ControlGo

Versatile 1-Universe DMX Controller with Touchscreen, RDM, CRMX and Multiple Power Options

QUICK GUIDE

Rev.01 - Preliminary

English version

Thank you for choosing PROLIGHTS

Please note that every PROLIGHTS product has been designed in Italy to meet quality and performance requirements for professionals and designed and manufactured for the use and application as shown in this document.

Any other use, if not expressly indicated, could compromise the good condition/operation of the product and/or be a source of danger.
This product is meant for professional use. Therefore, commercial use of this equipment is subject to the respectively applicable national accident prevention rules and regulations.

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Product user manual can be downloaded from the website www.prolights.it , or can be inquired to the official PROLIGHTS distributors of your territory (***https://prolights.it/contact-us***).

Scanning the below **QR Code**, you will access the download area of the product page, where you can find a broad set of always updated technical documentation: specifications, user manual, technical drawings, photometrics, personalities, fixture firmware updates.

Visit the download area of the product page

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SAFETY INFORMATION

WARNING!

- See https://www.prolights.it/product/CONTROLGO#download for installation instructions.
- Please read carefully the instruction reported in this section before installing, powering, operating or servicing the product and observe the indications also for its future handling.

This unit is not for household and residential use, only professional applications.

Connection to mains supply

- The Connection to the mains supply must be carried out by a qualified electrical installer.
- Use only AC supplies 100-240V 50-60 Hz, the fixture must be electrically connected to ground (earth).
- Select the cable cross section in according with the maximum current draw of the product and the possible number of products connected at the same power line.
- The AC mains power distribution circuit must be equipped with magnetic+residual current circuit breaker protection.
- Do not connect it to a dimmer system; doing so may damage the product.

Protection and Warning against electrical shock

- Do not remove any cover from the product, always disconnect the product from power (batteries or low-voltage DC mains) before servicing.
- Ensure that the fixture is connected to class III equipment operates at safety extra-low voltages (SELV) or protected extra-low voltages (PELV). And use only a source of AC power that complies with local building and electrical codes and has both overload and ground-fault (earth-fault) protection to power class III devices.
- Before using the fixture, check that all power distribution equipment and cables are in perfect condition and rated for the current requirements of all connected devices.
- Isolate the fixture from power immediately if the power plug or any seal, cover, cable, or other components are damaged, defective, deformed or showing signs of overheating.
- Do not reapply power until repairs have been completed.
- Refer any service operation not described in this manual to PROLIGHTS Service team or an authorized PROLIGHTS service center.

Installation

- Make sure that all visible parts of the product are in good visible condition before its use or installation.
- Make sure the point of anchorage is stable before positioning the device.
- Install the product only in well ventilated places.
- For non temporary installations, ensure that the fixture is securely fastened to a load-bearing surface with suitable corrosionresistant hardware.
- Do not install the fixture near sources of heat.
- If this device will be operated in any way di erent to the one described in this manual, it may su er damages and the guarantee becomes void. Furthermore, any other operation may lead to dangers like short circuit, burns, electric shock, etc

T_a 45°C

Max operating ambient temperature (Ta)

- Do not operate the fixture if the ambient temperature (Ta) exceeds 45 °C (113 °F).

T_a 0°C

Minimum operating ambient temperature (Ta)

- Do not operate the fixture if the ambient temperature (Ta) is below 0 °C (32 °F).

Protection from burns and fire

- The exterior of the fixture becomes hot during use. Avoid contact by persons and materials.
- Ensure that there is free and unobstructed airflow around the fixture.
- Keep flammable materials well away from the fixture
- Do not expose the front glass to sunlight or any other strong light source from any angle. Lenses can focus the sun's rays inside the fixture, creating a potential fire hazard.
- Do not attempt to bypass thermostatic switches or fuses.

Indoor use

- This product is designed for indoor and dry environments.
- Do not use in wet location and do not expose the fixture to rain or moisture.
- Never use the fixture in places subject to vibrations or bumps.
- Make certain that no inflammable liquids, water or metal objects enter the fixture.
- Excessive dust, smoke fluid, and particle build up degrades performance, causes overheating and will damage the fixture.
- Damages caused by inadequate cleaning or maintenance are not covered by the product warranty.

