USB Tester

User Manual

Part Number: MP780426 & MP780427

1. Introduction

The second generation USB testers can inspect USB chargers, portable power sources, data cables and other electronics charging devices. MP780426 / MP780427 measures output voltage, current, energy, capacity, circuit equivalent resistance, D+ and D-voltage of USB data cable, and more. This series is designed to be precise, reliable, stable, and portable. They are great tools for applications such as manufacturing verification, engineering testing, and DIYers.

2. Safety Regulations

MP780427 internal load will stop when the input voltage exceeds 13V.

MP780427 overheat protection: If internal load working temperature exceeds 65°C, “HOT” will blink and loading will stop. After temperature drops below 45°C, loading will restart.

Please read this manual carefully for operation and safety before use.

Users should not open or repair the device.

Please keep device out of reach of children.

Should this device come across any issues, please do not hesitate to contact local dealer for assistance.

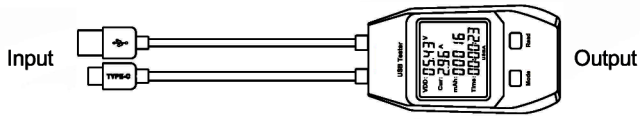
The device conforms to EN61326-1:2013, EN61326-2-2:2013 standards.

3. Operations

3.1 Connecting Input/output

a) Each USB tester is marked with Input (side with extension cord) and Output.

b) MP780426 DUAL can only be connected with the same type of input/output port at one time
(i.e. type A input and type A output, or type C input and type C output)



3.2 Input Voltage Confirmation

Insert USB Input port into output port of chargers or portable power sources.

Check if displayed voltage is within working range. If output voltage exceeds allowable range, please stop using it immediately. A voltage reading exceeds 24V, or a current reading over specified current will cause device to automatically disconnect and “OL” will appear on screen. A warning symbol “LO” will appear when voltage is below 4V. Input voltage must not exceed 25V.

3.3 Electronic Products Inserting

After confirming the output voltage is normal, users can charge or test electronic products by inserting the charging cable into output of device.

3.4 Buttons

a) MP780426 DUAL

i. Short press **MODE** button to switch screens and view different parameters.
Long press **MODE** button to clear current data.

ii. Long press **READ** button to save current parameters in M0 ~ M9. Users can short press **READ** button to browse, select the target data and short press **MODE** button to switch screens and view their parameters.
Browsing state will automatically return to the monitoring mode after 6s without operation, long press **READ** button during browsing state will clear all stored data.

b) MP780427 LOAD

i. Short press **MODE** button to switch screens and view different parameters.
Under load state, long press **MODE** button to first turn off load, if no load is present, long press **MODE** button will clear current data.

ii. Short press **LOAD** button to start load effect with the following sequence:
0.50A→1.00A→2.00A→3.00A→stop→0.50A (repeat)

iii. Press **MODE** and **LOAD** buttons together to enter query state, then short press **LOAD** button to browse data, press **MODE** button to query different data parameters.

iv. Long press **LOAD** button in query state to clear data. Long press **LOAD** button in load state to save a set of data.
(M1L records internal load data, M1 records non-internal)

4. Specifications

Features	Description	MP780426	MP780427
Input & output ports	USB Type A	√	√
	USB Type C	√	
Voltage Range	4.00 ~ 24.00VDC, resolution: 0.01V	√	√
Current range	0.05 ~ 3.00ADC, resolution: 0.01A (Type A)	√	√
	0.05 ~ 5.00ADC, resolution: 0.01A (Type C)	√	
Capacity	0-99999mAh, resolution: 1mAh	√	√
Energy	0-1000Wh	√	√
Circuit equivalent resistance measurement	1-480Ω	√	√
USB data cable voltage (D+, D-)	0-3.30V	√	√
Data storage	10 sets	√	√
Electrical load	0.50A, 1.00A, 2.00A, 3.00A		√
Maximum timing	99 hours, 59 minutes, 59 seconds, resolution:1s	√	√
Supports fast charge protocol	Supports USB2.0 data transmission and QC1 .0/2.0/3.0 fast charge protocol (Type A)	√	√
	Supports USB2.0 data transmission and QC1 .0/2.0/3.0/4.0 fast charge protocol (Type C)	√	
Certification	CE	√	√

5. Maintenance and recycling

Do not keep this instrument in high temperature and humid environment for long periods.

Please keep surface clean with damp cloth and dry ii in time, never clean it with corrosive liquids.

Waste dispose: please do recycle damaged instruments and packages according to environmental protection requirements.