Parameter description and price

Third generation screen 7 inch single stage reverse osmosis controller

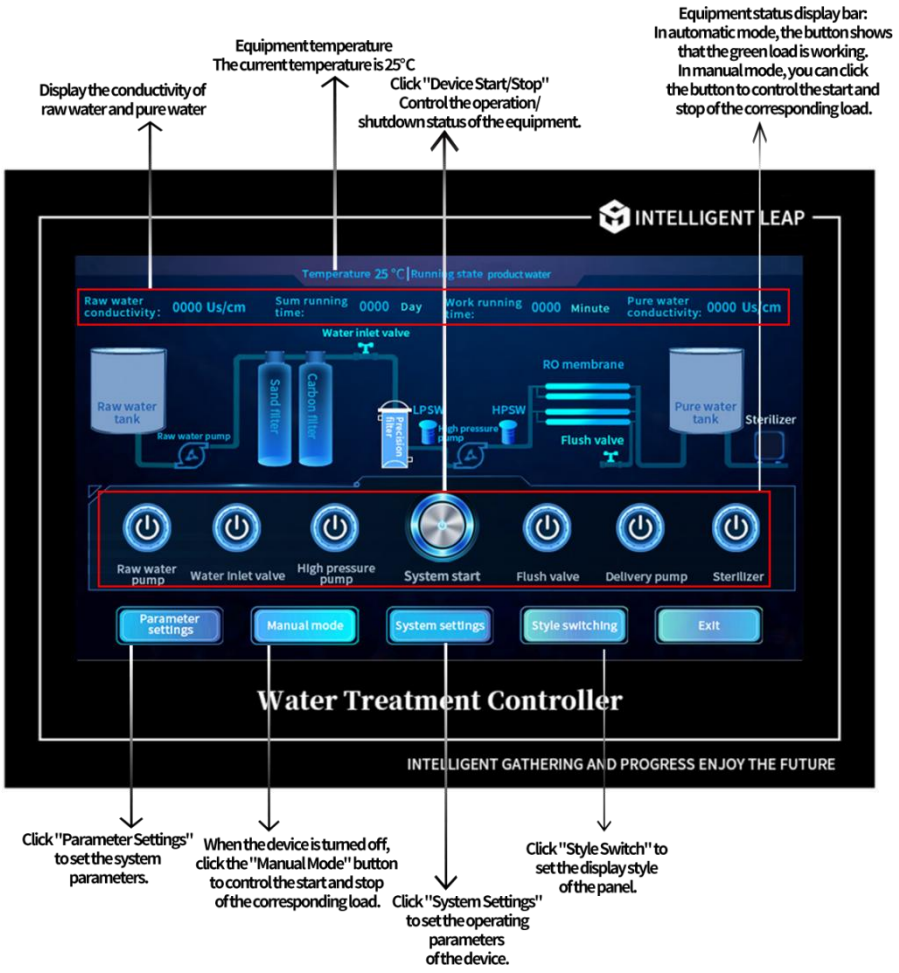


Figure 1 Main interface

Figure 2 Manual mode interface

Figure 3 Style switching interface

1. Introduction of main functions

Function	Explanation
Process control functions	The system can automatic/manual control raw water pump, water inlet valve, high pressure pump,system stop,flush valve,delivery pump,sterilizer.
Main input signal	Low water level of the raw water tank, low pressure alarm before the pump, high pressure

	alarm after the pump, high water level of the pure water tank.
Pre-tank flushing function	Short the flush valve on the equipment terminal board, open the flush valve head, and perform the front tank flushing.
High pressure protection function	If the pressure is too high, the system will give an alarm, and "High pressure Alarm" will be displayed in the alarm information bar.
Screen display	Display parameters: Raw water conductivity, sum running time, working running time, pure water conductivity, temperature, operating status. Display menu: Parameter settings, Manual mode, System settings, Style Switching, Exit.

2.System parameter Settings

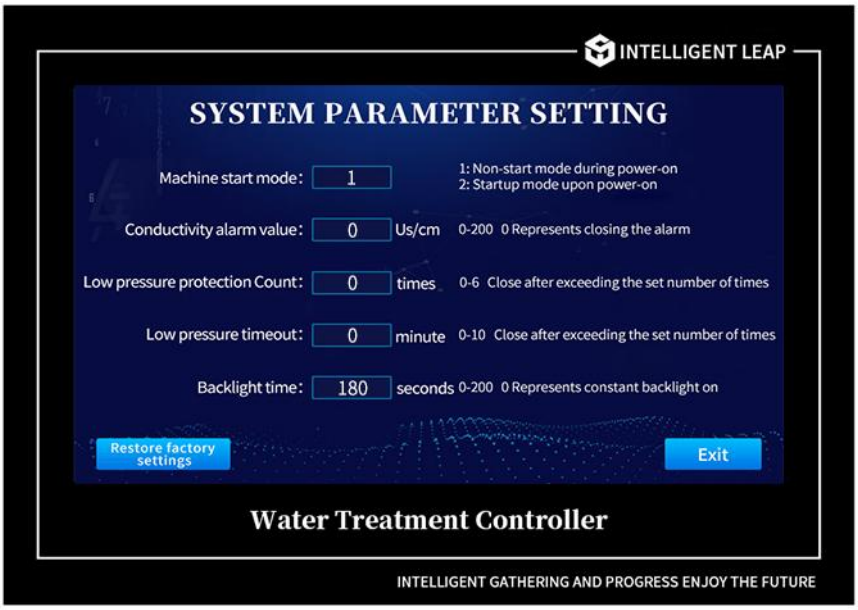


Figure 4 System Settings Interface

Function	Explanation
	There are two modes: 1.Non-start mode during power-on(menu setting value:

Machine start mode	1) 2.Startup mode upon power-on (menu setting value: 2)
Conductivity alarm value	When the test value of the conductivity of the measured solution exceeds the set fixed value, the device will give an alarm. Setting 0: Represents closing the alarm Parameter setting range: 0-200 US/cm
Low pressure protection	If the pressure is insufficient, the system will alarm, and the "low pressure alarm" will be displayed in the alarm information bar, and the water production process will be resumed if the water pressure is satisfied, and the system will enter the shutdown state if the test start is unsuccessful for 3 consecutive times. Setting 0: Close after exceeding the set number of times. Parameter setting range: 0-6 times
Low pressure timeout	If the pressure is insufficient, and the system exceeds the set low pressure timeout, the system will enter the shut down state setting 0: Close after exceeding the set number of times. Parameter setting: 0-10 minutes
Backlight time	Allows the user to customize the time when the screen backlight is on to provide sufficient illumination when operation is required, setting 0: Represents constant backlight on Parameter setting range: 0-200 seconds

3. Main technical indicators

1) Conductivity range: raw water (0 - 4000) Us / cm , pure water (0 - 400) Us / cm
2) Mainboard power supply: DC24
3) Power consumption: ≥ 5W
4) Conditions of use: temperature: (0 - 50) , humidity: ≤ 85%
5) Resolution: 800 * 480
6) Screen case size: 20.3 * 14.8 *4.5 cm
7) hole size :19.1 * 13.7 cm

4. Equipment operation parameter setting

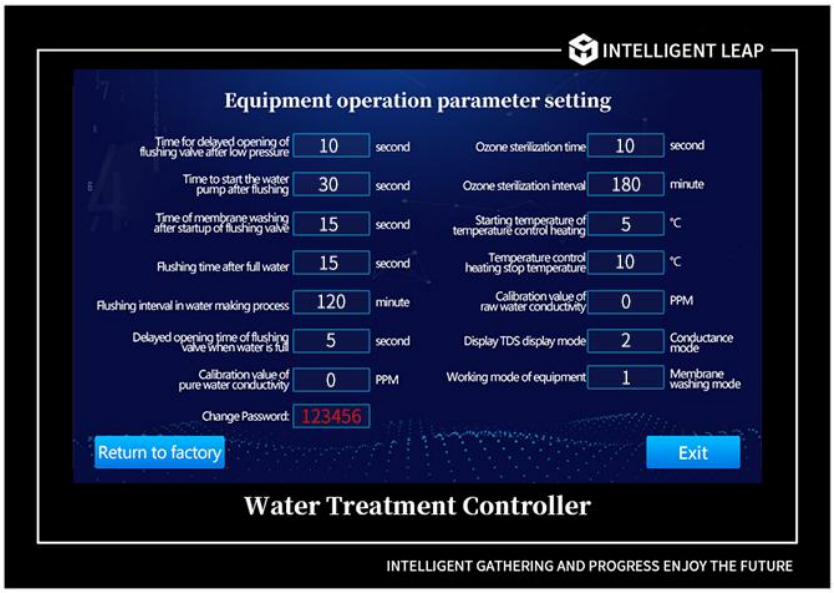


Figure 5 Interface of equipment operation parameters

Instruction	Radius
Time for delayed opening of flushing valve after low pressure	1s —— 240s
Time to start the water pump after flushing	1s —— 240s
Time of membrane washing after startup of flushing valve	1s —— 240s
Flushing time after full water	5s —— 240s
Flushing interval in water making process	1M —— 240M
Delayed opening time of flushing valve when water is full	5s —— 240s
Ozone sterilization time	5s —— 240s
Ozone sterilization interval	10M —— 240M
Starting temperature of temperature control heating	1℃——30℃
Temperature control heating stop temperature	1℃——30℃

Set the raw water TDS value	Setting 0: TDS is not displayed
Display TDS display mode	Setting 1: Display TDS Setting 2:Display conductivity
Modify the conductivity value to reduce the set value from the original detection value	
Working mode of equipment	Setting 1: Low pressure film washing Setting 2: High pressure film washing

5.Common question

Question	Solution
Low pressure alarm after starting	Check whether the low-pressure switch contacts are connected normally
High pressure alarm after starting	Check whether the high-pressure switch contacts are connected normally
The temperature shows 0 ℃	The sensor maybe disconnected
The solenoid valve cannot be opened	The solenoid valve selection does not conform, the input power of this equipment is limited, the ordinary solenoid valve can be directly connected to this equipment, and the high-power electrical equipment needs an external contactor. Such as raw water pump, high pressure pump.
Conductivity display 0 Us/cm	The sensor is short-circuited or the sensor is not in water
The equipment does not produce water	Turn on the manual mode and force the high-pressure pump to turn on and see if the high-pressure pump is running. 1. When the high-pressure pump is running, check whether the low-pressure switch and the raw water inlet pressure are sufficient. 2. If the high-pressure pump is not running, check whether the high-pressure pump has an electrical input, and check the points, wiring, and the high-pressure pump itself one by one.

