



1K2K Dosing and Dispensing Private Limited
Plot No. A-44/1/A-55, Rajmata Jijau Mahila
Industrial Premises, Chakan MIDC Road,
Phase II, Vasuli, Tal-Khed, Dist. Pune- 410501



ADoST SDS All Variants Manual

ABSTRACT

This document provides step by step handling and maintenance of ADoST dispensing system, including but not limited to every aspect of the equipment that an operator is expected to know and observe.



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ADoST- SDS

ADoST- SDS-PRO

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USER MANUAL

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Address - Plot No. A-44/1/A-55, Rajmata Jijau Mahila Industrial Premises,
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2.1		



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Information Ownership

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CONTENTS

1	Definitions	6
2	Introduction.....	7
3	General	8
4	System’s specifications.....	9
4.1	Technical specifications	9
4.2	SYSTEM Components.....	9
4.3	Detailed Dimensions.....	11
4.3.1	ADoST SDS	11
4.3.2	ADoST SDS-PRO	12
5	Safety precautions.....	14
6	System Setup	15
6.1	Stand assembly.....	15
6.1.1	ADoST SDS	15
6.1.2	ADoST SDS-PRO	17
6.2	Pneumatic connection setup.....	20
6.2.1	ADoST SDS	20
6.2.2	ADoST SDS-PRO	21
6.2.3	ADoST SDS-PRO with Pinch Valve	22
6.3	Electrical setup	23
6.3.1	ADoST SDS-PRO	23
6.4	cartridge placement inside the gun.....	24
7	Initial system configuration & standard operating procedure.....	24
7.1	ADoST SDS	24
7.1.1	System startup	24
7.1.2	Set adhesive flow rate.....	24
7.1.3	Start/stop adhesive dispensing	24
7.2	ADoST SDS-PRO	24
7.2.1	Initial system configuration.....	24
7.2.2	Timer mode	26
7.2.3	Manual mode (only for SDS-PRO)	28
7.2.4	Purging mode	30
7.2.5	Settings.....	31
8	Pressure switch factory settings (ADoST SDS-PRO).....	36



9	operating errors and troubleshooting.....	37
9.1	ADoST SDS /1K-SDS-PRO	37
9.2	ADoST SDS-PRO	37
10	Connecting with PLC/ROBO	42
10.1	Connection details.....	42
10.2	Control sequence diagram	43
10.2.1	Normal operation sequence	43
10.2.2	Error conditions	43
11	FAQs.....	44
12	System maintenance.....	45
13	System Do's and don'ts.....	46
14	Screen Flow diagram (ADoST SDS-PRO).....	47
14.1.1	Main screen and Purging setting	47
14.1.2	Working in Timer mode	48
14.1.3	Working in Manual mode	49
14.1.4	Dispense Time setting.....	50
14.1.5	Settings screen.....	51
15	Accessories.....	52
16	Consumables.....	53
17	Disclaimers.....	54



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Plot No. A-44/1/A-55, Rajmata Jijau Mahila
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1 DEFINITIONS

1.	User	The person using the system
2.	Adhesive	Dispensing Adhesive
3.	MCU	Main Control Unit
4.	SCU	Sub Control Unit
5.	HMI	Human Machine Interface
6.	Accessory	Device used to dispense adhesive

2 INTRODUCTION

ADoST SDS variants are dispensing systems designed to be an industry-standard in accuracy, control, and smart technology, with repeatability and advanced capabilities for applying low to medium viscosity Silicon adhesives also capable of accommodating 1K-cartridges

ADoST SDS improves application efficiency while nearly eliminating worker fatigue. With ADoST SDS, end users can apply adhesive ergonomically with just the press of a button. ADoST SDS-PRO comes with an add-on feature of auto purging.

ADoST SDS-PRO digitally controls the amount of adhesive deposited on the application substrate. Digital control allows more precision and comfort and its smart technology contains Purging feature which allows user to prevent curing of tube and nozzle in-between ideal time during continuous operation. It helps the user to precisely customise the amount of adhesive to be applied to a particular part thereby scaling the efficiency of adhesive dispensing.





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3 GENERAL

This Handbook is divided into sections to make it useful to understand every information about the system life cycle and to easily find that information necessary for the end user.

This document is specifically developed for ADoST SDS variants and the information given in this handbook can help users in achieving the best system performances while ensuring the long life-cycle to its components.

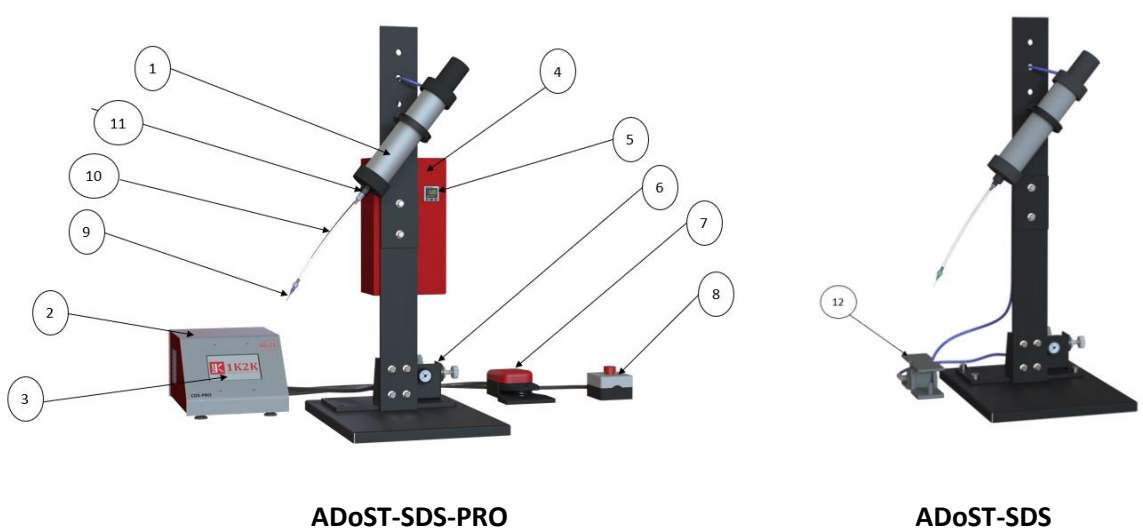
Due to ongoing developments and safety requirements and regulations system outfitting may be different from the one described in this document. In such a scenario, descriptions and procedures should be construed as generic. Quoted drawings and pictures are intended for example only.

4 SYSTEM'S SPECIFICATIONS

4.1 TECHNICAL SPECIFICATIONS

Model Number	ADoST-SDS	ADoST-SDS-PRO
Power Supply	NA	Min:100 VAC, Nominal:230 VAC, Max 275VAC
Size (Metric)	300m x 400mm x 770mm	450mm x 300mm x 770mm
Weight	10 Kg	15 Kg
Operating Air Pressure	3 Bar (Max.)	
Ambient temperature range	10°C to +45°C	
Response time	0.02s (Low viscous)	
Usage	Indoor use	
Minimum Dispense Size	0.020gm (Medium Viscosity)	
Accuracy	NA	+/-0.006gm (Medium viscous material, low dispensing volume) +/-0.02gm (Medium viscous material, high dispensing volume)
Recommended for	Single-component Adhesive	

4.2 SYSTEM COMPONENTS





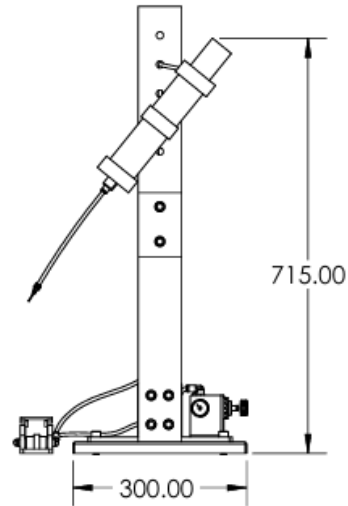
1. **Pneumatic Dispenser:** A robust pneumatic cartridge gun designed for dispensing high-viscosity adhesives and sealants. The dispenser is equipped with easily replaceable conversion kits, allowing quick adaptation to different ratios as needed.
2. **MCU (Main Control Unit):** The Main Control Unit, the core of the cartridge dispenser system, initiates operation via a rear power switch. It coordinates all components through detachable connectors for seamless integration, offering various dispensing features and modes to meet diverse dispensing needs.
3. **HMI:** The 4.3" HMI provides intuitive user interaction, enabling easy operation and monitoring of system settings and status through visual feedback and controls.
4. **SCU (Sub Control Unit):** Contains a pneumatic actuator and digital pressure switch for MCU-to-dispenser communication, managing and regulating system functions with precise control and monitoring.
5. **Digital pressure display/ Digital Switch:** Indicates current pressure with 0.01 precision, provides actuator control signals and sets upper and lower pressure limits for accurate output.
6. **Air pressure regulator:** The primary function is to maintain steady pressure inside the gun, protecting the system from air supply variations to ensure consistent adhesive dispensing.
7. **Foot Switch:** Operated by foot, this hands-free control provides an alternative method to initiate dispensing via the primary control's HMI.
8. **Emergency Switch:** The emergency switch immediately halts electrical operations to prevent hazards or damage in critical situations.
9. **Tube:** Tube ensure consistent, thorough mixing of 1K adhesives, optimizing performance and reliability.
10. **Dispensing Nozzle:** The dispensing nozzle precisely controls the adhesive flow, with larger diameters increasing output volume; replace when cured and consult our sales team for selection.
11. **Cartridge tube adaptor:** The single component tube connector connects the tube with cartridge for flow of the material through the tube.
12. **Pneumatic foot switch:** A pneumatic foot switch, also known as an air operated footswitch, is a device that uses compressed air to operate a device instead of electricity.

4.3 DETAILED DIMENSIONS

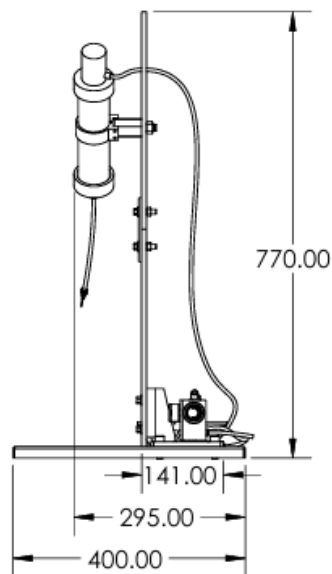
All dimensions are in mm

4.3.1 ADoST SDS

4.3.1.1 Front View



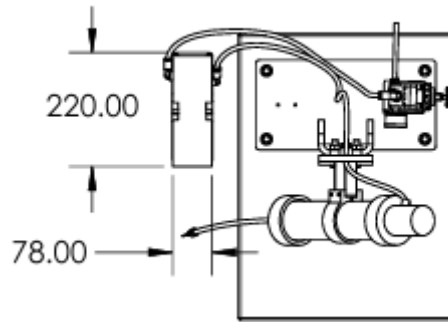
4.3.1.2 Right side view





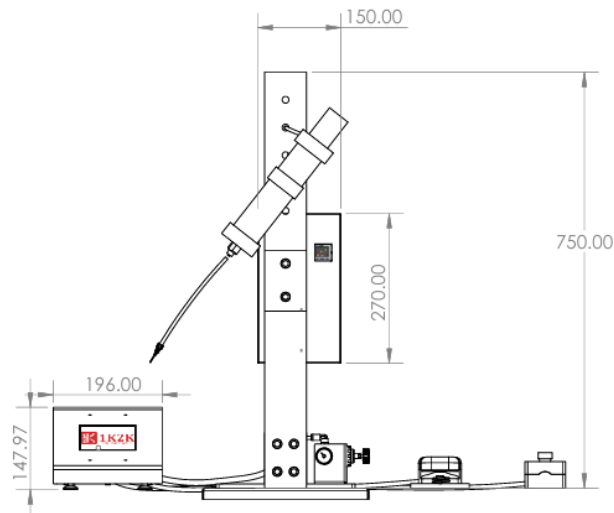
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4.3.1.3 *Top view*

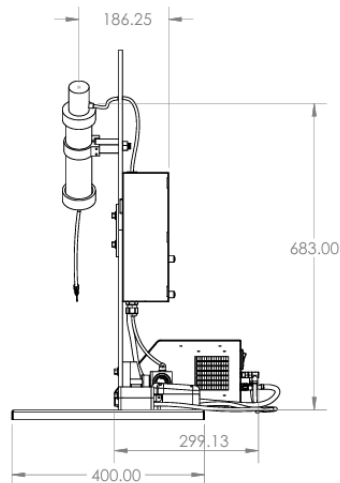


4.3.2 **ADoST SDS-PRO**

4.3.2.1 *Front View*



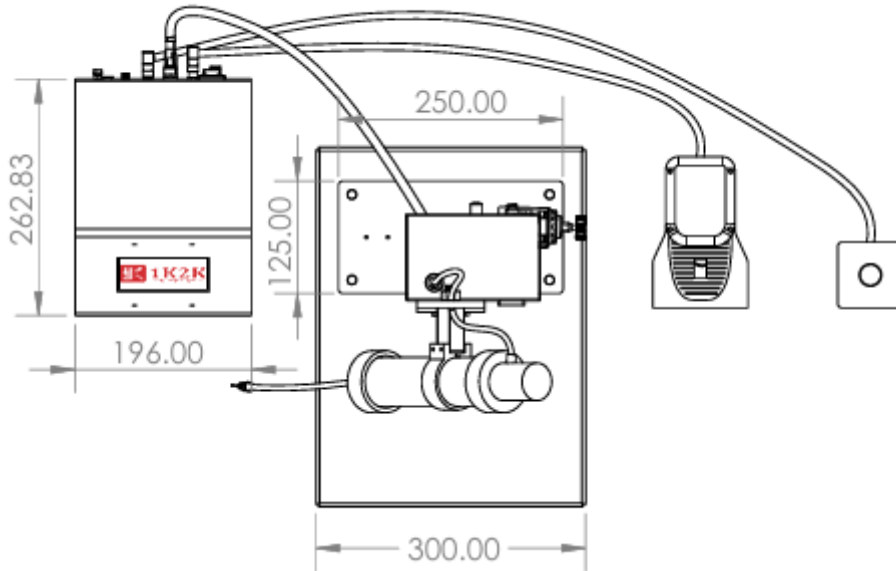
4.3.2.2 *Right side view*









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4.3.2.3 Top view



5 SAFETY PRECAUTIONS

1.	Wear safety gloves	
2.	Wear safety glasses	
3.	Wear face mask	
4.	Wear safety shoes	

6 SYSTEM SETUP

6.1 STAND ASSEMBLY

6.1.1 ADoST SDS

DOCUMENT PREVIEW	ITEM NO.	PART NUMBER
	1	Base Plate
	2	Regulator Mounting
	4	Vertical Plate bottom
	5	Connecting Plate
	6	Vertical Plate top
	7	Pinch Valve (Accessories)
	8	Pinch tube
	10	Regulator Dial
	11	Bolt-M3
	12	Small bolt-M4
	13	Long Bolt-M8
	14	Nut-M8
	15	Regulator Outer ring
	16	Nut-M12
	17	Gun Assembly
	20	Regulator
	22	Bolt-M10
	23	Long Bolt-M3
	24	Nut-M3
	27	Cartridge
	30	Cartridge Connector
	31	Needle
	32	Nut-M10
	33	1K-CDS PRO Base Plate
	33	PV Stand(Accessories)
	34	Ditachable connector
	36	Pneumatic footswitch

