

NexPump Manual



<p>NexPump, Inc. Phone: 630-365-4639 Fax: 630-365-6919 Email: support@nexpump.com Web Address: www.nexpump.com</p>	<p>User's Manual 8.2-R1 NexPump is a Registered Trademark of NexPump, Inc. Copyright © 2003-2023 NexPump, Inc., All Rights Reserved Patent Pending</p>
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NexPump User's Manual

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The NexPump is the World's Most Reliable Sump Pump

Box Contents

Qty. 1 - NexPump Ai System Unit

(ANi – Wired Internet Notification Module Installed)

(ANiw – Wireless Internet Notification Module Installed)

(ENi – Wired internet with Email Notification Only)

(ENiw – Wireless internet with Email Notification Only)

Model X-Treme

Qty. 1 - Ultra Capacity Pump w/Adapter

Model X-Treme Plus

Qty. 2 - Ultra Capacity Pumps w/Adapters

Qty. 1 - Gray Sensor with SS mounting clamp (Sensor 1)

Qty. 1 - White Sensor with SS mounting clamp (Sensor 2)

Qty. 1 - Owner's Manual

Purchased Separately: (Required to operate)

1 - Deep-Cycle Marine Battery (See Battery section for more information)

You will also need to supply for installation:

- 1-1/2" or 2" rigid PVC pipe and fittings
- PVC cement and primer
- Check Valves (if applicable)

Please take a moment and review this manual before starting installation or powering up your NexPump Ai System.

Safety Instructions

SAVE THESE INSTRUCTIONS – This manual contains important safety and operating instructions for the NexPump. Follow these important safety precautions. Failure to follow safety precautions can result in personal injury or damage to the NexPump.

CAUTION - To reduce the risk of injury, charge only lead type rechargeable batteries. Other types of batteries may burst causing personal injury and damage.

Do not expose the NexPump system unit to rain or snow.

Do not install the NexPump system unit where temperatures will be below freezing (32 degrees Fahrenheit).

Do not charge a battery that may be frozen. Allow the battery to sit at room temperature before connecting to the NexPump.

If an extension cord must be used, make sure

- A. That the pins on the plug or extension cord are the same number, size and shape as those of the plug on the NexPump system unit.
- B. That the extension cord is properly wired and in good electrical condition.
- C. That the wire size is large enough for the AC ampere rating of the NexPump system unit.

Do not operate the NexPump system unit if it has received a sharp blow, been dropped, or otherwise damaged in any way – take it to a qualified serviceman.

Do not operate the NexPump system unit with a damaged cord or plug – have it replaced or repaired immediately.

Do not disassemble the NexPump system unit – take it to a qualified serviceman when service or repair is required. Disassembly may result in a risk of electric shock or fire and void the warranty.

Never pull directly on any wiring connected to pumps, battery, AC power or sensors. Disconnect by pulling on connectors only.

Never force the connectors out of place, they should disconnect and connect easily. Some connectors have safety latches, so make sure they are depressed.

Never attempt any maintenance and/or cleaning with the NexPump powered up. Risk of electric shock may result.

WARNING - RISK OF EXPLOSIVE GASES WORKING IN THE VICINITY OF A LEAD-ACID BATTERY CAN BE DANGEROUS. BATTERIES GENERATE EXPLOSIVE GASES DURING NORMAL BATTERY OPERATION. FOR THIS REASON, IT IS OF THE UTMOST IMPORTANCE THAT EACH TIME BEFORE USING YOUR NEXPUMP CONTROL UNIT YOU READ THIS MANUAL AND FOLLOW THE INSTRUCTIONS EXACTLY.

A SPARK NEAR THE BATTERY MAY CAUSE AN EXPLOSION.

Be sure the area around the battery is well ventilated.

Personal Precautions

If LEAD-ACID Battery is Used:

Someone should be within range of your voice and/or close enough to come to your aid when you work near a lead-acid battery.

Have plenty of fresh water and soap nearby in case battery acid contacts skin, clothing or eyes.

Wear complete eye protection and clothing protection. Avoid touching your eyes while working near the battery.

If the battery acid contacts skin and/or clothing, wash immediately with soap and water. If acid enters the eye, immediately flood eye with running cold water for at least ten minutes and get medical attention immediately.

When the battery fluid level is low, add distilled water in each cell until the level reaches the indicator on each cell. Do not overfill.

Precautions for All Batteries

NEVER smoke or allow a spark or flame in the vicinity of the battery.

Be extra cautious to reduce the risk of dropping a metal tool onto the battery. It might spark or short-circuit the battery or another electrical part that may cause an explosion.

Remove personal metal items such as rings, bracelets, necklaces and/or watches when working with a battery. A battery can produce a short circuit current high enough to weld a ring (or the like) to metal, causing a severe burn.

When cleaning the battery terminals be careful to keep corrosion from coming in contact with eyes.

Do not use the system unit for charging dry-cell batteries that are most commonly used with household appliances. These batteries may burst and cause injury to persons and damage to property.

NexPump Precautions

NexPump System Unit Location

- Locate the NexPump system unit as far away from the battery as the DC cables permit.
- Do not operate the NexPump system unit in an area with restricted ventilation.
- Do not set a battery on top of the NexPump system unit.
- Do not allow the NexPump system unit to sit on top of the battery.
- Do not block the NexPump system unit ventilation in any way. Allow at least six inches of free space from the fan exhaust on the right side of the NexPump unit.
- Do not install the NexPump system unit where temperatures will be below freezing (32 degrees Fahrenheit).
- Do not install the NexPump system unit where it will be exposed to outside elements.

DC Connection Precautions

The NexPump unit requires a connected marine type deep-cycle battery for proper operation. You must assure the battery is connected while the NexPump unit is operating.

When attaching the battery cables to the battery posts, secure them to insure a good connection.

The BLACK wire from the NexPump system unit connects to the NEGATIVE (-) post of the battery. The RED wire from the NexPump system unit connects to the POSITIVE (+) post of the battery.

The 'REVERSE POLARITY LED' will illuminate if the battery connections are reversed.

Battery Reversed Polarity



AC Power Requirements

The NexPump system unit must be operated from 120 volt household current from the AC outlet.

GROUNDING AND AC CORD INSTRUCTIONS

The NexPump system unit should be plugged into an outlet that is properly installed and grounded in accordance with all local codes and ordinances.

DANGER – Never alter the AC cord or plug provided. If it will not fit the outlet, have a proper outlet installed by a qualified electrician. Improper connection can result in a risk of an electric shock. An adapter should not be used with the NexPump system unit.

Important Safe Guards

Never allow other items that discharge into the sump pit to be unsecured. Unsecured items such as garden hoses, laundry hoses and other medium used to discharge water may interfere with the NexPump pumps or sensors. Be sure to secure all items that may be used to discharge water into the sump pit and verify that secured items will not interfere with any NexPump operations.

