# ROBOTIC POOL CLEANER Raptor HJ3010



## **USER MANUAL**

Subject to update by manufacturer without prior notice

#### **Important Precautions**

- 1. In order to prevent severe damage to the cleaner, never power on the unit when it is outside of the swimming pool.
- 2. The power cord must be connected to an appropriate earthed socket.
- 3. Do not operate the cleaner when people are in the pool.
- 4. Hold the top handle when putting the cleaner into water or lifting out of the water, do not pull the cable.
- 5. Before power on, make sure to empty the trapped air inside the cleaner (no more air bubbles coming from the cleaner and the cleaner is fully submersed on the pool bottom).
- 6. Before power on, make sure the filter be assembled in position and cable be fully released to avoid any winding, which could affect the cleaner's performance or cause damage.
- 7. Remote control should be hold vertically for a maximum control distance.
- 8. Please clean and wash the filter bag every time after use.
- 9. The cleaner should be stored in a cool and ventilated place, away from direct sunlight when not in use.
- 10. The power supply unit should be placed in a shaded area during working. In order to avoid overheating and potential damage of components, never cover the power supply unit.
- 11. Only authorized after sales service personnel should open the cleaner's power supply unit and motor assembly, otherwise the warranty will be invalidated.
- 12. In order to avoid any accident/damage, it is strongly recommended to connect the caddy with a fixed holder beside the swimming pool by using the safety rope (included in the package).
- 13. Do not use the cleaner beyond the working environment/conditions stated in this manual.
- 14. After power off the machine, must wait until at least 30 seconds to restart it.
- 15. For different season different density of the filter net need to be chosen. More detail please contacts your local distributor.
- 16. This machine is for clean the pool only not for other purpose.
- 17. It may cause minor pollution in case of the leaking from the oil seal.

Please read this instruction manual carefully before use and keep it for future reference.

#### Contents

I .Introduction·····P 4
II.Safety· ····P 5
III.Specifications·····P 5
IV. Components of Swimming Pool Cleaner·····P 6
V . Preparation Before Operating·····P 9
VI. Instruction of Operating panel ······P 10
VII. After Use of Cleaner P16
VIII. Caddy assembling·····P18
IX. Packing List·····P19
X. Warranty ·····P20

## I.Introduction

The Raptor HJ3010 (Basic model) robotic pool cleaner is a new type of highly efficient and energy-saving swimming pool cleaning robot. Through its advanced computer controlled program, it can clean the pool walls and bottom automatically. At the same time, it filters the pool water and gets rid of suspended particles without replace the pool water. It's total environmental-friendly.

For safe operation, the cleaner works on 24V direct current. Please read this user manual carefully before use.

#### **Features:**

- ◆ 24V DC guarantees safety
- ♦ Smart program of cleaning route
- ♦ Manual/auto control to move forward/backward, turn left/right
- ◆ Control on smart phone apps through wifi (optional)
- ◆ Full coverage of pool floor, walls and waterline, multiple choice of pool floor only, walls only, once for each of pool floor and walls, or even triple for pool floor and once for pool walls
- ◆ Powerful vacuum filter system to catch leaves, hair, mud, dust, algae and other fine particles on the floor.
- ◆ Light weight, detachable filter container
- ◆ Filter bag full load alarm
- ◆ Out of water sensor and alarm, cable defect alarm, motor defect alarm, switch power defect alarm; all of these fault diagnosis shows on the display screen
- ◆ Fit for all types of pool

## II. Safety

#### 1, Power supply unit position:

Power supply unit need to be placed in proper position so as to reach the distal end of pool for the cleaner, meanwhile as least 3.5m from pool edge.

#### 2, important:

Before power on, make sure local voltage/frequency matches the rated voltage/frequency of the cleaner

Rated input voltage: 110VAC (120VAC) / 220VAC (230VAC)

