

XH Series Data Logger

XH13



- Set Logging of statistical data of temperature & humidity
- Work great on both Android and iOS mobile devices
- Set parameter & download PDF report via Cloud
- M.K.T. Mean Kinetic Temperature calculation
- USB/ Rechargeable Battery power supply



FAE Tech Support
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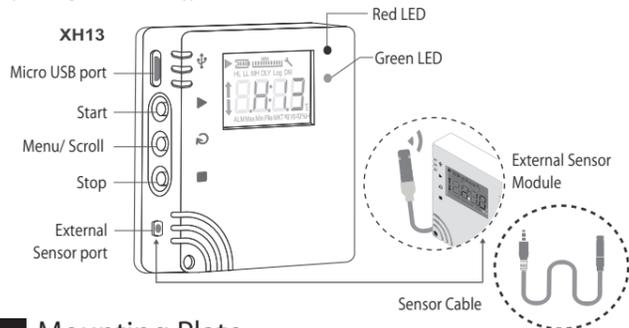
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XHLogger Quick Start

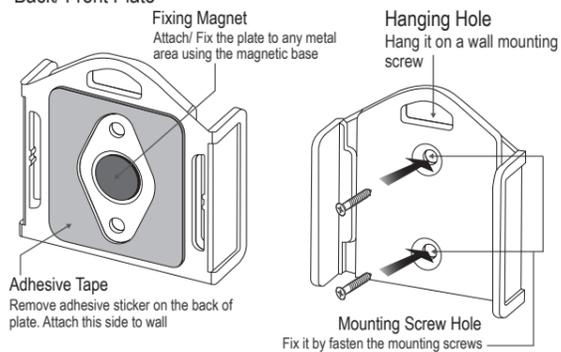
Package

- Data Logger x 1
- Mounting Plate/ Fixed Sticker x 1
- XH13 Battery Installed (3.7V/ 1500mA Li-ion)
- Screws/ Anchors x 2
- (Rechargeable Li Battery)
- Quick User Guide x 1
- External Sensor Probe x 1



Mounting Plate

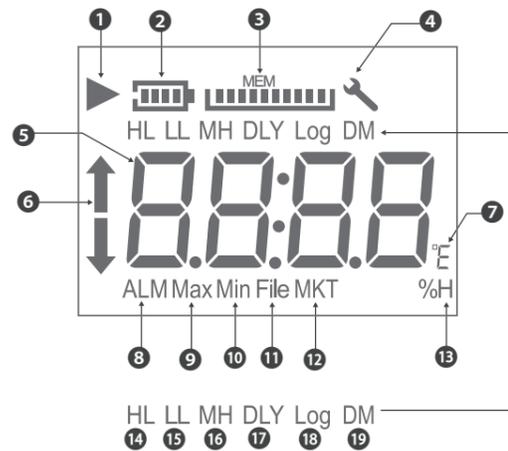
• Back/ Front Plate



LED

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

LCD Display



- The symbol ► indicates unit recording. Flashing ► indicates delayed recording, pending for scheduled tasks. The symbol ► will disappear after logging completed.
- Battery capacity displayed in proportion
- Remaining memory capacity displayed in proportion
- The wrench icon indicates errors occurred, disappears when confirms no error occurred.
- Real-time temperature or humidity info.
- ALM bar: When temperature/humidity reaching the alarm condition, HL ↑ (High Limit) or LL ↓ (Low Limit)
- Temperature Unit °C/ °F
- ALM: When temperature/humidity
- Max. temperature/humidity Value
- Min. temperature/humidity Value
- MKT: Mean Kinetic Temperature Calculation
- File: Total number of files
- %H: Relative Humidity %
- HL: High Limit
- LL: Low Limit
- MH: month/ hour
- DLY: Delay Time
- Log: Log interval
- 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	Start recording
SCROLL/MENU ◀ - Short/ Long press	Toggle screen/ menu views
STOP ■ - Short press 5 times cont.	Reset and clear all old pairing
STOP ■ - Long press 3 secs	Stop recording after logging
- Long press 3 secs after stopping	Sleeping mode before logging
All keys ►◀ - Short press	Wakeup from sleep mode

