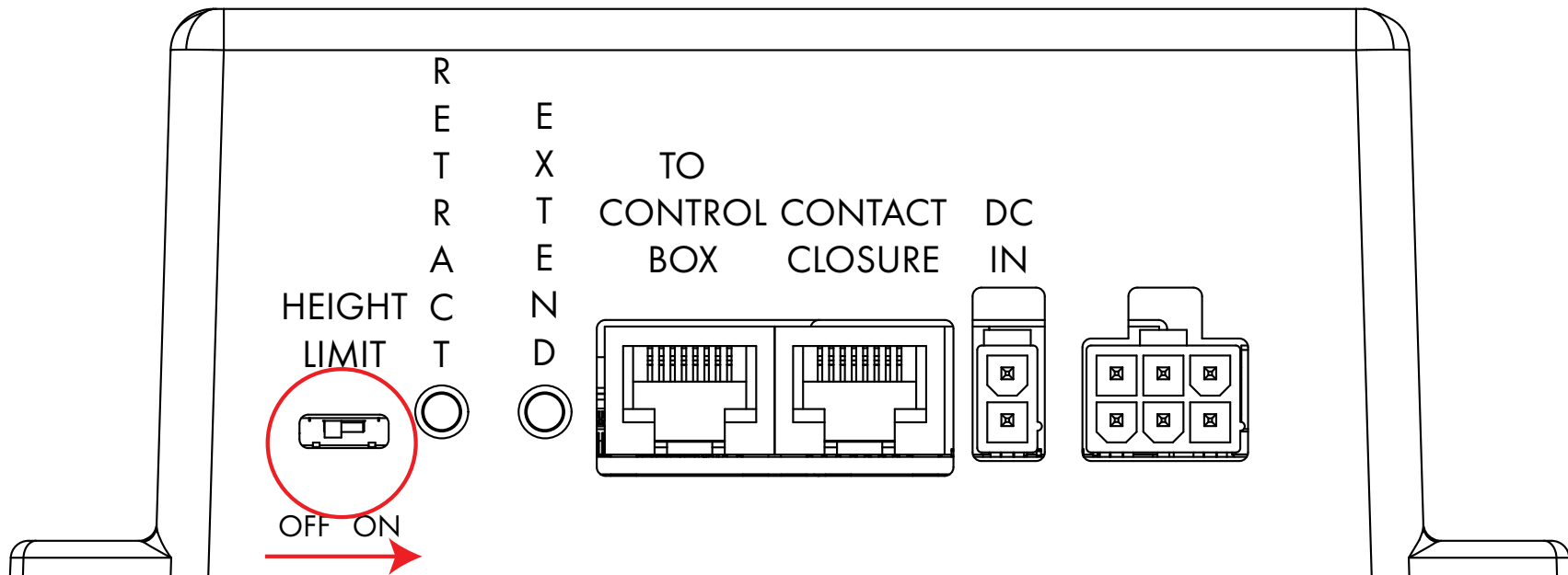


**1.** With the provided DC Power Cable & Ethernet Cable connected to the Universal Control Hub & Control Box, press the Extend and Retract buttons on the handset simultaneously to pair the handset to the Universal Control Hub.

**2.** If your lift system is already installed, test the function of the handset by pressing the Extend button on the handset.

**Note:** If the lift system does not respond, disconnect and re-connect the DC Power Cable on the Universal Control Hub to put the Module back into Pairing Mode, then repeat the previous steps.

