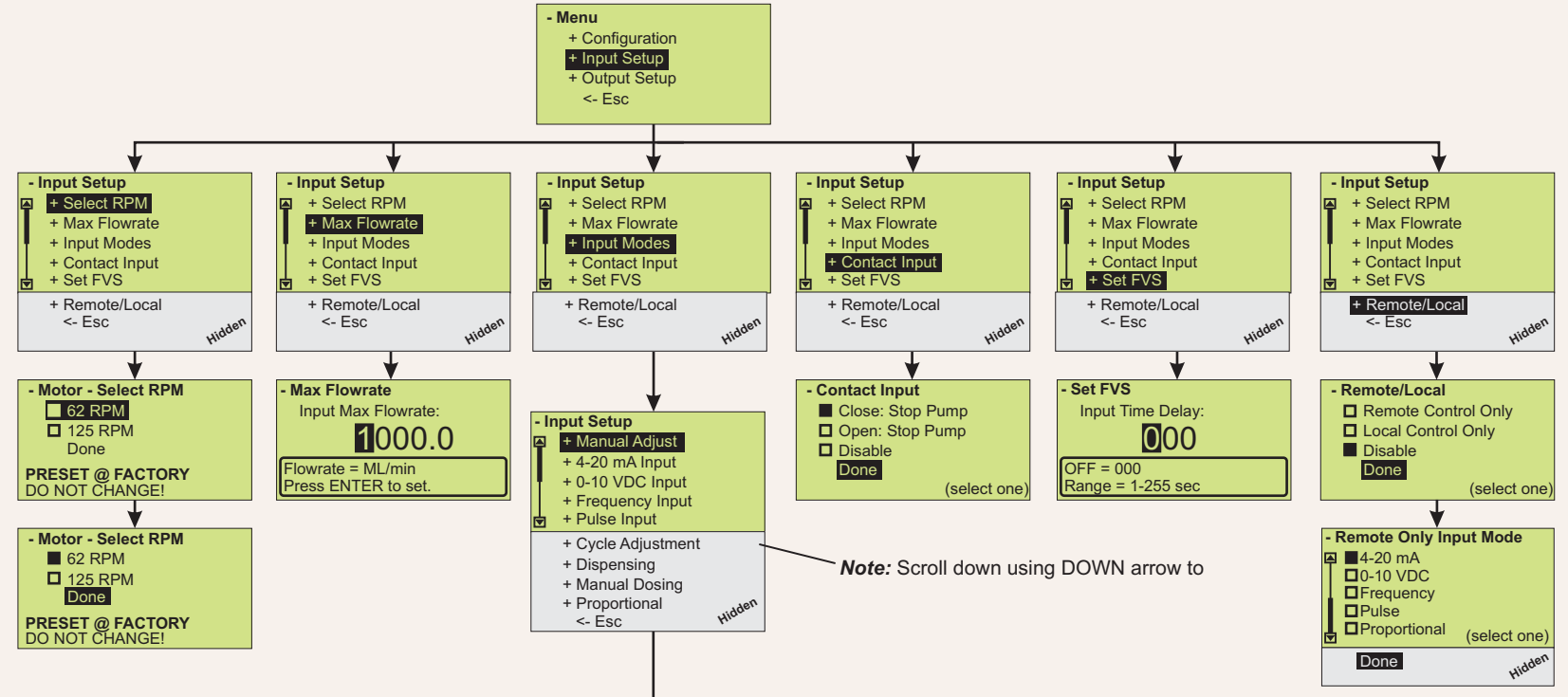
