

# 12 Volt Advanced Notification System

**OPERATING INSTRUCTIONS & PARTS MANUAL** 

READ, UNDERSTAND AND FOLLOW ALL INSTRUCTIONS IN THIS MANUAL - DO NOT DISCARD. Failure to follow these instructions could result in property damage, bodily injury or death.



**WSM3300** 

# **QUICK START INSTRUCTIONS**

# **STEP 1 - VERIFY PACKAGE CONTENTS**



- Switch with clamp (1)

Requires active telephone land line service

# **STEP 2 - DISCONNECT POWER**



**A DANGER** If the power disconnect is out of sight, lock in the open position and tag it to prevent unexpected application of power. Failure to do so COULD result in fatal electric shock!

# **STEP 3 - INSTALL BACK-UP AND FLOAT SWITCH**



# **STEP 4 - INSTALL BATTERY**



# **STEP 5 - CONNECT LID TO BATTERY**



# **STEP 6 - CONNECT WIRES**



# **STEP 7 - POSITION BATTERY AND CONTROLLER**



# **STEP 8 - CONTROLLER SETUP**



controller setup, restore AC power and test the main pump as described in the operation section of the manual.



# 12 Volt Advanced Notification System

**OPERATING INSTRUCTIONS & PARTS MANUAL** 

READ, UNDERSTAND AND FOLLOW ALL INSTRUCTIONS IN THIS MANUAL - DO NOT DISCARD. Failure to follow these instructions could result in property damage, bodily injury or death.

# INSTALLATION AND OPERATING INSTRUCTIONS

# DESCRIPTION

The 12 Volt Advanced Notification System includes a DC backup sump pump, an electronic controller with digital display, and an auto-dialer. Optimal back-up power is supplied by a 12 volt battery (not included). The system is designed for home sump applications. When an electrical power outage occurs, the electronic controller automatically switches the sump pump to battery power. Power loss will initiate a phone call via the autodialer to the phone number(s) entered by the homeowner. With a 24-hour monitor and a predetermined full system check, the system tells you it's status via a digital display and alerts you to potential problems with an audible horn and phone call.

# UNPACKING

Inspect this unit before it is used. Occasionally, products are damaged during shipment. If the pump or components are damaged, contact customer service at 1-800-237-0987.

# SAFETY GUIDELINES

To help recognize this information, observe the following signal words/hazard classifications.



This is the safety alert symbol. It is used to alert you to potential bodily injury hazards. Obey all safety messages that follow this symbol to avoid possible harm.

**A DANGER** 

Danger indicates an imminently hazardous situation which, if NOT avoided, WILL result in death or serious injury.

Warning indicates a potentially hazardous

situation which, if NOT avoided, COULD



result in death or serious injury. Caution indicates a potentially hazardous situation which, if NOT avoided, MAY result in minor or moderate injury.

NOTICE

Notice indicates important information, that if NOT followed, MAY cause damage to equipment.

# **GENERAL SAFETY INFORMATION**



This pump is NOT rated for use with flammable/

combustible liquids vapors or dusts. Do NOT use to pump flammable/combustible liquids vapors or dusts. Do NOT use in a flammable and/or explosive atmosphere. Pump SHOULD be used to pump clear water ONLY. Failure to follow these instructions WILL result in bodily injury or death.



**A DANGER** 

Electric shock hazard. Disconnect power before servicing. Apply a fixed lock or tag to prevent unexpected application of power.



Electric shock hazard. DO NOT walk

A DANGER on wet floor until power is disconnected. Use a licensed electrician to perform service in accordance with the National Electrical Code and all local codes.



NEVER allow children to use pump.



WSM3300

Battery acid is corrosive. Avoid spilling on skin or clothing. Eye protection MUST be worn when handling the battery.

A check valve MUST be used on the primary and back-up sump discharge.

A ground fault circuit interrupter is required. 🛦 WARNING

A WARNING

A WARNING

NOTICE

This pump MUST only be used to pump clear water. This pump is NOT designed to handle

effluent, salt water, brine, laundry discharge, or any other application which MAY contain caustic chemicals and/or foreign materials. Pump damage MAY occur if used in these applications and WILL void warranty.

## SPECIFICATIONS

Power Supply Requirements ......120 V, 60 Hz Motor .....12 V DC Motor Pump Dimensions ......11 in. high x 8 3/4 in. base

# CONSTRUCTION

Motor Housing	Thermoplastic
Impeller	Thermoplastic
Shaft	Stainless Steel
Discharge	1-1/2 in. NPT
Float Switch	Dual Reed

# **BATTERY INFORMATION**

The system is designed to operate most efficiently with a deep cycle, sealed lead (Pb) acid (SLA) battery. A deep cycle marine battery can also be used. Sealed lead acid batteries cost slightly more, but they can last longer than a wet cell battery and are maintenance free. The oversize battery case (included) will accomodate one 12 Volt battery up to a 27-frame size. Use a new battery. Chart 1 illustrates the expected performance with various battery combinations. Do not use batteries rated below 40 amp hours. Be certain that the area around the battery is well ventilated. Before servicing the battery, blow away gasses by waving a piece of cardboard near the battery. An assistant should be present or close enough to come to your aid in the event of an emergency. Have a reliable source of fresh water and soap nearby in case battery acid contacts clothing, skin or eyes. Wear eye and clothing protection when working around lead acid batteries. Avoid touching your eyes when working around lead acid batteries.