## Setting a Height Limit



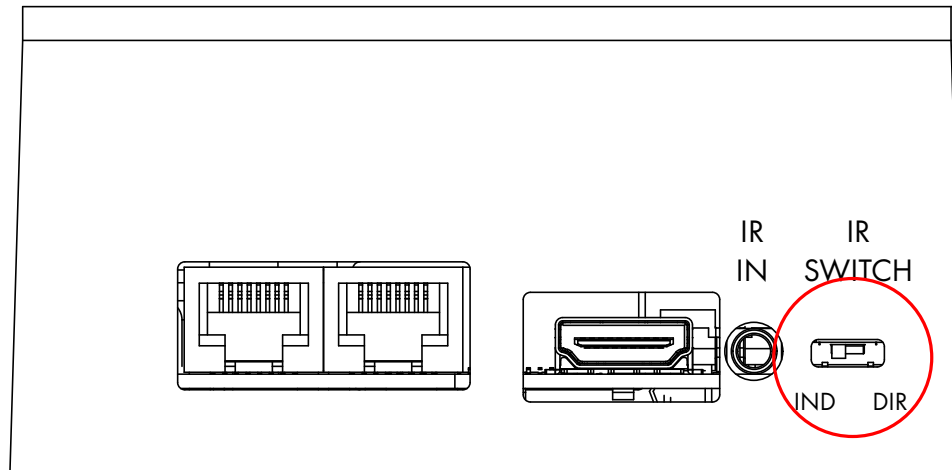
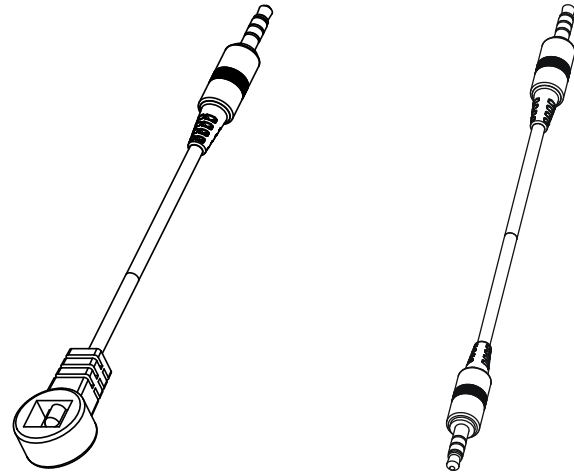
1. With the lift in the retracted state and the Height Limit switch in the OFF position (switch to the left), press the Extend button to begin extending the lift.
2. Press the Retract button while the lift is in motion to stop the lift when it reaches the desired height.
3. Wait 5 seconds then slide the Height Limit Switch to the ON position to set the Height Limit. The lift will now always stop at this height.

Note: If you need to change your height limit, slide the Height Limit Switch to the OFF position to remove the Height Limit, then repeat the above steps.

# Infrared Setup:

Indirect IR Cable

Direct IR Cable



## IR HEX CODES

| COMMAND         | HEX CODE                                                                                                                                                |
|-----------------|---------------------------------------------------------------------------------------------------------------------------------------------------------|
| EXTEND          | 0000 006D 0000 000C 000C 0115<br>000C 0115 000C 0115 000C 00B7<br>000C 00B7 000C 00B7 000C<br>00B7 000C 00B7 000C 0115 000C<br>0115 000C 0115 000C 0255 |
| RETRACT         | 0000 006D 0000 000C 000C 0115<br>000C 0115 000C 0115 000C 00B7<br>000C 00B7 000C 00B7 000C<br>00B7 000C 0115 000C 00B7 000C<br>00B7 000C 00B7 000C 0255 |
| STOP            | 0000 006D 0000 000C 000C 0115<br>000C 0115 000C 0115 000C 00B7<br>000C 00B7 000C 0115 000C 00B7<br>000C 00B7 000C 00B7 000C 0115<br>000C 0115 000C 0255 |
| MEMORY 1 (HOME) | 0000 006D 0000 000C 000C 0115<br>000C 0115 000C 0115 000C 00B7<br>000C 00B7 000C 00B7 000C<br>00B7 000C 00B7 000C 00B7<br>000C 00B7 000C 0115 000C 0255 |
| MEMORY 2        | 0000 006D 0000 000C 000C 0115<br>000C 0115 000C 0115 000C 00B7<br>000C 00B7 000C 00B7 000C<br>00B7 000C 00B7 000C 00B7<br>000C 0115 000C 00B7 000C 0255 |
| MEMORY 3        | 0000 006D 0000 000C 000C 0115<br>000C 0115 000C 0115 000C 00B7<br>000C 00B7 000C 00B7 000C<br>00B7 000C 00B7 000C 00B7<br>000C 0115 000C 0115 000C 0255 |

1. Connect either one of the provided IR Cables to the IR IN Port on the Universal Control Hub.
2. If using the Direct Connect Infrared Cable, move the IR Switch to DIR. If using the Indirect Infrared Cable, move the IR Switch to IND.

