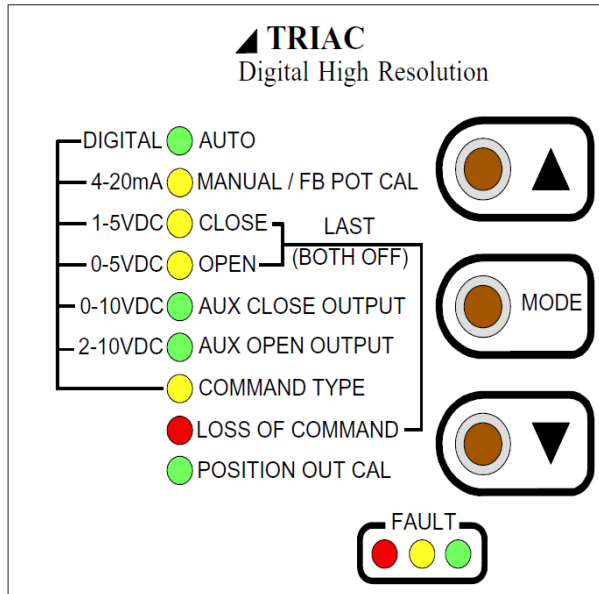
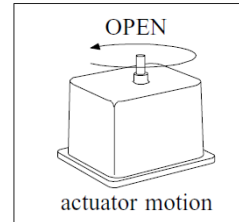


General

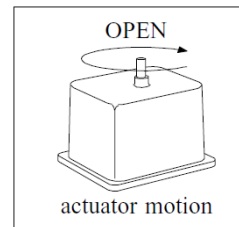
The MODE button selects a particular function, or mode, and the indicator for the selected mode turns on solid. Pushing the MODE button saves any new setting of the selected mode before switching to the next mode. The adjust up (▲) and adjust down (▼) buttons are used to make adjustments to the selected mode. For more details regarding calibration and features refer to the manual.



REFERENCE ROTATIONS



DIRECT ACTING



REVERSE ACTING

1. Before applying power, ensure that the unit is properly mounted and properly wired to the actuator. Refer to the pertinent Data Sheet specified for the actuator. Ensure potentiometer gears are tight and properly meshed.
2. Apply power to the actuator on Connector J2: terminal #1 (positive), terminal #2 (negative), and terminal #3 (earth). There is no need for a signal connection during calibration.
3. Push the MODE button until the yellow "MANUAL/FB POT CAL" LED is illuminated. The LED may be flashing (at different speeds) through the next several steps. This is expected and will be explained.
4. Use the adjust buttons (▲ and ▼) to move the actuator and verify that the limit switches are set past the desired open and closed positions, but not so far as to interfere with the mechanical end stops, if the actuator has this feature. Then move the actuator to mid stroke.
5. If LED is solid, proceed to step 7.
6. If LED is flashing, loosen the gear on the actuator shaft and rotate the potentiometer gear until the LED is no longer flashing, but on solid - this indicates the center of the potentiometer's travel. Note that the LED will flash at a slower rate the farther away from the mid position it gets. Once the LED is on solid tighten the actuator shaft gear and ensure that the gear engagement is tight and properly meshed.
7. Push the MODE button until the "CLOSE" LED is lit solid. Use the adjust buttons (▲ and ▼) to drive the actuator toward the desired closed position until the associated limit switch trips - the "CLOSE" LED will flash to indicate that the limit switch has tripped. Then tap the other adjust button to move the actuator just off the limit switch to the desired valve closed position.

8. Push the MODE button until the "OPEN" LED is lit solid. Use the adjust buttons (▲ and ▼) to drive the actuator toward the desired open position until the associated limit switch trips - the "OPEN" LED will flash to indicate that the limit switch has tripped. Then tap the other adjust button to move the actuator just off the limit switch to the desired valve open position.
9. If an OTR-101 option module is installed, follow **Auxiliary Open/Close Setup** (see below); otherwise continue to the next step.
10. Push the MODE button until the "COMMAND TYPE" LED is lit solid. Use the adjust buttons (▲ and ▼) to select appropriate input signal (4-20mA, 1-5VDC, 0-5VDC, 0-10VDC, 2-10VDC, or Digital). If 0-5VDC or 0-10VDC is selected, the LOSS OF COMMAND feature is not available, so proceed to step 12.
11. Push the MODE button until the "LOSS OF COMMAND" LED is lit solid; this sets the actuator to a predetermined position upon loss of command. Use the adjust buttons (▲ and ▼) to select appropriate position (OPEN, CLOSE, or LAST POSITION).
12. If an OTR-101 or OTX-101 option module is installed, follow **Position Output Mode Setup** (see below); otherwise continue to the next step.
13. Push the MODE button until the "AUTO" LED is lit solid. Your calibration is now **COMPLETE**. Connect the command signal wires to connector J2: terminal #4 (negative) and terminal #5 (positive). If a signal input was already connected, the actuator should have moved to that position.

Auxiliary Open/Close Setup (for units with an OTR-101 option module only)

1. Push the MODE button until the "AUX CLOSE OUTPUT" LED is lit solid. Use the adjust buttons (▲ and ▼) to drive the actuator to the desired auxiliary close position.
2. Push the MODE button until the "AUX OPEN OUTPUT" LED is lit solid. Use the adjust buttons (▲ and ▼) to drive the actuator to the desired auxiliary open position.
3. Continue with Step 10 in the **Quick Calibration Procedure** (see above).

Position Output Mode Setup (for units with an OTR-101 or OTX-101 option module only)

1. Push the MODE button until the green "POSITION OUT CAL" LED is lit solid **while** the "CLOSE" LED flashes.
2. Use the adjust buttons (▲ and ▼) to set the desired output current (mA) on the option module output for the closed position.
3. Push the MODE button so the "POSITION OUT CAL" LED remains solid **while** the "OPEN" LED flashes. Use the adjust buttons (▲ and ▼) to set the desired output current (mA) on the option module output for the open position.
4. Continue with Step 13 in the **Quick Calibration Procedure** (see above).

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A-T Controls, Inc. • 9955 International Boulevard, Cincinnati, OH 45246 • Phone: (513) 530-5175 • Fax: (513) 247-5462 • www.a-tcontrols.com