

Iron Box IBX-L1520PR

Iron Box L15-20 Plug and Connector Set User Manual

Model: IBX-L1520PR

1. PRODUCT OVERVIEW

The Iron Box L15-20 Plug and Connector Set is designed for creating custom generator power cables. This set includes one L15-20P male plug and one L15-20R female connector, both rated for 20 Amps and 250 Volts, supporting applications up to 12000 Watts. These components are built with heavy-duty construction and are UL Listed and CSA Approved, ensuring safety and reliability for demanding environments.



Image 1.1: The Iron Box L15-20P male plug and L15-20R female connector, shown together as a set.

Key Features:

- L15-20P Male Plug and L15-20R Female Connector included.
- Rated for 20 Amps and 250 Volts.
- Supports up to 12000 Watts for various applications.
- Heavy-duty construction with durable Dupont Nylon housing.
- UL Listed and CSA Approved for safety and compliance.
- Features solid brass blades for corrosion resistance and strong connections.
- Equipped with a reliable locking mechanism for stable power connections.
- Weatherproof design suitable for both indoor and outdoor use.

IRON BOX
Reliable Connections. Limitless Power.



NEMA L15-20P MALE PLUG & L15-20R FEMALE CONNECTOR SET

**NEMA L15-20P MALE PLUG
& L15-20R FEMALE**

250 VOLTS

20 AMPS

12000W

Image 1.2: The L15-20P male plug and L15-20R female connector, highlighting their NEMA type, 250 Volts, 20 Amps, and 12000W ratings, along with UL, REACH, and RoHS compliance logos.

2. SAFETY INFORMATION

WARNING: Electrical shock hazard. Always disconnect power before installation or servicing. Improper installation can result in serious injury or death.

- Ensure all local and national electrical codes are followed during installation and use.
- Only use this product within its specified voltage and amperage ratings (20A, 250V).
- Do not use if the plug or connector shows any signs of damage, cracking, or corrosion.
- Keep away from children.
- This product is designed for use with compatible L15-20 receptacles and plugs. Ensure proper mating to prevent electrical hazards.
- The product is UL Listed and CSA Approved, indicating it meets recognized safety standards.

3. SETUP AND INSTALLATION

This plug and connector set is designed for field wiring to create custom power cables. It is crucial to ensure correct wiring for safe and effective operation.

Required Tools:

- Wire strippers
- Screwdriver (appropriate size for terminal screws)
- Multimeter (for verifying connections)

Wiring Instructions:

1. **Prepare the Cable:** Select a suitable 4-wire cable (e.g., 14/4 to 12/4 gauge) for your application. Strip the outer jacket of the cable to expose the insulated wires. Strip approximately 1/2 inch of insulation from the end of each individual wire.
2. **Disassemble the Plug/Connector:** Unscrew the housing of the L15-20P plug or L15-20R connector to access the internal terminal block.
3. **Connect Wires:** Identify the corresponding terminals on the plug/connector (typically marked for Line 1, Line 2, Line 3, and Ground). Insert each stripped wire into its correct terminal and securely tighten the terminal screws. Ensure no stray wire strands are present that could cause a short circuit. The spacious terminals are designed for easy installation and reliable wire retention.
4. **Verify Connections:** After wiring, use a multimeter to check for continuity and ensure there are no short circuits between terminals or to the housing.
5. **Reassemble:** Carefully reassemble the plug/connector housing, ensuring all components are properly seated and the strain relief is tightened to secure the cable.

SOLID BRASS BLADES

Corrosion-resistant brass blades for a strong, consistent connection.

DUPONT NYLON HOUSING

Offers impact resistance in rugged conditions.

SECURED DESIGN

UL-listed for safety and reliable performance.

HIGH POWER CAPACITY

Supports 20 Amp, 250 Volt power for heavy-duty tools and equipment.

DESIGNED FOR CABLES

Specifically engineered to support 14/4 to 12/4 cables, the spacious terminals and internal clamps ensure easy installation and reliable wire retention.

Image 3.1: Diagram illustrating the internal components of the L15-20 plug, including solid brass blades, Dupont Nylon housing, secured design, and high power capacity, designed for 14/4 to 12/4 cables.

