## **AUTOMATIC PAINT DISPENSER**

# **USER MANUAL**



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## 1. USER MANUAL INTRODUCTION



Purpose and use of this manual

Automatic paint dispenser, Model: YJ-1A-16D

The manual provides instructions on the routine maintenance needed to uphold the machines performance over time.

It is aimed at the machine operators and installers, who must have the necessary training and professional skill to use similar automatic machines.

For the safe use of the machine, it is important:

- 1. To familiarize yourself with the structure and content.
- 2. To read the safety chapter in detail and make sure you understand all the instructions.

## 2. TECHNICAL SPECIFICATIONS

Application Range: water or oil colorants

Dispensing:Sequential

Capacity piston pump: 50 ml

Dispensing amount per minute:0.25L Minimum dispensing: 1/384 Y or 0.077 ml

Qty of canister:16 stainless cans Canister Capacity: each 2.3L Power supply:220V±10% 60Hz

Rated Power: 150W

## 3. TERMS OF WARRANTY

**Limited Warranty:** We provide a one year warranty for each equipment. Within guarantee period, we can help you judge the fault according to the failure phenomenon via Internet way and send replacement part to you. If the fault has been caused by mis-used or abnormal conditions of operation, repairs will be billed at a normal cost in this case. An estimate will be submitted before repair work is started in case requested.

## 4. SAFETY INSTRUCTIONS

Please read the instructions carefully before installing and operating the machine, as a personal safety measure as well as to avoid needless damage to the machine.

We declines any responsibility should be following instructions not be followed:

- Place the machine on a steady, horizontal surface by using a level.
- $\bullet$  The surrounding temperature should be kept as constant as possible (anyhow, always between 0-40  $^{\circ}\mathrm{C}$
- Make sure the dispenser machine is only connected to a wall socket assembled according to regulations.
- Connect the machine by carefully following the installation instructions.
- Maintenance can only be carried out by a qualified technician.
- Whilst functioning, the machine does in a noisy or irregular way, please press the power button to turn off the machine.
- The elastomer parts (O-ring) inside the dosing circuits could undergo damage if other thinners are used.
- When the machine not be used for a long time, please check if the nozzle get blocked. If yes, you need to clean it.
- Don't touch the electronic board when the machine is power on.
- The user must keep the machine in a proper working condition. Broken parts and accessories must be replaced with original appropriative parts of the machine.

## 5. DISPENSER MACHINE INSTALLATION

### Please read the instructions carefully before installing the machine

Only qualified or appropriately trained personnel are authorized to install the machine.

### **Conditions for proper installation**

- Install an electrical power line in accordance with the voltage and frequency required by the machine.
- Floor must be flat where machine is to be installed.
- The line must be protected from overloads, short- circuits and direct contacts according to current regulations.
- Computer operating system Windows XP/ Windows 7 is to be installed with the computer by user.
- UPS is to be provided by user.
- Grounding of the power supply system is must.

### **Installing a Automatic Paint Dispenser Machine involves:**

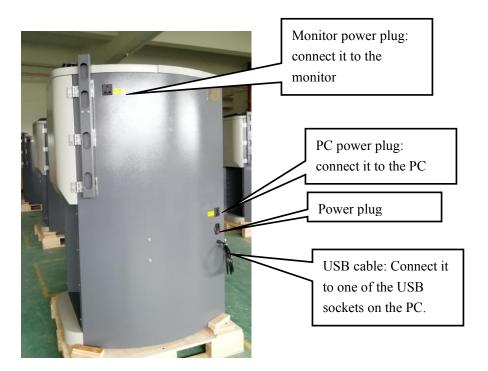
- Installing the dispenser machine.
- Connecting the computer to the machine
- Installing the driver 50 software.
- Installing the USB driver

### Computer and monitor assembly



The dispenser is provided with a shelf. The shelf can be used to position the PC, the monitor ,the keyboard and the mouse. After having positioned the PC, you must connect it to the dispenser machine. You will find a monitor power plug and PC power plug connecting with the dispenser. Please connect the other side to the appropriate socket positioned on the monitor and the PC.

You will also find a USB cable connecting with the dispenser, please connect the other side to one of the USB sockets on the PC. It will made possible by using the software to command and control the dispenser.

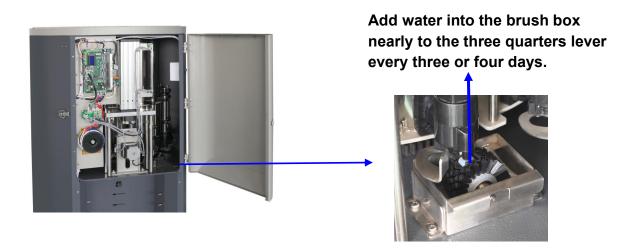


### Starting the dispenser

- 1). Connect the power cables of the dispenser machine to a wall socket then trun on the dispenser machine and the PC.
- 2).Install the driver 50 software and USB driver software.
- 3).Load the colorants into the canisters but be careful not to exceed the limit.

### **Cautions:**

- After having loaded all the circuits, the evacuation procedure must be implemented before being able to use the machine. Otherwise, it will affect the accuracy. Please refer to "colorant management" instructions regarding evacuation.
- You don't need to calibrate the pumps, we have calibrate all the pumps before shipments.
- Please add water into the brush box nearly to the three quarters level every three or four days.



### **Cautions:**



Pull the stainless steel to support the top cover as this photo show when you need to open the top cover.

## 6. DRIVER 50 SOFTWARE INSTALLATION

Note: Please exit the anti-virus software, because some anti-virus recognize it as virus.

