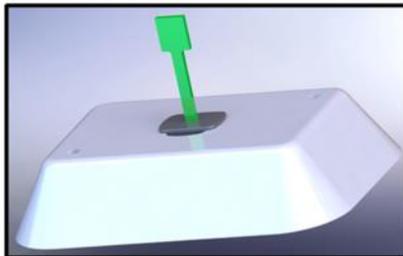




2000 Series Weather Stations
Analog Temperature / RH Sensor
Upgrade Kit

PRODUCT MANUAL

KIT # 3613WDU



Spectrum[®]
Technologies, Inc.

The 3613WDU Analog Temperature / RH Sensor Upgrade Kit is used to upgrade Watchdog 2000 Series Weather Station models: 2900ET, 2700 and 2550 to use the 3613WD Temperature / Humidity Sensor.

This manual provides instructions on upgrading a Watchdog 2000 Series Weather Station with a new Analog Temperature / RH Sensor.

PACKAGE CONTENTS

- 3613WD — Analog Temperature and RH Sensor for Weather Station with cable tie
- 3613WDP — Radiation Shield Plate
- 3300WD82 — 2000 Series Microcontroller

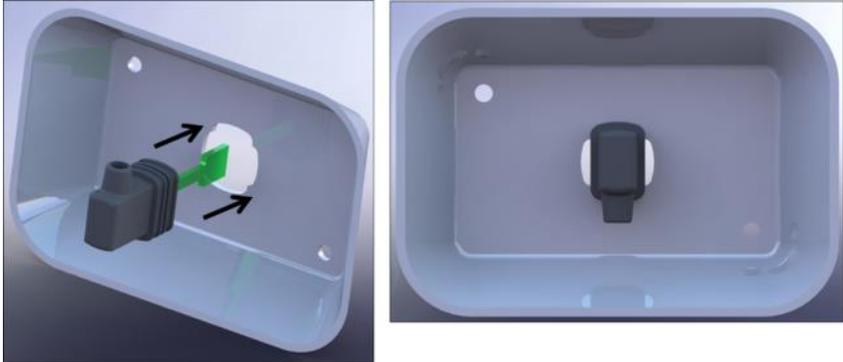
SPECIFICATIONS

- Temperature
 - Range: -40 to 257 °F (-40 to 125 °C)
 - Accuracy (typical): -40 to 185 °F, +/- 0.5°
(-40 to 85 °C, +/- 0.3°)
 - Accuracy (maximum): -40 to 185 °F, +/- 0.7°
(-40 to 85 °C, +/- 0.4°)
- Humidity
 - Range: 0 to 100%
 - Accuracy (typical): 0 to 100%, +/- 2%
 - Accuracy (maximum): 0 to 90%, +/- 2.5%
90 to 95%, +/- 3%
95 to 100%, +/- 3.5%

Contact info for customer support or to place an order:
Call 800-248-8873 or 815-436-4440
FAX: 815-436-4460,
E-mail: info@specmeters.com.
Web: www.specmeters.com
Spectrum Technologies, Inc.
3600 Thayer Court
Aurora, IL 60504

