

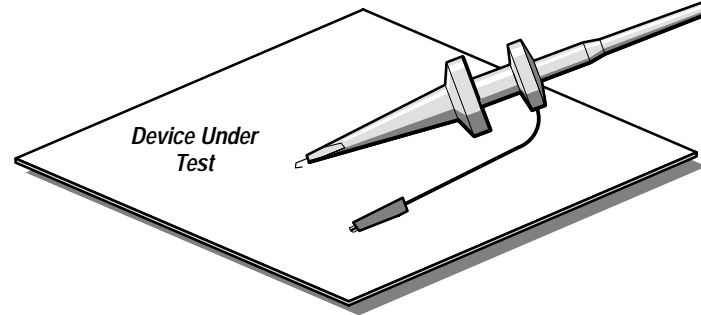
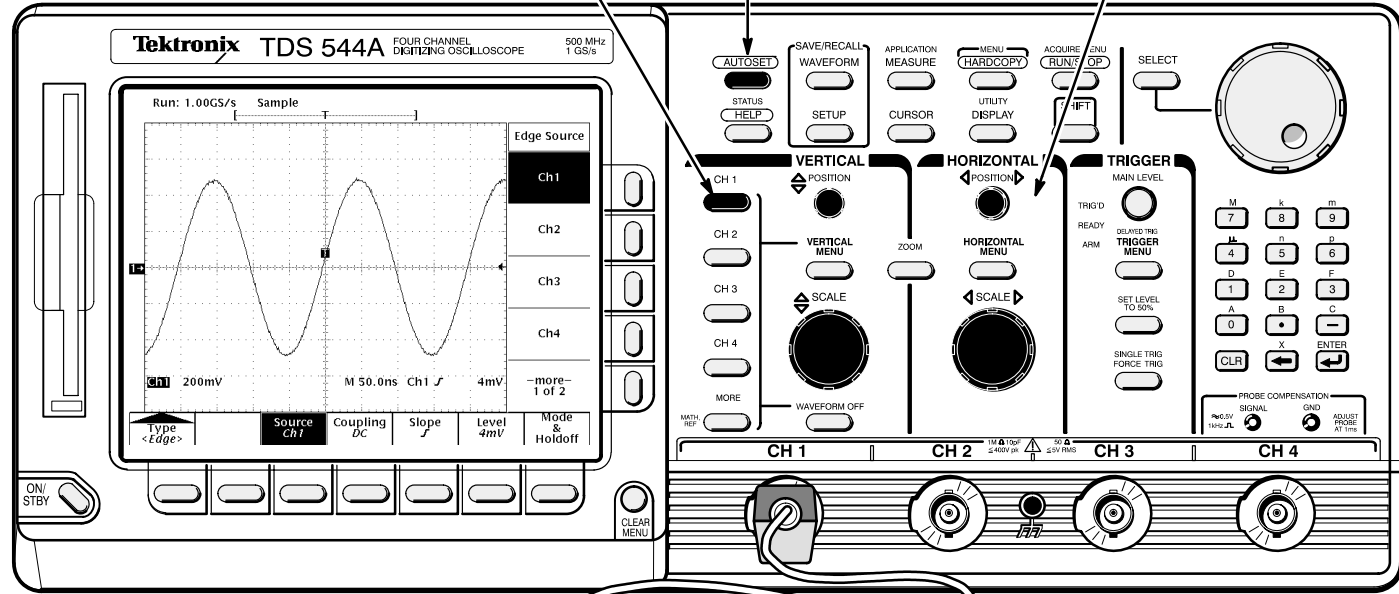
Reference

