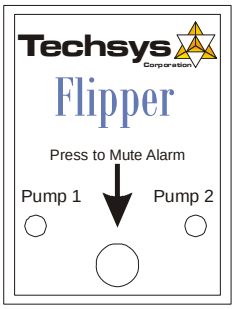
FLIPPER Relay



The new Level master controller is fitted with a Flipper relay, below is a summary of its functionality.

1. It operates on 24VAC and all float inputs etc are 24VAC which eliminates the need for the RCD. The inputs consume about 25mA each which is needed to keep the contacts in the floats functional.

2. It operates 2 pumps and after every pump stop input, it then alternates the first pump to start.

3. The alarm Buzzer is inbuilt. The buzzer pulses instead of emitting a continuos tone.

4. There is an output for an external buzzer. Typically this will be mounted in the bottom of the enclosure and has a moderate IP rating (54). This should be a 15V buzzer.

5. There is a mute button on the front of the relay and also connections for an external mute, this is typically a push button on the side of the enclosure.

6. All inputs have inbuilt delay timers, they are not adjustable. Pump Start inputs are 1sec, Pumps stop is 0.5 sec, Alarm is 5 secs & Mute is 0.2.

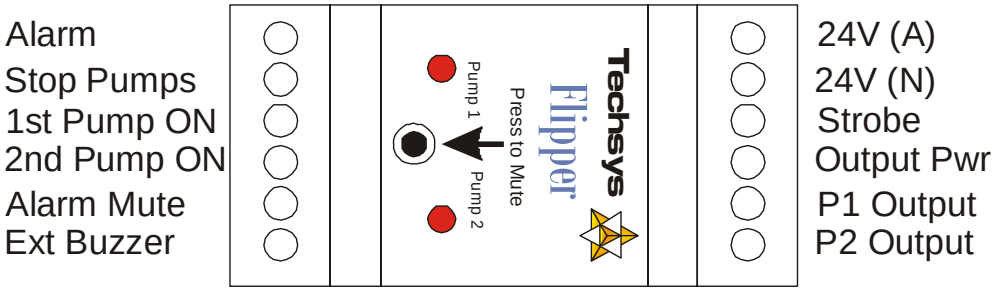
7. There is a test mode to enable checking of the outputs etc.

    a. If the internal mute button is held on for 5 seconds the internal buzzer & strobe output will turn on.
    b. If held down for a further 2 seconds then the External buzzer output will turn on.
    c. If held down for a further 1 second then the Pump 1 LED will turn flash.
    d. If held down for a further 2 seconds then the Pump 1 Output will turn on. (Pump 1 LED stay ON)
    e. If held down for a further 1 second then the Pump 2 LED will turn flash.
    f. If held down for a further 2 seconds then the Pump 2 Output will turn on. (Pump 2 LED stay ON)
    g. Releasing the internal mute button at any time stops the test & turns off all outputs.
    h. (All outputs are turned off even if they were on prior to the start of the test)

8. A bonus feature that is available via the test software is a Reset function.
    a. Hold on the internal mute button is for 5 seconds until the internal buzzer turns on, then release the internal mute button, this turns off all outputs including pumps, buzzers, strobes and reset the mute function. (Normally the power would need to be cycled to do this same function).

9. The Pump 1 & 2 outputs & the Strobe output have a common supply terminal (output Pwr), typically this would be 240VAC to drive contactors etc but if required it could be any voltage, there is a Max of 3Amps on each output. Contactors should be fitted with snubbers as per all other Techys products.

Connections-



24V (A) - Power supply input 24V AC/DC
24V (N) - Power supply common
Strobe - External Strobe output
Output Pwr - Voltage supply input for Strobe, P1 & P2 Outputs
P1 & P2 Outputs - Outputs to activate Pump 1&2 starters
Alarm - Alarm input > Switched to 24V (N) to activate
Stop Pumps - Input to stops both pumps > Switched to 24V (N) to activate
1st Pump ON - Starts Lead rotation pump > Switched to 24V (N) to activate
2nd Pump ON - Starts Lag rotation pump > Switched to 24V (N) to activate
Alarm Mute - Stops internal and external Buzzer - Strobe output remain ON
Ext Buzzer - 15VDC output for external buzzer - Other connection is 24V (N)