Explosion hazard. Smoking and open flames prohibited. Battery recharging and connections MUST be performed in a well ventilated area.

## **CALIFORNIA PROPOSITION 65**



This product or its power cord MAY contain chemicals, including lead, known to the State of California to cause cancer and birth defects or other reproductive harm. Wash hands after handling.

# **A WARNING**

Chemical hazard. If battery acid contacts vour eves, immediately flush eves with copious amounts of clean, tepid water for at least 30 minutes. Seek medical attention.

REMINDER: Keep your dated proof of purchase for warranty purposes! Attach it to this manual or file it for safekeeping.

### TRANSFORMER FEATURES

- When plugged into 120VAC, the transformer automatically provides power to the battery charging circuitry.
- · The transformer can be left connected to the wall outlet indefinitely.
- The transformer is designed for the system only, DO NOT use for any other purpose.

## CONTROL BOX FEATURES

CHART 1 - STANDBY POWER PUMPING CAPACITY			
*Hours of Protection During A Rain Event If Your Sump Pump Runs			
Deep Cycle Battery Size	1X Per Min	1X Every 5 Min	1X Every 10 Min
40 A-Hr 75 A-Hr	12 Hours 23 Hours	53 Hours	92 Hours
IVA-III	20110013		

\*Assumes a typical 10 ft. rise on the discharge pipe, and 17 in. diameter sump pit. Results may vary.

#### BACK-UP PUMP:

- 1. The pump will turn on when either the bottom or top float rises.
- 2. The pump motor will keep running for 15 seconds after the float drops.
- 3. An auto-test of the back-up pump will occur every 14 days between the hours of 5pm-7pm. The controller will report any known issues and record the date of the last auto-test on the home screen.
- 4 The last known float activated back-up pump run date can be found by scrolling through the main menu selections.

## NOTICE

Installation of this unit MAY take several hours. Before disabling your main pump, have a stand by pump ready or an appropriate means of evacuating the sump.

**A DANGER** 

Electric shock hazard. DISCONNECT power before servicing. Apply a fixed lock or tag to prevent unexpected application of power.

#### PUMP INSTALLATION

- 1. Turn power to main pump off.
- 2. Pump must be installed using 1-1/4 in. or 1-1/2 in. rigid PVC piping.

#### PUMP INSTALLATION

The 12 Volt Advanced Notification System can be installed as a back-up system with a separate dedicated discharge line (Method 1), or tied into an existing sump pump line (Method 2).

- Verify that the existing AC pump is in good working order. If 1. the AC pump is questionable, replace with the same HP pump or increase the HP rating if you have experienced flooding or the pump is not keeping up with the inflow of water.
- Remove any silt or accumulated debris from the sump pit 2. and surrounding area.
- Make sure that disconnecting the AC pump will not create a 3. flood in your basement. A pump should be available to evacuate water in the event incoming water rates should change.

#### METHOD 1 (PREFERRED) - See Figure 1

Check valves MUST be installed in the NOTICE discharge line of both the main AC pump and the back-up DC pump. Failure to install the check valves MAY allow water to recirculate into the sump pit. See Figures 1 and 2.

- 1. Locate the DC pump on a solid, level surface in the sump pit. Do NOT place the pump on a loose or sandy surface. Small stones or sand may damage the pump resulting in pump failure.
- 2. This pump has a 1-1/2 in. NPT discharge. If a 1-1/4 in. discharge pipe is desired, an adapter (not included) will be necessary. Smaller diameter piping will reduce pump flow-rate and performance.
- 3. A check valve is required in the discharge line of both the Main AC pump and the Back-Up DC Pump to prevent recirculation of water into the sump pit. The system will not function without two check valves.
- Cut a 4 ft. section of 1-1/4 in. or 1-1/2 in. diameter rigid PVC pipe. Cement 1-1/4 in. or 1-1/2 in. pipe to a threaded fitting. Cement 1-1/4 in. or 1-1/2 in. pipe into pipe coupling. Attach 1-1/4 in. or 1-1/2 in. pipe section to the Back-Up DC Pump discharge adapter.
- 5. Screw into pump discharge.

NOTICE	DO NOT over tighten or cross-thread plastic fittings or check valves. USE rigid PVC or metal
pipe for permanent ins	stallation.

- 6. Place the pump with the 4 ft. section of PVC pipe on a solid, level surface in the sump pit on an elevated surface.
- 7. Attach a rubber check valve (sold separately) to the top of the discharge pipe. This will allow the pump or check valve to be removed easily for servicing.
- 8. Check valve is recommended for effective operation of svstem.

The remainder of the discharge pipe installation will vary depending on individual circumstances. Using sound plumbing practices, route the discharge pipe to an exterior wall by the shortest path. Keep turns to a minimum because they reduce flow output of the pump. The pipe that exits the building structure should be sloped downward so that water will not freeze in the pipe.

