

The Coupler Kit (included with Standard 4-Conductor Cables) is used to connect the extension cables to the sensor cables. It includes a cable coupler and waterproof crimp-style splice connectors for making the connection as well as a protective shell in which you may place the connection point.

#### Components

The Coupler Kit includes the following components. Please make sure you have all listed components before continuing.

- Protective Shell (in two pieces)
- · Cable Coupler
- 4 Screws, #4 x ½" (12.5 mm)
- 5 Splice Connectors
- 1 Cable Tie

#### **Tools and Materials Needed**

- · Small Screwdriver
- Pliers
- Telephone Wire Stripper or Knife
- Hose Clamps or Conduit Clamps
- Cable Clips or Weather-Resistant Cable Ties



### **Tips On Making Connections**

• If the connection between the cables will be located **outside**, we recommend that you use the splice connectors rather than the coupler.

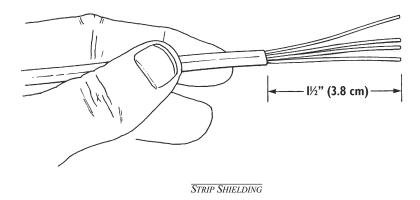
With the splice connectors, there is less chance of the cables separating and also less chance of water reaching the connection. Use the cable coupler only if the connection is located inside, protected from the effects of weather and other stresses.

Note: "Inside" means heated and dry. If the connection is in an attic or basement without heat, use the splice connectors.

- Try to place the connection between cables inside a building, underneath an
  eave, or in another location similarly shielded from rain.
- The protective shell must be well secured to avoid wind buffeting. Use hose clamps for poles or conduit clamps for surface mount.
- When securing cables, place a cable clip or tie on each side of the protective shell so the movement of the cables does not cause the connection to pull apart.
- It is a good practice to leave an extra length of cable near the connection point in case future adjustments or repairs are necessary.

#### To Connect the Cables Using Splice Connectors

- 1. Cut the modular connector off the end of the cable.
- 2. Use a telephone wire stripper or a knife to strip away about  $1\frac{1}{2}$  (3.8 cm) inches of the black shielding on the cable.
- 3. Repeat this procedure for the end of each cable you are connecting.



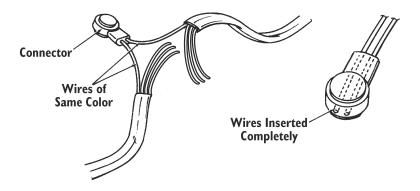
Note: If you accidentally strip away any of the colored shielding on the individual wires, trim off the wires and repeat step 2.

4. Take a wire from one of the cables and place it in one of the holes at the end of a splice connector.

Make sure you push the wire all the way in. You can check this by looking through the clear side of the splice connector.

5. Take the same colored wire from the other cable and place it in the other hole at the end of the splice connector you used in step 2.

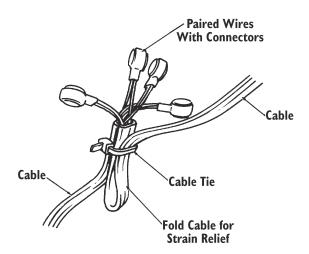
Make sure you push the wire all the way in. You can check this by looking through the clear side of the splice connector.



CONNECTING WIRES USING SPLICE CONNECTOR

- 6. Use pliers to snap the yellow cap into place, securing the wires.
- 7. Repeat this procedure for each set of colored wires.
- 8. Use a cable tie to secure the two cables together as shown below.

  Doing this provides a measure of strain relief which should prevent the wires from pulling apart under normal conditions. Cut off the excess cable tie when it is secure.

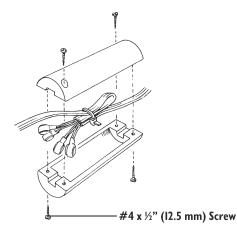


PROVIDING STRAIN RELIEF

9. Gather the wires and splice connectors neatly together and enclose the in the two halves of the protective shell as shown below.

Use the #4 x ½" (12.5 mm) screws to join the two

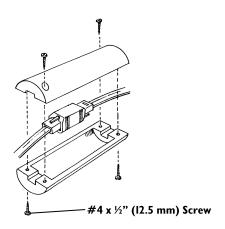
halves.



## To Connect the Cables Using the Coupler

- 1. Place the cable plug at the end of one of the cables into one end of the coupler.
- 2. Place the cable plug at the end of the other cable into the other end of the coupler.
- 3. Enclose the connection in the two halves of the protective shell.

Use the #4 x  $\frac{1}{2}$ " (12.5 mm) screws to join the two halves.



Coupler Kit; for use with Standard 4-Connector Cables 07395.010 Rev. D, October 12, 2011

**Product Number 7957** 

This product complies with the essential protection requirements of the EC EMC Directive 2004/108/EC.

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Cables

Use the 4-Conductor Extension Cable with versions of these products:

- Cabled Vantage Pro2 Console
- Anemometer
- · Rain Collector
- Solar Radiation Sensor
- UV Sensor
- Temperature Sensor or Probe
- WeatherLink®

The 4-Conductor Extension Cable includes waterproof coupler kits for joining two cables together. The following 4-Conductor Extension Cables are available:

- #7876-008, 8' (2.4m)
- #7876-040, 40' (12m)
- #7876-100, 100' (30m)
- #7876-200, 200' (61m)

Use the chart below to determine your maximum cable length. Cable length may affect the accuracy of data transmitted from the sensor or data logger to the console. We recommend you stay within the maximum ranges as described below.

Station	From	То	Maximum Cable Length
Vantage Pro2 <sup>®</sup>	ISS	Anemometer	Maximum wind speed reading decreases as the length of the cable increases. At 140' (43 m) maximum speed is 175 mph (78 m/s). At 340' (104 m), maximum speed is 70 mph (31 m/s). The accuracy of the reading below the maximum is not affected.
	ISS	Solar Radiation Sensor	Maximum is 125' (38 m)
	ISS	UV Sensor	Maximum is 125' (38 m)
	Console	ISS	Maximum is 1000' (300 m)
	WeatherLink	Computer	Maximum is 48' (14.6 m)
Weather Wizard III <sup>®</sup> or Weather Monitor II <sup>®</sup>	Console	Anemometer  Solar Radiation Sensor  UV Sensor  ISS Computer  Anemometer  Rain Collector  Temperature Sensor or Probe	Maximum wind speed reading decreases as the length of the cable increases. At 140' (43 m) maximum speed is 175 mph (78 m/s). At 340' (104 m), maximum speed is 70 mph (31 m/s). The accuracy of the reading below the maximum is not affected.
	Console		Maximum is 900' (274 m)
	Console		Maximum is 900' (274 m)
	WeatherLink	Computer	Maximum is 50' (15 m)

## Cables

# **Package Dimensions**

Product #	Package Dimensions (Height x Width x Depth)	Package Weight	UPC Codes
7876-008	6.63" x 6.00" x 1.00" (153 mm x 168 mm x 26 mm)	2.9 oz. (0.09 kg)	011698 00310 5
7876-040	3.50" x 7.00" x 1.50" (89 mm x 178 mm x 26 mm)	7.5 oz. (0.22 kg)	011698 78761 6
7876-100	9.00" x 5.50" x 1.50" (229 mm x 140 mm x 39 mm)	1.1 lbs. (0.51 kg)	011698 78762 3
7876-200	11.00" x 7.00" x 1.50" (280 mm x 178 mm x 38 mm)	2.2 lbs. (.99 kg)	011698 00311 2