Installation Procedures

Installing the NexPump does require some plumbing expertise. You can use the installation diagrams at the end of this document as a reference for proper installation. For the X-Treme Plus NexPump system, separate discharges are recommended for maximum discharge rates and multiple output paths. If the X-Treme Plus NexPump system is installed as a backup, then you can use a WYE, however install one NexPump Pump on the straight through of the WYE and your normal electric pump on the 45 degree of the WYE. The remaining NexPump Pump should be installed as a separate discharge. You can install all the pumps in a multiple wye configuration; however this type of installation may reduce the total discharge capacity of about 15% at high discharge rates.

Points for Proper Installation

- Tighten hose clamps on check valves if applicable.
- Tighten pump adapters securely.
- Install separate discharges for maximum discharge rate.
- Make sure the RED filter screen is securely attached to each pump.
- For very narrow sump pits, pumps can be stacked on top of each other. Pump 1 must be the lowest pump.

IMPORTANT: When using a check valve, a small 1/8" hole must be drilled in the vertical discharge pipe of each pump. DO NOT DRILL INTO THE PUMP OR THE ELBOW. The hole should be drilled at a 45 degree downward angle to prevent water spraying upwards and position the hole about 2" above the top of the elbow.

REVIEW ALL SAFETY PRECAUTIONS AND INSTRUCTIONS BEFORE PROCEEDING!

Finishing Installation

Step 1: Positioning the Sensors

Sensor 1 is the main sensor and will operate the pump(s) when the water rises above the sensor. The gray sensor should be used for Sensor 1. Sensor 2 does not operate exactly like Sensor 1, however, functions as a backup and high water alarm. (See Sensor Operations). The white sensor should be used for Sensor 2. Attach the sensors to any discharge pipe securely with the supplied stainless steel clamps (float side down, sensor cable up, mounting bracket up, remove any shipping tape). The float on each sensor should move freely up and down.

Position the sensors as described below.

Sensor 1 (Left Sensor Receptacle)

NexPump in Backup Mode:

Position Sensor 1 approximately 4 to 6 inches above the activation level of the main pump. If not, the NexPump may show the pumps have been activated prematurely.

NexPump in Primary Mode (only sump pump):

Position Sensor 1 approximately 2 to 4 inches above the pumps.

NexPump in Primary Mode (with electric sump pump):

Position Sensor 1 above the level of the NexPump pumps and below the level that the AC pump will turn on.

Sensor 2 (Right Sensor Receptacle)

Sensor 2 is used as a backup and alert for high water. When activated, the NexPump will begin operation in a special emergency mode and the 'Auto Notification' feature will alert immediately. Position Sensor 2 about six inches above all other trigger points.

Be sure the sensor is positioned vertically with the mounting bracket at the top. Verify the sensor is not tilted in any way.

IMPORTANT: If a vent hole is drilled in the discharge pipe, make sure a sensor or sensor clamp does not block the vent hole. Do not position the sensor on the side of the discharge pipe facing the drain tile or any incoming rush of water.

Step 2: Secure Wires

Secure the pump and sensor wires to discharge pipes with nylon wire ties.

IMPORTANT: Make sure the wire ties or wires do not interfere with the operation of the sensor.

Step 3: Position Battery and System Unit

Place the battery in a battery box (if used) on the floor or on a secure shelf, rack or ledge. Position the NexPump system unit in a secure place, ideally above the floor. The pump wires and sensor wires should be long enough to position the NexPump system unit approximately 3 to 4 feet above the floor. Be sure the power cord will reach the AC power socket. Secure the electrical power cord, as needed. **Do not plug in at this time.** Make sure battery cables will reach battery. **Do not connect battery cables at this time.**

Step 4: Pump and Sensor Connections

Plug the pump connectors into the NexPump system unit. If both pumps are not on the bottom of the pit, then Pump 1 must be the lowest pump. Plug in the sensors. Primary sensor (Sensor 1) to left receptacle. Backup sensor (Sensor 2) to right receptacle. The sensor connectors plug in with the security latch to the right of the NexPump System Unit. Verify the sensor connectors are securely attached.

- To disconnect a pump connector, slightly depress the security latch on the bottom of the connector and pull out the connector
- To disconnect a sensor connector, slightly depress the security latch on the right side of the connector and pull out the connector.

Step 5: Connecting the AC Power Cord

IMPORTANT: Make sure that the AC outlet is a grounded outlet.

Plug in the NexPump's AC power cord and verify a secure connection. The display will illuminate and 'Operating Status' green LED should be blinking.

Note: An alarm may sound at this time because the battery is not connected.

Step 6: Connect Battery

Attach the battery cables to the battery – the BLACK wire to the NEGATIVE (-) post, the RED wire to the POSITIVE (+) post – and tighten securely.

IMPORTANT: Check the 'Battery Reverse' LED on the NexPump system unit. If it is illuminated the connections are reversed.

Step 7: Check Your NexPump

All alarms should be off at this time. Set your preferred mode setting (see mode selection). The NexPump will schedule an automatic self-test approximately two minutes after power up. If there are any alerts, they will be displayed on the LCD display and an alarm will sound.

Step 8: Secure Battery Boxes

If battery boxes are used, place each battery in the battery box.

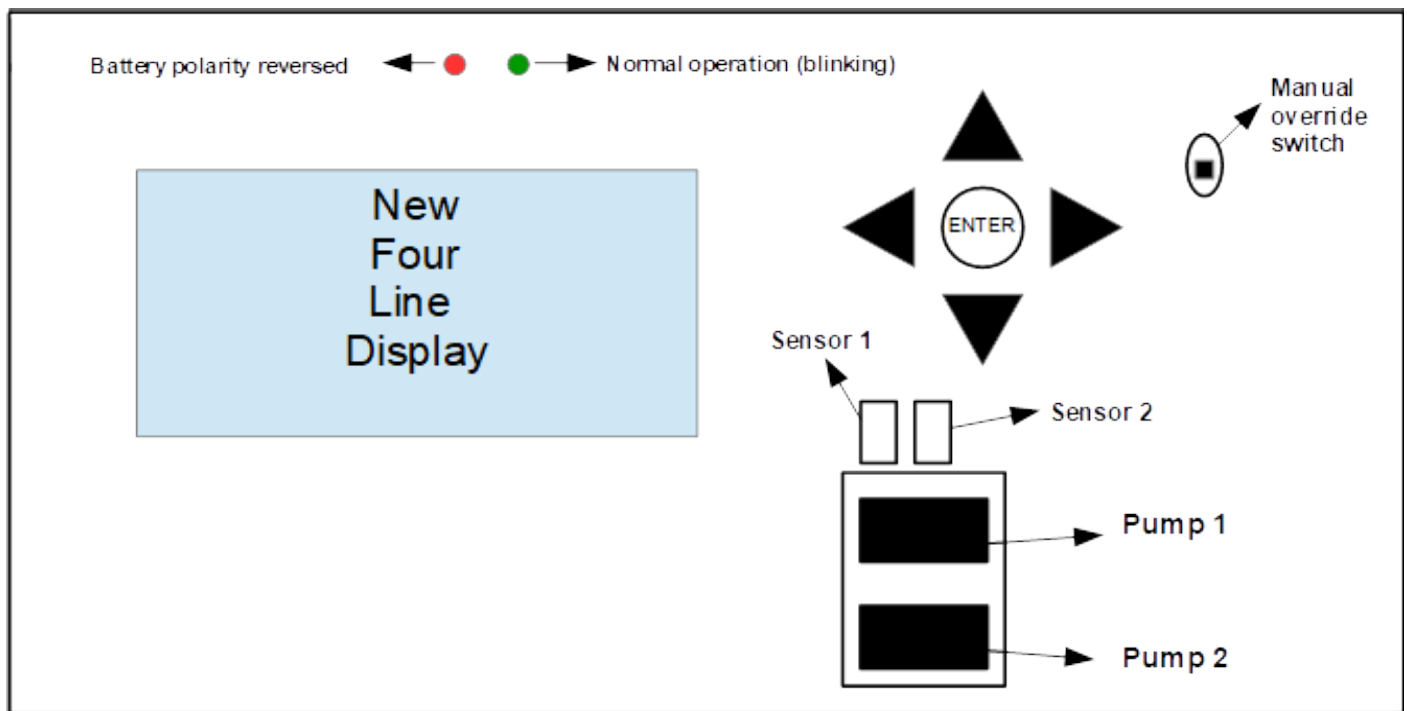
Step 9: Set Battery Type/Amp Hours and Enable Charger

