



QST6

Quick-Setup Tripod



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IMPORTANT NOTE: This Assembly Guide is meant to be a general reference to give the installer an overview of the steps required to make this tripod operational.

1 Caution!

- Ensure structural integrity during setup and weather extremes to minimize the chance of damaging the tripod or instruments. Read all instructions carefully. Once the tripod is in full vertical position, securely fasten it to the ground using ground spikes or another method suitable for the soil at the installation site.
- Maintain a distance of at least one-and-one-half times structure height, 20 feet, or the distance required by applicable law, whichever is greater, between overhead utility lines and the structure (tripod, attachments, or tools).
- Read all applicable instructions carefully and understand procedures thoroughly before beginning work.

QST6 fully assembled with optional guy kit

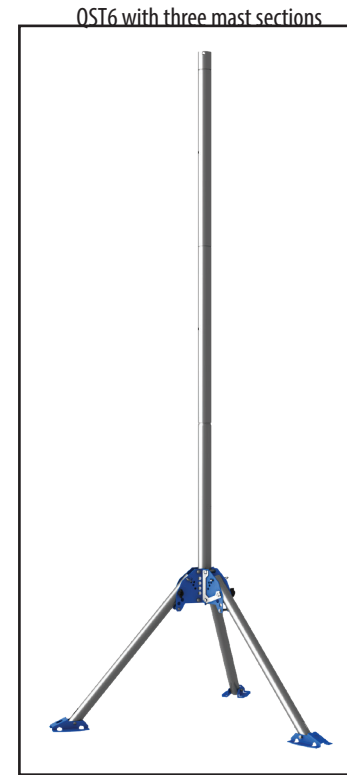
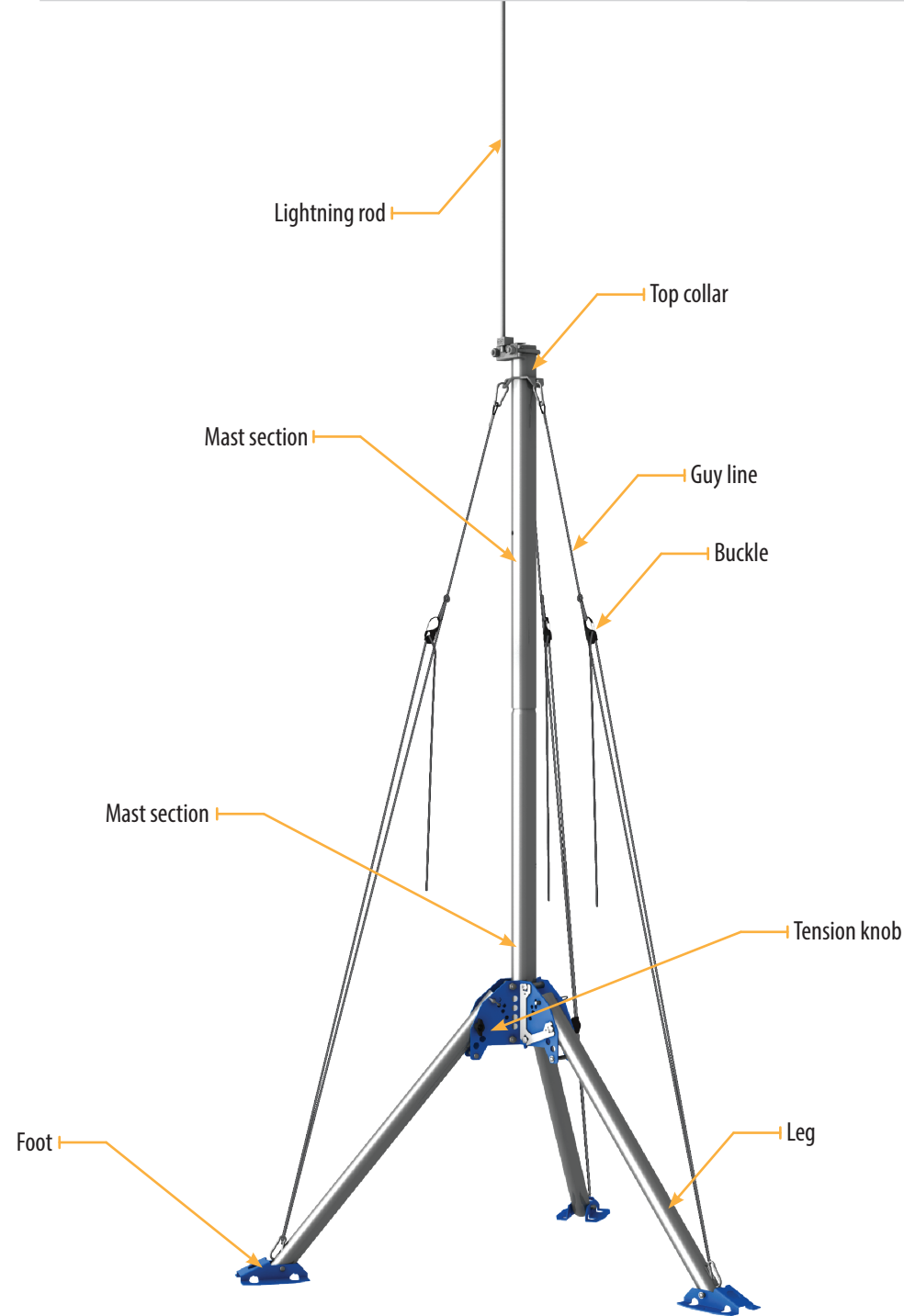
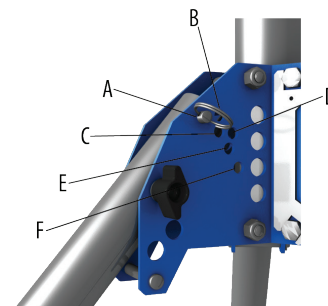


