



HYNDS LIFESTYLE VER 4 CONTROLLER

Introduction

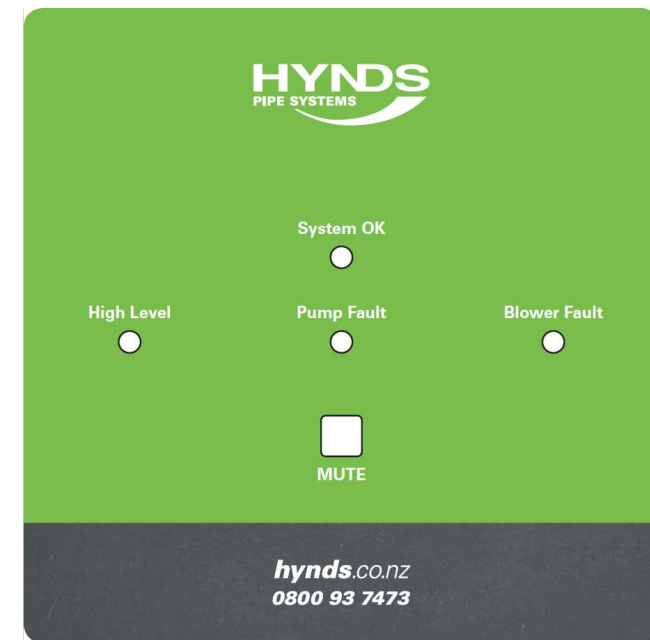
The new Lifestyle controller has several changes compared to the old controller. This document details these changes. It also includes the installation information that goes out with every controller.

The controller is powered via a 230V power supply. This power supply should be protected by a 16A MCB or as deemed necessary from the electrician. The controller is rated to 10A.

The controller comes with a junction box mounted onto the side of the turret. This junction box is where the installing electrician is to terminate power supply and the optional alarm panel. This junction box isolates the main controller from any stormwater ingress, insects etc, coming from the main power supply to the controller. There is a power supply cable pre installed from the junction box to the controller, via a plugged cable. The controller is mounted externally to the turret and has LED indications on the front of it.

The controller will have 2 x labelled 3 pin plugs extending from the base of the controller; one labelled *Pump* for the irrigation pump and one labelled *Blower* for the blower,. It will also have 2 x labelled plug and sockets for the float and optional alarm panel (refer to right). It is very important that all these plugs are plugged into the correct motor/socket. The controller is designed for simple removal and replacement. In addition to the above there is :

- An on/off switch on the upper left side of the enclosure for powering down the controller.
- An air hose for connecting to the blower line at the based of the controller
- An inbuilt buzzer that sounds if a fault occurs with an associated mute switch.
- An output for connection to an optional alarm panel.



High level and alarm plug and socket





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Alarm Panel

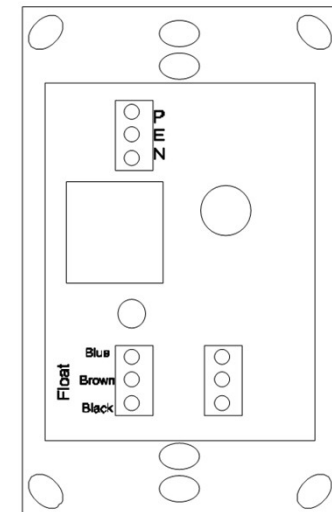
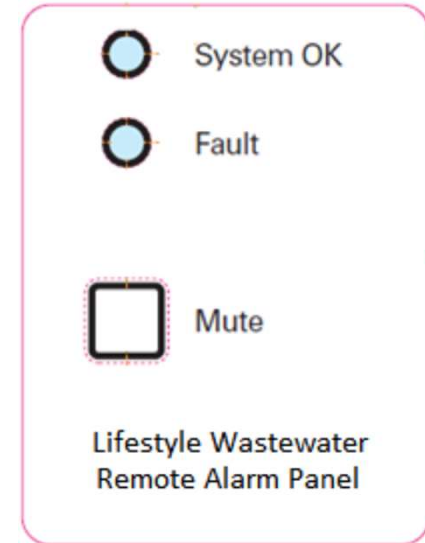
The alarm panel is connected to the main controller via a 2 core cable to the main controller's BMS output. The alarm panel is designed to fit within a standard light switch flush box and is powered independently.

The Alarm Panel will have 2 LEDs and a buzzer. The LEDs are a green *System OK*, and a red *Fault* one. The alarm panel also has a push button labelled *Mute* to mute the buzzer.

The alarm panel will receive the fault signal from the main controller's BMS output terminals. If there is power at the alarm panel and no fault, the green *System OK* LED is illuminated. If there is a fault at the main controller, the BMS output will close and the alarm panel's red *Fault* LED will illuminate on the alarm panel and the buzzer sounds. If the buzzer is activated, it is deactivated on pushing the Mute button.

