

ANSI E1.27-2: STANDARD WIRING PRACTICE FOR PERMANENTLY INSTALLED CONTROL CABLES FOR USE WITH ANSI E1.11 DMX512-A

Standard RS422/485 Conductor (ie Belden, Proplex, etc)	
XLR Pin	Wire Color Product/Manufacturer Specific
Pin 1	Shield
Pin 2	Data – (pair 1 complement)
Pin 3	Data + (pair 1 true)
Pin 4	Optional Data – (pair 2 complement)
Pin 5	Optional Data + (pair 2 true)

Cat5, Cat5e and Cat6 Wiring Pin outs (see notes)		
Wire Color and #	Function	XLR Pin Number
White/orange (1)	Data + (pair 1 true)	3
Orange (2)	Data – (pair 1 complement)	2
White/green (3)	Optional Data + (pair 2 true)	5
Green (6)	Optional Data – (pair 2 complement)	4
Blue (4)	Unused/unconnected	
White/blue (5)	Unused/unconnected	
White/brown (7)	Data signal common	1
Brown (8)	Data signal common	1

Note on Category Wire Chart

This chart is intended for DMX512 cabling only - **NOT** DMX-over-Ethernet cabling. Great care must be taken to prevent the accidental connection of DMX equipment to non-DMX equipment. The connection of DMX equipment to non-DMX equipment such as Ethernet switches or telephone equipment may result in serious equipment damage and/or personal injury, as pins 4 and 5 may carry voltages of up to 48VDC or greater.

Category wire is not recommended for loose or temporary cabling. The use of RJ45 connectors for DMX equipment should be restricted to patch bays in access controlled rooms and should not be used for the direct connection of portable equipment.

Please be aware that some non-standard pin-outs are also in use (i.e. Color Kinetics).