

User Manual

Smart Thermometer Hygrometer

Model: STH51



This user manual contains important information regarding the operation of your smart thermometer hygrometer. Ensure you read this user manual fully before installing and operating the listener. If you are installing this device for use by others, you must leave this manual (or a copy of it) with the end user.

Introduction

The wireless thermometer hygrometer supports all basic functions as well as smart functions such as remote monitoring and temperature & humidity graphs. This thermometer hygrometer is reliable and easy to use for homes, greenhouses, and more.

Product Overview



LED Indicator

Pair Button

Battery Compartment

Lanyard Loop Tab

Package Contents



Thermometer Hygrometers

Lanyards

Stickers

Device Setup

Download the X-Sense Home Security App




To download the **X-Sense Home Security** App, scan the QR code or search for “**X-Sense Home Security**” in the Apple App Store or Google Play Store. Sign up with a valid email address. If you already have an account, make sure the app is updated to the latest version.

Note: *Make sure your smartphone supports iOS 11 and higher, or Android 8.0 and higher.*

Connect the Thermometer Hygrometer to the Base Station

The thermometer hygrometer can be connected to the base station through the wireless network. When the listener is connected to the base station, you will receive push notifications wherever you are to stay informed of the device status.

Note: *Before adding devices to the system, make sure the base station has been successfully added to the app.*

1. Tap “”, and select “Thermo-hygrometers” in the product list. Then, tap “Next” to enter the pairing page.
2. Enter a name for the thermometer hygrometer. Then, select the room in which it is installed and tap “Next.”
3. Remove the back cover from the device. Tap “Next.”
4. Install the battery and ensure the battery polarities are matched correctly. Then, tap “Next.”
5. Follow the prompts on the page by quickly pressing the Pair button twice on the device until the LED flashes blue rapidly, indicating that the device is waiting to connect to the base station.
6. Tap “Next” to add the device. You will hear “Ready to add the device.”
7. After successfully connected, you will hear “Device added” and the “Device added” page will appear. Then you can find the thermometer hygrometer in the device list.
8. If you want to add multiple devices into the system, please repeat the above steps.

NOTE:

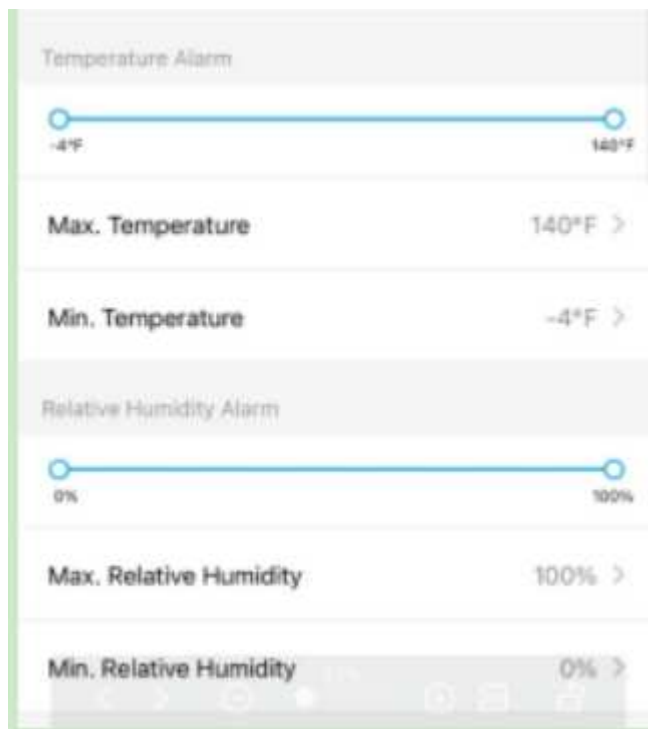
1. If you fail to add the device to the network within 60 seconds, the device will automatically exit the network configuration. To re-enter the network configuration, you need to repeat the above steps.
2. After adding the thermometer hygrometer, write its name on the provided sticker and attach it to the device for easy management in the future.

