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AVL-2-T101B AND SL3

INSTALLATION INSTRUCTIONS FOR

MODEL AVL-2-C-PN-M-OP1B, S/N 8572

SL3 INSTALLATION

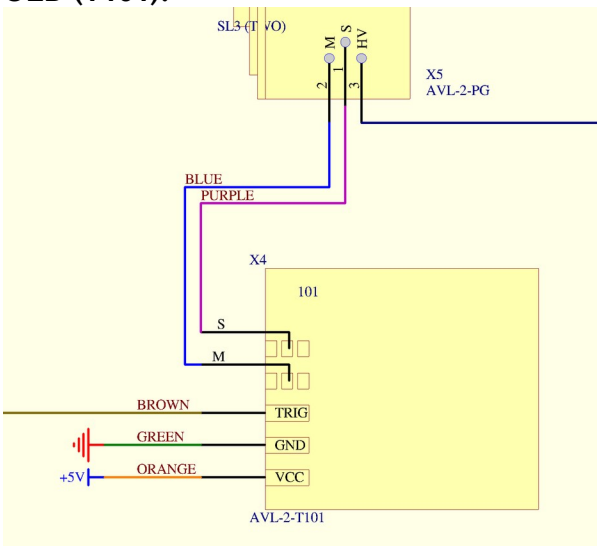
The “M” SL3 transistor should be installed in the socket closest to the AVL-2-T101 PCB. The “S” SL3 transistor should be installed in the other socket.

PCB AVL-2-T101B INSTALLATION

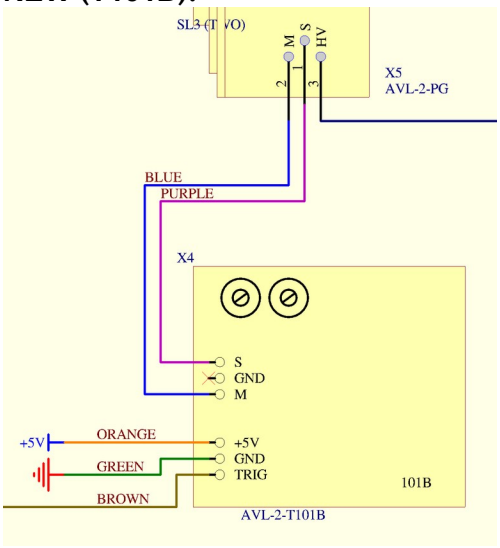
The AVL-2-T101B supercedes the AVL-2-T101 currently installed in AVL-2-C-PN-M-OP1B S/N 8572.

The old and new connection schemes are shown below. More detailed schematics are attached also.

OLD (T101):



NEW (T101B):



To replace the original T101, turn off the instrument, disconnect the power cord, remove the top cover, and unscrew the 2 screws holding the T101 PCB to the floor panel.

Then desolder the blue, purple, brown, orange, and green wires going to the T101. (There may be more than one green wire. Desolder all of them.)

Resolder all wires to the new T101B to the two 3-pin headers shown schematically above. The soldering may be done on the top side or the bottom side. (The schematic shows the top side / component side layout).

Alternatively, the two supplied 3-position insulation displacement connectors (IDCs) may be used to connect the wires to the headers instead. In this case, the exposed metal of the wires should be trimmed off, and each wire should be inserted into the mating forks of the IDC connector. (The Tyco 59803-1 tool, Digi-Key stock number A9982-ND, can be used for this purpose.)

Attach the T101B to the floor using the two screws removed earlier.

Re-install the top cover and power cord, and test the instrument.

TRIMPOT ADJUSTMENTS ON THE AVL-2-T101B

The AVL-2-T101B has two one-turn trimpots, marked “M” and “S”.

The settings of these trimpots were matched to the M and S SL3 transistors supplied with this order.

Some minor adjustment of the trimpots may be necessary if the AVL-2-T101B is used with other SL3 transistors.

Adjustments must be made with the power turned off, due to high voltages present in the area. DO NOT adjust the trimpots with the power on. Only apply power and check the waveform after you have made the adjustments and are not near the transistors and other internal circuitry.

Counterclockwise rotation of the M trimpot tends to sharpen the rise time and delay the leading edge (and shorten the pulse width).

Counterclockwise rotation of the S trimpot tends to sharpen the fall time and delay the falling leading edge (and lengthen the pulse width).

Only minor adjustment should be necessary.

If anything is unclear, or further assistance is needed, please contact:

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