



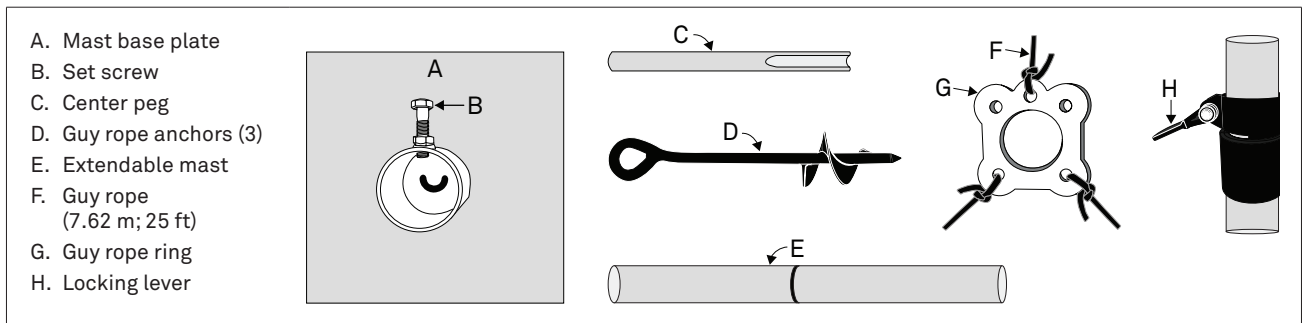
**METER**

## ANEMOMETER MAST ASSEMBLY INSTRUCTIONS

### INTRODUCTION

The anemometer mast is suitable to mount any of the following METER above-ground sensors: ATMOS 41, ATMOS 41W, ATMOS 22, ATMOS 14, ECRN-50, ECRN-100, ECT, PHYTOS 31, PAR, PYR, S2-411/412, S2-421/422, SI-400 series, SIL-411, SN-500, SQ-521, and SU-221. Review the installation section of the sensor user manual. Additional brackets may be required for some products. Also, the mast will not support the weight of an extension arm like the one used with the SRS sensor.

Make sure the items in the anemometer mast kit, shown below, arrive in good condition. Contact [Customer Support](#) with any questions.



### TOOLS NEEDED

The following tools are suggested for use in setting up the Anemometer Mast.

- Measuring tape
- Long metal screw driver
- Mallet
- Wrench
- Level
- Scissors
- Shovel (optional)
- Lighter (optional)

## SET UP MAST

The anemometer mast is intended for use with small, lightweight sensors and in mild weather conditions. Use the following guidelines when choosing a location.

- Ensure the site selection is far from wind obstruction.
- Ensure the site has low animal traffic.
- Choose a site far from sources of high electromagnetic interference (EMI).
- Avoid large rocks.

When the best location is determined, follow the instructions below to set up the mast.

1. Set the base plate (A) in the desired level location.
2. Align the center peg (C) with the center peg slot (Figure 1).
3. Insert the center peg (C) firmly in the soil until the entire lower portion is under ground (Figure 1).

A hammer or mallet may be needed to get it to the required depth, depending on how hard the soil is.

4. Place the mast (E) over the center peg (C) and seat the mast in the base plate (A) circular housing.
5. Carefully tighten the set screw (B) (Figure 1).

**NOTE:** Do not tighten the set screw (B) too tight. Doing so could damage the mast (E).

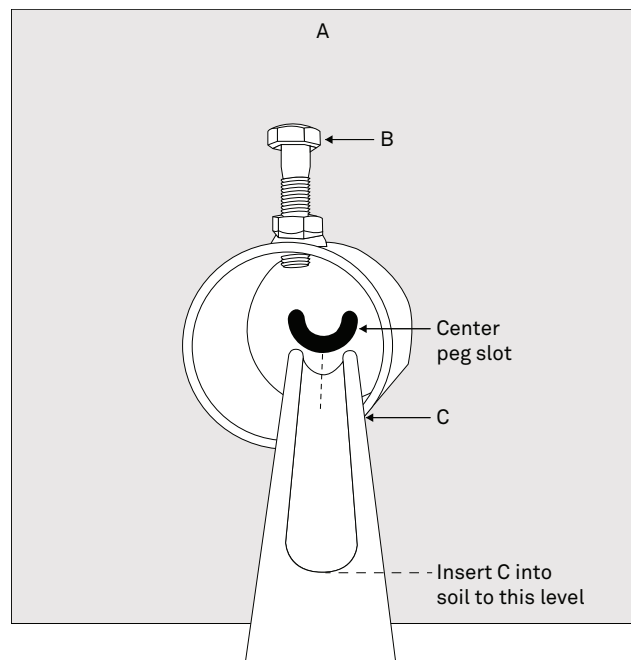


Figure 1 Set up the mast (E)

