

now can see high speed, single shot phenomena and low repetition rate digital and analog signals as they occur, at sweep speeds to 500 ps/div — in normal room light!

**At the Heart of the 2467B's Extraordinary Capabilities is an Exclusive Microchannel-Plate (MCP) CRT**

It brings the invisible to light by amplifying the intensity of infrequent and transient events while concurrently moderating the intensity of highly repetitive signals.

The result: an instrument able to display everything that happens in your circuit, whether it occurs once or repetitively. The technology that was pioneered by the 1 GHz Tek 7104 plug-in oscilloscope is available for a new range of applications in this portable, 400 MHz instrument.

With the 2467B you'll benefit from an approximate 100-fold increase in visual writing rate over that found in the fastest conventional CRT. Being able to see unexpected transients, even when masked by highly repetitive events, makes the critical difference in many troubleshooting situations.

**2467B/2465B/2445B**

4 div/ns Visual Writing Speed (2467B)

1 ns Rise Time (2467B, 2465B)

400 MHz Bandwidth (2467B, 2465B)

Measure Risetime, Faltime, Frequency, Width, Volts and Time A to B at the Push of a Button

On-Screen Trigger Level Readout

Volts and Time Cursors with On-Screen Readout

Cursors After Delay

Auto Setup

Save and Recall Setups

Set-Up Sequencing

500 MHz Trigger Bandwidth (2467B, 2465B)

Four Independent Channels

500 ps/Div Time Base (2467B, 2465B)

Switchable 1 M $\Omega$  and 50  $\Omega$  Inputs

20 ps Time Interval Resolution

2 mV/Div Vertical Sensitivity at 350 MHz

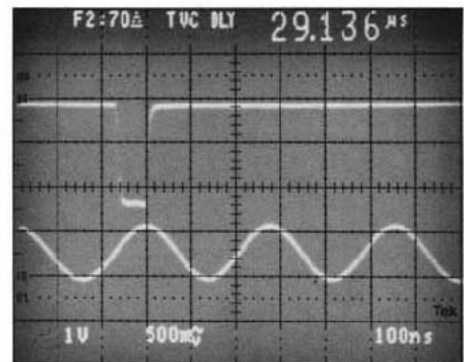
On-Screen Scale-Factor Readout

Lightweight and Rugged

**Digitize Waveforms With DCS01/2467B**



DCS01 Digitizing Camera System captures repetitive waveforms from analog scopes and transients according to a scope's CRT writing speed (400 MHz for 2467B).



2467B display of a digital control pulse (top trace—Ch1) relative to a video line signal (bottom trace—Ch2); notice the field 2 and line 70 trigger readout at the top, left of the display. The larger readout to the right is a line sync to digital pulse timing measurement. The 2467B microchannel plate (MCP) scope provides the writing speed and resulting display brightness necessary for viewing and measurement of this high-speed, low rep-rate signal.

**NEW 2467B**

The 2467B Option 10 complies with IEEE Standard 488-1978 and with GPIB IEEE-488 Tektronix Standard Codes and Formats.

**Transient Intensifying Oscilloscope**

Crisp Display of Single-Shot Events at 500 ps/Div in Normal Room Light

Digitize to 400 MHz With DCS01

Same Options as 2465B (Except DMM)

Specifications begin on page 121.

**Now Expose Invisible Signals That Cause the Most Difficult Problems in Troubleshooting**

From occasional glitches and fast transients to metastability and jitter in high repetition rate signals, the NEW Tek 2467B instantly reveals events that escape detection and measurement by any other portable instrument. You

**Digitally Controlled Video Measurements**

Making these measurements requires an oscilloscope with specialized capabilities. Tek's 2467B is the only oscilloscope that provides both the advanced video triggering capabilities and trace brightness (writing speed) necessary for locating and viewing the digital control signals found in digitally controlled video equipment.

**The Waveform Visibility Problem**

To expand on the waveform visibility problems of conventional oscilloscopes, consider the typical digital control signal used in video equipment. Generally, it will be a narrow TTL pulse, about 70-nanoseconds or less in width. That in itself raises little difficulty. The problem arises when this pulse occurs at video rates, every fourth field for example. This would be every 33 or 66 milliseconds,

**NEW PRODUCT**

## Portable Oscilloscopes

**TEK** 2467B/2465B/2445B

resulting in a 30-Hz or 15-Hz pulse repetition rate.

On conventional oscilloscopes, these narrow, low rep-rate pulses are invisible, even at full intensity setting. A Time per Division setting of 100-nsec is needed for viewing the 70-nanosecond pulse. Because of the pulse's low rep-rate, the CRT electron beam is tracing at 33 or 66 milliseconds. The beam raises the CRT phosphor almost to its luminance level but the phosphor decays before the next beam is triggered.

Tek's 2467B's MCP CRT solves this problem by multiplying the beam's electrons just before they reach the phosphor, providing a sharp, clear display—in normal room light!

### Advanced Video Triggering

See page 119 for Video Trigger (Option 05) performance.

### Making Single-Shot and Low-Repetition Rate Measurements

Even at 500 ps/div sweep speed, the 2467B's 4 div/ns visual writing rate displays the lowest repetition rate signals, even single shots, in normal room light. Its 400 MHz bandwidth faithfully reproduces your signal's high-frequency details. And for documentation, a C-30 Series oscilloscope camera produces high contrast photographs of single-shot signals at 500 ps/div using only ISO 3000 film.

Using the trigger-level readout feature, you can set the proper trigger point for your experiment the first time—no more guessing where the trigger point is set. And there's no wasted time and materials repeating the experiment just to properly set the trigger level.

Excellent EMI protection means reliable operation even in the high fields generated by high power lasers, ESD testing, or NMR equipment.

### PRODUCT SELECTION GUIDE

	Standard Models				Special Edition Models		
	2467B	2465B	2455B	2445B	2465B CT	2465B DM	2465B DV
Bandwidth	400 MHz	400 MHz	250 MHz	150 MHz	400 MHz	400 MHz	400 MHz
GPIB	Option 10	Option 10	Option 10	Option 10	Included	Included	Included
Counter/Timer/Trigger, Word Recognizer	Option 09	Option 09	Option 09	Option 09	Included	Included	Included
DMM		Option 01	Option 01	Option 01		Included	Included
Video Measurement System	Option 05	Option 05	Option 05	Option 05			Included
Counter/Timer/Trigger, No Word Recognizer	Option 06	Option 06	Option 06	Option 06			
Two Additional Probes	Included	Option 22	Option 22	Option 22	Included	Included	Included
Rackmount	Option 1R	Option 1R	Option 1R	Option 1R	Option 1R		
Probe Power	Option 11	Option 11	Option 11				

**NEW PRODUCT**