Operation Mode

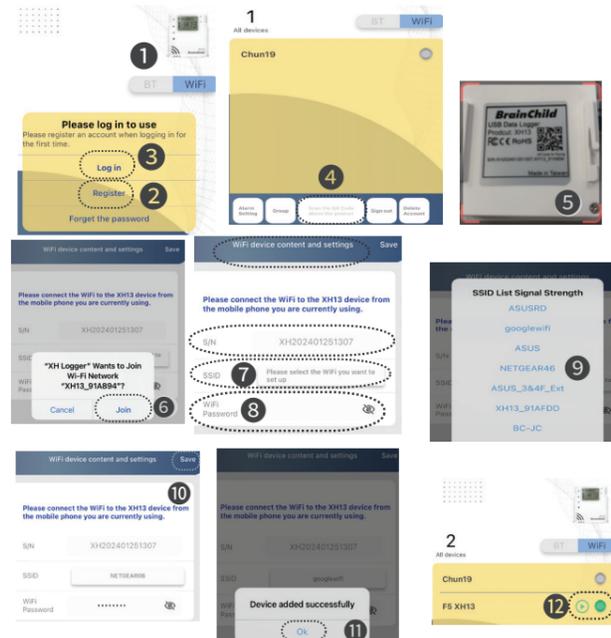
Start Recording	Description
Immediate (APP)	Immediate recording after configuration when setting activation from the App
Button (XH13)	Long Press START ► key for more than 3 secs when setting the XH through App The button mode also working with <Start Delay>, long press START ► key for more than 3 secs. When reaching the start delay time, it will automatically start recording
Specific Time (APP)	Start recording when reaching the specific time, when setting from the App
Stop Recording	Description
None	Stop by App configuration
Button	Long press STOP ■ key for more than 3 secs at logging mode, or stop by App
Specific Time	When reaching the stop time, it will automatically stop recording

Pairing & Configuration



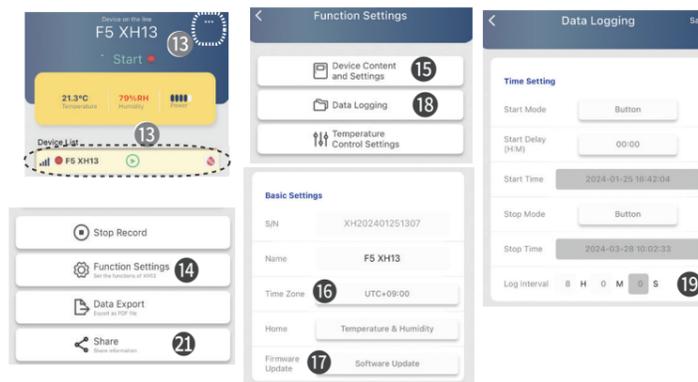
• APP Pairing

- * At least one XH13 running, search and download "XH Logger" from mobile App Store.
- * Open the XH Logger APP icon on your mobile. For first time user,
- * Tap ① [WiFi] in the upper right corner.
- * Tap ② [Register] to complete a new account registration.
- * Tap ③ [Log in]. Fill in your email and password to login. Go to the App homepage
- * Tap ④ [Scan the QR Code] to add a new XH13 device.
- * Scan the QR Code on the back of the cover ⑤.
- * Click ⑥ [Join] add a XH13 for iOS devices and [Connect] for Android devices.
- * Wi-Fi connection is available for pairing only when SN is shown XH13_XXXXXX in the Wi-Fi list. If the screen ⑥ [Join]/[Connect] missing, must check whether in pairing mode or not. If not, reset the device to pair again.
- * Select one Wi-Fi name from the list to connect to the XH13. Choose one from the signal strength list. From [SSID List Signal Strength], select one Wi-Fi name ⑦ and type this Wi-Fi password. ⑧
- * Press ⑨ [Save] in the upper right corner. Tap [OK]. Device added successfully and Pairing has been completed. ⑩⑪



