4 channel lightLINK
Zone-Specific Lighting

Contents

Specifications

Input Power	24VDC@1.5A Max.
Analog Outputs	(4) 0-10VDC 125mA Max/Output
Terminal Wire Guage	26 - 16 AWG
Tightening Torque	0.3-0.4 Nm

⚠️ **KEEP THESE INSTRUCTIONS**

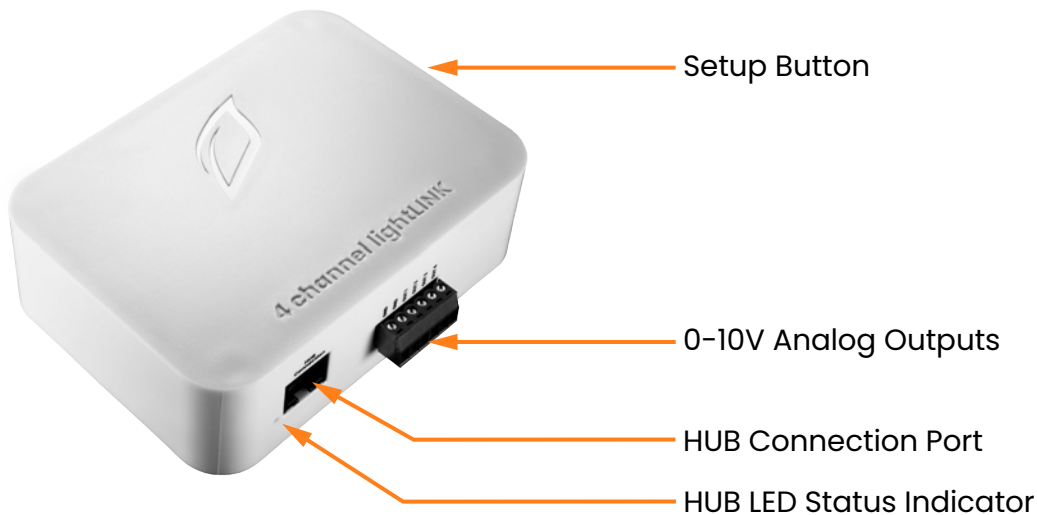*Made in the USA*

Overview

The 4 channel lightLINK connects Growlink's intelligent controllers to 0-10V devices in your growing environment.

4 channel lightLINK is intended for:

- 0-10V control of light dimming
- 0-10V Fan speed control
- 0-10V Variable Speed/Frequency Drives (VSD, VFD)
- Miscellaneous 0-10V control requirements

Setup Button

0-10V Analog Outputs

HUB Connection Port

HUB LED Status Indicator

External Features

Setup Button: Readdresses the 4 channel lightLINK module.

0-10V Analog Outputs: Drives 0–10V-controlled equipment.

HUB Connection Port: RJ-45 connector port for power & data.

HUB LED Status Indicator: Indicates device power and HUB communication status.

Warnings and Notices

This is a precision electronic instrument that requires careful handling and maintenance to ensure reliability. Failure to read, understand, and comply with warnings and installation requirements may result in property damage, personal injury, or death.

WARNING

READ & UNDERSTAND THE ENTIRE MANUAL BEFORE INSTALLATION OR OPERATION.

Danger: Electrocution Hazard

Disconnect power before performing maintenance or service on the system or its components to prevent equipment damage or electrical shock. Ensure proper grounding at the marked chassis ground terminal for continued protection against electric shock. All electrical equipment and wiring must be installed in compliance with national and local electrical codes. This product is for indoor use only in dry locations (0-75% RH, non-condensing). Use caution when servicing plumbing and drain the system away from electrical components and connections. Connect the system and components to GFCI fault-protected energy sources to reduce the risk of electric shock. Replace serviceable parts only with manufacturer-recommended components.

IMPORTANT SAFETY INFORMATION

This Product Is Not Intended for Life Safety Applications

Do not install in hazardous locations. Do not rely on this equipment as the sole control mechanism for life safety applications.

Installation Requirements

Follow all applicable plumbing and electrical codes when installing this product. This manual is intended for individuals with adequate electrical and mechanical experience who comply with federal, state, and local laws governing the installation, service, and repair of electrical, HVAC, and related equipment. Incorrect installation, service, or repair may result in personal injury and/or property damage. The manufacturer and seller assume no liability for misinterpretation or improper use of the information provided.

Indoor Use Only

This product is designed for indoor mounting only and must be protected from weather and direct sunlight.

Prevent Overheating

Maintain adequate airflow around the system to prevent overheating of system components.

Power Supply Warning

Only use the intended or included power supply. Do not exceed the maximum ratings specified on the product's serial label or in this manual. Any power supply exceeding specified energy levels must be current-limited or fused to prevent overcurrent damage.

