



DART - RETRANSMISSION

Anderson has made available, as an option, a 4-20 mA retransmission of the temperature signal. The signal is generated by averaging the two signals from the dual element probe, and does not fail if the display should blank.

Access to the transmission board is accomplished by removing the two nylon screws on the right side of the display board and pivoting the board outward.

The range of the transmission signal is determined by setting the position of the removable shunts. The offset or 4 mA value is set with the shunts column "A", and ranges from 50° to 200°F. The span value is set with the shunts in column "B", and ranges from 50° to a 300°F span. The chart below indicates the range settings and shunt positions available.

Column "A" Offset setting - Shunt	Column "B" Span setting - Shunt
-50°F – W1	50°F – W7
0°F – W2	100°F – W8
50°F – W3	150°F – W9
100°F – W4	200°F – W10
150°F – W5	250°F – W11
200°F – W6	300°F – W12

For example if a retransmission range of 50°F – 200°F is desired, the offset shunt is placed on W3 and the span shunt is placed on W9.

A fine zero and a fine span adjustment are available for any fine adjustment of the retransmission signal. These pots are located below the shunts. Rotating the zero pot counterclockwise increases the signal output.

Wiring to the internally powered 4-20 mA output signal is accomplished by connecting to the mA OUT (-) and mA RETN (-) terminals. The two fuses must be in the sockets labeled 'LOOP' and 'INT'.

If an externally powered or 2-wire retransmission is desired, the wiring will be to the +EXT (+), and the mA OUT (-) terminals, and the two fuses must be in the sockets labeled 'LOOP' and 'EXT'. The loop requires between 18 and 36 VDC from the external power supply. This type of connection requires that the DART and the receiving instrument share a common earth ground. Or, that a connection be made between the mA RETN terminal and the earth ground of the receiving instrument.

IMPORTANT NOTICE

This DART electronic thermometer has been specially modified to make the 4-20mA retransmission available. Therefore, it may not be stated that this unit meets the applicable provisions of the Pasteurized Milk Ordinance (PMO) for milk pasteurization.