When installing the separate discharge pipe, drill through the outside wall with appropriate drilling equipment. Seal the hole to prevent water from entering.

#### METHOD 2 - See Figure 2

Check valves MUST be installed in the NOTICE discharge line of both the main AC pump and the back-up DC pump. Failure to install the check valves MAY allow water to recirculate into the sump pit. See Figures 1 and 2.

If a separate, dedicated discharge is not possible as in Method 1, the Back-Up DC Pump can be tied into the AC-operated pump's discharge pipe by installing a "Y" or "T" connector. Two check valves will be required.



- 1. Locate the Back-Up DC Pump on a solid, level surface in the sump pit. Do not place the pump on a loose or sandy surface. Small stones or sand may damage the pump resulting in pump failure.
- 2. This pump has a 1-1/2 in. NPT discharge. If a 1-1/4 in. discharge pipe is desired, an adapter (sold separately, part #66002-WYN1 WAYNE adapter or equivalent) will be necessary. Smaller diameter piping will reduce pump flow-rate and performance.
- 3. A check valve will be required in the discharge line of both the Main AC pump and the Back-Up DC pump to prevent recirculation of water into the sump pit. System will not function without two check valves.
- 4. Cut a 4 ft. section of 1-1/4 in. or 1-1/2 in. diameter rigid PVC pipe. Cement 1-1/2 in. pipe to a threaded fitting. Cement 1-1/4 in. pipe into pipe coupling. Attach 1-1/4 in. pipe section to the Back-Up DC Pump discharge adapter.



Do NOT strip or cross thread plastic fittings or check valves. Flex hose is NOT recommended. Rigid PVC or metal pipe is required for permanent installation.

- 5. Screw into pump discharge.
- 6. Place the pump with the 4 ft. section of PVC pipe on the sump floor or on an elevated surface if required.
- 7. Attach a rubber check valve (sold separately) to the top of the discharge pipe. This will allow the pump or check valve to be removed easily for servicing.
- 8. Duplicate the discharge piping arrangement for the primary AC pump if the existing discharge line has to be adjusted to accommodate a second pump.

- Glue a 45° elbow to the short pipe on the Back-Up DC Pump. Glue a "Y" adapter to the short pipe on the existing 9 pump, as shown in illustration for Method 2.
- 10. Glue a short piece of PVC pipe between the 45° elbow and the "Y".

The remainder of the discharge pipe installation will vary depending on individual circumstances. Using sound plumbing practices, route the discharge pipe to an exterior wall by the shortest distance.



#### METHODS 1 AND 2

Install float switch at least 10 in. -12 in. above bottom of sump pit so that back-up unit turns on only when the water level is higher than the normal "on" level for main pump. Make sure power wires and hose clamp ends do not interfere with float switch, pump inlet, or main pump operation. The back-up pump must not be allowed to run dry except during the 20 second "auto-test. Incoming water can not flow directly onto the float switch. Failure to position properly may cause improper operation. Position the float switch so that it will not interfere with any portion of the plumbing, wiring, or sump pit. Check for clearance by lifting both floats.



### CONTROL BOX INSTALLATION



If battery cables are reversed, damage to the transformer. controller or battery COULD result, and warranty WILL be void.



Electric shock hazard. Connect this transformer to a properly grounded



GFCI (Ground Fault Circuit Interrupter) receptacle that is rated for at least 5 amps. Test the operation of the GFCI receptacle according to the manufacture's recommended intervals.

DISCONNECT AC power before connecting or disconnecting the battery.

NOTICE

Use the system indoors, in a well ventilated

area. Do NOT expose to rain or snow. Do NOT use an extension cord. Do NOT disassemble. Be sure battery box ventilation holes are unobstructed. If dropped or damaged, do NOT operate; contact manufacturer for service.



Explosion hazard. Smoking and oper flames prohibited. Battery

recharging and connections MUST be performed in a well ventilated area. Before servicing the batteries, blow away the gases by waving a piece of cardboard near the batteries.



- 1. Place battery box and controller within six feet of the sump and a 120 VÁC separately fused outlet. The outlet must be protected by a ground fault circuit interrupter (GFCI). The area must also be clean, dry, and well-ventilated.
- Wave cardboard over batteries to blow away any gas that 2. may be present.
- 3. Connect the power wires from the 12 Volt Advanced Notification System to the battery terminals as shown in (Figure 4). Connect the red wire to the positive terminal of the battery and then connect the black wire to the negative terminal of the battery. The display should be lit up at this time. If connected improperly an alarm will sound until corrected.
- 4. Plug the pump and float switch connectors into the 12 Volt Advanced Notification System. The connections are marked. (See Step 6 in the Quick Start Guide)
- 5. Follow the on-screen instructions. Test pump operation by filling the sump with water while the main pump is unplugged. If the back-up pump operates properly, plug the transformer into the GFCI protected outlet to begin charging the battery.



Protect electrical cord from sharp objects, hot surfaces, oil, and chemicals. Avoid kinking the cord and replace damaged components immediately.



