APPLIED WIRELESS ID

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Technical Reference

SENTINEL-PROX READERS

Reader Cable Specifications

Change History

Version	Date	Author	Comments
1.0	4 Aug 2004	Leigh	First release.

When an extender cable is installed between an AWID reader and the panel or controller to which it is connected, the cable should meet the following specifications:

Number of conductors.....Proximity readers: 5 or 6, plus shield or drain

.....Long-range reader (LR-911): 7 or 8, plus shield or drain

Wire type.....Copper, stranded

Wire size .....22 gauge

Insulation.....Each wire, color-coded

Wire combinations.....Individual wires – *not* twisted-pairs

Cable shield.....Overall shield only – *not* by pairs

Shield type .....Braid or foil, rated 100%

Sheath.....Overall plastic protective sheath

Maximum cable length .....Wiegand interface: 500 feet

.....RS-232 interface: 50 feet

Notes

Cable quality: Using high-quality cable pays dividends in ease of installation, performance of the reader, and long life.

Twisted-pair cable: If existing twisted pair cable is used, the AWID reader will perform best if the Wiegand-interface data lines (Data 0 and Data 1 – the green and white wires) are split between two different pairs. For example, the Data 0 line (green) can be paired with DC Power Plus (red); and the Data 1 line (white) can be paired with Power Common or Ground (black). This helps to prevent cross-talk between the data lines in long cable runs.

Power common: If an independent power supply is used for the AWID reader, tie the ground side of all power supplies to the controller's ground terminal. This creates a common ground reference for the power ground terminal in the controller's reader input ports, lock power, and reader power.

Cable grounding: See the Installation Sheet for each reader model for grounding requirements.