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示波器接口按键介绍

按键	短按	长按
Menu	进入菜单	返回主菜单界面
Flexo	多功能按键会在各自的界面做说明	
Auto	自动调节(部分界面无效)	自动校准
Ok/Hold	确认/暂停	居中
Left↗	左切换/逆时针切换设置类目	数据快速跳转到0地址
Right↙	右切换/顺时针切换设置类目	数据快速跳转到末地址
+	参数+	连续+
-	参数-	连续-

其他说明：

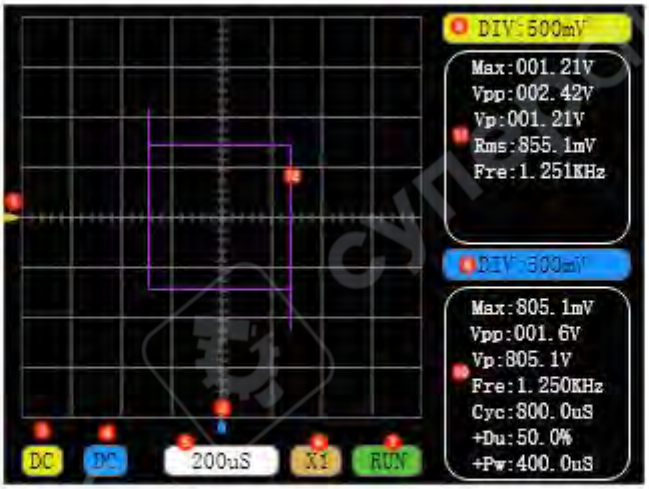
1. 通道1，2测量超过40V电压时，需要把高压探头笔身的开关拨动到X10端
2. 电流测量接口最大测量电流6A，超过6A可能会烧坏内部测量电路
3. 电流测量时，不要边充电边测，会干扰到电流测量精度
4. USB充电电压默认5V/1A，如果需要边充电边用，充电器功率最好超过7.5W
5. 做上位机通讯测量信号时，禁止测量市电

示波界面介绍

1. 示波器通道1，电平0位置箭头
2. 示波器通道2，电平0位置箭头
3. 通道1，垂直电压分量——如图代表的意思是垂直方向上一个格子500mV
4. 倍数：默认X1，如果使用了高压探头笔身上的X10开关，把该值设置为X10
5. 时基：如图代表水平方向上一个格子为200uS
6. 通道1耦合状态——DC耦合外部电压直接测量显示
7. 通道2耦合状态——AC耦合外部电压先滤除直流分量，再显示
8. 上升/下降沿触发
9. 运行/暂停
10. 垂直触发箭头
11. 触发方式——AUTO/Nomal/Single
12. 水平触发箭头
13. 数据地址
14. 通道2，垂直电压分量

按键	短按	长按
Menu	进入菜单	返回主菜单界面
Flexo	快速切换主触发通道	清除当前缓存波形数据
Auto	自动调节(部分界面无效)	自动校准弹窗/按下OK会自动校准
Ok/Hold	确认/暂停	居中
Left↗	左切换/逆时针切换设置类目	数据快速跳转到0地址
Right↙	右切换/顺时针切换设置类目	数据快速跳转到末地址
+	参数+	连续+
–	参数-	连续-

李沙育界面介绍



1. 示波器通道1，电平0位置箭头
2. 示波器通道2，电平0位置箭头
3. 通道1耦合状态——DC耦合外部电压直接测量显示
4. 通道2耦合状态——AC耦合外部电压先滤除直流分量，再显示
5. 时基：如图代表水平方向上一个格子为200uS
6. 倍数：默认X1，如果使用了高压探头笔身上的X10开关，把该值设置为X10
7. 运行/暂停
8. 通道2，垂直电压分量
9. 通道1，垂直电压分量——如图代表的意思是垂直方向上一个格子500mV
10. 通道2，参数显示区
11. 通道1，参数显示区
12. 波形显示

按键	短按	长按
Menu	进入菜单	返回主菜单界面
Flexo		
Auto	自动调节（部分界面无效）	
Ok/Hold	确认/暂停	居中
Left↗	左切换/逆时针切换设置类目	
Right↙	右切换/顺时针切换设置类目	
+	参数+	连续+
-	参数-	连续-

