Extending the Serial Cable for Your SMART Board™ 600 Series Interactive Whiteboard Beyond 25 Feet

Applies to: The SMART Board™ 600 series interactive whiteboard with the optional RS-232 conversion module

Issue

This article explains how to extend the length of a serial cable beyond 25' (7.6 m).

Solution

The SMART Board 600 series interactive whiteboard ships with a USB cable. If you installed the RS-232 conversion module, there are several options for extending the length of the serial cable that connects to the computer.

SOLUTION 1

Connect several RS-232 cables (Part No. 93-00527). There is no signal degradation over a 200' (61 m) cable (comprising eight 25' [7.6 m] cables) at 19,200 baud. SMART Board serial and USB cables are not plenum fire rated. Although you can purchase third-party RS-232 cables, the quality of the cable determines the length to which you can extend it. We recommend a maximum length of 100' (30.5 m) if you use third-party cables of good quality. Order plenum fire rated cables as necessary.

SOLUTION 2

You can create a custom cable by modifying a regular Cat 5 cable (4 pairs, 8 wires) or other cable to work with your SMART Board 600 series interactive whiteboard. This type of cable has been tested to 100' (30.5 m), but you may be able to extend it to a greater distance. Order plenum fire rated Cat 5 cables as necessary.

In contrast to the SMART Board 500 series, you don’t need to conduct power along this cable since the RS-232 module is powered separately.

When creating this custom straight-through connection cable, the arrangement at one end should match the arrangement at the other. The pin arrangement must be as follows:

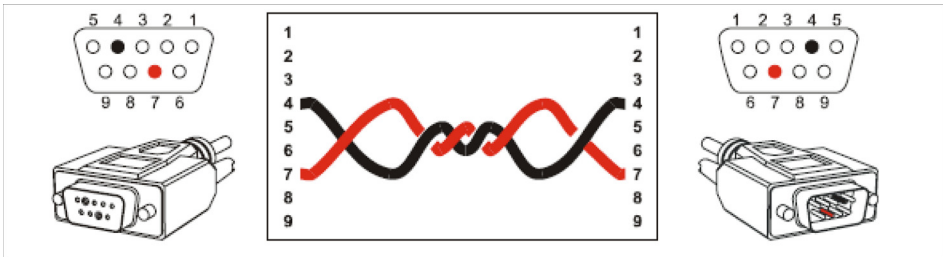
1	no connection
2	R×D (receive data)
3	T×D (transmit data)
4	DTR
5	SG (signal ground)
6	no connection
7	RTS (ready to send)
8	CTS (clear to send)
9	no connection

IMPORTANT

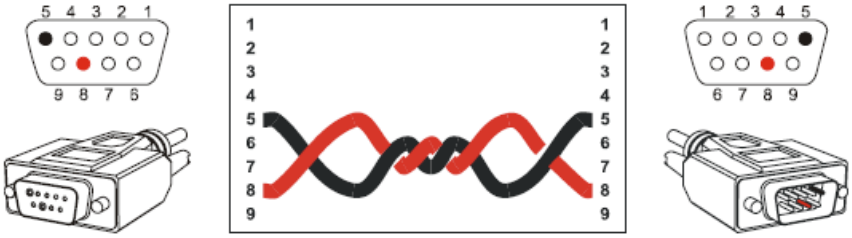
This option involves soldering or crimping wires onto the pins in a DSUB connector. Only users with sufficient technical knowledge should use this procedure.

Important Details

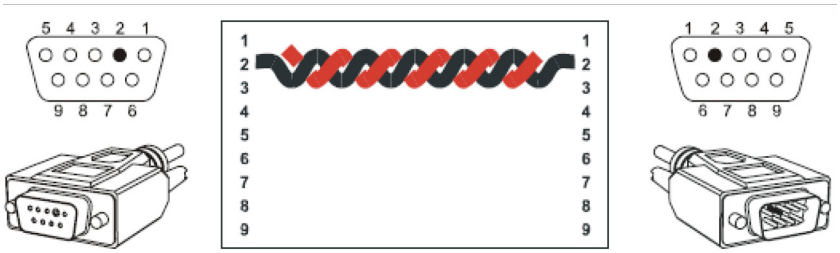
Pins 4 and 7 are one twisted pair.



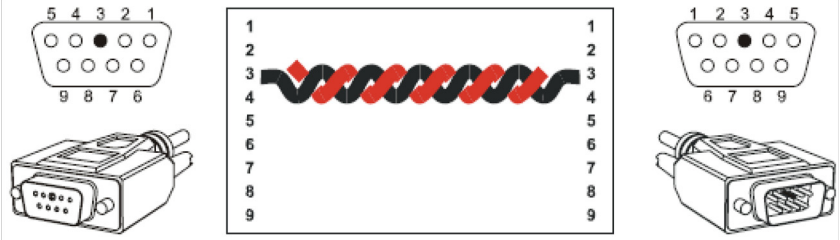
Pins 5 and 8 are one twisted pair.



Pin 2 is a twisted pair with an unused wire.



Pin 3 is a twisted pair with an unused wire.



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