# HOLMAN WS5029 Wind Speed Sensor Instruction Manual



Contents

**HOLMAN WS5029 Wind Speed Sensor**

## General Information

Please read the operating instructions carefully to familiarise 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:

- 1× weather station main unit
- 1× stainless steel mast

- 1× thermo hygro sensor
- 1× rain sensor
- 1× wind speed sensor
- 1× wind direction sensor
- 3 x plastic mounting brackets
- Mounting screws
- Stainless steel accessory for fixing the mast

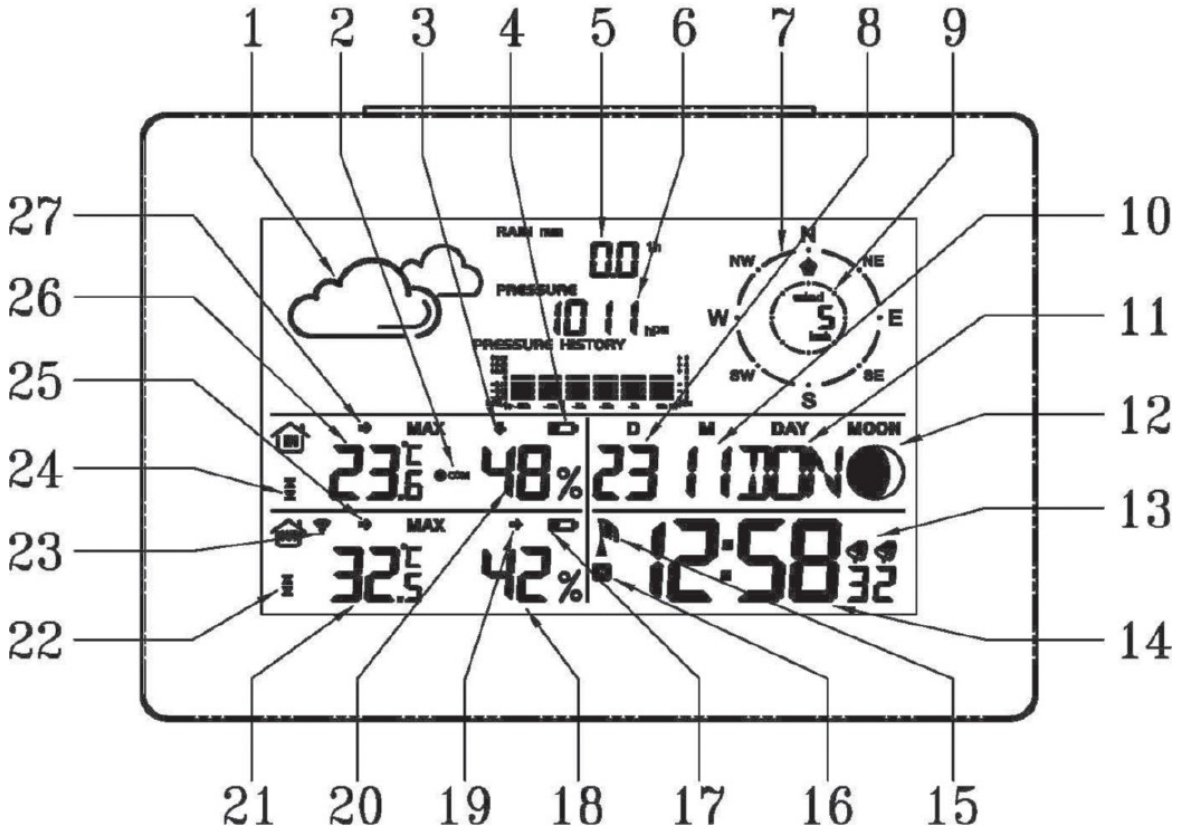
#### Technical Details

- S x keys: **MODE, +, -, ALARM, ALERT, SNOOZE** / **LIGHT**
- T me display n 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 forecasts: sunny, partly sunny, cloudy, rainy,
- Barometer and bar and data of 12 hours h story for a r pressure
- Indoor /outdoor temperature and humidity with trend
- Max /m n. of temperature and humidity
- Thermometer measuring range inside: °C to +50 °C, outside -20°C~60°C
- Temperature displays effective n °C or °F
- Temperature alert for indoor and outdoor
- Living space humidity
- Moon phase
- Wind speed n mph /kmh, wind speed 0~256kmh
- Wind direct on n 16 d reactions
- Rainfall n mm and inch and display of 1hour, 24hour, TOTAL. Rain volume (0~999.9MM)
- Low battery indication
- Blue background illumination
- Main unit batteries: 2 x AA Batteries 1.5V (not included)

