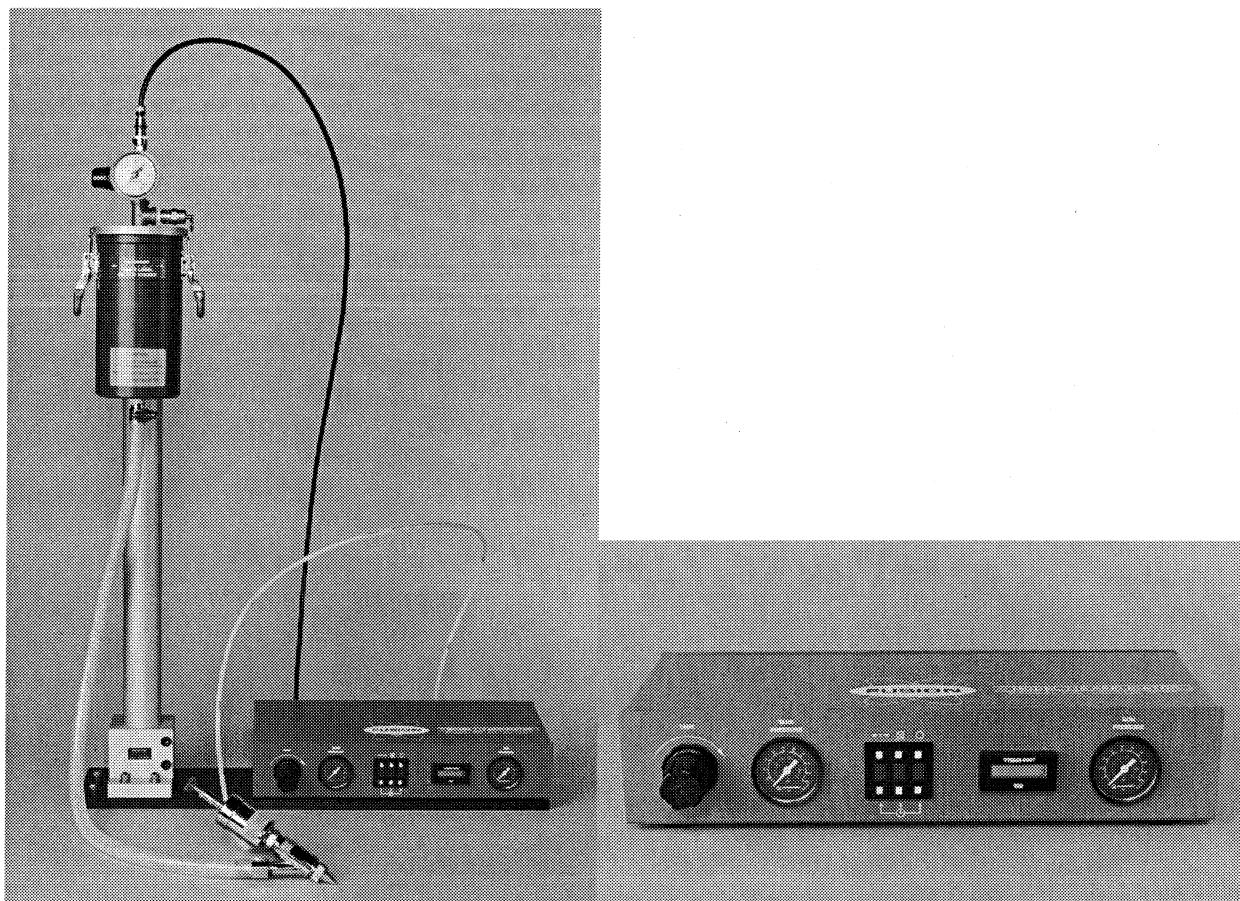


# OPERATIONS MANUAL

*MODEL 710*

*DIGITAL DISPENSING SYSTEM*





**Model 710 Digital Dispensing System**  
**OPERATIONS MANUAL**  
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# Fusion

## MODEL 710 PRECISION DISPENSER

The Model 710 Dispenser consists of:

