

# Supplement

**Tektronix**

**TDS 714L**  
**Digitizing Oscilloscope**  
**071-0628-00**

This document applies to firmware version 5.1  
and above.



071062800

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# TDS 714L Features

Most information in the *TDS 500D, TDS 600B, & TDS 700D Digitizing Oscilloscopes User* manual is valid for the TDS 714L oscilloscope. This supplement lists the unique features of the TDS 714L.

## Key Features

Except for the features and capabilities outlined in this manual, the information in your user manual (and other TDS documentation) applies to the TDS 714L.

Table 1 lists the key features of the TDS 714L. The pages that follow list the TDS 714L features, options, and accessories.

**Table 1: Key Features of the TDS 714L**

Feature	TDS 714L
Number of channels	4
Digitizing rate, maximum	500 MS/s
Number of Channels at maximum rate	4
Analog Bandwidth	500 MHz
Record Lengths, maximum	To 250 K/Channel <sup>1</sup>
DPO Acquisitions	No
Hi Res Acquisitions	Yes
Advanced DSP Math <sup>2</sup>	Standard
Storage, Floppy Disk Hard Disk Zip 100/250 Drive Support	Standard Option HD Standard
I/O includes GPIB, RS-232 and Centronics	Standard
Input Impedance	50 $\Omega$ and 1 M $\Omega$
Measurement statistics (mean, min, max, and std dev)	Standard
Waveform Histograms	Standard
Java-based Applications	Available
Display	Color

<sup>1</sup> Standard record length 130 K on 3 or 4 channels, 250 K on 1 or 2 channels. Option 2M adds longer record length settings. See Option 2M on page 2.

<sup>2</sup> Advanced digital signal processing provides FFTs, integrals, and derivatives of waveforms.

## Options

Options available for the TDS 714L are shown in Table 2:

**Table 2: TDS 714L Options**

Option #	Label	Description
A1	Universal European power cord	220 V, 50 Hz power cord
A2	UK power cord	240 V, 50 Hz power cord
A3	Australian power cord	240 V, 50 Hz power cord
A4	North American power cord	240 V, 60 Hz power cord
A5	Switzerland power cord	220 V, 50 Hz power cord
HD	Hard disk drive	Add a hard disk.
05	Video trigger	Oscilloscope comes with tools for investigating events that occur when a video signal generates a horizontal or vertical sync pulse. These tools allow investigation of a range of NTSC, PAL, SECAM, and high definition TV signals.
1K	Scope cart	K420 scope cart. This cart can help transport the oscilloscope around many lab environments.
2M	8 M acquisition length	Extend standard acquisition length as follows:  To 2 M samples on three or four channels, 4 M on two channels, and 8 M samples on one channel  (Option includes a hard disk.)
1R	Rackmount	Oscilloscope comes configured for installation in a 19 inch wide instrument rack. For later field conversions, order Tektronix part number 016-1236-00.
34	Differential probe	Add a 1 GHz (probe only) P6247 differential probe
35	Active probe	Add a 1 GHz (probe only) P6243 active probe
36	Passive probe	Add a 500 MHz P6139A 10X passive probe
C3	Three years calibration	Provides three years of calibration
D1	Calibration data report	Oscilloscope comes with a calibration data report.
D3	Calibration data for C3	Provides calibration data for option C3
L1	Manuals in French	Provides Language versions of User Manual, according to option number chosen.
L3	Manuals in German	
L5	Manuals in Japanese	
L9	Manuals in Korean	

## Standard Accessories

The oscilloscope comes standard with the accessories listed in Table 3.

**Table 3: Standard accessories**

Accessory	Part number
User Manual with Programmers Manual Help Disk	071-0130-XX
TDS 714L Supplement	071-0628-XX
Reference	020-2313-XX
Technical Reference: Performance Verification and Specifications	071-0630-XX
Probes: Four P6139A 10X, 500 MHz Passive probes	P6139A
Front Cover	200-3696-01
Accessory Pouch (only without Option 1R)	016-1268-00
U.S. Power Cord	161-0230-01

## Optional Accessories

You can also order the optional accessories listed in Table 4.

**Table 4: Optional accessories**

Accessory	Part number
Service Manual	071-0627-XX
Oscilloscope Cart	K420
Rack Mount Kit (for field conversion)	016-1236-00
Accessory Pouch	016-1268-00
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
Centronics Cable	012-1214-00
RS-232 Cable	012-1298-00

## Accessory Probes

Table 5 lists the recommended probes for the oscilloscope.

**Table 5: Recommended probe cross reference**

Probe	714L
Passive 1X	P6101B
10X	P6139A
100X	P5100
1000X	P6015A
SMD	P6563A
Active CMOS/TTL	P6243
Logic	P6408
Differential Digital/Telecom	P6246, P6247
Micro Volt	ADA400A
High Voltage	P5205 P5210
Current AC Only	P6021 P6022 CT-1 CT-2
Current AC/DC	TCP202 AM503S
Electro-Optical Converter	P6701B P6703B