The third generation 7-inch two-stage dynamic controller

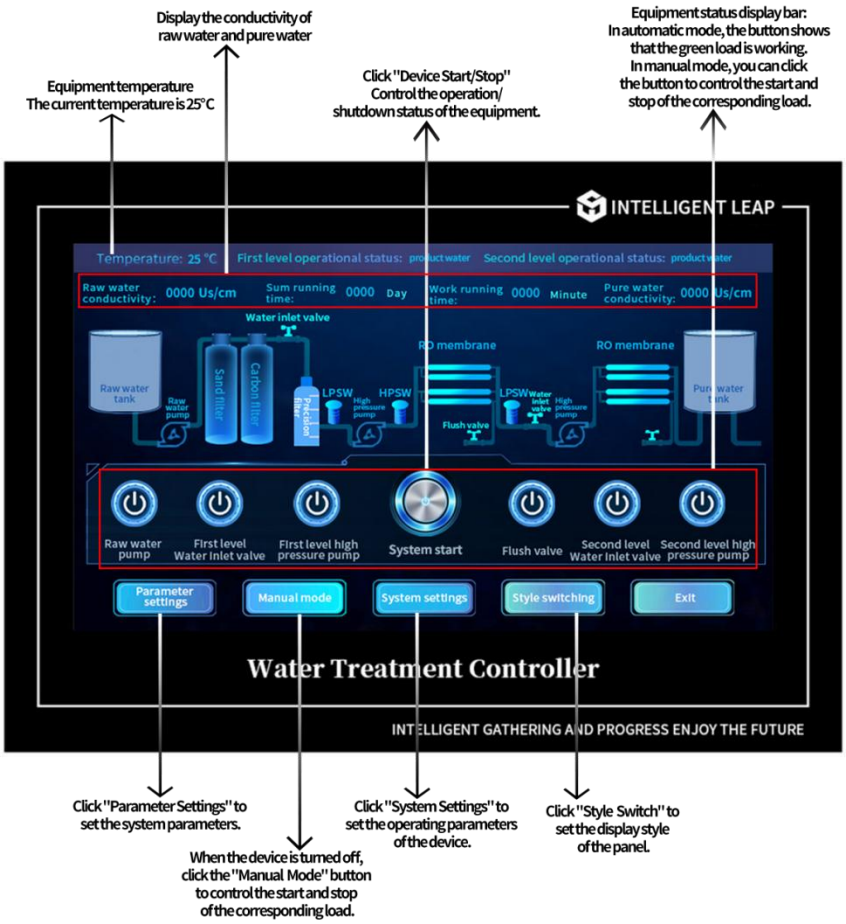


Figure 1 Main interface

Figure 2 Manual mode interface

Figure 3 Style switching interface

1. Introduction of main functions

Function	Explanation
Control input function	The system can automatically/manually control the raw water pump, the first level inlet valve, the first level high pressure pump, the equipment start and stop, the flushing valve, the second level inlet valve, and the second level high pressure pump according to the process
Main input signal	Low water level of the raw water tank, low pressure alarm before the pump, high pressure alarm after the pump, high water level of the pure water tank.
Pre-tank flushing function	Short the flush valve on the equipment terminal board, open the flush valve head, and perform the front tank flushing.
High pressure protection function	If the pressure is too high, the system will give an alarm, and "High pressure Alarm" will be displayed in the alarm information bar.
Screen display	Display parameters: raw water conductivity, cumulative running time, operating running

	time, pure water .conductivity, temperature, first running state, second running state.

2.System parameter Settings

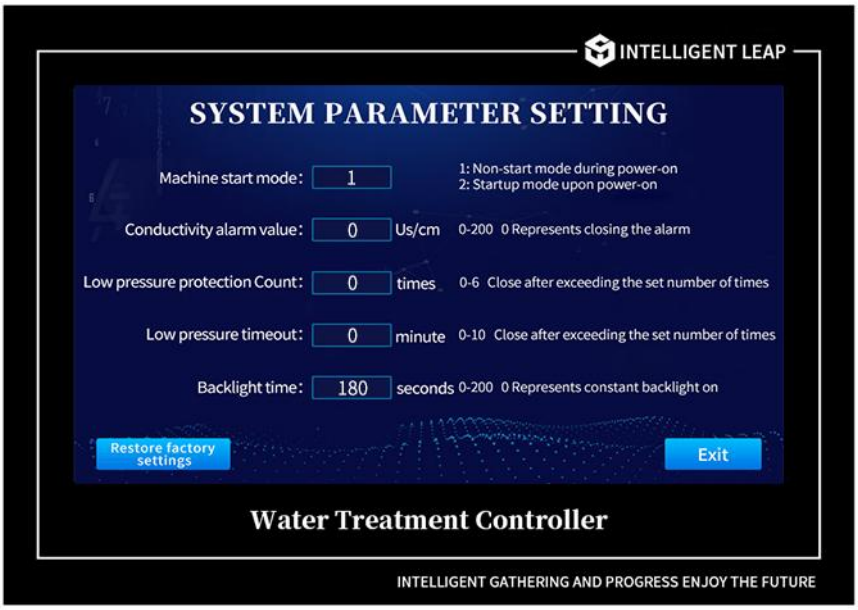


Figure 4 System Settings Interface

Function	Explanation
Machine start mode	There are two modes: 1.Non-start mode during power-on(menu setting value: 1) 2.Startup mode upon power-on (menu setting value: 2)
Conductivity alarm value	When the test value of the conductivity of the measured solution exceeds the set fixed value, the device will give an alarm. Setting 0: Represents closing the alarm Parameter setting range: 0-200 US/cm
Low pressure protection	If the pressure is insufficient, the system will alarm, and the "low pressure alarm" will be displayed in the alarm information bar, and the water production process will be resumed if the water pressure is satisfied, and the system will enter the shutdown state if the test start is unsuccessful for 3 consecutive times. Setting 0: Close after exceeding the set number of times. Parameter setting range: 0-6 times

Low pressure timeout	If the pressure is insufficient, and the system exceeds the set low pressure timeout, the system will enter the shut down state setting 0: Close after exceeding the set number of times. Parameter setting: 0-10 minutes
Backlight time	Allows the user to customize the time when the screen backlight is on to provide sufficient illumination when operation is required, setting 0: Represents constant backlight on Parameter setting range: 0-200 seconds

3. Main technical indicators

1) Conductivity range: raw water (0 - 4000) Us / cm , pure water (0 - 400) Us / cm
2) Mainboard power supply: DC24
3) Power consumption: ⩾ 5W
4) Conditions of use: temperature: (0 - 50) , humidity: ⩽ 85%
5) Resolution: 800 * 480
6) Screen case size: 20.3 * 14.8 *4.5 cm
7) hole size :19.1 * 13.7 cm

4. Equipment operation parameter setting

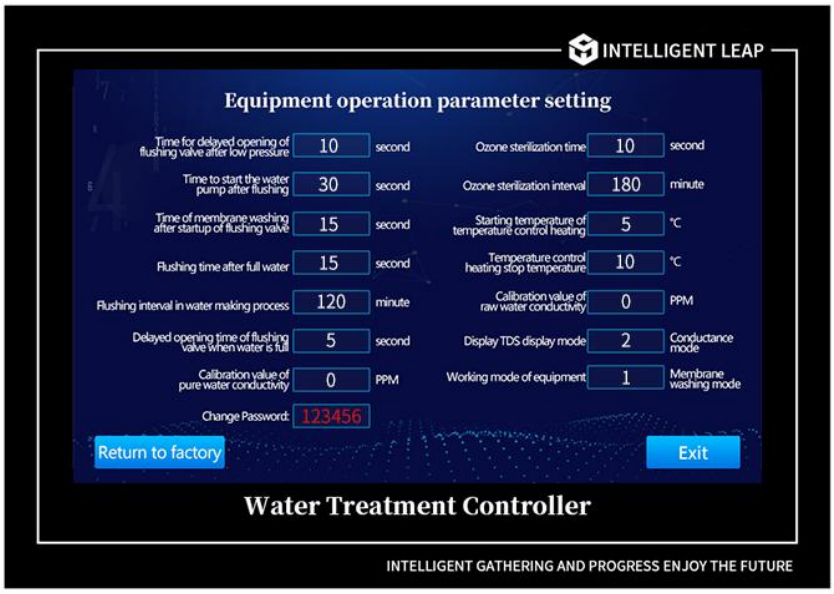


Figure 5 Interface of equipment operation parameters

Instruction	Radius
Time for delayed opening of flushing valve after low pressure	1s —— 240s
Time to start the water pump after flushing	1s —— 240s
Time of membrane washing after startup of flushing valve	1s —— 240s
Flushing time after full water	5s —— 240s
Flushing interval in water making process	1M —— 240M
Delayed opening time of flushing valve when water is full	5s —— 240s
Ozone sterilization time	5s —— 240s
Ozone sterilization interval	10M —— 240M
Starting temperature of temperature control heating	1°C——30°C
Temperature control heating stop temperature	1°C——30°C
Set the raw water TDS value	Setting 0: TDS is not displayed
Display TDS display mode	Setting 1: Display TDS Setting 2:Display conductivity
Modify the conductivity value to reduce the set value from the original detection value	
Working mode of equipment	Setting 1: Low pressure film washing Setting 2: High pressure film washing