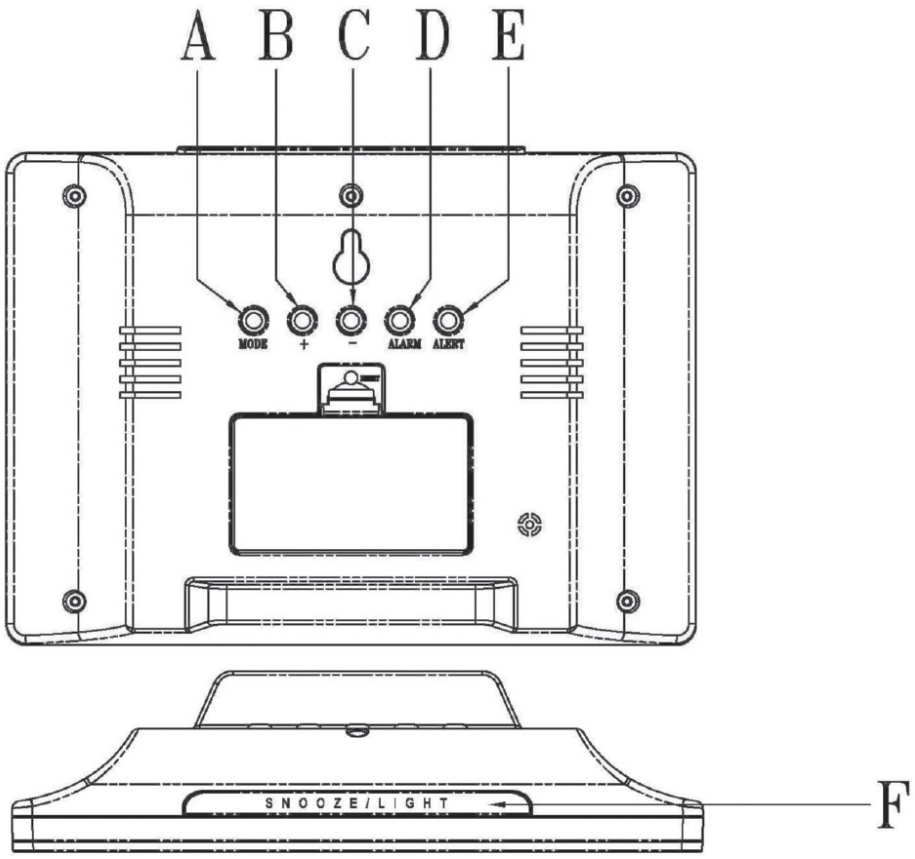
## Glossary

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

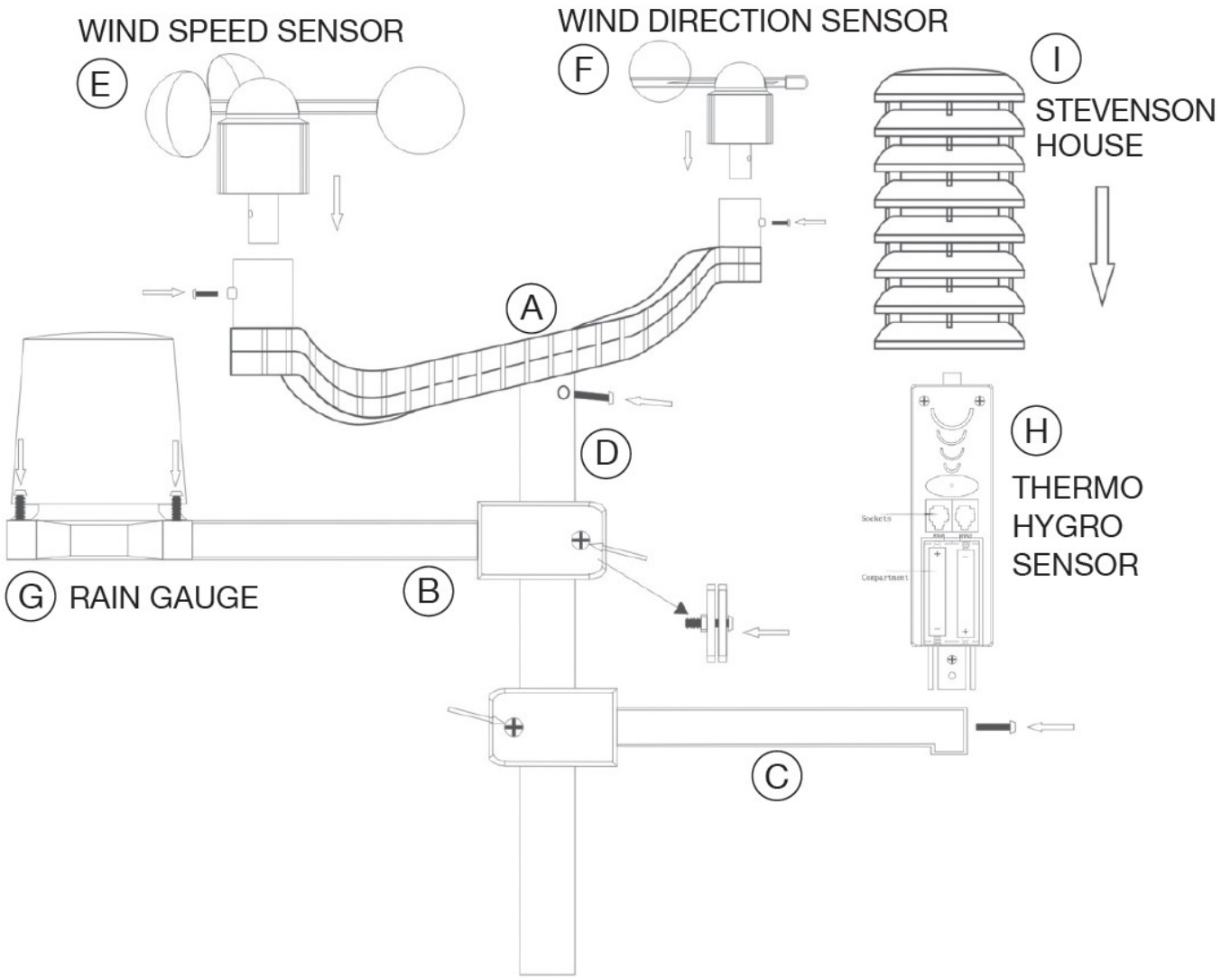



- A = MODE
- B = +
- C = –
- D = ALARM
- E = ALERT
- F = SNOOZE/ LIGHT

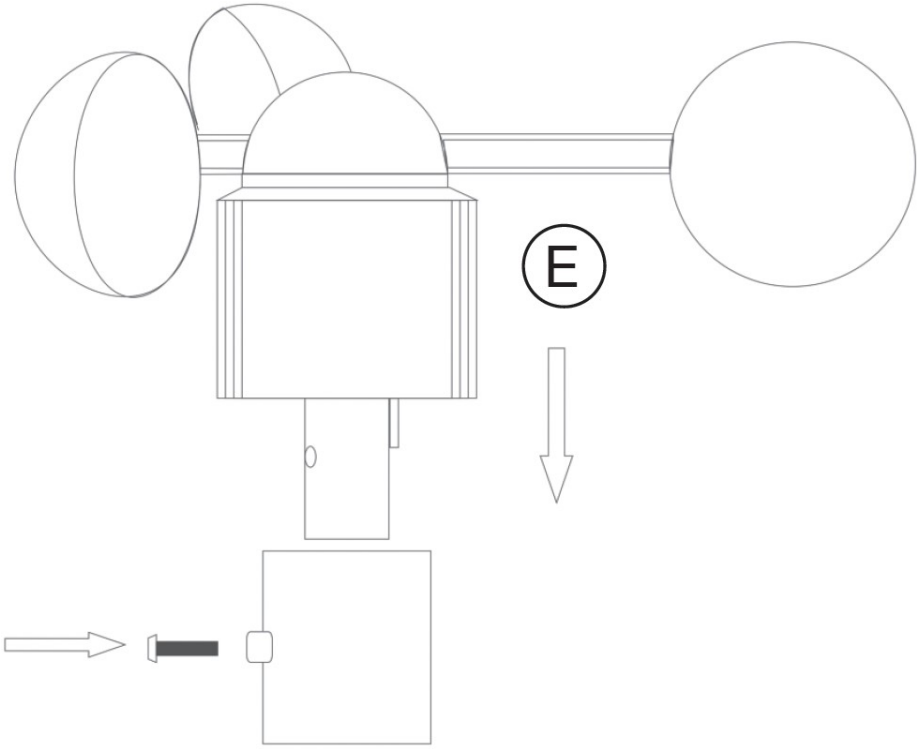