1). Decompress"Driver 50 setup.rar", you can see "setup.exe",double click to install.

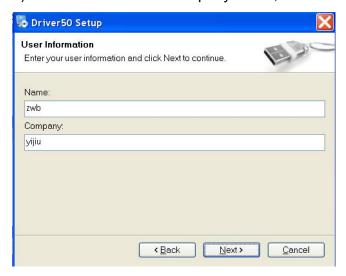


Click "next" button

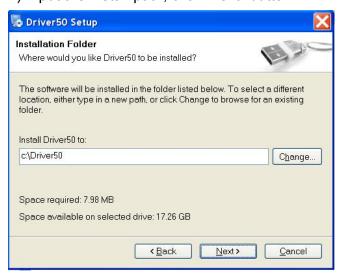
2). Select "I agree to the terms of this license agreement", click "next" button.



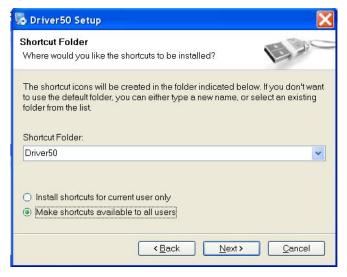
3). Enter the name and company name, click "next" button.



4). Input the install path, click "next" button.



5). Select and click "next" button.



### 6) Click "next" button.



### 7). Click "finish" button.

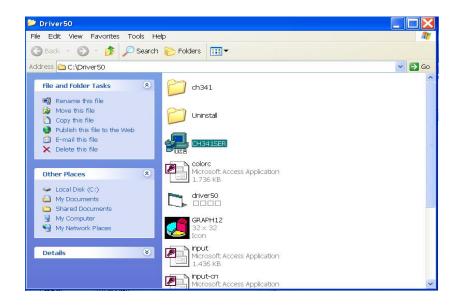


Now you will see a shortcut icon on your desktop .It means that the driver software is successfully installed in your computer. You can run the driver software by double clicking on the desktop icon.

## 7. USB DRIVER INSTALLATION

Connect the software and machine with USB line, the software will ask you to find CH341.

1). Please open "Driver 50" folder. You will see below interfac





2). Double click

, you will enter below interface:



Click "INSTALL" botton.

3).Click "OK".





## 8. GUIDE TO USE DRIVER 50 SOFTWARE

### (1) Function Introduction

**Driver 50** is a user Software Package developed for our range of Automatic Paint Dispenser machines. The package will assist the user in carrying out the following operations:

- **Dispensing:** Read the data from formula software and start dispensing;
- Manual Dispensing: The dispensing under this function can be done without formula software. The user can choose any colorants from the dropdown list, decide the amount for each colorant, and dispense here.
- Colorant management: manage all the datas of colorant.
- Debug: test each function of the machine manually;
- Pump calibration: calibrate the pulse data of each canister pump;
- Presentation management: translate the display language into your local language.

Double click on shortcut icon Driver50 to start the program, you will see below interface.



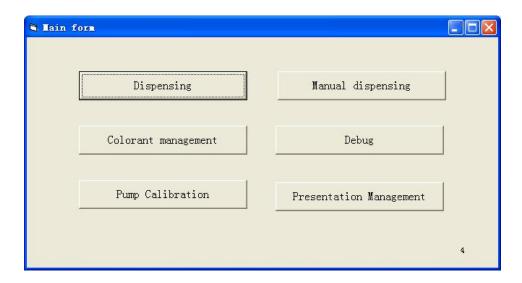
Press "Conform"

If the electrical power for machine is turned off or the USB COM is not connected, the driver will

show below interface, please check the electrical power and the USB COM accordingly.



Press "Confirm"or"Run offline", you will see the main menu as below picture.



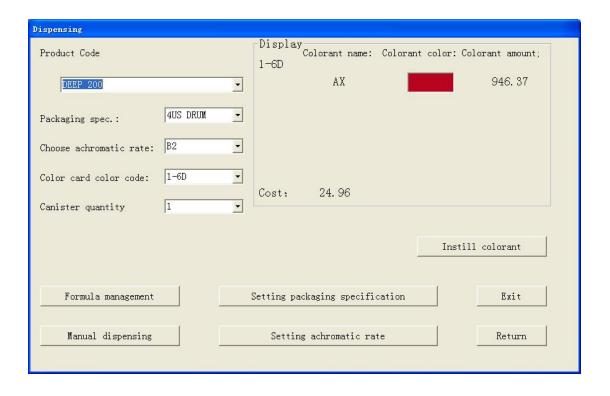
The driver software will enter the dispensing interface automatically if you don't click on any button for 10 seconds.

### (2) Software Operation Instruction.

### **1**Dispensing

If the driver select in debug interface was chose "Dispenser". Click on "dispensing" button, you will see interface as below.

You can choose colorant color card/ paint type/color code/ base paint/packaging specification/ achromatic rate/canister quantity in this page.



<sup>&</sup>quot;Product code": Click the dropdown arrow to choose product code.

#### **NOTICE:**

- 1. The default achromatic rate is 100%.
- 2.Colorant amount=colorant data in the formula form×achromatic rate×packaging spec.

<sup>&</sup>quot;Packaging spec.":Click the dropdown arrow to choose specification of package.

<sup>&</sup>quot;Choose achromatic rate": Click the dropdown arrow to choose achromatic rate.

<sup>&</sup>quot;Color card color code": Click the dropdown arrow to choose color code of color card.

<sup>&</sup>quot;Canister quantity":input or choose the canister quantity you want to dispend for one color.

