



IDEAL Wireless Sensor System

Setup and Mounting Guide

Guide Overview

This guide is provided to help users get started using their IDEAL Wireless Sensor System quickly and efficiently. For detailed instructions about the Gateway and network configuration. Please refer to user documents found on the following page:

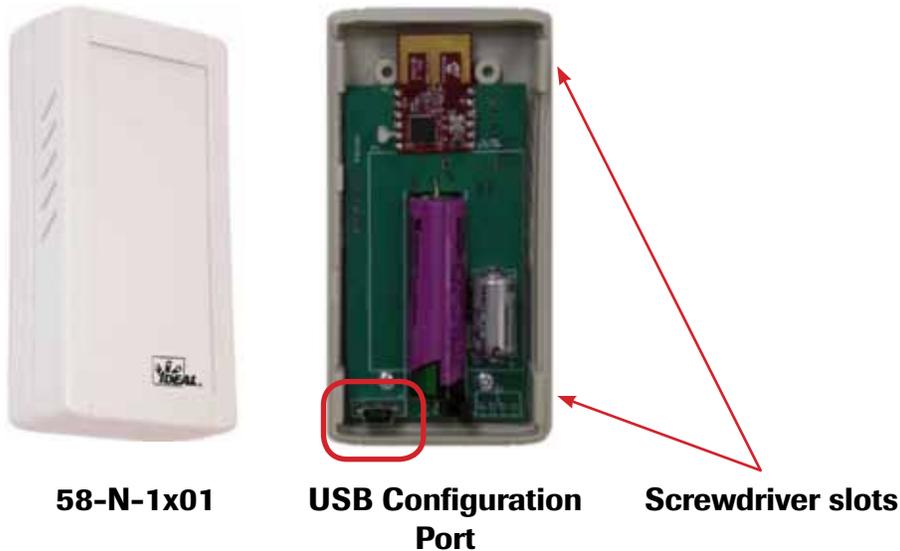
<http://www.idealwirelessensors.com/support/>

Configuring Sensors

It is easiest to configure all the sensors for a deployment at one time. After powering on the gateway and configuring the terminal interface, using the S option, take each sensor and plug them into the gateway, one at a time. This will configure each sensor with the gateway's network protocol settings; 2.4GHz systems – Comm Channel and Network ID; 915Mhz systems – Network ID ONLY.

To configure sensors, each sensor must be opened to expose the USB configuration port. To open the enclosure, there are 2 slots on the right side. The slots are just large enough for a flat-head screwdriver. Insert the screwdriver, applying light pressure to the tab, and then twist the screwdriver to release the tab. CAUTION: Excessive opening and closing of enclosure could result in broken tabs. Use care when opening and closing, and only open enclosure when necessary.

During configuration each sensor is assigned an ID that is activated in the gateway. This number should be written on the FCC



label inside the sensor enclosure. You can also write the network protocol settings for more detail (2.4GHz systems – Comm Channel and Network ID; 915Mhz systems – Network ID). Reattach the sensor back when configuration is complete.

idealwirelessensors.com
58-N-1202-C02-R
Contains:
FCC ID: OA3MRF24J40MA
IC: 7693A-24J40MA
Node ID#

Example Sensor Label



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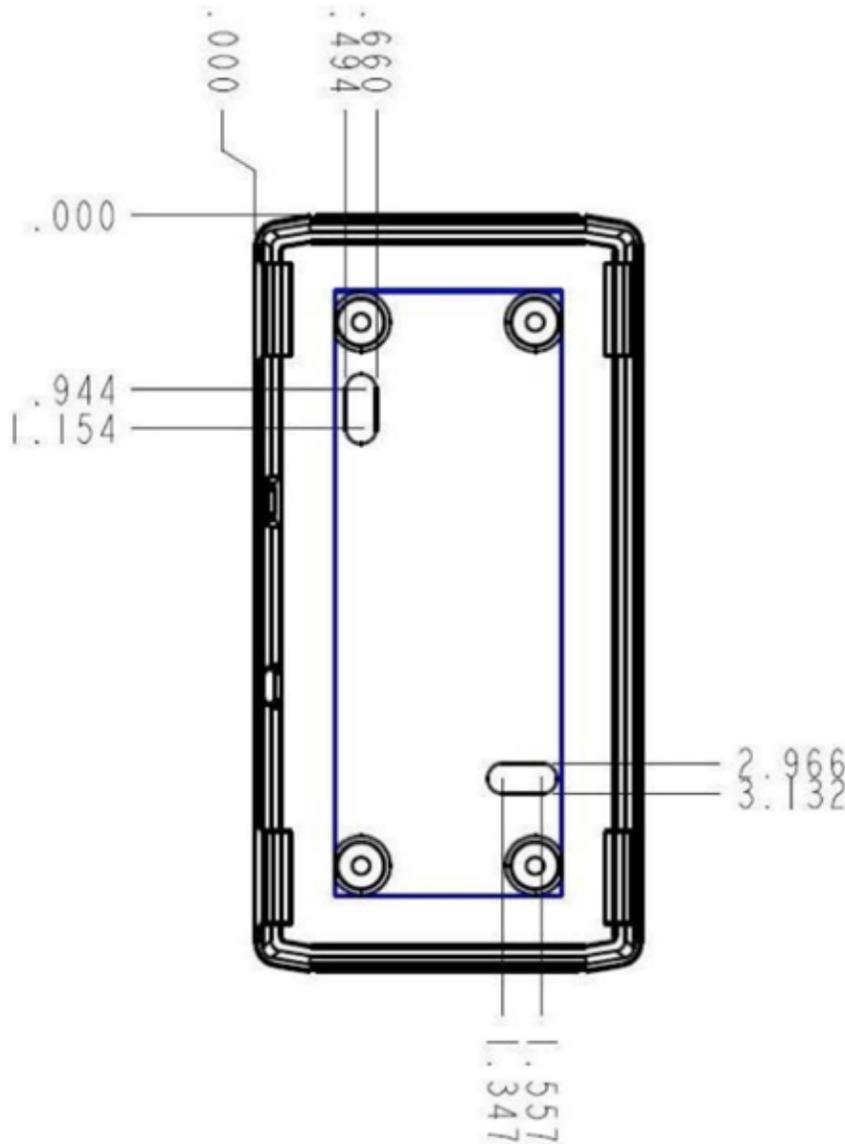
Sensor Mounting

