





REFERENCE GUIDE MODEL ZW-6400

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## PRODUCT WARNINGS



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This publication may contain examples of screen captures and reports used in daily operations. Examples may include fictitious names of individuals and companies. Any similarity to names and addresses of actual businesses or persons is entirely coincidental.

The illustrations in this manual are intended as a guide and may differ from your actual unit as ZeroWire is continually being improved.

#### **Intended Use**

Use this product only for the purpose it was designed for; refer to the data sheet and user documentation. For the latest product information, contact your local supplier or visit us online at www.interlogix.com/zerowire

The system should be checked by a qualified technician at least every 3 years and the backup battery replaced as required.

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# **Regulatory Notices for USA**

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

**Note:** This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- —Reorient or relocate the receiving antenna.
- —Increase the separation between the equipment and receiver.
- —Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- —Consult the dealer or an experienced radio/TV technician for help.

Caution: Any changes or modifications not expressly approved by the party responsible for compliance to this equipment would void the user's authority to operate this device.

FCC Radiation Exposure Statement: This product complies with FCC radiation exposure limits set for an uncontrolled environment. This equipment should be installed and operated with minimum distance of 20cm between the device and your body.



FCC ID: 2ADG2ZW-6400H Contains FCC ID: W7OMRF24WG0MAMB

DESTINATION CONTROL STATEMENT – These commodities, technology, or software were exported from the United States in accordance with the Export Administration Regulations. Diversion contrary to United States law is prohibited.

This equipment should be installed in accordance with Chapter 2 of the National Fire Alarm Code, ANSI/NFPA 72, (National Fire Protection Association, Batterymarch Park, Quincy, MA 02269). Printed information describing proper installation, operation, testing, maintenance, evacuation planning, and repair service is to be provided with this equipment.

## **Regulatory Notices for Canada**

Model / Modèle: ZW-6400

IC: 12545A-ZW6400H

Contains / Contient IC: 7693A-24WG0MAMB

CAN ICES-3 (B)/NMB-3(B)

This device complies with Industry Canada's licence-exempt RSSs. Operation is subject to the following two conditions:

- (1) This device may not cause interference; and
- (2) This device must accept any interference, including interference that may cause undesired operation of the device.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes :

- 1) l'appareil ne doit pas produire de brouillage;
- 2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

This Device complies with IC radiation exposure limits. It is desirable that the device shall be installed to provide a separation distance of at least 20cm from all persons and must not be co-located or operating in conjunction with any other antenna or transmitter.

# REFERENCE GUIDE MODEL ZW-6400

# Welcome!

Thank you for purchasing ZeroWire!

Please read through this document before starting the installation.

#### Features & Benefits

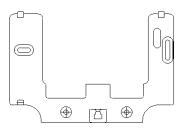
- 256 Users enough for even moderate sized businesses
- 64 wireless sensors + 20 Keyfobs
- 4 Areas/Partitions split your system into smaller parts you can protect individually
- Personal Voice Guided setup and menu prompts
- 2 Hardwired inputs (can be doubled to total 4)
- 2 Programmable Outputs
- 85db piezo siren
- 24 hour battery backup
- Wi Fi 802.11 b/g
- Wi Fi direct for setup
- IEEE 802.3 Compliant Ethernet
- 3G Cellular Radio Module, optional

# **Included In Box**

Check contents before beginning your installation.



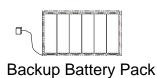
ZeroWire Panel



Wall Bracket

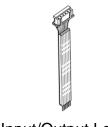


Transformer





Full Reference Guide Available Online



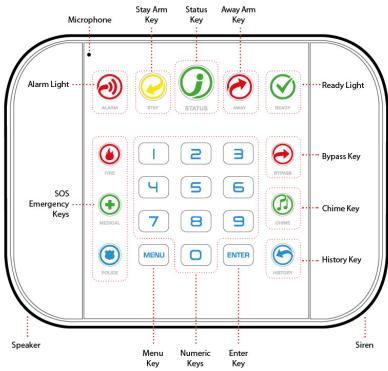
Input/Output Lead

## **Optional Accessories**

•	Cellular Radio Modem	ZW-HSPA	
•	Desk Stand	ZW-DS01	
•	Extension Antenna	ZW-ANT3M	
•	Battery	ZW-BAT23A	
•	Power Supply	ZW-PS9V	
•	Ultra Secure IP Camera	ZW-USW-3120	
	(Only works with ZeroWire)		

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## Front of ZeroWire



Key	Color	Description
ALARM	Red	System is in alarm. Enter your PIN code then ENTER to turn off the alarm. Press the STATUS key for more info.
	Yellow	System is armed in Stay mode.
STAY	Not lit	System is disarmed if Away is also not lit. Press the STAY key to arm in Stay mode.
	Green	System is normal.
	Yellow	Non-urgent system conditions present. Press the STATUS key to hear system conditions.
STATUS	Red	Urgent system conditions present. Press the STATUS key to hear system conditions. If you are unable to fix the issue, contact your service provider for help.
	Red	System is armed in Away mode.
AWAY	Not lit	System is disarmed if Stay is also not lit. Press the AWAY key to arm in Away mode.

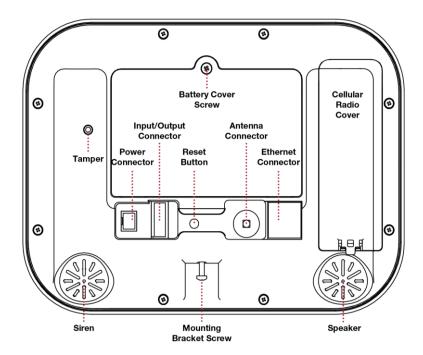
Key		
Key	Color	Description
	Green (steady)	All sensors are ready and the system can be armed in Away or Stay mode.
READY	Green (flashing)	Some sensors are unsealed but system is force-armable. If these sensors are not sealed by the end of the exit time the system may go into alarm.
	Not lit	System cannot be armed, press the STATUS key for more info.
BYPASS	Press the BYPASS key if you wish to isolate (ignore) a sensor. Bypassed sensors will not be active when the system is armed in Stay or Away modes.	
CHIME	Press the CHIME key to select which sensors will make a doorbell sound on the ZeroWire when they are tripped.	
HISTORY	Press the HISTORY key to listen for alarm and event history.	
<b>(</b>	Hold down the key to send a message to a central monitoring center. Enter your PIN code then ENTER to turn off a SOS alarm.	
FIRE		

**MEDICAL** 

**POLICE** 

Features may be enabled by professional security provider.

## **Back of ZeroWire**



Connections for the cellular radio module are located under the cover on the right.

# REFERENCE GUIDE MODEL ZW-6400

## 1 Hardware Installation

#### What You Need

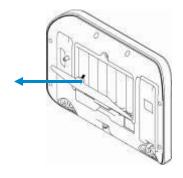
- ZeroWire Panel
- ZeroWire Accessories (Intrusion Detection Devices, Lifestyle Devices, lights locks etc.)
- A mobile or smart device, or computer for programming
- List of users and PIN codes you wish to add
- Small Phillips screwdriver
- Small Flathead screwdriver
- Router supporting 802.11 b or 802.11g if using local Wi Fi features
- IP access for cell module, Wi Fi/Ethernet access

#### **Choose a Location**

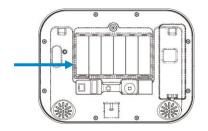
When choosing a location for your ZeroWire there are a number of appliances and areas to avoid which could interfere with the security system.

- Choose a central location that optimizes signal strength (Wi Fi, 319.5, Zwave)
- Avoid TV and other electronic appliances
- Avoid microwave ovens
- Avoid wet and moist areas such as bathrooms and toilets
- Avoid cordless telephones
- Avoid computers and wireless equipment

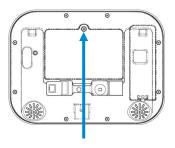
## 1.1 Install the Battery



Remove battery cover with a small screwdriver.



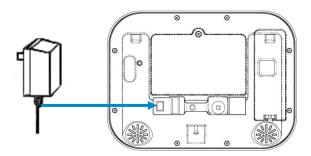
Connect battery pack lead to connector on the left inside battery compartment. Connectors are keyed.



Replace battery cover and screw.

## 1.2 Connect Power Lead to panel

Connect power lead from power supply to the back of the ZeroWire. The connector is keyed and only fits one way.



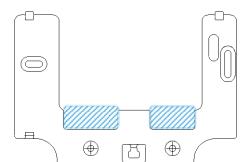
#### 1.3 Install ZeroWire Panel

ZeroWire may be mounted on a wall (recommended) or on a table.

For table mount information please reference Section 9.21

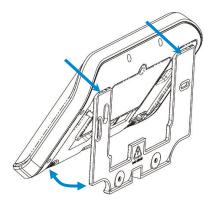
Install the bracket on a wall by using the supplied screws. Make sure the power lead can reach the ZeroWire when plugged in to a power source.

**Note:** Holes in the wall supplying Ethernet, power, antenna or I/O connector *must* be in the shaded area to ensure the unit mounts flat on the wall; See the drawing on the next page.

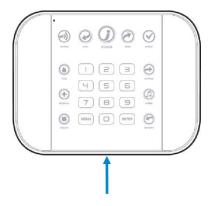


Hole location, shading:

Align the ZeroWire with the top clips on the wall bracket, and then push the ZeroWire so it sits flat against the wall.



Note: Ensure the screw on the underside of the ZeroWire is loosened; if not the ZeroWire may not fit flush against the wall. Tighten the screw on the underside of the ZeroWire to ensure a secure fit.



#### 1.4 Connect Power

Connect the power supply to receptacle.

Warning: Do not connect to a receptacle controlled by a switch.

# REFERENCE GUIDE MODEL ZW-6400

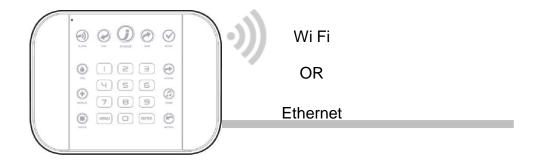
# 2 Set Up Connections

#### 2.1 Select a Permanent Connection Mode

Select a method to connect your ZeroWire to a network so it can report events via UltraSync, and allow you to configure settings using the built-in Web Server or UltraSync app. Recommended installations use IP as primary reporting with cellular backup. However IP only or cellular only installations may be used. For cellular radio setup reference Section 7

Option 1 – Ethernet Setup – This is the easiest to set up. The ZeroWire panel is set to use Ethernet by default. It requires a hardwired Ethernet connection to the ZeroWire. You will need to provide an Ethernet router and an internet connection for reporting and remote access.

Option 2 - Wi Fi Setup - This connects the ZeroWire to a local Wi Fi network. You will need to provide a wireless router and a secure internet connection for reporting and remote access.



To switch between Wi Fi or Ethernet modes:

1. MENU

Select main menu - Option 9, Advanced system configuration

INSTALLER CODE ENTER 2.

Enter Installer code

3.

Toggles between WiFi or Ethernet connections

**MENU** MENU 4.

Exits from Advanced system configuration menu

### 2.2 Option 1 - Ethernet Setup



Connect power to your ZeroWire.

If this ZeroWire was previously connected via Wi Fi, switch connection to Ethernet:

**MENU** 1. Select main menu - Option 9, Advanced system configuration INSTALLER CODE ENTER 2. Enter Installer code 3. Toggles between WiFi or Ethernet connections **MENU** 4. **MENU** Exits from Advanced system configuration menu

Connect an Ethernet cable to the rear of the ZeroWire and wait 10 sec for the local router to assign the ZeroWire an IP address.

On the ZeroWire press Menu – 8 – [PIN] – 6 and note the IP address announced. This is the IP address of your ZeroWire. If you hear "IP address is not configured" then wait a further 30s and repeat this step.

Open your web browser.

Enter **IP** address. The ZeroWire login screen should appear:



Enter your username and password. By default this is: installer and 9-7-1-3. You should now see a screen similar to one of the below:





Your ZeroWire is now successfully connected to your Ethernet network. Press **Settings** or Advanced to program your ZeroWire.

# 2.3 Check Ethernet Connection to UltraSync

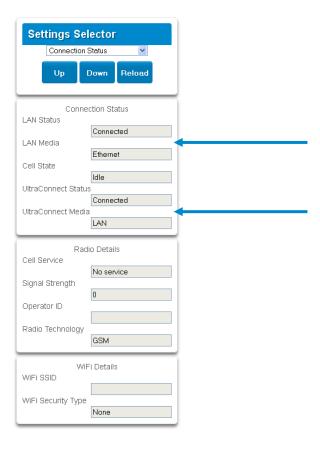
Login to the ZeroWire Web Server from your mobile device or computer using the IP address announced.

#### Press Settings.

Select Connection Status in the drop down menu.

#### Check that

- a. LAN Status should display Connected.
- b. LAN Media should display **Ethernet**.
- c. UltraConnect (UltraSync) Status should display Connected.
- d. UltraConnect (UltraSync) Media should display LAN.



ZeroWire Reference Guide

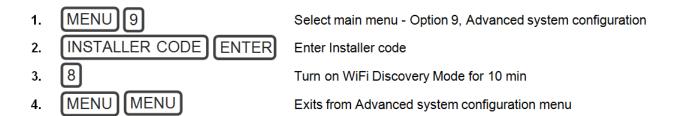
#### If it does not:

- e. Check cable connection.
- f. Check router settings.

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## 2.4 Option 2 - Wi Fi Setup

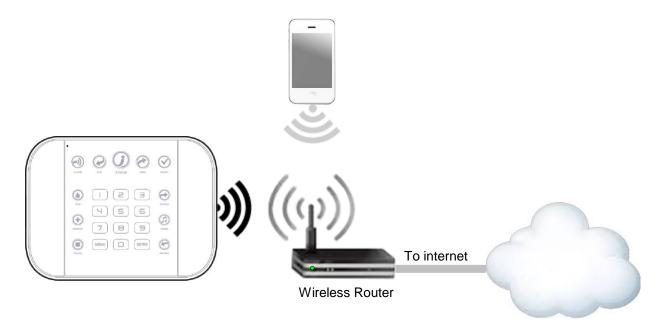
Turn on Wi Fi Discovery Mode – this provides direct access to the ZeroWire from a mobile device such as a smart phone, tablet, or laptop:



#### Enable Wi Fi on your mobile device

On your mobile device, browse for available Wi Fi networks and select the **ZeroWire\_xxxx** network to connect to it. Only a single user can connect at any time and there is no Wi Fi password. Once connected the ZeroWire will be assigned a fixed IP address of 192.168.1.3.

Use your device to connect to ZeroWire. The wireless router must support 802.11 b or 802.11q.



Open your web browser and enter 192.168.1.3. The ZeroWire login screen should appear.

Enter your username and password, by default this is: **installer** and **9-7-1-3**. Press **Sign In**. You should now see a screen similar to one of the below:





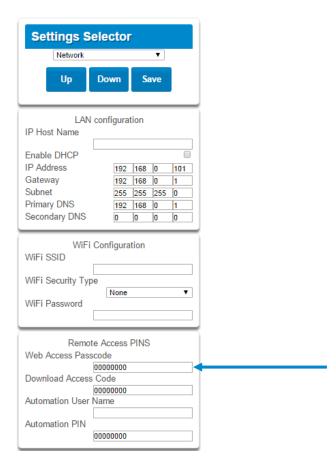
### Set Up a Web Access Passcode for UltraSync

For security, the UltraSync app is disabled by default. Follow these steps to enable it:



Select **Network** from the drop down menu.

Enter a Web Access Passcode:



#### Press Save.

For a detailed explanation of function of the Web Access Passcode please see section 4.6 Programming the Network

#### Scan for Wireless Networks

Press **Settings**.

Select Wi Fi Setup from the drop down menu.

Press Scan for Wireless Networks:



Press the Wi Fi network name you wish ZeroWire to connect to. Enter Wi Fi passcode then press OK. "Network Successfully selected" will appear as shown below. Your mobile device will be disconnected from the ZeroWire.



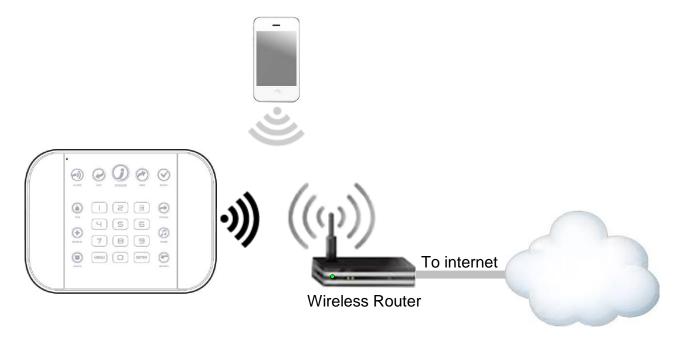
On your mobile device, connect to the same Wi Fi network found by the scan. On the ZeroWire press Menu – 8 – [PIN] – 6 and write down the IP address announced. This is the IP address of your ZeroWire. If you hear "IP address is not configured" then wait a further 30 seconds and repeat this step.

Open your web browser.

Enter announced **IP address**. The ZeroWire login screen should appear:



Your ZeroWire is now successfully connected to your Wi Fi network.



# Troubleshooting Wi Fi Setup

1. Cannot get an IP address	
Cause	Solution
Connection does not work	Close the web browser on your device, and restart your wireless router, and start again from step 1.
The wireless/router may not be configured for automatic DHCP or certain security settings may be enabled.	Check your router settings and try again.

2. Network connections fail		
Cause	Solution	
Some newer routers will have these off at factory default. Some 802.11n access points may not accept 802.11g connections.	Check if Wi Fi router allows b and g connections.	
	Check if router is within range and has good signal, otherwise a Wi Fi range extender may help.	
	Ensure auto-correct is turned off (when typing the pass phrase).	
	Ensure wireless router has DHCP enabled.	
	Ensure wireless router does not have firewall or security rules that prevent additional connections.	
	Ensure IP addresses are available; for example connect a new device to it and verify it has an internet connection.	

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# 2.5 Check Wi Fi Connection to UltraSync

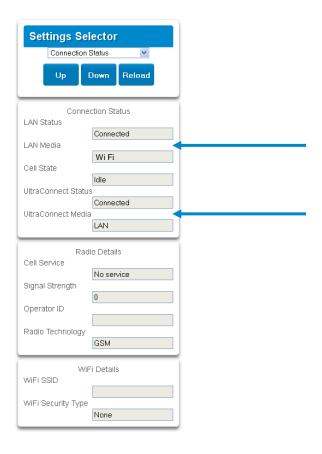
Login to the ZeroWire Web Server from your mobile device or computer using the IP address announced.

#### Press Settings.

Select or press Connection Status in the drop down menu.

#### Check that

- a. LAN Status should display Connected.
- b. LAN Media should display Wi Fi.
- c. UltraConnect (UltraSync) Status should display Connected.
- d. UltraConnect (UltraSync) Media should display LAN.



#### If it does not:

- e. Check cable connection.
- f. Check router settings.

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# 3 The UltraSync App



## 3.1 Install UltraSync App

UltraSync is an app that allows you to control your ZeroWire from an Apple® iPhone/iPad, or Google Android device. First set up the ZeroWire Web Server then download this app. Carrier charges may apply and an Apple iTunes or Google account is required.

On Apple<sup>®</sup> devices go to the App Store<sup>™</sup>. On Android devices go to the Google Play<sup>™</sup> store.





Search for **UltraSync**.

Install the app.

Press the icon on your device to launch it.

Press + on the top right to add a new site, or the blue arrow to edit an existing site.

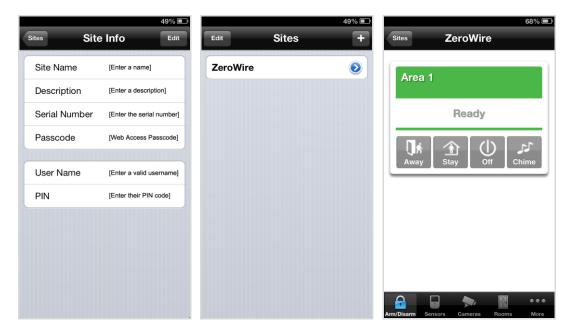
Enter the details of your security system.

The serial number is printed on the back of the ZeroWire unit. Alternatively login to ZeroWire Web Server and go to Settings – Details to view it.

The default Web Access Passcode of 00000000 disables remote access. To change it, login to ZeroWire Web Server and go to Settings - Network.

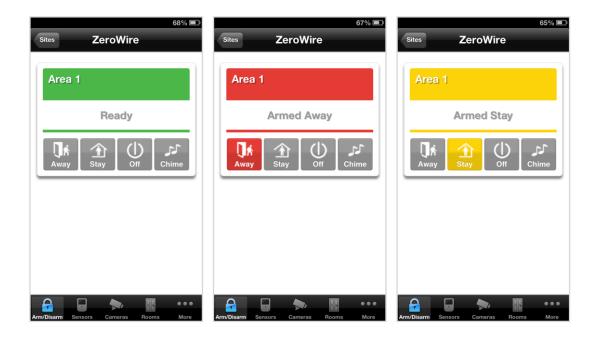
The default username and PIN code is: installer and 9-7-1-3, and User 1 and 1-2-3-4. You may also use any other valid user account. Users will only see and have access to menus at their permission level.

Press **Done** button to save the details, then Sites to go back. Press the name of the Site, the app will now connect you to ZeroWire.



## 3.2 Using the App

The first screen that will appear once you connect is Arm/Disarm. This will display the status of your system and allows you to arm or disarm areas by pressing Away, Stay, or Off. From this screen you can also enable or disable Chime mode.



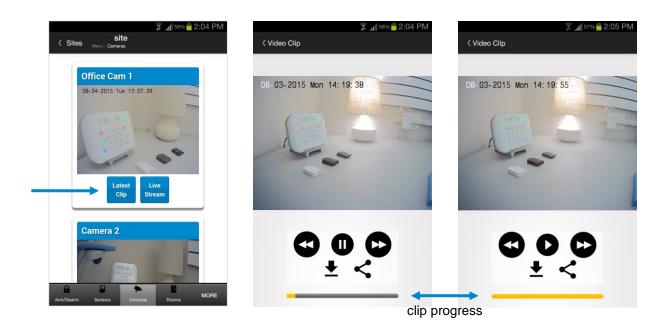
The menu bar is located along the bottom of the app. Press **Sensors** to view sensor status. From the Sensors screen you can press **Bypass** to ignore a sensor or press it again to restore it to normal operation. You may also add or remove a sensor from the Chime feature.



to view any cameras connected to the system. **Press** 

This is a live view of the camera.

Latest to view the last recorded clip by that camera. **Press** Clip



You can also access video clips linked to History events.

**Play Video Clip** from the History screen. **Press** 

If you have ZWave devices installed, press Rooms to view and control them.



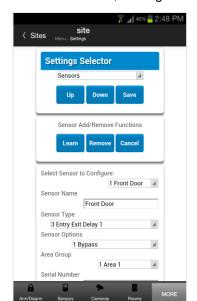
Master users will have access to the full Users menu for creating and managing users.

See Section 6, Users and Permissions for definitions of user levels and permissions.



When you login with the Installer account you will also have access to additional menus for setting up and programming the ZeroWire.

#### Installer menu, Settings



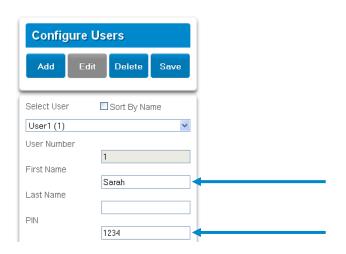
Installer menu, Advanced



## 3.3 Recommended Items to Change

- INSTALLER PHONE NUMBER
   This is announced to the user when certain status conditions occur. For example when there is a low battery. Add your phone number.

   See system Programming (Advanced) Service and Test Options
- USER 1 PIN User 1 PIN code is **1-2-3-4** at default. Always change this to prevent unauthorized access to the security system.
- WEB ACCESS PASSCODE
   DOWNLOAD ACCESS CODE These provide access to the ZeroWire Web Server, UltraSync app, and upload/download from the DLX900 management software.



**Settings Selector** Network LAN configuration V Enable DHCP IP Address 192 168 1 218 Gateway 192 168 1 255 255 255 0 Primary DNS 192 168 Secondary DNS 0 0 0 0 WiFi Configuration WiFi SSID Home\_Network WiFi Security Type WPA2 Passphrase V WiFi Password Remote Access PINS Web Access Passcode 12345678 Download Access Code 00000000

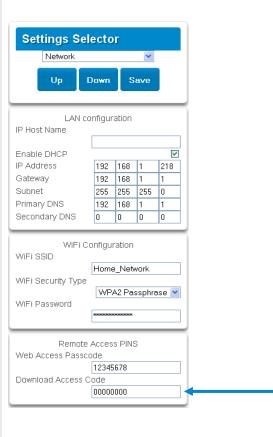
Enable remote access for UltraSync app by changing Web Access Passcode. The default Web Access Passcode of 00000000 prevents remote access.

To change it, login to ZeroWire Web Server and go to Settings – Network:

Enable remote access for DLX900 by changing the Download Access Code. The default Download Access Passcode of 00000000 prevents remote access. Login to ZeroWire

Web Server and go to Settings – Network then change the code.

Note: DLX900 will attempt to connect using the default installer / 9-7-1-3 account. To disable DLX900 access, change the Installer PIN code and set the Download Access Code to 00000000.



C

# 3.4 Troubleshooting UltraSync Setup

UltraSync Site Creation fails		
Cause	Solution	
	Check the serial number, web access passcode, user name and PIN codes match those in the ZeroWire.	
Settings are entered incorrectly	Web Access Passcode must not be 00000000.	
	User Name must be entered with a space between the first and last name and with correct capitalization.	

2. Cannot see local Wi Fi access point from smartphone	
Cause	Solution
Some 802.11n access points may not accept 802.11g connections.	Ensure your Wi Fi access point is able to accept 802.11b or 802.11g.

3. Network connections fail		
Cause	Solution	
Ethernet not working	If connected by Ethernet, check that the cable is plugged in and the connection is working.	
Wi Fi not working	If connected by Wi Fi, check that the connection is working.	
Network not set	Check Settings – Network – Enable UltraSync is checked.	

4. Cannot get IP address	
Cause	Solution
The wireless/router may not be configured for automatic DHCP or certain security settings may be enabled.	Check your router settings and try again.

5. Cannot access internet	
Cause	Solution
Mobile device has no access	Open a web browser on your mobile device to double check access.
	Try disabling Wi Fi on your device once the ZeroWire is configured, and using the 3G/4G data connection of your device with the UltraSync app.

6. Server connections fail	
Cause	Solution
	Check the UltraSync servers are correct. See UltraSync Programming (Advanced) for reference.
Server addresses are incorrect	<ul> <li>a. Ethernet Server 1 - zw1.UltraSync.com:443</li> <li>b. Ethernet Server 2 - zw1.zerowire.com:443</li> <li>c. Wireless Server 1 - zw1w.UltraSync.com:8081</li> <li>d. Wireless Server 2 - zw1w.zerowire.com:8081</li> </ul>

7. Configuration setting changes fail	
Cause	Solution
Devices are not responding to inputs	Re-initialize equipment. Power cycle connected equipment including ZeroWire and customer supplied router(s).

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# 4 System Settings

These instructions describe how to program all of the devices, schedules and areas used by the system.

#### 4.1 Learn Sensors into ZeroWire

Connect to the ZeroWire Web Server (either via Wi Fi Discovery Mode, Wi Fi, Ethernet LAN, or the UltraSync app).

Enter your username and password. By default this is **installer** and **9-7-1-3**.

#### Press Sign In.

You should see a screen similar to one of the below:





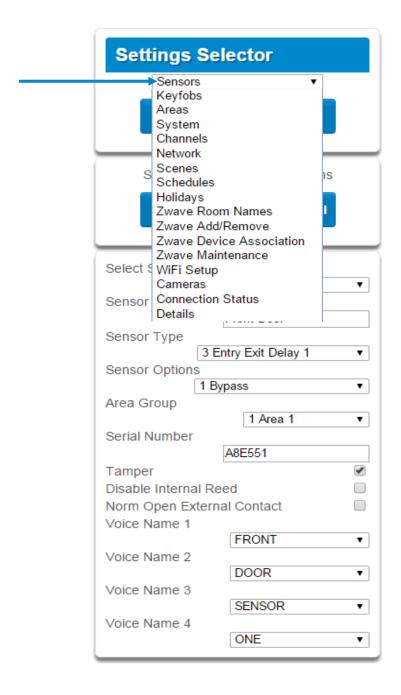
From the UltraSync app press the



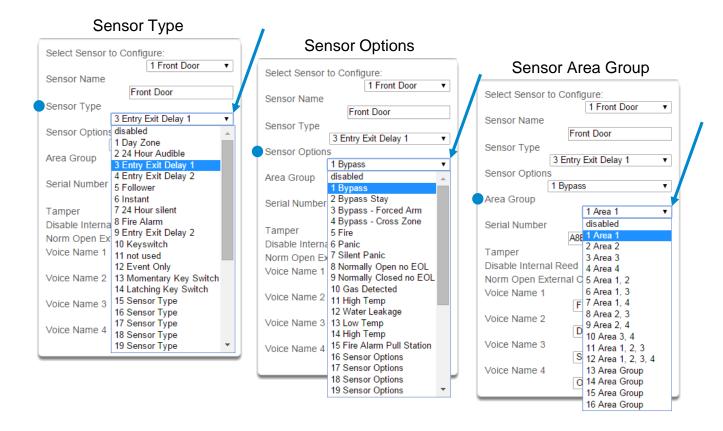


Select the drop down menu under **Sensors** to see the list of programmable items.

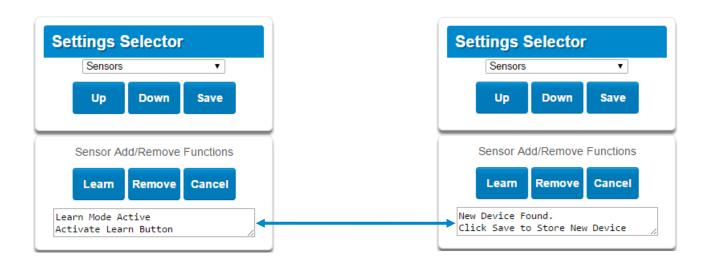
Select Sensors.



At this point you can type the name of the sensor and define its profile, by determining the sensor type (Entry, 24 hour, fire, key switch, etc.) and the sensor options (bypass, force arm, Cross Zone, stay mode, etc.). You can also assign it a specific area. Each of these has a drop down menu to make selections.



Give a name and definition to the sensor and press **Learn.** A notification box will appear below the learn button. Activate the sensor. Consult the sensor manual for instructions; generally this is performed by opening the case and manipulating the tamper activator. This will send a tamper signal to ZeroWire. The notification box will alert you that a new device was found.



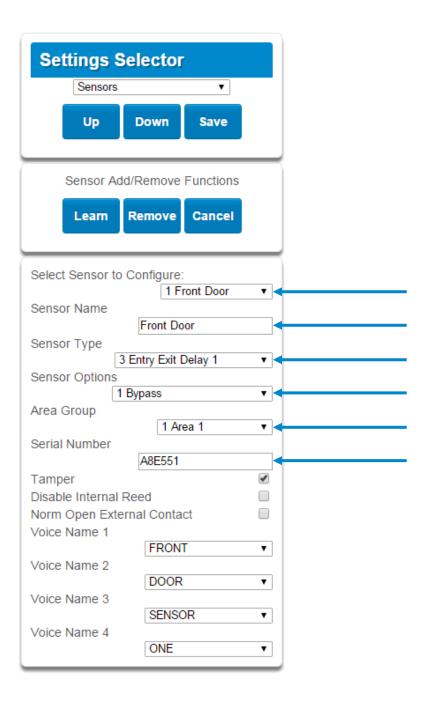
The screen below shows a sensor learned in.

Name: Front Door

Type: Entry Exit Delay 1

Option: **Bypass** Area Group: Area 1 Serial Number: A8E551

Note that the sensor Serial Number box has been populated after learning in the sensor.



Explanations of the sensor configurations appear on the next page.

Also reference Sensor Programming (Advanced), section 5.2.

	Option	Default	Function
	Select Sensor to Configure	1 Sensor	Choose among 60 sensors.
	Sensor Name	Blank	Custom 32 character name
	Sensor Type	3 Entry Exit Delay 1	Sensor types determine the sensor attributes such as entry/exit, instant, etc. Additionally sensor types determine the siren attributes.
Menu	Sensor Option	1 Bypass	Sensor options determine the sensor attributes such as a sensor's ability to be bypassed, force arm, Cross Zone, stay mode, etc. Additionally sensor options determine the sensors reporting attributes.
	Area Group	1 Area 1	Assigning a sensor to an area will enable it to report.
a tio	Serial Number	Blank	This is the TXID of the wireless sensor, it can be manual entered or the sensor can be "Learned" into panel.
ח	Tamper	On	Tamper switch on the wireless sensor is enabled or disabled.
f i g	Disable Internal Reed	Off	The internal reed switch(es) on the wireless device can be disabled.
r Con	Norm Open External Contact	Off	The external input on wireless sensors can be enabled. If the 60-362N-10-319.5 sensor is used the jumper PIN does not have to be used.
N S O	Voice Name 1	Blank	This feature uses the internal voice
S	Voice Name 2	Blank	vocabulary to name the sensor. These names will be announced in sequence when the sensor is opened while in the Chime
	Voice Name 3	Blank	mode.
	Voice Name 4	Blank	

When you are finished programming the Sensor,

Press the **Save** button. A dialogue box appears. Press the **OK** button. A dialogue box appears. Press the **OK** button.





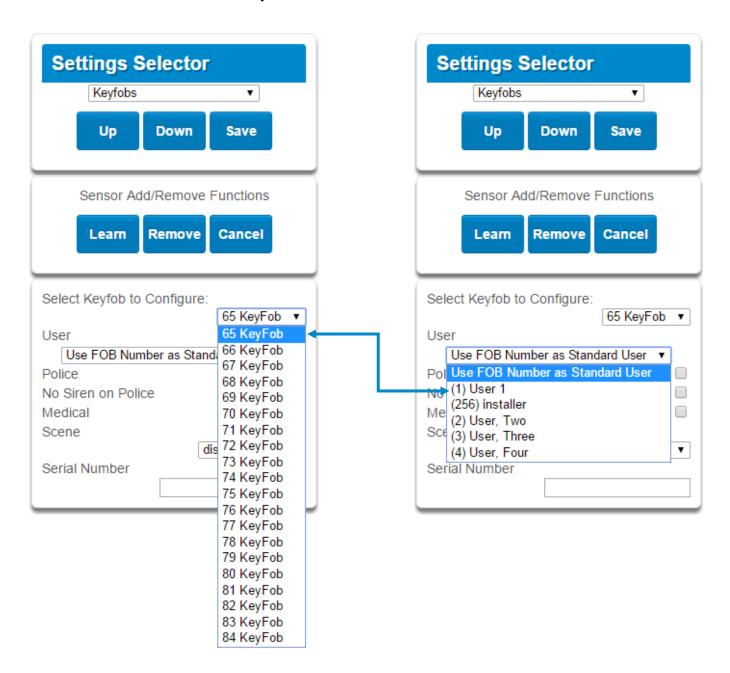
These dialogue boxes appear after any changes to the system are attempted/registered.