<sup>&</sup>quot;Formula management": Click on this button to enter formula management interface.

<sup>&</sup>quot;Setting packaging specification": Click on this button to enter packaging specification setting interface.

<sup>&</sup>quot;Manual dispensing": Click on this button to enter into manual dispensing interface.

**<sup>&</sup>quot;Setting achromatic rate"**:Click on this button to enter achromatic rate setting interface.

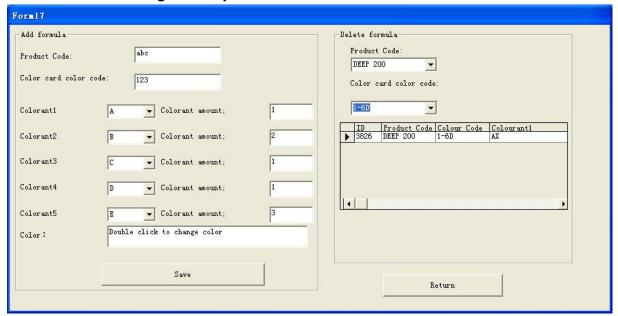
<sup>&</sup>quot;Display": Display the information of colorant name, colorant color, colorant amount of the formula you chose.

<sup>&</sup>quot;Cost":Total cost of the colorants.

<sup>&</sup>quot;Exit":Click on this button the machine will implement this formula, and exit this program.

<sup>&</sup>quot;Return": Return to main menu.

#### Click "Formula management", you will see below interface.



In this interface you can create formula or delete formula.

**NOTICE:** Base paint name can't be the same as colorant name,otherwise you created formula can't be saved.

Choose the formula from the list, then press "delete" key on the keyboard.

Double click the box"Double click to change color", you will see below interface.

<sup>&</sup>quot;Add formula": You can create formulas by yourself in this area.

<sup>&</sup>quot;Product code":Please input the product code of your formula into the corresponding box.

<sup>&</sup>quot;Color card code":Please input color code of color card into the corresponding box.

<sup>&</sup>quot;Colorant": Click on the dropdown arrow to choose colorant name of each colorant.

<sup>&</sup>quot;Colorant amount":Input the colorant quantity into the corresponding box.

<sup>&</sup>quot;Double click to choose color": Double click the box to choose you wanted color.

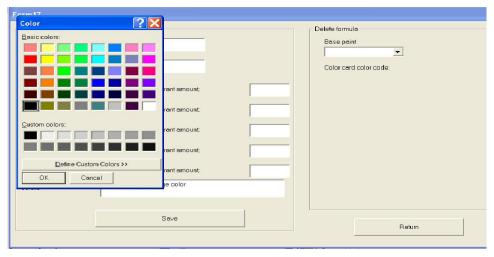
<sup>&</sup>quot;Save": Click on this button to save you created formula.

<sup>&</sup>quot;Delete formula": You can delete formula in this area.

<sup>&</sup>quot;Product code": Click on the dropdown arrow to choose the product code of the formula what you want to delete.

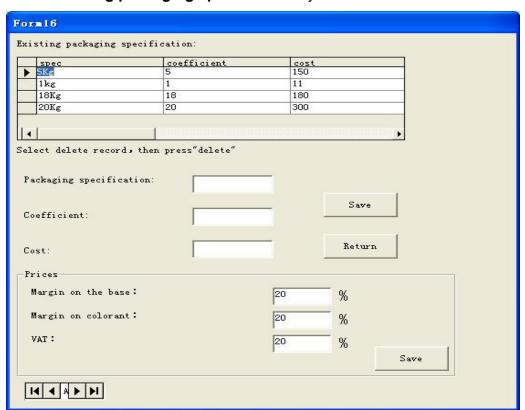
<sup>&</sup>quot;Color card color code": Click on the dropdown arrow to choose color-card color code of the formula what you want to delete.

<sup>&</sup>quot;Return": Return to dispensing interface.



In this interface you can choose you wanted color.

Click "Setting packaging specification" you will see below interface.



You can create or delete packaging specification here.

<sup>&</sup>quot;Existing packaging specification": Existing packaging specification at present.

<sup>&</sup>quot;Spec": Packaging specification of base paint.

<sup>&</sup>quot;Coefficient": Multiple of the color formula data.

<sup>&</sup>quot;Cost":Cost of base paint.

<sup>&</sup>quot;Select delete record, the press delete": Choose the record you want to delete first, then press "Delete "key on the keyboard.

<sup>&</sup>quot;Packaging specification": Please input packaging specification of base paint into the corresponding box.

- "Coefficient":Input coefficient into the corresponding box.
- "Cost":Input cost of base paint into the corresponding box.
- "Save": Save you created packaging specification.
- "Return": Return to dispensing interface.
- "Margin on the base":input the margin on base paint.
- "Margin on colorant":input the margin on colorant.
- "VAT":input the vat

Colorant quantity is bound up with the package setting.

For example, if we set the base paint as "1KG" and "coefficient" as "1", which means 1KG is the standard unit for its kind, then for spec. "3.5 KG", the "coefficient" should be 3.5, and "18" for spec. "18kg".

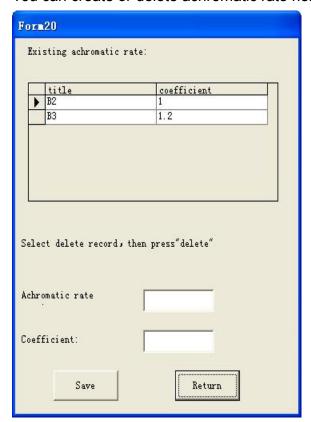
If we use "1L" as base paint standard unit to get the colorant data, then we set the "coefficient" as 1 for spec. "1L", "3.5" for "3.5L", "18" for "18L".

