# 9922 Quick Charger



Front panel


Rear panel

## Feature

- Support quick charger：QC2.0 / QC3.0 / PE+ / PE+2.0 / USB PD
- Suitable for all Electronic Load

## Specification

| MODEL：9922 | |
|---|---|
| No. of Test Channel | 1 |
| Support Quick Charge | QC2.0, QC3.0, PE+, PE+2.0, USB PD2.0 |
| Terminal of Charger | micro USB, USB Type C |
| Input Power | 5V, 150mA |

Input AC Power：100~230 Vac ±10%

## Order Information

9922 Quick Charger

200g
W=87mm
H=113mm
D=44.8mm

## Application

- Quick Charger

## Descriptions

Prodigit develops 9922 Quick Charger Controller, it provides Quick Charger, Pump Express, USB PD 3 types quick charging device simulation test。

9922 can simulate fast charge control signal of mobile phones, tablet and notebook devices for a variety of fast charging technology to provide rapid testing and verification of the charger.

9922's banana plug can be directly connected with the binding post of Prodigit electronic load, using the electronic load to simulate the load of the quick charger.

For the connection with the U.U.T, the 9922 provides a Micro USB and a USB Type C hardware interface.

The 9922 Quick Charger Controller can simulate the all voltage combinations of D +, D- for QC 2.0 testing to verify the output voltage of the test charger, and to simulate the connection and remove the connection to the charger to verify that the charger can be immediately automatically stop the high voltage output down to 5V, to ensure that the function is normal to meet the Quick Charge 2.0 specification

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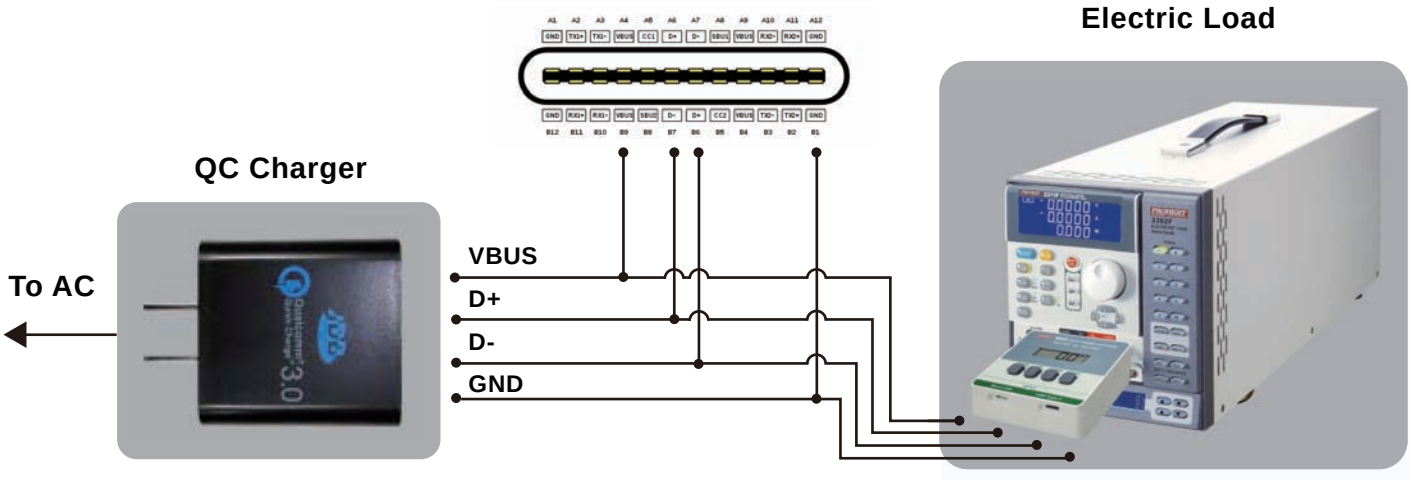
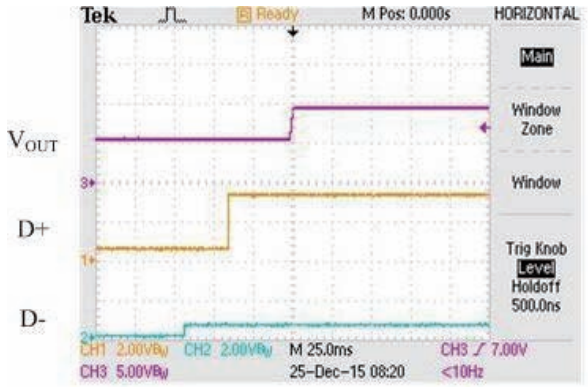
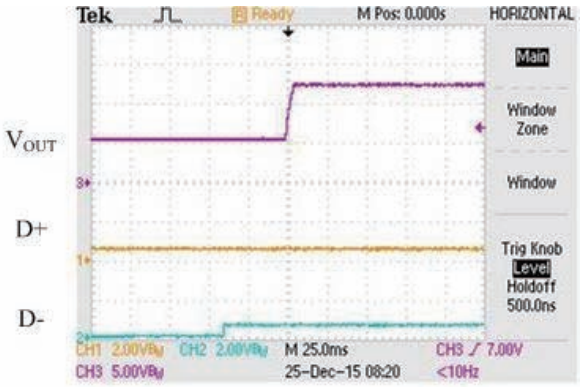