5.Common question

Question	Solution

Low pressure alarm after starting	Check whether the low-pressure switch contacts are connected normally
High pressure alarm after starting	Check whether the high-pressure switch contacts are connected normally
The temperature shows 0 ℃	The sensor maybe disconnected
The solenoid valve cannot be opened	The solenoid valve selection does not conform, the input power of this equipment is limited, the ordinary solenoid valve can be directly connected to this equipment, and the high-power electrical equipment needs an external contactor. Such as raw water pump, high pressure pump.
Conductivity display 0 Us/cm	The sensor is short-circuited or the sensor is not in water
The equipment does not produce water	Turn on the manual mode and force the high-pressure pump to turn on and see if the high-pressure pump is running. 1. When the high-pressure pump is running, check whether the low-pressure switch and the raw water inlet pressure are sufficient. 2. If the high-pressure pump is not running, check whether the high-pressure pump has an electrical input, and check the points, wiring, and the high-pressure pump itself one by one.

Third generation 7-inch dual stage dynamic controller with water tank

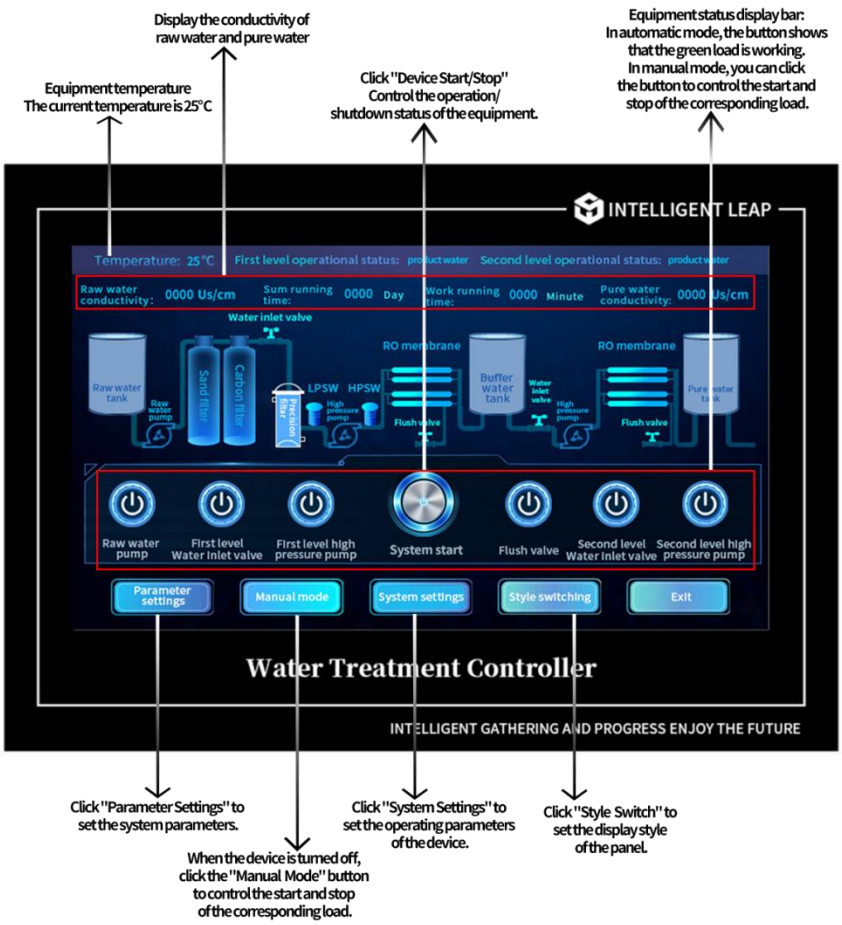


Figure 1 Main interface

Figure 2 Manual mode interface

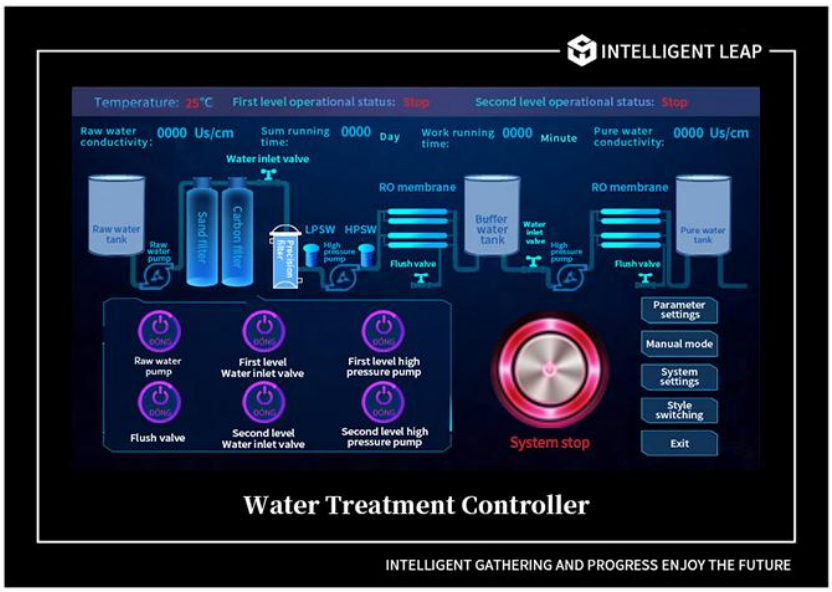


Figure 3 Style switching interface

1. Introduction of main functions

Function	Explanation
Control input function	The system can automatically/manually control the raw water pump, the first level inlet valve, the first level high pressure pump, the equipment start and stop, the flushing valve, the second level inlet valve, and the second level high pressure pump according to the process.
Main input signal	Low water level of the raw water tank, low pressure alarm before the pump, high pressure alarm after the pump, high water level of the pure water tank.
Pre-tank flushing function	Short the flush valve on the equipment terminal board, open the flush valve head, and perform the front tank flushing.
High pressure protection function	If the pressure is too high, the system will give an alarm, and "High pressure Alarm" will be displayed in the alarm information bar.

Screen display	Display parameters: raw water conductivity, cumulative running time, operating running time, pure water conductivity, temperature, first running state, second running state.

2. System parameter Settings

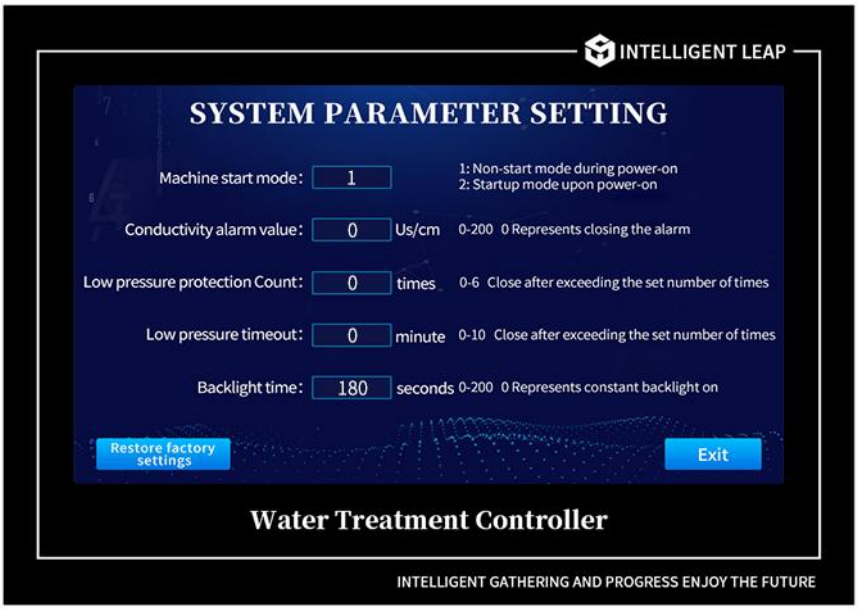


Figure 4 System Settings Interface

Function	Explanation
Machine start mode	There are two modes: 1.Non-start mode during power-on(menu setting value: 1) 2.Startup mode upon power-on (menu setting value: 2)
Conductivity alarm value	When the test value of the conductivity of the measured solution exceeds the set fixed value, the device will give an alarm. Setting 0: Represents closing the alarm Parameter setting range: 0-200 US/cm

