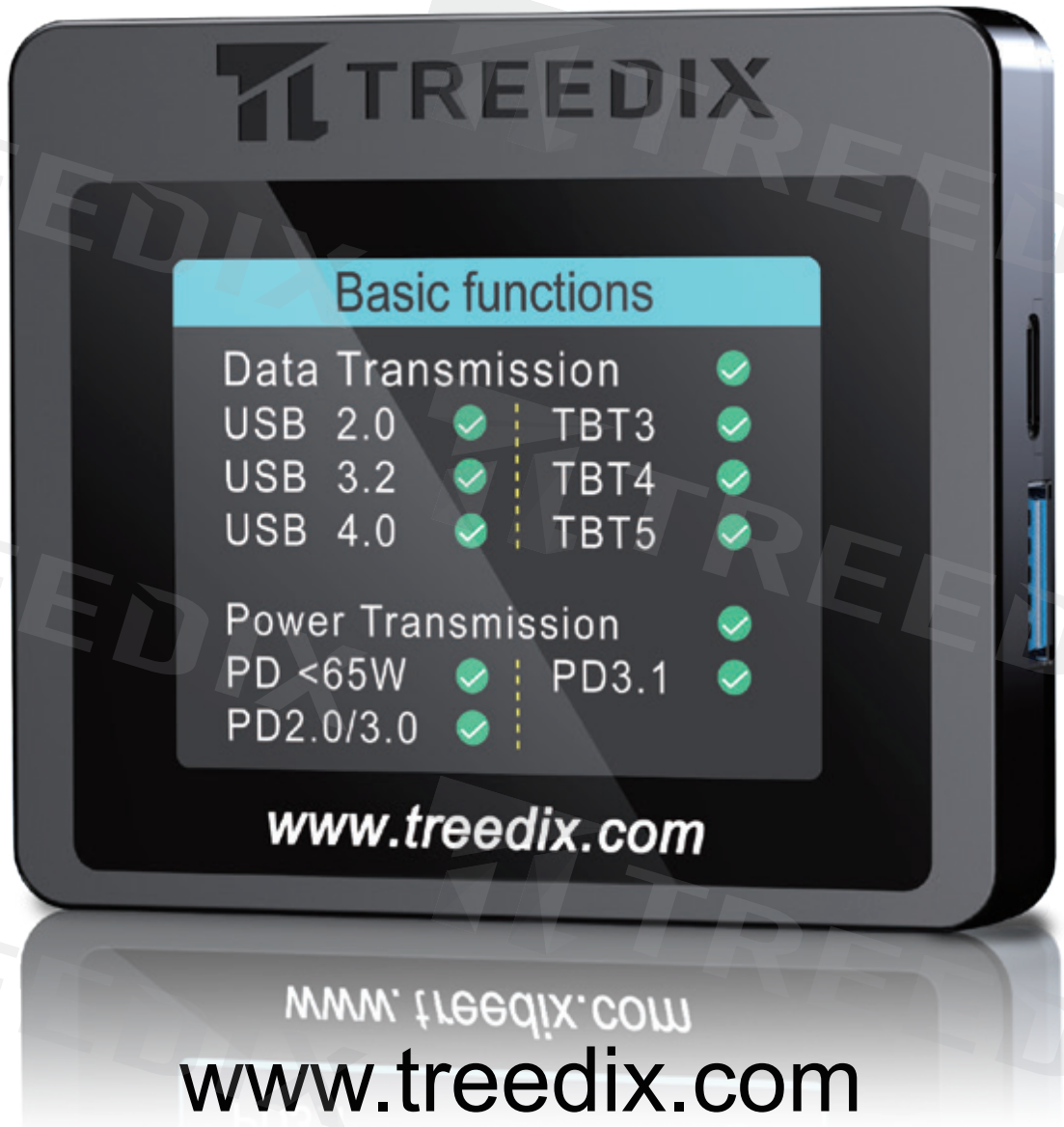
TREEDIX

USB Cable Tester User Manual



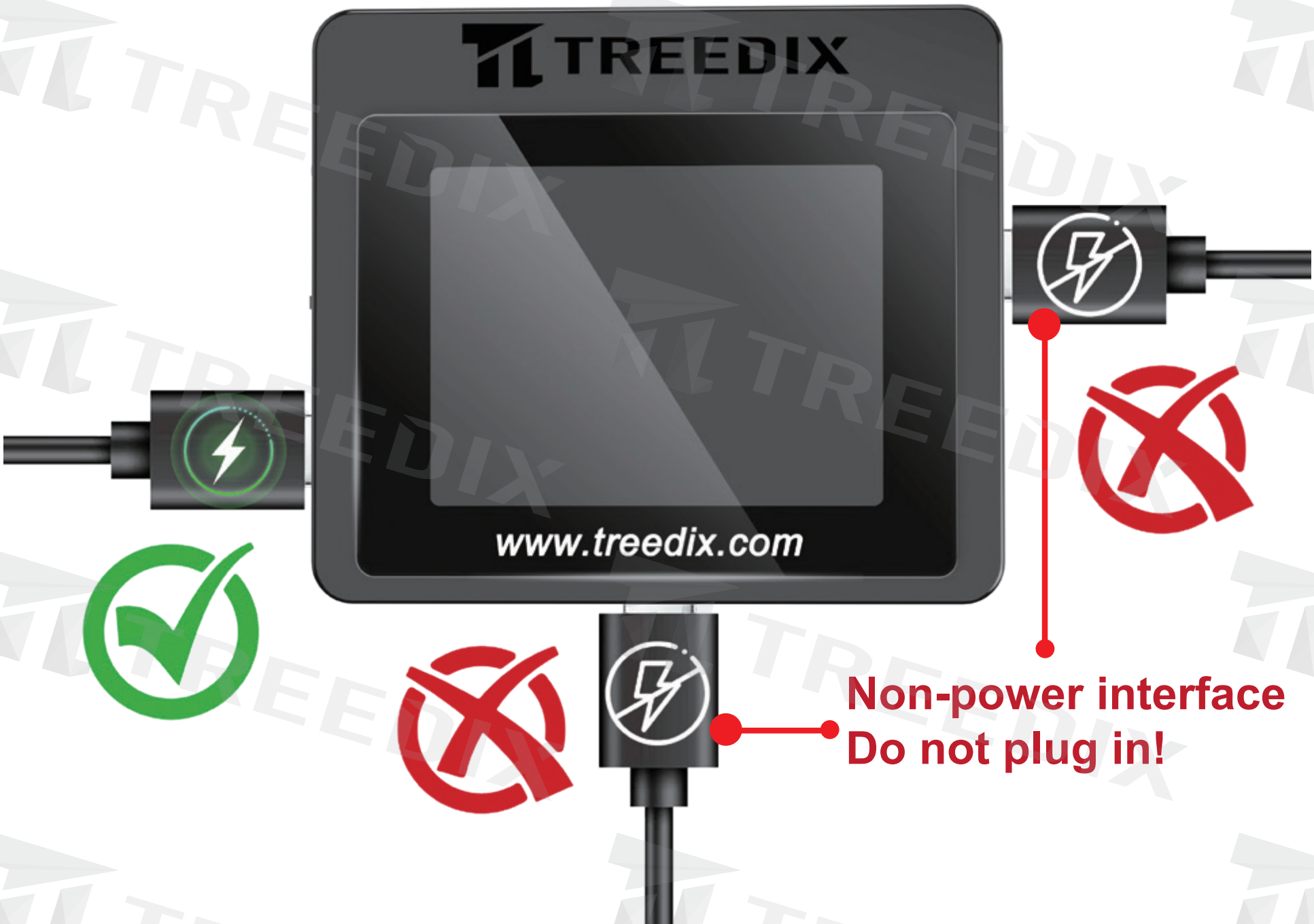
www.treedix.com

Email:contact@treedix.com



Direct access to the official Treedix product information page

Note: To power the device correctly via Type-C 5V, ensure to plug into the correct port. Inserting into a wrong port may cause damage to the product.



USB Cable Tester User Manual(EN)

I. Product Introduction

This product is an upgraded USB cable tester independently developed by Treedix. It integrates the basic function testing of data cables, internal cable testing, internal resistance testing, and Type-C eMarker reading functions into one. It is equipped with a large-sized color display screen. You can use AAA battery or Type C 5V power supply.

