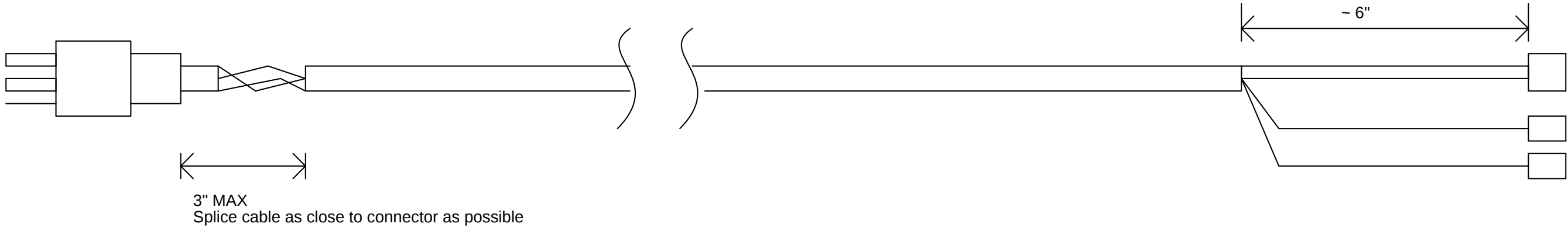


At 16 AWG, resistance is 13 mOhm/meter, so resistance of he pair is $47\text{m} \times 2 \times 13\text{mOhm/m} = 1.2 \text{ Ohm}$
At nominal current, the voltage drop in the cable is going to be $1.2\text{Ohm} \times 0.6 \text{ A} = 0.73\text{V}$
At start-up, voltage drop is going to be $2\text{A} \times 1.2 \text{ Ohm} = 2.4 \text{ V}$

From William MacLean at 4-Deep 3/18/2016
The S-DIHM draws between 1.5 and 2amps at start-up.
During normal operation the current draw will be approximately 600mA @ 12VDC. Voltage range is between 10 – 15VDC and should never be exceeded.
I would recommend a power supply that can provide 3A @ 12VDC if you don't use the supply that will come with the demo unit.



TIA/EIA 568B Wiring

1		White and Orange
2		Orange
3		White and Green
4		Blue
5		White and Blue
6		Green
7		White and Brown
8		Brown

Pin No.	strand color	Name
1	white and orange	TX+
2	orange	TX-
3	white and green	RX+
4	NC	*
5	NC	*
6	green	RX-
7	NC	*
8	NC	*

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