

CONTENTS

■ LXP-420 specifications-----	1
■ Instrument descriptions-----	2
■ Display descriptions-----	3
■ Key descriptions-----	4
■ Instructions-----	5
■ Precautions-----	6

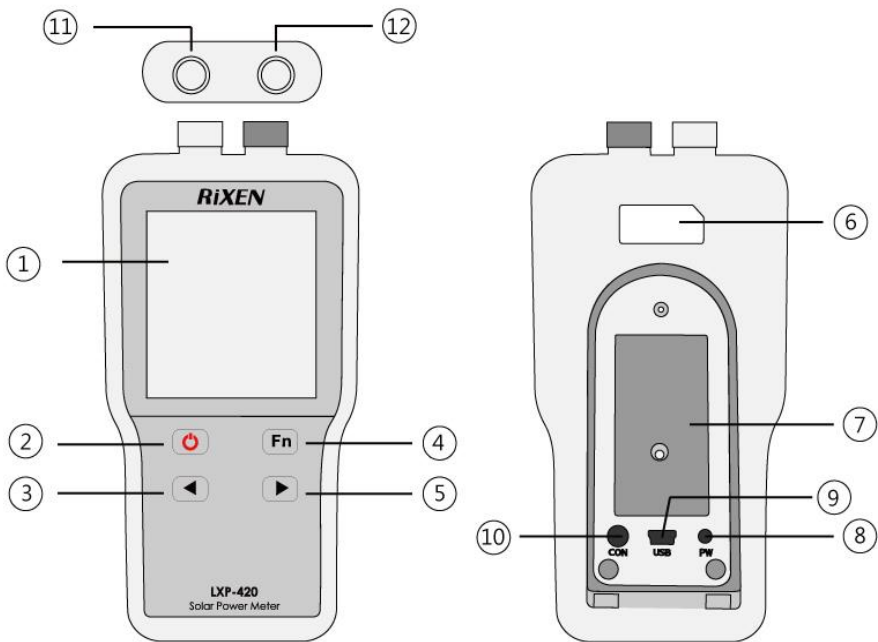
■ LXP-420 specifications

Input	0.0mV~140.0mV
Measurement Range	0.0~3200.0 W/m ²
Accuracy	± 0.1%
Resolution	0.1 W/m ²
Reading Rate	Approx 1 sec
Logging Sampling Rate	2 second to 120 minutes (User Selectable)
Baud Rate	57,600
Main Functions	Data hold, Max/Min/Avg Functions, Data-Logging, Perpetual calendar, AC/DC power, Battery sign and low battery warning, Calibration function, Sensitivity adjustment, LED back-light, IP66 water and dust proof.
Power Source	One 9 V battery or AC Adaptor
Dimensions / Weight	150 × 75 × 28 mm Approx 320g (battery included)
Input Connections	Banana Socket X 2
Standard Applications	LXP-420 Solar radiation power meter TU-655C Plastic Carrying Case TU-609 Battery 9V006P Instruction manual and warranty
Operating Environment	-20 ~ + 60°C ; 0 ~ 100 %RH

※Above accuracy and sampling rate excludes errors generated by Temperature probe.

※Specifications are subject to change without notice.

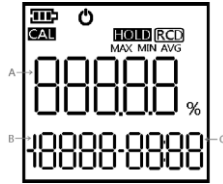
■ Instrument descriptions



- ① Large LCD Display
- ② Power switch
- ③ Move key / RCD record key
- ④ Function key / Setting key
- ⑤ Move key
- ⑥ Model No. and Serial No.

- ⑦ Battery cover
- ⑧ AC Adaptor Input
- ⑨ USB Output port
- ⑩ RS-232 Output connector
- ⑪ Anode (Red) Input
- ⑫ Cathode (Black) Input

■ Display descriptions



Display	Descriptions
	Battery Power Symbol
	Manual shut down
CAL	Under Calibrating
HOLD	Data Hold
RCD	Data Record
MAX	Maximum Value
MIN	Minimum Value
AVG	Average Value
Area Digit A.B.C.	Value Displayed
Hidden symbols	Shows when enter the setting mode or device abnormal

Abnormal displays

A. When Area A shows, please release all keys.

B. When Area A shows, the situations below may be the causes:

1. The read value higher than 3200.0 W / m²
2. The input signal connector (cable) is not properly inserted or locked in the instrument socket or the sensor is damaged.
3. If is appears when turning on the instrument, please release all keys and tune on the instrument again.

