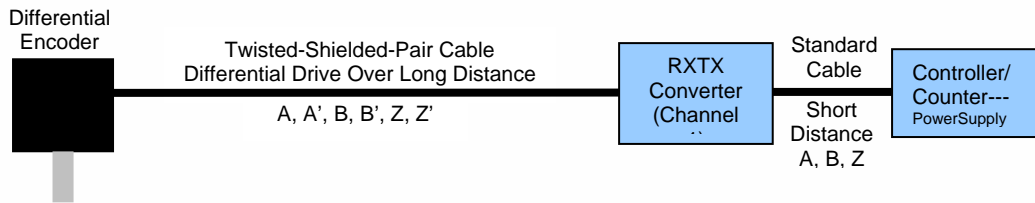


RXTX - Differential Encoder to Single Ended Device



Applications Guide

The illustration above utilizes Channel 1 of an RXTX Converter to convert the encoder's complimentary-differential signals to single-ended push-pull signals (which may be more compatible with some controllers/counters).

Note: Refer to the RXTX Converter connection diagram for the correct signal, power, and shield wiring to the terminal blocks (P1 and P2).

Suggestions:

- Mount the RX/TX Converter as close as possible to the Counter/Controller in order to minimize the single-ended cable length, thereby reducing susceptibility to noise.
- If transmitting encoder signals a long distance, provide a LOW CAPACITANCE, TWISTED-SHIELDED PAIR CABLE between the encoder and the RX/TX Converter.
- Terminate cable shields/drain wires to the RXTX Converter input/output (P1-2/P2-2) case terminals. The case terminals are connected to the RXTX housing. If, for some reason, it is not desirable to connect the shields to the housing, then connect the input and output shield/drain wires together.

CAUTION: The bare shield conductors and drain wires must be electrically insulated from the circuit board and components by a non-conductive sleeve (such as heat-shrink tubing used in cable termination assemblies).

TB-514.doc, Rev B, 05/05/04