### 4.2 Learn in a Keyfob

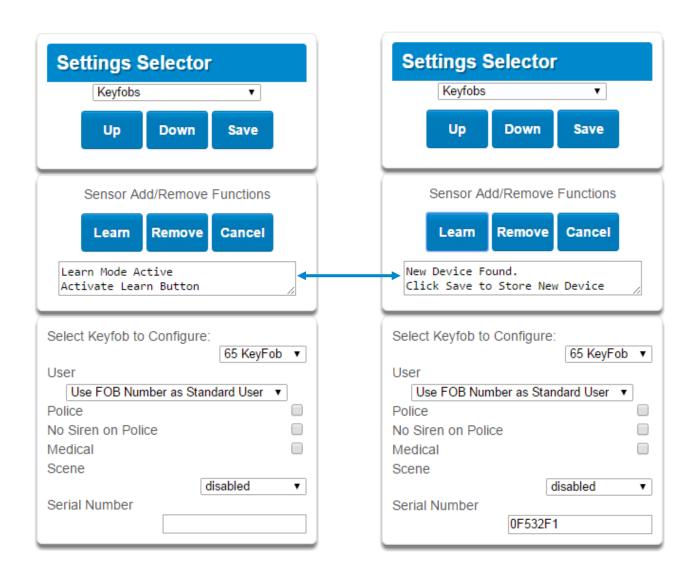


Select the drop down menu under **Sensors** to see the list of programmable items. Select Keyfobs.

With the keyfobs screen selected you can choose the keyfob number to configure and select the user number to link to the keyfob.



Give the keyfob a number, select the user and press **Learn**. A notification box will appear below the learn button. Activate the keyfob. Consult the keyfob manual for instructions; generally this is performed by simultaneously pressing the lock and unlock buttons. This will send a tamper signal to ZeroWire.



The notification box will alert you that a new device (keyfob) was found. The keyfob Serial Number box will be populated. Explanations of the Keyfob configurations appear on the next page.

	Option	Default	Function
	Select Keyfob to Configure	65 Keyfob	This is the starting Sensor number for Keyfobs.
tion Menu	User	Use FOB Number as Standard User	If "Use FOB Number as Standard User" is used, when there is an activation on that Fob the Central Station report will come in with that sensor number. If there is a user assigned to the fob that user number will come in on the Central Station Report. If no user is assigned it will show as user 999 in the Central Station Report.
onfigura	Police	Off	Enabling this will enable the Police / Panic on the Fob, this will also be audible at the panel (top 2 buttons press at the same time).
	No Siren on Police	Off	With this enabled it will make the Police / Panic silent at the panel.
fob C	Medical	Off	Enabling this will enable the Medical / Aux on the Fob. This will be an audible alarm at the panel. (bottom 2 buttons pressed at the same time)
Keyfol	Scene	Off	Using the drop down menu a Scene can be activated.
	Serial Number	Blank	This is the TXID of the Fob, it can be manual entered or the sensor can be "Learned" into panel.

When you are finished programming the Keyfob,

Press the **Save** button. A dialogue box appears. Press the **OK** button. A dialogue box appears. Press the **OK** button.



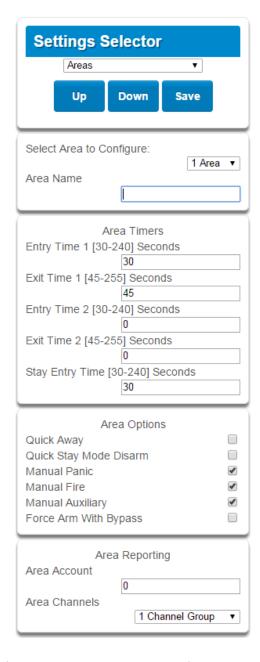


These dialogue boxes appear after any changes to the system are attempted/registered.

### 4.3 Programming Areas

From the UltraSync app press the More button then Settings Selector page.

Select **Areas** from the drop down menu. With the Areas screen selected you can choose an Area number to configure, give the area a name, and define attributes for that area. The ZeroWire can support a total of 4 areas; each area is configured with its entry and exit times, area options, area timers, area type and reporting characteristics.



Explanations of the Area configurations appear on the following pages.

Also reference Areas Programming (Advanced), section 5.3.

Option		Default	Function		
	Select A	area to Configure	Area 1	Use the drop down menu to select which of the 4 areas to program.	
		Area Name	Blank	Each area can be configured with a custom 32 character name. The area name is displayed wherever an area is referenced on the ZeroWire system.	
		Entry Time 1 (30-240) Seconds	30	Provides time to enter into the premises to deactivate the alarm system.	
	iers	Exit Timer 1 (45 - 255) Seconds	45	Provides time to exit the premise without activating the alarm system.	
e n u	Area Timers	Entry Timer 2 (30 - 240) Seconds	0	If there is a second entry door that requires more time to deactivate the alarm system.	
Σ	Area	Exit Timer 2 (45 -255) Seconds	0	If there is a second exit door that requires more time to leave.	
tion	1	Stay Enter Timer (30 - 240) Seconds	30	When the system is armed to "STAY" this will be the entry time to deactivate the alarm system.	
gura	tions	Quick Away	Off	If enabled, the area can be armed in away mode with a single press. When area is armed via quick away mode, the closing user number is the default user of 999.	
Confi			Quick Stay Mode Disarm	Off	If enabled, this will allow the stay mode to be disarmed by pressing the stay key on the ZeroWire panel. If the system is in alarm a PIN must be used.
S		Manual Panic	On	Enables or Disables the Keypad Panic	
a a		Manual Fire	On	Enables or Disables the Keypad Fire	
A	d	Manual Auxiliary	On	Enables or Disables the Keypad Auxiliary	
	Area Op			If enabled, the area can be armed even if sensors are not ready. Any sensors that are not ready will NOT be automatically be bypassed and may cause an alarm condition because they could still be in a not ready state once the area becomes armed.	
		Force Arm With Bypass	Off	This option is overridden if the Force Arm With Auto-Bypass is enabled.	
				Individual sensors can be made "force arm-able without auto-bypass" by leaving this area option off, then enabling Forced Arm Enable in Sensor options, and disabling Sensor Inhibit (Bypass) in the Sensor Type Profile.	

Configuration Menu	Reporting	Area Account	0	This account number is ONLY used when sending an email. This should be the same as the Central Station account number, however if it is not this will not affect the Central Station reporting
Areas Confi	Area R	Area Channels	1 Channel Group	This determines which channel will be used to report area events to the Central Station. The channel must be configured in the Channel option programming.

When you are finished programming the Area settings, remember to save your changes.

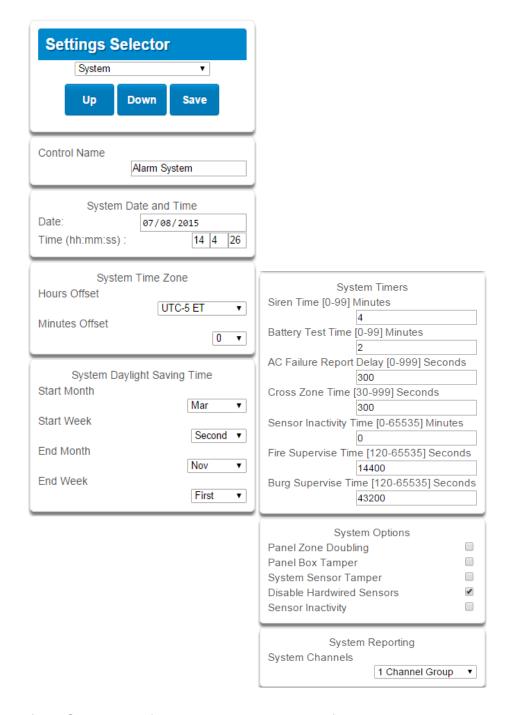


## 4.4 Programming the System



Select **System** from the drop down menu.

When the System screen is selected you can program several system wide settings, including the system clock and timers, as well as sensor options and reporting.



Explanations of the System configurations appear on the following pages.

Also reference System Programming (Advanced), section 5.1.

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	Option	Default	Function
Date &Time	Date		Once it is connected to UltraSync the Date and time are automatically synced.
P Da	Time (hh:mm:ss)		Once it is connected to UltraSync the Date and time are automatically synced.
Time	Hours Offset	UTC 5 ET	Starting with EST is UTC-5, CST is UTC-6, MT is UTC-6, PST is UTC-7.
ΪÄ	Minutes Offset	0	This is used in other locations throughout the world.
<b>ම</b>	Start Month	Mar	Standard
Daylight Saving Time	Start Week	Second	Standard
Dayl	End Month	Nov	Standard
Ö	Start Month	First	Standard
	Siren Time (0-99) Minutes	4	The siren time sets the time in minutes that the siren output is active.
S	Battery Test Timer (0- 99) Minutes	2	The dynamic battery test time sets the duration in minutes that the ZeroWire will perform a dynamic battery test. The ZeroWire will perform a dynamic battery test at the disarming of the first area or at midnight once each 24-hour cycle. Dynamic battery test is disabled when the test duration is set to 0. Dynamic battery test can also be run manually from a keypad.
m Timers	AC Failure Report Delay (0-999) Seconds	300	The AC fail report delay sets the duration in seconds that the AC power is lost or restored before a communication is initiated.  AC restore will report when power is maintained for this same duration.
System	Cross Zone Time (30- 999)	300	The Cross Zone time sets the duration in seconds whereby two or more sensors must trip before an alarm condition will be registered or the one sensor must trigger twice within this time period, or a continuous trip longer than 10 seconds. This feature only applies to sensors with the Cross Zone feature set in sensor options.
	Sensor Inactivity Time (0-65535) Minutes	0	Sensors programmed with Sensor Inactivity in the Sensor Options must be opened and closed within the time programmed here (in minutes). If they do not, a Sensor Inactivity will report. This feature can be enabled in the System Options menu.  Default Sensor Inactivity option is off and this timer is set to 10080 minutes (7 days).

			Option Default		
		System Timers	Fire Supervise Time (120-65535) Seconds	14400	This applie fire type. S supervisor manual for signal is re here then When set will be use correct val
	e n u		Burg Supervise Time (120-65535) Seconds	14400	This applied non-fire type supervisor manual for signal is rethered then will be used correct value.
	em Configuration M	m Configuration M em Options	Panel Sensor Doubling	Off	If enabled, doubled to Sensor 1 v terminals f This option the two se be used in
			Panel Box Tamper	Off	The ZeroV switch that removed f disable this
			System Sensor Tamper	Off	If enabled, fire sensor open circu alarms. Th Doubling is
			Disable Hardwire Sensors	On	If enabled, sensor inp
y s t	S		Sensor Inactivity	Off	If enabled, sensor for sensor act may be rechannel ar ZeroWire activity mosensor opt Sensors p Sensor Opthe time pra a Sensor I
	System Reporting	System Channel	1 Channel Group	The Chani events to.	

Option	Default	Function
Fire Supervise Time (120-65535) Seconds	14400	This applies only to wireless sensors programmed as fire type. Sensors send a reduced packet count supervisory signal every 60 minutes (check your sensor manual for most up to date details). If no supervisory signal is received by the panel within the time specified here then the sensor will be reported as missing. When set to 0 the default of 14,400 seconds (4 hours) will be used. Check your local regulations for the correct value to use.
Burg Supervise Time (120-65535) Seconds	14400	This applies only to wireless sensors programmed as non-fire type. Sensors send a reduced packet count supervisory signal every 60 minutes (check your sensor manual for most up to date details). If no supervisory signal is received by the panel within the time specified here then the sensor will be reported as missing.  When set to 0 the default of 43,200 seconds (12 hours) will be used. Check your local regulations for the correct value to use.
Panel Sensor Doubling	Off	If enabled, the two (2) hardwired sensor inputs will be doubled to support four (4) sensors. The terminals for Sensor 1 will represent sensors 1 and 3, and the terminals for sensor 2 will represent sensor 2 and 4. This option cannot be selected for sensors other than the two sensors on the main panel. This option cannot be used in conjunction with the DEOL option.
Panel Box Tamper	Off	The ZeroWire has a built-in normally closed tamper switch that will sound the siren if the ZeroWire is removed from the wall. This option will enable or disable this tamper switch.
System Sensor Tamper	Off	If enabled, the ZeroWire will monitor all sensors, except fire sensors, for Dual End of Line (DEOL). A short or open circuit on a DEOL will activate sensor tamper alarms. This feature cannot be used if Panel Sensor Doubling is enabled.
Disable Hardwire Sensors	On	If enabled, the ZeroWire will disable all hardwired sensor inputs.
Sensor Inactivity	Off	If enabled, the system ZeroWire will monitor each sensor for activations. If no activations occur within the sensor activity time then a failed sensor activity report may be reported via the selected communication channel and a failed sensor activity message set in the ZeroWire event log. For a sensor to be eligible for activity monitoring, it must have "Sensor Activity" set in sensor options.  Sensors programmed with Sensor Inactivity in the Sensor Options must be sealed and unsealed within the time programmed here (in minutes). If they do not, a Sensor Inactivity will report.
System Channel	1 Channel Group	The Channel Group that the ZeroWire will send system events to.

When you are finished programming the System settings, remember to save your changes.



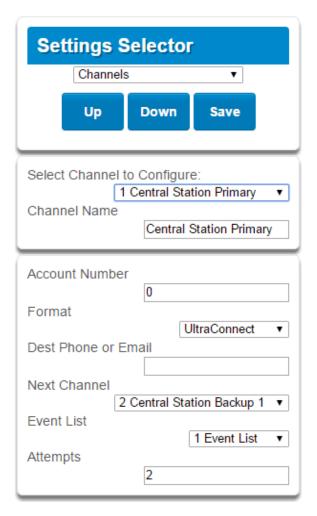
## 4.5 Programming Channels

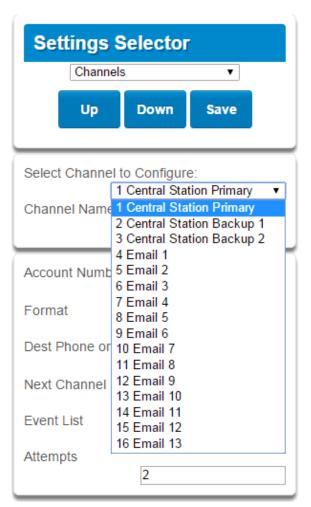


Select **Channels** from the drop down menu.

With the Channels screen selected you can program a communication path for events to be sent from the ZeroWire panel to a selected destination.

The ZeroWire can support a total of 16 channels; each channel is identified by a unique channel number, which cannot be altered, and remains as the key reference for each channel.





Choose a channel in the drop down menu and assign it attributes. Explanations of the Channel Configuration menu appear on the following page.

Also reference Channels Programming (Advanced), section 5.4.

When you are finished programming the Channel settings, remember to save your changes.

	Option	Default	Function
	Select Channel to Configure	1 Central Station Primary	
	Channel Name	Central Station Primary	Custom names of the selected channel can be created here.
n u	Account Number	Blank	This is the Account Number that will be reported with the event in email reports. When UltraSync format is selected, this field will not be used.
<b>≥</b>	<b>-</b>	Lillia C	This is the communication format for the selected channel. Select from:
O	Format	UltraSync	Use as Backup UltraSync
<del>-</del>			Email
ura	Dest Phone or Email	Blank	The phone number or email address of the selected destination.
Config	Next Channel	2 Central Station Backup	If the channel selected is unable to deliver the event to the selected destination, ZeroWire will try to use this backup channel instead. The Next Channel specified here must be greater than the Channel Number.
nel			A number lower than the current Channel Number will end the chain. This is to prevent accidental programming of endless loops.
Chan	Event List	1 Event List	Select the pre-programmed list of events that will be sent via this channel. The specific event in each event list is programmed in Channels Programming. See page 98.
	Attempts	2	Enter the number of times ZeroWire should try to send the events to the UltraSync server. After the number of attempts has been exhausted the ZeroWire will try the Next Channel if specified.

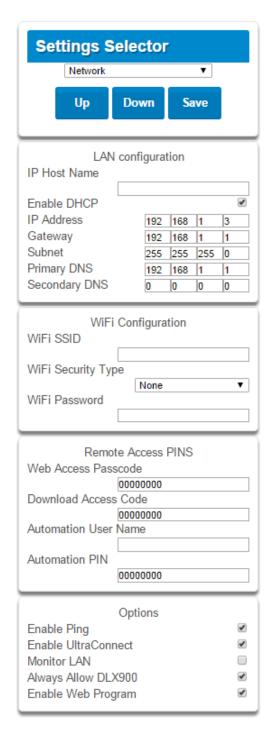
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## 4.6 Programming the Network



Select **Network** from the drop down menu.

Enter your network settings on this page.



Explanations of the Network Configuration Menu appear on the following pages. Remember to save your changes when you are finished programming the Network settings.

	Option	Default	Function
	LAN Configuration		
	IP Host Name	_	A text label assigned to the ZeroWire communicator so you do not have to remember the IP Address.  Note: This only works on local LAN and with Microsoft
			Windows PC, or an Apple device with the .local extension. Does not work remotely over the internet.
	Enable DHCP	off	Allows the ZeroWire panel to be automatically assigned an IP address by the network.
e n u	IP Address	-	The IP address assigned to the ZeroWire to enable it to connect on to the local LAN. This will allow you to access the embedded web server from a web-enabled device to program and view the status of the system. It is also used for alarm reporting.
Σ	Gateway	-	If required, the IP address of the router which is needed when remote IP communications are used.
0	Subnet	-	The subnet mask for the network. For example, 255.255.255.0 is the network mask for 192.168.1.0/24
urat	Primary DNS	-	The IP address of the Primary Domain Name Server. The DNS is used to translate host names for time servers and UltraSync servers.
f i g	Secondary DNS	-	The IP address of the Secondary Domain Name Server, used if the Primary DNS is not available.
	WI FI Configuration		
0	WI FI SSID	Blank	Wi Fi Network name
	WI FI Security type	Blank	WEP/WPA/WPA2
<u>-</u>	WI FI Password	Blank	Network password
0 /	Remote Access PINS		
N e t w	WEB Access Passcode	0	The UltraSync app requires the Web Access Code to get access to the panel. The default Web Access Passcode of 00000000 disables remote access. The system allows for an 8 digit numeric code. Each owner should have a unique number.
	Download Access Code	0	Enables remote access for DLX900. The default Download Access Passcode of 00000000 prevents remote access.
	Automation User Name	-	
	Automation PIN	-	
	Options		
	Enable Ping	On	Allows the ZeroWire panel to respond to the PING command.

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	Option	Default	Function
			This is an automatic feature of ZeroWire. It is recommended you leave this setting on.
			Enable this option to allow ZeroWire to send email reports via the UltraSync servers. This is independent of the Web Access Passcode which when set to 00000000 will prevent the UltraSync app from connecting.
	Enable UltraConnect (UltraSync)	On	If any channel is set to Email format reporting, then ZeroWire will override ignore this setting and allow email reporting via UltraSync cloud servers.
e n u			If you wish to prevent connections to the ZeroWire cloud servers, then uncheck this option and do not use the UltraSync reporting format.
Σ			Also reference table in Communicator Programming (Advanced).
ration	Monitor LAN	Off	When the Monitor LAN option is enabled the panel will monitor the Ethernet port for a valid Ethernet cable. If the Ethernet cable is disconnected while this option is enabled and the panel is unable to communicate, it will log a Fail To Communicate event.
i g u			Enabling this option will allow DLX900 to connect <u>at any time</u> if the correct Download Access Code is provided.
k Conf	Always Allow DLX900	On	Disabling this option provides greater security by only allowing DLX900 to connect when program mode is active. This allows the system to have DL900 access disabled until a user on site with physical access to the keypad enters program mode with a valid PIN code.
/ 0 L			ZeroWire will be in program mode if a user gains authorized access to menu 5, 8, or 9 on the keypad.
e t w		On	Enabling this option will cause ZeroWire Web Server and UltraSync app to always display Installer menus regardless of if the panel is in program mode or not.
Z	Enable Web Programming		Disabling this option will hide the Installer menus on ZeroWire Web Server and UltraSync app unless program mode is active. This provides greater security by keeping web programming disabled unless a user on site with physical access to the keypad enters program mode with a valid PIN code.
			ZeroWire will be in program mode if a user gains access to menu 5, 8, or 9.
			UltraSync app requires the Web Access Code to get access to the panel.

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## 4.7 Programming Scenes

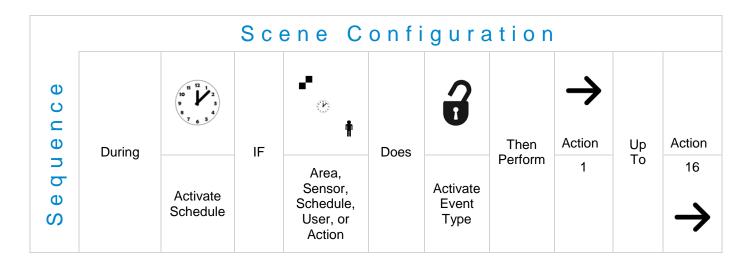
Press then for the Settings Selector page.

Select **Scenes** from the drop down menu.

With the Scenes screen selected you can create scenes on schedules and determine which event types and device triggers will activate them.

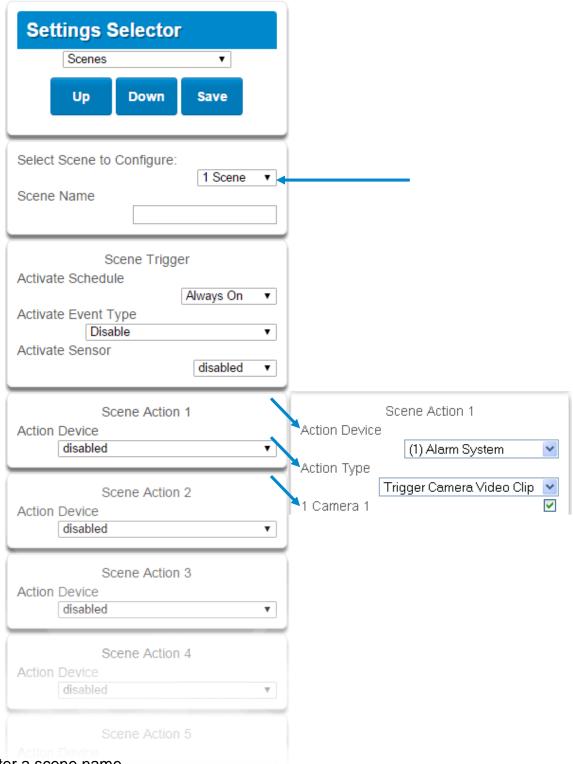
Each scene can trigger up to 16 consecutive scene actions when certain conditions are met. This can save users time by automatically running multiple actions. A scene can be triggered manually, through a schedule, or via a system event.

Remember to save your changes when you are finished programming the Scene settings.



Explanations of the Scene Configuration Menu appear on the following pages.

Also reference Scenes Programming (Advanced), section 5.18.



- 1. Enter a scene name.
- 2. Select the **Activate Schedule** drop down menu to restrict when the scene will be enabled
- 3. Select the event that will trigger recording a video clip using the Activate Event Type drop down menu.
- 4. Select the Activate Sensor/Area/User/Action if applicable.
- 5. Select Action Device (1) Alarm System. This enables another drop down menu for Action Type. Choose the Action Type "Trigger Camera Video Clip", then the cameras you wish to record a video clip when the event is triggered.
- 6. Press Save.

	Opt	ion	Default	Function
	Select Scene to Configure		2 21211	The ZeroWire can support a total of 16 Scenes.  Each Scene is identified by a unique number, which cannot be altered, and remains the key reference for each Scene.
	Scene Name			Each Scene can be configured with a custom 32 character name. The name is displayed wherever a Scene is referenced on the ZeroWire system.
uration Menu	<b>4</b> ) -	Activate Schedule	Always On	Select the Schedule that controls when this Scene is active. If the current date and time is outside of the selected schedule, then the Scene will not run.
	Scene Trigger	Activate Event Type	Disable	Select the event that will trigger this Scene. You can reference Activate Events list in Scenes Programming (Advanced).
		Activate Sensor	Disabled	Select which Area \ Sensor \ Schedule \ User \ Action \ Device will provide the trigger for the Scene.
	Scene Action 1 Action Device		Disabled	Each scene can perform up to 16 Scene Actions. These are simplified actions that allow you to control devices on your system.
<u>.</u>	Scene Action 2 Action Device		Disabled	There are two types of Scene Action
onf	Scene Action 3 Action Device		Disabled	<ol> <li>Alarm System Action</li> <li>ZWave Device Action.</li> <li>Alarm System Action</li> </ol>
О	Scene Action 4 Action Device		Disabled	Result Type - The event of the Action Result to perform. See Scenes Programming (Advanced) and the Scene Action and Scene Action Events Types for
c e n	Scene Action 5 Action Device		Disabled	reference.  Result Number - Select the area / scene / camera
S		Scene Action 6 Action Device	Disabled	number to control:  ZWave Device Action
		Etc.	Etc.	To display ZWave Action Types you must first learn in a ZWave device. The ZWave device name will then appear.
				Action Device – select the ZWave device you want to control
		Etc.	Etc.	ZWave Type 8 Setting 1 – depends on ZWave device.  May include options such as On, Off, Heat, Cool, Auto,  Up Down Lock Uplock

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### 4.8 Programming Schedules

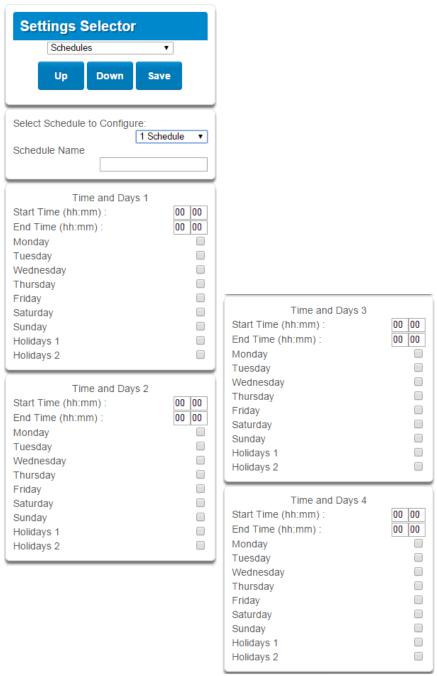


Select **Schedules** from the drop down menu.

With the Schedules screen selected you can create up to 16 schedules, each having four time and day periods.

Explanations of the Schedules Configuration menus appear on the following pages. Also reference Schedules Programming (Advanced), section 5.6.

Remember to save your changes when you are finished programming the Schedules settings.

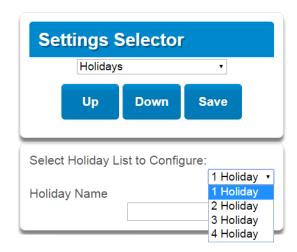


Option			Default	Function
n Menu		Select Schedule to Configure	1 Schedule 1	The ZeroWire can support a total of 96 schedules. Each schedule is identified by a unique schedule number, which cannot be altered, and remains as the key reference for each schedule.
iguratio		Schedule Name	Schedule 1	Each schedule can be configured with a custom 32 character name. The area name is displayed wherever a schedule is referenced on the ZeroWire system.
	Time and Days 1 -16	Start Time (hh:mm)	-	
n f		End Time (hh:mm)	-	
0		Monday	-	
O		Tuesday	-	
S		Wednesday	-	
chedule		Thursday	-	
	anc	Friday	-	
	ime	Saturday	-	
	-	Sunday	-	
S		Holiday 1	-	
		Holiday 2	-	

## 4.9 Programming Holidays



Select Holidays from the drop down menu.



With the Holidays screen selected you can create up to four sets of holiday dates for the Zerowire. Set the number, name and date range for each holiday. Remember to save your changes when you are finished programming the Holidays settings.

Explanations of the Holiday configurations appear below. Also reference Holidays Programming (Advanced), section 5.13.

		Option	Default	Function
Holiday Configuration Menu	Select Holiday List to Configure		n/a	ZeroWire supports up to 4 sets of holiday dates, each set can have up to 16 date ranges. Holidays are used as part of Schedules to control access to the system on specified dates.
	1 Holiday 2 Holiday 3 Holiday 4 Holiday		n/a	The ZeroWire can support a total of 4 Holidays. Each Holiday is identified by a unique number, which cannot be altered, and remains as the key reference for each area.
		Holiday Name		Each holiday can be configured with a custom 32 character name. The name is displayed wherever a Holiday is referenced on the ZeroWire system.
	Start -End	Start Date	n/a	Select the date range for the Holiday by
_		End Date	n/a	specifying the start and stop date. A total of 16 ranges can be entered for each Holiday.

### **Example Holiday List**

#### Holiday 1 US Holiday List 2016

Date Range 1 - Date Range 2 -		New Year's Day Memorial Day	Friday, January 1 Monday, May 30
Date Range 3 -		Independence Day	Monday, July 4
Date Range 4 -	05/09/2016	•	Monday, September 5
Date Range 5 -		Thanksgiving Day	Thursday, November 24
Date Range 6 -		Christmas Day (observed)	Monday, December 26**
Date Range 7 -		,	<b>,</b> ,
Date Range 8 -			
Date Range 9 -			
Date Range 10 -			
Date Range 11 -			
Date Range 12 -			
Date Range 13 -			
Date Range 14 -			



Date Range 15 -Date Range 16 -

#### Office Worker

User Permission 1 – All Areas Permission Schedule 1 – 8am-8pm M-F, Holidays 1 (checked)

An office is not staffed during a public holiday and you want to prevent access to the building from staff on this date. First program the holiday dates in this section under "Holiday 1", then go to Schedules and check "Holidays 1", then assign that schedule to the User.

# 4.10 Programming Zwave Devices



See the Zwave Configuration Menu later in this section.

Also reference Devices Programming (Advanced), section 5.9.

#### **Zwave Room Names**

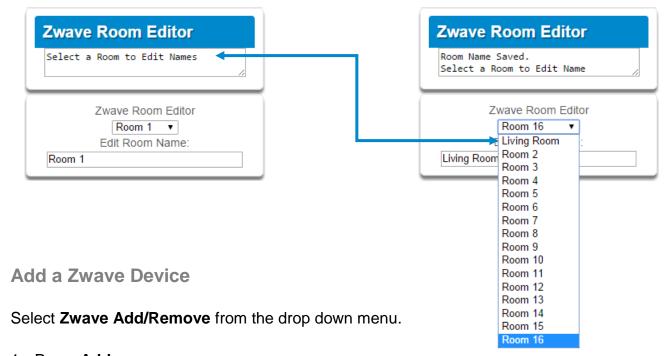
Select **Zwave Room Names** from the drop down menu.

From the drop down menu under **Zwave Room Editor** select a room to edit the name.

For this example we will change the name of Room 1 to Living Room.

Type Living Room in the form "Edit Room Name:"

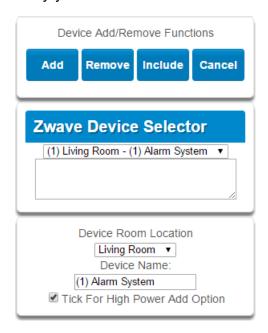
Press **Save**. The notification box will alert you that the Room Name is Saved. The drop down list has been updated for Room 1.



- 1. Press Add.
- 2. Initiate ADD mode on ZWave device. See your ZWave device's manual for instructions. The notification box will alert you that the Device is added.

**Note:** If a ZWave device has been added before or to another system, you must first remove it before adding it to this system. To do this, press **Remove**, then activate LINK or REMOVE mode on the device.

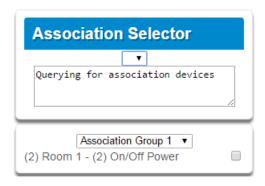
- Press Rooms.
- 4. Check that you can see the device you just added. Press a button such as ON or OFF to verify you can control the device.

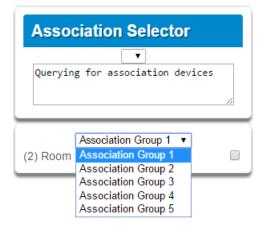




#### **Zwave Device Association**

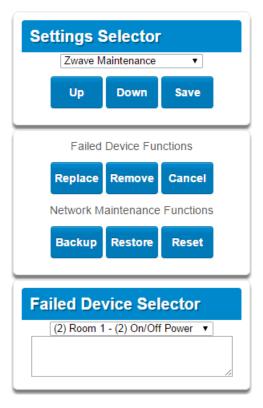
Select **Zwave Device Association** from the drop down menu.





### **Zwave Maintenance**

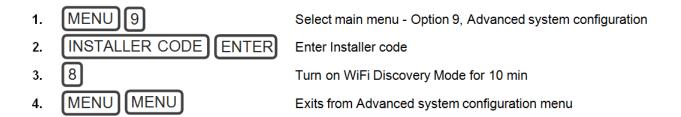
### Select **Zwave Maintenance** from the drop down menu.



		Option	Default	<b>Function</b>
Menu	Room	Zwave Room Editor	Drop down to select room to edit	Room Selection
	Names	Edit Room Name	Room 1	Room Naming
	Davis	Device Room Location	Drop down to select the room location	
	Device	Device Name	(1) Alarm	
U	Selector	Check For High Power Add Option	On	
		Association Functions		
+		Add		
Ø		Remove		
_	Device	Query		
n 6	Association	Association Selector	Drop down list of all devices learned into the system	
Ţ		Association Group		
0		Failed Device Functions		
$\circ$		Replace		
		Remove		
wave		Cancel		
	Maintenance	Network Maintenance Functions		
	Wainterlance	Backup		
		Restore		
		Reset		
Ν		Failed Device Selector	Drop down list of all the failed devices	

### 4.11 Wi Fi Setup

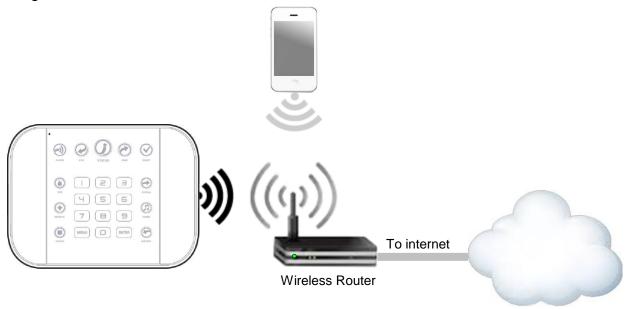
Turn on Wi Fi Discovery Mode – this provides direct access to the ZeroWire from a mobile device such as a smart phone, tablet, or laptop:



Enable Wi Fi on your mobile device

On your mobile device, browse for available Wi Fi networks and select the **ZeroWire\_xxxx** network to connect to it. Only a single user can connect at any time and there is no Wi Fi password. Once connected the ZeroWire will be assigned a fixed IP address of 192.168.1.3.

Use your device to connect to ZeroWire. The wireless router must support 802.11 b or 802.11g.



Open your web browser and enter 192.168.1.3. The ZeroWire login screen should appear.

Enter your username and password, by default this is: **installer** and **9-7-1-3**. Press **Sign In**. You should now see a screen similar to one of the below:





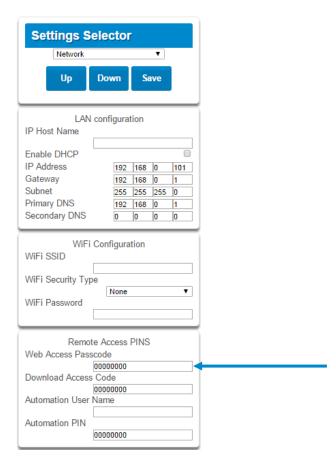
### Set Up a Web Access Passcode for UltraSync

For security, the UltraSync app is disabled by default. Follow these steps to enable it:



Select **Network** from the drop down menu.

Enter a Web Access Passcode:



#### Press Save.

For a detailed explanation of function of the Web Access Passcode please see section 4.6 Programming the Network

**Scan for Wireless Networks** 



Select Wi Fi Setup from the drop down menu.

Press Scan for Wireless Networks:



Press the Wi Fi network name you wish ZeroWire to connect to. Enter Wi Fi passcode then press OK. "Network Successfully selected" will appear as shown below. Your mobile device will be disconnected from the ZeroWire.



