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Viewing and Configuring End Devices

Once an End Device is connected to the ZW-REC it is visible in the End Device Readings Page:


#	Name	Status	Sensor 1	Sensor 2	Sensor 3	Sensor 4	Sequence #	Last Update
0	Supply Closet	Good	23.00 °C	49.60 %RH	1010.20 mbar	579.00 lx	49	17:08:21
7	Lab TH Sensor	Good	23.10 °C	52.30 %RH	--	--	192	17:08:15
15	Storage Room 1	Good	23.50 °C	48.00 %RH	1011.20 mbar	475.00 lx	6	17:08:21

Showing 1 to 3 of 3 entries

Device Filter: 1 sec

By default, End Devices are sorted by Device ID and up to 10 End Devices are shown. Use the **Previous** and **Next** buttons to show additional pages of End Devices.

The refresh rate of the web page is shown in the bottom left. This is how often the web page refreshes the displayed data. This number does not reflect how often the End Device takes readings.

Connected End Devices and Sensors can be configured by clicking the settings icon  in the right column. Here you can give the End Device a name, change the update interval and add offsets to sensor readings.

The update interval is the frequency End Devices transmit readings. By default, most End Devices send one reading every 10 seconds. The update interval greatly effects the battery life of End Devices. The shorter the update interval the shorter the battery life will be.

After making changes use the **Update** button to save the settings.

End Device - 15

General

Name:

Update Interval(second):

Sensor 1 Offset(°C):

Sensor 2 Offset(%RH):

Sensor 3 Offset(mbar):

Sensor 4 Offset(lx):

Special Functions

Turn On Identify Mode

ZW-REC Configuration

Once the ZW-REC is communicating with the End Devices, finish configuration of the ZW-REC.

Click on the System tab in the upper right to bring up ZW-REC System Settings. Login to the page using the Administrator credentials shown in **Step 3**.

The System information is shown at the top of the page including firmware revision and PAN ID. Use the PAN ID to configure UW Series devices. Click the information icon for help with setting up zSeries and zwSeries End Devices.

System

Baseboard Firmware: 2.0.0.29

MAC Address: 00:03:34:00:85:C1

Radio Firmware: 0.1.47.0

Radio PAN ID (PID): 13109 

When the ZW-REC starts up, it performs an energy scan to find a clear RF channel. This RF channel is displayed in the Radio Section. To prevent the ZW-REC from re-scanning when it is rebooted uncheck the Enable Energy Scan box and press **Save**. This allows End Devices to automatically reconnect to the ZW-REC after a reboot.

Radio

RF Channel:

Enable Energy Scan at Startup

The Measurement Units section selects between SI and Imperial units for temperature and pressure. Select the desired units and press **Save**. End Devices with LCDs will reflect the new settings after they next transmit.

Measurement Unit

Temperature:

Pressure:

6

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Other Features

The ZW-REC has many additional features to help visualize your data and to integrate with your network. You can change the IP Address to connect to a different sub-net. The ZW-REC also integrates with DHCP and DNS servers and full HTTPS encryption is available.

An integrated chart page allows for local data visualization and chart data can be saved to your local computer. The ZW-REC also works with the Omega Dashboard for comprehensive data logging, charting and e-mail alarm notification. For more information, please refer to the full user manual.

Note: To view Wireless Certification Statement please view full product manual at, www.omega.com/manuals/manualpdf/M5546.pdf LDSRUH



For complete product manual:
www.omega.com/manuals/manualpdf/M5546.pdf



ZW-REC zwSeries Wireless Receiver

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OMEGA ENGINEERING, INC. warrants this unit to be free of defects in materials and workmanship for a period of 25 months from date of purchase. OMEGA's WARRANTY adds an additional one (1) month grace period to the normal two (2) year product warranty to cover handling and shipping time. This ensures that OMEGA's customers receive maximum coverage on each product. If the unit malfunctions, it must be returned to the factory for evaluation. OMEGA's Customer Service Department will issue an Authorized Return (AR) number immediately upon phone or written request. Upon examination by OMEGA, if the unit is found to be defective, it will be repaired or replaced at no charge. OMEGA's WARRANTY does not apply to defects resulting from any action of the purchaser, including but not limited to mishandling, improper interfacing, operation outside of design limits, improper repair, or unauthorized modification. This WARRANTY is VOID if the unit shows evidence of having been tampered with or shows evidence of having been damaged as a result of excessive corrosion; or current, heat, moisture or vibration; improper specification; misapplication; misuse or other operating conditions outside of OMEGA's control. Components in which wear is not warranted, include but are not limited to contact points, fuses, and triacs.

