

# **Using VeriComm®**

**Orenco Systems, Inc.** 



## **What We Will Cover**

- What is VeriComm?
- The VeriComm panel
- The VeriComm website
- How does it work?



#### What is VeriComm<sup>®</sup>

- VeriComm is a two-part program
  - The VeriComm panel
    - At the site
    - Connects to the web
    - Monitors the wastewater system
    - Logs system data
  - The VeriComm website
    - The bridge between the service provider and the panel
    - Communicates with the system operator/service provider
    - Provides recommended actions for every alarm/alert condition
    - Tracks all sites the service provider is responsible for

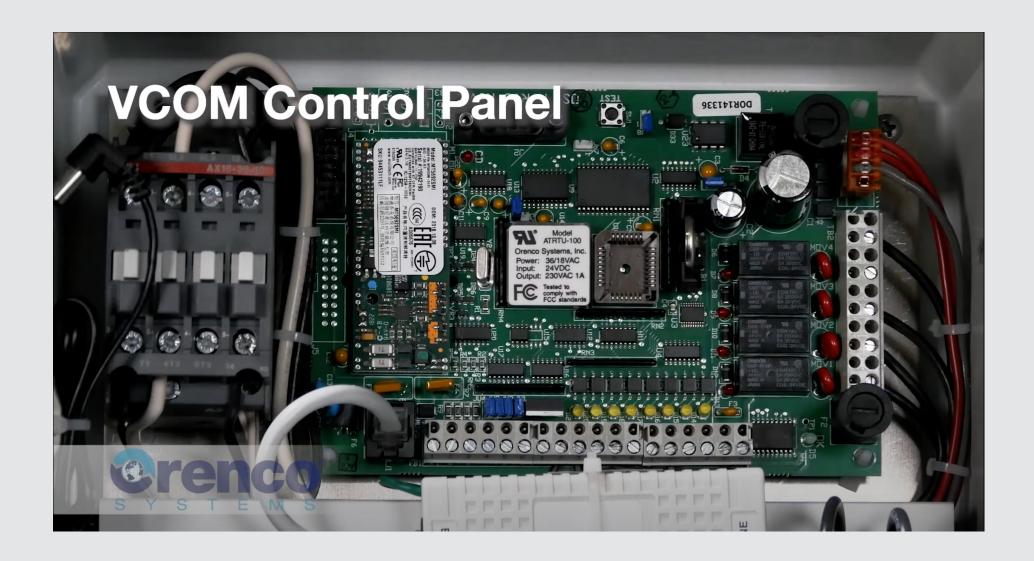


## The VeriComm® Panel





## The VeriComm® Board





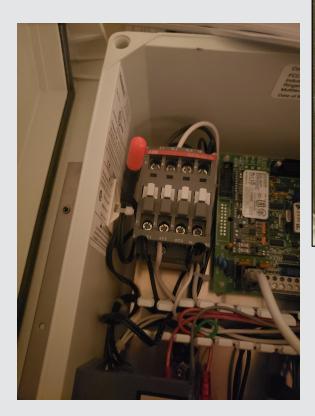
## **Communication Options**

- Remote communication options
  - Built in modem (older boards only)
  - IP adapter (available since 2008)
  - Future adapter (ex. cellular modem)
- There are two ways to access panel data in the field
  - Direct plug-in using your laptop
  - Wireless connection using Bluetooth®



## **VCOM-IP** Panels

- VCOM-AX20B1IP
- VCOM-AX20B1/PTIP(DRIP)
- VCOM-AX20B1UVIBIP
- IP upgrade kit
- IP retrofit kit