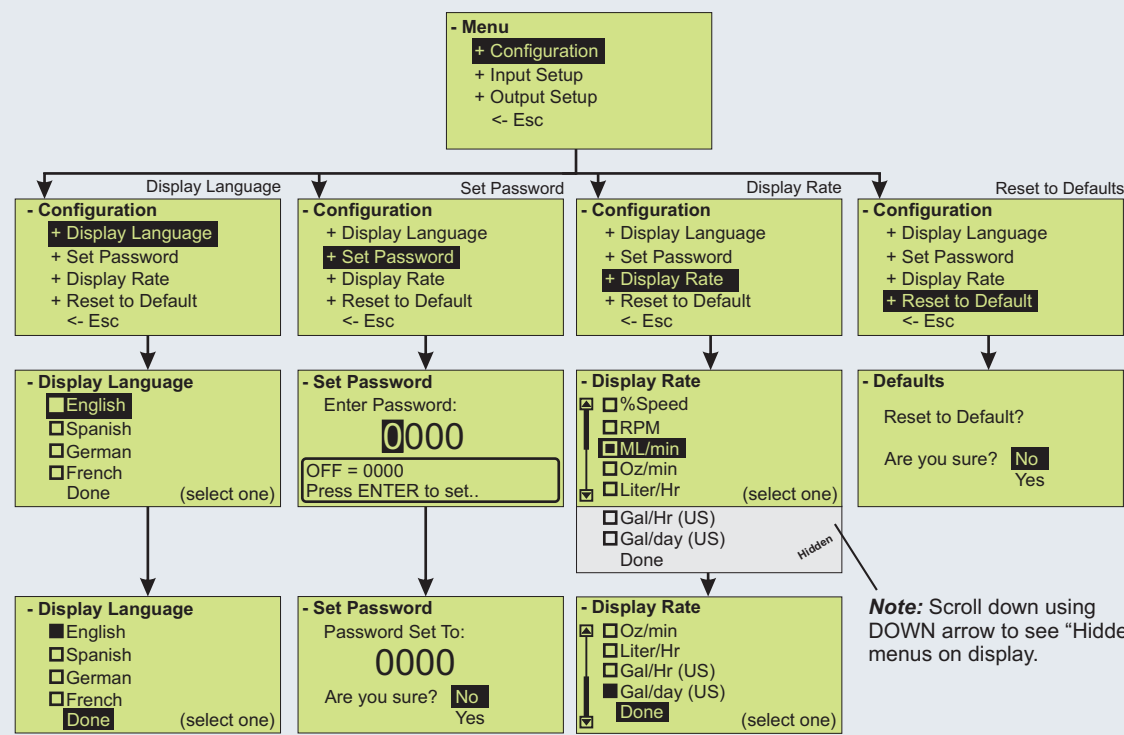


