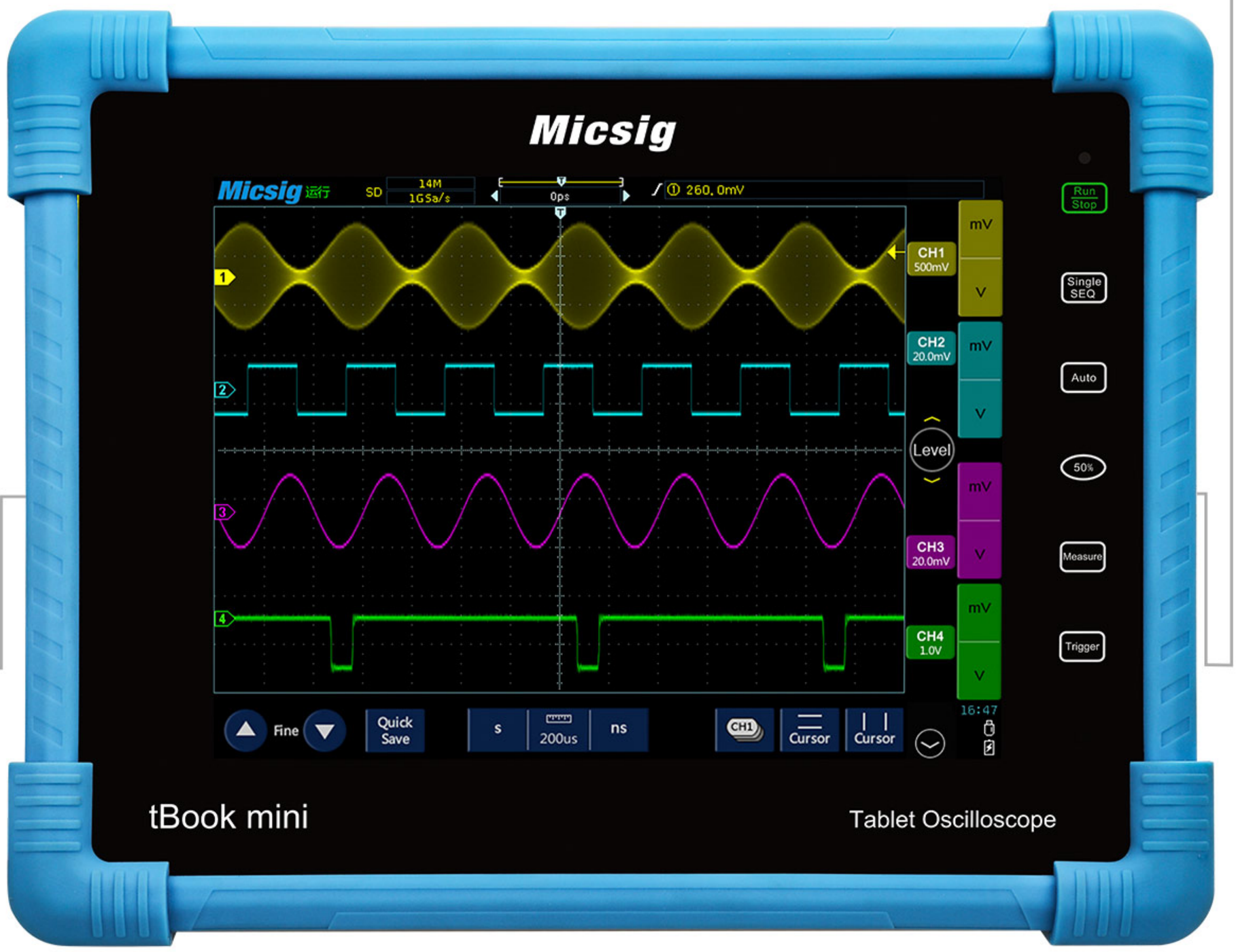
Micsig®

Tablet Oscilloscope

tBook mini TO1000series



70MHz or 100MHz bandwidth, 2 or 4 analog channels

1 GSa/s real-time sample rate

14Mpts or 28Mpts memory depth

Up to 80,000wfm/s waveform capture rate

Up to 5 hours optional Li-ion battery (Options)

8’’TFT LCD & 800*600 pixels high resolution Multi-touch capacity screen

Gradient waveform display with 256 intensity levels

7 types of trigger function: Edge, Pulse, Logic, Time Out, Dwart PW, Slope, N Edge, and Video

Built-in 8G storage capacity, waveforms and screenshots can be viewed and edited in scope

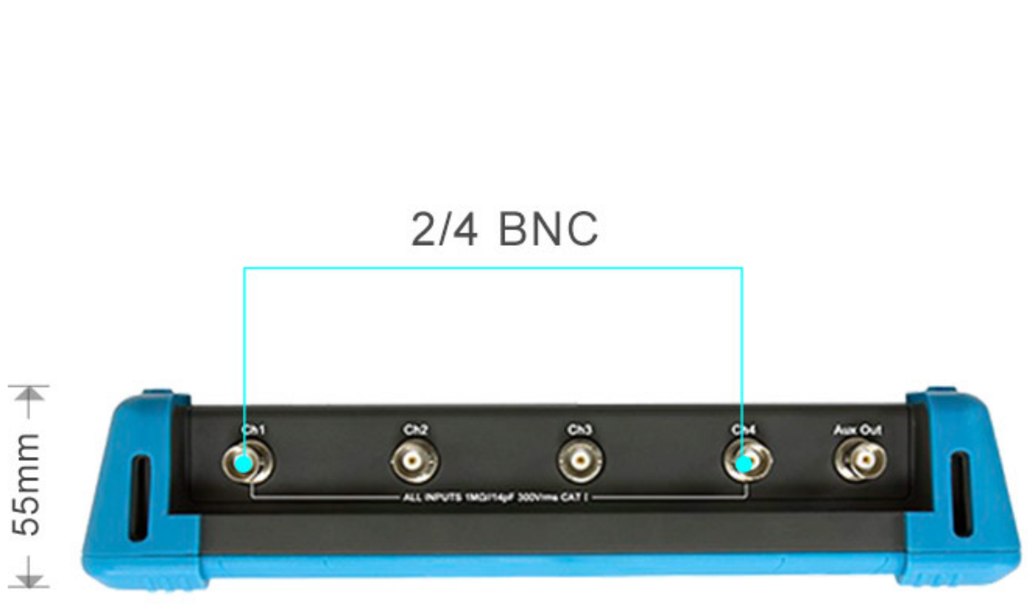
Various I/O port, LAN, Wifi, USB2.0, USB Device, HDMI, Trigger out, Pass/Fail

www.micsig.com

Innovation, makes test simpler.

Compared with traditional oscilloscope, Micsig tablet oscilloscope will bring you new operation experience and it will make your test and measurement worksimpler & easier.