Low pressure protection	If the pressure is insufficient, the system will alarm, and the "low pressure alarm" will be displayed in the alarm information bar, and the water production process will be resumed if the water pressure is satisfied, and the system will enter the shutdown state if the test start is unsuccessful for 3 consecutive times. Setting 0: Close after exceeding the set number of times. Parameter setting range: 0-6 times
Low pressure timeout	If the pressure is insufficient, and the system exceeds the set low pressure timeout, the system will enter the shut down state. setting 0: Close after exceeding the set number of times. Parameter setting: 0-10 minutes
Backlight time	Allows the user to customize the time when the screen backlight is on to provide sufficient illumination when operation is required, setting 0: Represents constant backlight on Parameter setting range: 0-200 seconds

3. Main technical indicators

1) Conductivity range: raw water (0 - 4000) Us / cm , pure water (0 - 400) Us / cm
2) Mainboard power supply: DC24
3) Power consumption: ≥ 5W
4) Conditions of use: temperature: (0 - 50) , humidity: ≤ 85%
5) Resolution: 800 * 480
6) Screen case size: 20.3 * 14.8 *4.5 cm
7) hole size :19.1 * 13.7 cm

4. Equipment operation parameter setting

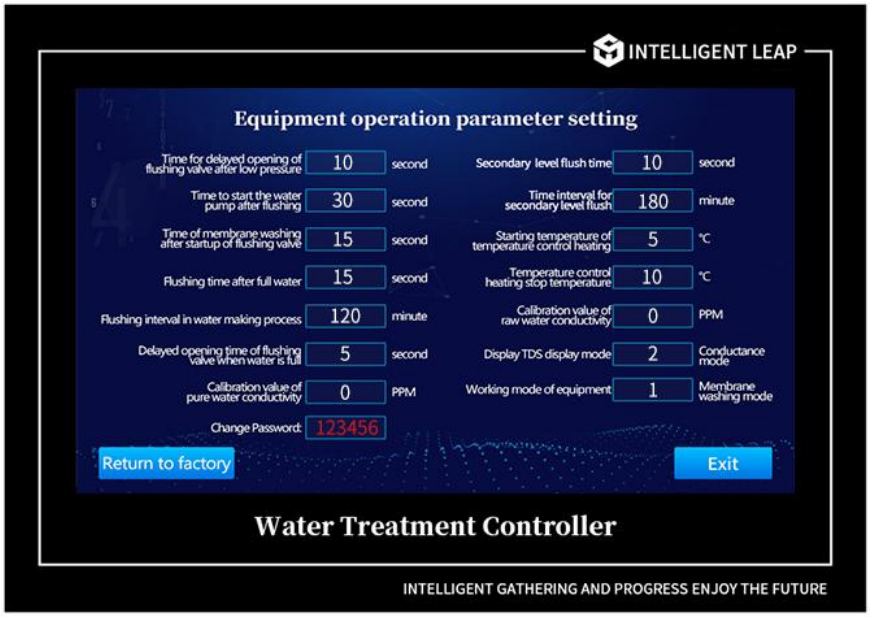


Figure 5 Interface of equipment operation parameters

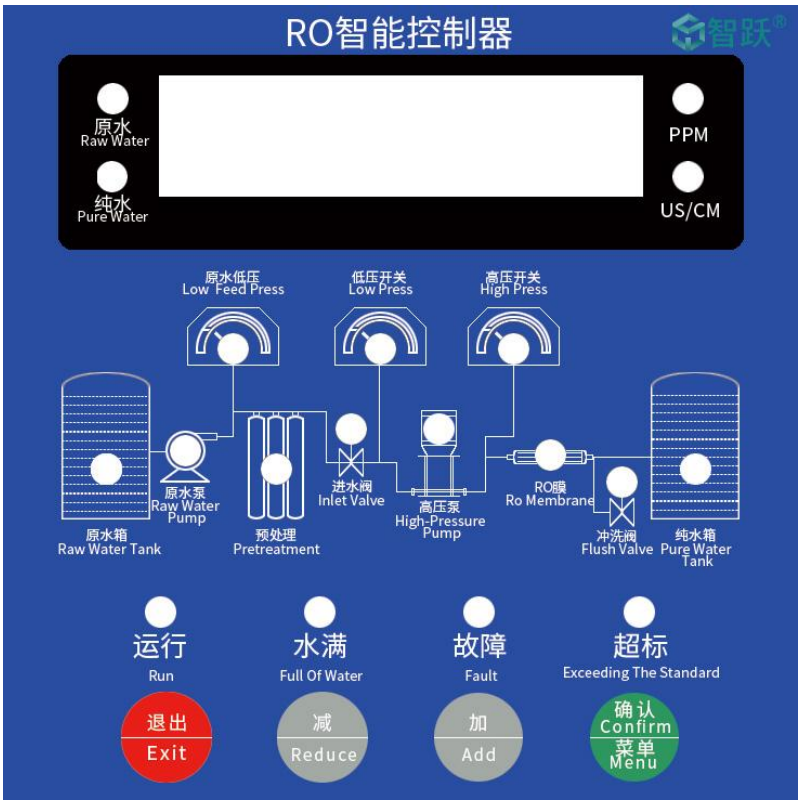
Instruction	Radius
Time for delayed opening of flushing valve after low pressure	1s —— 240s
Time to start the water pump after flushing	1s —— 240s
Time of membrane washing after startup of flushing valve	1s —— 240s
Flushing time after full water	5s —— 240s
Flushing interval in water making process	1M —— 240M
Delayed opening time of flushing valve when water is full	5s —— 240s
Secondary flush valve flush time	1s —— 240s
Secondary flush valve flush interval time	1M —— 240M
Starting temperature of temperature control heating	1°C——30°C
Temperature control heating stop temperature	1°C——30°C

Set the raw water TDS value	Setting 0: TDS is not displayed
Display TDS display mode	Setting 1: Display TDS Setting 2:Display conductivity
Modify the conductivity value to reduce the set value from the original detection value	
Working mode of equipment	Setting 1: Low pressure film washing Setting 2: High pressure film washing

5.Common question

Question	Solution
Low pressure alarm after starting	Check whether the low-pressure switch contacts are connected normally
High pressure alarm after starting	Check whether the high-pressure switch contacts are connected normally
The temperature shows 0 ℃	The sensor maybe disconnected
The solenoid valve cannot be opened	The solenoid valve selection does not conform, the input power of this equipment is limited, the ordinary solenoid valve can be directly connected to this equipment, and the high-power electrical equipment needs an external contactor. Such as raw water pump, high pressure pump.
Conductivity display 0 Us/cm	The sensor is short-circuited or the sensor is not in water
The equipment does not produce water	Turn on the manual mode and force the high-pressure pump to turn on and see if the high-pressure pump is running. 1. When the high-pressure pump is running, check whether the low-pressure switch and the raw water inlet pressure are sufficient. 2. If the high-pressure pump is not running, check whether the high-pressure pump has an electrical input, and check the points, wiring, and the high-pressure pump itself one by one.

Simple RO controller parameter description



1.System parameter description

Parameter	Instruction
SD-0K	Press and hold the plus and minus keys at the same time to enter manual mode.
SD-01	Raw water pump
SD-02	Water inlet valve
SD-03	High pressure pump
SD-04	Flush valve
SD-05	Ozone sterilization
SD-06	Reserved output
SD-07	Turn on manual water production
SD-08	Raw water inlet control

2.Equipment operation parameter setting

Parameter	Instruction	Radius
1P	Time for delayed opening of flushing valve after low pressure	1s —— 240s
2P	Time to start the water pump after flushing	1s —— 240s
3P	Time of membrane washing after startup of flushing valve	1s —— 240s
4P	Flushing time after full water	5s —— 240s
5P	Flushing interval in water making process	1M —— 240M
6P	Delayed opening time of flushing valve when water is full	5s —— 240s
7P	Ozone sterilization time	5s —— 240s
8P	Ozone sterilization interval	10M —— 240M
9P	Reserve	
1E	Reserve	
2E	Set the raw water TDS value (set 0: TDS is not displayed)	
3E	Display TDS display mode	Setting 1: Display TDS Setting 2:Display conductivity
4E	Modify the conductivity value to reduce the set value from the original detection value	
5E	Working mode of equipment	Setting 1: Low pressure film washing Setting 2: High pressure film washing
6E	Whether to turn on the detection of three times the low pressure	Setting 1: Enable Setting 2: Disable
7E	Buzzer alarm mode	Setting 1: Enable Setting 2: Disable