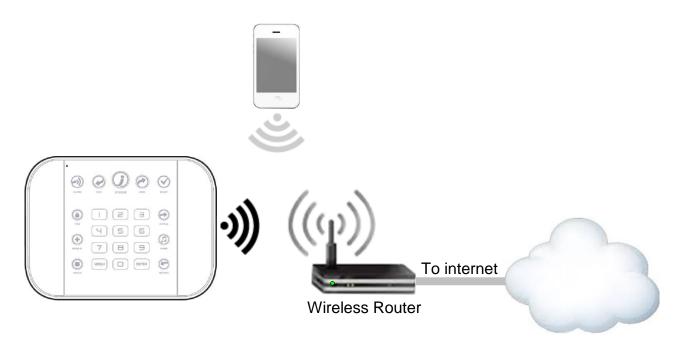
On your mobile device, connect to the same Wi Fi network found by the scan. On the ZeroWire press Menu – 8 – [PIN] – 6 and write down the IP address announced. This is the IP address of your ZeroWire. If you hear "IP address is not configured" then wait a further 30 seconds and repeat this step.

Open your web browser.

Enter announced **IP address**. The ZeroWire login screen should appear:



Your ZeroWire is now successfully connected to your Wi Fi network.



# **Troubleshooting Wi Fi Setup**

1. Cannot get an IP address	
Cause	Solution
Connection does not work	Close the web browser on your device, and restart your wireless router, and start again from step 1.
The wireless/router may not be configured for automatic DHCP or certain security settings may be enabled.	Check your router settings and try again.

2. Network connections fail				
Cause	Solution			
	Check if Wi Fi router allows b and g connections.			
	Check if router is within range and has good signal, otherwise a Wi Fi range extender may help.			
Some newer routers will have these off at factory	Ensure auto-correct is turned off (when typing the pass phrase).			
default. Some 802.11n access points may not accept 802.11g connections.	Ensure wireless router has DHCP enabled.			
	Ensure wireless router does not have firewall or security rules that prevent additional connections.			
	Ensure IP addresses are available; for example connect a new device to it and verify it has an internet connection.			

## 4.12 Check Wi Fi Connection to UltraSync

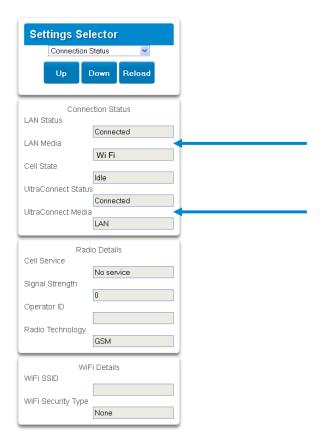
Login to the ZeroWire Web Server from your mobile device or computer using the IP address announced.

### Press **Settings**.

Select or press Connection Status in the drop down menu.

#### Check that

- g. LAN Status should display Connected.
- h. LAN Media should display Wi Fi.
- i. UltraConnect (UltraSync) Status should display Connected.
- UltraConnect (UltraSync) Media should display LAN.



#### If it does not:

- k. Check cable connection.
- I. Check router settings.

### 4.13 Programming Cameras



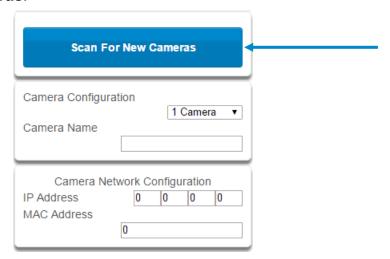
Also reference Camera Setup Instructions in section 8.

Select Cameras from the drop down menu.

ZeroWire supports selected IP cameras. Contact your supplier for the correct model(s). Install camera according to the manual supplied with the camera.

### Add a Camera Method 1 – Automatic Discovery

#### Press Scan For New Cameras.



The scan results in an IP address and MAC address listing in the form fields shown.

### **Viewing Cameras in UltraSync**

- 1. Log in to UltraSync app.
- 2. Press Cameras.
- 3. You will now be able to view the live camera feed.

### Add a Camera Method 2 - Manual Entry

Reference Cameras Programming (Advanced), section 5.20.

## **Removing Cameras**

Reference Cameras Programming (Advanced), section 5.20.

	Option	Default	Function
M e n u	Scan For New Cameras	-	Finds UltraSync cameras added to the same IP network as ZeroWire
_ _	Camera Configuration	Drop down for all the cameras	
O _	Camera Name	-	uo
Cam	IP Address	-	Notification
	MAC address	-	Noti

# **4.14 Check Connection Status**



Also reference System Programming (Advanced), section 5.1.

	Connections	Ор	tions	Function
	Connection Status			
	LAN Status	Not Linked, Con	figuring, Connected	
	LAN Media	Wi Fi,	Ethernet	
s Me	Cell State	<ol> <li>Getting Details</li> <li>Configuring Modem</li> <li>Modem Connected</li> <li>Configuring PPP</li> <li>Authenticating</li> </ol>	<ul><li>6. Configuring Protocol</li><li>7. Getting Echo</li><li>8. Connected</li><li>9. Terminating</li><li>10.Idle</li></ul>	ostic
tatu	UltraConnect (UltraSync) Status	1. Idle	<ul><li>5. Retry Delay</li><li>6. Getting Server Hello</li><li>7. Connected</li></ul>	Diagnostic
S	UltraConnect (UltraSync) Media	Wireless, LAN		<u> </u>
	Radio Details			Ē
0	Cell Service	No Service, Restricte	d Service, Valid Service	<u>.O</u>
-	Signal Strength	-113	to -51	¥
<b>+</b>	Operator ID			$\ddot{\mathbf{S}}$
O	Radio Technology	GSM	, UMTS	ij
Φ	WI FI Details			Æ
	WI FI SSID			Notification
Con	WI FI Security Type	WPA2 + AES WPA + AES WPA + TKIP/AES WPA + TKIP WEP		Z

# 4.15 Check Details



### Select **Details** from the drop down menu.

	<b>Detail Names</b>	Detail	Function
	Control Name		
S	Device UID (Serial)	Serial number of the ZeroWire	
<b>=</b>	Ethernet MAC Address		
a T	WI FI MAC Address		Notification
+	Control Model		Ħ.
S	Firmware Version		(O
_	Hardware Version		<u>ij</u>
<u>a</u> _	Bootloader		Oti
+	Voce Version		Ž
Φ	Website Version		
	Memory Map Version		
	Menu String Version		

# **Zero**Wire

# REFERENCE GUIDE MODEL ZW-6400

# 5 Advanced Installation Using Web Server

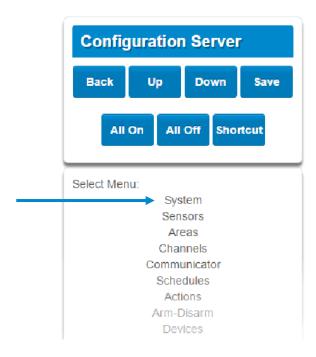
Advanced settings are only accessible via the ZeroWire Web Server, UltraSync app, or DLX900.



# 5.1 System Programming (Advanced)

Select **System** from the menu.

System Options is used to configure system wide options, such as time and dates, system timers and maintenance.



\System: System Clock General Options System Timers Siren Options Service and Test Options Status System Counts Automation Menu

#### System Submenus 1 System Clock 2 Clock Date and Time \System\System Clock: \System\System Clock: Date and Time Date: 07/14/2015 Time Zone Time (hh:mm:ss): 17 46 1 Daylight Saving Time The ZeroWire system clock can manage day, time, time sensor, and day light saving time settings to ensure ongoing accurate time. C 3 Time Sensor - Hours Offset / Minutes 4 Daylight Saving Time 0 Offset 0 \System\System Clock\Daylight Saving Time: \System\System Clock\Time Zone: Start Month $\equiv$ Hours Offset Mar UTC-5 ET Φ Start Week Minutes Offset Second • 0 . S **End Month** > Nov **End Week** S First Start Of DLST – Month 1 to 12 of year; Week of month 1 to 4 and last End Of DLST- Month 1 to 12 of year; Week of month 1 to 4 and last When connected to an IP network the ZeroWire system clock can synchronize its time and date automatically with an Internet Time Server if configured in Programming Communicator (Advanced).

1General Options
1 C   C - +

\System\General Options:	
Panel Zone Doubling	
Panel Box Tamper	
System Sensor Tamper	
Enable Celsius Scale	
Disable Hardwired Sensors	<b>4</b>
Strobe on Away&Off	
System Alarm Latch	<b>4</b>
Sensor Inactivity	

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	Option	Default	Function
) : :	Panel Sensor Doubling	Off	If enabled, the two (2) hardwired sensor inputs will be doubled to support four (4) sensors. The terminals for Sensor 1 will represent sensors 1 and 3, and the terminals for sensor 2 will represent sensor 2 and 4. This option cannot be selected for sensors other than the two sensors on the main panel. This option cannot be used in conjunction with the DEOL option.
•	Panel Box Tamper	Off	The ZeroWire has a built-in normally closed tamper switch that will sound the siren if the ZeroWire is removed from the wall. This option will enable or disable this tamper switch.
5	System Sensor Tamper	Off	If enabled, the ZeroWire will monitor all sensors, except fire sensors, for Dual End of Line (DEOL). A short or open circuit on a DEOL will activate sensor tamper alarms. This feature cannot be used if Panel Sensor Doubling is enabled.
	Enable Celsius Scale	Off	Enable Celsius vs. Fahrenheit Scale.
:	Disable Hardwire Sensors	On	If enabled, the ZeroWire will disable all hardwired sensor inputs. Wireless sensors with sensor numbers 1 to 16 may still be used.
	Strobe on Away	Off	If enabled, the system strobe will flash when an area is set in away mode. The strobe outputs must be configured follow the area alarm event condition. The strobe is not activated on Disarm or Stay.
	System Alarm Latch	On	If enabled, system alarms such as tampers, low battery, A/C fail and trouble requires a user with "Reset System Alarms" enabled in their current Permission Options to reset the alarm condition.  If disabled, system alarms do not latch and can be reset when a user arms or disarms an area.
	Sensor Inactivity	Off	If enabled, the system ZeroWire will monitor each sensor for activations. If no activations occur within the sensor activity time then a failed sensor activity report may be reported via the selected communication channel and a failed sensor activity message set in the ZeroWire event log. For a sensor to be eligible for activity monitoring, it must have "Sensor Activity" set in sensor options.  Sensors programmed with Sensor Inactivity in the Sensor Options must be sealed and unsealed within the time programmed here (in minutes). If they do not, a Sensor Inactivity will report.

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#### 1 System Timers

\System\System Timers: Siren Time [0-99] Minutes Strobe Time [0-99] Hours Battery Test Time [0-99] Minutes 2 AC Failure Report Delay [0-999] Seconds 300 Cross Zone Time [30-999] Seconds 300 Report Delay [15-45] Seconds 30 Holdup Delay [0-999] Seconds Fire Verify Delay [0,120-255] Seconds 120 Sensor Inactivity Time [0-65535] Minutes Fire Supervise Time [120-65535] Seconds 14400 Burg Supervise Time [120-65535] Seconds 43200

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Option	Default	Function
Siren Time (0-99) Minutes	4	The siren time sets the time in minutes that the siren output is active.
Strobe Time (0-99) Hours	3	The strobe time is the duration in hours that output programmed to follow the strobe time will activate. The valid time selection in this segment is 0 to 99 hours, where '0' disables the Strobe Output.
Battery Test Time (0- 99) Minutes	2	The dynamic battery test time sets the duration in minutes that the ZeroWire will perform a dynamic battery test. The ZeroWire will perform a dynamic battery test at the disarming of the first area or at midnight once each 24-hour cycle. Dynamic battery test is disabled when the test duration is set to 0. Dynamic battery test can also be run manually from a keypad.
AC Failure Report Delay (0-999) Seconds	300	The AC fail report delay sets the duration in seconds that the AC power is lost or restored before a communication is initiated.  AC restore will report when power is maintained for this same duration.
Cross Zone Time (30-999)	300	The twin trip time sets the duration in seconds whereby two or more sensors must trip before an alarm condition will be registered or the one sensor must trigger twice within this time period, or a continuous trip longer than 10 seconds. This feature only applies to sensors with the twin trip feature set in sensor options.
Report Delay (15-45) Seconds	30	The report delay is the duration in seconds that non-24 hour and non-fire type sensors will delay before reporting. This provides a valid user the opportunity to reset an unintended alarm condition before that event is reported.

	Optio	on	Defa	ult			Function	
	Holdup Dela (0-999) Seco		0		sensor typactivation holdup de If a holdu	be will wait before soccur during elay will immed be delay sensor	duration in second that a holdup ore it activates. If additional hold the holdup delay period then the iately expire and set the holdup type is de-activated during the I ldup alarm will reset and not act	lup e alarm. holdup
S	Fire Verify D (0,120-255) Her		12 e scenario		The fire alarm verification feature is designed to reduce false alarms reported by smoke detectors.  When a smoke sensor is first tripped, the ZeroWire will raise an Action Event 'Smoke Power Reset'. For hard wired 4-wire smoke detectors, you may program the output to follow the action event and power-cycle the detector(s). Hard wired sensors will be given 13 seconds to power-cycle.  The ZeroWire will wait 40 seconds to allow the smoke sensor to power up and settle. If a second trip occurs after this but before the end of the Fire Verify Delay time, a fire alarm will be generated. If no restoral is received after the first trip, a fire alarm will also be generated.  The valid time selection in this segment is 120 to 255 seconds. The communicator will delay for a specified time before reporting the fire alarm			
imer	1st Trip	l F	Fire		m Verification	n Time = 120 se	conds	
		l L		. 1				
e m	1st Trip		No rest	oral	Fire alarm	reported		
s t	1st Trip		Restore		2nd Trip	Fire alarm	Fire alarm reported	
S	0 s	Reset	Powe 13 s		Waiting fo	r second trip 1	Reset timer, wait for first trip	
	Sensor Inact Time (0-65535) M	•	0		Options n programn Inactivity Options". Default So	programmed winust be sealed ned here (in mi will report. This See section 4.	ith Sensor Inactivity in the Sensor and unsealed within the time nutes). If they do not, a Sensor is feature can be enabled in "Sys 5.	tem
	Fire Supervise Time (120-65535) Seconds  This applies only to wireless sensors p Sensors send a reduced packet count every 60 minutes (check your sensor ndate details). If no supervisory signal is within the time specified here then the as missing.  When set to 0 the default of 14,400 seconds. Check your local regulations for the second		I packet count supervisory signal your sensor manual for most up visory signal is received by the phere then the sensor will be reput of 14,400 seconds (4 hours) w	p to panel ported				
	Burg Superv (120-65535) Seconds		144	00	This appli type. Sen every 60 date deta within the as missin When set	es only to wire sors send a red minutes (check ils). If no super time specified g. to 0 the defaul	less sensors programmed as no duced packet count supervisory your sensor manual for most up visory signal is received by the pathere then the sensor will be repair to f 43,200 seconds (12 hours) egulations for the correct value	on-fire signal p to panel ported will be

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#### 1 Siren Options

\System\Siren Options: Siren Once per Sensor Siren At System Away or Disarm Siren At End of Exit Siren At Arm Report 

#### 1. Siren Once Per Sensor

If enabled, the ZeroWire will only set the siren once per sensor in a given arm cycle and will not set the siren again even if that siren time expires and that sensor reactivates. Every sensor will have one siren activation attempt before that sensor cannot reactivate the siren. If this option is not enabled, at the expiry of the siren time any sensor can reactivate the siren an unlimited number of times.

#### 2. Siren At System Away/Disarm

If enabled, the ZeroWire will activate the built-in siren briefly each time the last area in the system is set in away mode or when the first area is disarmed. To enable this function by area, leave this option disabled in this section, and enable the "Siren at System Away/Disarm" in section 5.3 Areas Programming (Advanced) for the area(s) you require.

#### 3. Siren At End Of Exit

If enabled, the ZeroWire will activate the built-in siren briefly each time the system is set in away mode and the exit delay expires.

#### 4. Siren At Arm Report

If enabled, the ZeroWire will activate the built-in siren briefly every time the system is set in away mode, the exit delay expires and a successful system arm report is completed.

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#### 1 Service and Test Options

\System\Service and Test Options: Status Email Intervals Status Email Time Service Phone Number [0-9]

Service and Test Options Submenu

#### 3 Email Time

\System\Service and Test Options: Status Email Time (hh:mm): 00 00

The status email time sets the time of day that the status email will report. This is set as 24-hour time in hours and minutes.

#### 2 Email Intervals

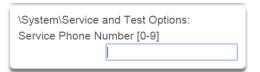
\System\Service and Test Options: Status Email Intervals 0

If enabled, the ZeroWire will report a system status email via one or more email channels. The number entered for Status Email Interval is the number of days between status reports. For example entering a 7 will cause a report to be sent every 7 days.

The interval starts from either the first time you program an interval in here or when it is powered

This is sent via the System Event Reporting -Reporting Channels.

#### 4 Service Phone number



When a system condition needs fixing, this number will be announced to the end-user. Typically this is the installation company.

GSM UMTS **UMTS** 

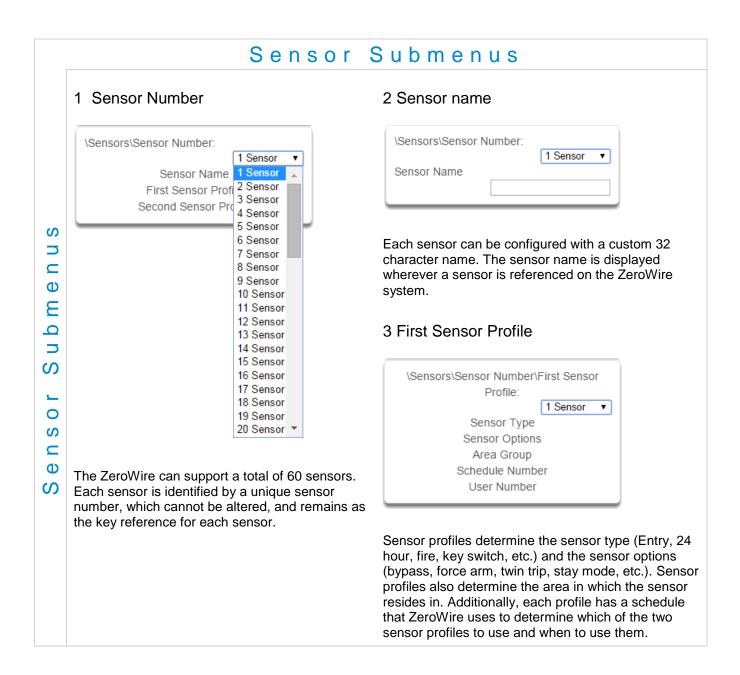
1 Counts S \System\System Counts: Swinger Shutdown [1-3] 0  $\equiv$ Swinger Shutdown is a false alarm prevention feature that counts the number of alarms caused by a Φ specific sensor. After a certain number of alarms caused by the same sensor within the same arming period, the controller will then shutdown that sensor for the remainder of that arming period. The sensor S will be reinstated when the system is disarmed or rearmed to any security mode. > S See SIA CP-01-2010 Programmable Features Table for reference. 1 Automation Menu 2 Automation User name Φ \System\Automation Menu: \System\Automation Menu:  $\geq$ Automation User Name Automation User Name Automation PIN 0 3 Automation Pin Ø  $\equiv$ \System\Automation Menu: 0 Automation PIN **5** ⋖  $\equiv$ The ZeroWire Communicator has a powerful automation feature which simulates a user performing arming and disarming of the system according to a specified schedule. Φ S > S

#### **5.2 Sensor Programming (Advanced)**



#### Select **Sensors** from the menu.

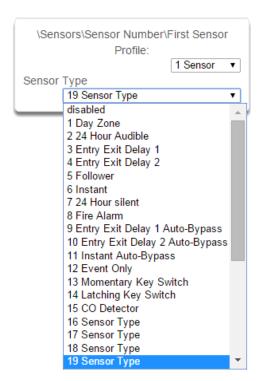
A sensor (sometime referred to as a sensor or input) on the ZeroWire is a single physical hardwired connection or a non-physical wireless connection. Additionally sensors on the ZeroWire can be used as logic inputs within actions and / or be configured as one of many sensor types. See Programming Actions (Advanced).



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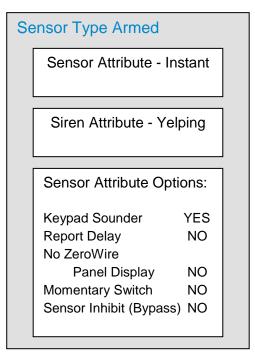
#### 4 Sensor Type



One of 32 configurable sensor types may be allocated to any sensor's sensor type. Each sensor type can behave independently between an arm and disarmed state. Sensor types determine the sensor attributes, siren attributes, and sensor attribute options.

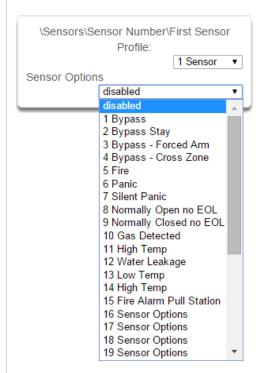
Here is an example of a preset sensor type:

#### Sensor Type – 1 – Day Sensor



Sensor Type Disarmed						
Sensor Attribute - Local						
	Siren Attribute - Sil	ent				
	Sensor Attribute Opti	ions:				
	Keypad Sounder Report Delay No ZeroWire Panel Display Momentary Switch	YES NO NO NO				
Sensor Inhibit (Bypass) NO						

#### 5 Sensor Options



One of 32 configurable sensor options may be allocated to any sensor's sensor options. Sensor options determine the sensor attributes such as a sensor's ability to be bypassed, force arm, twin trip, stay mode, etc. Additionally sensor options determine the sensor's reporting attributes.

One of 16 configurable schedules can be allocated to any sensor's schedule number. Sensor profile schedules determine when to allocate a sensor profile to a sensor. The first sensor profile has the highest priority and the second sensor profile has the lowest priority.

The panel will check if the current time and day fall within the schedule of the first sensor profile or if the schedule is disabled (thus always active). If the schedule is active then that profile is applied to that sensor.

If the first sensor profile's schedule is not active then it will check the second sensor profile. If the schedule is active then that profile is applied to that sensor.

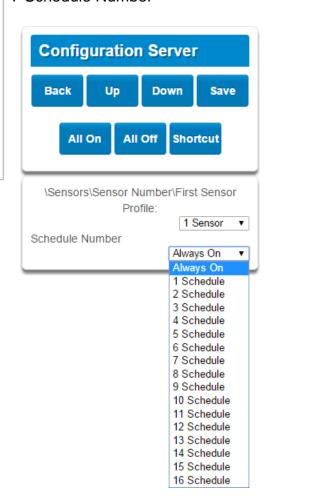
#### 6 Area Group (1-16)



One of 16 configurable area groups can be allocated to any sensor's area group. Area groups are a list of ZeroWire areas. When an area group is allocated to a sensor, that sensor will then belong to all the areas in the area group.

Ensure the correct Area Group is assigned to a sensor. If an area Group with no areas is used, then the sensor will never report.

#### 7 Schedule Number

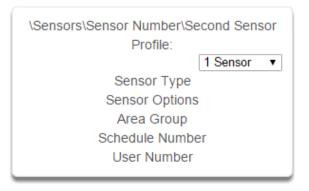


#### 8 User Number

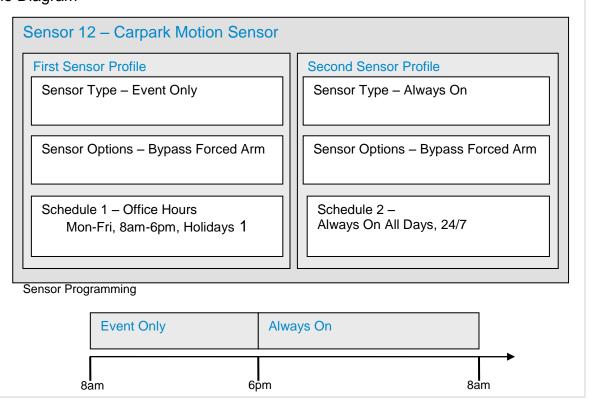


The sensor user number feature is used whenever the sensor type is set to "keyswitch". Instructions for users configuration are in Section 6 – Users and Permissions. One of 40 configurable users can be allocated to any sensor's user number. ZeroWire sensor profile user number is a powerful feature that is used to apply the selected user's attributes to a keyswitch operation. When the keyswitch sensor is activated, ZeroWire will check the user permissions and permission schedules to determine which areas are accessible. Additionally, area open and close reports will also report the user number selected in this option. If the user number is programmed to 0, the ZeroWire will use a default User number of 999 and will operate on all areas in the sensors area group.

#### 9 Second Sensor Profile (Refer to First Sensor Profile)



#### **Example Diagram**



# 5.3 Areas Programming (Advanced)

Press



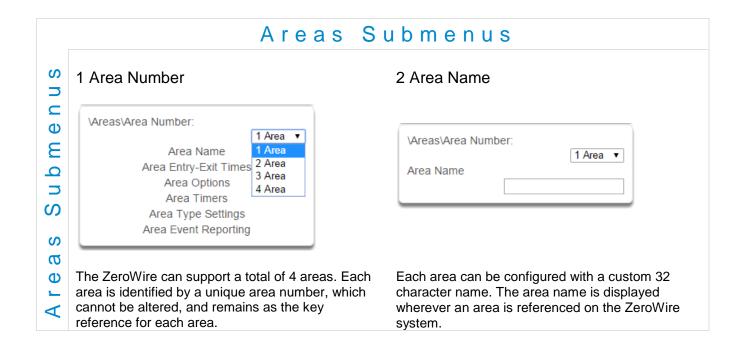
ther



for the Configuration Server

page.

Select Areas from the menu.

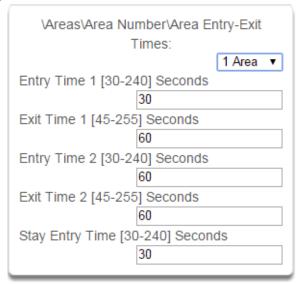


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#### 3 Area Entry-Exit times



ZeroWire uses the area entry and exit timers to delay the activation of an alarm event when entry/exit sensor types are activated.

When an area is turned on, it will start an Exit 1 timer. While an Exit 1 timer is running - Entry 1, Entry 2, and Handover sensor types will not create an alarm.

When the Exit 1 timer expires it will start the Exit 2 timer. While an Exit 2 timer is running - Entry 2 sensors will not create an alarm.

Once all exit delays are expired, an activation on an Entry 2 sensor type will start an Entry delay with the Entry 2 time, and an activation of an Entry 1 sensor type will start an Entry delay with the Entry 1 time.

If an entry delay is running and a sensor is activated with an entry time that is less than the time remaining, the timer will be reduced to the time of that new sensor.

Activation of a Handover sensor while an entry timer is not running will create an instant alarm.

If a sensor is in more than 1 area, the sensor will use the have the longest entry and exit delay time of the programmed area. If a area greater than 1 has the time set to 0, that area will use the time programmed in Area 1.

If area settings are set to 0, then the area will automatically inherit Area 1 settings.

#### 1. Entry Time 1

Entry time 1 is used to time the entry delay when an entry delay is started by an entry 1 sensor type.

Whenever a area is turned on, it will start an Exit 1 timer. Entry 1, Entry 2, and Handover sensor types will not create an alarm if triggered while an Exit 1 timer is running.

#### 3. Entry Time 2

Entry time 2 is used to time the entry delay when an entry delay is started by an entry 2 sensor type.

#### 4. Exit Time 2

When the Exit 1 timer expires it will start the Exit 2 timer. Entry 2 sensors will not create an alarm if triggered while an Exit 2 timer or an Exit 1 timer is running.

#### 5. Stay Entry Time

The stay entry time is the entry warning time that applies to all sensors armed in the stay mode. Entry 2 sensors will follow Entry 2 time and will ignore this setting. This stay entry time does not apply to fire sensor types.

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#### 4 Area Options

\Areas\Area Number\Area Options:	
1 Area	•
Arm-Disarm Reports	•
Quick Away	
Arm In Stay If No Exit	1
Quick Stay Mode Disarm	
Siren Chirp Away	1
Siren Chirp Stay	
Force Arm With Bypass	
Force Arm Without Bypass	
Manual Fire	1
Manual Auxiliary	1
Manual Panic	1
Use Area 1 Options	
Bypass Requires PIN	

#### 1. Arm/Disarm Reports

If enabled, this area will send open and close reports via one or more appropriately configured channels.

#### 2. Quick Away

If enabled, this area can be armed in away mode via a single away mode key press. When an area is armed via quick away mode, the closing user number is the default user of 999.

#### 3. Arm In Stay If No Exit

If enabled, Arm In Stay If No Exit will cause this area to arm in stay mode even when a user arms it in away mode, providing that an entry 1 or entry 2 sensor type is not triggered during the exit delay.

This allows the ZeroWire to behave intelligently – arming in Away mode if a user leaves the building, and arming in Stay mode if the user stays inside.

Stay mode encourages ZeroWire user to use their alarm system more frequently when the premise is occupied. Designated stay sensors (e.g. located perimeter motion sensors and doors) will be active in stay mode while all non-stay sensors (e.g. located upstairs) will be bypassed.

When armed in the stay mode, the opening of any sensors designated as stay mode sensor will initiate the keypad sounder and start the stay entry delay before creating an alarm. All other sensors and non-fire sensors will be bypassed during stay mode.

#### 4. Quick Stay Mode Disarm

If enabled, this will allow the stay mode to be disarmed by pressing the stay key on the keypad. This is only possible if the is no alarm active and the stay entry delay is currently running.

This is a convenience feature avoiding the need to enter the PIN to disarm from stay mode.

At the end of the stay entry delay or if there is an area alarm, the stay mode can only be disarmed via a valid user PIN.

#### 5. Siren Chirp Away

If enabled, the ZeroWire will activate the built-in siren briefly each time this area is set in away mode or disarmed with a key-switch sensor or wireless keyfob.

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#### 6. Siren Chirp Stay

If enabled, the ZeroWire will activate the built-in siren briefly each time this area is set in stay mode with a key-switch sensor or wireless keyfob.

#### 7. Force Arm With Bypass

If enabled, the area can be armed even if sensors are not ready. Any sensors that are not ready will automatically be bypassed, log the bypass, and optionally report the bypass.

The automatic bypass will be applied when the sensor is capable of causing an alarm condition due to a state change such as an area arming, schedule or action. This avoids false alarms.

If an auto-bypassed sensor becomes ready after it is armed, that sensor will automatically remove the bypass, log the bypass restore, and optionally report the bypass restore.

Individual sensors can be made "force armable with auto-bypass" by leaving this area option off, then enabling Forced Arm Enable in Sensor options, and enabling Sensor Inhibit (Bypass) in the Sensor Type Profile.

#### 8. Force Arm Without Bypass

If enabled, the area can be armed even if sensors are not ready. Any sensors that are not ready will NOT be automatically be bypassed and may cause an alarm condition because they could still be in a not ready state once the area becomes armed.

This option is overridden if the Force Arm With Bypass is enabled.

Individual sensors can be made "force armable without auto-bypass" by leaving this area option off, then enabling Forced Arm Enable in Sensor options, and disabling Sensor Inhibit (Bypass) in the Sensor Type Profile.

#### 9. Silent Exit

If enabled, ZeroWire not sound the exit warning beeper.

#### 10. Manual Fire

If enabled, the manual fire button will be enabled on keypads. Press and hold for 2 seconds to send a fire event. Default is off.

#### 11. Manual Auxiliary

If enabled, the manual auxiliary button will be enabled on keypads. Press and hold for 2 seconds to send an auxiliary event. Default is off.

#### 12. Manual Panic

If enabled, the manual panic button will be enabled on keypads. Press and hold for 2 seconds to send a panic event. Default is off.

#### 13. Use Area 1 Options

If enabled, the area will use Area 1 options. Default is on.

#### 14. Bypass Requires PIN

If enabled, a valid PIN code with access to this area is required to bypass sensors in this area.

#### 15. Manual Panic is Silent

If enabled (in **Settings**), manual panic alarms will not trigger an audible alarm.

#### Notes on Force Arming, Bypass, and Auto-Bypass

Normally to arm an area it must first be "Ready to Arm". This means all sensors in that area must be sealed.

For example, if the front door is open, then a user would need to close it first and ensure there is no movement in the reception area. This provides the Ready to Arm status in Area 1 that is needed before attempting to arm. This is not always user friendly or practical.

The term force arm refers to the ability to arm an area even though sensors are not ready. It is usually only used with motion sensors as these are self-restoring and will be restored by the time the exit delay ends (e.g. the person arming the system leaves the building causing the Reception PIR to restore.)

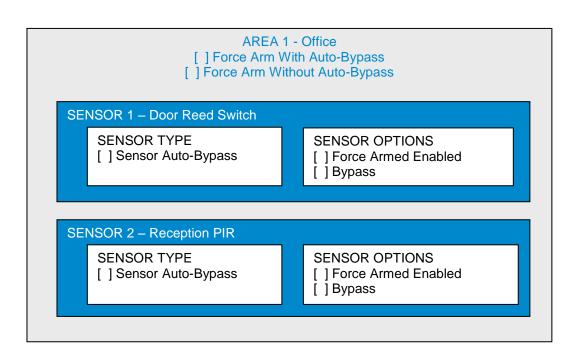
If the front door is not closed properly then Area 1 would go into alarm at the end of the Exit time. To avoid this false alarm we enable "Force Arm With Auto-Bypass" so all sensors that are not sealed (i.e. not ready) by end of the exit time will be "Auto-Bypassed".

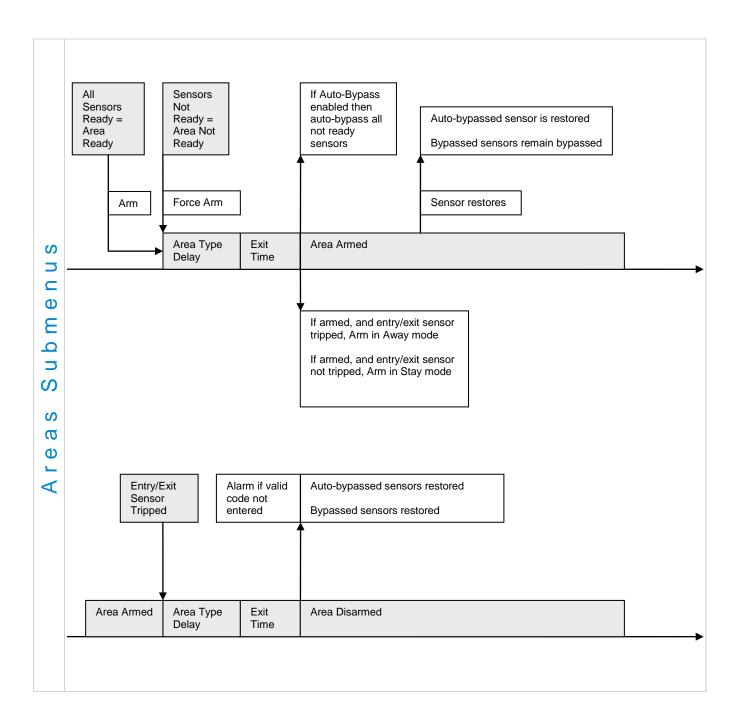
If after the Area is armed, that sensor restores (e.g. the person double checks and secures the front door) then the Auto-Bypass will be removed from the sensor and it will be active. If subsequently the sensor is triggered then Area will go into alarm.

Auto-bypass will be applied (if enabled, and if necessary) to a sensor whenever a change in state occurs that would result in an alarm condition. These include arming an area with a not-ready sensor, a sensor changing profile, Arm-Disarm function, or due to an action or schedule.

Enabling Auto-Bypass for the area will apply the feature to all sensors in that area as well.

In general disabling "Sensor Auto-Bypass" is not recommended because of the potential to create a false alarm but there are applications where it is desired. Use "Force Arm Without Auto-Bypass" at the area level to prevent sensors from being auto-bypassed when Force Armed.



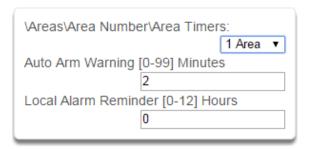


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#### 5 Area Timers



#### Auto Arm Warning

If the area type is Standard and Arm / Disarm is configured, this timer delays arming by the minutes entered.