**Assembling The Sensor Unit**

Assembly of the Weather Station parts may take a little time.
The following procedure is recommended for assembling and installing the sensor unit.
Please refer to below diagram through the duration of the assembly steps.

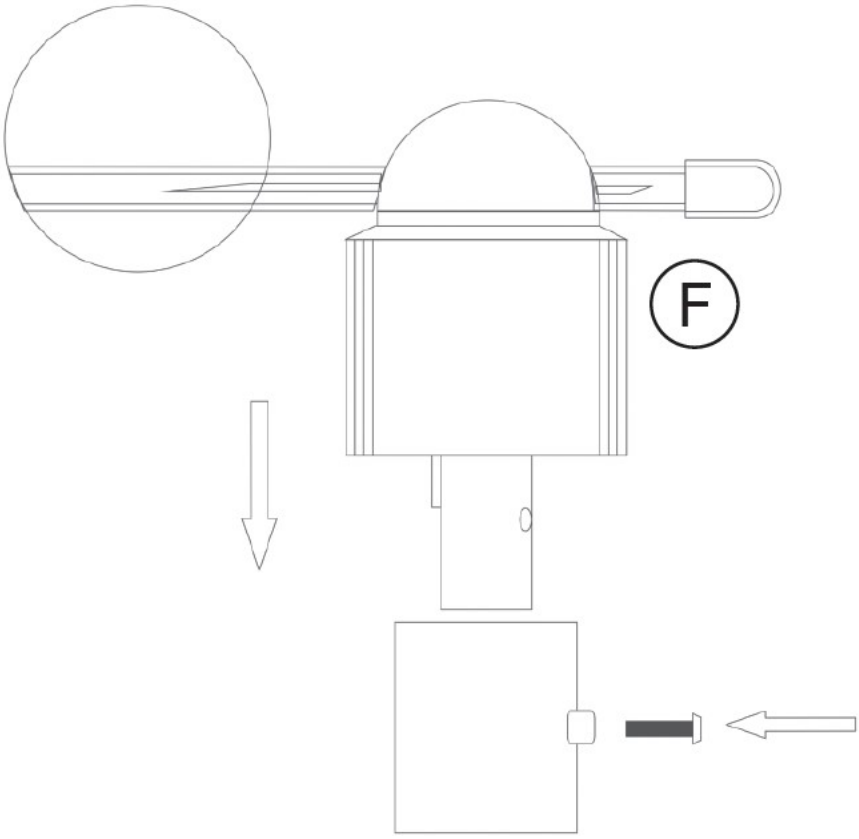



1. Fit the Wind Speed Sensor (E) to the end of the ‘U-Shaped’ plastic bracket (A)
   Insert the Wind Speed Sensor Head (E) into the bracket on the end of the plastic bracket (A) and fit the bolt and nut. Check that the buckets rotate freely. You will join the cable from this Wind Speed Sensor in the next step.