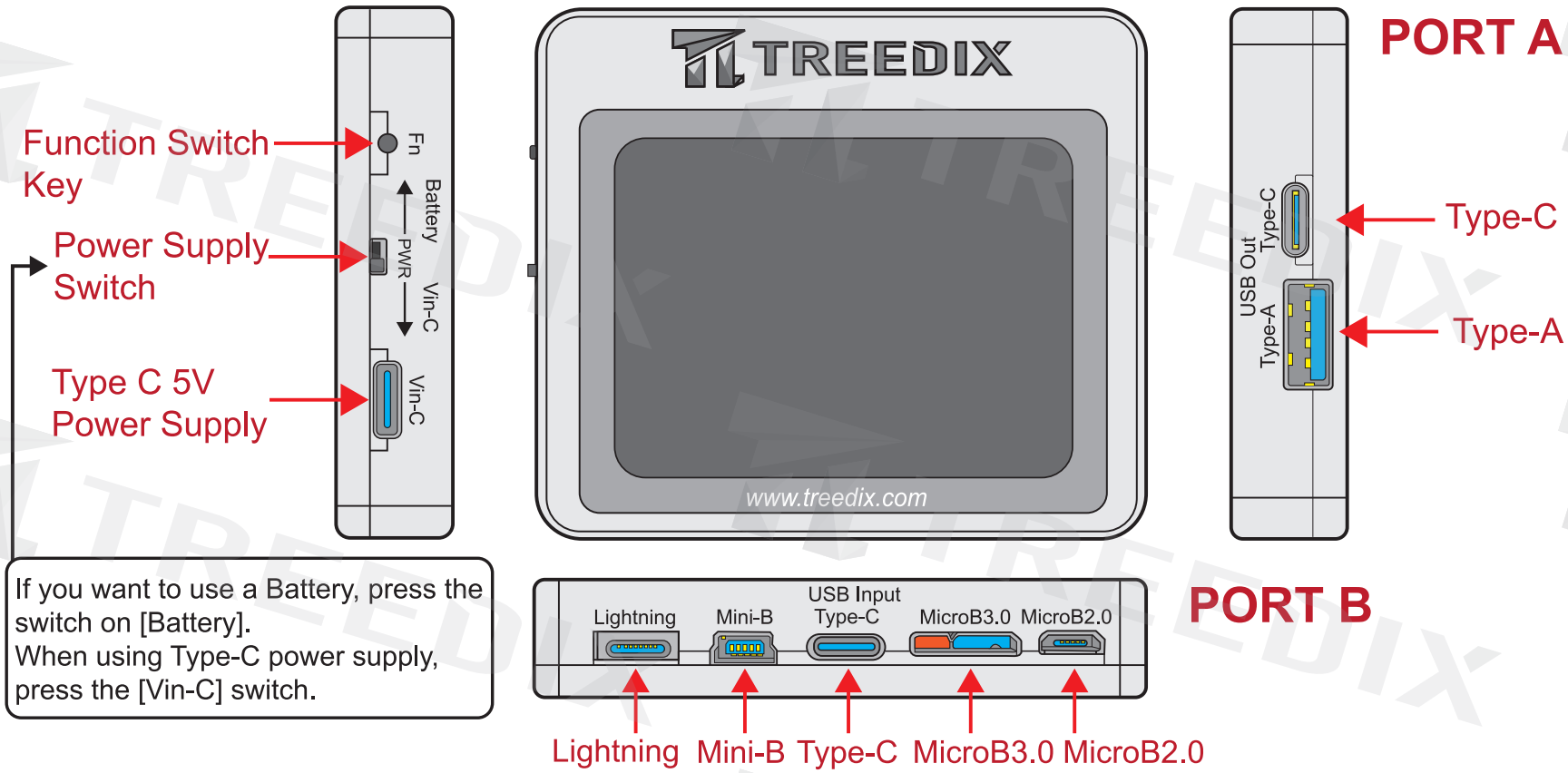
II. Warning

1.Please use the voltage within the range specified in the instruction manual for power supply.
2.Do not place this instrument in places with high humidity, excessive dust,direct sunlight or close to heat sources.
3.If powered by batteries and not used for a long time, please turn it off in time.
4.Do not connect PORTA or PORTB to other devices.
5.Do not test two data cables at the same time.
6.Please replace the batteries in time when the battery power is low.
7.Without operation, the screen of the usb cable tester will automatically dim after one minute. It will enter standby mode after 2 minutes.

III. Product Parameter

Display Screen	2.4-inch TFT color screen with LED backlight
Power Supply Method	AAA battery or Type-C 5V
Size	75*65*15mm (2.9*2.5*0.5in)
Standby Time	The battery can be used for about 2 hours