Step-1

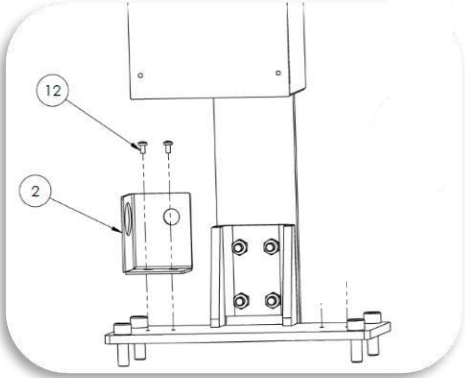
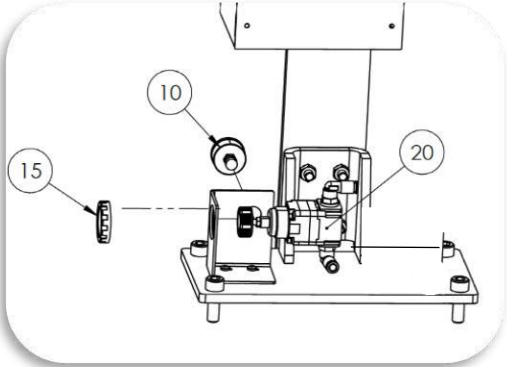
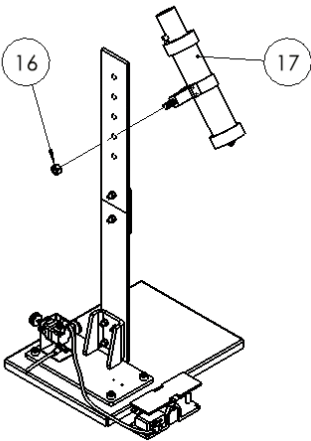
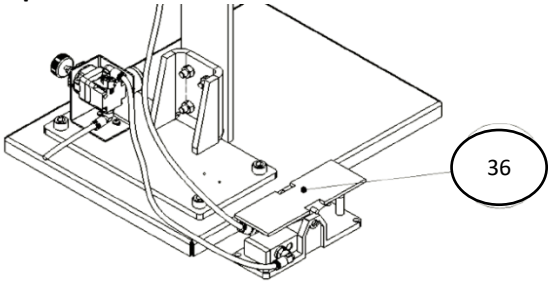
Install the Base Plate(1) on the SDS PRO Base Plate(33) with 4pcs Bolt(22) and Nut(32) Allen key.

Step-2

Secure the Vertical plate Bottom (4) and Vertical Plate Top (6), using Connecting Plate (5) Using the 2pcs of Long Bolt (13) and Nuts.

Step-3

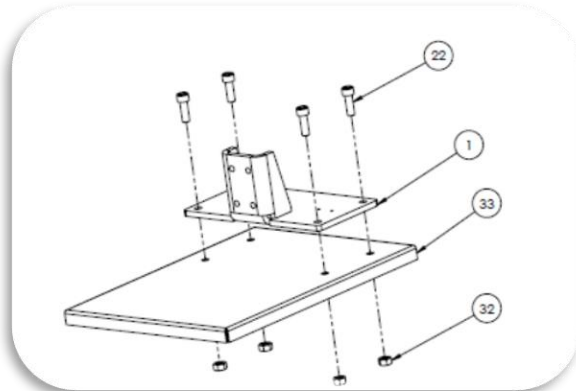
Secure the Assembly of step to the Base Plate(1) using Nut(14) Bolts(13).

<p>Step-4</p>  <p>Place the Regulator Mounting (2) on the Base plate (1) using 2pcs of small bolts (12) each as shown.</p>	<p>Step-5</p>  <p>Push the Regulator (20) Into Out and use outer ring(15) to lock the position further connect Dial (10) using clockwise rotation to it.</p>
<p>Step-6</p>  <p>Place The Gun assembly (17) in the Hole of Vertical Plate Top (6) with the help of Nut (16). Use Vertical Hole for raise and lower gun assembly or height adjustment.</p>	<p>Step-8</p>  <p>Connect Pneumatic Foot switch (36) with Gun using Pneumatic Line.</p>
<p>Step-9</p> <p>Connect all pneumatic lines according to the numbering.</p>	

6.1.2 ADoST SDS-PRO

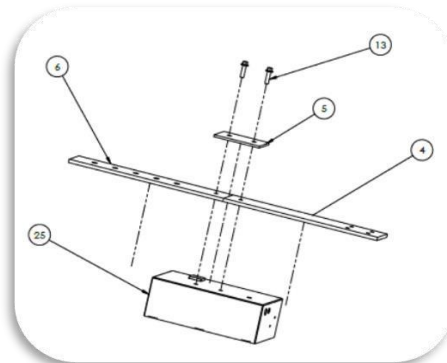
DOCUMENT PREVIEW	ITEM NO.	PART NUMBER
	1	Base Plate
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	10	Regulator Dial
	11	Bolt-M3
	12	Small bolt-M4
	13	Long Bolt-M8
	14	Nut-M8
	15	Regulator Outer ring
	16	Nut-M12
	17	Gun Assembly
	19	MCU
	20	Regulator
	21	Levelling Screw
	22	Bolt-M10
	23	Long Bolt-M3
	24	Nut-M3
	25	Foot Switch
	26	Emergency switch
	27	Cartridge
	28	Tube
	30	Cartridge Connector
	31	Needle
	32	Nut-M10
	33	1K-CDS PRO Base Plate
	33	PV Stand(Accessories)
	34	Ditachable connector
	35	SCU
	36	Pneumatic footswitch

Step-1



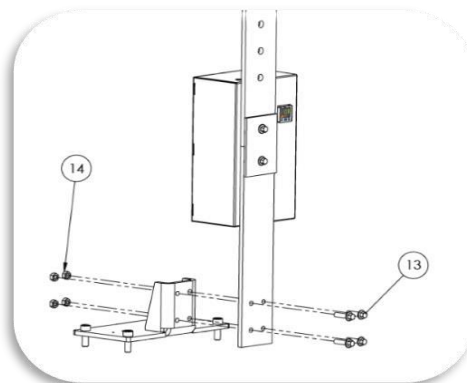
Install the Base Plate(1) on the SDS PRO Base Plate(33) with 4pcs Bolt(22) and Nut(32) Allen key.

Step-2



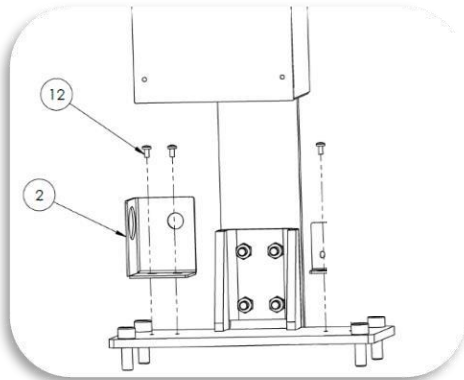
Secure the Vertical plate Bottom (4) and Vertical Plate Top (6) to the SCU (25), using Connecting Plate (5) Using the 2pcs of Long Bolt (13).

Step-3



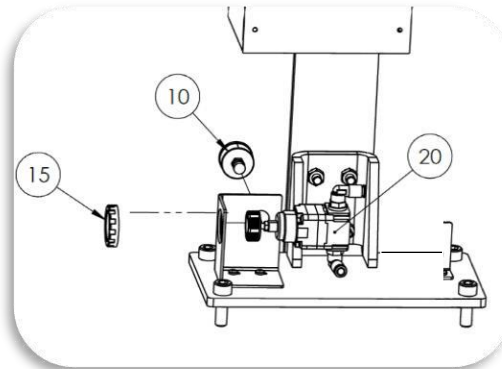
Secure the Assembly of step to the Base Plate (1) using Nut (14) Bolts(13).

Step-4



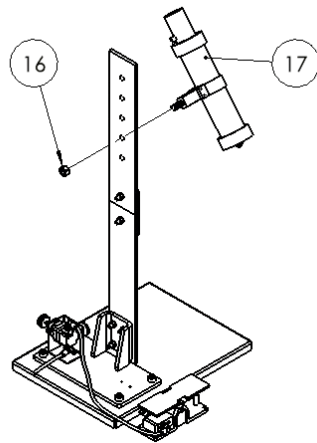
Place the Regulator Mounting (2) on the Base plate (1) using 2pcs of small bolts (12) each as shown.

Step-5



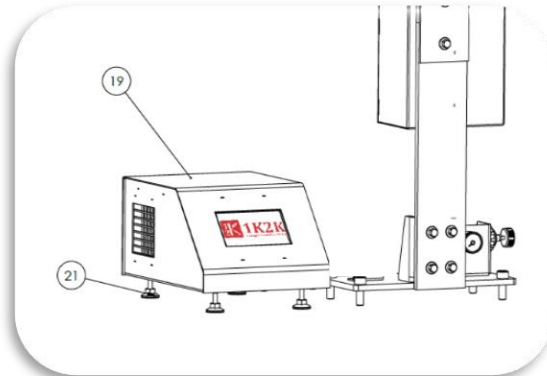
Push the Regulator (20) In to Out and use outer ring (15) to lock the position further connect Dial (10) using clockwise rotation to it.

Step-6



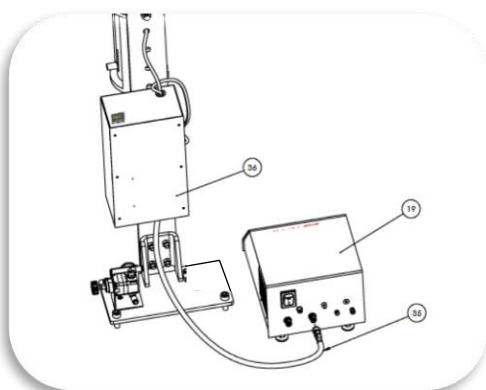
Place The Gun assembly (17) in the Hole of Vertical Plate Top (6) with the help of Nut (16). Use Vertical Hole for raise and lower gun assembly or height adjustment.

Step-7



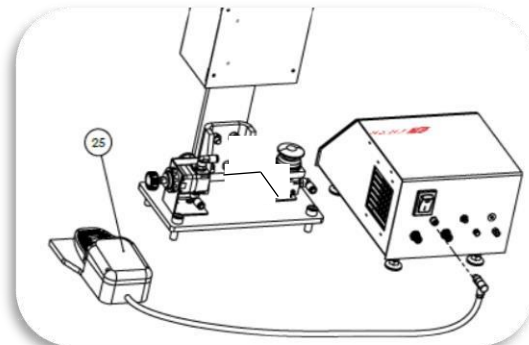
The 4pcs Levelling screw (21) into the 4 holes on the MCU(19), Rotate CW to raise and CCW to lower the position of MCU.

Step-8

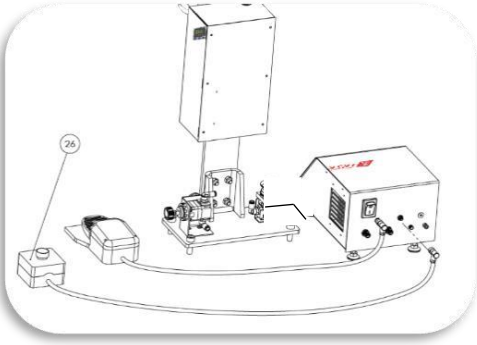
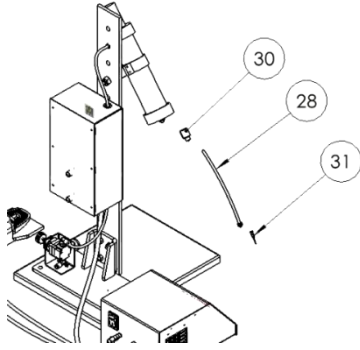


Connect MCU(19) with SCU(36) using Detachable Connector(35).

Step-9



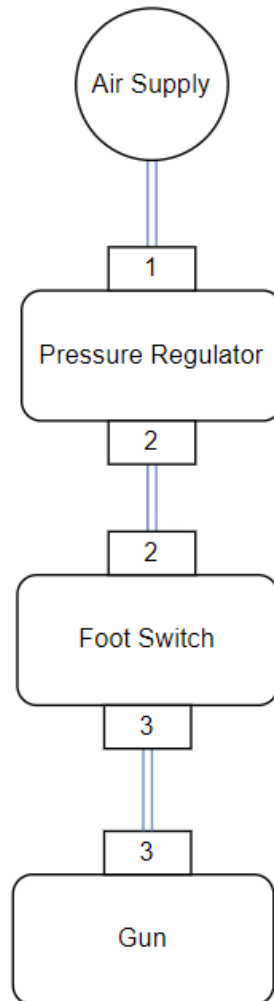
Connect Foot switch (25) with MCU using Detachable Connector.

<p>Step-10</p>  <p>Connect Emergency switch (26) with MCU using Detachable Connector.</p>	<p>Step-11</p>  <p>Connect all Consumable items – Tube (28), Cartridge connector (30), push the tube on cartridge connector barb. That assembly to cartridge. Further connect Nozzle (31).</p>
<p>Step-12 Connect all pneumatic lines according to the numbering.</p>	

6.2 PNEUMATIC CONNECTION SETUP

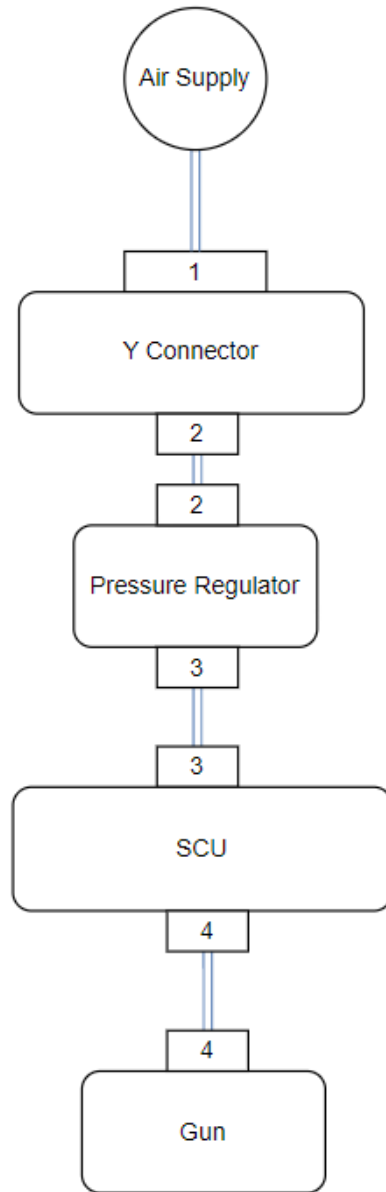
Connect pneumatic air pipe (6mm OD and 4mm ID) to indicated connector. Additional connectors (6X8, 6X10, 6X12) are supplied as standard spares. Using FRL (Filter, Regulator, and Lubricator) is advised in order to keep the input air supply dry and clean.