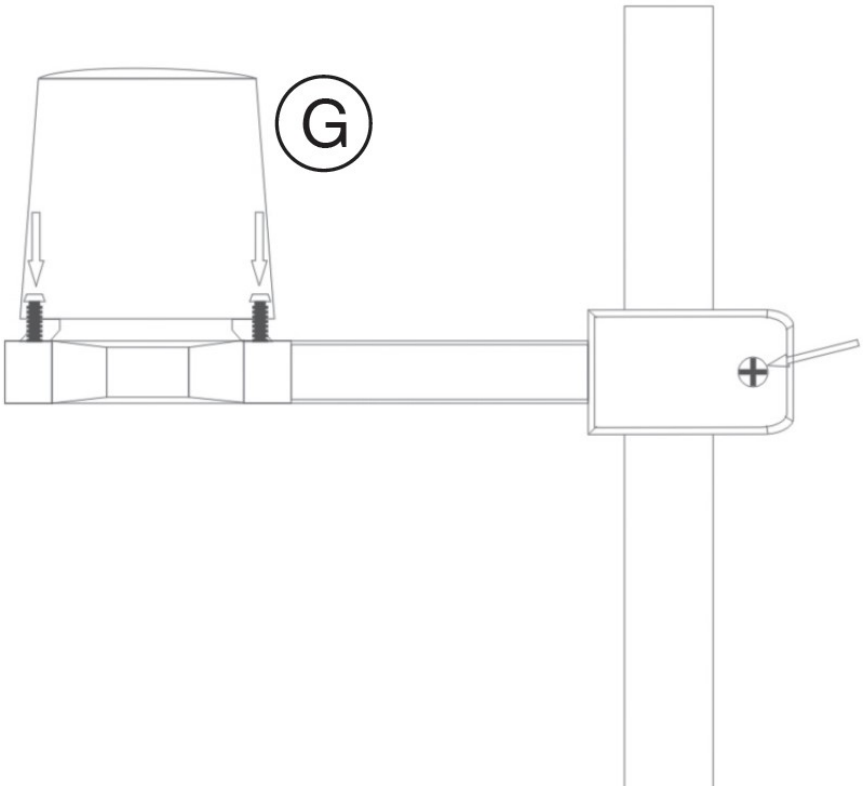
2. Fit the Wind Direction Sensor (F) to the other end of the ‘U Shaped’ plastic bracket (A) and connect the cable (J) from the Wind Speed Sensor (E)

   Insert the cable from the Wind Speed Sensor (E) into the socket in the base of the Wind Direction Sensor (F). Insert the Wind Direction head (F) into the bracket on the other end of the plastic bracket (A) and fix the bolt and nut. Use the clips on the bottom of bracket (A) to secure the cable (J) from the Wind Speed Sensor.




3. Mount the Rain Gauge (G) onto the plastic bracket (B)

   Place the Rain Gauge into the bracket and fix the 4 bolts and nuts in place. 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. Rotate it clockwise to secure the cover in place. It is important that the cover is secure.




