BrainChild

For Data Logger
Model: XH12
Ver: QS0XH120A

XH Series Data Logger
XH12

Wi-Fi 📶

- Set Logging of statistical data of temperature & humidity
- Wireless configuration, monitoring; set parameter & download report via Wi-Fi
- M.K.T. Mean Kinetic Temperature calculation
- USB/ Battery power supply

Tech Support:
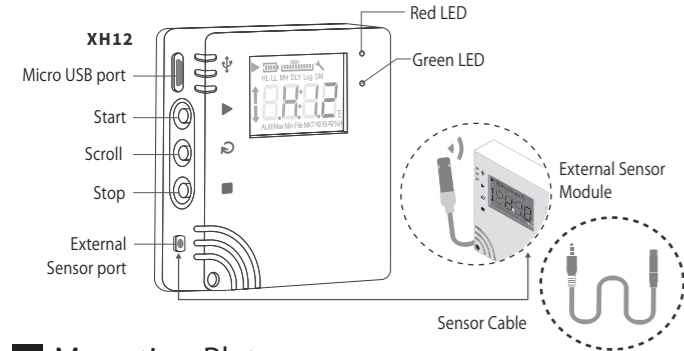service@brainchild.com.tw
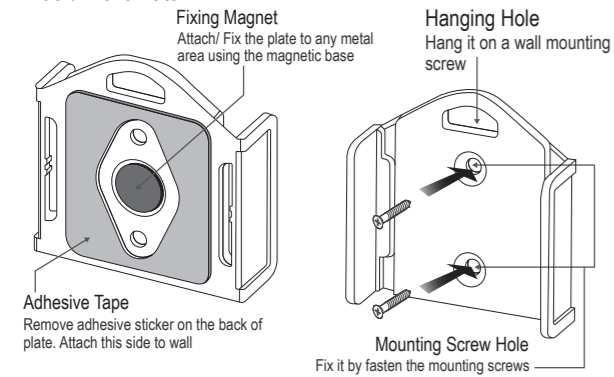XH12 QSG ENv1.0, 2024-05-23

XH12

XHLogger Quick Start

Package

- Data Logger x 1
- XH12 Battery Installed (3.7V/ 1500mA Li-ion) (Rechargeable Li Battery)
- Mounting Plate/ Fixed Sticker x 1
- Screws/ Anchors x 2
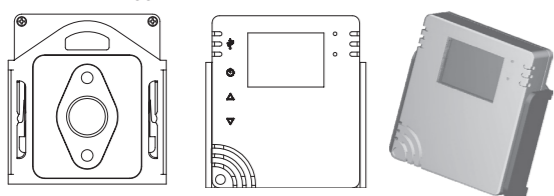- Quick User Guide x 1
- External Sensor Probe x 1

XH12

Red LED
Green LED
Micro USB port
Start
Scroll
Stop
External Sensor port

External Sensor Module

Sensor Cable

Mounting Plate

Back/ Front Plate

Fixing Magnet
Attach/ Fix the plate to any metal area using the magnetic base

Hanging Hole
Hang it on a wall mounting screw

Adhesive Tape
Remove adhesive sticker on the back of plate. Attach this side to wall

Mounting Screw Hole
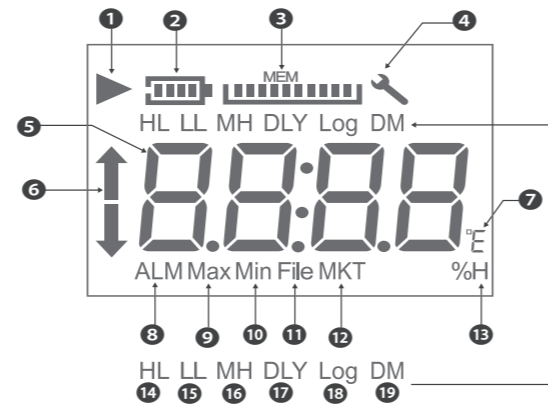Fix it by fasten the mounting screws

