

# 滴 胶 机

## Dispensing Controller

### 使用说明书

### Operating Instruction



本品属于电气制品，应遵守安全事项，以免发生事故。

本说明书中，指出了预防事故发生的重要事项和产品的使用方法，请仔细阅读本说明书，安全使用本产品。  
阅读后，请将此说明书妥善保管。

※ For your safety, Please read this "Operating Instruction" carefully before operating. And always keep this Manuals Within reach.

## 目录

技术指标 .....	1
零部件说明 .....	2
注滴周期的调整 .....	3
机内气压的调整 .....	3
真空控制的调整 .....	3
安装 .....	3
工作 .....	3
注意事项 .....	4
维护 .....	5
故障排除 .....	5
自动注滴机电路图 .....	7
滴胶机气动系统图 .....	8

## CONTENTS

Technical Data .....	1
Features .....	2
Dotting range regulated .....	3
Internal air pressure regulated .....	3
Vacuum control regulated .....	3
Setup .....	3
Operation .....	3
Caution .....	4
Maintenance .....	5
Trouble shooting .....	5
DISPENSING CONTROLLER ELECTRICAL SCHEMATIC .....	7
DISPENSING CONTROLLER PNEUMATIC SYSTEM .....	8

自动滴胶机是用气压在设定时间内，把胶液推出。由定时器控制每次注滴时间，确保每次注滴量一样。只要调节好气压、时间和选择适当的针咀，便可轻易改变每次注滴量。用途广泛，可注滴胶液包括快干胶、红胶、黄胶、环氧树脂、矽胶、润滑油、螺丝锁紧胶、防焊剂、锡浆等。产品配套齐全。可根据用户需要，配有大小不同的10种钢管针咀和5种塑胶咀，充分发挥注滴机的功能。

## 技术指标

1. 自动定时：： 可设定： 0.01~1S； 0.1~10S；  
0.2~20S； 0.3~30S；
2. 人工定时：： 持续脚踏（画线）或单触式脚踏
3. 重复准确度：： ±0.5%
4. 外形尺寸：： 235×225×63 mm<sup>3</sup>
5. 重量：： 主机2.20kg
6. 输入电源电压：： 220~240V 50Hz AC
7. 内部电压：： 24V DC
8. 最小注滴量：： 0.01ml
9. 输入气压：： 2.5~7 bar (35~100psi)
10. 气压输出：： 0.1~5.5bar (1~78 psi)

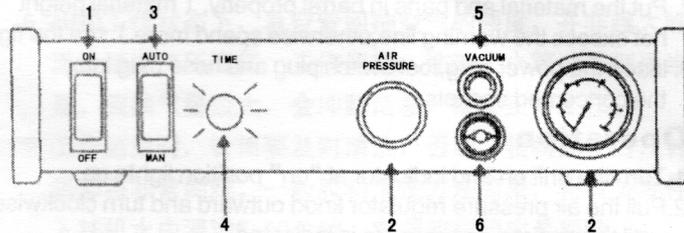
Automatic Liquid Dispenser with time control, to push the liquid pneumatically, controlled by timer, to be sure the same dispensing drops and dispensing cycle time, regulated the air pressure with suitable tip at your equipments of the different liquids as glues, greases, solder pastes. Applied for 10 types of steel tips and 5 types of plastic tips for various customers' needs..

## Technical data

1. Timer：： Programmable: 0.01~1S; 0.1~10S;  
0.2~20S; 0.3~30S;
2. Cycle Initiation：： Maintained or Momentary
3. Repeat Tolerance：： ±0.5%
4. Size：： 235×225×63 mm<sup>3</sup>
5. Weight：： 2.20kg
6. Voltage Input：： 220~240V 50Hz AC
7. Internal Voltage：： 24V DC
8. Minimum Deposit：： 0.01ml
9. Air Input：： 2.5~7 bar (35~100psi)
10. Air Output：： 0.1~5.5bar (1~78 psi)