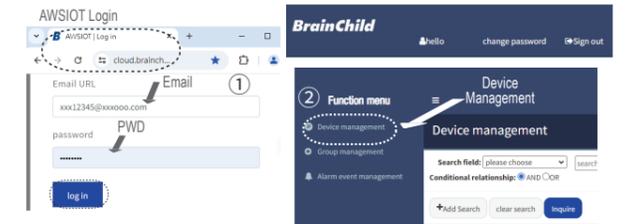
• APP Quick Configuration

- * Set Time Zone: The step is required to activate, resetting Time to unlock the system default setting. Select one connected XH name ⑫, which connected shown green light. Tap ⑬[...]. State in the upper right corner to enter this single device configuration. Reset Time and save to exit again even if your local time is the same as the default. Tap ⑭ [Function Settings] > ⑮[Device Content] > ⑯[Time Zone] to select the local time zone, and then tap [Save] to exit.
- * Set Log Interval: The step is required to activate, resetting Log Interval to unlock the system default setting. Set the interval not zero. Tap ⑰[Function Settings] > ⑱[Data Logging] to select the log interval, ⑲HMS hour/minute/second interval at least one not zero, and then tap [Save] to exit.
- * Change the language interface: if needed
The App supports English and Traditional Chinese. To change language, go to mobile Settings, change Language & Region (iOS).
- * Update Firmware to the latest version
-Tap ⑲[Function Settings] > ⑳[Device Content] > ㉑[Firmware Update]>>Software Update) to update the firmware to the latest version, and then tap [Save] to exit.
-Reset Time and save to exit again even if your local time is the same as the default. Tap ㉒[Function Settings] > ㉓[Device Content] > ㉔[Time Zone] to select the local time zone, and then tap [Save] to exit.
- * Start Recording
-Start Recording immediately: Select one connected XH name ⑫. Tap ⑬[...]. State in the upper right corner to enter this single device configuration. Tap [Start Record].
-Scheduled Session Start: Tap ⑬[...]. State in the upper right corner to enter this single device configuration. Tap ⑰[Function Settings], and select [Data Logging]/ [Start Mode>At Time]. Select the time setting details [Start Time/Stop Time], and then tap [Save] to exit.



• AWSIOT Cloud Web Operation/ Activation

- * Please finish registration in the App and pair the device via the App. Login to the webpage using owner accounts, https://cloud.brainchildtw.com. ① Please note that XH13 could only newly being added from the App.
- * After AWSIOT registration, login to the web. Click on the left upper corner [Device Management], and then enter device operation. ②



Battery Charge

- * The XH13 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.(≥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	Battery Level with 0-4
4 scales: Power 100%	1 scale: Power 40%
3 scales: Power 80%	0 scale: Power < 40%
2 scales: Power 60%	Frame Blinking: Power < 20%

Error Code

Code	Reason
Er01	Wi-Fi module abnormal disconnection, failed to start, please restart or reset
Er02	Cloud registration failure, please registration and pairing again
Er03	Login failed, please note whether ID/Password are correct, Wi-Fi signal as stable
Er04	AWS/MQTT connection failure, please check your network connection working
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 Firstly check whether the external sensor connected correctly firmly
Er07	Device time stamp not available, device timer abnormal. Please connect to the XL Logger cloud/ App to synchronise the time. Reset the time zones. ⑥ ⑰
Er08	The total files exceeds 100 and the memory is full. Please clear all file data
Er09	Start recording without setting parameters, logging interval error, setting/ configuration error. Please reset log interval. ⑥ ⑰

✎ An error symbol will appear when any error occurred/ red led flashing

XH13 FAQ

✧ Frequently Asked Tech Support Questions

- How to receive alerts via Email ?
Users need to register new accounts on App/ Webpage using email as login IDs. The error messages will send to this email for notification. Select a frequently used email account as receiving alerts email when temperature/ humidity occur. ①②③
- How to add a new XH13 device to cloud web account ?
A new XH13 hardware device can only be added from the App version by scanning the QR code. After pairing, login to AWSIOT, the XH will appear
- How to share XH13 with others members ?
* Login to the webpage using owner accounts, https://cloud.brainchildtw.com. Select one online XHLogger, ③ clicking green button [Share], ④ inputting a member's email address, and select permission type. Click the button [Share]. After setting, the share account also can receive alerts emails when system sends alerts notification.