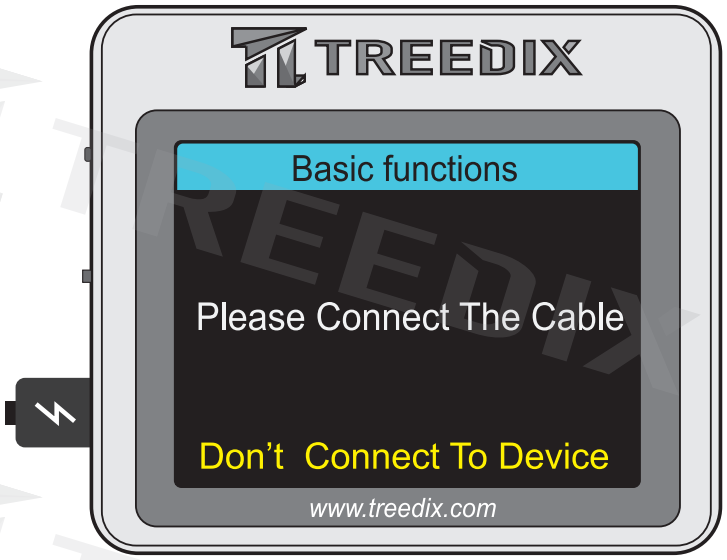
IV. Key Interface Analysis



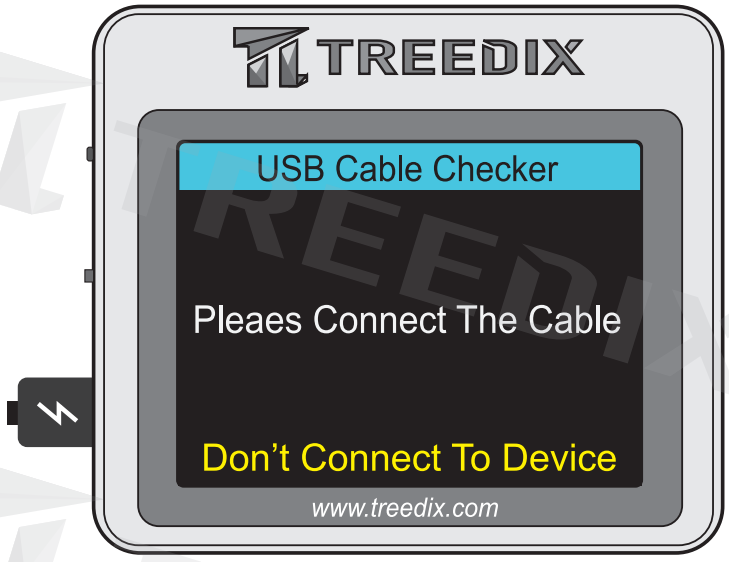
V. Operation and Page Description

There are four types of functional tests

Switch through the function switch key on the left



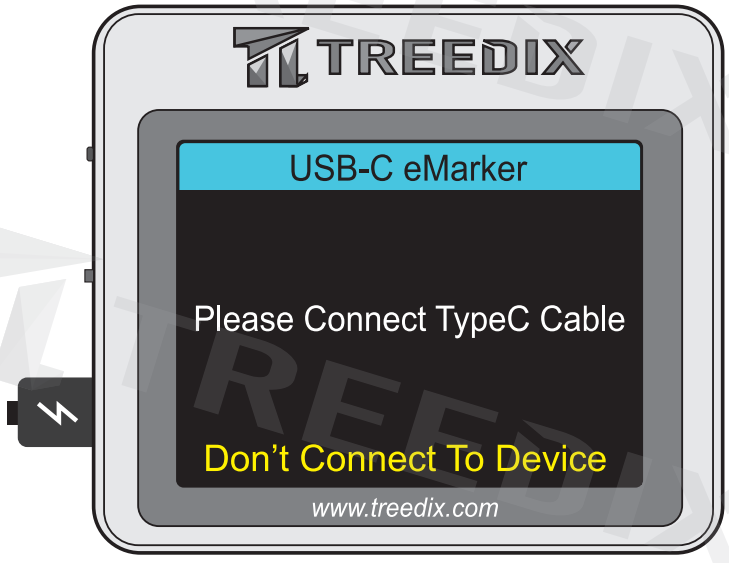
Basic Function Test



Internal Cable Test



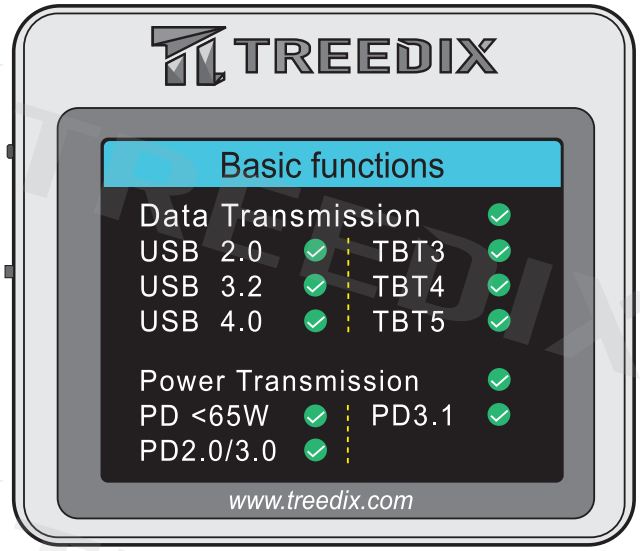
Internal Resistance Test



Type-C eMarker Read Function

1. Basic Function Test

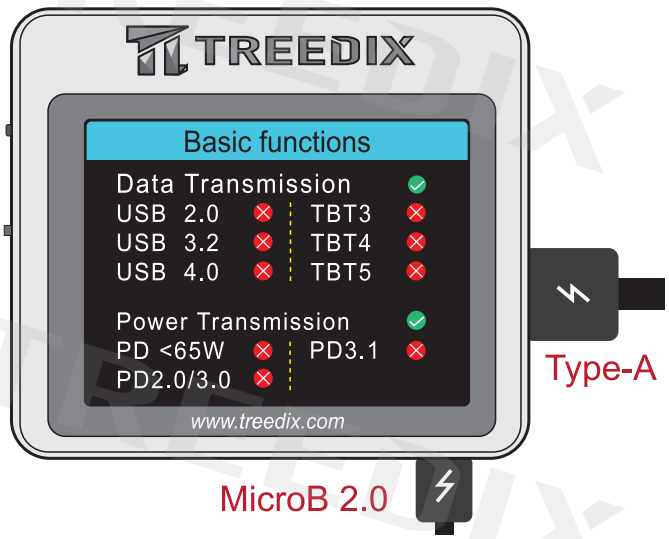