To install the alarm panel:

1. Run a 2 core low voltage cable from the junction box at the turret on the tank to the alarm panel. This signal is not polarity sensitive. Be sure to connect to the labelled alarm panel connection (grey wires).
2. Install the alarm panel in a suitable location. Connect the low voltage cable to the *Float Black* and *Brown* terminals. The Blue terminal is not used.
3. Supply 230V power to the alarm panel and wire into terminals labelled *P* (Phase), *E* (Earth), and *N* (Neutral).
4. Power up the controller and test. If the tank is fault free, only the green *Power* LED will illuminate. The red *Fault* LED will illuminate if there is a fault at the tank and the buzzer sounds. The mute button turns off the buzzer.





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Holiday Mode

The controller has an automatic holiday mode. If the irrigation pump has not discharged for 48hours, the controller will automatically enter a holiday mode.

In Holiday mode power is supplied to the blower periodically for 30 minutes On and 30 minutes Off.

The holiday mode is automatically disengaged once the irrigation pump starts again.

The air fault alarm will not activate if the blower is off during Holiday mode.

High Level Float

The high level float is a 3 pin plug, but only two pins are used. These are shown below. The floats are connected via screw terminal so can easily be replaced if needed on site. They voltage for the float is 12VDC.

The float is wired normally open i.e. when the float is down the circuit is open. The input is not polarity sensitive.

The float is opened by unscrewing the middle compartment and pulling the two ends apart.

Pins Used





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The table below refers to the possible alarms shown on the main controller at the wastewater tank and/or on the remote alarm panel . The table is broken down to show the respective alarms, their likely cause and their likely solution.

| Alarm at Controller | Cause | Solution |
|---|---|--|
| High Level | The fluid level in the irrigation tank is high | Check irrigation filter is clean |
| | | Check that the pump is running and pumping freely |
| | The float is caught in the high level position | Check float position and move to stop it being caught |
| Blower Fault | The air hose has come off the air piping in side the turret | Remove top of turret and secure hose onto air pipe |
| Blower not running and no Air Fault alarm | System in Holiday mode | Power up the pump outlet and system should exit holiday mode and blower should run. |
| | Air switch blocked/faulty | Short out and then remove wires from air pressure switch terminals within controller. The air fault alarm should change. If so it indicates a fault with the air switch and this will need to be replaced. |

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Trouble shooting continued.

| Alarm at Remote Panel | Cause | Solution |
|---|-------------------------|---|
| Alarm panel not showing any LEDs | No power at alarm panel | Ensure there is 230V supplied to alarm panel. |
| | Faulty alarm panel | Test by installing another alarm panel and check that this works |
| Fault LED on Alarm Panel when High Level float is down | Float wired incorrectly | Ensure the high level alarm is wired Normally Open i.e. an open circuit with the float is down (usually the Brown and Black wires). |
| | Float is faulty | Unplug the float. If the alarm stops when the float is unplugged, it indicates a faulty float OR a faulty float plug. Test the float with a multi meter to ensure it clearly changes resistances when moved from the up and down position. |
| No Fault LED on Alarm Panel when there is a fault at tank | Faulty alarm panel | Test the alarm panel by shorting out the fault input on the back. A short circuit will activate alarm. |
| | Incorrect wiring | Short out alarm wiring at the tank and ensure alarm panel alarm activates. |
| | Faulty main controller | Ensure the alarm terminals at the tank show a closed circuit when a fault occurs. |

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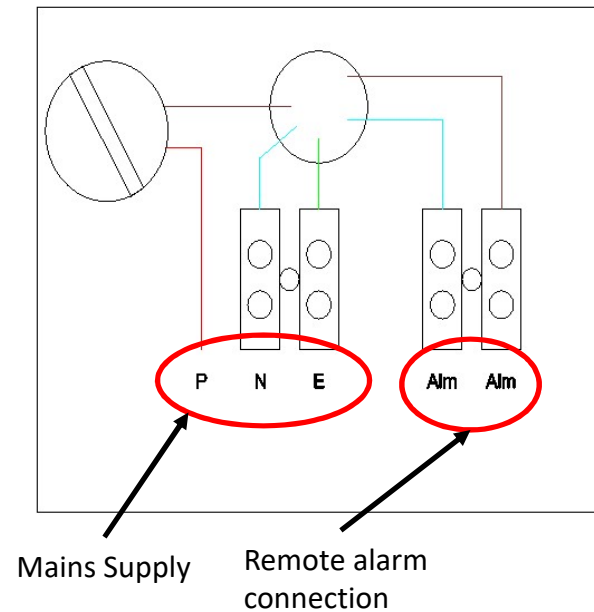
All electrical work must be carried out as per NZS 3000:2007 and NZECP2:1993. The controller is to be earth at the distribution board and the supply to the controller should be via 10Amp protected power supply. Any questions during installation please contact N2P Controls on +64 9 570 1919.