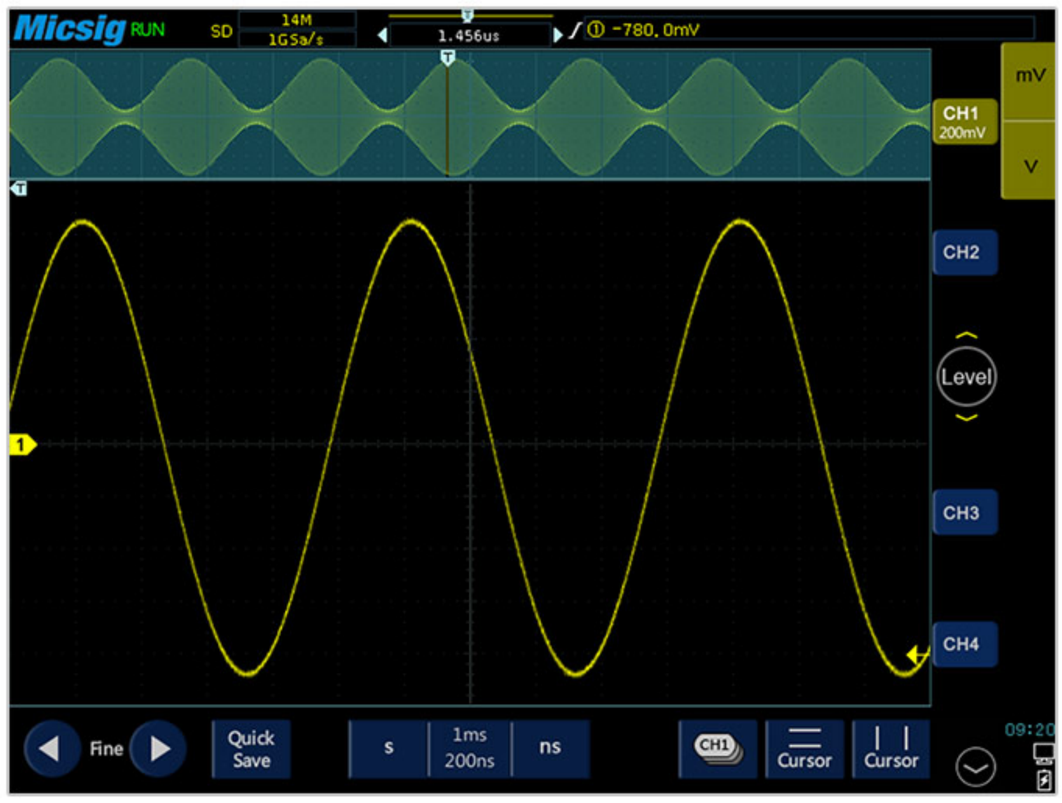
Micsig tBook mini TO1000 series is an entry level digital oscilloscope that will meet your requirements for excellent performance at an ultra-low price point. A portable and sleek design saves previous space on your workbench. Using high resolution capacitive touch with intuitive menus, the TO1000 series is engineered to deliver a truly state-of-the-art experience.



Specification

Model	TO1072	TO1074	TO1102	TO1104
Bandwidth	70MHz	70MHz	100MHz	100MHz
Input channel	2	4	2	4
Sample rate	1G Sa/S	1G Sa/S	1G Sa/S	1G Sa/S
Memory depth	14Mpts	14Mpts	28Mpts	28Mpts
Max capture rate	80,000 wfm/s	80,000 wfm/s	80,000 wfm/s	80,000 wfm/s
Bandwidth limitation	20MHz	20MHz	20MHz,high passt, low pass	20MHz,high passt, low pass
Interface	Wifi,LAN,HDMI,USB Host,USBDevice,GND,DCPower,Pass/Fail out,Trigger out			
Screen	8 inches TFT LCD 800*600 pixels display resolution,14*10 display range			
Dimension	250*210*55mm			
Battery(optional)	7,500mAh Li-ion battery			

WHY Micsig tBook mini?

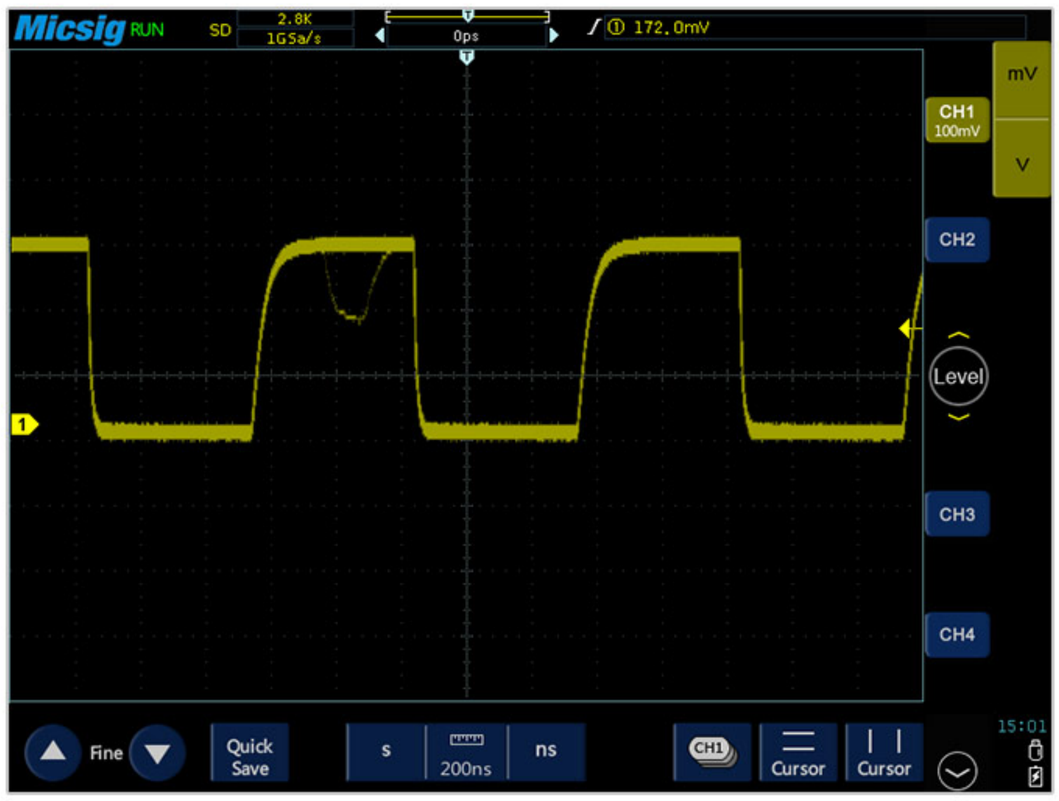


Up to 28Mpts memory depth

With 28Mpts memory depth and ZOOM technology, waveforms will be presented with more accuracy and detail.

Up to 80,000wfm/s capture rate

A high waveform capture rate allows for better detection of glitch and runt signals. The higher capture rate allows more signal waveforms to be captured. By increasing the waveform capture rate, you see a more complete picture of what is going on with the signal.



31 types of auto measurements

There are 31 auto measurements for the user to choose from on the Measure selection page

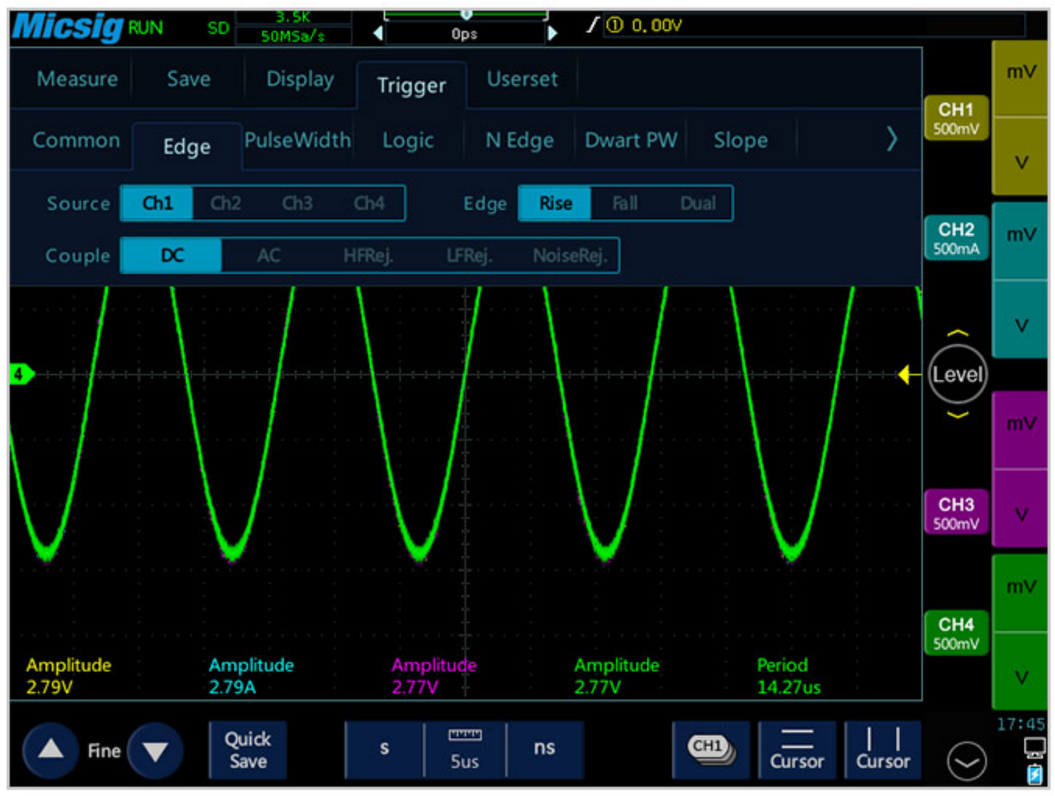
Tap Measure to display all the measurement options on one screen. Tap the desired measurement you want to select. Tounselect a measurement, either tap the icon of the measurement to be unselected, or tap clear to remove all measurements.

