

# ALR6 Automatic Liquid Refiller

User Manual  
Version 1.1 **EN**



## **To Users**

Dear user, thank you for choosing XAG products.

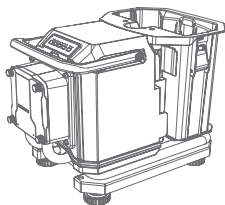
For safety purposes and the best experience possible, XAG recommends reading through the User Manual and Disclaimer contained in this document before attempting to use the ALR6 Automatic Liquid Refiller.

## **Contact Us**

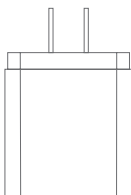
If you have any questions about this document, please contact our Technical Support via email: [info@xa.com](mailto:info@xa.com)

## List of Items

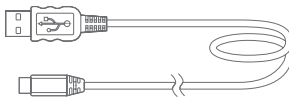
Please check carefully to ensure that this package contains all the items listed below. Contact your dealer if there are any missing items.



Refiller  
× 1



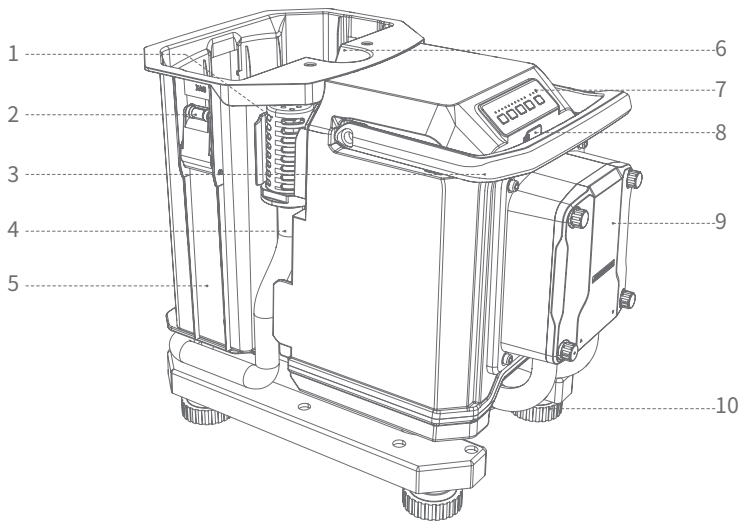
Power Adapter  
× 1



USB To Type-C Cable  
× 1

## ALR6 Automatic Liquid Refiller

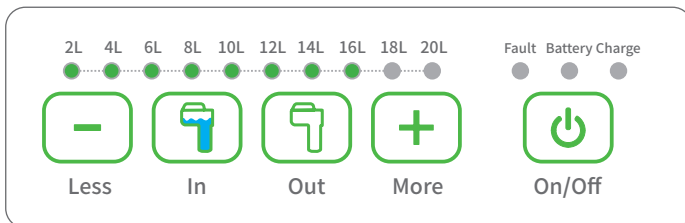
The main structural components of the ALR6 Automatic Liquid Refiller are as follows:



- |  |                          |
|--|--------------------------|
| ① Inlet Tube Sieve                                   | ⑥ Outlet                 |
| ② All-purpose Buckle (each on left, right, and rear) | ⑦ Button/Indicator Light |
| ③ Handle   | ⑧ Charge Port            |
| ④ Inlet Tube   | ⑨ Pump                   |
| ⑤ Sink   | ⑩ Base                   |

# Usage Instructions

## Operational Buttons



### ON/OFF button:

Press to turn on, and press and hold for 2 seconds to turn off.

### Note:

30 seconds after the refiller stops working, the ON/OFF button will flash for 8 seconds before the machine automatically shuts down. Press the ON/OFF button when it is flashing to delay the shutdown for 30 seconds.

### More:

Each time the "More" button is pressed, 2L of liquid will be added.

### Out:

When the refiller is powered on, press the "Out" button to expel all the liquid in the container.

### Note:

If the refiller is disconnected from the container (via Bluetooth), the pump out action will be suspended after 20 seconds.

### In:

When the refiller is turned on, press the "In" button to the refill to the set level .

