

Treedix TRX5-0865

Treedix USB Cable Tester User Manual

Model: TRX5-0865

1. INTRODUCTION

This manual provides comprehensive instructions for the Treedix USB Cable Tester, Model TRX5-0865. This device is designed to quickly and accurately identify various USB cable types and their functionality by observing LED indicators. It helps in managing cable clutter and diagnosing cable issues efficiently.

The tester supports a wide range of USB interfaces, including Type-C, USB-A 3.0, Micro-B 3.0, Micro-B 2.0, Mini-B 2.0, and Lightning cables. It is an essential tool for electronics repair, device debugging, and cable quality inspection.

2. PRODUCT OVERVIEW

2.1 Key Features

- High-Quality Testing:** Designed for quick identification of USB cable types and their transmission performance via LED indicators.
- Extensive Compatibility:** Supports Type-C, USB-A 3.0, Micro-B 3.0, Micro-B 2.0, Mini-B 2.0, and Lightning cables.
- Efficient Detection:** Quickly distinguishes between normal, fault, open circuit, charge-only, data transmission, and high-speed data transmission functions.
- Dual Power Supply:** Can be powered by a CR2032 button cell battery or via a Type-C interface (requires a separate 5V power adapter).
- Compact and Portable:** Small form factor (7.3×5.7×1 cm) for easy portability.

2.2 Package Contents

The Treedix USB Cable Tester package includes:

- 1 x Treedix USB Cable Tester
- 1 x User Manual
- 1 x CR2032 Battery (pre-installed or included)

2.3 Device Layout and Pinouts

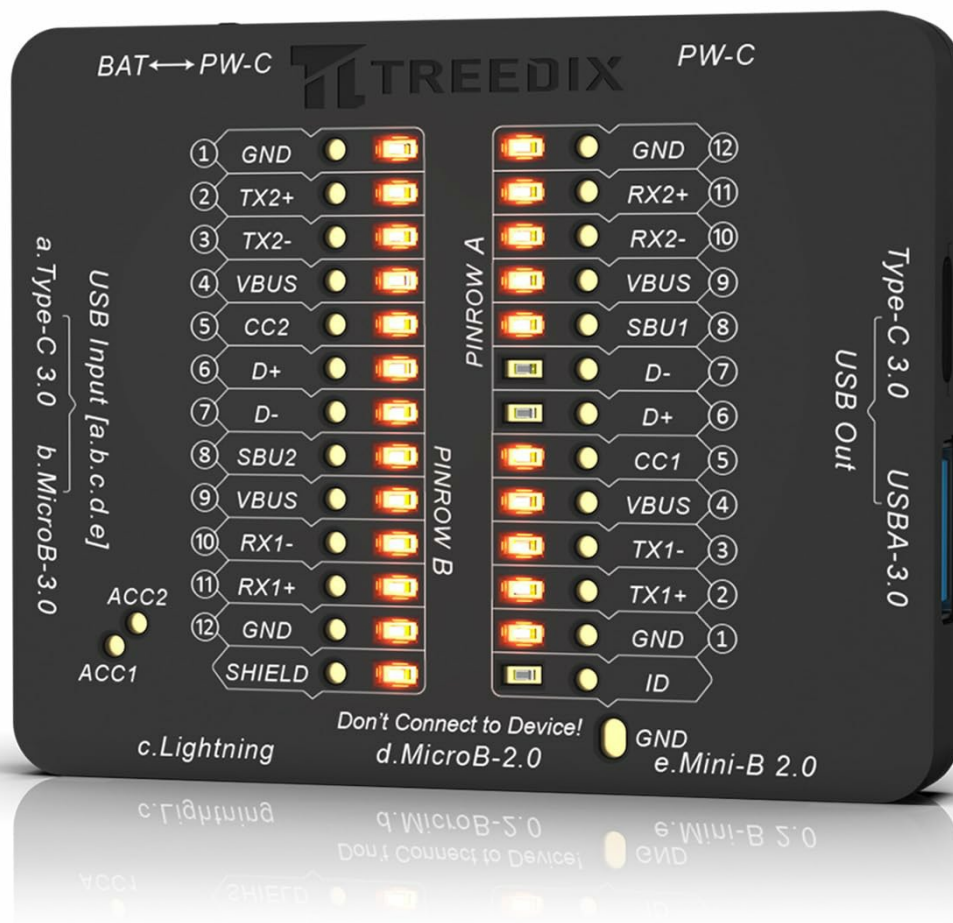


Figure 2.3.1: Front view of the Treedix USB Cable Tester, showing the LED indicator array and various input/output ports.

