

Temperature/Humidity Weather Station with 7" Colour Display XC0416 **User Manual**

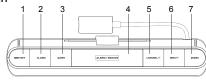




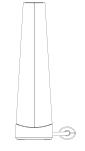
Thank you for selecting this delicate wireless colour weather station with colour display. Utmost care has gone into the design and manufacture of the clock. Please read the instructions carefully according to the version you purchased and keep the manual well for future reference

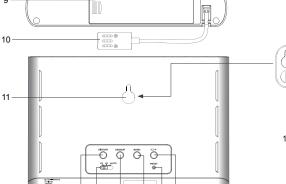
OVERVIEW

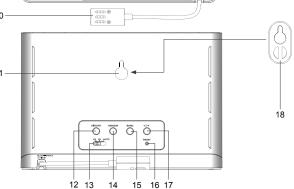
MAIN UNIT











[TIME SET] key

- In normal mode, press and hold for 2 seconds to enter time setting mode.
- In time setting mode, press to step next setting of time and calendar.

[ALARM] key

- In normal mode, press to show the alarm time and turn on/off the alarm.
- In normal mode, press and hold for 2 seconds to enter alarm setting mode.
- In alarm setting mode, press to step next setting of alarm.
- When alarm is sounding, press to stop the current alarm.
- In alert setting mode, press to toggle the HI / LO alert on/off.

[ALERT] key

- In normal mode, press and hold for 2 seconds to enter temperature alert setting
- In alert setting mode, press once to switch between setting options.
- In alert setting mode, press and hold for 2 seconds to confirm input values and return to normal mode.

[ALARM / SNOOZE] key

- When alarm is sounding, press to stop the current alarm and enter snooze.
- When alarm is sounding, press and hold for 2 seconds to stop the current alarm, the clock will sound again in the next day

[CHANNEL / +] key 5.

- In normal mode, press to switch between Channel 1~8 of outdoor sensors
- In normal mode, press and hold for 2 seconds to enter auto-cycle mode of Channel 1~8 temperature readings.
- During auto-cycle mode, press once to return to normal mode.
- In setting mode, press to increase the setting values.

[MEM / -] key

- In normal mode, press to check maximum and minimum temperature reading.
- During max or min record is displayed, press and hold for 2 seconds to erase the current records.
- In setting mode, press to decrease the setting values.

[INDEX] key

- In normal mode, press to toggle the between dew point and heat index
- 8. LCD display
- Battery compartment 9.
- Accommodates 3 x AAA batteries for backup.
- 10. Power jack
- 11. Wall mount hole
- 12. [HISTORY] key
- In normal mode, press to view the past 24 hour weather records.

13. [HI/LO/AUTO] sliding switch

- Slide to the [HI] position for brighter backlight.
- Slide to the [LO] position for dim backlight.
- Slide to the [AUTO] position for Auto backlight that depends on the environment brightness

14. [SENSOR] key

Press once to enter sensor receiving mode.

15. **[BARO]** key

- In normal mode, press to switch baro pressure unit
- In normal mode, press and hold for 2 seconds to enter rel/abs mode

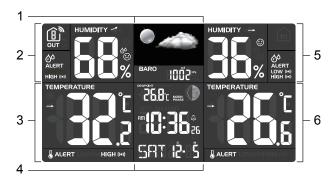
16. [**RESET**] key

- Press once to perform overall function reset.
- In case of malfunction, the unit may require reset.

17. [°C/°F] key

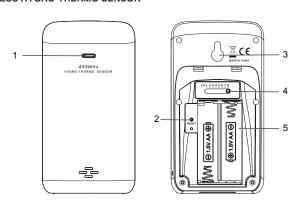
- In normal mode, press to switch between °C /°F format.
- 18. Extend wall mount holder
- To mount the main unit in horizontal viewing angle

LCD DISPLAY



- Weather forecast and baro reading section
- 2 Outdoor humidity section
- 3. Outdoor temperature section
- 4. Time, calendar and weather index display section
- 5. Indoor humidity section
- 6. Indoor temperature section

WIRELESS HYGRO-THERMO SENSOR



- Transmission status LED
- 2 [RESET] key
- Wall mounting holder
- [CHANNEL] slide switch
- Assign the sensor to Channel 1,2,3,4,5,6,7 or 8.
- Battery compartment
- Accommodates 2 x AA size batteries.

GETTING STARTED

WIRELESS SENSOR

- Remove the battery door.
- Insert 2 x AA size batteries into the battery compartment. Make sure you insert them the right way according to the polarity information marked on the battery compartment.
- 3. Close the battery door.

Note:

- Once the channel is assigned to a Wireless Hygro-Thermo sensor, you can only change it by removing the batteries or resetting the unit.
- Avoid placing the sensor in direct sunlight, rain or snow.

