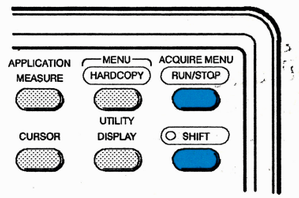
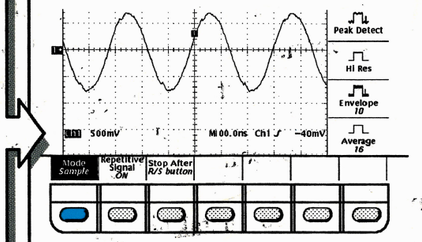
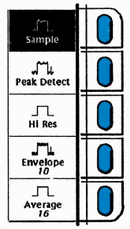
Acquisition Mode



1 Press **SHIFT**, then press **ACQUIRE MENU**



2 Press **MODE** in main menu



3 From the side menu, select an acquisition mode that will serve your application

Single Waveform Acquisition

Samples Acquired in Four Acquisition Intervals	Acquisition Mode	Displayed Record Points	Waveform Drawn on CRT
Interval 1 2 3 4	Sample		

Uses first sample in interval
Use for fastest acquisition rate.
This is the default mode.

	Peak Detect		

Uses highest and lowest samples in two intervals
Use to reveal aliasing and for glitch detection. Provides the benefits of enveloping with the speed of a single acquisition.

	Hi Res		

Calculates average of all samples in interval
Use to reduce apparent noise.
Provides the benefits of averaging with the speed of a single acquisition.

Multiple Waveform Acquisitions

Three Acquisitions from One Source	Acquisition Mode	Waveform Drawn on CRT
Acquisition 1 2 3	Envelope	

Uses Peak Detect Mode for Each Acquisition

Finds highest and lowest record points over many acquisitions
Use to reveal variations in the signal across time.

	Average	

Uses Sample Mode for Each Acquisition

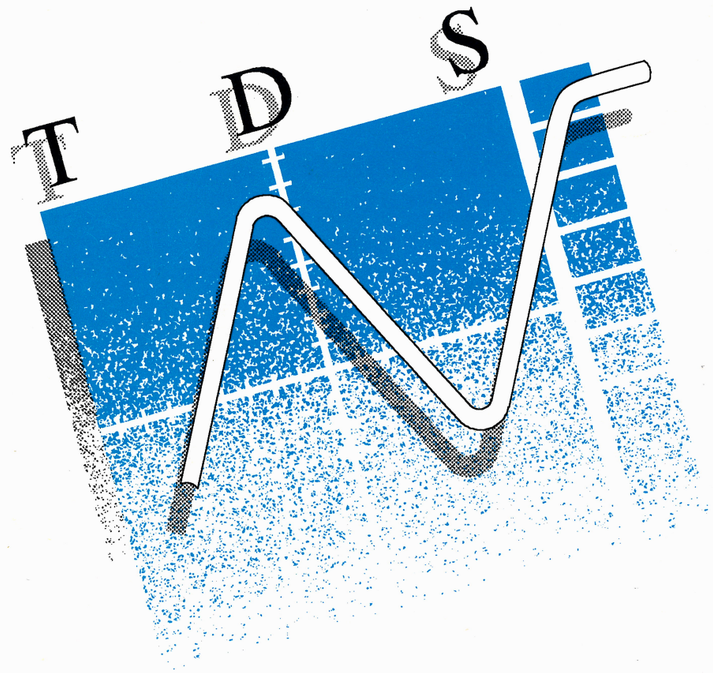
Calculates average value for each record point over many acquisitions
Use to reduce apparent noise in a repetitive signal.