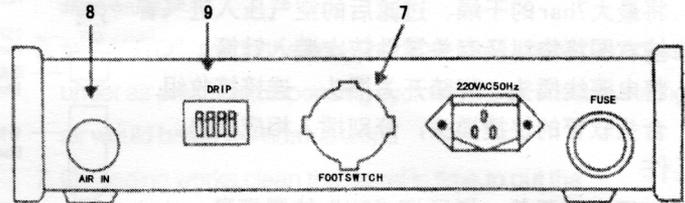
## 零部件说明

- | 零 部 件        | 功 能                         |
|--------------|-----------------------------|
| 1. 电源开关      | 接通电源, 指示灯亮, 示出“ON”位置        |
| 2. 气压调节器和气压表 | 控制并指示加到机内的气压(调压器手柄须拉出后再调整)。 |
| 3. 模式开关      | 把控制电路置于自动或人工注滴模式。           |
| 4. 定时控制      | 调整注滴持续时间                    |
| 5. 真空控制      | 调整施加于气路的真空反抽强度              |
| 6. 呼吸孔       | 快捷连接的呼吸插孔                   |
| 7. 脚踏开关插座    | 接入脚踏开关                      |
| 8. 进气管       | 高压空气入口                      |
| 9. 注滴量分档     | 把注滴持续时间分为四档                 |



## FEATURES

- | Feature                         | Function  |
|---------------------------------|---|
| 1. Power Switch                 | Turns unit on and off. Illuminated to indicate "ON" position.   |
| 2. Air Pressure Regulator/gauge | Controls and indicates air pressure to the dispense circuit ( the handle of regulator should be pulled out to adjust. ) |
| 3. Mode Switch                  | Places the dispense circuit in automatic or manual shot mode.   |
| 4. Timer Control                | Adjust the shot of the Auto dispense mode.  |
| 5. Vacuum Control               | Adjust the intensity of "suck back" vacuum applied to the dispense circuit.   |
| 6. Dispense Outlet              | Provide a quick connect receptacle for dispense air circuit.  |
| 7. Socket of Foot-switch        | Activates the dispense circuit.   |
| 8. Air-in tube                  | High-pressed air input.   |
| 9. Dispensing control           | Four grades for the dispensing cycle time.  |



## 注滴量的调整

在“**AUTO**”模式下，定时控制旋钮顺时针旋到底时，按一次脚踏开关，当：

DRIP开关1接通时，注滴持续时间大于 1S

DRIP开关1、2都接通时，注滴持续时间大于 10S

DRIP开关1、2、3都接通时，注滴持续时间大于 20S

DRIP开关1~4全接通时，注滴持续时间大于 30S

用户可根据自己的需要，选择DRIP开关的适当组合和定时控制旋钮的位置。

## 机内气压的调整

前面板上的气压调整旋钮，调整机内气压。从气压表上读取数值，一般用在0.1~2.7bar (1~40psi)

## 真空控制的调整

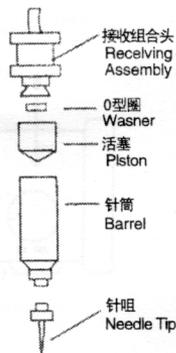
前面板上的真空控制旋钮，调整注滴结束时的空气反抽强度，其作用是截断因惯性而渗出的多余胶料。

## 安装

1. 将最大7bar的干燥、过滤后的空气压入进气管
2. 按右图将物料及有关零件依次装入针筒。
3. 将电源线插头、脚踏开关插头、连接接收组合头软管的快捷插头，分别插入相应插座。

## 工作

1. 打开电源开关，指示灯“ON”位置灯亮。
2. 旋转气压调节器旋钮，直到气压表显示出所希望的气压值。



## Dotting range regulated

Under the “**auto**” mode, full clockwise turn of timer knob, to step the foot switch, as:

Drip switch is on at 1: dispensing time > 1s

Drip switch is on at 1,2: dispensing time > 10s

Drip switch is on at 1,2 and 3: dispensing time > 20s

Drip switch is on at full grades: dispensing time > 30s

customer can adjust according to time-being requirements.

## Internal air pressure regulated:

On the air pressure regulated knob, regulated internal air pressure, on the air pressure gauge, general used between 0.1-2.7 bar (1-40 psi)

## Vacuum control regulated

On the vacuum control knob, regulated the ending dot in the air reflation, avoid dotting connected with others.

## Setup

1. Connect the 7bar dry and filtered air supply to the units air Input plug.
2. Put the material and parts in barrel properly, ( material height not excess the warning line, otherwise spend more ) see the fig3.
3. insert the power plug, foot switch plug and hose plug into the concerned sockets.

## Operation

1. Turn the unit on and indicator at “on” position lighte up.
2. Pull the air pressure regulator knod outward and turn clockwise until the desired air pressure is indicated.

