

iWash connection guide

1、 Connector overview

- 1) 9-pin connector (for Inverter pool pump or variable speed pump) ;
- 2) 7-pin connector (for float switch sensor & automation system) ;
- 3) Solenoid valve connector (for drain line and water supply line) ;
- 4) Single-speed pump connector ;

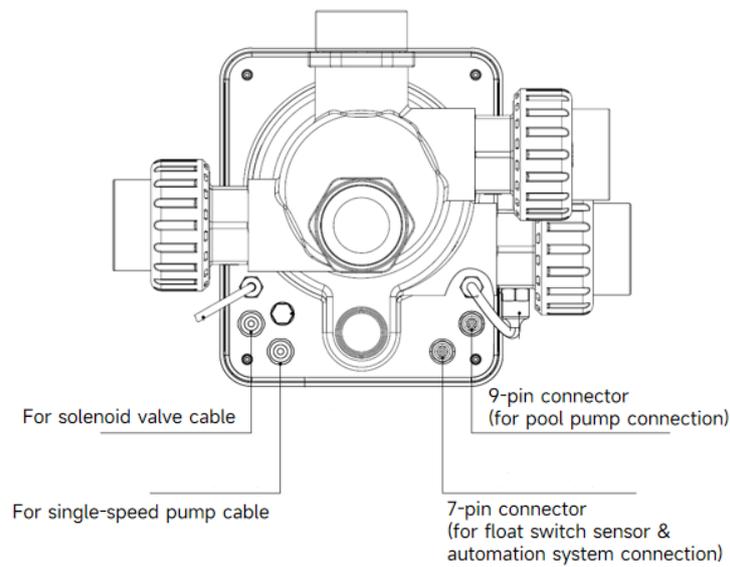


Fig 1 - Bottom view

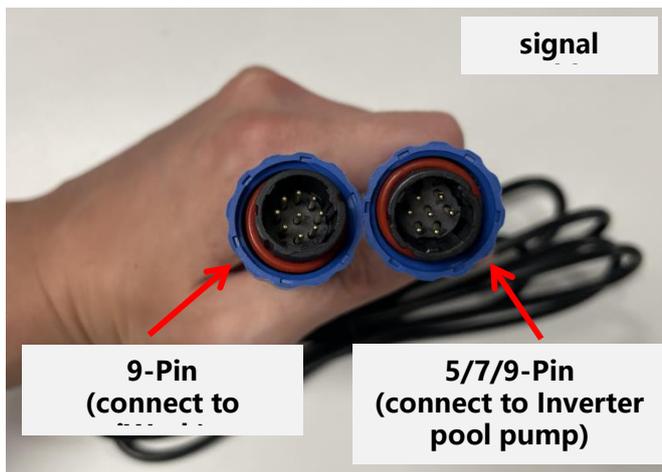
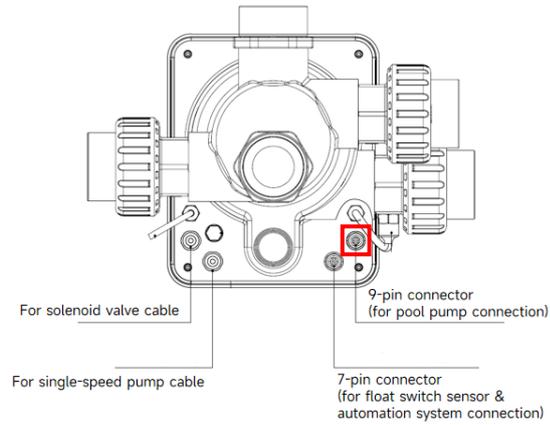


