

## ERROR CODES

Located next to the RESET switch, a small lamp flashes every 8 seconds which indicates possible faults as follows:

- 1 Flash** System is up & running normally with no faults.
- 2 Flashes** The **Sim Card** has not been inserted or is locked.
- 3 Flashes** No response from the **iWeather Server**, this indicates that the weather station is not able to connect to the server due to a poor signal, cellular provider is down or there is no data left on the SIM card. (**iWeather continually reloads data monthly as part of the annual fee**). The problem usually corrects itself once connectivity is restored.
- 4 Flashes** No response from **Modem Module** and unit will attempt again in **10 minutes**.
- 5 Flashes** **Battery** is depleted and waiting for the **Solar Panel** to recharge it. **Solar Panel** may be damaged or dirty, please clean it. This can also indicate the battery is faulty and needs to be replaced.

## MAINTENANCE

Always keep the Solar Panel & Rain Funnel clean of debris, especially insects that try to make it their home.

**CHECK THE UNIT AT LEAST EVERY 2-3 MONTHS FOR DEBRIS / SPIDERS AS THIS CAN AFFECT THE DATA READINGS.**

## CONTACT DETAILS

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6536**

The data will automatically be uploaded to the **iWeather data server** every 10 minutes for you to access via the internet or phone App. To register your weather station you must go to the web address: <https://iweather.co.za/register> and fill in the stations details.



SERIAL NO : T R [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ]

Warranty Start Date: [ ] [ ] / [ ] [ ] / 2 0 [ ] [ ]

Station Number: [ ] [ ] [ ] [ ] SIM No.: [ ] [ ] [ ] [ ]

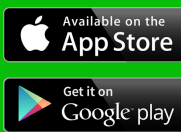


## QUICK INSTALLATION GUIDE



**TORNADO  
TORNADO PLUS  
AVANT-GARDE**

**THANK YOU FOR YOUR PURCHASE!**



## WEATHER STATION INSTALLATION

Probably the worlds most easy to install weather station, simply follow the steps:

1. Gently remove the **Weather Station** from the packaging and slot in the **Blanking Clamp** to the bottom section of the PSU Box and secure with the **screw** provided. (FIG.1)



FIG.1

2. Activate the station by connecting the **Battery** as shown in the image. However, if it is already plugged in, simply press the **START** button. (FIG.2)

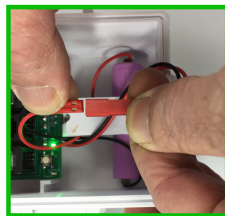


FIG.2

3. Close the **PSU Box** using the **Lid** with the attached **Solar Panel**.

This is done by first clipping down the top of the lid, then push down towards the box. This is to ensure the hooking hinge on the top of the lid is attached correctly - It must be sealed and secured. Gently tighten with the supplied lid screw but do not over tighten.

**Make sure the Lid is closed properly as this will cause water and dust ingress into the PSU Box which will cause premature damage and will void warranty.**

4. Insert the supplied **Metal Spike** into the top of the **Cone** by pushing the spike into the top of the **UV Window**.
5. Mount the **Weather Station** on top of a **2-4 meter pole** with a diameter of **40-70mm** in a low lightning area (use protection if necessary), ensure that the **Solar Panel is facing NORTH** and attach the station using the **two** supplied **cable ties**. Ensure the station is protected from **pests & insects**. Avoid setting up the station near dust roads as this will greatly reduce the longevity. The pole must not waver in the wind as this greatly deteriorates the wind speeds and direction accuracy.

6. Once the Station has been installed using the **two cable ties**, attach the **Rain Gauge** at the back or side of the weather station on the pole between the upper and lower cable ties using the third **cable tie**.

 If a SIM Card has been supplied by iWeather it remains the property of iWeather

## TORNADO SIM CARD INSTALLATION

ONLY REQUIRED FOR STATIONS OUTSIDE OF SOUTH AFRICA

1. Gently unscrew the **three hex screws** on the bottom of the **Cone** using an **Allen Key** of the correct size (**2 mm**). (FIG.3)



FIG.3

2. Remove the **Cone** section by gently pulling it upwards while holding the clamp. Be careful not to pull hard as a small **Antenna** is attached to the inside the **Cone**.

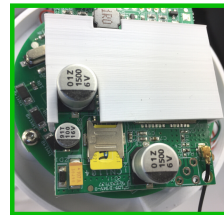


FIG.4

3. Insert the **SIM Card** into the **Modem Module Board** located on top with the cut out corner on the **SIM Card** facing inwards as shown. (FIG.4)

4. Ensure the **SIM Card** is seated as far forward as possible.

5. Re-attach the **Cone** section making sure the larger cut-out fits into the larger groove of the **Cone Base** section. Be careful not to pinch the **Antenna Wire**.

6. Screw the **hex screws** back into place gently and stop turning the moment there is a slight pressure to prevent it from stripping.

## CAMERA INSTALLATION

1. If supplied, attach the **Camera** using a **cable tie** to the pole either, beneath the weather station or to the side of it. Point the camera in the desired **horizontal direction**. (FIG.5)



FIG.5

2. Using an **Allen Key** to loosen the **side screws** of the **Camera** allows you to set the **vertical angle**. Once done screw it back in making sure not to over-tighten. (FIG.6)



FIG.6

3. If not already connected, fit the **Camera RJ12 plug** in to the open port in the stations **PSU Box**.

## WARRANTY INFORMATION

### GENERAL WARRANTY

Each unit is guaranteed for up to **12 months** from the date of purchase and **iWeather** will replace any components at no charge should they become faulty.

### NOT COVERED IN WARRANTY

1. Faults resulting from normal wear and tear after 12 months.
2. Damage arising from negligence, abuse or incorrect usage of the product.
3. Damage arising from a failure to adequately care for the product.
4. Damage arising from unauthorized alterations to the product.

### LIGHTNING

**iWeather** will not replace any components if the unit has been hit or damaged during a lightning storm or any other drastic forces of nature including hail damage. It is up to the **OWNER** to get insurance for the **Weather Station** should they feel it necessary or economical.

### INSECT OR ANIMAL DAMAGE

**iWeather** will not replace any components under warranty should the unit or any of the sensors become damaged due to insect, bird or animal damage.

## TORNADO FAULT FINDING

1. **Reset or Power Up:** Remove the screw found on the solar panel box lid and pull the cover up towards you from the bottom then push upwards and off. **Unplug the GREY Cable** that leads to the **Wind Cone** for a couple of seconds then re-insert it. Press the **RESET/START BUTTON** and the unit will now automatically power up unless the battery power is depleted to which you will see **5 flashes** on the status **LED** display. Put the lid back on properly and refit the screw (do not over tighten).
2. **No Rain Measurement:** The **rain tipper** inside the funnel can easily be stopped from tipping due to insects like spiders making it their home. Dirt can also get trapped inside causing problems. Open the **base of the rain gauge** by pushing the two sides together and un-clipping it. Clean the area using a dry **paint brush or similar** then fit it back in. **The tipper should move up & down freely**. Make sure the **rain gauge** is plugged in the correct port inside the **PSU Box** (most right hand side port).
3. **Battery Not Charged:** Run through the **'Reset & Power Up'** procedure 1 above. Make sure the **Solar Panel** is plugged in on the most left hand side port and the solar **LED** is lit. If the status **LED flashes 5 times** this usually indicates the battery power is depleted and is not getting charged by the solar panel. If the **Solar Panel** is tarnished from the **UV damage** over time, simply wipe or gently rub it with car polish, Brasso or Isopropyl alcohol.