Four Channel RS-232 to RS-422 Converter (Model 422CFC

This RS-232 to RS-422 converter converts unbalanced RS-232 signals to balanced RS-422 signals. The RS-422 Standard uses a balanced voltage digital interface to allow communications of 90k bits per second on cable lengths of 4000 feet. Ten receivers can be connected to any one driver for use in multi-drop systems.



Interconnection of the converter with another RS-422 device:

- 1. The polarity of the two RS-422 lines must be correct. With no data being sent, the RS-232 line should be negative and the RS-422 A terminal should be negative with respect to the B terminal.
- 2. The wire recommended in the RS-422 Standard is number 24 AWG copper conductor, twisted-pair, telephone cable with a shunt capacitance of 16 pF per foot.
- 3. For long runs and/or high rates (more than 200k bits per second) it is recommended that the wires be terminated with a resistor at the receive end. The twisted pair usually used has an impedance of about 100 ohms, therefore a 100 ohm resistor is normally used for the termination. In no case should the resistive termination be less than 90 ohms.
- 4. The RS-422 driver has the ability to drive ten RS-422 receivers connected in parallel. A system of multiple receivers may require some experimentation with location and size of termination resistors, line lengths, grounding, etc.
- 5. The RS-422 Standard recommends that Protective Ground (pin 1) be connected to a good "green wire" ground. This may already be connected in your RS-232 equipment. Protective Ground and Signal Ground should be connected through to each end of the system and be connected to each other using a 100 ohm 1/2-watt resistor at one end only. If a shielded twisted pair is used, the shield should be connected to Protective Ground.

DECLARATION OF CONFORMITY

Manufacturer's Name: B&B Electronics Manufacturing Company

Manufacturer's Address: P.O. Box 1040
707 Dayton Road
Ottawa. IL. 61350 USA

Model Numbers: 422CFC

Description: Four Channel RS-232 to RS-422 Converter

Type: Light industrial ITE equipment

Application of Council Directive: 89/336/EEC

Standards: EN 50082-1 (IEC 801-2, IEC 801-3, IEC 801-4)

EN 50081-1 (EN 55022)

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