Detect the Data Transmission and Power Transmission functions of the data line, and whether it supports high-speed data transmission functions (USB 2.0,USB 3.2,USB 4.0) and high-speed power transmission functions (PD3.0,PD3.1).



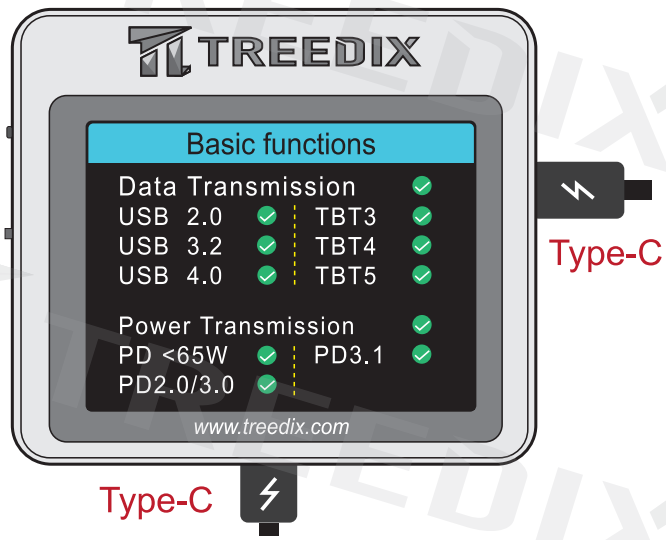
Test Screen Information

Data Transmission: Functionality for transferring data.
USB 2.0: Maximum data transfer speed is 480 Mbps.
USB 3.2: Maximum data transfer speed is 20 Gbps, which is significantly faster than USB 2.0.
USB 4.0: Cables support USB 4.0.Maximum transmission speed is 40Gbps.
TBT3, TBT4, and TBT5: Support TBT3, TBT4 and TBT5 respectively.