QC Charger Application Connect Diagram

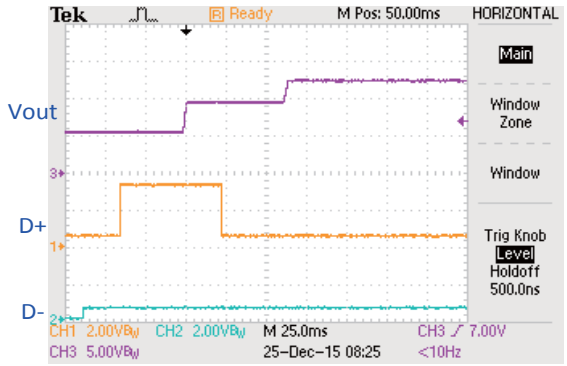



QC 2.0 Transition 5V to 9V

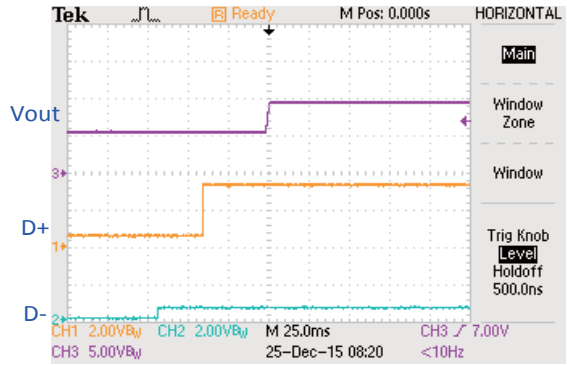



QC 2.0 Transition 5V to 12V

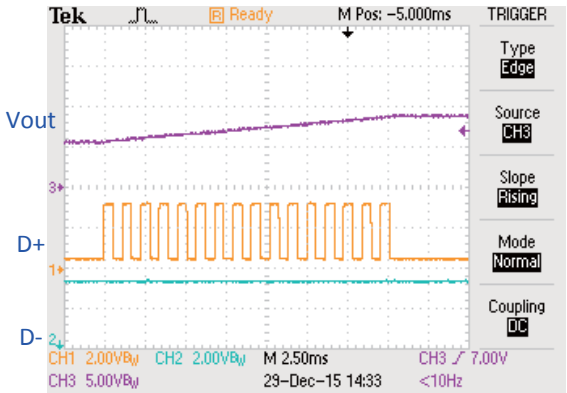
The 9922 Quick Charger Controller is able to simulate the D +, D- pulse control the increments and decrements of 0.2V to verify the output voltage of the test charger to ensure compliance with the Quick Charge 3.0 specification. As shown below...