Installing the Lanyard (Optional)



- ① Open the back cover.
- ② Thread the lanyard through the tab, making sure it is securely attached.
- ③ Close the back cover.
- ④ The device can be hung in any desired location with the lanyard.

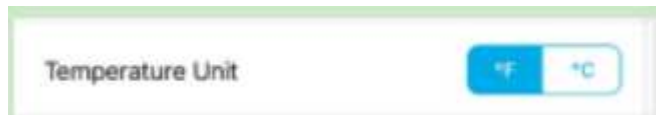
Using Your Thermometer Hygrometer



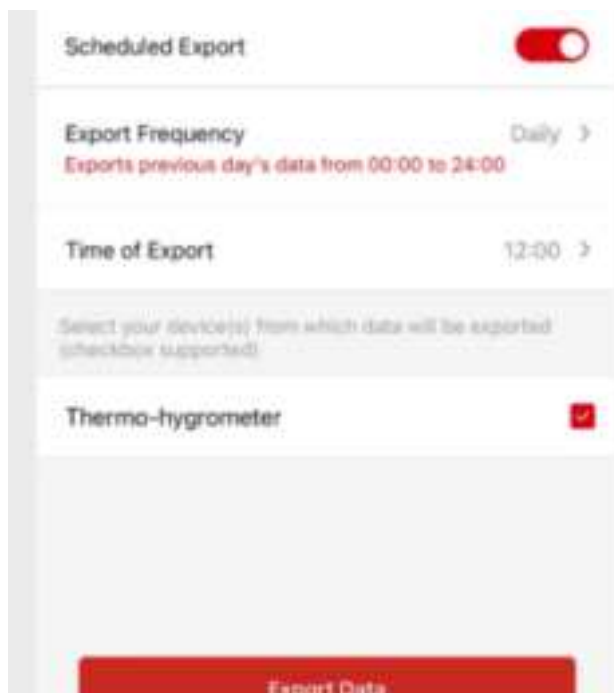
Set the Alarm: You can set the temperature and humidity range in the app. When the temperature and humidity level exceed this range, an app push notification will be sent immediately, and the

base station will sound an alarm at the same time (You can turn off the alarm function of the base station and only choose the push notifications).

To select the temperature and humidity you want to track, use the slider or make a selection from the dropdown list.



Unit Switch: Switch temperature units displayed in the appto Fahrenheit (°F) or Celsius (°C).



Export Data: Export data in CSV format after entering your email address and confirming the date/time range. You can create a data export task by toggling “Scheduled Export” to choose from daily, weekly, and monthly.



Device Test: You can complete the test by tapping Device Test button in the app to make sure the device is functioning properly.

Technical Specifications

Power Supply	2 × AAA batteries (Replaceable)	
Voltage	3 V DC	
Battery Capacity	1,200 mAh	
Product Life	5 years	
Battery Life	1 year	
Material	ABS	
Alarm Volume	No sound when the temperature or humidity exceeds or falls below the set level (the base station will sound and an app push notification will be sent)	
Indicator Light	Red/Blue	
Operating Temperature	-4–140°F (-20–60°C)	
Operating Humidity	0–100% RH	
Temperature Accuracy	-4–32°F (-20–0°C)	Typical accuracy: ±0.36–0.72°F (±0.2–0.4°C); Maximal accuracy: ±0.72–1.26°F (±0.4–0.7°C)

	32–140°F (0–60°C)	Typical accuracy: $\pm 0.36^{\circ}\text{F}$ ($\pm 0.2^{\circ}\text{C}$); Maximal accuracy: $\pm 0.72^{\circ}\text{F}$ ($\pm 0.4^{\circ}\text{C}$)
Humidity Accuracy	10–90%RH	Typical accuracy: $\pm 2\% \text{RH}$; Maximal accuracy: $\pm 3.5\% \text{RH}$
	0–10%/90–100%RH	Typical accuracy: $\pm 2\text{--}3\% \text{RH}$; Maximal accuracy: $\pm 3.5\text{--}5\% \text{RH}$

Note: The above humidity accuracy data is measured at a constant temperature of 77°F (25°C). When the temperature changes, the accuracy may be affected.