Fig 2 - Internal view

2、 Connection detail

2.1、 Connect to inverter pool pump

1. Connect the signal cable of pool pump to the 9-pin aviation plug on the iWash.

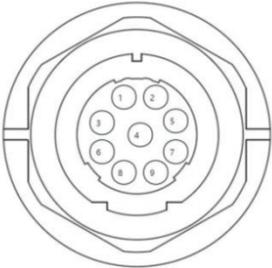


2. Connect the signal cable to the 5/7/9-pin terminal on the Inverter pool pump.

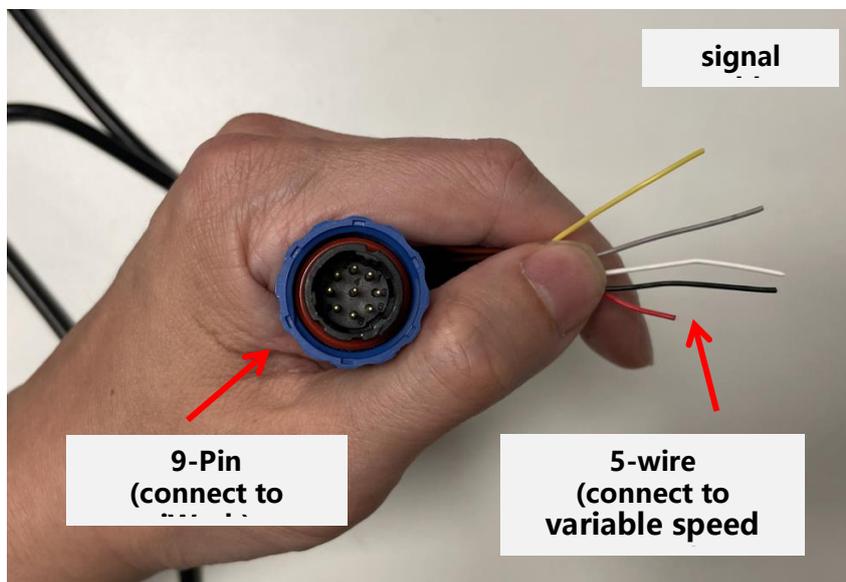


2.2. Connect to variable speed pump (Di pump)

1. It's required the variable speed pump equip with digital input function. The logic of digital output signal of the iWash is as below.

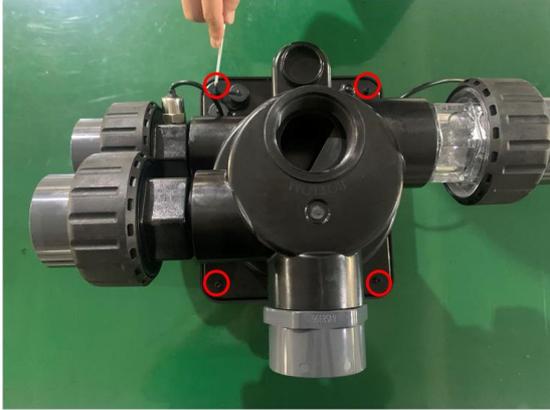
9-pin Aviation plug (for pool pump connection)			
	Name	Color	Description
	PIN 1	RED	Digital Output 4 (V1)
	PIN 2	BLACK	Digital Output 3 (V2)
	PIN 3	WHITE	Digital Output 2 (V3)
	PIN 4	GREY	Digital Output 1 (Stop)
	PIN 5	YELLOW	Digital Ground
	PIN 6	GREEN	RS485 A
	PIN 7	BROWN	RS485 B
	PIN 8	BLUE	/
	PIN 9	ORANGE	GND