Frequency: 50Hz/60Hz

## **III. Specifications**

1. Rated input voltage: 220VAC (230VAC)/ 110VAC (120VAC)

2. Frequency: 50Hz/60Hz

3. Output voltage: DC24V

4. Power: 200W

6. Remote control frequency: 433M

7. Cable length: 20m

8. Roller length: 465mm

9. Max cleaning area: Appr. 270 m<sup>2</sup>

10. flow rate: 20m<sup>3</sup>/h

11. Filter net density: 180um (250um optional)

12. Pool water temperature:  $10^{\circ}\text{C}$ -32°C

14. Moving speed: MAX 12.5m/min

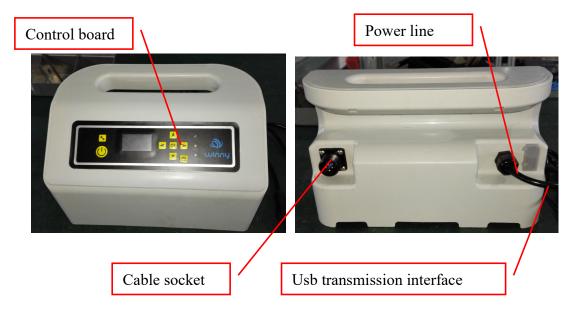
15. IP grade: Cleaner IPX8

Power supply unit IPX5

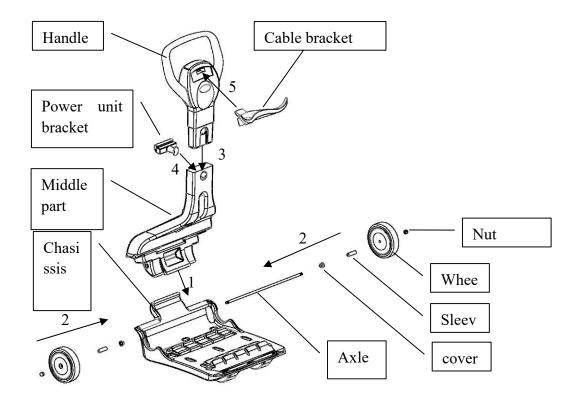
16. Cleaner weight: 12.5kg (Without cable)

# **IV.** Components

1. The cleaner consists of power supply unit, caddy, cleaner and remote control, with Bluetooth control function.



Pic.4-1 Power supply unit



Pic. 4-2 Caddy

#### Remote control

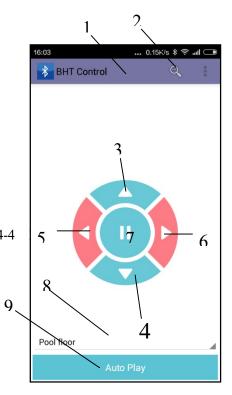


Pic. 4-3 Remote control

No.	Symbol	Description	Function	
1	Antenna			
2		Indicator light		
3	RUN	1	Press this button, robot runs automatically as per preset programme	
4	<b>&gt;</b>	Keep pressing	Turn right	
5	STOP	Stop	Robot stops	
6	<b>A</b>	Press once or keep pressing	Move forward	
7	•	Keep pressing	Turn left	
8	•	Press once or keep pressing	Move backforward	

#### Bluetooth control

item	Function	Detail			
1	Connection status	<ul><li>Disconnected: white</li><li>Connected: Purple</li></ul>			
2	Signal search	Press to search blue signal			
3	Forward	Press to let the cleaner move forward			
4	Backward	Press to let the cleaner move backward			
5	Left	Press to let the cleaner turn left			
6	Right	Press to let the cleaner turn right Pic 4			
7	Stop	Stop			
8	Cleaning mode	<ul> <li>Pool floor: only cleaner pool floor</li> <li>Pool wall: only cleaner pool walls</li> <li>One floor one wall: clean pool floor and pool wall each for once,</li> <li>Three floor one wall: cleaner pool floor for</li> </ul>			
9	Auto mode start/stop	● Auto Play: cleaner works in auto mode ■ STOP: Stop auto mode			



Pic 4-4 Bluetooth control

Pic. 4-5 Overview



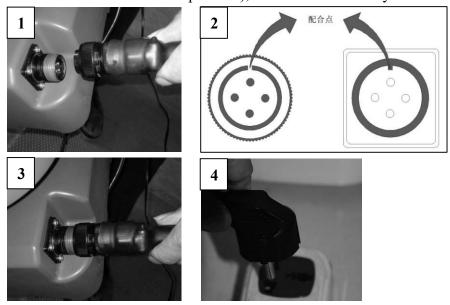
# V. Preparation before start

1. Hold the top handle and put the cleaner into the pool, Make sure to empty the trapped air inside, then The cleaner can immerse into the pool floor.