### Note:

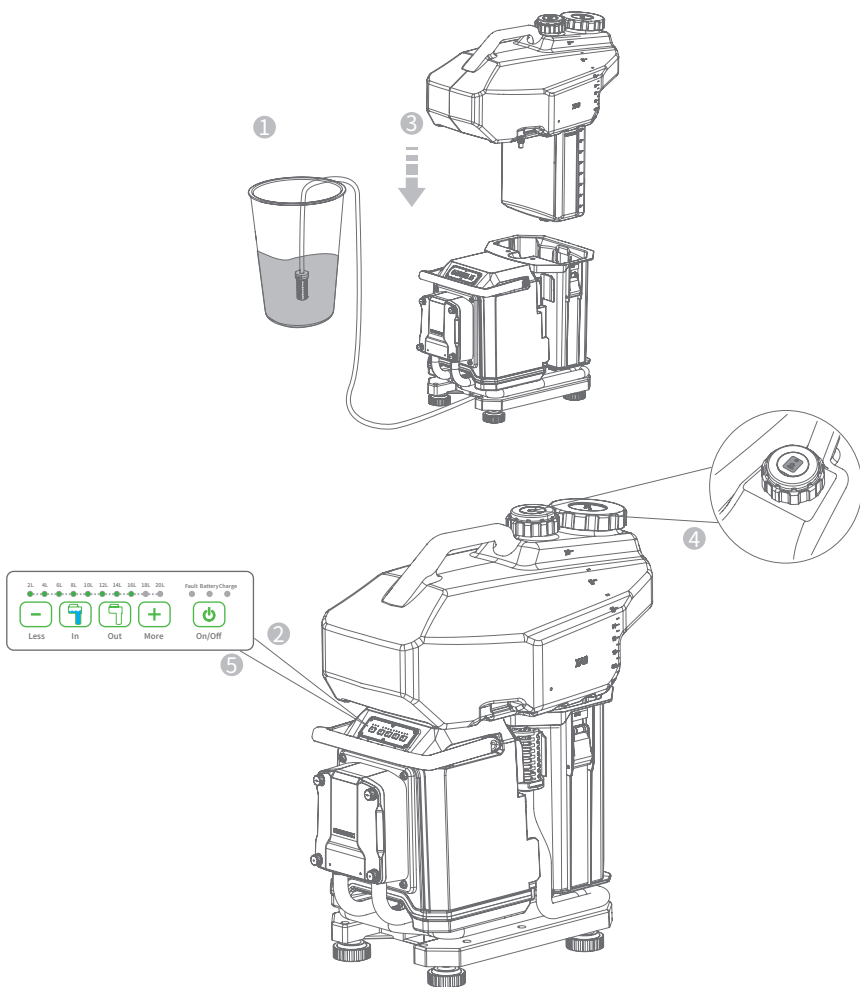
If the refiller is disconnected from the container (via Bluetooth), the refiller will automatically stop filling.

### Less:

Each time the "Less" button is pressed, 2L of liquid level will be reduced.





# How to Operate

1. Place the liquid inlet tube into a barrel containing prepared liquid.
2. Press the "ON/OFF button" of the refiller to power the machine on.
3. Place the container into the refiller. If the container is positioned properly, a "beep" will be heard from the buzzer.
4. Press the "ON/OFF button" of the container. When the power indicator is green, the container is ON.
5. Press the "Refill" button to transfer liquid into the container.



# Description of Status Indicator/Buzzer

There are 3 indicator LEDs on the Automatic Liquid Refiller, each indicating a status as follows:

Charge	Status LED	Status	
	RED LIGHT ON 	Charging	
	OFF 	Charging completed	
	RED LIGHT FLASHES 	Charging circuit failure or battery overdischarge	
Battery	Status LED	Battery Level	
	GREEN LIGHT ON 	50%-100%	
	YELLOW LIGHT ON 	25% -50%	
	RED LIGHT ON 	5%-25%	
	RED LIGHT FLASH 	Power level lower than 5%. Please recharge in a timely fashion.	
Fault	Status LED	Warning/Beep	Status
		Once	The refiller detects that the container has been accurately placed.
	RED LIGHT ON 	Twice	The refiller fails to detect the placement of the container when it starts operation.
	RED LIGHT ON 	Three times	The refiller fails to connect to the container via Bluetooth when it starts operation.
	RED LIGHT ON 	Four times	The float of the container is stuck or the inlet tube or the refiller is blocked.
	RED LIGHT ON 	Five times	The refiller detects irregular rotational speed.
		Six times	The refiller has completed the operation.
		Eight times	The filler detects low battery level. The operation is suspended. All indicators flash eight times and the buzzer beeps eight times before refiller turns off automatically. Charge the refiller immediately.

## Charging Refiller

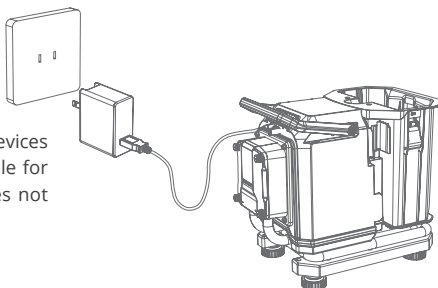
Please charge the refiller with the original charger. When charging, the red charging indicator will be on, and will turn off once the refiller is fully charged.

### Warning

- The refiller must be charged with the charging devices designated by XAG. The user shall be responsible for any problems caused by using charging devices not designated by XAG.

