

## LevNet RF™ Relay Receiver Heating Concerns

**Product:** LevNet RF Wireless Solutions

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**Summary:** This document describes how to address heating concerns with the LevNet RF relay receivers to avoid any damage to the receiver equipment.

**Information:** The Wire-In Relay Receivers have a max temperature limit of 122°F (50°C). If possible, the temperature at the location where the relay receiver is to be installed should be measured to ensure that this temperature limit is not exceeded.

The relay receivers should not be installed in a junction box above a ceiling hugger fixture. Light fixtures that place the bulb close to the junction box radiate heat into the junction box. This heat, combined with the internal heat produced by the relay receiver and the lack of airflow inside junction boxes, can cause the temperature inside the junction box to exceed the limit of the relay receiver.

Caution should be taken when installing the relay receiver in waterproof enclosures outside. Because there is no airflow in the enclosure, heat can become trapped. Also, if the enclosure is in direct sunlight, the inside of the enclosure can exceed the temperature limits of the relay receiver.

Be careful when placing a relay receiver next to a motor, as these can create heat.

Overloading the output of the relay receiver, or exceeding the voltage specifications of the input, can also cause the relay receiver to overheat, even if it is located in a place where there are no other sources of heat and plenty of air flow.

To confirm the suitability of a location for installation of the relay receiver, it is best to measure the temperature at that location under the worst case overheating scenario to ensure it does not exceed the specified temperature rating.

**Contact:** If you have any questions or concerns, please call LES technical support at (800) 959-6004.