

How can I identify and capture fast glitches?

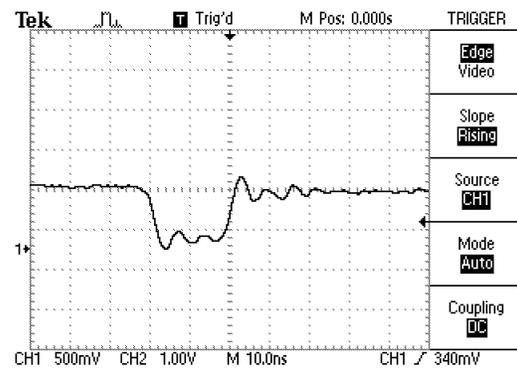
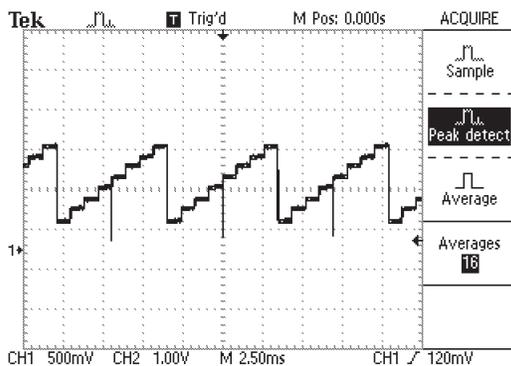
The proliferation of microprocessor and digital logic, along with ever increasing clock speeds and faster component technologies, has dramatically changed electronic design and service. With this shift toward faster signals comes increased demands on test and measurement tools and the engineers and technicians who use them.

The problem: Identifying and capturing fast glitches

- The display limitations of many analog oscilloscopes leave fast glitches undetected.
- Digital oscilloscopes that use equivalent time sampling may not capture enough data to accurately display glitches and other infrequent events.

The solution: The TDS 200's Peak Detect Mode and Horizontal Delayed Sweep

- Peak Detect Mode detects and displays fast glitches (as narrow as 10 ns).
- By triggering on the glitch and positioning it to the center of the screen, you can expand and characterize the glitch.



Troubleshooting Tip

Using the TDS 200 to identify and expand fast glitches

1. Push the ACQUIRE button to set the acquisition parameters
2. Press the PEAK DETECT button
3. Position the trigger indicator to the center of the screen
4. Adjust the trigger level to position the glitch in the center of the screen
5. Optimize the slope and coupling for a stable trigger
6. Turn the SEC/DIV knob to expand the glitch