MAIN UNIT

- 1. Plug the power adapter to power up the main unit.
- 2. Once the main unit power up, it will enter normal time mode.

Note:

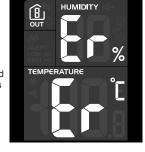
- You can using AAA batteries for backup purpose, remove the battery door and install 3 new AAA size batteries as per the polarity information marked on the battery compartment, then close the battery door.
- If no display appears on the LCD after installing the batteries, press the [RESET] key by using a metal wire.
- To avoid the wireless sensor and main unit pairing fail, please power up the sensor(s) first, and then press [RESET] key in main unit after sensor setup.
- You may not receive the signal immediately. Due to the atmospheric disturbance, the best reception often occurs during night time.

WIRELESS SENSOR SIGNAL RECEIVING

- . In normal mode, press [SENSOR] key once to start receiving the sensor signal of current on displaying channel. The signal icon will flash.
 For example, when CH 1 is displayed, pressing [SENSOR] key will start receive for CH 1 only.
- The signal icon will flash until the reception succeeded. If no signal is received within 5 minutes the icon will disappear.

Receiving wireless signal after manual reset or the [SENSOR] key is pressed	(B)
When waiting for signals, "" will display in the readings field	(B) OUT
Good wireless sensor signal	(B)

- If the signal for Ch 1~8 has discontinued and does not recover within 1 hour, the signal icon will disappear. The temperature and humidity will display "Er" for the corresponding channel.
- 4. If the signal does not recover within 48 hours, the "Er" display will become permanent you need to replace the batteries of "Er" channel's sensors and then press [SENSOR] key to pair up the sensors of each "Er" channels again.



Note:

After replacing the batteries of the wireless sensor or the unit fails to receive wireless sensor signal of a specified channel. During the failed channel is displaying, press **[SENSOR]** key to manually receive that sensor signal again.

VIEW CHANNEL OF MULTIPLE WIRELESS SENSORS

- 1. In normal mode, press [CHANNEL / +] key to switch the display between CH 1~8.
- In normal mode, press and hold [CHANNEL / +] key for 2 seconds to enter autocycle mode, after a bi sounds, it will alternately displays the channels at 4 second intervals.
- 3. During auto-cycle mode, press [CHANNEL / +] key once to stop auto-cycle and display the current channel.
- 4. Using auto-cycle mode will only display the communicated channels. For example, when CH 1 and 6 have received the signal from the corresponding sensor, holding [CHANNEL / +] key for 2 seconds will only toggle the readings of CH 1 and 6. Other channels will be neglected.



TIME AND CALENDAR SETTING

- In normal mode, press and hold [TIME SET] key for 2 seconds to enter date and time setting mode.
- 2. Press [CHANNEL / +] or [MEM /] key to adjust the setting.
- 3. Press [TIME SET] key to enter the next setting
- The setting sequence: 12/24H → hour → minute → second → year → DM/MD → month → day → time offset → language
- When you complete the setting, press [TIME SET] key or leave the unit for 60 seconds to return to normal mode.

12/24H setting	\$ 6: Hr	EK:Hr
Hour/Minute/ Second setting		
Year setting	20	Û
Month/Day setting	8 - 5 _{D/M}	5- 8 _{M/D}
Month/day setting	\$ B M/	Š- 🛱 _D
Time offset setting	00H → 01H23H →	1 1 H _r 23H01H → 00H
Language setting	EN →FR →DE →E	S →IT →NL→RU

ALARM TIME SETTING AND DISPLAY

- In normal time mode, press and hold [ALARM] key for 2 seconds until the alarm hour digit flashes to enter alarm time setting mode.
- Press [CHANNEL / +] or [MEM / -] key to change the value. Press and hold the key for quick-adjust.
- 3. Repeat the above operations to set the alarm time in this order: Hour \rightarrow Minute.
- When you complete the setting of Minute, Press [ALARM] key or leave the unit for 60 seconds to return to normal mode.



USING ALARM AND SNOOZE FUNCTION

- 1. Set the desired alarm time as described in the above section.
- Or press "ALARM" key to display the alarm time, press it again to turn on alarm function with the alarm icon "A" displayed on the LCD.
- 3. When clock reach the alarm time, alarm sound will start.

Where it can be stopped by following operation:

- a) Auto-stop after 2 minutes alarming if without any operation and the alarm will activate again in the next day.
- b) By pressing [ALARM / SNOOZE] key to enter snooze that the alarm will sound again after 5 minutes.
- c) By pressing and hold [ALARM / SNOOZE] key for 2 seconds to stop the alarm and will activate again in the next day
- d) By pressing [ALARM] key to stop the alarm and the alarm will activate again in the next day.

