

TABLE TENNIS ROBOT

Intelligent Voice Prompt APP Multifunctional Table Tennis Robot

V-989K

TABLE TENNIS ROBOT
Instruction Manual

Please read this manual before operation

Dear Customers:

We would like to take this opportunity to thank you for purchasing this table tennis robot. Please read this instruction manual carefully and keep it properly for better referencing at a later time.

Safe utilization and the regulations

Attention!

- Our company reserves the right of final interpretation for the manual and this product.
- Our company reserves the right to amend the contents in this manual without any notice in advance.
- Pictures in this manual are for reference only. If any discrepancy found between certain picture and product, please subject to the actual product.

Warning!

To prevent the danger of fire, electric shock, personal injury and product damage, children should be supervised while operating the robot:

- Instructive advice should be given when machine used by children.
- Avoid windy and/or rainy days when using outdoors.
- Use care when connecting and disconnecting the ball collecting net.
- When robot is operating, please keep away from the shooting head to avoid being hit with a ball.
- When robot is operating, if you observe something abnormal, such as smoke coming out of the robot, stop the robot and unplug it immediately. Repair must be performed by a qualified repair person.
- Do not remove the housing/cover of the robot without authorization.
- Some places on the robot will heat up during operation. Please be careful and pay attention so as to avoid burning yourself.
- Turn the power switch off and unplug the robot after use.

If any damage or loss due to the fact that you don't follow the safe utilization and regulation, and the proper usage instructed in this manual, our company will not take any responsibility.

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Components name of the table tennis robot and ball collecting net

Top-wheel

Bottom-wheel

Net Support

LCD panel support

Support frame

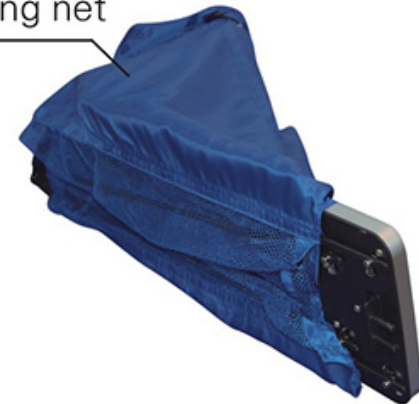
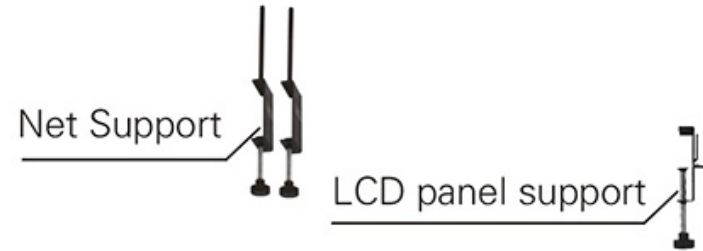
Ball container

Cell phone box

Power switch

LCD panel
(sold separately)

Ball collecting net



How to assemble the ball collecting net



1. First, open the lock buckles of the ball collecting net.



2. Partially unfold the ball collecting net, adapt the square outlet of the net with the robot head.

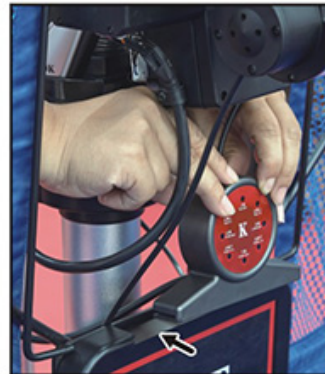
Insert the pin in the ball collecting net into the support frame of the robot.



Support frame



3. Spread out the ball collecting net with both sides.



4. Insert the Spin indicator panel into the slot of the net. If you need to disassemble the net, remove the Spin indicator panel first.

5. Put the table tennis robot close to the edge of table. Open the wheel lock when moving the robot.

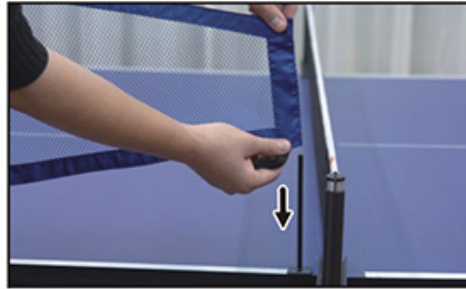
Wheel Lock



How to position the table tennis robot



6. The net supports are clamped to both sides of the table near the net.



7. Put both end sleeves of the ball collecting net on the net supports.



8. And the rubber rings are to be buckled to the outsides of the net support.



9. Attach the cell phone box to the LCD panel support, and put the mobile device inside the cell phone box (Picture A). If using the LCD panel, remove the cell phone box, and attach it to the LCD panel support instead. Please remove the screen protector from the LCD panel before using it; otherwise it may affect the touch sensitivity.



10. The presenting picture of a completed installation.



11. After training, fold back the ball collecting net in a reverse order of the original process, lock the buckles in a right way, and put it in any suitable place.

