

Paul's Firmware 1.5 operation manual.

Basic operation:

Press M to switch cycle downwards around menu items.

Press R/S to switch cycle upwards around menu items.

Press R/S and hold to jump back to Se (basic measurement) menu.

Use direction keys to adjust.

After long time idle, firmware jumps back to Se menu

Save parameter:

Keep power for 5 minutes for latest setup, or press and hold R/S button for menu other than Se.

Press M while powering up to use factory setting.

Frequency/Time measurement change.

Press UP/DOWN under C1 or C2 menu to toggle among Time/Frequency/Auto switch

Calibration

a) Zero calibration

Press LEFT while powering up, connect black and red probe. In Se menu, Press UP/DOWN to choose scale needs calibration, press LEFT/RIGHT to adjust the displayed average voltage to 0V.

b) Gain calibration

Prepare a reference power source, press RIGHT while powering up, attach probe to reference power supply. In Se menu, press UP/DOWN to choose the scale needs calibration, press LEFT/RIGHT to adjust the displayed average voltage to the power source.

To get the best result, please repeat above processes, press M after completion, then press and hold R/S to save to parameter.

USB communication

When connected to PC, USB communication is disabled by default, PC will report unrecognizable USB device.

To use USB communication, please press M while powering up.

=====Menu operations as below=====

Se Menu:

To set vertical Scale, Time Base, Probe attenuation scale

Press UP/DOWN to adjust vertical scale, Press LEFT/RIGHT to adjust time base

Press and Hold directions to adjust waveform positions

Press M to switch probe attenuation scale

Press R/S to run and stop waveform

Press and hold R/S to display or hide all measurement items.

Mo Menu:

To set scan mode and trigger mode

Press UP/DOWN to choose trigger mode, Press LEFT/RIGHT to choose scan mode

Tr Menu:

To set trigger level and trigger sensitivity

Press UP/DOWN to adjust trigger level, LEFT/RIGHT to adjust trigger sensitivity

Press and hold M to display/hide trigger level marker

C1 Menu:

To set cross cursor 1 (Red dotted lines)

Press UP/DOWN to adjust horizontal cursor 1, Press LEFT/RIGHT to adjust vertical cursor

Press and hold M to toggle display of latest modified cursor and value

C2 Menu:

To set cross cursor 2 (Blue dotted lines)

Press UP/DOWN to adjust horizontal cursor 1, Press LEFT/RIGHT to adjust vertical cursor

Press and hold M to toggle display of latest modified cursor and value

Me Menu:

To set measurement mode and display

Press UP/DOWN to set measurement mode

Press and hold RIGHT to display all measurement items

Press and hold LEFT to hide

Of Menu:

To set horizontal position and vertical position

Press UP/DOWN to adjust vertical position, Press LEFT/RIGHT to adjust horizontal position

Press and hold M to toggle display of horizontal indicator

Fo Menu:

To set output waveform characteristics

Press and hold UP/DOWN to adjust duty cycle

Press UP/DOWN to adjust frequency in rough stages

Press LEFT/RIGHT to tune frequency in 1% scale

Press and hold LEFT/RIGHT to tune in 10% scale

FL Menu:

To operate file on SD card

Press RIGHT to save, Press LEFT to load, Press UP/Down to select #, Press and hold M to execute.

Press and hold UP/DOWN to move reference form

Press and hold LEFT to hide reference waveform

Press and hold RIGHT to display reference waveform