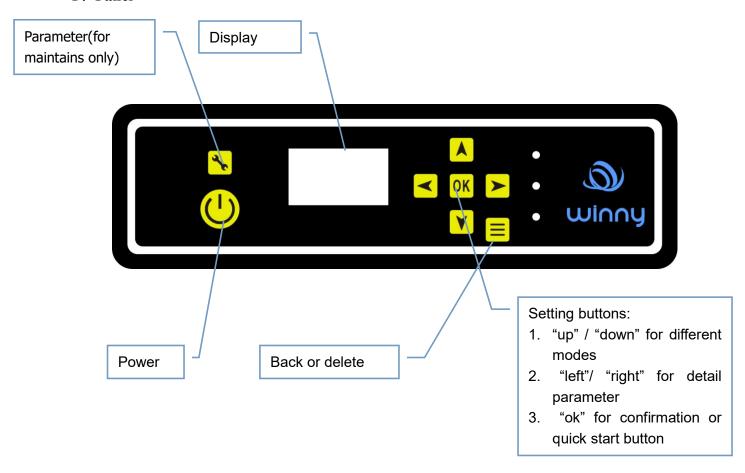
#### 2, Power Connection

Once the cleaner immersed into the pool floor, connect the cable with the power supply unit, and fasten the nuts on both sides, then plug into your power socket; (make sure to plug it in the correct direction and position), . The cleaner is ready to work



# **VI.** Operation

#### 1, Panel



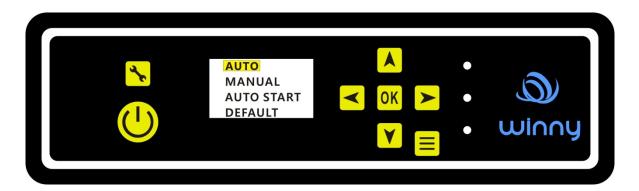
#### 2, Detail

2.1, Press button to power on



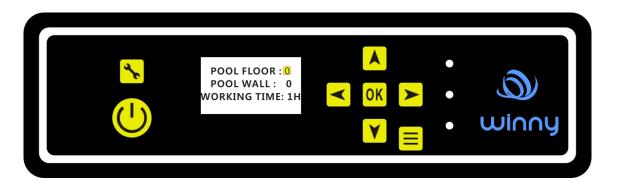
2.1.1 Press OK button machine will running as 【DEFAULT】 setting. (2 hours working cycle, three times of bottom one time wall)

- 2.1.2, Notice: when machine start to running as 【DEFAULT】 setting all button on the right of the display will not able to work, to stop machine please press button.
- 2.2.1, Press button, choose [AUTO] into AUTO mode setting



AUTO	AUTO mode setting
MANUAL	Manual mode setting
AUTO START	Auto start setting
DEFAULT	Default mode (triple for pool floor then once for walls,working 2 hours)

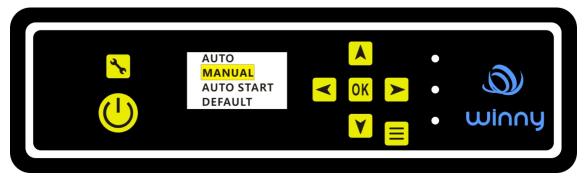
2.2.2, Press button, into [AUTO] into sub-menu



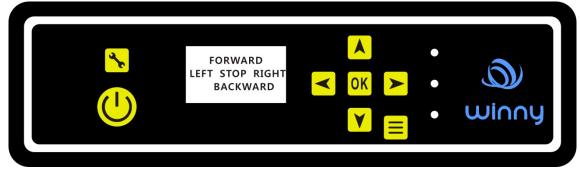
POOL FLOOR	Choose how many times to clean floor than clean other
	part of pool, choose 0 means machine will clean wall
	only.
POOL WALL	Choose how many times to clean wall, choose 0 means
	machine will clean floor only.
WORKING TIME	Duration of working cycle, can choose from 1-12 hours.

After setting, press ok button to confirm, machine will start to work.

2.3, Press button, select [MANUAL] option.



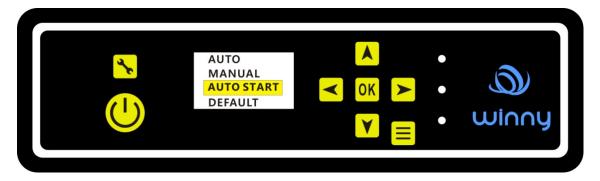
2.3, Press button, into [MANUAL] sub-menu.