# Contact Closure Setup:

## Requirements:

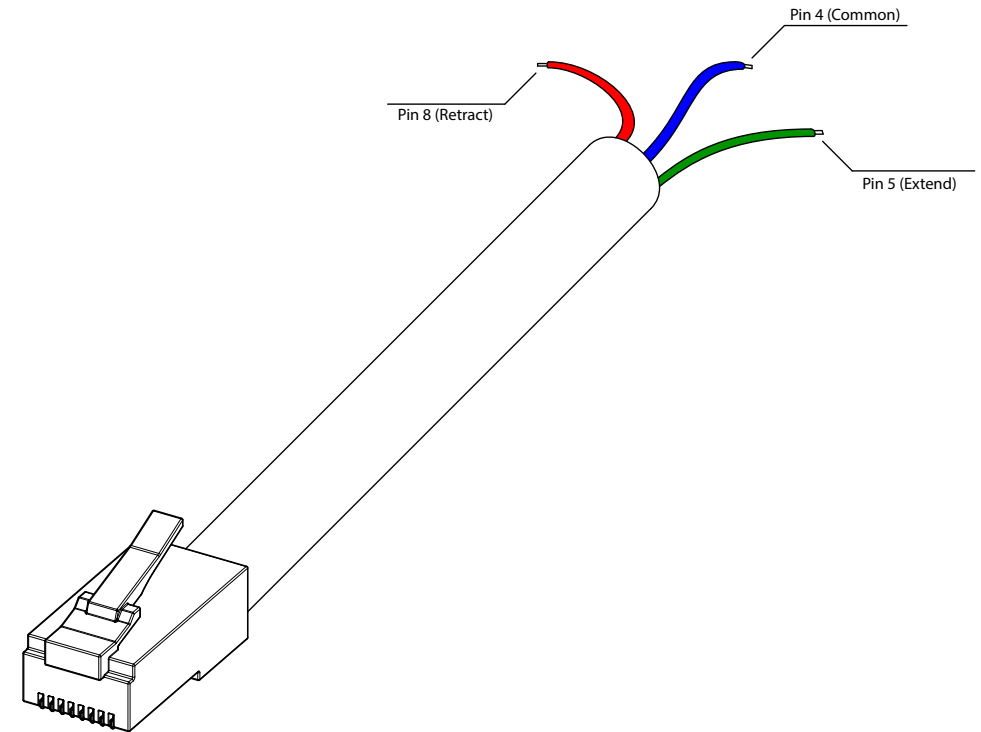
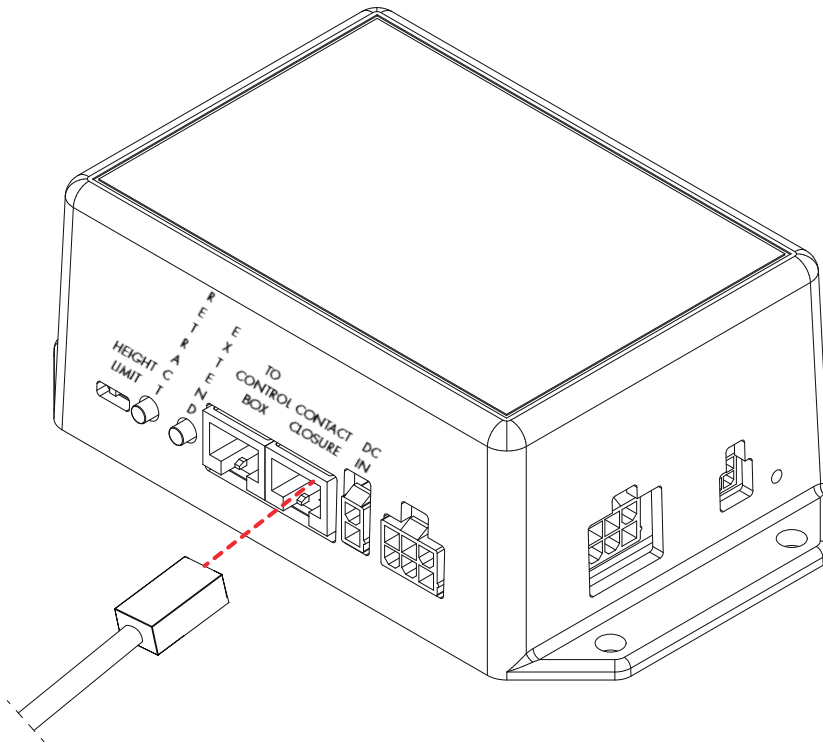
- Two **Normally Open** relays
  - Common Wire Jumped between both relays
    - 750ms momentary pulse commands
- NO 12v OR RS232**