电流波形界面介绍

1. 电流波形0电流位置
2. 垂直分量——如图表示垂直方向上1个格子为200mA
3. 初始时基——示波器实际采样时基
4. 压缩倍数——可对采样数据进行x倍数压缩
5. 显示时基——根据压缩倍数不同，显示波形的对应时基
6. 运行/暂停
7. 显示数据首位地址(左边开始)
8. 电流波形

注意：　电流波形测量仅针对直流电平，市电测量需先经过转换

按键	短按	长按
Menu	进入菜单	返回主菜单界面
Flexo		清除当前缓存波形数据
Auto		0基线校准对齐
Ok/Hold	确认/暂停	居中
Left ↗	左切换/逆时针切换设置类目	数据快速跳转到0地址
Right ↙	右切换/顺时针切换设置类目	数据快速跳转到末地址
+	参数+	连续+
–	参数-	连续-

固件升级说明

升级步骤:
第0步:按紧Flexo按键开机，示波器会进入固件升级模式
第1步:根据需要修改固件中英文，可无视
第2，4步:示波器连接电脑后按下刷新按键更新下端口，选择示波器对应的端口
第3步:默认115200，无视即可
第5步，打开串口开关
第6步，打开升级固件
第7步，点击下载等待进度条结束即可

如果升级失败或想转换回原始版本可重复以上动作。

扩展功能/上位机软件说明:

1. 扩展模块会根据客户反馈进行添加，具体说明会在电子版说明书增加，电子版说明书可以扫说明书背后的二维码获取

2. 上位机除固件升级外，其他功能暂未开放，后续也会在新版本固件中更新添加

★3. 感谢任何使用本产品的客户提出自己的需求，包括但不限于按键功能调节，增加/修改某些功能，只要该机器硬件可以支持，我们都会根据您的需求发布新版本固件给到客户手中进行升级，谢谢!

Oscilloscope interface key introduction

KEY	Short press	Long press
Menu	Enter the menu	The main menu is displayed
Flexo	The multi-function keys will be explained in their respective interfaces	
Auto	Automatic adjustment	Automatic calibration
Ok/Hold	Confirm/pause	Mediate between two parties
Left↗	Left toggle	Data quickly jumps to address 0
Right↙	Right toggle	Data quickly jumps to the last address
+	Parameters +	Consecutive +
-	Parameters -	Consecutive -

Other notes:

1. In channel 1 and 2, when the voltage exceeds 40V, flip the switch of the high voltage probe pen body to the X10 end
2. The maximum measuring current of the current measuring interface is 6A, which may burn out the internal measuring circuit
3. When measuring current, do not measure while charging, which will interfere with the accuracy of current measurement
4. USB charging voltage default 5V/1A, if you need to use while charging, the charger power is better than 7.5W
5. Do not measure the mains when making the communication measurement signal of the upper computer

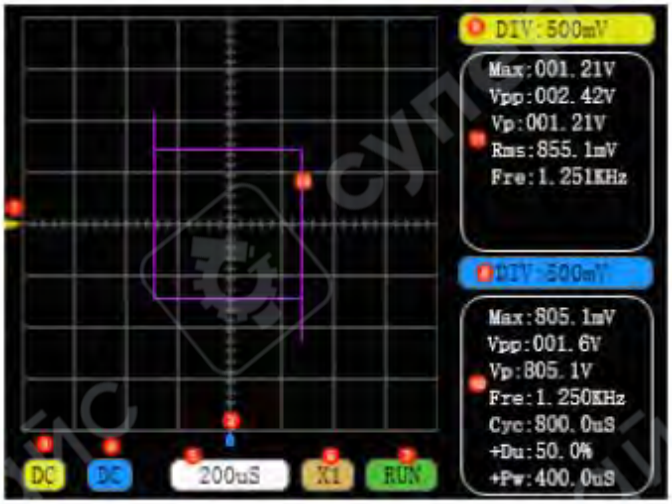
oscillographic interface

1. Oscilloscope channel1 level 0 position arrow
2. Oscilloscope channel2 level 0 position arrow
3. Channel 1. Voltage component. The figure represents 500mV/grid in the vertical direction
4. Voltage multiple :X1/X10
5. Time base: The figure represents 200uS/grid in the horizontal direction
6. Coupling status of channel 1
7. Coupling status of channel 2
8. Rise/fall edge trigger
9. Run/pause
10. Vertical trigger arrow
11. Trigger mode: AUTO/Nomal/Single