Power Transmission: Functionality for transmitting power.
PD <65W: Supports output below 65W
PD 2.0/3.0: Supports a maximum power output of 100W.
PD 3.1: Supports a maximum power output of 240W.



This cable supports power transmission only.

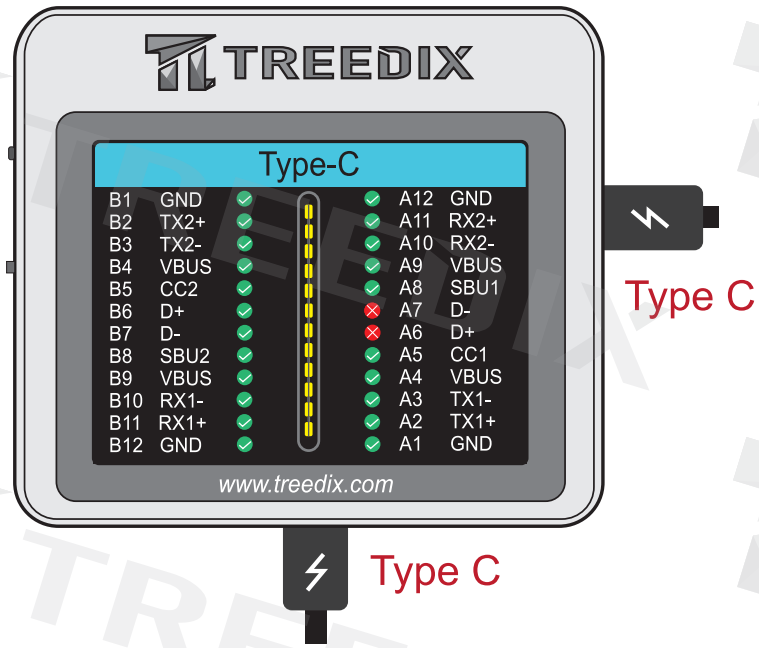


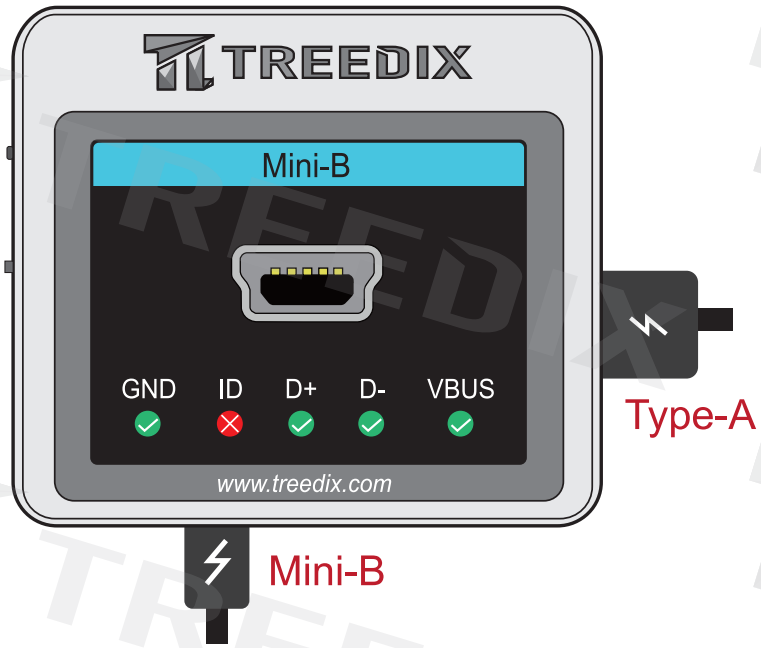
This cable supports USB 4.0/TBT5 high-speed data transmission and PD 3.1 high-speed power transmission.