6.2.1 ADoST SDS

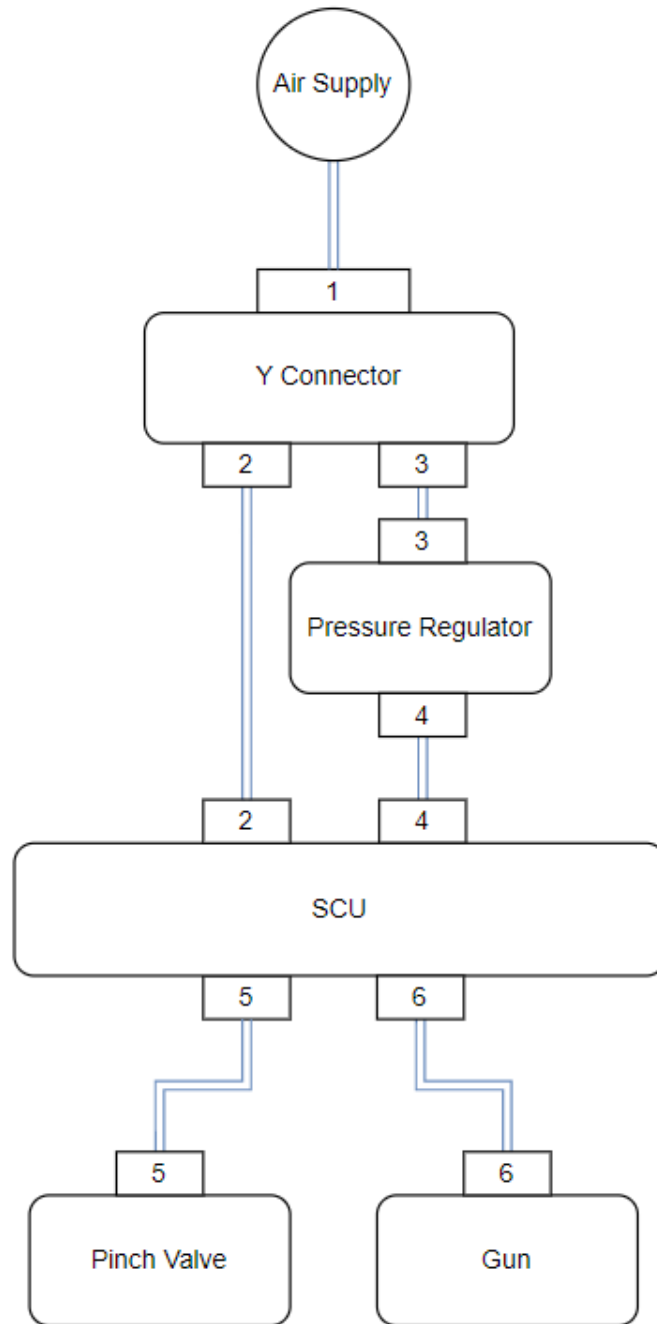




6.2.2 ADoST SDS-PRO

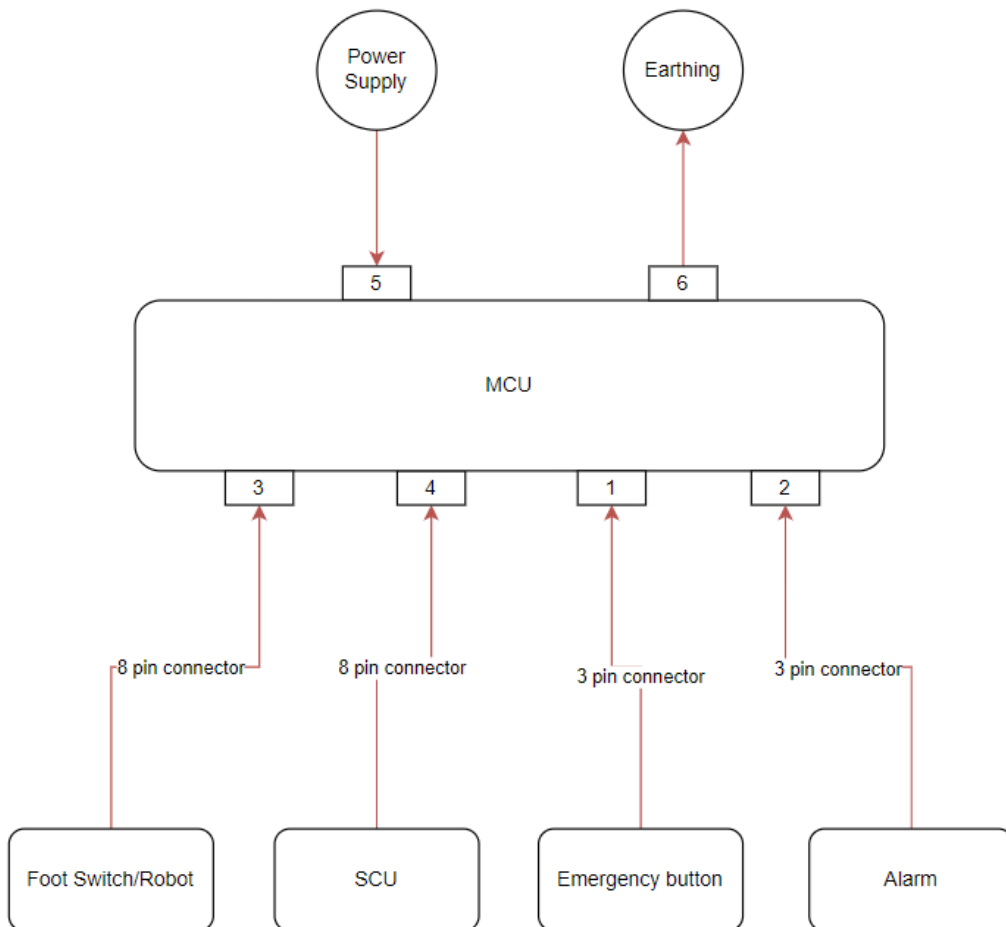
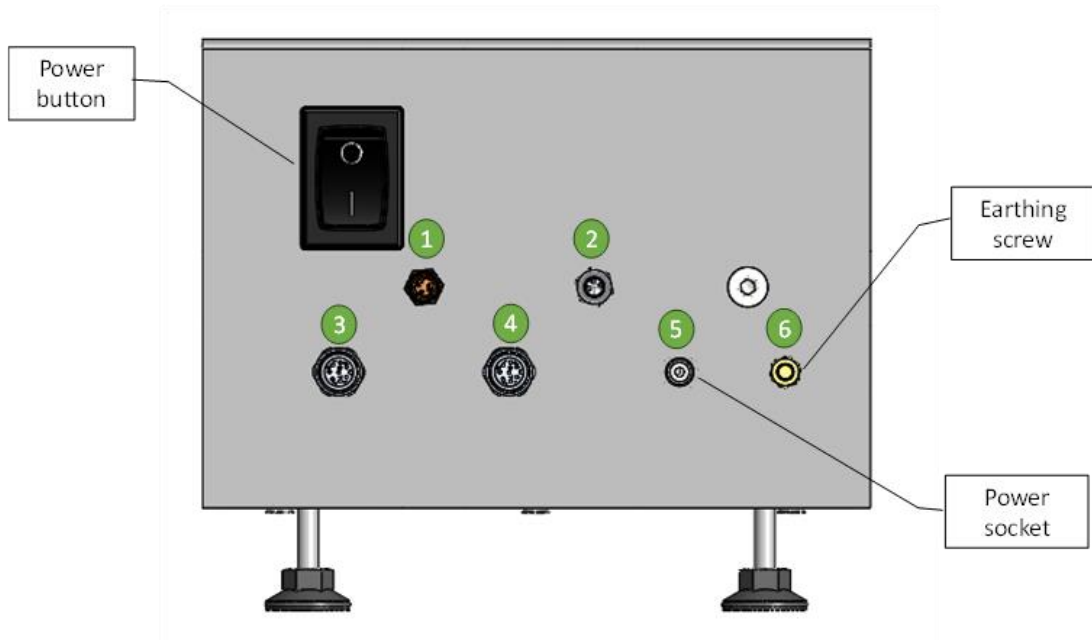


6.2.3 ADoST SDS-PRO with Pinch Valve



6.3 ELECTRICAL SETUP

6.3.1 ADoST SDS-PRO





6.4 CARTRIDGE PLACEMENT INSIDE THE GUN

1. Cut the cartridge front.
2. Insert cartridge inside the gun and tighten the gun front cap.
3. Connect the cartridge connector to cartridge.
4. Push the consumable tube on cartridge connector barb.
5. Connect the nozzle to the tube.

7 INITIAL SYSTEM CONFIGURATION & STANDARD OPERATING PROCEDURE

7.1 ADoST SDS

7.1.1 System startup

- 1) Start the Air supply, ensure you start with pressure as 1 and slowly increase based on the requirement, however NOT MORE THAN 3 bars.

7.1.2 Set adhesive flow rate

The adhesive flow rate in the system depends upon the pressure set in the pressure regulator.

Follow the steps below to set the pressure

- 1) Loosen the nut of the pressure regulator.
- 2) Rotate the knob clockwise to increase the pressure
- 3) Rotate the knob anti-clockwise to reduce the pressure
- 4) The Knob dial will show the set pressure.
- 5) Try to dispense the adhesive, if the desired flow rate is achieved the go to next step else go to step 2 and repeat the procedure.
- 6) Once the required flow rate is achieved, lock the nut to set the pressure.

7.1.3 Start/stop adhesive dispensing

Press the foot switch continuously till the required amount of adhesive has dispensed. When foot switch is not pressed there will not be any adhesive dispensing.

7.2 ADoST SDS-PRO

7.2.1 Initial system configuration

Before starting the dispensing, it is required to configure a few parameters. Please follow the instructions below to complete the basic setting procedure.

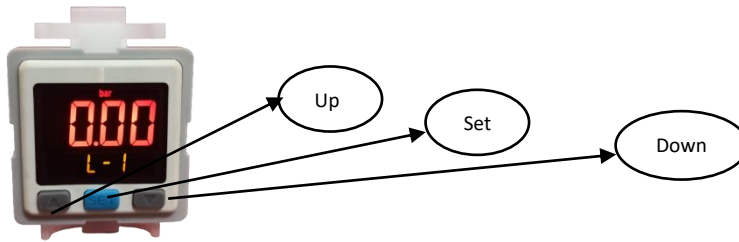
7.2.1.1 Air pressure regulator settings

1. Loosen the nut of the pressure regulator.
2. Rotate the knob clockwise to increase the pressure
3. Rotate the knob anti-clockwise to reduce the pressure
4. The Knob dial will show the set pressure.
5. Once the pressure gauge shows the required pressure, lock the nut to set the pressure.
6. Make sure the Digital Pressure switch lower limit is set as the same or a little lower than the pressure set through the pressure regulator

7.2.1.2 Air pressure switch settings

- To set the lower and upper pressure limits-
 There are 3 buttons on the pressure switch.
 - Up
 - Set
 - Down

On pressing the 'UP' button, 'L1' will appear on the display.



Enter the required pressure using UP, DOWN key and press SET.



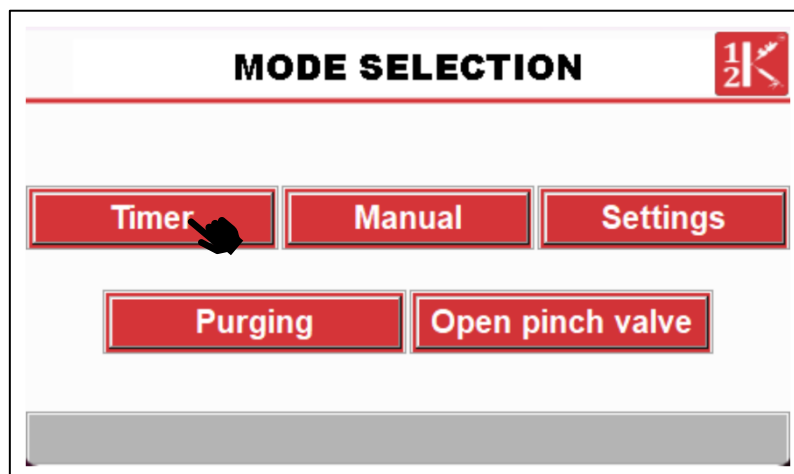
Please note: Quoted pictures are intended for example only.

7.2.1.3 System calibration for dispensing amount

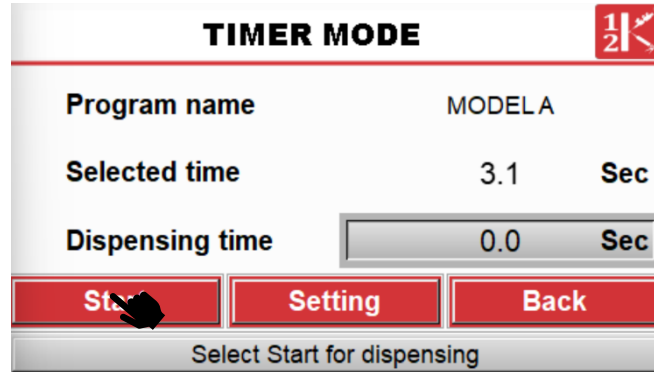
Follow the timer settings section below to create the 1st program with expected dispensing time.

Before starting the system calibration, keep a weighing machine ready to dispense the adhesive dispensed by the system. The weighing machine should be able to provide up to 3 decimals of precision. Keep a cup/small vessel which can be used for dispensing adhesive and dispensed measurements.

- Select the timer mode (to understand the timer mode in detail, please read the section with heading **Timer Mode.**)



- 2) Select start or use accessory/foot switch for dispensing. Ensure you are ready for measurement of dispensed amount.