# 1 Configuration - menu

# 2 Input Setup - menu



## Input Setup (Run Modes)

**Manual Adjust**  
Used to manually control speed of pump. Set % (percent) Motor Speed in this menu.

**4-20 mA Input**  
Used to remotely control pump with an incoming 4-20 mA signal.

**0-10 VDC Input**  
Used to remotely control pump with an incoming 0-10 VDC signal.

**Frequency Input**  
Used to remotely control pump with an incoming high speed frequency signal. Typically used with flow meters or other external devices.

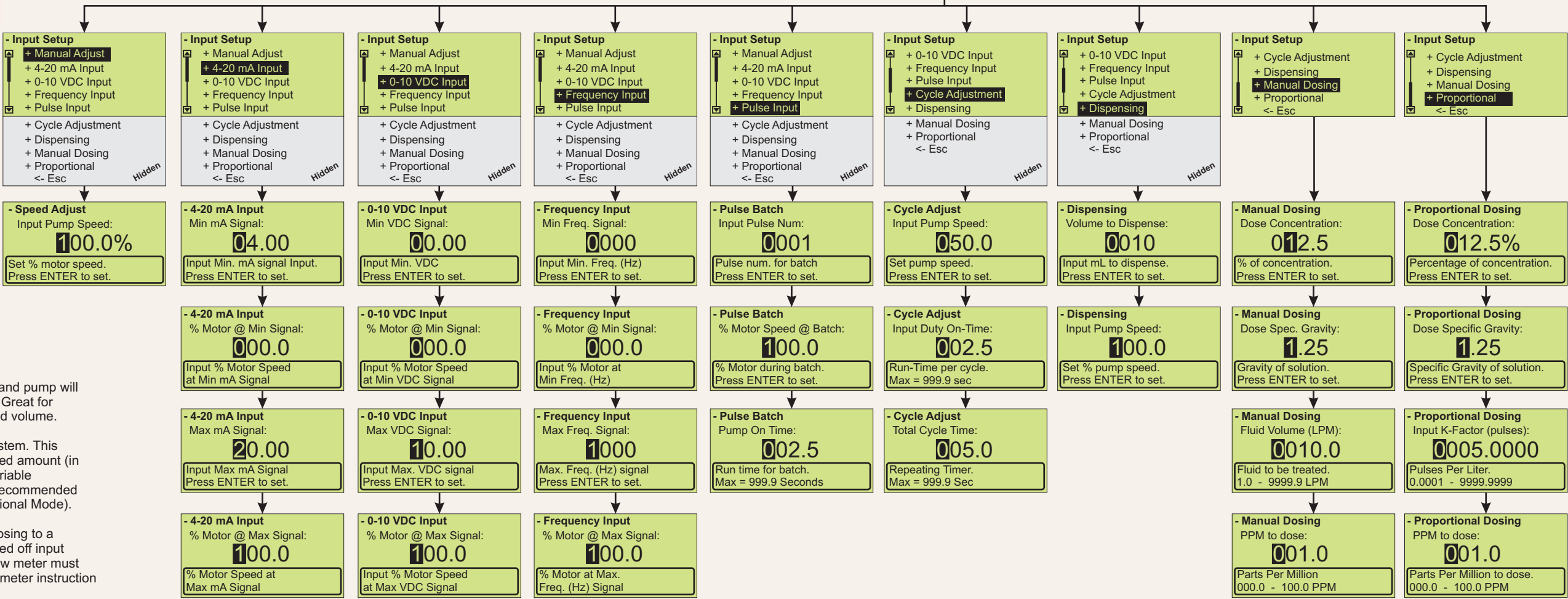
**Pulse Input**  
Used to remotely control pump with an incoming pulse signal. Can be used with an external foot pedal, a water meter, a PLC, contact closure, or other low speed pulse devices.

**Cycle Adjustment**  
Used to run at a pre-selected motor speed for a specified run time. This cycle will repeat itself using a repeating cycle timer.