## PHONE LINE INSTALLATION

PHONE SYSTEM INFORMATION

Sharing the phone jack:

The 12 Volt Advanced Notification System and your existing phone/fax can share the same wall jack. A standard phone jack splitter also known as a line splitter (not provided) can be purchased at your local hardware store. Install as shown in Figure 5. The splitter allows independent operation of both units without interference.



#### PHONE SERVICE AND POWER OUTAGES

The 12 Volt Advanced Notification System is designed and certified by the FCC to operate on a standard telephone line and connects to a standard phone jack. The System dials out using touch tone dialing only. Must have an active phone line that is detectable by the 12 Volt Advanced Notification System.

The 12 Volt Advanced Notification System does work with DSL, Cable, or Digital phone services with the appropriate in-line filters. If the modem doesn't produce a "dial tone" it will not be able to place a phone call. If the 12 Volt Advanced Notification System is unable to place a call while using one of these services, please contact your phone service provider for assistance.

NOTICE

POWER OUTAGES: DSL, Digital, and Cable provided phone services DO NOT WORK

when AC Power is lost. The 12 Volt Advanced Notification System will NOT be able to call out if the power is out when using these phone services. A back-up battery system (UPS-uninterrupted power supply) is required to keep the modem and/or system active for a minimum of 8 hours. Check with your phone service provider for details regarding UPS sizing for your installation. Standard telephone lines are self-powered by the telephone company and usually not affected unless the phone service itself is interrupted.

## PHONE NUMBER ENTRY AND STORAGE

The 12 Volt Advanced Notification System uses an onboard auto-dialer and microprocessor to place pre-recorded phone calls regarding the status of your back-up system. The System is capable of notifying up to three phone numbers (60 digits each) of your choice. The System stores each of your phone numbers locally and will not lose or erase your phone numbers due to a power outage or battery dying. Before you start entering phone numbers, DO NOT enter phone numbers of emergency services (fire, police, or ambulance).

CELL PHONES: The 12 Volt Advanced Notification System will call all phones that a basic telephone will connect with. It does not differentiate between a cellular phone or land line phone. Cellular calls are based upon having adequate reception.

**CRITICAL STEP:** It is recommended that a person at the call-to location confirms receiving the test phone call. Validate all calls before concluding that the system setup is finished.

#### ENTERING AND CHANGING PHONE NUMBERS

When programming phone numbers into the System, enter each phone number into the phone setup screens exactly as you would when making a personal phone call.

Two phone number entry methods:

- 1. As part of the Installation Setup procedure (follow the on screen prompts) or,
- 2. From the "Home Screen", select "MENU", enter the security code (if prompted), then locate the "Phone Setup" option and then press the button for "ENTER".
  - a. You can modify, delete, or verify within this selection.
  - b. To delete any number, simply press "DEL" and it will backspace as needed.
  - c. To EDIT a number, re-enter the phone number and it will overwrite the existing number.

#### PROPER PHONE NUMBER ENTRY

System can place local calls, long distance calls, and even international calls. The use of calling cards is not recommended for they are difficult to enter and can change without notice and result in a phone call never being made.

#### Example:

\*Local Number: 123-4567

\*Long Distance: 1 (555) 123-4567

\* International: Country code, followed by 1, then the phone number. For proper dialing instructions or further assistance, contact your service provider. Enter the phone number exactly as you would when dialing a call yourself. If your local number requires the area code, enter as needed.

#### CREATING PAUSES WHEN ENTERING PHONE NUMBERS:

Some phone calls require accessing an outside telephone line from a digital system. Obtain the digit(s) necessary to access the outside line (dialing "9" to access an outside line is most common). A time delay may be required to let the system fully access the outside line and this is accomplished by entering two "stars" (\*\*) after dialing the 9.

The following examples use a "9" to access the outside phone line followed by a 2 second delay before the auto-dialer is initiated to place an automated phone call by the System:

Local call: 9\*\* then 123-4567

Long distance call: 9\*\* then 1 (555) 123-4567

#### TIME DELAYS

\*\* = 2 seconds, \*\*\*\* = 4 seconds, \*\*\*\*\* = 6 seconds

All stars (\*) must be entered in multiples of 2 or the system will not recognize them as actual time delays.

#### PHONE TEST

After entering all phone numbers, it is crucial that you test your System to verify that it can reach the call list phone numbers.

# NOTICE

The CANCEL key does not function when the System is in "test mode".

# TESTING YOUR 12 VOLT ADVANCED NOTIFICATION SYSTEM PHONE NUMBERS

To test the System, do the following:

1. Make sure the System is powered up, phone line is connected, and the "Home Screen" has no error messages.

To make sure all timers and errors are cleared from the system memory, press and hold the "RESET" button for a minimum of 3-5 seconds.

- 2. Press the MENU button followed by the "Phone Setup" option.
- 3. Scroll to the desired phone number, hit ENTER, then select the TEST option.

The system will immediately dial the desired phone number. Upon answering, the unit will play the following message: "This is a test of the back-up system." It will repeat this message for approximately "1" minute and then hang up. The display will prompt you asking if the test was successful, if Yes, it returns to the home screen. If "NO", it will retest.

4. Repeat Steps 2 and 3 to test the remaining phone numbers.

The System does not provide any indication of call success; therefore, you must verify that the call was made successfully.

