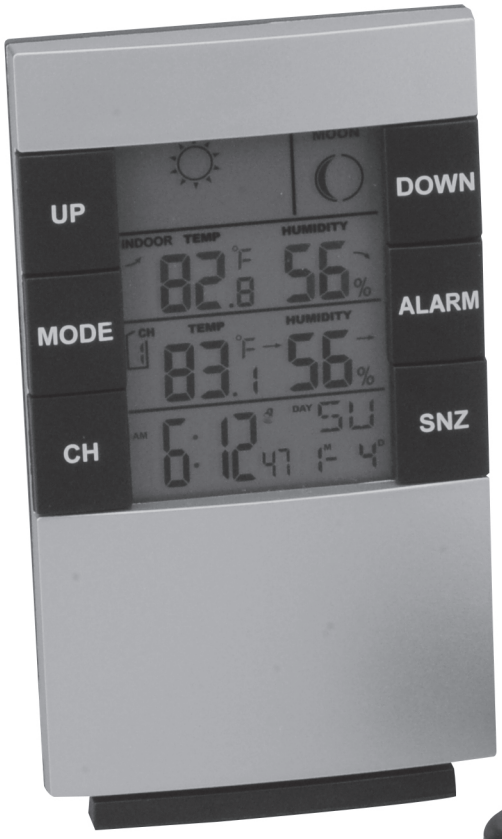
THERMO

YARUCRAFT

WIRELESS DIGITAL INDOOR/OUTDOOR THERMOMETER

User's Manual



433MHz

Power On & Reset:

- After batteries are installed, a buzzer will sound. The thermometer will begin to detect the sensor's ambient temperature, hygrometer, and start receiving RF for 3 minutes. It will exit RF reception after 3 minutes.
- Temperature default unit: °F
- The default time is: AM 12:00 .
- The perpetual calendar defaults to: 01/01/2014.

Keys Operation:

Function / Operation		MODE	ALARM	UP	DOWN	SNOOZE
Standard Mode	Press Once	Switch Year/Month	Check AL1.AL2 Time	Turn on the AL1/AL2 Symbol	Switch C/F	Backlight Lasts 5 Seconds
	HOLD	Enter Time Setting Mode	Enter Alarm Setting Mode	Switch Year/Week	---	Snooze Time Setting
Time Setting	Press Once	Determine The Setup Item	---	Step Forward	Step Back	Backlight Lasts 5 Seconds
	HOLD	---	---	8 seconds Forward	8 Seconds Back	---
Alarm Setting	Press Once	---	---	Step Forward	Step Back	Backlight Lasts 5 Seconds
	HOLD	---	---	8 seconds Forward	8 Seconds Back	---

Key Controls：

MODE

Standard Mode

- Press and hold Mode for 2 seconds, enter setting.
- The setting order: Year→Month→Day→Language→12/24→Hour→Minute→Exit.
- Automatically clears seconds when minutes are setting.
- Press mode once during setup to confirm the setting result and enter the next setup item.
- The language order：EN→GE→IT→FR→NE→ES→DA→RU（The default is English).
- If no mode operation is entered within 8 seconds, it will automatically exit the setting mode and save data during the setting process.

CH

Standard Mode

- Press CH once to switch RF channels (CH1 --> CH2--> CH3).
- Press and hold the CH button for 3 seconds to manually enter the RF registration state. After entering the registration state, the current channel data will be cleared. If no information is received within 3 minutes, the channel registration program will close.

UP

Standard Mode

- Press UP, and turn on：AL1, AL2, AL1+AL2.
- Press UP for 2 seconds, enter Year/Week.

Setting Mode

- Press UP once to increase one step at a time.
- Press and hold UP to enter the fast increment mode.

DOWN

Standard Mode

- Press DOWN once to switch temperature °F/°C.

Setting Mode

- Press DOWN once to decrease one step at a time.
- Press and hold DOWN to enter the fast decrease mode.

ALARM

Standard Mode

- Press ALARM once to see the alarm time.

Setting Mode

- Press ALARM once to enter the ALARM1 time setting. Press ALARM again to enter the ALARM2 time setting.
- Hold ALARM until the numbers begin to flash, then press UP/DOWN to set the time.

SNZ

Standard Mode

- Press SNZ once to turn on the backlight for 5 seconds. Press and hold the SNZ for 2 seconds to enter the SNOOZE time setting.
- SNOOZE default time is 5 minutes, press UP/DOWN to adjust the time. Adjustable range is 5 to 30 minutes. Press SNZ to confirm setting and exit.

Function and Description

RF Reception Function

- After the batteries are installed, it will automatically enter the RF receiver for 3 minutes after the temperature and humidity are detected.
- Under standard mode, press and hold CH for 2 seconds to clear the current channel data and re-enter the registration state.
- The receiving period of CH1 is 50 seconds, CH2 53 seconds, CH3 56 seconds.
- If the registered CH temperature and hygrometer do not receive a valid signal of the same ID code within 60 reception cycles, the CH temperature and hygrometer will be displayed. “--.-”.
- If the temperature is ever missing, allow time for the signal to be received again and the temperature display will be restored.
- If no connection has received RF signals for 60 cycles, please restart RF reception for 3 minutes.
- After batteries are installed, if the indoor receiver does not receive RF data, it will no longer automatically restart the 3-minute reception. To turn on the reception again, you need to manually press and hold CH for 3 seconds to enter the re-registration.

