



**N2P | Pump Controls**  
engineering innovative solutions

# Titan Pump Controller

## Installation and Instruction Guide

05110424



### OVERVIEW:

An LCD alarm panel shows pump status; any active alarms; and real-time voltage, current, and analogue signal. A flashing red light indicates a pump or system fault.

Set your maximum current draw and programme pump operation, including any timed operation; level faults; and duty, assist, or standby control.

### CONTROLLER SPECS:

**The controller is rated to 200–260 VAC, 5kW, 50Hz.  
Rated to IP64**

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**All electrical work must be carried out per required wiring regulations.**

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**Refer to attached wiring and circuit diagram when installing the controller.**

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## Overview

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## Installation Instructions

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## Quick Set-Up

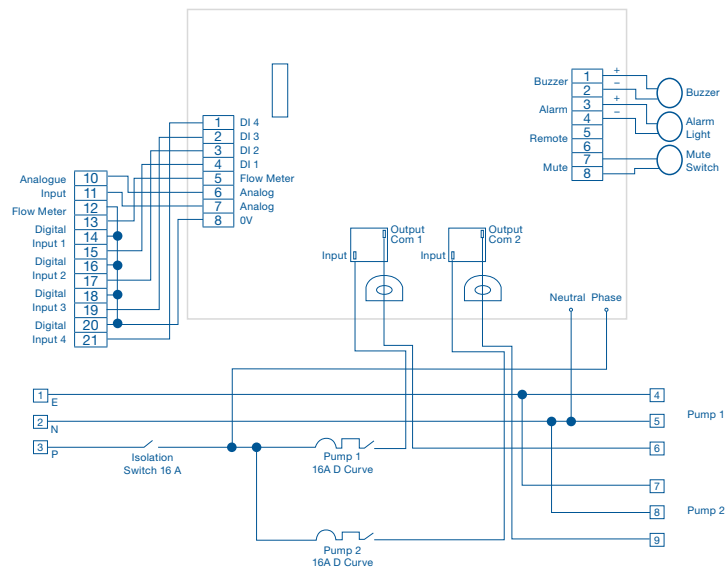
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## Menu Structure

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1. Date and Time
2. Maximum Current settings
3. Run Window settings
4. Duty/Standby/Assist
5. Float Fault settings
6. Timed Pumping settings

## Installation Instructions



Ensure all floats are connected as normally open (NO) and as an open circuit when the float is in the down position

1. Open the controller housing and internal panel. Take care not to damage the cable from the LCD screen and main PCB.
2. Connect the power supply to terminals 1, 2, and 3 (Earth, Neutral, and Phase respectively).
3. Connect Pump 1 to terminals 4, 5, and 6 (Earth, Neutral, and Phase respectively).
4. Connect Pump 2 to terminals 7, 8, and 9 (Earth, Neutral, and Phase respectively).
5. If a low-level float is being installed, wire into terminals 13 and 14.
6. Connect the start/stop float to terminals 16 and 17.
7. If you have an assist float, connect it to terminals 18 and 19. If this input closes, it will start the standby pump.
8. Wire the high-level float to terminals 20 and 21.
9. If a BMS/SMS unit is being installed, there will be additional terminals labelled 22 and 23. This is a voltage free connection, rated to 4A at 230V. This circuit will close when there is a fault. If the BMS output is added, be sure to select the Alarm Light settings, under Outputs, to Used Solid.
10. Power up the controller and test it by lifting the start/stop float for 5 seconds. This will start the duty pump and change the pump's status on the LCD screen.
11. Lift the high-level float and hold it for 5 seconds. This will cause a high-level alarm message to display on the LCD. The buzzer will sound and the alarm light will flash. Pushing the mute button will silence the alarm.

*To ensure the correct settings for your pump, refer to the following pages.*

## Quick Setup

The controller's menu structure is shown to the right. To access each parameter, move the cursor (>) to the parameter name and press Enter. This will take you to the next level of parameters or into the parameter itself.

When you have changed a parameter, press the Enter key. To return to the previous menu, press the Menu key (M).

The Inputs section allows you to select each input and what it will be used for.