Dielectric Grease Recommendation

In humid environments, apply dielectric grease to RJ-45 HUB connections to prevent moisture-related corrosion. Recommended products include Loctite LB 8423 Grease, DuPont Molykote 4/5, CRC 05105 Di-Electric Grease, Super Lube 91016 Silicone Dielectric Grease, and other silicone or lithium-based insulating greases. Apply a small amount of grease to RJ-45 plug contacts before inserting them into the HUB connection port.

California Proposition 65 Warning

This product may contain chemicals known to the State of California to cause cancer, birth defects, or other reproductive harm. Wear skin and eye protection when handling hazardous chemicals.

Installation Instructions

Before Installation

For optimal protection, install the unit with the power connection facing downward to minimize the risk of water entering the enclosure. This product is designed for indoor installation only, as the enclosures are not waterproof.

Before connecting or disconnecting any cables, disconnect power from all devices to prevent potential damage to components.

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Mounting the Enclosure

For optimal performance and easy service access, mount the 4 channel lightLINK outside the growing area to reduce exposure to humidity and moisture. If installed in a humid environment, use a sealed or weatherproof enclosure. Mount above plants, benches, and cable runs to prevent water damage to connectors and circuitry. Position centrally to sensor locations with enough space for all connections. Account for rolling benches, and use Growlink cable extensions if needed.

Follow these tips for best results:

- Mount the 4 channel lightLINK away from drips, condensation, and water equipment such as misters, foggers, and humidifiers.
- Ensure space for connections and service access.
- Use a weatherproof enclosure for high humidity conditions (<70% continuous).
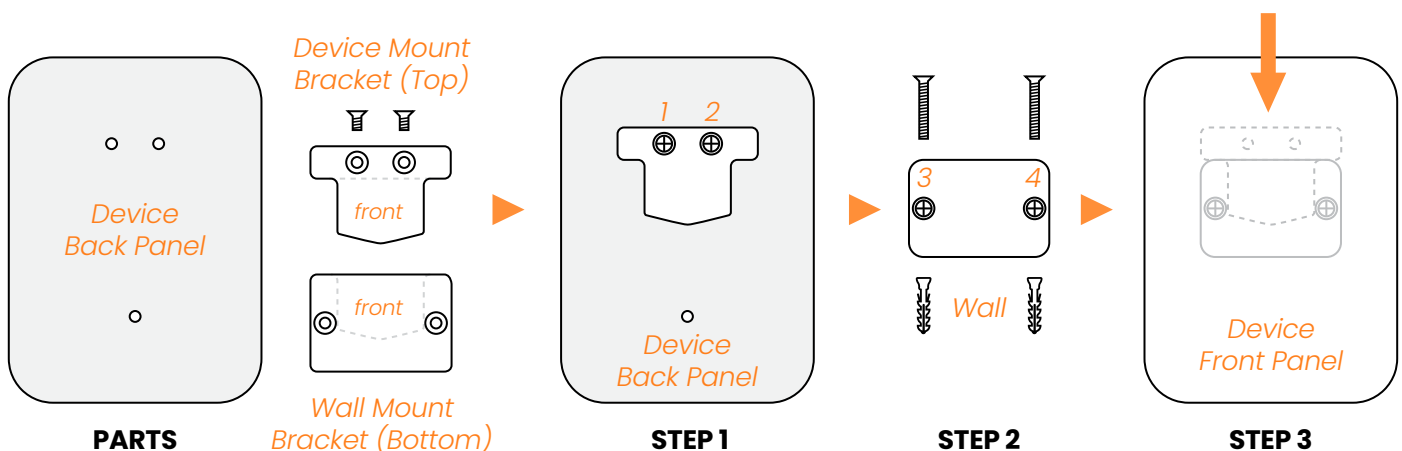- Cover open jacks with masking tape to prevent dust or contamination.

Wall Mounting

See Instructions and Diagram Below

Parts: LINKS Device, LINK Hardware Kit (Mounting Bracket, Screws, Anchors, Mini-Screwdriver).

Tools Needed (if necessary): Level, Marking Tool, Drill

1. Attach the **Device Mount Bracket (Top)** with the provided screws. Ensure the counter-sunk holes face forward. Do not over-tighten.
2. Position the **Wall Mount Bracket (Bottom)** on the wall. Mark the hole locations and install anchors or pre-drill holes if necessary.
3. Slide the **Device** into place, aligning the **(Top) Device Bracket** with the **(Bottom) Wall Mount Bracket**.