## Colored Wire Legend:

**Blue** - Common (Pin 4)

**Green** - Extend (Pin 5)

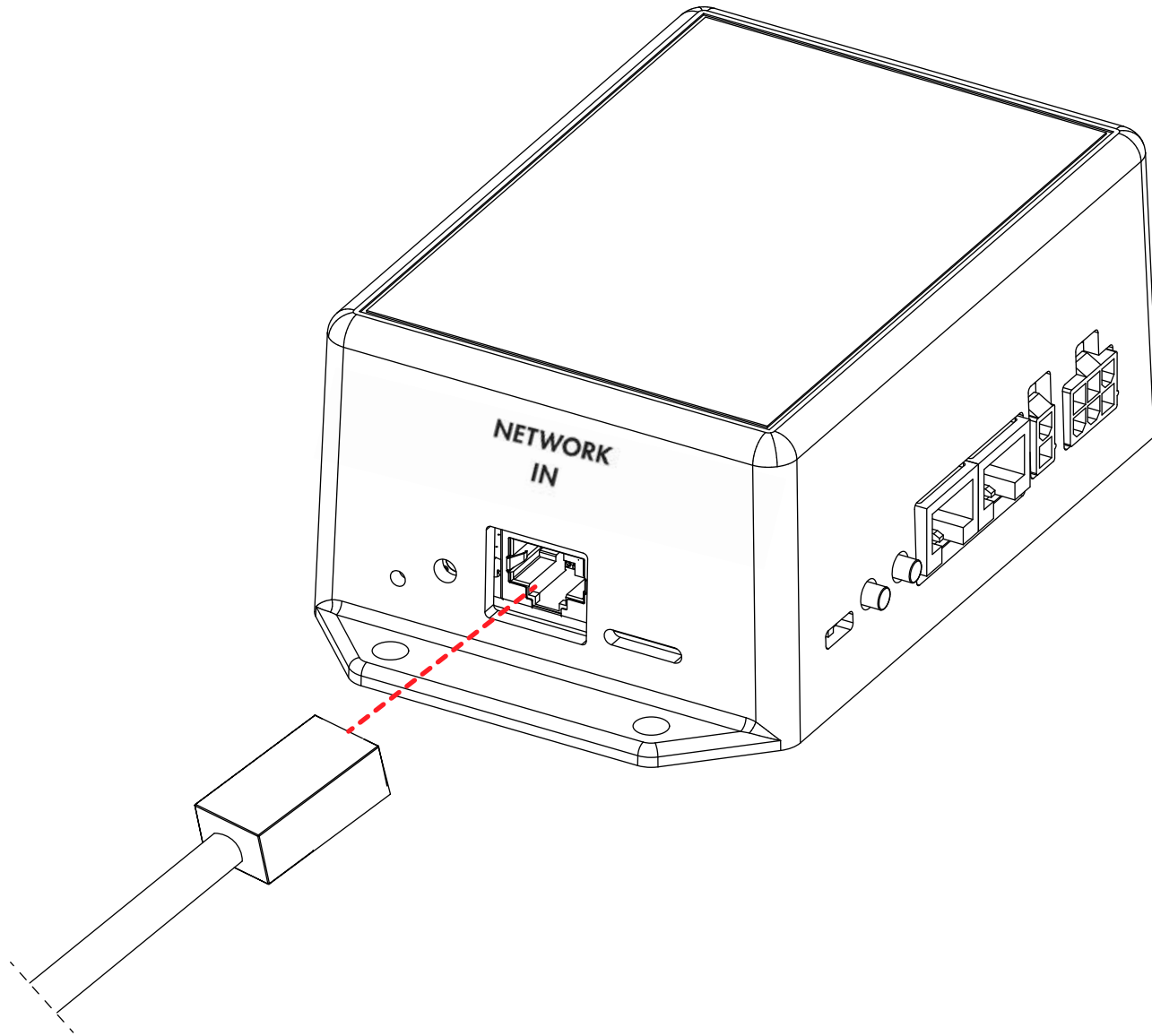
**Red** - Retract (Pin 8)



**1.** Connect one end of your Contact Closure Cable to the Contact Closure Port on the Universal Control Hub.

**2.** Connect the Extend and Retract wires to their own relays on your control system. Supply and connect a Jumper wire to the Common wire between the relays used for the Extend and Retract wires.