#### TESTING FOR A SPECIFIC ALARM CONDITION

To test for a specific alarm condition you will have to simulate that specific alarm condition and then verify if the alarm phone calls went through. In those scenarios, you must cancel the alarm call out sequence and correct the alarm condition by pressing and holding the RESET button for a minimum of 5 seconds.

# HOW THE SYSTEM WORKS WITH VOICE MAIL OR AN ANSWERING MACHINE

When it is necessary to connect an answering machine or voice mail device to the same phone line as the System, you can still use all the features of these devices, along with being able to check status and cancel an alarm call out of the System.

#### HOW THIS WORKS:

The System can answer incoming calls to check the system status. To do this, the ring count must be set to answer on either "5" or "10" rings (default setting is 10 rings, change this setting from the Main Menu>Set Ring Count).

Set your answering machine or voice mail to answer in fewer rings than the System. (For example, if the System is set to answer on 5 rings, set the answering machine/voice mail to answer in "4" or fewer rings.) Therefore, when a call comes into the location of the System, the answering machine/voice mail will respond first because it is set to answer in fewer rings than the System.

#### **RING COUNT TIMER**

The ring count timer works in the following way: when the first call comes in during an alarm event, the internal system timer starts counting down for "3" continuous minutes. If the System receives enough rings to answer (within "3" minutes), it will respond, and the ring counter will reset to "0" regardless if the three minutes have elapsed or not. Also, the timer will reset to "0" if no additional calls are received during a three minute period (multiple calls to the System within "3" minutes will not reset the ring timer).

# CALLING THE 12 VOLT ADVANCED NOTIFICATION SYSTEM DURING AN ALARM EVENT

#### Example:

1) The back-up system is set to answer in 5 rings (ring count setting).

2) The answering machine/voice mail is set to answer in "4" rings or fewer.

To get the System to respond given the above example criteria, do the following:

1. Call the phone number of the location where the System is located, and let the phone ring "3" times and then hang up. The internal 3-minute timer starts and

# **Operating Instructions and Parts Manual**

the System tallies and remembers the number of rings.

2. On your second call within "3" minutes, let the phone ring until the System answers. The System will answer first because it remembered the first "3" rings, and then answers with an audible system status. If done properly, the answering machine/voice mail will not answer.



If the System is set to answer in 10 rings (one of the Menu selectable options), you will need to place more calls within "3" minutes to get the System to eventually answer.

#### HOW TO CANCEL ALARM PHONE CALLS FROM YOUR SYSTEM

To cancel the alarm phone call from one of the numbers in the phone call list:

To cancel a call out sequence from the System while listening to an alarm message, do the following:

- 1. Answer the phone call.
- Listen to the alarm message.
- 3. When told, press the number "1" key followed by the pound (#) key within "1" minute to cancel the alarm call out. You can cancel the call at anytime during the message.
- 4. You can listen until you hear the System say goodbye or just hang up the phone.
- 5. If you do not cancel the call, the system will call the next number in your phone number list. The first cancel will stop all calls for all numbers. This sequence will repeat every 15 minutes until a call is cancelled.

To cancel the alarm phone call using the System display:

Press and hold the RESET button once to cancel the call (phone icon is present) and the RESET up to 5 seconds if multiple errors/alarms are present on the display to stop receiving phone calls. You will then be required to also clear/reset the message(s) on the display.

Canceling the call out sequence does not NOTICE cancel an active alarm. System will continue to beep and the alarm message will be displayed on the digital display until you hit reset for each message/condition. If you do not hit reset, each alarm message on the display system will recall the phone number(s) in the last 72 hours as a reminder for the uncleared alarm conditions.

#### PLACE A PHONE CALL TO YOUR SYSTEM TO CANCEL AN ALARM

To cancel a call out sequence during an active alarm condition, do the following:

- Make the call to the System (phone number at alarm 1. location)
- Wait for the System to answer (5 or 10 rings Menu option 2. selectable)
- 3. Listen to the alarm message.
- 4. Press the number "1" key followed by the pound (#) key anytime during the message to cancel the alarm call out and then hang up the phone.

#### REMOTE STATUS CHECK

The System will answer incoming calls if a warning condition exists on the display. When no alarm issue exists, you will get a general status update. If the call out sequence has been cancelled for an alarm by pressing "1" then "#" on the phone, but the alarm condition still exists on the display, the System will answer and describe the alarm condition.

#### CANCELING AN ALARM CALL OUT SEQUENCE WITH AN ANSWERING MACHINE/VOICE MAIL DEVICE ON THE SAME PHONE LINE

To cancel the alarm call out-sequence, do the following:

### STEP ACTION

- Make the call to the System (phone number at alarm location).
- Let the phone ring the desired number of times (before the 2. other in-line answering machine/voice mail can answer), Hang the phone up.
- Call the number a second time within three minutes (The 3. System keeps track of all the rings from the previous calls, accumulates them until the total ring count matches its ring count number, 5 or 10, and then it will answer). Listen to the alarm message.
- Press the number "1" key followed by the pound (#) key 4. anytime during the message to cancel the alarm call out. Hang up the phone.

