

VICTOR 152S



Dual-Channel Color-Screen Handheld Oscilloscope + Multimeter + Signal Generator (3-in-1)

Manufacturer / Brand	VICTOR
Model	VICTOR 152S
Bandwidth	50 MHz
Function integration	Oscilloscope + Signal Generator + Multimeter (three-in-one)
Source	Official product page, victor-multimeter.com (product #945) — text and product images

Key Highlights

Display	3.2-inch color screen
Measurement	High precision
Waveform handling	Waveform storage and export
Cursor measurement	Supported
Afterglow mode	Supported
Math operations	Mathematical operations on waveforms
Backlight	Adjustable
Display mode	X-Y mode supported
One-click measurement	AUTO RANGE button for automatic adjustment, no manual tuning required

Safety Note (from official product page)

The two oscilloscope channels are non-isolated and share a common ground reference. The ground leads of the two probes must not be connected to two points with different DC electrical levels, as this can cause a short circuit through the shared ground connection of the oscilloscope probes.

Oscilloscope — Feature Summary

Channels	Dual channel input
Bandwidth	50 MHz
Real-time sampling rate	Up to 200 MSa/s
Maximum record length	128 Kbyte
Maximum input voltage	x1 probe: < 150 V; x10 probe: < 300 V (DC + AC peak)
Cursor measurement	Supported
Automatic measurement	Multiple functions supported
Display mode	YT, XY
Trigger mode	Automatic, Normal, Single
Afterglow mode	Supported

Oscilloscope — Detailed Parameters



Bandwidth	50 MHz, Dual channel
Sampling — Way	Real-time sampling
Sampling — Sampling rate	200 MSa/s
Number of channels	2 (Dual channel)
Input — Input coupling	DC, AC
Input — Input impedance	1 M Ω , @ 16 pF
Input — Probe attenuation	x1, x10, x100
Input — Maximum input voltage	x1 gear < 150 V; x10 gear < 300 V
Level — Sampling rate range	1.5 MSa/s
Level — Waveform interpolation	(sinx)/x
Level — Scanning speed range	10 ns/div ~ 20 s/div
Level — Time base accuracy	20 ppm
Level — Record length	Up to 128 Kbyte
Vertical — Sensitivity	20 mV/div ~ 10 V/div
Vertical — Displacement range	4 grids (positive and negative)
Vertical — Analog bandwidth	50 MHz
Vertical — Low-frequency response	Greater than 10 Hz
Vertical — Rise time	Less than 10 ns
Vertical — DC gain accuracy	$\pm 3\%$
Measure — Automatic measurement	Cycle, frequency, peak-to-peak value, maximum value, minimum value, root mean square, duty cycle, average value
Trigger — Trigger mode	Automatic, Normal, Single time
Trigger — Trigger edge	Rising edge, Falling edge
Signal generator output (waveforms)	Sine wave, square wave, triangular wave, half wave, full wave, sawtooth wave
Display mode	YT, XY
Afterglow mode	Minimum, 500 ms, 1 S, 10 S, Unlimited

Probe Compensator Output

Output voltage (typical)	3 Vpp, high impedance
Frequency (typical)	Square wave, 1 kHz ($\pm 1\%$)

Multimeter — Feature Summary

Display	4½ digit, color screen, displays true (RMS) effective value
Functions	Voltage, current, resistance, capacitance, on-off (continuity), diode
Digital display resolution	25000 readings / 9999 readings for capacitance
Maximum input voltage	AC: 750 V, DC: 1000 V
Maximum input current	AC: 10 A, DC: 10 A
Range	Automatic range
Data handling	Data retention (HOLD), color screen display

Multimeter — Detailed Parameters

Function	Range	Accuracy
DC voltage (mV)	25.000 mV / 250.00 mV	$\pm(0.05\% + 5)$
DC voltage (V)	2.5000 V / 25.000 V / 250.00 V / 1000.0 V	$\pm(0.1\% + 10)$
DC current	25.000 mA / 250.00 mA / 2.5000 A / 10.000 A	$\pm(0.5\% + 10)$
AC voltage (mV)	25.000 mV / 250.00 mV	$\pm(0.1\% + 8)$
AC voltage (V)	2.5000 V / 25.000 V / 250.00 V / 750.0 V	$\pm(0.5\% + 10)$
AC current (mA)	25.000 mA / 250.00 mA	$\pm(0.5\% + 10)$
AC current (A)	2.5000 A / 10.000 A	$\pm(0.8\% + 10)$
Resistance	250.00 Ω / 2.5000 k Ω / 25.000 k Ω / 250.00 k Ω / 2.5000 M Ω / 25.000 M Ω / 250.0 M Ω	$\pm(1.0\% + 10)$
Capacitance	9.999 nF / 99.99 nF / 999.9 nF / 9.999 μ F / 99.99 μ F / 999.9 μ F / 9.999 mF / 99.99 mF	$\pm(2.0\% + 10)$
Frequency	99.99 Hz / 999.9 Hz / 9.999 kHz / 99.99 kHz / 999.9 kHz	$\pm(0.1\% + 2)$
On-off (continuity)	The buzzer sounds for a long time	
Diode test	Open circuit voltage is about 3.2 V	
Digital display	25000 readings / capacitance: 9999 readings	

