# High Water Level Alarm

## 12 VDC Powered Alarm With Battery Backup

Revision 1.5 - 14 April 2026

## INTRODUCTION

*The PA50-12 High Level Water Alarm is designed to detect elevated water levels within sump chambers used for groundwater or surface water pumping applications.*

*The unit is powered via a 12 VDC mains adapter (3-pin) or directly from a 12 VDC battery when used in conjunction with the Victron Battery Backup System. In addition, a 9 VDC battery ensures continued alarm operation during mains power failure in systems without a battery backup.*

*The alarm can be configured for either automatic or manual reset following an alarm event. A front-facing mute button allows the audible alarm to be silenced, once the alarm condition has been acknowledged. A flashing visual indicator remains active to signal an alarm condition, even when the sounder is muted.*

*For single pump systems, the alarm float switch should be positioned just above the activation point of the pump. In twin pump systems, the switch should be installed above the activation point of the primary pump but below the activation point of the secondary pump.*

## KEY BENEFITS

- Dual 12 VDC power options - powered from wall mounted power supply or directly from the large DC battery of the Victron Battery Backup System
- 9 VDC battery ensures alarm functionality during power outages
- Loud 90 dB sounder with visual indicator
- Auto or Manual reset options
- 10m float cable
- Mute and test buttons for user control
- Surface mounting or flush mounting to standard electric back box




- Zero volt relay outputs allows integration with Pulse or Bridge Monitoring Systems or BMS (Building Management System) of an alarm occurrence

## POWER SUPPLY OPTIONS

The alarm can be powered by a 3-pin power supply or directly from the 12 VDC battery of the Newton Victron Battery Backup system, which is always in a state of optimum charge, where available.

- Powered by Battery Backup System - **Code: PA50-12/B**
- Mains Powered - **Code: PA50-12/M**

## PACKAGING

- 1 x Alarm unit - PA50-12
- 2 x Compression glands
- 1 x Broken Finger Float Switch
- 1 x 9 VDC Battery
- Fitting clip with cable tie
- Operation Manual

Plus one of the following 12 VDC power supply options:

- 1 x Battery Lead with eyelets for battery connection and two crimped ferrules for connection to the alarm power terminals - Code: PA50-12/B; **OR**
- 1 x 12 VDC PSU (3-pin) with two crimped ferrules - Code: PA50-12/M



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**Opening Hours:**
Monday to Friday 8:00am - 5:00pm

# High Water Level Alarm

Battery & 12VDC Powered Pumping System Alarm

## CONTINUED OPERATION DURING MAINS POWER OUTAGE

**PA50-12/B**

When PA50-12/B is connected directly to the large 12 VDC battery of the Newton Victron Battery Backup System, the alarm is powered directly from the battery, which is always fully charged by the charging system of the Victron Inverter/ Charger and so is totally unaffected by a mains power outage.

**In-built battery backup**

If the large battery is fully discharged during the power outage event, the PA50-12 alarm will switch power supply to the 9 V battery within the alarm enclosure, which will ensure that the alarm is still powered.

**PA50-12/M**

When PA50-12/M is powered by grid mains, at power outage the alarm will switch power supply to the 9 V battery within the alarm enclosure.

## INSTALLATION INSTRUCTIONS

Please see Operation Manual supplied within packaging.

## ASSOCIATED PRODUCTS

- Newton Titan-Pro and Titan packaged pumping systems
- Newton Pulse & Newton Bridge, cloud based monitoring systems

## LIMITATIONS

- Not suitable for use as an alarm for sewage pumps unless the supplied broken finger float switch is exchanged for a sewage capable paddle float switch such as the PA25 at point of ordering
- Only for internal use as not IP rated for external use

## PACKAGING & HANDLING

Alarm is supplied in reinforced and protective cardboard box. Please handle with care.

## WARRANTY

The alarm is supplied with a one-year back-to-base warranty which is dated from either the date of purchase or a proven date of installation. If the unit develops a fault during the warranty period, Newton Waterproofing Systems will repair or replace the unit under warranty. Post the unit to the address below, together with an explanation of the problem and a return address. The warranty will be invalidated if the unit is damaged because of improper handling, storage, or installation and in such cases a repair charge may be applicable.

## STORAGE

Store in dry conditions at temperatures between 5°C and 35°C. Do not expose to freezing conditions.

## TECHNICAL DATA

| Features | Result | Units |
|---|---|---|
| Width | 152.0 | mm |
| Height | 92.0 | mm |
| Depth - fitted to wall | 37 | mm |
| Depth - fitted to double back box | 8.0 | mm |
| Power supply - Connected to Battery Backup System | 12 | VDC |
| Power supply - Connected to mains via 3-pin PSU | 12 | VDC |
| Power supply - Internal battery | 9 | VDC |
| Sounder volume - at 1000 mm distance | 90 | dB |
| Switching - within sump | Reed switch - Normally closed | |

Newton Waterproofing Systems reserve the right to update product literature at any time. Please always refer to our website for the latest versions.



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