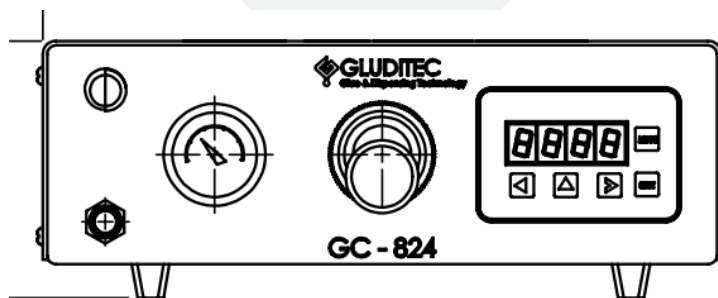


USER MANUAL

GC-824

Benchtop Dispenser



Contents

Chapter 1. Parts and Description	3
1. Product Description.....	3
2. Specification	3
3. Configuration	4
Chapter 2. Setup Guideline	6
Chapter 3. Operation Guideline	7
1. Setting the main air pressure.....	7
2. Setting the time.....	7
3. Effect of pressure/ time/ needle.....	8
4. Control the barrel vacuum	8
Chapter 4. Troubleshooting.....	9
Chapter 5. In/ Out Signal	9

Chapter 1. Parts and Description

1. Product Description

GC-824 is a versatile dispensing system that can accurately dispense various sizes of adhesives and fluids. It features advanced digital timing control, allowing for precise dispensing compared to traditional pressure-time systems. By adjusting the pressure regulator and using the airline adapter with an adhesive syringe barrel, users can easily control the amount of adhesive dispensed. The system offers two operating modes - manual and timed (automatic)- making it suitable for dispensing dots, beads, or filling syringes.

FEATURES

- Vacuum suck-back can effectively control product dripping or stringing.
- Manual, Incremental, or Timed modes allow a choice of adhesive dispensing methods.
- Includes Footswitch
- Optional Finger Switch is available.
- Easy integration to a robot using Interface Cable

2. Specification

Control Base	Microprocessor
Time range	0.001 ~ 99.99 sec
Repetitive Accuracy	0.05%
Adjustable liquid pressure	0 ~ 120 psi
Air input	80 ~ 120 psi
Voltage	AC110/220V, 50/60Hz
Dimension	L170 x W230 x H75 mm
Weight	2.5kg

3. Configuration



Figure 01. Frontage

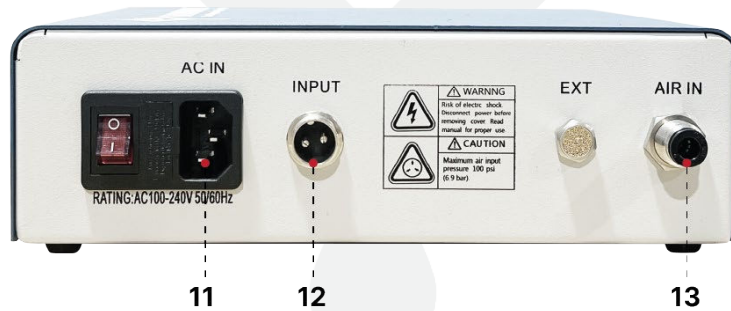
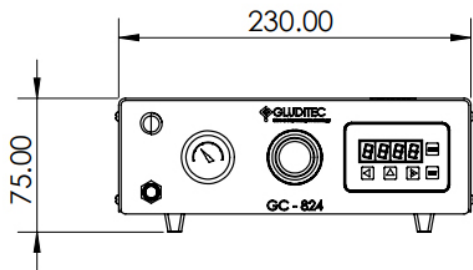


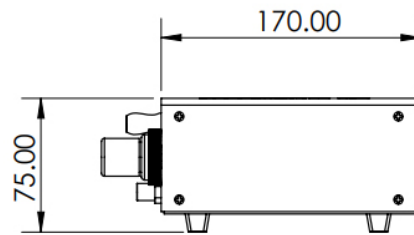
Figure 02. Backside

No	Description
1	Barrel Vacuum
2	Barrel Air Outlet Port
3	Pressure Gauge
4	Pressure Regulating Valve
5	Increase key (timing mode adjustable time)

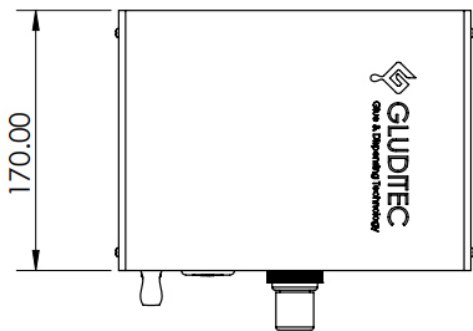
6	Decrease key (timing mode adjustable time)
7	Move key
8	Switch key in active/timed
9	Force putout the glue
10	LED display screen
11	Power
12	Cable
13	Air pressure pipe



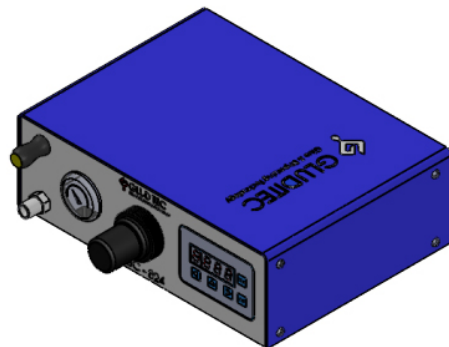
FRONT VIEW



RIGHT VIEW



TOP VIEW



Chapter 2. Setup Guideline

STEP 01. CONNECT AIR HOSE

Connect the main air hose from the compressor into the air inlet port on the rear panel of controller (Please see Figure 2, No. 13).