- 3) Measure the dispense amount, if it's not expected, change the pressure using a regulator and repeat step 2
- 4) Repeat steps 2 and 3 above until you achieve the desired measured output.
- 5) You may change the time of dispense from the setting. If you increase the time, then you will have to reduce the pressure and vice versa to achieve the same dispensing amount.

7.2.1.4 Cycle delay time

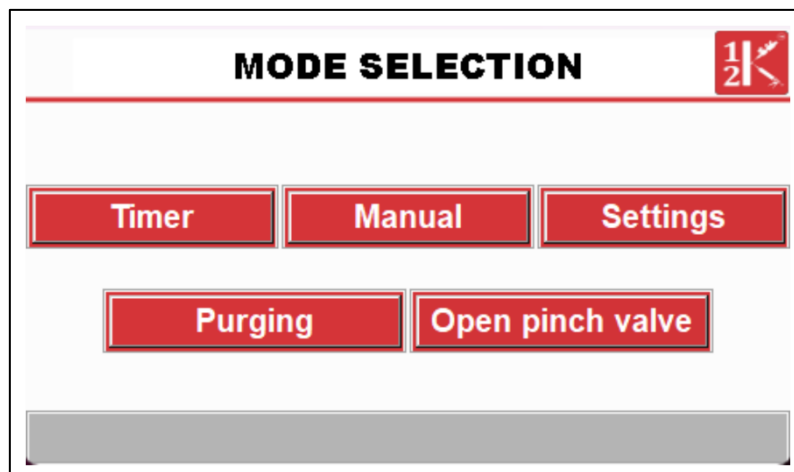
The cycle delay time is required when it's desired to keep the delay between two dispense. This feature is required to be set when using the system with sensors. This is to avoid multiple sensing of same component in short duration by the system and so avoiding more than once dispensing on same component.

Follow the button selection to reach cycle delay time settings

Settings -> Timer Settings -> Cycle Delay time

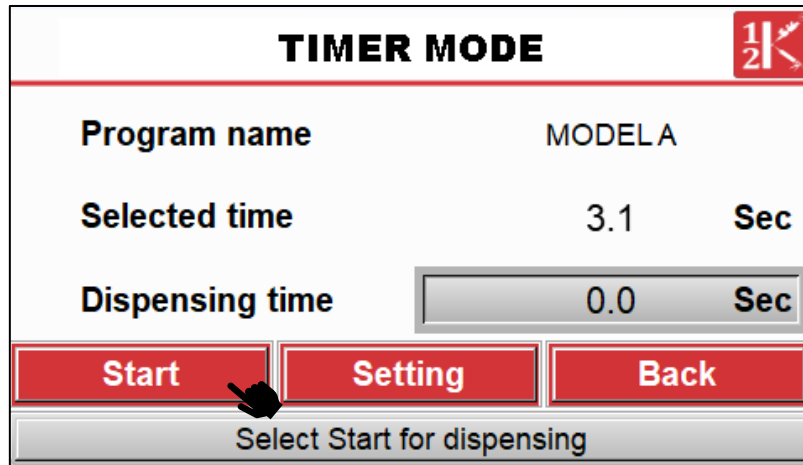
7.2.2 Timer mode

In timer mode, the system will dispense the fixed adhesive volume for a pre-set time and pressure. The system is designed to store 50 programs in the settings. Users can select a particular pre-set timer depending on the application requirement. The minimum and maximum time for dispensing is 0.1 and 3276.8 seconds respectively.



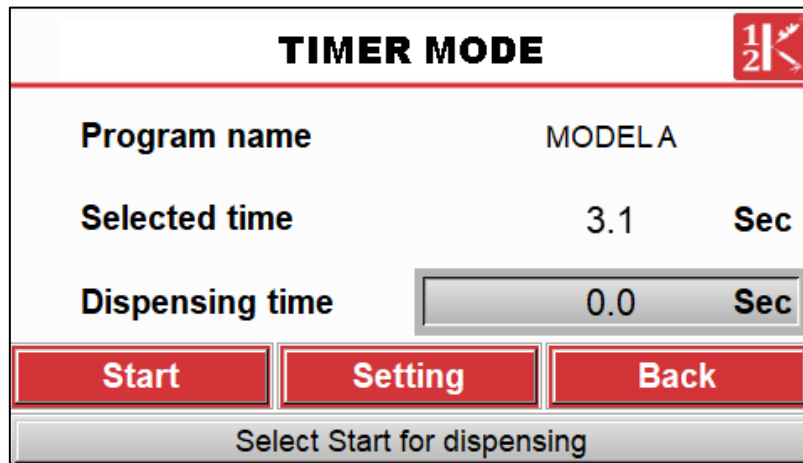
Make sure that the program name, time configuration and pressure settings are done. Then click on the 'Timer' button from mode selection screen. If not configured, then the HMI may show an error.

7.2.2.1 Timer Mode by HMI commands

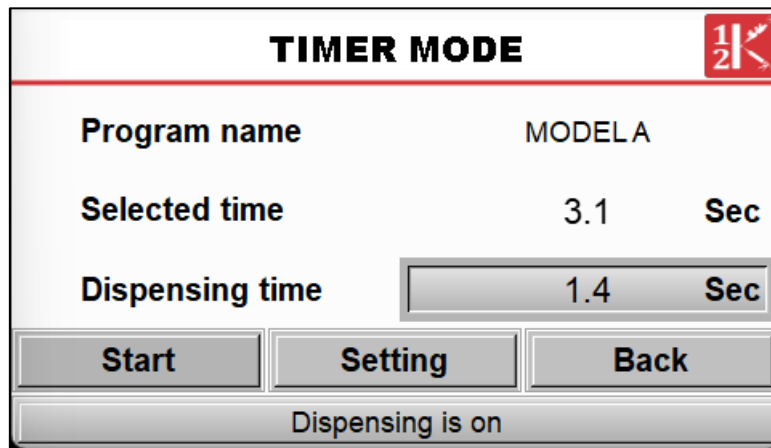


1. Touch the 'Start' button on the screen to start the dispensing and click on back button to exit the screen.
2. Once the Start command is received then the system waits for the pressure to reach the preset pressure, if the pressure reaches the set value within 6 seconds 'Dispensing is on'.
3. If the preset pressure is not achieved after the Start command the cycle is aborted.
4. To stop the dispensing while the operation is ON, press the 'Emergency push button'

7.2.2.2 Timer Mode by Accessory



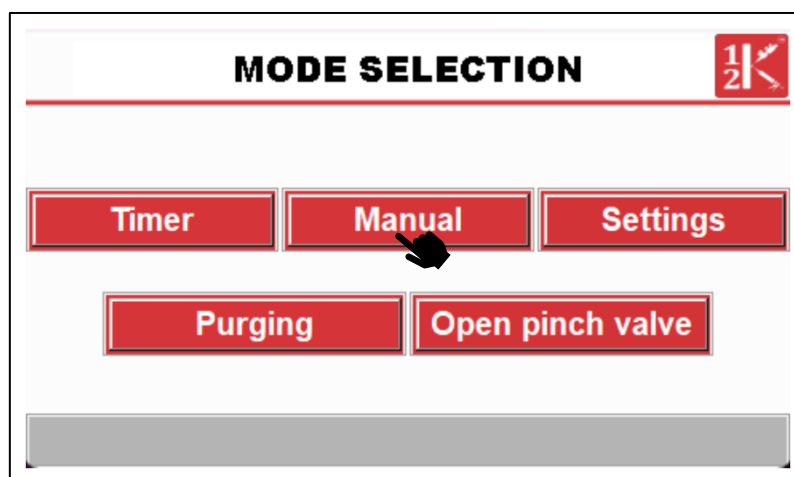
1. The accessory could be a sensor, foot switch, robot or a user specific device.
2. If the connected accessory is a sensor, keep the part on the fixture to dispense for the preset time and stop automatically.
3. If the connected accessory is a foot switch, pressing it once will start the dispensing and end after preset time.
4. If the accessory is a robot or user specific device then upon getting an impulse dispensing will start for the preset time and stop automatically.



5. Once the Start command is received then the system waits for the pressure to reach the preset pressure, if pressure reaches the set value within 6 seconds 'Dispensing is on'.
6. If the preset pressure is not achieved after the Start command the cycle is aborted.
7. To stop the dispensing while operation is ON, press the 'Emergency push button'.

7.2.3 Manual mode (only for SDS-PRO)

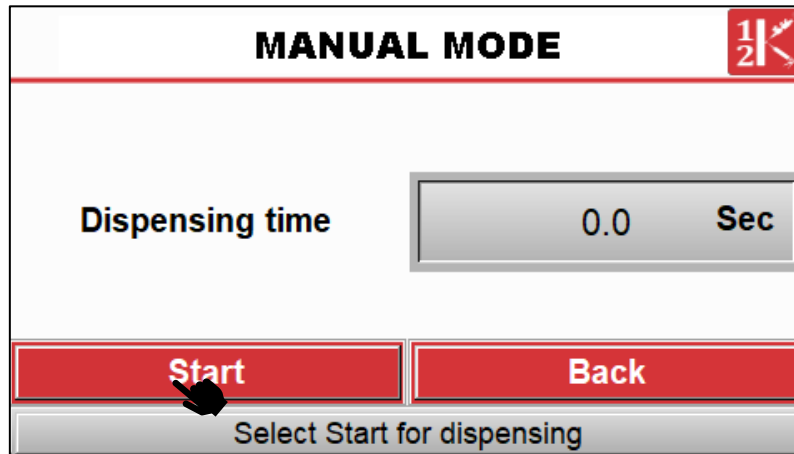
In manual mode, the dispensing is controlled manually by the user. System will dispense the adhesive till the user's command. Manual mode is designed for purging or application on a non-uniform dispensing operation. In this mode, dispensing will continue till the user stops it. The maximum dispensing time in manual mode is 3276.8 seconds. If the dispensing process continues till the maximum time, dispensing will stop automatically. There are two operating options. By HMI commands and by foot switch/accessory connected.



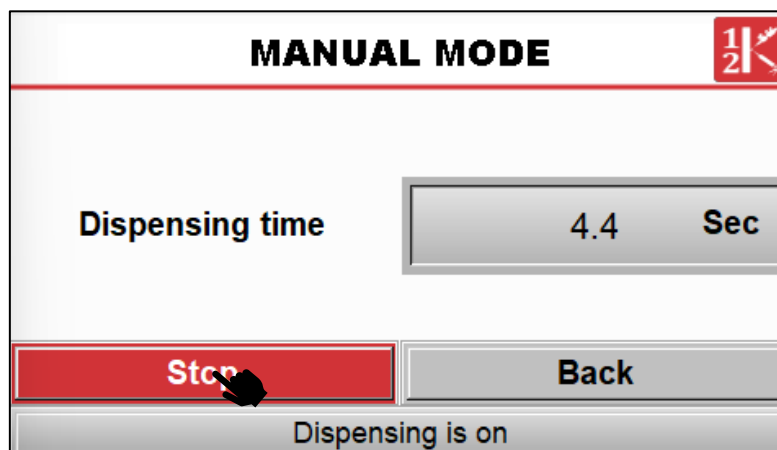
Click on 'Manual' button from mode selection screen.

7.2.3.1 Manual mode by HMI commands

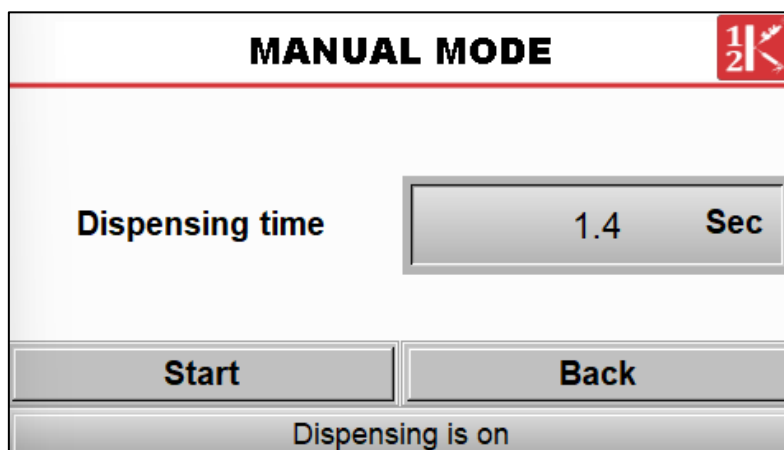
1. Press the 'Start' button on the screen to start the dispensing or use an accessory to dispense.



2. If on screen button is used to start dispensing then 'Stop' will be available to stop the dispensing.



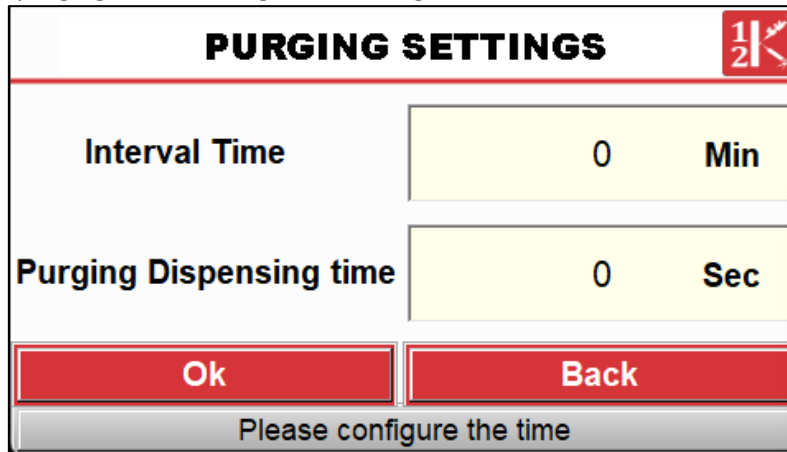
3. If accessory is used to dispense then on screen stop button is disabled and upon withdrawal of the accessory signal Stops the dispensing.