Tap any other place on screen to exit the menu.

Various trigger functions

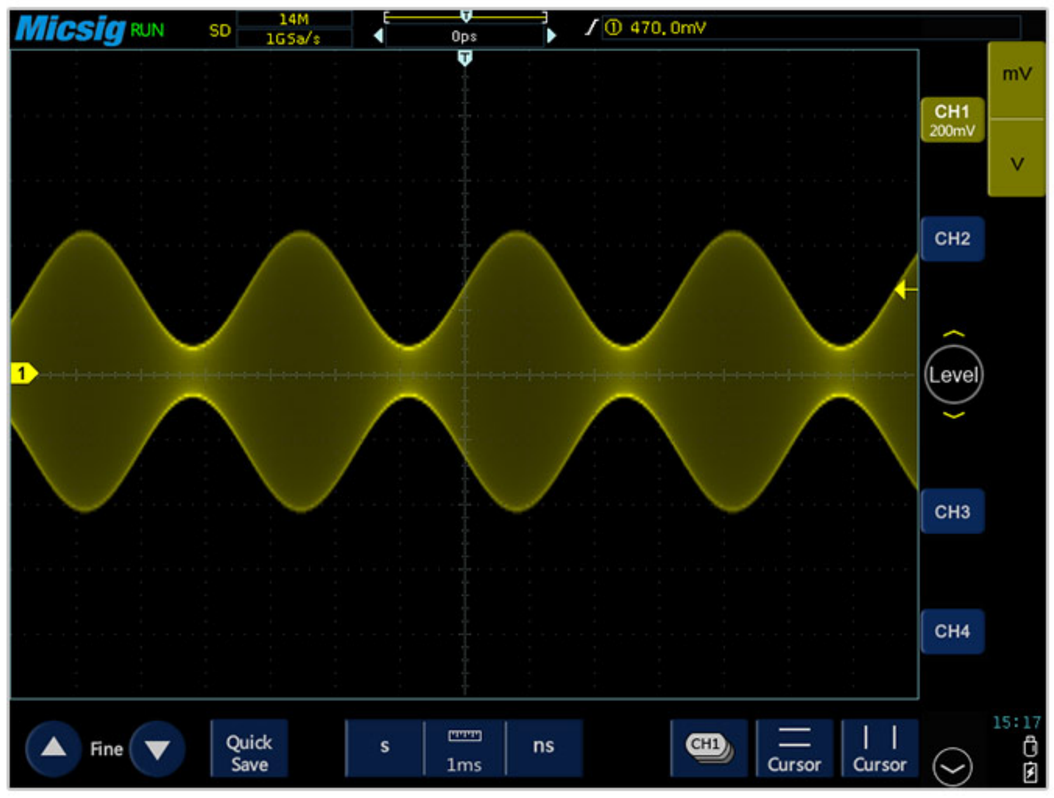
Supports 7 types of trigger function: Edge, Pulse, Logic, Time Out, Dwart PW, Slope, N Edge, and Video.

Tap Level to open the trigger level slider, and then drag the trigger level marker.



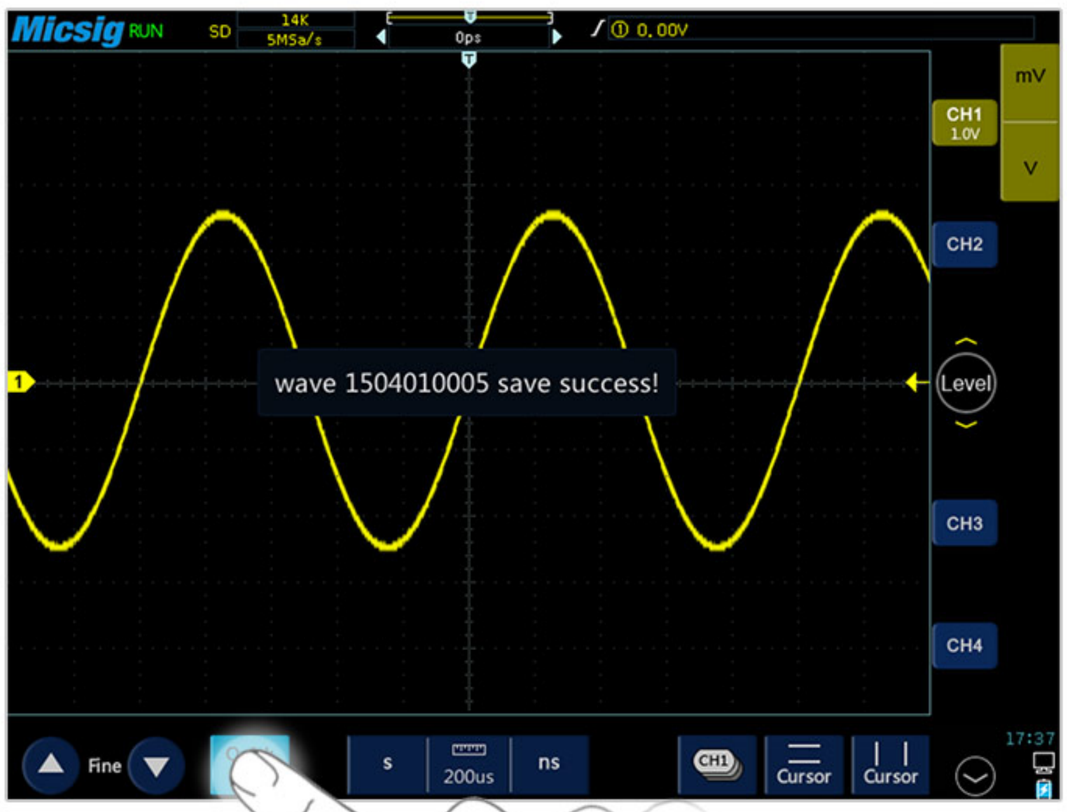
Gradient waveform display with 256intensity levels

A digital fluorescence display allows the user to see the distribution of the signal probability on the display. As the occurrence of the signal increases in that location, its brightness increases. Similarly, in regions of low occurrence, the signal will display more dimly.



Lower noise floor

Lower noise floor is less than 1mV help you to get more accurate measurements.