If we use 10KG as base paint standard to get the colorant data, then in "Package Setting", we input "0.1" in "coefficient" for spec. "1KG"., "0.35" for "3.5KG", "1.8" for "18KG".

(If you use "KG" as sample unit to get colorant data, then the package unit should be KG as correspondence. In like manner, if you use "L" as sample unit to get colorant data, then the package unit should be L. Otherwise the software calculation will go wrong.)

### Click "Setting achromatic rate", you will see below interface.

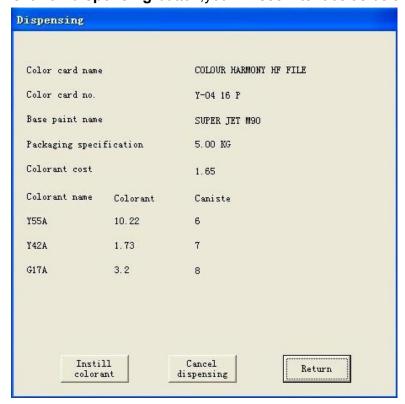
You can create or delete achromatic rate here.



**<sup>&</sup>quot;Existing achromatic rate":** Existing achromatic rate at present.

- "Title":Base paint name.
- "Coefficient": Multiple of the color formula data
- "Select delete record, then press delete": Choose the record what you want to delete from the list first, then press "Delete" key on the keyboard.
- "Achromatic rate":Input the base paint name into the corresponding box.
- "Coefficient":Input the coefficient into the corresponding box.
- "Save": Save your inputed information.
- "Return": Return to dispensing interface.

If the driver select in debug interface was choose "CPS Flink.dat". Click on "dispensing" button, you will see interface as below.



<sup>&</sup>quot;Color card name": It shows the name of color card to which the colorants belong.

<sup>&</sup>quot;Color card no.": It shows the number of color card to which the colorants belong.

<sup>&</sup>quot;Base paint name": It shows the name of the base paint.

<sup>&</sup>quot;Packaging specification": It shows the packaging specification of base paint.

<sup>&</sup>quot;Colorant cost": It shows the cost of colorant.

<sup>&</sup>quot;Colorant name": It shows the name of colorant.

<sup>&</sup>quot;Colorant": It shows the amount of each colorant. Please pay attention that all the amount of colorants shown by the driver are in ml no matter it's ml or grams in the formula software.

<sup>&</sup>quot;Canister": It shows the canister number for each colorant.

<sup>&</sup>quot;Instill colorant": Press this button, the machine will instill colorant automatically as per your formula data, afterwards delete the formula automatically.

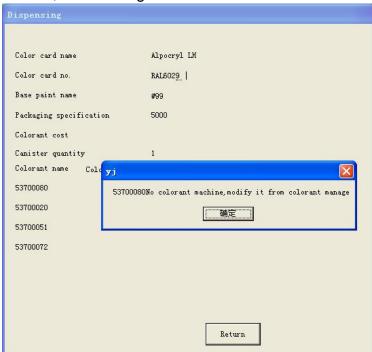
<sup>&</sup>quot;Cancel dispensing": Press this button, the machine will cancel dispense, and delete the formula.

<sup>&</sup>quot;Return": Pess this button, return to the main menu.

#### NOTICE:

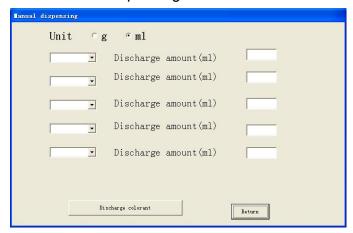
- 1.Except choosing "Dispenser"in "Debug"interface, other protocols need to cooperate with color software to implement the automatic dispenser.
- 2..Except choosing "Dispenser"in "Debug"interface, all the information of this interface is automatically collected from the data you choose from color software.

If driver program can't find relevant colorant name from "Colorant Management" as per the formula, note message will be as below.



### **2**Manual dispensing

Click "manual dispensing" on main menu to enter below interface.



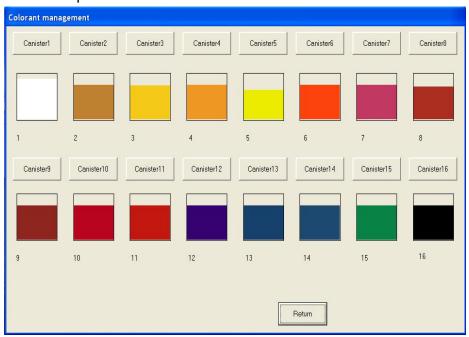
Please choose the unit "g" or "ml", the default is "ml".

You can choose from the dropdown list which colorant you want to dispense.

- "Discharge amount(ml)": You can input the amount for each colorant you choose here.
- "Discharge colorant": After the above rows are filled, press on "Discharge colorant" button, and then the machine will start to dispense and discharge following your formula.

