Appendix A: Options and Accessories

This section describes the various options as well as the standard and optional accessories that are available for the TDS 500A Digitizing Oscilloscopes.

Options

The following options are available:

Options A1 – A5: International Power Cords

Besides the standard North American, 110 V, 60 Hz power cord, Tektronix ships any of five alternate power cord configurations with the oscilloscope when ordered by the customer.

Table A-1: International Power Cords

Option	Power Cord	
A1	Universal European — 220 V, 50 Hz	
A2	UK 240 V, 50 Hz	
A3	Australian — 240 V, 50 Hz	
A4	North American — 240 V, 60 Hz	
A5	Switzerland — 220 V, 50 Hz	

Option B1: Service Manual

When Option B1 is ordered, Tektronix ships a service manual with the oscilloscope.

Option 1K: K420 Scope Cart

With this option, Tektronix ships the K420 Scope Cart. The cart can help you transport the oscilloscope around many lab environments.

Option 1M: 50,000 Point Record Length

This option provides a maximum record length of 50,000 points per acquisition (50,000/channel) and nonvolatite RAM storage of up to four 50,000 point records.

Warranty-Plus Service Options

The following options add to the services available with the standard warranty. (The standard warranty appears following the title page in this manual.)

- Option M2: When Option M2 is ordered, Tektronix provides five years of warranty/remedial service.
- Option M3: When Option M3 is ordered, Tektronix provides five years of warranty/remedial service and four oscilloscope calibrations.
- Option M8: When Option M8 is ordered, Tektronix provides four calibrations and four performance verifications, one of each in the second through the fifth years of service.

Option 1F: File System (Standard on TDS 524A & TDS 544A)

With this option, Tektronix ships the digitizing oscilloscope with a floppy disk drive and a variety of features for managing the floppy disk. With the file system you can save and recall setups, waveforms, and hardcopies on a floppy disk.

Option 1P: HC100 4 Pen Plotter

With this option, Tektronix ships a four-color plotter designed to make waveform plots directly from the digitizing oscilloscope without requiring an external controller. It handles A4 and US letter size media.

Option 1Q/2Q: TDS Tutorial

With option 1Q (US) and 2Q (Europe). Tektronix ships a TDS tutorial.

Option 1R: Rackmounted Digitizing Oscilloscope

Tektronix ships the digitizing oscilloscope, when ordered with Option 1R, configured for installation in a 19 inch wide instrument rack. Customers with instruments not configured for rackmounting can order a rackmount kit (016–1136–00 for field conversions).

Instructions for rackmounting the digitizing oscilloscope are shipped with the option 1R.

Option 13: RS-232/Centronics Hardcopy Interface (Standard on TDS 524A & TDS 544A)

With this option, Tektronix ships the oscilloscope equipped with a RS-232 and a Centronics interface that can be used to obtain hardcopies of the oscilloscope screen.

Option 05: Video Trigger

With this option, Tektronix ships the instrument with tools for investigating events that occur when a video signal generates a horizontal or vertical sync pulse. It allows you to investigate a range of NTSC, PAL, SECAM, and high definition TV signals.

Option 2F: Advanced DSP Math (Standard on TDS 524A & TDS 544A)

With this option, the oscilloscope can compute and display three advanced math waveforms: integral of a waveform, differential of a waveform, and an FFT (Fast Fourier Transform) of a waveform.

Option 2P: Phaser 200e Color Printer

With this option, Tektronix ships a Tektronix Phaser 200e, 300 dpi, thermal transfer, color printer. It handles letter or A4 size Tektronix thermal paper and transparencies. It can handle laser copy (plain) paper with the ColorCoat Transfer Boll.

Option 22: Additional Probes — (TDS 520A & TDS 524A only)

With this option, Tektronix ships two additional probes identical to the two standard-accessory P6139A probes normally shipped with the instrument. This provides one probe for each front-panel input.

Option 23: Active Probes

With this option, Tektronix ships two active high speed voltage probes (the P6205 10X FET).

Option 25: SMD Probes

With this option, Tektronix ships four passive SMD probes (the P6563AS 20X, 500 MHz).

Option 4P: HC220 Bubble Jet Printer

With this option, Tektronix ships a Tektronix HC220, 360 dpi. 83 cps, plain paper, bubble jet printer.

Option 9C: Certificate of Calibration and Test Data Report

Tektronix ships a Certificate of Calibration which states this instrument meets or exceeds all warranted specifications and has been calibrated using standards and instruments whose accuracies are traceable to the National Institute of Standards and Technology, an accepted value of a natural physi-

cal constant, or a ratio calibration technique. The calibration is in compliance with US MIL-STD-45662A. This option also includes a test data report for the instrument.

Standard Accessories

The following standard accessories are included with the digitizing oscilloscope:

Table A-2: Standard Accessories

Accessory	Part Number
User Manual	070-8710-01
Programmer Manual	070-8709-02
Reference	070-8711-02
Performance Verification	070 - 8712 - 01
Front Cover	200-3696-00
U.S. Power Cord	161-0230-01
Probes, TDS 540A & TDS 544A (quantity four), 10X Passive	P6139A (single unit)
TDS 520A & TDS 524A (quantity two), 10X Passive	

Probe Accessories

These are accessories to the standard probe listed previously (P6139A). Except for the probe-tip-to-circuit board adapter, they can also be ordered separately.

