

Hantek 2000 Series

An all-new handheld oscilloscope-Hantek2000 series, it continues the compact and lightweight concept but with a new generation of 3 in 1 multifunction tester: oscilloscope, signal source and multimeter; A small volume of the non-profit grip by a single hand; The suspending stand was designed to support multi-angle adjustment; Ultra-low-power, Type C charging interface, each 2 hours battery charge allow working one full day or stand by two months; High-definition color LCD screen display clear and delicate; Minimalist keyboard design simplify operation, easy to use.

- **Oscilloscope + Waveform Generator + Multimeter:** This multi-purpose station own three universal test instrument functions. It is outgoing right-hand product for engineers.
- **Intelligent charging control:** Its lithium batteries can be recharged by either high current-5V/2A or ordinary computer USB interface. Allow while charging, while using, very convenient and handy;
- **Ultra-low power design:** Type C charging interface, after every recharge of 2 hours, the device can be used continuously for a full day or standby more than two months;
- **Large-capacity lithium battery power supply:** 18650 replaceable lithium battery power system, free from replace battery;
- **5V/2A charger + Type C charging cable:** Type C power + data transfer interface, can share the charger and data cable with your mobile phone;
- **AUTO one-key test:** Magic tool and essential function for test newbie; Volume small, one hand holding: The 45 degree suspension bracket design provide you a work station anywhere anytime; One key page out, quick compare two groups of reference waveforms + 6 groups of waveforms storage, simple and effective;
- **Digital voltmeter function:** automatic frequency and amplitude measurement, convenient and worry-free; Its cursor measurement function supports time and voltage manual measurement, and measure the required waveforms accurately; One-click switching its Chinese and English language menu;
- **Color LCD screen:** exquisite and smooth lines make the waveforms clear and undistorted when magnify; Minimalist keyboard design simplify operation, convenient to use;
- **Unibody casing:** fine touch feeling, favorable impact resistance, outstanding heat resistance, easy to disassemble;
- **Self-calibration function:** free from level drift after long time unused;
- **Universal multimeter function:** voltage, current, resistance, diode, capacitor, on-off test;
- **Waveform generator output function:** output sine, square, triangle, trapezoidal and other waveforms; sine up to 25MHz;
- **Function of video help :** scan code on back of machine to get help of video course; The PC software supports windows7/8/10 32-bit and 64-bit.

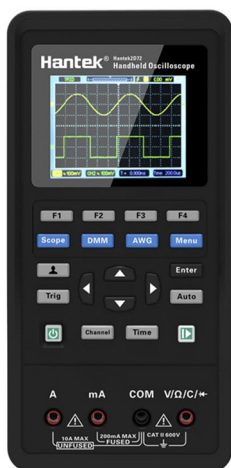
Model	Channel	Bandwidth	Sample	Power	DMM	AFG
Hantek2C42	2 CH+DMM	40 MHz	250MSa/S	Direct charge	✓	-
Hantek2C72	2 CH+DMM	70 MHz	250MSa/S	Direct charge	✓	-
Hantek2D42	2 CH+AFG+DMM	40 MHz	250MSa/S	Direct charge	✓	✓
Hantek2D72	2 CH+AFG+DMM	70 MHz	250MSa/S	Direct charge	✓	✓

3 in 1

Dual Channel Oscilloscope + Waveform Generator+Multimeter

OSCILLOSCOPE

250M Sampling rate, 70/40MHz Bandwidth; 10mV~10V Vertical resolution; Auto automatic measuring function; Key tone settings; Adjustable backlight brightness, backlight duration, and auto power off time; Digital voltmeter function; Support Chinese and English menu switch; Cursor measurement, reference waveform, waveform Storage function.



Great function with small size!

Color highlight LCD screen, legible even in bright sunlight; Soft colors, clear waveforms display; High quality casing + Silicon protective cover with fine touch feeling, favorable impact resistance, and outstanding heat resistance;

Powered by two 18650 lithium battery only; Be able to work continuously for a full day and standby over 8 weeks; Minimalist keyboard design simplify operation, easy to use.

WAVEFORM GENERATOR

250MSa/s Sampling rate, 12 bits vertical revolution; Sine: 1Hz~25MHz Square: 1Hz~10MHz Triangular: 1Hz~1MHz Trapezoid: 1Hz~5MHz Frequency revolution: 1Hz Output impedance: 50Ω 4 types arbitrary waveform; A multipurpose tester that meet your current and future testing demands.



MULTIMETER

All-series with standard multi-functional digital multimeter which can be used to measure AC/DC voltage/current, resistance, diode, capacitance, on-off test. High sensitivity and accuracy, clear display, strong overload ability, and ultra-portable.



