Manuals+
Q & A | Deep Search | Upload

Youmile DR-YM-569-2

Youmile 20V 5A USB-C PD2.0 PD3.0 to DC Fast Charge Trigger Module User Manual

Model: DR-YM-569-2

Introduction

This manual provides detailed instructions for the Youmile 20V 5A USB-C PD2.0 PD3.0 to DC Fast Charge Trigger Module. This module is designed to convert USB-C Power Delivery (PD) input into a selectable DC output voltage, enabling versatile power solutions for various electronic devices. Please read this manual carefully before use to ensure proper operation and safety.

Image: The Youmile 20V 5A USB-C PD to DC Fast Charge Trigger Module, showing its compact design and USB-C input port.

Setup and Configuration

Module Overview:

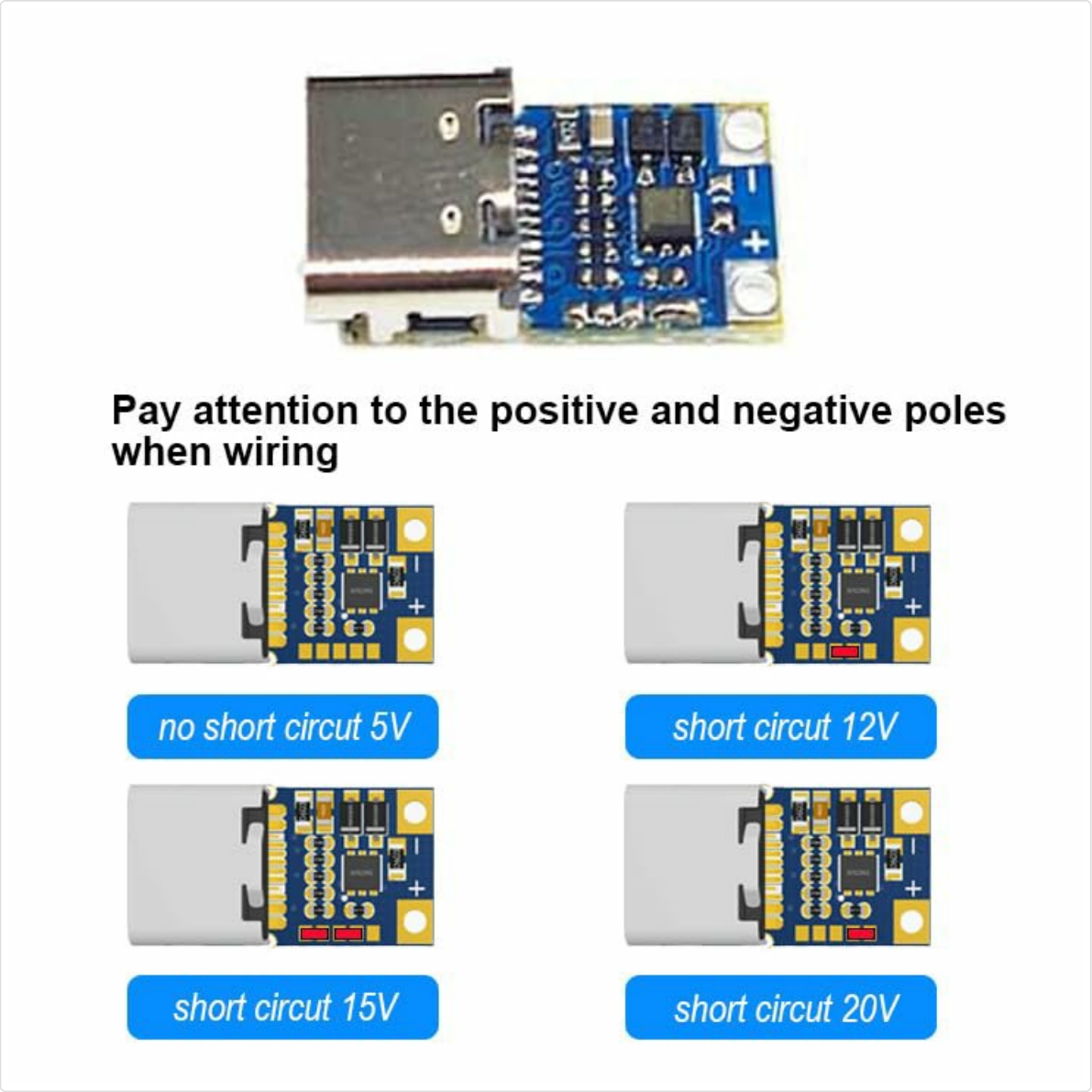


Image: A close-up view of the Youmile PD Trigger Module, highlighting its components and compact size.