These can be found in the configuration menu. Use the up/down arrows on the navigation panel to find the configuration menu and press ENTER. Use the left/right arrows to move the cursor/increase the amp hours. Press ENTER when cursor is on desired position.

Note: Always perform this step when installing new batteries.

Your NexPump is ready for use!

Control Box Overview



Pump 1: If system is a one pump system (X-Treme), make sure pump one is in the pump 1 slot.

Pump 2: If system is a two pump system (X-Treme Plus), put pump two in the pump 2 slot.

Sensor 1: Should be installed as the lowest of the two sensors (*closest to the bottom of the pit*)

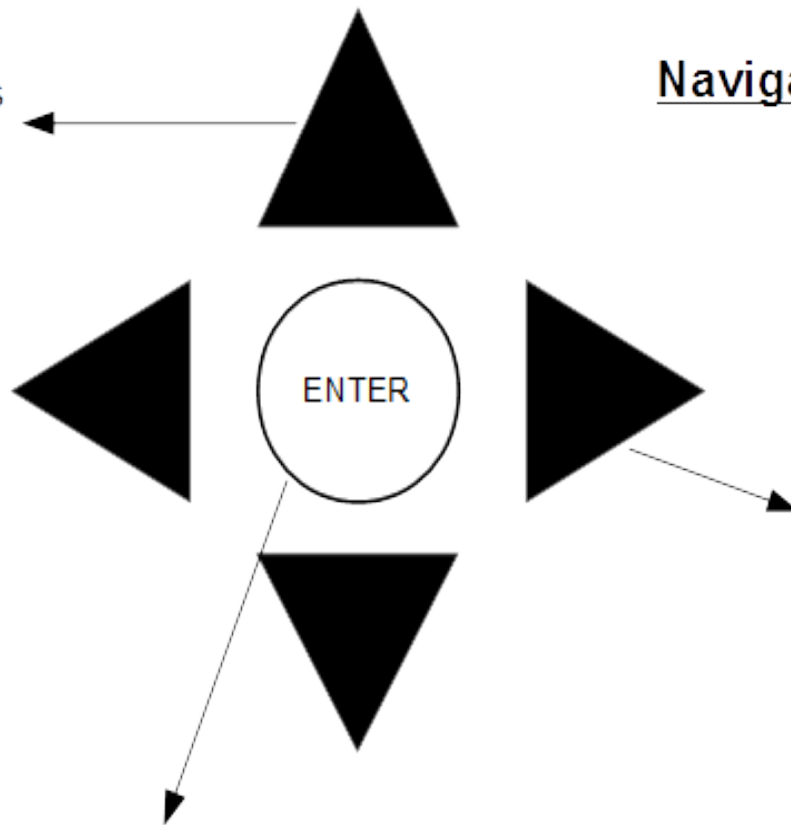
Sensor 2: Should be placed about 4-6 inches higher than sensor one.

Manual Override Switch: Will turn on pump(s) continuously. ONLY use in emergencies.

Battery Polarity Reversed: If red light is on, check battery connection. (*reversed*)

Normal Operation (Blinking): Steady green light flashing means normal operations.

Up/Down arrows
allow you to
scroll through
menus/options

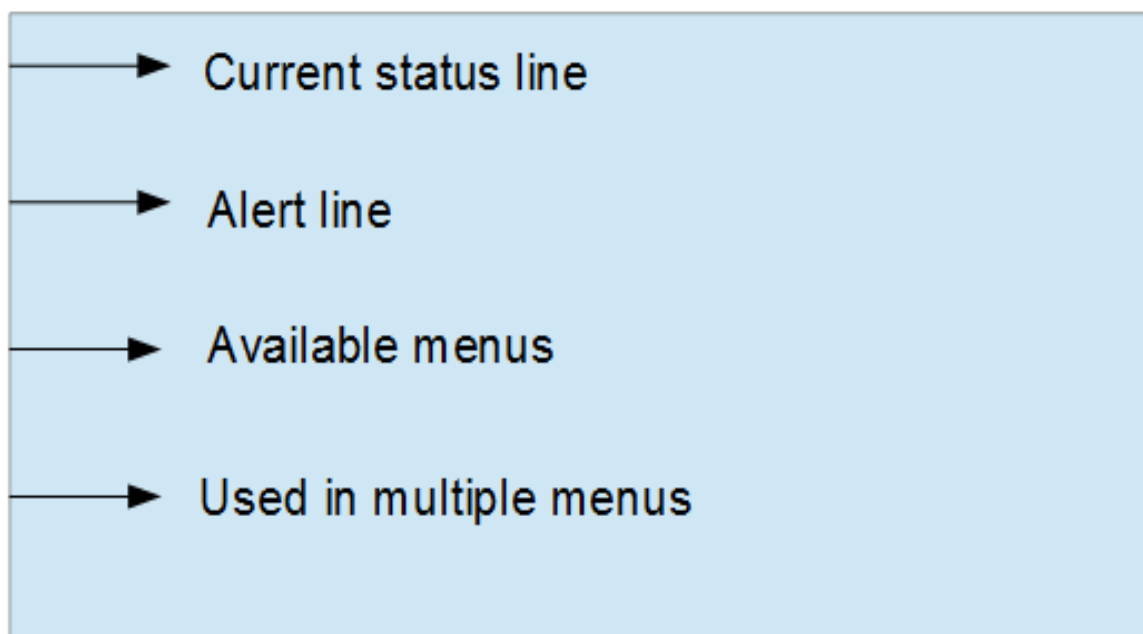


Navigation Panel

Right/Left arrows
allow you to select
functions (*example
Yes No*)

ENTER: To select a menu or a setting you must press ENTER. If no menu is selected it will revert back to the home screen

Display Screen



System Operating Status



Normal Operation (steady flash)

The 'Normal Operation' LED must be blinking to indicate the NexPump system is operating. If it is NOT blinking then there may be problem with the NexPump system.