8E	TDS alarm mode	Setting 1: Turn on the alarm Setting 2: Turn off the alarm

4.3 inch touch screen controller interface description

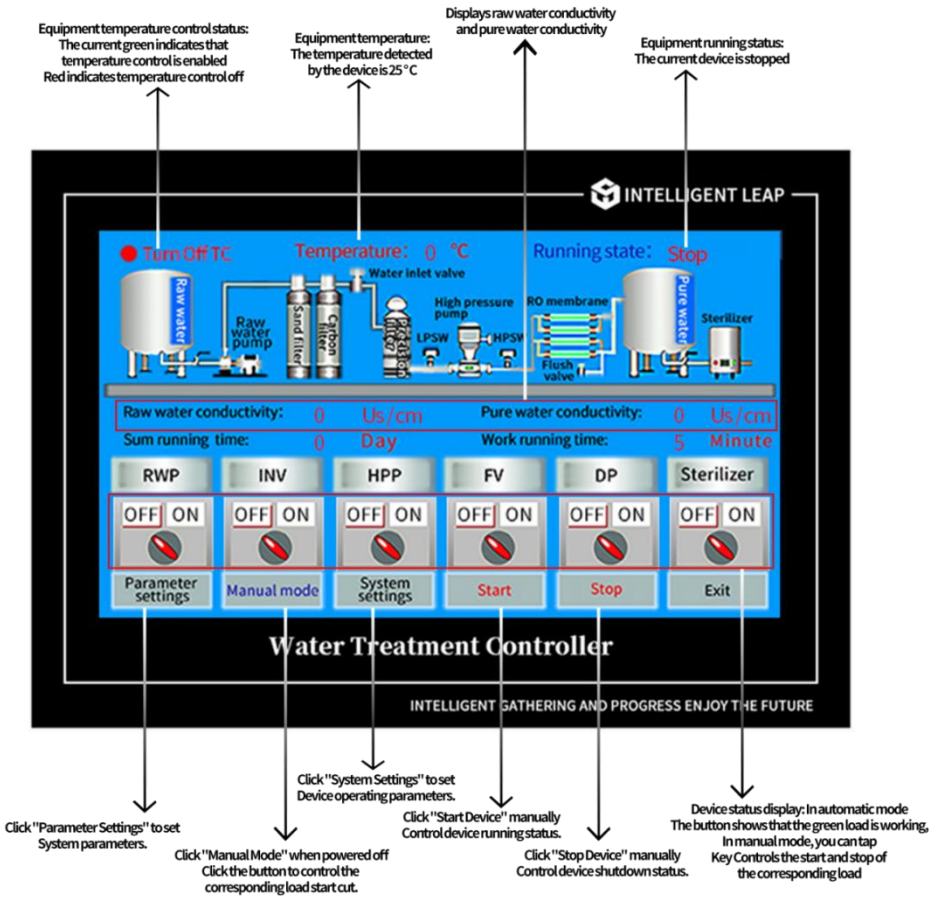


Figure 1 Main interface

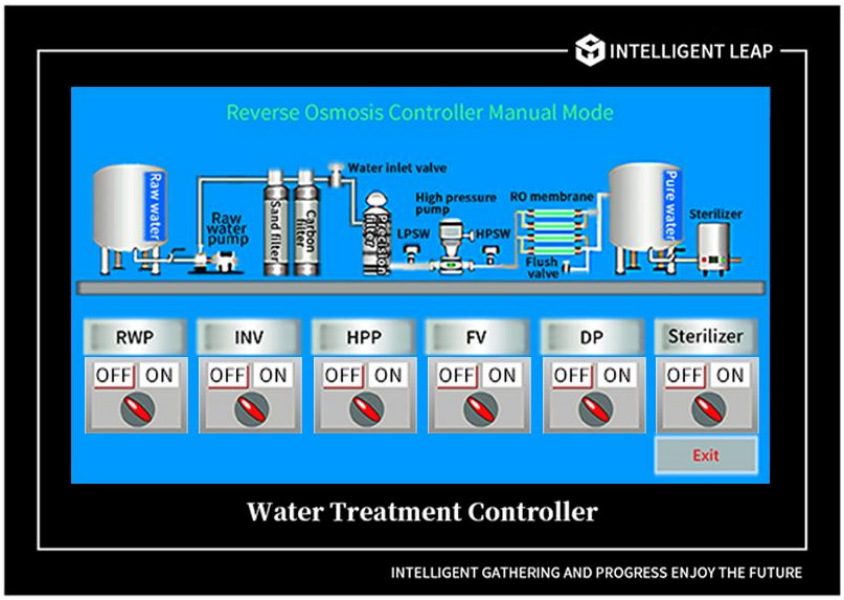


Figure 2 Manual mode interface

1.Main function introduction

Function	Explanation
Process control functions	The system can automatic/manual control raw water pump, water inlet valve, high pressure pump,system stop,flush valve,delivery pump,sterilizer.
Main input signal	Low water level of the raw water tank, low pressure alarm before the pump, high pressure alarm after the pump, high water level of the pure water tank.
Pre-tank flushing function	Short the flush valve on the equipment terminal board, open the flush valve head, and rinse the front water tank.
High pressure protection function	If the pressure is too high, the system will give an alarm, and "High pressure Alarm" will be displayed in the alarm information bar.
Screen display	Display parameters: Raw water conductivity, sum running time, working running time, pure water conductivity, temperature, operating status.Display menu: Parameter settings, Manual mode, System settings, Exit.

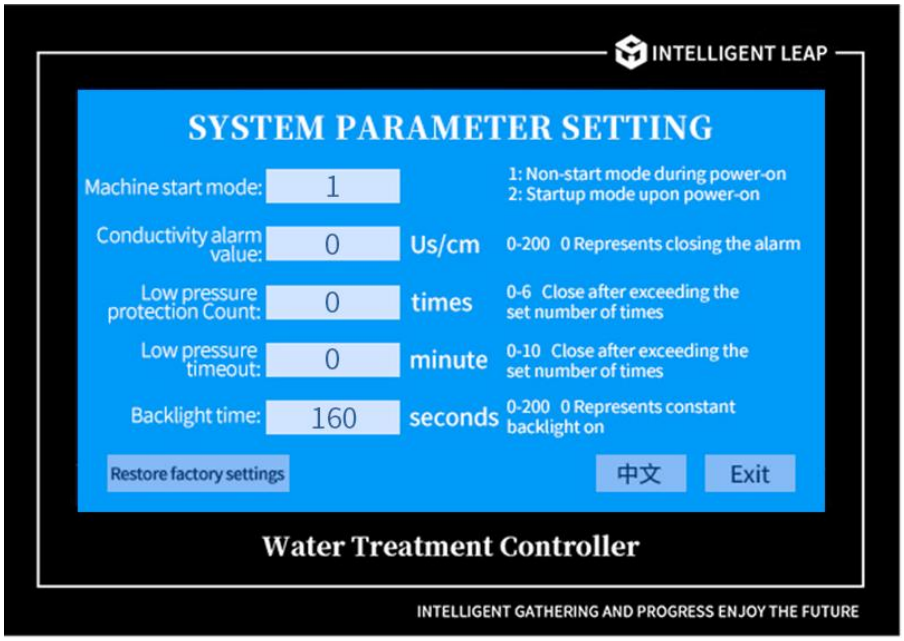


Figure 3 System Settings Interface

2.System parameter settings

Function	Explanation
Machine start mode	There are two modes: 1.Non-start mode during power-on(menu setting value: 1) 2.Startup mode upon power-on (menu setting value: 2)
Conductivity alarm value	When the test value of the conductivity of the measured solution exceeds the set fixed value, the device will give an alarm. Setting 0: Represents closing the alarm Parameter setting range: 0-200 US/cm
Low pressure protection	If the pressure is insufficient, the system will alarm, and the "low pressure alarm" will be displayed in the alarm information bar, and the water production process will be resumed if the water pressure is satisfied, and the system will enter the shutdown state if the test start is unsuccessful for 3 consecutive times. Setting 0: Close after exceeding the set number of times. Parameter setting range: 0-6 times
Low pressure timeout	If the pressure is insufficient, and the system exceeds the set low pressure timeout, the system will enter the shut down state setting 0: Close after exceeding the set number of times.

	Parameter setting: 0-10 minutes
Backlight time	Allows the user to customize the time when the screen backlight is on to provide sufficient illumination when operation is required, setting 0: Represents constant backlight on Parameter setting range: 0-200 seconds

3.Main technical indicators

1) Conductivity range: raw water (0 - 4000) Us / cm , pure water (0 - 400) Us / cm
2) Mainboard power supply: DC24
3) Power consumption: ≥ 5W
4) Conditions of use: temperature: (0 - 50) , humidity: ≤ 85%
5) Resolution: 800 * 400
6) Screen case size: 16.5 * 10 *4.4 cm
7) hole size :15.6 * 9.2 cm