Note

- The snooze could be used continuously in 24 hours.
- During the snooze, the alarm icon "A" will keep flashing.

TEMPERATURE FUNCTIONS

- 1. Press [°C / °F] key to switch between °C /°F temperature unit.
- When the temperature is below -40°C or above 70°C, "Lo" or "Hi" will be displayed respectively.



TEMPERATURE AND HUMIDITY TREND

The temperature and humidity trend indicator shows the trends of changes in the forthcoming few minutes. Arrows indicate a rising, steady or falling trend.

Arrow indicator	→	→	7
Trend	Rising	Steady	Falling

COMFORT INDICATION

The comfort indication is a pictorial indication based on indoor air temperature and humidity in an attempt to determine comfort level.



Note:

- Comfort indication can vary under the same temperature, depending on the humidity.
- There is no comfort Indication when temperature is below 0°C(32°F) or over 60°C (140°F)

THE SNOW ICON

When the outdoor temperature is 3°C or below, the flashing snow icon will appear in outdoor section.



WEATHER FORECAST

The device contains sensitive pressure sensor built-in with sophisticated and proven software that predicts weather for the next $12 \sim 24$ hours within a 30 to 50 km (19-31 miles) radius.





Note:

- The weather forecast is meant for the next 12 24 hours, it may not necessarily reflect the current situation.
- 2. The weather icon will flash on display when the rainstorm comes.
- The SNOWY weather forecast is not based on the atmospheric pressure, but based on the outdoor temperature. When the outdoor temperature is below -3°C (26°F), the SNOWY weather indicator will be displayed on the LCD.

BAROMETRIC/ATMOSPHERIC PRESSURE

TO SELECT THE DISPLAY MODE

Press and hold the **[BARO]** key for 2 seconds to toggle between: **ABSOLUTE** the absolute atmospheric pressure of your location **RELATIVE** the relative atmospheric pressure based on the sea

TO SET RELATIVE ATMOSPHERIC PRESSURE VALUE

- Press and hold the [BARO] key for 2 seconds until ABSOLUTE or RELATIVE icon flashes.
- 2. Press [CHANNEL / +] key or [MEM /] key to switch to RELATIVE mode
- Press the [BARO] key once again until the RELATIVE atmospheric pressure digit flashes.
- 4. Press [CHANNEL / +] key or [MEM /] key to change the value.
- 5. Press the [BARO] key to save and exit the setting mode.

Note:

- The default relative atmospheric pressure value is 1013 hPa (29.92 inHg), which refers to the average atmospheric pressure.
- When you change the relative atmospheric pressure value, the weather indicators will change along with it.
- The relative atmospheric pressure is based on the sea level, but it will change with the absolute atmospheric pressure change.

TO SELECT THE MEASUREMENT UNIT FOR THE BAROMETER

- Press the [BARO] key to enter unit setting mode.
- 2. Use the [BARO] key to change the unit between inHg / mmHg / hPa.
- 3. Press the [BARO] key to confirm.

HEAT INDEX / DEW POINT

TO VIEW HEAT INDEX

Press the [INDEX] key repeatedly to show **HEAT INDEX** value.



Note:

Heat index is only calculated when temperature is 27° C (80° F) or above, and based solely from the temperature and humidity measured from the outdoor wireless sensors.

TO VIEW DEW POINT

Press the [INDEX] key repeatedly to show DEW POINT value.



Note:

The dew point is the temperature below which the water vapor in air at constant barometric pressure condenses into liquid water at the same rate at which it evaporates. The condensed water is called dew when it forms on a solid surface. The dew point temperature is calculated from the outdoor temperature and humidity measured at the outdoor wireless sensors.

HISTORY DATA (WEATHER RECORDS IN THE PAST 24 HOURS)

The main unit will record past 24 hours weather data automatically that included past indoor and outdoor temperature & humidity, Baro, and Dew point / heat index records.

- 1. Press the [HISTORY] key to check past 1 hour history records.
- Press [HISTORY] key repeatedly to show past 2, 3, 4, 5......24 history weather records.

MAX/MIN RECORD

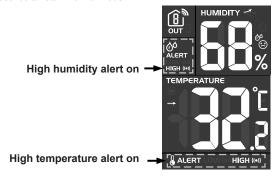
The main unit preserves the MAX/MIN weather data records since the last manual reset.

- In normal mode, press [MEM /] key once to show the current channel's maximum temperature.
- Press [MEM /] key repeatedly to show the MAX/MIN reading in this order: current channel's maximum temperature → current channel's minimum temperature → current channel's minimum humidity → indoor maximum temperature → indoor minimum temperature → indoor maximum humidity → indoor minimum humidity → maximum baro reading → minimum baro reading →
- When the MAX/MIN records are shown, the display will return to normal mode after leaving the unit for 6 seconds.
- To erase the MAX/MIN records of indoor or current channel, press and hold [MEM /] key for 2 seconds when the unit is displaying MAX/MIN records.