Maintenance

- Warning! Before starting any maintenance work or cleaning of the unit, disconnect the fixture from AC mains power and allow to cool for at least 10 minutes before handling.
- Only technicians who are authorized by PROLIGHTS or Authorised service partners are permitted to open the fixture.
- Users may carry out external cleaning, following the warnings and instructions provided, but any service operation not described in this manual must be referred to a qualified service technician.
- Important! Excessive dust, smoke fluid, and particle build up degrades performance, causes overheating and will damage the fixture. Damages caused by inadequate cleaning or maintenance is not covered by the product warranty.

Radio receiver

This product contains a radio receiver and/or transmitter:

- Maximum output power: 17 dBm.
- Frequency band: 2.4 GHz.

Disposal

- This product is supplied in compliance with European Directive 2012/19/EU – Waste Electrical and Electronic Equipment (WEEE). To preserve the environment please dispose/ recycle this product at the end of its life according to the local regulation.
- Don't throw the unit into the garbage at the end of its lifetime.
- Make sure to dispose according to your local ordinances and/or regulations, to avoid polluting the environment!
- The packaging is recyclable and can be disposed.

Lithium-Ion Battery Maintenance Guidelines

Refer to your battery's user manual and/or online help for detailed information about charging, storage, maintenance, transportation and recycling.

The products to which this manual refers comply with:

- 2014/35/EU - Safety of electrical equipment supplied at low voltage (LVD).
- 2014/30/EU - Electromagnetic Compatibility (EMC).
- 2011/65/EU - Restriction of the use of certain hazardous substances (RoHS).
- 2014/53/EU - Radio Equipment Directive (RED).

The products to which this manual refers comply with:

- UL 1573 + CSA C22.2 No. 166 - Stage and Studio Luminaires and Connector Strips.
- UL 1012 + CSA C22.2 No. 107.1 - Standard for power units other than class 2.

FCC Compliance:

- This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

1. This device may not cause harmful interference, and
2. This device must accept any interference received, including interference that may cause undesired operation.

Other approvals

1 - PACKAGING

PACKAGE CONTENT

- 1 x CONTROLGO
- 1 x Eva Case for CONTROLGO (CTRGEVACASE)
- 2 x Soft handle for CONTROLGO (CTRGHANDLE)
- 1 x Neck lanyard with double balancing and adjustable side strips for CONTROLGO (CTRGNL)
- 1 x User manual

OPTIONAL ACCESSORIES

- CTRGABSC: Empty ABS case for CONTROLGO;
- CTRGVMADP: V-Mount adapter for CONTROLGO;
- CTRGQMP: Quick mount plate for CONTROLGO;
- CTRGCABLE: 7,5 m cable for CONTROLGO.

2 - TECHNICAL DRAWING

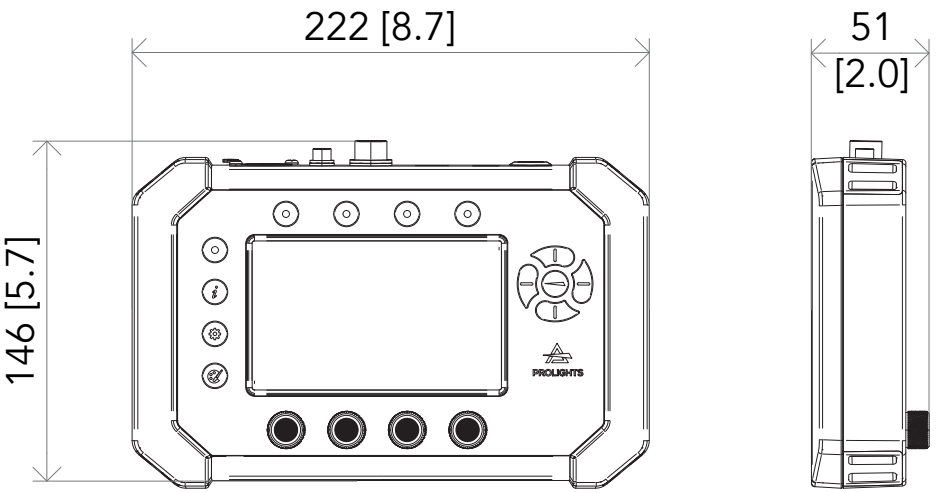


Fig. 01

3 - PRODUCT OVERVIEW

1. DMX OUT (5-pole XLR): These connectors are used for sending an output signal; 1 = ground, 2 = DMX-, 3 = DMX+, 4 N/C, 5 N/C;
2. Weipu SA6: 12-48V - Low Voltage DC connector;
3. Weipu SA12: 48V - Low Voltage DC connector;
4. USB-A Port for Data Input;
5. USB-C Port for 5-9-12-20V PD3.0 Power Input & data transfer;
6. Power Button;
7. HOOK for Soft Handle;
8. Quick function keys;
9. RGB Push Encoders;
10. 5'' Touchscreen Display;
11. Physical Buttons
12. NPF Batteries Slots