Mode Selection

Primary Mode – This should be used when pump is the primary pump.

- NexPump WILL NOT display or sound an alarm if pump(s) are activated.

Backup Mode – Should be used when pump is a backup pump

- NexPump WILL display and sound an alarm if pump(s) are activated.

Note: The option to change to primary or backup modes can be found in the configuration menu. Use the left and right arrows and press ENTER when cursor is over desired position.

Manual Mode – Will manually turn on both pumps

- If the switch is in the up position, manual mode is ON. If the switch is in down position, manual mode is OFF.
- When operating on battery power the NexPump will not calculate battery life remaining.
- Clog or vapor lock detection is disabled.
- Pumps will turn off for 5 seconds each minute to clear possible vapor lock conditions.
- Auto self-test is disabled



Emergency Mode – Will automatically be selected

- 'Mode Emergency' will be displayed on the first line of the unit.
- Alarm will sound with display indicating the reason NexPump went into the Emergency mode.

Mode Emergency
Alert 1 of 1

Note: The Emergency mode is automatically selected if the NexPump detects certain conditions. To the left is an example of the display when operating in the emergency mode.

Pump Operation

The NexPump system can only be used with a NexPump specified pump. The Single pump unit (X-Treme model) must be plugged into the Pump 1 slot. Make sure all pumps are plugged in properly.

Possible Pump Alerts

- Pump OK – normal operation
- Pump ON – pump is currently running
- Pump Activated (backup mode only) – pump needed to run
- Pump Problem (Low) – pump may be defective or not working correctly. The system will specify which pump number.
- Pump Problem (High) – pump may be defective or not working correctly. The system will specify which pump number.
- Pump Problem (Run) – circuit board issue. The system will specify which pump number.
- Pump is over hour lifespan- pump has gone over its lifespan of 2500 hours.

Possible Plumbing Alerts

- Vapor Lock – This alert indicates there may be air trapped in the discharge plumbing. It may also indicate Sensor 1 is stuck in the up position. If a check valve is used, check for a proper vent hole in the pump discharge pipe or check if the vent hole is clogged.
- Clog Alerts – This alert indicates a possible clog in the plumbing discharge. Verify the discharge is clear of obstructions. In the winter it may indicate a frozen discharge pipe.

If System Includes Notification Feature

Notifications will occur for all pump alerts after approximately five minutes, with the exception of Pump Activation' which will occur after approximately thirty minutes.

Clear Pump Alerts

To clear any pump alert, use the navigation panel up/down arrows to find the menu 'Clear Alarms'. Press ENTER to select.

Testing

Pumps are tested on 12-hour self-tests or manual tests.

Pump Hours/Type

This screen displays current stats of your pumps. This can be found in the information menu.

Pump 1= the current run hours on Pump 1

Pump 2= the current run hours on Pump 2

Type= will either have an 'H' or 'U' depending on the system

'H' = High capacity, 'U' = Ultra capacity

(00)= indicates how many times the pump has gone over 2500 hours. Each pump is rated at 2500 hours.

Pump 1=0000H (00)

Type='H'

Pump 2=0000H (00)

Type='H'

Sensor Operations

Sensor 1

- Runs and operates the pump(s), as needed

Sensor 2

- High Water Sensor
- Runs and operates pump(s) as a backup to Sensor 1
- Provides High Water Alert after 45 seconds

Testing Sensors

- To test Sensor 1, lift the float. Pump 1 will activate.
- To test Sensor 2, lift the float. Pump 1 will activate. This may produce a double-beep from the NexPump System Unit.
- If you hold Sensor 2 in the up position with no water in the pit, you may receive a 'Sensor 1 Inoperative' alert. This is normal. Once you are finished testing, clear the alert.

Sensor 1 Inoperative

Note: The gray sensor should be used as Sensor 1. Sensor 1 should be installed as the lower of the two sensors. The white sensor should be used for Sensor 2 and should be installed 4 to 6 inches higher than Sensor 1. The sensors are continually monitored.

If System Includes Notification Feature

A notification will occur on all sensor alerts after approximately five minutes, with the exception of a High Water Alert, which will occur after approximately one minute.

Clear Sensor Alerts

Sensor alerts will clear automatically when condition is corrected.

Sensor Displaying 'Disconnected'

Verify the sensors are plugged in and wires are attached to each connector. If the sensors are connected correctly, the sensor may be defective.

AC Power

AC Power Operation

The NexPump runs on AC power as long as AC is available. During an AC power problem, the NexPump will automatically switch to battery power. The NexPump will display 'AC Power Problem' and sound its alarm. If the alarm is silenced, the system will still display alerts. When power is restored, the alarm will turn off automatically.

Testing

AC power is continually monitored.

If System Includes Notification Feature

If there is an AC power problem, the 'AC Power Problem' notification will occur after approximately thirty minutes.

Clear AC Power Alerts

AC power alerts will clear automatically when condition is corrected.

AC Power Loss

If the NexPump is alerting about an AC power problem and there is not an issue with the AC power in your household, you should check to make sure the NexPump AC power cord is plugged into the electrical outlet. If it is plugged in correctly and still not working, use a portable device to check if the electrical outlet is live. If the electrical outlet is live, then there may be an issue with the internal power supply in the NexPump system unit.

IMPORTANT: The power supply is not field serviceable. Do not attempt to disassemble the NexPump or power supply.

Testing

Manual Self-Test?

The NexPump schedules an automatic self-test every 12 hours. A manual test can be done by selecting 'Manual Self-Test' in the menu. The self-test feature will test pumps, battery, electronics, etc. To run 'Manual Self-Test', use the up/down arrows and press ENTER to select.

Reset Self-Test Time Hour ? 12 AM/PM

Resetting the self-test time can be found in the 'Reset Menu' or can be performed with command console on internet versions. Resetting should be performed at the time you want the self-test to begin. Once reset, the automatic self-test will start at the new time.

To change the self-test time of the system, use the left/right arrows to adjust the time. When on desired time, press ENTER. The system self-tests every 12 hours, so this will be the time for AM and PM.

Battery

Battery Specifications

The NexPump requires a deep-cycle marine battery. A 105 amp hour or greater rating is required. This is usually a group 27 or group 31 deep-cycle marine battery.

Multiple Batteries

Two batteries may be connected in PARALLEL to increase time on battery power. This configuration is highly recommended.

IMPORTANT: DO NOT CONNECT BATTERIES IN SERIES. CONNECTING MULTIPLE BATTERIES IN SERIES WILL DAMAGE THE UNIT AND VOID THE WARRANTY.

Testing

Battery is tested during 12-hour self-tests and manual tests. *Exceptions: Charge system is active, battery disconnected, or battery replacement alert is active.*

If System Includes Notification Feature

Battery disconnected, low battery or battery replacement notifications will alert after approximately five minutes. If an AC power problem occurs when running on battery, a notification will occur after approximately thirty minutes.