Package Contents:

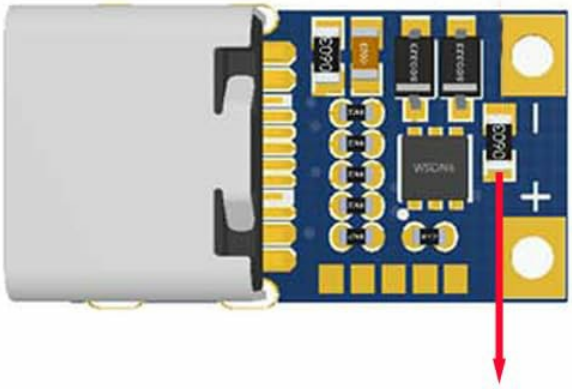
- 2 x Youmile 20V 5A USB-C PD2.0 PD3.0 to DC Trigger Modules
- 1 x 5A DC Male Power Cable
- 8 x DC Connectors (6.4x4.4mm, 6.3x3.0mm, 5.5x2.5mm, 5.5x2.1mm, 5.5x1.7mm, 4.8x1.7mm, 4.0x1.7mm, 3.5x1.35mm)

Voltage Selection:

The module supports various output voltages. You can configure the desired voltage by either short-circuiting specific pads on the module or by adding an external resistor. The default output voltage is 20V if no modifications are made.

Method 1: Short Circuit Configuration

To select 12V, 15V, or 20V, you can short-circuit the corresponding pads on the module. For 5V, no short circuit is required.



Resistance(kΩ)	Voltage
0	5V
6.04	9V
10	12V
14	15V
17.8	18V
NONE	20V

Image: Short circuit configurations for selecting 5V, 12V, 15V, and 20V output voltages. Ensure correct pads are shorted for the desired voltage.

Method 2: Resistor Configuration (for 9V, 18V, or custom voltages)

For 9V or 18V, or other specific voltages, an external resistor needs to be soldered onto the designated pads. Refer to the table below for resistor values and corresponding voltages.