**TDS Family Digitizing Oscilloscopes
(TDS 520A, 524A, 540A, 544A,
620A, 640A, & 644A)**

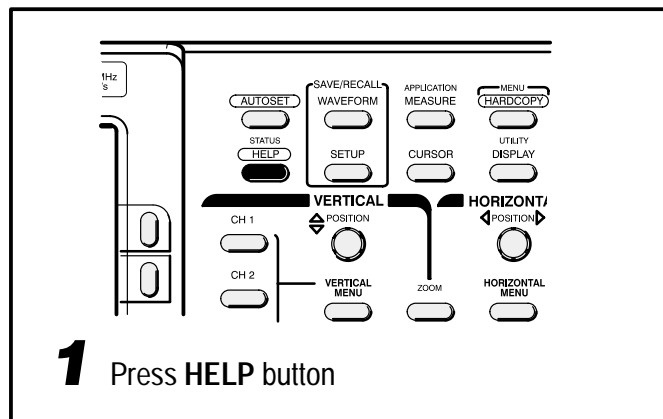
070-8711-02

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



Help Mode is on — push HELP to exit

Press any button or turn any knob for information about that control. Changing a control while in help mode will not affect the digitizing oscilloscope settings. Press HELP again to exit the help mode.

Press the SHIFT button before pressing front-panel buttons that bring up help screens for shifted menus. The shifted menus are the Acquire menu, Application menu, Hardcopy menu, Delayed Trigger menu, Status menu, and Utility menu.

With Help off, press SHIFT (lighted when on) before turning the general purpose, horizontal position, or vertical position knobs when you want increased knob response. Less knob rotation will produce greater changes in settings.

With Help off, press SHIFT after pressing any menu button that toggles through multiple settings (such as those for pop up menus). Pressing SHIFT reverses the direction in which the pop up menu or button label toggles through the menu or parameter settings.

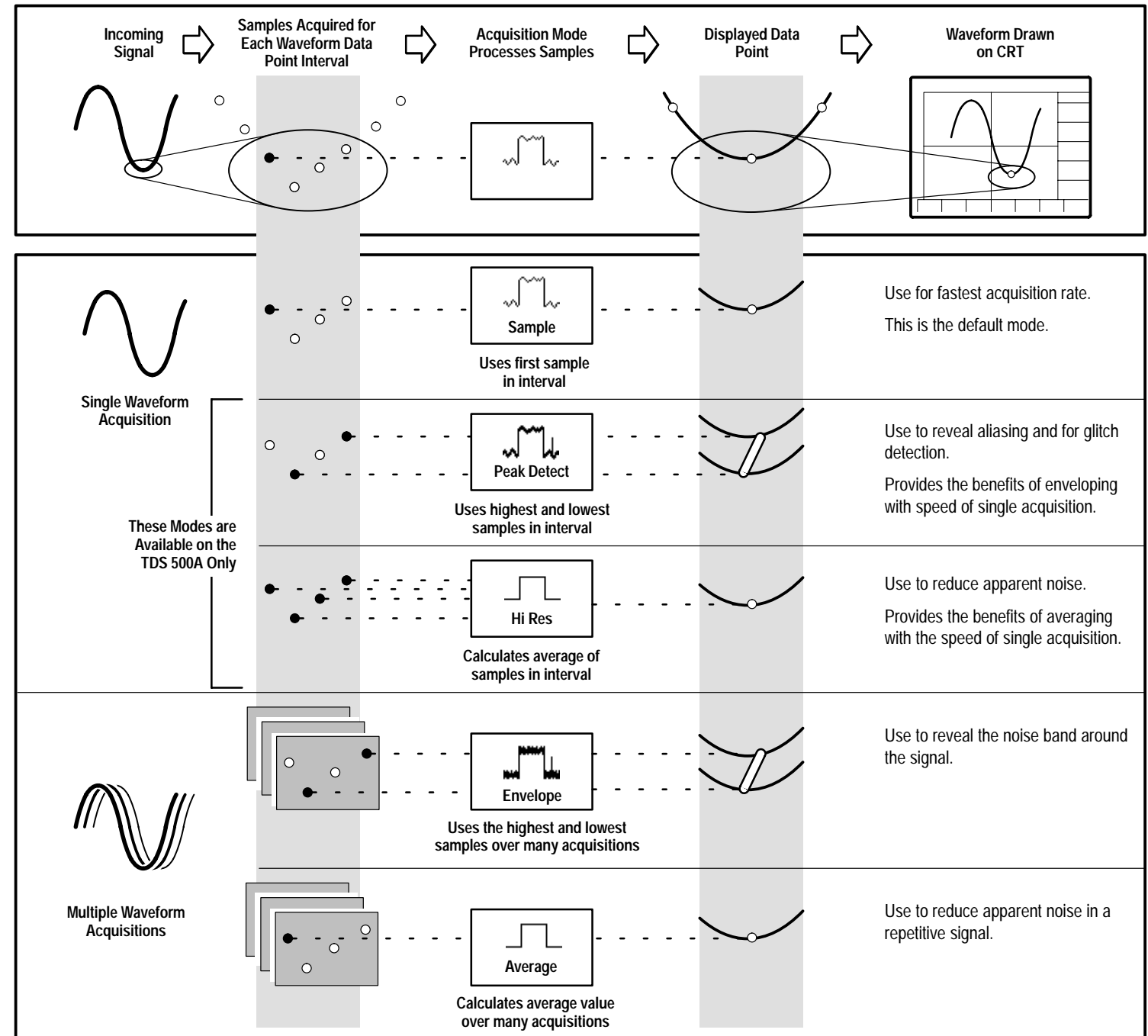
- 2 Now turn any knob or press any button and read a description of it on the display
Press HELP button again to exit help