INTELLIGENT CHARGING CONTROL

It can be recharged by either high current-5V/2A or ordinary computer USB interface. Allow while charging, while using, very convenient and handy;



BUILT-IN LARGE CAPACITY LITHIUM BATTERY

18650 replaceable lithium battery power system, free from replace battery;

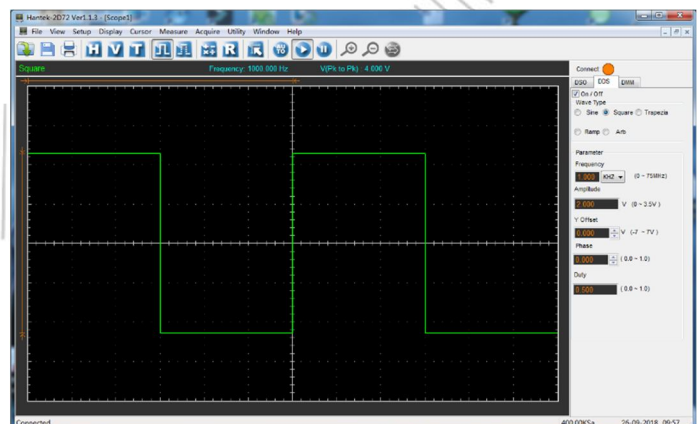
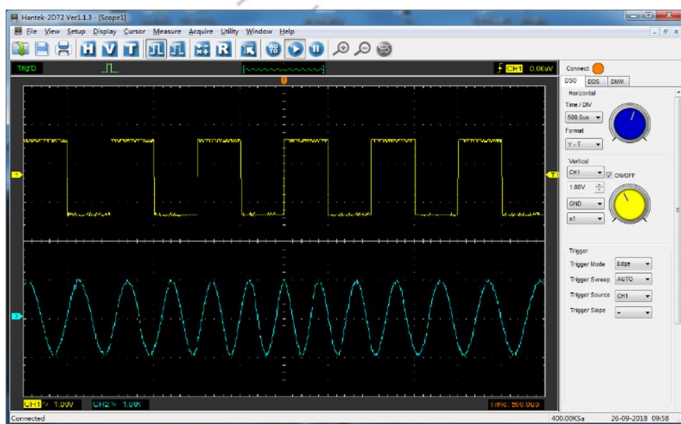
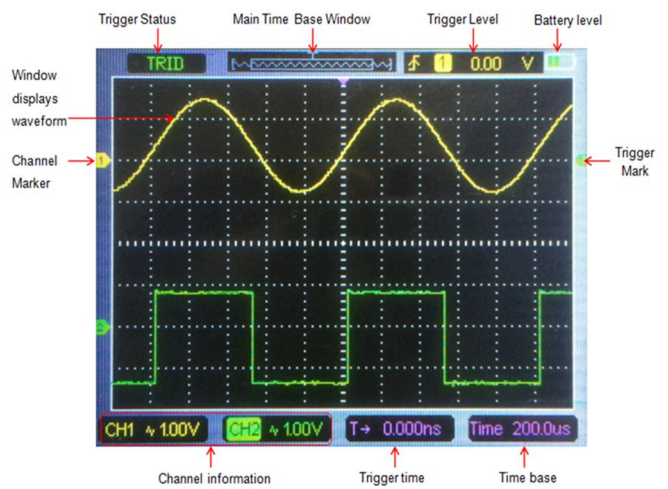
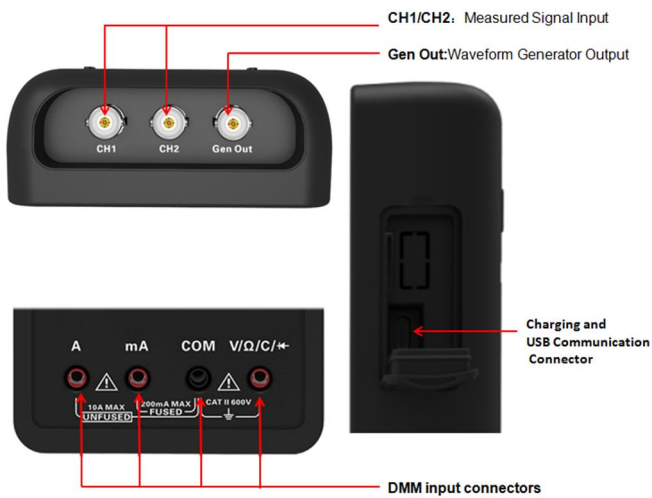
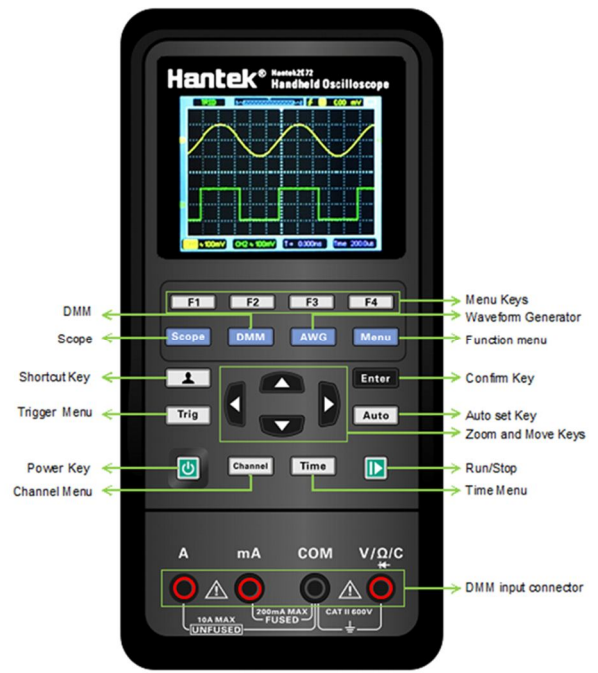
5V/2A CHARGER TYPE C CHARGING AND DATA TRANSMISSION CABLE

