

## Connecting a DB9 to the Vaisala Met-Packs; W 510 and 520

>These instructions are for RS 232 only<

Consult the User Guide for other communications standards

Attaching a DB 9 serial connector to the cable supplied with both models of the instrument is essentially the same; however there can be a difference with the cable supplied resulting in a difference of the wiring colors used for the power input. (DC 3-32 volts) The most important point is to ensure that the wiring to the DB9 results in the proper connections at the round M12 met-pack connector. Refer to the drawings with this document or check the documentation that came with the instrument.

Only 5 wires from the cable will be used. Three for communications connected to the DB9, and two for DC power input to the met-pack. Simply cut the unused wires even with the end of the cable outer insulation.

Use care in soldering the connections at the DB9 so excess solder does not create a short. Using small shirk tube over each connection point is advised.

It may be necessary to slightly enlarge where the cable exits the DB9 shell to accommodate the power leads exiting the shell. Alternately the cable cover can be *carefully* slit above and outside the connector shell and the power wire leads can be routed from the cable insulation cover and outside of the DB9 shell.

Solder and shirk wrap suitable lengths of 20-24 gauge wire as needed, to the two correct wires from the cable for the DC power input. Use *Red* wire for the positive and *Black* wire for the negative, to avoid any confusion in making power connections later. Finish by routing the power leads from the cable or DB9 connector. The end can be terminated to match your power connection needs. Add wire ties and shrink tubing as pictured to seal and reinforce the connections.

*NOTE: The power input leads DO NOT connect to the red and black wires in the supplied cable!*

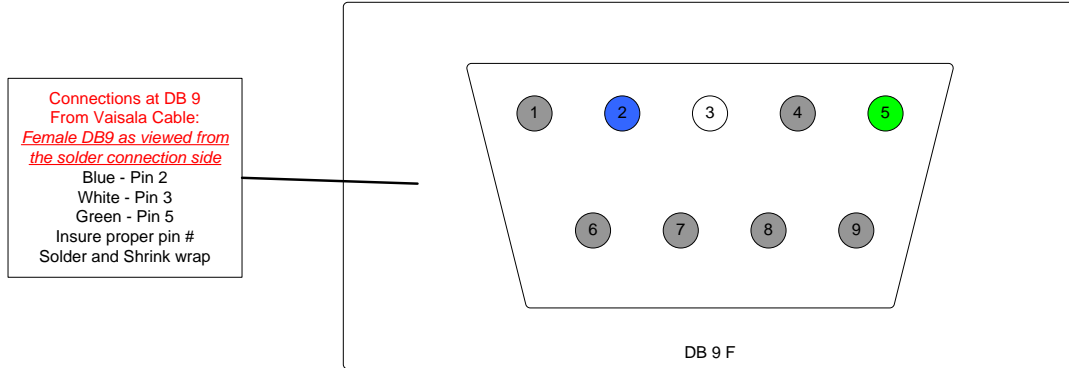
***For the 510 model (typically with an Orange cable) the negative is either a bare wire or a clear insulated wire and the positive is the wire with brown insulation.***

