

Professional Weather Station with Wireless Weather Wane



Instruction Manual





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Back Cover

Thank you for purchasing the HOLMAN iWeather WS5029 - Weather Station, Please read the operating instructions carefully to familarize yourself with the features and modes of operation before using the instrument.

NOTE: Always remember to use high quality batteries & change them at least once per year.

Package Contents

Carefully unpack and remove the contents:

- 1x weather station main unit
- 1x stainless steel mast
- 1x thermo-hygro sensor
- 1x rain sensor

Technical Details

- Six keys: MODE, +, -, ALARM, ALERT, SNOOZE/LIGHT
- Time display in 12/24 format
- Continuous perpetual calendar up to 2099
- Display of Date, Month and Day of week
- Day of week display English
- Dual alarm with snooze function (5 minutes alarm interruption)
- 5 weather forecast: sunny, partly sunny, cloudy, rainy, storm .
- Barometer and bar and data of 12 hours history for air pressure
- Indoor /outdoor temperature and humidity with trend
- Max./min. of temperature and humidity
- Thermometer measuring range inside: °C to +50 °C , outside -20°C~60 °C
- Temperature display elective in °C or °F
- Temperature alert for indoor and outdoor
- Living space humidity
- Moon phase
- Wind speed in mph /kmh, wind speed 0~256kmh
- Wind direction in 16 directions
- Rainfall in mm and inch and display of 1hour, 24hour, TOTAL. Rain volume (0~999.9MM)
- Low battery indication
- Blue background illumination LED.
- Main unit batteries: 2 x AA Batteries 1.5V (not included)

Outdoor sensor:

- Frequency: 433 MHz
- Transmission range: 100 meters in open area.

- 1x wind speed sensor
- 1x wind direction sensor
- Mounting screws
- Stainless steel accessory for fixing the mast.

Batteries: 2 x AA Batteries 1.5V (not included)

upon the enviroment, it will be shortened if with

** Actual distance may be varied depending

interference .such as concrete wall etc.

Glossary

- 1. Weather Forecast
- 2. Living space humidity
- 3. Indoor humidity trend
- 4. Indoor low battery
- 5. Rainfall
- 6. Air Pressure
- 7. Wind direction

- 8. Date
- 9. Wind speed
- 10. Month
- 11. Day of week
- 12. Moon Phase
- 13. Dual alarm
- 14. Time
- **15.** RCC symbol (not applicable in Australia)
- **16.** Summer time (not applicable in Australia)
- 17. Outdoor low battery
- 18. Outdoor humidity
- 19. Outdoor humidity trend
- **20.** Indoor humidity

- 21. Outdoor temperature
- **22.** Outdoor temperature alert
- 23. RF symbol
- 24. Indoor temperature alert
- 25. Outdoor temperature trend
- 26. Indoor temperature
- 27. Indoor temperature trend



A = MODE B = + C = - D = ALARM E = ALERT F = SNOOZE/LIGHT



Assembly of the Weather Station parts may take a little time.

The following procedure is recommended for assembling and installing the sensor unit.

1) Fit the Wind Speed Sensor to the 'U Shaped' plastic bracket (labelled '1' in illustration on page 4)



2) Fit the Wind Direction Sensor to the other end of the 'U Shaped' plastic bracket (*labelled '1' in illustration on page 4*)



The following diagram shows how the parts go together.



3) Mount the Rain Gauge on the bracket with 4 screws holes (labelled '2' in illustration above)

Place the 'bucket' into the bracket & fix the 4 bolts & nuts in place, so the Rain Gauge is securely positioned.

The cover of the Rain Gauge can be removed by rotating in an anti-clockwise direction. When replacing the cover it will only fit in one position. When you find the correct position it fits snugly on, and then rotate it clockwise to secure the cover in place.

It is important that the cover is securely located.