If the area type is Timed Disarm, Man Down, or Guard Tour, this setting is a warning time given to a user once the user's Disarm Time, Man Down Time, or Guard Tour Time has expired. During this warning time a user can cancel the automatic re-arming and event report by entering their code, this will also restart the appropriate user timer. At the end of the warning time the ZeroWire will re-arm the area and send the appropriate event (closing, man down, guard tour fail).

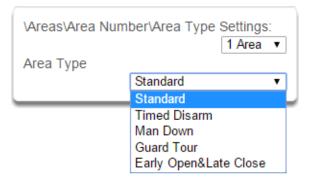
If the area type is Early Open & Late Close, this timer sets the period after the start (opening) and after the end (closing) of the area type schedule that the area can be disarmed or armed. Otherwise an early to open or late to close report will be sent if enabled in user permissions. Fail to open and fail to close report will be sent if Arm-Disarm Reports is enabled in area options.

Valid values are from 0 to 99 minutes Local Alarm Reminder

If set, the local alarm reminder is the period in minutes between 0 and 999 that may elapse between actioning a local alarm and the local alarm reactivating if that sensor has remained open.

For example if a smoke detector is removed to change the battery the tamper will trip; if a user resets the alarm on the ZeroWire but does not replace the smoke detector within the local alarm reminder time, then the fire alarm tamper will retrigger.

#### 6 Area Type



#### Standard

The area functions as normal.

Timed disarm is used when an authorised user can disarm an area for a predetermined period of time. At the end of this disarm time the area will start the auto-arm process ensuring that the area is not accidently left disarmed.

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The following conditions must be true before a timed area disarm function will occur.

- a. The area type must be set to Timed Disarm.
- b. The area type schedule must be active.
- c. The users active profile's permission must have:
- i. This area set in the permission's timed disarm area group.
- ii. The permission must be in schedule.
- iii. The permission's Area Type Override must NOT be set.

At the end of the user's disarm time, the Area Type Delay will activate for the set period. At the end of the Area Type Delay period the area will arm and start the Exit Delay and if configured, report a closing using via the last user number to have time disarmed the area.

At anytime during the timed disarm period, authorised users with Area Type Override set in their active profile can cancel the disarm time period by arming or disarming the area.

The user's permission determines how long the area will be disarmed for.

#### Man Down

Man down is used when an authorised user(s) is working in a hazardous area (or the like), and there is a requirement that the user(s) regularly "check-in" to notify others that the user(s) is safe. If the authorised user(s) fails to perform this action the system can set an audible warning and send a report.

The following conditions must be true before man down function will occur.

- a. The area type must be selected to man down.
- b. The area type schedule must be active (after the start time and before the end time).
- c. The uses active profile's permission must have;
  - i. This area set in the permission's man down group.
  - ii. The permission must be in schedule.
  - iii. The permission's Area Type Override must NOT be set.

The man down timer is set in the user's permission.

At the end of the user's man down time, the Area Type Delay will activate for the set period. At the end of the Area Type Delay period the area will arm and if configured, report a man down alarm. At anytime during the man down period, authorised users with the Area Type Override set in their active profile will cancel the man down time period by disarming or disarming the area.

#### **Guard Tour**

Guard tour is used when an authorised user(s) (such as a guard) is required to regularly "check-in" to notify others that they have physically attended to a location(s) on the site. If the authorised user(s) fails to perform this action the system can set an audible warning and report a "Guard Tour Fail" event.

The following conditions must be true before guard tour function will occur.

- a. The area type must be selected to guard tour.
- b. The area type schedule must be active (after the start time and before the end time).
- c. The uses active profile's permission must have;
  - i. This area set in the permission's guard tour group.
  - ii. The permission must be in schedule.
  - iii. The permission's Area Type Override must NOT be set.

The guard tour time is set in the user's permission.

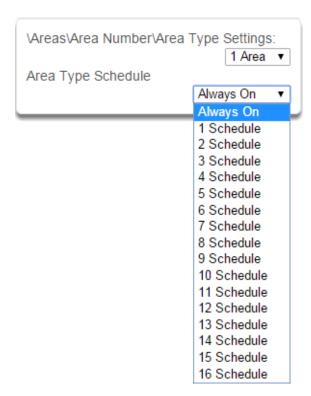
At the end of the user's guard tour time, the Area Type Delay will activate for the set period and keypad sounder will be active. At the end of the Area Type Delay period the area will arm and if configured, report a Guard Tour Fail alarm. At anytime during the guard tour period, authorised users with the Area Type Override set in their active profile will cancel the guard tour time period by disarming or disarming the area.

#### Early Open/Late Close

If the area type is Early Open & Late Close, the Area Type Delay sets the period after the start (opening) and the end (closing) of the area type schedule that the area must be either disarmed or armed.

For example, if the area type schedule is set between 8:00 AM (opening time) and 5:00 PM (closing time) and the Area Type Delay is set to 15 minutes; then the area must be disarmed between 8:00 AM and 8:15 AM otherwise if it is disarmed before 8:00 AM it is an early open, if it is disarmed after 8:15 AM it is late to open. Likewise the area must be armed between 5:00 PM and 5:15 PM otherwise if it is armed before 5:00 PM it is an early close, if it is armed after 5:15 PM it is late to close.

#### 7 Area Type Schedule



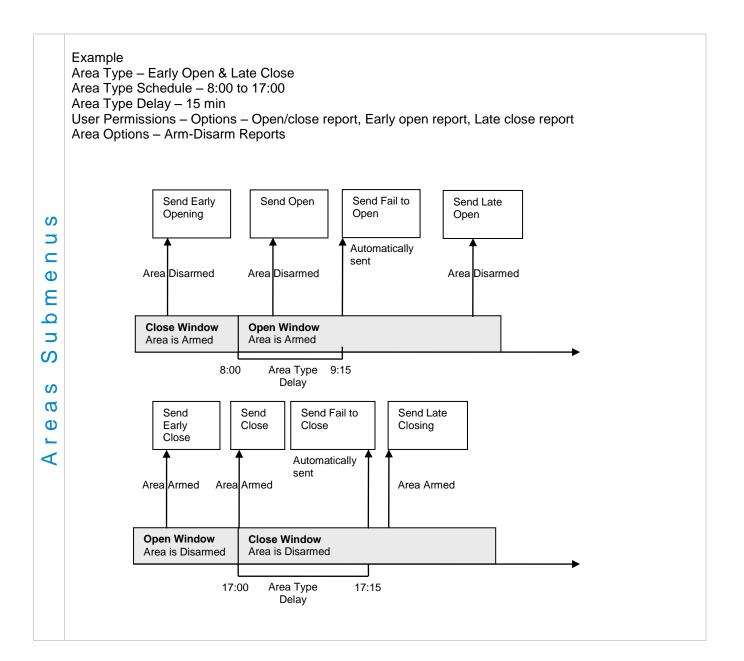
One of 96 configurable schedules can be allocated to the area type schedule. The area type schedule determines the schedule that the selected area type is active. Area types are not active when the schedule is not active. If a area type schedule is disabled (always active) that area will always have the type characteristics programmed in Area Type.

#### Area Type Delay

If the area type is Standard and Arm / Disarm is configured, this timer delays arming by the minutes entered.

If the area type is Timed Disarm, Man Down, or Guard Tour, this setting is a warning time given to a user once the user's Disarm Time, Man Down Time, or Guard Tour Time has expired. During this warning time a user can cancel the automatic re-arming and event report by entering their code, this will also restart the appropriate user timer. At the end of the warning time the ZeroWire will re-arm the area and send the appropriate event (closing, man down, guard tour fail).

If the area type is Early Open & Late Close, this timer sets the period after the start (opening) and after the end (closing) of the area type schedule that the area can be disarmed or armed. Otherwise an early to open or late to close report will be sent if enabled in user permissions. Fail to open and fail to close report will be sent if Arm-Disarm Reports is enabled in area options.



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#### 8 Area Event Reporting/Account



#### 9 Area Event Reporting/Channels

\Areas\Area Number\Area Event Reporting:				
	1 Area ▼			
Area Channels				
	1 Channel Group ▼			
	disabled			
	1 Channel Group			
	2 Channel Group			
	3 Channel Group			
	4 Channel Group			
	5 Channel Group			
	6 Channel Group			
	7 Channel Group			
	8 Channel Group			
	9 Channel Group			
	10 Channel Group			
	11 Channel Group			
	12 Channel Group			
	13 Channel Group			
	14 Channel Group			
	15 Channel Group			
	16 Channel Group			

If set, the area account code is a system unique 4 to 10 digit code (format dependent) used to associate area related alarm reporting events to this area. If the area account code is equal to the default of 0, the channel account code will be used for this area's alarm reporting events. If the channel account code is equal to the default of 0, the channel 1 account code is used. If the channel 1 account code is 0 then the account will be sent as 0.

The channel group determines which communicator channel(s) area events will be reported to. If the bit corresponding to one of the 16 reporting channels is set to on, area events will always be reported to this channel. It is referred to as a primary reporting channel. If a report is unsuccessful to a particular primary channel it will attempt that channel's backup channels if there are any.

#### 5.4 Channels Programming (Advanced)

Press then for the Configuration Server page.

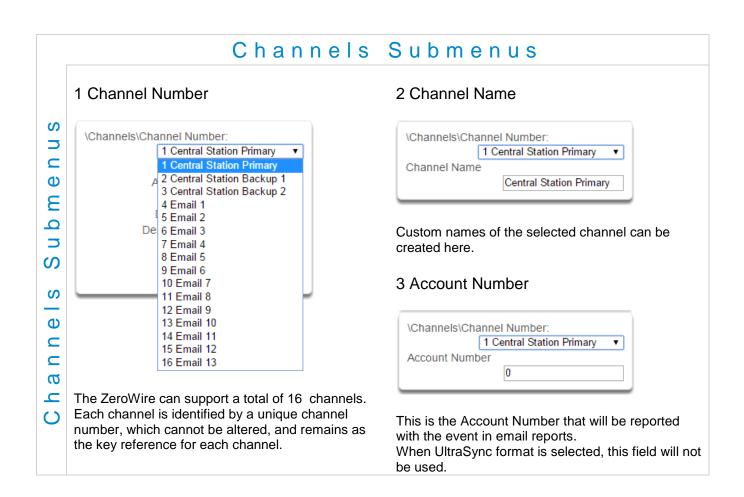
#### Select Channels from menu.

The ZeroWire can support a total of 16 channels; each channel is a communication path for events to be sent from the ZeroWire panel to a selected destination.

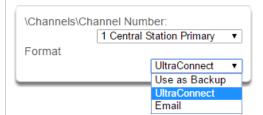
Default configuration reserves Channels 1 – 3 for UltraSync format, Channels 4 – 16 are Email format.

Email is a "best-effort" system and there is no guarantee messages will be delivered by the network. When the network is busy, messages can be dropped. Central control room monitoring is highly recommended as each event is acknowledged on receipt to ensure an appropriate response can be made.

Email addresses can only be configured by Master, Engineer, Master Engineer, and Custom Users with Channel menu permission. Master users can only see Channels configured as email. Standard users cannot change the email address.



#### 4 Format

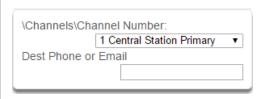


This is the communication format for the selected channel.

Select from:

Use as Backup UltraSync Email

#### 6 Destination Phone/Email



The phone number or email address of the selected destination.

#### 8 Event List 1-16



Select the pre-programmed list of events that will be sent via this channel. The specific events in each event list are programmed.

#### 5 Device Number



#### 7 Next Channel 1-16



If the channel selected is unable to deliver the event to the selected destination, ZeroWire will try to use this backup channel instead. The Next Channel specified here must be greater than the Channel Number.

A number lower than the current Channel Number will end the chain. This is to prevent accidental programming of endless loops.

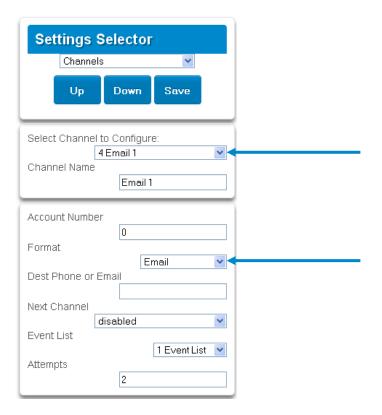
#### 9 Attempts



Enter the number of times ZeroWire should try to send the events to the UltraSync server. After the number of attempts has been exhausted the ZeroWire will try the Next Channel if specified.

#### **Configure Email Reporting**

- 1. Login to ZeroWire Web Server or UltraSync app. Use an Installer or Master user account.
- 2. Press **Settings**.
- 3. Select Channels in the drop down menu.
- 4. Press Select Channel to Configure where the Format is already set to Email.



- 5. Enter an email address.
- 6. Select an Event List.
- 7. Enter a Channel Name for future reference.
- 8. Press Save.

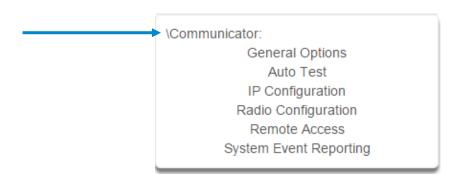
Installer and Engineer user types can customize Event List for selective reporting.

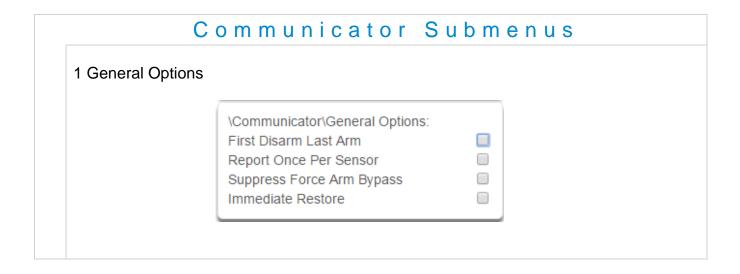
## **5.5 Communicator Programming (Advanced)**



#### Select Communicator from menu.

The ZeroWire Communicator is a core component of the ZeroWire System used in conjunction with the Channels feature to report events to a monitoring company or third party. In this menu you can configure the settings for various methods of reporting.





#### 1. First Disarm Last Arm

If enabled, the ZeroWire will only send a closing report when the last area is armed.

Note: The last area to arm must have open/close reports enabled. The ZeroWire will only send an opening report when the first area is disarmed.

This feature is used in place of Individual area Open and close. If you enable open and close in the area you will get both individual open and close and System open close

#### 2. Report Once Per Sensor

If enabled, this will limit reporting to only once per sensor each time you arm or disarm a area. This stops the control room or reporting destination to be flooded by multiple reports that the same sensor is being activated (for example the intruder may be moving around and is being picked up by the sensor on that sensor).

#### 3. Suppress Force Arm Bypass

If enabled, the ZeroWire does not send bypass reports when a sensor is forced armed.

If not enabled, when a sensor is forced armed and it remains in a state of creating an alarm, bypass reports are sent at the end of exit time. For example this would occur if it remains unsealed at the end of the exit time, or due to change of sensor type caused by a schedule.

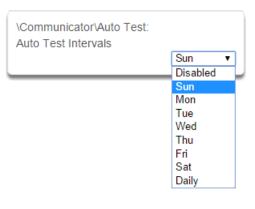
If forced armed sensors re-seal during the armed period, bypass restores are sent.

#### 4. Immediate Restore

If enabled, the ZeroWire will immediately send all restorals as the sensor reports the event.

If not enabled, the ZeroWire will send restoral events all at the same time when the marea is disarmed.

#### 2 Auto Test/Intervals



#### 3 Auto Test/Time

\Communicator\Auto Test: Auto Test Time (hh:mm): 02 00

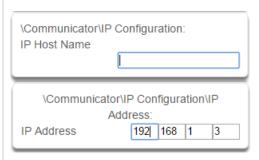
Enter the time at which the automatic test report should be sent. This should be in 24-hour format. For example 18:00.

Set day of the week to send an automatic test report to the system channel group. (Communicator\System Event Reporting\System Channels). You may also set auto-test to Daily.

#### 4 IP Configuration

\Communicator\IP Configuration: IP Host Name IP Address Gateway Subnet Primary DNS Secondary DNS WiFi SSID WiFi Security Type WiFi Password Ports Time Server IP Options

#### 5-6 IP Config Detail



#### Host Name

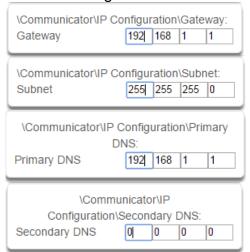
This is a text label assigned to the ZeroWire communicator so you do not have to remember the IP Address.

Note: This only works on local LAN and with Microsoft Windows PC, or an Apple device with the local extension. Does not work remotely over the internet.

#### IP Address

The IP address assigned to the ZeroWire communicator to enable it to connect on to the local LAN. This will allow you to access the embedded web server from a web-enabled device to program and view the status of the system. It is also used for alarm reporting.

#### 7-10 IP Config Detail



#### Gateway

If required, the IP address of the router which is needed when remote IP communications are used .

#### Subnet

The subnet mask for the network.

For example, 255.255.255.0 is the network mask for 192.168.1.0/24.

#### **Primary DNS**

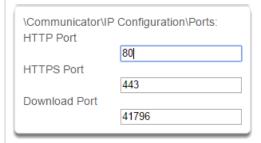
The IP address of the Primary Domain Name Server. The DNS is used to translate host names for time servers and UltraSync servers.

#### Secondary DNS

The IP address of the Secondary Domain Name Server, used if the Primary DNS is not available.

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The ports that the computer needs to communicate with the ZeroWire system.

Defaults: HTTP Port = 80 HTTPS Port = 443 Download Port = 41796

#### 15 Time Server



Enter the URL or IP address of a time server to allow the ZeroWire to automatically update and synchronise its clock without user intervention. The default is pool.ntp.org

#### 16 IP Options



#### 1. Enable DHCP

Allow the ZeroWire panel to be automatically assigned an IP address by the network.

#### 2. Require SSL

Feature no longer supported. Leave unchecked.

#### 3. Enable Web Updates - RESERVED

Allow the ZeroWire panel to update the web pages via a network. Go to Hostname/mpfsupload to update the web pages served by ZeroWire. Does not update firmware.



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#### 4. Enable Ping

Allow the ZeroWire panel to respond to the PING command.

#### 5. Enable Clock Updates

Allow the ZeroWire internal clock to synchronise with the internet time server specified .

#### 6. Enable Web Program

Enabling this option will cause ZeroWire Web Server and UltraSync app to always display Installer menus regardless of if the panel is in program mode or not.

Disabling this option will hide the Installer menus on ZeroWire Web Server and UltraSync app unless program mode is active. This provides greater security by keeping web programming disabled unless a user on site with physical access to the keypad enters program mode with a valid PIN code.

ZeroWire will be in program mode if a user gains access to menu 5, 8, or 9. UltraSync app requires the Web Access Code to get access to the panel.

#### 7. Always Allow DLX900

Enabling this option will allow DLX900 to connect at any time if the correct Download Access Code is provided.

Disabling this option provides greater security by only allowing DLX900 to connect when program mode is active. This allows the system to have DL900 access disabled until a user on site with physical access to the keypad enters program mode with a valid PIN code.

ZeroWire will be in program mode if a user gains authorised access to menu 5, 8, or 9 on the keypad.

#### 8. Monitor LAN

When the Monitor LAN option is enabled the panel will monitor the Ethernet port for a valid Ethernet cable. If the Ethernet cable is disconnected while this option is enabled, and the panel is unable to communicate, it will log a Fail To Communicate event.

#### 9. Enable UltraConnect (UltraSync)

This is an automatic feature of ZeroWire. It is recommended you leave this setting on.

Enable this option to allow ZeroWire to send email reports via the UltraSync servers. This is independent of the Web Access Passcode which when set to 00000000 will prevent the UltraSync app from connecting.

If any channel is set to Email format reporting, then ZeroWire will override ignore this setting and allow email reporting via UltraSync cloud servers.

If you wish to prevent connections to the ZeroWire cloud servers, then uncheck this option and do not use the UltraSync reporting format.

Features	<b>Email Reports</b>	UltraSync App
Enable UltraSync = OFF Web Access Code = 00000000	No	No
Enable UltraSync = OFF Web Access Code = not 00000000	Yes	Yes
Enable UltraSync = ON Web Access Code = 00000000	Yes	No
Enable UltraSync = ON Web Access Code = not 00000000	Yes	Yes

# Communicator Submenus

#### 17 Radio Configuration

\Communicator\Radio Configuration:
GPRS Username
GPRS Password
APN
Radio Options
SIM Preset

#### **19 APN**

\Communicator\Radio Configuration:
APN

Access Point Name (APN) for the settings to set up a connection to the gateway between the cellular network and the public Internet.

#### 21 SIM Preset

\Communicator\Radio Configuration:
SIM Preset

#### 23 Panel Device Number

\Communicator\Remote Access:
Panel Device Number

A number from 0 to 4,294,967,295 that must be entered in to the desktop software for remote access to take place.

#### 25 Callback Server

\Communicator\Remote Access:
Callback Server

If an IP address or host name is programmed into this feature, and "Call Back Before Download Session" is enabled, the ZeroWire will disconnect for approximately 10 seconds and then connect to this IP address.

This should be the IP address of the computer where DLX900 is installed, not the IP address of the ZeroWire panel.

**IMPORTANT:** the call back IP address should always be reviewed for accuracy before disconnecting.

#### 18 GPRS Username/Password

\Communicator\Radio Configuration:
GPRS Username
\Communicator\Radio Configuration:
GPRS Password

#### 20 Radio Options

\Communicator\Radio Configuration\Radio Options:
Smart Roaming

#### 22 Remote Access

\Communicator\Remote Access:
Panel Device Number
Download Access Code
Callback Server
Download Options

#### 24 Download Access Code

\Communicator\Remote Access:

Download Access Code

[00000000]

A variable length code for the computer user. This code gives the software complete authority over all menus including those that are locked. For convenience DLX900 will also try **installer** and **9-7-1-3** to allow a connection for first time set up if the Download Access Code does not work This is why changing the default code is important.

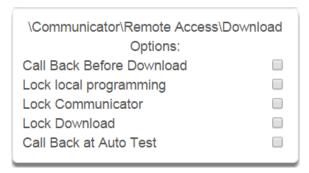
Changing this code may lock out your control room monitoring service and prevent you from maintaining your system. It is advised you contact your control room before changing this code.

Users must have access to the Communicator menu in order to change this setting. This can be programmed in Menus, and assigning the "Advanced" menu.

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#### 26 Download Options



#### 1. Call Back Before Download

If a download is requested the ZeroWire will hang up and make a call to the Call Back Number. This is to increase the security of remote access.

#### 2. Lock local Programming

Prevent changes to the ZeroWire system via a keypad, all changes MUST be made using the remote access software.

#### 3. Lock Communicator

Local programming locks all programming unless accessed with the Download Access code. Lock communicator locks local programming of communicator features unless accessed by the Download Access Code.

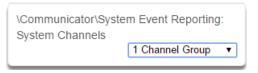
#### 4. Lock Download

Prevents the programming of the Remote Access Menu without using the Download Access PIN.

#### 5. Call Back at Auto Test

When an auto test is initiated, perform a call back to the number specified.

#### 27 Event Reporting /Channels



Enter the Channel Group that the ZeroWire will send system events to.

#### 28 Event Reporting /Attempts



This is the number of times the ZeroWire will sequence back to the primary channel if the backup channels all fail. This applies to ALL communication attempts including sensor and area events.

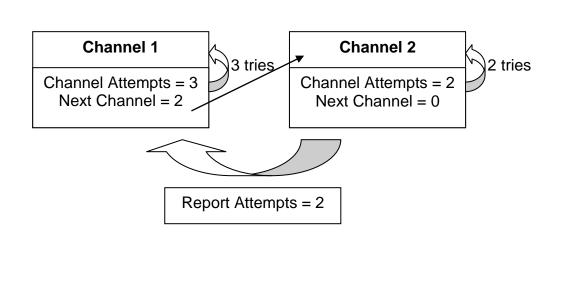
#### Example

If Channel 1 is the primary, and Channel 2 is the backup for Channel 1, then when both channels fail it will go back to Channel 1. This setting controls how many times ZeroWire cycles back to Channel 1 before it gives up.

The Channel Attempts setting controls how many times ZeroWire stays on the channel before switching to the backup.

Always check the max. number of attempts on all channels to avoid unexpectedly high communication charges.

In the diagram below, ZeroWire will try Channel 1 3 times, switch to Channel 2 and try 2 times, then go back to Channel 1. This sequence is repeated 2 times in total. In total there will be 10 attempts.



## 5.6 Schedules Programming (Advanced)

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for the Configuration Server

page.

#### Select **Schedules** from the menu.

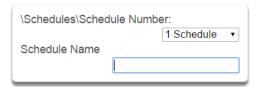
#### Schedules Submenus

#### 1 Schedule Number



The ZeroWire can support a total of 96 schedules. Each schedule is identified by a unique schedule number, which cannot be altered, and remains as the key reference for each schedule.

#### 2 Schedule Name



Each schedule can be configured with a custom 32 character name. The area name is displayed wherever a schedule is referenced on the ZeroWire system.

#### 3 Follow Action Number



If an action number is specified, then the schedule becomes enabled when the action is true. When the action becomes false, then the schedule becomes disabled.

Schedules can be used to control various parts of the system such as when a user's permissions are applied. The "Follow Action Number" option allows you to use actions to control schedules.

The result is actions can control when permissions are applied, when area types are applied, sensor behaviours, when arm-disarm can occur, and when scenes play.

This allows you to create conditional schedules that only become active when certain conditions are met. For example you could create a user that only becomes active (because of the linked schedule) under certain conditions like a fire alarm.

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#### Follow Action

## Action

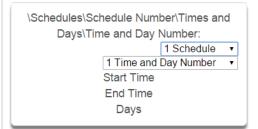
controls

## Schedule

controls

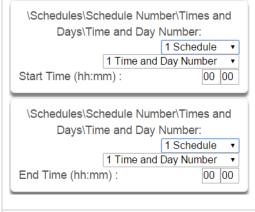
**Permissions** (users and devices) **Area Types Sensor Profiles Arm-Disarm Scenes** 

## 4 Times and Days



Up to 16 sets of time and days can be specified here.

#### 5 Start Time / End Time



Note: Holidays 1-4: If checked, it means the item assigned this schedule will NOT have access during the specified holiday dates.

> See Holidays Programming (Advanced) to program these dates.

ZeroWire handles schedules that span midnight automatically. For example, if a schedule is to cover Fri 8:00pm to Sat 6:00am, only check Friday and ZeroWire will automatically manage the time after midnight.

Thu	Fri ✓	Sat	Sun

If you check Friday and Saturday, the schedule will cover Fri 8:00pm - Sat 6:00am and Sat 8:00pm -Sun 6:00am.

Thu	Fri <b>√</b>	Sat ✓	Sun
	_	_	

## 6 Days / Holidays

\Schedules\Sc	hedule Number\Times ar	nd
Days\Time	and Day Number\Days:	
	1 Schedule	•
	1 Time and Day Number	•
All Days		
All Weekdays		
All Weekend		
Monday		
Tuesday		
Wednesday		
Thursday		
Friday		
Saturday		
Sunday		
Holidays 1		
Holidays 2		
Holidays 3		

# 5.7 Actions Programming (Advanced)

The ZeroWire features powerful automation control which can interact with different parts of the system. It can perform functions based on the status of one or more system conditions.

Each action has an **on** and **off** state. The state is controlled by up to 4 conditions called Action Events, each of which can have a range of items:



When all 4 Action Events are met, then the Action State will be set. The Action State can be monitored by the main ZeroWire Panel, Schedules, Devices with outputs, and Scenes to activate/deactivate.

For example, a strobe connected to Output 1 can be programmed to follow Areas 1 – 8 being armed.

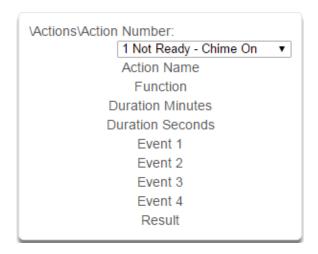
Each Action can also directly control selected parts of your ZeroWire when all 4 Action Events are met. This is called the Action Result. Its behaviour also follows the Action State.

For example, when all areas are armed and there is activity on sensor 1, activate a camera recording.



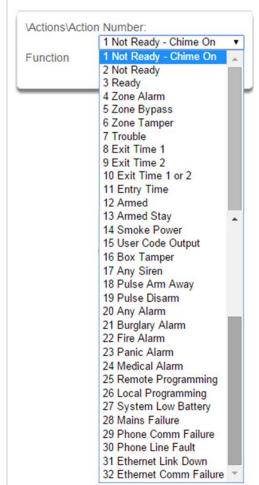


Select **Actions** from the menu.



## Actions Submenus

#### 1 Action Number



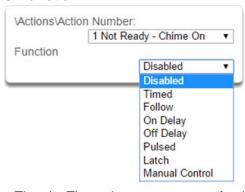
The ZeroWire can support a total of 32 Actions. Each Action is identified by a unique number, which cannot be altered, and remains as the key reference for each Action.

#### 2 Action Name



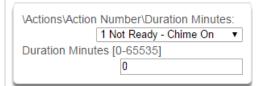
Each Action can be configured with a custom 32 character name. The name is displayed wherever an Action is referenced on the ZeroWire system.

#### 3 Function



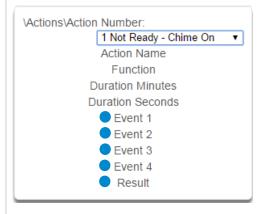
- Timed The action state turns **on** for the time specified.
- Follow The action state turns on once the Event conditions have been satisfied, then off once the Event conditions are not true.
- On Delay The action state becomes **on** after the programmed time period unless logic result is no longer active.
- Off Delay Follows the result of the logic equation, but remains active for the time programmed after the logic result is no longer active.
- On Pulse Action state turns on for the programmed time or the active period of the logic result, whichever is the SHORTEST.
- Latch The action state stays on once the Event conditions have been satisfied.

#### 4 Duration: Minutes

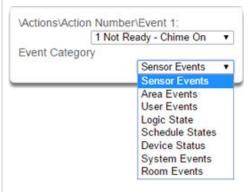


Where the Function requires duration, this determines, in minutes, how long the action should stay on.

## 6 Event(s) 1-4 and Results



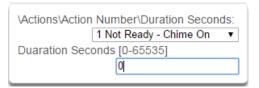
## 8 Event Category



Select the category of the first event. This will determine what events you can select in Event Type.

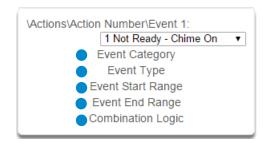
See the Action Events Category and Action Event Types table in section A.10 for reference.

#### 5 Duration: Seconds

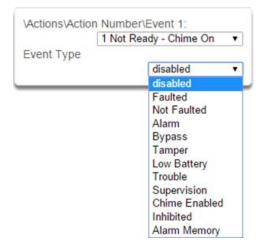


Where the Function requires duration, this determines, in seconds, how long the action should stay on.

#### 7 Event Attributes



#### 9 Event Type



Select the event that you want the Action to monitor.

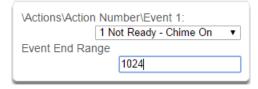
See the Action Events Category and Action Event Types table in section A.10 for reference.

#### 10 Event Start Range



Select the starting number of the event that you want the Action to monitor. This is related to a number range. For example this might be the first area or sensor number.

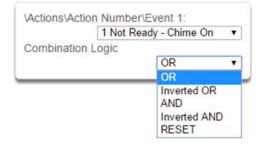
## 11 Event End Range



Select the ending number of the event that you want the Action to monitor. This is related to a number range. For example this might be the last area or sensor number.

If you just want to monitor one item, then leave it at the default of zero, or enter the same number as Event Start Range.

## 12 Event Combination Logic



The logic condition to apply to Event 1

- OR
   e.g. Area 1 Armed Away OR Area 2 Armed Away
   Inverted OR
   e.g. Not Sensor 1 Bypass OR Sensor 2 Bypass
- AND
   e.g. Area 1 Armed Away AND Area 2 Armed Away
   Inverted AND
   e.g. Not Sensor 1 Bypass AND Sensor 2 Bypass
- RESET Reset any latched event

The Combination Logic selected for each event places the logic prior to the event in an equation. Selecting the AND logic closes a parenthesis for the previous event. The DLX900 software displays an Event Equation field to make it easier to construct Actions.

For example,

Event 1 Inverted OR,

Event 2 OR,

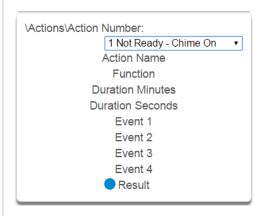
Event 3 AND,

Event 4 OR

produces a logic equation of:

(NOT Event 1 OR Event 2) AND (Event 3 OR Event 4)

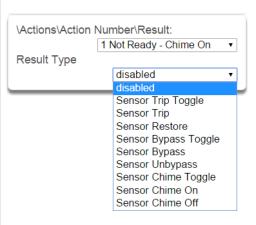
#### 13 Result



The ZeroWire can also perform an additional function once the Action Event conditions are satisfied, this is called an Action Result.

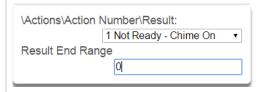
For example, when a fire alarm is active, you could disable Users 1-50 to prevent them from being able to control the alarm system.

#### 15 Result Type



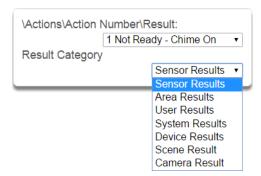
The event of the Action Result to perform See the Action Results Category and Action Results Event Types table in section A.11 for reference.

#### 17 Result End Range



Select the ending number of the event that you want the Action Result to affect.

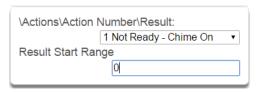
## 14 Result Category



The category of the Action Result to perform

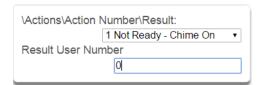
See the Action Results Category and Action Results Event Types table in section A.11 for reference.

#### 16 Result Start Range



Select the starting number of the event that you want the Action Result to affect.

#### 18 Result User Number



Select the User that you want the Action Result to behave as. This will apply this user's full permissions to the Action Result you select.

# 5.8 Arm-Disarm Programming (Advanced)

Press



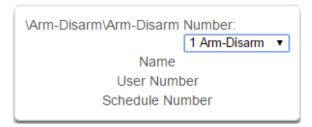
ther



for the Configuration Server

page.

#### Select Arm-Disarm from the menu.



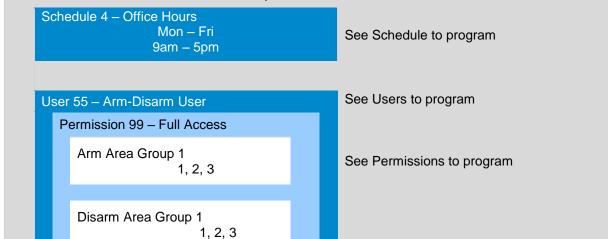
#### Arm-Disarm Submenus 1 Number (1-8) 2 Name S \Arm-Disarm\Arm-Disarm Number: \Arm-Disarm\Arm-Disarm Number: 1 Arm-Disarm ▼ 1 Arm-Disarm ▼ **5** Schedule Number Name Always On Φ E The ZeroWire can support a total of 96 Arm-Disarm. Each group can be configured with a custom 32 0 Each Arm-Disarm is identified by a unique number, character name. The name is displayed wherever which cannot be altered, and remains as the key an Arm-Disarm is referenced on the ZeroWire ഗ reference for each function. system. E 2 User Number 4 Schedule Number Ø S \Arm-Disarm\Arm-Disarm Number: \Arm-Disarm\Arm-Disarm Number: 1 Arm-Disarm ▼ 1 Arm-Disarm ▼ Schedule Number User Number ī, Always On 0 $\equiv$ The schedule number specified here determines 4 The user number that will perform the Arm-Disarm. when the arm and disarm is performed by the The user's schedule and permissions will be checked user number. The starting date/time of the and applied to all areas in the user's arm or disarm schedule will perform a disarm, the ending area group at the time of the Arm-Disarm. date/time of the schedule will arm.