2. Connect the signal cable to the iWash and variable speed pump.

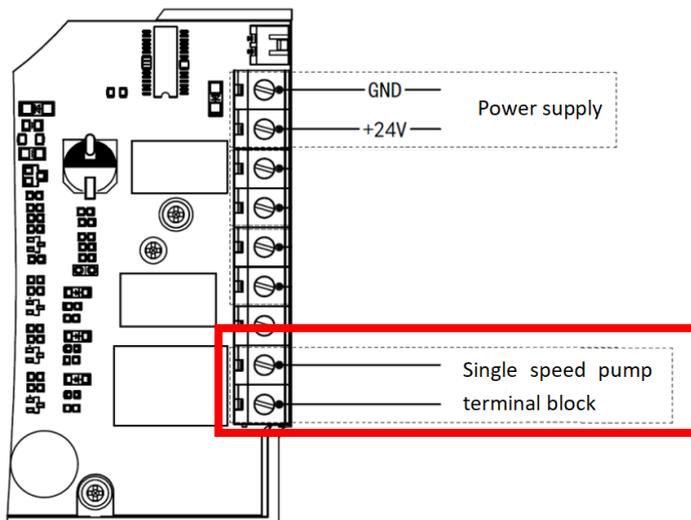
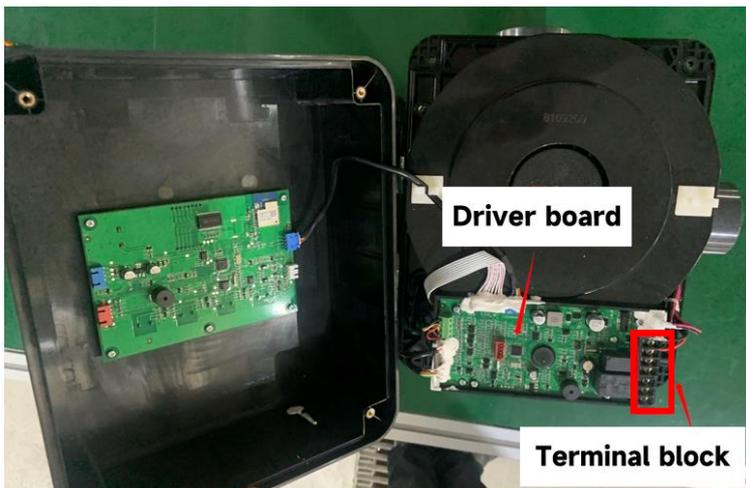


2.3. Connect to single speed pump

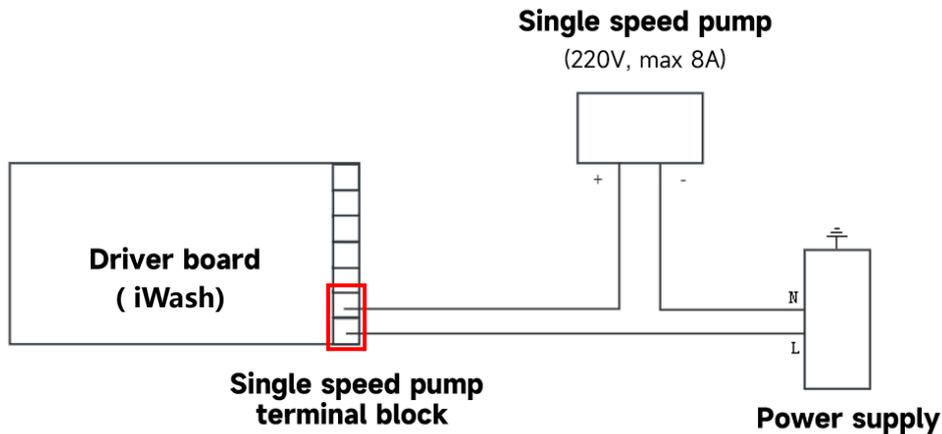
1. Remove the four screws at the back of the automatic multiport valve



