INSTRUCTION MANUAL
MT1010
200KHz MINI OSCILLOSCOPE
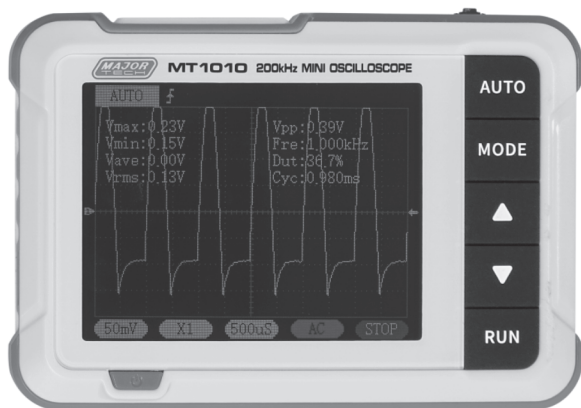
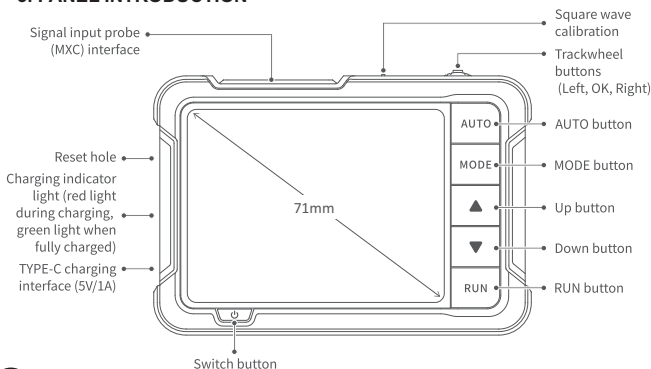# **Contents**   **Page no**

1. NOTICE TO USERS

- This manual introduces the usage method, precautions and related matters of the product in detail. Before using the product, please read the manual carefully in order to gain a good understanding of the functions of the product.
- Do not use the device in a flammable or explosive environment.
- The used batteries replaced by the device and the discarded device cannot be disposed of together with domestic waste. Please dispose of them according to relevant national or local laws and regulations.
- When there is any quality problem with the device or you have any questions about the use of the it, please contact the customer service of Major Tech, and we will resolve it for you.

2. PRODUCT INTRODUCTION

The MT1010 is a highly practical and cost-effective handheld oscilloscope which is aimed at the maintenance industry and the research education industry. The oscilloscope has a real-time sampling rate of 2.5MS/s, a bandwidth of 200kHz, and complete trigger functions (single, normal, and automatic). It can be used freely for both periodic analog signals and non-periodic digital signals, and can measure voltages up to ±400V. Equipped with an efficient one-key AUTO, it can display the measured waveform without cumbersome adjustments. Equipped with a 2.8-inch 320x240 resolution high-definition LCD screen. Built-in 1000mAh high-quality lithium battery, can be used continuously for about 4 hours after fully charged.

3. PANEL INTRODUCTION

Signal input probe (MXC) interface

Square wave calibration

Trackwheel buttons (Left, OK, Right)

AUTO button

MODE button

Up button

Down button

RUN button

Reset hole

Charging indicator light (red light during charging, green light when fully charged)

TYPE-C charging interface (5V/1A)

71mm

Switch button

4. KEY FUNCTION

Button	Operation	Function
☜	Short press	Control parameters function selection
	Short press	Exit auto calibration (Auto calibration page)
↓	Long press	Enter the automatic calibration page
	Short press	Control parameters function selection
☜	Short press	Automatic adjustment (frequency below 45Hz cannot be calibrated correctly)
AUTO	Short press	AUTO/Single/Normal switching by pressing mode
MODE	Long press	Rising edge/falling edge switching
▲	Short press	Parameter addition adjustment
▼	Short press	Parameter subtraction adjustment
RUN	Short press	Run/pause waveforms (other pages) Enter auto calibration (Auto calibration page)
	Long press	Show/close detailed parameters
⏻	Short press	OFF
	Long press	On

5. SCREEN INSTRUCTIONS
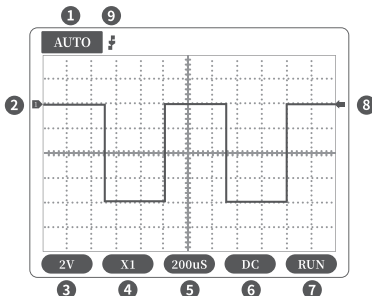
1 - Trigger mode indicator icon, Auto means automatic trigger, Single means single trigger, Normal means normal trigger.
2 - Baseline indicator icon, this icon indicates the current position is OV voltage.
3 - Vertical sensitivity, which means the voltage represented by a large grid in the vertical direction.
4 - 1X/10X mode indicator icon, this must be consistent with the 1X/10X switch setting on the probe handle, if the probe is in 1X mode, then the oscilloscope should also be set to 1X mode, 1X measures ±40V voltage, 10X measures ±400V voltage.
5 - Horizontal time base, indicating the length of time represented by a large grid in the horizontal direction.
6 - Input coupling indicator icon, AC means AC coupling, DC means DC coupling.
7 - Pause running indicator icon, RUN means running, STOP means pause.
8 - Trigger voltage indicator icon.
9 - Trigger edge indicator icon.

6. PRECAUTIONS
- After receiving the device, please use it after fully charged.
- When using the oscilloscope, pay attention to the selection of the gear, the gear of the oscilloscope should be consistent with the gear of the probe.
- When measuring high voltage, it is forbidden to touch any metal part of the oscilloscope to avoid the risk of electric shock.
- Try not to perform a high voltage test while charging.

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- When calibrating, unplug the signal input probe, or shorten the positive and negative poles of the probe.
- The USB firmware upgrade only supports WIN10 or above, and it is forbidden to drag in files other than the released firmware, otherwise it may cause unrecoverable consequences.
- Please use the voltage within the specification range of the manual for charging.

7. SPECIFICATIONS

Range	Function
Sampling rate	2.5MS/s
Bandwidth	200KHz
Vertical sensitivity	10mV/Div-20V/Div (Progress according to the 1-2-5 way)
Time base range	10μs/Div-50s/Div (Progress according to the 1-2-5 way)
Voltage range	X1: ±40V (Vpp: 80V) X10: ±400V (Vpp: 800V)
Trigger method	Auto/Normal/Single
Coupling method	AC/DC
Display	2.8 inches / PPI:320x240
USB charging	5V/1A
Lithium battery capacity	1000mAh
Square wave calibration	Frequency: 1K Duty cycle: 50%
Size	99 x 68.3 x 19.5mm
Weight	100g

*Size and weight are measured manually, there may be some errors, please refer to the actual product.

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