

BougeRV 20FT 10AWG Solar Extension Cable

BougeRV 20 Feet 10AWG Solar Extension Cable Instruction Manual

Model: 20FT 10AWG Solar Extension Cable

1. INTRODUCTION

This manual provides essential information for the safe and effective use of your BougeRV 20 Feet 10AWG Solar Extension Cable. This cable is designed to extend the reach of your solar panels, facilitating flexible placement and connection within your solar power system. It features high-quality materials and robust construction for outdoor durability and optimal performance.

2. SAFETY INFORMATION

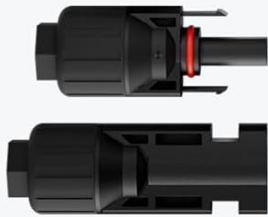
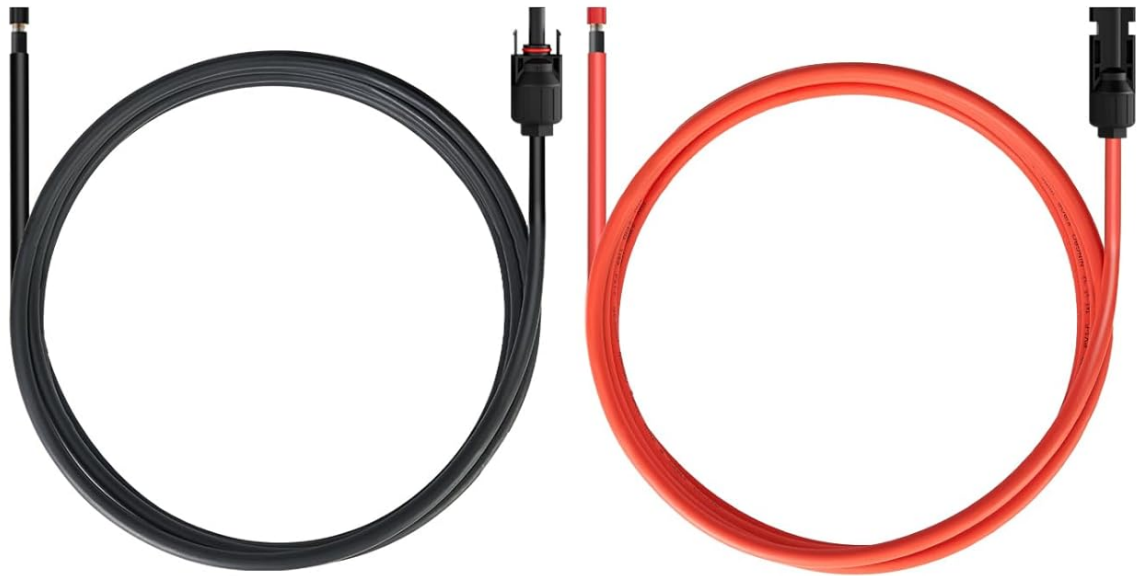
- Always disconnect power from solar panels before making or breaking connections.
- Ensure all connections are secure and properly seated to prevent electrical hazards and power loss.
- Do not exceed the maximum voltage rating of 1000V DC.
- Avoid bending cables sharply or placing them under heavy objects to prevent damage to insulation and conductors.
- Use appropriate personal protective equipment (PPE) when working with electrical systems.
- Consult a qualified electrician if you are unsure about any installation steps.

3. PACKAGE CONTENTS

Verify that all items are present in your package:

- 1 x 20 Feet 10AWG Red Solar Extension Cable with pre-installed MC4 connector on one end.
- 1 x 20 Feet 10AWG Black Solar Extension Cable with pre-installed MC4 connector on one end.
- 1 x Extra Pair of MC4 Connectors (Male and Female) for custom termination.

10 AWG MINIMIZE POWER LOSS



10AWG 20FT*2
+
1 PAIR CONNECTORS

Image: Contents of the BougeRV 20 Feet 10AWG Solar Extension Cable package, showing the red and black cables coiled, each with one pre-installed MC4 connector, and a separate bag containing an additional pair of MC4 connectors.