Remove the sensor back plate, and used screws to secure the back plate to a wall in the desired location. Document the Node ID (and Network configuration, if desired) on building floor plans or other configuration documentation. Snap the sensor assembly to the back plate to complete mounting.

CAUTION: Care should be taken when mounting sensors to get the maximum communication range. For best range, sensors should be mounted on drywall, wood, plastic, glass or other non-metallic and non-masonry surface.

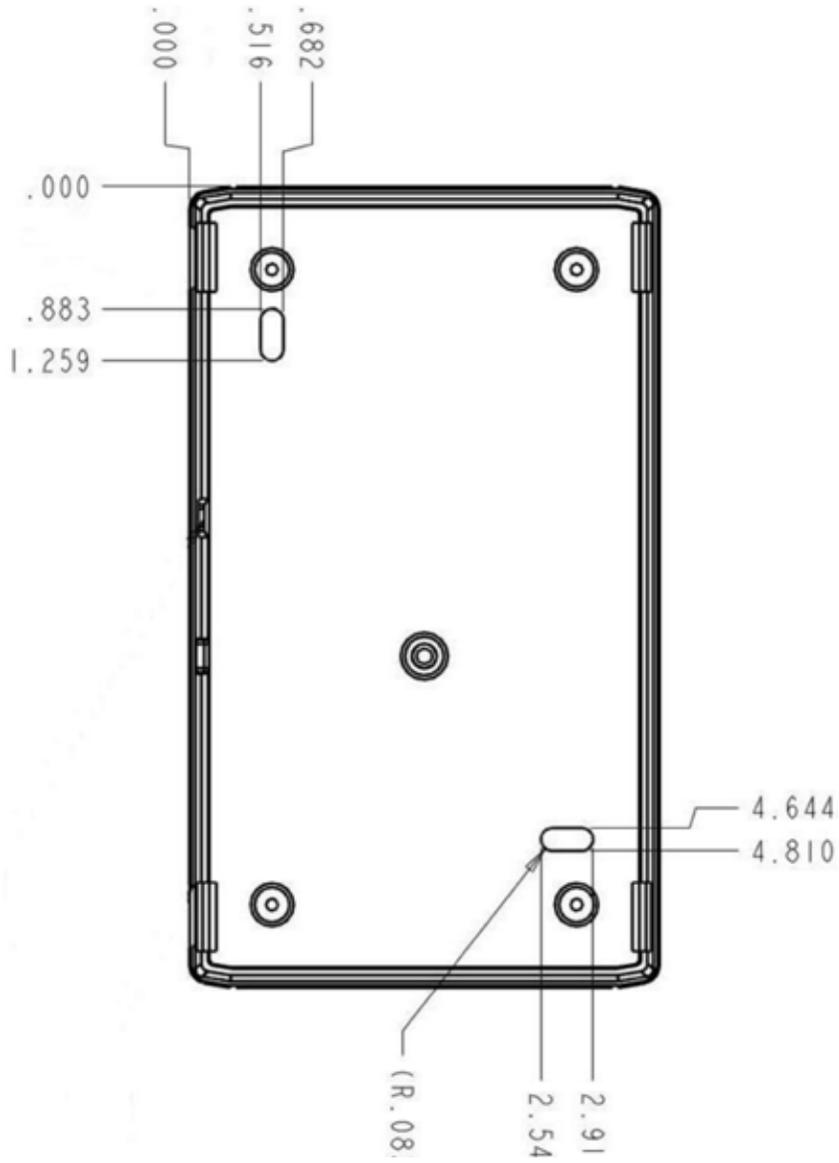
Mounting on metal surfaces or in metal structures, such as refrigerators, freezers, tanks, etc., should be avoided, as it will reduce the ability of the sensor to communicate back to the gateway. If possible, avoid mounting the sensors directly over a metal stud.

Sensor should be mounted so the longer dimension is vertical. Below are the hole patterns for the 1x01 Series and 1x02 Series sensors.



58-N-1x01 Hole Pattern

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58-N-1x02 Hole Pattern



Wireless Sensor System

Building Automation System Gateway

When mounting the gateway, follow the same precautions as the sensor. Avoid metal surfaces or studs to maximize reception range. The gateway should also be mounted with the longer dimension vertical.

The gateway has a flange with one screw hole on each side for mounting purposes. The screw holes are 0.19 inches in diameter, are center aligned vertically, and spaced 6.1 inches apart, center to center.

For testing purposes, it may be required to set the gateway in a temporary location. If the gateway is placed on a floor, make sure that the enclosure is inverted vertically (the IDEAL logo is upside down in the top left corner). This is because the antenna is located near the power connector on the bottom side of the unit. Setting the unit on the floor with the right side up can detune the antenna and give inaccurate range results.