

Common issues with Weather Stations and how to fix them!

There are a few common questions from people regarding their weather stations and the answers below will hopefully give you the answers you are looking for!

I'm not getting any outdoor readings on my base station from my outdoor sensors, what should I do?

This is one of the most common issues that we see here, and in general it is quite an easy issue to rectify. There are steps below that will assist you in getting the sensor to reconnect with the base station and in most instances will rectify the issue without any further steps needed.

- 1) Bring the outdoor sensor in from outdoors and place it approximately 1-3 metres away from the base station.
- 2) Remove all batteries (this includes the outdoor sensor/sensors and the base station) and allow all items to completely drain for approximately 20 minutes.
- 3) Put the batteries back in as per the instruction manual ensuring they are put back in in the exact order detailed within the manual.
- 4) Leave the sensors and the base station together for a minimum of 2-3 hours to ensure full synchronisation has occurred.
- 5) If this does not resolve the issue, repeat the process using brand new batteries, as it only takes one dead battery to stop the sensor from transmitting.

My rain gauge is giving higher than expected readings, how can I test it to see if it is accurate?

This issue is a tedious one to investigate and requires some patience to determine if your rain gauge is performing as expected. The simplest way to do this is to pour a known amount of water through your gauge to determine if it matches what you have poured through. There is a method detailed below for testing your rain gauge, this check is based on a 0.2mm per tip rain gauge:

- 1) Pour 54.4mm at a steady rate over three minutes, this should give 10 counts (2mm based on 0.2mm tips)
- 2) Repeat this step 5-10 times and then average them to ensure they are within specification.
- 3) If your gauge is within calibration then this is all you need to do.
- 4) If your readings are low and you have a station that offers a calibration screw you can adjust it to match the expected 2mm.

My rain gauge isn't giving any readings, what should I do?

The most common issue that we see present itself is cobwebs building up on the tipping bucket/spoon. This means that the bucket/spoon cannot tip as it is held in place by the web. This therefore means that no readings will be recorded. The best way to avoid this is to clean your weather station every 6 months and to make sure spiders are not building webs in your gauge.

The other common issue we see is a build-up within the gauge itself which then prevents precipitation from going in to the gauge. This can also be rectified by a clean every 6 months to ensure the gauge is free of debris and rain can flow freely into the gauge.

My temperature readings are much higher than expected, what is going on?

Correct positioning of your temperature sensor is most commonly the problem here. When you position any temperature sensor it needs to be placed in a shady position or out of direct sunlight. The ideal position for a temperature sensor is fixed in a north facing position. If it is only a wireless temperature/temperature and humidity sensor it can be positioned under eaves or a tree.

If this is not possible as the temperature sensor is combined into your weather station then you should study the area you are looking to place the station, monitor the garden during the day and take note which part stays shaded. This position will give you the temperature conditions that most closely match shaded air temperature.

If you are experiencing high temperature readings on the base unit (indoor console) this can be caused by being close to a window where it receives direct sunlight. It could also be caused when it is next to an area that emits heat such as a TV or computer. To eliminate this position the console in a shaded area away from sources that emit heat.

If you have any issues with a weather station that you purchased through Instrument Choice please contact one of our friendly Scientists via [email](#) or phone on 1300 737 871 and they will be only too happy to assist in resolving the issue!