4) Mount the plastic brackets onto the stainless steel mast (*Please refer to illustration opposite*)

Starting at the top, insert the 'U Shaped' plastic bracket (labelled 1) into the top of the stainless steel pole & fix with a bolt & nut.

Slide plastic bracket (labelled 2) with the Rain gauge onto the pole from the bottom and secure with a bolt and nut.

Slide the remaining plastic bracket (labelled 3 with nothing attached so far) onto the pole from the bottom and secure with a bolt & nut.

Orientate the brackets 2 & 3 to ensure the Rain Gauge is away from the Wind Sensors and is in 'clear air'. Likewise the Thermo Hygro Sensor (once attached) will need to be in 'clear air'.

Once orientation is good, make sure all the bolts and nuts are secure.

5) Mount the Thermo Hygro Sensor to the plastic bracket (*labelled '3' in illustration opposite*)

Insert the cables from the Wind Sensor & the Rain Gauge into the correct sockets. These are labelled on the plastic under the sockets.

Next, install the batteries - (refer to Page 6)

Then fit the Thermo Hygro Sensor to the plastic bracket (labelled 3) and fix with a bolt & nut.

Once secure, take the louvered housing part and slide it over the Thermo Hygro Sensor. (There are 4 small guide marks inside the louvered housing to help locate it properly)







Note: It is very important that this process is done correctly. The internal and external units must connect through the wireless communication system and the initial power up routine allows this to happen. It is very important both units have the batteries installed within 3 minutes of each other.

You can complete the assembly of the outside sensor unit before the batteries are installed or you can install the batteries before you assemble the sensor unit. The important issue is that the batteries must be installed in BOTH the internal and external units almost simultaneously.

Installing the Batteries

1) Internal Main Display Unit

Open the battery cover located at the back of the unit and insert 2 x AA (Alkaline) Batteries in the correct orientation.

2) External Sensor Unit (Thermo Hygro Sensor)

Slide away the battery compartment lid and insert 2 x AA (Alkaline) Batteries in the correct orientation.

Note: If you have inserted both sets of batteries within 3 minutes of each other the 2 units will automatically "sync up". You know this will have happened when the outside temperature, humidity and wind speed / direction shows on the main unit.

If this does not happen then press the ALARM button for more than 3 seconds and the units will re-establish their wireless connection.

If this still fails to connect the units, then remove both sets of batteries and leave for 5 - 10 minutes so both units have time to reset themselves. Then re-install both sets of batteries as stated above and wait for the wireless connection to be made.

ALWAYS USE NEW GOOD QUALITY ALKALINE BATTERIES

Remember - After replacing batteries in either of the units to press the ALARM button for more than 3 seconds to allow the synchronisation process to occur.

Checking the Wireless Connection is Achieved & Maintained

1) It is very important to install new high quality batteries in both the outside thermometer / hygrometer module and the internal receiver. Make sure the low battery indicator on the internal receiver does not show the batteries are low. Low batteries can cause the wireless connection to fail.

2) Make sure the red LED on the outside thermometer / hygrometer is flashing about once every minute (shown in picture 1).



3) Make sure the plugs from the Rain and Wind gauges are plugged into the correct sockets on the thermometer / hygrometer (shown in picture 2 below).



Picture 2

Checking Wireless Connection

4) Before installing the outside unit, test that the wireless connection is made.

i) Hold the "ALARM" button on the internal unit for 3 seconds.
ii) The RF Symbol will flash on the LCD for approximately 3 minutes (See Picture 3).
iii) While this is flashing insert (within 3 minutes) the batteries into the external thermomter / hygrometer (shown in picture 1). The LED light will flash when the unit is transmitting.



Picture 3



If successful the internal unit looks like picture 4

If unsuccessful the internal unit looks like picture 5





5) Once the units are communicating then install the outside unit.

