Installation Guide

XPOE-DCB-100

X-PoE® powered USB-C charging brick (100W)



INTRODUCTION

About This Guide

This guide provides complete instructions for installing and setting up the XPOE-DCB-100 USB-C charging brick. It includes details on placement, input wiring, USB-C output connection, status indication, and basic troubleshooting.

Cautions and Warnings

When installing hardware, it is important to follow safety precautions to avoid potential injuries or damage to the equipment. Failure to follow safety guidelines can result in electric shock, fire, or other hazards.

Definitions

NOTE

A note is typically used to provide additional information or clarification that is relevant to the installation process. It may include recommendations, tips, or other useful information that can help ensure a successful installation.

CAUTION

A caution statement indicates a potential hazard that could result in minor or moderate injury, or cause damage to the product if appropriate precautions are not taken. They are used to alert the reader to a potential risk and provide instructions on how to avoid it.

DANGER

A danger statement indicates a potential hazard that could result in serious injury or death if appropriate precautions are not taken. They are used to alert the reader to a potential risk that is critical and requires immediate attention to prevent harm. It may provide instructions on how to avoid the hazard or recommend seeking professional assistance.

Safety Precautions

CAUTION

- Follow all applicable local and national electrical codes and regulations. While a licensed electrician is not required, the installer should be familiar with Class 2 low-voltage wiring practices.
- Use only with an X-PoE® source (XS-108H in X-PoE® Max mode) or a compatible Class 2 power source. The XPOE-DCB-100 is not compatible with traditional PoE sources.
- Do not connect external power supplies to the USB-C output.
- Ensure the RJ45 input is de-energized before connecting or disconnecting the device.
- Ensure all wiring connections are secure and properly terminated.
- This equipment is not suitable for use in locations where children are likely to be present.

NOTE

- Do not exceed the rated output power of the USB-C port.
- For indoor use only.

PRODUCT OVERVIEW

The XPOE-DCB-100 is a single-port, X-PoE®-powered USB-C charger that delivers up to 100W of clean, safe low-voltage power right where people work, without needing an AC outlet. It accepts an X-PoE® input (44–57VDC over RJ45) and provides a single USB-C output supporting standard USB-C Power Delivery profiles.

Key features:

- (1) X-PoE® RJ45 input and (1) USB-C output for high-power, low-voltage device charging
- Supports USB-C PD profiles at 5V, 9V, 12V, 15V, and up to 20V / 5A (100W maximum)
- Status LED for power and charging indication
- ETL Listed (cETLus) to UL 62368-1

ORDERING INFORMATION

Charging Bricks

Part Number	Description

Part Number	Description
XPOE-DCB-100	Single-port X-PoE® powered USB-C charging brick (100W)

INSTALLATION

Parts List

Before getting started with the installation process, it's important to make sure all the necessary components are included. Here's what should be found inside the box:

- (1) XPOE-DCB-100 USB-C charging brick

Placement

Perform the following steps to position the device:

1. Review all cautions and warnings to ensure safe installation practices are followed.
2. Select a location at or near the desk or workstation where USB-C charging is needed, within reach of the structured Cat6 cabling that supplies X-PoE® power.
3. Position the brick so the USB-C output is accessible to the user and the RJ45 input cable is not strained or pinched.
4. Ensure the device has adequate clearance for heat dissipation and is not enclosed in tightly packed insulation or cabling.

Input Wiring

Perform the following steps to connect the X-PoE® input:

1. Review all cautions and warnings to ensure safe wiring practices are followed.
2. Connect an Ethernet cable from an X-PoE® switch (XS-108H in X-PoE® Max mode) or a compatible Class 2 power source to the RJ45 input port on the unit.

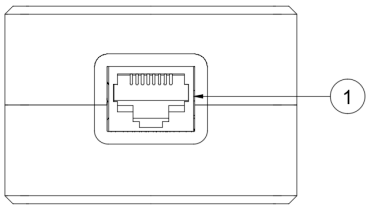


Fig. 1 — RJ45 Input Connection

3. If the X-PoE® port has not yet been configured, the device will power on once a valid input is connected.

CAUTION

Confirm the upstream X-PoE® port is configured for X-PoE® Max mode before relying on full 100W output.

USB-C Output

Perform the following steps to connect a device to the USB-C output:

1. Connect a USB-C cable from the USB-C output port to the device to be charged.

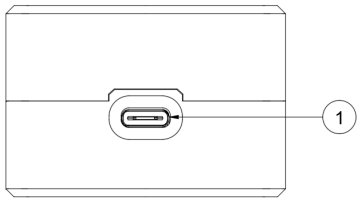


Fig. 2 — USB-C Output Connection

2. The connected device will negotiate an appropriate USB-C PD profile, up to a maximum of 100W (5A @ 20V).

NOTE

Maximum output from the device is subject to the input wire length and the USB-C cable used.

INITIAL SETUP

The XPOE-DCB-100 itself does not require configuration. Configure the associated X-PoE® port for X-PoE® Max mode using the Channel Configuration guide.

RELATED INFORMATION

Status LED

The USB status LED indicates the power and charging state of the device:

USB Status LED	Meaning
OFF	No power
Orange ON	Unit powered, not charging
White ON	Unit powered, charging or fully charged

Basic Troubleshooting

If the device does not power on, confirm the upstream X-PoE® port is enabled and configured for X-PoE® Max mode. Basic troubleshooting can also be performed by observing the port status LEDs on the X-PoE® switch. Refer to the Port Status LED Table in the X-PoE® switch installation guide for detailed diagnostic information.

Technical Support

If you experience any issues during installation or operation of this product, contact our technical-support team via email at support@luum.io. Please provide a detailed description of the issue, including any error messages or other relevant information.

Warranty

All Luum.io lighting products and controls come with a 5-year parts warranty. We warrant that our products will be free from defects in material and workmanship for a 5-year period from the date of purchase. Defective products under warranty will be replaced with an equal or higher-quality product.

If you experience any issues during the warranty period, we will repair or replace the product at no charge. To initiate a warranty claim, contact our customer-service team at support@luum.io. For additional support options, visit luum.io.

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Document Feedback

While we have taken great care to ensure the accuracy and completeness of this document, we welcome your feedback and suggestions. If you notice any errors or omissions, or feel a topic could benefit from further explanation, please email your feedback to support@luum.io.

Revision History

Date	Revision	Notes
6/15/2026	A	Initial XPOE-DCB-100 install guide release

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