## **VeriComm® Cellular Connection**

- Available, but currently custom
- Uses Verizon 4G cellular network



## **Bluetooth® Overview**

#### Kit and Accessories

- Bluetooth® Device
- AC Adapter

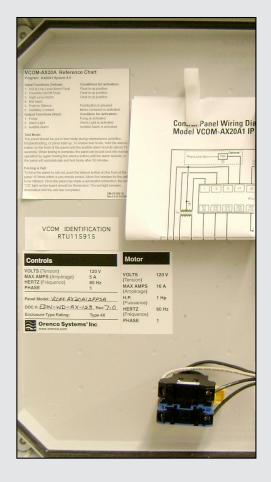
#### Recommended Hardware

- Laptop
- Android-based phones and tablets

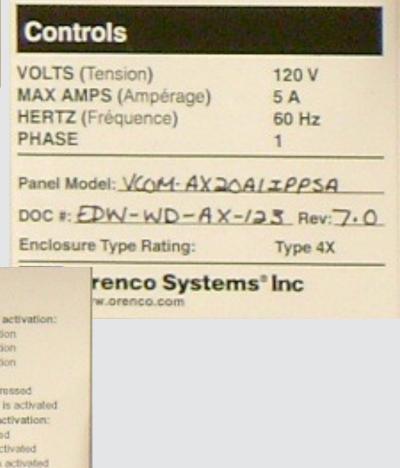




## **Important Information**



VCOM IDENTIFICATION RTU115915



Program: AX20A1 System 4.0

#### Input Functions (Yellow):

1. RO & Low Level Alarm Float 2. Override On/Off Float

3. High Level Alarm

4. Not used

5. Push to Silence

6. Applicary Contact Output Functions (Red):

1. Pump

2. Alarm Light

3. Audible Alarm.

#### Conditions for activation:

Float in up position

Float in up position

Float in up position

Pushbutton is pressed

Motor contactor is activated Condition for activation:

Pump is activated

Alarm Light is activated Audible Alarm is activated

#### Test Mode:

The panel should be put in test mode during maintenance activities, troubleshooting, or panel start-up. To enable test mode, hold the silence



## **VCOM-IP Programs**

- DAXRO
- DAXPTRO
- S1PTRO
- S1PTROUV
- S1RO

- AX20A1
- AX20AUV
- DAXPTROUV
   AX20B/PTDRIP
  - AX20B/PTUVDRIP
  - AX20B1
  - AX20BDRIP
  - AX20PTUV



# **Panel Operation Intro**

- Basic control logic
- Advanced control logic
- Data collection and utilization
- Troubleshooting and diagnostic logic
- Communications



#### **Test Mode**

- Hold the push to silence button for ~20 seconds
- Shortens the recirc timer settings
- Eliminates any stuck float logic
- Eliminates the audible alarm delay
- Eliminates data logging
- Prevents the panel from calling out for alarm/alert conditions
- Lasts for 30 minutes



## What Happens in an Alarm Condition?

- Panel will attempt to communicate to the VeriComm monitoring system via phone or IP connection
- The VeriComm monitoring system notifies the alarm contacts via email
- The panel will attempt to keep the system in as normal a state as possible

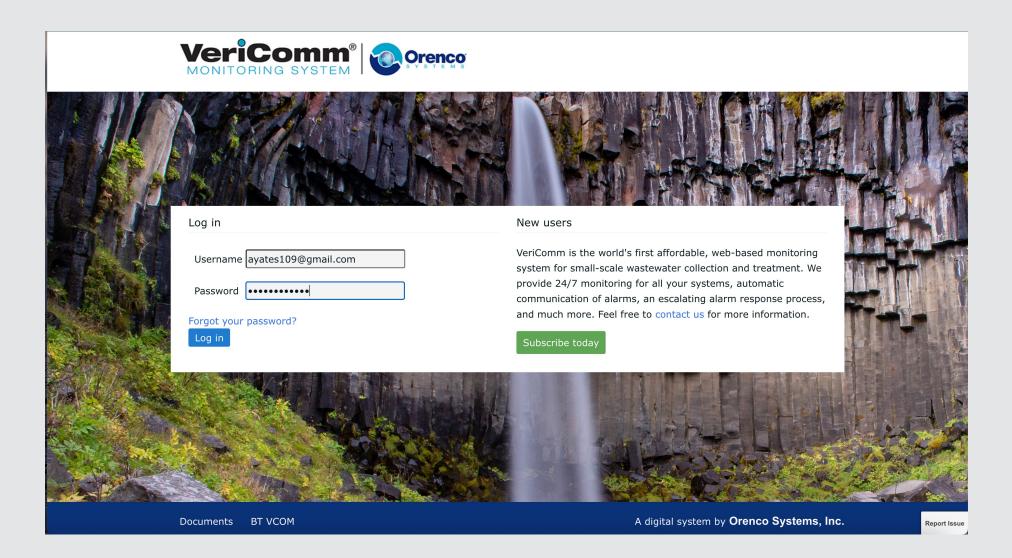


## What Happens When a Float Fails?

- The panel will communicate with the VeriComm monitoring system via phone or IP connection
- The VeriComm monitoring system will email the alert contact of the system fault
- The panel will continue to operate normally by utilizing trend data established during the first 30 days of operation