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FOR WARRANTY RETURNS, please have the following information available BEFORE contacting OMEGA:

- Purchase Order number under which the product was PURCHASED,
- Model and serial number of the product under warranty, and
- Repair instructions and/or specific problems relative to the product.

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- Purchase Order number to cover the COST of the repair or calibration,
- Model and serial number of the product, and
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START HERE

Using This Quick Start Manual

Use this Quick Start Manual to set up your zwSeries wireless system and begin operation. Information is provided on:

- Required equipment
- Configuring your computer
- Setting up the ZW-REC
- Setting up an End Device
- Viewing and Configuring End Devices
- ZW-REC Configuration
- Other Features

For complete information on all setup options see the user manual available at omega.com/manuals.

Before You Begin

Warning: The following parts of the unit are ESD sensitive:

- The Antenna
- Metal connectors for the Antenna, USB Port, and Power

The ZW-REC is designed to be operated in a clean and dry environment. Care should be taken to prevent the device from being exposed to moisture, toxic chemicals, extreme cold or hot temperature that are outside the specification listed in the user manual.

Required Equipment

Before setting up a zwSeries wireless system ensure you have the following components:

- ZW-REC Wireless Receiver
- ZW-ED or other compatible Wireless End Device(s)
- Measurement Probe (If required. Some End Devices have Integrated Sensors)
- Computer with a free Ethernet port and HTML5 capable web browser
- Ethernet Cable (A crossover cable is required for computers using older 10/100Base-T Network Interfaces)

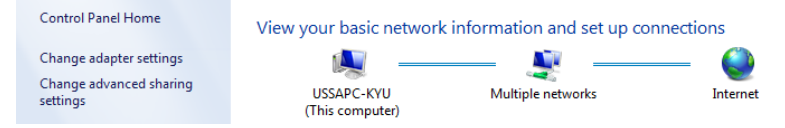
2

Configuring Your Computer

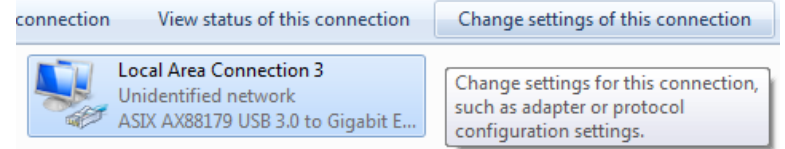
The ZW-REC is configured with a default static IP Address of 192.168.1.200. Before connecting to the ZW-REC, first configure your network adaptor so that it is on the same sub-net.

For Windows:

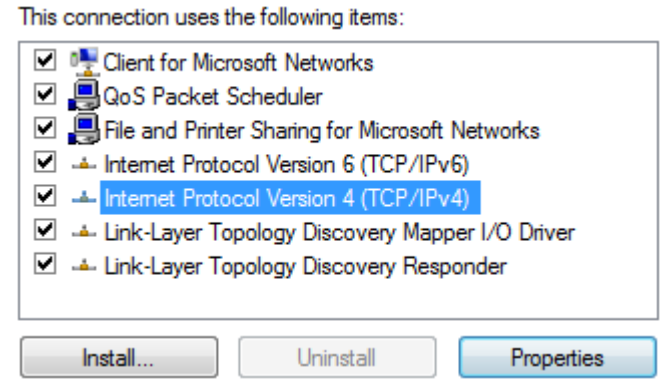
- Open Network and Sharing Center
- Click **Change adaptor settings**



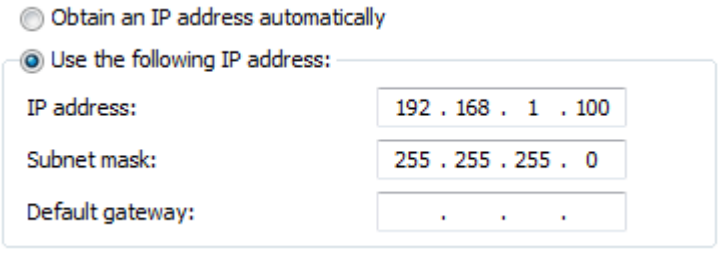
- Select your Network Adaptor
- Click **Change settings of this connection**



