Global Water

Instrumentation, Inc.

11390 Amalgam Way
Gold River, CA 95670
T: 800-876-1172
Int'l: (916) 638-3429, F: (916) 638-3270

High Water Alarm
WA400-DC
WA400-AC
WA400-BU
WA400-FS
WA400-AL

10/23/06
P/N: 01-527

Global Water
800-876-1172 • globalw.com

Congratulations on your purchase of the Global Water WA400 High Water Alarm. This instrument has been quality tested and approved for providing accurate and reliable measurements. We are confident that you will find the WA400 to be a valuable asset for your application. Should you require assistance, our technical staff will be happy to help.

Table of Contents

I. WA400 Checklist

a. High Water Alarm

b. Mounting brackets (x2)

c. WA400 Manual

d. 115 V AC-to-12 VDC Transformer (-AC, -BU and –AL models only)

II. Inspection

a. Your WA400 unit was carefully inspected and certified by our Quality Assurance Team before shipping. If any damage has occurred during shipping, please notify Global Water Instrumentation, Inc. and file a claim with the carrier involved.

Use the checklist to ensure that you have received everything needed to operate the WA400.

III. Operation

The High Water Level Alarm will sound a loud speaker and flash a bright red strobe when a switch closure signal is detected. This signal is usually from a water level sensor, but can be integrated with other equipment such as our PC300 controller or any device that has a dry contact switch output. The WA400 also has the ability to output a switch closure signal to control an external device simultaneously such as samplers, pump panels, and security switches.

IV. Models

WA400-DC

The WA400-DC battery powered version may be quickly deployed in temporary emergency applications or anywhere you need a level alarm where no AC power is available. The unit will strobe and sound for up to 12 hours on its eight standard 1.5 volt AA batteries. *Please note that the WA600 (or any other powered sensor) should NOT be used with the WA400-DC model*

WA400-AC

The WA400-AC externally powered version allows you to the use the alarm with water level sensors, any standard float switch, or any contact closure.

WA400-BU

Our WA400-BU version includes an automatic battery backup in addition to standard AC power– a great feature if your AC power source may be unreliable.

WA400-FS

Liquid Level Float Switch with 8 AA 1.5 VDC battery power for remote sites without AC power

WA400-AL

Water Level Alarm Sensor with 115 VAC power

V. Specifications

Input: Contact Switch Closure (40mA load)

Outputs: • 12 VDC (switched) power terminals
                                                Rating: (25mA Max)
                                                • Contact Switch Closure
                                                Rating: (5A @ 30V DC)

Operating Voltage: **WA400-DC:** 1.5 V DC AA Batteries (x8)
                                                WA400-AC: 115 V AC
                                                WA400-BU: 115 V AC with
                                                1.5 V DC AA Batteries (x8) battery backup
                                                WA400-FS: 1.5 V DC AA Batteries (x8)
                                                WA400-AL: 115 V AC

                                                Use appropriate AC converter if needed

Visual Alarm: Strobe w/red lens (approx. 1 Hz)
Audible Alarm: 95dB, 2900 Hz sounder (@ 10 cm)
Enclosure: PVC, weather resistant w/wall brackets
Weight: 2.5 lbs (1.1 kg) without sensor
Dimensions: 14″ long x 2-1/2″ diameter
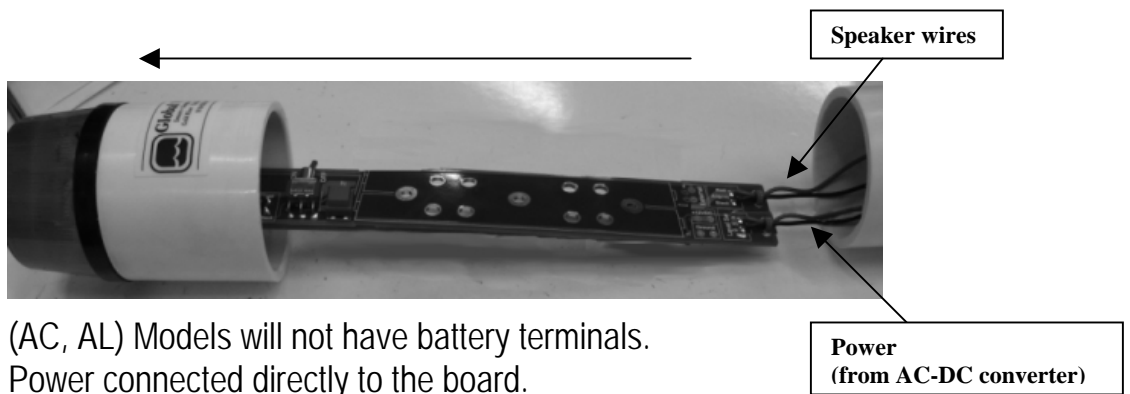   (35.5cm long x 6.4cm diameter)

VI.   High Water Alarm Installation

a. Slowly remove top cap to access power compartment and Input/Output terminals. **Be careful not to snag or break any wires of the sensors or alarm.**

(DC, FS) models will have battery terminals.

