

CO-422 CONVERTER (RS-232 TO RS-422/RS-423)

CO-422 CONVERTER

RS-232 to RS-422

TECHNICAL REFERENCE

ELECTRONIC ENERGY CONTROL, INC.
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USA

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*International & Domestic

SPECIFICATIONS

Power Supply..... 9 to 14 volts DC 150ma

Function..... Converts the RS-232 interface standard to meet both the RS-422 and RS-423 interface standards. The CO-422 may also be used to convert RS-422/RS-423 to the RS-232 interface standard. (converters are also available to meet the RS-422A, RS-423A and RS-485 interface standards, contact technical support for more information)

Weight..... 1.5 ounces

Size..... 2 inches by 3.5 inches

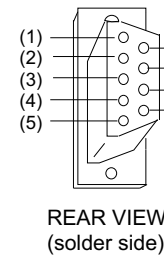
Options Available. RS-422 TransZorbs, Power TransZorb and resetting fuse

TECHNICAL SUPPORT

Technical support for our products is available by calling (614) 464-4470. If a technical adviser is not available, please leave your name, phone number and a time that you can be reached. Your call will be returned within 24 hours.

DB-9 RS-422 PIN-OUT (plug)

PIN		CONNECT TO
(1)	Aux. Out (+)	Not used
(2)	Transmitter (+)	(Red of Red/Black pair), to R+
(3)	Equipment Ground	Connect to shield
(4)	Receiver (+)	(White of White/Black pair), to T+
(5)	Aux. In (+)	Not used
(6)	Aux. Out (-)	Not used
(7)	Transmitter (-)	(Black of Red/Black pair), to R-
(8)	Receiver (-)	(Black of White/Black pair), to T-
(9)	Aux. In (-)	Not used



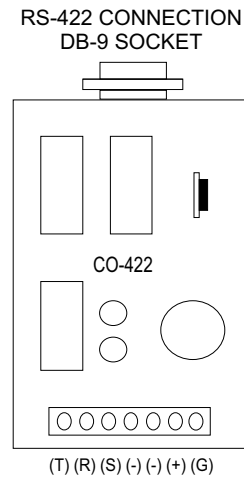
NOTE: The CO-422 provides a DB-9 socket. Make wire connections to a DB-9 plug (shown above). Always use 2 twisted pairs to connect the CO-422 converter to the interface card (up to 4,000 feet apart). The twisted pairs are necessary to cancel noise and to prevent transmission errors.

CONNECTION OF THE CO-422

IMPORTANT NOTE: The RS-422 interface IC's (3486 and 3487) are sensitive to lightning discharge and are subject to damage if powered when an electrical storm is in your vicinity. If you plan to use the CO-422 converter (or any RS-422 communications) while electrical storms are occurring, we recommend that the following grounding procedure be followed.

- (1) Install both the CO-422 converter and the interface card (ADC-4/8/16, STA-8/16 or AR-16) in metal enclosures and ground both metal enclosures to a good earth ground (an electrical system ground will usually be acceptable).
- (2) Use shielded 2 pair (twisted) communication cable and connect the shield at both ends to the metal enclosures.
- (3) In extreme cases it may be necessary to install transzorbors on the power inputs to the converter and interface card and on the RS-422 lines. You may contact us at technical support for more information.

CO-422 TERMINAL BLOCK CONNECTIONS



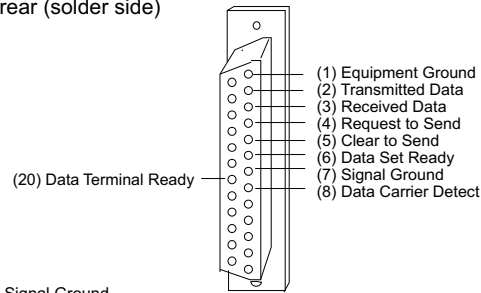
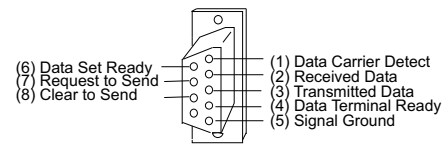
TERMINAL BLOCK CONNECTIONS FOR RS-232 & POWER

- (T) Transmitter (green wire) connect to computer RS-232 receiver
- (R) Receiver (white wire) connect to computer RS-232 transmitter
- (S) 12 Volt Signal (black wire) not required
- (-) Signal Ground (red wire) connect to computer RS-232 signal ground
- (-) Power Supply (black wire) (USE CAUTION...9 TO 14 VOLTS DC ONLY)
- (+) Power Supply (red wire) Reversed Polarity May Cause Damage
- (G) Shield and TransZorb Ground (connect to earth ground)

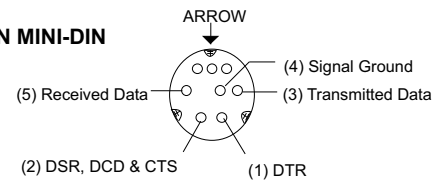
COMPUTER RS-232 CONNECTOR PIN-OUTS

DB-9 SOCKET (female)

Note: All connectors are viewed from the rear (solder side)



8 PIN MINI-DIN



DB-25 SOCKET (female)