Table 1: Leg position dimensions

Hole	A	B	C	D	E	F
Height	179.5 cm (70.7 in)	174.5 cm (68.7 in)	170.3 cm (67.1 in)	164.4 cm (64.7 in)	158.7 cm (62.5 in)	145.1 cm (57.1 in)
Diameter	103.0 cm (40.5 in)	112.5 cm (44.3 in)	123.4 cm (48.6 in)	130.6 (51.4 in)	139.0 cm (54.7 in)	148.6 cm (58.5 in)

Outer Diameter (mast) : 4.8 cm (1.9 in)
Pipe Size (mast): 1.5 in. IPS sch 10
Leg Length: 66.0 cm (26 in)
Folded size: 71.1 x 20.3 x 20.3 cm (28 x 8 x 8 in)
Weight: 4 kg (9 lb)



Ratings

Tip over/pull out of screw earth anchors: 105 kph (65 mph) for pin hole F
74 kph (46 mph) for pin hole A
Maximum vertical load (excluding guy wire load): 22.7 kg (50 lb)
Guy wire tension: Pull ~14 kg (30 lb) on ropes, equals 28 kg (60 lb) tension
Maximum sustained wind load (guyed or unguyed): 97 kph (60 mph). The guy wires add stability to the mast (less flexing in high winds).

2 Required tools

The QST6 quick-setup tripod is designed to be assembled with minimal tools.

- A hammer is required to drive the ground rod into the ground.
- A screwdriver is needed to attach the ground wire to the lightning rod bracket
- A 1/2 inch open-end wrench or adjustable wrench is needed to secure the lightning rod to the mast.

3 Physical deployment

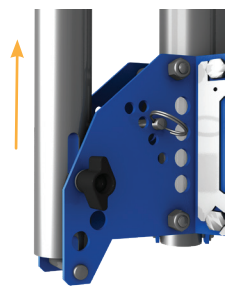
Remove the QST6 from the packaging. Ensure all components are present before assembling the tripod.

Tripod Assembly

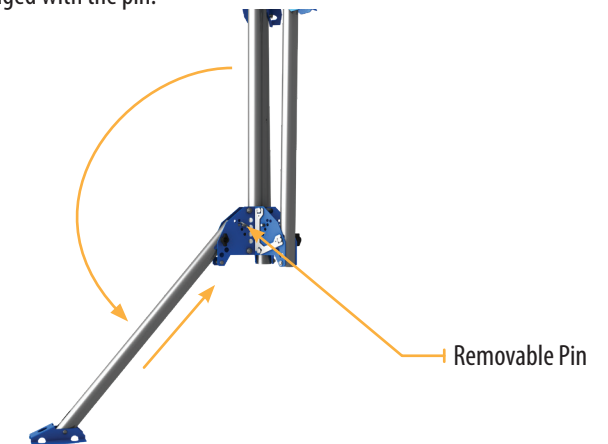
- Loosen the black tension knob securing one of the tripod legs.



