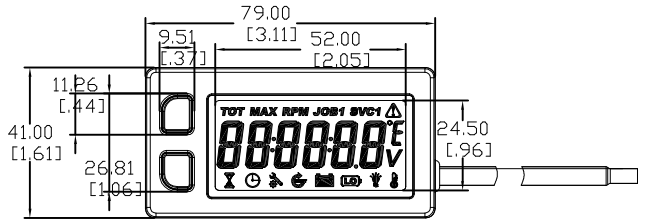
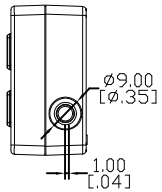
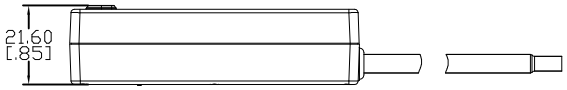
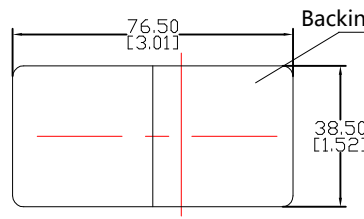
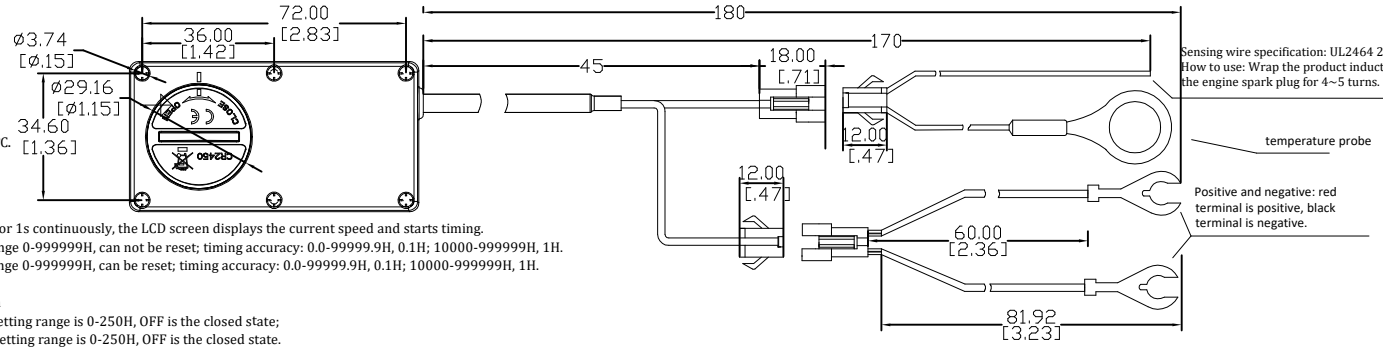
REVISIONS			
REV.	DESCRIPTION	DATE	INIT
0	INITIAL RELEASE	2022-4-18	
1			

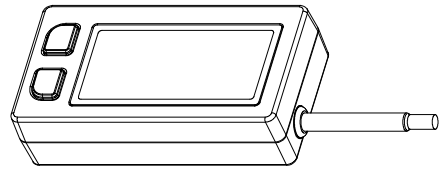












1.Display
lLCD display: Viewing direction
● 12o'clock. 6 digits display
●LCD temperature range: -30℃-80℃.
lbacklight color: red and green two-color backlight.

2.Timing function
● After detecting the engine signal for 1s continuously, the LCD screen displays the current speed and starts timing.
● Record the total working time: range 0-999999H, can not be reset; timing accuracy: 0.0-99999.9H, 0.1H; 10000-999999H, 1H.
● Recording single time of work: range 0-999999H, can be reset; timing accuracy: 0.0-99999.9H, 0.1H; 10000-999999H, 1H.

3.Maintenance reminder function
● SVC maintenance reminder: the setting range is 0-250H, OFF is the closed state;
SVC1 maintenance reminder: the setting range is 0-250H, OFF is the closed state.
● Maintenance reminder clearing method: When the maintenance reminder occurs, the SVC icon flashes continuously, and the red backlight reminder flashes three times every 5s; When SVC and SVC1 reach the maintenance time at the same time, SVC and SVC1 flash alternately, the red backlight reminds, flashes three times every 5s; Short press any key to clear the maintenance reminder, and the maintenance reminder starts a new round of timing.
● After detecting the engine signal for 1s continuously, the LCD displays the speed value, and the maintenance timer starts to count down.

4.RPM function
● Measure the current running speed of the engine, and it is valid after detecting the signal for 1s continuously.
● The strokes are: 1P1R, 1P2R, 2P1R, 3P1R, 3P2R, 4P1R, 5P2R, 6P1R, 8P1R.
● Resolution: 10RPM, accuracy ≤±50RPM.
● Maximum RPM: When the current measured speed value exceeds the historical record, the historical record value will be updated.
● Over-speed reminder: When the current speed is greater than the speed of the over-speed reminder, red backlight lights up; when the current speed is less than the over-speed reminder, product returns to normal.

5.Temperature function
● Display the current ambient temperature after connecting the temperature probe.
● Maximum temperature: Display the historical maximum temperature value, long press the SET button for 2S to clear the maximum temperature.
● Maximum temperature reminder: long press the SET button for 3S to set thereminder range: -2℃- 300℃
Temperature unit: long press the SET button for 3S to set the temperature unit, which are "℃" and "℉"respectively, and the default setting is"℃

6.Voltage function
● When the red and black electronic wires are correctly connected to the power supply to be tested,displays the current voltage.
● Maximum voltage: Display the historical maximum voltage value, long press the SET button for 2S to clear the maximum voltage.
● Maximum voltage reminder: long press the SET button for 3S to set the reminder range: 10V-30V, default OFF.

7.Backlight mode
● Three modes: Always On Mode [(L-ON) Green Backlight], Auto Mode [(L-AUT) Green Backlight], Off Mode [(L-OFF) No Backlight Color].

8.Clock function
● Clock function: 24H system, can be set to any time, the default starts from 12:00.
● The main interface will automatically switch to the clock interface after 2 minutes without any operation
● Long press the SET button for 3S to set the clock, short press the MENU button to switch the set digits, short press the SET button to increase

9.Sleep wake-up function
● After the product returns to the main interface or the engine stops working, press and hold the MENU and SET buttons simultaneously for 2S, the product will enter the sleep state.
● Short press any button or connect to the engine signal for 8s to wake up.

10.Internal battery
● Specification model. CR2430, capacity: 540mAh.
● Service life: The average engine speed is 3000 RPM, working 8 hours a day, it can be used for 7 years.

Item	Parameters
Type of working signal	**Gasoline engine spark plug Induction signal**
Housing material	ABS black
Product size	79mm*41mm*21.4mm
Display window size	51.3mm*23.3mm
Working temperature	-20°C-300℃
Waterproof rate	IP65
External power supply	8-30V

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: .X± .1 .XX± .02 .XXX± .005 X°± 1°	DRAWN Fred	DATE 2022-4-18	Runleader® NINGBO JIANGBEI RUN LEADER ELECTRONICS CO., LTD WWW.RUN-LEADER.COM			
	CHECKED	DATE				
	APPROVEO	DATE				
	MATERIAL N/A	PROJECTED VIEWS ARE 3RD ANGLE	TITLE Temperature meter			
COMPUTER GENRATED DRAWING-NO MANUAL CHANGES ALLOWED	FINISH N/A		SIZE B	PART.NO. RL-HM028A		
	DO NOT SCALE DRAWING	STATUS DS4_DESIGN	SCALE NTS	SHEET 1 OF 1	PROJECT NO. 114	REVISION 0