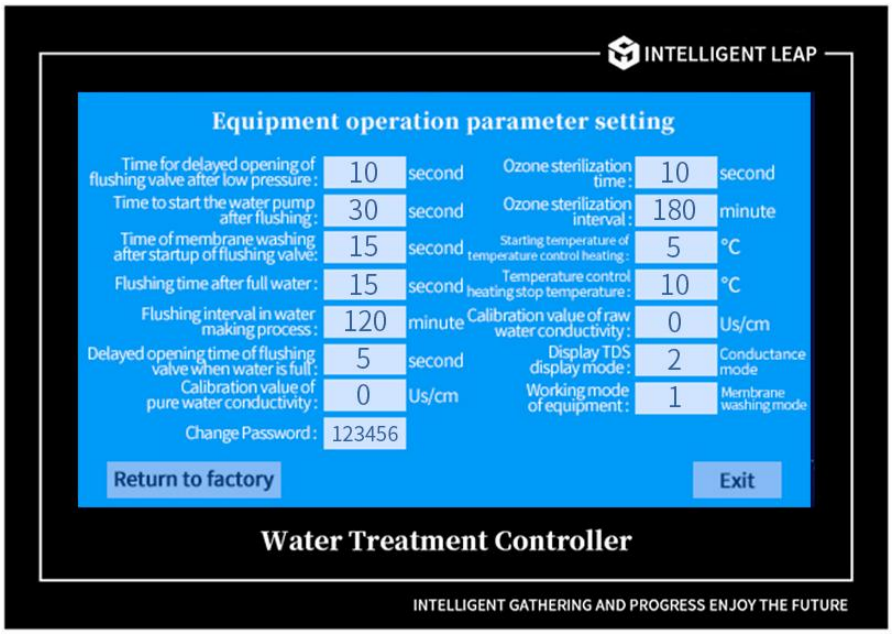


Figure 4 Interface of equipment operation parameters

4.Equipment operation parameter setting

Instruction	Radius
Time for delayed opening of flushing valve after low pressure	1s —— 240s
Time to start the water pump after	1s —— 240s

flushing	
Time of membrane washing after startup of flushing valve	1s —— 240s
Flushing time after full water	5s —— 240s
Flushing interval in water making process	1M —— 240M
Delayed opening time of flushing valve when water is full	5s —— 240s
Ozone sterilization time	5s —— 240s
Ozone sterilization interval	10M —— 240M
Starting temperature of temperature control heating	1°C——30°C
Temperature control heating stop temperature	1°C——30°C
Set the raw water TDS value	Setting 0: TDS is not displayed
Display TDS display mode	Setting 1: Display TDS Setting 2:Display conductivity
Modify the conductivity value to reduce the set value from the original detection value	
Working mode of equipment	Setting 1: Low pressure film washing Setting 2: High pressure film washing

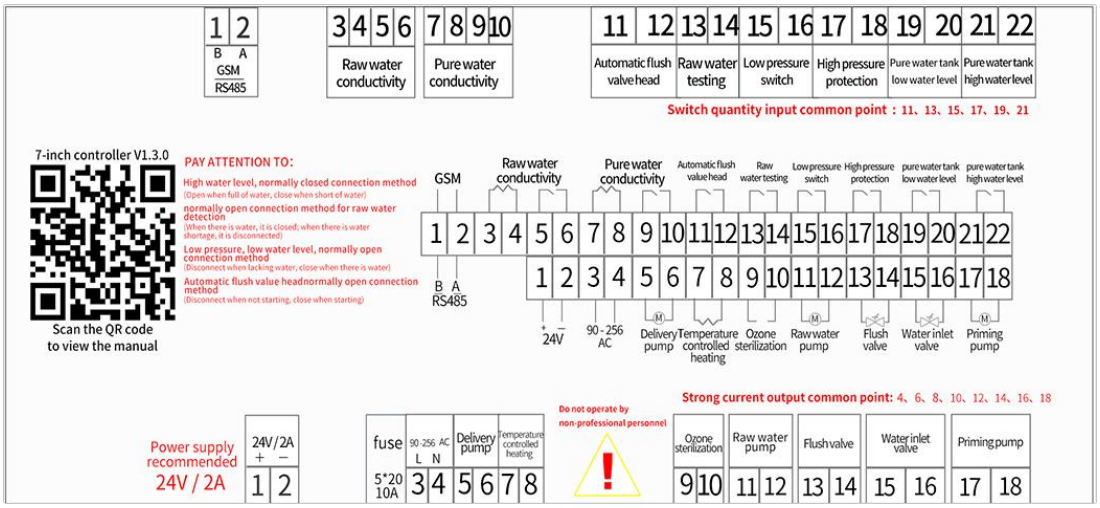
5.Common question

Question	Solution
Low pressure alarm after starting	Check whether the low-pressure switch contacts are connected normally
High pressure alarm after starting	Check whether the high-pressure switch contacts are connected normally
The temperature shows 0 ℃	The sensor maybe disconnected
The solenoid valve cannot be opened	The solenoid valve selection does not conform, the output power of this equipment is limited, the ordinary solenoid valve can be directly connected to this equipment, and the high-power electrical

	equipment needs an external contactor. Such as raw water pump, high pressure pump.
Conductivity display 0 Us/cm	The sensor is short-circuited or the sensor is not in water
The equipment does not produce water	Turn on the manual mode and force the high-pressure pump to turn on and see if the high-pressure pump is running. 1. When the high-pressure pump is running, check whether the low-pressure switch and the raw water inlet pressure are sufficient. 2. If the high-pressure pump is not running, check whether the high-pressure pump has an electrical output, and check the points, wiring, and the high-pressure pump itself one by one.

Installation instructions

Third generation 7-inch single stage dynamic controller installation description



1.Description of the upper input interface

Serial number	Wiring instructions
1、2	Remote antenna interface (if it does not have a remote

	function, it does not include this interface)
3、4、5、6	Raw water conductivity probe head
7、8、9、10	Pure water conductivity probe head
11、12	Automatic flush valve head, normally open point COM, NO two interfaces. If there is no automatic flush valve, the automatic control head is directly suspended and not connected. If the front tank is a manual flush valve head, you can connect a self-locking switch to this port. When cleaning is required, manually set the front tank to the manual state and press the self-locking switch to enable the cleaning of the front tank. If the front tank is a manual flush valve head, manually set the front tank to the manual state, and enter the manual mode of the reverse osmosis controller, and only turn on the raw water pump to clean the front tank. If there are multiple front tank, connect all the switch lines in parallel and connect them to ports 11 and 12.
13、14	Raw water testing is connected with the low water level float ball of the raw tank, normally open connection method.
15、16	Low pressure switch interface, normally open connection method. (used to detect water pressure in the water supply)
17、18	High pressure protection interface, normally closed connection method, (Used in high pressure pumps, when the pressure is too high to play a role in protecting RO)
19、20	Pure water tank low water level floating ball interface, if you don't use this interface, don't connect it.
21、22	Pure water tank high water level floating ball interface, normally closed connection method.

2. Description of the lower row input interface

Serial number	Wiring instructions
1、2	DC 24V/2A power interface（You need to prepare a power cord）

3、4	The device uses 220V/AC interfaces
5、6	Delivery pump interface
7、8	Temperature control heating interface (for pipeline heating protection, maximum 500W in winter, if more need to add contactor)
9、10	Ozone generator interface
11、12	Control the A1A2 point interface of the contactor of the raw water pump
13、14	Flush valve interface
15、16	Inlet valve interface
17、18	Control the A1A2 point interface of the AC contactor of the high pressure pump （The output interface is an active output interface, the input AC220V, the output is AC220V, which is divided into zero wire and live wire）

3. wiring precautions

1) The input interface is an input passive signal, which is an ordinary switch.

2) If the equipment does not have a raw water tank and directly uses tap water to supply water, then it is necessary to short-circuit the low-pressure switch 15 and 16, and connect the low-pressure switch line of the equipment to the raw water detection 13 and 14 to detect whether there is a normal external water source.

3)The input power of this equipment is limited, and the ordinary solenoid valve can be directly connected to this equipment, and the high-power electrical equipment needs an external contactor. Such as raw water pump, high pressure pump.

4) When the contactor needs to be used externally, the input node can be directly connected to the contactor A1 and A2.

4. Complete set of instruments

Name	Model	Quantity

Reverse osmosis controller	7 inch	One set
Electric conductivity head		Two pieces
Equipped with a fixed bracket	7 inch	Two Pieces
5.08 Terminal blocks	2P、6P、10P、12P	Each is one

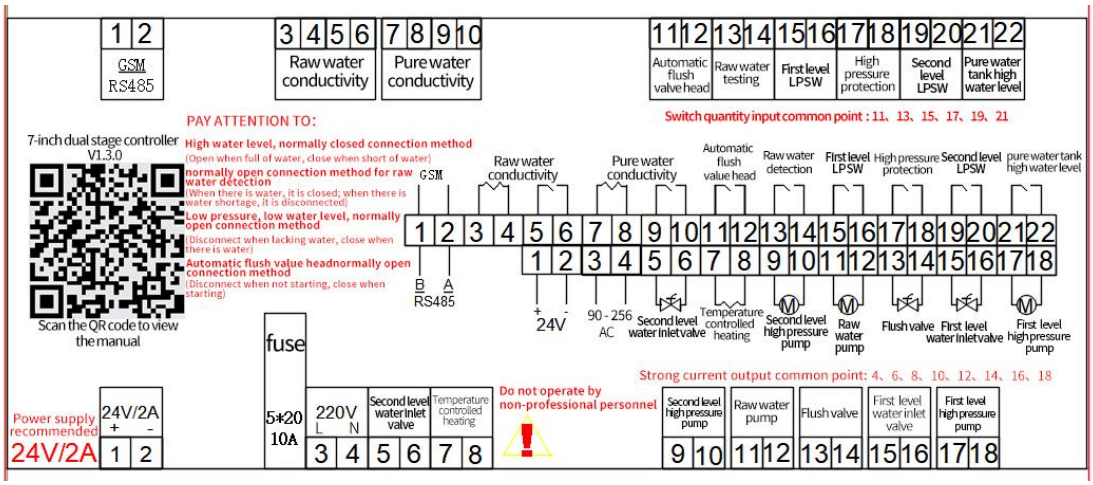
5. Wiring diagram

1. The controller is connected with the AC contactor

A1A2 is the output of the controller to control the engagement of the AC contactor, providing power to the raw water pump or high-pressure pump.