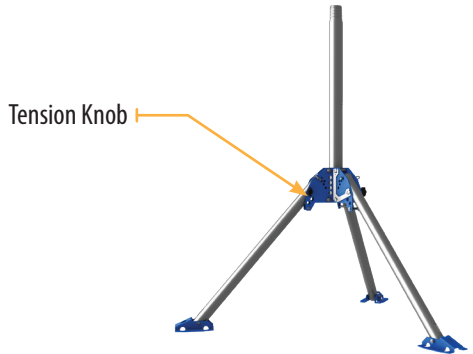
- Slide the leg upward to free the notch on the end of the leg from the pin at the bottom of the tripod frame.



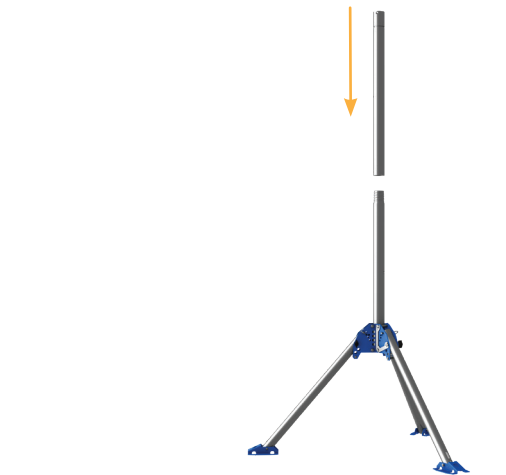
- Rotate the leg down until the notch on the end of the leg lines up with the removable pin in the tripod frame. Slide the leg onto the pin until the notch is fully engaged with the pin.



- Tighten the black tension knob to secure the leg in the new position. Repeat for the other two legs.



- A small amount of anti-seize lubricant is provided to apply to the mast threads. The first mast section is attached to the legs. Place the second mast section on top of the first. Turn the second section clockwise to thread it onto the first. If installing an optional third mast section, install the section without the top collar first, then thread the third section onto the second.



4 Leg adjustment

The QST6 legs have six possible positions to choose from when setting up the tripod. Changing which hole is used will change the height of the tripod and the diameter of the legs.

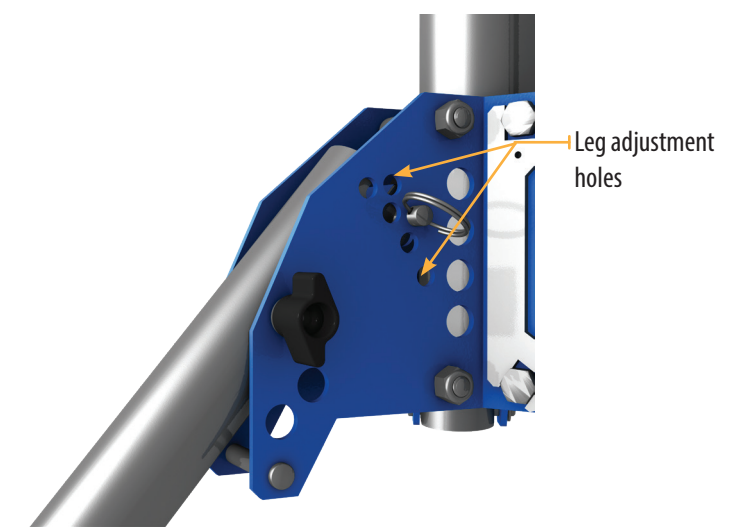


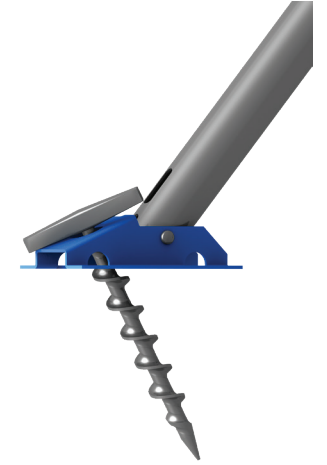
Table 1 shows the height and diameter of the tripod at each each pin setting.