- * Login to the App, select one connected XH ⑫. Tap ⑬[...]. State in the upper right corner to enter this single device configuration. Tap ⑭[Share] > [New] to add new member to the Share List, and then tap back icon to exit.
- How to upgrade the firmware of the XH13 ?
* Upgrade via XH Logger App: After register and connect to the App. Scan the QR code on the XH. Complete pairing. Go to state>Function Settings> Device Content> Software Update. ⑰ Follow the steps to complete.
- * Upgrade via AWSIOT Cloud: ①② Go to Function Menu> Device Management > Select one online> Firmware update. ⑤ Follow the steps to complete.

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

XHLogger 數據記錄器

XH13



- 雲端設定/遠距儲存監控
- 支援手機APP高效運作 (iOS/Android)
- 可由雲端設定組態
- APP可設定參數及下載報表
- MKT平均動力學溫度計算
- 可充電電池



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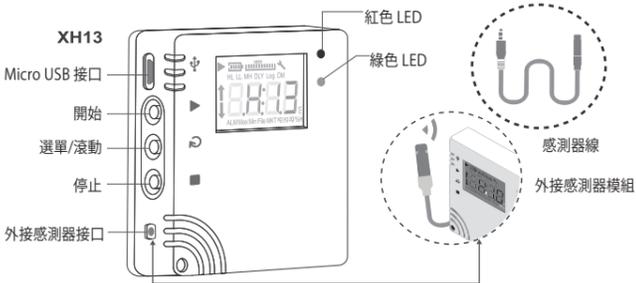
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快速使用指南 XH13 Quick Start

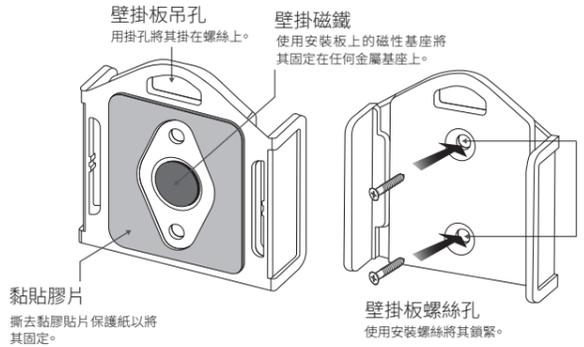
產品包裝內容

- 數據記錄器XH13 x 1
- 電池已安裝
- **電池為鋰離子充電電池 3.7V/1500mA Li-ion
- 壁掛板和固定貼紙 x 1
- 螺絲和螺絲套 x 2
- QSG快速使用指南 x 1
- 外接式感測器模組 x 1