Bracket + XHLogger
Place the XHLogger into the mounting bracket

LED

- Flashing Red/ Green LED, indicating devices startup successfully
- Flashing Green LED, indicating working in recording monitoring mode
- Flashing Red LED, indicating errors occurred, alarms triggered
- Red LED blinking 3 times & off continuously, when the connection is interrupted

LCD Display

❶ The symbol ▶ indicates unit recording. Recording will start only when the timer matching settings. Flashing ▶ indicates delayed reocrding, pending for scheduled tasks. The symbol ▶ will disappear after logging completed.
❷ Battery capacity displayed in proportion
❸ Remaining memory capacity displayed in proportion
❹ The wrench 🔧 indicates errors occurred, disappears when confirms no error occurred.
❺ Real-time temperature or humidity info.
❻ ALM bar: When temperature/humidity reaching the alarm condition, HL ⬆ (High Limit) or LL ⬇ (Low Limit)
❼ Temperature Unit °C/ °F
❽ ALM: When temperature/humidity value reaching the alarm triggering condition
❾ Max. temperature/humidity Value
❿ Min. temperature/humidity Value
⓫ MKT: Mean Kinetic Temperature Caculation
⓬ File: Total number of files
⓭ %H: Relative Humidity %
⓮ HL: High Limit
⓯ LL: Low Limit
⓰ MH: month/ hour
⓱ DLY: Delay Time
⓲ Log: Log interval
⓳ DM: date/ minute

*Please refer to User Manual, Configuration & Data Analysis, for more information.

3-Key Operation

Action	Description
START ▶ - Short press	Reconnection
START ▶ - Long press more than 3 secs	Start recording
SCROLL ⟳ - Short press	Toggle screen views
STOP ■ - Long press more than 3 secs	Stop recording after logging; Sleeping mode before logging
SCROLL ⟳ +STOP ■ - Long press	Registration/ Pairing
STOP ■ - Press & Hold for 5 times	Reset

Operation Mode

Start Recording	Description
Immediate (PC)	Immediate recording after unplugging the USB at USB mode when setting the XH through DLV
Button (XH12)	Long Press START ▶ key for more than 3 secs when setting the XH through DLV whether to connect the USB or not
	The button mode also working with <Start Delay>, long press START ▶ key for more than 3 secs. When reaching the start delay time, it will automatically start recording
Specific Time (PC)	Start recording when reaching the specific time, when setting the XH through DLV whether to connect the USB or not

Stop Recording	Description
None	Stop by DLV software only (via USB interface)
Button	Long press STOP ■ key for more than 3 secs at logging mode, or stop by DLV software
Specific Time	When reaching the stop time, it will automatically stop recording, or stop by DLV software

Data Configuration/ Analysis

Download DLV, the Data Logger Viewer software, from the manufacturer's website. The PC Software can be used for configuration of the data logger, viewing and analysing of historical data.

NOTE: *Recording has been locked by default factory settings, please reset time zone firstly & time interval.

