

## Terraforma Technology fd7455f4-a242-49dd-9c5b-c56346e9f14d

# Terraforma Technology H Adapter for Porter Cable 20V Max Battery

INSTRUCTION MANUAL - MODEL: FD7455F4-A242-49DD-9C5B-C56346E9F14D

## 1. Introduction

This manual provides essential information for the safe and effective use of your Terraforma Technology H Adapter for Porter Cable 20V Max batteries. This adapter is designed to convert your Porter Cable 20V Max battery into a direct power source for various applications, such as robotics or DIY projects, by providing a wired output. The adapter is constructed from durable PETG material and includes pre-installed 12-gauge wires for robust electrical connections.

## 2. Safety Information and Warnings

**Please read and understand all safety instructions before using this product. Failure to follow these instructions may result in electric shock, fire, or serious injury.**

- **DO NOT** use this adapter to charge your battery. It is designed solely for power output.
- **DO NOT** short circuit the battery terminals or draw more than 20 amps continuous current. Exceeding this limit can damage the battery, adapter, or connected device, and poses a fire risk.
- Disconnect the battery from the adapter before it reaches 15 volts to prolong battery life. Deep discharge can permanently damage lithium-ion batteries.
- For optimal battery longevity, avoid leaving the battery charged at 100% for extended periods. It is recommended to store the battery at approximately 70% charge.
- **DO NOT** leave the battery or adapter outdoors, especially in hot climates, as extreme temperatures can degrade battery performance and safety.
- Ensure proper polarity when connecting the adapter's wires to your device. Incorrect wiring can cause damage.
- Keep out of reach of children.

## 3. Package Contents

Verify that all items are present and in good condition upon opening the package:

- 1 x Terrafirma Technology H Adapter (Red)
- 10 inches of 12-gauge wire (pre-installed)

## 4. Product Features

- **Compatibility:** Designed for Porter Cable 20V Max batteries.
- **Durable Construction:** 3D printed from PETG material, offering:
  - Increased heat resistance (up to 80°C)
  - Increased impact resistance
  - Increased chemical resistance
- **Direct Power Output:** Provides direct battery voltage and power. This is not a charger or converter.
- **High-Quality Wiring:** Includes 10 inches of pre-installed 12-gauge wire for reliable current delivery.
- **Safety Feature:** Equipped with short circuit protection.

## 5. Setup and Installation

Follow these steps to properly set up your H Adapter:

1. **Prepare the Adapter:** The adapter comes with 10 inches of 12-gauge wire already installed. These wires are typically red for positive (+) and black for negative (-).
2. **Connect to Your Device:** Carefully connect the adapter's wires to your intended application or device. Ensure correct polarity (red to positive, black to negative) to prevent damage to the device or adapter. Soldering or using appropriate connectors is recommended for secure connections.
3. **Attach Battery:** Slide your Porter Cable 20V Max battery onto the adapter until it clicks securely into place. Ensure a firm connection.
4. **Verify Connection:** Before operating your device, double-check all connections for security and correct polarity.



- 3D Printed Adapter in PETG**
- \*Increased Heat Resistance(80c)**
- \*Increased Impact Resistance**
- \*Increased Chemical Resistance**
  
- \*Battery Not Included**

Image: The H Adapter securely connected to a Porter Cable 20V Max battery, illustrating the integrated 12-gauge wires.

## 6. Operation

Once the adapter is securely connected to your device and battery, it will provide direct power. Monitor your battery's voltage during operation to avoid over-discharging, especially for sensitive applications. Disconnect the battery when not in use or when the voltage drops below 15 volts.



Image: Top view of the H Adapter with a Porter Cable 20V Max battery, ready for operation.

## 7. Maintenance and Storage

- **Cleaning:** Wipe the adapter with a dry, clean cloth. Do not use harsh chemicals or immerse in liquids.
- **Storage:** Store the adapter and battery in a cool, dry place, away from direct sunlight and extreme temperatures. For prolonged storage, ensure the battery is charged to approximately 70% to maintain its health.
- **Inspection:** Periodically inspect the adapter and wires for any signs of damage, wear, or corrosion. Replace if any damage is observed.

