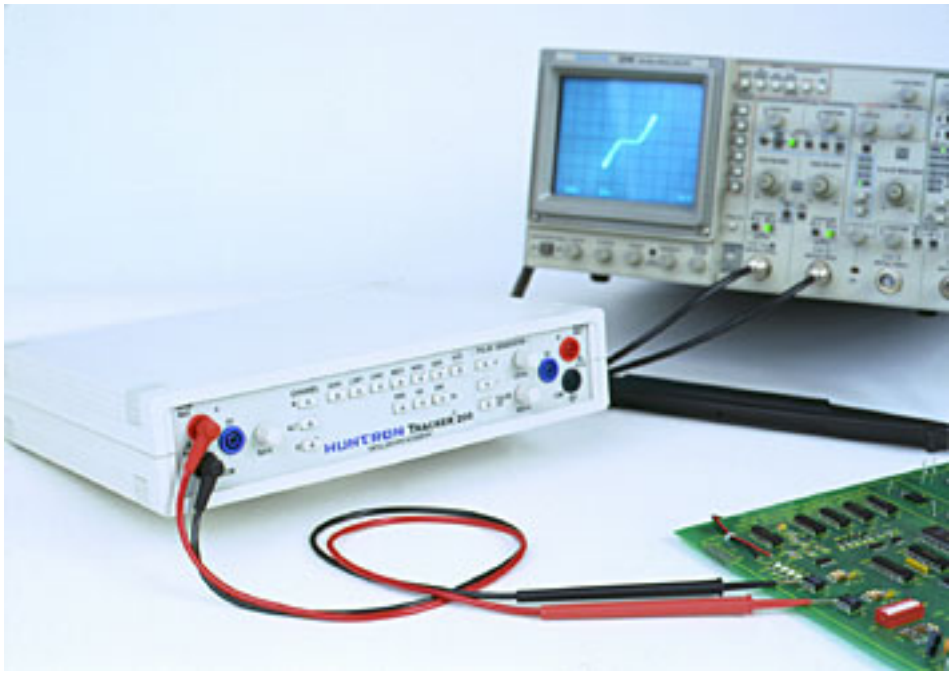
HUNTRON

Manufacturer and Distributor of Electronic Inspection, Test and Repair Instrumentation and Sof

# Tracker 200



## Highlights

- CE Certified
- Test components and boards without power - ideal for catastrophic failures
- Uses the X-Y inputs on most oscilloscopes
- Get a picture of a components overall health - including intermittent problems
- Test gate-fired devices with a built-in pulse generator
- Non-destructive testing

## The Advantage of Tracker Technology

The Huntron Tracker 200 provides advanced troubleshooting capabilities to simplify testing newer technology components such as CMOS and MOS circuits. Its built-in pulse generator lets you thoroughly troubleshoot gate-fired devices such as SCRs, TRIACs and optocouplers. By energizing the gate, you can test a component in an active mode.

You use a Tracker 200 while the power to the circuitry you're testing is turned off. So you avoid an accidental short that could cause further damage. It allows you to analyze the overall health of a solid-state component, which makes it perfect for finding leakage or substrate damage that has brought a system or PCB down prematurely. Because it can compare suspect components to known-good equivalents, it's also ideal for troubleshooting when documentation is missing or incomplete.

## Real-World Troubleshooting Challenges

The Huntron Tracker 200 is ideal for troubleshooting Programmable Logic Controls (PLCs). In troubleshooting multi-channel input modules, technicians frequently run into a damaged channel because the IC buffers, optocouplers and drivers have been over-stressed. By using the pulse generator built into the Tracker 200, you can quickly troubleshoot optocouplers and other gate-fired devices. Simply compare signatures of one channel against another. You'll usually find problems where you see differences in signatures. Likewise, you can compare multi-channel outputs with the Tracker 200. These devices usually fail when too much current is drawn through the logic section. To troubleshoot them, compare the signatures of ICs in one channel against those in another, looking for differences that indicate a problem.

# Analog Signature Analysis

The Tracker works by applying a current-limited AC signal across two points of a component. The current flow causes a vertical deflection on the oscilloscope display, while the voltage causes a horizontal deflection. Together, they give you a unique current-voltage analog signature that represents the overall health of the device you're testing. Analyzing each signature, you can quickly tell if a component is good, bad or marginal.

# Ranges

| Ranges | VS | ZS | ISC | Pmax | Pdiode |
|---|---|---|---|---|---|
| | (Vpk) | (kΩ) | (mArms) | (mW) | (mW) |
| **High** | 60 | 74 | 0.6 | 6 | 0.2 |
| **Medium 2** | 20 | 27 | 0.6 | 2 | 0.2 |
| **Medium 1** | 15 | 1.2 | 8.5 | 23 | 2 |
| **Low 2** | 10 | 54Ω | 132 | 232 | 33 |
| **Low 1** | 3 | 10Ω | 0.21 | 0.1 | 0.05 |

# Specifications

| | |
|---|---|
| **Input Selection** | A, B, Alternate (variable rate) |
| **Test Frequencies** | 50/60 Hz, 200 Hz, 2000 Hz |
| **Functions**<br>**Range Selection** | <br>Manual or AutoScan<br>High Range Lockout |
| **Compare-A-Trace Adjustable** | (0.5 Hz to 10 Hz) |
| **Pulse Generator**<br>**Level**<br>**DC Mode**<br>**Pulse Mode** | <br>0V to 5V<br>+DC or -DC<br>+Pulse, -Pulse, or both; adjustable duty cycle |
| **Line Voltage** | 100 VAC, 115 VAC or 230 VAC 50 or 60 Hz |
| **Power** | 15 Watts maximum |
| **Dimensions** | 10.2 in L x 11.45 in W x 2.45 in H (25.9 cm L x 29.1 cm W x 6.2 cm H) |
| **Weight** | 4.6 lb. (2.1 kg) |
| **Operating Temp** | +32 F to +122 F (0 C to +50 C) |
| **Storage Temp** | -58 F to +140 F (-50 C to +60 C) |
| **EMC** | Directive 89/336/EC |
| **Safety Compliance** | Low voltage directive 73/23/EEC as amended by 93/86/EEC |
| **Warranty** | 1 year, limited |

# Supplied Accessories:

The Huntron Tracker 200 comes with:

- Huntron uProbes (1 pair)

- Common test leads
- Two mini-clip leads
- Two 18-inch coaxial BNC cables
- Power cord
- Intructional/maintenance manual

## Optional Accessories:

The Tracker 200's usefulness can be enhanced with the following accessories:

- Switcher 410 - Manual Switch Matrix
- ShorTrack 90 - Short Detector
- Tracker 2000 Self-Paced Training Course