SERVICE NOTE

NUMBER 23B   10/13/09

B&B Electronics Universal RS-232 to RS-485 Converter

NOTE: The Black Box Short Haul Modems used in the past for CPU-95 and CPU-2000 programming have been changed. The IC620A-F was replaced by the IC1620A-F, while previous versions of the ME721A-F were revised to "R1" and "R2". These did not work with the CPU Terminal Programs.

SERVICE NOTE 23A, released in October, 2003, outlined the details of the B&B modem which changed from the earlier Black Box modem. This modem, model **4WSD9R**, is still valid, but it requires the wiring of a DB-9 connector, which can be difficult. On more than one occasion this part was installed backwards (there are two identical DB-9's — one labeled RS-232 and the other RS-485).

Altronic recommends the B&B Electronics Universal Converter which eliminates the DB-9 connector and is supplied with a terminal block for easy connectivity. The part number is **4WSD9TB** (TB = Terminal Block).

Model 4WSD9TB is line powered, but can be externally powered if necessary via an optional 110VAC to 12VDC power supply (model number 485PS), although our applications have yet to require an external power source. The B&B device replaces the Black Box converters as well as the ADAM-4520 converters shown in the Digital Product literature for products such as the DSM's or ETM's.

This unit may be purchased from Altronic (part number 691-181-1), online at **www.bb-elec.com**, or by calling **815-433-5100** and selecting option #4.

B&B Electronics Mfg. Co.
707 Dayton Road
P.O.Box 1040
Ottawa, IL 61350

4WSD9R

4WSD9TB

Directions for model 4WSD9TB are available online at the above email address, and are also supplied with the unit. Connect the unit according to the "RS-485 2-Wire Half-Duplex" wiring diagram. Select the 4-position DIP switch according to "table 3" for half duplex operation. (RS-485, ECHO "ON", 2-wire, 2-wire) Some devices will require the "ECHO" to be turned on or off with the DIP switch, depending on the product and the "ECHO" selections made in the Terminal Programs. The "ECHO" must be turned "ON" for use with the CPU Terminal Programs.

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