## 8. Troubleshooting

If the adapter is not providing power to your device:

- **Check Battery Charge:** Ensure the Porter Cable 20V Max battery is adequately charged.
- **Verify Battery Connection:** Make sure the battery is fully seated and locked onto the adapter.
- **Inspect Wiring:** Confirm that the adapter's wires are securely connected to your device and that there are no breaks or short circuits.
- **Device Compatibility:** Ensure your device is compatible with the voltage and current supplied by the Porter Cable 20V Max battery via the adapter.

## 9. Specifications

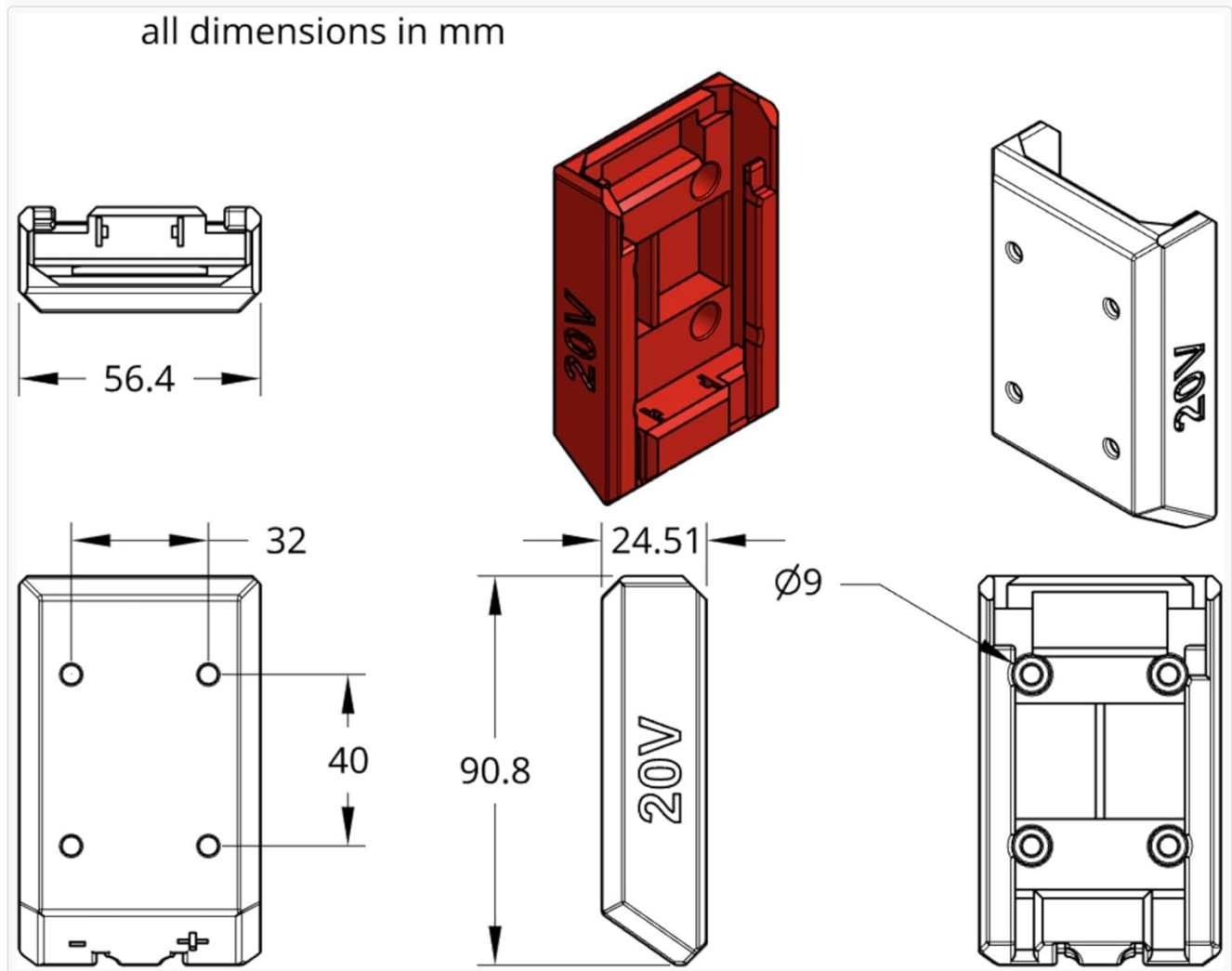


Image: Dimensional drawing of the H Adapter, with measurements in millimeters.