Quicksave

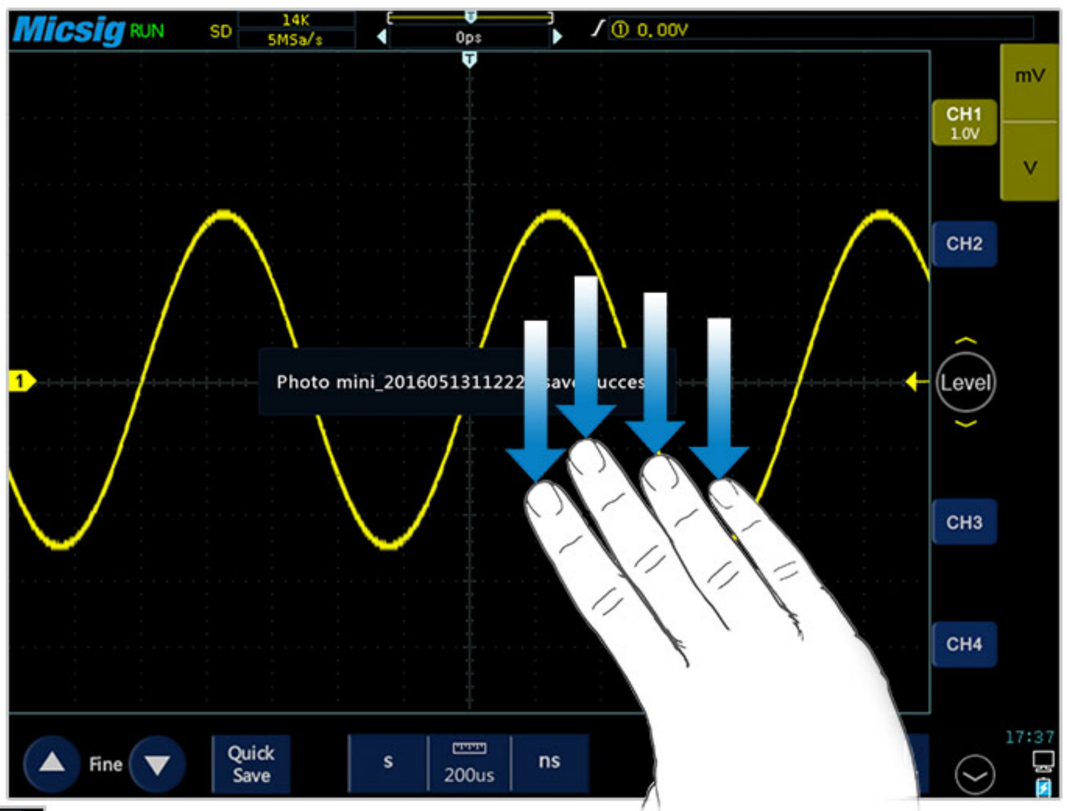
Tap Quick Save to save waveform to memory.

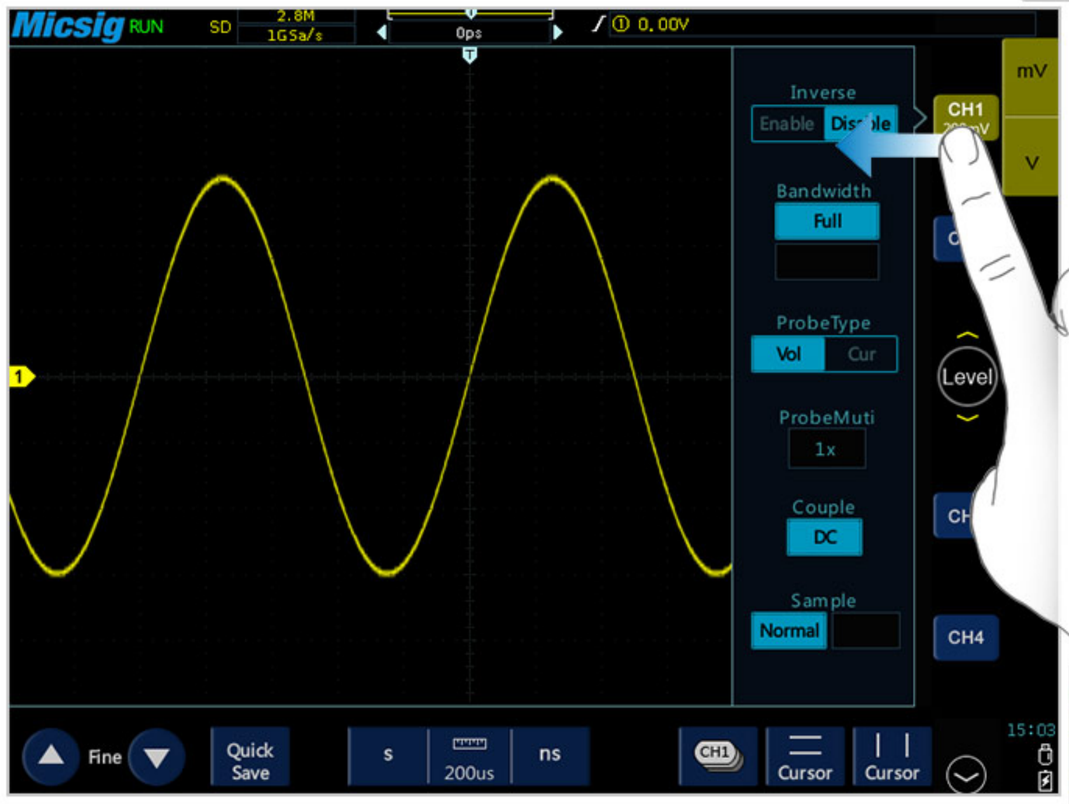
An internal 8GBstorage capacity, expandable via USB, allows for a virtually unlimited number of waveforms to be saved.

Screenshot

Swiping down to take a screen shot quickly with four fingers.s.

Waveforms can be viewed& edited in local.





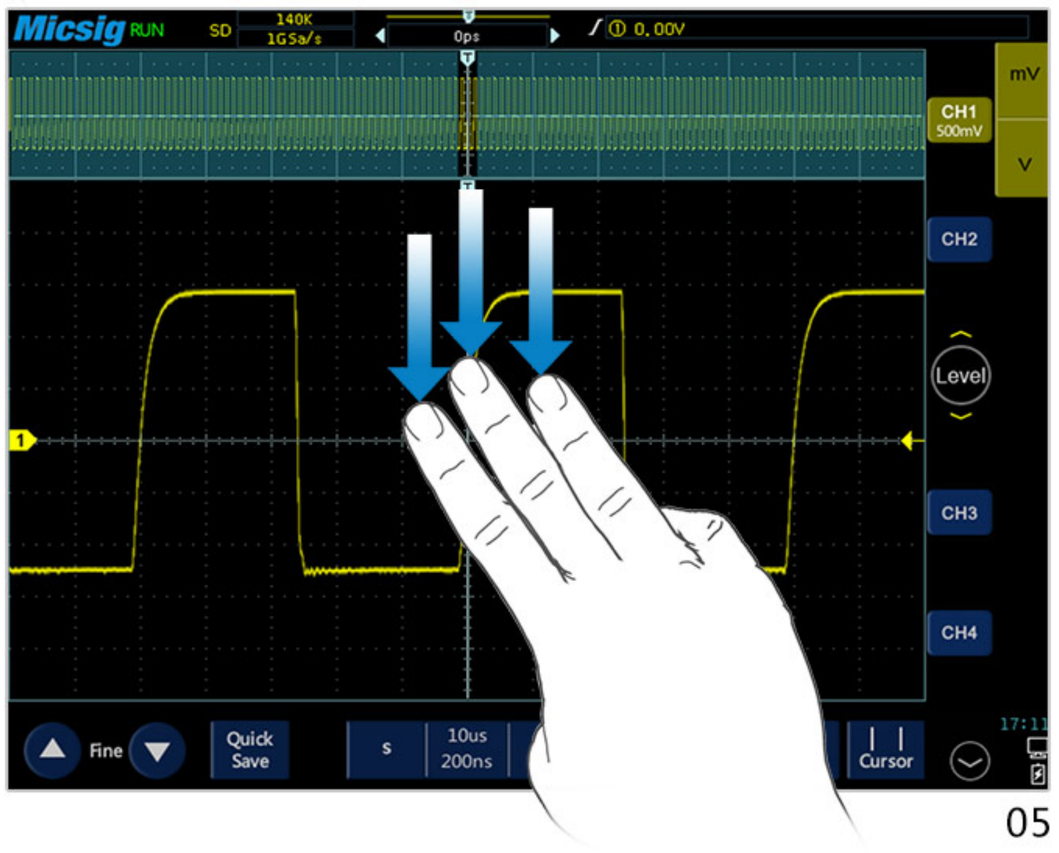
Channel quick setup

Tap CH1 5.0V icon to display or hide the desired channels.

Sliding right on the “channel” icon will open the channel configuration menu.