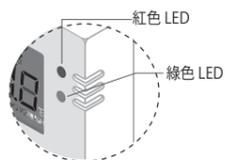
XH13壁掛板安裝固定

壁掛板背面/正面

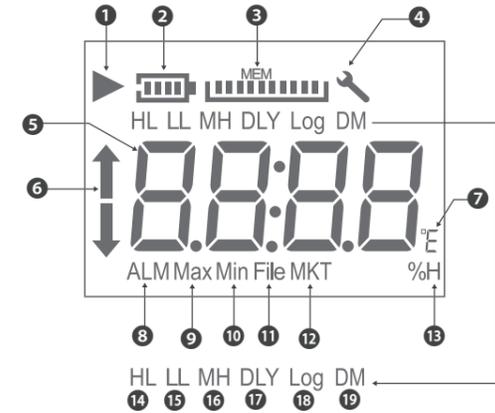


LED

- 啟動時，閃爍紅/綠色LED。
- 記錄監控模式下，綠色LED閃爍。
- 若發生任何錯誤，紅色LED閃爍。
- 連線中斷時，紅色LED連續閃爍3下。



LCD 顯示



- 符號 ▶ 表示裝置正在記錄; 記錄完成後 ▶ 會消失。閃爍: ▶ 表示延遲啟動或者記錄的功能將會在計時器符合組態設定時啟動。未顯示 ▶▶: 未紀錄。
- 電池容量以比例來顯示。
- 剩餘儲存容量(最大200,192筆; 每一格代表20,019筆)以比例來顯示。
- 扳手工具符號出現表示有錯誤發生。
- 即時溫度或濕度資訊。
- 當溫度或濕度達到警報條件(HL或LL)。
- °C/°F 攝氏/華氏。
- ALM: 當溫度或溼度達警報條件。
- Max: 最高溫度或濕度。
- Min: 最低溫度或濕度。
- File: 檔案數
- MKT 代表平均動力學溫度。
- %H 相對溼度。
- HL低警報相關
- LL低警報相關
- DLY: 延遲時間。(Delay Time)
- Log: 記錄間隔。(Log Interval) *
- DM: 日(D)/分鐘(M)

按鍵操作

動作	說明
啟動鍵 ▶-短按	重新連線
啟動鍵 ▶-長按	啟動記錄
選單鍵Menu ◀-短按/長按	切換畫面
停止鍵 ■-連續短按5下	重置設備清除舊的配對
停止鍵 ■-長按	長按停止記錄
-停止後長按	停止後長按進入休眠
所有按鍵 ▶▶-短按	休眠中喚醒

記錄運作模式

開始模式 Start	說明
立即 (APP)	從APP設定啟用
按鍵	由App設定後, 由長按啟動 ▶ 鍵開始記錄。
	按鍵模式同時可搭配啟動延遲 (Start Delay) -長按 ▶ 啟動鍵後待設定之啟動延遲時間到即開始記錄。
指定時間 (APP)	由APP設定後, 至指定時間到後即開始記錄。
停止模式 Stop	說明
未指定	從APP設定停止
按鍵	可透過長按 ■ 停止鍵或由App停止紀錄。
指定時間	至指定時間到後即停止記錄。

電池充電

*XH13採用充電電池, 拿到新品時使用前請先自行充電。充電用microUSB-USB線, 接電源DC5V/1A充電。設備電池完全沒電時, 接DC5V/1A(≥1A)充電約4小時。正常使用時, 約2-3個月充電一次。

XH電池量顯示	
	電池4格時: 電力 100%
	電池3格時: 電力 80%
	電池2格時: 電力 60%
	電池1格時: 電力 40%
	電力 < 40% 圖標0格
	電力 < 20% 圖標外框閃爍



配對及設定

※ APP配對啟用

- * 至少一台XH13已開機運作, App商店上搜尋並且下載XH Logger
- * 手機上開啟XH Logger APP圖標
- * 點選右上角 ❶ [WiFi]
- * 點選 ❷ [註冊], 完成註冊帳號申請
- * 點選 ❸ [登入]
- * 點選 ❹ [掃描產品上方QR Code], 加入新硬體XH13
- * 掃描產品XH13背面上的QR Code ❺
- * iOS裝置點選❻ [加入]-Android裝置點選❼ [連線]-Wi-Fi列表裡有XH13_XXXXXX名稱的設備時才可進行WiFi連線。若無❸的畫面需確認是否處於配對模式。若否, 請將裝置Reset後重新開始操作。
- * WiFi連上XH13, 按下[請選擇您所想設定的Wi-Fi], 按下Wi-Fi名稱 ❷ ❹ 並填入所選擇的Wi-Fi密碼 ❸。
- * 按下儲存 ❺。完成配對。
- * 完成配對裝置新增綠色標示到列表上。 ❶ ❷