When placing both the inside and outside units remember they are subject to interference. Try to:-

i) Install both units as close as possible to each other.

ii) Try and avoid outside interference by not placing them near computers, T.V.'s or T.V. Arials etc.iii) Also remember concrete walls & floors can interupt transmissions. Try and avoid as much as possible.

6) If the connection is successful initially & then fails occassionally, try to reduce the distance between the 2 units.

7) To "re-connect", please hold the "ALARM" button down for 3 seconds, the symbol will flash for 3 minutes and re-connection should be achieved.

Barometer Information

The barometric pressure is affected by 2 factors.

i) The Local conditions in the atmosphere. A local storm will create a lower reading for example.ii) The height you are located above (or below) sea level. The barometric pressure will reduce

by approximately 10 hpa for every 100 metres you go above sea level.

If you are comparing the barometric pressure you are reading against the reading from the MET office, you must allow for the local differences.

The receiver unit allows you to adjust for the altitude you are above or below sea level. To adjust this hold the **Snooze/Light** button down for 3 seconds. Then adjust the number (in metres) for your height above (or below) sea level. Once the outoor sensor is assembled and the wireless connection is working you need to install the sensor in a suitable location.

Hints for Installation

1) The sensor needs to be installed in 'Free Air' where the wind is flowing freely and rainfall is unimpeeded.

2) A good place is on a sewer vent pipe that goes above the roof line of the house or shed.

3) A very effective way of fixing to a vent pipe is to use 3 or 4 cable ties that can secure the stainless steel pole in place, ensuring the sensors are located above the vent pipe.

Very Important Hint to ensure the wind direction is displayed correctly

You must orientate the weather sensor so the wind direction on the inside display unit is correct. It is important to have the base of the wind direction indicator aligned with the physical direction.

To make this easy please align the "North" indicator sticker with the NORTH direction. This should be done as you fix the weather sensor pole to whatever is supporting it.

For more information regarding this product and to watch the video of how it works please scan the QR code with your mobile device.



1) Introduction

Once the sensor unit is installed it is important to set the main internal receiver unit.

There is a lot of information shown on this display unit and most of the measurements can be displayed in more than one measurement standard.

For example the clock can operate in 12 hour AM & PM mode or in a 24 hour military style.

The rainfall can be in millimetres (mm) or in inches (in). The choice of how you run the measurements is yours.

To set all the parameters you must work your way logically through the measurements.

The numbers and settings are controlled by six setting keys on the top & back of the main unit. These are labelled **MODE**, +, -, ALARM, ALERT & SNOOZE / LIGHT.

2) Initial Operation

After inserting the batteries the main unit will connect with the outdoor sensor by wireless signal.

The 2 units must be properly "synchronised". This should have been done during assembly. If not, the process take about 3 minutes to do. It is done automatically by both units providing both sets of batteries are installed within 3 minutes of each other. You will know when the connection has been made once the outside measurements are displayed on the main unit.

If a wireless connection is not made you can start the "sync" process by holding down the "ALARM" button for more than 3 seconds.

3) Initial Adjustments

When you first instal the batteries the first adjustment you can make is the "altitude setting". You will note that the pressure will display a flashing number. This reading is in metres and refers to the height above or below sea level.

You should adjust this to reflect the altitude of the receiver unit by pushing the "+" or "-" buttons. This adjustment is necessary to ensure the barometric pressure reading is accurate. This is because the barometric pressure decreases with altitude.

Once adjusted push the Snooze/Light (f) button.

Next you will see the weather forecast (i) flash. By using the "+" or "-" key you can change this forecast to match what best fits your current weather conditions.

Once adjusted push the Snooze/Light (f) button.

HINT: This feature can also be accessed by holding down the Snooze/Light key for more than 3 seconds. The receiver unit allows the adjustment of altitude between 200 below and 2000 metres above sea level.

4) Setting the Time, Date, °C or °F, Pressure in hPa or inhg & Rainfall in mm or in

To make these adjustments you must work through all the settings in sequence. If you stop for more than 20 seconds without adjusting a setting the unit will automatically default out of the programming cycle. If this happens you must start again.