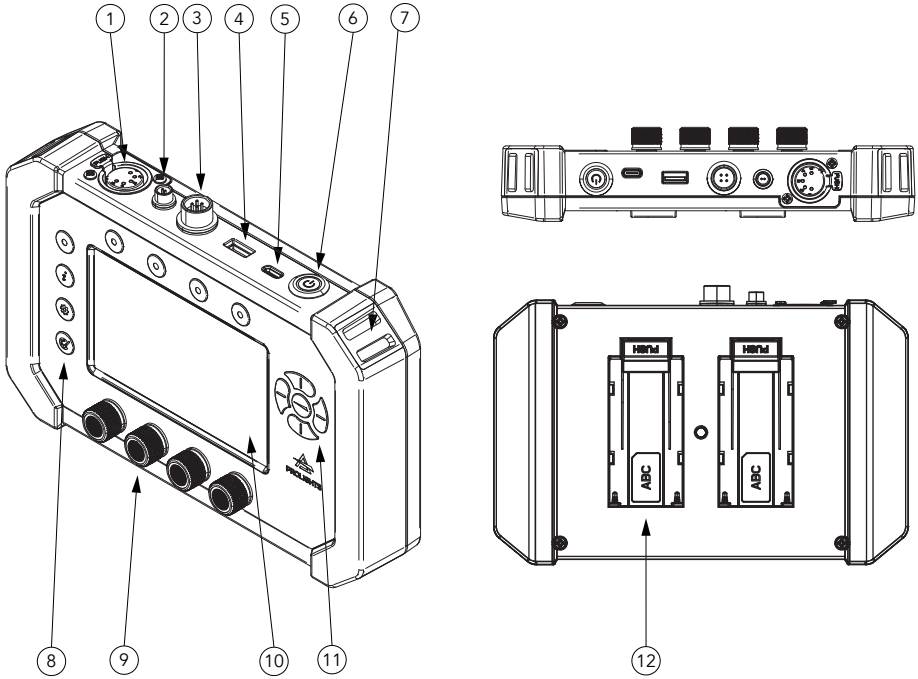


Fig 02

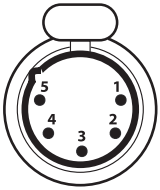
4 - CONNECTION TO THE POWER SUPPLY

ControlGo is equipped with an NP-F battery slot and optional accessory to fit V-Mount batteries. If you want to keep it lighter, you can still source power from the USB C, the Weipu 2 Pin DC input, or from the remote port on board of PROLIGHTS fixtures.
Wired power keep always priority so that you can keep your batteries connected as power backup.
The max power consumption is 8W.

5 - DMX CONNECTION

CONNECTION OF THE CONTROL SIGNAL: DMX LINE
The product has XLR socket for DMX input and output.
The default pin-out on both socket is as the following diagram:

DMX - OUTPUT
XLR socket



Pin1 : GND - Shield
Pin2 : - Signal
Pin3 : + Signal
Pin4 : N/C
Pin5 : N/C

Fig. 03

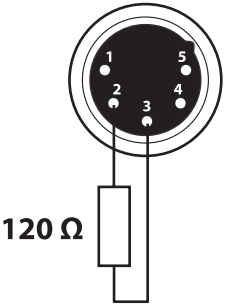
INSTRUCTIONS FOR A RELIABLE WIRED DMX CONNECTION
Use shielded twisted-pair cable designed for RS-485 devices: standard microphone cable cannot transmit control data reliably over long runs. 24 AWG cable is suitable for runs up to 300 meters (1000 ft). Heavier gauge cable and/or an amplifier is recommended for longer runs.
To split the data link into branches, use splitter-amplifiers in the connection line.
Do not overload the link. Up to 32 devices may be connected on a serial link.

