

# Operating Instructions (7016311)

## Relius™ 1500FV Fluid Logic Dispenser

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The all pneumatic Relius 1500FV Fluid Logic dispenser is used where hazardous environments prohibit the installation of electrical powered dispensers.

For pneumatic installation and general operation, refer to the enclosed operation manual. The manual illustrates hook-up, normal operating procedures, and the use of the vacuum venturi control.

The Relius 1500FV Fluid Logic dispenser, when used with the 5 micron filter/regulator (supplied with the unit), requires no maintenance. If any problem should occur, please return to EFD for repair.

Most questions you will have are answered in this guide. However, if you need assistance, please do not hesitate to contact EFD or your authorized EFD distributor.

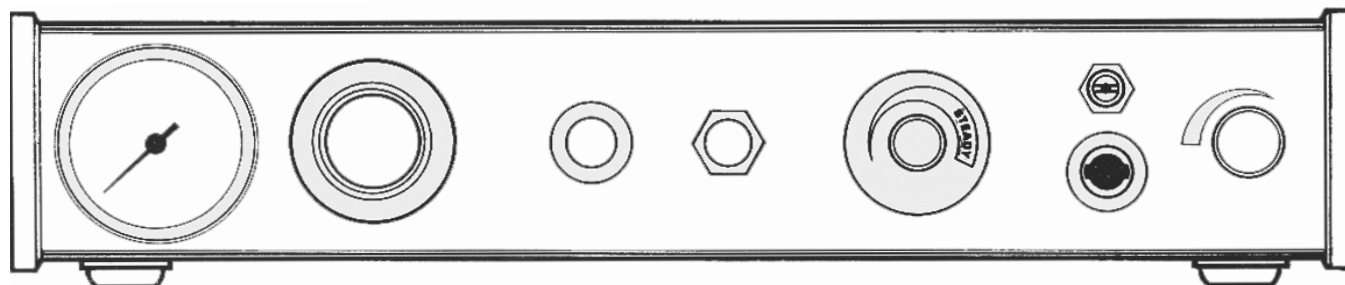
In Asia, call +86 (21) 3866 9166.

In Europe, call +44 (0) 1582 666334.

In Mexico, call 001-800-556-3484.

In the USA, call 800-556-3484 between 8:30 a.m. and 5:30 p.m. Eastern time.

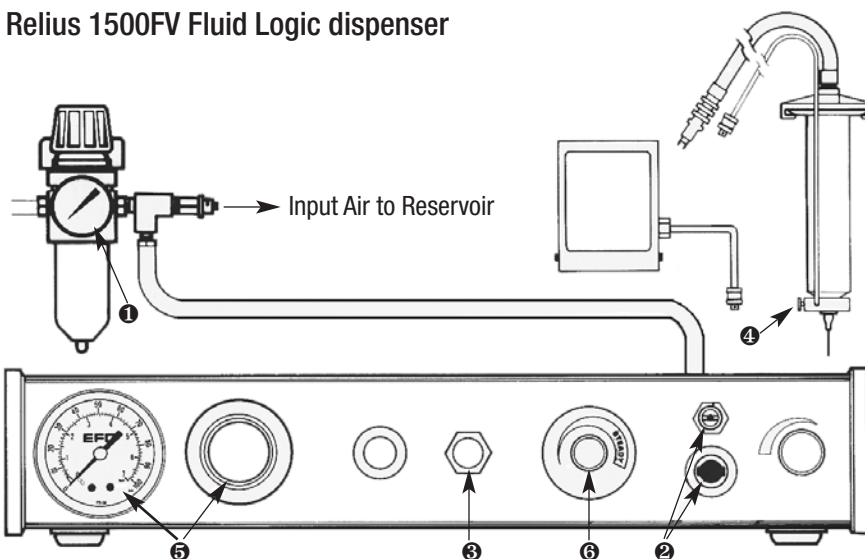
In all other areas, call your authorized EFD distributor or +1-401-434-1680.