### **3**Colorant management

The user specifies the colors which will be filled in each canister. It is



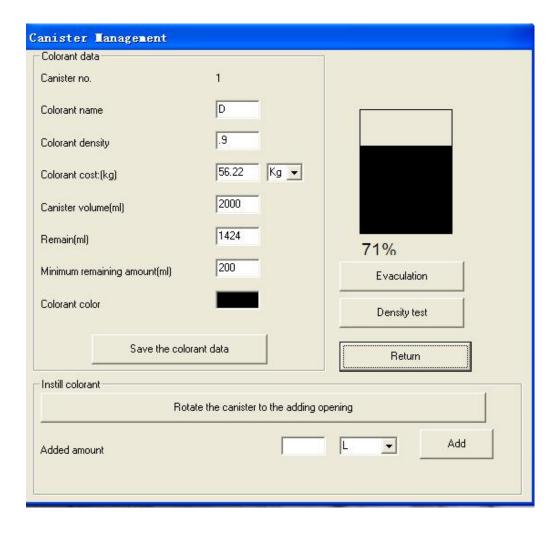
Please click the colorant canister you want to amend, and then you can set up the canister (please do not put the same colorant name for two canisters. Otherwise, the accuracy will be affected when dispensing)

#### SPECIAL DECLARATION:

Since the density for colorant is not so accurate (the colorant will evaporate automatically in the air and the machine will discharge automatically to protect the nozzle from being blocked by colorants), the remain volume of colorant in each canister can only be regarded as a reference. Please observe the actual remain volume of colorant and add colorant in time. Otherwise, the color might turn out different from the aim color. Our company will not take responsibility for this.

After choosing canister, you will see below interface.

This screen is used to specify the Colorant name, density, cost, Canister volumn, remain amount, Minimum remaining amount, color shade of the colornant.



<sup>&</sup>quot;Colorant name": It shows the name of colorant.

Click on colorant color shade, you will see next interface.

<sup>&</sup>quot;Colorant density": It shows the density of colorant.

<sup>&</sup>quot;Colorant cost": It shows the cost of colorant.

<sup>&</sup>quot;Canister volume": It shows the volume of canister in ML.

<sup>&</sup>quot;Remain": It shows the remain amount in ML.

<sup>&</sup>quot;Minimum remaining amount": It shows must remained amount of colorant.

<sup>&</sup>quot;Colorant color": It shows the color of colorant. You can double click it to choose the shade.

<sup>&</sup>quot;Added amount": It shows the added amount of colorant in kg/L/ml.

<sup>&</sup>quot;Rotate the canister to the adding opening":Rotate the specific canister to the adding opening, so that you can add colorant.

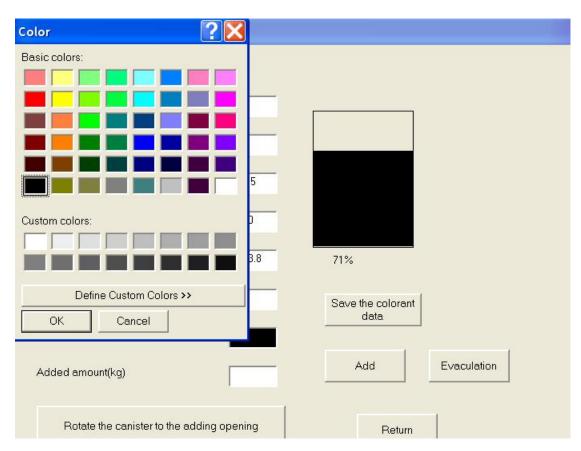
<sup>&</sup>quot;Save the colorant data": To save the colorant data you chose.

<sup>&</sup>quot;Add": Click on it to add colorant.

**<sup>&</sup>quot;Evacuation"**:Discharge air in the pump.Please note:you have to do evacuation before first using.

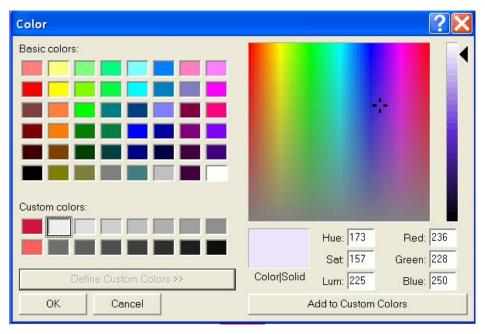
<sup>&</sup>quot;Density test":click to test density of the colorant.

<sup>&</sup>quot;Return": Return to previous menu.



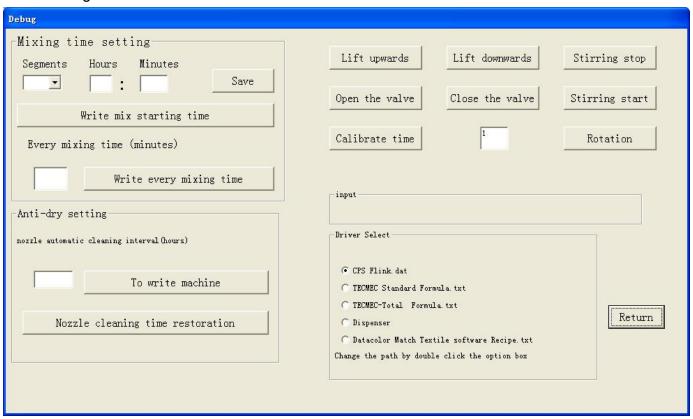
You can choose color from "Basic colors" color shade list.

If you wanted color isn't in basic colors interface, you can click on "Define Custom Colors" to search the color which is close to the objection color, then click "add to custom color" and "OK" Now the objection color will be Changed. If you want to save the formula datas, please click "Save". This function is used for the special requirement from customer.



### **4**Debug

Click "Debug"on main menu to enter below interface.



<sup>&</sup>quot;Mixing time setting": To set automatic stirring colorant time.

**NOTICE:** If all canisters never worked, the machine will not carry out this function. Only those canisters already worked will automatic clean nozzle.

<sup>&</sup>quot;Segments": Press drop-down arrow to choose segment of stirring time.we arranged 16 segments to choose.