#### **OPERATION**

- After installation, the back-up pump will start once the water 1 level raises the bottom float.
- 2. The System has a charging circuitry designed to optimize the recharging time of your battery and to prevent overcharging. In addition, the control box has a time delay which keeps the pump from repeated, short cycles when it shuts off. This time delay feature will allow the pump to run 15 seconds after the switch reaches the off position.
- 3. MUTE FUNCTION: Press the mute button once to silence the alarm for 12, 24, or 48 hours (menu selectable). To turn off the mute timer, press and hold the RESET button down for 5 seconds.

## **BATTERY CARE AND MAINTENANCE**

Explosion hazard. Smoking and open flames prohibited. Battery recharging and connections MUST be performed in a well ventilated area. Before servicing the batteries, blow away the gases by waving a piece of cardboard near the batteries.

- 1. Unplug the transformer.
- 2. For batteries with top caps that can be removed, the electrolyte level should be checked and filled to manufacturer's specifications. The charge for each cell should be checked with a hydrometer. A specific gravity of 1.265 indicates the battery is at full charge. If the specific gravity of any of the cells varies more than .050, the battery should be replaced.
- If the battery fluid levels are low or battery plates are exposed, 3 refer to the manufacturer's recommendations on how to replenish properly.
- Inspect the terminals and clamps for corrosion and tightness. Clean and tighten as required.



An inexpensive hydrometer can be purchased at an automotive parts dealer.

#### **EXTENSION CORDS**

We DO NOT recommend using extension cords, but if you find it absolutely necessary then:

1. Use at least a 16 gauge cord that does not exceed 50 feet in length.

- 2. The extension cord must have a ground wire and plug pin and be connected to a properly functioning GFCI receptacle.
- 3. Make sure the connection between the transformer and extension cord are elevated off the floor.

## SECURITY SYSTEM INSTALLATION AND SETUP

lock or tag to prevent unexpected application of power.

Electric shock hazard. Disconnect

power before servicing. Apply a fixed

The advanced notification system produces auto-dialer alerts and can also notify your 3rd party home security system provider (if available). A qualified home security technician is required when making connections between the two systems. An access port is available on the back of the lid in which the gualified technician can properly connect the advanced notification system to the security system. (See Figure 5)



NOTICE

The inner shield will have to be removed during this step. Be sure not to damage any components on the control board.

At this time, you may wish to change the system settings. Since both the auto-dialer and security system cannot access the phone line at the same time, you must choose which system the software accesses first. If you wish the security system to have first priority, on the main menu, scroll to and select the "SECURITY SETUP" option, select "Security has Priority" and hit "Enter" to confirm. The factory default setting is "Back-up has Priority".

If you choose, you can test the security notification by simulating any of the security notification alerts. (See Figure 6)

NOTICE

DO NOT overtighten screw.

Replace the inner shield once all connections and tests have been validated.

#### **OPERATING INSTRUCTIONS**

- 1. To test the back-up pump, unplug the main pump and transformer and fill sump with water until the water lifts the bottom float therefore activating the back-up pump. Repeat this process two times to be sure pump is operating normally.
- 2. If pump operates normally, plug the transformer into wall outlet and plug the main pump back in. Verify the main pump is operational by repeating step 1 above.

#### FCC STATEMENT

This equipment complies with Part 68 of the FCC rules and the requirements adopted by the ACTA (American Council for Terminal Attachments). On the inside cover of your unit is a label that contains, among other information, the FCC registration number for this product. If requested, this number

www.waynepumps.com

must be provided to the telephone company.

#### PLUG AND JACK USE

A plug and jack used to connect this equipment to the premises wiring and telephone network must comply with the applicable FCC Part 68 rules and requirements adopted by the ACTA. A compliant modular plug is provided with this product. It is designed to be connected to a compatible modular jack that is also compliant. See installation instructions for details.

#### RING EQUIVALENCE NUMBER (REN)

The REN is used to determine the number of devices that may be connected to a telephone line. Excessive REN's on a telephone line may result in the devices not ringing in response to an incoming call. In most, but not all areas, the sum of RENs should not exceed five (5.0). To be certain of the number of devices that may be connected to a line, as determined by the total REN's, contact your local telephone company. The REN for this product is listed on the inside of the controller lid with the FCC identifier.

#### TELEPHONE NETWORK INTERFERENCES

If this System causes harm to the telephone network, the telephone company will notify you in advance that temporary discontinuance of service may be required. But if advance notice isn't practical, the telephone company will notify the customer as soon as possible. Also, you will be advised of your right to file a complaint with the FCC if you believe it is necessary. The telephone company may make changes in its facilities, equipment, operations or procedures that could affect the operation of the equipment. If this happens, the telephone company will provide advance notice in order for you to make necessary modifications to maintain uninterrupted service. If the equipment is causing harm to the telephone network, the telephone company may request that you disconnect the equipment until the problem is resolved. If your home has specially wired alarm equipment connected to the telephone line ensure the installation of your System does not disable your alarm equipment. If you have questions about what will disable alarm equipment, consult your telephone company or a qualified installer.

