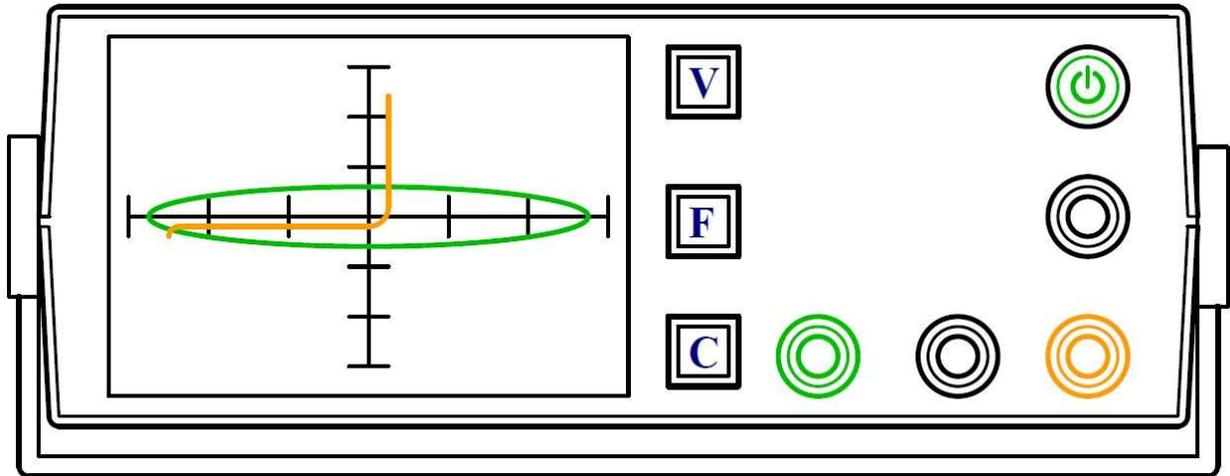


Alaonix Digital Curve Tracer

User Manual



Alaonix Two Channels Benchtop Digital Curve Tracer 4800

1. About the Device

Alaonix Two Channels Benchtop Digital Curve Tracer is a small and light device. User can use it to check electronics semiconductor – transistors, diodes, zeners , capacitor and resistor.....

Specifications:

Device Display: 3.95” color LCD display with Touch Pad.

Resolution: 320 x 480

Serial Baud: 9600, 8, N, 1 (for professional technician remote control or calibration)

Waveform: Sine wave

Test Frequencies: 20Hz, 50Hz, 100Hz, 200Hz (< +/- 3%)

Open circuit Voltage: 3.0v, 6.0V, 12.0V, 24.0V (Peak to Peak) (< +/- 5%)

Unit Power: Output 5V-1A, Input 100v-240v

Current: < 800 mA

Dimensions: 200 x 175 x 70 mm

Weight: 425 g (15.0 Oz)

2. Before The Test

When the PCB to be measured, the power supply **MUST** be Shut off.

Must make sure that the capacitors is discharged on the PCB. High voltage charged capacitors can damage the device.

3. Turning on or turning off

Plug the power supply to the socket, and press the power button.

When the device is on, you will see:

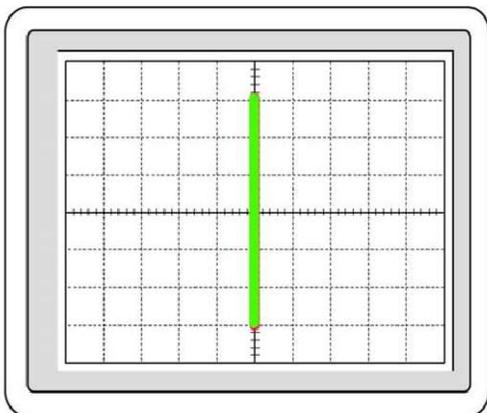
Start screen Main screen

To turn off the device: press the power button.

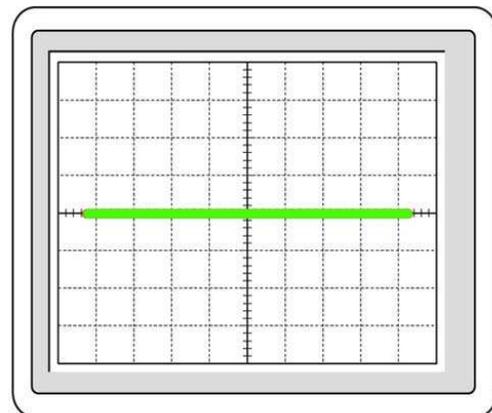
4. Device Introduction

Curve tracing is essentially a means of making a graph of current (I) versus voltage (V) called an I-V curve, to display the basic characteristics of an electronic device.