To start hold the 'MODE' button down for 3 seconds.

- The 12/24 hour will flash. Use "+" and "-" to select the option you require then press 'MODE' to confirm.
- Next the display for the time zone will flash. To select the Australian time zone please leave as "00" and press 'MODE' to confirm.
- Next the DM/MD will flash, Use "+" or "-" to select the option you require then press
 'MODE' to confirm.
- Next the display for the year will flash. Use "+" or "-" to select the year then press
 'MODE' to confirm.
- Next the display for the month will flash. Use "+" or "-" to select the month then press
 'MODE' to confirm.
- Next the display for the date will flash. Use "+" or "-" to select the date then press
 'MODE' to confirm.
- Next the display for the hour will flash. Use "+" or "-" to select the hour then press
 'MODE' to confirm.
- Next the display for the minutes will flash. Use "+" or "-" to select the minutes then press
 'MODE' to confirm.
- Next the language selection for the display of weekdays will flash.
 Use "+" or "-" to select the language then press 'MODE' to confirm.
- Next the C/F for temperature will flash, Use "+" or "-" to select then press
 'MODE' to confirm.
- Next the hpa/inhg for air pressure will flash, Use "+" or "-" to select then press
 'MODE' to confirm.
- Lastly the mm/inch for rainfall and kmh/mpg will flash, Use "+" or "-" to select then press
 'MODE' to confirm.

Once you have completed all the '**MODE**' selections and confirmed them, your unit will be ready to display your choice of measurements on screen.

Hint:

 The clock automatically changes from set-up mode to time display mode if no keys are pressed for 20 seconds.

5) Daily alarm set-up

- Press 'MODE' to switch from the time display to A1 display.
- Press and hold 'MODE' for 3 seconds, the alarm time will flash.
- The alarm time hour will flash. Use "+" or "-" to select the hour then press
 'MODE' to confirm.
- next the minutes will flash. Use "+" or "-" to select the minutes then press
 'MODE' to confirm.
- Use the same set up as above for A2.

6) Daily alarm on/off

- 1st press "ALARM" to activate the alarm 1 with alarm symbol showing.
- 2nd press "ALARM" to cancel the alarm 1, then activate the alarm 2 with alarm symbol showing.
- 3rd press "ALARM" to activate the alarm 1 and alarm 2 with alarm symbol showing.
- 4th press "ALARM" to cancel all the alarms.

Hint:

- The clock automatically changes from set-up mode to time mode if no keys are pressed for 20 seconds.
- The alarm sounds for 2 minutes if no key is pressed to stop it.

7) Snooze function

To activate the snooze function, follow the steps below

- Press the key "SNOOZE/LIGHT", while the alarm sounds, to activate the snooze function.
- If the snooze function is activated, the alarm symbol will flash.
- The alarm will repeat after 5 minutes.
- The snooze function can be stopped by pressing any key.

12/24 hours mode

 The time display can be in 12 (AM/PM) or 24 hours mode, please follow the manual set-up to select

°C/°F temperature display

• The temperature display can be in °C or °F, please follow the manual set-up to select.

8) Max./ Min. for the indoor/outdoor temperature and humidity

 Press "+" to display the indoor/outdoor max./min. temperature and humidity, hold "+" for more than 3 seconds to delete the max./min. readings.

Temperature alert set-up

- Press "ALERT" for more than 3 seconds, the upper limit of inside temperature will flash, use "+" or "-" to set the maximum alert temperature.
- Next press "ALERT" and the lower limit of inside temperature will flash, use "+" or "-" to set the minimum alert temperature.
- Next press "ALERT" and the upper limit of outside temperature will flash, use "+" or "-" to set the maximum alert temperature.
- Next press "ALERT" and the lower limit of outside temperature will flash, use "+" or "-" to set the minimum alert temperature.
- When the alert is activated, the alert symbol will be shown.

