

WatchDog Weather Station Mid-Range Wireless Kit

Installation Instructions

Catalog Numbers 3391W

Package Contents

Wireless mounting bracket (white)
Solar Panel, 4.5 x 3.5" (11.5 x 9 cm)
Radio assembly
Antenna
4 AA NiCd batteries
Parts bag, containing:

6" communications cable
Antenna/Solar cable assembly with captive strain relief
4 screw-washer-nut assemblies
2 6-32 x 3/8" screws
1 aluminum spacer
1 cable tie



Tools required

Phillips screwdriver
Slotted tip screwdriver
5/16" wrench (or pliers)



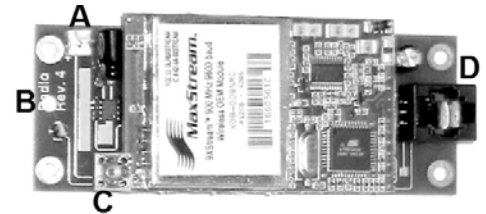
Installation

Note: the installation process involves several small parts, and should not be attempted in the field. If the weather station is already deployed, then it should be brought inside so radio installation can be done on a workbench, table, or desk.

1. Remove the right-most strain relief from your weather station. Insert the Antenna/Solar cable assembly with captive strain relief in its place. *(For first-generation weather stations*, insert the strain relief through the right-most cable opening, then replace the cover).*
2. For weather stations with a rain collector, thread the antenna and solar cables through the 3/4" hole in the side of the weather station mounting bracket.
3. Attach the solar panel to the wireless mounting bracket using the four screw-washer-nut assemblies. The screw terminals on the solar panel should be oriented toward the top of the bracket. The lock washers should be next to the nuts.
4. Remove the nut from the connector on the end of the antenna cable. Leaving the lock washer on the antenna connector, insert the connector up through the smaller of the two holes in the top of the wireless mounting bracket, securing it with the nut.
5. Feed the two connectors on the end of the solar cable up through the larger of the two holes in the top of the wireless mounting bracket. Use the screws on the solar panel terminals to attach the two connectors: red to the left terminal (marked "+") and black to the right terminal (marked "-").
6. Using the screws on the weather station (if they are missing, two replacement 6-32x3/8" screws are provided in this kit), mount the wireless bracket assembly to the weather station. For weather stations with a rain collector, use the two horizontal holes to mount the bracket at the rear of the station, under the rain collector, and above the radiation shield. For weather stations without a rain collector, use the two vertical holes to mount the wireless bracket on the right side of the station's bracket.



7. Remove the batteries from your weather station.
8. *If you are installing the wireless kit into a first-generation weather station*, insert the 6” communications cable into the “AUX” port on the weather station module, and into the socket on the radio assembly. Set the radio assembly into the bottom (open) portion of your weather station case, behind any sensor wires. Skip to Step 16.*
9. Disconnect all sensors from your weather station module. Be sure to note the location of any sensors plugged into ports A through H.
10. Remove the four screws on the face of the module, and then remove the module from the case, setting it face-down on the work surface.
11. Push the circular black plastic cover out of the aluminum baseplate.
12. Remove the mounting nut in the lower left area of the circuit board. Slide the aluminum spacer over the threaded post.
13. Hold the radio assembly so that the red LED is on the left, and the black plastic “phone” jack is on the right. Place the radio assembly onto the module, aligning it so that the hole in the left-center of the radio board (“B” on photo) fits over the threaded post. Replace the mounting nut removed in Step 12, tightening it to hold the radio assembly in place.
14. Feed the 6” communications cable through the circular opening in the module’s base plate, plugging the connectors into the module’s “AUX” port and the radio assembly’s “phone” jack (“D” on photo).
15. Feed the ends of the antenna and solar power cables through the circular opening in the module’s base plate.
16. Press the solar panel cable’s red connector onto the white connector in the upper left corner of the radio assembly (“A” on photo). The red connector is recessed to accept the white clip.
17. Plug the antenna connector into the socket on the lower left corner of the upper radio board (“C” on photo).
18. Insert the weather station module back into the case, securing it with the four screws removed in Step 10. Reattach all the sensor cables disconnected in Step 9. (*Not necessary for first-generation weather stations**)
19. Screw the antenna onto the antenna cable connector on the top of the wireless mounting bracket.
20. Insert the four AA NiCd batteries into the station, and replace the battery cover.
21. For 2000 Series Weather Stations, use the SET button to set date and time, and then use the arrow button to display “CONFIGURE RADIO”, and press SET twice to configure the wireless parameters. (*First-generation weather stations* must be launched to begin recording data.*)
22. When deploying the station, be sure to orient it so the solar panel receives the most sunlight.
23. See the WatchDog Wireless Modem Operation Manual for instructions on how to configure SpecWare and use your wireless modems.



* *First-generation Weather Stations are model numbers 900ET, 800, 700, 600, 550, 525.*

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