<sup>&</sup>quot;Hours": To setup stirring hours, and input into the blank.

<sup>&</sup>quot;Minutes": To setup stirring minutes, and input into the blank.

<sup>&</sup>quot;Save": Press this button setting data will be saved to database.

<sup>&</sup>quot;Write mix starting time": Press this button, the machine will record your setting stirring time, and stir automatically as per it.

**<sup>&</sup>quot;Every mixing time(minutes)"**:You can setup how long you want the machine to stir colorant per time ,and input your required every mixing time in the blank.

**<sup>&</sup>quot;Write every mixing time":** Press this button, the machine will record your setting every mixing time, and stir colorant automatically as per it.

<sup>&</sup>quot;Anti-dry setting": You can set time to avoid the colorant from drying. Default anti-dry setting: The canisters will discharge 0.2ml colorant automatically every 120 hours of not working. The first automatically discharging time is at 17:00pm.

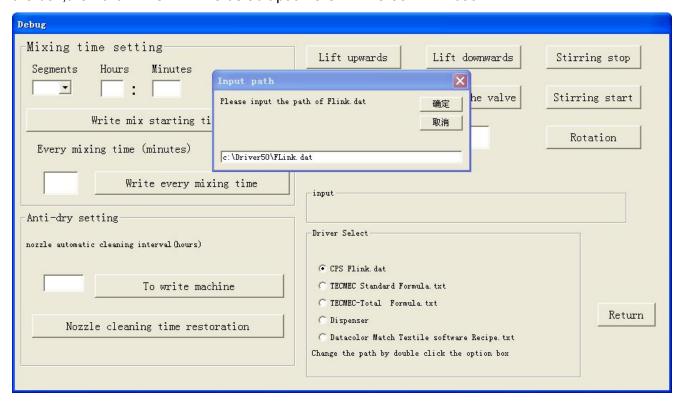
<sup>&</sup>quot;Nozzle automatic cleaning interval(hours)":To setup nozzle automatically cleaning period, you can input the time of how many hours the canister not work, then it will discharge 0.2ml.

"To write machine": Press this button, the machine will record your setting nozzle automatic cleaning interval, and clean the nozzle automatically according to it.

#### NOTICE:

"Nozzle cleaning time restoration": If press this button, the program will take record that all canisters never worked, the machine will not automatic cleaning nozzle unless canisters begin to work again.

- "Lift upwards": Drag lifting mechanism to the up most point.
- "Lift downwards": Push back the lifting mechanism to its original point.
- "Open the valve": This is to open the valve which is in the lifting position.
- "Close the valve": This is to close the valve which is in the lifting position.
- "Stirring start": Turn on the mixing motor to start mixing
- "Stirring stop": Stop mixing from mixing motor.
- "Rotation": Rotate the dispensing pump of the corresponding canister to the lifting position.
- "Calibrate time": Send the computer time to machine by pressing this button, so that the machine can get the local time. Its default time is Beijing time. Please calibrate time before use.
- "Driver select": There are several driver protocols to select, you can choose anyone. Default is "Dispenser".
- "Change the path by double click the option box": Choose the protocol by single click the circle first, then double click it ,you will see below interface. You can input the protocol path into the box, then click "OK". The default path is C:\\Driver50\FLink.dat.

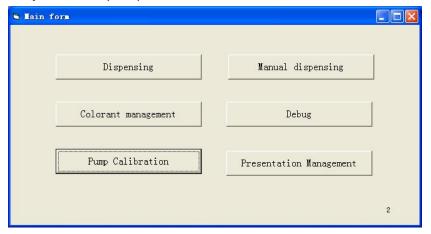


<sup>&</sup>quot;Return": Return to previous menu.

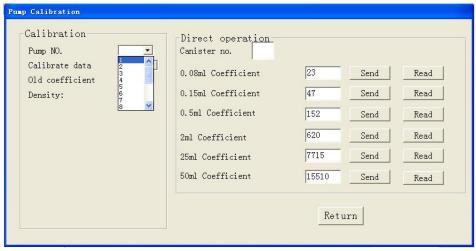
### **⑤Pump calibration**

Please learn below to see how to calibrate the pumps.

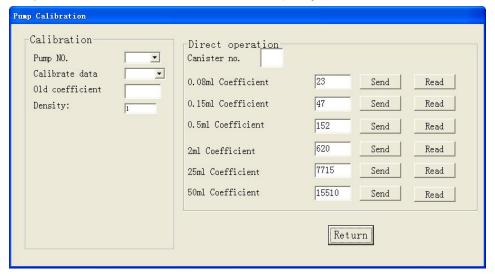
Step 1: Press pump calibration.



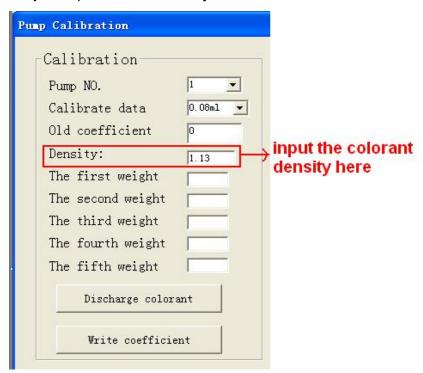
Step 2: Choose Pump No.



Step 3: Choose calibrate data, for example, you choose "0.08ml".