Figure 1　220V connection method

The third generation 7-inch two-stage dynamic controller installation description



1. Description of the upper input interface

Serial number	Wiring instructions
1、2	Remote antenna interface (if it does not have a remote function, it does not include this interface)
3、4、5、6	Raw water conductivity probe interface
7、8、9、10	Pure water conductivity probe interface
11、12	Automatic flush valve head, normally open point COM, NO two interfaces. If there is no automatic flush valve, the automatic control head is directly suspended and not connected. If the front tank is a manual flush valve head, you can connect a self-locking switch to this port. When cleaning is required, manually set the front tank to the manual state and press the self-locking switch to enable the cleaning of the front tank. If the front tank is a manual flush valve head, manually set the front tank to the manual state, and enter the manual mode of the reverse osmosis controller, and only turn on the raw water pump to clean the front tank. If there are multiple front tank, connect all the switch lines in

	parallel and connect them to ports 11 and 12.
13、14	Raw water testing is connected with the low water level float ball of the original tank, normally open connection method.
15、16	First-level low-voltage switch interface, normally open connection method. (Used to detect water pressure in the water supply)
17、18	High-voltage protection interface, normally closed connection method, (used for high-pressure pump pressure too high to protect RO)
19、20	Second-stage low-voltage switch interface, normally open connection method. (Used to detect water pressure in the water supply)
21、22	Pure water tank high water level floating ball interface, normally closed connection method.

2. Description of the lower row input interface

Serial number	Wiring instructions
1、2	DC 24V/2A power interface（You need to prepare a power cord）
3、4	The device uses 220V/AC interfaces.
5、6	Second-stage water inlet valve interface.
7、8	Temperature control heating interface (for pipeline heating protection, the maximum can be 500W in winter, if larger, need to add contactor)
9、10	Control the A1A2 point interface of the AC contactor of the secondary high-pressure pump.
11、12	Control the A1A2 point interface of the AC contactor of the raw water pump.
13、14	Flush valve interface
15、16	First-level water inlet valve interface.
17、18	The A1A2 point interface that controls the AC contactor of the first-level high-pressure pump. （The input interface is an active input interface, the input AC220V, the input is AC220V, which is divided into zero wire

	and live wire)

3. wiring precautions

1) The input interface is an input passive signal, which is an ordinary switch.

2) If the equipment does not have a raw water tank and directly uses tap water to supply water, then it is necessary to short-circuit the low-pressure switch 15 and 16, and connect the low-pressure switch line of the equipment to the raw water detection 13 and 14 to detect whether there is a normal external water source.

3)The input power of this equipment is limited, and the ordinary solenoid valve can be directly connected to this equipment, and the high-power electrical equipment needs an external contactor. Such as raw water pump, high pressure pump.

4) When the contactor needs to be used externally, the input node can be directly connected to the contactor A1 and A2.

4. Complete set of instruments

Name	Model	Quantity
Reverse osmosis controller	7 inch	One set
Electric conductivity head		Two pieces
Equipped with a fixed bracket	7 inch	Two Pieces
5.08 Terminal blocks	2P、6P、10P、12P	Each is one

5.Wiring diagram

2. The controller is connected with the AC contactor

A1A2 is the output of the controller to control the engagement of the AC contactor, providing power to the raw water pump or high-pressure pump.

Figure 1　220V connection method

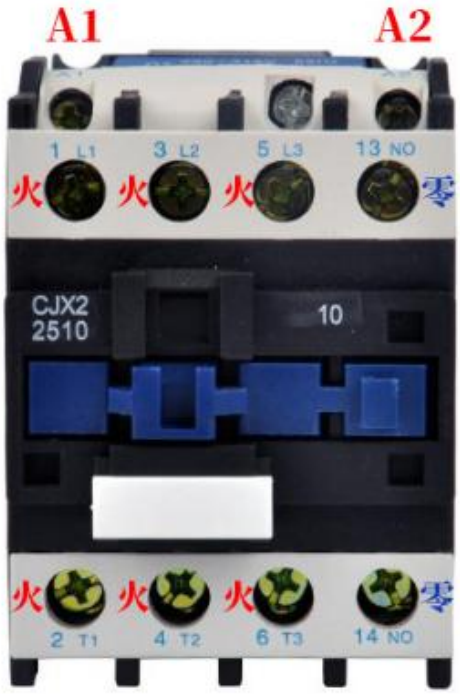
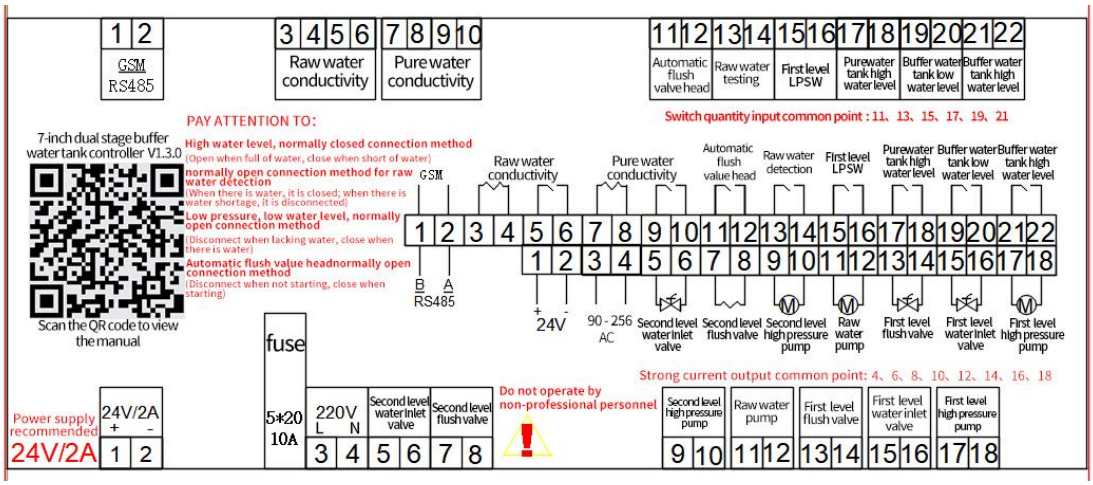


Figure 2　380V connection method

Third generation 7-inch dual stage dynamic controller with water tank installation description



1. Description of the upper input interface

Serial number	Wiring instructions
1、2	Remote antenna interface (if it does not have a remote function, it does not include this interface)
3、4、5、6	Raw water conductivity probe interface
7、8、9、10	Pure water conductivity probe interface
11、12	Automatic flush valve head, normally open point COM, NO two interfaces. If there is no automatic flush valve, the automatic control head is directly suspended and not connected. If the front tank is a manual flush valve head, you can connect a self-locking switch to this port. When cleaning is required, manually set the front tank to the manual state and press the self-locking switch to enable the cleaning of the front tank. If the front tank is a manual flush valve head, manually set the front tank to the manual state, and enter the manual mode of the reverse osmosis controller, and only turn on the raw water pump to clean the front tank.

	If there are multiple front tank, connect all the switch lines in parallel and connect them to ports 11 and 12.
13、14	Raw water testing is connected with the low water level float ball of the original tank, normally open connection method.
15、16	First-level low-voltage switch interface, normally open connection method. (Used to detect water pressure in the water supply)
17、18	Pure water tank high water level floating ball interface, normally closed connection method.
19、20	Buffer water tank low water level, normally open connection method.
21、22	Buffer water tank high water level, normally closed connection method.

2. Description of the lower row input interface

Serial number	Wiring instructions
1、2	DC 24V/2A power interface（You need to prepare a power cord）
3、4	The device uses 220V/AC interfaces
5、6	Second-stage water inlet valve interface
7、8	Secondary flush valve interface
9、10	Control the A1A2 point interface of the AC contactor of the secondary high-pressure pump.
11、12	Control the A1A2 point interface of the AC contactor of the raw water pump.
13、14	First stage flush valve interface
15、16	First-level water inlet valve interface.
	The A1A2 point interface that controls the AC contactor of the first-level high-pressure pump.

17、18	(The input interface is an active input interface, the input AC220V, the input is AC220V, which is divided into zero wire and live wire)

3. wiring precautions

1) The input interface is an input passive signal, which is an ordinary switch.

2) If the equipment does not have a raw water tank and directly uses tap water to supply water, then it is necessary to short-circuit the low-pressure switch 15 and 16, and connect the low-pressure switch line of the equipment to the raw water detection 13 and 14 to detect whether there is a normal external water source.

3)The input power of this equipment is limited, and the ordinary solenoid valve can be directly connected to this equipment, and the high-power electrical equipment needs an external contactor. Such as raw water pump, high pressure pump.

4) When the contactor needs to be used externally, the input node can be directly connected to the contactor A1 and A2.

4. Complete set of instruments

Name	Model	Quantity
Reverse osmosis controller	7 inch	One set
Electric conductivity head		Two pieces
Equipped with a fixed bracket	7 inch	Two Pieces
5.08 Terminal blocks	2P、6P、10P、12P	Each is one

5. Wiring diagram

3. The controller is connected with the AC contactor

A1A2 is the output of the controller to control the engagement of the AC

contactor, providing power to the raw water pump or high-pressure pump.