### The VeriComm® Website



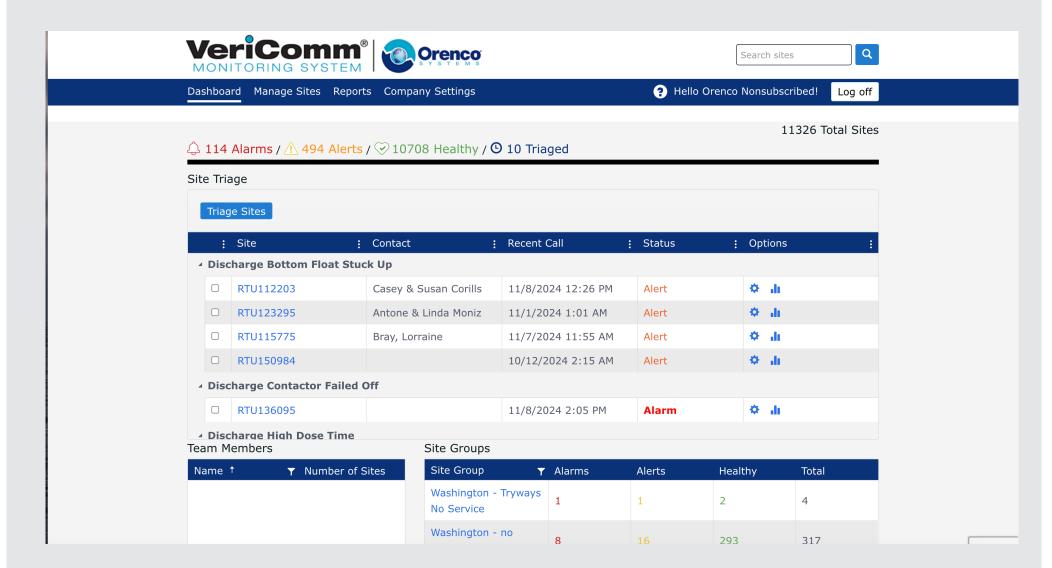


## **Site Definitions**

- Triage Grid
- Site
- Site Group
- Alert
- Alarm
- Permissions
- Notifications
- Call data