Signal Generator — Feature Summary

Maximum waveform output frequency	5 MHz
Waveforms	6 types: sine wave, square wave, triangular wave, half wave, full wave, sawtooth wave
Real-time sampling rate	200 MSa/s
Frequency resolution	1 Hz
Waveform length	256 Byte
Vertical resolution	8-bit

Signal Generator — Detailed Parameters



Frequency range by waveform:

Sine wave	1 Hz ~ 5 MHz
Square wave	1 Hz ~ 2 MHz
Triangular wave	1 Hz ~ 2 MHz
Half-wave	1 Hz ~ 2 MHz
Full wave	1 Hz ~ 2 MHz
Sawtooth wave	1 Hz ~ 500 kHz

Amplitude range at 50 Ω load — frequency reachable at each amplitude band:

Waveform	Amplitude band 1	Amplitude band 2
Sine wave	0.3 Vpp~3 Vpp → 1 Hz~3.999999 MHz	0.3 Vpp~2.8 Vpp → 1 Hz~5 MHz
Square wave	0.3 Vpp~3 Vpp → 1 Hz~2 MHz	0.3 Vpp~2.8 Vpp → 1 Hz~2 MHz
Triangular wave	0.3 Vpp~3 Vpp → 1 Hz~1.7 MHz	0.3 Vpp~2.8 Vpp → 1 Hz~2 MHz
Half-wave	0.3 Vpp~3 Vpp → 1 Hz~2 MHz	0.3 Vpp~2.8 Vpp → 1 Hz~2 MHz
Full wave	0.3 Vpp~3 Vpp → 1 Hz~1.7 MHz	0.3 Vpp~2.8 Vpp → 1 Hz~2 MHz
Sawtooth wave	0.3 Vpp~3 Vpp → 1 Hz~300 kHz	0.3 Vpp~2.8 Vpp → 1 Hz~500 kHz

DC offset range	0
Frequency resolution	1 Hz
Channel count (Thoroughfare)	1
Waveform length	256 Byte
Vertical resolution	8-bit
Output impedance	50 Ω

General / Outline Specification

Display type	3.2-inch color LCD display
Display resolution	320 × 240
Power supply	3.7 V, 2200 mAh rechargeable lithium battery
Charging interface	USB Type-C
Working environment	0 °C ~ 40 °C
Relative humidity	< 80%
Product size	181 × 89 × 40 mm
Product weight	About 380 g (excluding battery)

Connectors & Physical Layout

Top panel	Signal generator output connector (GEN Out), Oscilloscope input terminals CH1 and CH2
Side panel	Probe compensation output: 3 V / 1 kHz square wave signal; USB Type-C port for charging and communication
Bottom panel (multimeter input terminals)	A (MAX 10 A, fused), mA (MAX 250 mA, fused), COM, VΩ→→ ■+ — rated 600 V CAT III

Packaging & Accessories

Standard package contents, per the official product page:

- 1 — Color box
- 2 — Instrument carrying case
- 3 — Host unit (VICTOR 152S)
- 4 — Instruction manual
- 5 — Crocodile clip line
- 6 — USB cable
- 7 — Test probe (multimeter test leads)
- 8 — Passive probe (oscilloscope probe) — available in 20 MHz / 40 MHz / 60 MHz / 100 MHz variants, X1 & X10 switchable attenuation
- 9 — Attachment (probe accessory clip)

Source: official VICTOR 152S product page — <http://www.victor-multimeter.com/products/oscilloscope/victor-152s-handheld-oscilloscope-with-multimeter-two-channel-1200-msa-s-50mhz-945.html> (text content and product specification images provided by the user).
Datasheet compiled by Claude (Anthropic) — for reference only, not an official manufacturer document.