## Wired IP Setup:

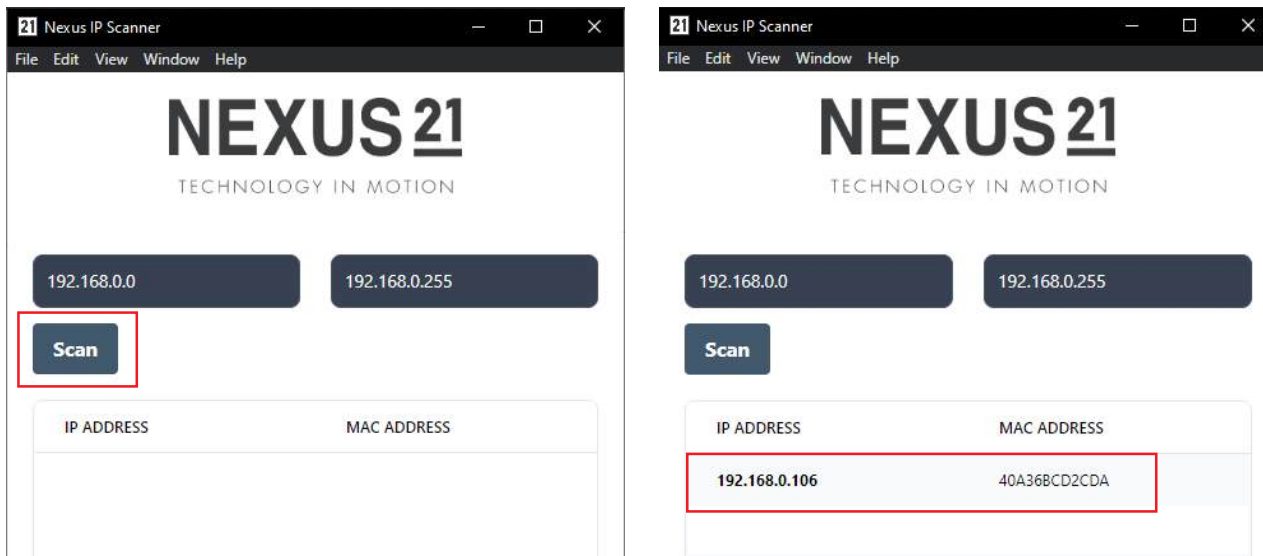


1. Connect your Ethernet cable (not provided) to the Network In Port on the Universal Control Hub.

### IMPORTANT NOTE ABOUT LOCATING THE UNIVERSAL CONTROL HUB:

The Universal Control Hub must remain located near the Control Box for the Lift System in order to connect to its power source. Because of this, your Ethernet cable must be long enough to reach inside the TV enclosure, where the Universal Control Hub is located, to connect it to your network.

## Using the Nexus<sup>21</sup> IP Scan Tool

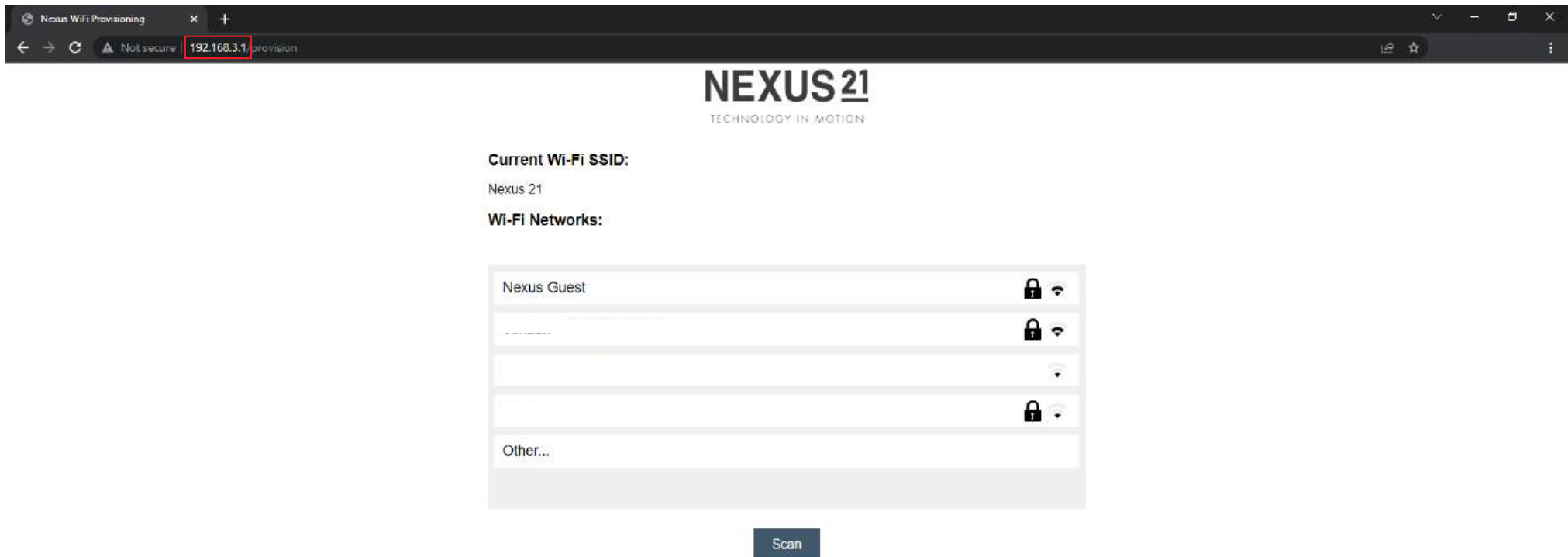
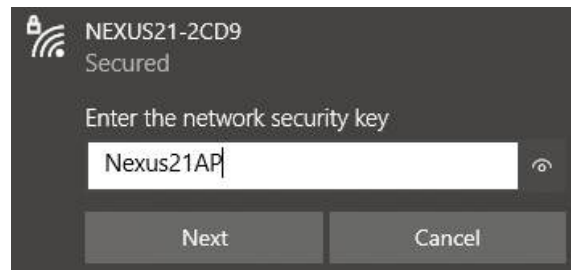