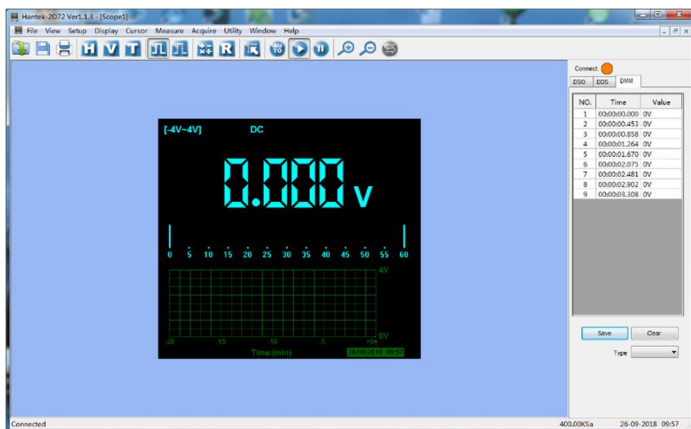
Type C power + data transfer interface, can share the charger and data cable with your mobile phone;

ULTRA LOW POWER DESIGN

Each 2 hours battery charge allow working one full day or standby two months;







Specification

Model	Hantek 2D72	Hantek 2D42	Hantek 2C72	Hantek 2C42
Oscilloscope Mode				
Bandwidth	70MHz	40MHz	70MHz	40MHz
Channel	2CH+DMM+AWG	2CH+DMM+AWG	2CH+DMM	2CH+DMM
Horizontal				
Sample Rate Range	250MSa/s(Single-channel), 125MSa/s(Dual-channel)			
Waveform Interpolation	(sin x)/x			
Record Length	Max. 6K for single-channel; 3K samples per dual-channel			
SEC/DIV Range	5ns/div~500s/div 1, 2, 5 sequence			
Vertical				
A/D Converter	8-bit resolution , each channel sampled simultaneously			
VOLTS/DIV Range	10mV/div~10V/ divat input BNC			
Bandwidth Limit, typical	20MHz			
Low Frequency Response (-3db)	≤10Hz at BNC			
Rise Time at BNC, typical	≤5ns			

DC Gain Accuracy	$\pm 3\%$ for Normal or Average acquisition mode, 10V/div to 10mV/div
Note: Bandwidth reduced to 6MHz when using a 1X probe.	
Acquisition	
Acquisition Modes	Normal
Trigger	
Type	Edge
Mode	Auto, Normal, single
Level	± 4 divisions from center of screen
Trigger Level Accuracy	0.2div \times volts/div within ± 4 divisions from center of screen
Slope	Rising, Falling, Rising & Falling
Source	CH1/CH2
Input	
Coupling	DC, AC or GND
Input Impedance, DC coupled	25pF ± 3 pF, 1M $\Omega \pm 2\%$
Probe Attenuation	1X, 10X
Supported Probe Attenuation Factors	1X, 10X, 100X, 1000X
Maximum Input Voltage	150V _{RMS}
Measurement	
Cursor	Voltage difference between cursors: ΔV
	Time difference between cursors: ΔT
Automatic Measurements	Frequency, Amplitude
Arbitrary Waveform Generator Mode	