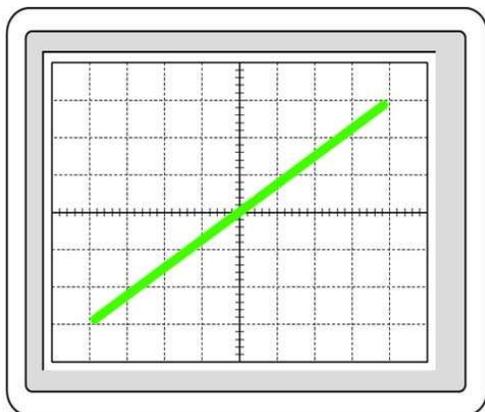
Below are some electronics semiconductors test images:



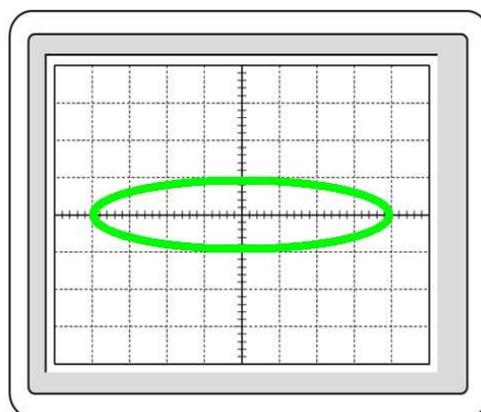
Open



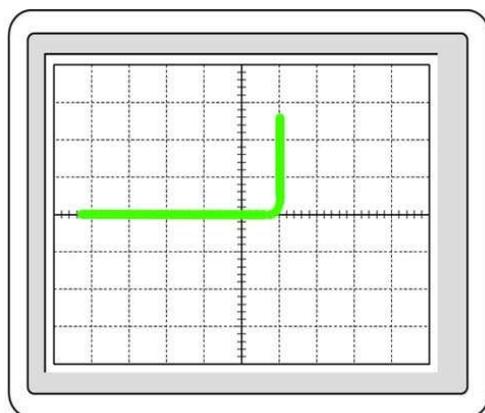
Short



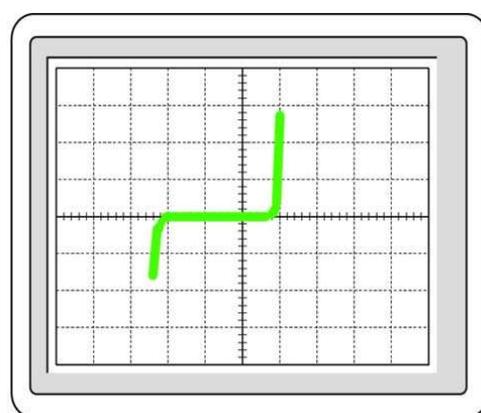
Resistor



Capacitor



Diode



Zener

Buttons Function:

Top Button: The button is **V**oltage Range Select Button. And also press and hold the button when the unit power on, it will be into remote and calibration function mode.

Middle Button: The button is **F**requency Select Button. And also press and hold the button when the unit power on, it will change Line Size. (2dots or 4 Dots)

Bottom Button: The button is for **C**hannel Select. (Green Channel, Yellow Channel and Both)

Remote control and Calibrate the device:

Open the cover, connect a serial port Tx and Rx to Display board.

Send H or h to show One Character Command list.

Send M or m to calibrate (decrease) voltage.

Send P or p to calibrate (increase) voltage.

Send A to changed device to 3.0V Range. (peak to peak)

Send B to changed device to 6.0V Range. (peak to peak)

Send C to changed device to 12.0V Range. (peak to peak)

Send D to changed device to 24.0V Range. (peak to peak)

Send a to changed device to 20Hz Range.

Send b to changed device to 50Hz Range.

Send c to changed device to 100Hz Range.

Send d to changed device to 200Hz Range.

Send 1 to changed device to Green and Yellow channels.

Send 2 to changed device to Green channel.

Send 3 to changed device to Yellow channel.

Send I or i key to set EEPROM Default data.

Send L key to set device to increase Line Size (Thick line, between one dot to 4 dots)

Send l key to set device to decrease Line Size (Thin line, between 4 dots to one dot)

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Adjust Curve Tracer position:

A) Send x (0x78) to move curve to Left.

B) Send X (0x58) to move curve to Right.

C) Send y (0x79) to move curve to Down.

D) Send Y (0x59) to move curve to UP.

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READ THE FOLLOWING TERMS AND CONDITIONS CAREFULLY

LIABILITY WARNING:

This device should be used only for experimental purposes. It has NOT gone through extensive testing

and it could erase or corrupt some or all data on media cards that are inside the device. You assume to

take your own risk when you purchase this device, and release the responsibility and liability from the

manufacturer with no harm.

REGULATORY WARNING:

This device is intended solely for experimental purposes; it is not in finished product form and is NOT

FCC approved. If you wish to install these modules into nonexperimental final finished products, you will

be responsible to have the modules approved by the FCC at your own cost.

Support:

AlaTeam@alaonix.com