Device Mount Bracket (Top)

Device Back Panel

front

front

Wall Mount Bracket (Bottom)

PARTS

1 2

Device Back Panel

STEP 1

3 4

Wall

STEP 2

Device Front Panel

STEP 3

DIN rail Mounting

The DIN rail mounting clips come in handy where standard DIN rail is used for mounting devices. The flat mounting surface and a variety of mounting holes make these clips versatile for mounting LINK devices.

See Instructions and Diagram Below

Parts: LINKS Device, DIN rail Clip Kit, (Sold Separately)

Tools Needed (if necessary): Phillips Screwdriver

1. **Position at an Angle**
   Hold the device at a slight angle with the top part of the DIN rail clip hooking onto the top edge of the rail first. Ensure proper alignment to avoid unnecessary force on the clip.
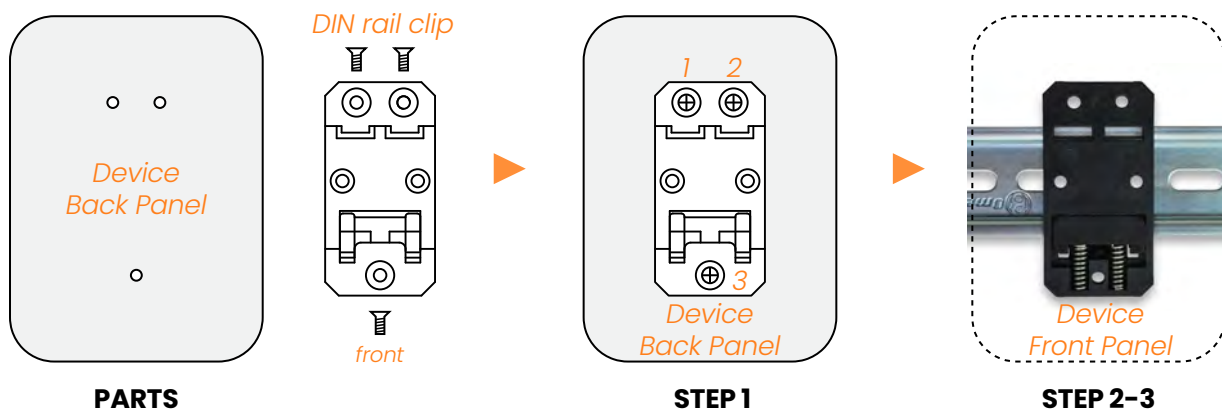
2. **Snap into Place**
   Gently rotate the bottom of the device toward the rail while applying light pressure. The spring-loaded or flexible lower clip should compress slightly and then snap into place once fully engaged.

3. **Verify Secure Fit**
   Check that the device is firmly seated on the rail by giving it a gentle tug. It should not shift or wobble excessively.

4. **Careful Removal: Lift and Pivot**
   To remove, compress the spring of the mount by gently pressing the device upwards. Once spring is compressed, tilt the top of the device outward at an angle. Then, once top is free, guide device downwards to release from DIN rail completely. Do not force or twist to prevent breaking plastic parts.

PARTS   STEP 1   STEP 2–3
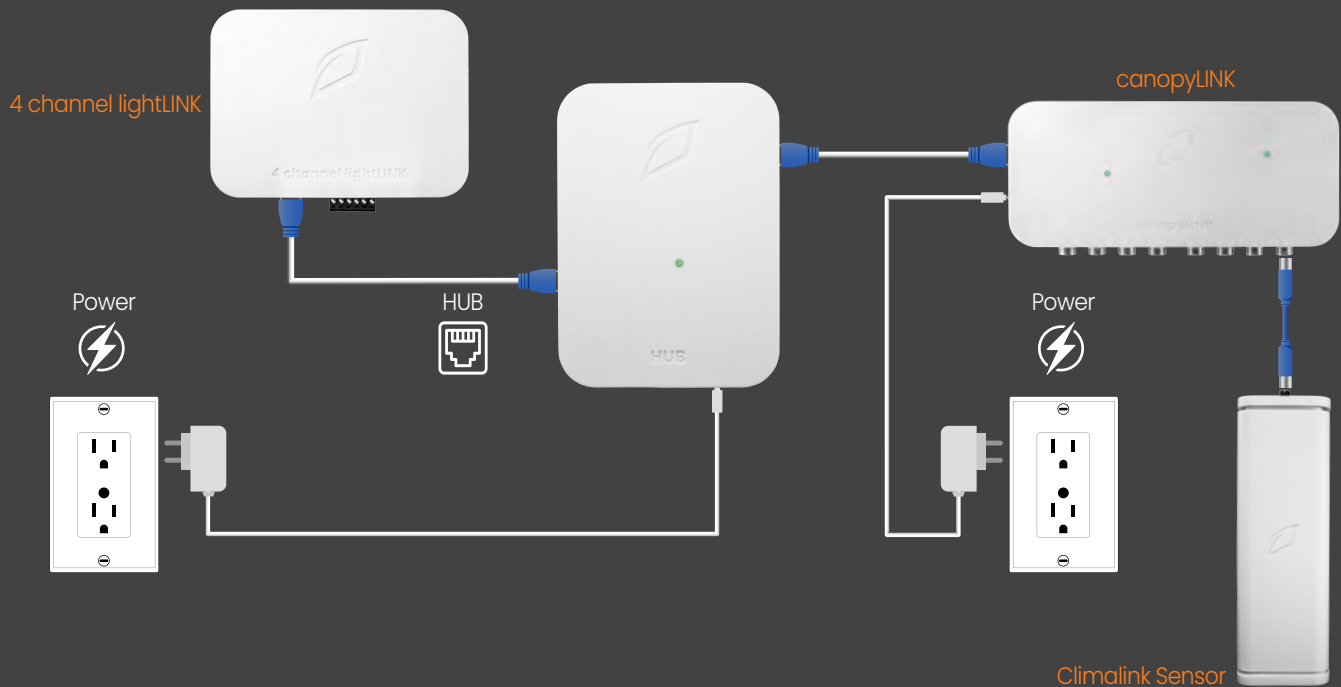
Device Registration