4. SETUP

4.1 Cable Overview

The BougeRV solar extension cables are designed for ease of use. One end of each 20-foot cable (red and black) comes with an MC4 connector pre-installed. The other end is bare wire, allowing for custom termination or direct connection to a charge controller or inverter.

SOLID AND EASY

Compatible with standard connectors.



Image: Visual guide demonstrating the simple plug-and-play connection of MC4 connectors.

4.2 Connecting Pre-installed MC4 Connectors

1. Identify the male and female MC4 connectors on your solar panel and the extension cables.
2. Align the male connector from the solar panel with the female connector of the extension cable, and vice-versa.
3. Push the connectors firmly together until you hear a distinct "click." This indicates a secure, locked connection.
4. Verify the connection is tight and cannot be easily pulled apart.

Video: BougeRV Solar Cable Introduction. This video provides a general overview of the solar cables and their connection features.

4.3 Custom Termination with Extra Connectors

If you need to connect the bare wire end to another MC4 connector (e.g., to extend the cable further or connect to a device requiring an MC4 input), use the provided extra pair of MC4 connectors.

1. Carefully strip approximately 6-8mm of insulation from the bare end of the solar cable.
2. Insert the stripped wire into the metal contact pin (male for male connector, female for female connector).
3. Using a dedicated MC4 crimping tool (not included), crimp the metal contact pin securely onto the wire.
4. Slide the crimped contact pin into the main body of the MC4 connector until it locks into place.
5. Screw the cable gland onto the connector body to ensure a waterproof seal.

