

# **X4 Dosing Pump**

## **User's Manual For IOS (v: 1.0)**



**Kamoer Fluid Tech (Shanghai) Co., Ltd.**  
[www.kamoer.com](http://www.kamoer.com)

# Contents

<b>1. How to Use.....</b>	<b>1</b>
1.1 Download Software.....	1
1.2 Connection Settings.....	2
1.3 Software Interface.....	8
<b>2. Maintenance.....</b>	<b>16</b>
2.1 Chemical Compatibility.....	16
2.2 Storage.....	16
<b>3. Technical Support.....</b>	<b>16</b>

# 1 How to use

## 1.1 Download Software



Scan QR code to download the IOS software.

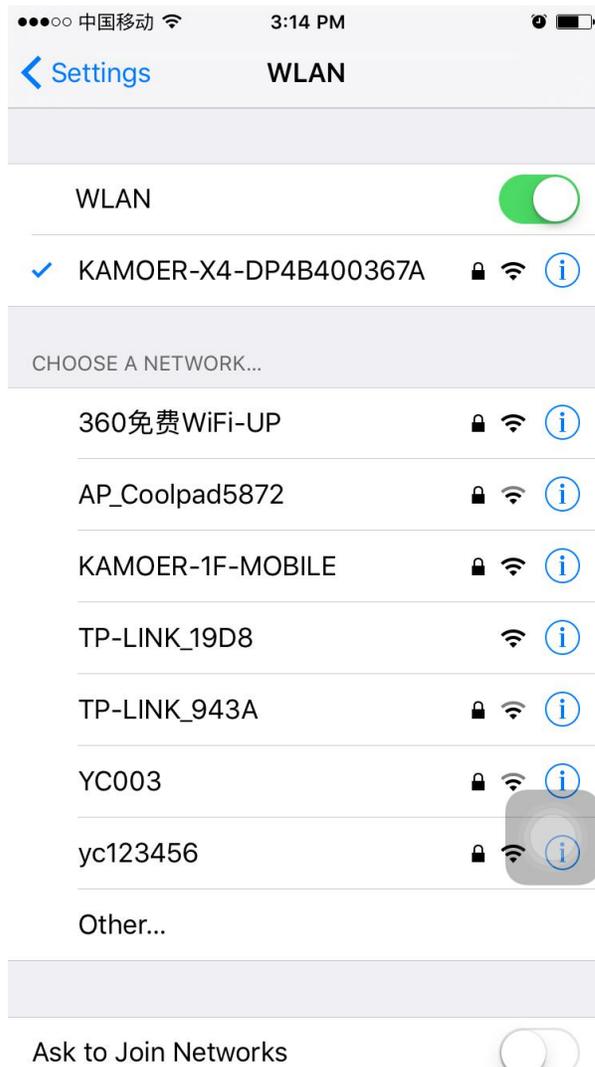
## 1.2 Connection Settings

### 1> Direct connection

#### Preparations

- 1, An iphone and install the X4 control software;
- 2, X4 power on.

Step 1: Search the network: "KAMOER-X4-(The X4 SN No.)"



Step 2: Connect the network with the password: 12345678

Step 3: Open X4 software;

Step 4: Login.

**Tips:**

1.If you cannot find the network "KAMOER-X4-(The X4 SN No.)", reset the wifi on the X4

How to reset wifi:

Press ESC to the X4 starting screen,

press the "SET " button

select 4 "Options"

select "Reset WiFi"

Press set to select "Yes" (wait 3-5 seconds.)

Back to the starting interface and power reset.

2.If the phone or computer says “connect failed” or “network error” when you login, set the configuration to default and reconnect;

Steps:

Open login software

select "Network" on the software

Change the network to default address: 10.10.100.254

Default Port: 8899

select "Reconnect"

It will say “Connect successfully”

## 2>Auto connect

Note: Software requirements:

X4 IOS Version: 1.3 (or higher)

X4 firmware version: 1.1.1 (or higher)

Preparation:

- 1 Install the latest control software of X4 on the phone;
- 2 Phone connected to your home router;

Step 1: Take out the pump, power on, wait for X4 shows the main interface



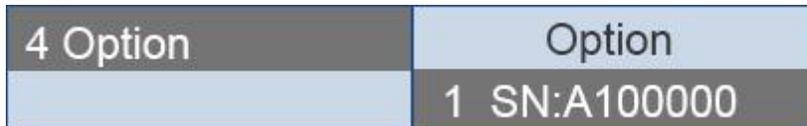
Auto 12:24:50  
P1 16:20

Step 2: Press the "SET" button to enter the menu.