Two Methods of Power Supply

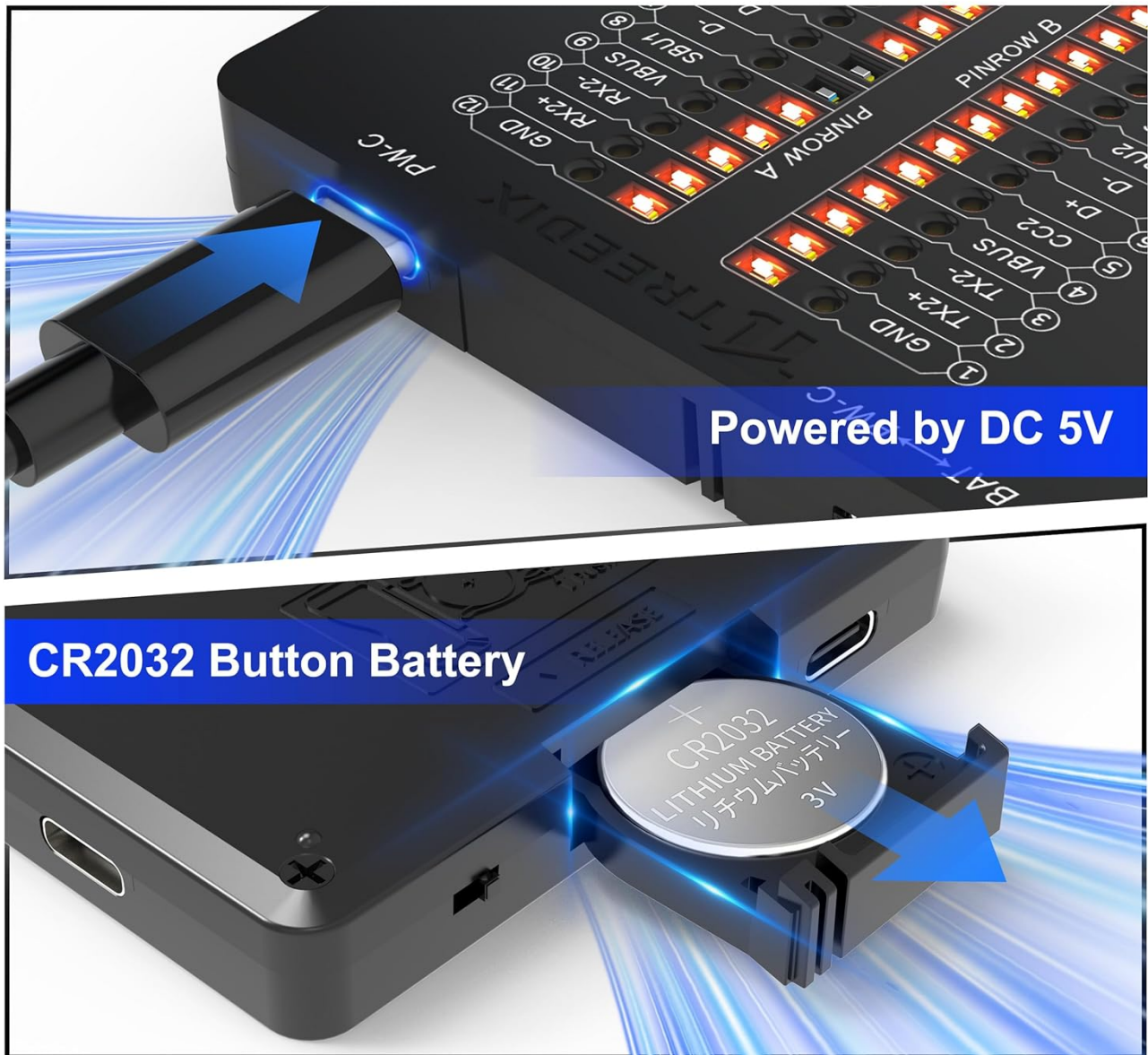


Figure 2.3.2: Detailed diagram illustrating the USB Cable Tester's pinouts and the location of each input and output port, including Type-C, USB-A 3.0, Micro-B 3.0, Micro-B 2.0, Mini-B 2.0, and Lightning.