- (1) Dispenser Control Box
- (2) Foot Pedal Switch
- (3) Power Cord

### INSTALLATION

- 1) Connect the dispenser to plant air. A minimum of 60 PSI of compressed air from a ¼" line is required. The unit requires clean dry air. A 5-micron filter/regulator is required because of the vacuum transducer.
- 2) Connect the foot pedal to the rear of the dispenser control box.
- 3) Plug the power cord into the rear of the Dispenser. Then plug the 3 prong end into a grounded 115 VAC outlet. The power entry unit on the rear the dispenser can be converted to 220 VAC by opening up the fuse holder and rotating it 180°. The correct voltage should be showing in the window of the power entry unit.
- 4) Attach the hose from the dispensing gun to the white quick disconnect on the rear of the dispenser labeled "GUN".
- 5) Attach the hose from the Paste Reservoir to the white quick disconnect on the rear of the dispenser labeled "TANK".

### OPERATION

- 1) Fill the paste reservoir.
- 2) Turn the Dispenser's power on by using the switch on the rear of the unit over the power cord.
- 3) The large regulator knob on the left of the front control panel controls the pressure to the paste reservoir. Turning the knob clockwise will increase the pressure. The pressure can be read from the left gauge on the front panel.
- 4) The gauge on the right side of the dispenser indicates the gun pressure. This value is factory pre-set to around 45 Psi..

### HOW THE DISPENSER WORKS

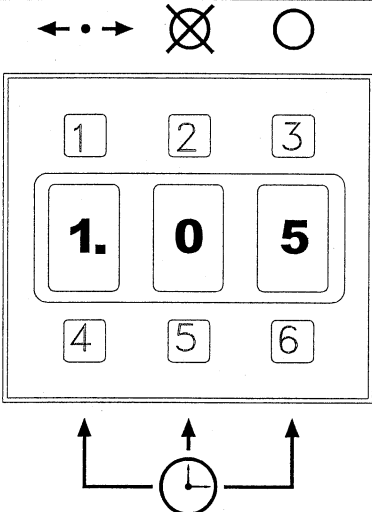
- 1) When the foot pedal is pressed the digital timer begin the timing cycle. The display will show dashes on the top and bottom.
- 2) The gun valve is energized.
- 3) The tank Air pressure pushes the material out of the gun.
- 4) At the end of the dispense time the gun valve shuts off.
- 5) The tank pressure is applied when the dispenser is turned on. The paste reservoir stays pressurized for 30 minutes, which is factory-preset time. After 30 minutes of inactivity, this pressure to the paste is shut off to eliminate the possibility of continued air pressure on the paste which may affect the paste. Air pressure is restored by power cycling the unit or by stepping on the foot pedal to dispense.

### SETTING DISPENSE TIME


There are 2 ways to set the dispense time:

1. Use the foot pedal to teach a time. This is done the first time you need to dispense a new compound and don't know how long to set the dispense time.
2. Use the time set buttons to set the dispenser to a previously used time.

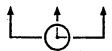
## TIMER DISPLAY CONTROL

<p><b>1 Decimal Button</b> – Press to move the decimal point from right to left. When no decimal point is shown the range is .000 to .999 seconds.</p> <p><b>2 Timer Bypass Mode</b> – Press button once and the display changes to - - -(dashes). Now the foot pedal controls the liquid flow. Press again and the display shows the last programmed time.</p>		<p><b>3 Teach Mode</b> – Press this button once and the display will start to blink. Now the time can be set using the time set buttons or the foot pedal can be used to set a time. Hold the button in for 2 second and the display will be set to 000. Press the button again to stop the flashing and store the taught time in memory.</p> <p><b>4-6 Time Set Buttons</b> - Each button controls the display digit in the panel. Each press will advance the display. This can only be done in Teach Mode when the display is flashing.</p>
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## HOW TO USE THE DISPLAY CONTROL PAD


 To put the dispenser in manual mode and bypass the timer

This mode is used to do manual dispensing operations or to fill the dispensing tip with material. Press the Manual Button Once and the display will change to - - -. Press again to return to timed mode. The valve is actuated as long as the foot pedal is depressed.