(AC, AL) Models will not have battery terminals. Power connected directly to the board.

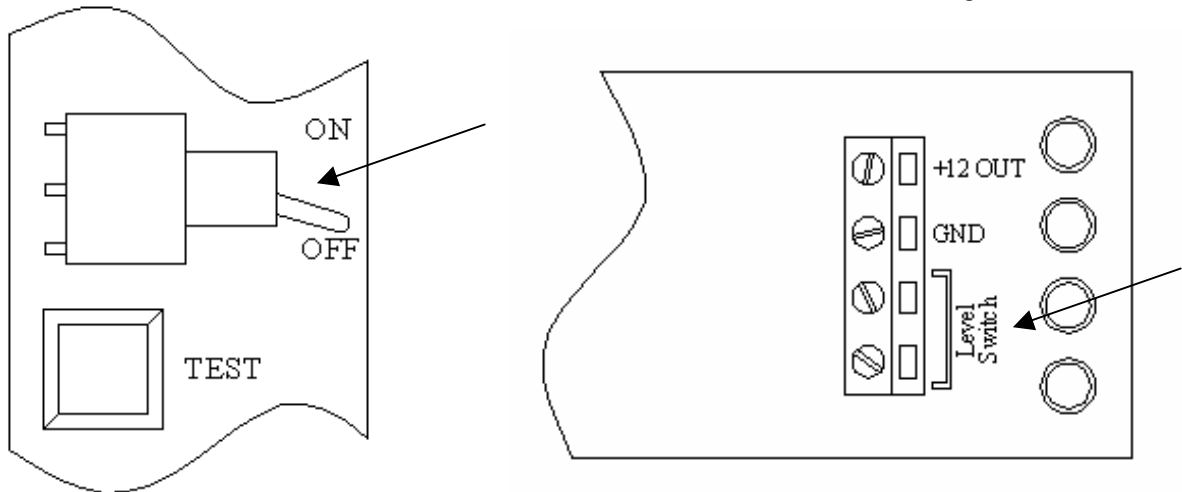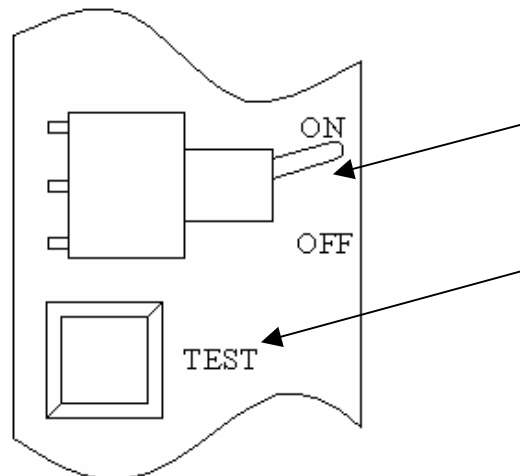Note: (BU) Model will have **both** Battery compartment and Power wires from an AC-DC converter.

b. Connect the switch closure sensor to the LEVEL SWITCH terminals. Sensor cabling should be cut to appropriate length to allow wiring and alarm board to fit into the enclosure. **Make sure power is off when connecting sensor.**

Note: Refer to manual of the attached device for correct wiring.

c. Turn the switch to the ON position to put the alarm into the active state. Alarm will only sound when sensor is triggered by alarm contact.