ALERT SETTING AND DISPLAY

The unit can setup temperature HI/LO alert for indoor and up to 8 outdoor channels.

- In normal mode, press and hold [ALERT] key for 2 seconds to enter alert setting mode and the "IN" icon will flash. Press [CHANNEL / +] or [MEM / -] key again to choose outdoor channel.
- Press [ALERT] key to switch between channel, temperature HI, temperature LO, humidity HI and humidity LO alert setting.
- Press [CHANNEL / +] or [MEM /] key to modify the value by 0.1 °C/°F for temperature or 1% for humidity, you can also press and hold to quick adjust the value.
- 4. When setting temperature Hi or Lo value, press [ALARM] key to toggle the alarm on/off of the regarding HI / LO alert.
- When finished, press and hold [ALERT] key for 2 seconds or without pressing keys for 60 seconds to return normal mode.



Note:

- You cannot enter conflicting HI / LO values in the setting. For example, if the HI temperature alert value is 40°C, you cannot enter more than 39.9°C for the LO alert, and so forth.
- When the alert is triggered, the alarm will sound and the alarm icon on the display will flash. Press [ALARM / SNOOZE], [ALARM] or [ALERT] key to stop the alarm sound. If you ignore the alarm, it will stop after 2 minutes.
- When auto-cycle mode, if any alarm is triggered the display will switch to the regarding channel. You can press [ALARM / SNOOZE], [ALARM] or [ALERT] key or leave the unit for 2 minutes to stop the alarm. The display will return to auto-cycle mode afterwards.

MOON PHASE

The main unit can show the Southern hemisphere moon phase status, below is the table which illustrate how the moon will appear on the main unit

Southern Hemisphere	Moon Phase
MOON PHASE	New Moon
MOON PHASE	Waxing Crescent
MOON PHASE	First quarter
MOON PHASE	Waxing Gibbous
MOON PHASE	Full Moon
MOON PHASE	Waning Gibbous
MOON PHASE	Third quarter
MCON PHLASE	Waning Crescent

LOW BATTERY ICON

If the main unit or sensor is low in battery, the low battery icon " " will display. The icon will only appear when the corresponding channel is displayed.

For example, the sensor of **CH 1** is low in battery. When **CH 1** is displayed, the icon " I will show.

Not:

The batteries in main unit are only for backup purpose, the battery life cannot maintain for long time usage.

IMPORTANT NOTE

- Read and keep these instructions.
- Do not subject the unit to excessive force, shock, dust, temperature or humidity.
- Do not cover the ventilation holes with any items such as newspapers, curtains etc.
- Do not immerse the unit in water. If you spill liquid over it, dry it immediately with a soft, lint-free cloth.
- Do not clean the unit with abrasive or corrosive materials.
- Do not tamper with the unit's internal components. This invalidates the warranty.
- The socket outlet shall be installed near the equipment and shall be easily accessible.
- Only use fresh batteries. Do not mix new and old batteries.
- Do not dispose old batteries as unsorted municipal waste. Collection of such waste separately for special treatment is necessary.
- Attention! Please dispose of used unit or batteries in an ecologically safe manner.
- Technical specifications and user manual contents for this product are subject to change without notice.



SPECIFICATIONS

MAIN UNIT

Dimensions (W x H x D)	202 x 138 x 38mm
Main power	DC 5V, 1A adaptor
Backup battery	3 x AAA size 1.5V batteries (Alkaline battery recommended)
Barometer range	540 to 1100hPa, 405 to 825mmHg, 15.95 to 32.49inHg
Operating temperature range	-5°C to 50°C (23°F to 122°F)
Display temperature range	-40°C to 70°C (-40°F to 158°F)
Display humidity range	RH 1% to 99 %
Resolution of temperature	1 decimal place of °C / °F
Resolution of humidity	1%
Number of sensors support	Up to 8 units

WIRELESS SENSOR

Dimensions (W x H x D)	61 x 113.6 x 39.5mm
Main power	2 x AA size 1.5V batteries (Lithium battery recommended for low temperature environment)
Operating temperature range	-40°C to 60°C (-40°F to 140°F)
Operating humidity range	RH 1% to 99 %
RF frequency	433MHz
RF transmission range	30 meters

Distributed by: TechBrands by Electus Distribution Pty. Ltd. 320 Victoria Rd, Rydalmere NSW 2116 Australia

Ph: 1300 738 555 Int'l: +61 2 8832 3200 Fax: 1300 738 500 www.techbrands.com

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