3. 按需要将模式开关置于MAN或AUTO状态，即可工作。

## 注意事项

所用化合物可能有毒、易燃。请参考制造厂家的有关说明，做适当处理，按要求安全操作。

1. 输入高压气最高压强不得超过7bar (100psi)，滴胶机工作气压最高压强不得超过5.5bar (78psi)，如工作气压在4bar以上，请改用铝合金接驳头。
2. 如有条件，所用物料按说明恒温(5℃)存放，保证使用时浓度变化不大，物料浓度过大(流动困难)，不能注滴。如要使用，要按厂家说明加以稀释后再用。
3. 工作前物料必须充分搅拌均匀，保证注滴量大小一致。
4. AUTO状态工作时，一般机内气压调整在1~2.7bar (15~40psi)较为适宜。
5. AUTO工作状态下，要根据实际情况，及时清除滞留在针咀处的物料。这些物料逐渐固化，起到阻滞针咀出料和反抽气的不利作用。
6. AUTO工作状态下，真空管回抽空气的强度，并非越大越好，而是根据气压高低、工作周期、注滴大小等调整到适当位置。回抽气量过大，会冲翻活塞，破坏正常工作。
7. 工作结束时，针筒要及时清洗，否则，物料固化后，针筒拆卸将非常困难。一般胶料清洗方法简单，将有关零件放入抹机水中浸泡5~10分钟，敷着胶料很容易剔除。

3. As the need of switch on the "MAN" or "AUTO" mode, then it's ready to be operated.

## Caution

The dispensed material may be toxic and/or hazardous, refer to material manufacturer's bulletin for proper handling and safety precautions.

1. High pressure air max. Shall not excess 7bar ( 100 psi ) , otherwise bad influences will occur. If the work pressure is over 4 bar, please use aluminium-allog connector.
2. All material are kept on ( 50c ) avoid the density changed more, if not, hard to pass, can not dotting.
3. The material must be used average normally, when operate.
4. Auto mode operation, the air pressure regulated at 1-2.7 bar, ( 15-40 psi ) available.
5. Auto mode operation, clean the material of the tip in order to shot easily.
6. In "AUTO" mode, the suck-back air force should be adjusted under air pressure, dispensing cycle and drop size, too stronger air would break the normal work.
7. On ending works, clean the barrel in time, to put the concerned parts in cleaning water for 5-10 minutes, it is easy to clean.

## 维护

为确保无故障工作，建议必须做到：

1. 一定要保证空气干燥、清新。
2. 一定要保证交流电源插孔接地良好，电源电压要符合要求。
3. 要避免随意乱放和转动针筒，以防止胶料到处流动，通过气管流入机内元器件上。
4. 不允许针筒组件接触到过热和尖硬物件上。
5. 不允许把机器置于气压超过7bar (100psi) 的地方。
6. 要避免把机器暴露在过于潮湿和腐蚀气液的环境中。

## Maintenance

To assure trouble free operation,the following points should be followed:

- 1.Make certain air supply is clean and dry.
- 2.Make certain AC outlet is grounded and proper voltage rating.
- 3.Avoid turning barrels upside down or laying barrel,so that material may run through air Line to internal components.
- 4.Do not allow barrel assemblies to contact hot or sharp objects.
- 5.Avoid connecting liquid dispenser to air supply exceeding7 bar(100psi)
- 6.Avoid exposing liquid dispenser to excessive moisture or solvent situation.

