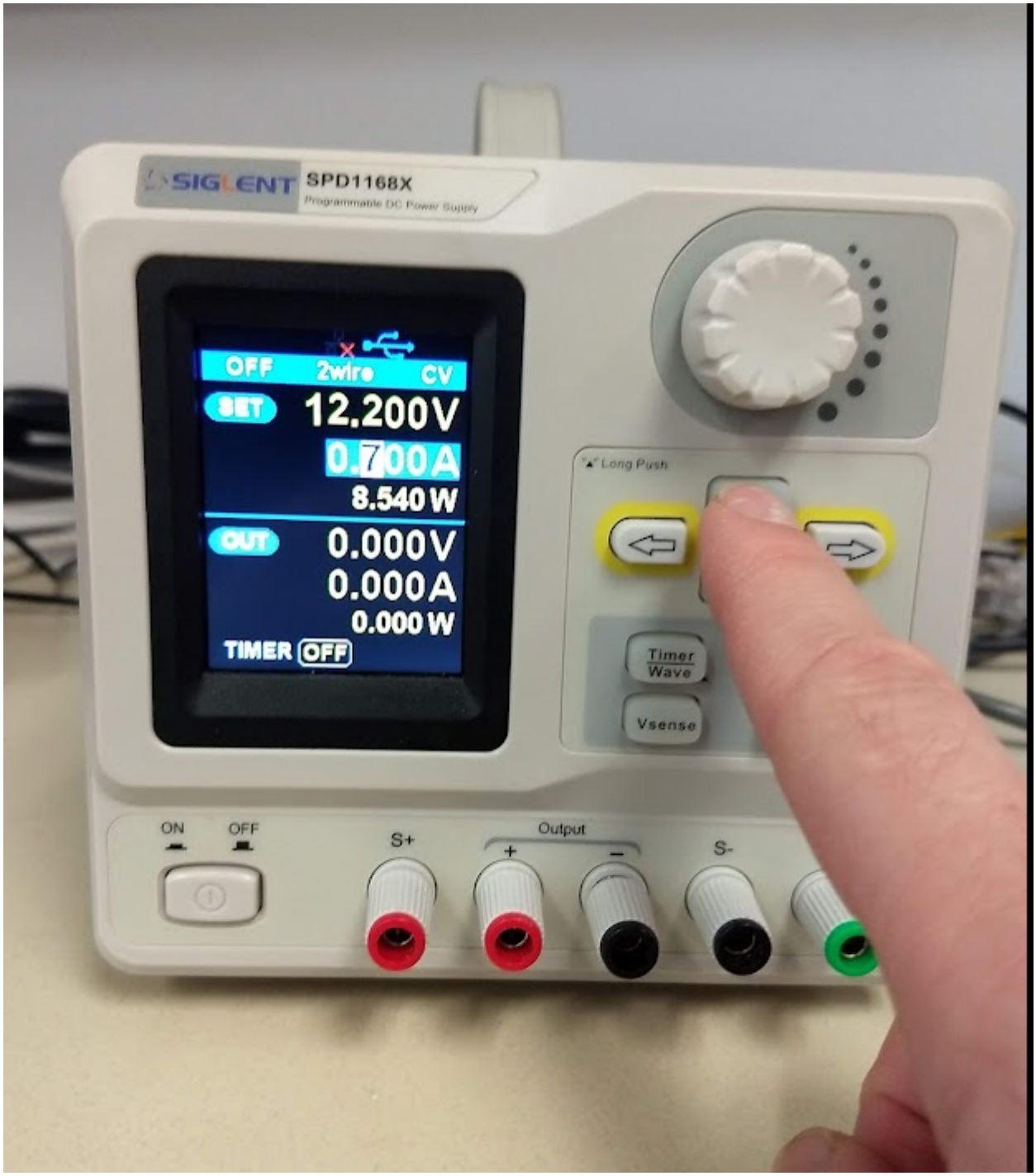
SPD1000X Over Current Protection (OCP) function added in Firmware Revision 2.1.1.9