### Note

- Do not charge the refiller in an environment with high temperature, high humidity, or surrounded by flammables.
- After charging is complete, block the charging port with a dust and waterproof rubber plug to prevent foreign objects from entering the refiller and causing short circuiting or damage.



# Upgrading Refiller

Please upgrade the refiller at the firmware center when connected via Bluetooth. The unified Bluetooth name of the refiller is XALR6.

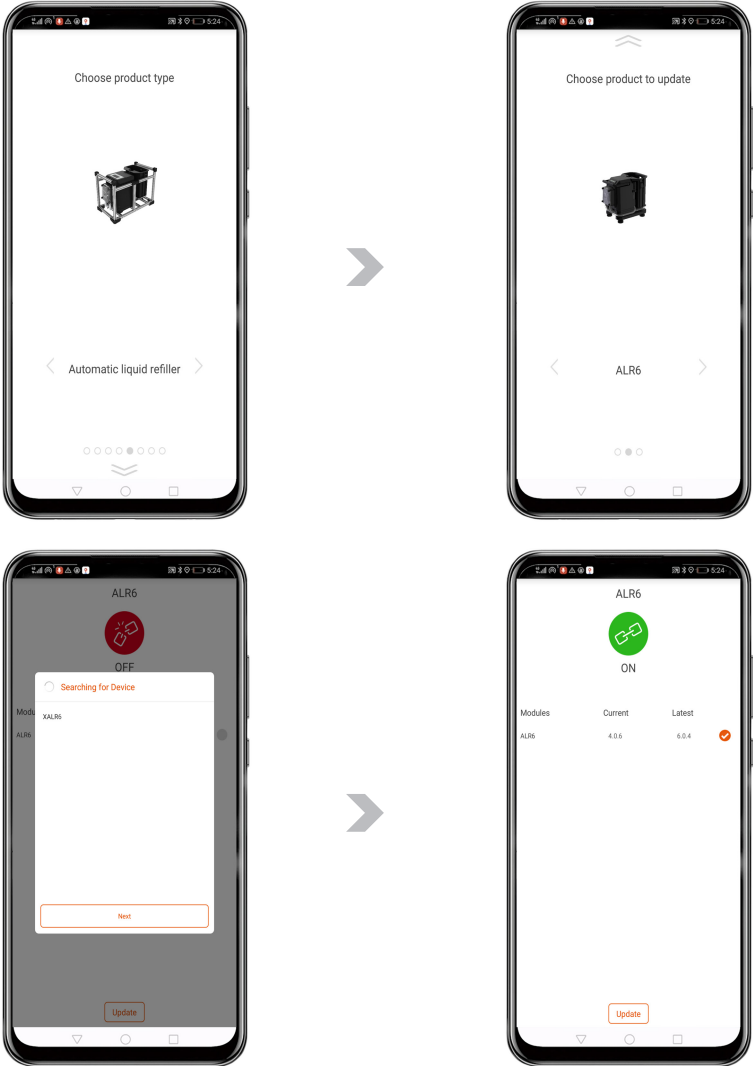
How to operate:

Step 1: Open the "Firmware Center" App in A3 pilot phone;

Step 2: Slide to select the Product Type, click on the Refiller, and choose Liquid Refiller 2020 (ALR6);

Step 3: Select the XALR6 Liquid Refiller;

Step 4: Select the Liquid Refiller 2020 module and click "Upgrade". It takes around 2 minutes to complete the upgrade.





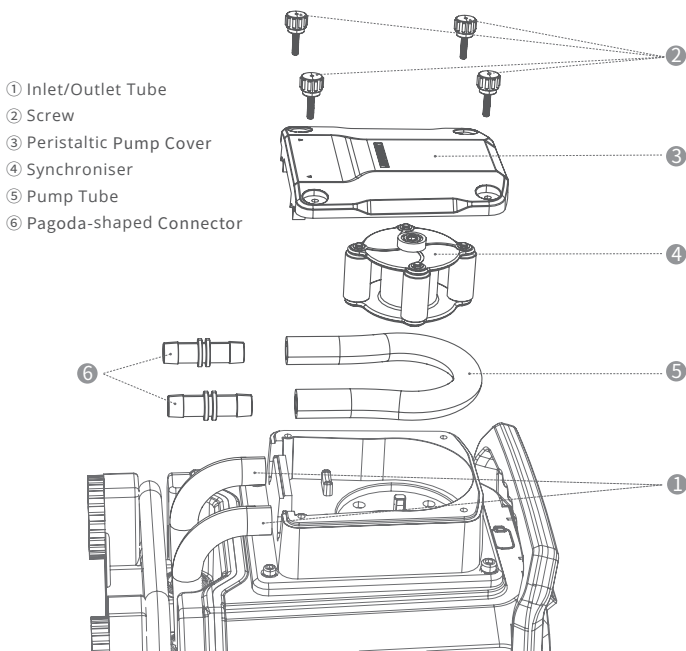
## Changing Refiller Pump Tube

### Disassemble

1. Drain the liquid in the tubes and unplug the inlet/ outlet tubes of the peristaltic pump.
2. Remove the 4 screws that secure the peristaltic pump cover.
3. Remove the peristaltic pump cover, synchronizer, damaged pump tube, and pagoda-shaped connectors, and separate the connectors from the damaged pump tube.