1. Remove the cover from the junction box that is visible on the outside of the green turret.
2. Wire the phase supply to the spare terminal on the On/Off switch on the junction box.
3. Wire the Earth and Neutral power supply to the strip connectors on back of controller connected to the power supply cable. **NOT THE 2 ALARM PANEL STRIP CONNECTORS.**
4. Test that the controller by;
 - Ensuring the *System OK* LED is illuminated when power is supplied to the controller.
 - Ensure each alarm LED is illuminated and the buzzer sounds when the high level alarm is activated (lift float) and air switch activated (pull hose).
 - Press the mute button to ensure alarm is muted.

Note:

- The high level alarm float is wired as Normally Open (Black and Brown wires).
- The controller and alarm panel are tested prior to delivery.

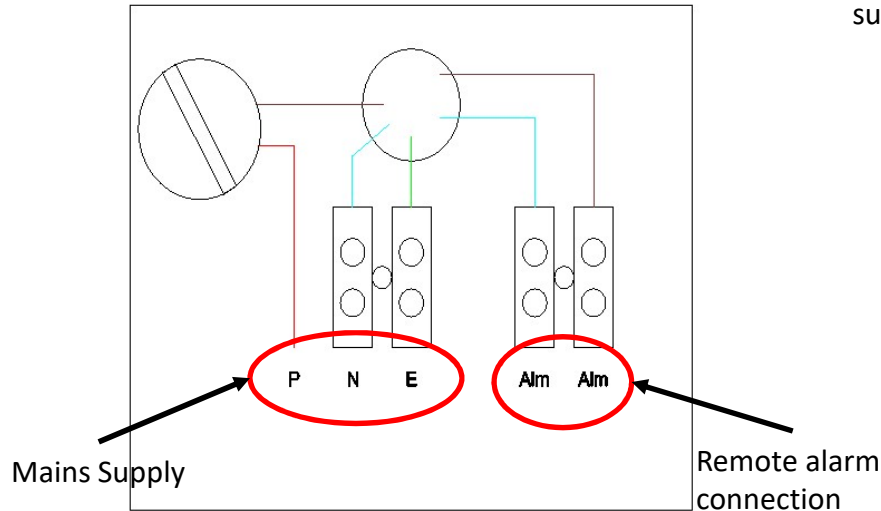
For installation information for the remote Alarm Panel, please refer to back.



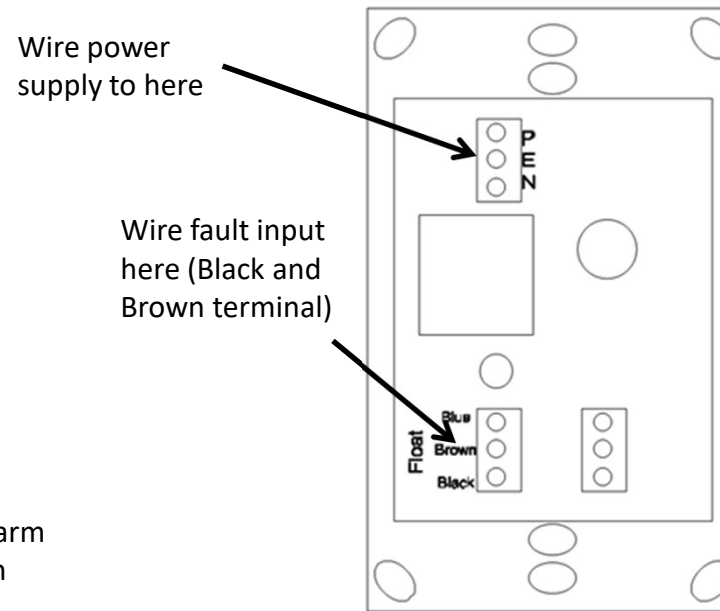
HYNDS LIFESTYLE WASTEWATER SYSTEM CONTROLLER INSTALLATION GUIDE

Optional – Alarm Panel Installation

1. A separate 2 core low voltage cable is required for the alarm panel. Connect this to the strip connectors labelled *Alm*. This is not polarity sensitive. This is an extra low voltage circuit so ensure this wiring is not mixed with the mains supply to the controller.
2. Connect the alarm wiring to the terminals labelled *Black* and *Brown* on the alarm panel. These are not polarity sensitive.
3. Place alarm panel into standard light switch flush box and ensure secured in place.
4. Test the alarm panel by forcing an air fault and high level fault at the tank and ensure the alarm panel activates.



Junction Box Layout



Optional Alarm Panel