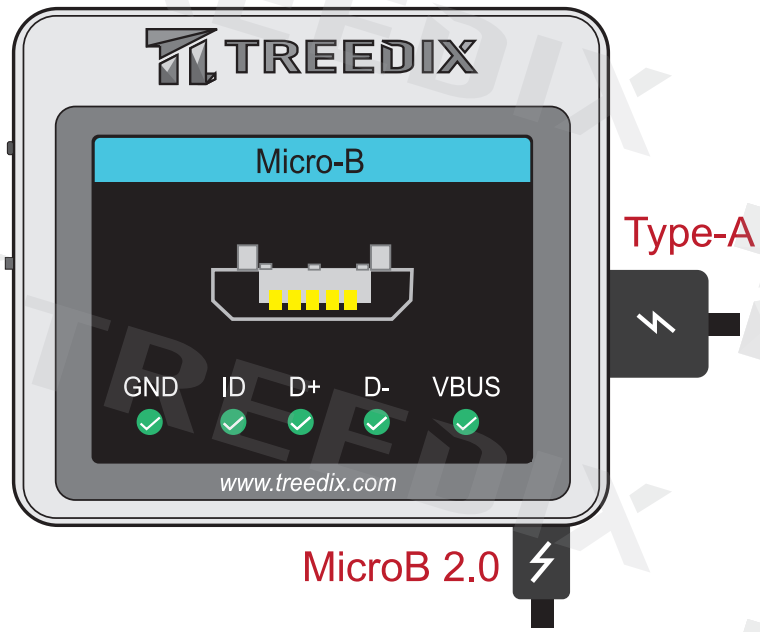
2. Test Internal Cables

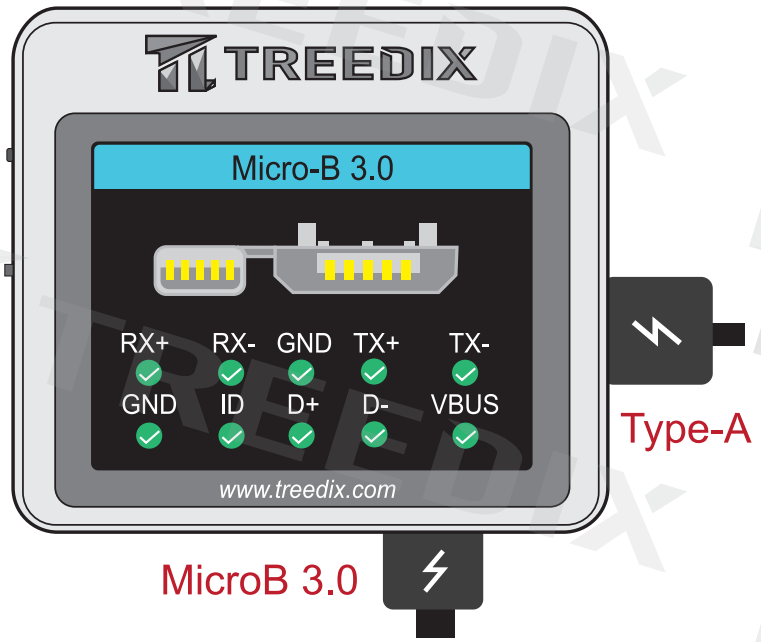
Connect the data line to PORTA and PORTB

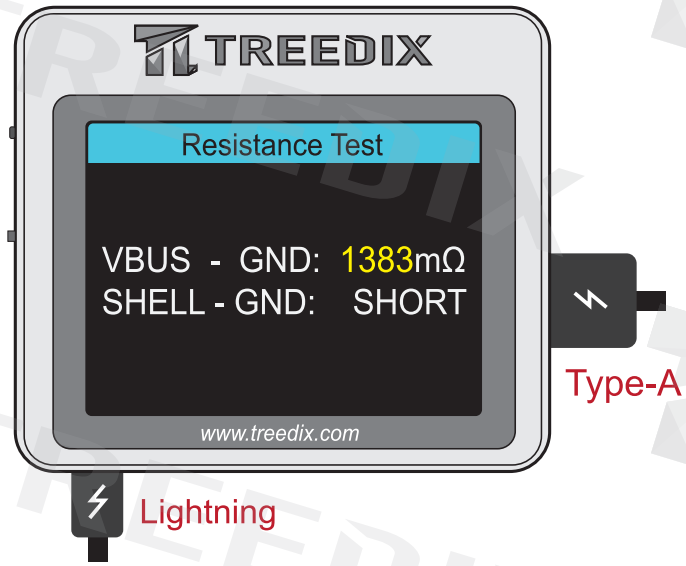
The screen shows the corresponding interface of the data cable and the corresponding internal cable. The green indicates that the internal circuit of the line is conductive, and red indicates that the internal circuit of the line is open.











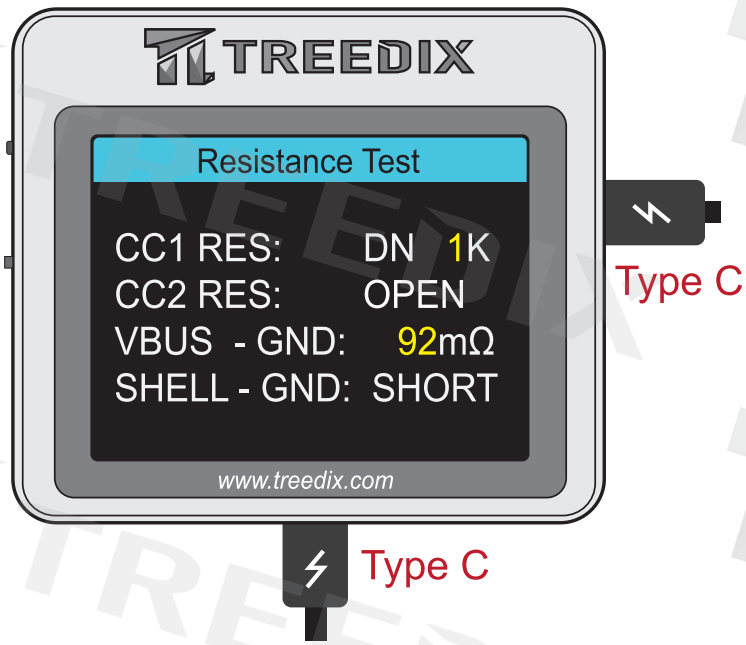
Due to the chip inside the Lightning data cable, the test result of the internal resistance have errors.

