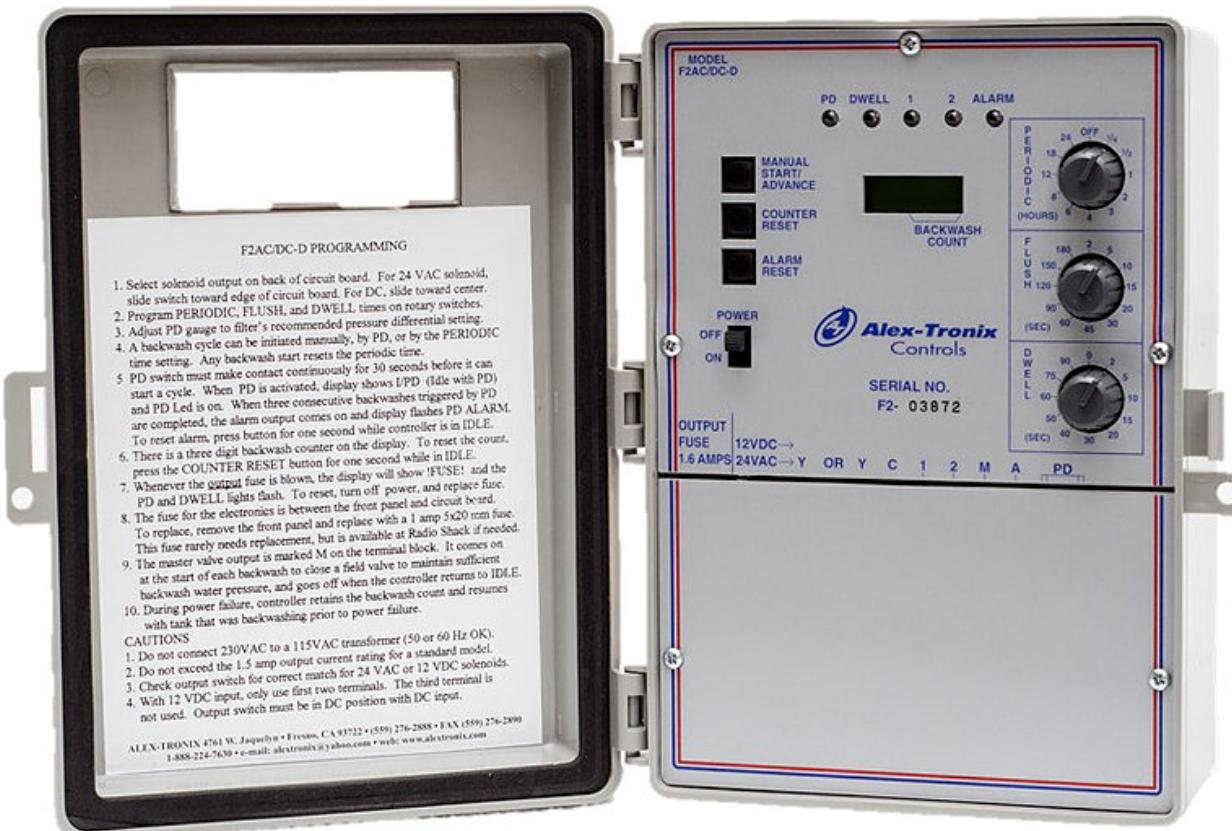




F2ACDC-D

FILTER BACKWASH CONTROLLER

OPERATION MANUAL



F2AC/DC-D PROGRAMMING

1. Select solenoid output on back of circuit board. For 24 VAC solenoid, slide switch toward edge of circuit board. For DC, slide toward center.
2. Program PERIODIC, FLUSH, and DWELL times on rotary switches.
3. Adjust PD gauge to filter's recommended pressure differential setting.
4. A backwash cycle can be initiated manually, by PD, or by the PERIODIC time setting. Any backwash start resets the periodic setting.
5. PD switch must make contact continuously for 30 seconds before it can start a cycle. When PD is activated, display shows LPD (idle with PD) and PD Led is on. When three consecutive backwashes triggered by PD are completed, the alarm output comes on and display flashes PD ALARM. To reset alarm, press button for one second while controller is in IDLE.
6. There is a three digit backwash counter on display. To reset the count, press the COUNTER RESET button for one second while in IDLE.
7. Whenever the output fuse is blown, the display will show 'FUSE!' and the PD and DWELL lights flash. To reset, turn off power, and replace fuse.
8. The fuse for the electronics is between the front panel and circuit board. To replace, remove the front panel and replace with a 1 amp 5x20 mm fuse. This fuse rarely needs replacement, but is available at Radio Shack if needed.
9. The master valve output is marked M on the terminal block. It comes on at the start of each backwash to close a field valve to maintain sufficient backwash water pressure, and goes off when the controller returns to IDLE.
10. During power failure, controller retains the backwash count and resumes with tank that was backwashing prior to power failure.