Battery Connected Improperly

If the battery cables are connected to the wrong posts, the 'Reversed Polarity' red LED will illuminate and an alarm will sound for 'Battery Problem'.

Battery Reversed Polarity



Note: Correct by reversing the battery cables.

Battery Type ? W A
W=Wet A=AGM,Gel

Selecting Battery Type

Be sure to select the battery type installed with the system. This screen can be found in the 'Configuration Menu'.

Use the left/right arrows and press ENTER when cursor is over desired position.

Battery Amps ? 105AH

Selecting Battery Amp Hours

If multiple batteries are connected, add the total amp hours together. This screen can be found in the 'Configuration Menu'.

Use the left/right arrows to increase or decrease amp hours. When on desired number, press ENTER.

Charger ? On Off

Battery Charger

The charger should be turned on when the system is first installed or when replacing the batteries. This can be found in the 'Configuration Menu'.

Use the left/right arrows and press ENTER when cursor is over desired position.

Reset Battery Timer?
Confirm ? Y N

Battery Timer

Batteries have a lifespan and should be replaced when the NexPump reports this timeframe has expired. The Battery Timer should be reset when replacing batteries. The system includes the following defaults for battery type:

(WET = 1300 days, 3.5 years, AGM = 1600 Days, 4.5 Years)

This can be found in the 'Reset Menu'. To select, use the left/right arrows and press ENTER when cursor is over desired position.

BA=105 AH
E/S=On Batt=Wet
Replace Battery
In: 1350 Days

Battery Information

This screen can be found in the 'Information Menu'.

BA=current amp hours of your battery

Batt=battery type

Replace battery= how many days until the system recommends changing the battery

Running On Battery Power

When AC power is out, the system will alert of an AC power problem. It will then indicate how many hours are remaining on the battery. '999' hours is the maximum number displayed. The battery life monitor calculates the remaining life about four times an hour.

When running on battery power, you should closely monitor the battery life when the hours indicated are ten or below. Battery life will not be accurate if the battery amp hours are not set correctly before the power outage began. You can silence this alarm by using the up/down arrows until the menu 'Silence Alarm (24H)' appears. To select, press ENTER. Once AC power is restored, the display will again display a normal status.

IMPORTANT: When the battery life is calculated at two hours or below, a 'Low Battery' alarm will sound. In addition, a notification will take place if this is the only critical alert. When zero hours are calculated, the pump(s) will no longer operate to prevent total battery discharge.

Note: If battery life is LOW and battery power is still needed, you should connect a replacement battery at this time.

Battery Maintenance

Check fluid levels, if applicable for each installed battery, at least once every six months. To fill fluid levels:

Remove the cell caps of battery. Add distilled water to each cell. If distilled water is not available, tap water with a low mineral content may be used. NEVER ADD MORE ACID. Fill the battery cell so water is just below the fill cap.

Clean battery posts as needed with a 50/50 solution of water and baking soda or a wire brush. Do not allow any cleaning solution to enter the battery. Thoroughly dry the terminals and apply petroleum jelly to terminals as needed.

Battery Replacement

The NexPump is constantly monitoring the battery state and will fail a battery if any one of several tests are not passed within tolerance.

IMPORTANT: Review the safety instructions before proceeding to replace the battery or batteries.

1. Disconnect each battery. You DO NOT need to power off the NexPump system unit.
2. Remove each battery and dispose properly.
3. Connect each new battery. Attach the battery cables to the battery – the BLACK wire to the NEGATIVE (-) post, the RED wire to the POSITIVE (+) post and tighten securely.

IMPORTANT: Verify the 'Battery Reverse' LED is NOT illuminated. If so, reverse connections.

4. Verify battery type and amps in the 'Configuration Menu'.
5. Turn ON Charger in the 'Configuration Menu'.

Battery Life 333H AC Power Problem

Battery Replace

Charger Operation

Charger System Operation:

Charge Rate: 20 Amps

The charging circuit is disabled any time the battery or electric power is disconnected or if both pumps are operating. The charge status can be Full, Trickle, Maintain Mode or Disabled. When the charge is started, the display will show 'Fxx', where the 'xx' is the actual charge rate in amps. The charge is automatically monitored at all times.

After a full charge is complete, the NexPump unit will go into a trickle charge mode. The display will show 'Txx' where the 'xx' is the charge rate. When the 'Trickle Mode' is complete, the NexPump will go into the 'Maintain Mode'. In the 'Maintain Mode' charge rates can be very low and may even display 'M00' for extended times. It is normal for the 'Maintain Mode' to run for multiple days. When the battery is disconnected, the charging mode will go into the 'Disable Mode'. The display will show 'D00'.

Battery Disconnected to Reconnected

'S30' – The count, in seconds, for when the charge system will start. This allows time for the battery to be reconnected before the charger starts again.

Charge Mode F00

If System Includes Notification Feature

Notifications will occur for all charger system alerts after approximately five minutes.

Testing

Charger system is tested on 12-hour self-tests or manual tests. Exceptions: 'Full' or 'Trickle' charge is currently active, AC power is off or battery is disconnected.

Turn Charger On

The charger should be turned on when system is first installed or when replacing the batteries.

This can be found in the configuration menu. Use the left/right arrows and press ENTER when cursor is over desired position.

Charger ? On Off

Charger Problem

Charger system problems may also be a result of an AC power problem while a charger system test was active. In that case, use the up/down arrows to find the menu 'Clear Alarm' and press ENTER. If that is not the case, it may indicate a problem with the battery charger system.

Note: If the battery is completely discharged, the NexPump may display the 'Battery Disconnected' and count down from five seconds. This may cycle until the battery is at a sufficient level to start the full charge mode. This prevents an overload to the charge system or battery.

Internal Cooling Fan

Fan Operation

The internal fan does not run continually and is only in use when the charging system is active, any pump is in use or it is in test mode. However, the fan will continue to run for some time after any pump has run.

Testing

Fan testing takes place during operation, self-tests and manual tests.

If System Includes Notification Feature

If there is a fan problem, the 'Fan Problem' notification will alert after approximately five minutes.

Fan Problem

A fan problem usually means that the fan is defective and must be repaired.

Fan Problem

Internal Electronics

Primary VRef Alert

A 'Primary VRef Problem' alert indicates an internal hardware problem. This will display as a 'VRef Problem' in the alert line of the display. The NexPump automatically switches over to its backup VRef if this alert is detected.

Testing

The Primary VRef is continually monitored.

If System Includes Notification Feature

If there is a Primary VRef problem, the 'Primary VRef Problem' notification will alert after approximately five minutes.

Clear Primary VRef Alerts

Primary VRef alerts will clear automatically when condition is corrected.

Alerts

The NexPump system monitors 40 critical points on the unit. In the case of an alert, the system will sound an alarm followed by a notification (if your system includes the notification feature).