- Select Internet Protocol Version 4
- Click **Properties**



- Select Use the following IP address:
- Enter 192.168.1.100 as the IP address
- Click **Okay**

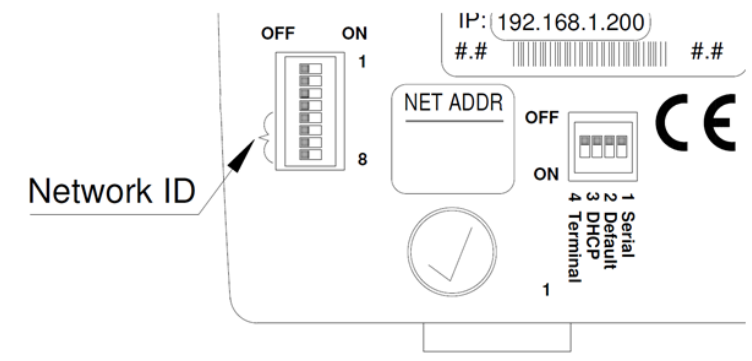


Your computer is now setup to communicate with the ZW-REC.

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Setting up the ZW-REC

Before turning the ZW-REC on, first locate the DIP switches on the back of the unit. These switches set the Network ID (NID) which the ZW-REC uses to identify which End Devices to communicate with. The NID is set to Zero by default. Most End Devices also have a default NID of Zero.



If NID Zero is used by an existing wireless installation, change the NID using switches 5 – 8. If older zSeries End Devices are used, do not use switch 8. For more information on setting the NID consult the full manual.

Attach the included antenna to the ZW-REC.

Power on the ZW-REC using the supplied AC adaptor. The blue wireless link LED will flash and then remain on.

Connect the ZW-REC to your computer using an Ethernet cable. The Network Link and Activity LEDs will light up to indicate the ZW-REC recognizes an Ethernet Connection.

Open a web browser and navigate to: <http://192.168.1.200>

A dialog box will appear asking for a user name and password. Use the default Client login information found below:

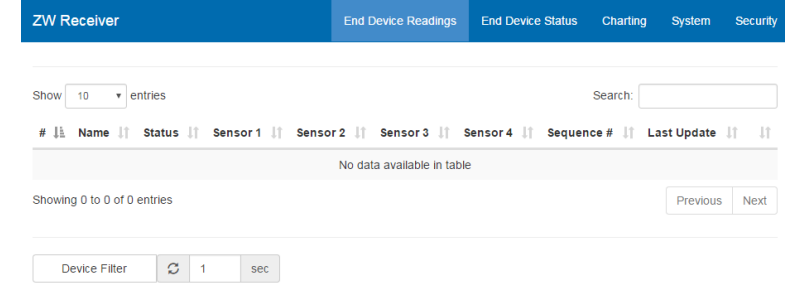
User Account	Login Name	Password
Client	login	12345678
Administrator	admin	00000000

The Administrator information is required later.

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Setting up an End Device

A blank End Device Readings page is shown once you have logged into the ZW-REC webpage. As End Devices are connected to the ZW-REC they appear in this page.



To connect an End Device to the ZW-REC, first set the NID of the End Device to be the same as the ZW-REC. All zSeries and zwSeries devices ship with the NID set to Zero.

End Devices require a Device ID (DID) to distinguish between different devices in the network. Most End Devices ship with a default DID of Zero. If more than one End Device is being configured, each End Device needs a unique DID. Please consult the End Device User Manual for more information on setting the DID.

Note UW Series End Devices use a 5 digit NID called the PAN ID and refer to the DID as the Address. To find the PAN ID add 13106 to the NID. If you are using a UW Series End Device please consult the full ZW-REC and UW user manuals for information on setting the PAN ID and DID.

If your End Device requires a probe, connect the probe before applying power to the device. End Devices may not connect to the ZW-REC if the probe is not connected.

Attach the included antenna to the End Device. (If applicable)

Use the supplied batteries and/or AC adaptor to power on your End Device.

Note zwSeries and zSeries End Devices blink their Blue Link LED while searching for the ZW-REC. Once connected the LED will stop blinking and flash briefly after each transmission.