**2.** Using a Windows PC, download and open the Nexus 21 IP Scan Tool and click “Scan” at the top to find the Universal Control Hub on your Network, along with its corresponding IP Address. The Nexus 21 IP Scan Tool can be found at <https://www.tvlift.com/dealer-portal/resources/installers-resources/controls-integration/>

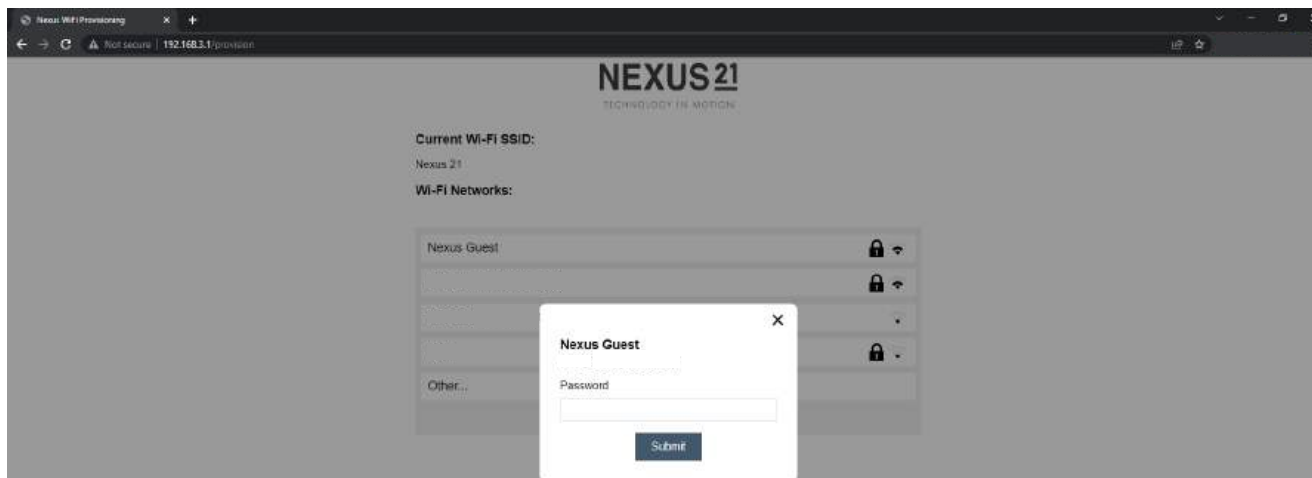
**Note:** If a Windows PC is not available, search your network for the MAC Address listed on the bottom of the Universal Control Hub.

