



# BIRD DETERRENT INSTALLATION INSTRUCTIONS

18300-03  
1.2022

## METER

### Items Included

- Spikes (13)
- Spike ring (1)

### Required Tools (not included)

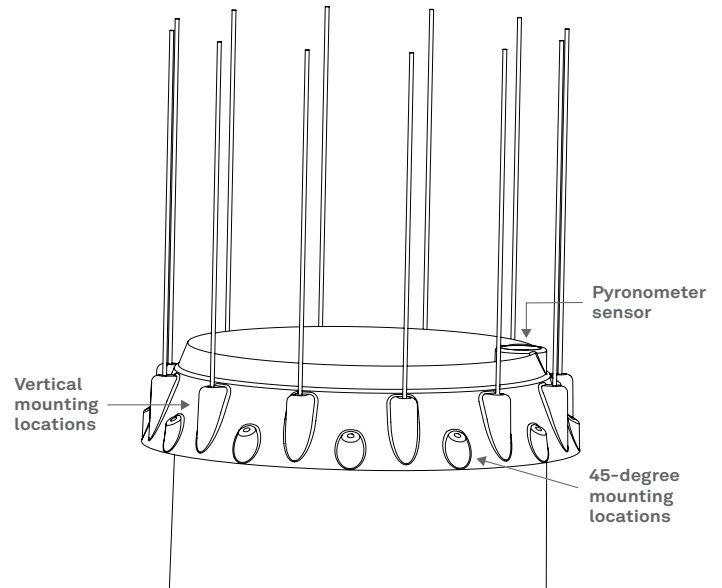
- Pliers

### Assembly Instructions

1. Count all parts to ensure nothing was lost in shipping. Contact Customer Support ([metergroup.com](http://metergroup.com)) if anything is missing.
2. Gently press a bird spike into a vertical mounting location on the bird spike ring by hand.
3. Using pliers, pinch the bird spike near the base and press down until fully seated.
4. Repeat for all bird spikes.
5. Tug upward on each spike to make sure the pins were all pressed in.

**NOTE:** Additional spikes at 45-degree angles may need to be added to effectively deter birds. Use reverse side for installation instructions. Otherwise, continue with step 6.

6. Position the ring on top of the ATMOS 41 with the pyranometer sensor between two spikes to limit shadows on the sensor.
7. Press the finished bird deterrent onto the ATMOS 41 funnel to at least the depth shown in the figure.



# BIRD DETERRENT INSTALLATION INSTRUCTIONS

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- Spikes (13)
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### Required Tools (not included)

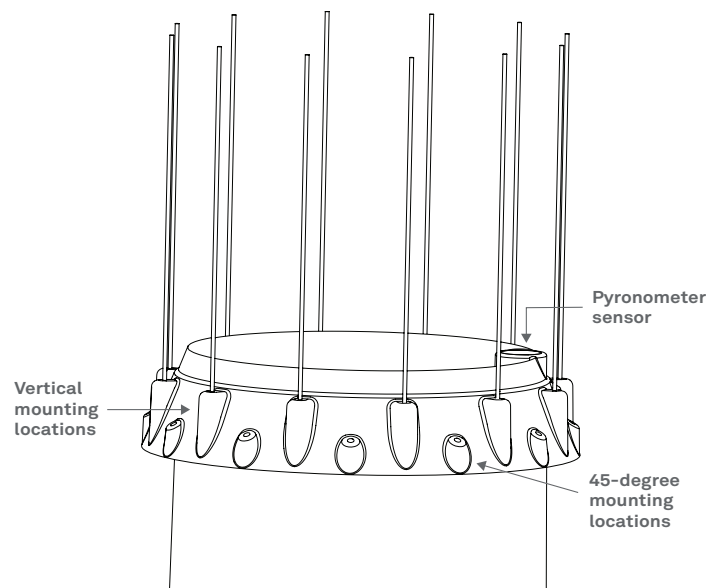
- Pliers

### Assembly Instructions

1. Count all parts to ensure nothing was lost in shipping. Contact Customer Support ([metergroup.com](http://metergroup.com)) if anything is missing.
2. Gently press a bird spike into a slot on the bird spike ring by hand.
3. Using pliers, pinch the bird spike near the base and press down until fully seated.
4. Repeat for all bird spikes.
5. Tug upward on each spike to make sure the pins were all pressed in.

**NOTE:** Additional spikes at 45-degree angles may need to be added to effectively deter birds. Use reverse side for installation instructions. Otherwise, continue with step 6.

6. Position the ring on top of the ATMOS 41 with the pyranometer sensor between two spikes to limit shadows on the sensor.
7. Press the finished bird deterrent onto the ATMOS 41 funnel to at least the depth shown in the figure.





## METER

Below are instructions for installing 45-degree spikes.

1. Remove the spike ring from the ATMOS 41.
2. Drill out the 45-degree mounting locations.
3. Gently press a bird spike into a 45-degree mounting location on the bird spike ring by hand.
4. Using pliers, pinch the bird spike near the base and press down until fully seated.
5. Repeat for all angled bird spikes.
6. Tug upward on each spike to make sure the pins were all pressed in.
7. Position the ring on top of the ATMOS 41 with the pyranometer sensor between two spikes to limit shadows on the sensor.
8. Press the finished bird deterrent onto the ATMOS 41 funnel to at least the depth shown in the figure.

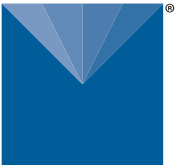
Thicker wire may be necessary to deter large raptors. The vertical mounting locations can be drilled out to accommodate larger diameter wire; however, larger wire will cause increased pyranometer shading. To minimize shading, every-second spike may be increased to the larger diameter or the spikes nearest the pyranometer may be left at the standard diameter.

**NOTE:** The bird spike ring will attenuate the solar radiation that reaches the ATMOS 41 pyranometer, decreasing the accuracy of the solar radiation measurement. See [metergroup.com/how-the-bird-deterrent-affects-solar-data](https://metergroup.com/how-the-bird-deterrent-affects-solar-data) for more information on spike effects on solar radiation measurement.

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## METER

Below are instructions for installing 45-degree spikes.

1. Remove the spike ring from the AMTOS 41.
2. Drill out the 45-degree mounting locations.
3. Gently press a bird spike into a 45-degree mounting location on the bird spike ring by hand.
4. Using pliers, pinch the bird spike near the base and press down until fully seated.
5. Repeat for all angled bird spikes.
6. Tug upward on each spike to make sure the pins were all pressed in.
7. Position the ring on top of the ATMOS 41 with the pyranometer sensor between two spikes to limit shadows on the sensor.
8. Press the finished bird deterrent onto the ATMOS 41 funnel to at least the depth shown in the figure.

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