STEP 02. ELECTRICAL CONNECTION

Please check whether the voltage is AC 220V before connecting (Figure2, No. 11).

STEP 03. CONNECT THE FOOT/ FINGER S/W

Connection the foot or finger switch into the connector or the rear panel of the controller (Figure 2, No. 12).

STEP 04. CONNECTION THE BARREL AIR HOSE

Connect the barrel air hose (♂ Coupler) into the barrel air outlet port (♀) on the front panel (Figure 1, No. 2). Push it until you hear a sound with a click. * Note: When disconnect the Barrel air hose, please pull the air hose coupler (♂) body slowly then it will depart from the coupler (♀) of air outlet port.

STEP 05. POWER

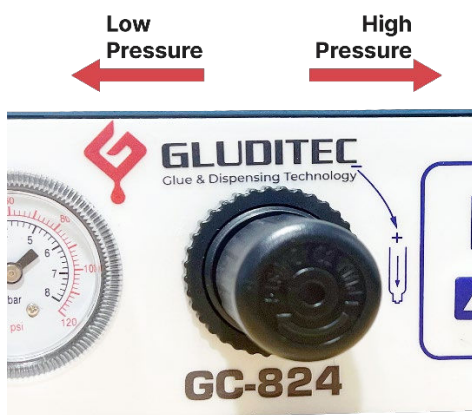
Turn the power on (Figure 2, No. 11).

Chapter 3. Operation Guideline

1. Setting the main air pressure

- Set the main air pressure to 5 ~ 6 kg/cm² using the air pressure regulator on the compressor or any other air supply source.
- Setting the dispensed deposit size
 The deposit size determined by different air pressure, time setting and Tip (needle) gauge.
 - needle gauge
 - air pressure
 - time
- If the needle is too thin for application of high-viscosity material. May drip or ooze at the end of dispensing cycle.
- Set the barrel air pressure by using the air pressure regulator on the front panel of the controller.
 - High viscosity material requires high air pressure.
 - Low viscosity material requires low air pressure.

Air pressure regulator



- Unlock the pressure regulator by pulling it and set the pressure by turning the regulator to the right and left. After the desired air pressure is set, please push the regulator.
- Low viscosity: ~ 2kg
- Medium viscosity: 2 ~ 4 kg
- High viscosity: > 4 kg
- Please adjust the air pressure watching the dispenser deposit size

2. Setting the time

Set the time ▲ ▼ with button until the desired amount is dispensed.

- Select short mode
- Setting time



- **Manual running mode:** pressing and holding the “SHOT” button to dispense. When the button is released, the process will stop.
- Dispensing time could be set with functional buttons. While setting, the number on the display will twinkle.
- To fix the time for continuous dispensing, please wait 2 seconds afterward, or press Mode button.

3. Effect of pressure/time/needle

- Thicker & more viscous liquids, like pastes or greases, will require either more pressure, longer time, or larger gauge tips.
- Thinner & less viscous liquids, like cyanoacrylates or thinners, will require either less pressure, shorter time, or smaller gauge tips.
- Higher pressure and short time cycle will increase speed of dispensing and higher output.
- Lower pressure and a longer time cycle will allow more accuracy in deposit size.

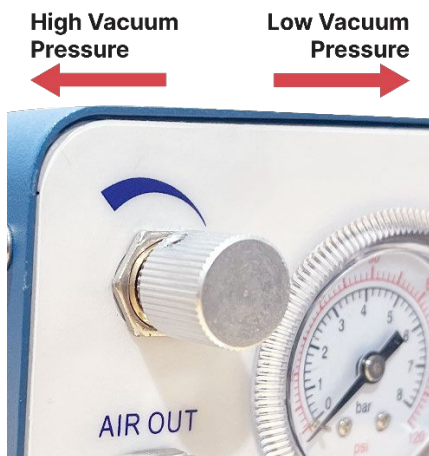
Please choose the correct tools and the appropriate factors considering above for getting high quality dispensing and operation efficiency

4. Control the barrel vacuum

Barrel Vacuum - Auto / Manual Operation

When you dispense low to medium viscosity materials, GC-824 offers precise control overflow rate and shut-off that prevents oozing or dripping at the end of dispensing cycle.

Turn the “**Vacuum pressure dial**” to the left and right slowly if the material drips or is dewed at the end of tip (needle) until you can see the material cannot be oozed at the end of dispensed.



- **Manual running mode:** pressing and holding the “SHOT” button to dispense. When the button is released, the process will stop.
- Dispensing time could be set with functional buttons. While setting, the number on the display will twinkle.
- To fix the time for continuous dispensing, please wait 2 seconds afterward, or press Mode button.

Chapter 4. Troubleshooting

Problem	Cause	Solution
The power doesn't work	<ul style="list-style-type: none"> • Plug is not connected. • The Fuse blew 	<ul style="list-style-type: none"> • Put a plug in the socket. • Change the Fuse (AC 220V-250V 1A, AC 110V-125V 1A)
The material is not dispensed	<ul style="list-style-type: none"> • Poor supply of air. • The regulator is locked. • Poor connection of auto coupler. 	<ul style="list-style-type: none"> • Supply with main air. • Turn the regulator “Clockwise” to supply air (5-6kg/cm²) • Push the auto coupler until you hear a sound with click
Poor dispensing	Contact us	

Chapter 5. In/ Out Signal

Input Signal

- Open collector
- DC 24V

Output Signal

- Open collector
- DC 24V
- Relay: a point of contact
- Out signal: 20ms, 100ms