2. Locate the single-speed pump terminal block at the driver board



3. Connect the single-speed pump with the iWash at the terminal block



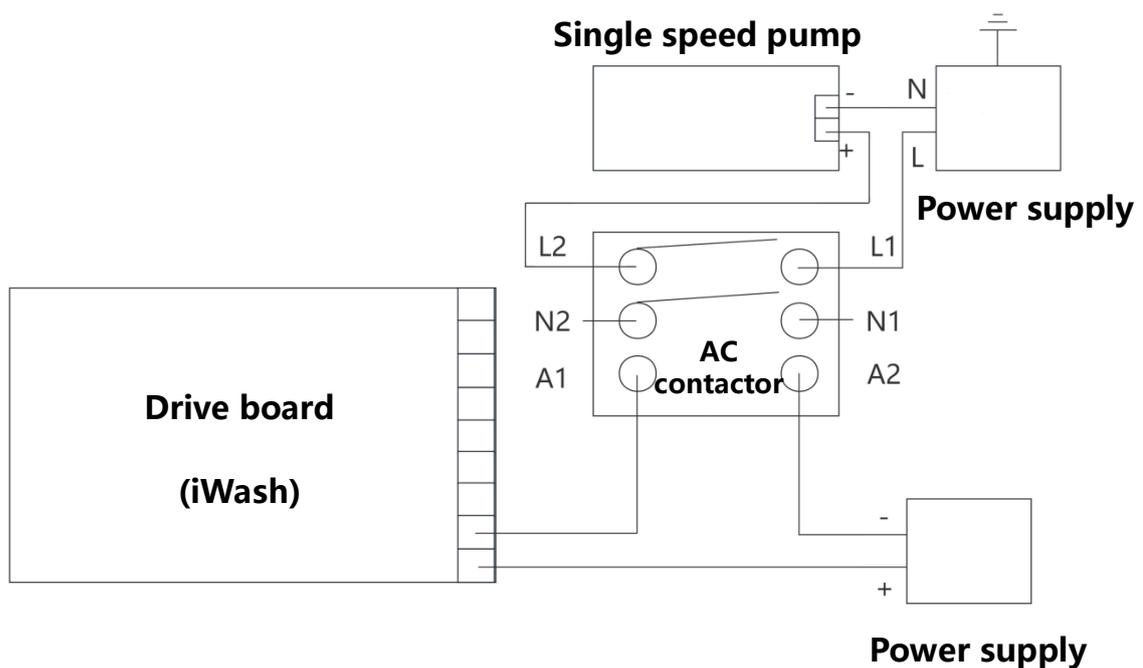
4. Parameter Setting

The default pool pump type is the Inverter pool pump. If connecting with the single-speed pump, user needs to adjust the value in the **parameter address 6** to "1" (single-speed pump) and restart the automatic multiport valve.

Note:

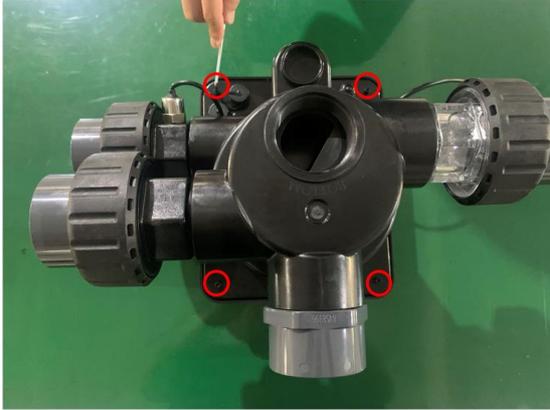
1) There' s no positive or negative end at the single-speed pump terminal block. Please ensure one end at the terminal block is connected to the positive end of the pump and the other end is connected to the positive end of the power supply.

2) If the current of single speed pump is greater than 8A, an additional AC contactor needs to be connected to the single speed pump by users , please refer to the below pic.

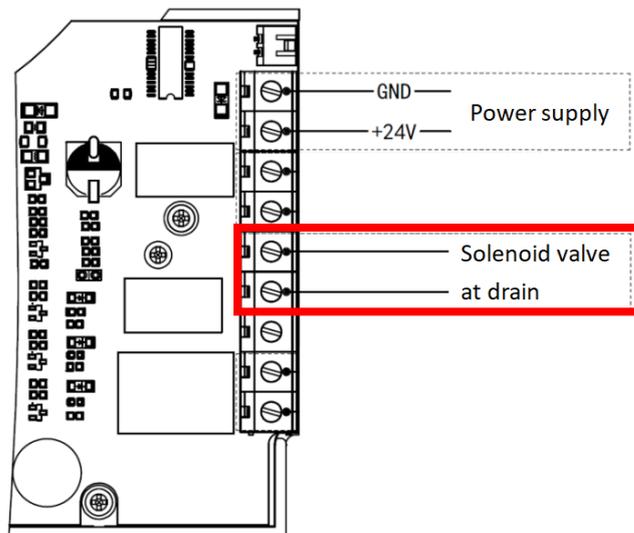
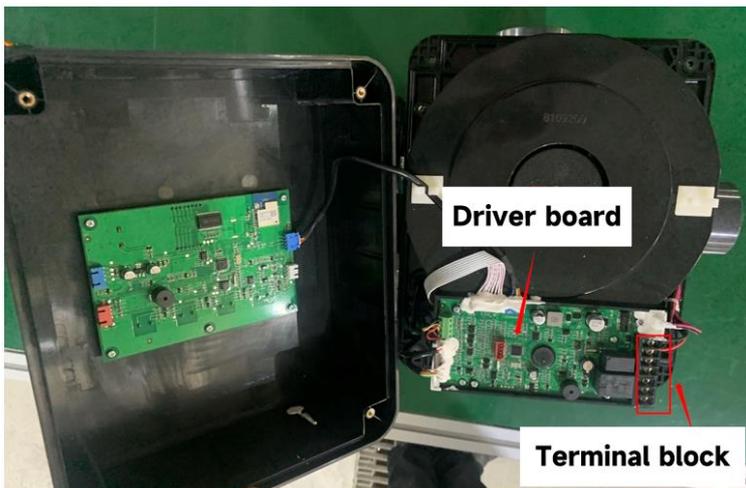