12. Horizontal trigger arrow
13. Data address
14. Channel 2. Voltage component

KEY	Short press	Long press
Menu	Enter the menu	The main menu is displayed
Flexo	Quickly switch the main trigger channel	Clear the current cache waveform data
Auto	Automatic adjustment	Auto calibration Popup
Ok/Hold	Confirm/pause	Center
Left↗	counterclockwise to set the category	Data quickly jumps to address 0
Right↙	clockwise toggle setting categories	Data quickly jumps to the last address
+	Parameters +	Consecutive +
−	Parameters −	Consecutive −

Lissayu interface

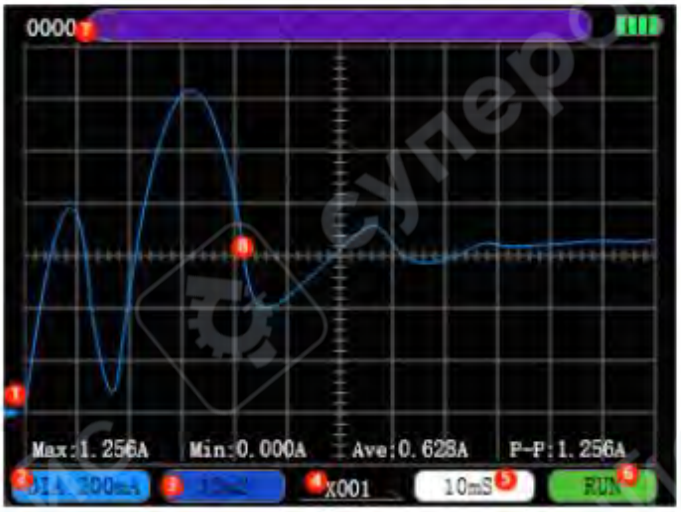


1. Oscilloscope channel 1, level 0 position arrow
2. Oscilloscope channel 2, level 0 position arrow
3. Coupling status of channel 1
4. Coupling status of channel 2
5. Time base
6. Multiple :X1/X10
7. Run/pause
8. Channel 2. Vertical voltage component
9. Channel 1. Vertical voltage component
10. Channel 2. Parameter display area

11. Channel 1. Parameter display area
12. Waveform display

KEY	Short press	Long press
Menu	Enter the menu	The main menu is displayed
Flexo		
Auto	Automatic adjustment	
Ok/Hold	Confirm/pause	Center
Left↗	counterclockwise to set the category	
Right↙	clockwise toggle setting categories	
+	Parameters +	Consecutive +
–	Parameters -	Consecutive -

Current waveform interface



1. Current waveform 0 Current position
2. Vertical component of current
3. Initial time base -- the actual sampling time base of the oscilloscope
4. Compression factor -- The sampled data can be compressed by x factor
5. Display time base
6. Run/pause
7. Show the first address of the data (from the left)
8. Current waveform

Attention:Current waveform measurement is only for DC level, mains measurement needs to be converted first

KEY	Short press	Long press
Menu	Enter the menu	The main menu is displayed
Flexo		Clear the current cache waveform data
Auto		0 Baseline alignment
Ok/Hold	Confirm/pause	Center
Left↗	counterclockwise to set the category	Data quickly jumps to address 0
Right↙	clockwise toggle setting categories	Data quickly jumps to the last address
+	Parameters +	Consecutive +
-	Parameters -	Consecutive -

Firmware Upgrade Description

Upgrade procedure:
Step 0:Press the Flexo button to power on, and the oscilloscope will enter firmware upgrade mode
Step 1:Modify the firmware in both English and Chinese as required
Step 2,4:After the oscilloscope is connected to the computer, press the refresh button to update the port and select the port corresponding to the oscilloscope
Step 3:The default is 115200, ignore it
Step 5:Turn on the serial port switch
Step 6:Open the upgrade firmware
Step 7,click Download and wait for the progress bar to end

If the upgrade fails or you want to switch back to the original version, repeat the above actions.

Extended function/Host software description

1. Expansion modules will be added according to customer feedback, and specific instructions will be added in the electronic manual, which can be obtained by scanning the two-dimensional code on the back of the manual

2. In addition to firmware upgrade, other functions of the upper computer are not open for the time being, and will be updated and added in the new firmware version later

★3. Thank any customers who use this product to put forward their own needs, including but not limited to key function adjustment, add/modify some functions, as long as the machine hardware can support, we will release a new version of the firmware according to your needs to the customer for upgrading, thank you!

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