## Setup and Operation

- ❶ Input air pressure (from filter regulator) should be set at 70 psi (5 kg/cm). Lower or higher pressures will affect operation.
- ❷ Attach finger switch sensing hose and adapter assembly male quick-connect.
- ❸ Pull out the ON-OFF switch (green indicator shows air is on).
- ❹ Attach finger switch to barrel, and tighten knob.
- ❺ Establish output air pressure according to material being used.
- ❻ Time is established by turning the time control knob — clockwise increases time. Using the test material supplied with the unit, practice adjusting time to get the “feel” of it. For longer time, turn more clockwise. For very short pulses, turn counterclockwise.

Relius 1500FV Fluid Logic dispenser



## How to Use the Vacuum Control

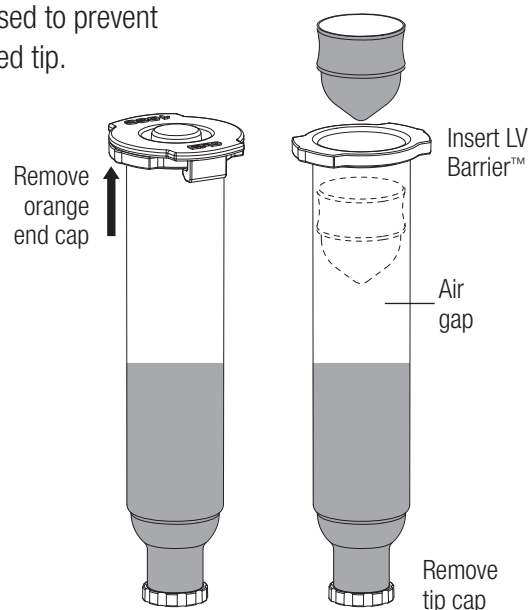
### Making Timed Deposits of Watery-thin Fluids

The vacuum control allows low viscosity liquids, even water, to be consistently dispensed without dripping between cycles.

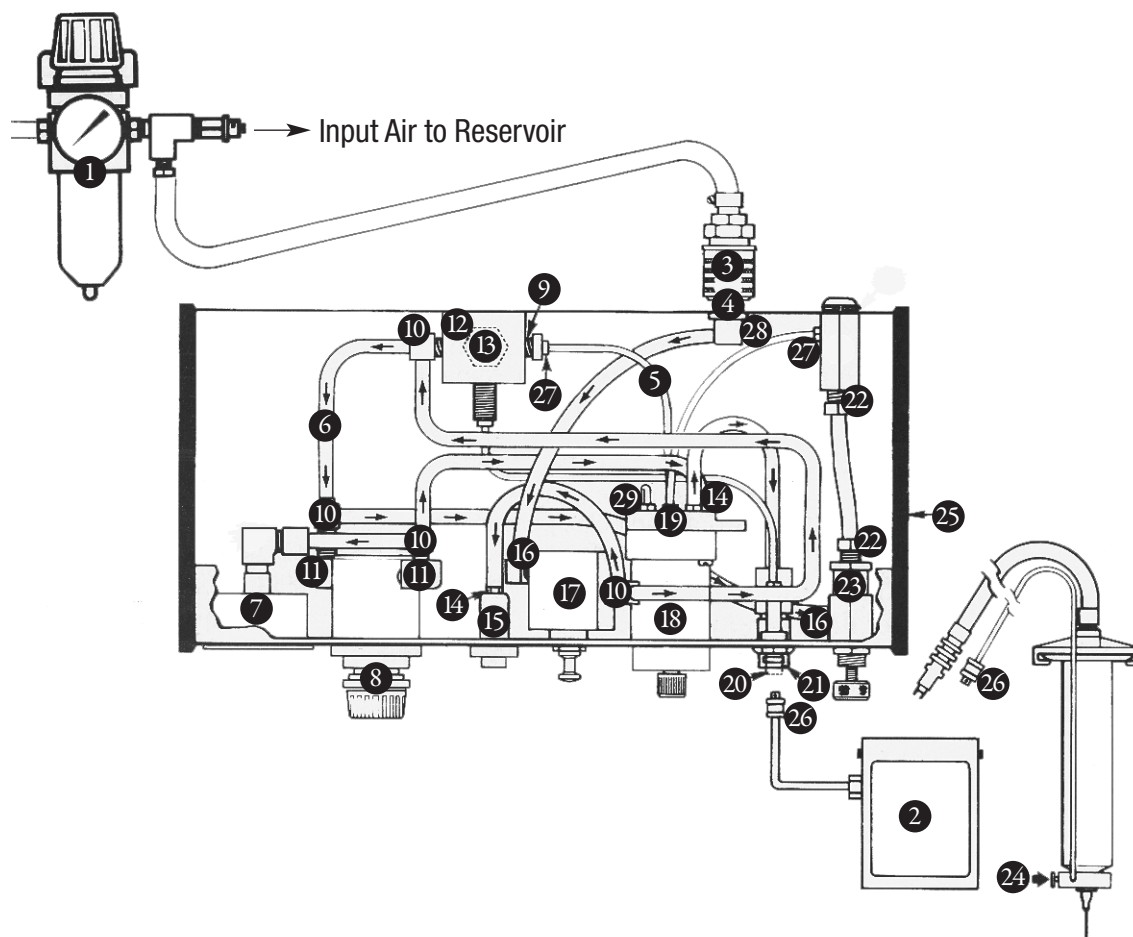
The vacuum exerts a negative pressure on the liquid in the barrel and prevents dripping.