• Wi-Fi Pairing

DLV/ Wi-Fi Pairing Video

Sensor > New
Quick and easy wireless pairing
* Take one XH12 which is new to the system
(If this XH device used before, already paired wireless before, press the third button, STOP ■ key, more than 3 secs for 5 times, thus clear the previous Wi-Fi setting)
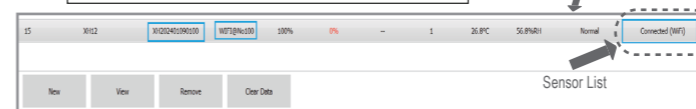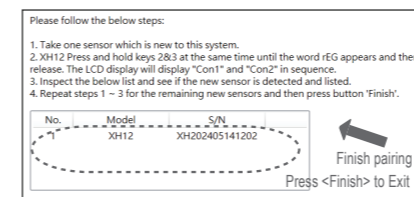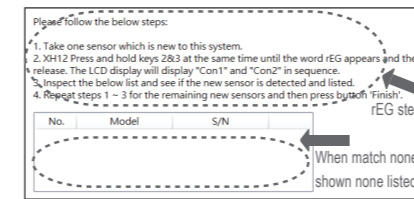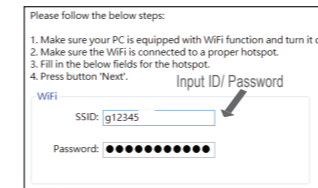* Open the DLV software on your PC via micro USB port. Go to <Sensors> on the top menu.
* Press and hold sync the 2&3 keys, ⟳Scroll+ ■Stop, for 3 secs. rEG registration steps will appear.
* Wi-Fi setting screen appeared on DLV, follow the sequence steps to complete wireless pairing.
* Press <Finish> after pairing successfully. Go to <Sensors> list-page, the connected Wi-Fi already discovered on the page.
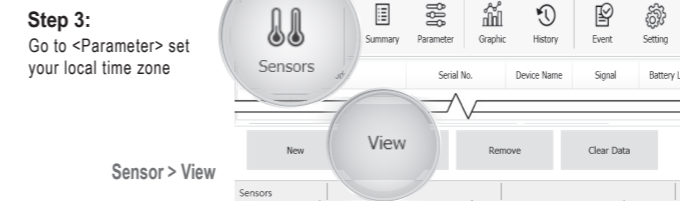
Sensor > New > SSID/PWD > Next > rEG > Finish

Please follow the below steps:
1. Make sure your PC is equipped with WiFi function and turn it on.
2. Make sure the WiFi is connected to a proper hotspot.
3. Fill in the below fields for the hotspot.
4. Press button 'Next'.

WiFi — Input ID/ Password

SSID: g12345
Password: ●●●●●●●●●●●●

Please follow the below steps:
1. Take one sensor which is new to this system.
2. XH12 Press and hold keys 2&3 at the same time until the word rEG appears and then release. The LCD display will display "Con1" and "Con2" in sequence.
3. Inspect the below list and see if the new sensor is detected and listed.
4. Repeat steps 1 – 3 for the remaining new sensors and then press button 'Finish'.

No.	Model	S/N

When match none shown none listed

rEG
Scroll ⟳
Stop

rEG step

Please follow the below steps:
1. Take one sensor which is new to this system.
2. XH12 Press and hold keys 2&3 at the same time until the word rEG appears and then release. The LCD display will display "Con1" and "Con2" in sequence.
3. Inspect the below list and see if the new sensor is detected and listed.
4. Repeat steps 1 – 3 for the remaining new sensors and then press button 'Finish'.

No.	Model	S/N
	XH12	XH202405141202

Finish pairing
Press <Finish> to Exit

Sensors
Sensor List

• DLV Quick Activation

Step 1: Connect the XHLogger to PC, micro-USB plug of the USB cable into the PC USB port.
*Use only USB data file transfer cables to collect data for analysis

Step 2: The Sensor list will renew newly discoveried devices, click <View> of new items

Sensors | Summary | Parameter | Graphic | History | Event | Setting
Serial No. | Device Name | Signal | Battery Level
New | View | Remove | Clear Data

Sensor > View

Step 3: Go to <Parameter> set your local time zone

Step 4: Set <Log Interval>, the number must not be zero
Step 5: Press <Save> after all settings applied

Data Logger Viewer
Sensors | Download | Su... | Graphic | History | Event
XH_XH202401090100
Device Info.
S/N: XH202401090100
Name:
PDF Language: Chinese(Traditional)

Time Zone: UTC+08:00
Desc.:
Password:

Parameter > Time Zone
Parameter > Log Interval
Parameter
Time Zone: UTC+08:00
Log Interval: 0 H 2

* Connect the XHLogger to your PC via USB transfer cable
* Install Data logger viewer to your PC
* Double click on DLV logo
* Go to Parameter > Time Zone > Save
* Set correct time zone/ log interval
* Save the setting to initialize recording