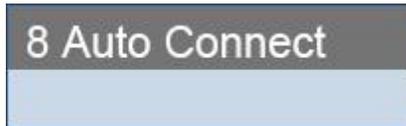
Settings  
1 Manual Dose

Step 3: Press "UP" key to select "Options" and press the "SET" key to enter the options menu.



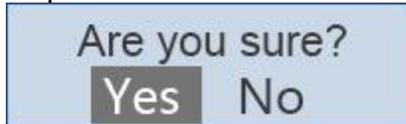
4 Option      Option  
1 SN:A100000

Step 4: Press the "UP" key to select "Auto Connect" and press the "SET" key to enter the confirmation screen.

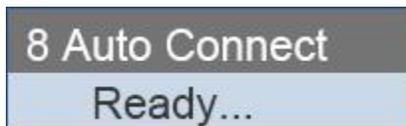


8 Auto Connect

Step 5: Press the "UP" or "DOWN" button to select "Yes" and press the "SET" button.



Are you sure?  
Yes No

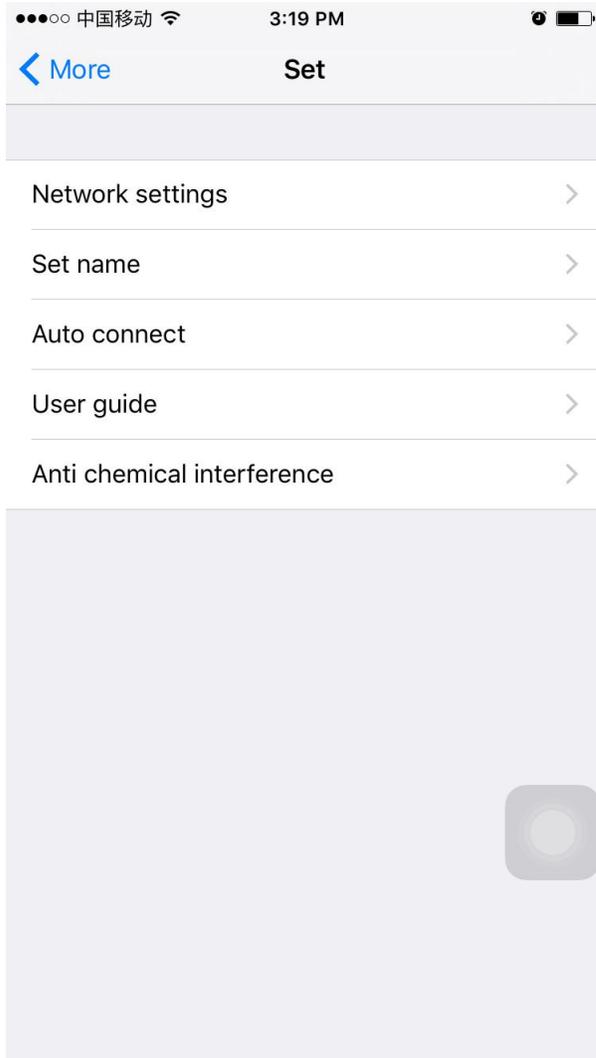


8 Auto Connect  
Ready...

Step 6: Change to your mobile phone operation

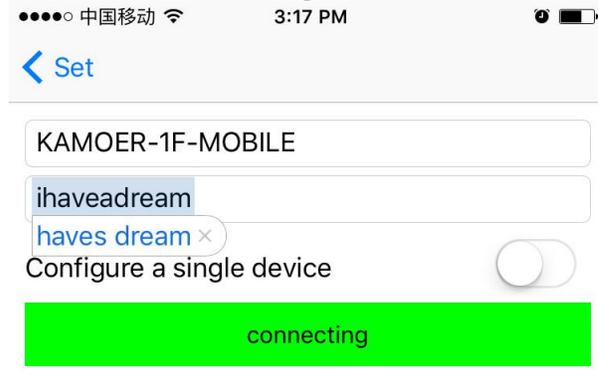
Step 7:

Open X4 control app, click “More”, choose Settings, click "Auto connect."



