onset®

HOBOnode Outdoor Wireless System
Quick Start Guide

www.onsetcomp.com

Follow the steps in this Quick Start Guide to setup a HOBOnode Outdoor Wireless system. Steps 1-8 should be performed in a lab/office environment to familiarize yourself with the components and perform initial setup before you deploy the system in the field.

IMPORTANT: All HOBOnode devices come with rechargeable alkaline batteries, which **can only be purchased from Onset**. The HOBOnodes and HOBOnode Repeaters (but not the HOBOnode Receiver) can also use standard AAA lithium batteries, which can be purchased from Onset. Lithium batteries are recommended in applications with elevated temperatures.

See the *HOBOnode Outdoor Wireless System User Guide* at the following location for more details:
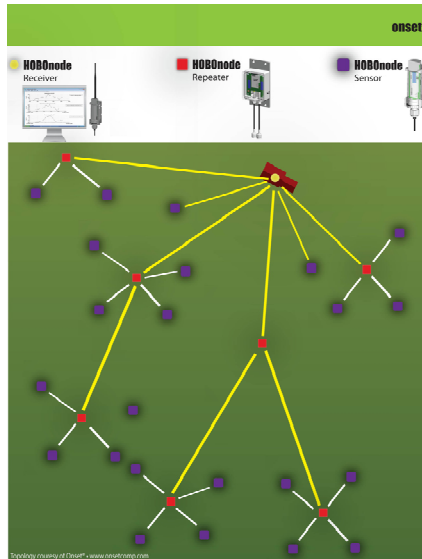
http://www.onsetcomp.com/support/manuals

Components
The HOBOnode System includes:
- 1 HOBOnode Outdoor Receiver (W-RCVR-USB)
- HOBOnode(s) (W-xxx)
- HOBOnode Outdoor Repeater(s) (Optional) (W-REPEATER)

The following diagram shows an example deployment of a HOBOnode Outdoor Wireless system.

Step 1 - Download the HOBOnode Viewer utility
Download Onset's HOBOnode Viewer Utility software. You also must have Microsoft .NET version 3.5. HOBOnode Viewer and .NET can be downloaded from: http://www.onsetcomp.com/support/software_utilities

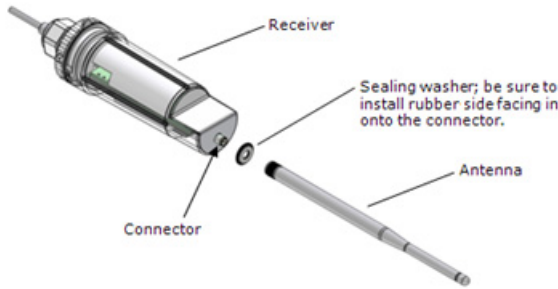## Step 2 - Run the HOBOnode Viewer Setup Wizard

Enter information in each window as required and click **Next** to proceed to the next window. In the **General Information** pane, make sure you select your desired units. In the **Alarm/E-mail Configuration** pane, enter the E-mail addresses for any accounts that you want to receive alarm notifications.

If you want to enable authentication, check the *use Authentication* box and enter a **Username** and **Password**. If you are unsure of values for Server Address or Port, contact your IT Administrator or your Internet Service Provider (ISP). Note that if you click the Send Test Email button, only the first address listed in the Recipient Addresses field will receive a test message.

NOTE: To skip this step, check the *skip and configure later …* box and click **Next**.

Step 3 - Set Up and Connect HOBOnode Outdoor Receiver

IMPORTANT: Before installing the antenna, be sure to install the sealing washer, rubber side in, onto the connector as shown below.
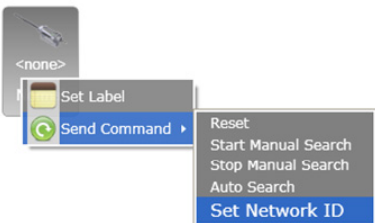

After installing the antenna, connect the HOBOnode Outdoor Receiver to the PC. Put the receiver into the base and mount vertically or lay horizontally on a desk. Make sure the antenna is pointing upward. The receiver will automatically connect to HOBOnode Viewer within approximately 1 to 2 minutes and an icon will appear in the Network Tree. Only one HOBOnode Outdoor Receiver can be connected to a single PC.

Step 4 - Set HOBOnode System Network ID

Before you activate HOBOnodes, you must set the HOBOnode Network ID for the HOBOnode Receiver to make your HOBOnode Network unique from any other HOBOnode or wireless networks that may be in the area.