※ APP快速設定

- * 設定時區 Time Zone: 此為啟用時必要動作
按下設備名稱 ❷ 設定時區, 需已連線有綠燈, 按下右上角 ❶ [---] (設備管理) 狀態進入單一設備配置。按下 ❸ [功能設定], 按下 ❹ [裝置內容及設定], ❺ [時區] 選當地的時區, 按下右上角 [儲存] 退出。
- * 設定記錄間隔 Log Interval: 此為啟用時必要動作
按下 ❸ [功能設定], 按下 ❻ [資料記錄] 設定記錄間隔, 需選記錄間隔的HMS時分秒間隔, 至少一項設定不是0❸, 儲存後退出。
- * 設定語言界面: 如需更改語言
App僅支援繁中及英文, 更改手機的語言為繁中, App則轉為繁中。iOS用戶可到設定>一般>語言及地區中更改。
- * 更新韌體 FW: 如需使用最新版本
❶ 進入單一設備配置。按下 ❸ [功能設定], 按下 ❹ [裝置內容及設定], 按下 ❷ [韌體更新] 依步驟更新韌體到最新版。
- * 開始記錄
立即開始: ❶ 進入單一設備配置。按下 [開始記錄]。
預約時段開始: ❶ 進入單一設備配置。按下 ❸ [功能設定], 按下 [資料記錄], 選取時間設置細節, 再按下右上角 [儲存] 退出。

注意:
--設備連線後, 需先設定<時區>, 才會開始做記錄。
--時區與出廠預設一樣, 仍需要儲存才能啟用。
--<記錄間隔>需重設, 間隔不可為0



※ AWSIoT雲端網頁版操作

※ 雲端網頁啟用

- * 從PC瀏覽器開啟雲端網頁 <https://cloud.brainchildtw.com>
- * 帳號申請網頁版 ❶ 填寫註冊資料, 再按下 [註冊帳號], 完成註冊可先在App完成註冊及XH13配對, 或在網頁版註冊新帳號。
注意: * 新增XH13硬體只能從App版新增
- * 按下 [登入], 登入網頁版帳號 ❶
- * 按下左上角 ❷ 設備管理。開始操作列表上的設備。



錯誤代碼

代碼	說明
ER01	Wi-Fi模組異常無法正常啟動。請重新啟動或重置設備。
ER02	雲端註冊失敗。請重新註冊、重新配對。
ER03	登入失敗, 請確認ID及密碼是否正確, 並注意Wi-Fi訊號強度是否穩定
ER04	AWS/MQTT 連線失敗。請檢查網路連線是否異常。
ER05	無線AP分享器連線失敗。請檢查路由器是否正常運作。
ER06	感測器故障, 請與經銷商聯絡, 請先檢查外接感測器是否正確接上。
ER07	裝置的時間異常。請檢查網路連線。請至雲端版連線設定參數 ❹ ❺
ER08	記憶體已滿或者檔案數已達100個。請先清除資料。
ER09	沒有設定參數後執行開始記錄。如果為全新XHLogger, 請連線雲端網頁版/手機App版, 至功能或設備管理中設定參數 ❹ ❺

※ XH13 FAQ常見問題

- ▶ 如何收到異常通知
* 需先註冊帳號, Email為登入ID, 設備及溫/濕度異常時傳送通知到此Email。❶ ❷ ❸
- ▶ 如何加入新的XH13到網頁帳號中
* 新增XH13硬體只能從App版新增, 登入XH Logger App後, 掃QR code新增設備。
* 再從PC上開啟網頁, 登入後, 新增的XH13硬體會出現在列表上。
- ▶ 如何與成員分享XH13
* AWSIoT: 登入網頁擁有者帳號, 按下左上角 [設備管理], 設備列表中選取已連線的設備 ❸, 按下綠色 [分享] ❹, 輸入成員的ID/Email帳號, 選取權限, 按下 [分享]。之後有異常時, 分享的帳號也會收到異常通知
* App: 登入App, 選擇運作中的設備 ❷, 按下右上角 [---] ❸ (設備管理) 狀態, 按下 [分享], 新增email為分享名單。❹



▶ XH13韌體如何升級?

- * App版: 須先完成XH Logger App與XH13的配對。App[首頁]-> 進入已連線的單一設備配置-> [···] -> [功能設定] -> [裝置內容及設定] -> [軟體更新]。❶
- * AWSIoT版: 需在App上已新增好XH13, 註冊登入AWSIoT -> [功能選單] -> [設備管理] -> 已連線的單一XH13配置-> [韌體更新]。❶ ❷ ❸