Step 8:

- 1 In the password input box, enter the password of the family router;
- 2 Click the "Connecting" button to start "Auto connect".

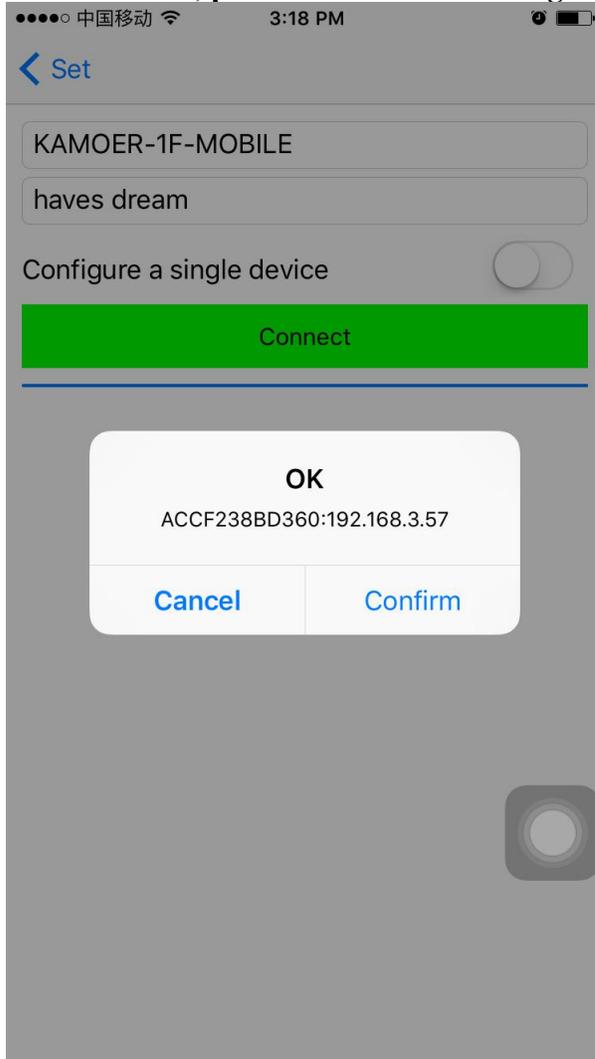


**Step 9:**

1 When “Auto connect” is complete, X4 pump will make a beep, the screen returns to the main screen;

2 iPhone: Display OK, and displays the IP address

**Note: If failed, power off the X4. Start again from the first step.**



**Step 10:**

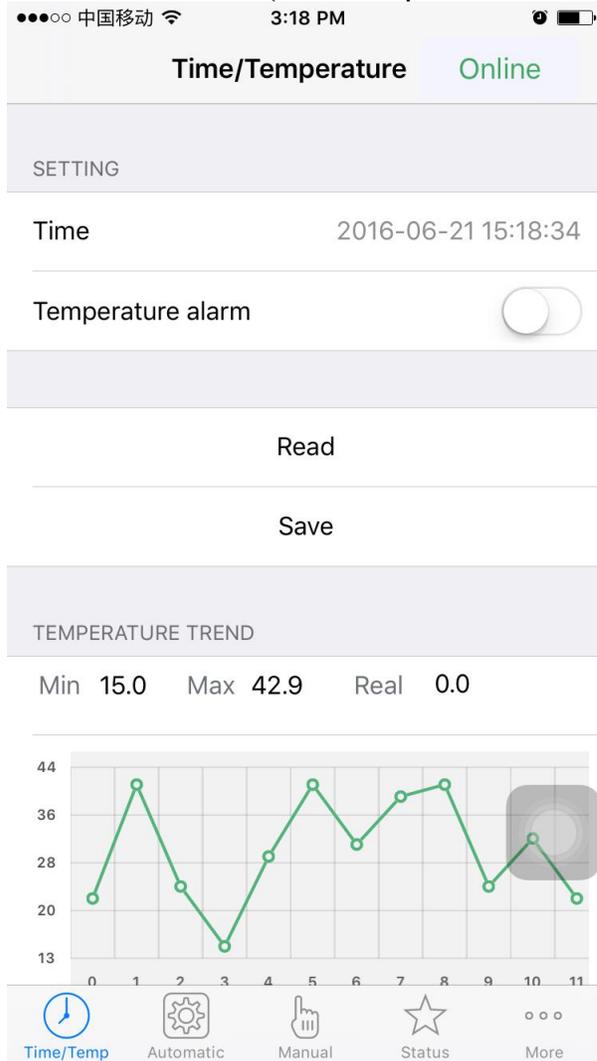
After your login, it will auto turn to the main control page.