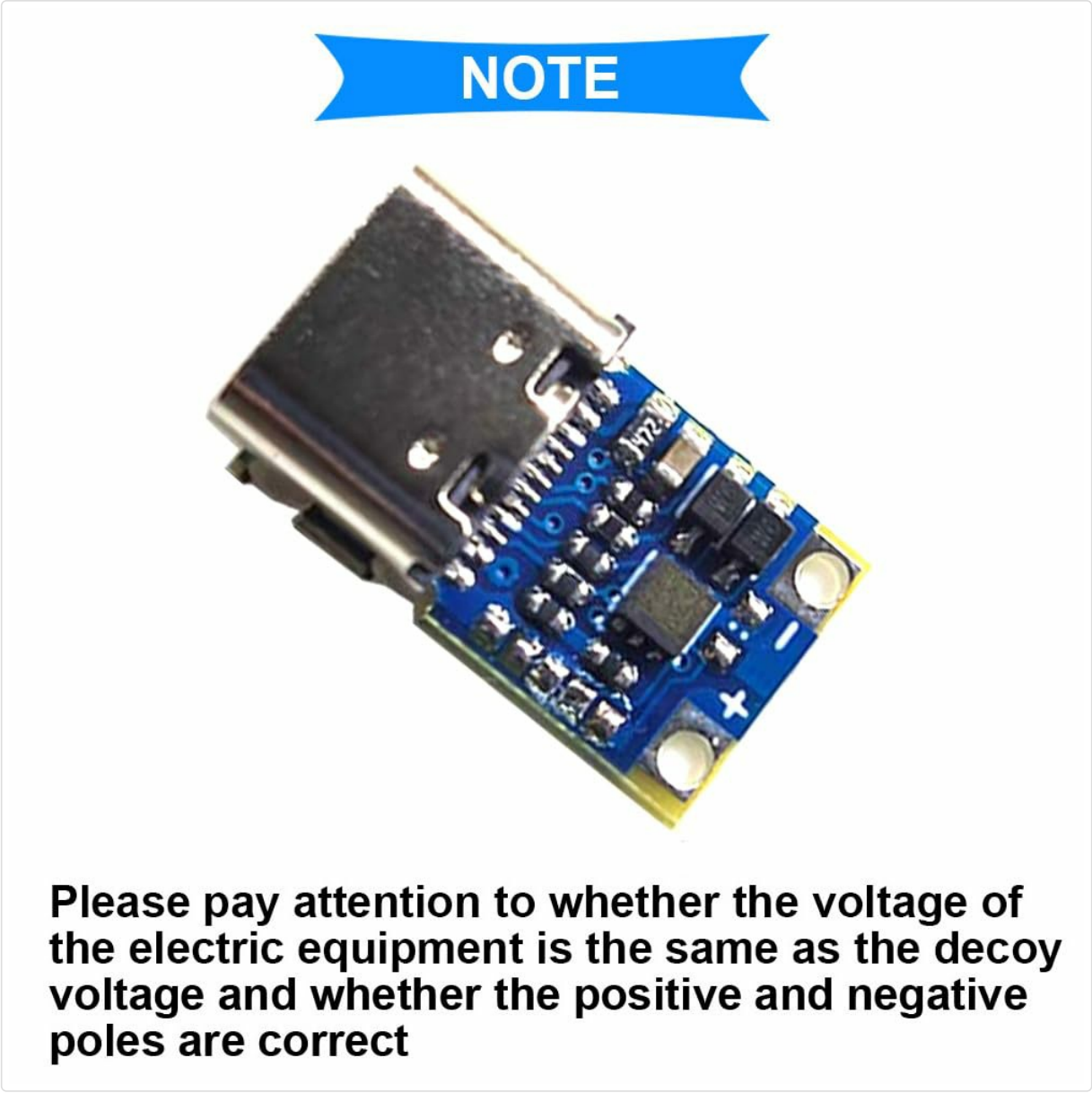


Image: Diagram indicating the resistor placement for voltage adjustment. The accompanying table lists resistance values (in kΩ) required for 5V, 9V, 12V, 15V, 18V, and 20V outputs.

Resistor Values for Voltage Selection

Resistance (kΩ)	Voltage
0	5V
6.04	9V
10	12V
14	15V
17.8	18V
NONE	20V

Wiring and Connection:

When connecting the module, always pay close attention to the positive and negative poles to prevent damage to the module or the connected device. Ensure the DC output cable is correctly wired to your device.