Test button can be used to test strobe and speaker functionality. Hold test button down for 2 seconds to activate speaker and strobe. Release button to turn off speaker and strobe once functionality is verified.
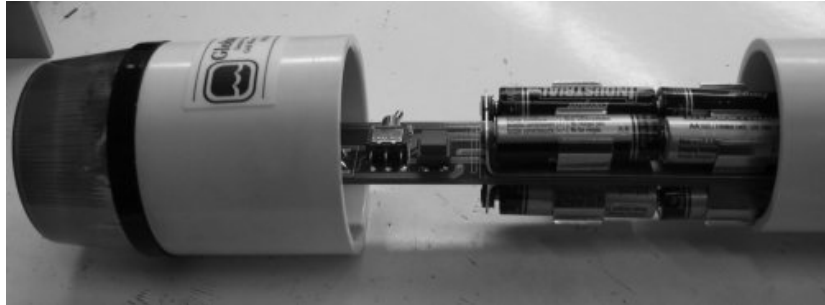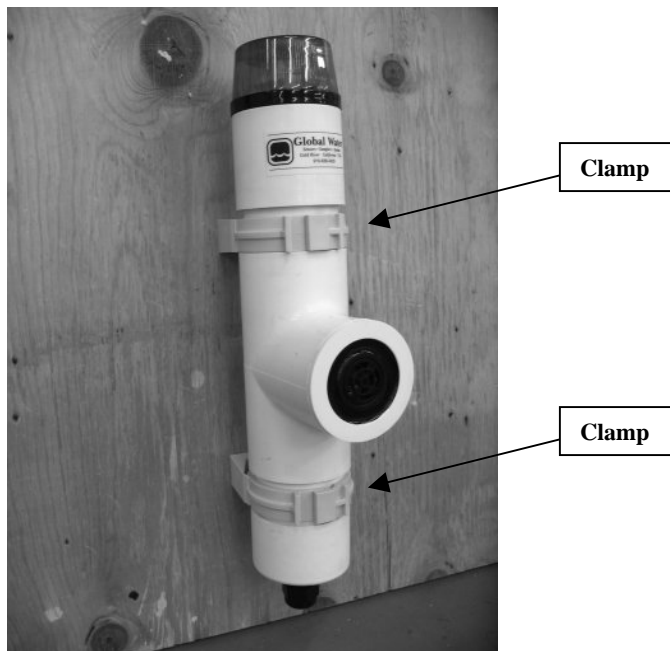
d. Slowly reinstall the top cap into PVC enclosure. **Be careful not to snag or break any wires of the sensors or alarm.**

e. Install High Water Alarm with mounting brackets (included). Drill holes for brackets at 6-3/4″ apart. Install clamps. Put the PVC housing into place by snapping clamps together.
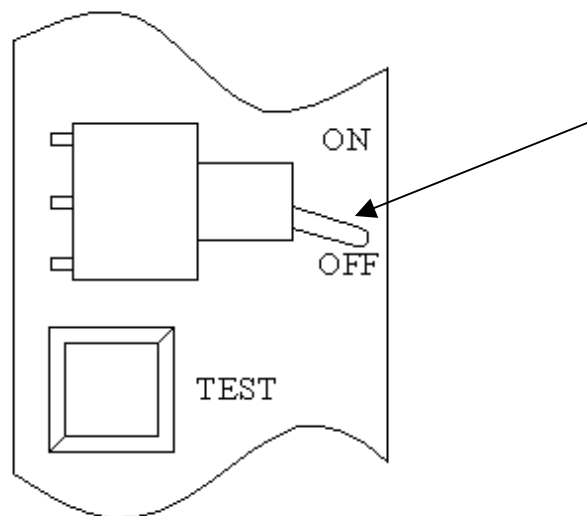

Clamp

Clamp

f. To change batteries (DC, FS, BU models only) while installed, slowly remove the top cap to access the board and batteries. **Turn the switch to the OFF position before changing batteries. Be careful not to snag or break any wires of the sensors or alarm.**
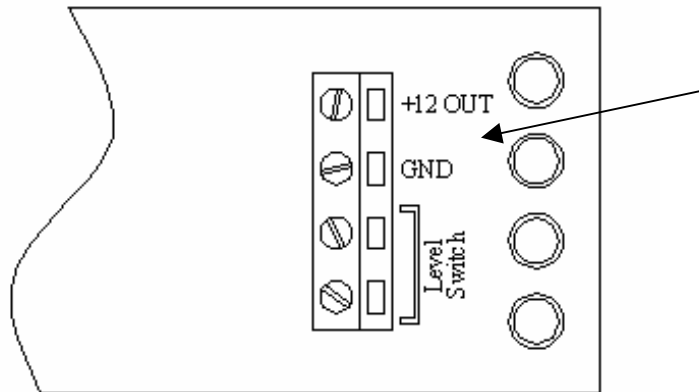