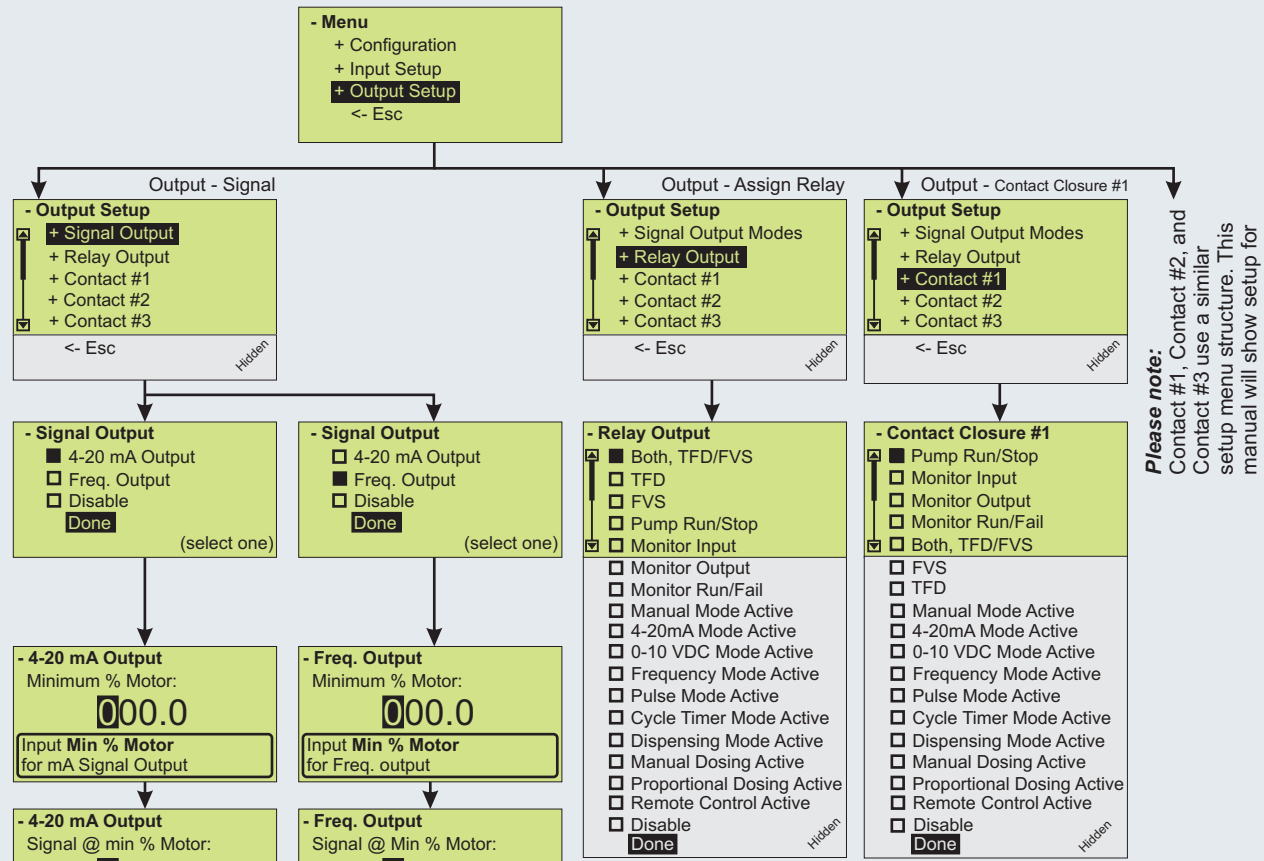
**Dispensing**  
Configure any dispensing amount or sample size and pump will repeat it on command by pressing START button. Great for accurate single shot dispensing of a pre-configured volume.

**Manual Dosing**  
Used to configure Parts Per Million dosing to a system. This method can be used if treated fluid volume is a fixed amount (in Liters Per Minute). If the treated fluid volume is variable (continuous change), then use of a flow meter is recommended along with pumps Proportional Mode (see Proportional Mode).

**Proportional**  
Used to configure proportional Parts Per Million dosing to a system. This method of proportional dosing is based off input pump is receiving from an external flow meter. Flow meter must have a pulse output. You will need to refer to flow meter instruction manual to obtain K-factor for flow meter.



# 3 Output Setup - menu



Please note:  
Contact #1, Contact #2, and  
Contact #3 use a similar  
setup menu structure. This  
manual will show setup for

### Description of Relay and Contact Closure Output triggers

**Selection:** Contact activates when:

- Pump Run/Stop* . . . . . Motor turning (roller assembly is rotating).
- Monitor Input* . . . . . Incoming analog or digital signal is not received. Use with any signal input mode, i.e. 4-20 mA.
- Monitor Output* . . . . . Outgoing analog or digital signal not transmitted.
- Monitor Run/Fail* . . . . . Motor fails to respond to commands.
- Both TFD/FVS* . . . . . Either TFD or FVS system triggers.
- FVS* . . . . . After the programmed delay time, pulses are not received by flow sensor.
- TFD* . . . . . Tube failure is detected by sensors in the head.
- Active Mode* . . . . . Use to monitor any changes to the run mode selection.
- Remote Control Active* Use to monitor the remote/local setting.
- Disable* . . . . . Output contact is disabled.