All LINKS devices require an internet connection and must be registered through the Growlink App.

Note: Some LINKS devices can be standalone or require additional modules. **The 4 channel lightLINK requires both a canopyLINK and Climalink sensor for proper operation including High Heat Shutdown.**

HUB Connection Method

Connect the 4 channel lightLINK to an available HUB connection port using an unshielded RJ-45 cable. The device draws power through the network cable upon connection. Ensure the RJ-45 cable is secure, then proceed with manual registration.

Note: A HUB must be registered with the Growlink App before connecting any additional devices. After completing the HUB setup, each device must be connected and registered one at a time to ensure proper addressing and system integrity.
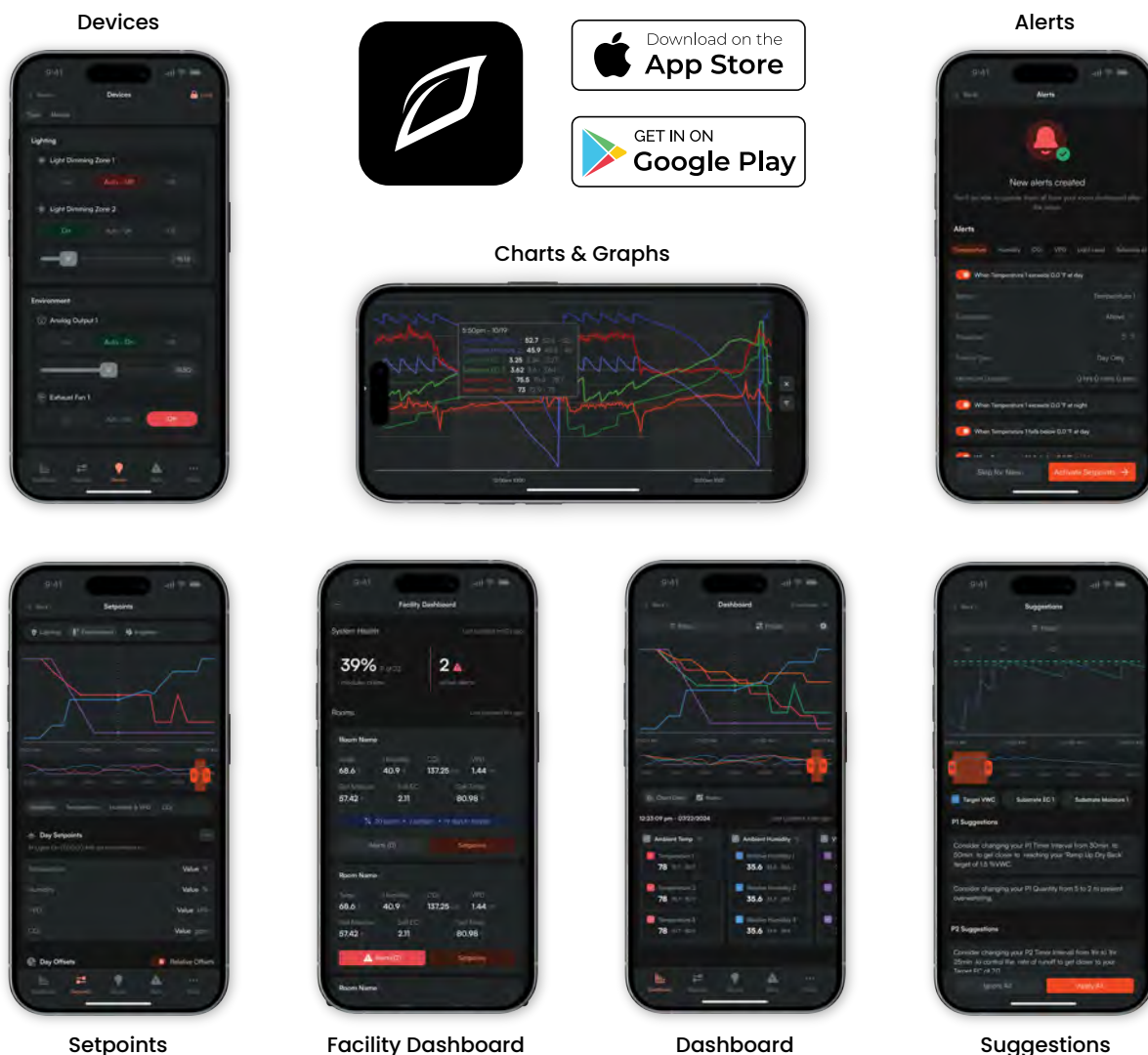