When the tripod is on level ground, each leg will use the same hole to keep the tripod level. When the tripod is on a hill, point one leg directly downhill and move the pins as needed to bring the tripod into vertical alignment.

5 Anchoring the QST6 with the optional anchors

The QST6 may be anchored to the ground using three optional 9-inch T-Handle screw anchors available from Campbell Scientific.

Note: Anchor the QST6 to the ground prior to installing the optional guy kit. The guy line and clip may interfere with turning the anchor handle.



Place the tip of an anchor through the hole in the top of the foot. Turn the handle clockwise, applying downward pressure, until the anchor fully secures the tripod foot to the ground.

Some soil types may require additional anchors or longer stakes to secure the tripod.

6 Installing the optional guy kit

- Unpackage the guy kit and separate the three guy lines.
- Unscrew the top collar from the QST6. Holes are provided as points to insert a screwdriver for additional leverage, if needed. If an optional third section is installed, unscrew the top section from the second section instead of removing the top collar.



- Place the guy ring, with the fins angled down, over the top of the mast section. Align the holes in the fins with the tripod legs



- Reattach the top collar (or third mast section).



- Connect the clip secured to one end of the guy line to one of the fins in the guy ring.



- Bring the guy line to the corresponding foot on the tripod. Attach the clip to lower end of the tripod leg, routing the clip through the notch in the end of the leg, then back up and through slot in the leg



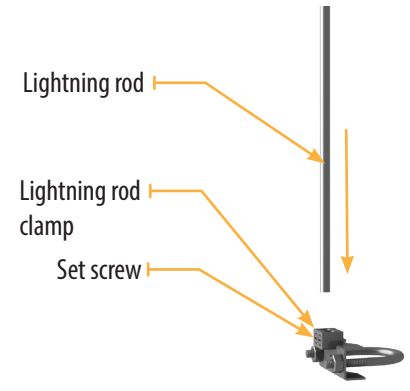
- Latch the buckle into the knotted hole near the top end of the guy line.



- Pull the free end of the guy line downward to increase tension on the line.
- Repeat for the other two guy lines.
- Once all three guy lines are in place, increase tension on the guy lines to secure the mast in place with equal tension on all three lines.

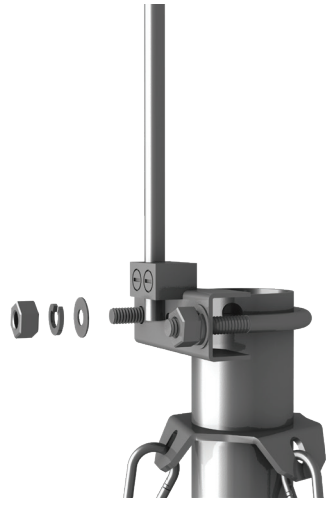
7 Grounding the QST6

- Insert the flat end of the lightning rod into one of the two holes on the lightning rod clamp. Tighten the set screw for that hole to secure the lightning rod.

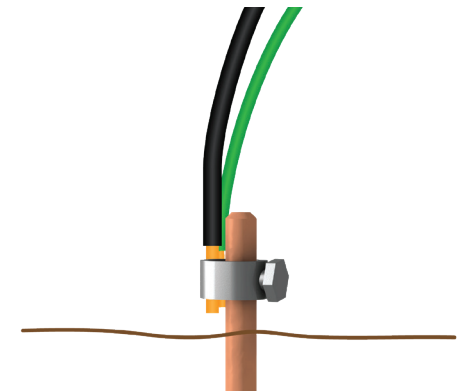


- Place the lightning rod over the top collar, sliding it on until there is approximately 1.25 cm (1/2 in) of clearance between the top of the U-bolt and top of

the collar. Tighten the two bolts so there is an equal length of U-bolt visible at each end.



- Place the ground clamp over the flat end of the ground rod and tighten the clamp.
- Use a hammer to drive the ground rod into the ground, directly below the tripod, until only the tip of the rod with the clamp is visible.
- Attach one end of the 4 AWG copper ground wire (black insulation) to the clamp on the ground rod. Also attach one end of the 10 AWG green ground wire to the clamp. The green ground wire is used to ground an enclosure when an enclosure is mounted on the tripod. Connect the other end of this wire to the enclosure ground lug.



- Secure the other end of the 4 AWG copper ground wire in the open hole in the lightning rod clamp. Fully tighten the set screw to secure the wire.