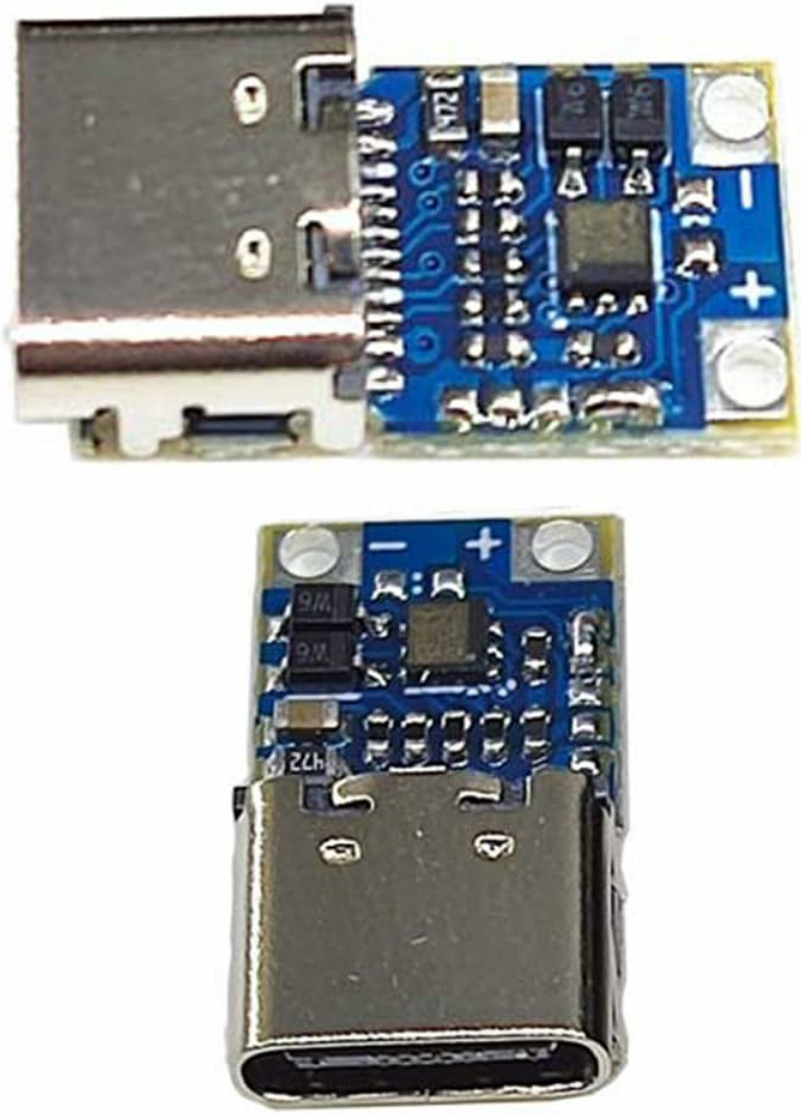


Image: A selection of 8 common DC power connectors (6.4x4.4mm, 6.3x3.0mm, 5.5x2.5mm, 5.5x2.1mm, 5.5x1.7mm, 4.8x1.7mm, 4.0x1.7mm, 3.5x1.35mm) for various applications.

The included DC male power cable and 8 connectors allow for broad compatibility with different devices. Select the appropriate connector for your application.

Operating Instructions

Power Source Requirements:

- The module requires a genuine USB Power Delivery (PD) compliant power source.
- It is not compatible with Quick Charge (QC) only chargers.
- For currents exceeding 3A (up to 5A), an electronically marked Type-C cable is necessary to ensure stable power delivery.

Image: The module connected to a USB-C power meter, demonstrating its ability to support 5A output with an electronically marked cable for high power applications.

Voltage Negotiation:

The module initiates a Power Delivery negotiation with the connected USB-C power source. It will request the configured voltage. However, not all USB-C power supplies support every voltage. If the power supply does not support the requested voltage, the module will automatically trigger the next lowest available voltage that the power supply offers.

Example: If the module is configured for 15V, but the connected USB-C power supply only supports 5V, 9V, and 20V, the module will trigger a 9V output.