4 channel lightLINK

canopyLINK

Power

HUB

Power

Climalink Sensor

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Connection to the Growlink App

The **Growlink Mobile App** provides remote access to your grow operation, allowing real-time monitoring, system adjustments, and automation of climate, lighting, and irrigation. The app features advanced analytics, push notifications for alerts, and an intuitive interface for efficient management.

The **Growlink Mobile App** enables remote control over your LINKS devices for:

- Firmware Updates
- Manual Device Operation
- Creating Automation Rules

- Viewing Data
- Sending Alerts
- Various Other Features

Devices

Alerts

Download on the
App Store

GET IN ON
Google Play

Charts & Graphs

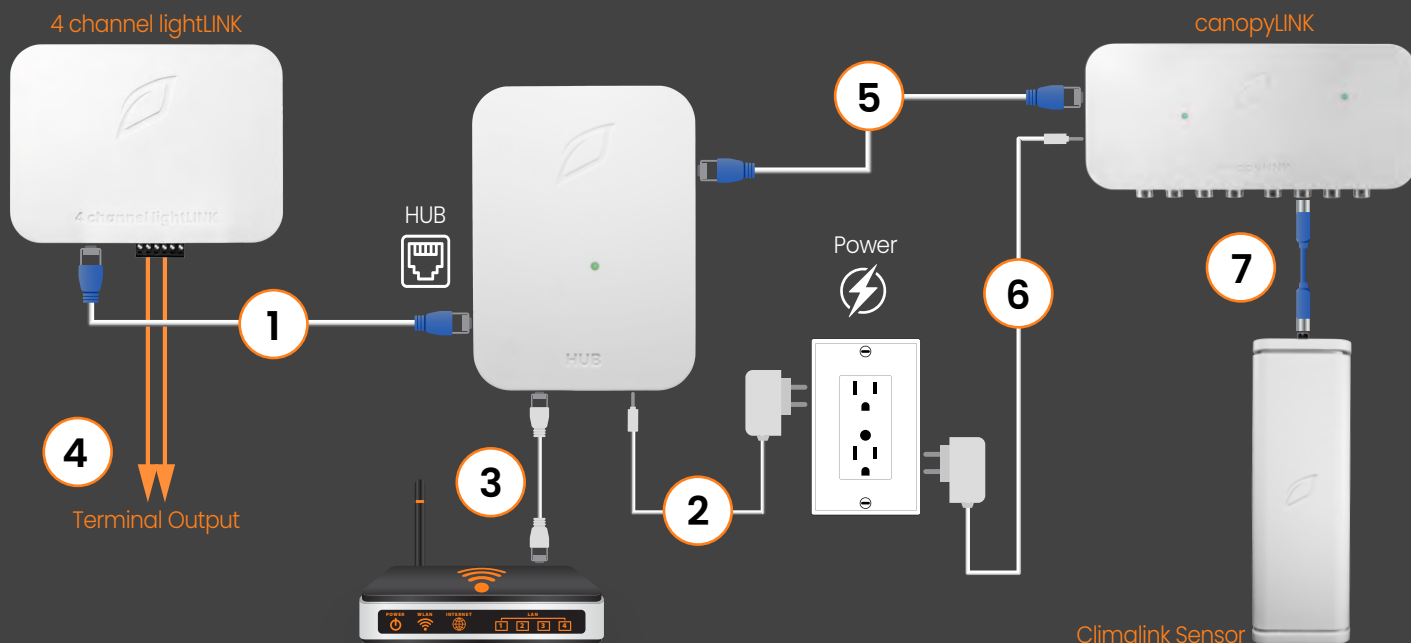**Setpoints**   **Facility Dashboard**   **Dashboard**   **Suggestions**

Device Connections

Connect the 4 channel lightLINK to an available HUB connection port using an unshielded RJ-45 cable. This connection provides both communication and power, as the lightLINK requires the HUB for full functionality.