CAUTIONS

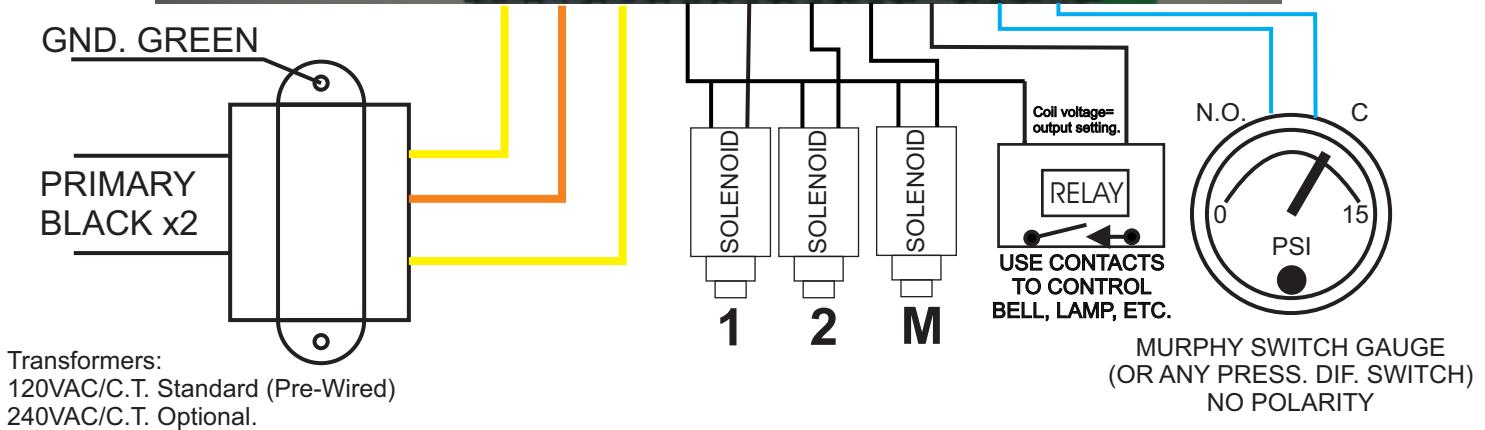
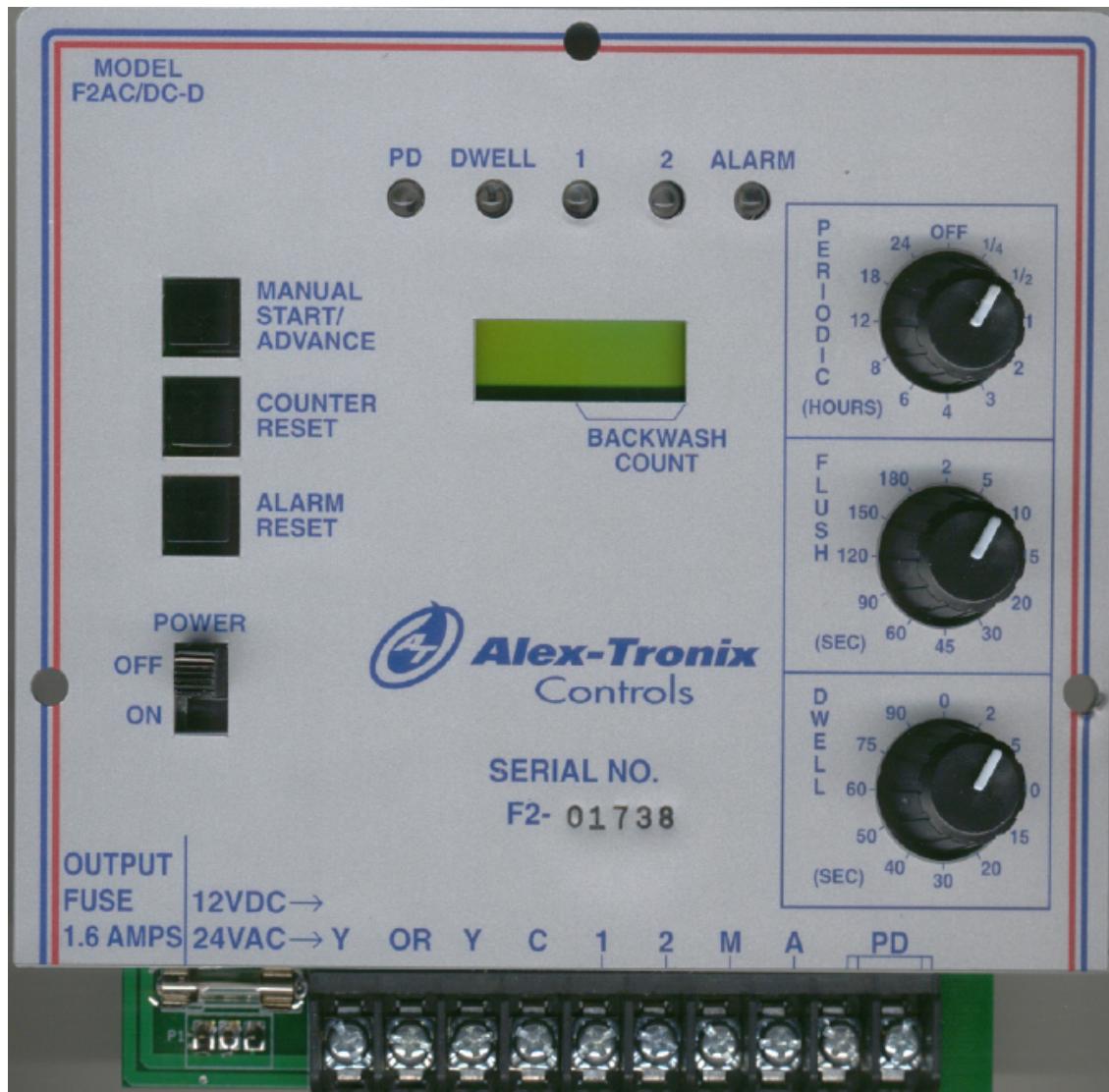
1. Do not connect 230VAC to a 115VAC transformer (50 or 60 Hz OK).
2. Do not exceed the 1.5 amp output current rating for a standard model.
3. Check output switch for correct match for 24 VAC or 12 VDC solenoids.
4. With 12 VDC input, only use first two terminals. The third terminal is not used. Output switch must be in DC position with DC input.

