



SERVICE AND APPLICATION NOTES

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Minimize Electrical Noise when using an X2658 Outdoor Air Temperature Sensor

AFFECTED UNITS:

Any application that uses the X2658 outdoor air temperature sensor.

ISSUE:

Multi-conductor thermostat cable installation may result in inconsistent outdoor sensor temperature readings or an out-of-range error display. The out-of-range issue will manifest itself as a "double dash" appearing on any product that displays the outdoor temperature.

DESCRIPTION OF ISSUE:

When only two wires of a multiple conductor cable are used, there is a possibility that electrical noise could interfere with the temperature sensor readings.

SOLUTION:

Short Term

When using the outdoor air temperature sensor and connecting to zone sensor or thermostat terminal connections we suggest using a dedicated two-wire minimum 22AWG (recommend 18AWG) thermostat cable between the sensor and host device (zone sensor or thermostat) and not to exceed 150 feet (45 meters).

Long Term

We will investigate ways to minimize electrical interference from other wires.

NOTE: *For all control systems using the remote outdoor sensor a good practice would be to run independent wires from the indoor control to the sensor. Keep all control wiring away from all high voltage wiring. The use of twisted pair or shielded cable can also be use if needed.*