Normal Alerts

- Pump Activation (notification alerts after approximately thirty minutes)
- AC Power Loss (notification alerts after approximately thirty minutes)

Note: 'Pump Activation' lets you know there may be an issue with your main pump. If you find you have a problem with your main pump you can switch the NexPump mode to 'Primary' until the main pump problem is corrected.

Critical Alerts

- All other alerts (notifications alert after approximately five minutes except for 'High Water Alert', which notifies after approximately one minute).

Silencing or Un-Silencing the Alarm

The alarm can be silenced for normal alerts only. It will silence for 24 hours. A silenced alarm clears automatically after 24 hours.

To silence or un-silence alarm, find 'Silence Alarm (24H)' or 'Unsilence Alarm' on the menu and press ENTER to select.

Note: When the alarm is silenced, the alerts will blink to notify which conditions are in the alarm state.

Silence Alarm? (24H)

Disabling or Enabling the Alarm

The alarm can be disabled, if needed. When disabled, the alarm will not sound for any reason. The alarm will stay disabled for five days and automatically be enabled after that time. You can enable the alarm before the five-day period by selecting the 'Enable Alarm' menu and pressing ENTER.

Note: All notifications will take place while the alarm is disabled. Disabling the alarm simply turns off the sound.

Disable Alarm? (5D)

Alert History

Under the information menu, you can retrieve the history of the last ten alerts registered. The date and time will be displayed with the alert.

To find the alert history, select the information menu and select 'Alert History Display'. Use the left/right arrows to move the cursor and press ENTER.

Alert History
Display ? Y N

Displaying Alerts:

Below are two examples of what the display will look like when there are alerts on the NexPump. Line two of the display will show you each alert approximately every three seconds. The first example shows the number of alerts and the current number it will be displaying. The format will be 'Alert x of x'. The second example is the actual alert that follows the first example.

Alert 1 of 1

Sensor 2 Problem

Clearing, Silencing, Disabling Alarms

Clear Alarm?

To clear the alarm, use the up/down arrows to find the menu 'Clear Alarm'. To select, press ENTER.

Silence Alarm? (24H)

The alarm can be silenced for normal alerts only. These include 'Pump Activation' and 'AC Power Loss'. A silenced alarm clears automatically after 24 hours.

To silence the alarm, use the up/down arrows to find the menu 'Silence Alarm'. To select, press ENTER.

Note: When the alarm is silenced, the alerts will blink to notify which conditions are in the alarm state.

UnSilence Alarm?

If the alarm is silenced, you can un-silence it by using the up/down arrows to find the menu 'UnSilence Alarm'. To select, press ENTER.

Disable Alarm? (5D)

The alarm can be disabled, if needed. When disabled, the alarm will not sound for any reason. The alarm will stay disabled for five days and automatically be enabled after that time. You can enable the alarm before the five day period.

To disable the alarm, use the up/down arrows to find the menu 'Disable Alarm'. To select, press ENTER. It will ask you to confirm. Use the left/right arrows to select desired position and press ENTER.

Note: All notifications will still take place while the alarm is disabled. Disabling the alarm simply turns off the sound.

Enable Alarm?

If the alarm is disabled, you can enable it by using the up/down arrows to find the menu 'Enable Alarm'. To select, press ENTER.

Configuration Menu

Note: If you have a notification unit, please see the Notification Guide for additional screens.

Configuration Menu?

The configuration menu allows unit specific information to be input into the system including battery, amps, charger, etc.

To select the configuration menu, use the up/down arrows until you see 'Configuration Menu' on the third display line and press ENTER.

Battery Type ? W A W=Wet A=AGM,Gel

Select the battery type currently on your system. Press ENTER when cursor is over desired position.

Battery Amps ? 105AH

Select the battery amp hours on your battery. If multiple batteries are connected, add the total amp hours together. Use the left/right arrows to increase or decrease amp hours. When on desired number, press ENTER.

Charger ? On Off

'Charger' will turn on the battery charger, if selected. It is recommended to turn on the charger when system is first installed or when replacing batteries. Press ENTER when cursor is over desired position.

Mode ? Back Prim

There are two types of modes to select.

Primary Mode should be used when pump is the primary pump. NexPump WILL NOT display or sound an alert if pump(s) are activated.

Backup Mode is used when pump is a backup pump. NexPump WILL display and sound an alarm if pump(s) are activated.

To select a mode, use the left/right arrows and press ENTER when cursor is over desired position

Information Menu

Note: If you have a notification unit, please see the Notification Guide for additional screens.

Information Menu?

The information menu provides specific information about your system including stats, serial number, alert history, etc.

To select the information menu, use the up/down arrows until you see "Information Menu" on the third display line, then press ENTER.

System Type

SN-NPB00000000

Version Type

The first line displays current system type.

SN = System Serial Number

The last line will indicate the current version of the system.

Pump 1=0000H (00)

Type='H'

Pump 2=0000H (00)

Type='H'

This screen displays the current stats of your pumps

Pump 1 = current run hours on Pump 1

Pump 2 = current run hours on Pump 2

Type = will either display an 'H' or 'U' depending on the system.

'H' = High capacity, 'U' = Ultra capacity)

(00) = indicates how many times the pump has gone over 2500 hours. The pump is rated at 2500 hours.

CPU=00123 Days

TPU=00123 Days

Auto Tests=00123

Man Tests=00123

CPU = current power up days of the system

TPU = total power up days of the system

Auto Tests = amount of self-tests the system has preformed

Man Tests = amount of manual tests the system has preformed

BA=105 AH

E/S=On Batt=Wet

Replace Battery

In: 1350 Days

BA = current amp hours of your battery

E/S = empty sump option

Batt = battery type

Replace battery = how many days until the system recommends changing the battery

Time=12:12AM/PM
Date=01-01-18

Current time and date set to the system.

Note: Notification systems will automatically set the date and time.

Alert History
Display ? Y N

Alert history will display the last ten alerts of the system. It will display the alert as well as the date and time the alert occurred.

Advanced Menu

Note: If you have a notification unit, please see the Notification Guide for additional screens.

Advanced Menu?

To select the advanced menu, use the up/down arrows until you see 'Advanced Menu' on the third display line, then press ENTER.

Empty Sump ? On Off

The 'Empty Sump' option will pump the water out of the pit after each 12-hour self-test so no standing water is left in the pit. This is especially useful when the NexPump is a backup pump for another pump that could corrode.

To select, use the left/right arrows and press ENTER when cursor is over desired position.

Reset Menu

Note: If you have a notification unit, please see the Notification Guide for additional screens.

Reset Menu?

The reset menu allows you to change or reset the time, date, timers, etc.

To select the reset menu, use the up/down arrows until you see 'Reset Menu' on the third display line, then press ENTER.

Set Time ? Y N Time=12:12 AM/PM

This will allow you to set the current time on the system. To set the time, select the 'Y' and use the up/down arrows to adjust the time.

Note: The up/down arrows will adjust the time and the left/right arrows will move the cursor.