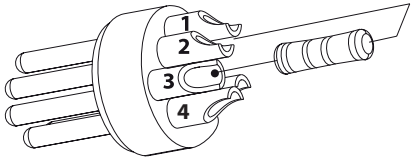
CONNECTION DAISY CHAIN
Connect the DMX data output from the DMX source to the product DMX input (male connector XLR) socket.
Run the data link from the product XLR output (female connector XLR) socket to the DMX input of the next fixture.
Terminate the data link by connecting a 120 Ohm signal termination. If a splitter is used, terminate each branch of the link.
Install a DMX termination plug on the last fixture on the link.

CONNECTION OF THE DMX LINE
DMX connection employs standard XLR connectors. Use shielded pair-twisted cables with 120Ω impedance and low capacity.

CONSTRUCTION OF THE DMX TERMINATION

The termination is prepared by soldering a 120Ω 1/4 W resistor between pins 2 and 3 of the male XLR connector, as shown in figure.





Example:
5 pin XLR connector

Fig. 04

6 - CONTROL PANEL

The product has an 5'' touchscreen display with 4 RGB push encoders and physical buttons for unprecedented user experience.

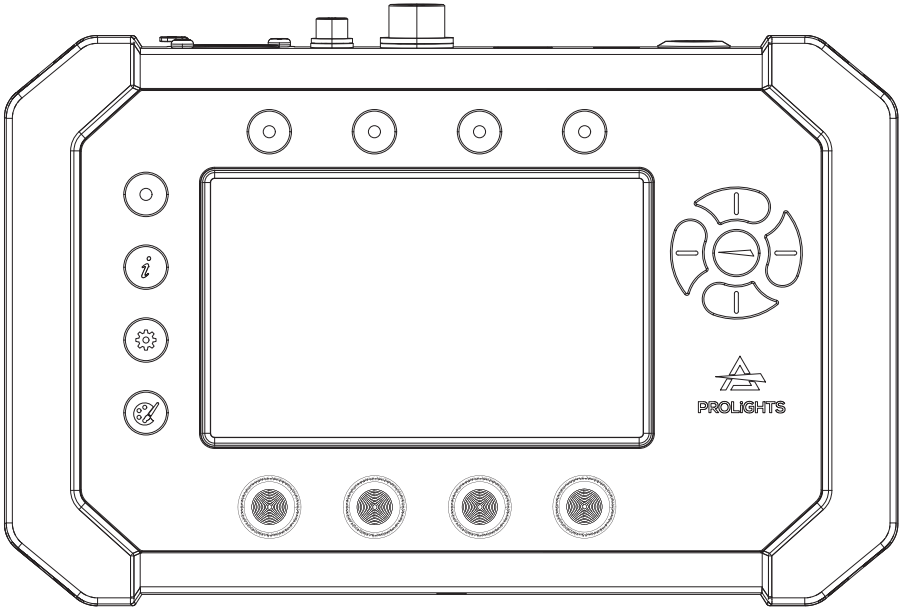
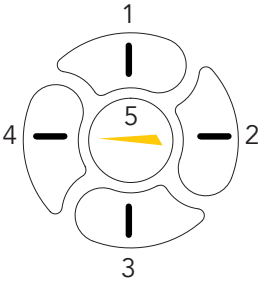


Fig. 05

BUTTONS FUNCTIONS AND NAMING CONVENTIONS

The ControlGo device features a display and several buttons that provide access to various control panel functions. Each button's functionality can vary depending on the context of the screen currently in use. Below is a guide to understanding the common names and roles of these buttons as referenced in the extended manual:

Directional Keys:



1		• UP arrow button
2		• RIGHT arrow button
3		• DOWN arrow button
4		• LEFT arrow button
5		• ENTER button.

Quick Funcionts Key:	
	• Back/Esc button (Buttons to the Left of the Touchscreen)
	• INFO button
	• GEAR button
	• PRESET Button
	• PUSH ENCODER
	• GROUP buttons (Buttons Above the Touchscreen)

7 - PERSONALITY LIBRARY UPDATE

ControlGo allows you to update and customize fixture personalities, which are profiles that define how the device interacts with various lighting fixtures.

CREATING CUSTOM PERSONALITIES
Users can create their own fixture personalities by visiting the Fixture Builder. This online tool allows you to design and configure XML profiles for your lighting fixtures.

UPDATING THE LIBRARY:
There are several methods to update the personality libraries on your ControlGo device:

1. **Via PC Connection:**
   - Download the personality package (zip file) from the Fixture Builder on the ControlGo website.
   - Connect the ControlGo to your PC using a USB cable.
   - Copy the extracted folders into the designated folder on the ControlGo device.