The tester features dedicated input and output ports for different USB cable types. The central area displays two rows of LED indicators (Pinrow A and Pinrow B) that illuminate to show the connection status and functionality of each wire within the cable.

3. SETUP

3.1 Powering the Device

The Treedix USB Cable Tester offers two methods for power supply:

1. **CR2032 Button Cell Battery:** A CR2032 battery is included and can be installed in the battery compartment.
2. **Type-C Interface (5V):** The tester can also be powered by connecting a 5V power adapter to its Type-C power input port. This method is useful for extended testing sessions or if a battery is not available.

USB Type C to Type-C

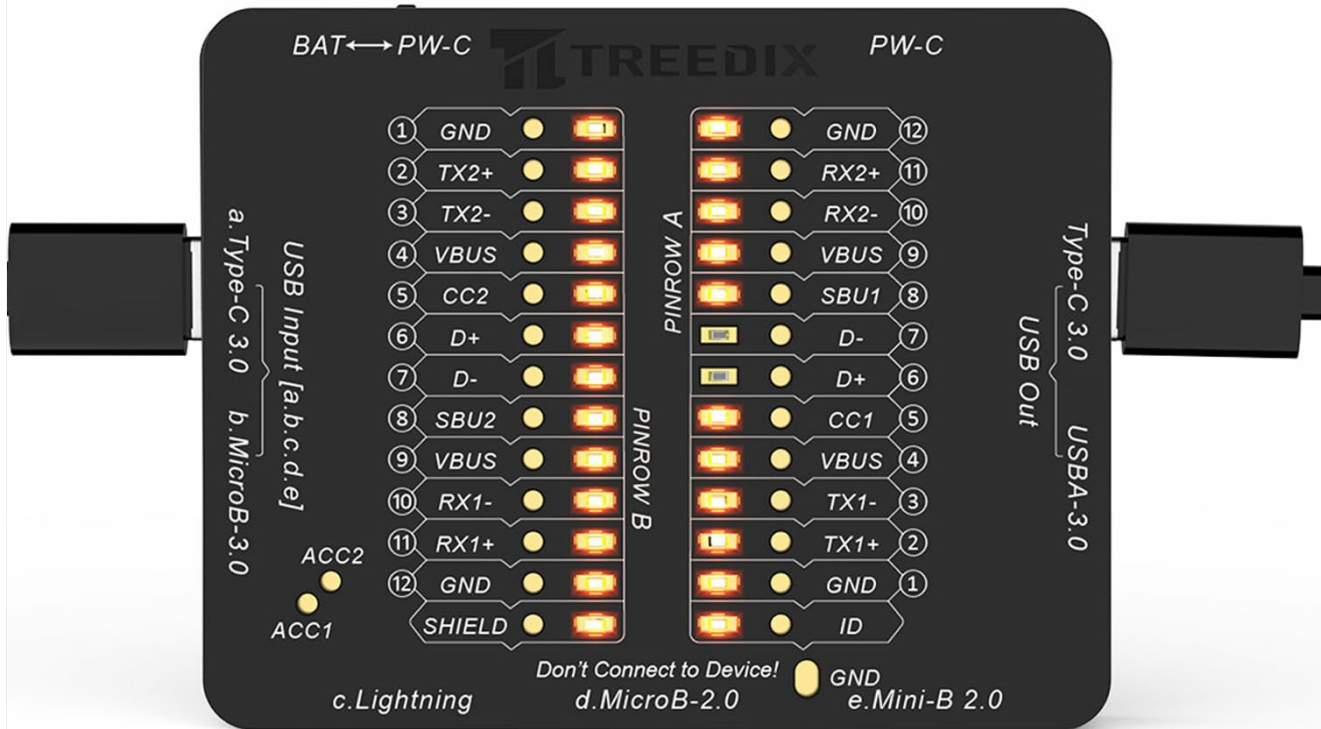


Figure 3.1.1: Illustration of the dual power supply options: Type-C 5V input and CR2032 battery installation.