7.2.4 Purging mode

7.2.4.1 Purging mode setting

1. Open the purging mode setting from Settings menu



PURGING SETTINGS

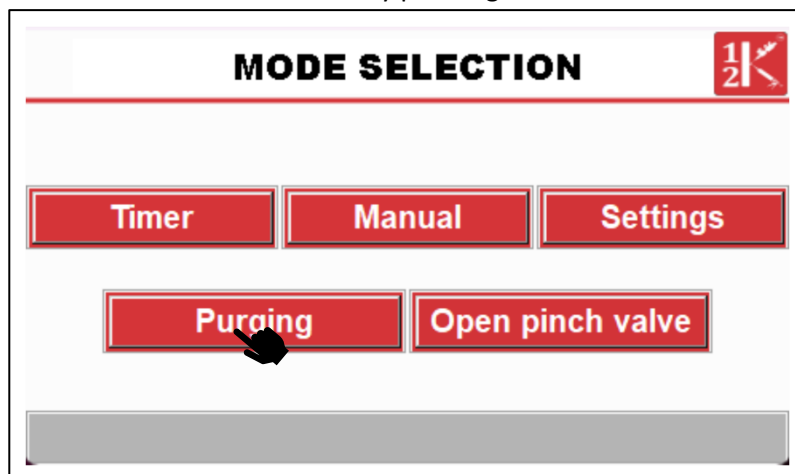
Interval Time 0 Min

Purging Dispensing time 0 Sec

Ok Back

Please configure the time

2. Configure with the required time for 'Interval Time' and 'Purging dispensing time'
3. Go back to 'Settings' from Purging settings by pressing Back
4. Go back to the 'Mode selection' screen by pressing Back

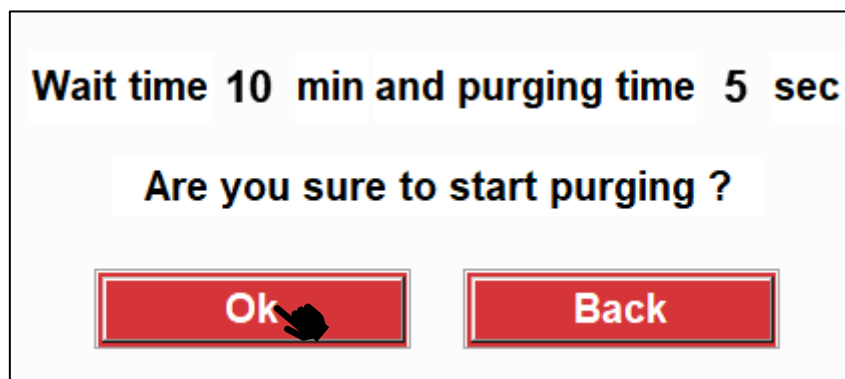


MODE SELECTION

Timer Manual Settings

Purging Open pinch valve

5. Select 'Purging' from 'Mode selection'
6. A confirmation popup will be shown, make sure the pneumatic pressure is sufficient.

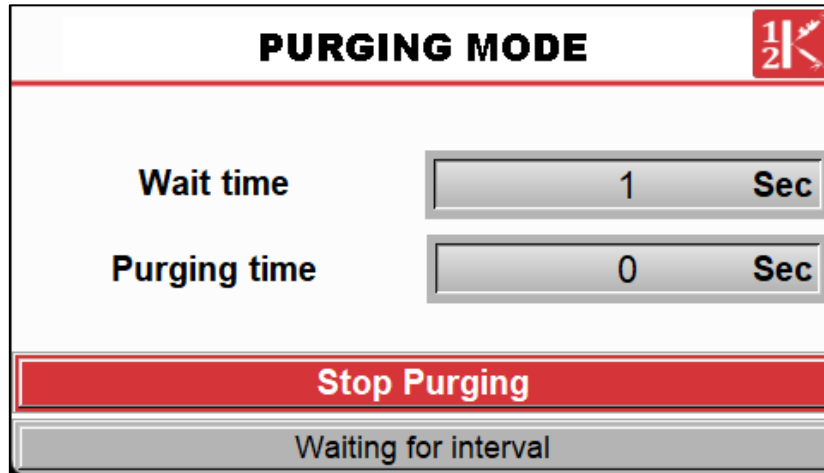


Wait time 10 min and purging time 5 sec

Are you sure to start purging ?

Ok Back

7. After acknowledging, 'Purging mode' will be open, and starts waiting for the 'Interval time's

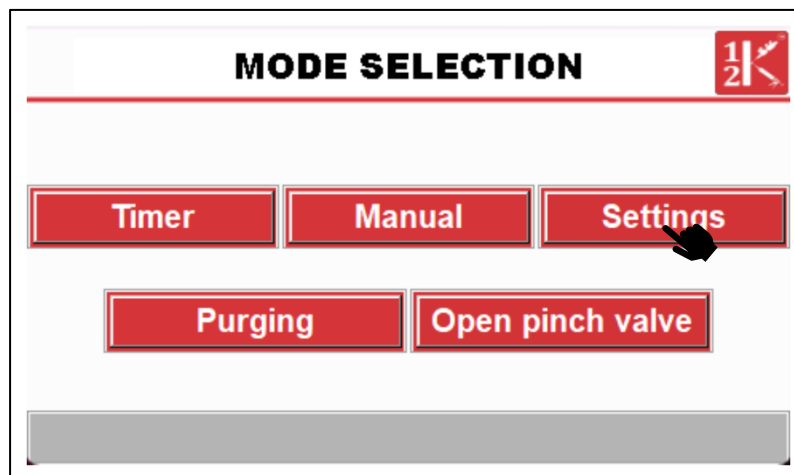


8. As the Interval time is reached purging starts when the pressure configured is achieved and stops after the 'Purging time'
9. This cycle continues till the 'Stop Purging' button is pressed, Emergency is pressed or error from low pneumatic pressure.

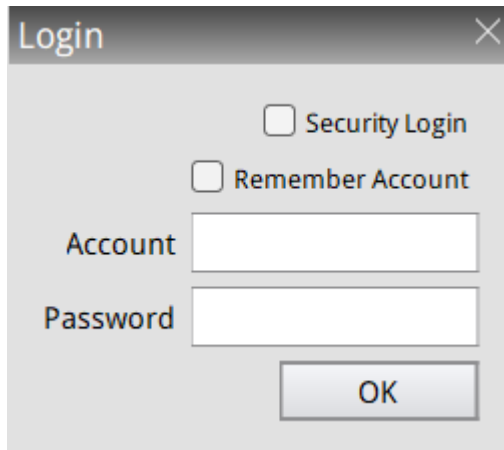
7.2.5 Settings

7.2.5.1 Timer Setting

1. Click on the 'Settings' button

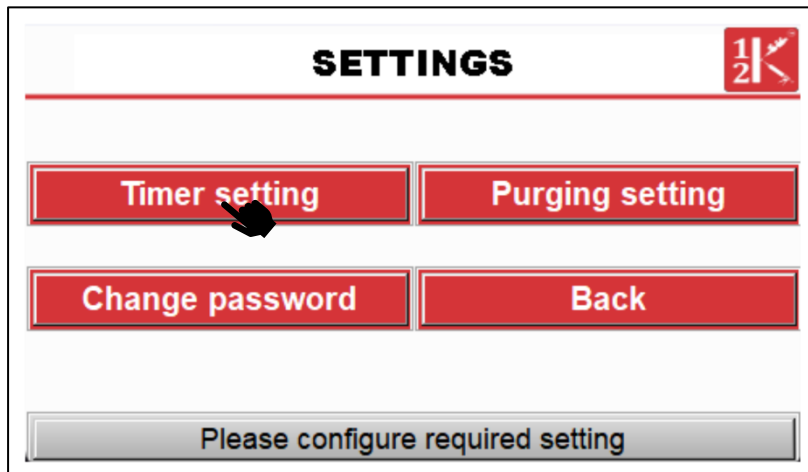


2. Enter Login & Password (Please contact your ADoST supplier for Authentication details)



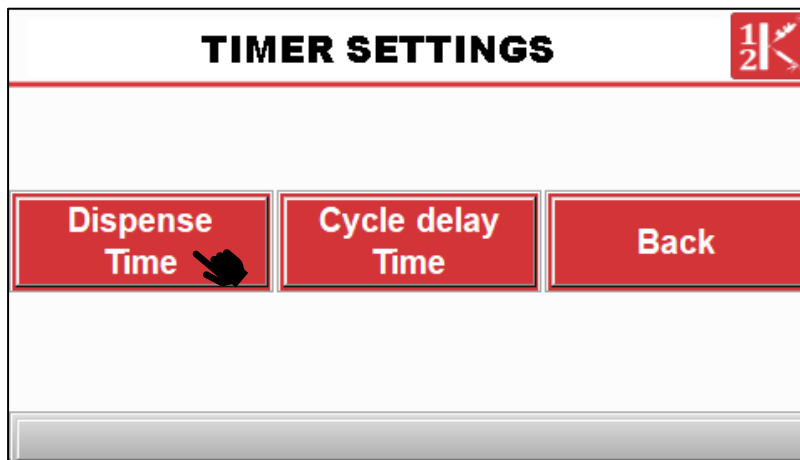
A login dialog box titled "Login" with a close button (X) in the top right corner. It contains two checkboxes: "Security Login" and "Remember Account". Below these are two text input fields labeled "Account" and "Password". At the bottom center is an "OK" button.

3. Click on Timer setting,



A screen titled "SETTINGS" with a 1/2K logo in the top right corner. It features four red buttons: "Timer setting" (with a hand cursor pointing to it), "Purging setting", "Change password", and "Back". At the bottom is a grey bar with the text "Please configure required setting".

4. Select Dispense time to configure.



A screen titled "TIMER SETTINGS" with a 1/2K logo in the top right corner. It features three red buttons: "Dispense Time" (with a hand cursor pointing to it), "Cycle delay Time", and "Back". At the bottom is a grey bar.

5. Select the required time and click on select. User can have 50 options of different programs

TIMER SETTING		
No.	Program name	Time
1	MODEL A	3.1
2		0.0
3		0.0
4		0.0
5		0.0

Please configure the time

7.2.5.2 Edit the Program

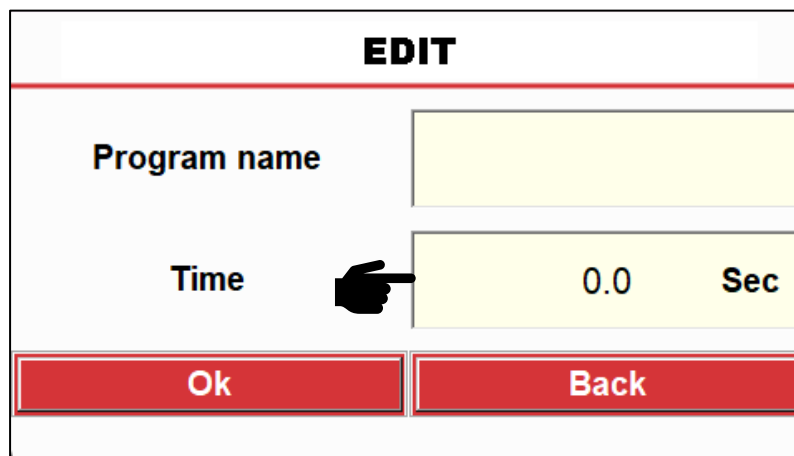
1. To edit the program name, click on program name's edit box. (Indicated box)

EDIT		
Program name	<input type="text"/>	
Time	<input type="text" value="0.0"/>	Sec

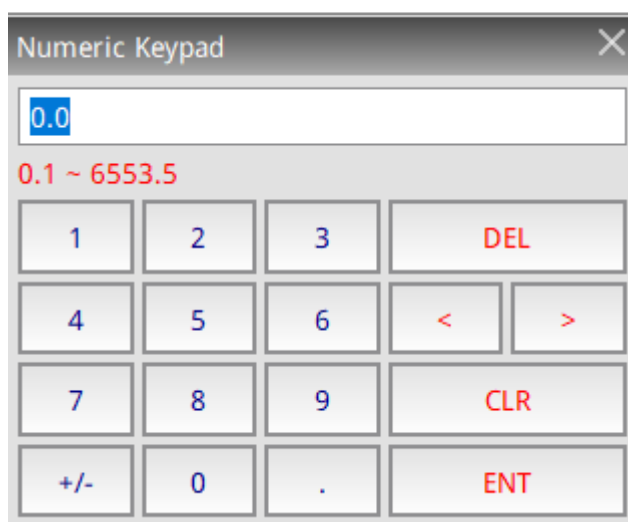
2. Type required name on the keyboard and enter.



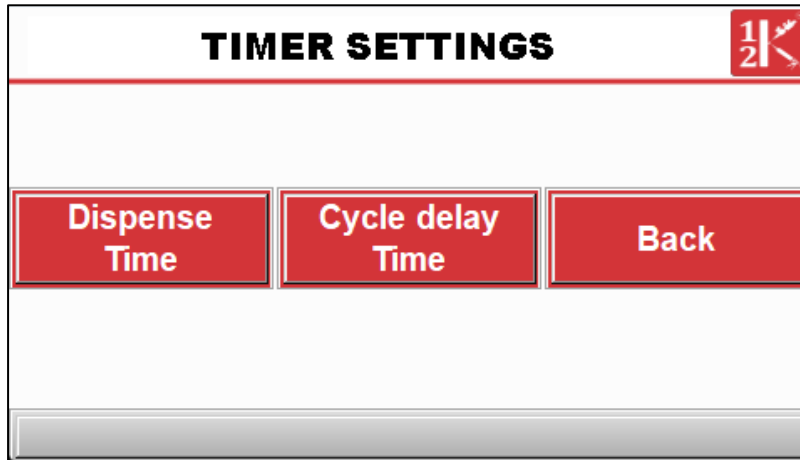
3. To edit the timer, click on timer's edit box. (Indicated box)



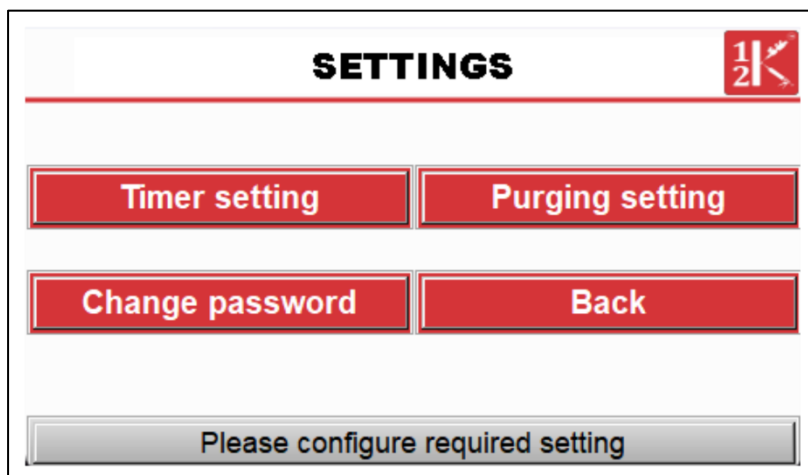
4. Type required time on the keyboard and enter.



- By selecting the program will take you back to the previous screen, or Back button also take you back to the previous screen without selecting the program.









- Click on back to exit the Timer settings



- Click on back to exit the settings

8 PRESSURE SWITCH FACTORY SETTINGS (ADoST SDS-PRO)

Following are the default factory settings required for desired operation of the machine.