Once connected, wire lighting fixtures to the four independent 0–10V output terminals. Each channel supports up to 50 fixtures, enabling zone-based dimming control for efficient, scalable lighting management in cultivation environments.

The 4 channel lightLINK requires both a canopyLINK and Climalink sensor for proper operation including High Heat Shutdown.
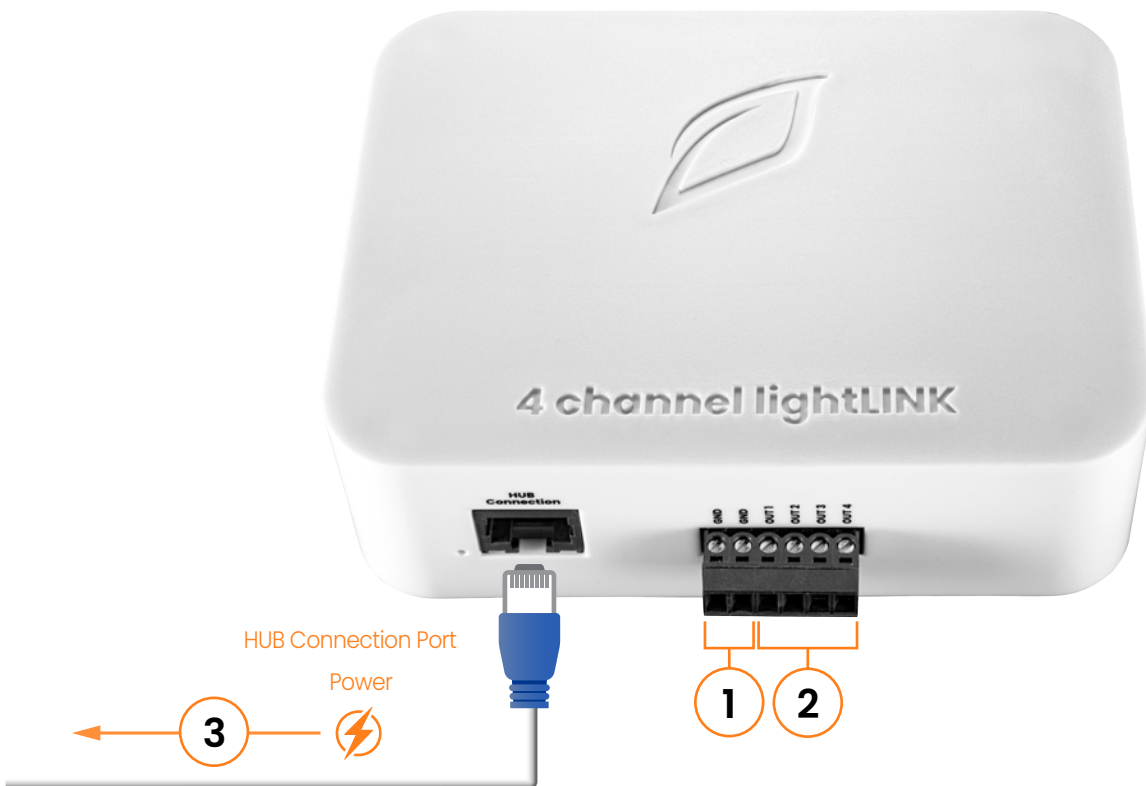

1.   **Device Cable:** Connects the digital lightLINK to a HUB connection port.
2.   **HUB Power Supply:** 24VDC/1 Amp power supply is required to operate the HUB.
3.   **HUB Ethernet Cable:** Connect the HUB to the local network (Optionally, utilize 2.4GHz Wi-Fi).
4.   **Terminal Output:** Terminal block for connecting fixtures.
5.   **canopyLINK Device Cable:** Connects the canopyLINK to the HUB.
6.   **canopyLINK Power Supply:** 24VDC Power Supply
7.   **Climalink Sensor Connection:** M8 Sensor Port Connection

All HUB connection cabling uses standard 8-conductor RJ-45 straight-through wiring with no cross-over. T568B pattern recommended.