### The factory settings are:

#### Digital Input 1:

*Not Used*

#### Digital Input 2:

*Pump Start A (start/stop float)*

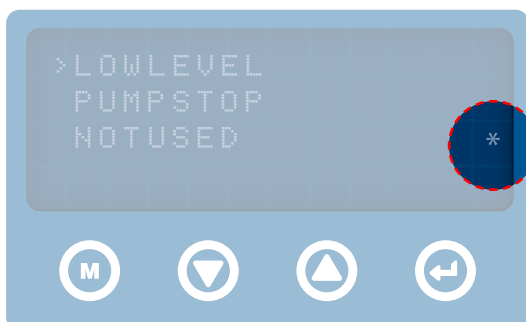
#### Digital Input 3:

*Pump Start B (assist float) – Optional*

#### Digital Input 4:

*High Level (high-level float)*

An asterisk (\*) indicates the currently selected setting. *The Digital Input 1 screen is shown below. The asterisk (circled in red) shows that this input is Not Used.*



### Menu Structure

#### Inputs

Digital Input 1  
 Digital Input 2  
 Digital Input 3  
 Digital Input 4  
 Analogue Input  
 Flow Meter  
 HL Float Fault  
 PS Float Fault  
 Mute

#### Outputs

Pump 1  
 Pump 2  
 Alarm Light  
 Alarm Buzzer  
 Remote Alarm Panel  
 Telemetry

#### Parameters

Date and Time  
 Start Delay  
 Max Run Time  
 Alarm Delay  
 Manual Run Time  
 Low Voltage Alarm  
 Maximum Current  
 No Flow Alarm  
 Run Window  
 Dry Run Protection  
 Duty / Standby / Assist  
 Mute  
 Timed Pumping  
 Password Protection  
 Analogue  
 Reset

#### History

Voltage  
 Current  
 Run Time  
 Analogue Reading  
 Total Flow  
 Pump Starts

#### Alarms

Alarm History

Typically the only settings that need checking are Date and Time, Maximum Current, Run Window (optional), and Duty/Stdby/Assist.

### Date and Time

To update the time, select *Parameters* on the LCD screen. Once in Parameters, select *Date and Time*. In this screen, you can change the day, date, and time using the up and down arrow keys. Once satisfied with each parameter, press Enter to move to the next. When the last parameter has been entered, you will be returned to the Parameters menu.

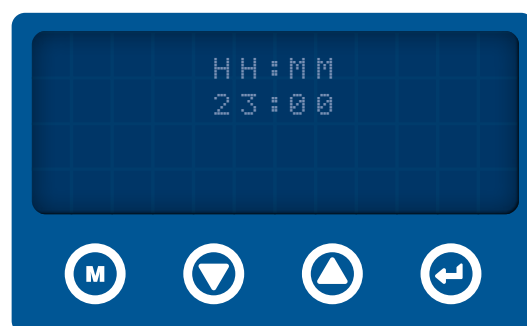
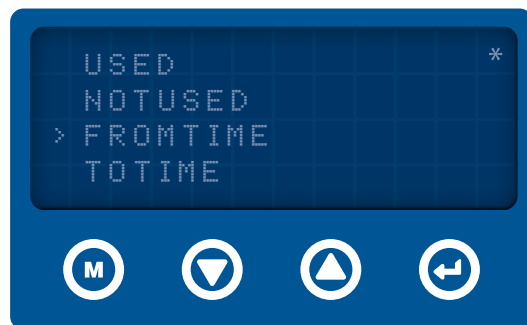
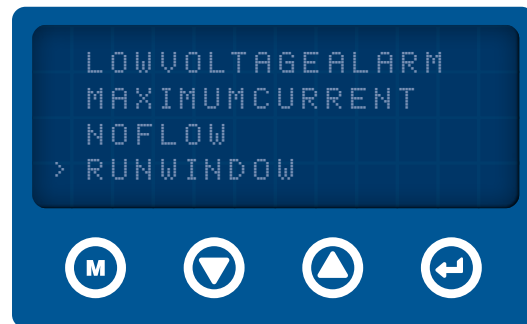
### Run Window settings

Use Run Window to programme your pump to run at a specific time of day, e.g., from 23:00 to 05:00. Note: If the assist or high-level float are activated, the run window will be overridden and the pump(s) will start.