Temperature alert on/off

Press and hold the "ALERT" button to set the temperature alert to "ON" or "OFF".

- Alert ON: The temperature alert symbol will be shown on the display.
- Alert **OFF**: The temperature alert symbol will disappear.

Hint:

- The set-up process cannot be completed if the maximum temperature selected is lower than the minimum selected temperature.
- The minimum temperature selected must at least be 1°C below the maximum selected temperature.

9) Weather forecasts

These are determind from the barametric pressure readings. Sometimes they may vary from the actual weather. There are 5 weather forecasts each of which are depicted in picture form. It can take a few days for the forecaster to accurately predict the future weather. This is because the forecaster is based on the changes in barometric pressure. As described in 3) the weather forecast can be changed immediately after the batteries are installed or the **Snooze/Light** button is held down for 3 seconds.

Sunny Slightly Sunny Cloudy Rainy Storm

The barometric pressure is shown in Hecta Pascals and millimetres of mercury. It is displayed in number format and also represented in bar graph form for the last 12 hours. This shows if the barometric pressure is rising, falling or is steady.

10) Wind speed in mph/kmh (0~256kmh)

 The wind speed can be shown in mph and kmh, please follow the manual set-up to select mph/kmh, the display of the speed is updated approximately every minute.

Wind direction

 There are 16 wind directions, the display of the direction is updated approximately every minute.

11) Rainfall display

- Rain fall can be shown in mm and inch, please follow the manual set-up to select either mm/inch.
- Press "-" to show the rainfall in 1 hour, press again for 24 hours, then again for the TOTAL.
- Press "—" for more than 3 seconds to delete the volume accordingly, for example if the display shows 1 hour and you delete the data, the others options will be unchanged, if the display shows 24 hours and you delete the data, the others options will be unchanged, and so on.
- The max. display reading for the rainfall is up to 999.99mm (99.99inch), at this maximum the display will flash, this data must be deleted by manual selection, or it will not update past these readings.

Hint:

Please make sure you have set if you want the rainfall to clear every 1 hour or every 24 hours. We recommend setting this to every 24 hours because it will read zero very quickly.

Illumination

Press the "SNOOZE/LIGHT" button to activate the screen backlight for 8 seconds.

12) Moon phase display

The weather station uses saved data to show the moon phase

				O		0		
	А	В	С	D	Е	F	G	Н
A: New moon		B:	incre	easin	ig cre	C: First half		
D: increasing 3/4		E:	E: Full moon					F: decreasing 3/4
G: Last half		H:	H: decreasing crescent					

13) Living space humidity

The weather station uses saved data to determine the humidity in the living space and shows the respective symbols.



14) Low battery condition display

The weather station unit displays the low battery condition symbol to show you that the batteries of either the weather station or the outdoor sensor need to be replaced.

- · Weather station low battery condition display: Replace the Indoor Unit batteries
- · Outdoor sensor low battery condition display: Replace the Outdoor Unit batteries

15) RF connection to the outdoor sensor

Press and hold the "ALARM" button for 3 seconds to search for the outdoor sensor, the RF signal symbol at the outside area will flash when trying to connect. RF reception is weaker in rooms with concrete walls (e.g. in the basement) and in office buildings, the connection distance will be shortened if you have any interference. For extreme cases, please put the main unit near a window.

Warranty



Should you have any questions about this product or its operation please telephone our customer service help line on **1300 716 188**.

Holman offer a 1 year replacement warranty from the original date of purchase.

To claim warranty the product must be returned with a copy of the original receipt.

We will honour all statutory guarantees that this product is of acceptable quality (including that it is fit for purpose).



HOLMAN INDUSTRIES 47 Walters Drive, Osborne Park, Western Australia 6017. Tel: 61 8 9204 1011 Fax: 61 8 9204 1013 Web: www.holmanindustries.com.au