**PUMP TUBE TIMER**

Current tube timer:

**186** Hrs.

Enter twice to reset

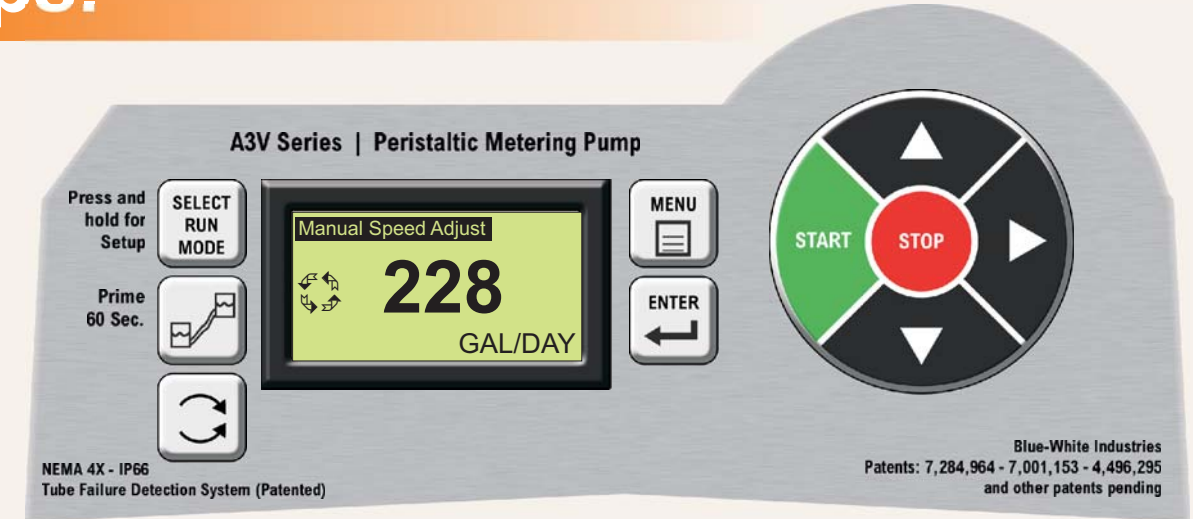
### Pump Tube Timer.

To view current Pump Tube Timer, Press ENTER and DOWN arrow at same time. Screen will display current Pump Tube Time in run-time hours. Timer starts when rotor is rotating and stops when rotor is stopped. Pump Tube Timer will display for 5 seconds then switch back to previous operating screen.

**Caution:** Press ENTER button twice to reset Pump Tube Timer.

**Note:** When replacing pump tube, pump will ask you if you'd like to reset Pump Tube Timer. If you choose YES, screen will display current Pump Tube Time for 5 seconds before timer is reset.

## Tips.



Manual Speed Adjust

**228**

GAL/DAY

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4-20 mA Input

**12.5**

mA

### View display rates.

While pump is operating in any Run Mode, you can view %Speed, RPM, and another Display Rate (see "display rate" section in instruction manual). Press RIGHT arrow while pump is in any Run Mode. RIGHT arrow is a convenient way to scroll through multiple read-only screens during normal operating modes of pump.

If pump is using input signals to operate (such as 4-20 mA), you can view current input signal by pressing RIGHT arrow.

**Note:** This is a read-only feature, no changes can be made using this feature in any Run Mode.

Currently selected Run Mode

Manual Speed Adjust

**OFF**

Press START to run

### Select Operating Run Mode.

SELECT RUN MODE button will allow you to scroll and select the current Run Mode (operating Input Mode). Current Run Mode is displayed along top left portion of LCD.

**Example:** If pump is currently running in **Manual Speed Adjust** mode and you press SELECT RUN MODE button, the pump will disable **Manual Speed Adjust** mode and activate next Run Mode (which is **4-20 mA Input**). You can scroll back to your desired Run Mode by continuously pressing SELECT RUN MODE button until you reach your desired Run Mode.

**Note:** You can configure multiple Run Modes (Operating Input Modes). The pump can only run in ONE Run Mode (Operating Input Mode) at a time.

Currently selected Run Mode

Manual Speed Adjust

**OFF**

Press START to run

### Shortcut Run Mode setup.

SELECT RUN MODE button also serves as shortcut button. Pump must be in normal operating mode to use shortcut.

**Press and Hold** SELECT RUN MODE button to enter programming menu for currently displayed Run Mode.

Once Run Mode has been configured, Press ENTER to save changes.

**Press and Hold** SELECT RUN MODE button to jump back to current Run Mode of pump.

**Press** START button to start pump with new settings.