2.4. Connect to solenoid valve for drain line(Vavle 1)

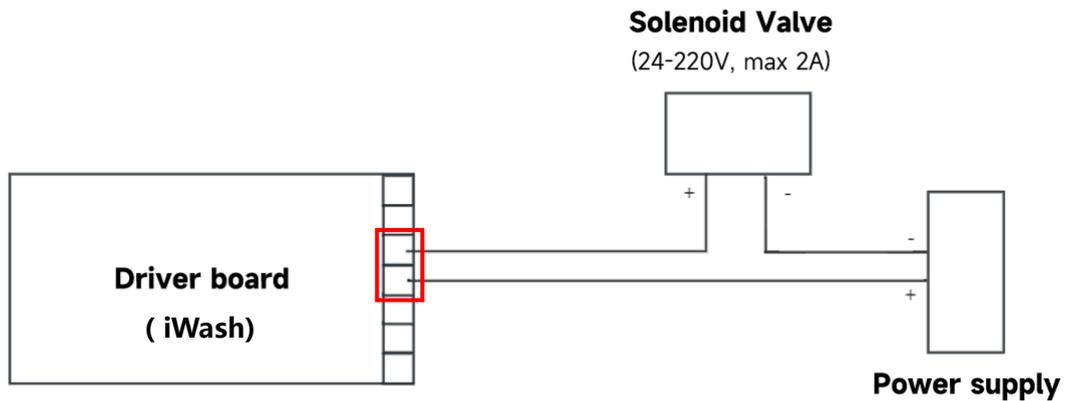
1. Remove the four screws at the back of the automatic multiport valve



2. Locate the solenoid valve terminal block for drain line(vavle1) at the driver board



3. Connect the solenoid valve (prepared by the customer, 24-220V, max 2A) with the valve at the terminal block(vavle1), and install the solenoid valve at the drain line to prevent the pool from emptying if there' s a power failure during the backwash or waste procedure.