OUT1 operating mode setting	
OUT1 type setting	
OUT2 Operating mode setting	
Response Time setting	
Unit setting	
H1 set to 6.0 bar	



9 OPERATING ERRORS AND TROUBLESHOOTING


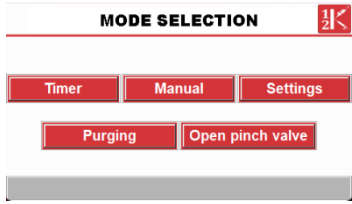

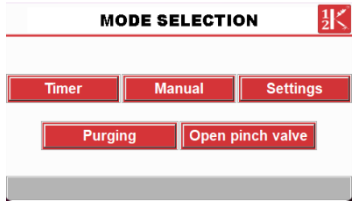
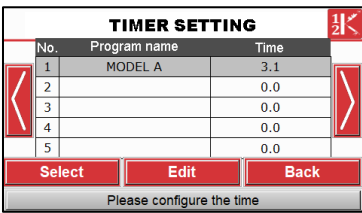
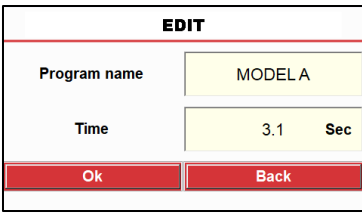

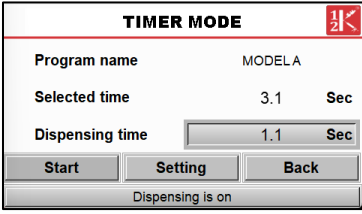
9.1 ADoST SDS /1K-SDS-PRO

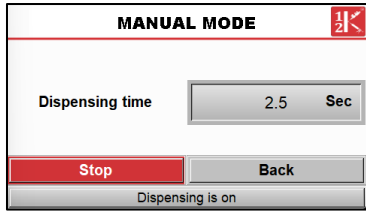

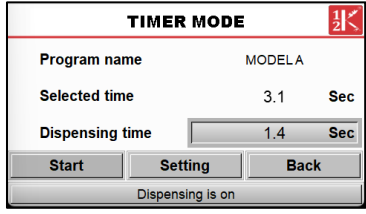
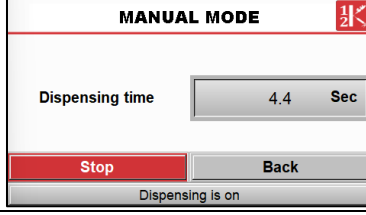
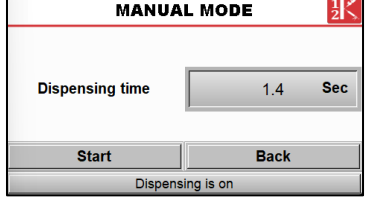

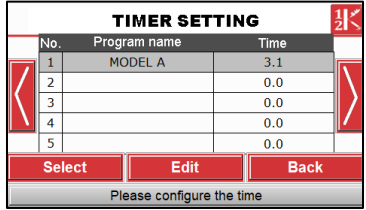
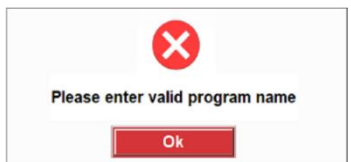
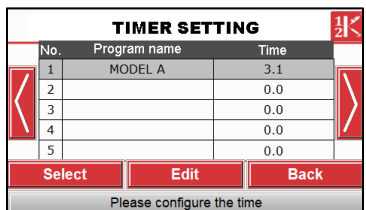
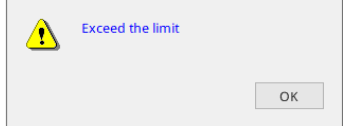
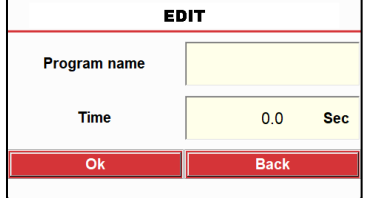
Sr. No.	Error	Troubleshooting
1	There are air bubbles in the Adhesive.	Check whether the Adhesive line is leak free and check the cartridge is having bubbles.
2	The adhesive is not coming out of the nozzle	Clogged adhesive line, clean and try again.
3	If there is an air leakage from the system	Immediately turn off the air pressure supply and contact the supplier.
5	Unresponsive pressure switch	Check the MCU to SCU 8 pin connector, If persists contact the supplier.

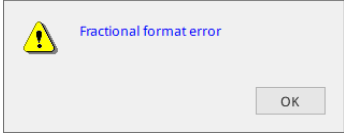
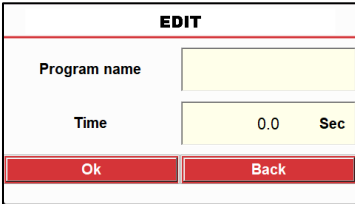

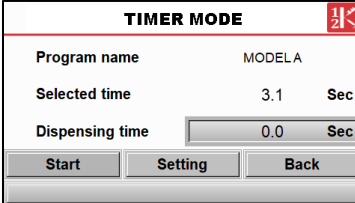
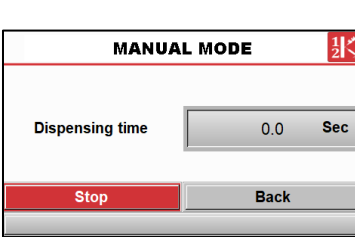
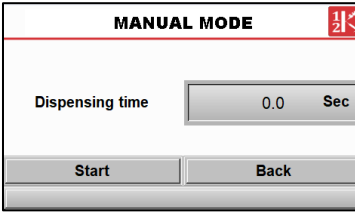
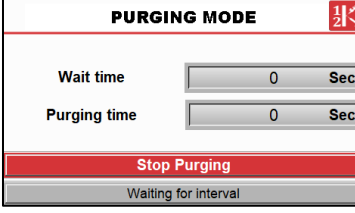

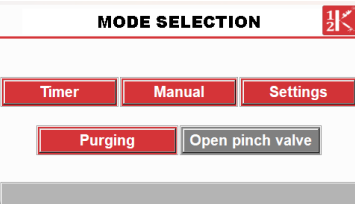
9.2 ADoST SDS-PRO


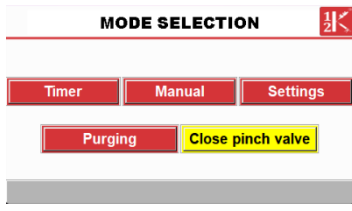

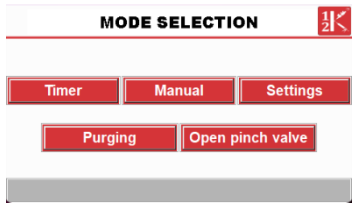

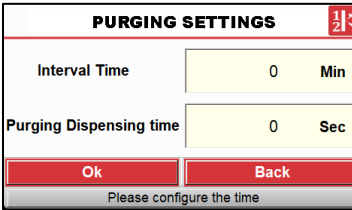

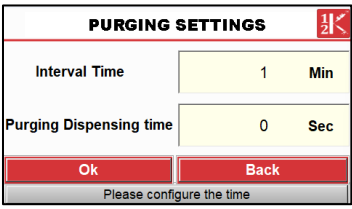
Sr. No.	Error	Troubleshooting
1	There is a short circuit in MCU/SCU	Immediately turn off the power supply and contact the supplier.
2	Unresponsive pressure switch	Check the MCU to SCU 8 pin connector, If persists contact the supplier.
3	Doesn't remember the password to enter into the settings screen	Contact supplier to reset password

If a function does not work, the screen will deliver an error message. When this happens, follow the following table to troubleshoot.

Sr. No.	Error	Screen where the error will appear	Why am I getting this error?	Troubleshooting																		
1.			Timer button should not be pressed without configuring the program	Click on Ok, configure the program																		
2.			Foot switch or emergency button should not be pressed, sensor should not be sensed.	Wait for 2 seconds, the error screen will disappear																		
		 <table border="1"> <thead> <tr> <th>No.</th> <th>Program name</th> <th>Time</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>MODEL A</td> <td>3.1</td> </tr> <tr> <td>2</td> <td></td> <td>0.0</td> </tr> <tr> <td>3</td> <td></td> <td>0.0</td> </tr> <tr> <td>4</td> <td></td> <td>0.0</td> </tr> <tr> <td>5</td> <td></td> <td>0.0</td> </tr> </tbody> </table>	No.	Program name	Time	1	MODEL A	3.1	2		0.0	3		0.0	4		0.0	5		0.0	Foot switch or emergency button should not be pressed, sensor should not be sensed.	Wait for 2 seconds, the error screen will disappear
		No.	Program name	Time																		
1	MODEL A	3.1																				
2		0.0																				
3		0.0																				
4		0.0																				
5		0.0																				
	Foot switch or emergency button should not be pressed, sensor should not be sensed.	Wait for 2 seconds, the error screen will disappear																				
3.			Foot switch should not be pressed when dispensing by screen commands	Wait for 2 seconds, the error screen will disappear																		

			Foot switch should not be pressed when dispensing by screen commands	Wait for 2 seconds, the error screen will disappear																		
4.			Dispensing will stop immediately	Release emergency button, Click on Ok																		
			Dispensing will stop immediately	Release emergency button, Click on Ok																		
			Dispensing will stop immediately	Release emergency button, Click on Ok																		
5.		 <table border="1" data-bbox="655 1196 1013 1379"> <thead> <tr> <th>No.</th> <th>Program name</th> <th>Time</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>MODEL A</td> <td>3.1</td> </tr> <tr> <td>2</td> <td></td> <td>0.0</td> </tr> <tr> <td>3</td> <td></td> <td>0.0</td> </tr> <tr> <td>4</td> <td></td> <td>0.0</td> </tr> <tr> <td>5</td> <td></td> <td>0.0</td> </tr> </tbody> </table>	No.	Program name	Time	1	MODEL A	3.1	2		0.0	3		0.0	4		0.0	5		0.0	Program with timer ZERO should not be selected	Click on Ok, and select program with a timer greater than ZERO
No.	Program name	Time																				
1	MODEL A	3.1																				
2		0.0																				
3		0.0																				
4		0.0																				
5		0.0																				
6.		 <table border="1" data-bbox="655 1420 1013 1603"> <thead> <tr> <th>No.</th> <th>Program name</th> <th>Time</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>MODEL A</td> <td>3.1</td> </tr> <tr> <td>2</td> <td></td> <td>0.0</td> </tr> <tr> <td>3</td> <td></td> <td>0.0</td> </tr> <tr> <td>4</td> <td></td> <td>0.0</td> </tr> <tr> <td>5</td> <td></td> <td>0.0</td> </tr> </tbody> </table>	No.	Program name	Time	1	MODEL A	3.1	2		0.0	3		0.0	4		0.0	5		0.0	Program without a name should not be selected	Click on Ok, select program with a name
No.	Program name	Time																				
1	MODEL A	3.1																				
2		0.0																				
3		0.0																				
4		0.0																				
5		0.0																				
7.			Entered time should not be less than 0.1 sec and more than 3276.8 sec	Click on Ok, enter time between 0.1 and 3276.8 sec																		

8.			Entered time should not be more than 1 digit after a decimal point	Click on Ok, enter time with not more than 1 digit after a decimal point
9.		   	Pneumatic pressure is not achieved after cycle start	Acknowledge the error, check pneumatic pressure and check pressure switch settings
10.			Disabled open pinch valve button shouldn't be pressed before releasing emergency button	Acknowledge the error, and release emergency button

11.	 <p>Please close the pinch valve to go back</p> <p>Ok</p>		Pinch valve should be closed before exiting settings	Acknowledge the error, close pinch valve, and exit the settings
12.	 <p>Please select purging time and interval time greater than ZERO</p> <p>Ok</p>		Purging settings should be completed before opening purging mode	Acknowledge the error, Configure the purging settings
13.	 <p>Please select the interval time greater than ZERO</p> <p>Ok</p>		Purging interval time shouldn't be 0	Acknowledge the error, and set a value between 1 to 999 mins
14.	 <p>Please select the purging time greater than ZERO</p> <p>Ok</p>		Purging dispense time shouldn't be 0	Acknowledge the error, and set a value between 1 to 99 secs

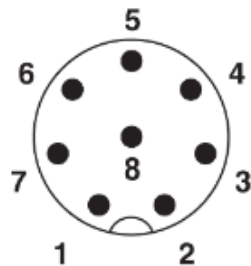
10 CONNECTING WITH PLC/ROBO

Its possible to connect ADoST SDS-PRO with a PLC or Robo to control the dispensing. It's expected to use following connection for achieving the expected results.

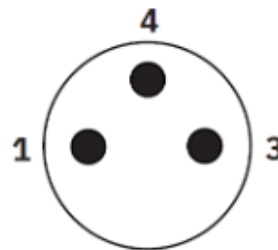
Please connect with sales team or numbers given in contact list if you need the connectors.

