# **Digitizing Oscilloscopes**

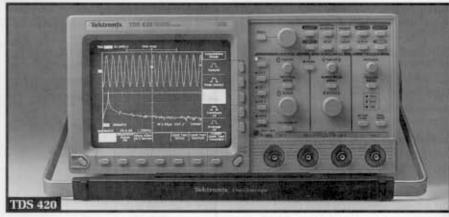
#### TDS 410/TDS 420/ TDS 460

- 150 and 350 MHz Bandwidths
- 100 MS/s Sampling Rate on 4 Channels
- 15 K Records Standard, 60 K Optional
- 1.5% Accuracy
  1 mV/div 10 V/div
- Proprietary Hi-Res Mode for up to 12-bits of Single Shot Vertical Resolution
- Extended Waveform Math/FFT (Option)
- 10 ns Peak Detect Mode for Glitch Capture
- 25 Automatic Measurements
- Pass/Fail (Template)
  Waveform Testing
- Roll and Triggered Roll Modes
- RS-232 and Centronics Type Interfaces
- · Tek Secure®

### DIFFERENTIAL MEASUREMENTS

- ADA400A Analog Differential Amplifier (10 µV/div sensitivity)
- P5200 High Voltage Differential Probe (up to 1300 V) for floating measurements

(Please see pages 501 and 502 for details on ADA400A and P5200)



The 4 channel TDS 420.

## TDS 400 Digitizing Oscilloscopes

For demanding precision measurement applications requiring high accuracy and acquisitions confidence, the simple to use portable TDS 400 family offers a choice of two channel and four channel models ranging from 150 to 350 MHz. 100 MS/s on all channels coupled with a choice of FFT Math, Video, Long Record Length options makes analysis work extremely simple.

# Characteristics

### SIGNAL ACQUISITION SYSTEM

Bandwidth – 150 MHz (TDS 410, TDS 420), 350 MHz (TDS 460).

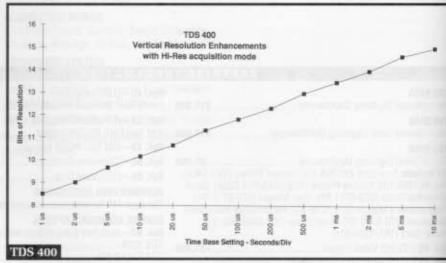
Channels - 4 (2 on TDS 410).

Digitizers - 4 (2 on TDS 410).

Sample Rate - 100 MS/s on all channels.

Sensitivity - 1 mV to 10 V/div (with calibrated fine adjust).

Position Range - ±5 Divisions.



Theoretically achieveable resolution with TDS 400 Hi-Res Mode.

### APPLICATIONS

- . Biophysical Research
- · Biomedical Research
- Electrophysical and Electromechanical System Design
- Audio System Measurement and Analysis
- Manufacturing Test and Quality Control
- Power Supply and Power-related Design
- Product Service and Maintenance

# **Digitizing Oscilloscopes**

2430A/2440 Replacements

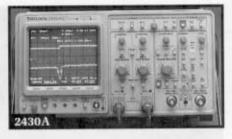
TDS 420 TDS 520A 2430A 2440

# Note to our Valued 2430A and 2440 DSO customers:

The 2430A and 2400 DSOs have served their markets very well, and have been replaced by the new generation of TDS series. The TDS Digitizing oscilloscopes offer numerous performance advantages over the 2400 series in terms of Accuracy, Acquisition Flexibility, Input/Output Capability, Easy to use Graphical User Interface, and Lower Price!

The following summary tables highlight the key performance differences between the TDS family and 2400 series DSOs. We at Tektronix are proud to continuously deliver superior value to our customers.

Please contact us for any assistance you require in making your Digitizing Oscilloscope selection. In U.S., call toll free: 1-800-835-9433, Ext. 2400 or contact your nearest Tektronix representative. Please refer to the pages in the back of the catalog for Tektronix contacts in your region.





	2430A	→ TDS 420
Bandwidth	150 MHz	150 MHz
Sample Rate	100 MS/sec	100 MS/sec
Channels	2 Channels	4 Channels
Vertical Accuracy	2% Vertical Accuracy	1.5% Vertical Accuracy
Single Shot BW	40 MHz	40 MHz
Auto Measure	21 Auto Measurements	25 Auto Measurements
Auto Setup	Yes	Yes
Record Length	1K	15K (60K Optional)
Update Rate	30 Hz	150 Waveforms/sec
I/O Transfer	GPIB only	GPIB, RS-232, Centronics
Roll Mode	Yes	Yes + Triggered Roll
Horizontal Range	5 ns-5 seconds	1 ns-20 seconds
Display Size	5 in, CRT Size	7 in. CRT Size
User Interface	Normal	Graphical User Interface
Advanced Math	None	FFT, Differentiate, Integrate (Optional)
Printer Pack	None	Optional
Price	Supply Depleted	\$6,295





	2440	TDS 520A
Bandwidth	300 MHz	500 MHz
Sample Rate	500 MS/sec	500 MS/sec
Channels	2 Channels	2 + 2 Channels
Vertical Accuracy	1.5% Vertical Accuracy	1% Vertical Accuracy
Single Shot BW	200 MHz	200 MHz
Auto Measure	21 Auto Measurements	25 Auto Measurements
Auto Setup	Yes	Yes
Record Length	1K Memory	15K (50K Optional)
Update Rate	30 Hz	200 Hz
I/O Transfer	GPIB only	GPIB, RS-232, Centronics
Roll Mode	Yes	No
Horizontal Range	5 ns-5 seconds	1 ns-20 seconds
Display Size	5 in, CRT Size	7 in. CRT Size
User Interface	Normal	Graphical User Interface
Advanced Math	None	FFT, Differentiate, Integrate (Optional)
Price	Supply Depleted	\$8,895