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



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 **SELECT** to switch between cursors

Read Measurement
 Δ = Distance Between Cursors
 @ = Position of Active Cursor Relative to Ground or Trigger

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

Readout Indicates Value That You Can Adjust with the General Purpose Knob or Keypad

Adjustable Menu Item Value

4 Adjust menu item values with general purpose knob or by entering numbers on the keypad

Use **SHIFT** Button for Alternate (Blue) Values

End Your Entry by Pressing **ENTER** (↵)

Mass Storage (Optional on TDS 520A, 540A, 620A, & 640A)

1.4 Mbyte Disk Drive

Save waveforms, setups, and screen copies to PC-compatible 3.5 inch disk

Quicker Adjustments

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

Selecting a Trigger

1 Press **TRIGGER MENU** button

2 Select trigger type or parameter from main menu

TYPE <Edge>		TYPE <Logic>		TYPE <Pulse>			TYPE <Video> (Optional)
		CLASS <Pattern>	CLASS <State>	CLASS <Glitch>	CLASS <Runt>	CLASS <Width>	
Coupling	DC DC	AND	AND	Positive	Positive	Positive	NTSC
	AC AC	OR	OR	Negative	Negative	Negative	PAL
	HF Reject	NAND	NAND	Either	Either		HDTV
	LF Reject	NOR	NOR	Width		Within Limits	FlexFmt
Slope	Positive	Define High, Low, and Don't Care states for channels 1, 2, 3, and 4		OFF Accept Glitch	Threshhold	Upper Limits	
	Negative	Qualify condition by time		ON Reject Glitch		Lower Limits	

3 Set **TRIGGER LEVEL**

"T" Shows Trigger Position

Press to Display Pop-Ups

Press Again to Make Selection

A Pop-Up Selection Changes the Other Main Menu Items

Title of Side Menu

Arrow Shows Trigger Level

Removes Menus From Screen

Select Measurement						
Period	Rise Time	Delay	High	Pk-Pk	Mean	Area
Frequency	Fall Time	Phase	Low	Amplitude	Cycle Mean	Cycle Area
						—more— 7 of 7
Positive Width	Positive Duty Cycle	Burst Width	Max	Positive Overshoot	RMS	
						To 1 of 7
Negative Width	Negative Duty Cycle		Min	Negative Overshoot	Cycle RMS	
—more— 1 of 7	—more— 2 of 7	—more— 3 of 7	—more— 4 of 7	—more— 5 of 7	—more— 6 of 7	

Automated Measurements

1 Press **MEASURE** button

2 Press **Select Measrmt** or **Snapshot** in main menu

3 Select up to 4 measurements

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