3. Internal Resistance Testing

The screen shows the internal resistance of the data cable and whether the data cable housing is grounded.

Test Screen Information

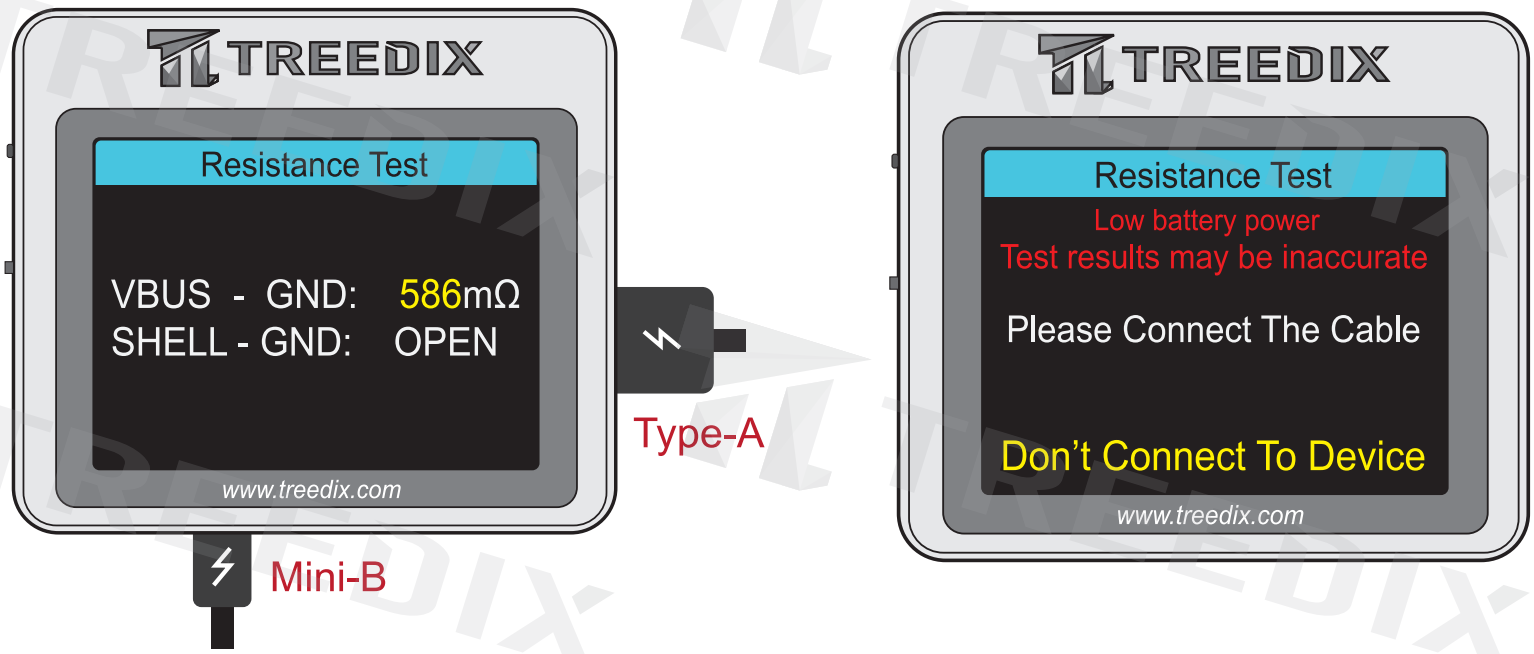
VBUS-GND: Internal resistance test.
CC RES: Pull-up and pull-down resistors [**DN** is the pull-down resistor], [**UP** is the pull-up resistor, and the resistance value is after it].
SHELL-GND: Whether the casing is grounded.
OPEN: Indicates that there is no pull-up or pull-down resistor on the CC line.



92mΩ (VBUS-GND) is the total resistance of both wires.

⚠ Note:

1.When measuring resistance (including the contact resistance of the connector), under the premise of ensuring good contact of the data line, the error is approximately ± 10%.
2.When using battery power, low battery levels may result in inaccurate internal resistance measurements.
3.Only USB Type A to Type C and Type-C to Type-C have pull-up and pull-down resistors.



4. Type-C eMarker Read

Detect whether there is an eMarker chip. If present, display the eMarker information. If not, display "No eMarker chip detected".

The eMarker information is as follows:

Wire Type: Only supports measurement of passive cables.

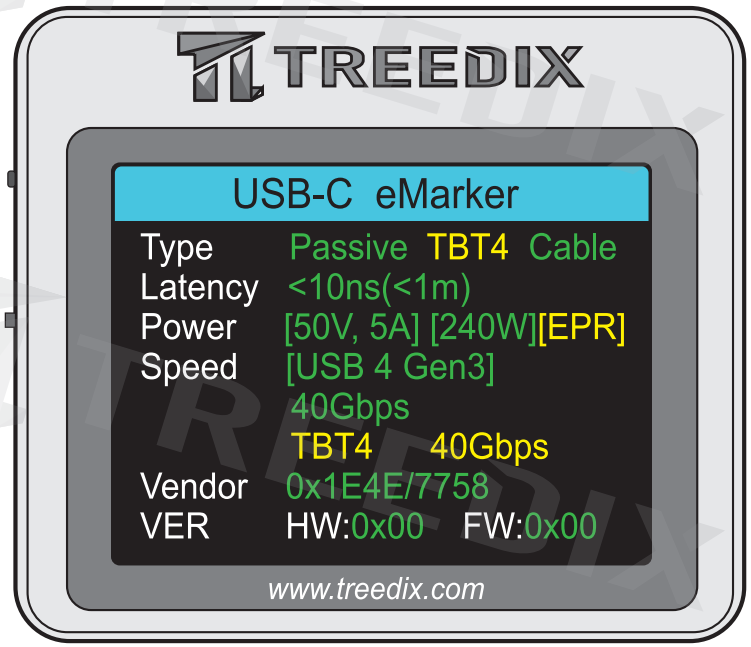
Wire Delay: Wire delay and wire length.