The ZeroWire Communicator has a powerful automation feature which simulates a user performing arming and disarming of the system according to a specified schedule.

When a Schedule becomes valid (inside valid time sensor) the ZeroWire will disarm all Areas that are in the User's - Active Profile - Disarm Area Group. When the Schedule becomes invalid (out of time sensor) then ZeroWire will arm all areas that are in the User's - Active Profile - Arm Area Group.

For example if we had Schedule 4 Mon-Fri 9am-5pm, and User 55 with permission to arm and disarm area 1, 2, and 3, plus their schedule was 24 hours 7 days a week.

Then each weekday at 9am the system would disarm areas 1, 2, and 3 as if it were user 55. At 5pm each weekday the system would arm areas 1, 2, and 3 as if it were user 55.



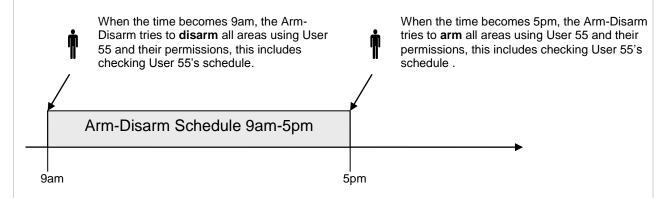
Schedule 1 – Full Access 7 days, 24 hours

Arm Disarm Number 1 - Arm-Disarm Example

See Schedule to program

For an Arm-Disarm to occur, both the Arm-Disarm schedule here and the User Schedule need to be valid at the time the Arm-Disarm is triggered.

The Arm-Disarm Schedule determines what the operation is. The leading edge causes a disarming function and trailing edge causes an arming function. The Users Permissions then determines which areas if any are armed or disarmed. If the function is to disarm, the Users Disarm Area Groups will be disarmed. If the function is to arm, the Users Arm Area Group will be armed.



More complex interactions with the system are possible by modifying the schedule selected here, the schedule assigned to the user, and even combining actions to control schedules. Also, user permissions can have up to 4 permission and schedule pairs.

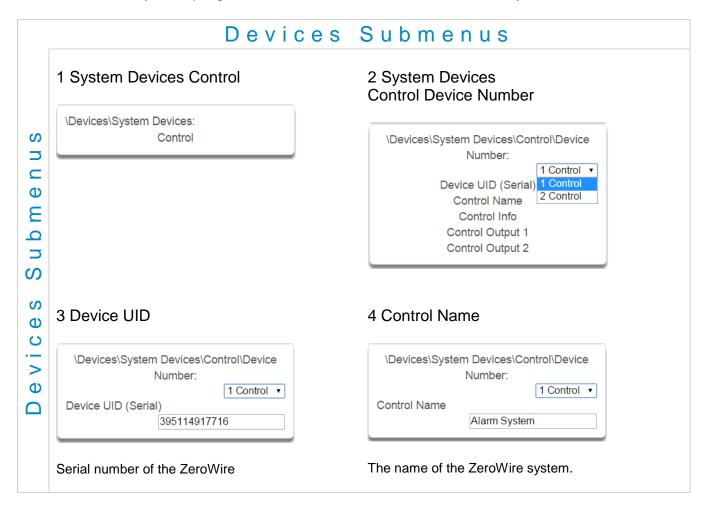
# 5.9 Devices Programming (Advanced)



Select **Devices** from the menu.



This menu allows you to program devices connected to the ZeroWire system.



#### 5 Control Info



## 6 Control Output 1

\Devices\System Devices\Control\Device

Number\Control Output 1:

1 Control

Output Name

Action Assignment

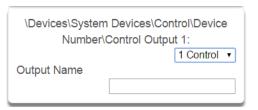
Schedule Number

Invert

The ZeroWire has 2 on-board outputs which can be programmed to follow actions.

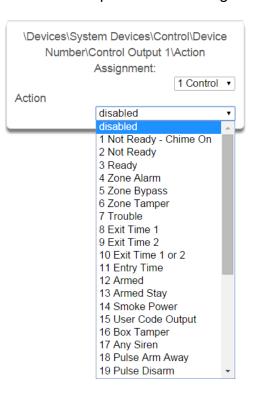
Version information about the ZeroWire including firmware, voice, web, and MAC address.

#### 7 Control Output 1 Output Name



Each output can be configured with a custom 32 character name.

## 8 Control Output 1 Action Assignment



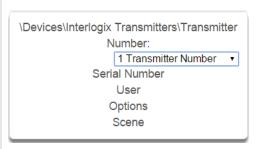
The output will activate while the selected action state is true. If the action state becomes false then the output will deactivate.

## 9 Control Output 1 Schedule Number



If a schedule is entered here then the output will only be active when the schedule is valid. If no schedule is entered then the output will always function.

## 11 Interlogix Transmitters



Number of the Interlogix Transmitter

#### 13 User



By default all keyfobs are reported as user 999. To enable individual keyfob reporting, assign a user number here.

#### 10 Control Output 1 Invert



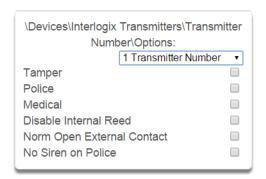
Invert the Output

#### 12 Serial Number



Serial number of the Interlogix Device

## 14 Transmitter Options



Allows the Installer to configure options for wireless transmitters including:

- Tamper
- Police
- Medical
- Disable Internal Reed this applies to transmitters with an internal reed switch
- Norm Open External Contact
- No Siren on Police

15 Scene	16 Zwave Devices
\Devices\Interlogix Transmitters\Transmitter	\Devices\Zwave Devices\Device Number:  1 Device Number  Name  Basic Type  Generic Type  Specific Type
On a four-button keyfob, this allows the user to activate a scene when the fourth button is pressed.	
17 Zwave Devices Name	18 Zwave Devices Basic Type
\Devices\Zwave Devices\Device Number:  1 Device Number ▼  Name  Alarm System	\Devices\Zwave Devices\Device Number:  1 Device Number  Basic Type
19 Zwave Devices Generic Type	20 Zwave Devices Specific Type
\Devices\Zwave Devices\Device Number:  1 Device Number  Generic Type	\Devices\Zwave Devices\Device Number:  1 Device Number ▼  Specific Type  1
19 Zwave Devices Generic Type	20 Zwave Devices Specific Type
\Devices\Zwave Devices\Device Number:  1 Device Number  Generic Type	\Devices\Zwave Devices\Device Number:  1 Device Number ▼  Specific Type

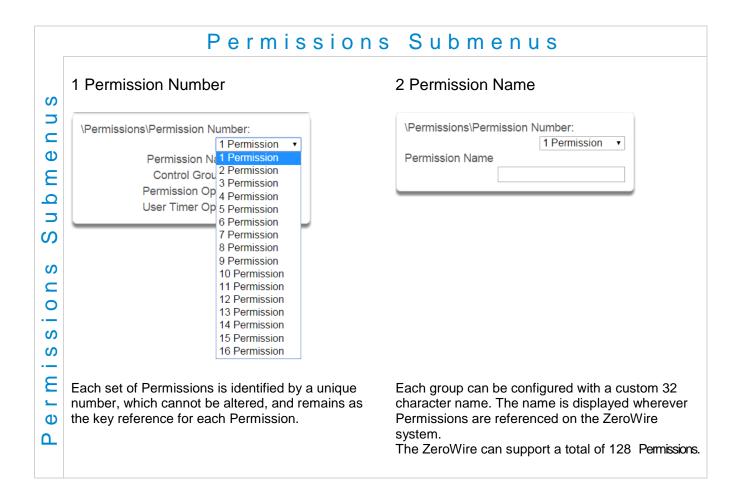
# **5.10 Permissions Programming (Advanced)**



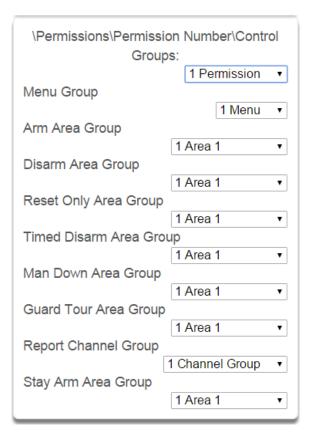
Select **Permissions** from the menu.



Permissions control what a user or device has access to on the ZeroWire system and what they can do.



## 3 Control Groups



1. Menu Group

This controls what menus the user or device can access

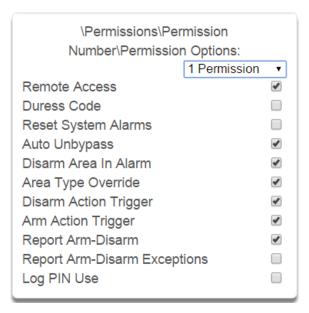
- 2. Arm Area Group This controls which areas can be armed.
- Disarm Area Group This controls which areas can be disarmed.
- 4. Reset Only Area Group This controls which areas can be reset only.

For example, if a guard is present on the site you may not want them to be able to disarm any areas. By assigning them a Reset Only Area Group, they can turn off alarms, but they cannot accidentally disarm an area.

5. Timed Disarm Area Group This controls which areas can be timed disarm.

- 6. Man Down Area Group This controls which areas will have man down monitoring.
- 7. Guard Tour Area Group This controls which areas are a part of the guard
- 8. Area Display Group This controls what areas can display area status.
- 9. Report Channel Group This controls what channels the user can modify.
- 10. Stay Arm Area Group This controls what areas can be stay armed.
- 11. Action Group This controls what actions can be displayed or accessed.

## 4 Permission Options



- Remote Access Enables and disable remote web access to the permission. If this is not enabled, a user will not be able to access the web interface directly or via a smartphone app.
- 2. Duress Code designates this user as a duress code, whenever this code is used a duress message is sent.
- 3. Reset System Alarms when System Option -System Alarm Latch is enabled, system alarms include panel box tamper can only be reset by a user with this permission. Users without this permission will be able to arm and disarm areas as normal, but system alarms will stay latched.
- 4. Auto Un-Bypass When enabled, a bypassed sensor will be reset when disarming. When disabled, the Sensor will remain bypassed even after the system has been disarmed.
- 5. Disarm Area In Alarm When disabled, this user will not be able to disarm and reset an area in alarm. Even if the user has permission in their Disarm Area Group, this option will override disarm authority.
- 6. Area Type Override Applies to non-standard area types 'Time Disarm' 'Man Down' 'Guard Tour'. When set, disables the feature for the user.
- 7. Disarm Action Trigger When enabled, this users will trigger the Action trigger event "User Disarm Trigger" when disarming an area, used in conjunction with for programming actions.

- Arm Action Trigger When enabled, this users will trigger the Action trigger event "User Arm Trigger" when arming A area, used in conjunction with for programming actions.
- Report Arm/Disarm Where a system is already configured to send Arm-Disarm reports this option allows a user to NOT send a report. When enabled the reports will be sent. When disabled reports will not be sent.
- Report Arm-Disarm Exceptions Report Arm-Disarm Exceptions = ON:
- All four reports are sent as appropriate. Early Opening

'Fail To Open' and the reset report 'Late Open'

Early Close

'Fail To Close' and the reset report 'Late Closing'

Report Arm-Disarm Exceptions = OFF:

As expected only reports were the 'Fail To Open' and 'Fail To Close' reports with their respective resets 'Late Open' and 'Late Close'. Both the 'Early Open' and 'Early Close' reports were suppressed.

'Fail To Open' and the reset report 'Late Open' 'Fail To Close' and the reset report 'Late Closing'

See Area Type for more details.

Log PIN Use - Log will show "Valid Code Entered" when enabled. Must be enabled to allow actions and scene events to monitor user interaction.

# S Φ $\equiv$ 0 **5** S S 0 S S

Φ

#### 5 User Timer Options



- 1. Disarm Time
- 2. Man Down Time
- 3. Guard Tour Time

These timers apply to a user when allocated this permission and:

- the Area Type is set to Timed Disarm, Man Down, or Guard Tour,
- is inside Area Type schedule,
- and Area Type Override is NOT enabled under Permission Options

If the value of the associated timer is zero, then the system will apply a timer of 45min.

See Area Type Settings for a more detailed description on these features.

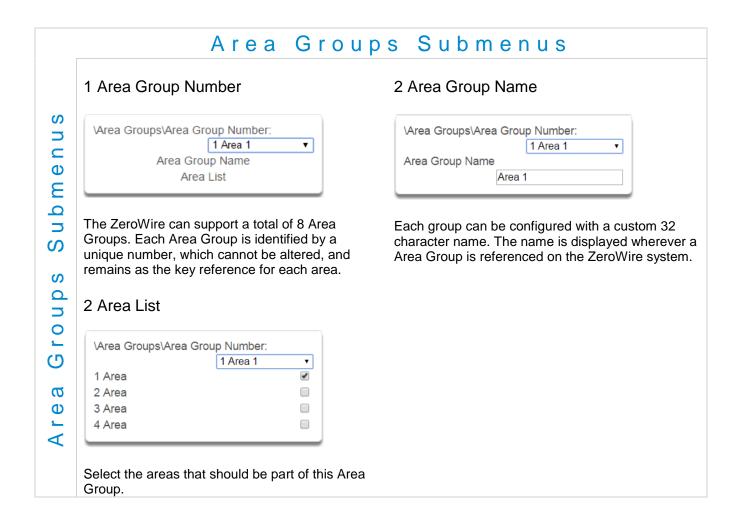
# 5.11 Area Groups Programming (Advanced)



## Select Area Groups from the menu.

The ZeroWire can support a total of 16 Area Groups. Each Area Group is identified by a unique number, which cannot be altered, and remains as the key reference for each area.

When assigned to a user, an Area Group controls what areas the user can see and control. When assigned to a sensor or device, an Area Group determines what Areas that sensor/device will report and display in.



# 5.12 Menus Programming (Advanced)

Press



ther

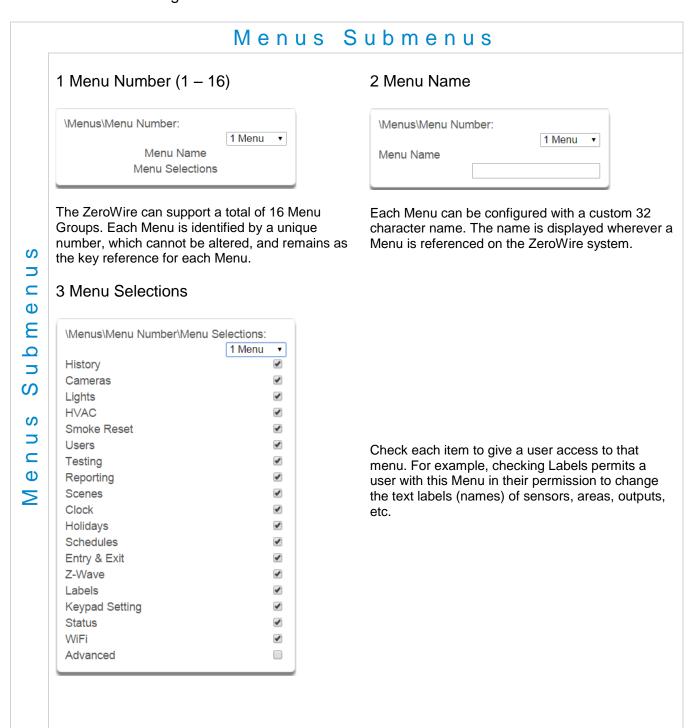


for the Configuration Server

page.

Select Menus from the menu.

Menus are assigned to users and devices to control what menus can be accessed. A total of 64 Menus can be configured.

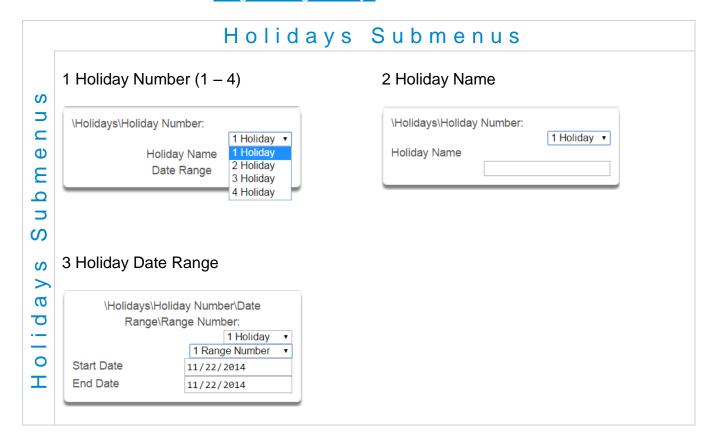


# 5.13 Holidays Programming (Advanced)

Press then for the Configuration Server page.

Select Holidays from the menu.

Also reference Section 4.9 Programming Holidays

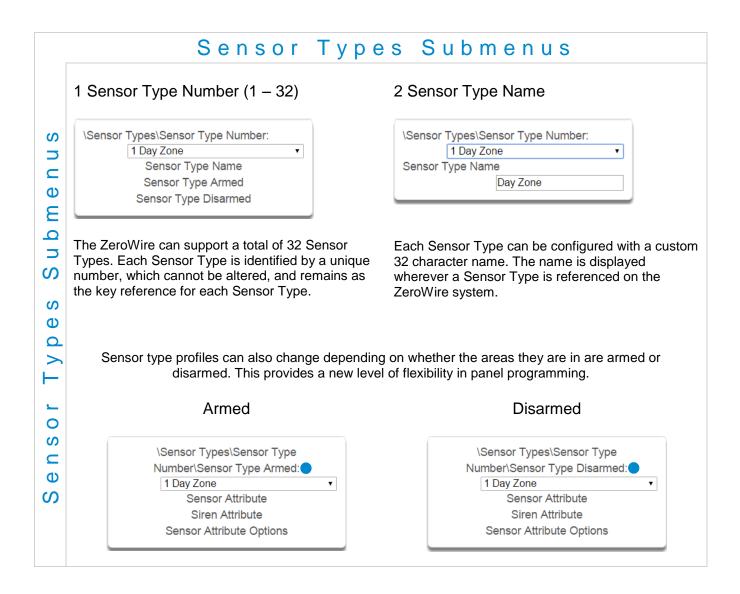


# 5.14 Sensor Types Programming (Advanced)



## Select **Sensor Types** from the menu.

Sensors can be programmed to be one of 32 different sensor configurations (sensor type profiles). Sensors are fully configurable in the ZeroWire panel. These features are considered advanced programming and should only be changed with a thorough understanding of the operation of each bit.



# S **5** Φ $\equiv$ 0

# S Φ 0

S

# 0 S Φ

S

## 3 Sensor Type Profile / Armed

#### Sensor Attribute

This is how the sensor will behave when the area it is in is armed.

- Disabled sensor is disabled.
- Entry 1 sensor will follow area entry/exit timer 1.
- Entry 2 sensor will follow area entry/exit timer 2.
- Handover instant alarm type unless an entry sensor if tripped first.
- Instant sensor goes into alarm as soon as it is tripped.
- Local sensor only triggers a local alarm and keypad sounder but does not report when tripped.
- Fire smoke detectors must be wired Normally Open. A short on a fire sensor will create an alarm condition when the system is armed or disarmed. An open will create a Trouble condition that is always reported for this sensor type, regardless of the Sensor Trouble reporting option. Keypad sensor LED is steady for fire condition and flashing for trouble condition. After fire activation, use the keypad to clear & reset fire sensor by pressing Sensor Reset.
- Holdup delay when tripped, starts the hold up timer, if the timer is reached then a hold up alarm is sent.
- Holdup reset when this sensor is tripped, the hold up timer is stopped.
- Keyswitch A momentary key switch can be used to arm/disarm the panel when it is momentarily shorted from a sealed condition. Use a 3.3K resister for this sensor type. Or if DEOL monitoring is enabled in System Options, use two 3.3K resistors to allow full line monitoring.
- Event Only this sensor only creates an event when tripped and is stored in the event log.

#### Siren Attribute

Select from these 4 options to control what sound the siren makes when this sensor goes into alarm.

- Silent siren makes no sound
- Steady constant siren sound
- Yelping siren makes a yelping sound
- Pulsing siren pulses on and off

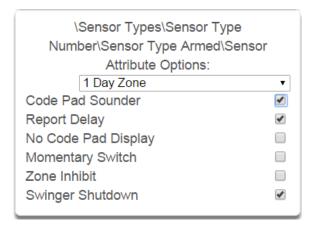
See the drop down menu, This is how the sensor will behave when the area it is in is disarmed.

- · Disabled sensor is disabled.
- Instant sensor goes into alarm as soon as it is tripped.
- Local sensor only triggers a local alarm and keypad sounder but does not report when tripped.
- Fire smoke detectors must be wired Normally Open. A short on a fire sensor will create an alarm condition when the system is armed or disarmed. An open will create a Trouble condition that is always reported for this sensor type, regardless of the Sensor Trouble reporting option. Keypad sensor LED is steady for fire condition and flashing for trouble condition. After fire activation, use the keypad to clear & reset fire sensor by pressing Sensor Reset.
- Holdup delay when tripped, starts the hold up timer, if the timer is reached then a hold up alarm is sent.
- Holdup reset when this sensor is tripped, the hold up timer is stopped.
- Keyswitch A momentary key switch can be used to arm/disarm the panel when it is momentarily shorted from a sealed condition. Use a 3.3K resister for this sensor type. Or if DEOL monitoring is enabled in System Options, use two 3.3K resistors to allow full line monitoring.
- Event Only this sensor only creates an event when tripped and is stored in the event log.

#### Siren Attribute

See descriptions above, this is how the siren will behave when the area it is in is disarmed.

## Sensor Attribute Options (Armed or Disarmed)



- Code Pad Sounder If enabled, the panel will announce alarm, tamper, or trouble conditions. Default is on.
- Report Delay if enabled, the ZeroWire will delay reporting sensor activations until the next scheduled report. This setting is ignored if the sensor is a Fire type and sensor activations are reported immediately. When disabled sensor activations (trip, bypass and restorals) are reported immediately. Default is off.
- No Keypad Display if enabled, any sensor conditions such as alarm and tamper will not illuminate the Alarm Light. Conditions will still report and function as normal. Default is off.
- Momentary Switch if enabled, the sensor will not latch. If it is triggered again then it will send another report immediately. Default is off.
- Sensor Inhibit (Bypass) This feature is designed to reduce false alarms at arming/disarming. If enabled, a sensor that is currently faulted that could cause an alarm condition will be temporarily bypassed when changing armed states.

This typically occurs when forced arming and the sensor is unsealed, or when a schedule change occurs that changes the sensor type. The bypass will be applied to the sensor if it remains unsealed at the end of the exit timer. Default is off.

· Swinger Shutdown

Swinger Shutdown is a false alarm prevention feature that counts the number of alarms caused by a specific sensor.

# **Sensor Types Table**

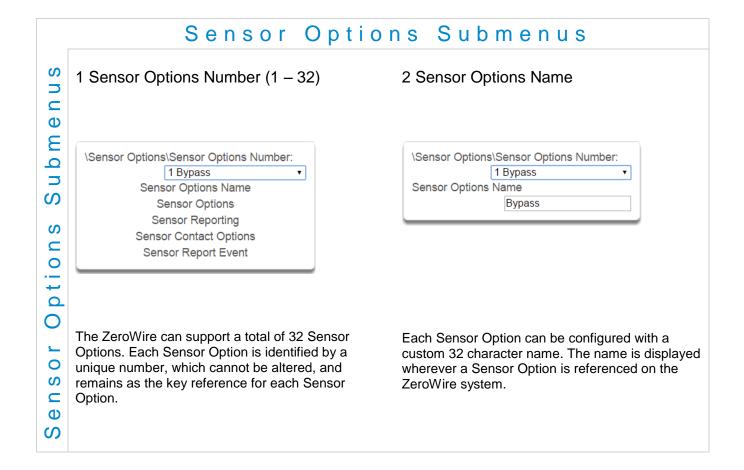
	Types rable							
Preset Number	Preset Name	Sensor Attribute	Siren Attribute	ZeroWire Panel Sounder	Report delay	No ZeroWire Panel Display	Momentary	Sensor Inhibit (Bypass)
			Arn	ned				
1	Day Sensor	Instant	Yelping	Υ	Ν	N	Ν	N
2	24 Hour Audible	Instant	Yelping	Υ	N	N	N	N
3	Entry Exit Delay 1	Entry 1	Yelping	Υ	N	N	Ν	N
4	Entry Exit Delay 2	Entry 2	Yelping	Υ	N	N	Ν	N
5	Follower	Handover	Yelping	Υ	N	N	Ν	N
6	Instant	Instant	Yelping	Υ	N	N	N	N
7	24 Hour Silent	Instant	Yelping	Υ	N	N	Ν	N
8	Fire Alarm	Fire	Steady	Y	N	N	N	N
9	Entry Exit Delay 1 Auto- Bypass	Entry 1	Yelping	Y	N	N	N	Υ
10	Entry Exit Delay 2 Auto- Bypass	Entry 2	Yelping	Y	N	N	N	Υ
11	Instant Auto-Bypass	Instant	Instant	Y	N	N	N	Υ
12	Event Only	Event Only	Silent	N	N	Y	N	N
13	Momentary Key Switch	Keyswitch	Silent	N	N	N	Υ	N
14	Latching Key Switch	Keyswitch	Silent	N	N	N	N	N
15	CO Detector	Instant	Pulsing	Υ	N	N	N	N
			Disa					
1	Day Sensor	Instant	Yelping	Υ	N	N	N	N
2	24 Hour Audible	Instant	Yelping	Υ	N	N	N	N
3	Entry Exit Delay 1	Entry 1	Yelping	Y	N	N	N	N
4	Entry Exit Delay 2	Entry 2	Yelping	Y	N	N	N	N
5	Follower	Handover	Yelping	Y	N	N	N	N
6	Instant	Instant	Yelping	Y	N	N	N	N
7	24 Hour Silent	Instant	Yelping	Y	N	N	N	N
8	Fire Alarm Entry Exit Delay 1 Auto-	Fire	Steady	Y	N	N	N	N
9	Bypass	Entry 1	Yelping	Y	N	N	N	Υ
10	Entry Exit Delay 2 Auto- Bypass	Entry 2	Yelping	Y	N	N	N	Υ
11	Instant Auto-Bypass	Instant	Instant	Υ	N	N	N	Υ
12	Event Only	Event Only	Silent	N	N	Y	N	N
13	Momentary Key Switch	Keyswitch	Silent	N	N	N	Υ	N
14	Latching Key Switch	Keyswitch	Silent	N	N	N	N	N
15	CO Detector	Instant	Pulsing	Υ	N	N	N	N

# **5.15 Sensor Options Programming (Advanced)**



#### Select **Sensor Options** from the menu.

Sensors are fully configurable in the ZeroWire panel. These features are considered advanced programming and should only be changed with a thorough understanding of the operation of each bit.



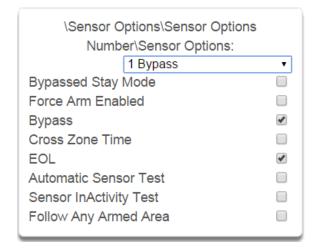
S

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## 3 Sensor Options



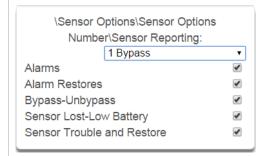
Also see the Sensor Options table for reference.

- Bypassed Stay Mode if enabled, this sensor is automatically bypassed when the area is armed in stay mode. For example, it is an interior sensor.
- Force Arm Enabled if enabled, this sensor type may be unsealed while arming if forced arming is
  enabled in the area options. Normally all sensors in an area must be sealed before a user can
  attempt to arm that area.
- Bypass if enabled, this sensor may be bypassed.
- Cross Zone– This sensor type will require two triggers or another sensor would have to have been trigged before it will activate an alarm.
- EOL Enable End Of Line resistor tamper monitoring
- Automatic Sensor Test if enabled, this test is controlled by action results automatic test on and off.
- Sensor Inactivity Test if enabled, this sensor will check for Sensor Inactivity. The Sensor Inactivity setting must be enabled in General Options. The time is programmed in Sensor Inactivity Time. See <a href="Programming the System">Programming the System</a>, section 4.4.
- Follow Any Armed Area If enabled, and a sensor is in more than 1 area it will create an alarm if triggered when any area is armed. If this feature is off then all the areas must be armed before the sensor will become active.

If sensor is type 10 sensor (Interlogix Door/Window sensor) then these two options apply:

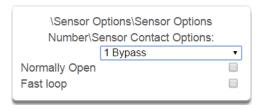
- Disable Internal Reed Switch check this box when using external contacts.
- Normally Open External Contact check this box when external contact is normally open.
   These two options appear in the Web Server Settings Sensors page, and under Advanced\Devices\Interlogix Transmitters\Transmitter Number\Options.

## 4 Sensor Reporting



- Alarms Reporting if enabled, this sensor will report alarms.
- Alarm Restores Reporting if enabled, this sensor will report alarms.
- Bypass-Unbypass Reporting if enabled, this sensor will report bypasses and unbypass restorals.
- Sensor Lost-Low Battery Reporting if enabled, this sensor will report loss of wireless supervision and low battery faults.
- Sensor Trouble and Restore if enabled, this sensor will report sensor trouble and restorals. Fire type sensors will always report regardless of this option.

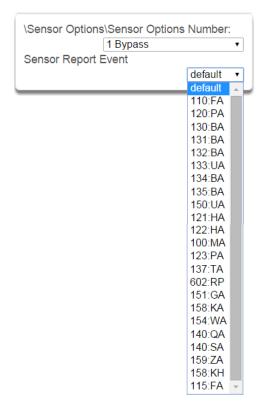
#### 5 Sensor Contact Options



(Applies to the hardwire inputs, not wireless sensors.)

- Normally Open no EOL if enabled, the sensor circuit is normally open. Default is off.
- Fast Loop if enabled, the ZeroWire will be more sensitive and respond quicker to a change in state to the sensor. For example, we could enable this on a door contact to trigger the turning on of lights quicker when someone opens the door by using an Action. Depending on the application this may increase the chance of a false alarm if the sensor is used for intrusion detection.

## 6 Sensor Report Event



From the drop down menu, select the CID and SIA event code to report when this sensor is tripped.

# **Sensor Options Table**

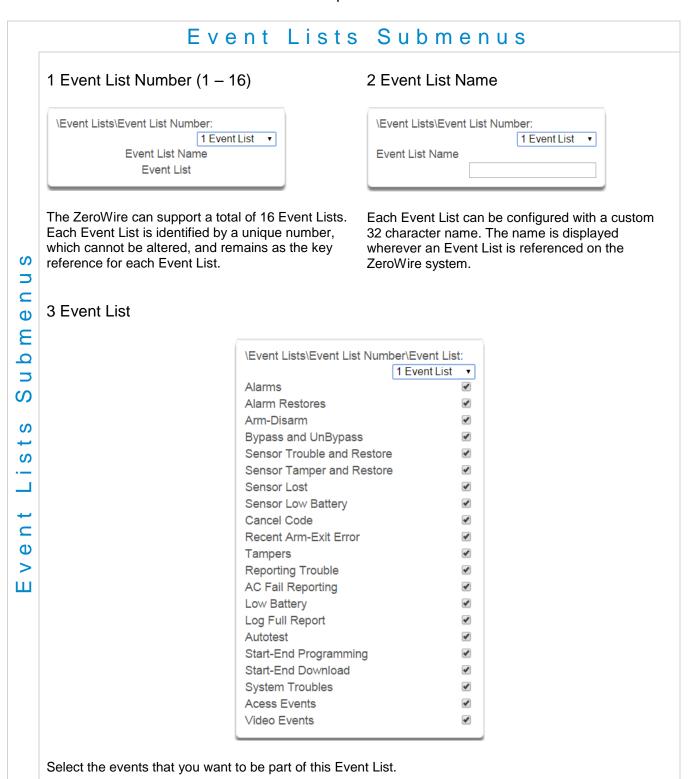
Preset Number	Preset Name	Bypassed Stay Mode	Forced Arm Enabled	Bypass	Cross Zone Time	EOL	Automatic Sensor Test	Sensor Inactivity Test	Follow Any Armed Area	Alarms reporting	Alarm restore reporting	Bypass-Unbypass reporting	Sensor reporting Lost-Low Battery	Sensor reporting Trouble and Restore	Normally Open	Fast Loop	Sensor Report Event
1	Bypass			Х		Х				Х	Х	Х	х	х			134:BA
2	Bypass Stay	х		х		Х				Х	Х	Х	х	х			130:BA
3	Bypass - Forced Arm		Х	Х		Х				Х	Х	Х	х	х			134:BA
4	Bypass - Cross Zone			х	Х	Х				Х	Х	Х	х	х			134:BA
5	Fire		Х			Х				Х	Х	Х	Х	Х			110:FA
6	Panic		х			х				х	х	Х	х	х			120:PA
7	Silent Panic					х				х	х	Х	Х	Х			122:HA
8	Normally Open no EOL			х						х	х	Х	х	х	Х		130:BA
9	Normally Closed no EOL			х						х	х	Х	Х	Х			130:BA
10	Gas Detected					Х				Х	Х	Х	х	х			151:GA
11	High Temp					х				х	х	Х	Х	Х			158:KA
12	Water Leakage					х				х	х	Х	х	х			154:WA
13	Low Temp					х				х	х	Х	Х	Х			159:ZA
14	High Temp					Х				Х	Х	Х	х	х			158:KH
15	Fire Alarm Pull Station					Х				Х	Х	Х	х	х			110:FA
16	Blank		Х	Х		Х				Х	Х	Х	х	х			130:BA
17	Blank		х	Х		х				х	Х	х	Х	Х			130:BA
18	Blank		х	х		х				х	х	х	х	х			130:BA
19	Blank		х	х		х				х	х	Х	х	Х			130:BA
20	Blank		х	х		х				х	х	х	х	х			130:BA
21	Blank		Х	Х		х				х	Х	Х	Х	Х			130:BA
22	Blank		Х	Х		Х				Х	Х	Х	х	х			130:BA
23	Blank		х	х		х				х	Х	х	Х	Х			130:BA
24	Blank		х	x		х				х	x	Х	Х	х			130:BA
25	Blank		х	х		х				х	Х	х	Х	Х			130:BA
26	Blank		Х	Х		Х				Х	Х	х	х	х			130:BA
27	Blank		Х	Х		Х				Х	X	Х	х	х			130:BA
28	Blank		Х	х		х				х	х	Х	х	Х			130:BA
29	Blank		Х	Х		х				х	Х	Х	Х	Х			130:BA
30	Blank		Х	х		х				х	х	Х	х	Х			130:BA
31	Blank		Х	Х		Х				X	Х	Х	х	Х			130:BA
32	Blank		Х	Х		Х				Х	Х	Х	X	X			130:BA

# 5.16 Event Lists Programming (Advanced)



Select Event Lists from the menu.