CONDITION		
PRIMARY PUMP STATUS		
AC Power Interrupted		
Primary Pump Suspect		
BACK-UP DC PUMP STATUS		
DC Pump In Operation		0 .
DC Pump Not Operable (Failed Test)		
Check Floats For Debris		
Capacity Overflow Possible		
DC Impeller Locked		
BATTERY TRANSFORMER		
Transformer Bad		$\bigcirc \bigcirc \bigcirc \bigcirc \bigcirc$
MICROPROCESSOR CONTROLLER		
Blown Controller Fuse		$\bigcirc \bigcirc \bigcirc \bigcirc \bigcirc$
12 V BATTERY STATUS		
DC Pump Under Test		1
Battery Fully Charged		1
Battery 80% Charged		1
Battery 60% Charged		1
Battery 40% Charged		
Battery 20% Charged		
Battery Dead		0000
Battery Condition Questionable		
Reverse Polarity		۲
	$(\mathbf{C})$	$\bigcirc$
MESSAGE ON UNIT SCREEN AUDIBLE ALARM	CALL PHONE	SECURITY SYSTEM

Figure 6 -Notification alerts chart

# **Troubleshooting Chart**

Message	Possible Cause(s)	Corrective Action
BACK-UP PUMP		
Pump Won't Run	<ol> <li>Connections not secure</li> <li>Low or defective battery</li> <li>Float switch stuck</li> <li>Defective or blown fuse</li> </ol>	<ol> <li>Check all connections</li> <li>Check battery and replace if low or defective</li> <li>Make sure nothing is interfering with operation of switch</li> <li>Check internal fuse located inside the controller lid. Pull the transformer from the wall outlet and remove. If the fuse is blown, replace with onboard 20 amp automotive type fuse or equivalent</li> </ol>
Motor Hums But Pump Won't Run	<ol> <li>Defective battery</li> <li>Impeller is locked</li> </ol>	<ol> <li>Check battery and replace if low or defective</li> <li>Unplug pump, remove screen, and check to see if impeller is free to turn. If impeller is locked, remove the 7 screws on the bottom of the pump to release the housing around the impeller. Remove the obstruction. Reassemble pump and reconnect</li> </ol>
Pump Runs But Pumps Very Little or No Water	<ol> <li>Check valve missing or improperly installed</li> <li>Obstruction in discharge pipe</li> <li>Discharge pipe length and/or height exceeds capacity of pump</li> <li>Low or defective battery</li> <li>Blocked vent hole</li> </ol>	<ol> <li>Check to make sure check valves installed between primary pump discharge and back-up sump pump are functioning properly</li> <li>Check for obstruction and clear if necessary</li> <li>If discharge is too high, a separate line may be required with a lower discharge height</li> <li>Check battery and replace if low or defective</li> <li>Check to make sure the back-up pump is not air locked. Locate the vent hole, inspect, and clear the hole using a pipe cleaner</li> </ol>
Pump Cycles Too Frequently	1. Check valve problem	<ol> <li>Check to make sure check valves installed between primary pump discharge and back-up sump pump are functioning properly</li> </ol>
CONTROLLER		
Flood Emergency	<ol> <li>Inflow exceeds pump rating</li> <li>Inflow exceeds pump rating</li> <li>Battery has become depleted</li> </ol>	<ol> <li>Restore AC pump</li> <li>Incorporate auxiliary pump</li> <li>Replace battery</li> </ol>
Check AC Pump	<ol> <li>Float stuck or obstructed</li> <li>Switch defective</li> <li>AC power interrupted</li> <li>Inlet clogged</li> <li>Defective pump</li> </ol>	<ol> <li>Free float</li> <li>Replace switch</li> <li>Reset breaker or GFCI outlet</li> <li>Clear debris</li> <li>Replace pump</li> </ol>
Check Back-up Pump	<ol> <li>Defective pump</li> <li>Pump jammed</li> </ol>	<ol> <li>Replace pump</li> <li>Clear obstruction</li> </ol>
Check BU Pump Fuse	1. Fuse blown	1. Replace fuse
AC Power Failure	<ol> <li>Defective wall transformer</li> <li>GFCI Tripped</li> <li>Circuit breaker tripped</li> <li>Power outage</li> </ol>	<ol> <li>Replace wall transformer</li> <li>Check for moisture and reset</li> <li>Reset breaker</li> <li>Notify Utilities Company</li> </ol>
Less Than 1 Hr Run Time	<ol> <li>Power outage</li> <li>Extended power outage</li> </ol>	<ol> <li>Notify Utilities Company</li> <li>Prepare spare battery</li> </ol>
Replace Battery	<ol> <li>Battery weak</li> <li>Battery more than 5 years old</li> <li>Discharged and left uncharged for more than 3 days</li> <li>Charging cycles exceed max</li> </ol>	<ol> <li>Replace battery asap</li> <li>Replace battery</li> <li>Replace battery</li> <li>Replace battery</li> </ol>
Replace/Inspect Float	<ol> <li>Float stuck</li> <li>Float defective</li> </ol>	<ol> <li>Clear float and debris</li> <li>Replace float</li> </ol>
Check Power Supply	1. Wall transformer defective	1. Replace wall transformer

# For Replacement Parts or Technical Assistance, call 1-800-237-0987

Please provide following information:

- Model number
- Serial number (if any)
- Part description and number as shown in parts list

Address parts correspondence to: WAYNE Water Systems 101 Production Drive Harrison, OH 45030 U.S.A.