10.1 CONNECTION DETAILS

Dispensing control and feedback connector C1



Alarm connector C2



Dispensing control and feedback connector C1

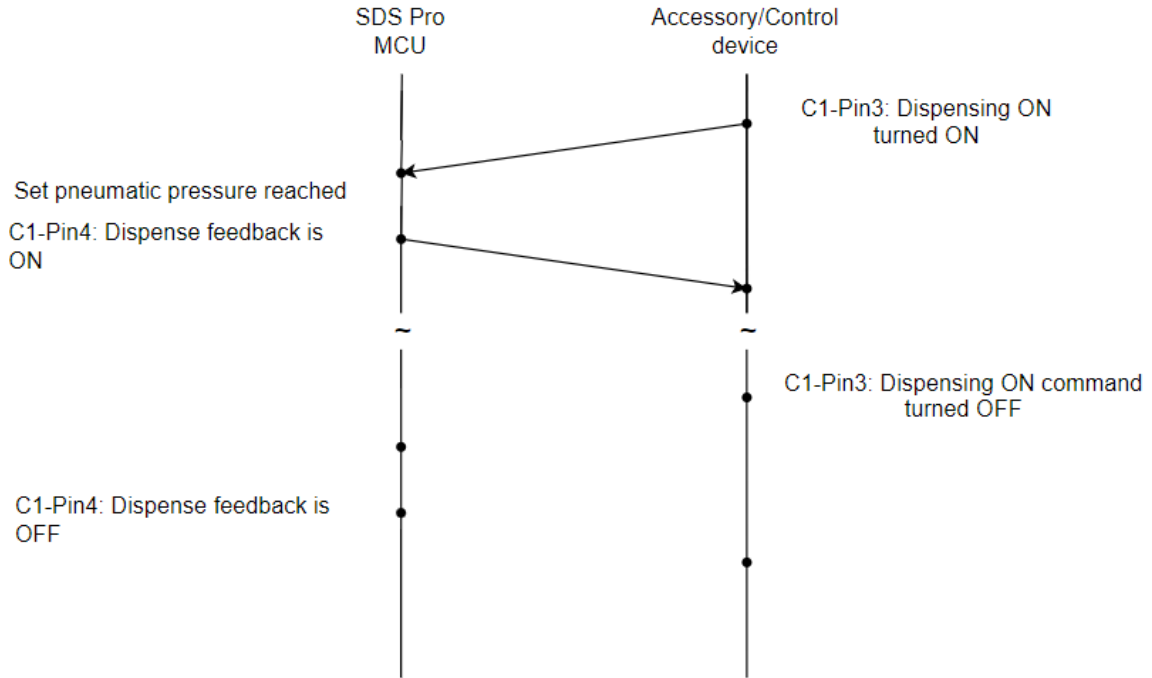
Pin and signal		
Pin number	Signal	Signal type
1	24VDC	Reference ground for Input
2	0VDC	Reference ground for Output
3	Dispense on	Input
4	Dispense feedback	Output
5 - 8	Not used	

Alarm connector C2

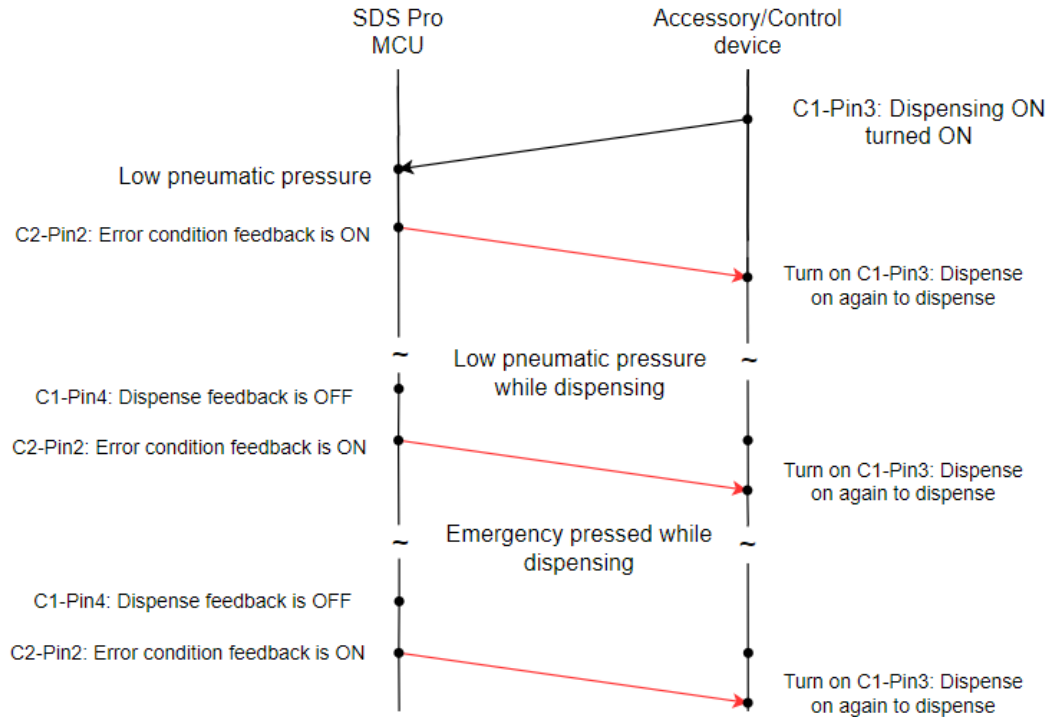
Pin and signal		
Pin number	Signal	Signal type
1	0VDC	Reference ground for Output
3	Error condition	Output
4	Not used	

10.2 CONTROL SEQUENCE DIAGRAM

10.2.1 Normal operation sequence

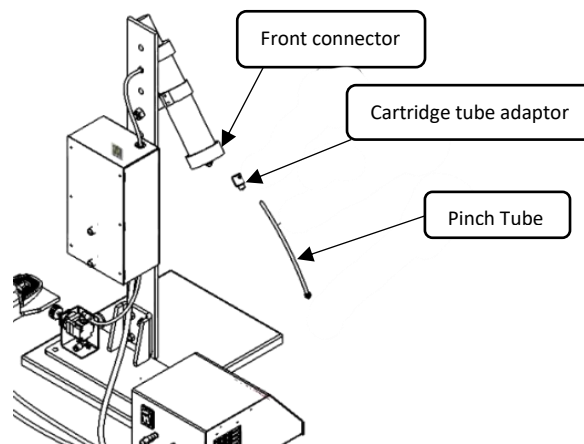


10.2.2 Error conditions



11 FAQs

1. What is a dispensing system and what does it do?
A dispensing system is an equipment that digitally controls the volume of liquid to be dispensed. The system ensures repeatability in every subsequent shot.
2. What types of Adhesive systems is compatible with ADoST SDS-PRO?
ADoST SDS-PRO is designed to dispense low to medium viscous single-component adhesive in a cartridge system.
3. How do I change the cartridge?



Make sure there is no dispensing going on. Remove the Cartridge tube adaptor. Remove the front connector of the gun. Remove empty cartridge. Take the new cartridge cut its dispensing front. Insert the cartridge in gun, tight the front connector of gun. Connect the Cartridge tube adaptor and pinch tube to the cartridge. Tighten the Cartridge tube adaptor to the cartridge.

4. How often should I clean the system?
It is important to clean the nozzle and pinch valve to prevent any type of contamination and to prevent the clogging of the valve. The exact cleaning frequency will depend dispenser's intended use, but it is generally recommended to clean daily.
5. What cartridge size can be used?
Standard 12 component 310/350ml cartridges can used in the ADoST SDS-PRO.
6. For how much time should I keep the Adhesive unused in the system/ what is the cure time for the Adhesive?
Curing time depends on the chemical properties of both the activator and adhesive, contact our sales representative.
7. Can I use a dispenser for outdoor applications?
ADoST SDS-PRO is designed to be used indoors, The System may get affected by outdoor dust, air, etc



8. Can the system work without air pressure?
No. The system needs a minimum air pressure of 0.1 bar.
9. What is the min and max operating Air pressure?
The minimum working pressure is 0.1 bar and The maximum working pressure is 3 bars.
10. Is the system battery operated?
The SDS Pro system needs an AC power supply between 100-275 volts 50/60Hz AC.
11. Can I set the timer for dispensing?
Yes, the system has this feature (For detailed information, please refer to point 8.3.4)

12 SYSTEM MAINTENANCE

To ensure smooth functioning and a long service life, perform following maintenance operations as needed.

1. Clean the MCU to protect it from dust or liquid etc.
2. Clean the pinch valve and keep it free of adhesives.
3. Keep the dispensing gun plunger free of adhesives.
4. Ensure the pneumatic regulator is clean and free of any contaminants.
5. Make sure the pneumatic air used is clean and doesn't contain any water droplets.
6. The provided power adaptor should be protected from water or anything which may damage an electronic component.



13 SYSTEM DO'S AND DON'TS

Do's

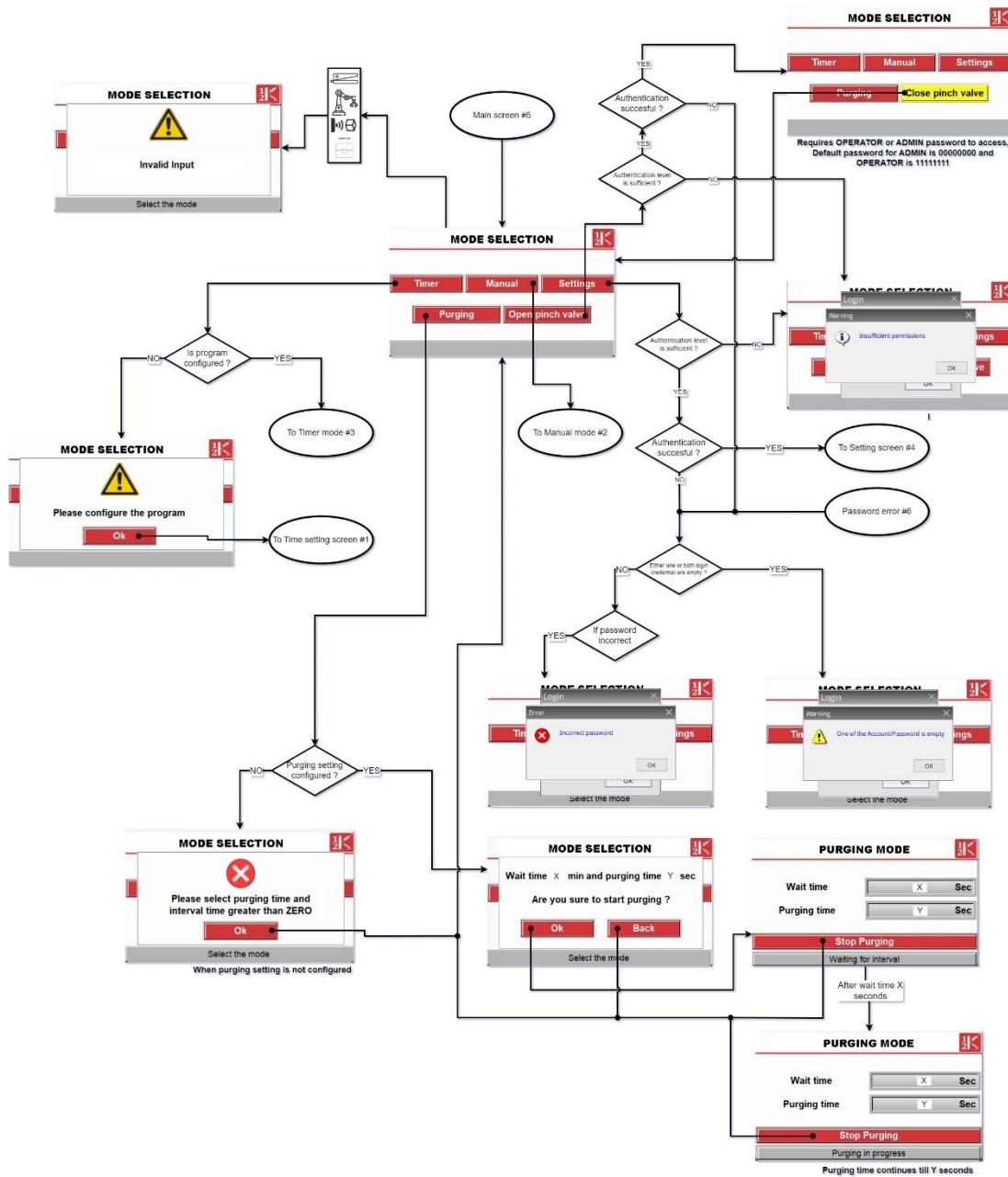
1. If adhesive is changed then the corresponding time and pneumatic pressure should be changed.
2. Pneumatic pressure switch settings must be done by only an authorised person.
3. Switch off the air supply when not in use.
4. Keep the system in such way, any dust or water molecules to enter in air pipe and dispensing gun
5. Make sure the pneumatic pressure is below the maximum working pressure for dispense pressure
6. Please make sure the pneumatic pressure is sufficient for the pinch valve to operate.
7. Please Keep the dispenser operating within the limits of its maximum settings or ratings.
8. Please Make sure there is a dry, clean air supply connected to the dispenser. Using FRLs (Filters, Regulators, and Lubricators) is advised to keep the input air supply dry and clean.
9. The fluid being discharged might be poisonous and/or harmful. Refer to the Material Safety for correct handling and safety considerations.
10. If the dispenser malfunctions, Press the Emergency switch and disconnect the air line from the dispenser or isolate the air supply.
11. Pressure regulator and Pressure switch values should not be changed or Tamper. Pressure Values should be constant for the whole operation otherwise dispensing amount will change.
12. Always keep the dispenser clean to avoid malfunctioning errors or Physical Damage.

Don'ts

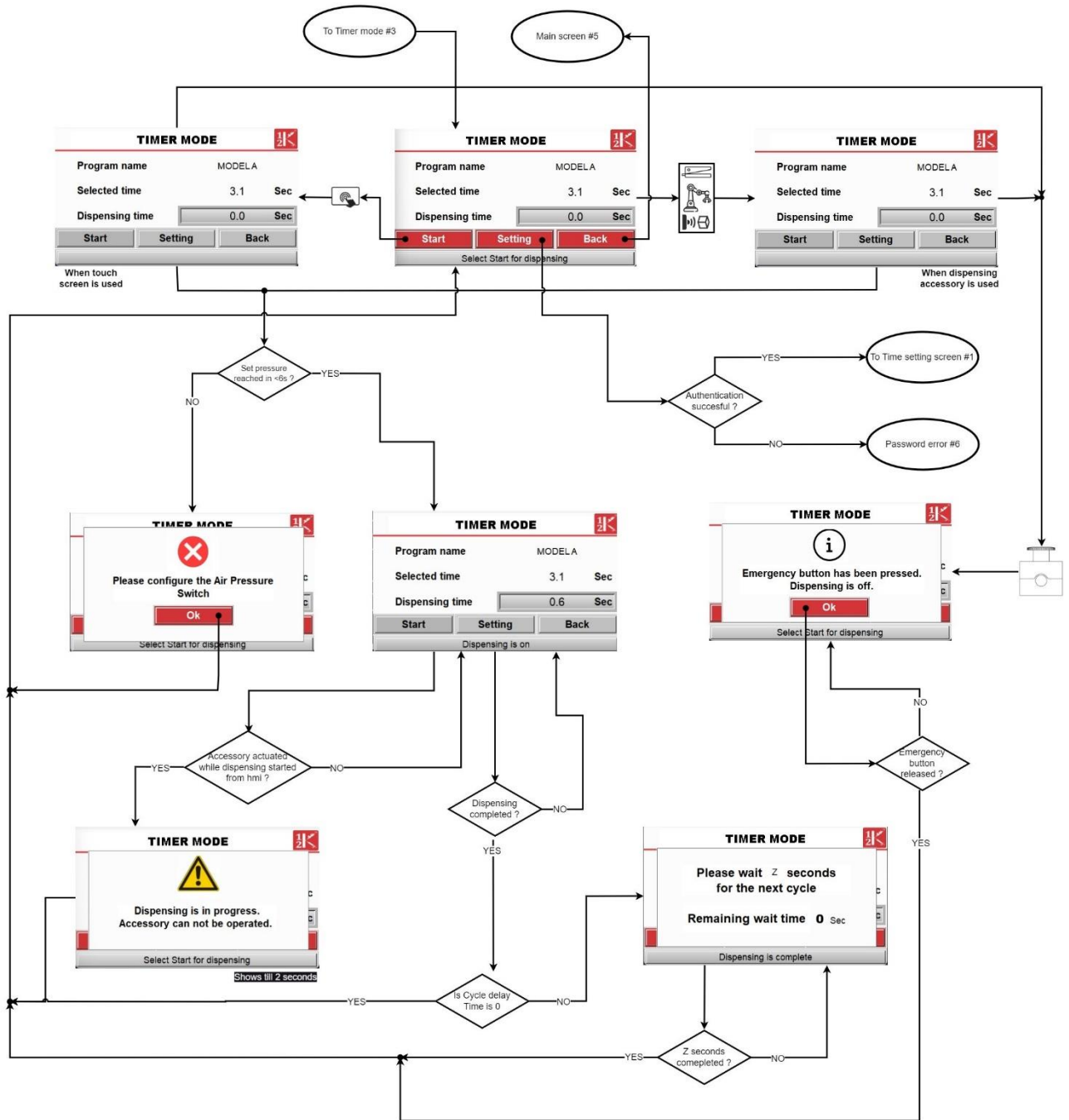
1. Please don't turn the pressure regulator knob, once setting is finished
2. Please don't change software setting while using same adhesive
3. Please don't operate machine without training
4. Please don't keep the foot switch pressed in timer mode even after dispensing is in the process
5. Please don't spill any kind of liquid on the MCU, SCU and dispense gun
6. Please don't keep the emergency button pressed without any emergency condition
7. Please don't stretch the accessory wires beyond its capability
8. Please don't yank the SCU, MCU cables or Pneumatic line
9. Please don't connect the connectors other than the designated positions
10. Please don't operate the machine without connecting the pneumatic line to the pinch valve