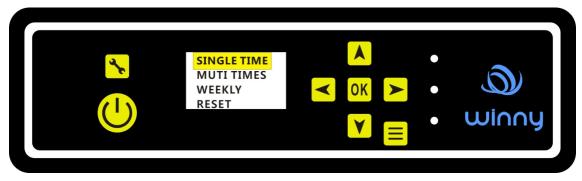
FORWARD	Moving forward
BACKWARD	Moving backward
LEFT	Turn left
RIGHT	Turn right
STOP	Stop

Once choose MANUAL potion, keep pressing the direction button to control the machine, release the button the machine will stop.

2.4 Press button, choose [AUTO START] option.

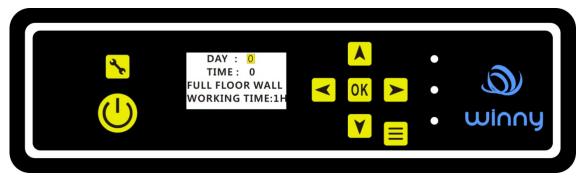


2.4.1, Press button, into 【AUTO START】 sub-menu



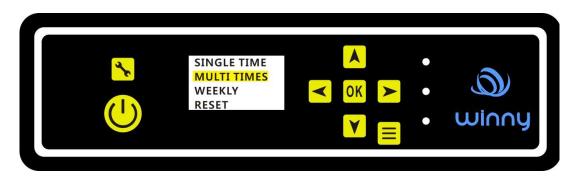
SINGLE TIME Auto start single time	
MUTI TIMES	Auto start more then once
WEEKLY	Auto start weekly
RESET	Cancel auto start

2.4.2, Press button, into [SINGLE TIME] sub-menu.

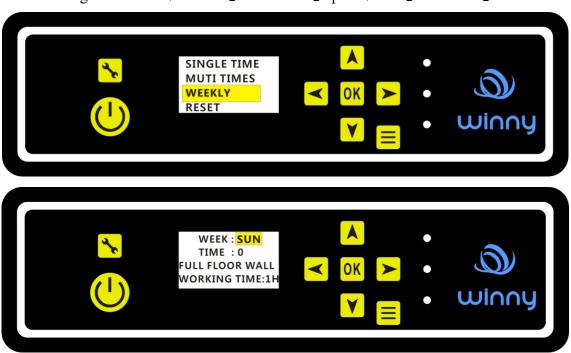


DAY	Can choose any day from 1-28
TIME	Choose start time
FULL FLOOR WALL	Three working models, full; floor only; wall only.
WORKING TIME	Duration of work cycle, from 1-12 hours

2.4.3 according to 2.4 menu, choose [MULTI TIMES] option, into [MULTI TIMES] sub-menu, all setting are same from SINGLE TIME setting.



2.4.4according to 2.4 menu, choose [WEEKLY] option, into [WEEKLY] sub-menu.

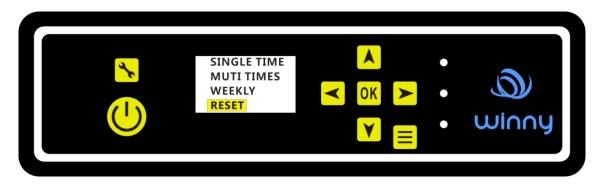


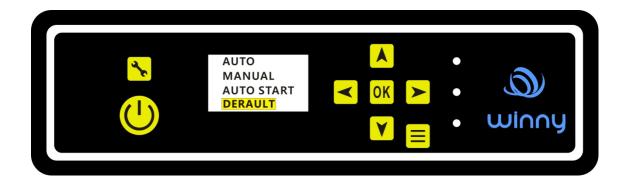
2.4.5.Press button, into [WEEKLY] sub-menu.