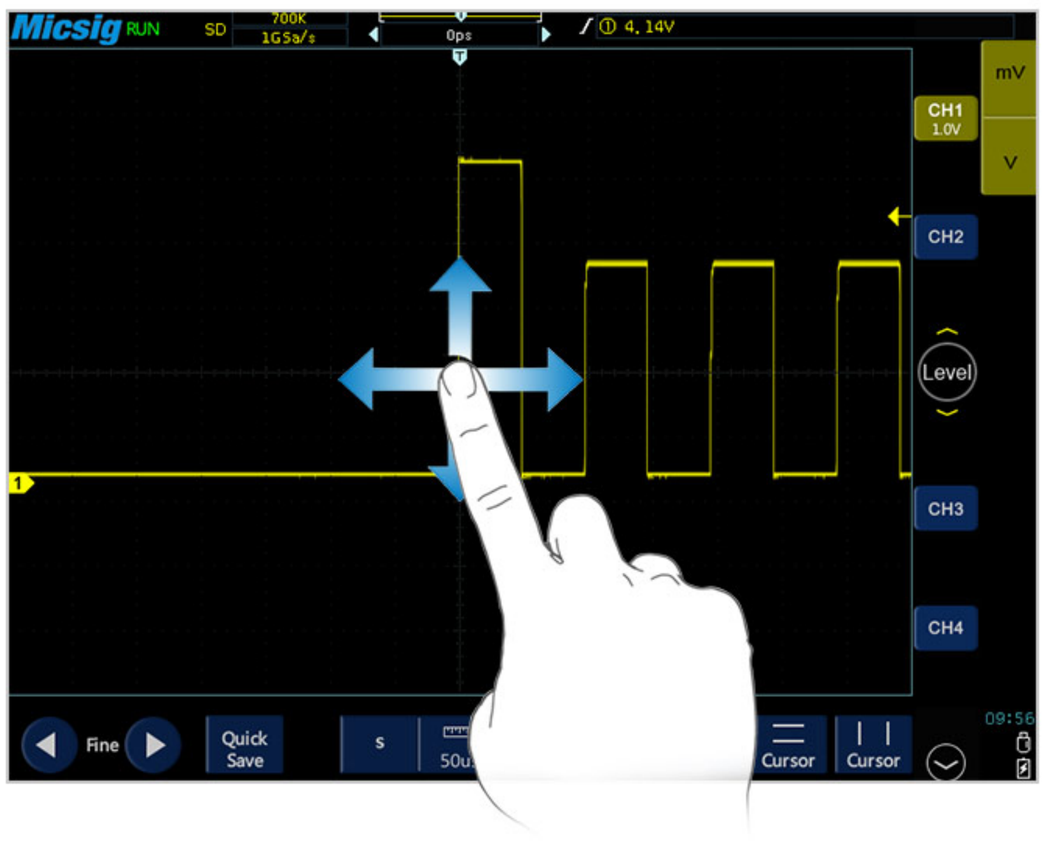
Zoom

Swipe down with three fingers simultaneously to access the ZOOM function.



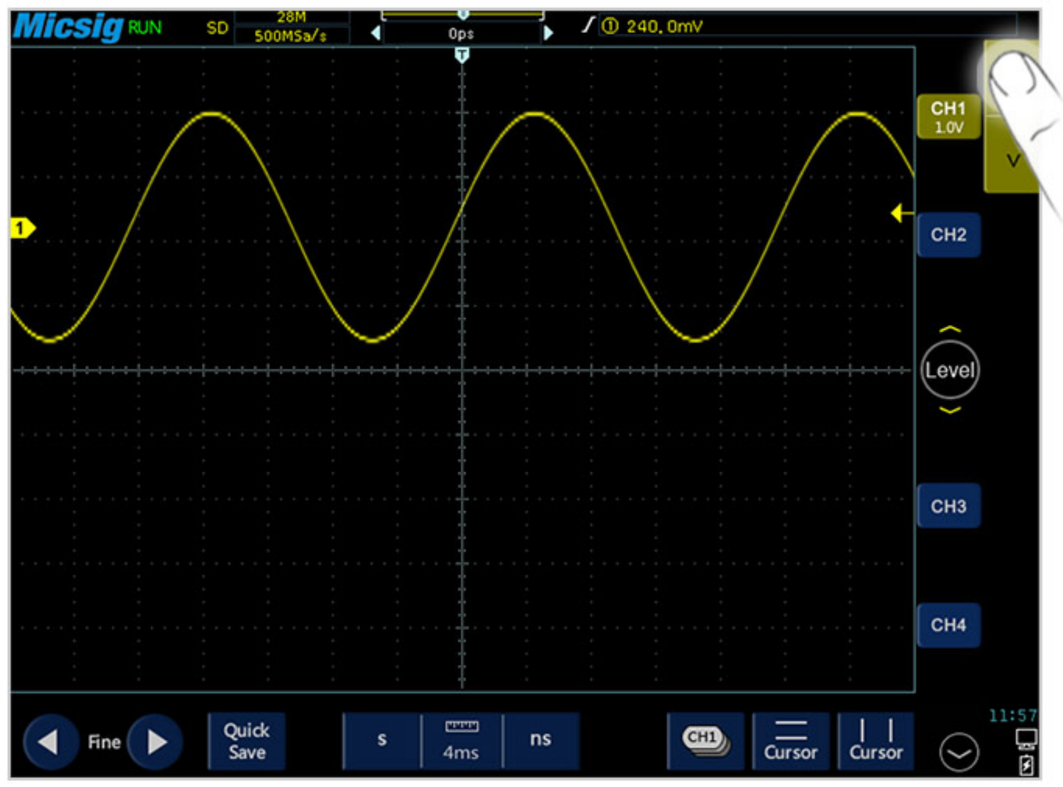
Waveform Positioning

Drag the waveform in the desired direction with the tip of your finger



Vertical Divisions

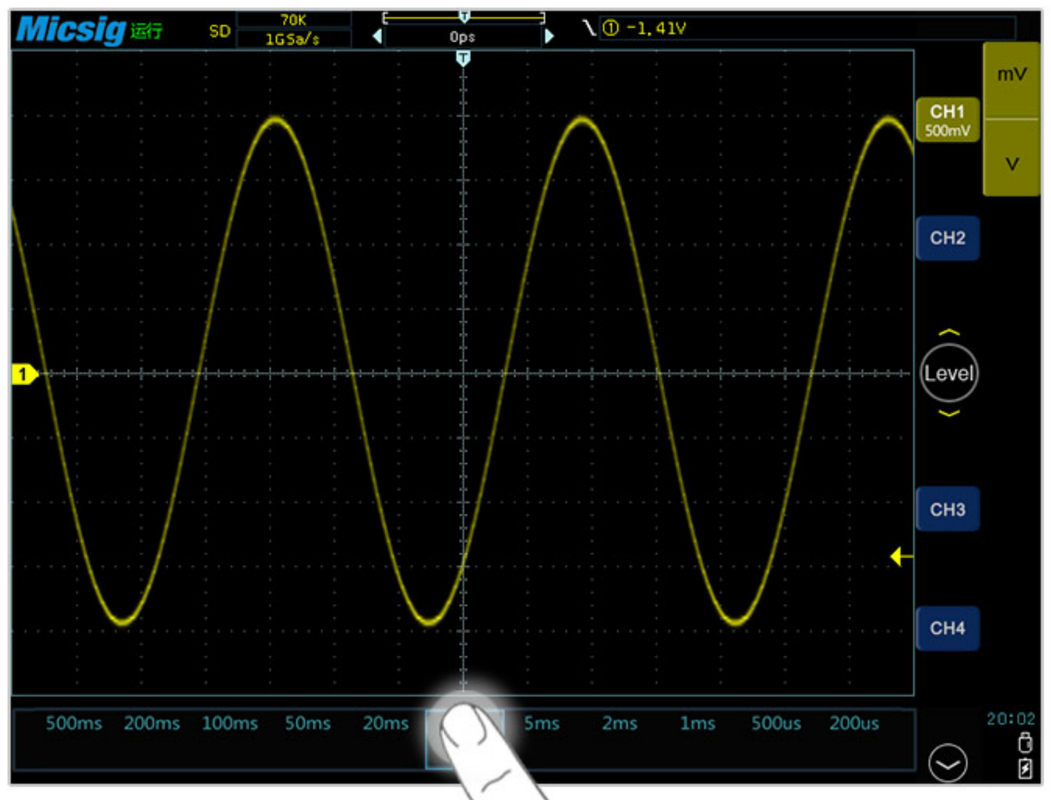
Tapping mV or V to set the desired vertical divisions. The Volts per division are displayed in the user interface.