Set Date ? Y N Date=01-01-18

This will allow you to set the current date on the system. To set the date, select the 'Y' and use the up/down arrows to adjust the time.

Note: The up/down arrows will adjust the time and the left/right arrows will move the cursor.

Reset Self-Test Time Hour ? 12 AM/PM

To change the self-test time of the system, use the left/right arrows to adjust the time. When on desired time, press ENTER to set.

The system self-tests every 12 hours so this will be the time for AM and PM.

Reset Battery Timer? Confirm ? Y N

Batteries have a lifespan and should be replaced when the NexPump reports this time frame has expired. This should also be reset when replacing batteries. Defaults are provided for battery type selected. (WET = 1300 days, 3.5 years, AGM = 1600 Days, 4.5 Years)

To select, use the left/right arrows and press ENTER when cursor is over desired position.

Quick Reference Guide

Power OFF

1. Disconnect Battery
 - a. Disconnect (+) Positive Cable (Red)
 - b. Disconnect (-) Negative Cable (Black)
2. Unplug NexPump's AC Power Cord

Power ON

1. Plug in the AC Power Cord FIRST!
2. Connect Battery
 - a. Connect (-) Negative Cable (Black)
 - b. Connect (+) Positive Cable (Red)
 - c. Verify Battery Reverse Indicator

Manual Override Mode

1. Set Override switch to up position.
2. Pump(s) should turn on.
3. Battery life will not be calculated.
4. Clog or vapor lock detection is disabled.
5. Set Override switch to down position to turn pump(s) off and return to normal.

Clear Alarm(s)

To clear the alarm, use the up/down arrows to find the menu 'Clear Alarm'. To select, press ENTER.

Silence Alarm

To silence the alarm, use the up/down arrows to find the menu 'Silence Alarm' (24H). To select, press ENTER.

Note: Automatically cleared after 24 hours. Alarm will only silence for 'Pump Activated' and 'AC Power Problem' alarms

UnSilence Alarm

If the alarm is silenced, you can un-silence it by selecting the menu 'UnSilence Alarm'.

To un-silence the alarm, use the up/down arrows to find the menu 'UnSilence Alarm'. To select, press ENTER.

Manual Test

To run a manual self-test, use the up/down arrows to find the menu 'Manual Self-Test'. To select, press ENTER.

Retrieve Serial Number

The NexPump serial number is located on a card on the top of the unit or a sticker on the rear of the unit.

Battery Amp Hours Setup

1. Use the up/down arrows to find the configuration menu. Select it by pressing ENTER.
2. Wait for the screen 'Battery Amps?'
3. Use the left and right arrows to increase or decrease the amps. Press ENTER when on correct amps.

Stats Information

The stats can be found under the 'Information Menu'. Use the up and down arrows to find the 'Information Menu'. Select it by pressing ENTER.

Disable Alarm

To disable the alarm, use the up and down arrows to find 'Disable Alarm (5D)'. Select it by pressing ENTER. To confirm, use the left and right arrows until the cursor is over the desired position. Select it by pressing ENTER.

Enable Alarm

If the alarm is disabled, you can re-enable it by using the up and down arrows to find 'Enable Alarm'. Select it by pressing ENTER.

Reset Battery Timer

1. Use the up/down arrows to find the 'Reset Menu'. Select it by pressing ENTER.
2. Wait for the screen 'Reset Battery Timer Confirm?'
3. Use the left and right arrows until the cursor is over the desired position. Select it by pressing ENTER.

NexPump Specifications

Maximum input/output levels

Input: AC

Model X-Treme Plus

- Full Load 115 Volts AC @ 8.5 amps
- Standby Load 115 Volts AC @ 0.17 amps

Model X-Treme

- Full Load 115 Volts AC @ 4.5 amps
- Standby Load 115 Volts AC @ 0.17 amps

Charge Output

20 Amps

Operating Temperature

9°C~38°C (48°F~100°F)

Storage Temperature

0°C~38°C (32°F~100°F)

LIMITED WARRANTY:

This NexPump, Inc. product is warranted against defects in workmanship and materials. If any failure of these components, resulting from a defect in either workmanship or material shall occur under normal use within THREE YEARS (3) from the original date of purchase for Models X-Treme and X-Treme Plus, such failure shall be corrected free of charge to the original purchaser by repair or, at NexPump's sole option, replacement of the defective part or parts.

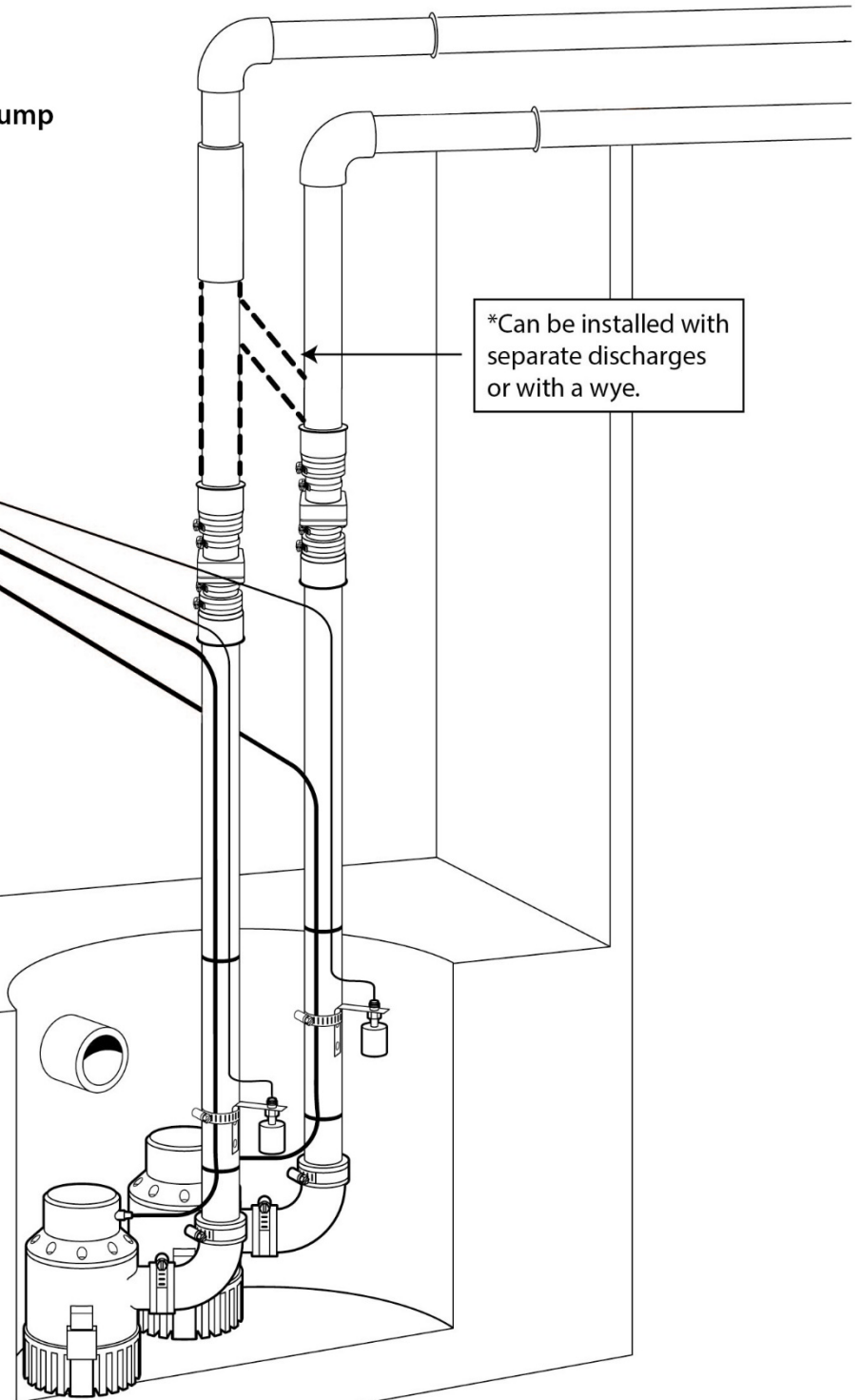
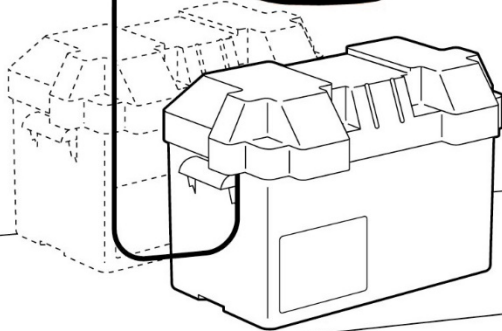
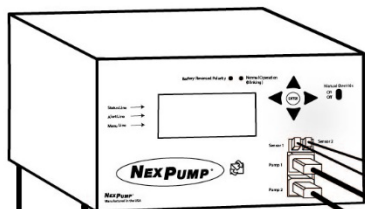
No charge shall be made for labor or services performed during the said warranty period providing the defective product is sent prepaid to our Authorized Service Station. NexPump, Inc. will either repair or at its sole option, replace any such part except for fuses, circuit breakers under normal and proper use. This warranty does not cover Ultra Capacity pumps that have exceeded 2500.0 hours of operating and does not cover equipment, which had been tampered with in any way, or to damage caused by accident, negligence, alteration, misapplication or natural disasters.