Alarm Function

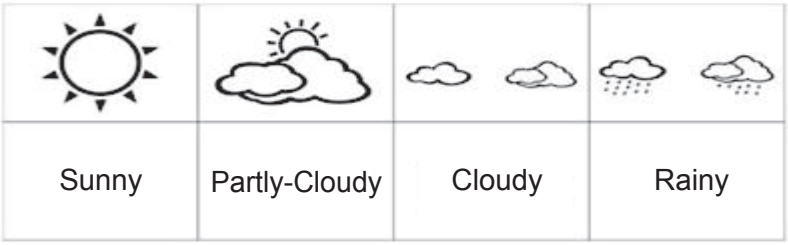
- BUZZER alarm time is 2 minutes, alarm format as below：
  a. 0-10s： BI/s
  b. 10-20s： BI BI/s
  c. 20-30s： BI BI BI BI/s
  d. After 30s, Continuous BI
- When alarm is ringing, press “SNZ” to delay sound according to the set SNOOZE time. Press other keys to exit the alarm.
- When snoozed, another alarm time will be entered based on the snooze time selected.
- In the nap state, press SNZ to turn on the blacklight for 5 seconds, press other keys to stop the current nap and end the current ALARM function. In the nap state, the corresponding ALARM bell symbol and nap symbol will flash at the same time.
- After ending the nap time, open the sound alarm again. The nap function can be used repeatedly.
- If you have a second alarm set during a time one alarm is snoozed or sounding, the second alarm will sound, canceling the snooze/sound of the first alarm.

Temperature and Hygrometer Function

- Indoor Temperature Range：32°F - 122°F（0°C - 50°C）.
- Indoor Hygrometer Range：20%-99%.
- Outdoor Temperature Range： -58°F - 158°F（-50°C - 70°C）.
- Detection Period: 30s.
- Temperature Resolution：0.1°F, 0.1°C
- Hygrometer Resolution：1 %.
- When the alarm sounds, the temperature and hygrometer detection are suspended.

Weather Forecast Function

- The weather forecast is the trend of weather conditions in the next 24 hours.
- Weather is divided into 4 categories: Sunny ＞Partly-Cloudy ＞Cloudy ＞Rainy (Algorithm according to internal documents: Smart-Tech Temperature and Hygrometer Forecasting Algorithm)



- Weather forecasts must be under natural ventilation conditions. There will be large errors in indoor conditions, especially in air-conditioned rooms.

Temperature Trend Detection:

- Based on previous test temperature, if the change range exceeds +1.8°F, it will raise the temperature trend.
- Based on previous test temperature, if the change range exceeds -1.8°F, the refresh trend will lower.
- If the change range does not exceed ±1.8°F, the trend remains unchanged.
- If the cumulative temperature change exceeds +1.8°F in 1 hour, the refresh trend begins to rise immediately.
- If the cumulative temperature change exceeds -1.8°F in 1 hour, the refresh trend begins to go down immediately.
- If the cumulative temperature change within 1 hour does not exceed ±1.8°F°C, the trend remains unchanged.
- When the current temperature is compared with the temperature of 1 hour shows no change, the trend changes to flat.

Hygrometer Trend Detection:

- If the previous test hygrometer change range exceeds +3%, the refresh trend begins to rise immediately.
- If the change range exceeds -3%, the refresh trend begins to go down immediately.
- If the change range does not exceed ±3%, the trend remains unchanged.
- If the current hydrometer is compared to the system 1-hour earlier and the change does not exceed ±3%, the trend changes to flat.

Environmental Comfort Indicator:

Indoor Comfort Indicator:

- Displays indoor temperature, hydrometer data, and temperature pattern changes.
- Any temperature, hydrometer less than 40%, it shows 😐 DRY
- Any Temperature, hydrometer more than 70%,it shows ☹ WET
- Temperature range between: 68°F - 78.62°F, hydrometer range between: 40-70 %, it shows ☺
- Temperature range outside 68°F - 78.62°F, hydrometer range between: 40-70 %, it shows no face.

Electronic Specifications

Battery Voltage =2×1.5V (AAA), Ambient Temperature =77°F

Items	Unit	Min	Standard	Max
1. Supply Voltage:	V	2.6	3.0	3.3
2. Quiescent Current:	uA	--		60
3. RF Receiving Current:	mA	--	--	5.5
4. Alarm Ring Current:	mA	--	--	30
5. Time Accuracy:	S/D	-2	--	+2
6. RF Receiving Distance:	M	50	--	--
7. Numbers of RF Channel:	--	--	3	--
8. Indoor Temperature Range:	°F	0		+50
9. Working Temperature Range:	°F	0		+50
8. Outdoor Temperature Range:	°F	-50		+70
10. Temperature Accuracy 0 ～ 122°F Other Range	°F °F	-1 -2		+1 +2
11. Hydrometer Range:	%	20		99
12. Hydrometer Accuracy:	%	40-80%±5%	Others±8%	
13. RF Receiving Time:	Second	Channel 1 = 50 sec. Channel 2 = 53 sec. Channel 3 = 56 sec.		
14. Low-Battery Indicator	V	2.6		2.8
15. Backlight Current	mA			20
16. Battery Lift	Month	12		

FCC WARNING:

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

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.

Note: 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.