## Wireless IP Setup:

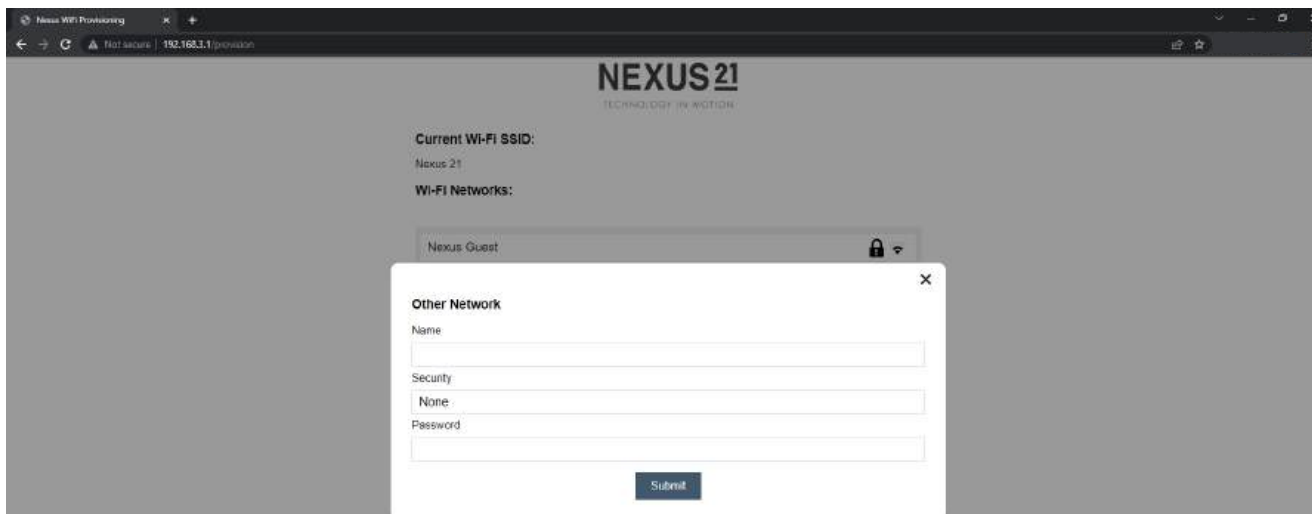
For the following steps, ensure your computer is near the Universal Control Hub, otherwise the access point may not populate on your list of Available Networks.



1. Locate and select the access point on your Mac, PC, or Smartphone named "NEXUS21-XXXX" and enter: **Nexus21AP** as the security key.
2. Open a web browser and navigate to <http://192.168.3.1>



If "Other" is selected

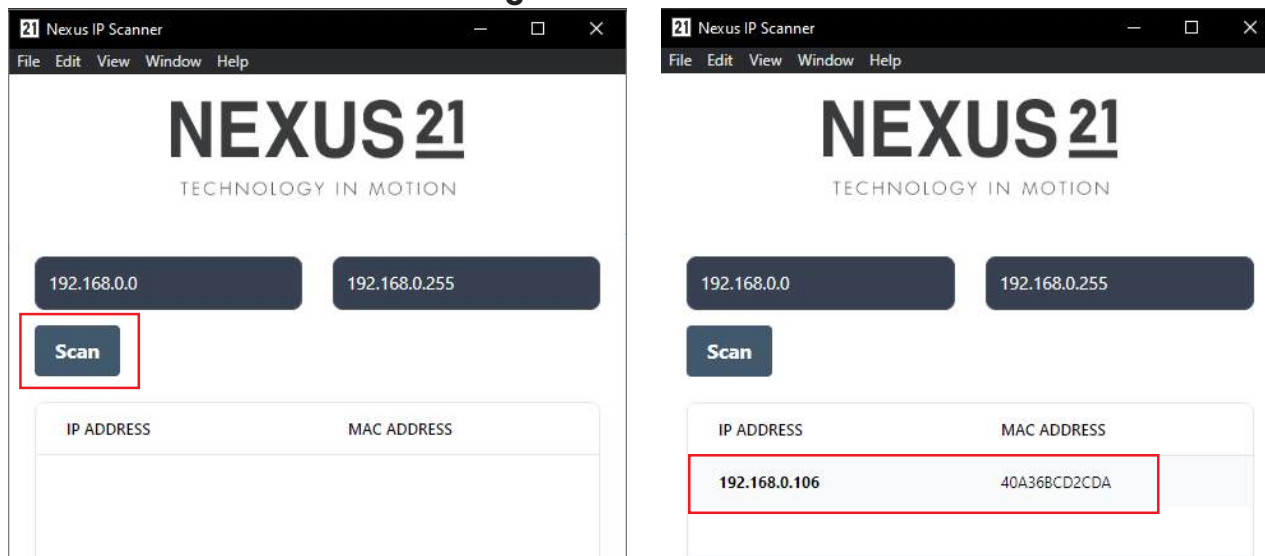


**3a.** Allow the webpage to scan the available Wireless Networks, then select your Wireless Network from the list. If your SSID does not appear, scroll to the bottom of the list and select "Other".