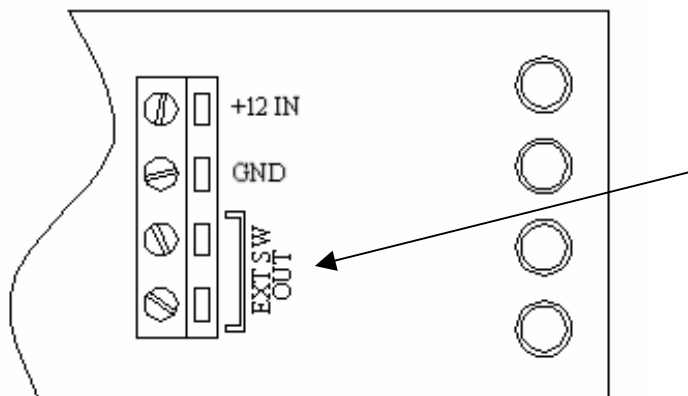g. To de-activate alarm, turn the power switch to the off position.

VII. Input/Output Terminals

a. WA400 has switched 12 V DC terminals to power an optional external device. Power switch must be ON for these terminals to output voltage.
[+12 OUT and GND]

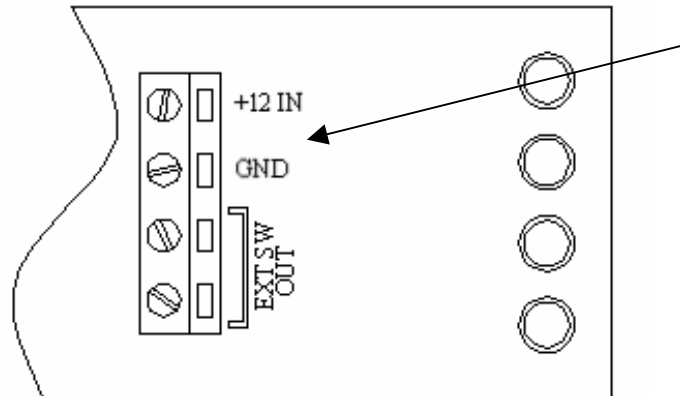b. WA400 has 1 (Normally Open) Switch Closure Output terminal to trigger an external device.
[EXT SW OUT]

c. WA400 (DC, FL models only) has the ability to connect an external DC power supply if needed. If a DC source, other than the batteries, needs to be connected, these terminals can be used.
[+12 IN and GND]

Note: AC, AL and BU models use this terminal as the power input from the AC-to-DC converter.

VIII. Maintenance

a. Check batteries for correct voltage periodically. Under typical conditions with no alarms, it is recommended that the unit and batteries be checked every month.

The unit will strobe and sound for up to 12 hours continuously on its eight standard 1.5 volt AA batteries

IX. Trouble Shooting

Issue: High Water Alarm not operating correctly

a. Verify power source is supplying correct voltage.

b. Verify correct and solid terminal connections

Other issues

c. Call us for tech support: 800-876-1172 or 916-638-3429 (many problems can be solved over the phone). Fax: 916-638-3270 or Email: globalw@globalw.com.

Be prepared to describe the problem you are experiencing including specific details of the application and installation and any additional pertinent information.

d. In the event that the equipment needs to be returned to the factory for any reason, please call to obtain an RMA# (Return Material authorization). Do not return items without an RMA# displayed on the outside of the package.

Clean and decontaminate the WA400 if necessary.

Include a written statement describing the problems.

Send the package with shipping prepaid to our factory address. Insure your shipment, as the warranty does not cover damage incurred during transit.

e. When calling for tech support, please have the following information
    ready;

    1. Model #.
    2. Unit serial number.
    3. P.O.# the equipment was purchased on.
    4. Our sales number or the invoice number.
    5. Repair instructions and/or specific problems relating to the
        product.

X.   Warranty

a. Global Water Instrumentation, Inc. warrants that its products are free
    from defects in material and workmanship under normal use and
    service for a period of one year from date of shipment from factory.
    Global Water's obligations under this warranty are limited to, at Global
    Water's option: (I) replacing or (II) repairing; any products determined
    to be defective. In no case shall Global Water's liability exceed the
    products original purchase price. This warranty does not apply to any
    equipment that has been repaired or altered, except by Global Water
    Instrumentation, Inc., or which has been subject to misuse, negligence
    or accident. It is expressly agreed that this warranty will be in lieu of
    all warranties of fitness and in lieu of the warranty of merchantability.

b. The warranty begins on the date of your invoice.