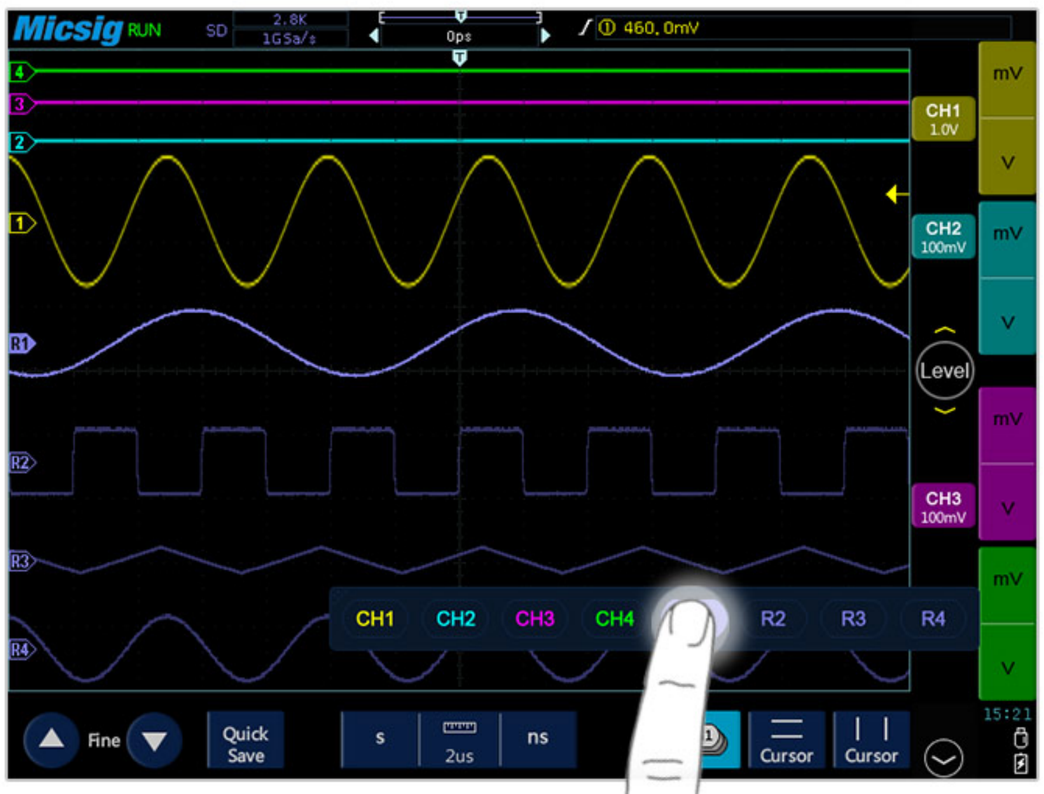


Horizontal Divisions

Double tap the waveform to zoom in on the desired region

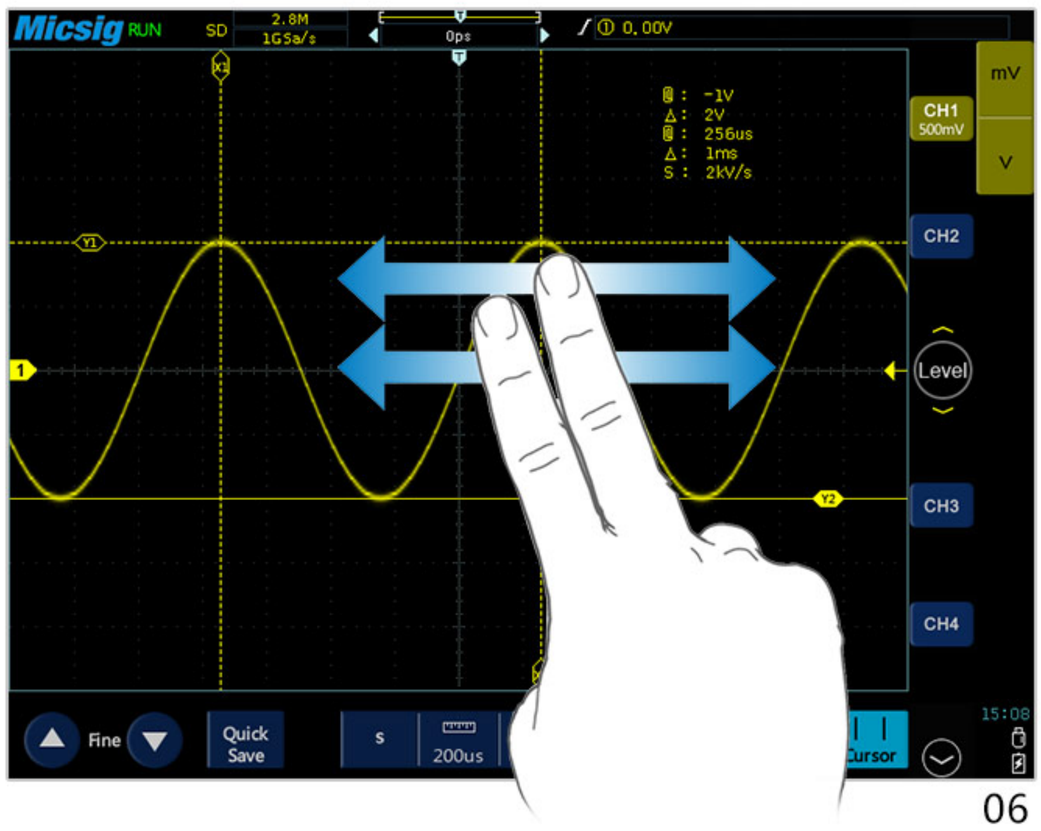
Tap 10ms to open the time-base ruler to quickly modify the horizontal divisions





Select/ unselect current channel

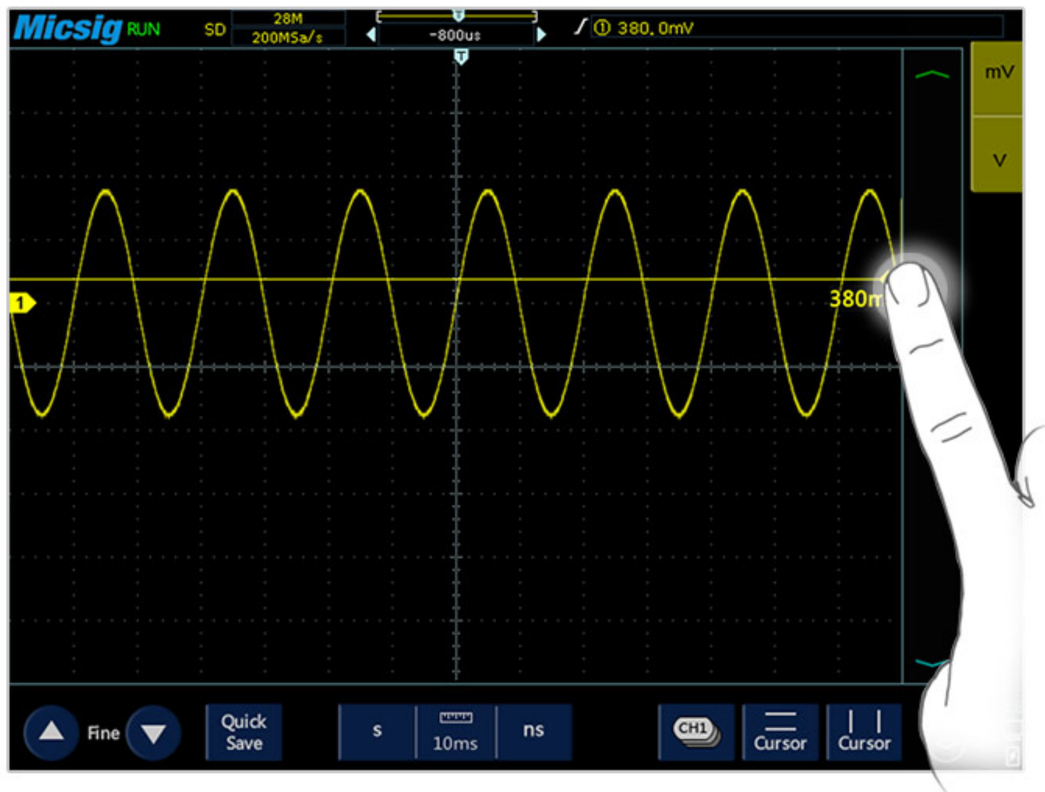
Tap CH1 icon once to select desired channel you want to use, then you can easily to find desired waveform when there are many waveforms on the screen.