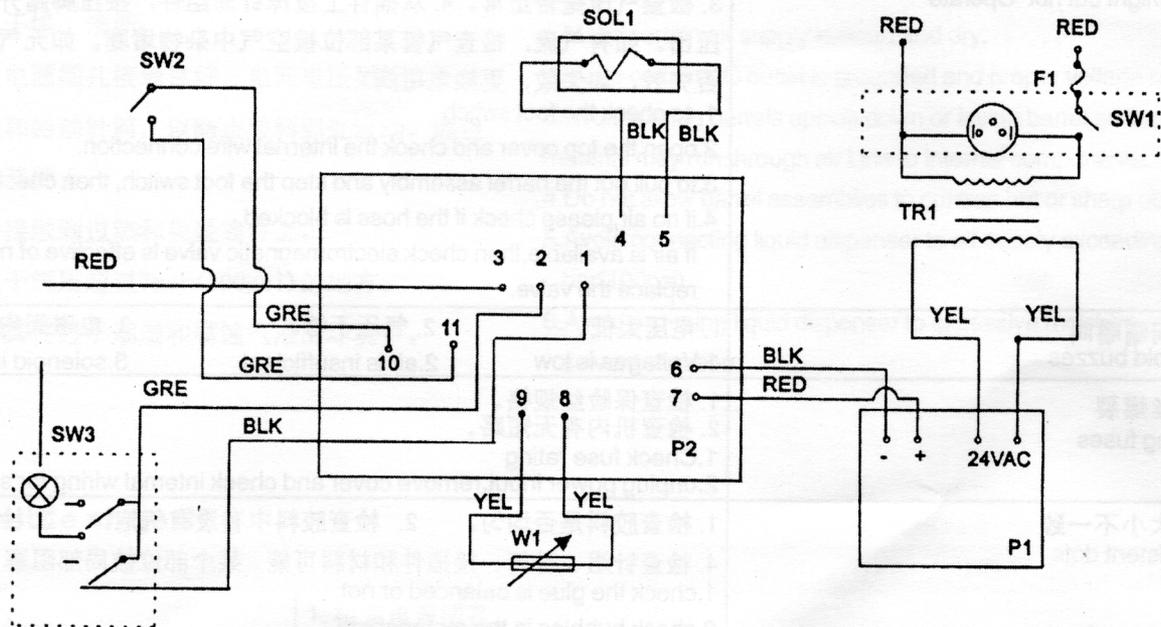
## 故障排除 Trouble shooting

问 题 Problems	修 理 check for correction
无电源 No power	1. 检查电源插孔 2. 检查保险丝 3. 拔掉插头，开启盖板，目测检查有无断线或短路 1. check wall socket power supply.check fuse 2. unplug from wall,remove top cover,visually inspect any loose or short connection.
有电，但指示灯不亮 Power,but no light	更换电源开关 replace power switch

<p>有电, 指示灯亮, 但不工作 Power/light but not Operate</p>	<p>1. 检查脚踏开关连接是否良好。 2. 打开机盖检查机内有无断线。 3. 检查气压是否正常。4. 从插件上拨掉针筒组件, 按压脚踏开关, 检查有无气流压出。如有气流, 检查气管某部位被空气中杂物堵塞。如无气流, 检查电磁阀是否失效, 如失效, 更换电磁阀。 1. to check the foot switch 2. open the top cover and check the internal wire connection. 3. to pull out the barrel assembly and step the foot switch, then check if there is air output 4. if no air, please check if the hose is blocked. If air is available, then check electromagnetic valve is effective or not, if not, please replace the valve.</p>		
<p>电磁阀嗡嗡叫 Solenoid buzzes</p>	<p>1. 电压太低。 1. Voltages is low</p>	<p>2. 气压不够。 2. air is insufficient</p>	<p>3. 电磁阀内有异物 3. solenoid is not clean.</p>
<p>保险丝爆裂 Blowing fuses</p>	<p>1. 检查保险丝规格。 2. 检查机内有无短路。 1. Check fuse rating 2. unplug power input, remove cover and check internal wiring for short connection.</p>		
<p>注滴大小不一致 Inconsistent dots</p>	<p>1. 检查胶料是否均匀。 2. 检查胶料中有没有气泡。 3. 检查气压是否稳定。 4. 检查针咀、针筒、接插件和材料可能 某个部位被局部阻塞 1. check the glue is balanced or not. 2. check bubbles in the material 3. check air gauge for air pressure variation. 4. check needles tip, barrel, adapter and material For possible clogging.</p>		
<p>注滴正常, 但真空管不起作用 Dispense Okay, but no Vacuum in dispense circuit</p>	<p>1. 检查真空管调整是否正常, 有无阻塞现象。 2. 检查气压是否相差太大(一般在1 ~2.7bar) 1. check vacuum adjustment setting. 2. check air pressure setting (normally be 1-2.7 bar)</p>		

# 自动注滴机电源理图

## DISPENSING CONTROLLER ELECTRICAL SCHEMATIC



F1 : 保险丝0.5A

Fuse0.5am.

W1 : 定时器1.2MΩ

Time-set potentionmeter

P1 : 电源板

Power board

P2 : 定时板

Time set board

SOL1: 电磁阀

Solenoid valve

SW1 : 电源开关

Power switch

SW2 : 脚踏板开关

Foot switch

SW3 : 模式开关

Mode switch

TR1 : 电源变压器

Transformer

# 滴胶机气动系统图

## DISPENSING CONTROLLER PNEUMATIC SYSTEM