Feature	Detail
Brand	Terrafirma Technology
Model Number	fd7455f4-a242-49dd-9c5b-c56346e9f14d
Compatible Batteries	Porter Cable 20V Max
Material	3D Printed PETG
Color	Red
Wire Gauge	12 Gauge
Wire Length	10 inches (approx. 25.4 cm)
Max Continuous Amperage	20 Amps
Special Feature	Short Circuit Protection
Item Weight	1.76 ounces (approx. 50 grams)
Package Dimensions	7.28 x 5.04 x 1.14 inches (approx. 18.5 x 12.8 x 2.9 cm)

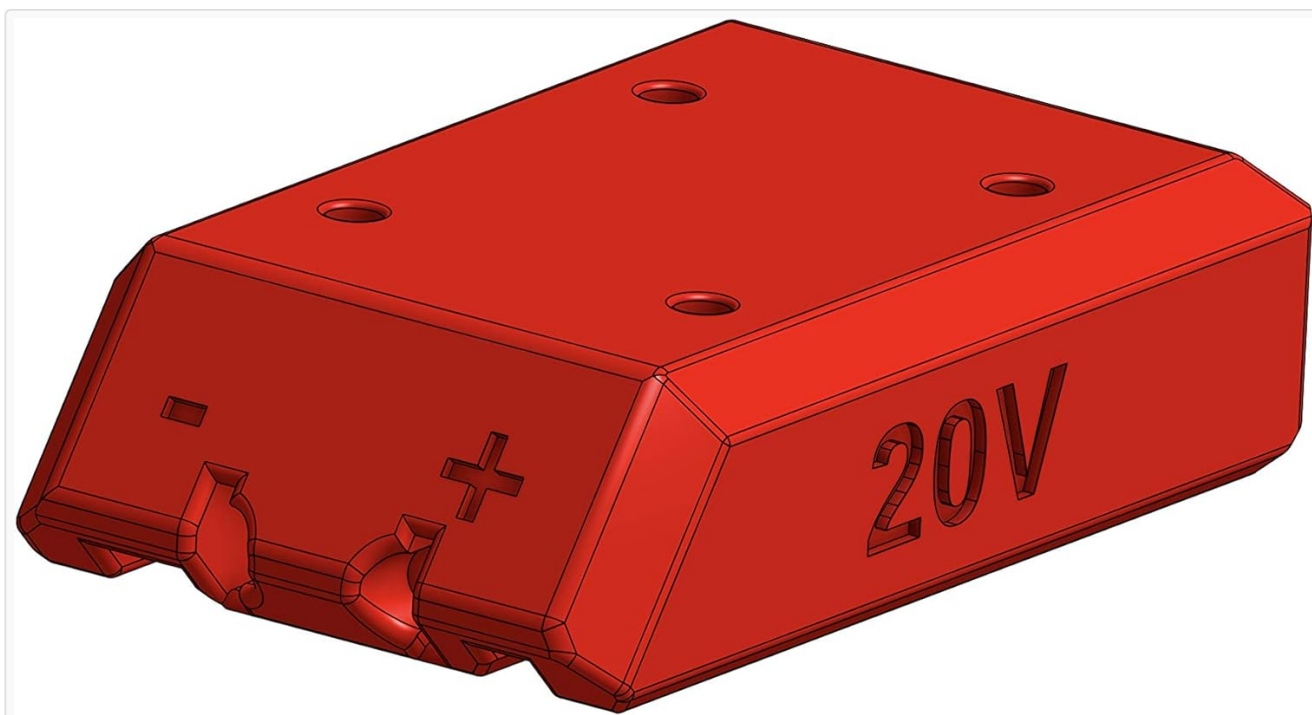


Image: Detailed view of the H Adapter, highlighting its terminals and 20V marking.

## 10. Warranty and Support

For warranty information or technical support, please contact Terrafirma Technology directly through their official channels or the retailer from whom the product was purchased. Keep your purchase receipt as proof of purchase.