Note: 1. You only need to set Auto Connect for once, it will save the settings and you can login to X4 by your own wifi.

2. If you want to login by a computer, change the IP address of the software to the same as the phone.

### 1.3 Software Interface

The initial interface (time / temperature interface)



Upper right corner shows "Online" indicates the phone has connected to the pump; "offline" indicates that there is no connection;

Time: displays the current time and date;

Temperature alarm: select whether temperature alarm;

Unit: Optional Celsius or Fahrenheit;

High temperature: Alarm when reaches the temperature

Low temperature: Alarm when reaches the temperature

Read parameters: Read the last saved parameters;

Save parameters: Saves the parameters currently set;

Temperature trends: record the last 24 hours the temperature profile;

## Automatic Interface



Switch: Channel switch can turn off / on the pump;

Run Mode: "every day", "every other day", "every three days", "weekly" optional;

Start time: 00: 00-23: 59 minutes Optional (Note: you can set the hours, minutes can not be set);

End Time: 00: 00-23: 59 minutes Optional (Note: you can set the hours, minutes can not be set);

Number of runs: the number must be divisible by period;

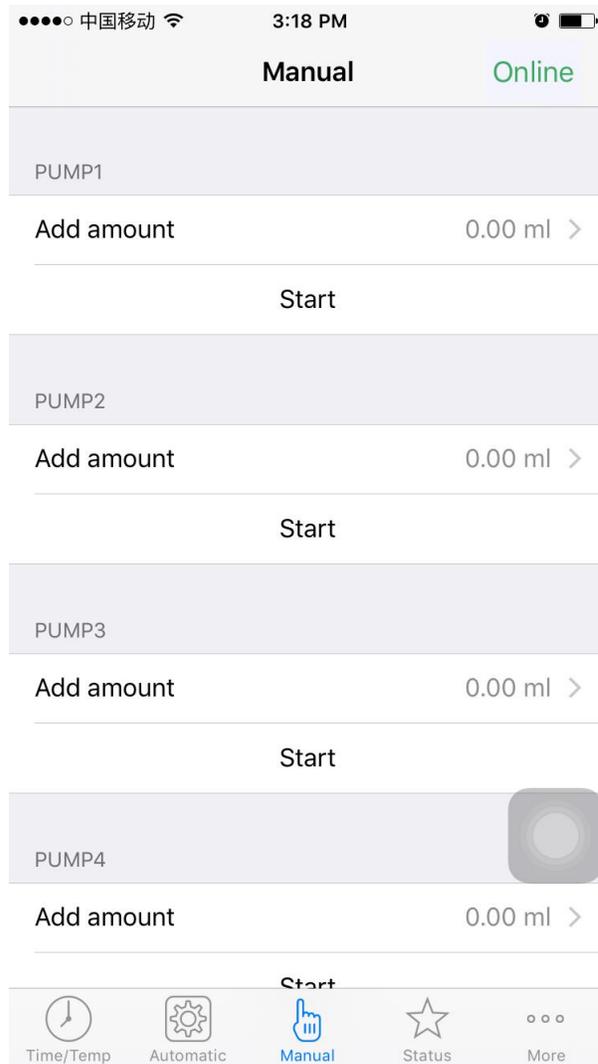
Dosing volume: total liquid per day;