4. Mount the plastic brackets (A, B & C) onto the stainless steel mast (D)

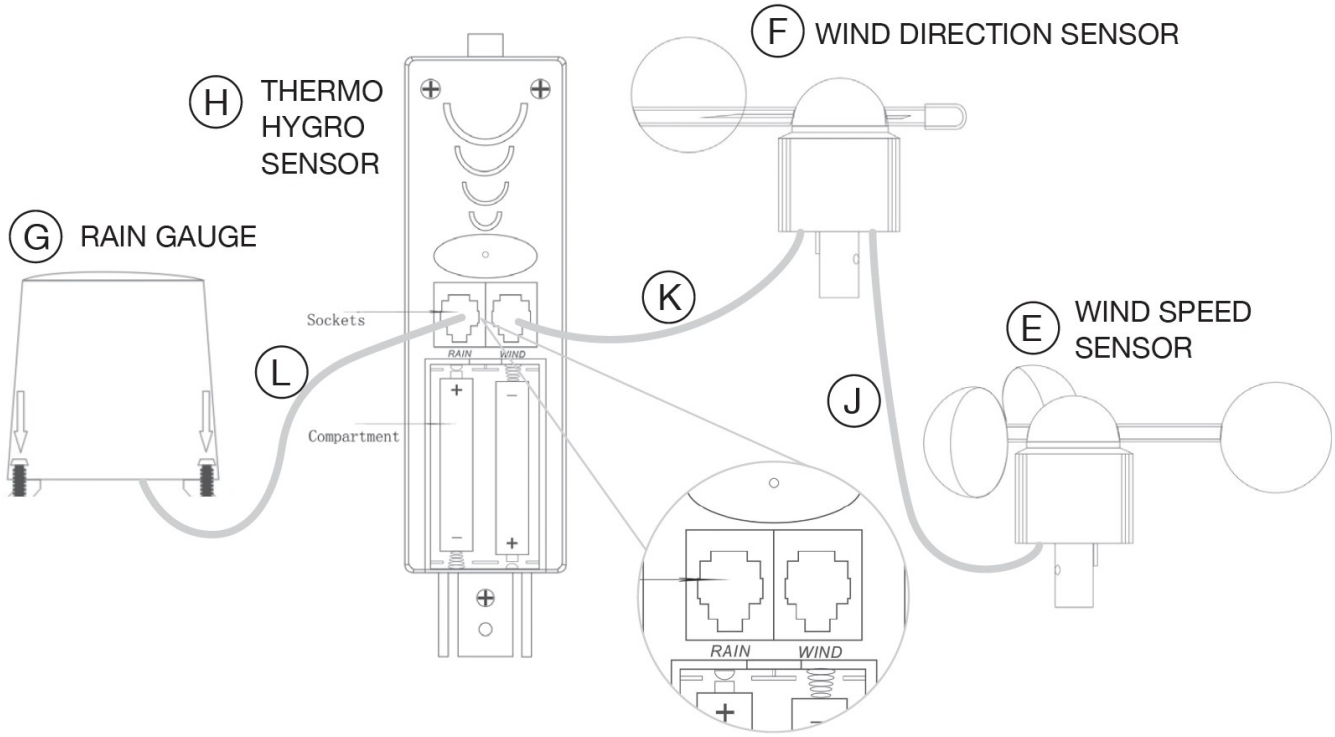
Starting at the top, insert the ‘U Shaped’ plastic bracket (A) into the top of the stainless-steel pole (D) and fix with a bolt and nut.

Slide plastic bracket (B) with the Rain Gauge onto the pole from the bottom and secure with a bolt and nut.

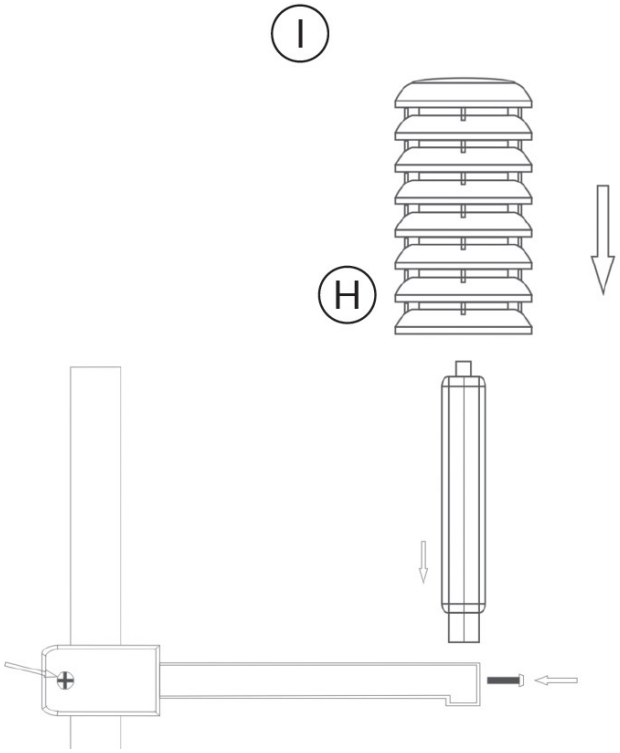
Slide the remaining plastic bracket (C) with nothing attached so far, onto the pole from the bottom and secure with a bolt and nut.