### Assemble

1. Connect the pagoda-shaped connectors to the pump tube. Apply grease to the inner wall of the pump head and the rotor of the synchronizer.
2. Bend the silicone tube around the synchronizer and press it into the pump head. Press the silicone tube down to the center of the rotor.
3. Install the pagoda-shaped connectors, and put the peristaltic pump cover back in place and tighten the screws.



### ⚠ Warning

- Make sure to apply grease and avoid foreign matters.
- Make sure the parts are in place and there is no obvious gap in between.

## Understanding and Handling Refiller Errors

- The buzzer will beep once if the container is properly placed. Otherwise, it indicates the container magnet is broken or the container detection circuit on the motherboard of the refiller is faulty.
- If the refiller is turned on while the container has not been placed, the buzzer will beep twice and the fault indicator will turn red.
- If the refiller is turned on when it is not connected to the container via Bluetooth, the buzzer will beep three times and the fault indicator will turn red.
- If the container float is stuck or the flow rate of the refiller is too low, the buzzer will beep four times, and the fault indicator will turn red.
- If the rotational speed of the refiller is irregular, the buzzer will beep five times, and the fault indicator will turn red.
- When the liquid filling is completed, the buzzer will beep six times.
- 30 seconds after the refiller stops working, all indicators will flash eight times and the buzzer will beep eight times before the refiller is automatically turned off.
- When the battery is low, the operation will be suspended, all indicators flash eight times and the buzzer beeps eight times before refiller turns off automatically. Please charge the refiller as soon as possible.

## Technical Specifications

### Automatic Liquid Refiller

Model: ALR6

Dimensions: 417\*260\*347mm

Weight: 5.50 kg

Protection Rate: IP54

Operating Temperature: 0-40°C

Storage Temperature: -10-40°C

Filling Speed: 7L/min

Rated power: 50W

Continuous Operating Hours: <=2.2h

Compatibility: 20L (10/16L for 2019 Automatic Liquid Container)

### Built-in Battery

Type: 18650 lithium battery

Voltage: 24 V

Capacity: 112Wh

### Charger

Input: AC220V

Output: DC5-12v

Power: 18W

## Disclaimer

1. Please read this document carefully before using this product. This Disclaimer has an important impact on the safe use of the product and your legitimate rights and interests. The use of the product shall be deemed as you have known, understood, acknowledged, and accepted all terms and contents of this document.
2. This product is not a toy, and is not suitable for people under the age of 18. Please keep this product away from the reach of children, and be very careful when operating in the presence of children.
3. This product must be charged with the charging devices provided by XAG. For product malfunction or damage caused by the use of other charging devices, XAG does not bear the corresponding legal responsibility.
4. Please assemble and use this product in strict accordance with the “Product Manual/User Manual” . Do not modify or disassemble the product without authorization. The user shall bear all losses arising from his or her unauthorized modification or disassembly of this product, for which XAG may not be held liable.
5. To the maximum extent permitted by law, XAG shall not be liable for all losses caused by users' failure to use the product in accordance with this document and the “Product Manual/User Manual” .
6. To the maximum extent permitted by law, the liability or amount XAG under any circumstances owes to you for all damages, losses, and litigation arising therefrom will not exceed the amount paid to XAG by you for the purchase of the product.
7. In any case, the purchaser or user shall comply with relevant laws and regulations of the country and region where the product is used. XAG does not assume any liability arising from violation of relevant laws and regulations by the purchaser or user.
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9. To the extent permitted by law, XAG has the final right to interpret and modify the above terms. XAG has the right to update, modify, or terminate these terms through its official website, the “Product Manual/User Manual” , online App and other means without prior notice.

## Warning

Users are required to read the complete “Product Manual” and be familiar with the product operations before using the product. Otherwise, it may cause serious injury to yourself or others, or cause product damage and property loss. Strong safety awareness is required to operate this product. Do not use the parts that are not provided or suggested by XAG. Please strictly follow the instructions of XAG to install and use the product.

P-Series UAV Systems include supporting modules such as Airframe, Remote Controller, Battery, Operation Box, Liquid Refiller, Charger, RTK Rover, RTK Base Station, etc. Users may also check the “User Manual” of the modules for a better use experience of the system.

Visit our website ([www.xa.com/en](http://www.xa.com/en)) for more information



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This Manual is subject to upgrade without prior notice.

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