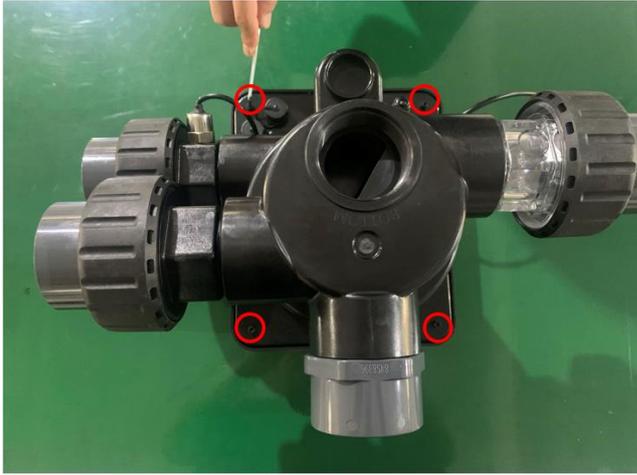


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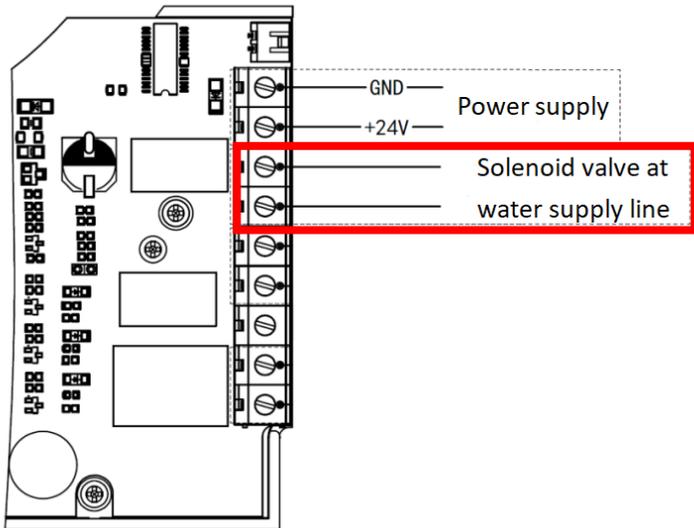
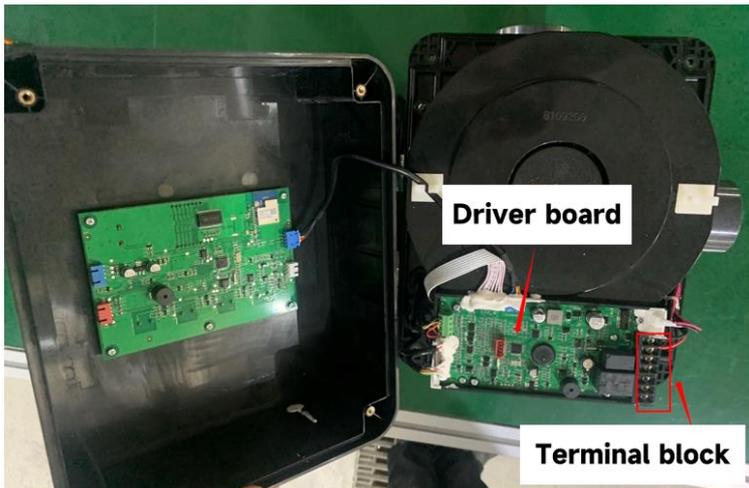
There' s no positive or negative end at the solenoid valve terminal block. Please ensure one end at the terminal block is connected to the positive end of the solenoid valve and the other end is connected to the positive end of the power supply.

2.5、 Connect to solenoid valve for water supply line(Vavle 2)

1. Remove the four screws at the back of the automatic multiport valve

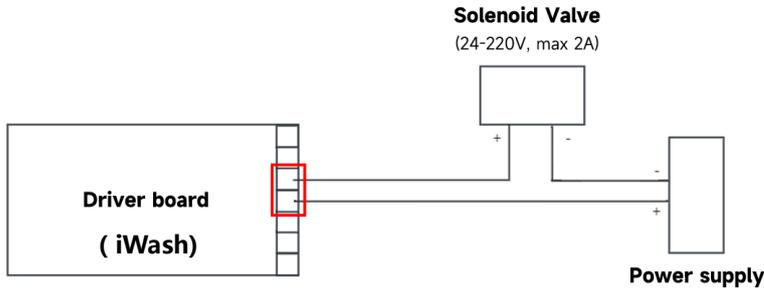


2. Locate the solenoid valve terminal block for water supply line(vavle2) at the driver board
- board



3. Connect the solenoid valve (prepared by the customer, 24-220V, max 2A) with the valve

at the terminal block(vavle2), and install the solenoid valve at the water supply line for water supplement.



Note:

There' s no positive or negative end at the solenoid valve terminal block. Please ensure one end at the terminal block is connected to the positive end of the solenoid valve and the other end is connected to the positive end of the power supply.

2.5. Connect to float switch

1. It's required that when the water level drop, the float switch is closed.

7-pin aviation plug (for float switch sensor & pool automation system connection)			
	Name	Color	Description
	PIN 1	RED	/
	PIN 2	BLACK	GND (float switch)
	PIN 3	WHITE	Float switch
	PIN 4	GREY	/
	PIN 5	YELLOW	RS485 Ground
	PIN 6	GREEN	RS485 A
	PIN 7	BROWN	RS485 B

2. Connect the signal cable to the iWash and float switch.