LINKS

Wiring terminals are "pluggable" blocks and can be removed from the module by pulling the terminal block away from the module face. This is convenient for wiring and for replacing a module in the event of a failure without the need to remove wiring from the terminals.
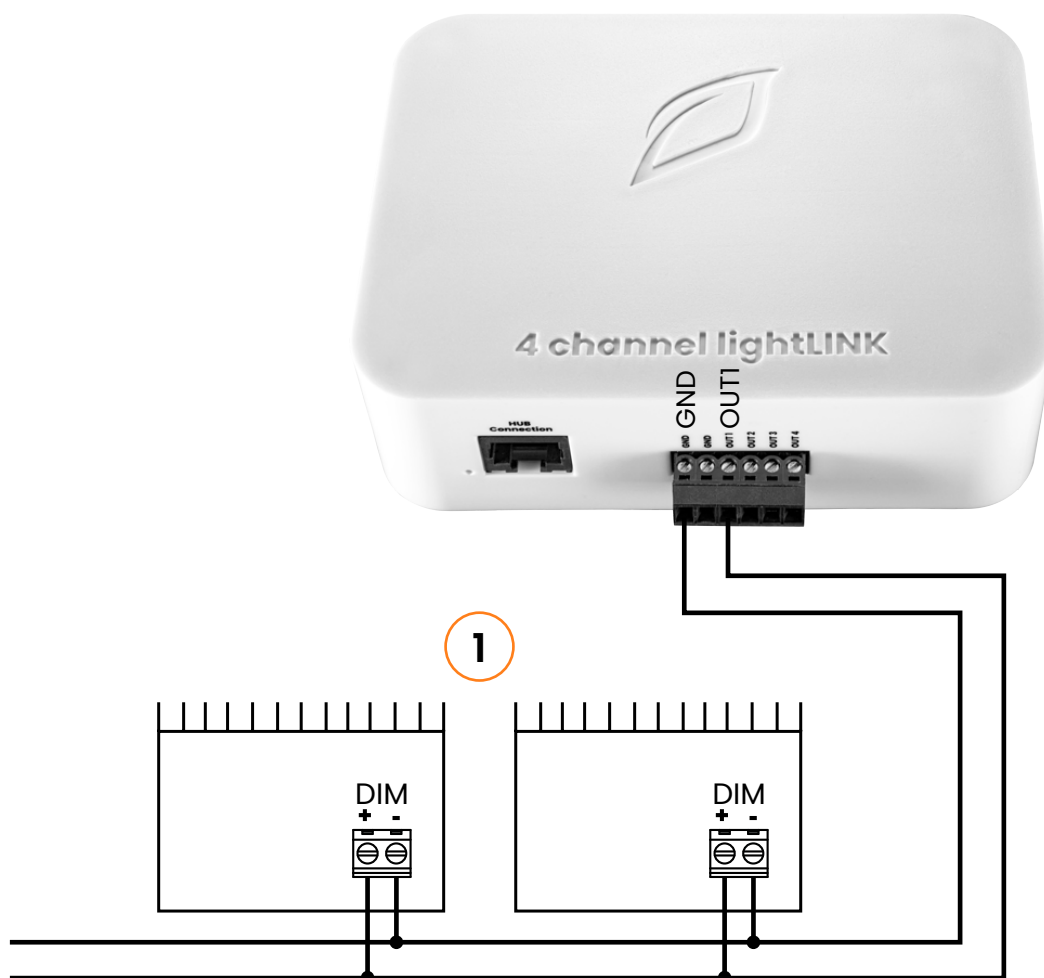
4 channel lightLINK Terminals

The 4 channel lightLINK features four (4) analog 0–10VDC outputs for controlling ballast dimming signals, variable speed drives, and other devices with an analog voltage control input.

HUB Connection Port

Power

1. **GND:** Common DC ground terminals for connections.
2. **Analog Outputs:** (Out 1-4) Sinking/Sourcing DC outputs for driving lighting dimming controls and other equipment with a 0-10VDC analog input. Each channel is capable of driving up to 50 light fixtures (125mA max. per channel).
3. **Power:** Power is provided to the module via the HUB Connection Port.

4 channel lightLINK Outputs, 0-10V (Analog Voltage)

Analog voltage outputs are designed for analog signal control primarily in light dimming and speed control applications. For light dimming, the 4 channel lightLINK allows for up to 50 fixtures (typical) to be driven from a single output channel.