2. **Via USB Flash Drive** (Future Implementation)**:**
   - Download the updated personality files and copy them onto a FAT32-formatted USB flash drive.
   - Insert the flash drive into the ControlGo.
   - Navigate to the firmware update section and select the personality update file, similar to the firmware update process.

3. **Online Update via Wi-Fi** (Future Implementation)**:**
   - Ensure the ControlGo is connected to a Wi-Fi network.
   - Go to the SETTINGS menu on the ControlGo.
   - Use the online update function to download and install the latest personality files directly from the internet.

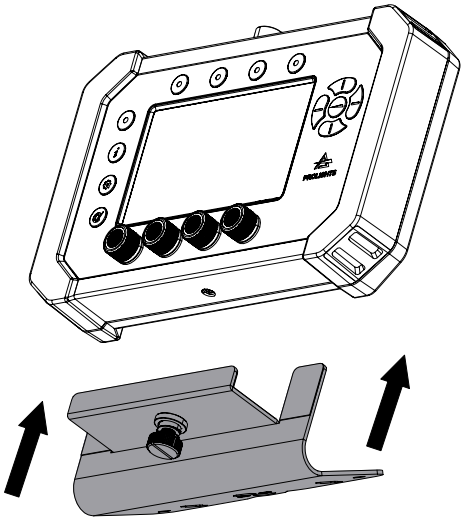
Additional Information:
Before updating, it's a good practice to backup your current settings and profiles. For detailed instructions and troubleshooting, refer to the ControlGo user manual.

8 - ACCESSORIES INSTALLATION

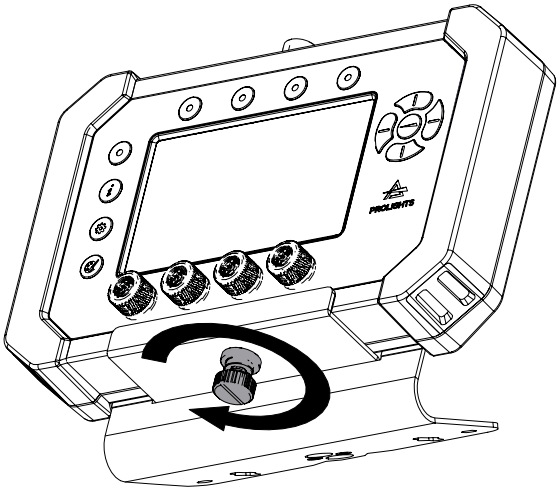
QUICK MOUNT PLATE FOR CONTROLGO

(CODE CTRGQMP - OPTIONAL)

1



2

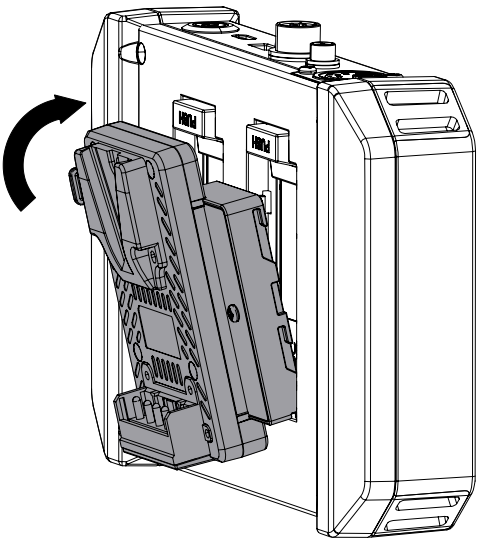


Place fixture on a stable surface.

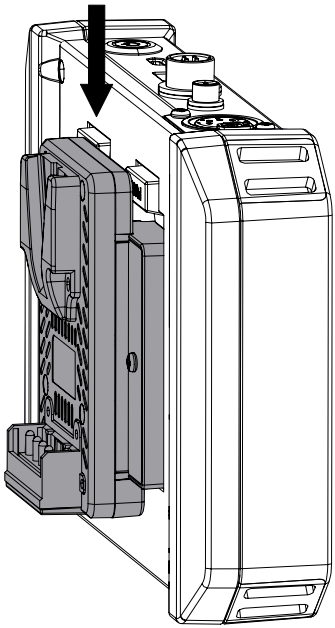
1. Insert the CTRGQMP from the bottom part.
2. Screw the supplied screw to fix the accessory to the CONTROLGO.