Figure 3.1.2: Step-by-step guide for opening the battery compartment and inserting the CR2032 battery. Press the plastic lock and pull out the tray.

Important Note:

⚠ This device is intended solely for cable testing. Do not connect it to end devices such as smartphones, computers, or other electronic equipment, as this may cause damage to the tester or the connected device.

⚠ When using the Type-C interface for power, ensure the power adapter provides a stable 5V output.

4. OPERATING INSTRUCTIONS

4.1 Basic Cable Testing

To test a USB cable, follow these steps:

1. Ensure the Treedix USB Cable Tester is powered on (either by battery or Type-C 5V input).
2. Identify the correct input and output ports on the tester for the cable you wish to test. For example, for a USB Type-C to Type-C cable, connect one end to the "Type-C 3.0 USB Input" and the other end to the "Type-C 3.0 USB Out" port.
3. Carefully insert both ends of the USB cable into their respective ports on the tester.
4. Observe the LED indicators on the test board. The illuminated LEDs correspond to the functional wires within the cable.

Professional Tool for 🔧 Electronics Repair

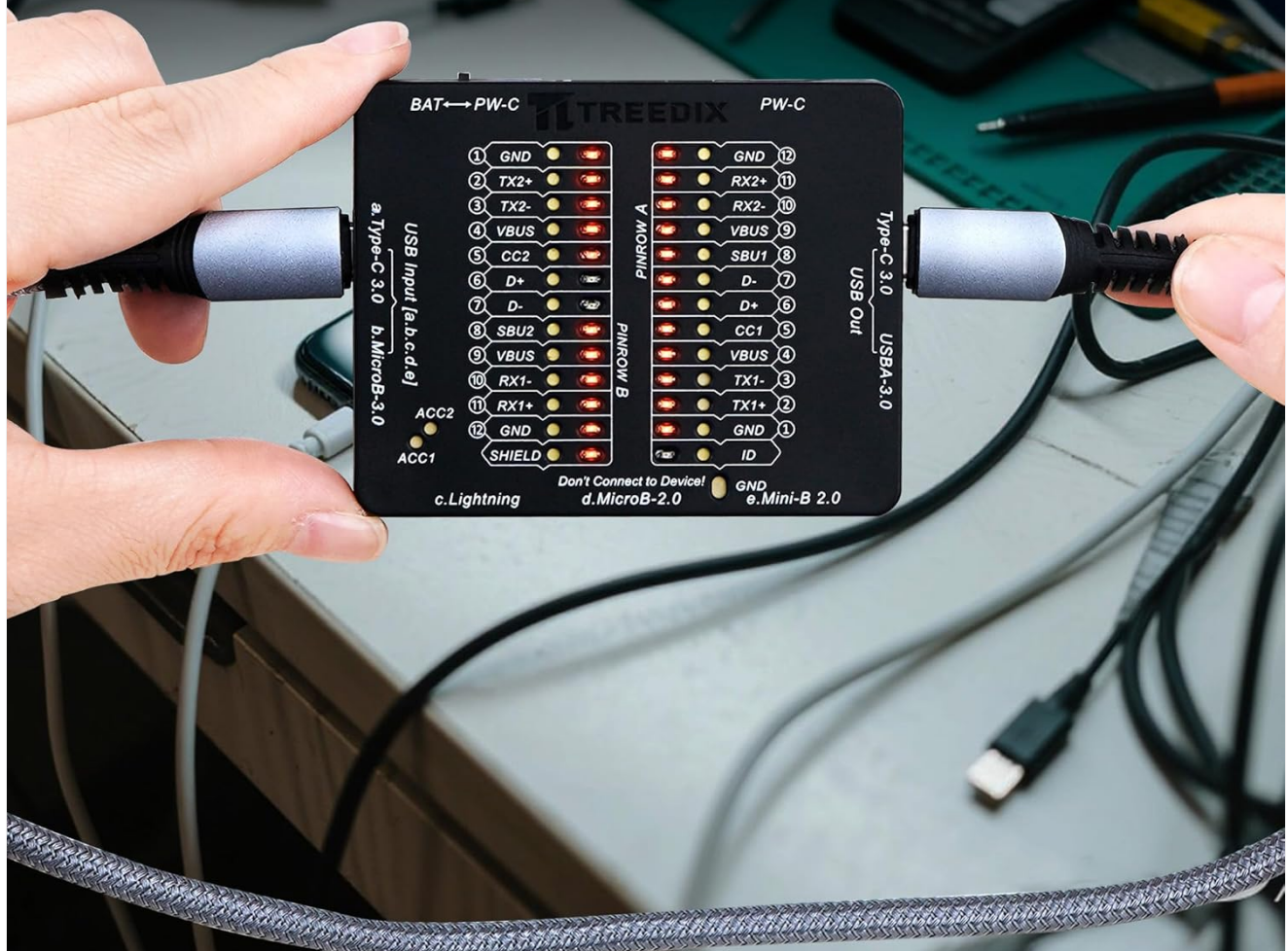


Figure 4.1.1: Demonstrating the connection of a USB cable to the tester for diagnosis.