***For the 520 (typically a Black cable) the negative is Red, while the positive is a wire with brown insulation.***

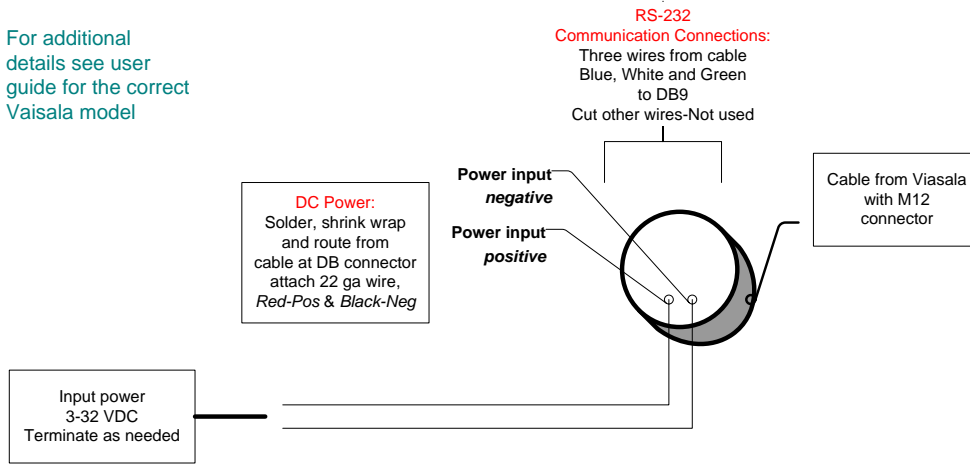
**The pin out for the cable should be confirmed by performing a continuity check with a voltage meter. Be sure the power input is on pins 2 and 8 of the round M12 connector to either model of the met-pack with the positive voltage on pin 2 of the M12**

(see drawing attached)

**Viasala WXT 510 & 520**  
 RS232 and Power  
 cable connections

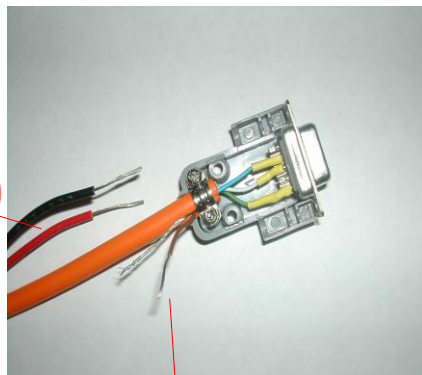


For additional details see user guide for the correct Vaisala model

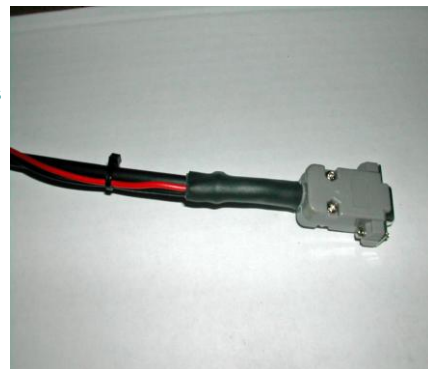


DB 9 before final assembly

Red and black power leads from power source; solder to cable power leads



Completed cable with DB9 and power leads routed outside of connector



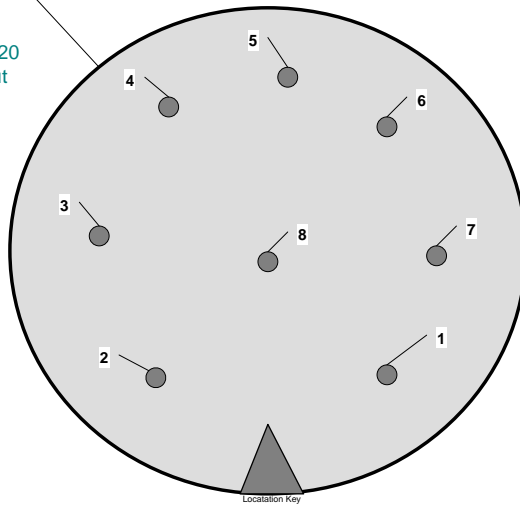
Positive and negative power input from cable see text for wire colors, they may differ between cables or Vaisala model

Vaisala WXT **510 & 520**  
RS232 and Power  
cable connections-  
M12 Connector

Round M12 connector  
viewed looking at the  
cable\*

*\*This will be opposite viewing the connector  
on the bottom of the Met-Pack*

Vaisala WTX 510/520  
M12-Cable pin out



Pin out  
Pin 8: operating voltage  
*negative*  
Pin 2: operating voltage  
*positive*  
Pin 7 Data out  
Pin 1; Data in  
Pin 3: Data Ground

**NOTE - for RS232 only**

M12 Connector  
connects to bottom of Met-Pack