To programme the run window, select *Parameters* on the LCD screen then scroll down and select *Run Window*.

In this screen, select *Used* by moving the cursor to *Used* and pressing the *Enter* Key. Then select *From Time*, using the up and down arrows to set the desired values for hours and then minutes. Press Enter to accept each value or M to exit the screen without changing it.

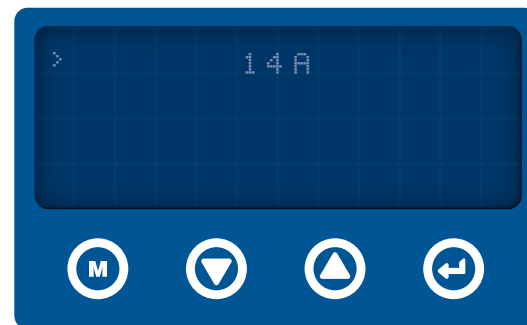
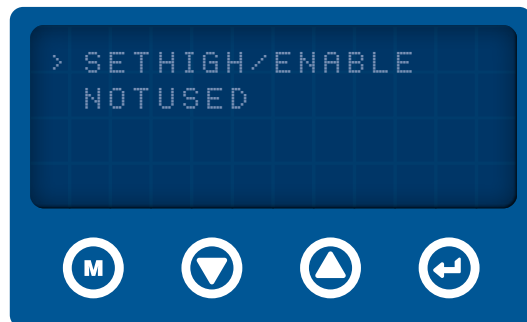
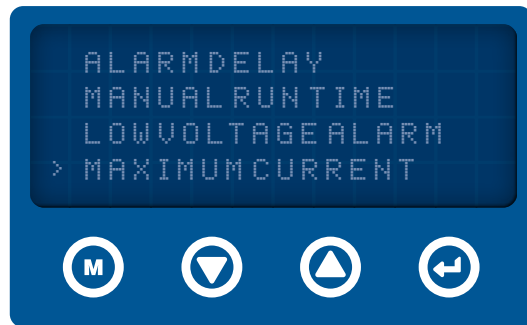
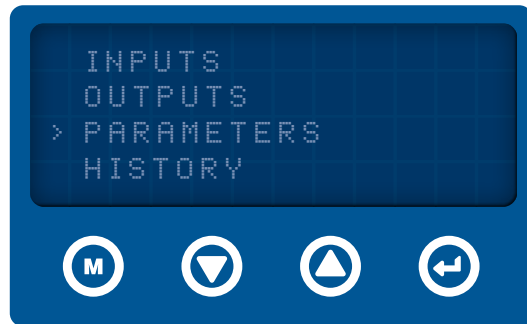
Repeat the process to set the desired *To Time*. Make sure the controller is set to the correct time by checking the *Date and Time* screen.



### Maximum Current settings

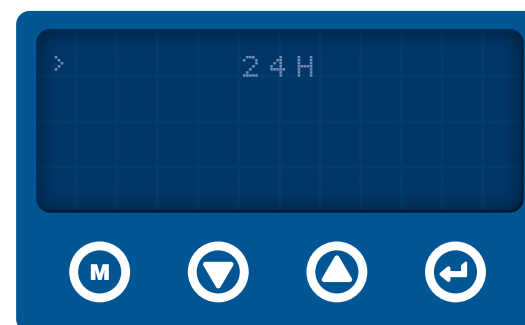
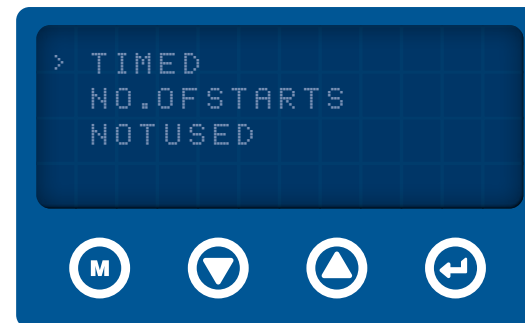
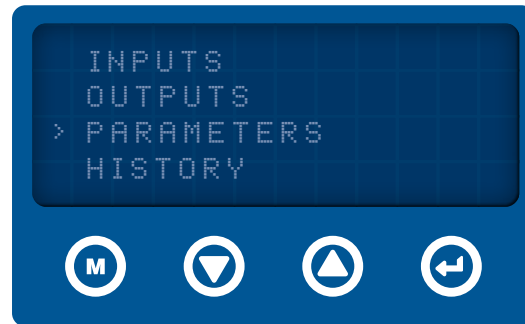
To check maximum current, select *Parameters* on the LCD screen then scroll down and select *Maximum Current*.