Event Lists are monitored by Channels to determine if they should be reported. Only events on a Channel's associated Event List will be reported

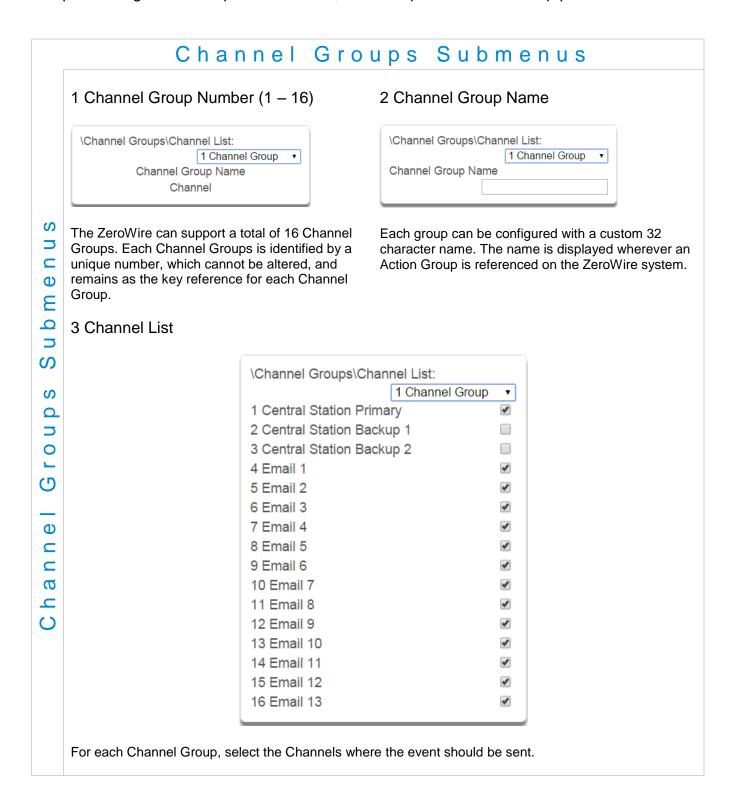


## 5.17 Channel Groups Programming (Advanced)



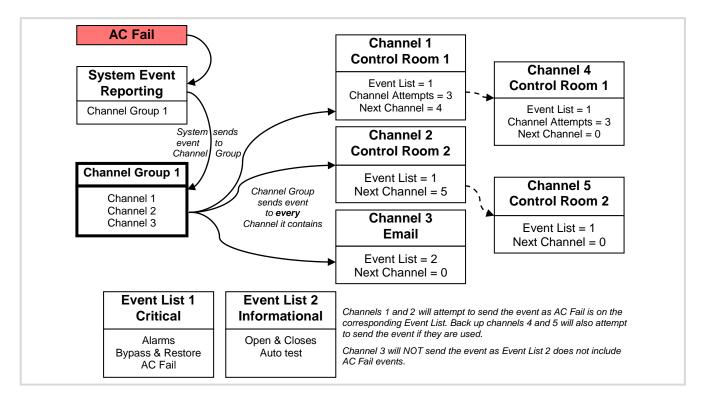
#### Select **Channel Groups** from the menu.

The ZeroWire provides you powerful and flexible reporting capability through its Channel feature. They are fully configurable to suit your needs by allowing you to specify what events to report to single and multiple destinations, with multiple levels of back up paths.



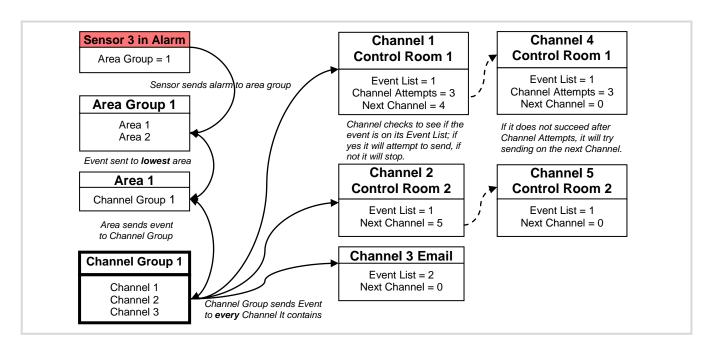
When a **system event** occurs, it is routed to the System Event Channel Group (Communicator\System Event Reporting\System Channels). The Channel Group will forward the event to each of the Channels it contains. If the event is on the Channel's Event List, the Channel will attempt to send the event to the Channel's destination.

#### Example System Event



If a **sensor or area event is generated**, then the event is sent to the Channel Group specified (Area – Channel Group) in the <u>lowest</u> area the sensor belongs to. The Channel Group forwards the event to each of the Channels it contains. Each Channel checks its Event List to determine if the event should be sent.

#### Example **Sensor or Area** Event



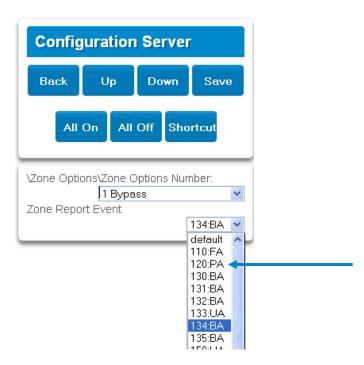
## **Customize Reporting Codes**

The ZeroWire control panel has the ability to report Ademco Contact I.D. transmissions. Each report in Contact I.D. consists of an event code and the sensor I.D. generating the alarm.

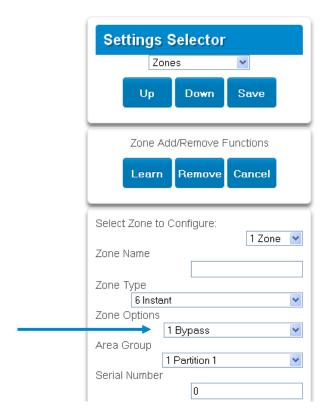
Programmed Event Code	Contact I.D. Code	SIA Event Code	Description
0	Use default code for Sensor Type	Use default code for Sensor Type	
1	110	FA	Fire Alarm
2	120	PA	Panic Alarm
3	130	BA	Burglary Alarm
4	131	BA	Perimeter Alarm
5	132	BA	Interior Alarm
6	133	UA	24 Hour (Safe)
7	134	BA	Entry/Exit Alarm
8	135	BA	Day/Night Alarm
9	150	UA	Non Burglary 24 Hour
10	121	HA	Duress Alarm
11	122	HA	Silent Panic
12	100	MA	Medical Alarm
13	123	PA	Audible Panic Alarm
14	137	TA	Tamper Alarm
15	602	RP	Periodic Test
16	151	GA	Gas Detected
17	158	KA	High Temp
18	154	WA	Water Leakage
19	140	QA	General Alarm
20	140	SA	General Alarm
21	159	ZA	Low Temp
22	158	KH	High Temp
23	115	FA	Fire Alarm Pull Station

Customize the code reported by following these steps:

- 1. Login to the Web Server
- 2. Press Advanced\Sensor Options.
- 3. Select the Sensor Options you want to change.
- 4. Press **Sensor Report Event**.
- 5. Select the desired Contact I.D.\SIA Event Code pair from the drop down menu.



- 6. Press Save.
- 7. Press **Settings** and Sensors should appear.
- 8. Assign the customized Sensor Options to the Sensor.



9. Press Save.

## **Reporting Fixed Codes in Contact I.D.**

The table below lists the CID event codes sent for the following reports (if enabled). The number in brackets following the event is the number that will be reported as the sensor number if extended Contact I.D. is enabled in the system options. Otherwise sensor '0' will always be reported. If there are no parentheses, the sensor will be reported as '0'.

Report	Contact I.D. Event
Manual Test	601
Auto test Open (user number)	602
Close (user number)	401
Cancel (user number)	406
Download Complete	412
Start Program	627
End Program	628
Ground Fault	310
Ground Fault Restore	310
Recent Close (user number)	401
Exit Error (user number)	457
Event Log Full	605
Fail To Communicate	354
Expander Trouble	333
Expander Restore	333
Siren Tamper	321
Siren Restore	321
Aux Power Over Current	312
Aux Power Restore	312
Low Battery	309
Low Battery Restore	309
AC Fail	301
AC Restore	301
Box Tamper	137
Box Tamper Restore	137
ZeroWire Panel Tamper	137
ZeroWire Panel Panic	120
Duress	121
ZeroWire Panel Fire	110
ZeroWire Panel Medical	100
RF Sensor Lost (sensor number)	381
RF Sensor Restore (sensor number)	381
Sensor Low Battery (sensor number)	384
Sensor Battery Restore (sensor number)	384
Sensor Trouble (sensor number)	380
Sensor Trouble Restore (sensor number)	380
Sensor Tamper (sensor number)	137
Sensor Tamper Restore (sensor number)	137
Sensor Bypass (sensor number)	570
Bypass Restore (sensor number)	570
Sensor Inactivity	391

# 5.18 Scenes Programming (Advanced)

Press



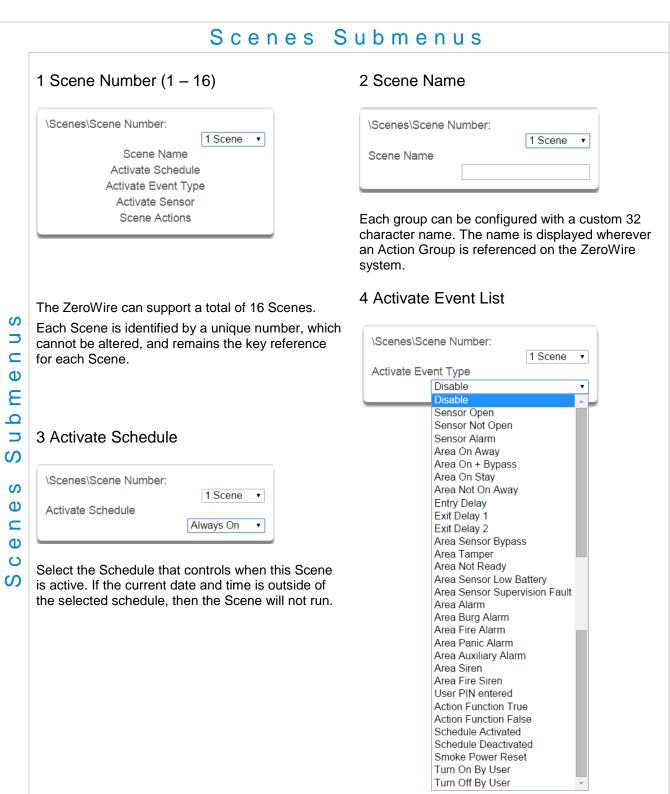
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for the Configuration Server

page.

Select **Scenes** from the menu.



Select the event that will trigger the Scene.

# es Submenus

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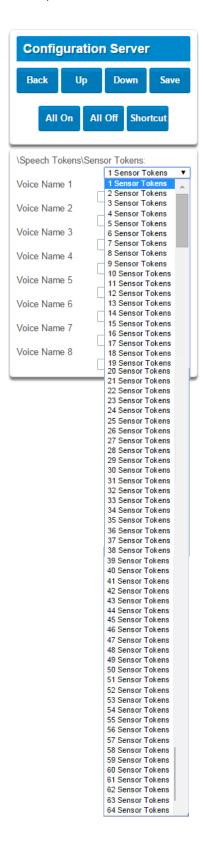
# 5 Activate Sensor 6 Scene Action Number/Action Device \Scenes\Scene Number: \Scenes\Scene Number\Scene 1 Scene Actions\Scene Action Number: Activate Sensor 1 Scene disabled 1 Scene Action Number Action Device disabled Select which Area \ Sensor \ Schedule \ User \ Action \ Device will provide the trigger for the Scene. Each scene can trigger up to 16 scene actions when a certain condition is met. A scene can be triggered manually, through a schedule, or via a system event. These are simplified actions that allow you to control devices on your system. There are two types of Scene Action - Alarm System Action and ZWave Device Action. 1. Alarm System Action 2. Result Type - The event of the Action Result to perform. Reference the Scene Action and Scene Action Events Types table below. 3. Result Number - Select the area / scene / camera number to control. 1. ZWave Device Action To display ZWave Action Types you must first learn in a ZWave device. The ZWave device name will then appear. 2. Action Device – select the ZWave device you want to control. 3. ZWave Type 8 Setting 1 - depends on ZWave device. May include options such as On, Off, Heat, Cool, Auto, Up, Down, Lock, Unlock.

Scene Action	Action Event Type
Alarm System Action	Disabled Sensor Bypass Turn On Away Turn Off Turn On Stay Reset AutoArm Timer Turn On Away, No Auto Stay Chime On Chime Off Activate Scene Trigger Camera Video Clip
ZWave Device Action	The available functions depend on the ZWave device(s) installed. Here are some examples:  Disabled On Off Heat Cool Auto Cool Set Point Heat Set Point Lock Unlock

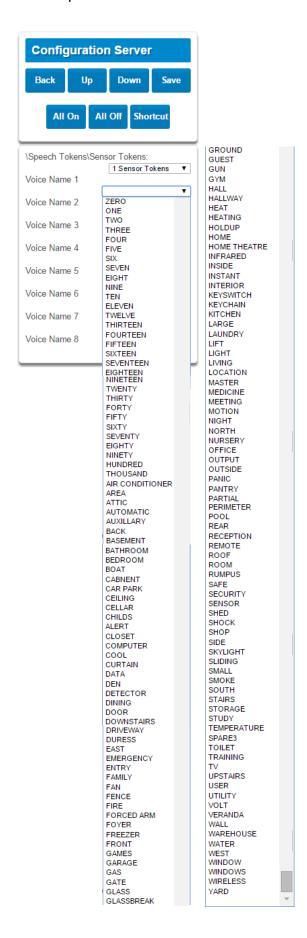
# 5.19 Speech Tokens Programming (Advanced)



Select **Speech Tokens** from the menu, and select a sensor token from the drop down menu.



Select a voice name from the drop down menu.



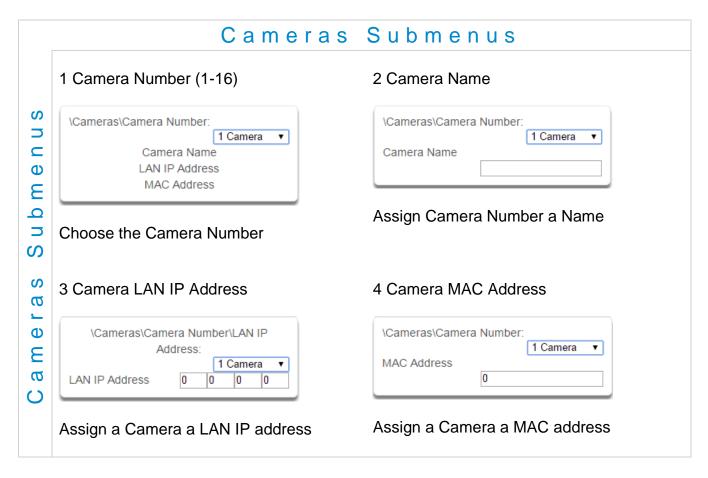
# 5.20 Cameras Programming (Advanced)



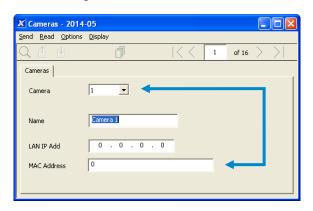
Select Cameras from the menu.

#### Add a Camera Method 2 – Manual Entry

- 1. Enter a name for the camera.
- 2. Enter the IP address and MAC address (Submenu 3,4 below).
- 3. Press Save.
- 4. Your camera will now be viewable from the ZeroWire Web Server and UltraSync app.



You may also make your entries using the DLX900, menu shown below.



# Removing a Camera

- 1. Select the camera you wish to remove.
- 2. Delete the IP address and MAC address (Submenu 3,4 above).
- 3. Press Save.
- 4. Your camera will no longer be accessible from ZeroWire.
- 5. You may also make your entries using the DLX900.

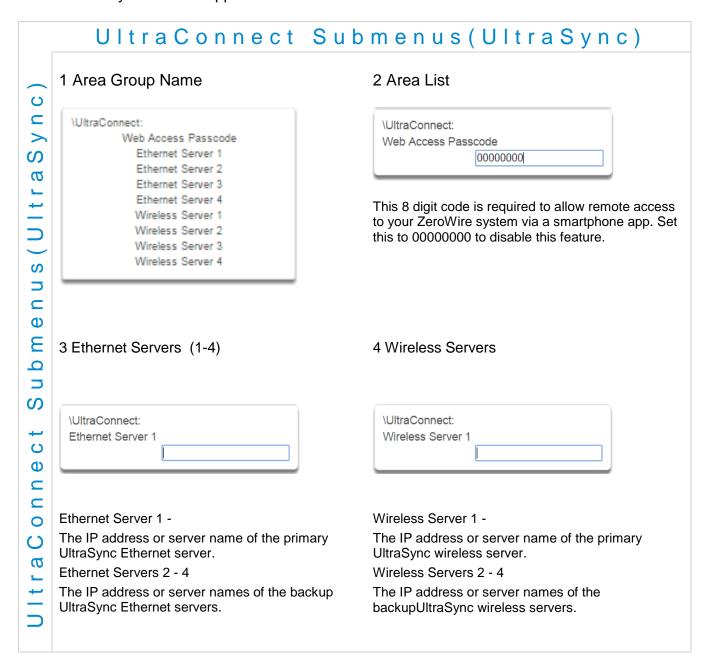
# 5.21 UltraConnect (UltraSync) Programming (Advanced)



#### Select **UltraConnect** from the menu.

ZeroWire can establish a secure VPN connection to UltraSync Servers to allow simplified set up and configuration of email reporting and remote access features.

The server addresses are pre-programmed and SHOULD NOT be modified unless you are instructed to by technical support staff.



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# 6 Users and Permissions

A user is a ZeroWire operator that is granted the authority to control and or configure the ZeroWire system. The Users menu is where you add, delete or modify one of the 40 ZeroWire users.

Users will typically interact with the ZeroWire system via a keypad or wireless (s) for tasks such as arming and disarming an area, bypassing a sensor. Permissions can be granted to a user to perform tasks such as adding sensors, modifying schedules or deleting users.

Users can only edit users with the same or less permissions. If a user attempts to access a user with a higher level of access (e.g. to more menus or more areas) then the ZeroWire will deny access.

ZeroWire allows you to add up to 40 users. Each user is assigned a PIN code and a user number. This allows them to interact with the system.

#### 6.1 Add Users

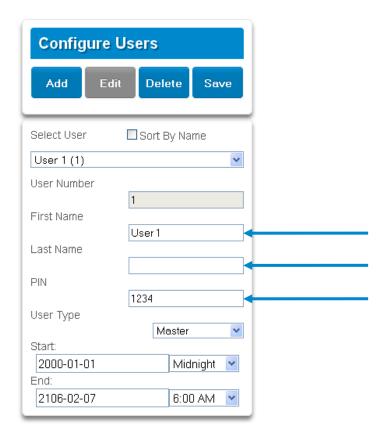
Connect to the ZeroWire Web Server (either via Wi Fi Discovery Mode, Wi Fi, Ethernet LAN, or the UltraSync app). The ZeroWire login screen should appear:



Enter your username and password. A master code is required to add users, by default this is "User 1" and "1-2-3-4", then press Sign In.

You should see a screen similar to below. Press Users.





User Menu:

Enter a First and/or Last Name.

Enter a unique PIN code between 4 and 8 digits.

#### Select a User Type:

- Master users can arm and disarm areas. They can create, delete, or modify user codes.
   They can also change system settings.
- **Standard users** can arm and disarm areas. But they cannot create users or review event history.
- Arm Only users can only turn on the security system; they cannot disarm, or dismiss any system conditions.
- **Duress users** will send a duress event when they are used to arm or disarm the system.
- Custom users can have additional permissions and settings configured.

Press Save.

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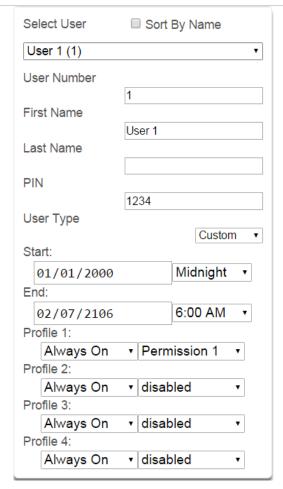
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**5** 

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# User Submenus



#### **User First Name**

Each user can be configured with a custom 16 character first name. The user name descriptor may be displayed in the event log, keypad and when remotely connected to the ZeroWire via the management software.

#### **User Last Name**

Each user can be configured with a custom 16 character last name. The user name descriptor may be displayed in the event log, keypad and when remotely connected to the ZeroWire via the management software.

#### **User Number**

The ZeroWire system will store a number of users relative to the model type and the amount of memory installed. Unlike other systems, user numbers are not predefined and can be configured from user number 1 to 1000 as long as user numbers are not duplicated and do not exceed the total number of users that can fit the allocated memory.

#### **User PIN**

ZeroWire users can be configured with 4 to 8 digit PIN. The user PIN is required by the ZeroWire system to determine the user number and the users associated permissions system control and configuration. Any number of users can have any digit length from 4 to 8 digits.

# Submenus.

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#### **User Type**

User Type provides quick configuration of user permissions. The available user types are:

Standard – Standard users can only change their own PIN codes and cannot change the settings of the system. They can arm and disarm areas to which they have access.

Master – Master users can change Standard user PIN codes and Master user PIN codes, and can access all menus except installation programming.

Engineer – Engineer can only access installation programming menus, but no user programming menus. This user can always arm a system but only disarm areas they armed.

Master Engineer – Master users can create or manage Engineer type users, and can access all menus.

Arm Only – Users can only arm selected areas.

Duress – Duress code will send a duress report to the specified Channel Groups under System Event Reporting. The duress code does not trigger an audible alarm.

Custom – ZeroWire will apply user permissions and user permission schedules. This requires advanced programming. A Custom user is able to modify the configuration of themselves or another user if:

Permission Option 'Remote Access' is enabled (for web page access).

Permission Menu 'Users' is enabled to allow them to assign user permissions.

Otherwise they will only be able to change their own PIN code.

They have area access to at least one area of the user being modified. This does not check permission options.

#### 6.3 Permissions

There are a total 128 unique permissions that can be configured in the Permissions menu. Once configured any permission number from 1 to 16 can be allocated in this feature (user permissions 1).

User permissions determine what level of access and functionality a user has when interacting with the ZeroWire system. This includes what menus they can see, what areas they can see, areas they can arm / disarm / reset, perform special area functions of timed disarm / man down / guard tour, what actions they can use, and what channel to report on.

Combining a user permission with a user permission schedule will determine when that user has that level of access and functionality. ZeroWire allows each user to be allocated with up to 4 user permissions and permission schedules. This provides a high level of flexibility and user permissions can change based on time and date, or even certain system conditions when combined with actions.

When any user permission is active, it overrides any user type. This means a permission can increase or decrease access when it is active. If a user is not assigned any permissions (i.e. permission set to "Disabled"), then the User Type setting is used to determine what the user can do.

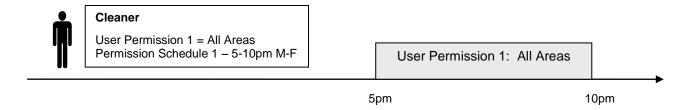
#### **Permission Schedule 1**

ZeroWire permission schedules determine when to allocate user permissions to a user.

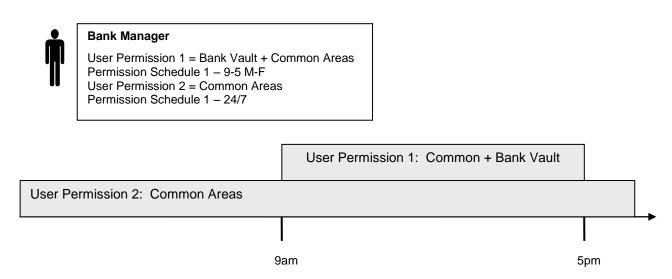
User permissions are numbered from 1 to 4 where permission 1 is the highest priority and permission 4 is the lowest priority. If user permission 1 schedule is not valid then user permission 2, 3 and 4 are checked in sequence until a valid schedule can be applied.

Higher priority permissions replace lower priority level permissions when they become active. Only one permission can be active at any time. Permissions have a logic OR function.

**IMPORTANT:** If permission 1 is active due to a valid schedule, permission 2 will never become active. Make sure to assign/program permissions in the right order.



A cleaner is given access to all areas after hours. They can disarm/arm the security system from 5pm to 10pm on weekdays. They have no access outside of these times and days.



A bank manager has access to the common areas of the bank 24 hours a day. During office hours they have access to the bank vault as well. The permissions to access bank vault become active at 9am, overriding the common areas permission. When the time becomes 5pm the bank vault permissions become inactive and their lower level permissions to access the common areas become active again.

**IMPORTANT:** Only one permission can be active at any one time. User Permission 1 overrides User Permission 2, so ensure User Permission 1 includes all the areas (and other features) you want to give access to. If User Permission 1 only included the Bank Vault, the user would NOT have access to the Common Areas.

	Arm Only	Standard	Master	Engineer	Master Engineer	Custom User
Change their own PIN code	X	X	X	X	X	Custom
Arm areas based on permissions	X	X	X	X	X	Custom
Disarm areas based on permissions		X	Х	Limited	X	Custom
Can create and modify Standard users			X		X	Custom
Program ZeroWire installation settings				X	X	Custom
Can create and modify Engineer users					X	

#### **Area Group**

When a non-Custom User Type is selected, this setting determines what areas that user has access to.

When a Custom User Type is selected, permissions will be used instead of this Area Group setting.

#### **Start Date**

The first date when this ZeroWire user can interact with the system. Future start dates can also be set here. The user will only be able to interact with the system between the start date and end date.

#### **End Date**

The last date when this ZeroWire user can interact with the system. Future end dates can also be set here. The user will only be able to interact with the system between the start date and end date.

#### Language

Currently English is the only supported language.

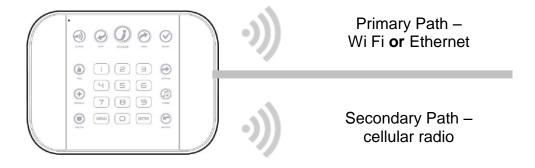
# **Zero**Wire

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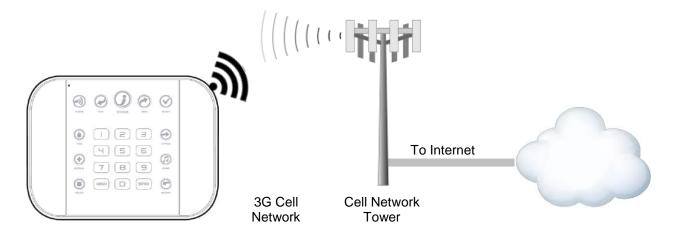
# 7 Cellular Radio Setup

An optional 3G cellular radio modem provides a backup reporting path to the central monitoring station over a cellular network if the Ethernet/Wi Fi connection is not working.



This provides a plug and play connection to UltraSync servers for secure reporting with no configuration needed in most cases. The only requirement is good mobile device reception. To connect via Cellular Radio you only need to plug in the cellular radio module.

Your cellular radio module should be pre-configured and function once plugged in to the ZeroWire. If not, please refer the manual that comes with the cellular radio for instructions on how to install it.



# 7.1 Install Optional Cellular Radio

A mobile device can provide general guidance on mobile network coverage.

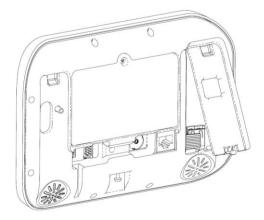
Look at the signal strength on a mobile device to verify there are 4/5 to 5/5 bars of reception in the location where you will install the ZeroWire.



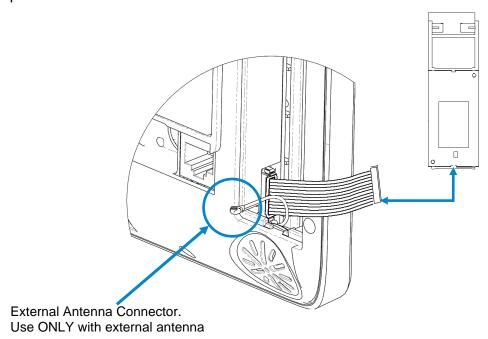
If the signal strength is low, find another location which has stronger signal strength.

Note: Actual signal strength can only be determined using the ZeroWire which will connect to a specific network which may be different than your device.

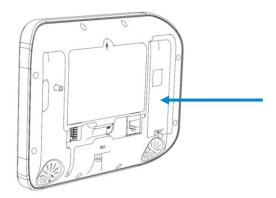
To install, remove the cover on the right.



Locate the 10-pin lead inside the ZeroWire and connect this to the radio module.

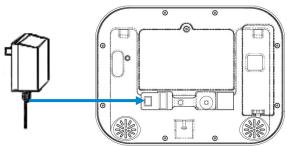


Insert the whole radio module in to the ZeroWire taking care not to crimp any cables. Replace the cover on the ZeroWire.



#### 7.2 Connect Power

Connect power lead from power supply to the back of the ZeroWire. The connector is keyed and only fits one way.

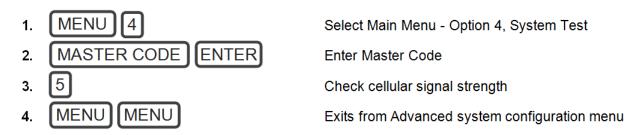


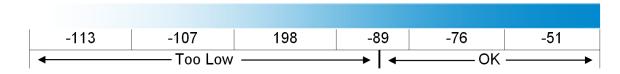
Connect the power supply to receptacle.

Warning: Do not connect to a receptacle controlled by a switch

# 7.3 Check Signal Strength

On the ZeroWire key pad:



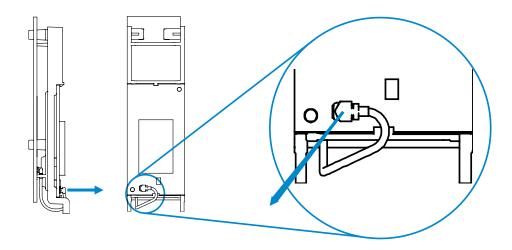


- If the reported value is -113 to -89 then installing an external antenna is recommended.
- If the reported value is -89 to -51 then the signal strength is OK.

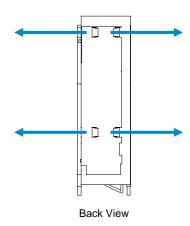
# 7.4 Install External Antenna – Optional

Complete this section only if signal strength is between -121 to -89.

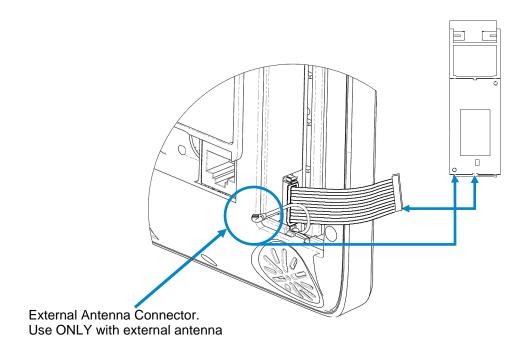
Unplug power supply from receptacle and remove battery from ZeroWire. Disconnect the antenna cable from the radio module.



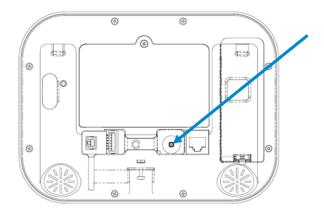
Gently pull retaining clips outwards and remove the rear circuit board. This is the internal antenna which will no longer be needed.



Connect the internal antenna cable from the ZeroWire to the radio module.



Connect an external antenna to the antenna connector on the rear of the ZeroWire. To obtain maximum signal strength the external antenna must be fully extended. Re-check signal strength following steps in section 7.3.

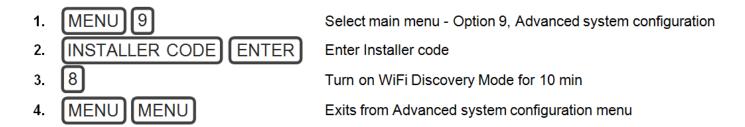


Move the ZeroWire or the antenna to another location if the signal is still too low. Place the external antenna to optimize signal strength.

Note: The external antenna can be used wherever the panel is installed. The antenna can be mounted in a wall for that kind of installation, or extended from the panel in a table mount installation.

# 7.5 Check Cellular Connection to UltraSync

Turn on **Wi Fi Discovery Mode** – this provides direct access to the ZeroWire from a mobile device such as a smart phone, tablet, or laptop:



Enable Wi Fi on your mobile device

On your mobile device, browse for available Wi Fi networks and select the **ZeroWire\_xxxx** network to connect to it. Only a single user can connect at any time and there is no Wi Fi password. Once connected the ZeroWire will be assigned a fixed IP address of 192.168.1.3.

Open your web browser and enter **192.168.1.3**. The ZeroWire login screen should appear:



Enter your username and password. By default this is **installer** and **9-7-1-3**.

Press **Sign In**. you should now see a screen similar to one of the below:



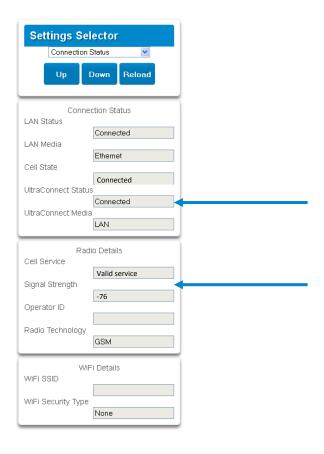


Press **Settings**.

Press Connection Status in the drop down menu.

Check that

- a. UltraSync Status should display **Connected**.
- b. Cell Service should display Valid service.
- c. Signal Strength should display a value between -89 to -51.

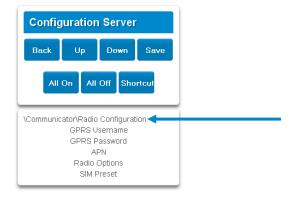


#### If it does not:

#### Check cellular connection:

- a. Look at cell state, it should display Connected.
- b. Wait until cell state displays **Connected**, press **Reload** to refresh the status.
- c. Check signal strength signal strength should be between -91 to -51.
- d. Contact Tech Support for assistance.
- e. Check that radio is correctly installed and firmly connected to the 10 pin cable.
- Check if antenna is correctly installed or move antenna to a higher location.

If you need to make changes, open the ZeroWire Web Server and go to Advanced – Communicator – Radio Configuration:



Only change these settings as instructed by your supplier or telecommunications provider.

# **Zero**Wire

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# 8 Camera Setup Instructions

## 8.1 Quick Setup

**Note:** If the light source where the camera is installed experiences rapid, wide variations in lighting, the camera may not operate as intended.

#### To quickly put the camera into operation:

- 1. Prepare the mounting surface.
- 2 Mount the camera using the appropriate fasteners.
- 3. Connect the camera to the local network via Ethernet cable or Wi Fi.
- 4. Learn the camera into the UltraSync App using the "Scan for New Cameras" button in Section 4.12 Camera Configuration

# 8.2 Setting up Ethernet/Wi Fi transmission

#### Wi Fi transmission distance

The Wi Fi transmission distance/range of the camera is approximately 50 m (164 ft.) in open air applications.

**Note:** The transmission distance may vary due to the presence of physical obstacles, such as trees, walls, elevators, fire doors, furniture, etc. Avoid very solid walls and metallic objects in the transmission path. Other Wi Fi networks (for example Wi Fi, WiMAX) operating on 2.4 GHz and certain types of devices (e.g., microwave oven point-to-point Wi Fi transmission) can cause interference with your network. The result would lead to a reduction in transmission distance/range.

#### **Devices Supported For Ad Hoc Installation**

Apple iOS, PC - Windows XP, 7, 8

#### **Devices NOT Supported For Ad Hoc Installation**

Android, Windows Mobile, Blackberry

# 8.3 Wi Fi Signal Strength

Wi Fi signal strength can be checked in the Network section of the TruVision Browser. Use the scale below to measure if actions are needed to improve performance.



#### 85+ - Excellent:

No additional actions needed and default video resolutions settings may be increased if desired.

#### **75-85 – Very Good:**

No additional actions needed to increase signal strength. It is not recommended to increase video resolution settings.

#### 65-75 - Good:

It is recommended to use a Wi Fi repeater or Powerline adapter to increase signal strength. Alternatively, video resolutions settings may be reduced to minimize poor video quality.

#### Below 65 - Poor:

It is not recommended to use the camera with a signal strength below 65. Video streams will likely not work below this level. A Wi Fi repeater or Powerline adapter should be used to increase signal strength.