TEK TDS 400 SERIES

Part No. 070-8035-00
Product Group 3G

THE TDS 420 &TDS 460

DIGITIZING OSCILLOSCOPES



Quick Reference

Tektronix®
COMMITTED TO EXCELLENCE

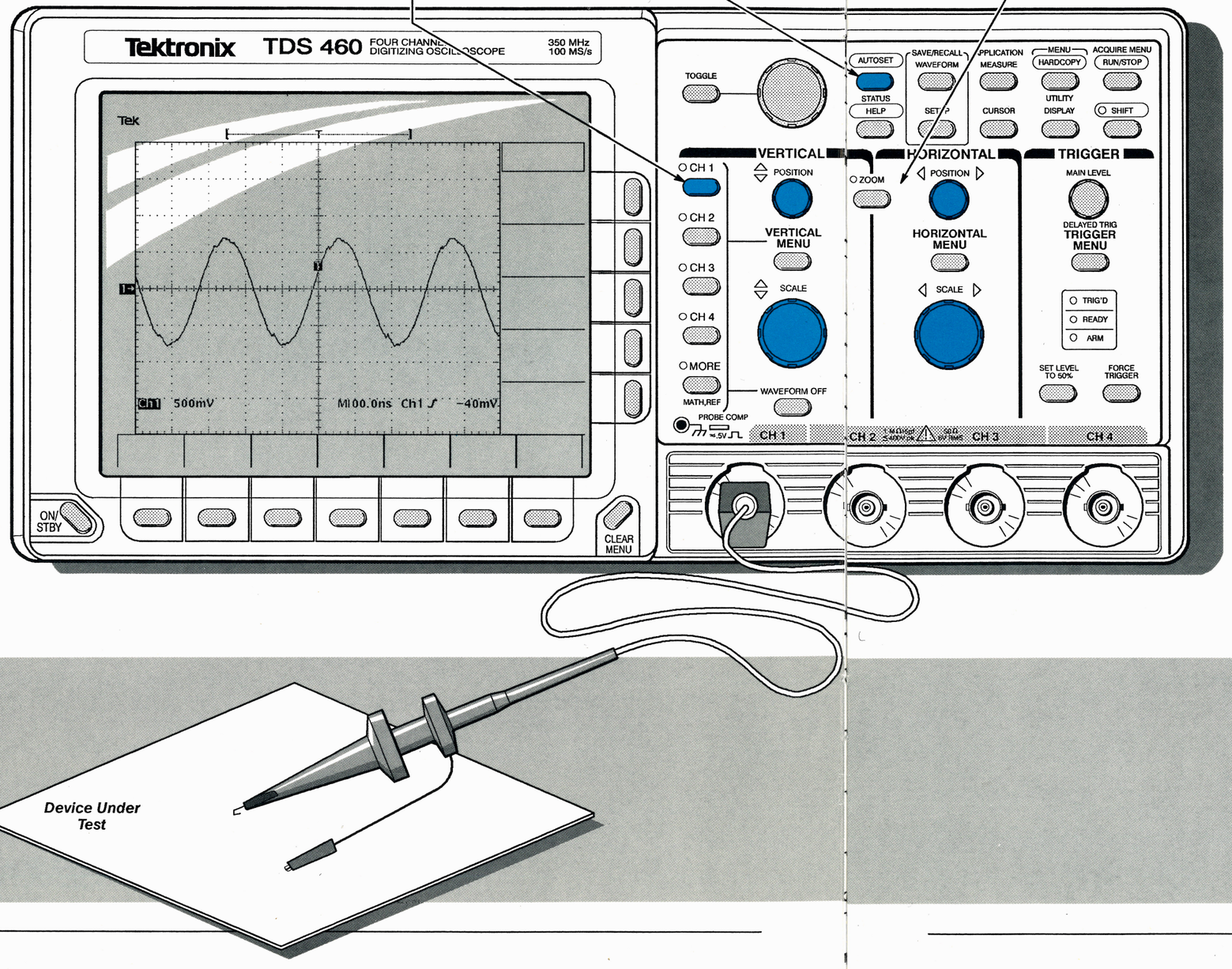
Displaying a Waveform

1 Attach a probe to **CH 1** and hook it up to your signal

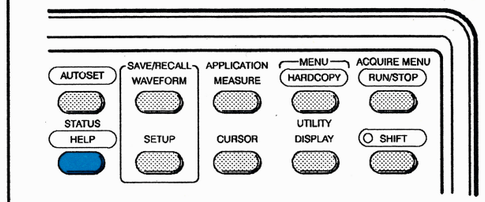
2 Press **CH 1** button

3 Press **AUTOSET**

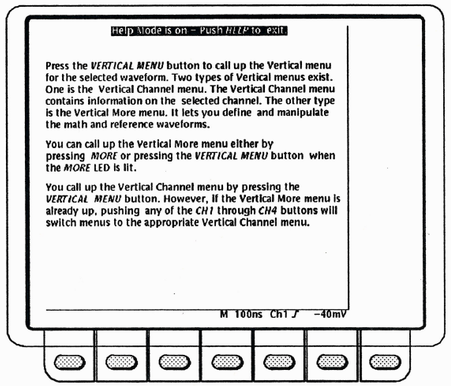
4 Adjust **VERTICAL** and **HORIZONTAL POSITION** and **SCALE** as desired