Select *Set High/Enable* to set the overload current using the up and down arrows. Press Enter to accept the new value or M to exit the screen without changing it.



### Duty/Standby/Assist

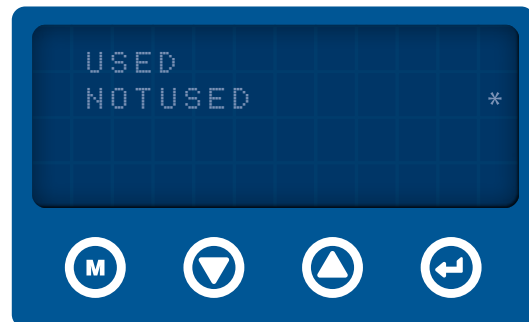
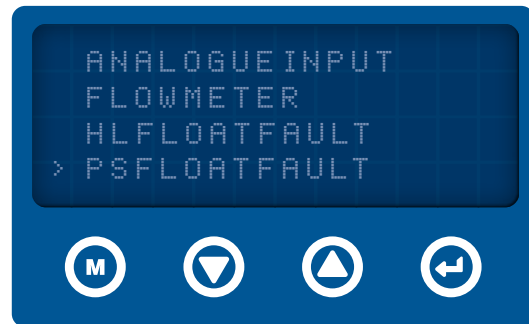
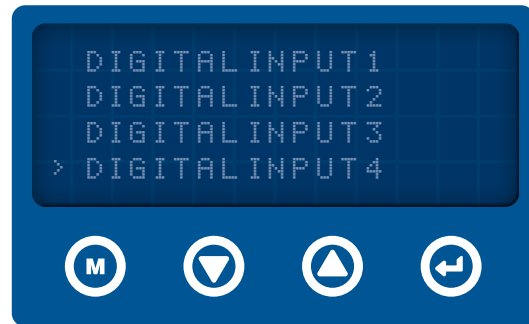
Select *Duty/Stdby/Assist* in the *Parameters menu*. In this page select either *Timed* or *No. of Starts*. When in the *Timed* screen, change the hours by using the up and down key. This is the number of hours between pumps changing duty. If the *No. of Starts* is selected, use the up and down key to change the number of starts required before the duty pump changes.



### Float Fault settings

If you are not using a start/stop float input and these terminals are shorted out, you will not be able to use *No. of Starts* to change the duty pump. You will also need to change the *PS Float Fault* setting by entering *Inputs* then selecting *PS Float Fault* and *Not Used*.

When finished, return to the *Menu* screen, which will revert to the *Status* screen after about 10 seconds.