For these tests, you will use the test barrel with the clear fluid.

1. While holding the barrel upright in one hand, remove the orange end cap and insert the blue LV Barrier™. Allow an air gap as shown.
2. Attach the barrel to the 10cc adapter. Snap the safety clip tightly closed to prevent any dripping or bubbling. Remove the tip cap and attach suitable sized tip.
3. Set air pressure at 5 psi, and the time at 0.14 (Fig. 1).
4. Set dispenser timer at approximately 2 sec pulse time.
5. With the barrel pointing downward over a container, unsnap the safety clip. Then press the foot pedal to fill the tip.
6. If a drop begins to form at the end of the tip, slowly turn the vacuum control knob counterclockwise to stop the drop from growing. Wipe the tip and adjust vacuum as necessary. Normally, only 1 to 2 psi of vacuum pressure is necessary.
7. Now set dispenser to desired dispense pulse time.
8. Take the barrel and place the tip on the test sheet. Press the foot pedal. Check the dot size. Increase or decrease by adjusting pressure or time.



## Internal Schematic – Relius 1500FV Fluid Logic dispenser



1. 7002002	Filter Regulator	15. 7016332	On/Off Indicator
2. 7016350	Foot Pedal Assembly	16. 7016835	1/8 MPT to 1/4 Barb Elbow
3. 7016807	Air Quick Connect, Female	17. 7016334	On/Off Switch
4. 7016806	Air Quick Connect, Male	18. 7016333	Pneumatic Timer
5. 7016849	1/8 Tube	19. 7016352	Subplate for Timer
6. 7016792	1/4 Rigid Tubing	20. 7016337	Quick Connect, Male
7. 7016569	0-100 psi Gauge (0-7 bar)	21. 7016641	Quick Connect Female w/Mtg. Nut
8. 7016576	Regulator 0-100 psi (0-7 bar)	22. 7016787	1/8 MPT to 1/4 Barb
9. 7017016	1/8 MPT-10-32	23. 7016911	Barrel Vacuum Control
10. 7016930	1/8 MPT – Tee 1/4 Barb	24. 7016340	Finger Switch Panel
11. 7016871	1/8 MPT – 1/8 FPT Elbow	25. 7016731	Dispenser End Panel
12. 7016335	Control Valve	26. 7016336	Quick Connect, Female
13. 7020769	Muffler	27. 7016847	10-32 Miniature Barb
14. 7016838	10-32 to 1/4 Barb	28. 7016836	1/8 FPT Elbow to 1/4 Barb