On-Line Help



1 Press **HELP** button

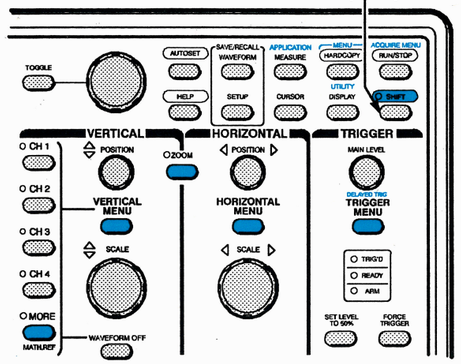


2 Now turn any knob or press any button and read a description of it on the display

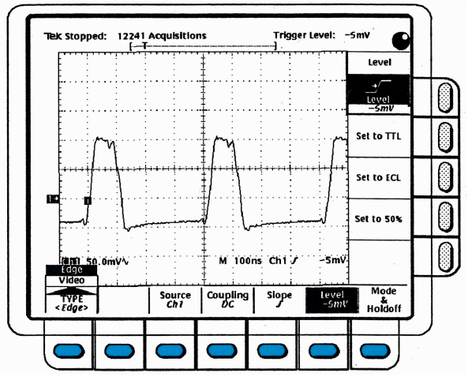
Press **HELP** button again to exit help

 First Printing SEP 1991

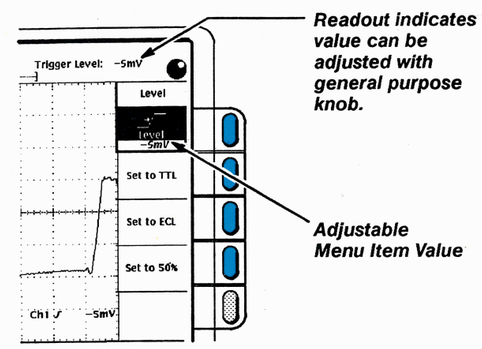
Operating a Menu



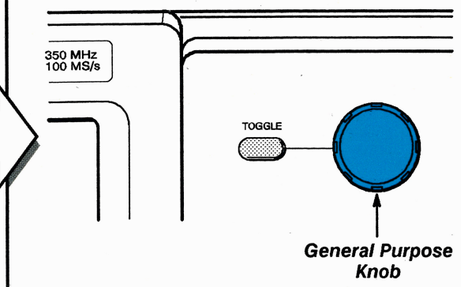
1 Press any of the front panel menu buttons



