

Be certain.



DMX-512®

DMX lighting control cable is based on RS-485 data cable, 120Ω impedance and a capacitance of 12 pF/ft. or less. Many lighting designers use 100Ω cables for DMX because those cables are smaller, cheaper and easier to find. The impedance mismatch and higher capacitance will make them distance-limited compared to true RS-485. Among the 100Ω cable types are the premise/data cables such as Category 5, Category 5e, Category 6 and Category 6A. Using this cable for DMX is not the same as lighting control run with Ethernet,

which use these same Category cables but in a completely different protocol (i.e. Ethernet) with a 100m distance. Others use standard microphone cables or similar to run DMX. As these cables vary widely in impedance and capacitance, they are poor choices for DMX and only run effectively for very short distances, if at all. Three-pin XLR connectors have been specifically prohibited in the DMX standard since 2004, but many still use them.



9841, One Pair DMX (RS-485)

One Pair DMX (RS-485)

Description	Belden Part Number	Standard Lengths		Gauge	Impedance (Ω)	Capacitance		Shield	Insulation	Jacket	Nominal OD		UL NEC/C(UL) Type
		Ft.	m			pF/ft.	pF/m				In.	mm.	
Most Popular	9841	100	152	24 AWG (7x32)	120	12.8	42	100% foil 90% braid + drain	PE	PVC	.232	5.89	CM
		500	305										
		1000	1524										
LSZH Version	9841NH	500	152	24 AWG (7x32)	120	14.5	26	100% foil 90% braid + drain	PE	LSZH	.258	6.55	CMG
		1000	305										
Plenum Version	82841	500	152	24 AWG (7x32)	120	12	39	100% foil 90% braid + drain	Foam FEP	PVC	.204	5.18	CMP
		1000	305										
		5000	1524										
Plenum Version	89841	500	152	24 AWG (7x32)	120	12	40	100% foil 90% braid + drain	Foam FEP	FEP	.202	5.13	CMP
		1000	305										
		5000	1524										
Low Capacitance Version	3105A	500	152	22 AWG (7x30)	120	11	36	100% foil 65% braid + drain	Datalene® Foam PE	PVC	.281	7.14	CM PLTC
		1000	305										
		5000	1524										
Flexible Version (1 million flex cycles)	7200A	500	152	24 AWG (41x40)	120	15	49	100% foil 85% braid + drain	Foam PE /PE	PVC	.240	6.10	CM
		1000	305										
One-pair	9271	100	30	25 AWG (7x33)	124	12	40	100% foil 65% braid + drain	PE	PVC	.240	6.10	CM
		500	152										
		1000	305										
One-pair Low Capacitance	9860	500	152	16 AWG Solid	124	11	36	100% foil 90% braid	Foam PE	PVC	.440	11.18	CMX
		1000	305										
		2000	610										
One-pair 600V Rating	3074F	500	152	18 AWG (7x26)	124	12	40	100% foil 55% braid	PO	PVC UV Resistant	.460	11.68	CMG PLTC ITC TC
		1000	305										
		2500	762										
		5000	1524										