WEEK	Choose a day to auto start
TIME	Choose the time
FULL FLOOR WALL	Three working models, full; floor only; wall only.
CLEAN TIME	Duration of working cycle, from 1 to 12 hours

**NOTICE:** Make sure press oK to confirm all settings, press to switch off. Do not disconnect the power plug of the power supply unit

2.4.5 Chose "Reset" and press **OK** to clear all auto-start settings

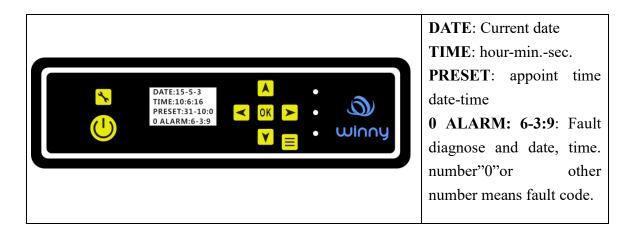




2.5, Press button, choose 【DEFAULT】 option.

Press of button, machine will work follow the default setting. (three times of pool floor one time of pool wall)

3, Press button to see the working status



#### 4, Fault diagnose (Alarm)

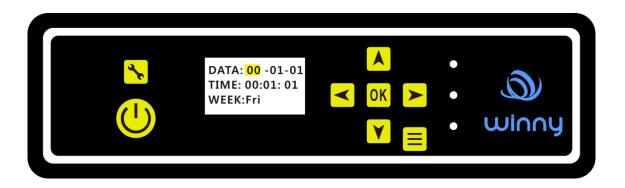
The indicator light will flash in case there is an alarm, and fault diagnosis will show on display screen

Alarm code	Diagnose information	meaning
1	Communication anomaly	Electrical communication fault
2	Robot to leave pool!	Cleaner out of water
3	Water inlet Check seal box	Water gets into the sealed motor
		tank

4	Pump over load! Check pump motor	Pump motor over loaded		
5	Motor over load Check 1_motor!	Driving motor 1 over loaded		
6	Motor over load Check 2_motor!	Driving motor 2 over loaded		
7	Voltage V Check power!	Fault on power supply unit, unusual voltage		
8	Robot box full Check Robot box	Filter tray over loaded		

#### 5. Time setting.

Press to power on, then press the two buttons and time.



Press button and week day.

## VII. After use

#### Lift the cleaner out of pool

The cleaner will powered off automatically after one cleaning cycle. Unplug the power cable, pull the cable line slightly and lift the cleaner by carrying the top handle.





#### Note:

- 1) In order not to scratch the pool wall or damage the cleaner, avoid the cleaner touching the pool wall during carrying out from pool.
- 2) Before lifting out from pool, suspend the cleaner above water for about 10-15 seconds to empty the inside water.
- 3) Please hold the top handle only, never pull the cable.

#### Wash and reassemble the filter as following steps:

1. Lift the handle



3. Push towards the middle to open the filter tray



2. Lift the filter tray

4. Move the filter panel outwards about 2 cm



5 .Pull out the filter panel vertically



6. Rinse the filter



7. Slide the filter tray along the groove



8. Filter tray match with cleaner



9. Press the two ends of handle to fix with robot



10. Two filter trays reassembled





# **VII.** Caddy assembling





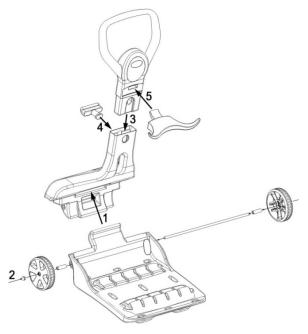












# IX.Packing list (delivered package in kind prevail)

Item		Name	Type	QTY-p	Model	Remark
1	Cleaner	Cleaner body		1		In carton
2		Power supply			HJ-3010	In carton
		unit		1	НЈ-3011	
3		User manual		1		Plastic bag
4		Filter		2		Plastic bag
5		Remote	23A	1		Plastic bag
		battery				
6		Antenna	HJ-2028	1	НЈ2028/НЈ	Plastic bag
					-3010/HJ30	
					11	
7		Remote	HJ-2028	1	НЈ2028/НЈ	Plastic bag
		control			-3010/HJ30	
					11	
10	Caddy	Top handle		1		In carton
11		Middle part		1		In carton
12		Chassis		1		In carton
13		Power unit		1		In carton
		bracket				
14		Cable bracket		1		In carton
15		Axle		1		In carton
16		Wheel		2		
17		Nut	M10	2		Plastic bag
18		Sleeve		2		Plastic bag
19		Cover		2		Plastic bag

# X. Warranty

Motor and electronic parts two years warranty.