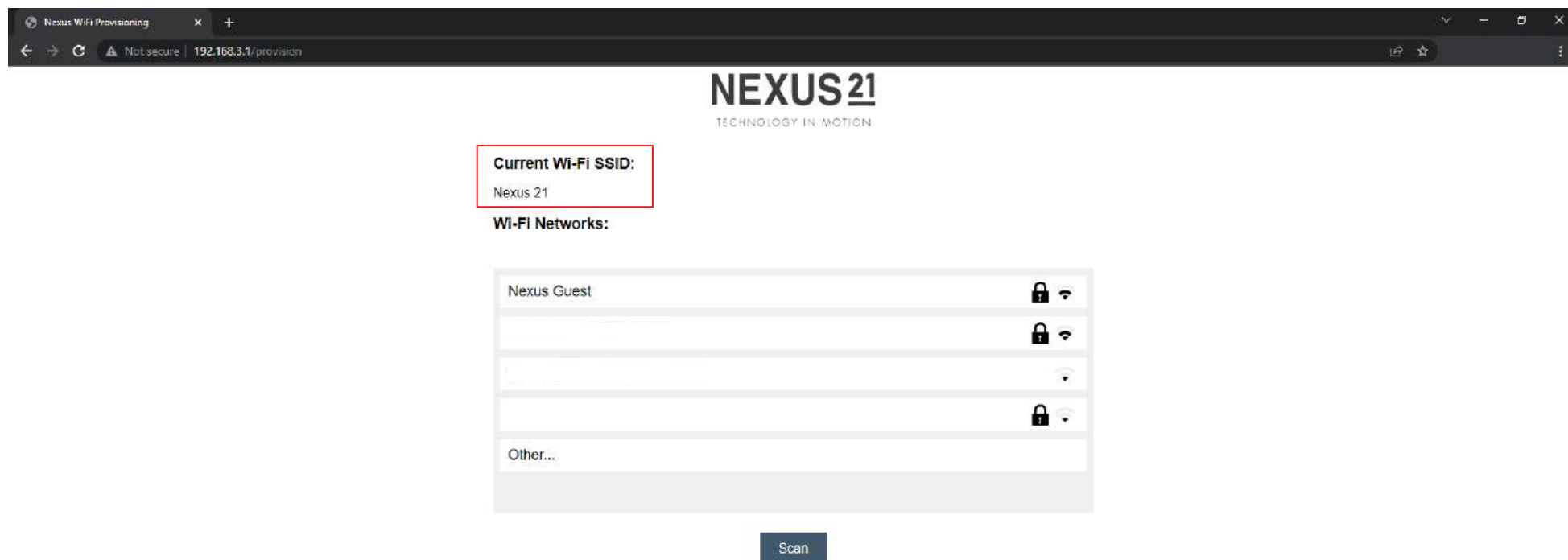
**3b.** Enter the security settings for your Wireless Network then click Submit.

**Note:** Your device may re-join your Wireless Network, and the loading animation may appear stuck at this time. Ignore it and proceed to the next step.

## Using the Nexus<sup>21</sup> IP Scan Tool



## Checking the Current SSID Using a Browser



**4.** Using a Windows PC, download and open the Nexus 21 IP Scan Tool and click “Scan” at the top to find the Universal Control Hub on your Network, along with its corresponding IP Address. The Nexus 21 IP Scan Tool can be found at <https://www.tvlift.com/dealer-portal/resources/installers-resources/controls-integration/>.

**Note:** If a Windows PC is not available, repeat steps 1-3 and check the “Current Wi-Fi SSID” section of the setup page to confirm the device has connected, then search your network for the Wireless MAC address listed on the bottom of the Universal Control Hub.

# IP Integration Information

Nexus 21 Universal Control Hub has drivers for most Control Systems. A list of supported drivers can be found at [www.chowmainsoft.com](http://www.chowmainsoft.com) under the Driver Modules tab.

Documentation is included with each driver that provides detailed information about commands, installation, and setup procedures.

**Note:** All drivers for Savant can be found directly through Savant's Database.

## Support Information:

Contact Chowmain with any issues regarding integration or driver questions, if you are unsure of whether or not the issue relates to the integration or the driver, contact Nexus 21 Product Support for assistance.

### **Nexus 21 Product Support**

Phone: 480-306-5462

Email: [support@nexus21.com](mailto:support@nexus21.com)

#### Hours:

7:00 AM to 4:00 PM MST Mon. - Thu.

7:00 AM to 2:30 PM MST Fri.

Closed Sat. & Sun.

### **Chowmain Driver Support**

Phone: +61 3 9028 6999

Email: [support@chowmainsoft.com](mailto:support@chowmainsoft.com)

#### Hours:

8:30 AM to 4:30 PM AEST Mon. - Fri.

Closed Sat. & Sun.

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www.nexus21.com

1 - 888 - 991 - 6166