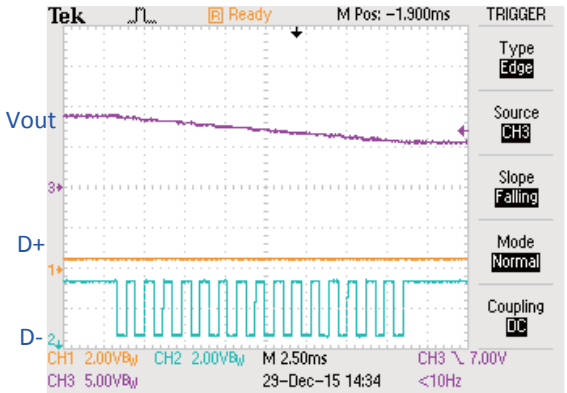

**Transition from 5.0 V to 9.0 V to 12V**




**Transition from 5.0 V to 9.0 V**

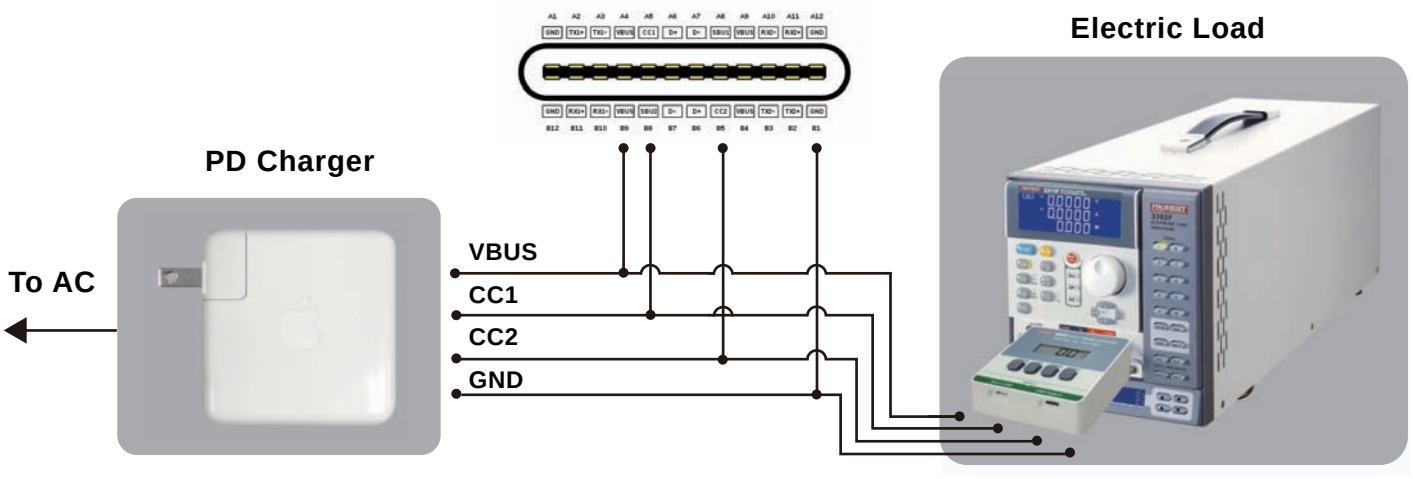



**Continuous Mode Ramp Up**

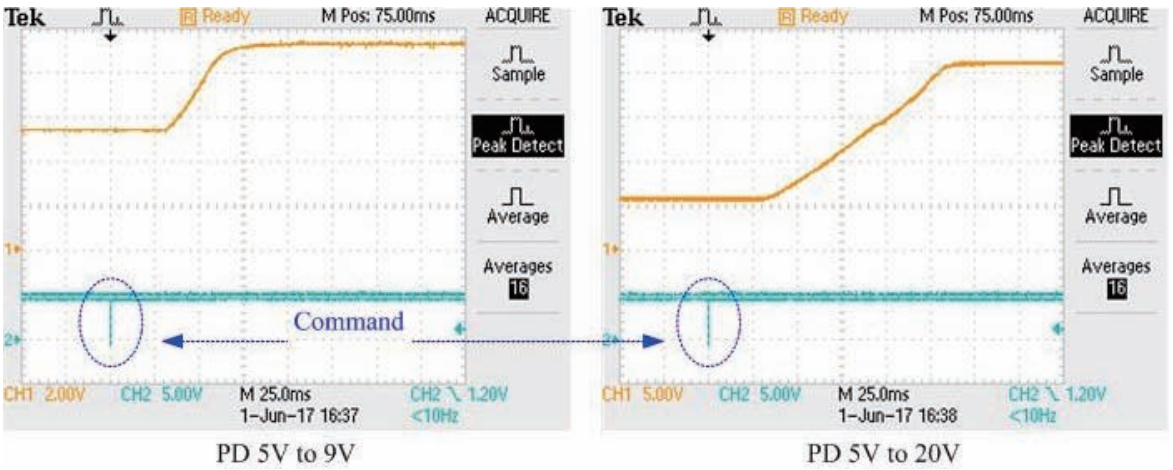



**Continuous Mode Ramp Down**

The 9922 Quick Charger Controller, containing a PD control chip which can simulate the device to verify the test procedure of USB PD, you can use a single button to complete all the required test to ensure compliance with the PD specification. As shown below...