USB Cable Tester Pinouts

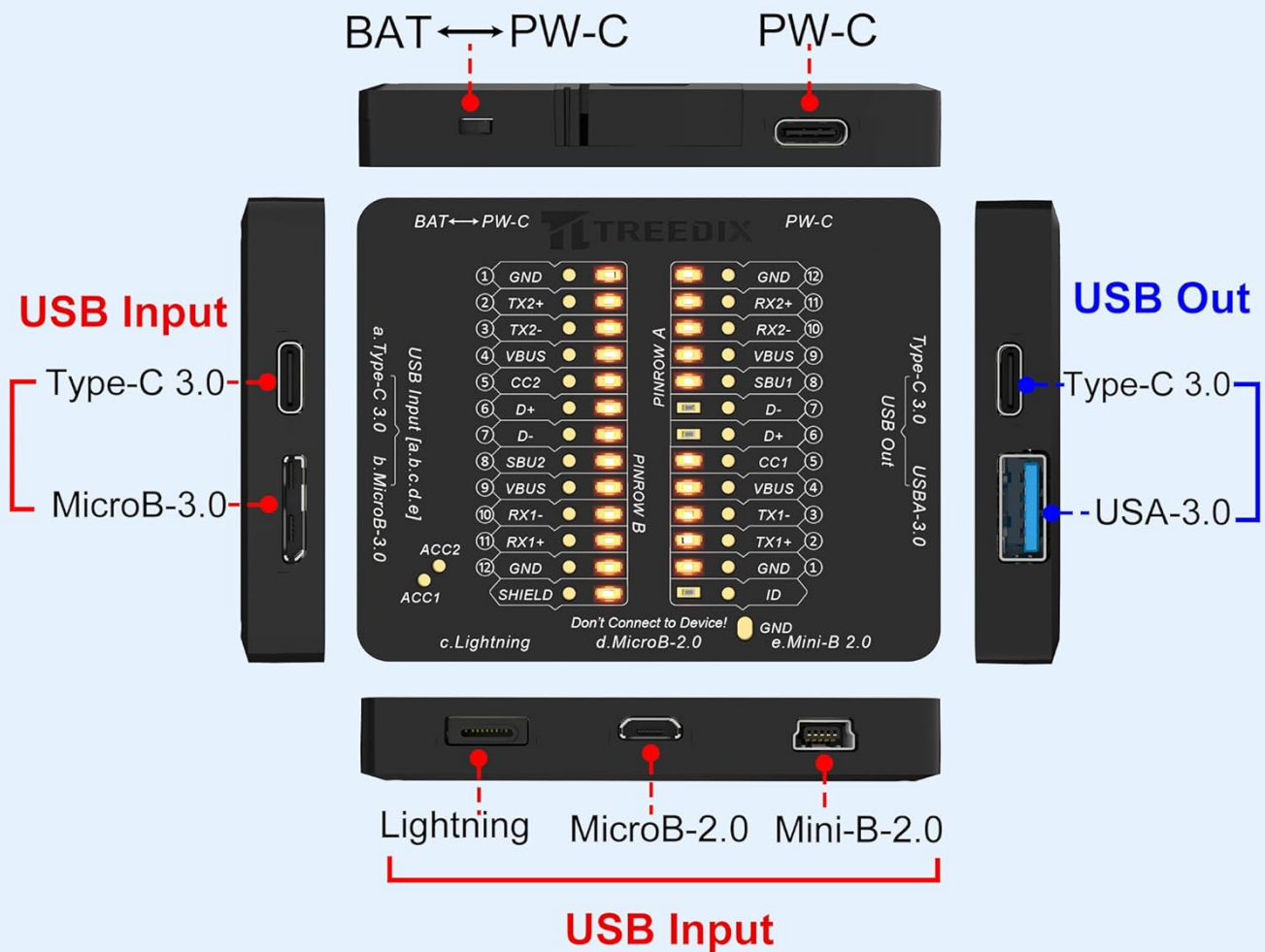


Figure 4.1.2: The tester supports a wide array of USB interfaces for comprehensive cable compatibility.

4.2 Interpreting LED Indicators

The LED indicators provide visual feedback on the cable's status and functionality. Each LED corresponds to a specific pin or wire within the USB cable. By observing which LEDs illuminate, you can determine the cable's capabilities and identify any faults.

HOW TO OPEN THE BATTERY COMPARTMENT?

Press the plastic lock on the side of the battery compartment and pull the battery compartment out.

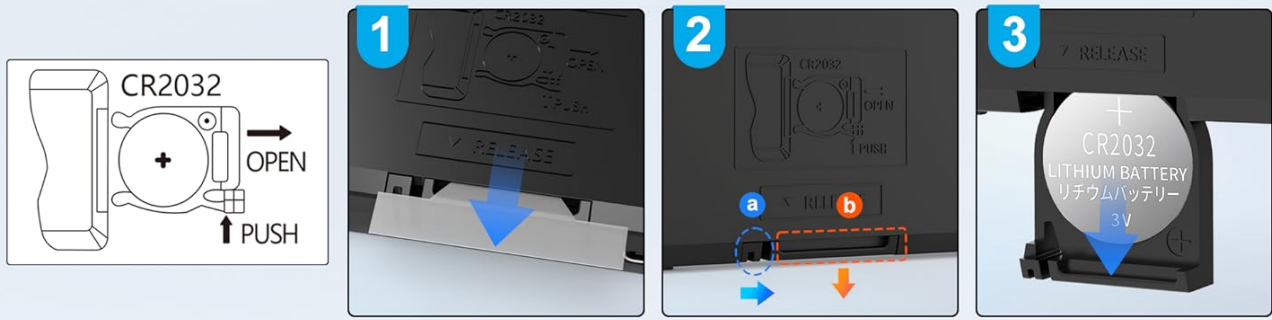


Figure 4.2.1: Reference guide for interpreting LED patterns to understand cable functionality.

- **Test 1 (Charge-Only Cable):** When only GND and VBUS LEDs are illuminated, the cable primarily supports charging functionality.
- **Test 2 (Charging and Data Cable):** If GND, VBUS, D+, and D- LEDs are on, the cable supports both charging and standard data transmission.
- **Test 3 (USB 3.0/3.1/3.2 Cable):** When GND, VBUS, TX2+, TX2-, CC2, D+, D-, RX1+, RX1-, TX1+, TX1-, CC1, SBU1, SBU2, and SHIELD LEDs are illuminated, it indicates a USB 3.0, 3.1, or 3.2 cable with high-speed data transmission capabilities.
- **Test 4 (Comprehensive Functionality Cable):** When all LEDs are illuminated (except for one D+ and one D- which may vary based on specific cable design), the cable supports comprehensive functionality including charging, data transmission, audio, and video transmission.
- **Fault/Open Circuit:** If certain expected LEDs do not light up, it indicates a fault or open circuit in the corresponding wire.

