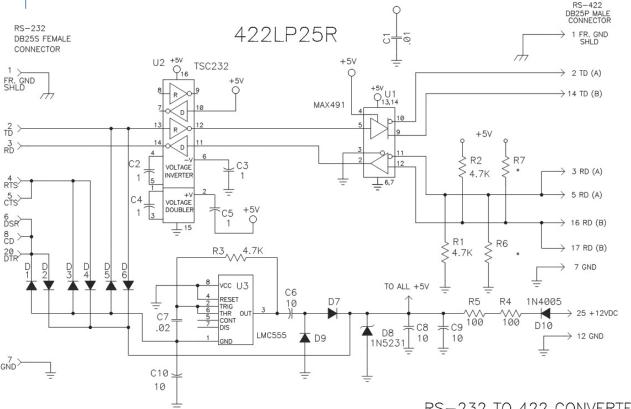
422LP25R Schematic



ALL DIODES 1N4148 UNLESS NOTED. ALL CAPACITANCE VALUES IN MICROFARADS.

* THROUGH-HOLE RESISTORS NOT STUFFED

RS-232 TO 422 CONVERTER

MODEL 422LP25R

Recommended Accessories

Serial Cable, DB25M to DB25F, 6ft. (1.8 m) # 232AMF5



Serial Cable, DB25M to DB25M, 6ft. (1.8 m) # 232AMM5



B+B SMARTWORX

Powered by

ADVANTECH

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707 Dayton Road | PO Box 1040 | Ottawa, IL 61350 Phone: 815-433-5100 | Fax: 815-433-5109 www.advantech-bb.com | E-mail: support@advantech-bb.com

+ QUICK START GUIDE



Model 422LP25R

Port-Powered RS-232 to RS-422 Converter

Before you begin, be sure you have the following:

+ 422LP25R Port-Powered Converter



Fast and easy on the web: www.advantech-bb.com

Product Overview

RS-422 DB25 Male Port



RS-232 DB25 Female Port

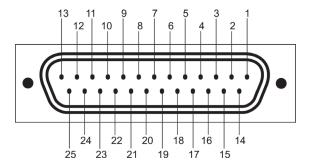
| 422LP25R Specifications Table | | |
|-------------------------------|---|--|
| Baud Rate | Up to 115.2 kbps | |
| Conversion | Converts unbalanced RS-232 signales to balanced RS-422 signals. | |
| Signals Supported | TD, RD, RTS, CTS | |
| Power | Port-powered (external power optional) | |

1 | RS-232 Pinouts (DB25 Female)

Pins 2(TD) and 3(RD) are passed through to the RS-422 side.

Pins 4(RTS) and 5(CTS) are tied together and provide power to the converter.

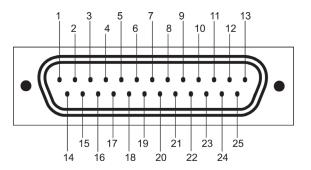
Pins 6(DSR), 8 CD) and 20(DTR) are also tied together and provide power to the converter (see diagram below).



| RS-232 Pinout Table | | |
|---------------------|--------------|--|
| PIN | SIGNAL | |
| 1 | FR GND, SHLD | |
| 2 | TD | |
| 3 | RD | |
| 4 | RTS | |
| 5 | CTS | |
| 6 | DSR | |
| 8 | CD | |
| 20 | DTE | |
| 7 | GND | |

2 | RS-422 Pinouts (DB25 Male)

The polarity of the RS-422 lines must be correct. with no data, being sent, the RS-232 line should be negative and RS-422 "A" Pin 2 should be negative with respect to "B" Pin 14.



| RS-422 Pinout Table | | |
|---------------------|--------------|--|
| PIN | SIGNAL | |
| 1 | FR GND, SHLD | |
| 2 | TD A (-) | |
| 14 | TD B (+) | |
| 3 | RD A (-) | |
| 5 | RD A (-) | |
| 16 | RD B (+) | |
| 17 | RD B (+) | |
| 7 | GND | |

3 Port-Powering

Power for the converter is derived from the Transmit Data line (pin 2) and the Handshake Control lines (pins 4, 5, 6, 8, and 20). The converter can derive power from these lines when they are in the Positive or Negative voltage state. This permits the converter to be used in applications without regard to software control of the handshake lines.