



Presentation:

The Rastre Curve 2Plus is a defect-tracking device, commonly known as a Curve Signature Analyzer, or Curve Tracer that contains features of characteristic curve analysis. Curve analysis is a powerful test technique for finding faults in PCBs: an AC voltage at a given frequency is injected into a pin at a certain point on a circuit board and the analyzer injects the voltage and current which results in a curve shape on an XY screen. This display is a "signature" of the circuit's operation, which can be compared to a standard or a known "good" sign. If the patterns do not match, the test card is defective. For example, when testing a point, a capacitor will show an ellipse, a resistor will show a straight line at an angle, a diode will show the characteristic exponential curve, etc.





Signature analysis is popular in bench testing situations, because it does not require knowledge of circuit operation and can therefore be used to streamline the analysis and maintenance of equipment. The Rastre Curve 2Plus represents a significant advantage over existing signature analysis instruments: it costs less than existing signature analysis instruments and the frequency range of the test signal is injected for a very short time (1.5ms) suitable for not damaging sensitive circuits ... In this software that comes with the acquisition device, there are 4 test profiles:



Low Power: Indicated for boards where the voltage / frequency is low. Also suitable for boards where they contain a high level of capacitance, as the inserted frequency is 4 'HZ.

Normal Power: Suitable for most tests, this option will be already defaulted to start future tests, you can change it to your liking.

Automatic Power: Indicated when the card to be measured is unknown, the current in this option will be limited by the measured circuit.

Maximum Power: Indicated for power circuits, transistors, amplifiers, etc. In this option the frequency will be higher.

With these options you can change as you like during the test and during memorization, so that the results can be translated into more accurate values. The "curve signature" and other waveforms can be saved, retrieved and compared to make this a valuable debugging tool. Allowing a greater variety of useful measures.

All functions of the instrument can be controlled via a USB2.0 connection from a computer.

Through our software that can be installed on Windows XP SP3 operating systems up to Windows10, 32bit or 64bit.

Content:

- 1- Data acquisition device
- 2- CAT2 needle probes
- 1- Yellow Pulse Test Cable
- 1- USB cable
- 1- DVD Containing Software and License + PDF manuals

Areas of use:

Automotive ECU electronic circuit boards, stepper motor drivers, medical area circuit boards, military electronic circuit boards, computer and monitor circuit boards, audio-television circuit boards, textile machine boards, circuit boards electronics for mobile phones, etc. (all types of electronic circuit boards.)



Electronic component testing:

Resistors, capacitors, inductors, diodes (general purpose, Zener, high voltage, etc.) Transistors (NPN, PNP, JFET, MOSFET etc.), SCRs, TRIACs, Optocouplers, integrated circuits (digital, analog) etc.

SAFETY:

1- The RastreCurve is produced and designed in accordance with international RoHS regulations.

Users must use the following usage rules:

2- We ask that the bench and if possible the equipment chassis (REF GND) should be isolated and grounded

3- Test electronic circuit boards without supplying power. Before testing, electronic circuit

or board and the devices must be disconnected and the capacitors discharged correctly.

4- Users of this equipment must have knowledge and experience to repair electronic components, circuit boards, etc. Therefore, when using the RastreCurve, do not touch the probe with your finger. Do not use this equipment, without sufficient knowledge and experience in electronics, stay away from high voltages, do not use parallel notebook sources that can generate interference as well as the mains voltage that can damage the system.

5- It is not allowed to modify, add or insert external signals during the test.

RastreCurve 2Plus Technical Information:

The RastreCurve 2Plus Basically in its concept it is a signal generator and an oscilloscope together. An alternating signal (sine) is injected into the circuit in question and its displacement in fall, rectification, delay, advance and / or any alteration caused is measured, and by comparison with the generated signal a "curve" is created. This resulting curve is the difference between the voltage drop and the current increase in the circuit through the injected signal, so we call this curve VI an analog signature of the point, an identical circuit in perfect condition must contain the same signature, while an identical but defective circuit will show differences in voltage drop versus current. But we have the software that does this job in addition to not needing the signal generator or the oscilloscope, because the software already does it. But in addition to this there are functions in the software that will help you a lot, such as the memorization by the photo of points in the circuit, and also in the case of the 2plus, pulse tests by degree of the generated sine and detection of the conduction. And of the switching test, inserting 2 independent channels, where you can test the conduction of a mosfet, fet, transistors, triacs etc., we also count with the 3d test that runs VI test at the point with 4 different frequencies to capture the 3d thus helping to widen the range of variables in the detection of defects, also the saturation test which is intended to assist in the detection of defects in leaking, saturated components and also to identify variations in consumption in a circuit. The tests must be done with the board or module turned off, and if there is a capacitor it must be discharged before the test to avoid burning the input. In summary, basically the concept of comparing characteristic curves is' a signal injected by a signal generator,



and this signal is monitored its impact on the circuit or point in question and this impact is converged on the screen as a "signature "analog that can be compared.

Technical Data:

1- Channels: 3, 2 for comparison and memorization and testing, and 1 for triggering transistors, triacs, scr, photo couplers, etc.

- 2- Memorization by photo, capture mode point by point, and three points.
- 3- USB powered only
- 4- Test profiles: 4 (Low, normal, maximum and automatic power)

Low Power: Indicated for boards where the voltage / frequency is low. Also suitable for boards with a high level of capacitance, as the frequency inserted is 4 HZ, maximum voltage 1vp (2vpp) RMS voltage: 0.70710V and impedance of 10KOhm.

Normal Power: Suitable for most tests, this option will be already defaulted to start future tests, you can change it to your liking. In this test the inserted frequency is 40 Hz, maximum voltage 2vp (4vpp) RMS voltage: 1.41420V and impedance of 10KOhm.

Automatic Power: Indicated when the card to be measured is unknown, the current in this option will be limited by the measured circuit. In this test the inserted frequency is from 30 Hz to 1 kHz, maximum voltage 2vp (4vpp) to 2.4v (4.8vpp) Maximum voltage RMS: 1.697040V and impedance of 10KOhm.

Maximum Power: Indicated for power circuits, transistors, amplifiers, etc. In this option the frequency will be higher. In this test the inserted frequency is 50 Hz, minimum voltage 2.4vp (4.8vpp) RMS voltage: 1.697040V and impedance of 10KOhm

- 1- Maximum test voltage up to 2.4vp (4.8vpp)
- 2- Maximum Current 10mA
- 3- Test voltage application time: 1.5ms
- 4- Impedance: 10kOHM
- 5- Measurement of resistors, capacitors, diodes etc.
- 10-Data recording and memory comparison.
- 11-Sensitivity: 2.5 mV
- 12-Image rate: 0.05 mS / div ... 0.100 mS / div



- 13-Yellow pulse terminal output voltage: + 5V
- 14-Frequency (Digital): From 4hz to 1khz
- 15-Dimensions: 11.7CM X 7.5CM X 3.4CM
- 16-Weight: 450 grams with all accessories
- 17- Product Code: MLB115371268
- 18- NCM: 90303100
- 19- Description: Locator, Defect Tracker Rastre Curve 2plus

NOTE: Tests must be done with the board and / or modules turned off and if capacitors are charged, they must be discharged