4. OPERATION

Once the L15-20 plug and connector are properly wired to a power cable, they can be used to connect compatible electrical equipment to a power source, such as a generator or an inlet box.

1. **Connect the Plug:** Insert the L15-20P male plug into a compatible L15-20R generator receptacle or inlet box. Ensure the plug is fully inserted and the locking mechanism engages securely.
2. **Connect the Connector:** Attach the L15-20R female connector to a compatible male plug or equipment inlet. Ensure a firm and secure connection.
3. **Verify Connection:** Visually inspect the connection to ensure it is tight and there are no gaps. The reliable locking mechanism helps maintain a stable and safe power connection.
4. **Apply Power:** Once both ends are securely connected, you may energize the power source (e.g., start the

generator or turn on the breaker).



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ower usage for
not individually.
corresponding

MAIN BREAKER

 **DURABLE
DESIGN**

Built for heavy use with a tough
molded plug and connector.

 **QUALITY
TESTED**

Tested for Voltage, Continuity, and
Polarity to ensure safe performance.

Made with high-quality materials to ensure durability, safety,
and optimal performance in demanding environments.

Image 4.1: A close-up view of the L15-20 connector securely plugged into a generator receptacle, demonstrating its durable design and quality testing for voltage, continuity, and polarity.



Image 4.2: A hand demonstrating the connection of the L15-20 plug, highlighting its reliable locking mechanism for a stable and safe power connection, and its wide compatibility with various tools and equipment.

5. MAINTENANCE AND CARE

Proper maintenance ensures the longevity and safe operation of your Iron Box L15-20 Plug and Connector Set.

- **Regular Inspection:** Periodically inspect the plug and connector for any signs of wear, damage, cracks, or discoloration. Check the blades for corrosion or bending.
- **Cleaning:** Keep the plug and connector clean and free of dirt, dust, and moisture. Use a dry cloth to wipe down the exterior. Do not use harsh chemicals or abrasive cleaners.
- **Storage:** When not in use, store the plug and connector in a clean, dry place, away from extreme temperatures and direct sunlight.
- **Weatherproof Design:** While designed to endure elements, avoid prolonged submersion in water. Ensure connections are dry before use in wet conditions.



Image 5.1: The L15-20 plug and connector set lying on the ground in an outdoor environment, illustrating its weatherproof design built to endure the elements for reliable performance indoors and outdoors.

6. TROUBLESHOOTING

If you encounter issues with your Iron Box L15-20 Plug and Connector Set, consider the following common troubleshooting steps:

- **No Power:**

- Ensure the power source (generator, breaker) is active.
- Check that both the plug and connector are fully and securely seated.
- Inspect the cable for any visible damage or cuts.
- Verify the internal wiring connections are tight and correct.

- **Loose Connection:**

- Ensure the locking mechanism is fully engaged.
- Check for any debris in the receptacle or plug that might prevent a full connection.

- **Overheating:**

- Ensure the connected load does not exceed the 20 Amp rating of the plug and connector.
- Verify the cable gauge is appropriate for the current draw.
- Check for loose connections, which can cause resistance and heat.

If problems persist, discontinue use and consult a qualified electrician or contact Iron Box customer support.

7. SPECIFICATIONS

Attribute	Value
Model Number	IBX-L1520PR
Plug Type	NEMA L15-20P (Male)
Connector Type	NEMA L15-20R (Female)
Amperage Rating	20 Amps
Voltage Rating	250 Volts
Wattage Rating	12000 Watts
Number of Poles	4
Number of Wires	4
Material	Nylon
Color	Black
Certifications	UL Listed, CSA Approved
Item Weight	362.87 g
Manufacturer	Iron Box

8. WARRANTY INFORMATION

For specific warranty details regarding your Iron Box L15-20 Plug and Connector Set, please refer to the warranty documentation provided at the time of purchase or visit the official Iron Box website. Generally, Iron Box products are manufactured to high standards and are covered against defects in materials and workmanship under normal use. Please retain your proof of purchase for any warranty claims.

9. SUPPORT AND CONTACT

If you require further assistance, have questions about installation, or need to report an issue with your Iron Box L15-20 Plug and Connector Set, please contact Iron Box customer support.

For the most up-to-date contact information, please visit the official Iron Box website or refer to the contact details provided with your product packaging.

