YSC-3B Batch Controller
Installation & Operation

Instructions | Read carefully before handling.

PRODUCT OVERVIEW

BASICS

The YSC-3B is engineered to provide control of the number of cycles produced by a solenoid controlled AODD (air operated double diaphragm) pump for "Batch". It also determines at what pump speed those cycles will be accomplished, how many "Batches" are to be incorporated in a single operation and the interval of time between the batches. A cycle is defined as the pumping of both pump "water" chambers. The system requires 110 volts AC to power it and delivers 12 volts DC to the pump solenoid.

You must use the appropriate pump solenoid valve when using the YSC-3B. For more details, visit our accessories web page, Solenoid Controlled.

The system is programed using the 8-button keypad on the cover. The system is operated using the keypad on the cover and can be remotely paused or stopped using dry contacts via a Switch terminal strip already on the circuit board.

The circuit board is installed in a NEMA 4X plastic enclosure for use in wet or harsh environments. However, one should avoid spraying or washing down the unit.

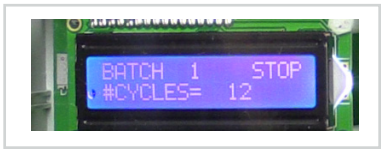
The unit always powers up in the **Continuous** mode and switches to batching when the **Batch** switch is pressed. The unit stores programs for three different batches, as well as the continuous speed.

Pump & Solenoid Valve sold seperately.

Batch count (cycle) is repeatable as long as the air pressure and volume is constant. Note: A pump stroke is one liquid chamber and a pump cycle is both chambers.

PROGRAMMING

- Select BATCH (i.e.; BATCH 1, BATCH 2, BATCH 3), press SET
- Select the number of cycles per batch, press SET
- Select the pump speed for Sec/Stroke, press SET
- Select the number of batches, press SET (zero makes the batch run an infinite number of times)
  To set the CONSTANT speed, press SET when the unit is displaying that it is in the CONSTANT mode. Use the UP and DOWN buttons to set the speed and press SET to escape the programming mode.
- Select the hours, minutes and seconds, press SET between each segment
- Press SET to complete the BATCH setup mode



The system is now ready to RUN. Repeat above steps to program additional batches.

- To RUN the system, press RUN
- To STOP the pump but be able to pick up where you left off, press STOP
- To PAUSE the system, press PAUSE
- Select PAUSE or RUN to start back up

EXAMPLE *A pump with a 0.1 liter "Water Chamber" capacity per side. You want to pump 2.2 liters in 66 seconds.*

2.2 Liters/0.1 Liters per Stroke = 22 Strokes
22 Strokes/2 Strokes per Cycle = 11 Cycles
66 Seconds/22 Strokes = 3 Seconds per Strokes

Form# YA-030-YSC0223

PRODUCT OVERVIEW (continued)

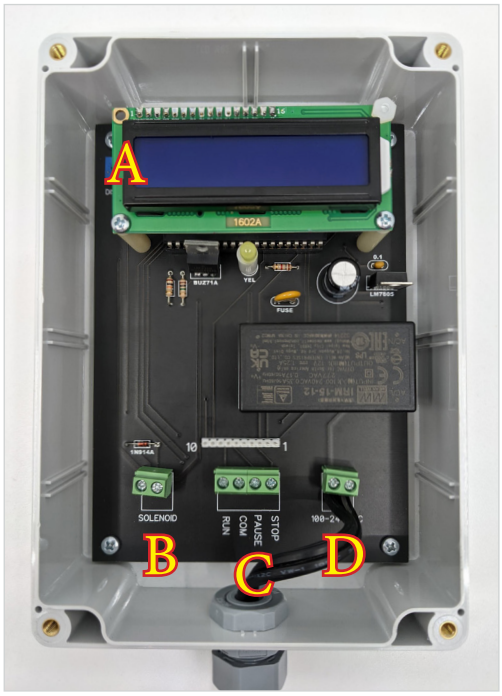
QUICK TOUR

A = DISPLAY/CONTRAST
The Display control changes the contrast on the LCD display. You will probably never touch it unless the temperatue around the unit is unusually high or low. If there is no information on the display, someone probably fiddled with the control. Simply bring it full counterclockwise and then back off until you have the desired contrast.

B = SOLENOID OUTPUT (12 volts DC)
The Solenoid output provides 12 volts DC for the pump's integral solenoid. You must use the correct pump solenoid in order for the pump to operate properly.

C = SWITCH TERMINAL
The Switch terminal connects the control switches to the system. You can remotely RUN, PAUSE, and STOP the system by connecting remote dry contacts to the appropriate terminals.

D = POWER TERMINAL
The 110 VAC input is the only way to power the unit. Make sure the connections are neat and, for safety reasons, no conductor is exposed. The is the only location on the circuit board where more than 12 volts are present.



Converting to YSC Controlled Pump:

1. With a wrench, untighten the screws that attach the air valve assembly to the pump (fig.3)
2. Remove and replace the air valve with the solenoid valve (fig.4); insert the mounting plate where applicable and tighten screws.
3. Insert YSC controller DC wire to solenoid valve (fig.5).
4. Insert air line to solenoid valve (fig.6).

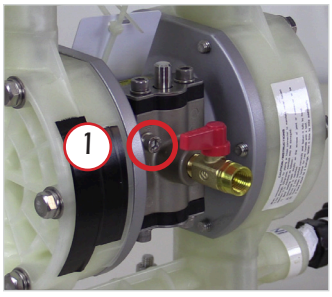


Fig. 3: Pump Air Valve

Fig. 4: Solenoid Valves

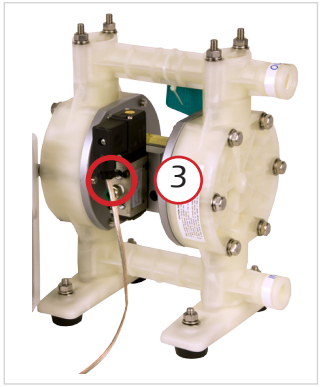


Fig. 5: Connecting YSC to Solenoid Valve

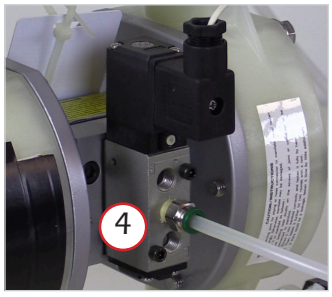


Fig. 6: Conneting Airline to Solenoid Valve