ALEX-TRONIX 4761 W. Jaqueline • Fresno, CA 93722 • (559) 276-2888 • FAX (559) 276-2890
1-888-224-7639 • e-mail: alextronix@yahoo.com • web: www.alextronix.com

F2 AC/DC Operation Manual

Thank you for purchasing the F2 AC/DC filter controller-- manufactured in the U.S.A. Please completely read this operation manual for proper installation and operation of this unit.

WIRING:



Wire the unit as shown above as features needed. **DC input from alternator: For DC operation, remove the A/C transformer**, and directly wire DC power into the first two terminals starting from left to right. The third terminal 'Y' will not be connected. An external in-line fuse with a rating of 2 amps must be installed on the positive terminal located at the battery. To ensure power quality, directly connect the wires to the battery terminals. If the power source is noisy, install an inline noise filter--purchased separately. Use quality terminal connections at the battery- use no clamps for temporary use of any kind.

Optimum operating voltage is 12.8-13.8 volts. Set output switch (on rear of panel) to DC/DCL. NOTE: Use 12VDC non-latching solenoids for this configuration only. When transformer is in place, solenoid configurations available are 24VAC or 12VDC.

PRESSURE DIFFERENTIAL GAUGE MOUNTING:

The F2ACDC-D comes with a PD gauge mounting bracket. The mounting bracket may be fastened to the underside of the enclosure with extra hardware, or can be mounted on the filter systems manifold in a convenient area. Additional wire must be purchased to extend the distance of the gauge. When plumbing tubing on to the gauge, the threaded gauge ports **must be held in place with a wrench** while fastening the tubing to avoid damage. The high and low ports are marked on the gauge. The high side is fastened to the outlet side the filter system. The low port on the inlet side.