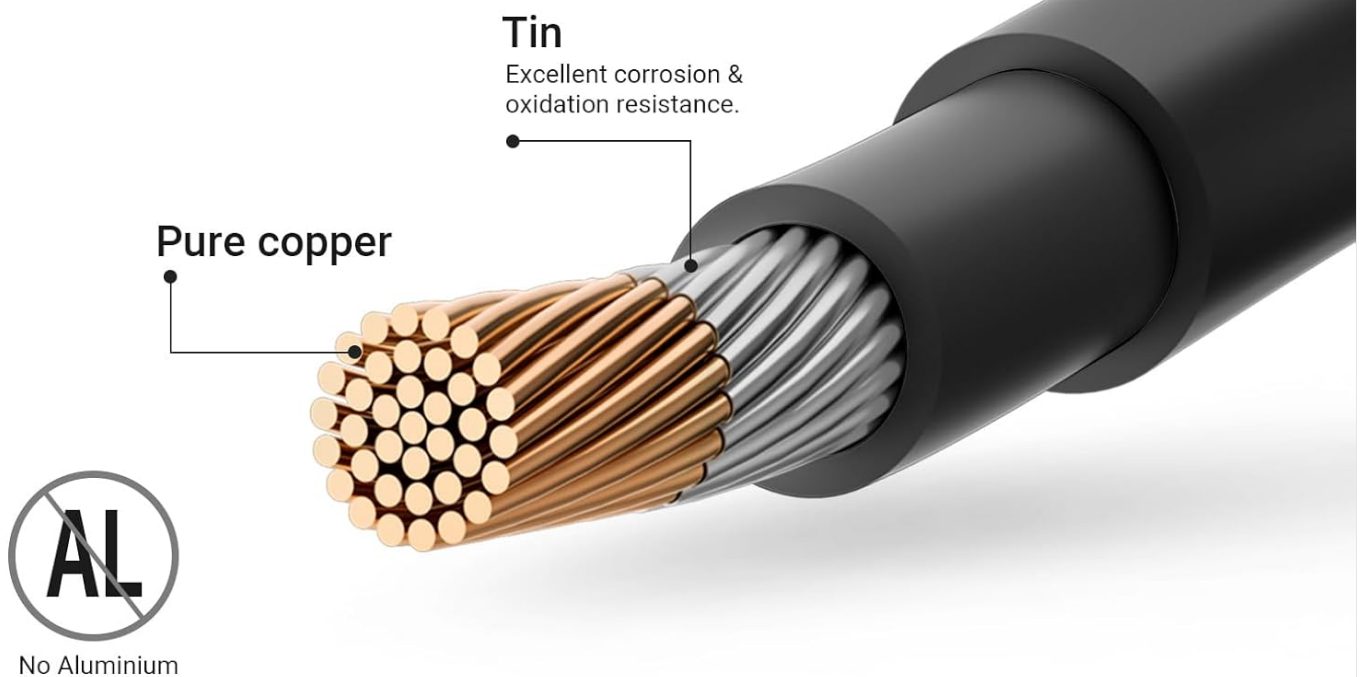
5. OPERATING

Once the solar extension cables are securely connected, they will transmit power from your solar panels to your charge controller, inverter, or battery system. Ensure proper polarity (red for positive, black for negative) throughout your system to avoid damage.

The 10AWG thickness of these cables helps minimize power loss over the 20-foot length, ensuring efficient energy transfer from your solar panels.

SUPERIOR TO BARE COPPER

Excellent conductivity, less loss.



- Tinned copper wire has excellent corrosion and oxidation resistance.

Image: Illustration highlighting the superior conductivity and corrosion resistance of tinned pure copper wire used in the cables.

6. MAINTENANCE

- **Regular Inspection:** Periodically check cables and connectors for any signs of wear, damage, or corrosion.
- **Cleaning:** Keep connectors free from dirt, dust, and moisture. Use a dry cloth to wipe them clean.
- **Secure Connections:** Ensure all MC4 connections remain tightly locked.
- **UV Protection:** While the cables are UV resistant, prolonged exposure to extreme sunlight can still affect their lifespan. Position cables to minimize direct sun exposure where possible.
- **Temperature Range:** The cables are designed to operate stably from -40°F to 194°F. Avoid exposing them to temperatures outside this range.

DUAL SHEATHING

Thicker and better than others.