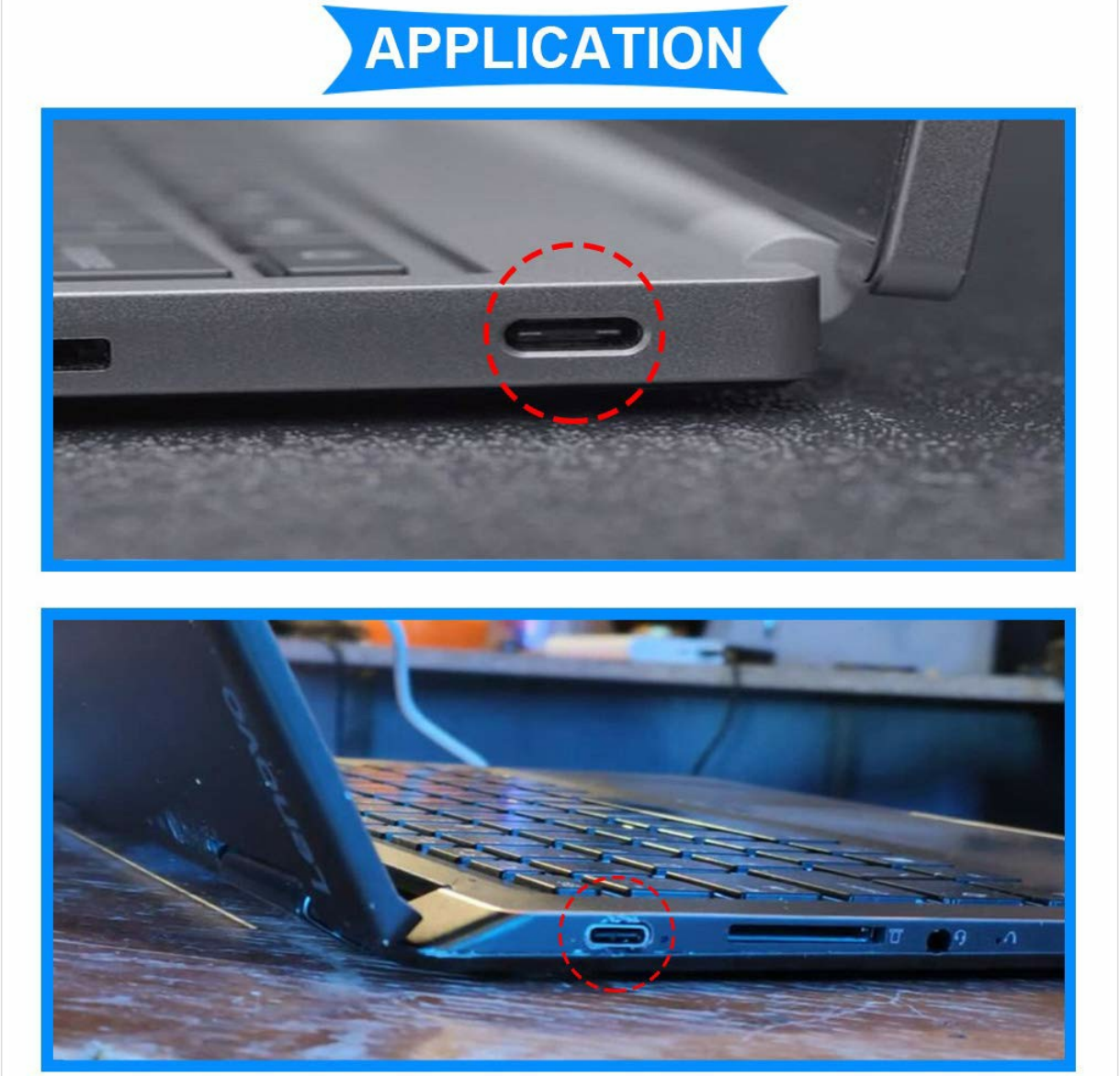


Image: Application examples showing the module connected to USB-C ports on laptops, illustrating its use for powering devices.

Maintenance

The Youmile PD Trigger Module requires minimal maintenance. Keep the module clean and free from dust and moisture. Avoid exposing it to extreme temperatures or direct sunlight. Do not attempt to disassemble the module, as this will void any potential warranty and may cause damage.

Troubleshooting

- **No Output Voltage or Incorrect Voltage:**
  - Ensure your USB-C power source is a genuine Power Delivery (PD) charger, not a Quick Charge (QC) only charger.
  - Verify that the configured voltage (via short circuit or resistor) is supported by your USB-C power supply. If not, the module will output the next lowest supported voltage.
  - Check all wiring for correct polarity and secure connections. Refer to the wiring diagrams in the Setup section.
  - Ensure that for currents above 3A, an electronically marked Type-C cable is used.

- **Module Not Functioning:**
  - Confirm that the input USB-C power source is active and providing power.
  - Inspect the module for any visible damage.
  - Compatibility with all charging heads is not guaranteed. Try a different USB-C PD power source if available.

Image: Important note reminding users to verify that the output voltage and polarity of the module match the requirements of the connected electrical equipment to prevent damage.

Specifications

Feature	Detail
Brand	Youmile
Model Number	DR-YM-569-2
Input Interface	USB-C (Type-C Female)
Output Interface	DC (via included cable and connectors)

Feature	Detail
Operating Voltage	5V - 20V (Configurable)
Max Current	5A (requires e-marked cable for >3A)
Max Power	100W
PD Protocol Support	PD2.0, PD3.0
Package Dimensions	12.4 x 8.1 x 1.7 cm
Weight	50 grams (total package)
Country of Origin	China

Warranty Information

Specific warranty details for this product are not provided in the available information. Please refer to the retailer's return policy or contact the seller directly for warranty inquiries. Generally, electronic components come with a limited manufacturer's warranty against defects in materials and workmanship under normal use.

Customer Support

For technical assistance, troubleshooting, or product-related questions, please contact your point of purchase or the manufacturer, Youmile, through their official support channels. When contacting support, please have your product model number (DR-YM-569-2) and purchase details readily available.

© 2024 Youmile. All rights reserved.