2 Select an item from the main (bottom) menu

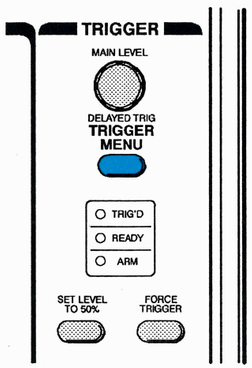


3 Select an item from the side menu, if displayed

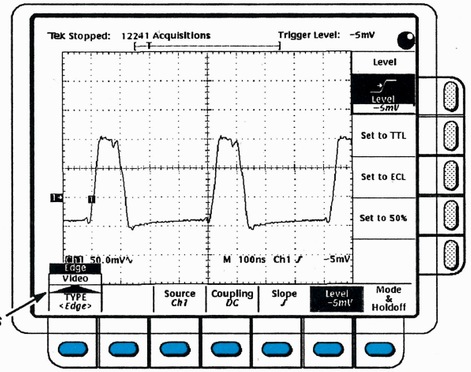


4 Adjust menu item values with general purpose knob

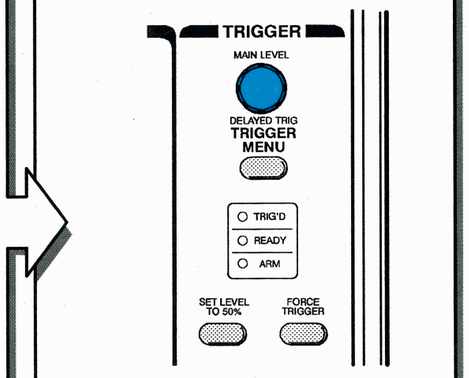
Selecting a Trigger



1 Press **TRIGGER MENU** button

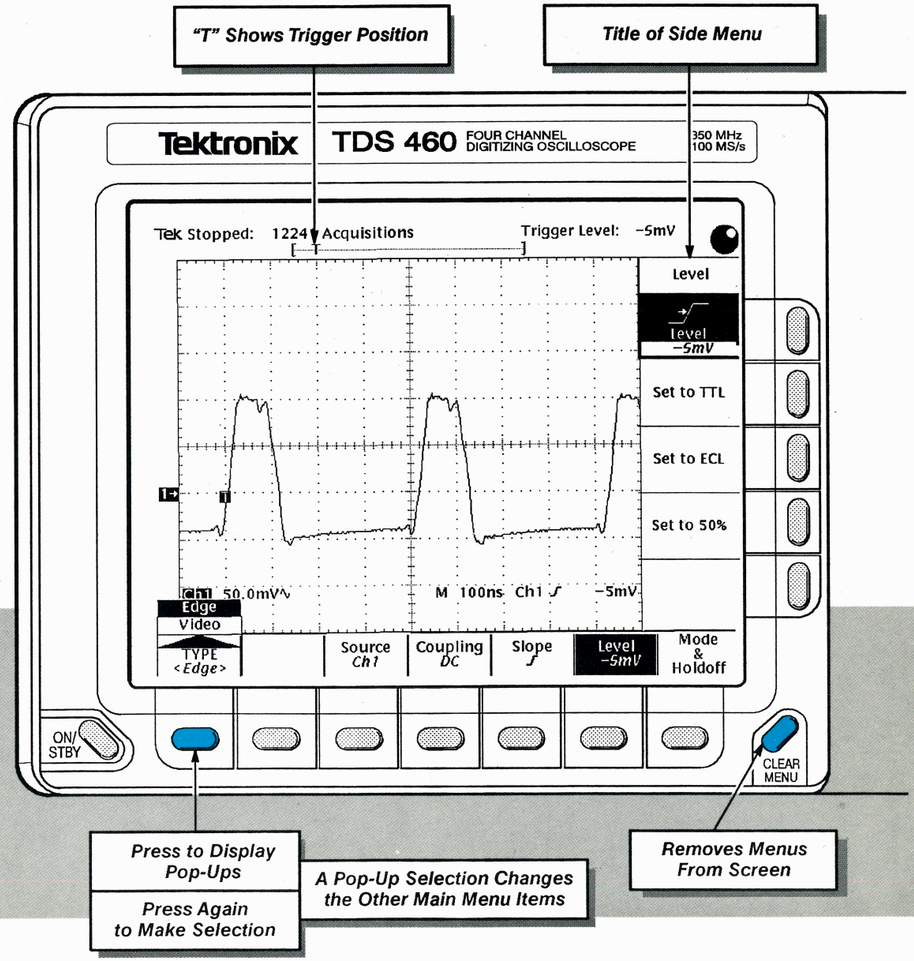


2 Select trigger type or parameter from main menu

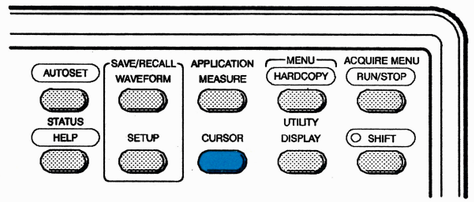


3 Set **TRIGGER LEVEL** (Edge trigger only)

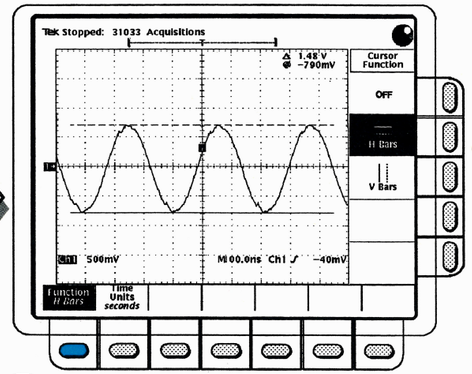
TYPE <Edge>		TYPE <Video>	
Coupling	Slope	Video Class	Sync Polarity
DC	Positive	NTSC	Positive
AC	Negative	PAL	Negative
HF Reject		Custom	
LF Reject			
Noise Rej (DC Low Sensitivity)			