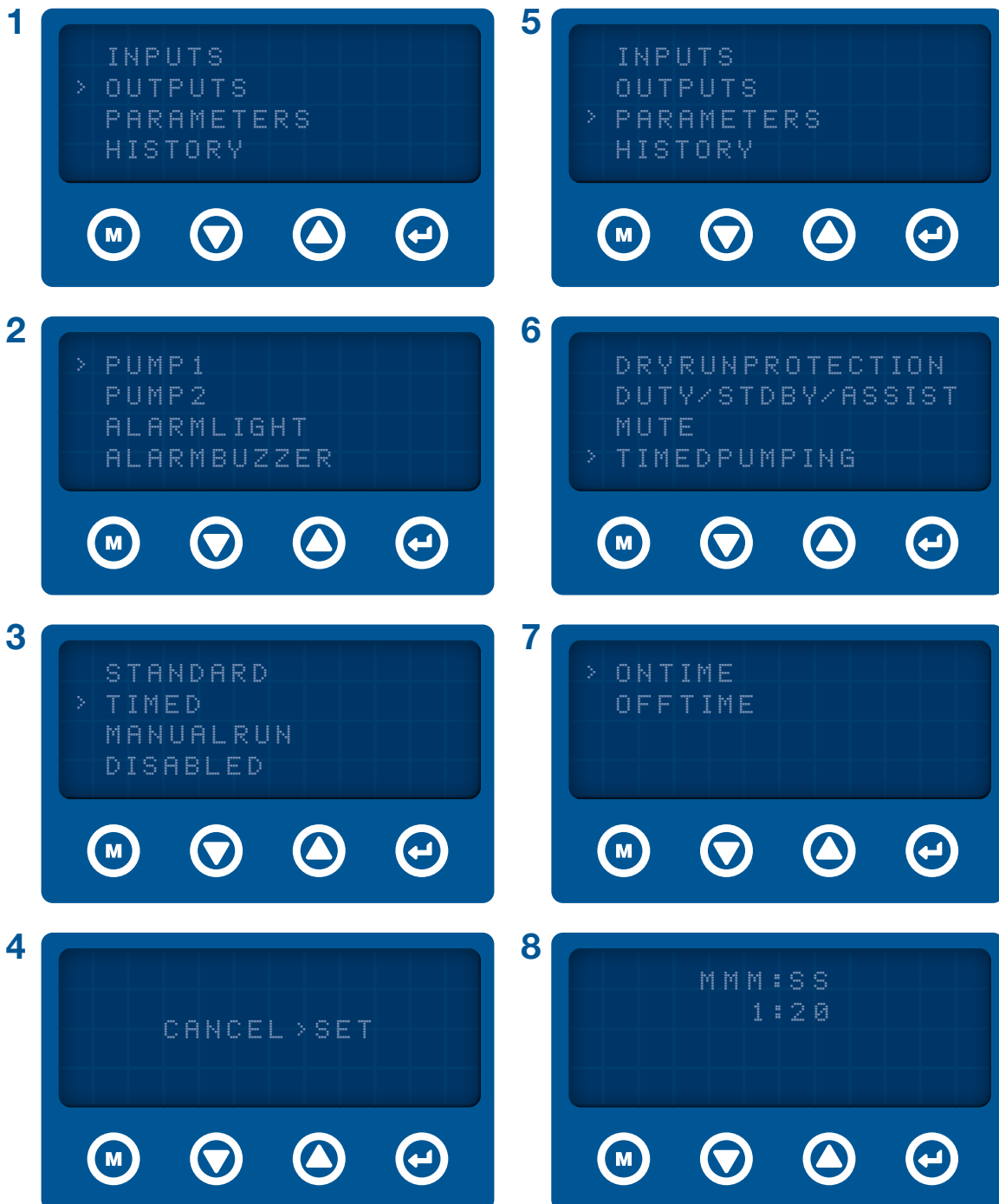




### Timed Pumping settings

To set your pumps to run at a specific on and off time, select the *Outputs* option from the main menu then select *Pump 1, Timed, Set* and press *Enter*. You have now set *Pump 1* to operate in *Timed* mode. For a *Duty/Standby* installation, repeat the process for *Pump 2*.

To set the *ON* and *OFF* time, go to *Timed Pumping* in *Parameters* and select *On Time*, using the up and down arrows to adjust hour and minute values. Once satisfied, press *Enter*. Repeat the process to set *Off Time*. The maximum *ON* or *OFF* time is 999 minutes and 59 seconds.



1. INPUTS  
> OUTPUTS  
PARAMETERS  
HISTORY
2. > PUMP1  
PUMP2  
ALARMLIGHT  
ALARMBUZZER
3. STANDARD  
> TIMED  
MANUALRUN  
DISABLED
4. CANCEL > SET
5. INPUTS  
OUTPUTS  
> PARAMETERS  
HISTORY
6. DRYRUNPROTECTION  
DUTY/STDBY/ASSIST  
MUTE  
> TIMEDPUMPING
7. > ONTIME  
OFFTIME
8. MMM:SS  
1:20