Step 4: Input colorant density



#### Step 5:

- -press "discharge colorant" button. Use a electronic scale to weigh the discharged colorant and input the weight into the blank of "The first weight" with two decimal (the unit is "g", ).
- -Press press "discharge colorant" button again. Use a electronic scale to weigh the sencond discharged colorant and input the weight into the blank of "The second weight" with two decimal ( the unit is "g" ) .
- -Press press "discharge colorant" button again. Use a electronic scale to weigh the third discharged colorant and input the weight into the blank of "The third weight" with two decimal ( the unit is "g" ) .
- -Press press "discharge colorant" button again. Use a electronic scale to weigh the fourth discharged colorant and input the weight into the blank of "The fourth weight" with two decimal ( the unit is "g" ).
- -Press press "discharge colorant" button again. Use a electronic scale to weigh the fifth discharged colorant and input the weight into the blank of "The fifth weight" with two decimal ( the unit is "g" ) .
- -Press "Write coefficient" button. When it show the message "sucessfully writing!", means calibrate finish for the pump of the calibrate data you choose.

**Step 6:**Choose another calibrate data, for example "0.15ml", then do as step 5.



### Step 7:

Repeat step 6 by choosing 0.5ml/2ml/25ml/50ml. Then this pump you choose was finished calibrating.

#### Step 8:

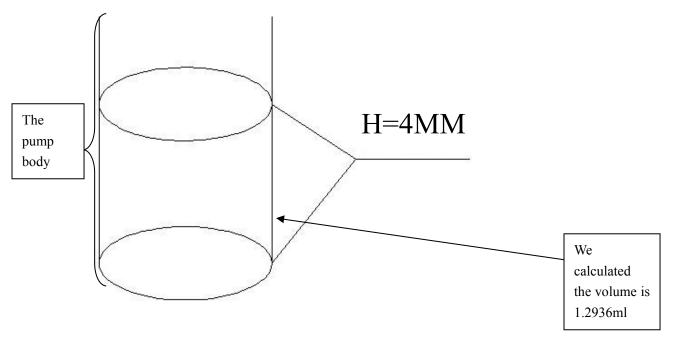
If you want to calibrate another pump, choose the pump No. and then do as step 2 to 7.

#### NOTES:

Please kindly note that the machine is already calibrated before shipment. Generally, you do not need to calibrate again. But if you want to calibrate it, please pay attention to the density as we calibrate the machine with water, Please amend the density to 1.0 when calibrating if you also use water. In order to get a exact result, you might have to repeat several times. Please don't do calibration before evacuating the pump. Otherwise the data you get will be wrong.

#### About coefficient of calibration:

In order to make pump calibration clearly,we will show you the theory of pump calibration. Theory of our coefficient:After testing and measuring ,we know that 400r move 4mm (height of pump), relevant volume of 4mm is 1.2936ml (Look at the picture below)



Our calculated coefficient (take 4 ml for example): 4(ml)/1.2936(ml)\*400r=1236.86 But this coefficient is not so precise.

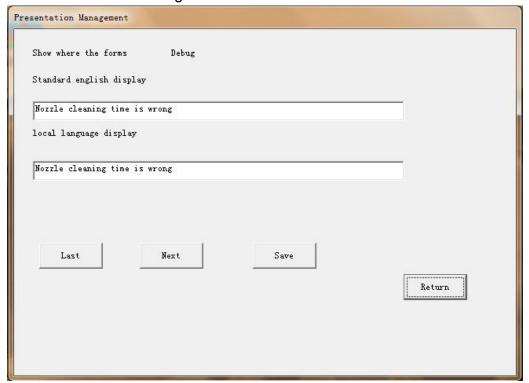
Our calibrated theory(take 4 ml for example): new coefficient =4ml/actual weight of liquid\* old coefficient

So our calibrated coefficient(take 4 ml for example) = 4ml/actual weight of water \* 1236.86(We calibrate the machine with water)

Actually, the coefficient is pulse count.

### **6** Presentation Management

Click "Presentation Management" on main menu to enter below interface.



Steps for presentation management

The default display language is English, but you can translate the English sentences in the first box into your local language, and input it into the second box, then press "Save", then press "Next", to translate next words.

After translating all sentences, please exit the program, and restart the program, you will see the interface display your local language

## 9. HOW TO UPDATE DATA IN SPECIFIED FILES.

NOTICE: you need to install access software before you open this form

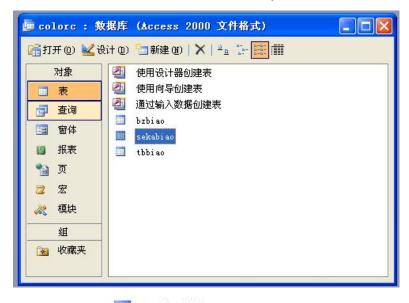


### ① Update formula data



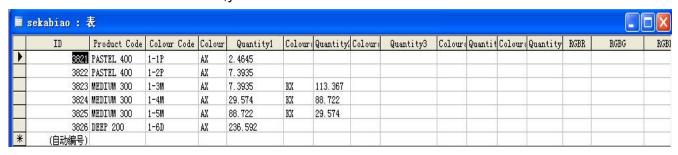
Double click.

you will enter below interface:



Double click

sekabiao ,you will enter below interface:



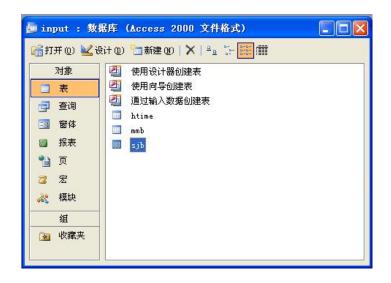
You can update the color formula in this form.