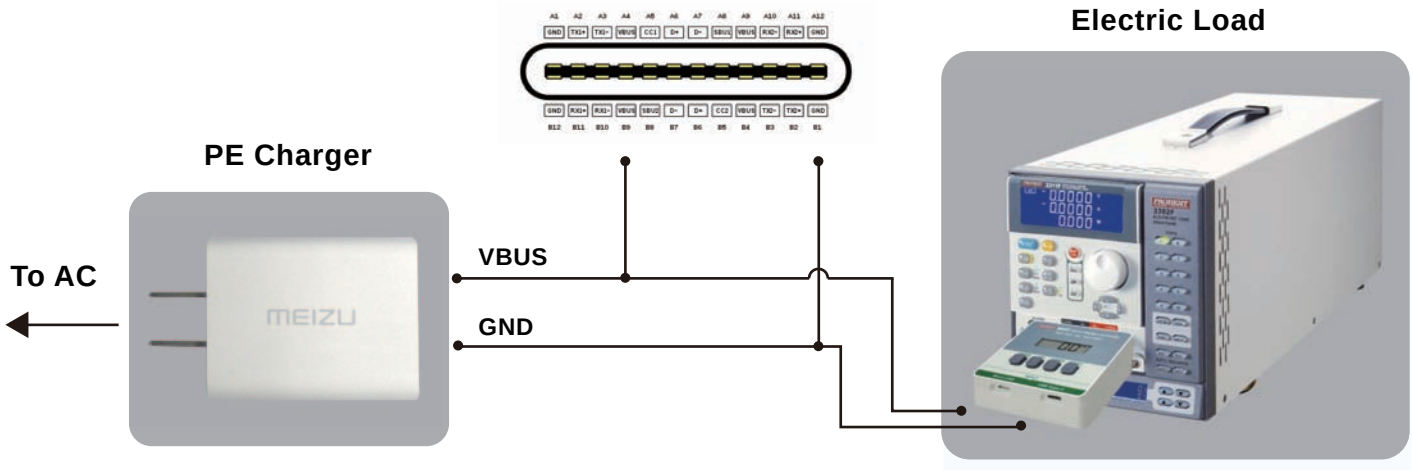



PD Charger Application Connect Diagram




PD 5V to 9V　　PD 5V to 20V

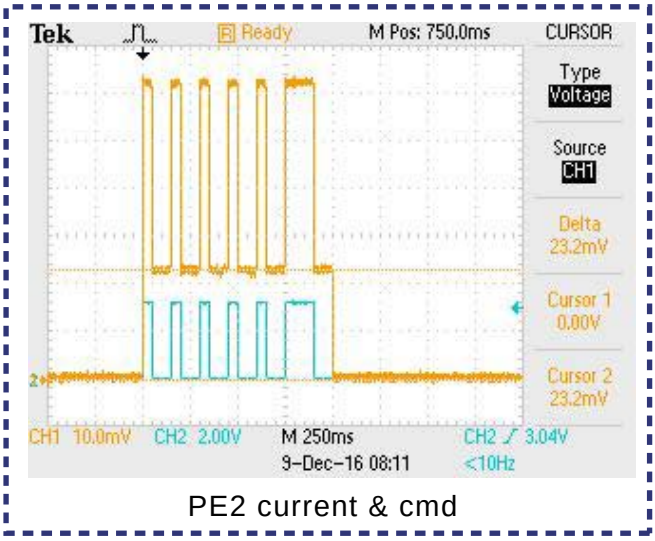
The 9922 Quick Charger Controller is capable of simulating commands with current Ilow <0.13A and Ihigh> 0.3A to verify and test the output voltage of the charger to ensure compliance with PE specification. As shown below...