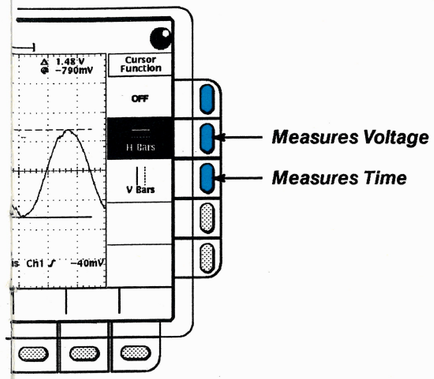
Cursor Measurements



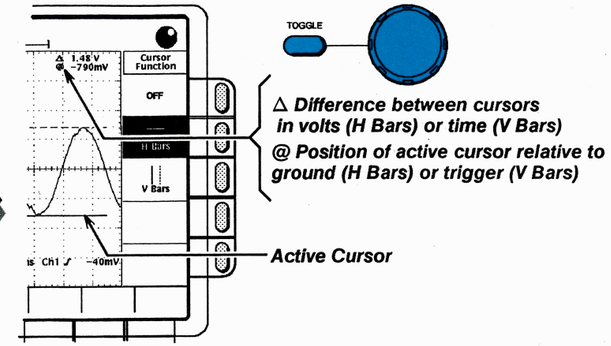
1 Press **CURSOR** button



2 Press **FUNCTION** in main menu

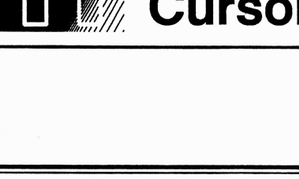


3 Select from side menu

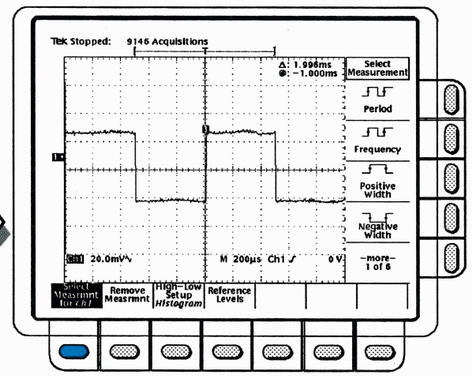


4 Move cursor with general purpose knob
Press **TOGGLE** to switch between cursors

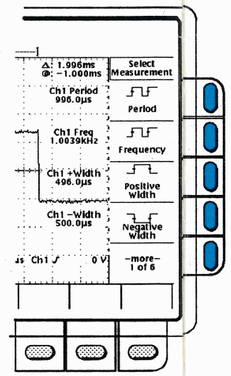
Automated Measurements



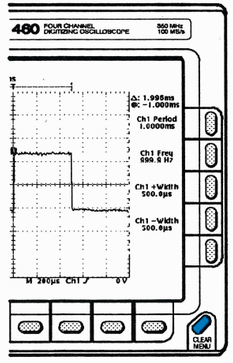
1 Press **MEASURE** button



2 Press **Select Measrmnt** in main menu



3 Select up to 4 measurements

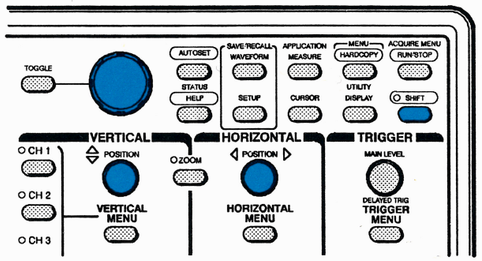


4 Press **CLEAR MENU** button to move measurement readouts away from graticule

Automated Measurement Selections

Period	Rise Time	Delay	High	Pk-Pk	RMS
Frequency	Fall Time	Burst Width	Low	Amplitude	Cycle RMS
Positive Width	Positive Duty Cycle	Positive Overshoot	Max	Mean	-more- 6 of 6
Negative Width	Negative Duty Cycle	Negative Overshoot	Min	Cycle Mean	*To 1 of 6*
-more- 1 of 6	-more- 2 of 6	-more- 3 of 6	-more- 4 of 6	-more- 5 of 6	

Quicker Adjustments



Press **SHIFT** button to change rate of **VERTICAL** and **HORIZONTAL POSITION** knobs, and general purpose knob