Error Code

Code	Reason
Er01	Wi-Fi module abnormal disconnection, failed to start, please restart or reset
Er02	DLV registration failure, please registration and pairing again
Er03	Login failed, please note whether ID/Password are correct, Wi-Fi signal as stable
Er04	Connection with DLV failed, please check if Wi-Fi disconnected or DLV turned off.
Er05	Wireless AP failed to connect, please check if the router is working properly.
Er06	Sensor failure, please contact local dealers or the original manufacturer
Er07	Firstly check whether the external sensor connected correctly firmly
Er08	Device time stamp not available, device timer abnormal
Er09	Start recording without setting parameters, logging interval lerror, setting configuration error. Please reset. Go to Parameter > Data logging
	The total files exceeds 100 and the memory is full. Please clear all file data

🔧 An error symbol will appear when any error occurred

XH12 FAQ

※ Frequently Asked Tech Support Questions

▶ After successfully paring DLV with XH12, do I need to keep DLV software opening to stay connection?
For normal usage, the XH12 will keep connection with DLV, also sending data back to DLV continuously. When the XH12 cannot find DLV, it will try to search DLV and the LED screen will display Er04, which will make battery draining fast. Even power saving mechanisms exist, it is recommended to keep the connection between DLV and XH12 all the time.

▶ During pairing processing, cannot find any XH12 device on the list?
Press the STOP button 5 times, and wait until "rSt" displayed on LED to clear paring setting on this device. Manually operate the pairing procedure again. Enter and make sure paring/ networking SSID and password correct. Before pairing again, check Wi-Fi and networking environment, whether the signal too weak on the location. Also avoid turning phone hotspot to replacing Wi-Fi, which cause networking connection unstable. Please note that it is required to run program under windows 10 OS or above.

▶ Will the connection between DLV and XH12 failed after when the DHCP assigns a new IP address?
Under normal network circumstances, DLV and XH12 use the same domain for connection. When IP address on the computer changed, DLV will still search and update the link automatically.

▶ When the error code, Er05, is shown on XH12 LED?
Er05 occurs when XH12 cannot connect to the paired Wi-Fi, so please check the network device firstly and then restart the DLV software and confirm that IP domain of DLV is the same as setting before.

▶ How to reconnect the device with DLV software again?
The device has been paired successfully before, yet if the device unexpected disconnection problems occur, the user can try to pair again to establish the connection between XH12 and DLV. Press the STOP button 5 times, and wait until "rSt" displayed on LED to clear paring setting on this device. Manually operate the pairing procedure again.

▶ The DLV is activated and finished pairing but my XH12 cannot work properly?
The first step to activate DLV is to click on the device name; go to <Parameter> firstly to reset <Log Interval>, <Time Zone>. Set Log Interval not zero (H/M/S) and set current Time Zone. Save and Exit.

▶ How to change the DLV language interface?
To change the DLV language, click on the device name and go to <Setting> on the top menu. On the <General > tab, change <Language> field and Exit the program. Launch the DLV again, the new language interface will start.

*** If you have any other tech problems, please contact us and provide the serial number on the sticker from the back of the device.

Battery Charge

* The XH12 uses a rechargeable battery; when receiving the brand new product, before usage for the first time, please charge the new device to full level via USB port. Use one microUSB-USB cable, connecting USB port to power supply DC5V/1A. When the device completely no power, less than 20%, the totally charging time to fully charged takes around 4 hr to finish with connecting to DC5V/1A charging adapter. For normal usage, recharge the device every 2 to 3 months.

Battery Level with 0-4	
	4 scales: Power 100%
	3 scales: Power 80%
	2 scales: Power 60%
	1 scale: Power 40%
	0 scale: Power < 40%
	Frame Blinking: Power < 20%

USB-Powered
USB-Charge: DC 5V/1A
microUSB-USB