### **2**Update the colorant data

input.mdb Microsoft Office... 1,436 KB

Double click

, you will enter below interface:



Double click ,you will enter below interface:



You can update the colorant data in this form

#### Noted:

<sup>&</sup>quot;remain" means the remain amount (ml) of colorants in the canisters

<sup>&</sup>quot;no" means the colorant in the corresponding canister number

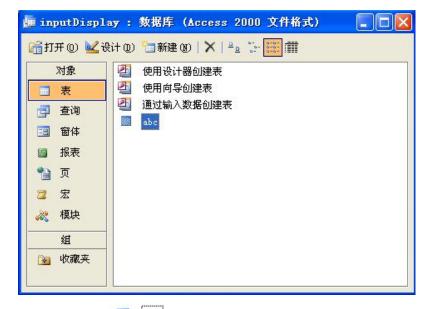
<sup>&</sup>quot;minimum" means minimum remain amount (ml) of colorants in the canisters you want.

### **3 Translate the software display in local language**

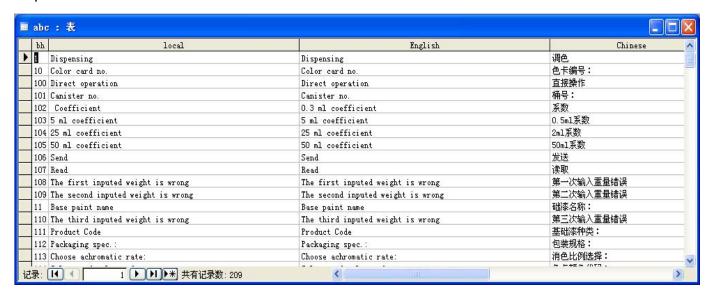


Double click

, you will enter below interface:



Double click ,you will enter below interface, write the language which you want the software display in the "local" column corresponding to the English, then the software will display as per the "local" column.



# 10. TOUBLE SHOOTING

Contact authorized service personal if the following measures do not remedy the problem.

### 1. Dispense inaccurate colorants

Problem cause	Solution
1. Didn't evacuate before using	Evacuate
2. Nozzle blocked	Clean the nozzle or replace the nozzle
3. Calibration coefficient incorrect	Recalibrate
4. Piston pump leakage	Replace the piston pump

#### 2. The machine can not turn on

Problem cause	Solution
Missing of power supply	Check the power connection of the
	machine
2. Power switch in OFF position	Set the power switch to the ON position
3. Machine disconnected from the	Check the connection between the
computer	machine and computer
4. Inline fuse of the power plug in the	Replace the fuse
machine get burnt	
5. Main board fuse get burnt	Replace the fuse 3A on the main board
6. Main board broken	Replace the main board

### 3. Valve operation does not take place

Problem cause	Solution
1. Left or right limit detector of valve broken	Replace the broken detector of the valve
2. Connection problem between valve	Check the connection between valve motor
motor and the detecting board.	and the detecting board.
3. Main board broken	Replace main board
4. Valve motor broken	Replace valve motor

### 4. Rotating table can not rotate

Problem cause	Solution
1. Pump rod is lifted	Put down the pump rod
2. Canister counting sensor maybe broken	Replace canister counting sensor
3. Origin of canister detector maybe broken	Replace the origin of canister detector
4. Disconnection between rotating motor	Check the connection between rotating
and main board	motor and main board
5. Main board broken	Replace main board
6. Reducer of rotating motor problem	1).If the reducer broken, replace it.
	2).If the driving pin fall off, put back the
	driver pin to the original place.
7. Rotating motor broken	Replace the rotating motor

### 5. The specified canister can not rotate to the discharge place.

Problem cause	Solution
Canister counting sensor problem	Replace the canister counting sensor
2. Electromagnetic brake problem	Replace the electromagnetic brake

### 6. Stirring function can't work

Problem cause	Solution
The stirring motor not work	Check if there's electricity of stirring motr
	1).If yes, replace the motor.
	1). If not, replace the main board.
2. Reducer of stirring motor broken	Replace the reducer of stirring motor
3. The eccentric wheel on the rotating table	Replace the eccentric wheel.
broken.	
4. Stirring rod installed not well in the	Re-install the canister with the stirring rod
canister and the rotating table.	

### 7. Elevator problem

Problem cause	Solution
Upper or Lower limit detector broken	Replace the broken detector of the elevator
2. Disconnect between with elevator motor	Check if the connection cable loosen or in
and main board	error connecting
3. Main board problem	Replace the main board
4. Elevator motor broken	Replace the elevator motor
5. Error lifting speed setting	Reset the speed

### 8. When turn on the dispenser machine, appear continuous beeping.

Problem cause	Solution
Main board self-testing problem	Replace the main board

### 9. Dispenser machine can not dispense colorants normally

Problem cause	Solution
1. Nozzle blocked	Clean or replace the nozzle
5. Calibration coefficient incorrect	Recalibrate
1. Valve can not open	Check the reason according point 3.

### 10. Disconnection between software and dispenser machine

Problem cause	Solution
Didn't connect the USB cable	Connect the USB cable and restart the
	software
2. USB cable broken	Replace the USB cable
3. Didn't install the USB driver	Install the USB driver which in the driver 50
	folder

2. Main board broken	Replace the main board	
11. Pump rod go up automatically		
Problem cause	Solution	
2. Didn't evacuate before using	Evacuate	
3. Nozzle blocked	Clean or replace the nozzle	
4. Valve blocked	Clean or replace the valve	
6. Piston pump leakage	Replace the piston pump	

# 11. Component details

Remark: computer, keyboard, mouse are not in scope of supply.