Attention: Please install the cell phone box securely. If it causes damage to the mobile device due to improper use of the cell phone box, our company does not undertake to compensate users for any losses.

What power supply to use



The connection between plug and socket should be perfect. Unplug the robot after finishing the exercise.
(Input: AC100V-240V, 50/60Hz)



The power switch locates at the back side of the machine body, turn the switch "on" before the use of robot and turn the switch "off" after use.

Capacity of the Ball Container



The ball container may contain 100 balls in 40mm size. The level of the balls in the ball container should not be higher than the label (yellow line) positioned inside. Other things(except table tennis balls) should not be put into ball container, otherwise its parts may be damaged, affecting normal operation of robot.

Control method

This model has two control methods: Bluetooth APP control and LCD panel control (the LCD panel is sold separately; installation is described in a separate page)



Bluetooth APP control



LCD panel control

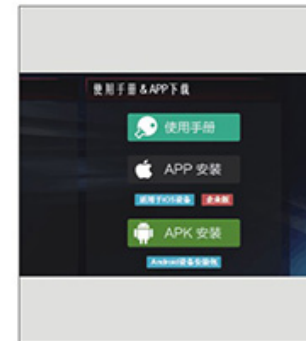
Attention: The following instruction pictures use the Bluetooth APP control interface.

APP download guide:

Scan the QR code on the robot, go to the download webpage, and select the APP for either iOS or Android device. For iOS device, you can download it directly from the Apple App Store by searching the name “Taide Robot V-989K” .

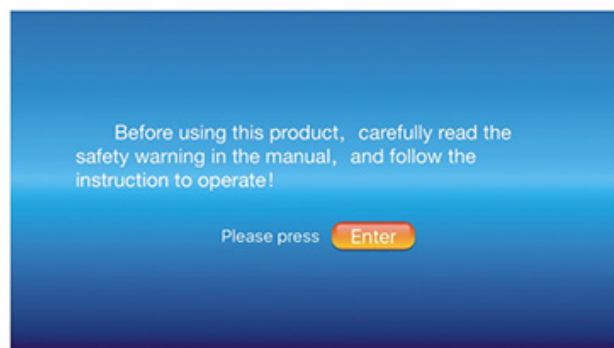
How to connect mobile device to robot:

Turn on the robot, and turn on the Bluetooth on your mobile device. Click on the APP, follow the instruction to connect to the Bluetooth. Once the connection is successful, you can start using the robot. One robot can only connect to one mobile device with Bluetooth connected. If you want to connect it to another mobile device, please turn off the Bluetooth on the other one or close the APP (due to the difference between device models or the Bluetooth version, the connection may fail, the mobile device may not be able to control the robot properly. Please reconnect the robot with your mobile device).

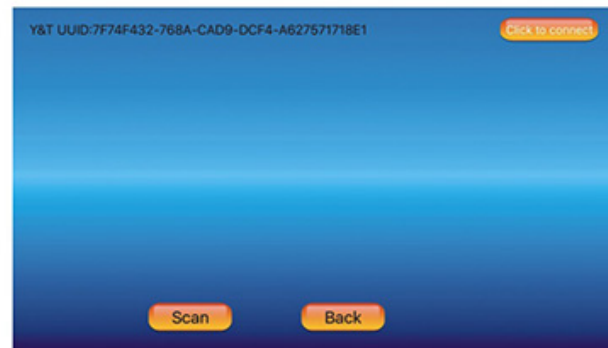


Main menu functions description

Click on the APP, the welcome screen shows up (Picture 1). Read the message carefully and press “Enter” to enter into Scan screen (Picture 2), press “Click to connect” to enter into the Main menu (Picture 3).



Picture 1



Picture 2

Main menu functions



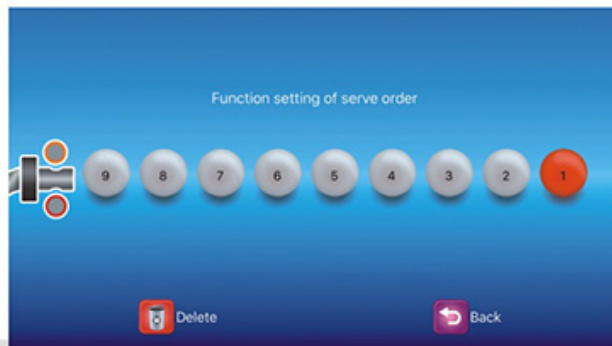
Picture 3 Main menu

- Landing spots/Functions: adjust all the Function of each ball.
- Frequency: adjust the ball frequency .
- Total ball counts/Timer: set the number of balls to receive and working time.
- Custom sequences: program your own multifunctional sequence.
- Build-in sequences: select the pre-programmed sequence.
- Setting: adjust Volume* #, Language* #, Top Wheel speed, Bottom Wheel speed, Frequency, Time# and Display brightness#.
- Reset: reset all settings to default.
- Start: press this button to start the machine after setting the functions.
- Scan: click to connect to the robot
- Time: display the current time#.