STEP 1: ASSEMBLE THE NEW SENSOR & SHIELD PLATE

1. Insert the 3613WD sensor into the 3613WDP radiation shield plate as shown below.

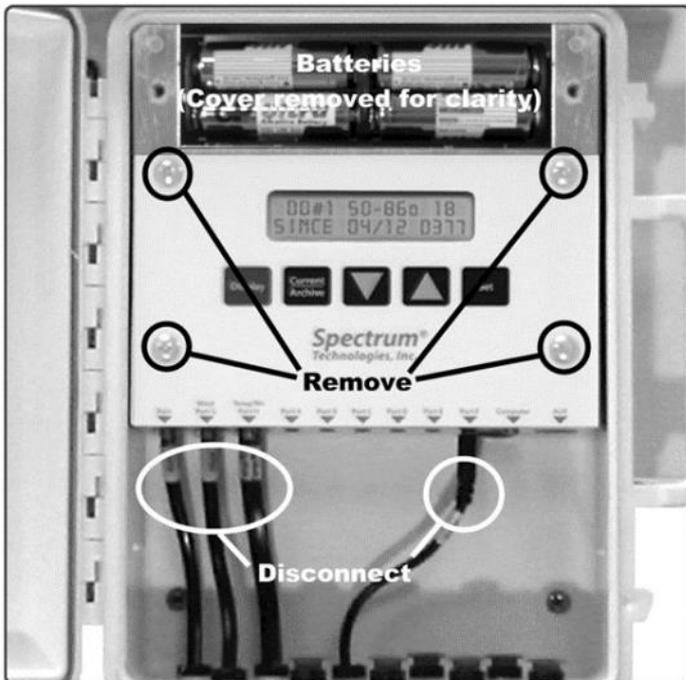


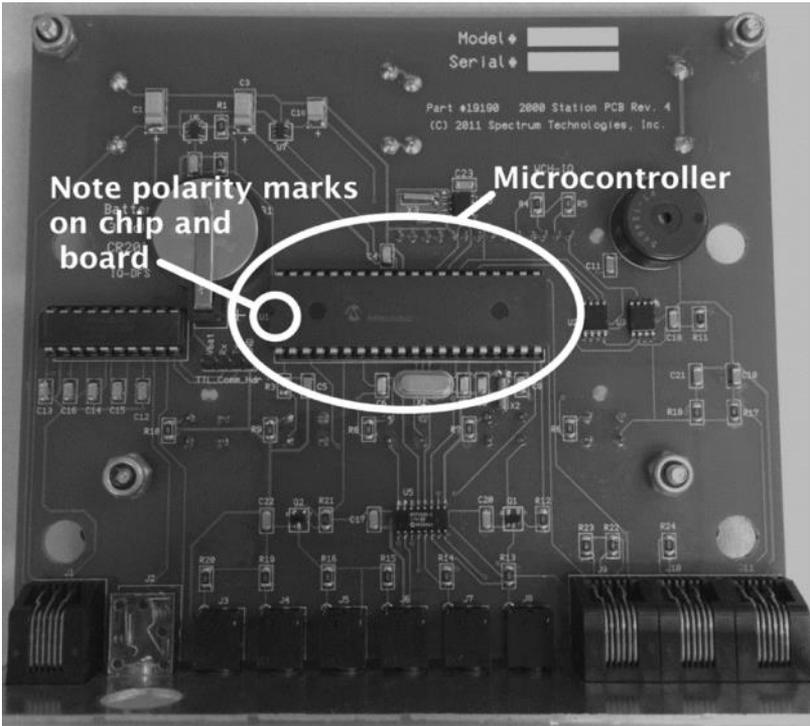
2. Turn the sensor module 90 degrees clockwise to lock it into the shield's opening.



STEP 2: REPLACE THE MICROCONTROLLER

1. Disconnect all sensor wires on the bottom of the Weather Station display module.
2. Remove the four Phillips head screws on the front of the module.
3. Pull the module straight out of the station enclosure (may require light prying or manipulation).
4. Remove the battery cover, and remove all batteries.
5. Flip over the display module and locate the microcontroller chip in its socket. With a small screwdriver or knife, gently pry the chip out of the socket by alternating ends. Grasp the microcontroller by the ends of the black plastic, not the pins.

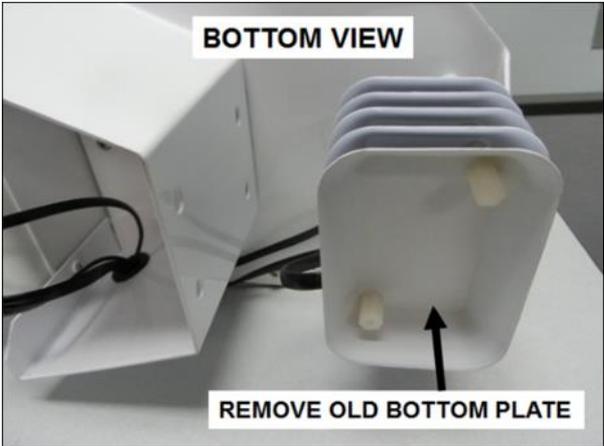




6. Align the new microcontroller with the socket (note the polarity markings on the microcontroller, the socket, and the circuit board). Be sure all pins are aligned with the socket, and press the chip firmly into place.
7. Reinsert the batteries. The unit should beep when the last battery is inserted, and the display should show the model and serial number, and then ask that date and time be set. If not, double-check that the polarity of the microcontroller and socket are the same, and that the the batteries were inserted properly.
8. Replace the display module back into the station enclosure, reinsert and tighten the four Phillips head screws, and reconnect the sensor wires.

STEP 3: REPLACE THE OLD WITH THE NEW SENSOR

1. Unscrew the nylon threaded nuts that hold the radiation shield plates on the bottom of the station.
2. Remove and discard the bottom plate. Remove the old sensor.



3. Put the new sensor and plate assembly upgrade (from page 3 assembly) on the bottom of the stack.
4. Screw the nylon threaded nuts to hold the stack in place.



5. Remove one of the batteries from the Weather Station.
6. Unplug the cable of the old sensor from the “Temp/RH” port.
7. Unscrew the gland at the bottom of the WS housing and pull the cable out of the enclosure.
8. Remove the old sensor cable from the station, noting how it is routed from the housing to the radiation shield. You may have to cut a zip-tie to release the cable.
9. Route the new sensor’s cable along the same path that the old cable used. Insert it through the cable hole and screw in the gland. Plug the cable into the “Temp/RH” port. Use the zip-tie to neatly tie the cable to a radiation shield mounting post (see the photo on the right below).
10. Insert the battery. While the LCD is displaying “PLEASE WAIT”, an “s” will appear in the lower left of the LCD to indicate the new sensor is present.

SIDE VIEWS AFTER INSTALLING THE NEW SENSOR & PLATE



WARRANTY

This product is warranted to be free from defects in material or workmanship for one year from the date of purchase. During the warranty period Spectrum will, at its option, either repair or replace products that prove to be defective. This warranty does not cover damage due to improper installation or use, lightning, negligence, accident, or unauthorized modifications, or to incidental or consequential damages beyond the Spectrum product. Before returning a failed unit, you must obtain a Returned Materials Authorization (RMA) from Spectrum. Spectrum is not responsible for any package that is returned

DECLARATION OF CONFORMITY	
	Spectrum Technologies, Inc. 3600 Thayer Court Aurora, IL 60504 USA
Model Numbers: 3350WD2, 3345WD2, 3340WD2, 3330WD2, 3320WD2, 3315WD2 with 3613WD	
Description:	WatchDog Weather Station
Type:	Electrical equipment for measurement, control, and laboratory use
Directive:	2004/108/EC
Standards:	EN 61326-1:2006 EN 61000-4-2:1995, including A1:1998 and A2:2001 EN 61000-4-3:2002 EN 55011:2007
	
Michael J. Dunning, Weather Products Manager	March 25, 2009

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(800) 248-8873 or (815) 436-4440
Fax (815) 436-4460
E-Mail: Info@specmeters.com
www.specmeters.com