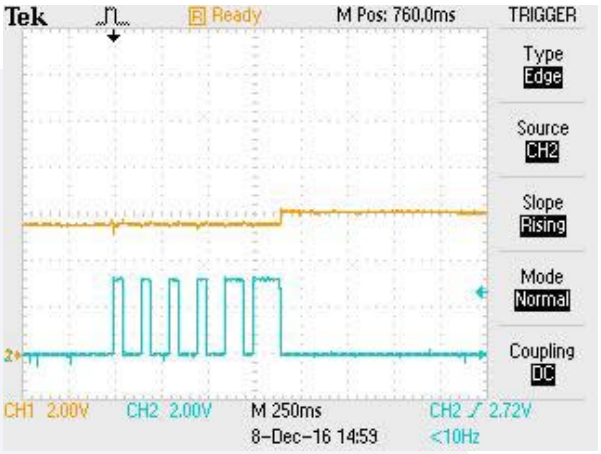

PE Charger Application Connect Diagram

| Digital Code bit5~bit0 [4:0] | Absolute Voltage | Unit |
|---|---|---|
| 00000B | 5.5 | V |
| 00001B | 6 | V |
| 00010B | 6.5 | V |
| 00011B | 7 | V |
| 00100B | 7.5 | V |
| 00101B | 8 | V |
| 00110B | 8.5 | V |
| 00111B | 9 | V |
| 01000B | 9.5 | V |
| 01001B | 10 | V |
| 01010B | 10.5 | V |
| 01011B | 11 | V |
| 01100B | 11.5 | V |
| 01101B | 12 | V |
| 01110B | 12.5 | V |
| 01111B | 13 | V |
| 10000B | 13.5 | V |
| 10001B | 14 | V |
| 10010B | 14.5 | V |
| 10011B | 15 | V |
| 10100B | 15.5 | V |
| 10101B | 16 | V |
| 10110B | 16.5 | V |
| 10111B | 17 | V |
| 11000B | 17.5 | V |
| 11001B | 18 | V |
| 11010B | 18.5 | V |
| 11011B | 19 | V |
| 11100B | 19.5 | V |
| 11101B | 20 | V |

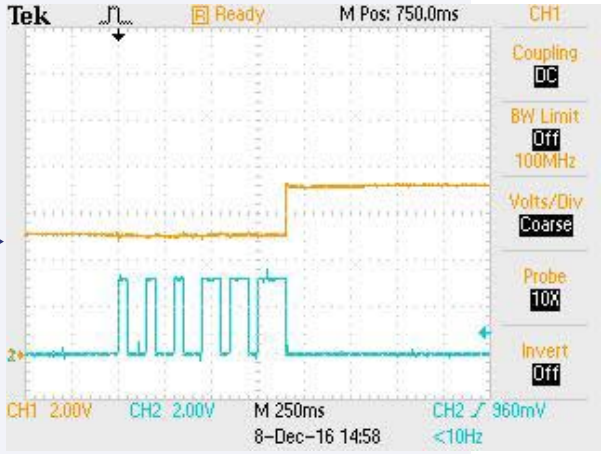
PE+ 2.0 COMMANHD



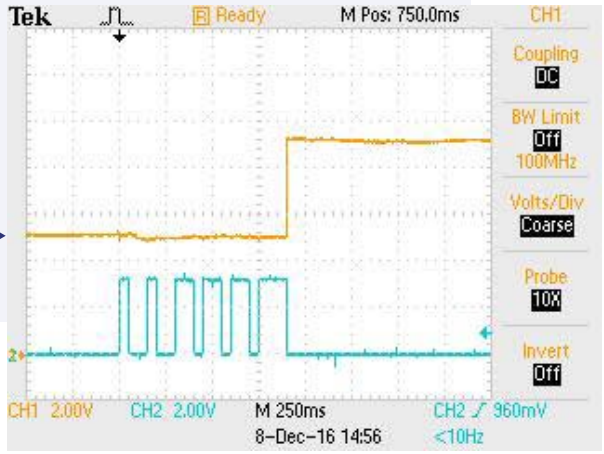

PE2 current & cmd



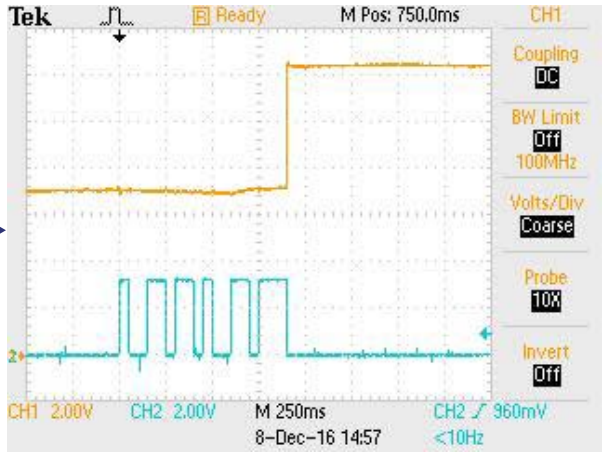

PE2 cmd: 00001b 6.0V




PE2 cmd: 00011b 7.0V




PE2 cmd: 01111b 9.0V




PE2 cmd: 01101b 12.0V