CONTROLS:

POWER: Use this switch to turn controller on or off. When power is removed from the unit by any means; all programmed settings are retained via back up battery. The F2ACDC-D will resume operation at the point where the controller was turned off when powered back up.

MANUAL START/ADVANCE: Pressing this button initiates a backwash, or forwards to the next station.

PERIODIC TIME: This sets backwashing *cycle intervals*. It is independent from the PD gauge initiation; however, if the gauge triggers a backwash cycle before a periodic interval initiates, the periodic's interval time clock will reset to zero, and begin timing up again. After a cycle is complete, the controller reverts back into filtering mode, the periodic time resets to zero, and periodic timing begins again.

BACKWASH TIME: This sets the cleaning duration for each filter tank. Consult with filter manufacturer for proper settings.

DWELL TIME: This sets idling time between tank 1 and 2 in order to maintain system pressure, and allow valves enough time to open and close as backwashing progresses.

COUNTER RESET: The F2ACDC-D counts every backwash cycle that occurs. To reset the display count to zero, press and hold this button until it clears to '000'. The unit will then resume counting backwash cycles.

ALARM RESET: Press this button to reset (deactivate) the alarm output terminal after it is triggered.

OPERATING CHARACTERISTICS

BACKWASH CYCLE COUNT: This displays how many backwashes have occurred since it was last cleared.

PD DELAY TIME: Intermittent surge pressures in a filter system can occur which could trigger a backwash cycle unnecessarily. Adding PD delay time alleviates unnecessary backwashing, and allows 'gauge bouncing' to stabilize before a legitimate pressure reading is taken. The F2ACDC-D has a PD delay time of **30 seconds** pre-programmed into the unit. It is not adjustable.

OPERATION: Aside from initiating a backwash cycle manually, a backwash cycle initiates by PD and/or Periodic time. When a backwash initiates, the F2ACDC-D moves out of filtering mode, and individually washes each tank. The systems pressure differential drops (as noted on the gauge) when cycle is complete, and the tanks are deemed clean. If the pressure does not drop, troubleshooting of the filter system itself should be performed, beginning with filter system maintenance.

If the pressure differential gauge remains closed by the third consecutive backwash, *indicating the filter is not getting clean*, an 'Alarm' will be triggered, and the 'A' output terminal will be activated. Additional troubleshooting resources can be sought out on the tech support page on the web at: www.alextronix.com

BLOWN FUSE: Should the output fuse blow, !FUSE! will flash on the LCD display. immediate action should be taken to troubleshoot the system for short circuits, overload, etc. Once the fault is corrected, replace fuse, and turn on unit. This will reset the fuse fault on the display.

CAUTION: Replace output fuse with same type only! – 20mm 1.6amp Slow Blow.

As a convenience, a spare fuse is located on the rear panel next to the output fuse.

For any questions or help regarding this controller please contact us at 1-888-224-7630.
For questions regarding your filter system, contact the manufacturer.

WARRANTY

Suppliers and end users of this product agree to the following terms, conditions and limitations of warranty and liability coverage:

Alex-Tronix warrants the F2ACDC-D to be free from original defects for two years from the date of original sale. The manufacturer shall replace, free of charge any part found defective under normal use and service within the guarantee period, provided the product is installed, used, and maintained in accordance with any applicable instructions or limitations issued by Alex-Tronix. Components supplied replacement parts are warranted for 90 days from the date of shipment. The manufacturer assumes no liability for incidental or consequential damage sustained in the adoption or use of our engineering data, service, or products. Liability is therefore limited to the repair of the product manufactured by Alex-Tronix. No agent or representative of Alex-Tronix has the authority to waive or add to this agreement. Altered products, or use of products in a manner not intended shall void this warranty. For warranty service, ship unit pre-paid to the address below. Controllers damaged in transit due to improper packaging are not covered by warranty.

For warranty repair, send defective product freight pre-paid to:

Alex-Tronix Controls Div. GNA Industries - 4761 W. Jacquelyn Ave. Fresno, CA. 93722 - Tel: (888)-224-7630 Fax: (559) 276-2890
www.alextronix.com orders@alextronix.com