Cable Testing

The image shows a black TREEDIX USB cable tester. It has a USB Type-C 3.0 input on the left and a USB Type-A 3.0 output on the right. The tester has various pins labeled: 1 GND, 2 TX2+, 3 TX2-, 4 VBUS, 5 CC2, 6 D+, 7 D-, 8 SBU2, 9 RX2+, 10 RX2-, 11 VBUS, 12 SBU1, 13 D-, 14 D+, 15 VBUS, 16 TX1-, 17 TX1+, 18 GND, 19 ID, 20 RX1-, 21 RX1+, 22 GND, 23 SHIELD, 24 GND, 25 Mini-B 2.0. A blue light is visible on the cable being tested, and a label 'Damaged Cable' points to the cable.

5. MAINTENANCE

6. TROUBLESHOOTING

| Problem | Possible Cause | Solution |
|---------|----------------|----------|
|---------|----------------|----------|

| Problem | Possible Cause | Solution |
|---|---|---|
| Device does not power on. | <ul style="list-style-type: none">• Low or dead CR2032 battery.• Type-C power adapter not connected or faulty. | <ul style="list-style-type: none">• Replace the CR2032 battery.• Ensure the Type-C power adapter is properly connected and functioning, providing 5V. |
| No LEDs illuminate when a cable is connected. | <ul style="list-style-type: none">• Cable is severely damaged or completely open circuit.• Cable not fully inserted into ports.• Device not powered on. | <ul style="list-style-type: none">• Try testing with a known good cable to verify tester functionality.• Ensure both ends of the cable are firmly seated in their respective ports.• Verify the device is powered on as per Section 3.1. |
| Only some LEDs illuminate for a data cable. | <ul style="list-style-type: none">• Internal wire(s) in the cable are broken or shorted.• Cable is a charge-only type. | <ul style="list-style-type: none">• Refer to Section 4.2 to interpret the LED pattern. If data lines (D+, D-, TX/RX) are not lit, the cable may be faulty or designed for charging only.• Replace the cable if it is intended for data transfer but shows missing connections. |

7. SPECIFICATIONS

| Feature | Detail |
|----------------------|--|
| Model Number | TRX5-0865 |
| Dimensions | 7.3 × 5.7 × 1 cm (2.87 × 2.24 × 0.39 inches) |
| Weight | Approximately 59 grams (2.08 ounces) |
| Power Source | 1 x CR2032 Button Cell Battery (included) or Type-C 5V DC Input |
| Supported Interfaces | Type-C, USB-A 3.0, Micro-B 3.0, Micro-B 2.0, Mini-B 2.0, Lightning |
| Color | Black |
| Manufacturer | Treedix |
| UPC | 644197778641 |

8. WARRANTY AND SUPPORT

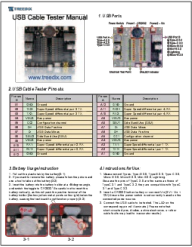
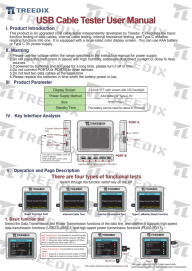
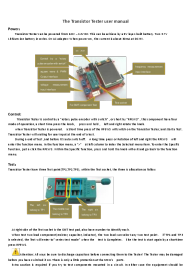
Treedix products are manufactured to high-quality standards. For specific warranty information and support, please refer to the documentation included with your purchase or visit the official Treedix website. Keep your purchase

receipt as proof of purchase for warranty claims.

Manufacturer: Treedix

For further assistance, please contact Treedix customer support through their official channels.

Related Documents

| | |
|---|--|
|  | <p>Treedix USB Cable Tester Manual</p> <p>A comprehensive manual for the Treedix USB Cable Tester, detailing its ports, pinouts, battery usage, and instructions for use with various USB cable types.</p> |
|  | <p>Treedix USB Cable Tester User Manual</p> <p>User manual for the Treedix USB Cable Tester, detailing its features, operation, and specifications for testing various USB data cables.</p> |
|  | <p>Treedix GM328 Transistor Tester User Manual and Assembly Guide</p> <p>Comprehensive user manual and assembly instructions for the Treedix GM328 Transistor Tester, detailing its features, functions, testing procedures, and component assembly.</p> |