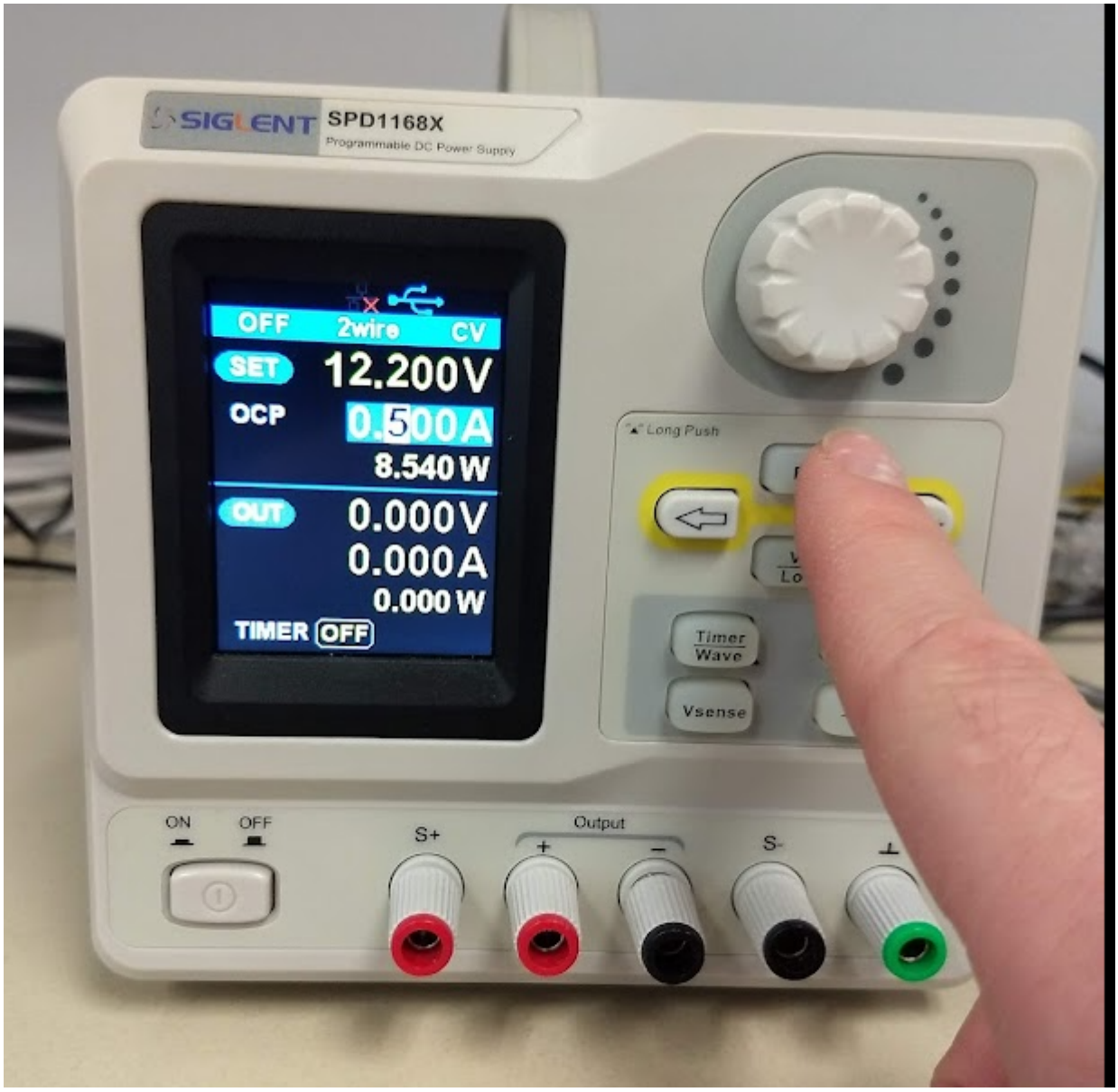
March 16, 2022

Over Current Protection (OCP) has been added to the SIGLENT SPD1000X series of single-channel power supplies with the SPD version 2.1.1.9

The OCP function quickly disables the output when the current draw from the supply surpasses the set limit current.