14 SCREEN FLOW DIAGRAM (ADoST SDS-PRO)

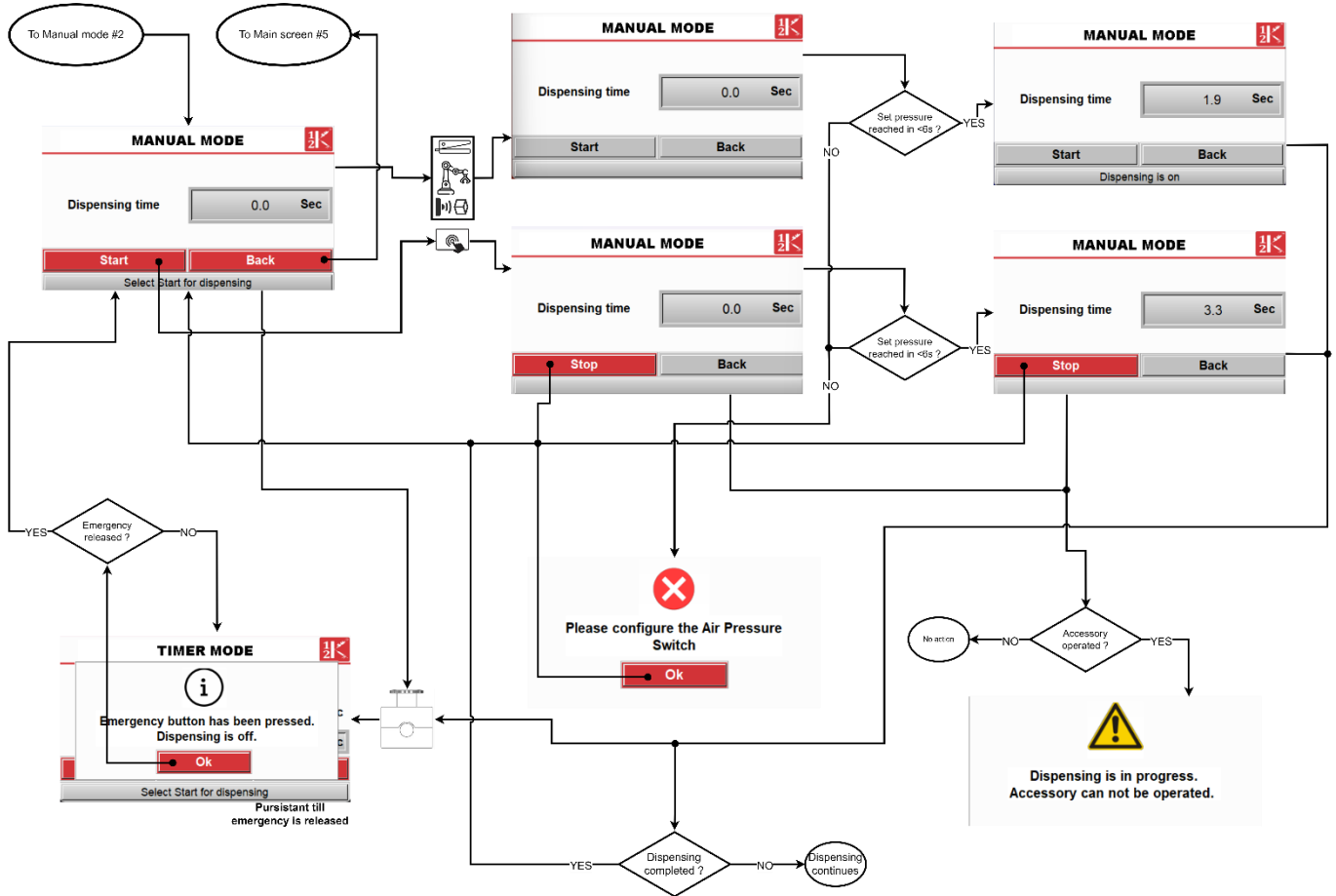
14.1.1 Main screen and Purging setting



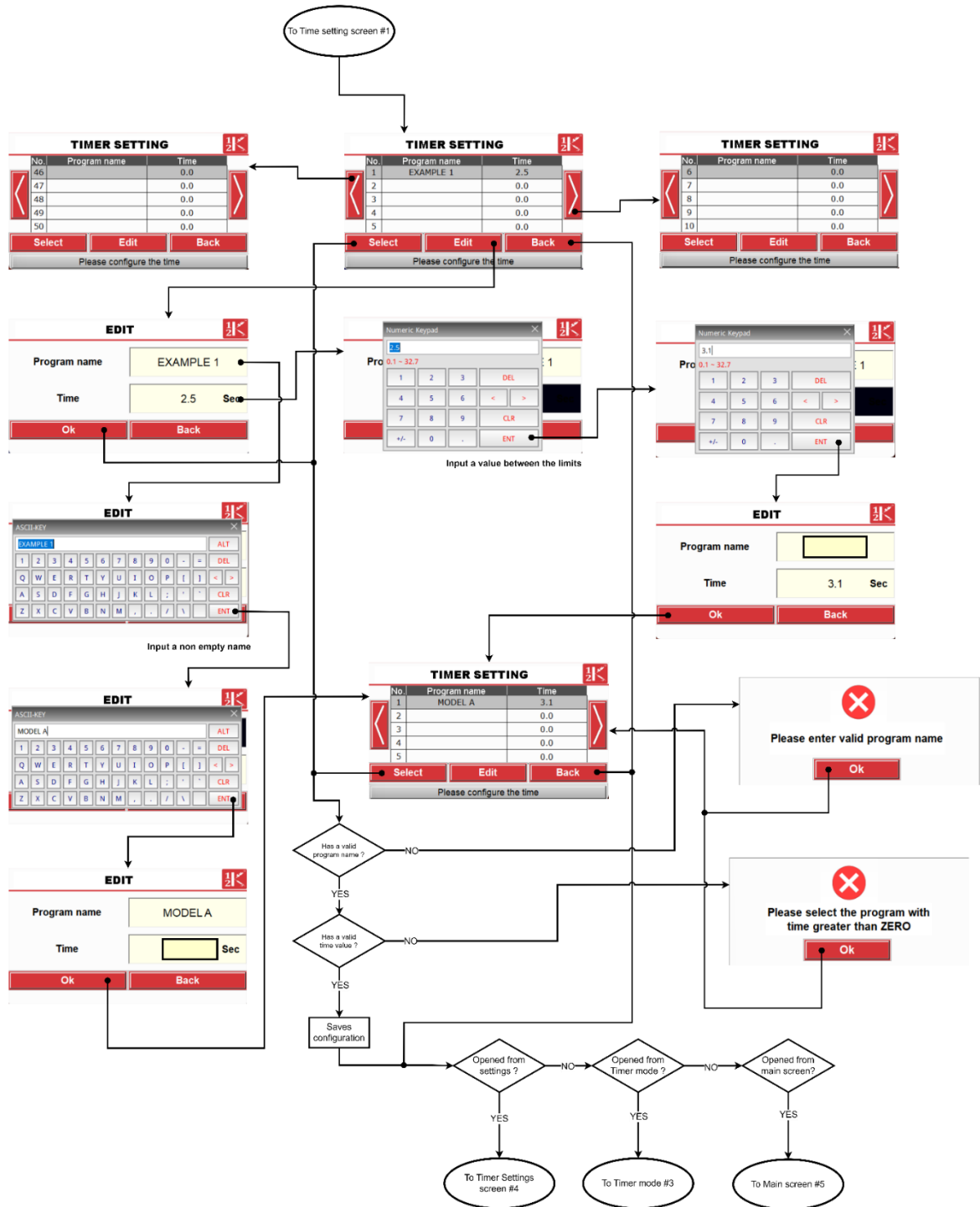
14.1.2 Working in Timer mode



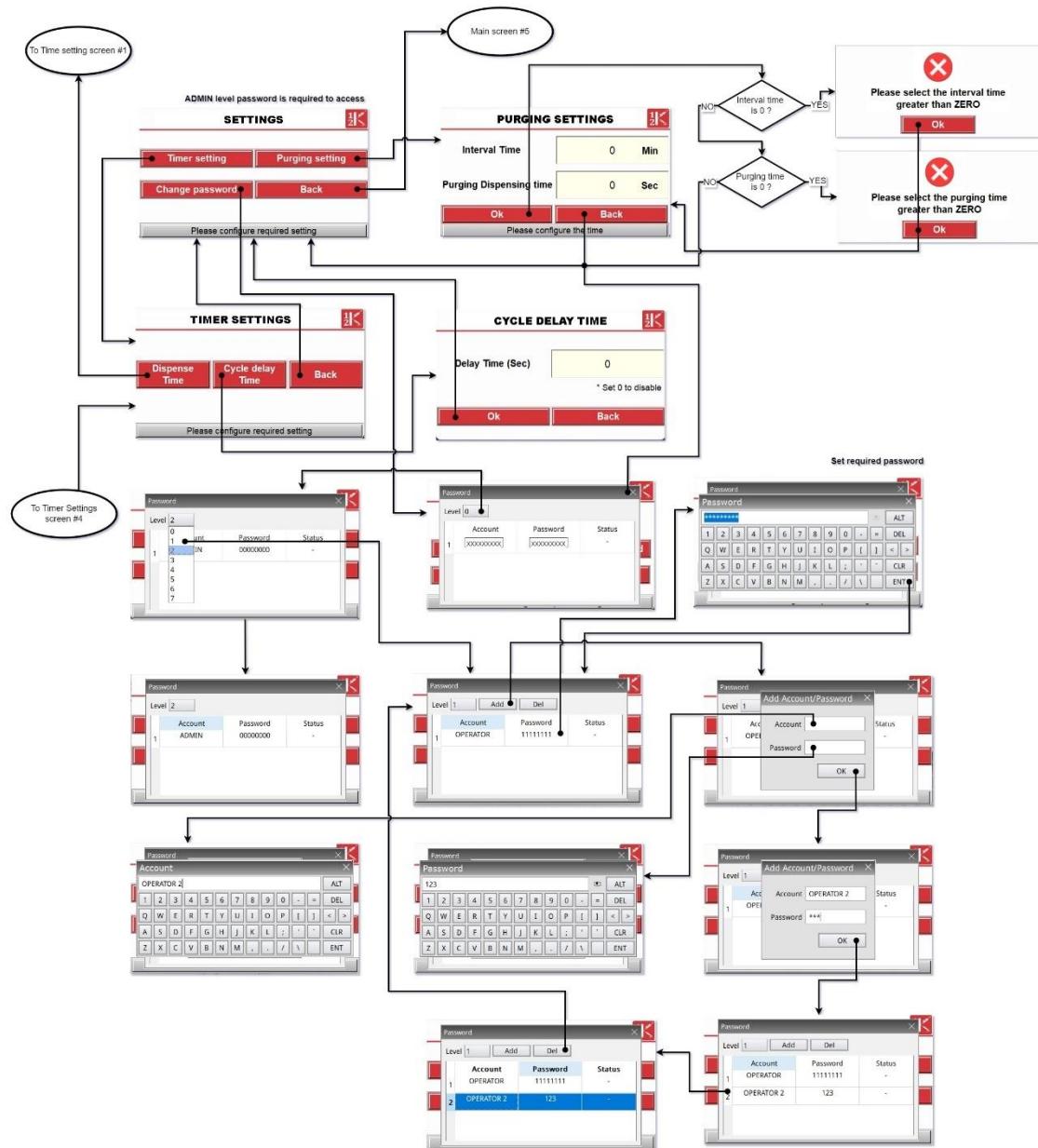
14.1.3 Working in Manual mode



14.1.4 Dispense Time setting




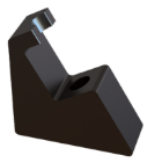



14.1.5 Settings screen




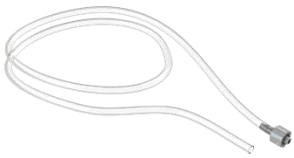




15 ACCESSORIES

	
Pinch valve	Pinch Valve stand
	
Pen	Pen Holder
	
Tube Adaptor	



16 CONSUMABLES

	
Nozzle	Pinch Tube
	
Cartridge tube adaptor	Cartridge nozzle adaptor



17 DISCLAIMERS

1. Material dispensing behaviour may be unexpected and some components may behave inconsistently if the air pressure is not maintained as mentioned in TDS (The air pressure required to dispense the adhesive is directly proportional to viscosity of the adhesive)
2. The system will not be able to boot if the electrical power supply is less than 100V AC.
3. System may not handle the power and cause danger if the electrical power supply is more than 275V AC.
4. Sufficient pneumatic pressure is ensured before starting purging mode, purging mode will be stopped if there is not enough pneumatic pressure.
5. The emergency button will stop the dispensing when all pipes and wires are connected properly. If any of the pipes loose, or any of the wires is cut, emergency condition will not work.
6. The system may not work properly, if the system is damaged by any external cause like falling, hitting by any object, excessive heat, etc.
7. Dispensing cannot be done if the connector cord is not connected to the MCU's female connector.
8. The Dispensing quantity may not be consistent, when not used in idle conditions as the behaviour of adhesive changes based on applied pressure, external temperature and from one batch to another batch.