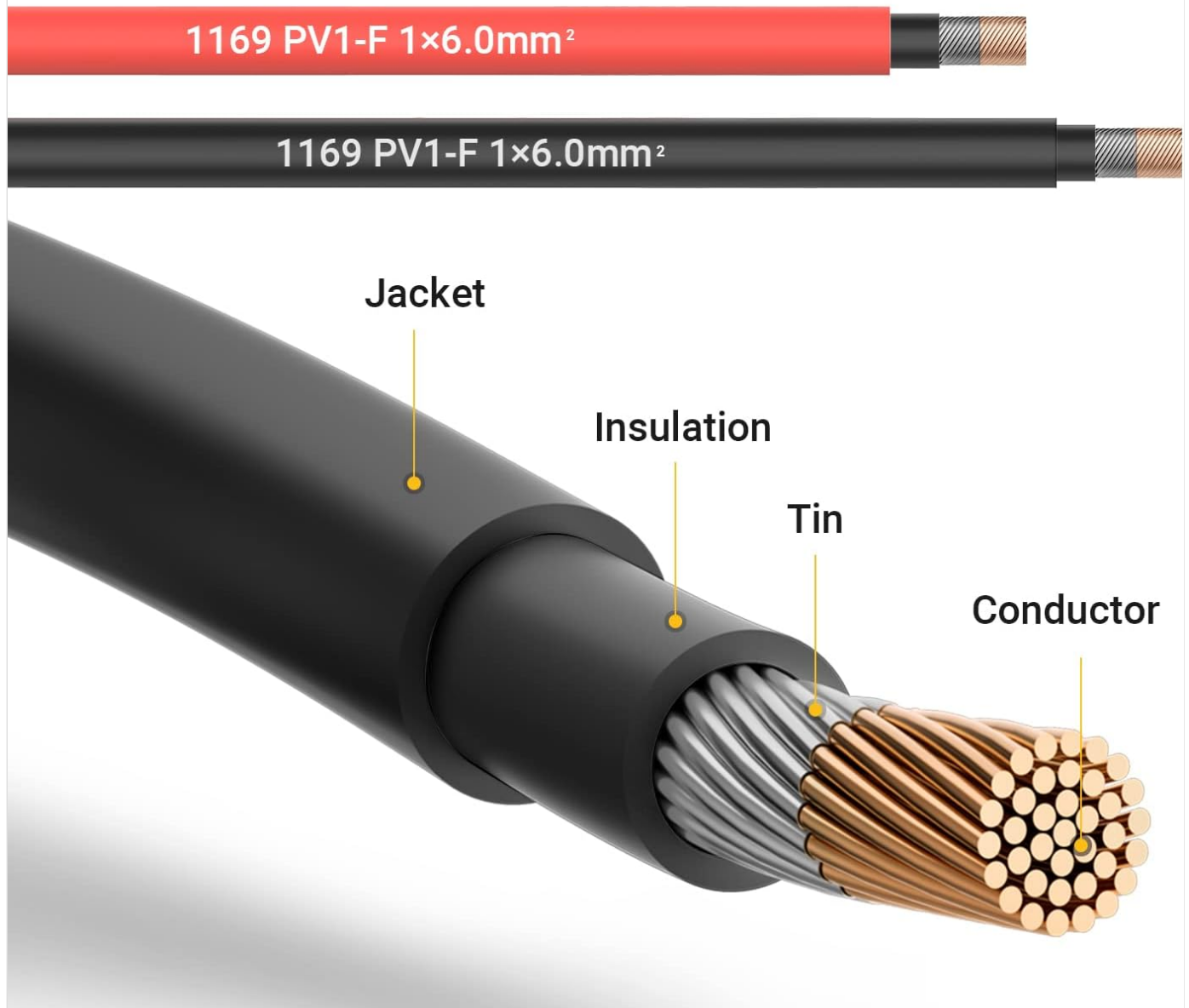


Image: Cross-section view of the dual-sheathed cable construction, emphasizing its durability and insulation.

7. TROUBLESHOOTING

• No Power Output:

- Check all MC4 connections for tightness and proper seating.
- Verify correct polarity (red to positive, black to negative) throughout the system.
- Inspect cables for visible damage (cuts, kinks, severe wear).

• Reduced Power Output:

- Ensure solar panels are clean and free from shading.
- Confirm cable gauge (10AWG) is appropriate for your system's current and length to minimize voltage drop.
- Check for any loose or corroded connections that might increase resistance.

- **Difficulty Disconnecting MC4 Connectors:**
 - MC4 connectors are designed to be secure. Use an MC4 disconnect tool (not included) for easier and safer separation.
 - Avoid excessive force, which can damage the connectors.

8. SPECIFICATIONS

Brand	BougeRV
Model	20FT 10AWG Solar Extension Cable
Cable Length	20 Feet (per cable, 1 red, 1 black)
Wire Gauge	10AWG
Conductor Material	Tin-coated Pure Copper
Insulation Material	XLPE (UV Resistant)
Connector Type	MC4 (Male-to-Female)
Waterproof Rating	IP67
Maximum Voltage	1000V DC
Operating Temperature	-40°F to 194°F (-40°C to 90°C)
Certifications	TÜV, UL

IP67 WATERPROOF

Ideal for Outdoor



Image: The IP67 waterproof feature of the MC4 connectors, crucial for outdoor use.

9. WARRANTY & SUPPORT

BougeRV provides an 18-month technical support for this solar extension cable. For warranty claims, technical assistance, or further inquiries, please contact BougeRV customer service through their official website or the retailer where the product was purchased.

For more information on product quality and materials, you may refer to the following video:

Video: Do you buy the Real Copper Wire? This video discusses the quality of copper wire in solar cables, relevant to the product's pure copper feature.