## ATTACH GUY ROPES

1. Slip the guy rope ring (G) over the mast (E) and slide it down until it sits on top of the locking lever (H).
2. Cut the length of guy rope (F) into three equal lengths of approximately 2.54 m (8.33 ft).
3. Tie each length of guy rope (F) to a hole in the guy rope ring (G) as shown in Figure 3.

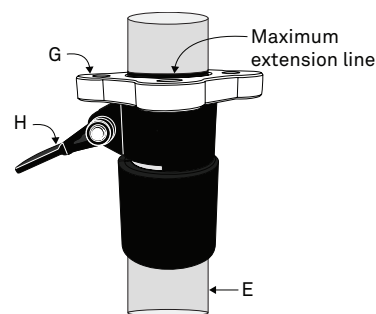


Figure 2 Guy rope ring (G) inserted on mast (E)

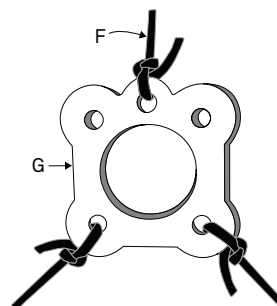


Figure 3 Guy rope (F) tied to guy rope ring (G)

## INSERT GUY ROPE ANCHORS

The three guy rope anchors (D) must be screwed into the soil in a triangular arrangement so the tension created when the guy ropes are tied tight to each anchor will hold the mast upright.

1. Screw each guy rope anchor (D) in the soil at an angle aligned with a guy rope (F) coming off the guy rope ring (G).
2. Screw each anchor (D) into the soil at an angle that is the same as the angle the rope (F) comes from the guy rope ring (G).
3. Screw the guy rope anchors in until only a little of the top loop is showing (Figure 5).

**NOTE:** If the soil is hard, making it difficult to screw the anchor (D) in the soil, use a flat screwdriver (or something similar) in the anchor (D) eye as a lever to help screw the anchor (D) into the soil.

4. Pull each guy ropes (F) to the aligned guy rope anchor (D) and securely tie to the top loop (Figure 4).

**NOTE:** The guy rope (F) should not have any play in it when all three are securely tied. The tension of the guy rope (F) pulling against each other is what stabilizes the mast (E) in an upright position.

Figure 5 shows what the anemometer mast (E) should look like when all three guy rope anchors (D) are secured.