Ref. No.	Description	Order No.	Quantity
1	Lid/Controller Assembly	60157-001	1
2	Float Switch with Clamp	60158-001	1
3	Transformer	60159-001	1
4	Back-up Sump Pump	60160-001	1



# Limited Warranty

For two years from the date of purchase, WAYNE Water Systems Division ("WAYNE Pumps") will repair or replace, at its option, for the original purchaser any part or parts of its Water Pumps ("Product") found upon examination by WAYNE to be defective in materials or workmanship. Please call WAYNE Pumps (1-800-237-0987) for instructions. Be prepared to provide the model number and the serial number when exercising this warranty. All transportation charges on Products or parts submitted for repair or replacement must be paid by purchaser.

This Limited Warranty does not cover Products which have been damaged as a result of accident, abuse, misuse, neglect, improper application, improper maintenance, or failure to operate in accordance with WAYNE Pumps' written instructions.

#### THERE IS NO OTHER EXPRESS WARRANTY. IMPLIED WARRANTIES, INCLUDING THOSE OF MERCHANT-ABILITY AND FITNESS FOR A PARTICULAR PURPOSE, ARE LIMITED TO ONE YEAR FROM THE DATE OF PURCHASE. THIS IS THE EXCLUSIVE REMEDY AND ANY LIABILITY FOR ANY AND ALL INDIRECT OR CONSEQUENTIAL DAMAGES OR EXPENSES WHATSOEVER IS EXCLUDED.

Some states do not allow limitations on how long an implied warranty lasts, or do not allow the exclusions or limitations of incidental or consequential damages, so the above limitations might not apply to you. This limited warranty gives you specific legal rights, and you may also have other legal rights which vary from state to state.

In no event, whether as a result of breach of contract warranty, tort (including negligence) or otherwise, shall WAYNE Pumps or its suppliers be liable for any special, consequential, incidental or penal damages including, but not limited to loss of profit or revenues, loss of use of the products or any associated equipment, damage to associated equipment, cost of capital, cost of substitute products, facilities, services or replacement power, downtime costs, or claims of buyer's customers for such damages.

You **MUST** retain your purchase receipt along with this form. In the event you need to exercise a warranty claim, you **MUST** send a **copy** of the purchase receipt along with the material or correspondence. Please call WAYNE Pumps (800-237-0987) for return authorization and instructions.

DO NOT MAIL THIS FORM TO WAYNE PUMP	S. Use this form only to maintain your records.
-------------------------------------	---

MODEL NO.\_\_\_\_\_ DATE\_\_\_\_\_

ATTACH YOUR RECEIPT HERE

# **Operating Instructions and Parts Manual**

Copy, cut out and save the following Quick Reference Cut-A-Way Card for your records. These are especially useful when you are not at home and need to contact the System to check the status, retrieve or cancel messages and alarms. It would also be useful to give this card to others who are on the call notification list for your System.





# Système de notification préalable de 12 volts

#### MODE D'EMPLOI ET LISTE DES PIÈCES DETACHEES

LIRE, S'ASSURER DE COMPRENDRE ET SUIVRE TOUTES LES INSTRUCTIONS DE CE MANUEL - NE PAS JETER. Le non-respect de ces instructions pourrait entraîner des dommages matériels, des blessures corporelles ou la mort.

# **INSTRUCTIONS DE DÉMARRAGE RAPIDE**

# ÉTAPE 1 : VÉRIFICATION DU CONTENU DE L'EMBALLAGE



N'inclut pas : la batterie à décharge poussée de 12 volts c.c., la prise téléphonique, la ligne téléphonique, le tuyau et les raccords nécessaires.

- Transformateur (1)
- Assemblage couvercle et contrôleur (1)
- Boîte de batterie (1)
- Pompe de secours de 12 volts c.c. (1) Interrupteur avec pince (1)

Requiert un service de ligne terrestre téléphonique actif

# ÉTAPE 2 - METTRE HORS TENSION



A DANGER Si la source de courant n'est pas visible, verrouiller en position ouverte (arrêt) et étiqueter pour éviter tout rétablissement inattendu de l'électricité. Le nonrespect de cette directive POURRAIT entraîner une décharge électrique mortelle !

## ÉTAPE 3 - INSTALLER LA POMPE DE SECOURS ET L'INTERRUPTEUR À FLOTTEUR



# ÉTAPE 4 - INSTALLER LA BATTERIE



**WSM3300** 

#### Noir Noir

# ÉTAPE 6 - BRANCHER LES FILS



# ÉTAPE 7 - POSITIONNER LA BATTERIE ET LE CONTRÔLEUR



# ÉTAPE 8 - CONFIGURATION DU CONTRÔLEUR



© 2012, WAYNE/Scott Fetzer Company.

Pour des renseignements sur les pièces, les produits et l'entretien, visiter www.waynepumps.com

la section Fonctionnement de ce manuel.

# ÉTAPE 5 - BRANCHER LE COUVERCLE À LA BATTERIE