

+ QUICK START GUIDE



Model 422CFCR

4-Channel RS-232 to RS-422 Converter

Before you begin, be
sure you have the following:

- + 422CFCR Serial Converter
- + 12VDC Power Supply (sold separately)

Recommended Accessories

12 VDC Power Supply, 6 W,
Int'l AC Input, 2.5mm Plug
SMI6-12-V-P230-C1



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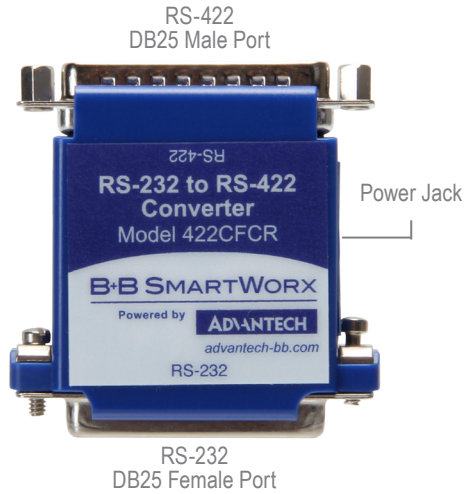
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Product Overview

Extend RS-232 lines up to 4000 ft (1219 m)



422CFRC SPECIFICATIONS

| | |
|--------------------------|--|
| Signals | Converts four RS-232 channels to RS-422 |
| Signals Supported | TD, RD, RTS, CTS |
| Power | 10-30 VDC, 110 mA (unloaded) Additional current for external loading. |

1 Getting Started

Model 422CFRC, 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 (1200 m). Ten receivers can be connected to any one driver for use in multi-drop systems.

2 Polarity

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. (If your equipment uses A + and - naming scheme, in most cases, the A line will be connected to the "-", and the B line will be connected to the "+.")

3 Termination Resistor

The wire recommended in the RS-422 Standard is number 24 AWG copper conductor, twisted-pair telephone cable with a shunt capacitance of 16pF per foot.

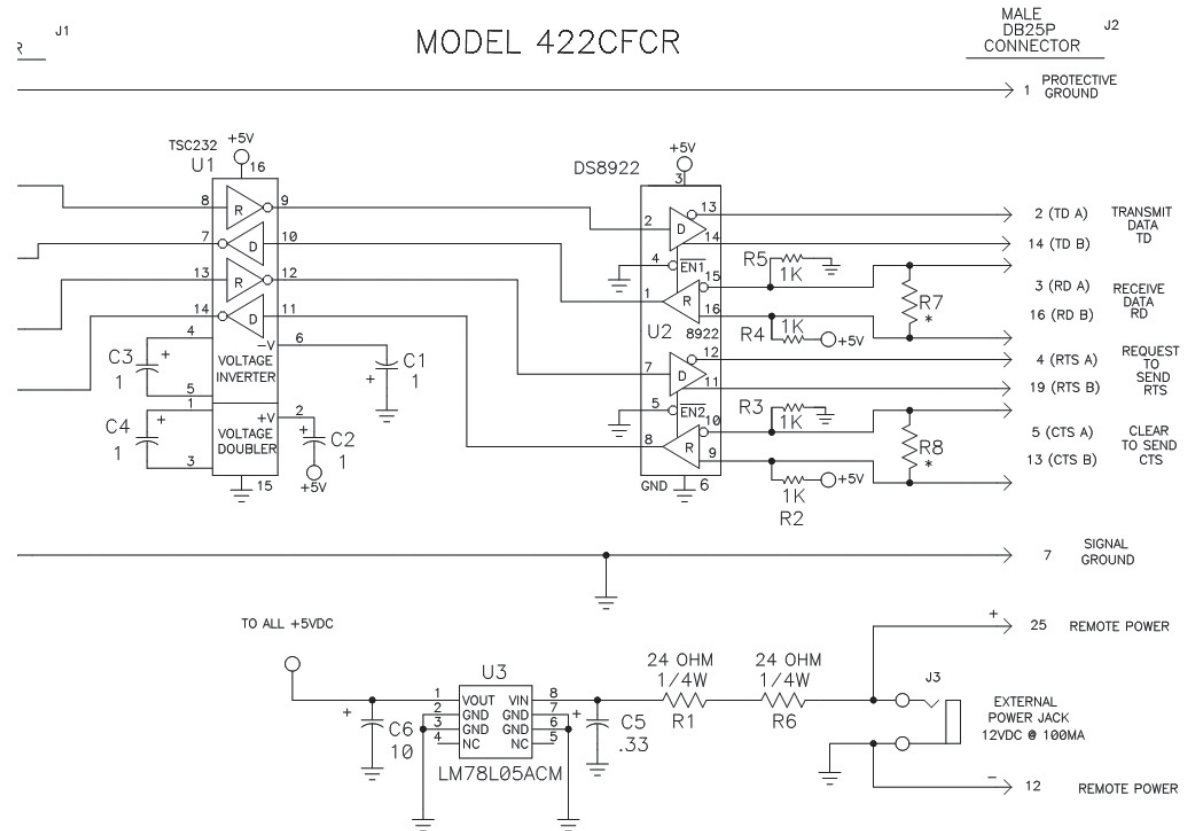
For long runs and/or high rates (more than 200k bits per second), it is recommended that the wires be terminated with a resistor at the receive end. The twisted pair usually used has an impedance of about 100 Ohms, therefore a 100 Ohm resistor is normally used for the termination. In no case should the resistive termination be less than 90 Ohms.

The RS-422 driver has the ability to drive 10 RS-422 receivers connected in parallel. A system of multiple receivers may require some experimentation with resistors, line lengths, grounding, etc.

4 Protective Ground

The RS-422 Standard recommends that Protective Ground (pin 1) be connected to a good "green wire" ground. This may be already 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.



* OPTIONAL THROUGH HOLE TERMINATION

422CFRC Schematic Diagram