MINI-TROL RO CONTROLLER
Specifications

Power	120VAC or 240VAC, 50/60 Hz, +10/-15%, 2.5 watts (Optional 24V)
Inputs:	3 switch inputs, selectable normally open or normally closed
Outputs:	RO pump and inlet solenoids, 20A total load
Enclosure:	4.6 x 4.6 x 2.25 ABS Plastic **or** 5 x 5 x 2 NEMA 4X

OPERATION

When the power switch is turned ON, the status LED will light Green, the inlet valve will OPEN and the RO pump will START.

Under normal operation the RO unit will run until: (A) the storage tank is full (status LED Amber) or (B) Pretreat lockout has occurred (status LED Flashing Green). When A or B has cleared, after a time delay, the RO unit will restart, and the status LED will return to Green. Jumper setting J-6 selects a 2 second or 15 minute tank full restart time delay.

Upon an alarm signal for Pressure Fault, the status LED will turn RED, the RO pump will stop and the inlet valve will close.

If jumper J-4 and J-5 are in Position ›B‹ (disabled), the status LED will flash RED and the RO will not restart until the Power Switch has been manually cycled OFF then ON to reset the unit.

If jumper J-4 is in Position ›A‹ (auto reset), every 60 minutes the RO will start and stop again if a pressure fault continues.

If jumper J-5 is in Position ›A‹ (pressure fault retry), the RO will attempt to restart after 30 seconds, then 5 minutes, then 30 minutes. If the pressure alarm has not cleared after the third try, the RO unit will remain off until manually reset.

If jumper J-4 and J-5 are in Position ›A‹, after a pressure fault condition, the RO unit will continually attempt to restart after each 60 minute cycle, until the pressure switch input has cleared.

Installation

1. Confirm that the controller is configured for the proper voltage 120, 240 or 24 volt. See ID label, also a label is located on top of the transformer designating voltage (See Fig. 1)
2. The RO pump motor or motor starter and the solenoid valves must be of the same voltage 120, 240 or 24 volt.
3. Confirm that the (3) input signals - pressure switch, tank level switch and pretreat switch are all of the same configuration, normally open or normally closed.
4. Confirm the desired jumper settings for your operation. The jumpers are factory set to Position ›B‹ Auto Reset (disabled), Pressure Fault Retry(disabled), Tank Full restart time delay (2 seconds), Input contact type (NC, open to operate), and flush on tank full. If you desire to change any jumper function, move that jumper to Position ›A‹. [See Table 1, Jumper Selection].
5. If a wire harness is provided with this controller, skip this section and proceed to step 6. If wiring to the controller is required, proceed as follows:
   A. Remove the enclosure cover.
   B. Mark and drill necessary electrical entry holes in the empty enclosure.
   C. Terminate necessary wiring to the terminal strips as required (See Fig. 1). Each terminal is labeled for the proper connection. Terminal strip P1 is high voltage for power, motor and inlet solenoid. Utilize proper 3 conductor wire size for the appliance. ***CAUTION:*** The controller is rated for maximum 20 amp total load. Terminal strip P2 is low voltage for input signals from tank full, pressure fault and pretreat lockout. Use small gauge 2 conductor cable for these wire connections.
6. Position and mount the enclosure in the desired location.
7. Connect all wiring to the appropriate appliances (Do not connect to the power source at this time).
8. Reassemble the enclosure, be sure to coil and leave some slack wire inside the enclosure.
9. Turn the power switch to the OFF position.
10. Connect the power wire 120, 240 or 24 volt to its source.
11. Proceed to turn the power switch ON and test the completed unit as necessary.
12. Notice the status LED color to confirm system status.

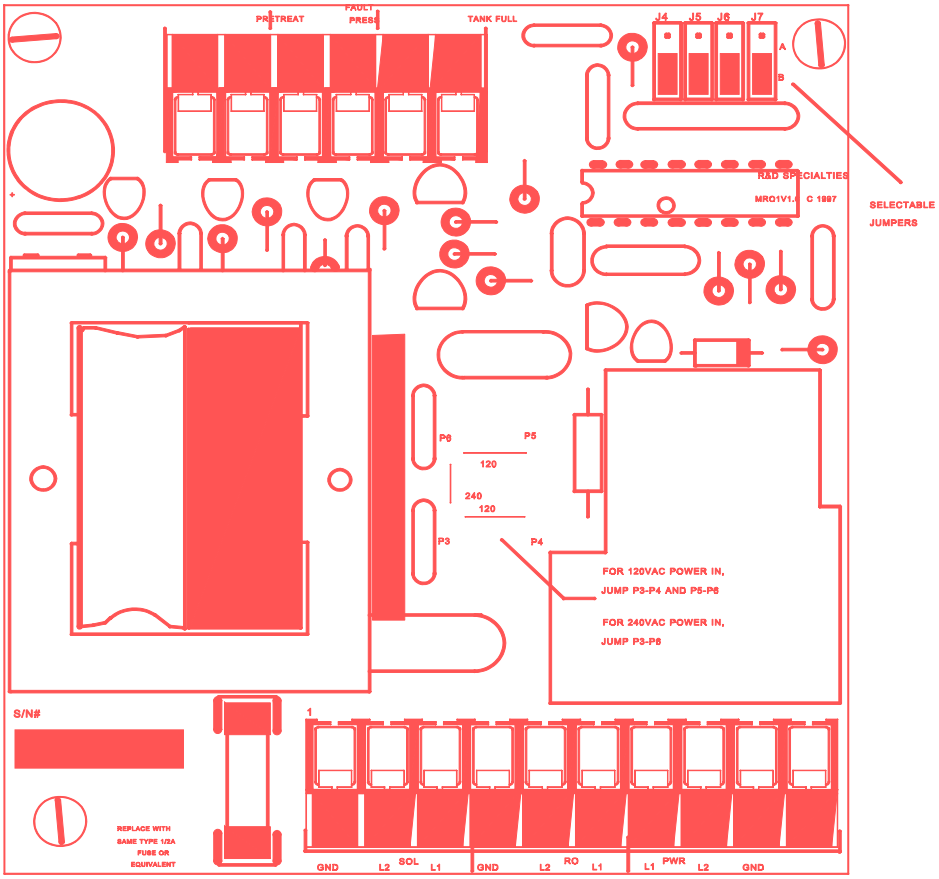

Figure 1

JUMPER	POSITION B	POSITION A
J4	AUTO RESET DISABLED	AUTO RESET ENABLED
J5	RETRIES DISABLED	RETRIES ENABLED
J6	2 SEC RESTART	15 MIN RESTART
J7	N.O. SWITCHES	N.C. SWITCHES

Table 1

NOTES:

ALL SWITCH INPUTS MUST BE DRY CONTACT ONLY!! IF VOLTAGE IS APPLIED TO THESE INPUTS, DAMAGE TO THE CONTROLLER WILL RESULT.

FOR POWER WITH NEUTRAL AND HOT LEADS, L1 IS HOT AND L2 IS NEUTRAL

7/6/01