If you are setting up more than one HOBOnode network, use unique RF Channels for each. **NOTE**: This is for your HOBOnode network only and is not related to your corporate network or any other wireless or internet network.
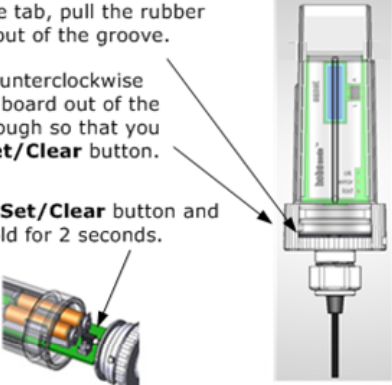
a. Right-click on the Receiver icon and select **Send Command** > **Set Network ID**

b. Select a unique **RF Channel** (11-25) and **Unique ID** (0-4095).

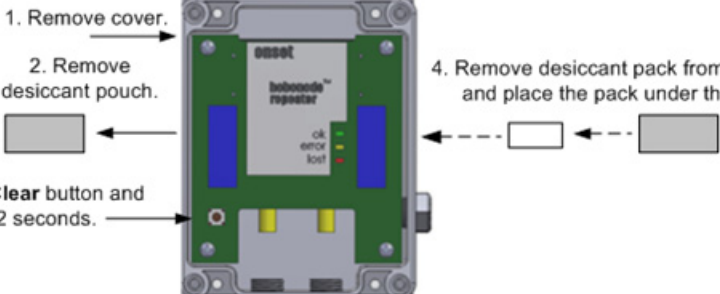## Step 5 - Activate Devices (If not already Activated)

You must push the **Set/Clear** button on HOBOnodes and HOBOnode Outdoor Repeaters to activate them. Remove the cap and locate the brown button. Hold it down for 2 seconds. The LEDs will flash briefly to indicate that the device is activated.

Activating HOBOnodes

1. Using the tab, pull the rubber spacer out of the groove.

2. Twist cap counterclockwise and slide the PC board out of the case, just far enough so that you can reach the **Set/Clear** button.

3. Push **Set/Clear** button and hold for 2 seconds.

4. Slide the PC board back into the case, aligning the tab on the cap with the groove in the case. Twist the cap clockwise to secure.

5. Re-install the rubber spacer, aligning the tab with the ridge on the top of the case.

Activating Repeaters

See the *HOBOnode Outdoor Repeater Setup Guide* for details on setting up and deploying the HOBOnode Outdoor Receiver.

1. Remove cover.

2. Remove desiccant pouch.

3. Push **Set/Clear** button and hold for 2 seconds.

4. Remove desiccant pack from the pouch, and place the pack under the board.

Step 6 - Link Devices to the HOBOnode Receiver

In HOBOnode Viewer, right-click on the Receiver icon and select **Send Command > Start Manual Search.** The receiver will search for any HOBOnodes or HOBOnode Outdoor Repeaters within its range. The yellow Search LED on the receiver will blink while searching. As nodes are linked to the receiver, they will appear in the Network Tree.

Step 7 - Add Labels to Nodes (Optional)

In HOBOnode Viewer, right-click on a node icon, select **Set Label**, and enter a label for the node**.**

Step 8 - Configure Alarms (Optional)

In HOBOnode Viewer, right-click on a node icon, select **Configure Alarms**, and enter values for the alarm**.**

Step 9 - Deploy HOBOnodes

Deploy HOBOnodes in desired locations. Attach the mounting bracket to a wall, post, or tree, then insert the HOBOnode into the bracket. Make sure the cable is hanging down and has a drip-loop.

Step 10 - Deploy HOBOnode Repeaters (if required)

Onset recommends you mount HOBOnode Repeaters and antennas to an Onset tri-pod, however, you can mount them to a pole. The Directional antenna connects the HOBOnode Repeater to the HOBOnode Receiver and should be pointing as directly at the HOBOnode Receiver as possible to optimize the connection. Repeaters must be grounded when deploying them in an open field. Refer to the *HOBOnode Outdoor Repeater Setup Guide* for more information. Once Repeaters are deployed, perform an Auto Search to check for communication with Repeaters before re-linking devices in the following step.

Step 11 - Re-link Devices

When all devices are deployed, go to HOBOnode Viewer and perform an Auto Search. Verify that all nodes are linked to the correct Receiver or Repeater.

<u>Troubleshooting</u>

- If you are having trouble linking a component to the receiver or repeater, try repositioning the component.

- If you experience general connection problems, try assigning a different RF Channel to the HOBOnode Receiver, and then reset all of the devices so that they re-link to the Receiver with the new Network ID. See the *HOBOnode Outdoor Wireless System User Guide* for information on resetting nodes.