Single dosing volume: Equal the total amount divided by the number of runs;

Read parameters: Read the last saved parameters;

Save parameters: Saves the parameters currently set;

## Manual interface



Pump1: Pump 1

Add amount: Manually dosing the total amount (plus stops automatically after);

Start: Start / stop switch;

Pump2, Pump3, Pump4 the same as Pump1;

## Status Screen

The screenshot shows a mobile application interface for monitoring pumps. At the top, the status is 'Online'. Below this, there are three sections for PUMP1, PUMP2, and PUMP3. Each section displays 'Capacity' (50.0 ml), 'Remaining' (43.2 ml), and 'Days remaining' (2 Day). PUMP1 and PUMP2 show a 'Liquid level status' of 'Alarm', while PUMP3 shows 'Normal'. A bottom navigation bar includes icons for 'Time/Temp', 'Automatic', 'Manual', 'Status' (highlighted with a blue star), and 'More'.

Pump	Capacity	Remaining	Days remaining	Liquid level status
PUMP1	50.0 ml	43.2 ml	2 Day	Alarm
PUMP2	50.0 ml	43.2 ml	2 Day	Normal
PUMP3	50.0 ml			

Pump1: Pump 1

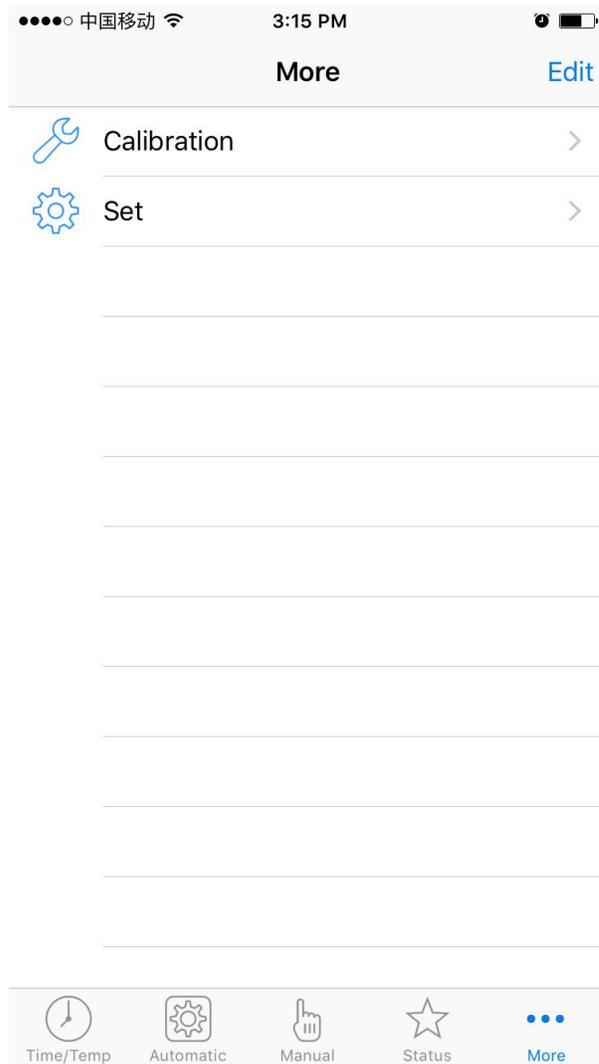
Capacity: Volume of titrant bucket;

Remaining: current remaining amount of titrant;

Days remaining: Number of days that can dose under the dosing amount per day;

Pump2, Pump3, Pump4 same as Pump1;

## More interface



Calibration: flow calibration, the calibration of the flow rate of each pump head;

Setting: function parameters;

Edit: Shortcuts position custom settings;

## Calibration Interface

中国移动 3:19 PM

More Calibration Online

CALIBRATION

Pump pump1 >

Calibration time 0.0 s >

Start

Get volume 0.0 ml >

Working time 0.0 s

Flow rate 0.0 ml/s

Save calibration result

TEST

Test pump pump1 >

Test volume 0 ml >

Time Consuming 0.0 s

Start

Pump: Optional pump1, pump2, pump3, pump4;

Calibration Time: time of the pump head to run calibration;

