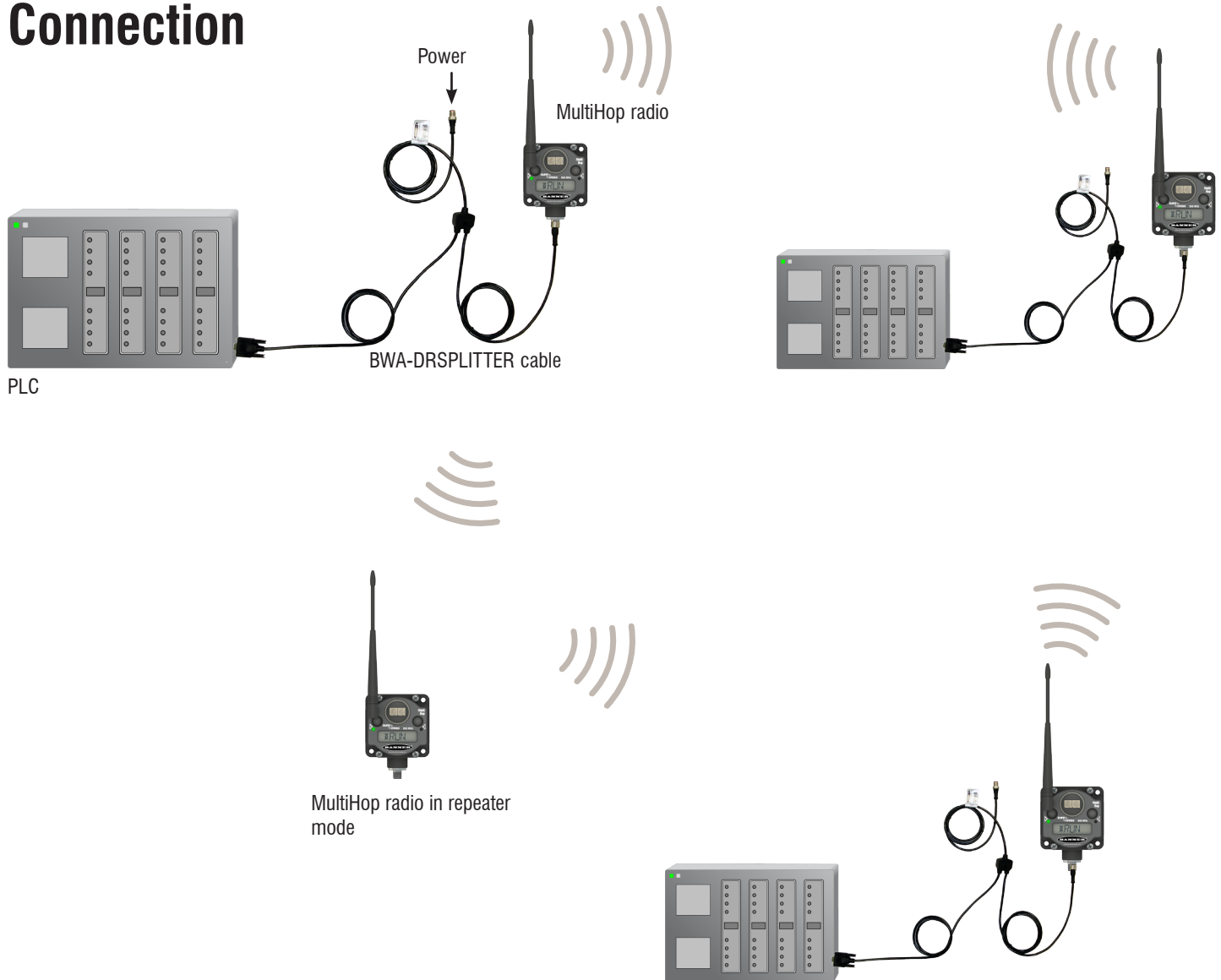


Connecting MultiHop Radios to PLCs with a RS-232 Connection



STEP ONE

To connect a PLC to the MultiHop radio, using the DR9 splitter cable, model number BWA-DRSPLITTER.

1. Connect the DB9 serial female branch to the PLC's serial interface connection.
2. Connect the 5-pin Euro-style female end to the MultiHop radio.
3. Connect the 4-pin Euro-style male trunk to the power supply. (You can use the MQDC1-506 cable that ships with the MultiHop radios to connect from the "power" trunk of the splitter cable to the power supply.

STEP TWO

Run a site survey between the MultiHop radios to verify the radios communicate reliably at the installed range. Consider using additional MultiHop radios in repeater mode or a higher gain antenna to extend the range of your serial network.

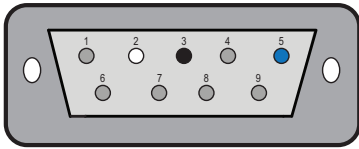
Note, Other serial options are available, including Modbus RTU or Modbus/TCP with the DX83T Ethernet Bridge.

EXAMPLE APPLICATIONS

Example applications include the following:

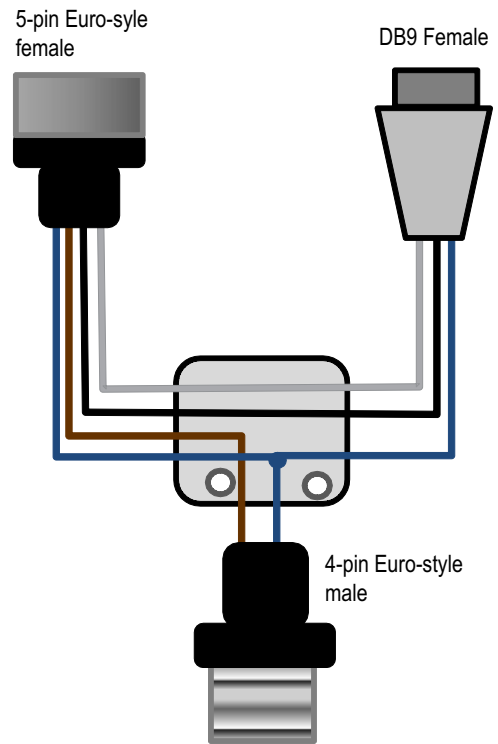
- Operating the MultiHop radios in transparent mode and using RS-232 to communicate with devices using Allen-Bradley's DF1 protocol.
- Installing a Control Microsystems 32 controller operating in Modbus mode on RS-232 to share data between controllers and with MultiHop M-H1 radios.

WIRING DIAGRAMS



The splitter cable's DB9 male connection uses the following pin configuration:

Pin	Wire Color	Connection
2	White	RS-232 Rx
3	Black	RS-232 Tx
5	Blue	Ground



	Wire Color	5-Pin Euro-style (Female)
1	Brown	+10 to 30V dc Input
2	White	RS-485 / D1 / B / + or RS-232 Tx
3	Blue	dc common (GND)
4	Black	RS-485 / D0 / A / - or RS-232 Rx
5	Gray	Comms ground

	Wire Color	4-Pin Euro-style (Male)
1	Brown	+10 to 30V dc Input
2	White	
3	Blue	dc common (GND)
4	Black	

Connecting power to the communication pins (white and black) causes permanent damage.