# **Ensentic**

# **EWS** Weather station

# **Assembly Manual**

Rev: 180523





## a) What's included

- Sensors
- Control box
- Tools
- Instruction manual
- mast

# b) Assembly step by step Guide



What included with the 10 foot mast kit 7/32 Allen wrench 5 each 5/16" counter sink screws Base Lower mast

Upper mast



Align mark to ensure bolt hole pattern matches





Screw in partially the center screw, the remaining screws, then tighten



Unbox you're the controller. Remove the brackets from back side and rotate and reattach



The wind speed and direction sensor is shipped with tail removed, replace and tighten screw.



Layout all components of your system

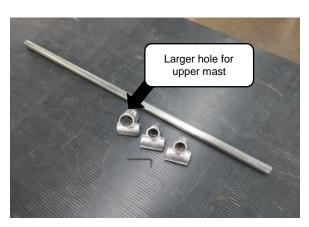




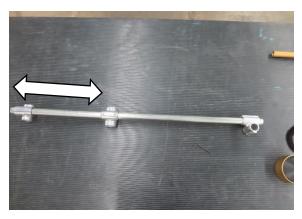
Anchor your mast base onto a flat and level concrete pad, see attached hole layout



**Tighten bolts** 



Layout 1" OD cross-arm tube with crossover brackets with included 5/32" Allen wrench, if you purchased system with solar sensor you will get 3 brackets otherwise you will get 2.

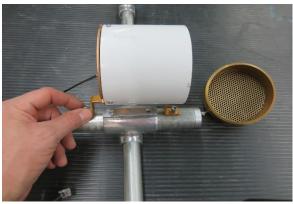


The crossover bracket which has the larger hole for upper mast tubing should be located 16" from one end, this is where the solar sensor will be located. At the other end you will attach the crossover bracket rotated 90 degrees from the others, this is where the wind sensor will be located

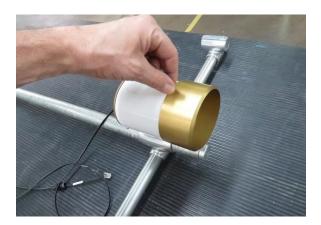




Slip the cross-arm tube assembly on the 1.25" upper mast section. Center it between the 2 holes where the rain gauge bracket attaches if purchased.



Attach the rain gauge bracket (if equipped) and tighten with included screws with the included Allen wrench. You will have to remove the top collector from the rain gauge with the thumbscrew to access one of the screws



Replace the collector and tighten screw



Assemble the solar sensor if equipped











Assemble the wind sensor

Now you can slip the top mast section into the lower mast section and use the included cable ties to hold the cables securely on tubing. Make sure all sensors are level and aligned properly before raising section.

Tighten lightning rod in top of upper mast

watch for mark on tubing to allow 4 inches to remain in bottom section (careful to not complete remove section) and tighten setscrew with 5/32" Allen wrench.





Attach Temperature/Humidity sensor with saddle bracket and tighten with ½ socket wrench



Attach solar panel (if equipped) with saddle brackets and face flat side of bracket to the South and raise panel at appropriate angle to maximise angle with sun depending on time of year. Make sure this bracket is high enough on the upper mast section to allow room for the control panel to be mounted next.



Attach the control box to lowest part of upper mast section and attach with saddle brackets



Carefully insert the connectors thru treaded holes at bottom of control panel.





Connect each sensor to appropriate socket, all should be marked



If equipped connect the solar panel connector.



If powering with 12VDC. Make the power connection to the PCB at this terminal. + positive is marked BATTP and the – is marked BATTN.



tighten with O-rings, sealing for water tight connection





Only after all sensors are attached you can connect the battery

#### WARRANTY AND RETURN POLICY

Ensentic will accept returns within 30 days of purchase as long as the product is in new condition (to be determined by Ensentic). Returns are subject to a 10 % restocking fee.

#### What is Covered

All products manufactured by Ensentic are warranted to be free from defects in materials and craftsmanship for a period of two (2) years from the date of shipment from our factory. To be considered for warranty coverage an item must be evaluated either at our factory or by an authorized distributor.

#### What is Not Covered

The customer is responsible for all costs associated with the removal, reinstallation, and shipping of all warranty items to our factory. The warranty does not cover equipment that has been damaged due to the following conditions:

- 1. Improper installation or abuse.
- 2. Operation of the instrument outside of its specified operating range.
- 3. Natural occurrences such as lightning, fire, etc.
- 4. Unauthorized modification.
- 5. Improper or unauthorized repair.
- 6. Removal of the original serial number label or reprogramming of the electronic serial number voids any warranty on the device. Please note that accuracy drift is expected over time. Routine recalibration of sensors/meters is considered part of proper maintenance and will not be covered under warranty.

This warranty covers the original purchaser of the product or other party who may own it during the warranty period. What we will do

- 1. Either repair or replace (at our discretion) the item under warranty.
- 2. Ship the item back to the customer by the carrier of our choice. Different or expedited shipping methods will be at the customer's expense.