To set a new time on the display using the time set buttons

Press the Teach button in and hold for 2 seconds. The display will start flashing and change to 000. You can now adjust the time using the Time Set Buttons. When the desired time is set press the Teach button again to store the time.

 To change the position of the decimal point

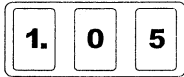
When the display is flashing indicating that you are in teach mode, the decimal point can be moved using the decimal button. When no decimal point is showing the time range is .000 to .999 seconds. The maximum time is 99.9 seconds.



To teach a new time using the foot pedal

Press the Teach button once. The display will start flashing. Press the foot pedal to dispense the desired amount. The time the foot pedal was pressed will be shown on the display. This can be repeated as many times as needed. You can also adjust the time using the time set buttons. Once you are satisfied press the Teach button again to store the time. The display will stop flashing indicating that you are in the timed mode.

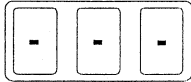
## EXAMPLES OF DISPLAY TIME



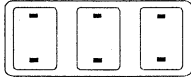
This would be a dispense time of 1.05 seconds



This would be a dispense time of 0.080 Seconds. When no decimal is displayed, it is assumed to be before the first digit.



This indicates the dispenser is in manual mode.



This indicates that the dispenser is currently in a timing cycle. At the end of the timing cycle the programmed time will be displayed again.

## HOW TO ADJUST TANK AIR PRESSURE

- 1) Pull out the air pressure regulator knob.
- 2) Turn the knob clockwise to increase the pressure. The pressure can be read on the left gauge.
- 3) Once the pressure is set, press the knob in to lock in the setting.

## TIPS ON DISPENSING

- 1) The gun should be held or mounted at a 45-degree angle to work surface. The tip should contact the work surface for more consistent deposits.
- 2) Start with the tank air pressure of 10-15 PSI. Most materials can easily be dispensed at this pressure. Higher pressures will cause the paste to separate.

## DIGITAL COUNTER

- 1) The digital counter on the front panel counts the number of times the foot pedal is pressed and the gun dispenses paste.
- 2) This can be reset to Zero, by pressing the white button near the display.

## SPECIFICATIONS

Size:	14.75"W x 5.75"D x 3"H
Air Input:	100-Psi max.
Tank Output:	1-100 Psi
Gun Output:	Preset to 45 psi
Voltage Input:	100/120/220 VAC
Internal Voltage:	24VDC
Cycle Rate:	>600/minute
Time Control:	Digital Timer Control
Time Range:	Programmable 0.001 – 99.9 seconds
Initiation:	Momentary or self completing (see optional settings)
Memory:	Non-volatile memory to store last displayed time.

## **I/O Connection**

There is a 9 pin "D" connector on the rear of the unit that can allow the unit to be controlled by an external system.

Pin	Function
1	Initiate + start cycle (contact closure or TTL input)
2	Ground
3	Output + TTL output (20mA Max)
4	Ground
5	Initiate + start cycle (contact closure or TTL input)
6	Ground
7	Ground
8	Ground
9	Ground

## **Optional Settings:**

**Note: a qualified technician should only do this.**

Changing from self-completing mode to Momentary.

1. Remove the power cord.
2. Remove the 4 screws on the bottom of the unit.
3. You will find a jumper (J5) on the main board. This should be moved so it is attached to both pins. When the jumper is on both pins of the connector the dispenser is in the momentary mode.

Changing the tank air shutoff delay

1. Remove the power cord.
2. Remove the 4 screws on the bottom of the unit.
3. You will find a jumper (J7) on the main board. To set the delay to 15 minutes move the jumper to pins 1+2 and for 30 minutes move jumper to pins 2+3

## **1-YEAR LIMITED WARRANTY**

Your Dispenser is warranted to the original purchaser for 1 year from the date of purchase to be free from defects in materials and workmanship (but not against damages caused by misuse, negligence, accident, and faulty installation or by using materials incompatible with the equipment).