Cursor

Tap Cursor Cursor to enable the cursor function

Touch the screen with two fingers to simultaneously adjust (as a pair) cursor X1 and X2 or cursor Y1 and Y2 positions.



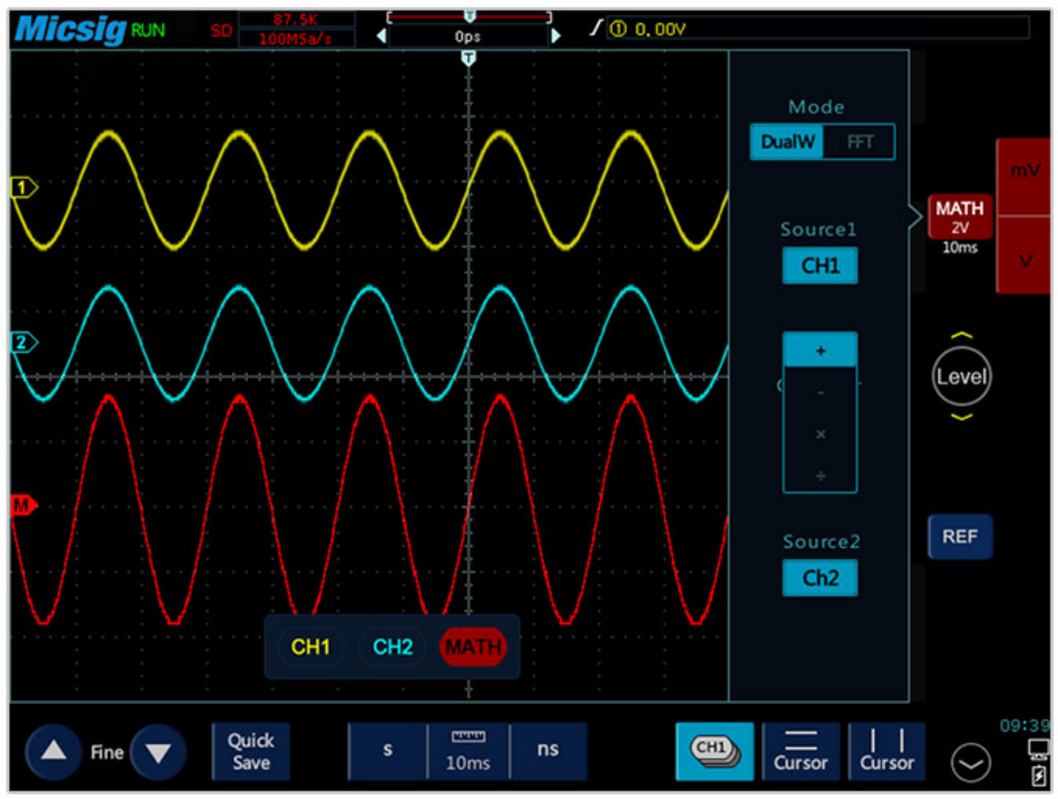
Trigger level setup

Tap to open the trigger level slider Level , then drag the trigger lever marker to the desired position.

Math & reference channel setup

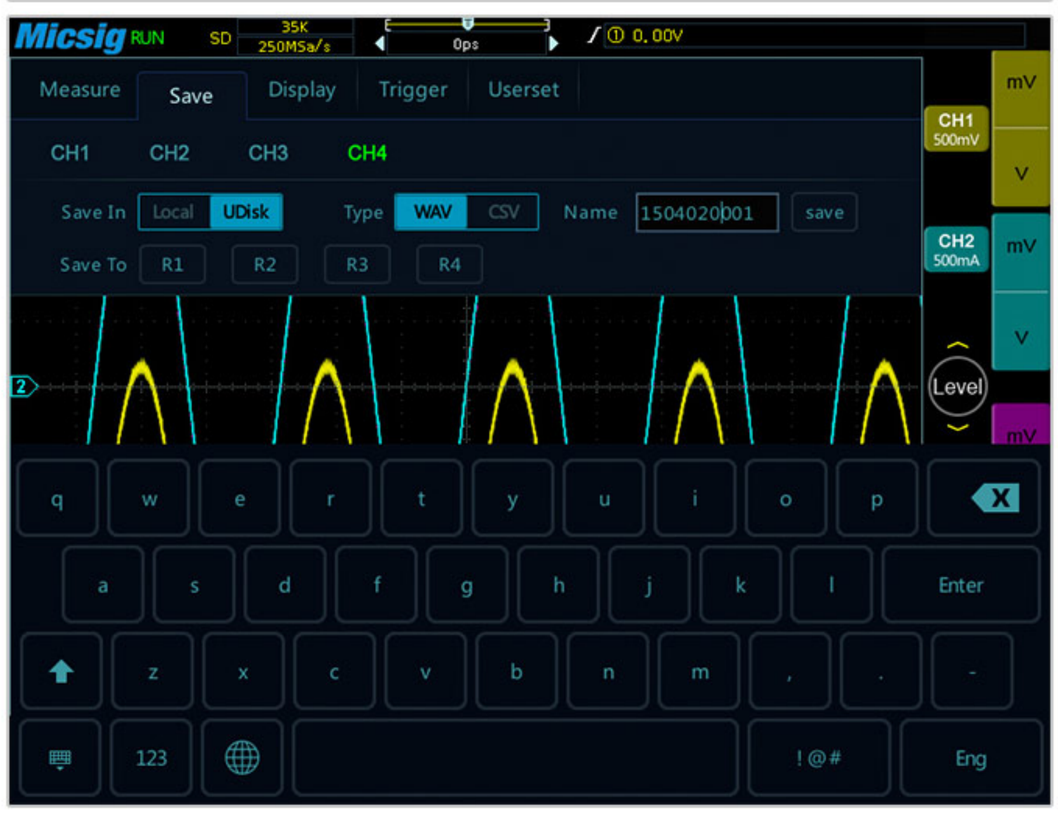
Tap to get math and reference channel icon, then tap MATH to open. Swipe left/ right to open/ close math channel setting. Tap MATH again to turn off math function.

Use the same method to set up the reference waveform.