#### 8.4 Add Camera to Network via Wi Fi for iOS Device

- 1. Power up the camera. (Boot up may take 1-2 minutes)
- 2. From your iOS device, go to **Settings**, then **Wi Fi**.
- 3. Find and select TVW-xxxxx. (Listed under Devices)
- 4. Once connected, press the info circle on the right of TVW-xxxxx.
- 5. Under IP Address, press **Static** and enter the info below.
  - a) **IP Address**

192.168.1.71

b) Subnet Mask 255.255.255.0

- 6. Open Mobile Browser. (Safari)
- 7. Enter the camera's default IP Address into the address bar.
  - 192.168.1.70 a)
- 8. TruVision Configurator will appear. Enter Credentials below.
  - User Name: admin
  - Password: 1234 b)
- Press **Configuration** on the top menu.
- 10. Press **Network** on the left menu.
- 11. Press Wi Fi on the middle tab.
- 12. Select your network from the Wireless List.
- 13. Enter Wi Fi Network Passphrase in Key 1 Section.
- 14. Press **Save** on the bottom of the screen.

#### You are now connected to the network via Wi Fi!

#### 8.5 Add Camera to Network via Wi Fi for Windows PC

- 1. Power up the camera. (Boot up may take 1-2 minutes)
- 2. From your Windows PC, Find and connect to TVW-xxxxx in Wi Fi network list.
- 3. Go to Network and Sharing Center.

#### **Control Panel > Network and Internet > Network and Sharing Center**

- 4. Press Change Adapter Settings on left.
- 5. Right click Wireless Network Connection and select Properties.
- 6. Click Internet Protocol Version 4 (TCP/IPv4) and click Properties.
- Click "Use the following IP address", enter the info below, and then click OK.
  - IP address: 192.168.1.71 a)
  - b) Subnet mask: 255.255.255.0
- 8. Open Browser (Firefox, Chrome, IE8) and enter the camera's IP Address into the browser's address bar.
  - Camera's Default IP Address is 192.168.1.70.
- TruVision Configurator will appear. Enter Credentials below.
  - User Name: admin a)
  - Password: 1234 b)
- 10. Click Configuration on the top menu.
- 11. Click **Network** on the left menu.
- 12. Click Wi Fi on the middle tab.
- 13. Select your network from the Wireless List.
- 14. Enter Wi Fi Network Passphrase in Key 1 Section.
- 15. Click **Save** on the bottom of the screen.

#### You are now connected to the network via Wi Fi!

# 8.6 Add Camera to Network via Ethernet for iOS Device (non DHCP)

- Power up the camera. (Boot up may take 1-2 minutes)
- From your iOS device, go to **Settings**, then **Wi Fi**.
- 3. Find and select TVW-xxxxx. (Listed under Devices)
- 4. Once connected, press the info circle on the right of TVW-xxxxx.
- Under IP Address, press **Static** and enter the info below. 5.
  - IP Address 192.168.1.71 a)
  - 255.255.255.0 b) Subnet Mask
- 6. Open Mobile Browser. (Safari)
- 7. Enter the camera's default IP Address into the address bar.
  - 192.168.1.70 a)
- 8. TruVision Configurator will appear. Enter Credentials below.
  - User Name: admin
  - b) Password: 1234
- Press Configuration on the top menu.
- 10. Press **Network** on the left menu.
- 11. Change LAN settings to desired configuration.
  - Change the IPv4 Address and IPv4 Subnet Mask to match the router if a static IP Address is desired.
    - i. You must change the static IP address to something different than the default 192.168.1.70 if more than one camera is used on the network.
    - ii. Make sure to use the Test button to validate IP Address is not already assigned to another device in the network.
- 12. Press **Save** on the bottom of the screen.

You are now connected to the network via Ethernet!

# 8.7 Add Camera to Network via Ethernet for Windows PC (non DHCP)

- 1. Power up the camera. (Boot up may take 1-2 minutes)
- 2. From your Windows PC, Find and connect to TVW-xxxxx in Wi Fi network list.
- 3. Go to Network and Sharing Center.

#### **Control Panel > Network and Internet > Network and Sharing Center**

- 4. Click Change Adapter Settings on left.
- Right click Wireless Network Connection and select Properties.
- 6. Click Internet Protocol Version 4 (TCP/IPv4) and click Properties.
- 7. Click "Use the following IP address", enter the info below, and then click OK.
  - IP address: 192.168.1.71 a)
  - b) 255.255.255.0 Subnet mask:
- 8. Open Browser (Firefox, Chrome, IE8) and enter the camera's IP Address into the browser's address bar.
  - Camera's Default IP Address is 192.168.1.70.
- 9. TruVision Configurator will appear. Enter Credentials below.
  - a) User Name: admin
  - b) Password: 1234
- 10. Click **Configuration** on the top menu.
- 11. Click **Network** on the left menu.
- 12. Change LAN settings to desired configuration.
  - Change the IPv4 Address and IPv4 Subnet Mask to match the router if a static IP Address is desired.
    - i. You must change the static IP address to something different than the default 192.168.1.70 if more than one camera is used on the network.
    - ii. Make sure to use the Test button to validate IP Address is not already assigned to another device in the network.
- 13. Click **Save** on the bottom of the screen.

#### You are now connected to the network via Wi Fi!

# 8.8 Add Camera to Network via Ethernet (DHCP)

- 1. Power up the camera. (Boot up may take 1-2 minutes)
- 2. Connect router and camera with Ethernet cable.

#### You are now connected to the network via Wi Fi!

## 8.9 Add Camera to UltraSync

Ensure proper installation of camera hardware before proceeding to camera setup.

Make sure camera and UltraSecure intrusion panel are on the same local area network.

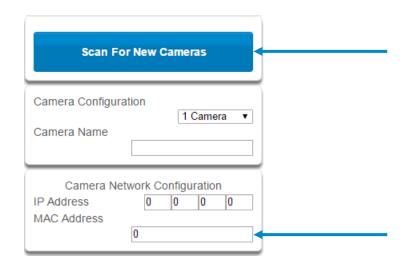
Applications were the Intrusion panels uses cellular only are not compatible with this camera.

**Note:** For detailed information on how to setup the UltraSync app, add locations, and login as an Installer, reference the intrusion panel installation guide.



Select Cameras from the drop down menu.

Press **Scan for New Cameras**. "Success!" message will pop-up after a few moments. The scan results in an IP address and MAC address listing in the form fields shown.



Make sure the MAC ID that is automatically populated in the **MAC Address** field matches the MAC Address printed on the back of the camera. If not, change in the MAC Address to the one listed on the back of the Camera.

Press Save.

**Note:** Camera may take up to 1-2 minutes to finalize association with intrusion panel and show in cameras tab.

CONGRATULATIONS! You have now added the camera to UltraSync!

# 8.10 View Live Stream and Latest Clip

Press



tab on bottom of the screen. All available cameras will be shown.



Press Latest Clip to view a live feed of a specific camera.

Press Live Stream to view the last recorded clip from a specific camera.

# 8.11 Program event triggered camera clips

Cameras can be programmed to automatically record when selected events occur. This is achieved by creating a scene.

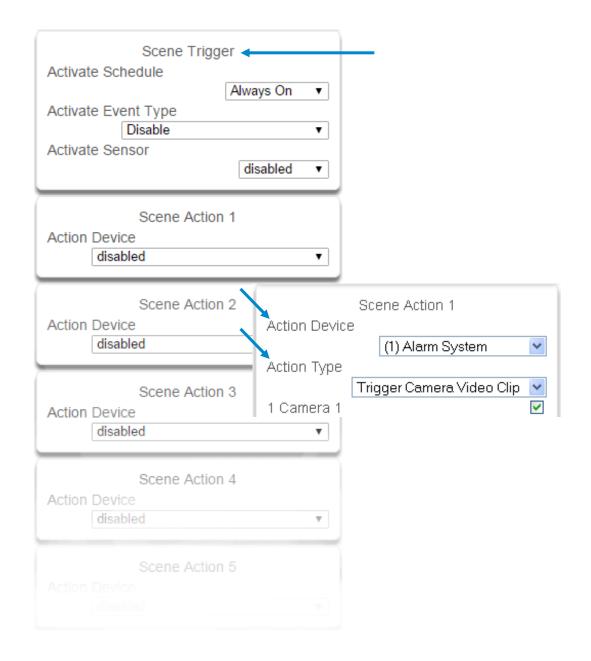


Select **Scenes** from the drop down menu.

Select the **Scene to Configure** and type **Scene Name**.



Select the **Scene Trigger**.



Select **Action Device (1) Alarm System**. This enables another drop down menu for Action Type. Choose the Action Type "Trigger Camera Video Clip", then the cameras you wish to record a video clip when the event is triggered.

#### Press Save.

Clips are recorded on the Micro SD card installed in the camera and are linked to events in History.

See the following page to see how to view event triggered clips.

# 8.12 View event triggered clips in History

Press on bottom of the screen.



Find the Event you wish to view using **Oldest**, **Prev**, **Next**, and **Latest** buttons.



Once you find the clip you wish to view, press Play Video Clip.



#### Remove Camera from UltraSync (if needed)

- 1. Press the **More** tab on the bottom of the Screen.
- 2. Press **Settings**.
- 3. Select **Cameras** under Settings Selector.
- 4. Select the camera you with to remove.
- 5. Delete text in Camera Name, IP Address and MAC Address.
- Press Save.

Remove All Cameras Shortcut: To remove all cameras from UltraSync, go to Advanced Settings and use SHORTCUT 910.22.

#### Reset Camera to Factory Default (if needed)

If needed, the camera can be reset to factory default. Remove the camera cover, then press and hold the RST/WPS button for 20 Seconds.



# 8.13 Change Default Camera Settings (Via TruVision Navigator)

- 1. From a computer or mobile device that is connected on the same network as the camera, type in the IP address of the camera into the devices browser.
- Login using default login.
  - a. Login: admin
  - b. Password: 1234
- 3. Change settings as desired such as video quality, frame rate, pre and post recording times.
- 4. For detailed instructions on using TruVision Navigator, go to www.interlogix.com/video.

# 8.14 Camera Troubleshooting

1. Camera is not showing in list of Wi Fi networks.	
Cause	Solution
The camera takes up to 90 seconds to boot up.	It will not show in Wi Fi Networks until this is complete.
The camera has previously been setup and ad hoc mode was turned off.	Perform a factory reset to broadcast the camera again.
Certain mobile devices do not support ad hoc mode. iOS and Windows devices are known to support ad hoc, Android and Windows Mobile devices typically do not support ad hoc mode.	If your device does not support ad hoc mode, install the camera using a Windows PC.

2. The camera does not add to the UltraSync network when I perform the "Scan for Cameras" Function		
Cause	Solution	
Older firmware versions do not support cameras.	Make sure your panel is updated to the XXXXXX-04 Firmware or new.	
The camera will not work if the devices are not on the same network.	Make sure your camera and ZeroWire Panel are on the same network.	
ZeroWire must be using IP to work with the cameras.	Make sure your ZeroWire panel is not installed using a cellular radio only.	
Make sure you are not adding cameras on a network that already has a high number of cameras installed on the same network. This is unusual, but may be common in testing environments.	Put ZeroWire and the cameras on their own router and this should solve the problem.	

3. The camera was added in the setup process, but the video doesn't show in the Cameras tab.		
Cause Solution		
After completing the setup process, the camera may take up to 2 minutes to full sync and show in	Wait for the process to complete	
	Make sure your camera is still connected to the networ	
the UltraSync App.	If video still doesn't show, go back into setup and perform the "Scan for Cameras" function again.	

4. Live Video isn't giving good quality. It is choppy, shows gray, etc.		
Cause	Solution	
Check to make sure your camera's Wi Fi and/or Ethernet connection speeds are not poor.	If Wi Fi connection speeds are poor. It is recommended to use a Wi Fi repeater to increase signal strength.	
The cameras default settings are setup to work on a strong home network.	In some cases, low video settings may be required to achieve a smooth video. Use the TruVision Browser to change the cameras video settings.	

5. Video Clips take a long time to load.	
Cause	Solution
The cameras default settings are setup to have video clips start playing in the UltraSync App within 15 seconds (On a strong network). If default settings were changed to longer clip times or higher video quality, the amount of time needed to pull the clip will be higher.	Lower the quality or length of clips to shorten load times.

# 9 Installation Using Keypad

#### 9.1 Basic Installation

It is possible to quickly install and test sensors using only the ZeroWire keypad, the voice guide will walk you through each option that requires programming.

Additional sensor settings can be accessed via the ZeroWire Web Server, UltraSync app, or DLX900.

# 9.2 Learning Sensors into ZeroWire

Example: Add a PIR motion detector to ZeroWire and assign it as sensor 1.

1.	MENU 5	Select Sensor Configuration
2.	INSTALLER CODE ENTER	Enter Installer code
3.	1	Select add sensor or keyfob
4.	PRESS DEVICE BUTTON	Press the configuration button on the device and ZeroWire will announce that the sensor or keyfob is detected
5.	1 ENTER	Assign the sensor as sensor number 1, or just press Enter to automatically assign a number
6.	5 ENTER	Select a sensor type from the table below
7.	MENU MENU	Exits from Advanced system configuration

## **Sensor Types Presets**

The sensor type can be changed using the ZeroWire keypad to one of the following presets. If you require further customization please use the ZeroWire Web Server, UltraSync app, or DLX900 to access more advanced settings.

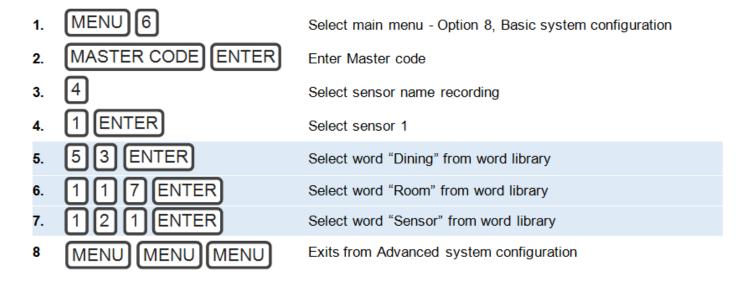
Option	Voice	Sensor Type	Sensor Options
1	Delay Sensor Type	3 Entry Exit Delay 1	1 Bypass
2	Delay Sensor Type with Bypass in Stay Mode	5 Follower	2 Bypass Stay
3	No Delay Sensor Type	6 Instant	1 Bypass
4	No Delay Sensor Type with Bypass in Stay Mode	6 Instant	2 Bypass Stay
5	24 Hour Sensor Type	2 24 Hour Audible	6 Panic
6	24 Hour Silent Sensor Type	7 24 Hour Silent	7 Silent Panic
Smoke Sensors	Smoke Sensor	8 Fire Alarm	5 Fire

# 9.3 Configure Sensor Names (optional)

All sensors can be named; see the Voice Library table for reference.

This makes it easier to identify the correct sensor in the event of a condition. You may enter up to eight words to achieve your desired description.

Example: Configure sensor 1 name as "Dining Room Sensor".



If you require less than eight words, press **MENU** (as in step 6) after you have entered the last word number.

# **Voice Library**

These words can be used to customize your sensor names.

0	zero	46	closet	92	kitchen
1	one	47	computer	93	lounge
2	two	48	cool	94	laundry
3	three	49	curtain	95	lift
4	four	50	data	96	light
5	five	51	den	97	living
6	six	52	detector	98	location
7	seven	53	dining	99	master
8	eight	54	door	100	medicine
9	nine	55	downstairs	101	meeting
10	ten	56	driveway	102	motion
11	eleven	57	duress	103	night
12	twelve	58	east	104	north
13	thirteen	59	emergency	105	nursery
14	fourteen	60	entry	106	office
15	fifteen	61	family	107	output
16	sixteen	62	fan	108	outside
17	seventeen	63	fence	109	panic
18	eighteen	64	fire	110	pantry
19	nineteen	65	forced arm	111	partial
20	twenty	66	foyer	112	perimeter
21	thirty	67	freezer	113	pool
22	forty	68	front	114	rear
23	fifty	69	games	115	reception
24	sixty	70	garage	116	remote
25	seventy	71	gas	117	roof
26	eighty	72	gate	118	room
27	ninety	73	glass	119	rumpus
28	hundred	74	glass break	120	safe
29	thousand	75	ground	121	security
30	air conditioner	76	guest	122	sensor
31	partition	77	gun	123	shed
32	attic	78	gym	124	shock
33	automatic	79	hall	125	shop
34	auxiliary	80	hallway	126	side
35	back	81	heat	127	skylight
36	basement	82	heating	128	sliding
37	bathroom	83	hold-up	129	small
38	bedroom	84	home home theatre	130	smoke
39 40	boat cabinet	85 86	infra-red	131 132	south stairs
41	cabinet car park	87	inside	133	
42	ceiling	88	instant	134	storage study
43	cellar	89	interior	135	temperature
44	child's	90	key switch	136	spare
45	alert	91	Keychain	137	toilet
73	aicit	<i>3</i> I	Neychain	131	เบเเซเ

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152

training

TV

upstairs

user

utility

volt

veranda

wall

warehouse

water

west

window

windows

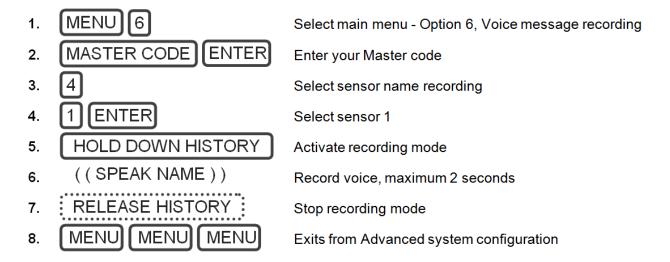
wireless

yard

# 9.4 Record Sensor Names (optional)

You can also record the names of the first 64 sensors using your voice.

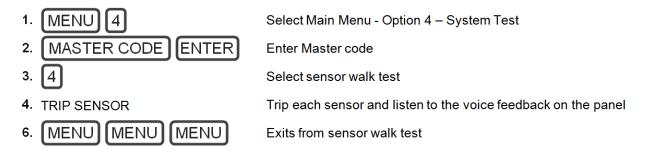
Example: Record user name for sensor 1.



# 9.5 Test Sensor Signal Strength

It is highly recommended you check the signal strength of each sensor once installed.

Test the signal strength:



If signal is low, then move sensor to another location. Alternatively move your ZeroWire to a more central location.

#### 9.6 Remove a Sensor

Example: Remove sensor 8.

1. MENU 5	Select Sensor Configuration
2. MASTER CODE ENTER	Enter your Master Code
3. 2	Select remove sensor or keyfob
4. 2	Select remove sensor
5. 8 ENTER	Select sensor 8
6. MENU MENU MENU	Exits from Advanced system configuration

# 9.7 Change the User Type (optional)

The user type determines what that user can do:

**Master users** can arm and disarm areas. They can create, delete, or modify user codes. They can also change system settings.

Standard users can arm and disarm areas. But they cannot create users or review event history.

**Arm only users** can only turn on the security system; they cannot disarm, or dismiss any system conditions.

# 9.8 Add a User / Keyfob

ZeroWire allows you to add up to 40 users. Each user is assigned a PIN code and a user number between 1 and 1000. This allows them to interact with the system Advanced user settings are only accessible via the ZeroWire Web Server, UltraSync app, or DLX900.

Example: Add a new user to ZeroWire and assign them a PIN code 2580. We will add this as user 4.

1. MENU 3	Selects User Configuration menu
2. MASTER CODE ENTER	<b>Note:</b> Installer account does NOT have access to users, must use a master code
3. 1	Selects configure user PIN
4. 4 ENTER	Select user 4
5. 2 5 8 0 ENTER	Sets user 4 PIN code as 2580
6. MENU MENU MENU	Exits from Advanced system configuration

Example: Change user 6 to a master user to allow them to add/remove users.

1. [MENU] Selects User Configuration menu 2. MASTER CODE |ENTER Enter Master code 3. Selects configure user type 4. 16 ENTER Select user 6 5. Sets master user type 6. MENU MENU MENU Exits from Advanced system configuration

## 9.9 Record User Names (optional)

You can also record the names of the first 40 users using your voice. Example: Record user name 1.

1. MENU 6 Select main menu - Option 6, Voice message recording 2. MASTER CODE ENTER Enter Master code 3. 3 Select user name recording ENTER 4. Select user 1 HOLD DOWN HISTORY 5. Activate recording mode ((SPEAK NAME)) 6. Record voice, maximum 2 seconds 7. RELEASE HISTORY Stop recording mode MENU MENU 8. Exits from Advanced system configuration

#### 9.10 Remove a User

Example: Remove user 4 from your system.

1. **MENU** Selects User Configuration menu 2. MASTER CODE **ENTER** Enter Master code 1 3. Selects configure user PIN ENTER Select user 4 4. 5. **BYPASS** Disables the user PIN 6. MENU **MENU** MENU Exits from Advanced system configuration

# 9.11 Add a Keyfob

Example: Add a new keyfob and assign it as user 65

1. MENU 5 Select Sensor Configuration

2. MASTER CODE ENTER Enter Master Code

3. Select add sensor or keyfob

Press the configuration button on the device and ZeroWire will announce that the sensor or keyfob is detected

5. 6 5 ENTER Assign the keyfob to user 65

6. MENU MENU MENU Exits from Advanced system configuration

# 9.12 Remove a Keyfob

Example: Remove keyfob 65.

4.

1. MENU 5 Select Sensor Configuration

2. MASTER CODE ENTER Enter Master Code

3. 2 Select remove sensor or keyfob

Select remove keyfob

5. [6][5][ENTER] Select the keyfob number

Exits from Advanced system configuration

## Personalize Your ZeroWire

### 9.13 Volume Level

Example: Set volume level to 6.

1. MENU 1 Select main menu - Option 1 Volume level

2. 6 Set volume level to 6

3. MENU MENU Exit menu

#### 9.14 Voice Annunciation

Example: Turn on/off the voice when arming and disarming.

MENU 8 1.

Select main menu - Option 8, Basic system configuration

2. MASTER CODE **ENTER**  Enter Master Code

[4] Toggles voice annunciation on / off [5] Toggles full menu annunciation on / off

**MENU MENU** 

Exits from Advanced system configuration

#### 9.15 Full Menu Annunciation

Turning this feature On, gives full descriptions to all the options within the main menu. Turning this feature Off shortens the descriptions.

1. MENU 8

Select main menu-Option 8, Basic system configuration

2. MASTER CODE ENTER

**Enter Master Code** 

3. 5

[4] Toggles voice annunciation on/off [5] Toggles full menu annunciation on/off

MENU MENU

Exits from Advanced system configuration

## 9.16 Backlight Level

Set Run Mode or Idle Mode brightness.

Example: Set run mode brightness level to 8.

1. MENU

2.

[1] Run mode backlight level

3.

MENU MENU Select main menu - Option 2 Backlight level

[2] Idle mode backlight level

Set brightness level to 8

Exit menu

Idle mode is when your ZeroWire is not being used. The lights on the screen dim for your comfort at night and to save power. All security functions work normally.

Example: Set idle mode brightness level to 1.

IMENU

[1] Run mode backlight level

3.

2.

MENU MENU Select main menu - Option 2 Backlight level

2 [2] Idle mode backlight level

Set brightness level to 1

Exit menu

# 9.17 Change Time and Date

Time and date are normally automatically updated with an internet time server. Example: Setting the time as 9.30AM, and the date as 19.6.2016.

Select main menu - Option 8, Basic system 1. **MENU** 8 configuration **ENTER** 2. MASTER CODE 3. Select time and date configuration 4. [1] To configure the time and date |2| [2] To configure the date 5. **ENTER** Enter the hours value 0 6. 3 ENTER Enter the minutes value 7. Select AM time 8. **ENTER** Enter the day 1 9. 6 **ENTER** Enter the month **ENTER** 10. Enter the year, must be 4 digits **MENU** MENU Exits from Advanced system configuration MENU

# 9.18 Adjust Area Entry or Exit Times

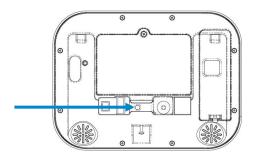
Example: Setting the entry time as 90 seconds.

Select main menu - Option 8, Basic system 1. **MENU** configuration MASTER CODE ENTER 2. **Enter Master Code** 3. 3 [2] Select area entry time [3] Select area exit time 4. ENTER Enter the new entry time 5. **MENU MENU MENU** Exits from Advanced system configuration

### 9.19 Reset Installer Account

Lost your Installer PIN code? Follow these steps to reset it:

- 1. Unplug the power supply and remove the backup battery.
- 2. Use a small screwdriver to hold down the reset button **before** you turn on power.



- 3. Wait 3 seconds after turning on the power. This will reset user 40 to PIN **9-7-1-3** and username **installer**.
- 4. Release the reset button.

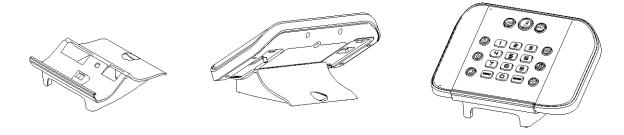
# 9.20 Reset to Factory Default (optional)

Follow these steps to reset your ZeroWire back to factory default settings:

1.	MENU 9	Press Menu - 9
2.	INSTALLER CODE ENTER	Enter Installer Code
3.	0	Press 0
4.	$\overline{m{igo}}$	Press Bypass key
5.	Wait	Wait 10 seconds for the panel to start talking

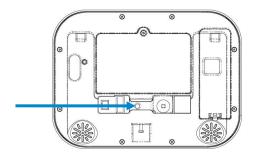
# 9.21 Table Mount (Optional)

Alternatively, you may use the optional table mount to place the ZeroWire on a secure flat surface. Ensure the box tamper is **off**.



# 9.22 Wall Tamper Option

- 1. CAUTION: Wall tamper is an optional security feature that is <u>disabled</u> by default. When enabled, the siren will make a very loud alarm sound when power is connected. Press **9-7-1-3 Enter** to turn the siren off. If this does not work, reset the Installer account:
  - a. Disconnect power.
  - b. Use a small screwdriver to hold down the reset button.

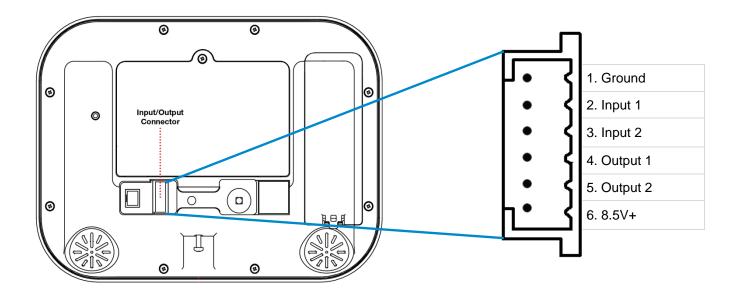


- c. Turn on power and keep holding down reset button for 3 seconds, then release the reset button. This will reset user number 256 to PIN **9-7-1-3** and username to **installer**.
- 2. Lights should be lit on the ZeroWire when the power is turned on. If not check that the power lead is connected securely to the rear of the ZeroWire.

Avoid using multiple power adapters and power boards. ZeroWire is designed to be connected at all times to a power source; it is NOT designed to run from the battery pack.

# 9.23 Connecting Inputs

ZeroWire has two general purpose inputs located on the rear of the unit. These can be connected to up to 4 devices when Sensor Doubling is enabled. Use the supplied header cable.



#### To disable the inputs:

Set System Menu -> General Options -> Disable Hardwired Sensors = ON

#### To enable 2 inputs:

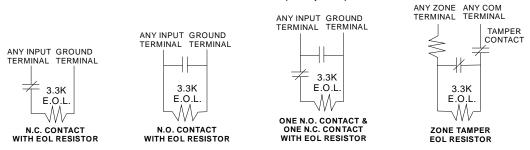
- Set System Menu -> General Options -> Disable Hardwire sensors = OFF
- Set System Menu -> General Options -> Panel Sensor Doubling = OFF
- Set System Menu -> General Options -> Double EOL = ON for tamper monitoring, or OFF for no tamper

#### To enable 4 inputs without tamper monitoring:

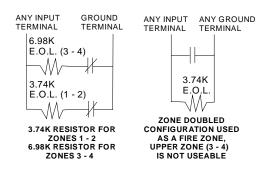
- Set System Menu -> General Options -> Disable Hardwire Sensors = OFF
- Set System Menu -> General Options -> Panel Sensor Doubling = ON
- Set System Menu -> General Options -> Double EOL = OFF

#### IMPORTANT NOTES:

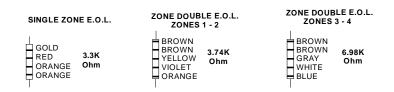
- If hard wired inputs are programmed as sensor 1, 2, 3, and/or 4, then these will take priority over the wireless sensors
- System Double EOL will take priority over Sensor EOL setting. If Sensor EOL is OFF and Double EOL is on, Double EOL tamper monitoring will be active.
- Normally Open or Normally Closed state can be set in Sensor Options -> Options
- Sensor Doubling can only be used with Normally Closed devices End-Of-Line Resistors for Non-Sensor Double (2 inputs):



#### End-Of-Line Resistors for Sensor Double (4 inputs):



### Resistor Diagram



# 9.24 Connecting Outputs

ZeroWire has two general purpose outputs located on the rear of the unit. See illustration in section 9.23, Connecting Inputs. These can be connected to up to 2 devices. Use the supplied header cable.

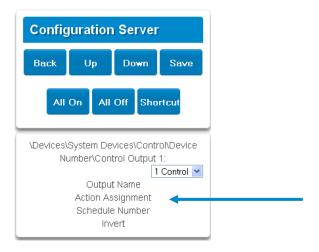
Outputs are controlled by Actions in the ZeroWire.

When an output is configured with an action, the output will monitor the status of the action:

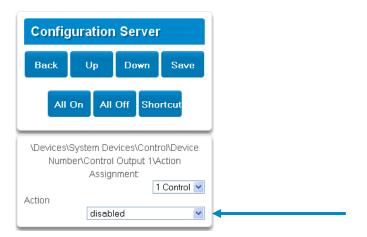
- When the action logic is true, the output will be on
- When the action is <u>false</u>, the output will be <u>off</u>
   If no action is assigned to an output the default behaviour is:
- Output 1 = Siren
- Output 2 = Strobe

To program outputs from ZeroWire Web Server:

- 1. Press Advanced Actions.
- 2. Create an Action refer to Actions Programming (Advanced) for more help.
- 3. Press Advanced Devices System Devices Control.
- 4. Press Control Output 1 or Control Output 2.
- 5. Press Action Assignment.



6. Press the drop down action menu and select the action you want to control the output. The output will now be controlled by the state of the selected action.



# **Zero**Wire

# REFERENCE GUIDE MODEL ZW-6400

# 10 Testing the System

Your security system is only as effective as each of the components. This includes your sirens, communicator, back up battery, and detection devices.

Each of these should be tested at least once per week and maintained to provide the highest level of security. Failure to conduct regular testing can result in system failure when most required.

The four system tests to perform are:

# 10.1 Perform a Walk Test

This is an important test to use regularly to verify that each sensor is working correctly.

How to perform a sensor walk test:

1. **MENU** 

Select main menu - Option 4, System Test

MASTER CODE ENTER 2.

Enter Master Code

3.

Select sensor walk test

- Walk past each motion sensor, open and close windows and doors with sensors. The ZeroWire will 4. chirp the siren and announce the sensor name and the signal strength of each sensor that is triggered
- 5. STATUS

Hear the status of each sensor that has been tested

**MENU MENU** 6.

Exits from System Test

### 10.2 Perform a Siren Test

The Sirens are used as audible deterrents in the event of your security system activating. As this test sounds all the audible devices connected to your security system, it is advisable to notify neighbors and other persons within the premises prior to activating this test. Using hearing protection is also recommended.

How to perform a siren test:

1. **MENU** Select main menu - Option 4, System Test 2. MASTER CODE **ENTER** Enter Master Code 3. Select siren test **MUTE** To stop sirens (Within 30 seconds) 4. **MENU** 5. **MENU** Exits from System Test

# 10.3 Perform a Battery Test

The backup battery is located on the rear of the ZeroWire behind a cover. It provides temporary power to the ZeroWire when mains power is not available. This may occur during a power outage or an intruder cutting power to a property.

The ZeroWire will automatically test the battery each day. If the battery fails then your system can no longer protect your property in a power outage. This is why replacing it when needed is very important.

The battery is a consumable part of the system and should be replaced every 3 years or when the battery test fails (whichever is sooner). Contact your service provider for replacement parts.

How to perform a battery test:

MENU 1. Select main menu - Option 4, System Test MASTER CODE 2. **ENTER** Enter Master Code 3 3. Select battery test MENU MENU **MENU** 4. Exits from System Test

# 10.4 Perform a Communicator Test

The communicator is a part of the ZeroWire responsible for sending alarm messages. The communicator test is only available if your security system has been set up to report to a central monitoring station. Proper operation of this is very important for alarm reporting.

When testing your communicator, no sirens will sound and a test message will be sent to the central monitoring station.

How to perform a communicator test:

1. Call your central monitoring station and tell them you are performing a communicator test **MENU** 8 2. Select main menu - Option 4, System Test MASTER CODE **ENTER** 3. Enter Master Code 2 4. Select communicator test 5. The central monitoring station will confirm the test message was received **MENU** 6. **MENU MENU** Exits from System Test

# 10.5 Event History

7.

The Event History menu is used to listen to events that occurred in your security system. These events include arming, disarming, system faults and alarmed sensors. Ensure your clock is set correctly as all events are time stamped.

If communicator test fails, notify your service provider

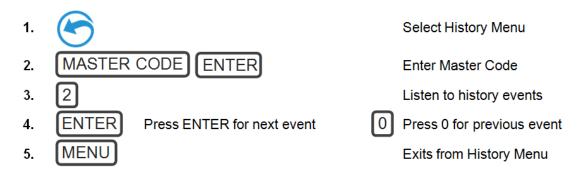
"Alarm Memory" will announce the last sensor(s) that caused your security system to go into an alarm condition:



It is recommended you record user names, sensor names, and outputs names to make reviewing any events much clearer as ZeroWire will announce the recorded name.

You may also review all events recorded by your security system:

Reference the Event ID Table for events that can appear in the event log.



# **Zero**Wire

# REFERENCE GUIDE MODEL ZW-6400

# 11 Glossary

Action	An action allows the ZeroWire to perform automation functions. These can monitor the status up to 4 input conditions called Action Events, change state (Action State), and perform a function (Action Result) such as arming a range of areas.
Action Group	An action group is one or more actions that can be accessed by a device or user. They are assigned to a user or device via permissions.
Area	Sensors are grouped in to areas which can be secured independently from each other. This allows you to split your security system in to smaller components that can be separately managed.
Area Group	An area group is one or more areas that can be accessed by a device or user. They are assigned to a user or device via permissions.
Arm	To turn your security system <b>On</b> .
Arm-Disarm	Automatically arm and disarm areas by a specific user according to a specified schedule. The areas armed and disarmed will be the ones that the user has access to via their permissions.
Away Mode	To turn your security system on when you are leaving the premises.
Bypass	Sensors can be temporarily disabled so they will not be monitored by the security system. For example, an interior door is left open, bypass it to temporarily ignore it and allow arming of the security system. Bypassed sensors are not capable of activating an alarm. Sensors will return to normal operation when the system is armed then disarmed. This prevents unintentional permanent disabling of a sensor.
Central Station	A company to which alarm signals are sent during an alarm report. Also known as Central Monitoring Station (CMS).
Channel	A channel is a communication path for events to be sent from the ZeroWire panel to a selected destination. Channels can be set to UltraSync or Email.  A channel has an associated event list which contains the events it
	is allowed to forward on.
Channel Group	A channel group is one or more destinations for event messages to be sent to. When a message is sent to a channel group, it is sent to all the channels that it contains. It forms the basis of multi-path reporting in ZeroWire.
Chime Group	All the sensors that will activate chime, when in chime mode.
Chime Mode	An operational mode that will emit a ding-dong sound at the keypad when specific sensors are activated.