Orientate the brackets A & B to ensure the Rain Gauge is away from the Wind Sensors and ensure that they do not come into contact. Likewise, the Thermo Hygro Sensor (once attached) will need to have space and not come into contact with any brackets. Once orientation is good, make sure all the bolts and nuts are secure.

5. Mount the Thermo Hygro Sensor (H) to the plastic bracket (C)
   After installing the batteries – (refer to Page 6) fit the Thermo Hygro Sensor (H) to the plastic bracket (C) and fix with a bolt and nut.
6. Connect the Wind Direction Sensor (F) and Rain Gauge (G) into the Thermo Hygro Sensor (H)
   Connect the remaining cable (K) from the Wind Direction Sensor (F) into the socket labelled “WIND” on the Thermo Hygro Sensor (H). Connect the cable (L) from the Rain Gauge (G) into the socket labelled “RAIN” on the Thermo Hygro Sensor (H).




7. Add the Stevenson House (I) over the Thermo Hygro Sensor (H)
   Now that the Wind Direction Sensor and Rain Gauge cables are secure, take the Stevenson House (I) and slide it over the Thermo Hygro Sensor (H). There are 4 small guide marks inside the Stevenson House to help locate it properly.




## Powering Up the Weather Station

**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.

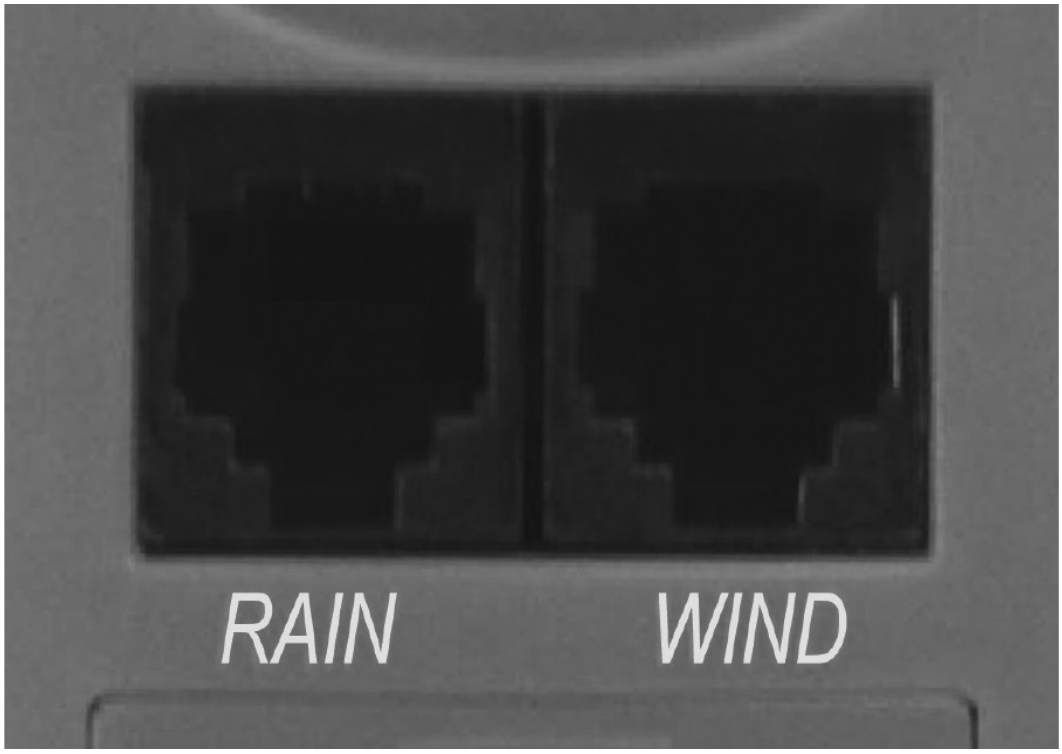
## Checking Wireless Connection

**Checking the Wireless Connection is Achieved & Maintained**

1. It's 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 / hygrometers flashing about once every minute.

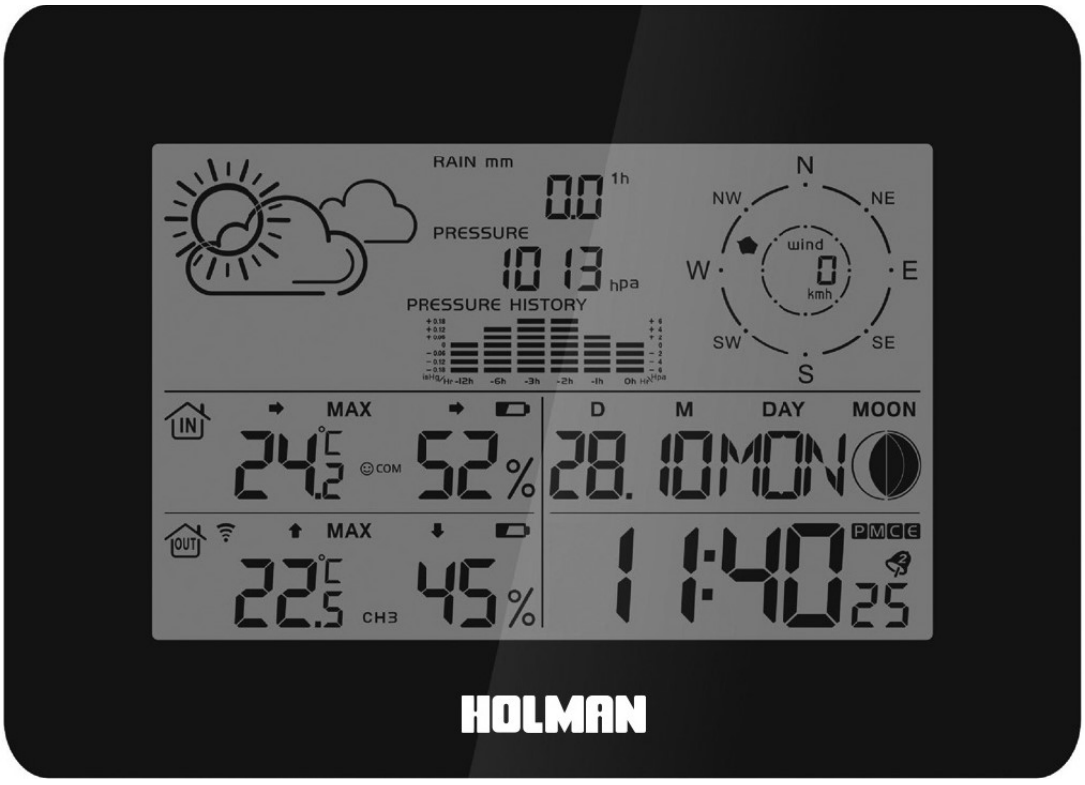
*Picture 1*

3. Make sure the plugs from the Rain and Wind gauges are plugged into the correct sockets on the thermometer / hygrometer.




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


IN
OUT


RAIN mm
0.0
1h
PRESSURE
1013
hpa
PRESSURE HISTORY
N
NW
NE
W
E
SW
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wind
0
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24.2
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DAY
MOON
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MON
OUT
MAX
22.5
°C
CH3
45
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11:40
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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.
6. If the connection is successful initially & then fails occasionally, 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 reconnection should be achieved.

Barometer Information

The barometric pressure is affected by 2 factors.

1. The **Local** conditions in the A local storm will create a lower reading for example.
2. The height you are located above (or below) sea 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 offce, 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.

## Installation of the Weather Vane

Once the outdoor sensor is assembled and the wireless connection is working you need to install the sensor in a suitable location.

#### Hints for Installation

- The sensor needs to be installed in ‘Free Air’ where the wind is flowing freely and rainfall is unimpeded.
- A good place is on a sewer vent pipe that goes above the roof line of the house or shed.
- 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.

www.holmanindustries.com.au/product-registration/

## Documents / Resources

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|  | HOLMAN WS5029 Wind Speed Sensor [pdf] Instruction Manual<br>WS5029, Wind Speed Sensor |