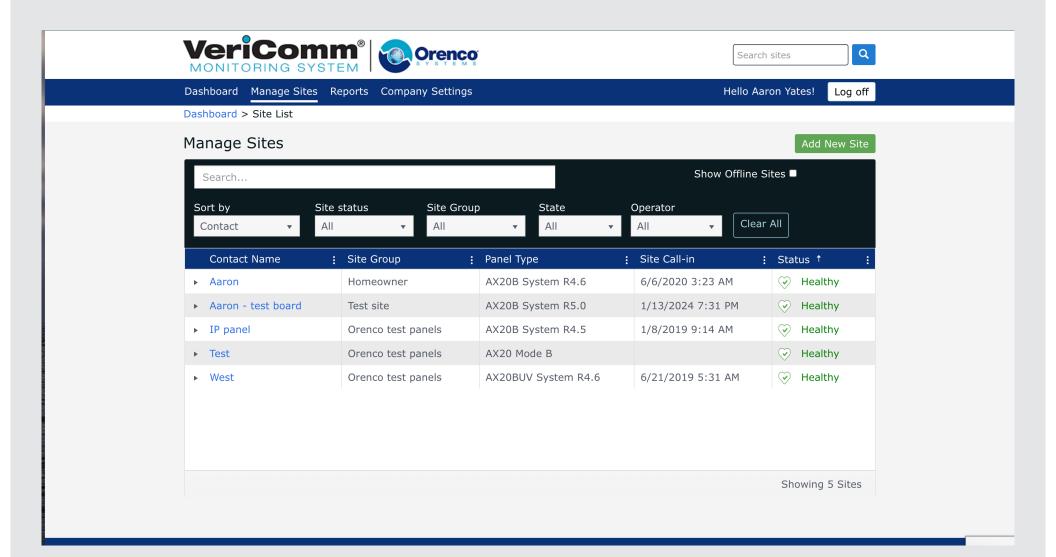


## **Addressing Alarms and Alerts**



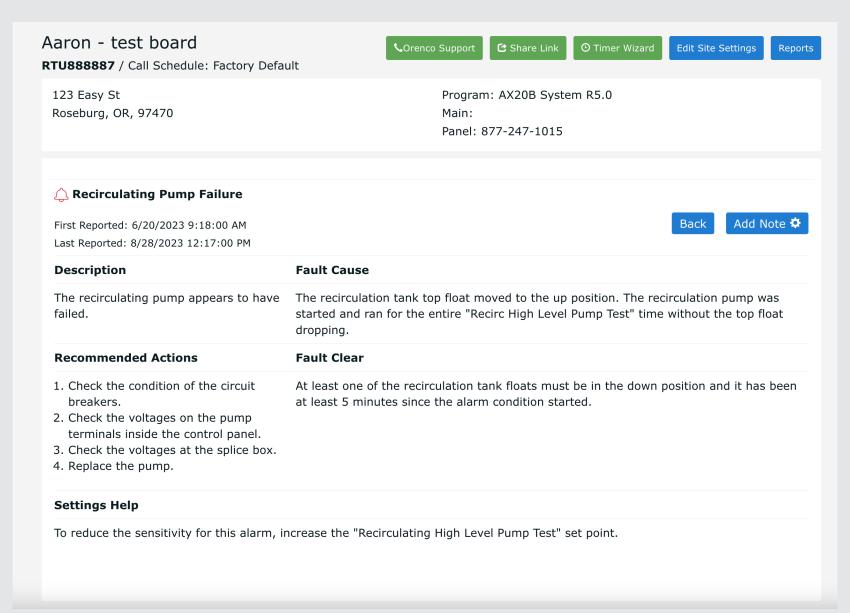


# **Managing Sites**



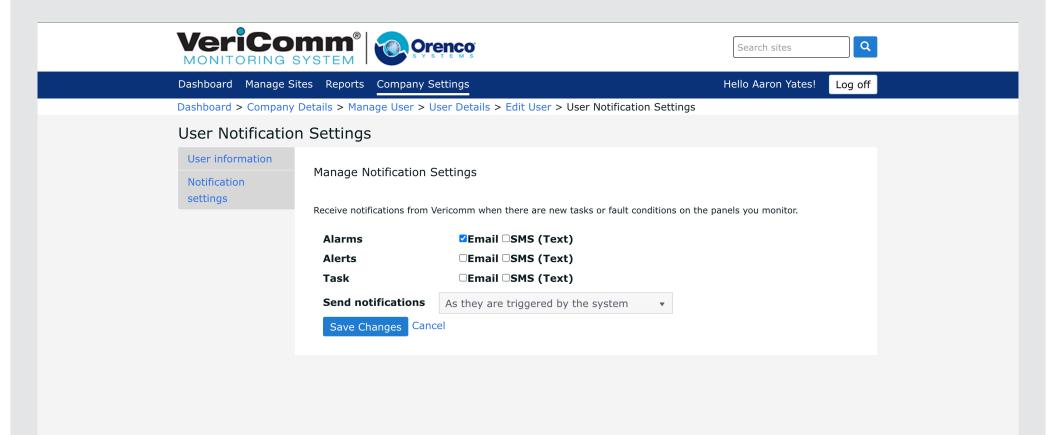


## **Fault Conditions**





## **Operator Communication**





# **Remote Settings Changes**

#### Edit Site - Advanced Settings

General
Information
Graph Settings
Panel Settings

Data	point	Settings

Point Group All ▼

The default value for Duration is Zero (for a permanent change). You can set it to the desired value.

Po <b>y</b>	Point <b>y</b>	Orenc	Last Known Value	New Value	Duration
17	Recirc Off Cycle Time	19.7	19.7 Minutes (Automatic)		
18	Recirc On Cycle Time	0.3	0.3 Minutes (Automatic)		
19	Recirc Override Off Cycle Time	9.7	9.7 Minutes (Automatic)		
20	Recirc Override On Cycle Time	0.3	0.3 Minutes (Automatic)		
21	Recirc Minimum Override Cycles	3	3.0 Cycles (Automatic)		
22	Recirc Override Cycle Limit per Day	7	7.0 Cycles (Automatic)		
23	Recirc Time Limit per Day	75	75.0 Minutes (Automatic)		
24	Recirc High Level Pumn Test	2	2.0 Minutes		

Save Cancel



## **Call Scaling**

- Limit the number of calls the system can make during sustained alarm conditions
- Most alarm conditions follow a 2/4/8/24 hour routine
- Alerts are automatically scaled to 24 hours



## **Summary**

- Provides affordable, invisible, <u>round-the-clock supervision</u> of onsite systems, saving time and money in O&M
- VeriComm<sup>®</sup> gives you ...
  - Verification of system performance
  - Automatic notification of fault conditions
  - Diagnosis of the problem
  - Recommendations for action
  - Ability to change timer settings and other key operating parameters remotely
  - Secure Web access to system and site information
  - Standard reporting
  - Invisible utility



#### Solutions for Decentralized Wastewater Treatment

**Questions?** 

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