V-MOUNT BATTERY ADAPTER FOR CONTROLGO
(CODE CTRGVMADP - OPTIONAL)

1



2



Place fixture on a stable surface.

1. Insert first the pins of the accessory on the bottom part.
2. Fix the accessory as shown in the figure.

9 - FIRMWARE UPDATE

FLASH DRIVE PREPARATION:

- Format a USB flash drive to FAT32.
- Download the latest firmware files from the Prolights website here
- Copy these files to the root directory of the flash drive.

RUNNING THE UPDATE:

- Connect ControlGo to the UPBOXPRO tool and follow the update instructions provided here.
- After completing the UPBOXPRO update, disconnect the DMX connector from the ControlGo.
- Insert the USB flash drive into the ControlGo's USB port without powering off the device
- If you are inside the ControlGo software, press and hold the Back/Esc button for 5 seconds to return to the main screen.
- Select the update app that appears on the main screen.
- Push on UPDATE and choose the file named “updateControlGo_Vxxxx.sh” from the USB flash drive.
- Confirm and begin the update process. The device will automatically restart once the update is completed.
- After the device restarts, remove the USB flash drive.
- Check the firmware version in the settings to confirm the update was successful.

ADDITIONAL NOTES:

- Ensure the ControlGo is connected to a stable power source throughout the update to prevent interruptions.

10 - MAINTENANCE

MAINTENANCE THE PRODUCT

It is recommended that the product be checked at regular intervals.

- For cleaning use a soft, clean cloth moistened with a mild detergent. Never use a liquid, it might penetrate the unit and cause damage to it.
- The user may also upload firmware (product software) to the fixture via the DMX signal input port and instructions from PROLIGHTS.
- It is recommended to check at least annually if new firmware is available and a visual check of the status of the device and mechanical parts.
- All other service operations on the product must be carried out by PROLIGHTS, its approved service agents or trained and qualified personnel.
- It is PROLIGHTS policy to apply use the best quality materials available to ensure optimum performance and the longest possible component lifetimes. However, components are subject to wear and tear over the life of the product. The extent of wear and tear depends heavily on operating conditions and environment, so it is impossible to specify precisely whether and to what extent performance will be affected. However, you may eventually need to replace components if their characteristics are affected by wear and tear after an extended period of use.
- Use only accessories approved by PROLIGHTS.

VISUAL CHECK OF PRODUCT HOUSING

- The parts of the product cover/housing should be checked for eventual damages and breaking start at least every two months. If hint of a crack is found on some plastic part, do not use the product until the damaged part will be replaced.
- Cracks or another damages of the cover/housing parts can be caused by the product transportation or manipulation and also ageing process may influence materials.

TROUBLESHOOTING

Problems	Possible causes	Checks and remedies
Product doesn't power ON	• Battery Depletion	• The battery may be discharged: Check the battery charge level. If low, refer to the purchased battery's manual for charging instructions and recharge as necessary.
	• USB Power Adapter Issues	• The USB power adapter might not be connected or could be damaged: Ensure the USB power adapter is securely connected to the device and a power source. Test the adapter with another device to verify it's functioning correctly.
	• WEIPU Cable and Fixture Power	• The WEIPU connection may be linked to an unpowered fixture: Check that the WEIPU cable is properly connected to a fixture that is receiving power. Verify the fixture's power status and ensure it's switched on and functioning.
	• Cable Connections	• Inspect all cables for signs of wear or damage, and replace if necessary.
	• Internal fault	• Contact the PROLIGHTS Service or authorized service partner. Do not remove parts and/or covers, or carry out any repairs or service that are not described in this Safety and User Manual unless you have both authorization from PROLIGHTS and the service documentation.

The product does not communicate properly with the fixtures.	• Check DMX Cable Connection	• The DMX cable may not be connected properly or could be damaged: Ensure the DMX cable is securely connected between the ControlGo and the fixture. Inspect the cable for any signs of wear or damage and replace it if necessary.
	• Verify CRMX Link Status	• If using wireless communication via CRMX, the fixtures may not be properly linked: Check that the fixtures are correctly linked to the ControlGo's CRMX transmitter. Re-link them if necessary by following the CRMX linking procedure in the ControlGo manual.
	• Ensure DMX Output from ControlGo	• The ControlGo might not be outputting a DMX signal: Confirm that the ControlGo is configured to output DMX. Navigate to the DMX output settings and verify that the signal is active and being transmitted.
	• No signal output	• Ensure that the fixtures are powered on and operational.

Note

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