Battery Replacement

1. Remove the back battery cover of the device using the bottom notch.
2. Install the batteries. Ensure battery polarities are matched correctly.
3. Close the back cover by gently pressing it back into place until it clicks.

Maintenance

1. The thermometer hygrometer is rated to work in environments with temperatures ranging from -4°F to 140°F (-20°C to 60°C) and humidity from 0 to 100%RH.
2. Please, always handle these devices with care and do not attempt to disassemble.
3. Do not immerse these devices in water.

Troubleshooting

Problem	Cause	Solution
The thermometer hygrometer cannot be connected to the base station.	The thermometer hygrometer does not enter pairing mode.	Quickly press the Pair button twice on the thermometer hygrometer until it flashes blue rapidly, indicating it has entered pairing mode.
Push notifications failed, or the app prompts show that the operation failed.	The device's batteries have run out.	Replace the batteries.
	The app push notification permission is disabled.	Turn on the push notification permission on the phone.
	The base station is not within the network coverage of the router.	The distance between the base station and the router should be within 170 ft (50 m). Please ensure that the base station is always within the network coverage of the router.
	The communication between the thermometer hygrometer and base station is not stable or they are too far apart.	Reduce the obstacles between the thermometer hygrometer and base station. The maximum distance between the device and the base station in an open environment is 1,700 ft (500 m).

	The network connection of the router and the mobile phone is abnormal.	Make sure the network connection of the router and the mobile phone is normal.
The app shows that the thermometer hygrometer is offline.	The communication between the thermometer hygrometer and base station is not stable or they are too far apart.	Reduce the obstacles between the thermometer hygrometer and base station. The maximum distance between the device and the base station in an open environment is 1,700 ft (500 m).
	The batteries of the thermometer hygrometer have run out.	Replace the batteries.
The app prompts low battery, and the LED indicator flashes once every 60 seconds.	Low battery warning.	Replace the batteries.

FCC Statement

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:

(1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

FAQ

Can it be used in the fridge or freezer?

Using the thermo-hygrometer in a refrigerator or freezer will shorten the battery life and affect the connection of the device in low temperature environments. The recommended ambient temperature for prolonged operation is 14–140°F (-10–60°C).

Can it be used in a high humidity environment for a long time?

Since the device is not waterproof, it is not recommended to use the device in a high-humidity environment (above 80% RH water condensing) for a long period of time.

How do I set the temperature and humidity alarm range?

Go to “Device Settings.” Under the “Temperature Alarm” and “Relative Humidity Alarm” settings, select the temperature and humidity you want to track by moving the slider or choosing from the dropdown list.

How do I export data?

To export data, start by tapping on the thermometer hygrometer on the app's device page to access the data page. Once you're on the data page, scroll down to the bottom and tap the "Export Data" button. Keep in mind that you can only export a maximum of 6 months (180 days) worth of data at a time, so make sure the time span you select falls within this range.

If you need to export data for the entire past year, you will need to do so in two separate batches.

How do I calibrate the temperature and humidity?

The device has been calibrated by precision instruments and usually does not require recalibration. If you still want to calibrate, you can go to “Device Settings” and calibrate the temperature and humidity in the “Calibration” setting.

How do I distinguish which device in the app corresponds to the real device?

The box your device comes in contains stickers. After you add a device to the app, label it by writing its name in the app and on the provided sticker and sticking it to the device.

To distinguish, use the app's test feature. To test the device, go to "Device Settings" and select "Device Test." During the 10 seconds, the LED light during the test will remain solid blue.

Environmental Protection

Waste electrical products should not be disposed of with household waste. Please recycle where facilities are available. Please check with your local authorities or retailers for recycling advice.

Manufacturer and Service Information

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