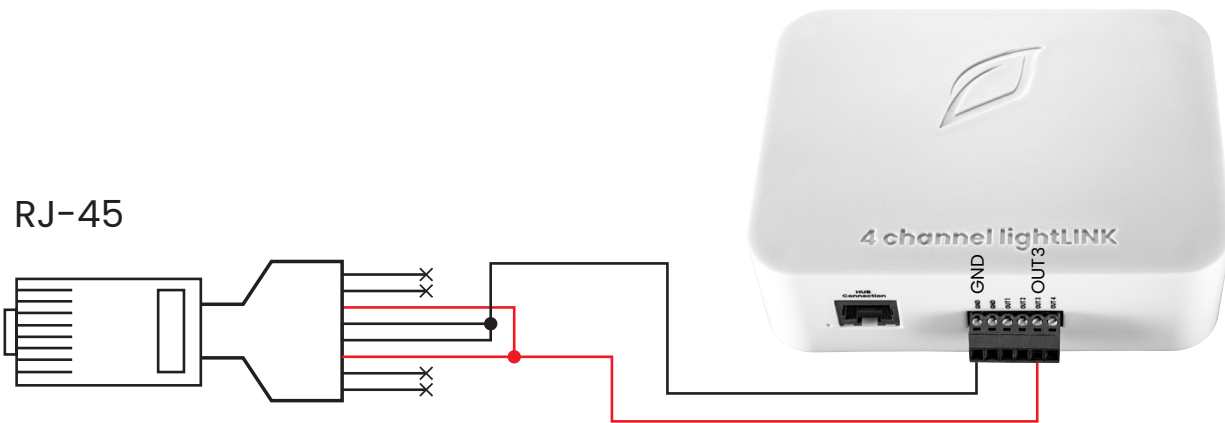1. **Dimmable Ballasts & VFD Motor Controllers:**

    Ballasts and VFD controllers that accept a 0-10V signal may be controlled by one of four (4) analog voltage output channels. Each of the four channels may be set to 0-10VDC independently. Internal feedback sensing manages voltage levels automatically accounting for unit loading.

4 channel lightLINK, Outputs, RJ-45 (Gavita®)

Gavita® fixtures use a RJ-45 connector.

The connections from a standard RJ-45 connector to the 4 channel lightLINK are detailed below.

Example shows connection to Output Channel #3.

RJ-45

4 channel lightLINK Outputs 0-10V, RJ-12

Gavita®, Grower's Choice®, Luxx Lighting®, and many other 0-10V dimmable fixtures use RJ-12 or similar style "phone" cord modular connectors.

The connections from a standard RJ-12 style connector to the 4 channel lightLINK are detailed below.

Example shows connection to Output Channel #2.

RJ-11, RJ-12
If 6-wire cable, do not use outer wires.

Note: If you don't see a component in the wiring diagram that matches your brand of light, contact the manufacturer.

Technical Information

Support

If your device requires troubleshooting beyond what is outlined in this manual, please contact our customer support team at **800.432.0160** or at *support@growlink.com* for assistance with any hardware issues.

You can also visit our knowledge base for additional support and resources. *https://knowledgebase.growlink.ag*

Maintenance & Service

Exterior Cleaning

Wipe the exterior with a damp cloth and mild dish detergent, then dry thoroughly. **Disconnect power before cleaning** to prevent equipment damage.

Storage

Store equipment in a **clean, dry environment** with an ambient temperature between 50-122°F (10-50°C).

Disposal

This industrial control equipment may contain traces of lead, metals, or other environmental contaminants. **Do not discard as municipal waste**. Dispose of the equipment through proper recycling or hazardous waste collection channels. **Wash hands after handling internal components or PCBs.**

Warranty

Growlink Limited Warranty

Growlink warrants that all its manufactured products are, to the best of its knowledge, free from defects in materials and workmanship. This product is warranted for one (1) year from the date of purchase. This warranty is extended to the original purchaser from the date of receipt.

This warranty does not cover damages resulting from abuse, accidental breakage, or modifications, alterations, or installations that do not comply with the provided installation instructions. The warranty applies only to products that have been properly stored, installed, and maintained in accordance with the installation and operation manual and used for their intended purpose.

This limited warranty does not cover products installed or operated under unusual conditions or environments, including but not limited to excessive humidity or extreme temperatures beyond specified limits.

Prior to returning a product, Growlink must be contacted to obtain a return authorization. Returns will not be accepted without prior authorization. For products not purchased directly from Growlink, proof of purchase is required; otherwise, the purchase date will be considered the date of manufacture.

Products that meet the warranty conditions outlined above will be repaired or replaced at Growlink's sole discretion at no charge. This warranty is provided in place of all other warranties, express or implied, including but not limited to any implied warranties of merchantability or fitness for a particular purpose, and is limited to the specified warranty period.

Under no circumstances shall Growlink be liable to the claimant or any third party for damages exceeding the purchase price of the product. Growlink is not responsible for any loss of use, inconvenience, commercial loss, lost time, lost profits, lost savings, or any other incidental, consequential, or special damages arising from the use or inability to use the product. This disclaimer is made to the fullest extent permitted by law and explicitly states that Growlink's liability under this limited warranty, or any extension thereof, is limited to repairing or replacing the product or refunding the purchase price.