■ Key descriptions

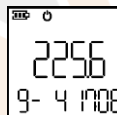
Key	Function	Descriptions	LCD display
	Power On/Off	Press one second (Be-) can turn on the power. If the instrument is lying idle for five minutes, it will turn off automatically.	
	Manual turn off	When the device is on off state, hold , then press to turn on. When appears in the screen, please release this two keys. It is finished to entering the manual turn off mode.	
	Hold mode	Under testing mode, press to entering the data hold mode (HOLD show up). Use and to change the displayed functions. Press to exit to RCD hold mode. When MAX and MIN are showed, area B will shows the first occurred data sheet, area C will shows the time (hour : minute). When AVG is showed, area B and area C will shows the total recording time (hour-minute: second), RCD revealed the data item.	
	RCD Reading Mode	Under hold mode, press to into the RCD reading mode. Use and to switch the displayed record value. Press and hold or to switch quickly. Press again to back to the hold mode.	
	Setting Mode (Ref, SEn, date, time, sampling time)	Under measurement mode, press and hold more than two seconds, when area A appears , release the to enter the setting mode, there are several selects in the setting mode, press to entering. Ref. Span setting: To entering when and appeared on the screen. Press to choose the figures from 0 to 9 and use to select the digit. Press to finish the setting. Date setting: Entering when appears, use and to switching the value, press and hold can speed up the value switch. Press to confirm the value. Sampling rate setting: Entering when appears, use and to switching it, press to confirm the value. Exit: when the screen shows , press to exit.	
	RCD Record Mode	Under the testing mode, and there is no recording data, press to entering the RCD record mode. The sampling time will be showed this moment. The will flashes when record mode process. Please press or to stop recording. The will stop flashes while stop. The will showed up when there are records on the internal.	
	RCD Clear Mode	Under the testing mode, and there are records on the internal (showed), press to entering the RCD clear mode, the will be displayed. Please press and to select options, press to confirm. The twinkled means not to clear the data, and the twinkled means to clear the data. It needs 7 to 10 seconds to processing this instruction.	

Key	Function	Descriptions	LCD display
	Value Change	Press to change the values in any modes.	--
 + 	turn on back light	Under any mode, press and simultaneously, the back light will be turned on. Note: When the battery power is lower than 25% , the LED back light will not be able to function, and the will twinkled for four seconds.	

■ Instructions

A. Real Time Testing Mode:

Show up the real time measured values, months, date, and current time.



B. RCD Record mode:

Under the testing mode, press into the record mode, It will shows up the sampling rate before starting record, and the will twinkled. Press or to stop recording. The will stop flashes while stop. The will showed up when there are records on the internal. Alarm function cannot be activated on the record mode.



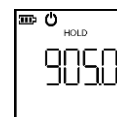
C. RCD Clear Mode:

Under the testing mode, and there are records on the internal (showed), press to entering the RCD clear mode, the CLEAR will be displayed. Please press and to select options, press to confirm. The twinkled means not to clear the data, and the twinkled means to clear the data. It needs 7 to 10 seconds to processing this instruction. the CLEAR will twinkled when clearing record, please waiting for the symbol - below disappeared.



D. Hold Mode:

Under testing mode, press to entering the data hold mode. Use and to change the displayed functions such as Max, Min, Avg and logging data items. Press again to switch to the RCD recording mode.



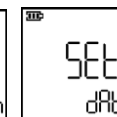
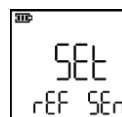
E. RCD Reading Mode:

Under hold mode, press to into the RCD reading mode. Use and to switch the displayed record value. Press and hold or to switch quickly. Press again to back to the hold mode.



F. Select Setting Mold




Under measurement mode, press and hold more than two seconds, release when SET appeared to entering the setting mode. Use and to choose the setting item, and press to confirm. Press again to finish setting.



■ Setting Mode Description

1. REF and SPAN setting mode

Use this mode to setting the low deviation (REF) and sensitivity (SEN).

Press  to choose the figures from 0 to 9 and use  to select the digit. The thousands digit can be switched into a negative sign when setting of low deviation. It is not feasible that to switched into the negative sign when the value shows 0000.0. Press  to confirm and it will switch to the setting select mode.

*REF setting range: 100.0 to -100.0



*SEN Setting range: 200.00% to 0.00% (original set at 10.00%)


*SEN Calculation:


If the sensor did not show up the sensitivity, please transfer the value by the following formula:
 $SEN = \text{Maximum output (mV)} / \text{Maximum received power (kW)}$

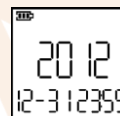


2. Date and Time setting mode




Press  to select the digit and use  to choose the figures from 0 to 9.

Press and hold  can acceleration the figures circulate. The value of second cannot be setting and the maximum setting of year is in 2099.

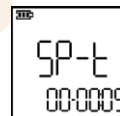
Press  to confirm and finish the setting.



3. Sampling rate setting mode

This mode is use to setting the sampling rate, press  and  to switch the rate. Display format: hour- min: sec; Press  to confirm the setting.

*Sampling rate setting: 2 seconds, 5 seconds, 10 seconds, 20 seconds, 30 seconds, 1 minute, 2 minutes, 5 minutes, 10 minutes, 30 minutes, 1hour, 2 hours



4. Exit the setting mode

Use this option when you finish your setting.



■ Precautions

1. This instrument has a waterproof function; please do not use it in a high temperature environment or with corrosive materials to avoid leakage or damage.
2. When the instrument shows power shortages, please replace the battery immediately.
3. When the device will not be used in a long time, please set the device and all accessories into the protective case, stored in a dry place, and avoid exposure to sunlight directly.
4. If there are any operation questions or malfunction, please contact your local distributor or our service department.

MEMO