Start: Start / Stop;

Get Volume: During the calibration time, the volume of liquid you get;

Working time: the calibration time of the actual operation time of the pump;

Flow rate: the pump head's flow rate;

Save calibration results: Save parameters;

Test pump: Optional pump1, pump2, pump3, pump4;

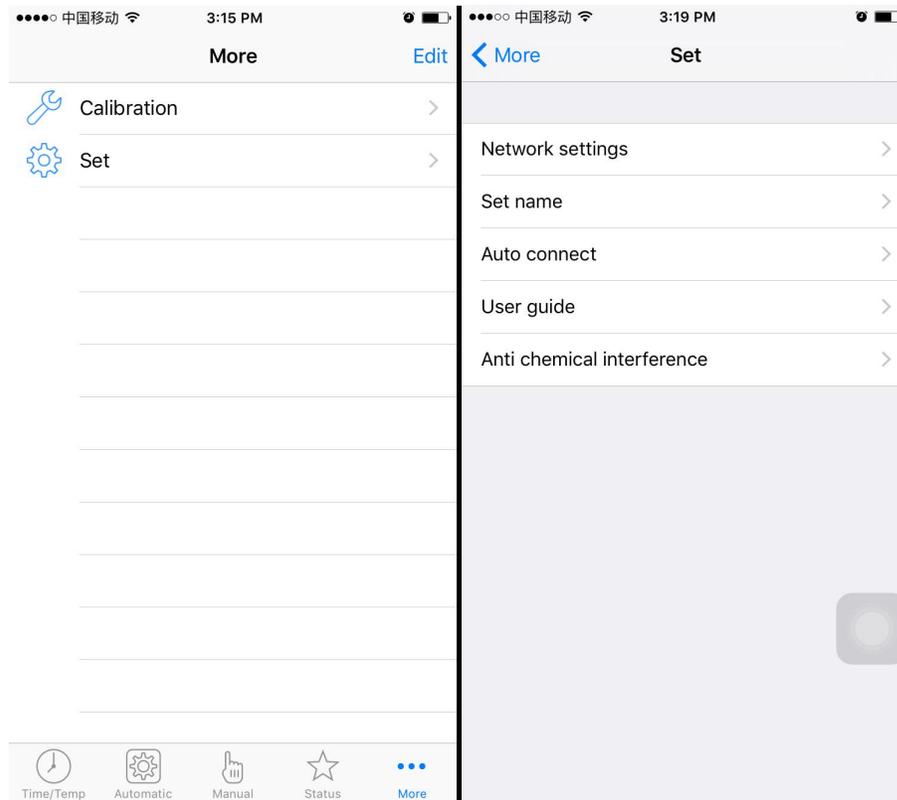
Test Volume: Enter the volume to be tested;

Time-consuming: Actual time of testing;

Start: Start / Stop;

- Note: 1, Before the calibration, empty the air inside the tube;**
- 2, The test function can test the accuracy of the calibration;**

## Set interface



Network settings: Default connection ip address: 10.10.100.254 Port:8899

Set the name: the name of the pump head can be modified;

Auto connect: one button connected to the pump;

Anti-chemical interference: set the delay time of each pump head to prevent chemical interference at the same time start.

Four pump heads set total time < 55 min

## **2.Maintenance**

### **2.1 Chemical compatibility**

X4 standard pump tubing is Pharmed BPT tube, it is suitable for most occasions.If you are transferring a specific liquid, please contact the manufacturer to get help.

### **2.2 Storage**

- When the pump is stored for a long time that does not run, you should take out the tube from the pump head to avoid deformation.
- The pump head rollers should be kept clean and dry, otherwise it will shorten the life of the tube.

## **3.Technical Support**

If you have any problems during using X4 pump, please contact us by the following information. In order to give you a better and faster service, please inform us your instrument model and serial number.

If there are any special applications of information (such as using an unnormal liquid) please inform us in advance.

**Kamoer Fluid Tech (Shanghai) Co.,Ltd.**

**Add: No.7459 Beisong Highway,Songjiang District,Shanghai.**

**Tel: +86-21-57831915**

**Website: [www.kamoer.com](http://www.kamoer.com)**