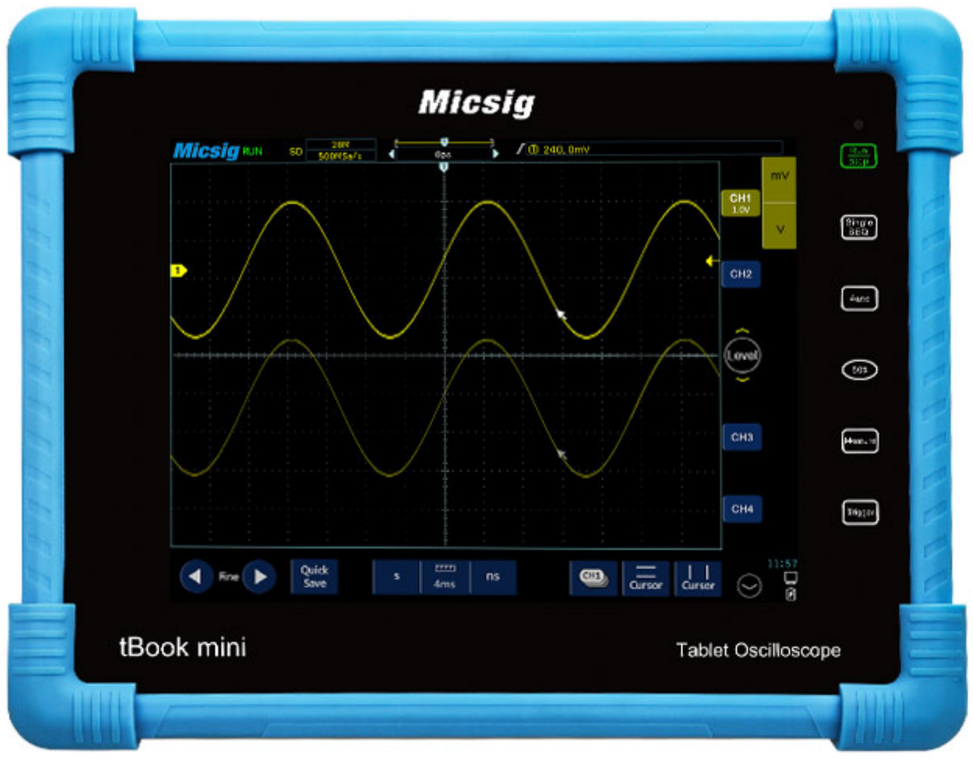
Soft keyboard

The onscreen, soft keyboard allows for easy file naming and eliminates the need for using a knob to try and name files. This improves file naming efficiency up to 95%.



Mouse operation

Support remote operation through a standard or wireless mouse and fly mouse. This allows the Oscilloscope to be place in a convenient place for reading, while still maintaining functionality through the mouse interface.



Data sheet

Vertical system	
Bandwidth limitation	20MHz, high pass, low pass
Input coupling	DC, AC, GND
Input impedances	1MΩ±1%||14.5pF±3pF
Vertical resolution	8bits
DC gain accuracy	< ±2% (1MΩ)
vertical scale	1mV/div to 5V/div (1MΩ)
Channel to channel	≥40dB (100:1)
Offset range	±6div
Maximum input voltage	CAT I 300V (1MΩ)

Horizontal system	
Time base range	2ns/div to 1ks/div
Time base delay range	-14 divisions to 14ks
Clock skew	≤±2ppm/Year
Time based accuracy	±20ppm

Sampling system	
Sampling mode	Real time sample rate
Peak sampling	
Sample rate 1G Sa/s	All the sampling glitches in scanning rate are narrow to single channel 1 ns, dual channel 2 ns .four channel 4ns
Max duration in the max sampling rate	
Sample rate 1G Sa/s	28/14ms
Sample rate 500MSa/s	56/28ms
Sample rate 250MSa/s	56/28ms
Average	Average of sampling for N times N is chosen from 2, 4, 8, 16, 32, 64, 128, 256
Envelope	Envelope of sampling for N times N is chosen from 2, 4, 8, 16, 32, 64, 128, 256, ∞

Trigger level	
Trigger mode	Normal, Auto, and Single
Trigger coupling	DC, AC, HF reject(>50KHz), LF reject(<50KHz), noise reject
hold off range	200ns to 10s
Trigger type	
Edge	Positive, negative, or either slope on any channel input. Coupling includes DC, AC, HF reject, LF reject, and noise reject.
Pulse Width	Trigger on width of positive or negative pulses that are > , < , = , ≠, or inside/ outside a specified period of time (8ns~10s).
Logic	Trigger when any logical pattern of channels goes false or stays true for specified period of time (8ns~10s). Any input can be used as a clock to look for the pattern on a clock edge. Pattern (AND, OR, NAND, NOR) specified for all input channels defined as High, Low, or Don't Care
Video trigger	Trigger on all lines or individual lines, odd/ even or all fields on PAL/625 SECAM、NTSC/525、720P、1080I、1080P video signals.
Time out	Trigger on an event which remains high, low, oreither, for a specified time period. Selectable from
Slope	Positive slope (Great than, lower than, within specific interval) Negative slope (Great than, lower than, within specific interval)
Dwart PW	Trigger on a pulse that crosses one threshold but fails to cross a second threshold before crossing the first again. Event can be time- or logic qualified.
Nth edge	Edge type: Risingm Falling Idle time: 16ns to 4s Number of edges 1 to 65535

Waveform measurement	
Cursor	Horizontal Cursor, Vertical Cursor, Cross Cursor
Auto measurements	23, of which up to five can be displayed on-screen at any one time. Measurements include: Period, Frequency, Rise Time, Fall Time, Delay, Positive duty Cycle, Negative Duty Cycle, Positive Pulse Width, Negative Pulse Width, Burst Width, Positive Overshoot, Negative Overshoot, Phase, Peak to Peak, Amplitude, High, Low, Max, Min, Mean, Cycle Mean, RMS, Cycle RMS.
Waveform math	
Dual Waveform FFT	Add, subtract, multiply, and divide waveforms
FFT	Spectral magnitude. Set FFT Vertical Scale to Linear RMS or dBV RMS, and FFT Window to Rectangular, Hamming, Hanning, or Blackman-Harris.

Display system	
Display type	8″ TFT LED Multi point touchable capacitive screen
Display resolution	800*600
Max touch point on touch screen	5 points
Operation way	Full touch
Afterglow time	Auto, 10ms to 10s, ∞
Time Base format	YT, XY, Roll, Zoom
Expansion bench mark	Center, Trigger Position
Waveform display	Brightness is adjustable, point ,Line
Grid	14*10 div, Brightness of the grid is adjustable
Grey level	256 level
Time	YES
Language	English, Chinese, German, Russian

Storage	
Storage media	Native, U Disk
Built-in storage	8G
Storage format	csv , wav
Waveform storage number	Unlimited
waveform storage name	Support
display the reference waveform quantity	4 piece
screenshot	Support
User setting number storage	Unlimited
User name setting	Support
Flash format	Comply with industry standards

Power source	
Power source voltage	100 to 240V AC, 50/60Hz
Power consumption	< 60W
Fuse	12V DC, 5A
Built-in Battery(Optional)	7.4V, 7500mAh

Interface	
USB2.0 interface	Support USB mass storage devices, can read and write
Micro USB2.0 interface	1, support read and write
DC interface	1, for charging
Probe calibration	1KHz, 2Vpp
signal output frequency	
LAN	Support
Micro HDMI	Support
Wifi	Optional
Web screen	Support Web screen
Pass/Fail out	Support

Environment	
Temperature	
Operating	0℃ to 45℃
Non-operating	-40℃ to 60℃
Humidity	
Operating	5% to 85%, 25℃
Non-operating	5% to 90%, 25℃
Altitude	
Operating	< 3000m
Non-operating	< 12000m

Physical characteristics	
Dimensions	
Height	210mm
Width	250mm
Depth	55mm
Weight	
Net	
2CH Bare	1040g
4CH Bare	1125g
Shipping	
4CH Bare	2445g
2CH Bare	2630g
Battery	7.4V 7500mAh

Standard accessories	
Tablet oscilloscope	1
USB data cable	1
Power adapter	1
CD	1
Probes ---MP130	2 pcs for 2 channel; 4 pcs for 4 channel 300MHz bandwidth, 10X, Input capacitance: 1X: 85pF-120p, 10X, 16pF-20pF, Input Voltage: 1X: ＜300V DC +Peak AC, 10X: ＜600V DC +Peak AC
Warranty	Repair Service 3 Years (including warranty) Probes and accessories are not covered by the oscilloscope warranty and service offerings. Refer to the datasheet of each probe and accessory model for its unique warranty and calibration terms.

Optional accessories	
Battery	7.4V 7500mAh, Li-ion, recharging
High frequency current probe	30A/50MHz, 30A/100MHz , 150A/12MHz , 300A/6MHz, 500A/5MHz
High voltage differential probe	700Vpk/70MHz, 1500Vpk/70MHz, 1500Vpk/100MHz, 2800Vpk/100MHz, 7000Vpk/70MHz, 7000Vpk/100MHz
Handbag	Black nylon dimension 300*410*130mm

Contact us

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