

## **Features**

- Connects a Sure Cross® Gateway, a MultiHop Radio, or an RS-485 sensor to a Windows PC USB port
- BWA-HW-006 supplies power to one Gateway, one MultiHop Radio operating at 250 mW, or one RS-485 sensor
- · BWA-UCT-900 supplies power for one Gateway or one MultiHop Radio operating at 1 Watt
- Supports baud rates of 9600, 19200, and 38400
- Converts USB to RS-485 (2-wire) with a M12 connector
- · Supports Windows XP and Vista
- Download the User Configuration Software, MultiHop Configuration Software, or Sensor Configuration Software free from Banner Engineering's Wireless I/O Products website
- Includes cordset MQDMC-401 for use with the DX80...C models



Do not use **BWA-HW-006** to connect a Performance Gateway or MultiHop Radio operating in 1-Watt mode. Always configure the Performance and MultiHop models to operate in 250 mW mode before connecting them to your computer to avoid damaging your USB port.

To supply power to 1 Watt radios during configuration, use cable BWA-UCT-900.

When plugging this cable into your computer for the first time, give the cable 1 to 2 minutes to check your computer for the proper driver, download the driver, then install it. Plug the cable into your Gateway; the cable should supply enough power to the Gateway to configure it.

For additional information, updated documentation, and a list of accessories, refer to Banner Engineering's website, www.bannerengineering.com.

## Models

Model	Adapter	Length	
BWA-HW-006	RS-485 to USB	1 meter	
BWA-UCT-900	RS-485 to USB, with wall plug to power 1 Watt radios during configuration		

Both cordsets include cordset model MQDMC-401 for use with the DX80...C models.

# 4-pin M12 Female Connection

Connecting power to the communication pins will cause permanent damage.

4-pin M12 female connector wiring

4-pin M12 Female Quick Disconnect	Pin	Wire Color	DX80 Wiring	DX80C Wiring
2	1	Brown	10 V DC to 30 V DC	V+
1 200	2	White	RS-485 Tx +	Tx
(6.9)	3	Blue	DC common (GND)	V-
4	4	Black	RS-485 Rx –	Rx

# **Specifications**

## Input Power

BWA-HW-006: 5 V DC from USB port

BWA-UCT-900: 5 V DC from USB port; 100 to 240 V AC from

the plug-in wall transformer

## **Output Power**

**BWA-HW-006**: 10 V DC power output for a single device

transmitting at 250 mW or less

BWA-UCT-900: 24 V DC power output for a single device

transmitting at 1 Watt

#### Current Draw

Models BWA-HW-006/073/083: 60 mA

## **Operating Parameters**

0 °C to +50 °C (+32 °F to +122 °F)

95% maximum relative humidity (non-condensing)

## USB

Connector: USB type A plug

Standard: 2.0

### RS-485

2-wire; 9.6k, 19.2k, or 38.4k; 8 data bits; 1 stop bit; no parity Connector: M12 connector compatible with Banner Sure

Cross Gateways and data radios



#### **Banner Compatible Devices**

DX80G\*, DR9M, DR2M models

M12FTH3Q Temperature and Humidity Sensor; M12FT3Q Temperature Sensor, GPS50M GPS Sensor

BWA-HW-006 will not power a MultiHop radio in 1 Watt mode. Use **BWA-UCT-900** to supply power to 1 Watt radios. To use BWA-HW-006 with a MultiHop radio, set the radio to operate at 250 mW.

#### Length

1 meter

#### Maintenance

Product label to be cleaned with dry or water-dampened cloth only

## FCC Part 15 Class B for Unintentional Radiators

(Part 15.105(b)) This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.

  Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help

(Part 15.21) Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

## Industry Canada ICES-003(B)

This device complies with CAN ICES-3 (B)/NMB-3(B). Operation is subject to the following two conditions: 1) This device may not cause harmful interference; and 2) This device must accept any interference received, including interference that may cause undesired operation.

Cet appareil est conforme à la norme NMB-3(B). Le fonctionnement est soumis aux deux conditions suivantes : (1) ce dispositif ne peut pas occasionner d'interférences, et (2) il doit tolérer toute interférence, y compris celles susceptibles de provoquer un fonctionnement non souhaité du dispositif.

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