Figure 1　220V connection method

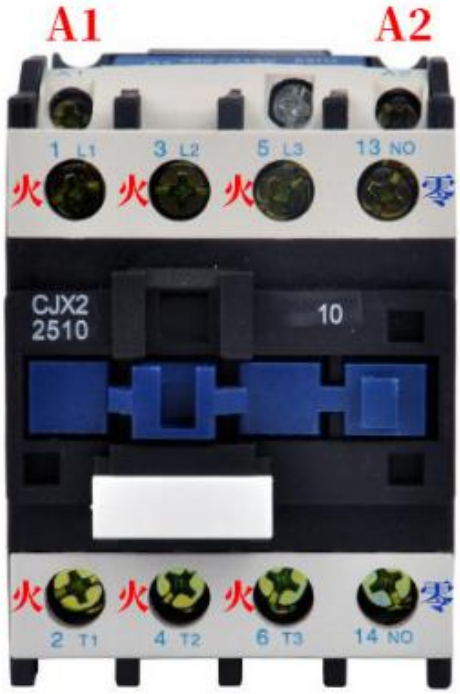
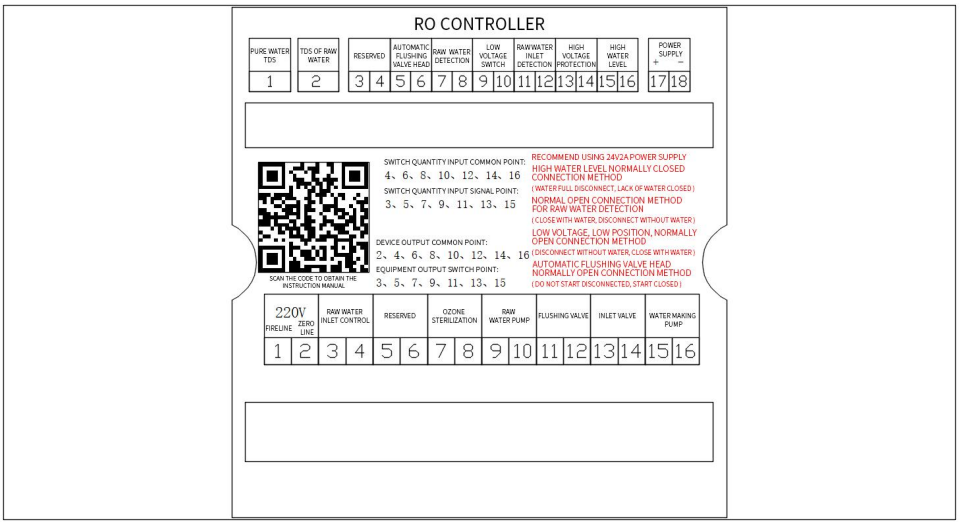


Figure 2　380V connection method

Simple RO controller installation instructions



1.Description of the upper output interface

Serial number	Wiring instructions
1	Pure water conductivity probe head
2	Raw water conductivity probe head
3、4	reserve interface
5、6	Automatic flush value interface, normally open point COM, NO two interfaces. If there is no automatic flush value, the automatic control head is directly suspended and not connected. (1) If the front tank is a manual flush valve head, you can connect a self-locking switch to this port. When cleaning is required, manually set the front tank to the manual state and press the self-locking switch to enable the cleaning of the front tank. (2) If the front tank is a manual flush valve head, manually set the front tank to the manual state, and enter the manual mode of the reverse osmosis controller, and only turn on the raw water pump to clean the front tank. (3) If there are multiple front tank, connect all the switch lines in parallel and connect them to ports 5 and 6.

7、8	Raw water detection is connected with the low water level float ball of the raw tank, normally open connection method.
9、10	Low pressure switch interface, normally open connection method. (used to detect water pressure in the water supply)
11、12	Raw water influent detection is connected to the water supplying pump valve.
13、14	High pressure protection interface, normally closed connection method, (Used in high pressure pumps, when the pressure is too high to play a role in protecting RO)
15、16	Pure water tank high water level floating ball interface, normally closed connection method.
17、18	power interface

2.Description of the lower row output interface

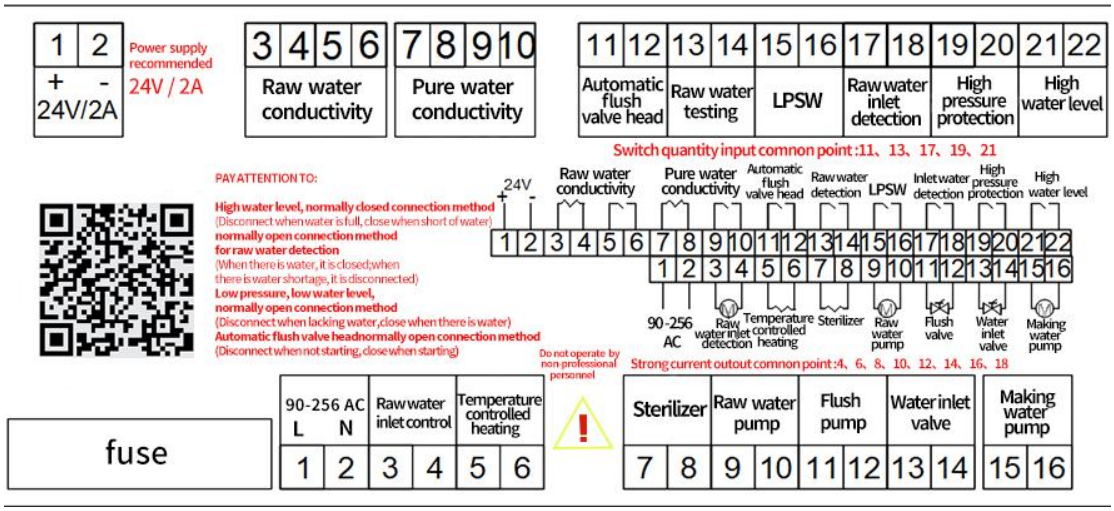
Serial number	Wiring instructions
1、2	The device uses 220V/AC interface
3、4	Raw water inlet control interface
5、6	Reserve interface
7、8	Ozone generator interface
9、10	Raw water pump interface
11、12	Flush valve interface
13、14	Water inlet valve interface
15、16	Water making pump interface

3.Product parameter

Name	Parameter
equipment accessory	High precision water quality probe
mains voltage	DC24

Power dissipation	⩾5W
Use environment	temperature：0~50℃ humidness：⩽85%
External dimensions	12*12*8.5（CM）
Opening size	11.1*11.1（CM）

4.3 inch touch screen controller installation description



1.Description of the upper input interface

Serial number	Wiring instructions
1、2	The device uses 90-256 AC head
3、4、5、6	Raw water conductivity probe head
7、8、9、10	Pure water conductivity probe head
11、12	Automatic flush valve head, normally open point COM, NO two interfaces. If there is no automatic flush valve, the automatic control head is directly suspended and not connected. 1) If the front tank is a manual flush valve head, you can connect a self-locking switch to this port. When cleaning is

	required, manually set the front tank to the manual state and press the self-locking switch to enable the cleaning of the front tank. 2) If the front tank is a manual flush valve head, manually set the front tank to the manual state, and enter the manual mode of the reverse osmosis controller, and only turn on the raw water pump to clean the front tank. 3) If there are multiple front tank, connect all the switch lines in parallel and connect them to ports 11 and 12.
13、14	Raw water testing is connected with the low water level float ball of the raw tank, normally open connection method.
15、16	Low pressure switch head, normally open connection method. (used to detect water pressure in the water supply)
17、18	Raw water inlet detection is connected to the high-water level float ball of the original tank, and the normally closed connection method. (The water inlet solenoid valve used to control the filling of water into the original water tank) can be shorted or not connected without this point.
19、20	High pressure protection head, normally closed connection method, (used for high-pressure pump pressure too high to protect RO)
21、22	Pure water tank high water level float interface, normally closed connection method.

2.Description of the lower row input interface

Serial number	Wiring instructions
1、2	The device uses 220V/AC interfaces
3、4	Raw water inlet control head（Used to inject water into the raw water tank)
5、6	Temperature control heating (for pipeline heating protection, maximum 500W in winter, if more need to add contactor)
7、8	Ozone generator interface

9、10	Control the A1A2 point interface of the contactor of the raw water pump
11、12	Flush valve interface
13、14	Inlet valve interface
15、16	Control the A1A2 point interface of the AC contactor of the high pressure pump（The output interface is an active output interface, the input AC220V, the output is AC220V, which is divided into zero wire and live wire）

3.Wiring precautions

1) The input interface is an input passive signal, which is an ordinary switch.

2) If the equipment does not have a raw water tank and directly uses tap water to supply water, then it is necessary to short-circuit the low-pressure switch 15 and 16, and connect the low-pressure switch line of the equipment to the raw water detection 13 and 14 to detect whether there is a normal external water source.

3)The output power of this equipment is limited, and the ordinary solenoid valve can be directly connected to this equipment, and the high-power electrical equipment needs an external contactor. Such as raw water pump, high pressure pump.

4) When the contactor needs to be used externally, the output node can be directly connected to the contactor A1 and A2.

4.Common question

Name	Model	Quantity
Reverse osmosis controller	4.3 inch	One set
Electric conductivity head		Two pieces
Equipped with a fixed bracket	4.3 inch	Two Pieces
5.08 Terminal blocks	2P、6P、10P、12P	Each is one

5.Wiring schematic diagram

1. Connect the controller to an AC contactor

A1A2 is the controller output control AC contactor suction, supply power to the primary pump or high pressure pump.

FIG. 1 220V connection

FIG. 2 380V connection