1. Update the firmware
2. Set the OCP value by pressing and holding the FINE button on the front panel. After a few seconds, the OCP label will appear:


SIGLENT
SPD1168X
Programmable DC Power Supply
OFF
2wire
CV
SET
12.200V
0.700A
8.540W
OUT
0.000V
0.000A
0.000W
TIMER OFF
Long Push
Timer
Wave
Vsense
ON
OFF
S+
Output
+
−
S-

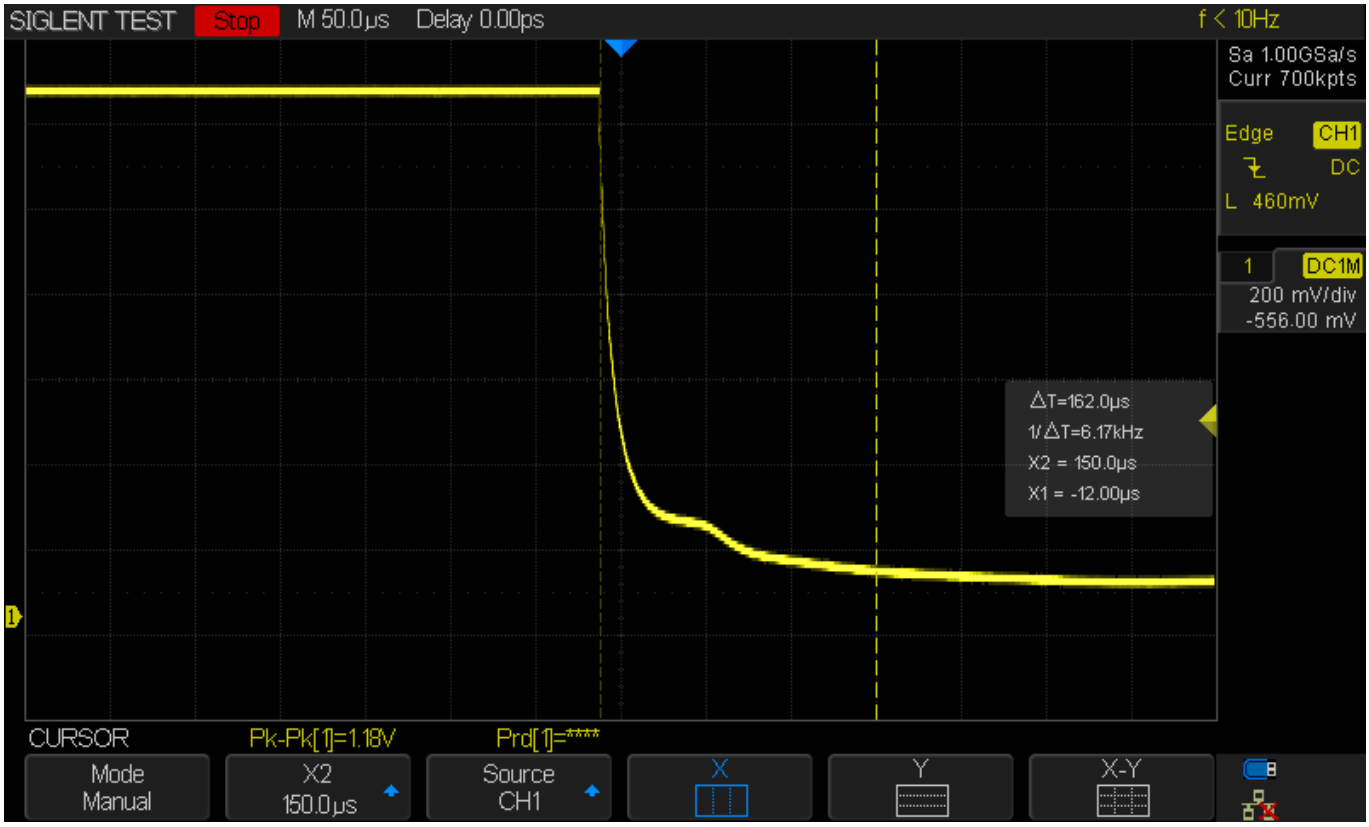


3. Set the OCP current value using the knob and right/left arrows to adjust.

4. Long press the FINE button to remove the OCP menu selection.

5. If the output exceeds the setpoint, the instrument will immediately disable the output and briefly show an error:

Here is an oscilloscope trace showing a shorted output causing an overcurrent situation (OCP triggered):


SIGLENT TEST
Stop
M 50.0µs
Delay 0.00ps
f < 10Hz
Sa 1.00GSa/s
Curr 700kpts
Edge
CH1
DC
L 460mV
1
DC1M
200 mV/div
-556.00 mV
ΔT=162.0µs
1/ΔT=6.17kHz
X2 = 150.0µs
X1 = -12.00µs
CURSOR
Pk-Pk[1]=1.18V
Prd[1]=****
Mode
Manual
X2
150.0µs
Source
CH1
X
Y
X-Y

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