This product must be returned transportation prepaid, properly packed and insured. NexPump, Inc. bears transportation cost of the repaired product back to the purchaser. This warranty applied only to the original purchaser.

NO OTHER WARRANTIES ARE EXPRESSED OR IMPLIED. NEXPUMP, INC. IS NOT LIABLE FOR CONSEQUENTIAL DAMAGES.

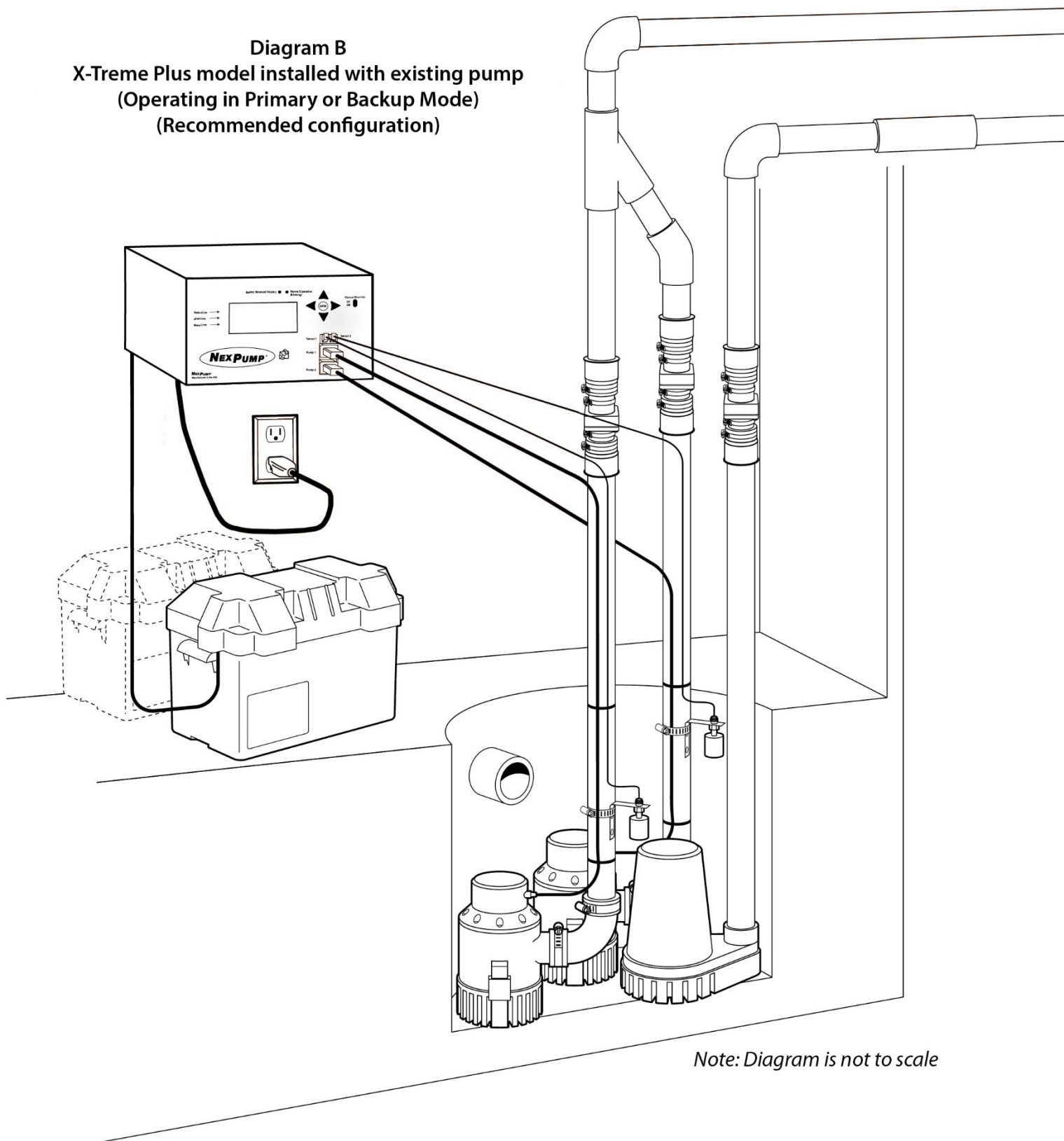
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Diagram A
X-Treme Plus model installed as only pump
(Operating in Primary Mode)



Note: Diagram is not to scale

Diagram B
X-Treme Plus model installed with existing pump
(Operating in Primary or Backup Mode)
(Recommended configuration)



Note: Diagram is not to scale

Diagram C
X-Treme model installed with existing pump
(Operating in Backup Mode ONLY)

