## Adaptive Remote Control: ARC-2e Wiring

The ARC-2e is a menu-driven adaptive remote control for Symetrix DSPs. Featuring a more simplified design for enhanced reliability and robustness, the ARC-2e succeeds the ARC, ARC-2, and ARC-2i. This tech tip will review how to properly wire an ARC-2e.

General Wiring Guidelines

• Most Symetrix DSPs can wire directly to a ARC-2e using a straight-through CAT5 cable.
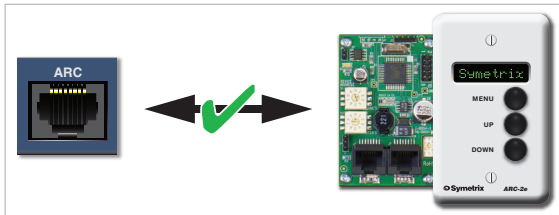
• Multiple ARCs can be daisy-chained together. Download the ARC Power Calculator at **www.symetrix.co** to calculate distance limitations.
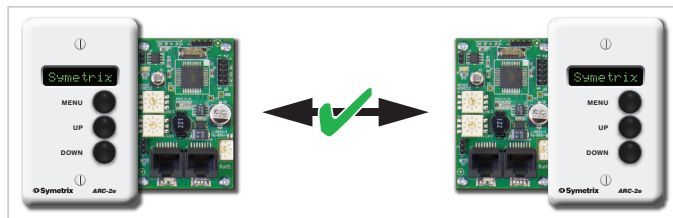
Wiring to a Symetrix DSP With No ARC Port

If using the ARC-2e with a Symetrix DSP that does not have an ARC port (8x8 DSP, for example), it will be necessary to connect the appropriate pins of the ARC CAT5 cable to the RS-485 port on the DSP and DC power supply.

1. Terminate a CAT5 cable on one end with a male RJ-45 (8P8C).

2. Strip remaining end and prepare connection to the following pins:

    a. RS-485 ground > Pin 3

    b. RS-485 data A > Pin 4

    c. RS-485 data B > Pin 5

    d. DC ground > Pin 6

    e. DC + V > Pin 7

    f. DC + V > Pin 8 (optional)

3. Pins 3, 4, 5 will connect to the RS-485 port on the host DSP.

4. Pins 6 and 7 will connect to a DC power supply.

5. Pins 1 and 2 are not used.

6. RJ-45 end of CAT5 plugs into ARC-2e.

Within limitation, any subsequent ARC in the chain will receive data and power via CAT5 from the first ARC-2e.

DC Power Requirements

The ARC DC power requirements vary depending on the voltage supplied and the number of ARCs on the chain. At 15 VDC, one ARC-2e uses approximately 115 mA, while at 6 VDC it uses approximately 300 mA maximum. As the voltage goes from 15 to 6 VDC, the DC power requirement increases accordingly. Visit **www.symetrix.co** and download ARC Power Calculator for detailed information.

For additional information on this topic email Symetrix technical support at **support@symetrix.co**.