Waveform Frequency	Sine: 1Hz~25MHz	-	-
	Square: 1Hz~10MHz	-	-
	Ramp: 1Hz~1MHz	-	-
	EXP: 1Hz~5MHz	-	-
Sampling	250MSa/s	-	-
Amplitude	2.5Vpp(50Ω)	-	-
	5V pp (High impedance)	-	-
Frequency Resolution	0.10%	-	-
Channel	1CH waveform output	-	-
Waveform Depth	512Sa	-	-
Vertical Resolution	12 bit	-	-
Output Impedance	50 Ω	-	-
DMM			
Maximum Resolution	4000 Counts		
DMM Testing Modes	Voltage , Current, Resistance , Capacitance , Diode &On-Off		
Maximum Input Voltage	AC:600V, DC: 600V		
Maximum Input Current	AC: 10A, DC:10A		
Input Impedance	10MΩ		
Measurement Term	Range	Accuracy	Resolution
DC Voltage	400.00mV	± (0.8% + 5)	100uV
	4.000V		1mV
	40.00V		10mV
	400.0V		100mV
	600.0V	± (1% + 2)	1V

	Overload protection: 400mV: 250V, other: 600Vrms.		
AC Voltage	4.000V	$\pm (1.2\% + 5)$	1mV
	40.00V		10mV
	400.0V		100mV
	600.0V	$\pm(1.5\% + 5)$	1V
	Frequency: 40Hz~400Hz;		
	Frequency of 400V and 600V: 40Hz~100Hz		
DC Current	40.00mA	$\pm (1\% + 2)$	10uA
	200.0mA	$\pm (1.5\% + 2)$	100uA
	4.000A	$\pm (1.8\% + 2)$	1mA
	10.00A	$\pm (3\% + 2)$	10mA
	Overload protection:		
	self restoring fuse: 200mA/250V, 4A and 10A range no fuse.		
AC Current	40.00mA	$\pm (1.3\% + 2)$	10uA
	400.0mA	$\pm (1.8\% + 2)$	100uA
	4.000A	$\pm (2\% + 3)$	1mA
	10.00A	$\pm (3\% + 5)$	10mA
	Frequency: 40Hz~400Hz;		
	self restoring fuse: 200mA/250V, 4A and 10A range no fuse.		
Resistance	400.0 Ω	$\pm(1\% + 3)$	0.1 Ω
	4.000K Ω	$\pm(1.2\% + 5)$	1 Ω
	60.00K Ω		10 Ω
	400.0K Ω		100 Ω
	4.000M Ω		1K Ω
	40.00M Ω	$\pm (1.5\% \pm 3)$	10K Ω
	Overload protection: 220Vrms		

Capacitance	40.00nF	$\pm(3\% + 5)$	10pF
	400.0nF		100pF
	4.000uF		1nF
	40.00uF		10nF
	100.0uF		100nF
	Overload protection: 220Vrms		
Diode	0V~1.0V		
On-Off	<50Ω		
General Specifications			
Display			
Display Type	2.8 inch 64K color TFT		
Display Resolution	320 horizontal by 240 vertical pixels		
Display Contrast	Adjustable		
Power Supply			
Supply Voltage	100V-240VAC, 50Hz-60Hz; DC INPUT: 5VDC, 2A		
Power Consumption	<2.5W		
Fuse	T, 3A		
Battery	2600mA*2		
Environmental			
Operating Temperature	0~50 °C (32~122 °F)		
Storage Temperature	-40~+71 °C (-40~159.8 °F)		
Humidity	≤+104°F(≤+40°C): ≤90% relative humidity		
	106°F~122°F (+41°C ~50°C): ≤60% relative humidity		
Cooling Method	Convection		
Altitude	Operating and	3,000m (10,000 feet)	

	Nonoperating			
Mechanical Shock	Random Vibration	0.31g _{RMS} from 50Hz to 500Hz, 10 minutes on each axis		
	Nonoperating	2.46g _{RMS} from 5Hz to 500Hz, 10 minutes on each axis		
	Operating	50g, 11ms, half sine		
Mechanical				
Dimension	199 x 98x 40mm (L x W x H)			
Weight	624g			
Standard Accessories	Probe*1, Clip	Probe*1, Clip	Probe*1, Clip	Probe*1, Clip
	Probe*2, Type	Probe*2, Type	Probe*1, Type	Probe*1, Type
	Charging Cable*1, Power Adapter*1, Multimeter	Charging Cable*1, Power Adapter*1, Multimeter	Charging Cable*1, Power Adapter*1, Multimeter	Charging Cable*1, Power Adapter*1, Multimeter
	Probe*1	Probe*1	Probe*1	Probe*1

مولتیکو

تجهيزات اندازه گیری