Table A-3: Probe Accessories

Accessory	Part Number
Retractable Hook Tip	013-0107-06
Body Shell, tip cover	204-1049-00
Probe-Tip-to-Circuit Board Adapter (quantity two standard, optionally available in package of 25 as 131 – 5031 – 00)	No customer order- able part number for double unit
Six-inch Slip-On Ground Lead	196-3113-02
Low Inductance Ground Lead	195-4240-00
Marker Rings Set (quantity eighteen rings which includes two each of nine colors)	016-0633-00
Ground Collar	343-1003-01

Table A-3: Probe Accessories (Cont.)

Accessory	Part Number
Six-inch Alligator Clip Ground Lead	196-3305-00
Screwdriver: adjustment tool, metal tip	003-1433-00
SMT KlipChip TM	206-0364-00
Accessory Pouch	016-0708-00

Optional Accessories

You can also order the following optional accessories:

Table A-4: Optional Accessories

Accessory	Part Number
Service Manual	070-8713-01
Plotter (GPIB and Centronics Standard)	HC100
Oscilloscope Cart	K218
Rack Mount Kit (for field conversion)	016-1136-00
Oscilloscope Camera	C9
Oscilloscope Camera Adapter	016-1154-00
Soft-Sided Carrying Case	016-0909-01
Transit Case	016-1135-00
GPIB Cable (1 meter)	012-0991-01
GPIB Cable (2 meter)	012-0991-00

Accessory Probes

The following optional accessory probes are recommended for use with your digitizing oscilloscope:

- P6101A 1X, 15 MHz, Passive probe.
- P6156 10X, 3.5 GHz, Passive, low capacitance, (low impedance Z_O) probe. Provides 100X, when ordered with Option 25.
- P6009 Passive, high voltage probe, 100X, 1500 VDC Peak AC.
- P6015A Passive high voltage probe, 1000X, 20 kVDC + Peak AC (40 kV peak for less than 100 ms).
- P6205 750 MHz probe bandwidth. Active (FET) voltage probe.

- P6204 Active, high speed digital voltage probe. FET. DC to 1 GHz. DC offset. 50 Ω input. Use with 1103 TekProbe Power Supply for offset control.
- P6563AS Passive, SMD probe. 20X, 500 MHz
- P6046 Active, differential probe, 1X/10X, DC to 100 MHz, 50 Ω input.
- A6501 Buffer Amplifier (active fixtured), 1 GHz, 1 MΩ, 10X.
- P6501 Option 02: Microprobe with TekProbe power cable (active fixtured), 750 MHz. 1 MΩ, 10X.
- AM 503S DC/AC Current probe system, AC/DC. Uses A6302 Current Probe.
- AM 503S Option 03: DC/AC Current probe system, AC/DC. Uses A6303 Current Prope.
- P6021 AC Current probe. 120 Hz to 60 MHz.
- P6022 AC Current probe. 935 kHz to 120 MHz.
- CT-1 Current probe designed for permanent or semi-permanent in-circuit installation. 25 kHz to 1 GHz, 50 Ω input.
- CT-2 Current probe designed for permanent or semi-permanent in-circuit installation. 1.2 kHz to 200 MHz, 50 Ω input.
- CT-4 Current Transformer -- for use with the AM 503S (A6302) and P6021. Peak pulse 1 kA. 0.5 Hz to 20 MHz with AM 503S (A6302).
- P6701A Opto-Electronic Converter, 500 to 950 nm, DC to 850 MHz, 1 V/mW.
- P6703A Opto-Electronic Converter, 1100 to 1700 nm, DC to 1 GHz,
 1 V/mW.
- P6711 Opto-Electronic Converter, 500 to 950 nm, DC to 250 MHz, 5 V/mW.
- P6713 Opto-Electronic Converter, 1100 to 1700 nm, DC to 300 MHz, 5 V/mW.
- TVC 501 Time-to-voltage converter. Time delay, pulse width and period measurements.

Probe Accessories

The following optional accessories are recommended for use with the standard probe listed under *Standard Accessories*.

Table A-5: Probe Accessories

Accessory	Part Number	
	013-0226-00	
Connector, BNC: 50 Ω BNC to Probe Tip Adapter	013-0227-00	
Connector, Probe: Package of 100, compact	131-4244-00	
Connector, Probe: Package of 25, compact	131-5031-00	
Screwdriver Adjustment Tool. Package of five	003-1433-01	
Compact-to-Miniature Probe Tip Adapter	013-0202-02	
Probe Tip Holder: (holds three tips)	352-0670-00	
Three-inch Slip-On Ground Lead	196-3113-03	
Probe Holder: Black ABS	352-0351-00	
IC Protector Tip, Package of 10	015-0201-07	
IC Protector Tip, Package of 100	015-0201-08	
Marker Ring Set: Two each of nine colors	016-0633-00	
SMT KlipChip TM : 20 Adapters	SMG50	
Low-Inductance Spring-Tips: Two each of five different springs and insulator	016-1077-00	
Bayonet Ground Assembly	013-0085-00	
Probe Tip-to-Chassis Adapter	131-0258-00	

NOTE

The next four items below can only be used with the Compact-to-Miniature Probe Tip Adapter.

Dual-Lead Adapter	015-0325-00
BNC-to-Probe Tip Adapter	013-0084-01
G.Rto-Probe Tip Adapter, 50 Ω	017-0088-00
Bayonet Ground Assembly	013-0085-00

Accessory Software

The following optional accessories are Tektronix software products recommended for use with your digitizing oscilloscope:

Table A-6: Accessory Software

Software	Part Number
EZ-Test Program Generator	S45F030
Wavewriter: AWG and waveform creation	S3FT400
TekTMS: Test management system	S3FT001
LabWindows	S3FG910

Warranty Information

Check for the full warranty statements for this product, the probes, and the products listed above on the first page after the title page of each product manual.

A-8 Appendices