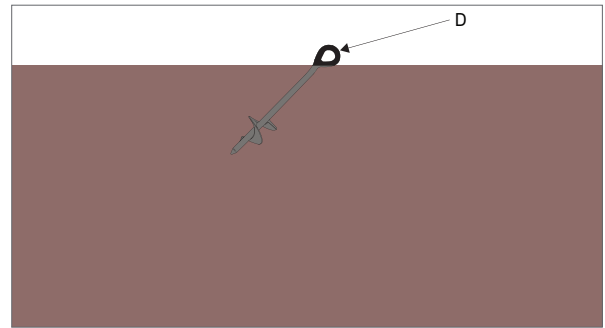


Figure 4 Guy rope screw (D) screwed into soil

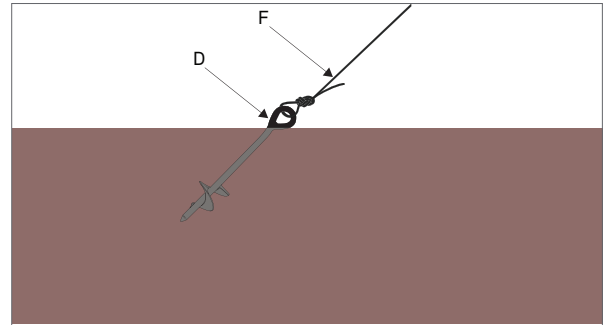


Figure 5 Guy rope screw (D) with rope (F) attached

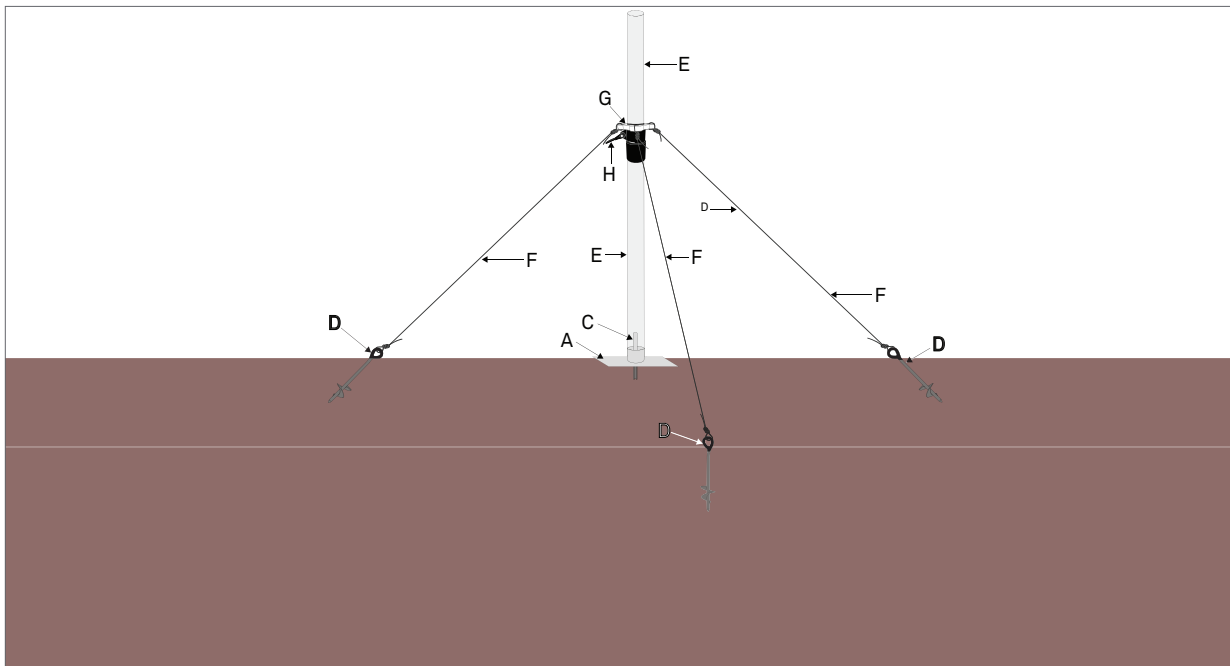


Figure 6 Anemometer mast secured

## ATTACH SENSOR TO MAST

1. Attached the sensor to the upper part of the mast (E).  
Refer to the sensor user manual installation instructions for details on how to attach the sensor.
2. Lift the locking lever (H) by pulling it up (Figure 7).
3. Raise the top portion of the mast (E) to the desired height.

**NOTE:** The height should be no higher than when the maximum extension line is level with the guy rope ring (G) (Figure 7). If the mast (E) is raised higher than it is supposed to be, the top portion of the mast (E) will be unstable.

4. Lower locking lever (H).

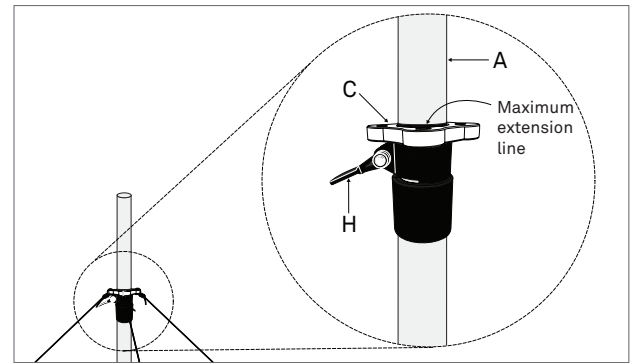


Figure 7 Locking lever (H)