Cable Support (Supply) : Specifies whether the voltage, current and power supported by the cable support EPR.

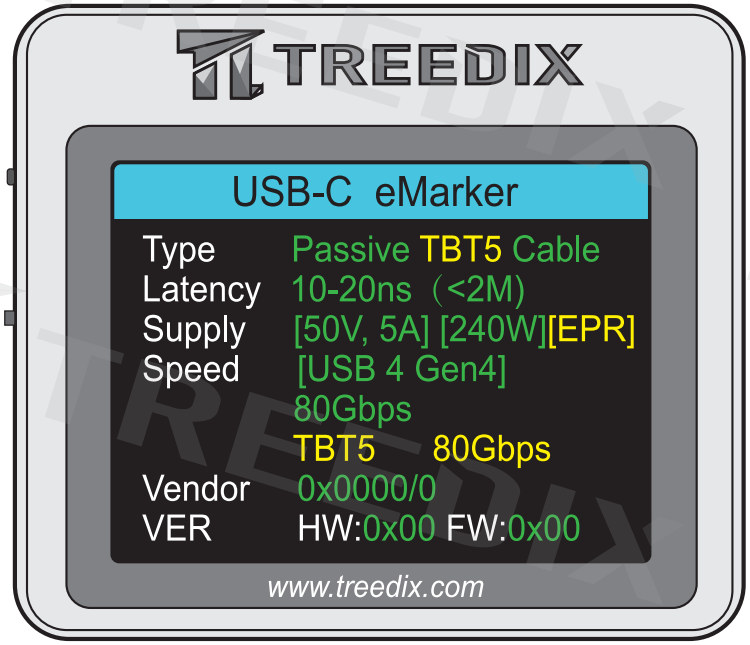
Wire Speed: Whether the cable supports the USB protocol and the transmission speed supports TBT3,TBT4 or TBT5.

Cable Vendor: Indicates the number of the cable solution vendor.

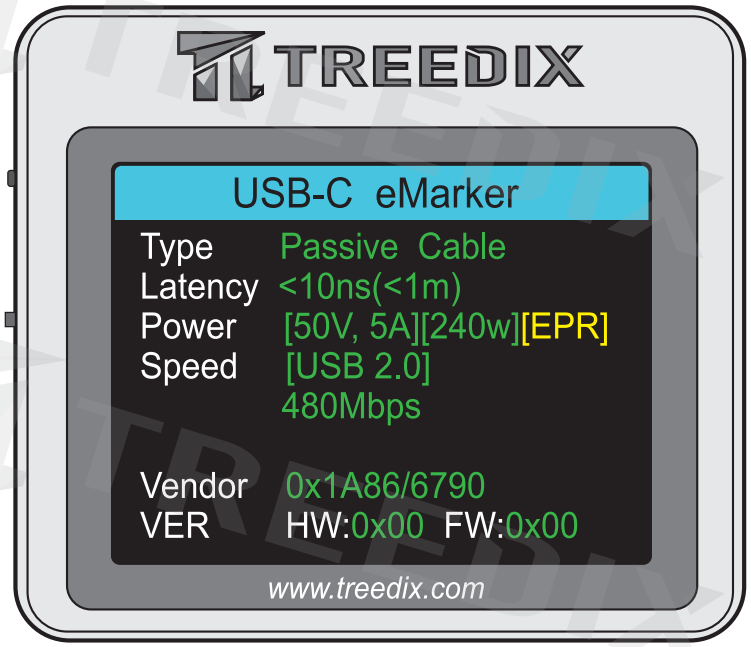
Cable Version Number (VER) : HW: hardware version FW: software version.



TBT4



TBT5



USB 2.0

Note: Before using the device for the first time, please be sure to remove the protective film from the battery. This film is for transport protection and must be removed for the device to function properly.

Reference Material:Differences and Development History of USB Versions.

Warning



1.Power Requirements:

This product operates with a DC 5V power supply, connected via a Type-C port. Avoid using high voltage or unstable power sources to prevent damage to the device.

2. Battery use:

The battery level display only appears when powered by a battery.

⚠ For first-time use, peel off the battery's plastic film!

3.Operating Environment:

Operating temperature: -10°C ~ 40°C.

Keep the environment dry and avoid exposure to water or other liquids.

4.Prohibited Actions:

This product is only intended for testing USB data cables and should not be used for any other purposes.

5.Disposal:

Please comply with local regulations for the proper disposal of used batteries and electronic devices.

Compliance Declaration:

This product complies with CE (European Union) and FCC (United States) safety standards.