Permission	Permission includes a list of features a user or device is allowed to access. This includes programming menus, areas, reporting channels, actions, reporting options, access control options, special	
Perimeter	Typically this refers to sensors located around the boundary of the protected area such as sensors on doors and windows, and excludes interior motion sensors.	
Area	One or more sensors form an area which can be independently armed and disarmed. For example your system can be divided into an upstairs area and downstairs area.	
Output	Outputs on the ZeroWire panel can be connected to a siren and strobe when an alarm condition occurs on the system.	
Monitored	A security system that is configured to send all alarm signals to a central monitoring station.	
wenus	Menus are used to restrict what is displayed by a device and what features a user has access to.	
Menus	ZeroWire has a large range of features sorted into various menus such as Users, System, and Sensors. Each menu item can be seen when using the ZeroWire Web Server or the UltraSync app.	
Master Code  A PIN code that is used by a user to arm or disarm the system. Its main feature is the ability to create, alter and del PIN codes. Can also be used as a function code for all feature		
Forced Arming	An option that permits arming even when there are unsealed pre- selected sensors. Generally assigned to sensors that cover the ZeroWire (egg; motion sensors, front door reed switches), allowing the user to arm the security system without the need to wait for those sensors to be sealed. A security system that is ready to be "force armed" will flash the ready light.	
Exit Delay The time allowed to exit the premises after the security sy armed.		
Event Lists contain events that a channel is allowed to specified destination. If a channel receives an event that associated event list, then the channel will ignore the event list, then the channel will ignore the event list.		
Events are messages that are sent by the ZeroWire due to s or area conditions. These include areas in alarm, opening closing, sensor bypass, low battery, tamper, communication trand power issues.		
Entry Delay	The time allowed to disarm your security system after the first detection device has been activated.	
Disarm  Duress Code	To turn your security system <b>Off.</b> A predetermined user PIN code that will arm / disarm the security system while sending a special code to the central monitoring station indicating the user is entering / leaving the premises under duress. Only applicable on monitored systems.	
	ZeroWire has multiple communicator options including Ethernet IP interface, email, and 3G (with optional cellular radio module).	
Communicator	It sends event messages to the specified destination including details such as where the event originated from and the type of event. The receiver will then log the time and date when it receives the event. For example, Alarm from Sensor 2 in Area 1 at 3:00am on 5/5/2014 from Account 1234.	
	The communicator is responsible for notifying a control room or third party that an alarm event has occurred so an appropriate response can be made.	

	connect to your ZeroWire system.
Unsealed	A sensor in an abnormal state is "unsealed". The security system monitors each sensor for changes in state from sealed to unsealed and can respond with certain actions such as sounding the siren.
	For example, when a PIR sensor detects movement it will change from a sealed state to an unsealed state.
	An authorised person who can interact with the ZeroWire security system and perform various tasks according to the permissions assigned to them.
	Each ZeroWire user has a set of profile levels. These control what the user has access to, a list of functions, and when the user is allowed to perform these functions.
User	A user is typically a person who is assigned a PIN code and arms/disarms the system with this code or keyfob device.
	Users can also be automatic functions of the system. For example, ZeroWire can automatically arm specific areas a user has access to at a specified time. No human interaction is required; all the permissions of the programmed user will still be applied and enforced.
User Code	A PIN code that is used by a user to arm or disarm the security system. Also can be used as a function code for certain features.
ZeroWire Panel	The main controller for the security system. It stores all programming, provides network and other connectivity options for reporting, and provides physical terminals for connecting power, backup battery, sensors, and outputs.
ZeroWire Web Server	ZeroWire has a built-in web server which provides access to ZeroWire features via a web browser interface or a native smartphone app.
Zerownie web Server	This allows you to performing programming and control of the system without needing to be physically in front of the ZeroWire keypad.

# **Zero**Wire

# REFERENCE GUIDE MODEL ZW-6400

A

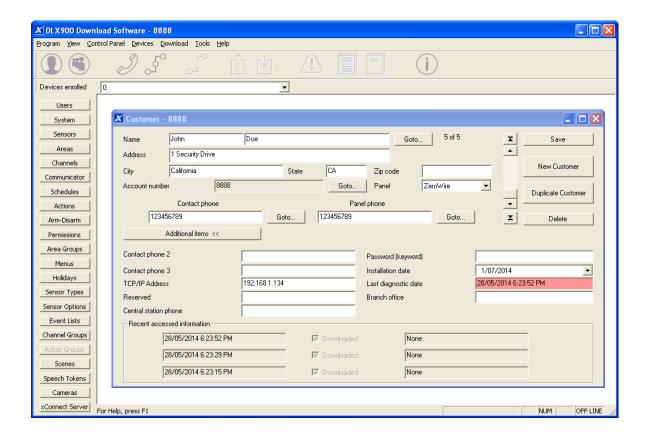
# **Appendices**

### A.1 DLX900 Software

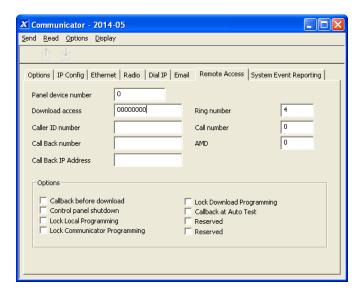
DLX900 is a fully featured management tool for control rooms and security professionals. Compatible with Microsoft Windows 7 and 8, this is available to download from www.interlogix.com.

In order for DLX900 to connect to a ZeroWire panel you will need:

- The IP address of the ZeroWire (or use the Discover feature for LAN connections)
- To know the Download Access Code (see Troubleshooting section, A.2) and,
- If Always Allow DLX900 is enabled then you will be allowed to connect; if Always Allow DLX900 is disabled then you must first put the ZeroWire into program mode, this can be changed in Settings-Network.



- 1. Install and launch DLX900 software.
- 2. Create a new customer and select **ZeroWire** for the Panel.
- 3. Enter the **TCP/IP address** of the ZeroWire, press **Save**.
- 4. Go to Communicator Remote Access.



- 5. Enter the **Download Access Code** to match the one configured on the ZeroWire panel.
- 6. Press the Connect TCP/IP button.

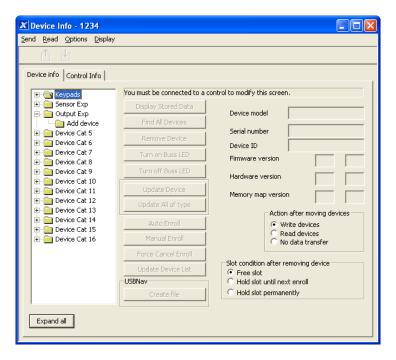
# A.2 Troubleshooting DLX900

Problem	Solution	
Cannot connect over TCP/IP	Check you can ping the ZeroWire.  Check the Download Access Code.  Check that remote access is enabled on the ZeroWire.  You generally need to be on the same network to connect via TCP/IP. If you are connecting from a separate network, you will need to set up port forwarding to port 41796 on the router the ZeroWire is connected to. Consult your router manual or your IT department for assistance. Technical support is unable to assist with setting up port forwarding due to differences in customer networks and equipment.	
Do not know Download Access Code	Login to ZeroWire Web Server and go to Settings – Network. Generally this will need to be done on-site with an internet browser.  At factory default, DLX900 will automatically allow a connection using the default Go To Program Code / Installer Code of 9-7-1-3 even if the Download Access Code is unknown or set to default of 00000000 (disable upload/download). This is a convenience feature for Installers and control rooms when a system is first installed.  This is why you must change the Installer Code to protect the system from further changes. Once the Installer Code has been changed, this feature no longer works and you must have the correct Download Access Code.	

# A.3 Firmware Upgrade using DLX900

Upgrading firmware can be performed remotely using DLX900.

- 1. Check with your supplier to download the latest firmware file for your device.
- Open DLX900 and go to Devices Device Info:

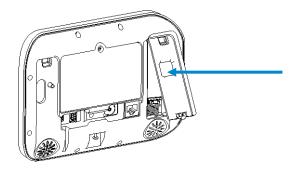


- 3. Select the device you want to upgrade. If you wish to update the ZeroWire control panel, select the **Control Info** tab.
- 4. Press Update Device, Update All of Type, or Update Control.
- 5. Select the firmware file.
- 6. Press OK.
- 7. Wait for the firmware files to transfer to your device(s).

# A.4 Firmware upgrade using USBUP

Upgrading firmware on your ZeroWire is easy using a USBUP.

- 1. Check with your supplier to download the latest firmware file for your device.
- Create a folder on the USBUP called "ZEROWIRE".
- 3. Copy the firmware files into this folder.
- 4. Take the ZeroWire off the wall and remove the USB modem cover on the right.
- 5. A USB modem may be pre-installed. Take it out of the ZeroWire but leave it connected.
- 6. The USBUP header is inside the ZeroWire panel where the arrow indicates:



- 7. Connect your USBUP to this header using the 5 pin cable supplied with your USBUP.
- 8. Press and hold the button on the USBUP until the light begins to flash green rapidly. Release the button and USBUP will continue the firmware transfer.
- 9. When the light stays lit orange the firmware was successful. Disconnect the cable and replace the USB modem and cover.
- 10. If the light flashes red slowly then there has been an issue performing the upgrade. Check the files are correct and in the right folders on the USBUP then try again. You may also open the log file that is written to the USBUP for more diagnostic information.

# A.5 System Status Messages

Various messages may appear on the Status screen of ZeroWire Web Server and UltraSync app. These are also announced by voice when the Status button is pressed.

### **System**

- AC power fail The security system has lost its electricity power.
- Low battery The security system's back up battery requires charging.
- Battery test fail The security system's back up battery requires changing.
- Box tamper The security system's cabinet tamper input has activated.
- Siren trouble The security system's external siren has a problem.
- Over current The security system is drawing too much current.
- Time and date loss The security system time and date need resetting.
- Communication fault The security system has detected a problem with the communication channel
- Fire alarm A fire alarm has been activated from the ZeroWire unit
- Panic A panic alarm has been activated from the ZeroWire unit
- Medical A medical alarm has been activated from the ZeroWire unit

### **Area Number / Area Name**

- Is On in the away mode This area is armed in the away mode.
- Is On in the stay mode This area is armed in the stay mode.
- Is ready This area is secure and ready to be armed.
- Is not ready This area is NOT ready to be armed, a sensor is not secure.
- All areas are on in the away mode All areas in this multi area system are armed in the away mode.
- All areas are on in the stay mode All areas in this multi area system are armed in the stay mode.
- All areas are ready All areas in this multi area system are secure and ready to be armed.

#### Sensor Number / Sensor Name

- In Alarm This sensor has triggered a system alarm condition.
- Is bypassed This sensor is isolated (disabled) and will not activate an alarm.
- Chime is set This sensor is part of the chime group.
- Is not secure This sensor is not closed.
- Fire alarm This sensor has triggered a fire alarm.
- Tamper This sensor has triggered a tamper alarm.
- Trouble fault This sensor has an open circuit.
- Loss of wireless supervision This sensor is a wireless device and has lost its communication link with the control pane.I
- Low battery This sensor is a wireless device and needs its battery changed.

# A.6 App and Web Error Messages

Various error messages may appear on the ZeroWire Web Server and UltraSync app.

#### **Advanced / Settings Configuration Menus**

- "You must select a Menu before you can scroll" An attempt was made to scroll up or down from the top level menu.
- "Select a submenu from the list or select back to access the main menu" An attempt was made to scroll up or down from a submenu that has no additional levels.
- "Defaulting requires 2 levels" a Shortcut was entered without two levels.

#### **Read Write errors and results**

- "Write Access Denied"
- "Nothing displayed can be Saved"
- "Program Success!"
- "Name Saved"

#### **Sensors Page**

• "No Sensors Configured For Your Access" – Displayed on Sensors page when there are no sensors available to view.

#### Wi Fi

 "Connection Was lost before a response was received" – Sent when No response received on a Wi Fi network change.

#### **Data Entry Errors**

- "Data must only contain the following characters"
- "Date must be of the form YYYY–MM–DD."
- "Day must be from 1 to 31"
- "Data entry must only contain the numbers 0 9 and A–F"
- "Data entry must only contain the numbers 0 9"
- "Data must be a number from X to Y"
- "Improper Time Value"
- "must be 4 to 8 digits
- "You must enter a user Number between 1 and 1048575"
- "PIN digits must be between 0 and 9"
- "PIN Must be 4–8 digits from 0–9"
- "Data must not contain the following characters []"

# A.7 Zwave Messages

#### **Zwave Messages**

- "Unavailable Failed Device Function in progress" An Attempt was made to enter an add remove mode when failed device mode is active.
- "Unavailable Add mode active" Attempt was made to enter an add remove mode when add mode is active.
- "Unavailable Remove mode active" An Attempt was made to enter an add remove mode when remove mode is active.
- "Unavailable Resetting Network" An Attempt was made to enter an add remove mode when resetting mode is active.
- "Unavailable Backing Up Network" An Attempt was made to enter an add remove mode when backup mode is active.
- "Unavailable Restoring Network" An Attempt was made to enter an add remove mode when restore mode is active.
- "Busy, Try Again Momentarily" This message is received when the ZWave module is attempting a command and a new command was submitted.
- "Not primary controller" An attempt was made to perform device functions when not a primary controller.
- "Device Not Found in failed list" An attempt was made to remove a failed device that is now responding.
- "Remove Device failed already in process" An Attempt was made to enter remove mode when remove mode is active.
- "Replace Device failed already in process" An Attempt was made to enter Replace mode when Replace mode is active.
- "Remove Failed" An Attempt to remove a device from the network has failed
- "Replace Failed" An Attempt to replace a device from the network has failed
- "Function timed out or canceled" Add/Remove/Replace function timed out.
- "Unavailable, Try Again Later" This message is received when the ZWave module is still initializing
- "Command Failed" A ZWave command has failed.
- "You must press **Select** to choose a set point" A set point change was attempted without selecting a set point to change.
- "There are no Failed Devices" Displayed in the failed device dialog when no failed devices detected.

# **A.8 History Events**

The table below lists events that can appear in the event log.

# **Event ID Table**

<b>Event Name</b>	Description
24 Hour Alarm	
24 Hour Alarm Restore	
Abort	
Activity Monitor fail	
Alarm Aborted	Alarm was aborted
Automatic Test	7 Harri Was aborted
Battery Low Event	
Battery Low Event Restore	
Box Tamper	
Box Tamper Restore	
Burg Alarm	
Burg Alarm Restore	
Bypass	
Bypass Restore	
Cancel	
Checksum Fault	
Checksum Fault Restore	
Clock Changed Close	
Communication Failure	
Communication Failure Restore	
Cross Zone initial trip	
Cross Zone initial trip Restore	
Device Enrolled	
Device Failure	
Device Failure Restore	
Door Access	
Door Access Denied	
Door Forced	
Door Forced	
Door Propped	
Door Propped	
Duress	
Early Opening	
Early Opening	
End Listen In	
End Local Program	
End Remote Program	
End Walk Test Mode	
End Sensor Test	
Exit Error	
Expander DC Loss	
Expander DC Loss Restore	
Expander Low Battery	
Expander Low Battery Restore	
Fail To Close	
Fail to Open	
Fire Alarm	
Fire Alarm Restore	
Fire Maintenance Alarm	

Fire Maintenance Alarm Restore	
Fire Supervision	
Fire Supervision Restore	
First Open	
Ground Fault	
Ground Fault Restore	
Guard Tour Fail	
Keypad Lockout	
Last Close	
Late Closing	
Late Opening	
Mains Fail Event	
Mains Fail Event Restore	
Man Down	
Manual Audible Panic	
Manual Fire	
Manual Medical	
Manual Silent Panic	
Manual Test	
Manual Test Restore	
Open	
Output Restored	
Output Restored Over Current	
Over Current Restore	
Partial Close	
Partial Open	Opening from Partial Arm
Power Up	
Power Up Restore	
Recent Close	
Remote Program Fail	
Reserved	
Reserved Sensor Event Types/Restores	
Sensor Low Battery	
Sensor Low Battery Restore	
Serial Bus Expansion Event	
Siren Tamper	
Siren Tamper Restore	
Start Listen In	
Start Local Program	
Start Remote Program	
Start Walk Test Mode	
Start Sensor Test	
System Device Bypassed	
System Device Un-bypassed	
System Shut Down	
System Turn On	Restore from system shutdown
Tamper	Nestore from System Shutuown
·	
Tamper Restore	
Technician Arrival	
Technician Left	
Telephone Fault	
Telephone Fault Restore	
Trouble	
Trouble Restore	
User Activated Output	
Valid Code Entered	
Valid Code expired	
Valid Code lost	
Valid Code out of Schedule	

Valid Code Void	
Walk Test Fail	
Walk Test Pass	
Watchdog Reset	
Wireless Jam	
Wireless Jam Restore	
Wireless Supervision	
Wireless Supervision Restore	
Sensor Activity Supervision	
Sensor Activity Supervision Restore	

# A.9 Event Reporting Class Table

Class Name	Description	
Bypass/Bypass Restore	Sensor has been isolated	
Cancel		
Communication Failures		
Don't care	Used for devices that do not classify events.	
Fire Alarm	A fire device created an alarm	
Fire Restore	A fire device restored from Alarm	
Log Only		
Non-Fire Alarm	A non-fire device created an alarm. This includes medical, panic, and burg.	
Non-Fire Restore	A non-fire device restored from alarm.	
Open/Close	An area turn on turn off	
Power Trouble	Mains and battery trouble	
Program Mode	Local or remote programming	
Recent Close/Abort		
Reserved		
Sensor Trouble/restore	Low battery or wireless supervision	
System trouble/Restore	A system trouble event or restore.	
Tampers/Tamper Restore	A tamper alarm or tamper restore.	
Test Reports	Manual or automatic test event	
Sensor Trouble/Restore	A fire sensor or day sensor is in trouble or restored from trouble.	

# A.10 Action Events: Category and Types

Action Events Category	Action Event Type	Action Events Category	Action Event Type
Sensor Events	Disabled Faulted Not Faulted Alarm Bypass Tamper Low Battery Trouble Supervision Chime Enabled Inhibited (Bypassed) Alarm Memory	User Events	Disabled PIN entered PIN Entered out of schedule Void PIN Entered Lost PIN Entered Expired PIN Entered Turn On By User Turn Off By User
	Disabled Armed Away Armed Away + Bypass Armed Partial	Logic State	Disabled Action State True Manual Output On Manual Output Off Scene Activated Action State False
	Auto Arm Warning Holdup Delay Timed Disarm Guard Tour Time Guard Tour Fail Man Down Timer Man Down Fail Entry Exit 1 or Exit 2 Exit 1 Exit 2 Silent Exit Active Exit Error Abort Window Cancel Window Sensor Cross Zone Timing Sensor Bypass Sensor Tamper Sensor Not Ready Sensor Low Battery Sensor Supervision Fault Chime On (from sensor) Walk Test (from sensor) Trouble (from sensor) Any Alarm Burg Alarm Fire Alarm Panic Alarm Auxiliary Alarm Any Siren Fire Siren Keypad Sounder DLX900 Turn off command DLX900 Turn on partial DLX900 Turn on away Manual Fire Manual Panic Manual Auxiliary User Arm Trigger User Disarm Trigger	Schedule States	Disabled Schedule State
Area Events		Device Status	Disabled Fire Alarm Verification Box Tamper Local Programming Remote Programming Battery Test Off line Power Up delay Shut Down Phone Communicator trouble Phone Line fault Ethernet Communicator Trouble Ethernet No Link Ethernet Server Fault Radio Communicator Trouble Radio No Link Communicator Active Smoke Power Fail Mains Fail Low System Battery Strobe On Siren On
		System Events	Disabled Remote Program Fail Watchdog Reset
		Room Events	Disabled Connected To Pending Connection To Privacy Talking Using Channel 1 Using Channel 2

# A.11 Action Results Category and Action Results Event Types

Action Results		Action Results	Action Results
Category	Action Results Event Type	Category	Event Type
Sensor Results	Sensor Trip Toggle Sensor Trip Sensor Restore Sensor Bypass Toggle Sensor Bypass Sensor Unbypass Sensor Chime Toggle Sensor Chime On Sensor Chime Off	User Results	User Expire or Activate User Activate User Deactivate
	Arm Away Turn Off Silence Arm Stay Toggle Arm Stay Arm Away No Auto Stay	System Results	Disabled Detector Reset Communicator Test
		Device Results	Disabled Battery Test Start Siren Device Bypass Device Unbypass
Area Results	Chime Toggle Chime On Chime Off Automatic Sensor Test Toggle Automatic Sensor Test On Automatic Sensor Test Off Auto Arm Timer Restart Disarm Timer Restart Man Down Timer Restart Guard Tour Timer Restart Hold Up Timer Restart Activity Timer Restart Arm or Disarm Test Timer Restart	Camera Results	Camera 1 Camera 2 Camera 3 Camera 4 Camera 5 Camera 6 Camera 7 Camera 8 Camera 9 Camera 10 Camera 11 Camera 12 Camera 13 Camera 14 Camera 15 Camera 15 Camera 16
Scene Results	Scene 1 Scene 2 Scene 3 Scene 4 Scene 5 Scene 6 Scene 7 Scene 8 Scene 9 Scene 10 Scene 11 Scene 12 Scene 13 Scene 14 Scene 15 Scene 16		

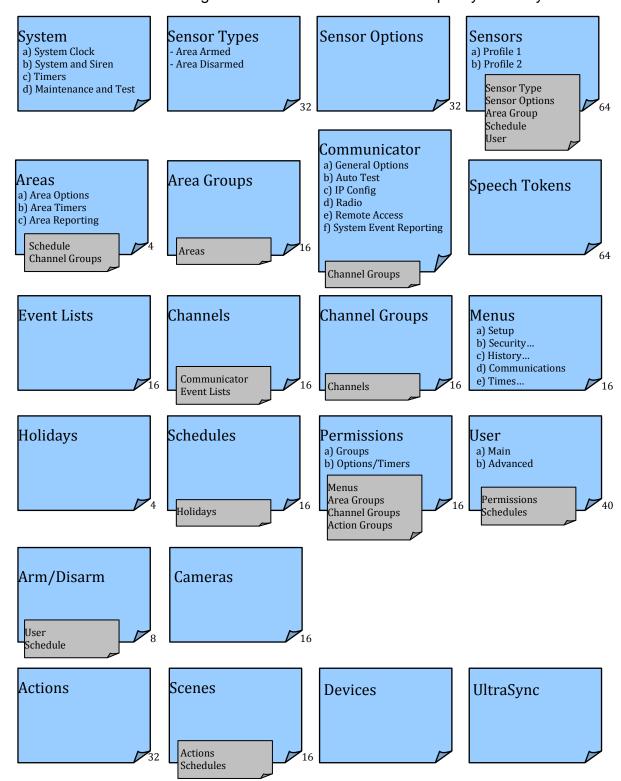
# A.12 ZeroWire Building Blocks

On the following page is the system diagram of ZeroWire showing all the different building blocks that can be used to create a ZeroWire system.

You have full flexibility to customise your system. Program each building block in turn to complete your system. We suggest left to right, top to bottom. Refine blocks as you go or use presents to save you time.

The smaller grey blocks indicate related blocks that are used by the larger blue block.

The number on the bottom right of each block indicates the capacity of the system.



### A.13 ZeroWire Menu Tree

#### The menu structure as seen from the Advanced menu in ZeroWire Web Server:

#### 1. Users

#### 2. System

- 1. System Clock
- **General Options**
- System Timers 3.
- Siren Options
- Service and Test Options
- 6. Status

#### 3. Sensors

- 1. Sensor Number
- Sensor Name
- 3. First Sensor Profile
- 4. Second Sensor Profile

#### 4. Areas

- 1. Area Number
- 2. Area Name
- 3. Area Entry-Exit Times
- 4. Area Options
- 5. Area Timers
- 6. Area Type Settings
- 7. Area Event Reporting

#### 5. Channels

- 1. Channel Number
- Channel Name
- Account Number
- 4. Format
- 5. Device Number
- Dest Phone or Email
- 7. **Next Channel**
- 8. Event List
- 9. Attempts

#### 6. Communicator

- 1. General Options
- 2. Auto Test
- 3. IP Configuration
  - 1. IP Host Name
  - 2. IP Address
  - 3. Gateway
  - 4. Subnet
  - 5. Primary DNS
  - Secondary DNS
  - 7. Wi Fi SSID
  - 8. Wi Fi Security Type
  - 9. Wi Fi Password
  - 10. Ports
  - 11. Time Server
  - 12. IP Options
- 4. Radio Configuration
- 5. Remote Access
  - 1. Panel Device Number
  - 2. Download Access Code
  - 3. Callback Server
  - 4. Download Options
- System Event Reporting
  - 1. System Channel
  - 2. Attempts

#### 7. Schedules

- 1. Schedule Number
- Schedule Name
- 3. Follow Action Number
- 4. Times and Days
- 8. Actions
  - 1. Action Number
  - Action Name 2
  - Function 3
  - 4 **Duration Minutes**
  - 5. Duration Seconds
  - 6. Event 1
  - 7. Event 2
  - 8. Event 3
  - 9. Event 4
  - 10. Result

#### 9. Arm-Disarm

- 1. Arm-Disarm Number
- Name
- 3. User Number
- 4. Schedule Number

#### 10. Devices

- 1. System Devices
  - 1. Control
- Interlogix Transmitters
  - 1. Transmitter Number
  - Serial Number
  - User
  - 4. Options
  - Scene 5.
- 3. ZWave Devices
  - 1. Name
  - Basic Type
  - Generic Type
  - 4. Specific Type

#### 11. Permissions

- 1. Permission Number
- 2. Permission Name
- 3. Control Groups
- 4. Permission Options
- **User Timer Options** 5.

#### 12. Area Groups

- 1. Area Group Number
- 2. Area Group Name
- 3. Area List

## 13. Menus

- 1. Menu Number
- 2. Menu Name
- 3. Menu Selections

#### 14. Holidays

- 1. Holiday Number
- 2. Holiday Name
- 3. Date Range

#### 15. Sensor Types

- 1. Sensor Type Number
- Sensor Type Name
- Sensor Type Armed
- 4. Sensor Type Disarmed

#### 16. Sensor Options

- 1. Sensor Options Number
- 2. Sensor Options Name
- 3. Sensor Options
- Sensor Reporting
- 4.
- Sensor Contact Options
- Sensor Report Event

#### 17. Event Lists

- 1. Event List Number
- 2. Event List Name
- 3. Event List

### 18. Channel Groups

- 1. Channel Group Number
- Channel Group Name
- Channel List

### 19. Scenes

- Scene Number 2. Scene Name
- 3. Activate Schedule
- 4. Activate Event Type
- 5. Activate Sensor

#### Scene Actions 6.

20. Speech Tokens

#### 1. Sensor Tokens

- 21. Cameras Camera Number 1.
  - 2. Camera Name
  - LAN IP Address
  - 4. MAC Address

# 22. UltraSync

- 1. Web Access Passcode
- Ethernet Server 1
- Ethernet Server 2
- Ethernet Server 3 4
- Ethernet Server 4 5. Wireless Server 1
- 7. Wireless Server 2 8. Wireless Server 3 9. Wireless Server 4

# **Specifications**

Operating Temperature...... 0 to 50 Degrees Celsius

Back Up Battery...... Rechargeable Ni-MH battery pack

# **UL SPECIFICATION**

General: The UL Listed system consists of the following features and compatible devices:

#### **Electrical:**

9VDC Power Supply:

UL Listed (E365620) Huizhou Zhongbang Electronic Co Ltd, Model ZB-A090020A-J.

Input: 100-240VAC 50/60 Hz, 0.6A max

Output: 9 VDC, 2A

Backup Battery Pack: Golden Power, Model 6MR2300AAH4A 7.2 VDC. 2300 mAh. Ni-MH

#### **Software Version:**

1.x

#### **Installation Notes:**

The system shall not be programmed to add input from the Web Server, UltraSync App, and Wi Fi to smartphone.

The chime feature is only to be used in the disarm stage. It is not to be used as the main audible alarm.

During the test mode, test AC and Battery every week by disconnecting AC power and verifying 5 minutes of emergency signaling. Reinstall restraining means of power plug.

Replace the battery pack every three (3) years.

The RF jamming signal is announced by the voice message "RF signal blocked" repeats until code is entered.

### **Compatible Receivers:**

Operation has been verified with industry standard SIA Contact ID format. It is the Installer's responsibility to verify compatibility between the panel and the receiver used during installation. The Installer shall verify the compatibility of the receiver and the system on a yearly basis.

## **Listings and Approvals:**

UL:

ANSI/UL 985 **Household Fire Warning** ANSI/UL 1023 Household Burglar

ANSI/UL 1637 Home Health Care Signaling

cUL:

ULC S545 - Residential Fire Warning System Control Units

ULC/ORD-C1023 - Preliminary Standard for Household Burglar Alarm System Units

SIA:

ANSI/SIA CP-01-2010 False Alarm Reduction

# **Minimum System Configuration:**

Control Panel Model ZW-6400 for use with the following UL Listed accessories manufactured by UTC:

TX-1012-01-1, TX-1012-01-3 DOOR CONTACT

60-362N-10-319.5 DOOR CONTACT

TX-6010-01-1 SMOKE DETECTOR

60-848-02-95 SMOKE DETECTOR

60-703-95 PIR

60-639-95R PIR

#### Abort:

Consult with your Installer to determine if your system is configured with a communicator delay. A communicator delay will prevent a report to the central station if the control panel is disarmed within 30-45 seconds after an intrusion alarm is triggered. **Note:** Fire-type alarms are normally reported without a delay.

#### Quick exit:

Use the guick exit feature when someone wants to briefly leave while the home is still armed (for instance to get the newspaper). This feature needs to be enabled by your Installer. When you press the **DISARM** button, the display shows *Exit Time is On*. This allows a designated exit door to be open for up to two minutes without triggering an alarm.

Note: The designated door may be opened and closed only once. If you close the designated door behind you when you exit, you will have to disarm the system upon reentering. Leave the designated door open while using the guick exit feature.

Note: The designated door may be opened and closed only once. If you close the designated door behind you when you exit you will have to disarm the system upon reentering. Leave the designated door open while using the quick exit feature.

# Exit delay extension:

If enabled by your Installer, the Exit Delay extension feature will recognize when you arm the system, leave your house and then quickly re-enter your house (such as you would if you forgot your car keys.) In such a case ZX-6400 will restart your exit delay to give you the full exit delay again.

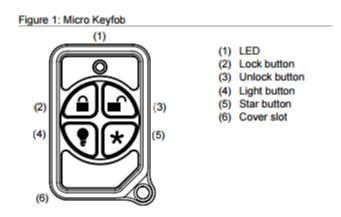
### **Exit Progress Annunciation:**

A pulsating audible sounds throughout the duration of the Exit Time to indicate that the exit period is in process. A rapid pulsating audible sounds during the last ten (10) seconds of the Exit Time to indicate that the Exit Time is running out.

# **Entry Progress Annunciation:**

A pulsating audible sounds upon entry to indicate that the Entry Delay has begun.

Remote Control Devices: UTC model 6001064-95R



# **Keyfob operation / System Acknowledgement:**

**Unlock button.** Disarm the system. LED light momentary on and two squawks from the control panel

Lock button. Arm the system. LED light momentary on and two squawks from the control

**Light button.** Toggle system-controlled lights on/off (if programmed).

**Star button.** As programmed in the system.

When the battery is low, the LED light will not turn on when buttons are pressed, and the keyfob will not operate.

# Canceling and preventing accidental alarms:

One of the biggest concerns you might have regarding your security system is causing an accidental alarm. Most accidental alarms occur when leaving the residence after arming the system or before disarming the system upon your return.

Alarms are canceled by entering a valid master or user code within the minimum cancel window of five (5) minutes. After alarms are canceled, the system will be disarmed.

# **Recent Closing:**

Enabled (2-minute window)

# **Sensor Tripping Instructions:**

Sensor	Action		
Door/window	Open the secured door or window.		
Carbon monoxide alarm	Press and hold the <b>Test/Hush</b> button (approximately 5 seconds) until the unit beeps two times, and then release the button.		
Glass break	Test with an appropriate glass break sensor tester.		
Motion sensor	Avoid the motion sensor field of view for 5 minutes, and then enter its view.		
Smoke	Press and hold the test button until the system sounds transmission beeps.		
Keyfob	Press and hold the <b>Lock</b> and <b>Unlock</b> buttons simultaneously for 3 seconds.		
Remote touchpad	Press and hold the two <b>Emergency</b> buttons simultaneously for 3 seconds.		

# **SIA CP-01-2010 Programmable Features**

Your ZeroWire panel is shipped with preset defaults to comply with the Security Industry Association CP-01 Standard. The relevant settings are listed below and should not be changed to maintain CP-01 compliance.

FEATURE	REQUIREMENT	RANGE	SHIPPING DEFAULT
Exit Time	Required (programmable)	For full or auto arming: 45 sec 2 min. (255 sec. max.)	60 Seconds
Progress Annunciation / Disable - for Silent Exit	Allowed	Individual keypads may be disabled	All annunciators enabled
Exit Time Restart	Required Option	For re-entry during exit time	Enabled
Auto Stay Arm on Unvacated Premises	Required Option (except for remote arm)	If no exit after full arm	Enabled
Exit Time and Progress Annunciation / Disable - for Remote Arm	Allowed Option (for remote arm)	May be disabled - for remote arming	Enabled
Entry Delay(s)	Required (programmable)	30 sec 4 min. **	30 Seconds
Abort Window – for Non-Fire Sensors	Required Option	May be disabled - by sensor or sensor type	Enabled
Abort Window Time  – for Non-Fire Sensors	Required (programmable)	0 sec 45 sec. **	30 Seconds
Abort annunciation	Required Option	Annunciate that no alarm was transmitted	Enabled
Cancel Window	Required	Minimum duration of the window shall be five (5) minutes.	
Cancel Annunciation	Required Option	Annunciate that a Cancel was transmitted	Enabled
Duress Feature	Allowed Option	No automatic derivative of another user code  No duplicates with other user codes	Disabled
Cross Zoning	Required Option	Programming needed	Disabled
Programmable Cross Zoning Time	Allowed	May Program	Per manufacturer
Swinger Shutdown	Required (programmable)	For all non-fire sensors, shut down at 1 to 6 trips	Two trips
Swinger Shutdown Disable	Allowed	For non- police response sensors	Enabled
Fire Alarm Verification	Required Option	Depends on panel and sensors	Disabled
Call Waiting Cancel	Required Option	Depends on user phone line	Disabled

#### Smoke and heat detector locations:

Selecting a suitable location is critical to the operation of smoke alarms. *Figure 2* shows some typical floorplans with recommended smoke and heat detector locations. Use these location guidelines to optimize performance and reduce the chance of false alarms:

- Before mounting alarms, program (learn) them into memory and do a sensor test from the alarm's intended location to ensure good RF communication to the panel.
- Locate the alarm in environmentally controlled areas where the temperature range is between 40 and 100°F (5 and 38°C) and the humidity is between 0 and 90% noncondensing.
- Locate alarms away from ventilation sources that can prevent smoke from reaching the alarm.
- Locate ceiling mounted alarms in the center of the room or hallway, at least 4 in. (10 cm) away from any walls or areas.
- Locate wall mounted alarms so the top of the alarm is 4 to 12 in. (10 to 31 cm) below the ceiling.
- In rooms with sloped, peaked, or gabled ceilings, locate alarms 3 ft. (0.9 m) down or away from the highest point of the ceiling.
- When mounting to suspended ceiling tile, the tile must be secured with the appropriate fasteners to prevent tile removal.

**Note:** Do not mount the alarm to the metal runners of suspended ceiling grids. The metal runners can draw the magnet's field away from the alarm's reed switch and cause a false tamper alarm.

Required smoke detector

Optional smoke detector

Optional smoke detector

Hall Bedroom

Bedroom

Bedroom

Bedroom

Living room

Bedroom

Figure 2. Smoke and Heat Detector Locations:

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