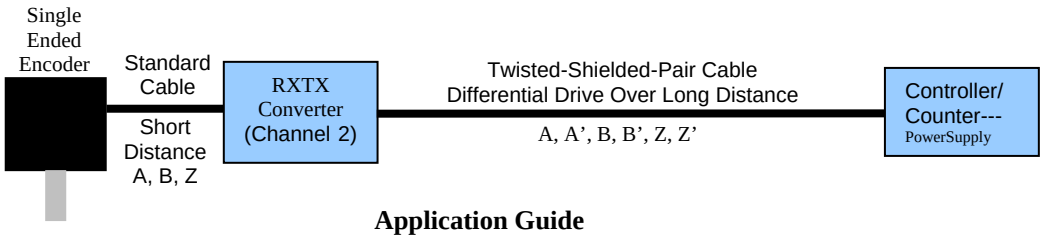
RXTX – Single Ended Encoder to Differential Receiver



Application Guide

The illustration above utilizes Channel 2 of an RXTX Converter to convert the encoder's single-ended signals (open collector, pull-up, or push-pull) to complimentary-differential signals (which are recommended for signal transmission over long distances).

Note: Refer to the RXTX Converter connection diagram for the correct signal, power, and shield wiring to the terminals.

Suggestions:

a) Mount the RX/TX Converter as close as possible to the encoder in order to minimize the single-ended cable length, thereby reducing susceptibility to noise.

b) If transmitting encoder signals a long distance, provide a LOW CAPACITANCE, TWISTED-SHIELDED PAIR CABLE between the RX/TX Converter and the Controller/Counter. It should be noted that this application requires that the Controller/Counter be designed to receive differential signals.

c) Terminate cable shields/drain wires to the 0V Terminal.

TB-515.doc, Rev B, 05/05/04, BEPC Version

Technical Bulletin 515

British Encoder Products Company Tel: +44(0)1978 262100 Fax: +44 (0)1978 262101 www.encoder.co.uk sales@encoder.co.uk