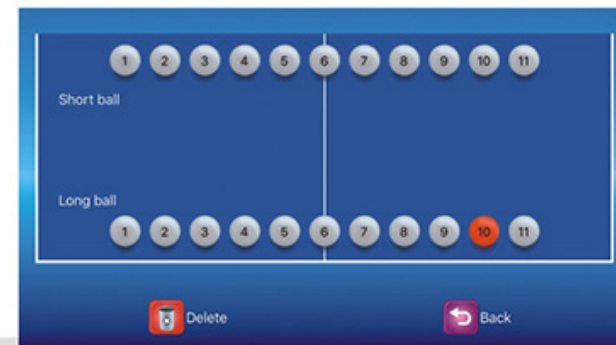
* Functions included in Android device
#Functions included in LCD panel

Landing spots/Functions

Setting the Landing spots/Functions: Press the “Landing spots/Functions” on the Main Menu (see Picture 3), enter into the following screen (see Picture 4), the function of the first serving set to the ninth serving set can be programmed individually in this menu. The routine begins from the first serving set to the ninth serving set, and then repeat from the first serving set until the machine is turned off. The system will automatically skip the non-programmed serving set. For example, to set the function of the first serving set: press the “1” button on the function setting screen (see Picture 4, the orange color indicates the set selected). Press “Delete” to reselect if needed), and then enter into the landing spot selection screen (see Picture 5). Now you can select any ideal landing spot from total of 22 landing spot for both long and short ball. If no selection applied, the default landing spot is spot #10 for long ball. You can only select one spot each time. The spot will turn orange after being selected. Press “Delete” to reselect if needed. (The setting procedure for second serving set – ninth serving set is the same.) After choosing one landing spot, it goes to the next screen (see Picture 6).



Picture 4



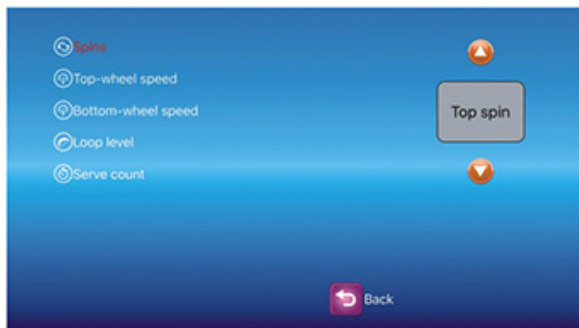
Picture 5

Landing spots/Functions (Spin, Top/Bottom wheel speed, Loop)

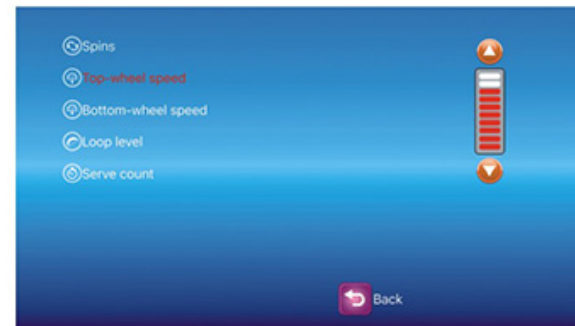
The selected function will turn red after you press either one of the functions: Spins, Top-wheel speed, Bottom-wheel speed, Loop Level, and Serve count. When the “Spins” function is selected (see Picture 6), press the Up and Down arrow to choose different spins. When the robot begins to serve ball, the Spin indicator panel will show the selected spin. (Top and Under spin display at the same time means “No spin” or “Dead” ball).

Press “Top-wheel speed” function (see Picture 7) to adjust the top wheel speed of spin and press “Bottom-wheel speed” function (see Picture 8) to adjust the bottom wheel speed of spin. Each wheel has 10 stages to choose from. You may make appropriate change on the speed according to your desire. (The Top and Bottom wheel speed associate with the spin behavior.)When Top wheel speed is much higher than Bottom-wheel speed, the serve/ball is top spin. When Top wheel speed much lower than Bottom wheel speed, the serve/ball is under spin. Less or no spin is produced when both wheel speed are set very close to each other. If the top and bottom wheel speed adjustment is out of range. The actual spin behavior may be different from the displayed spin setting. In Settings screen, you can make a fine-tuning for the top and bottom wheel speed (See Page 12 for details)

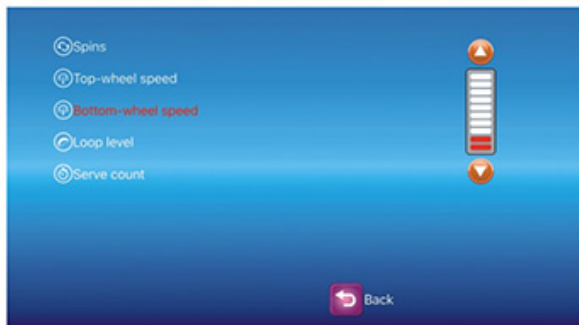
Press “Loop level” function (see Picture 9) to adjust the arc of the ball's flight. There are 7 stages to choose from. You may make appropriate change on the loop level according to your desire.



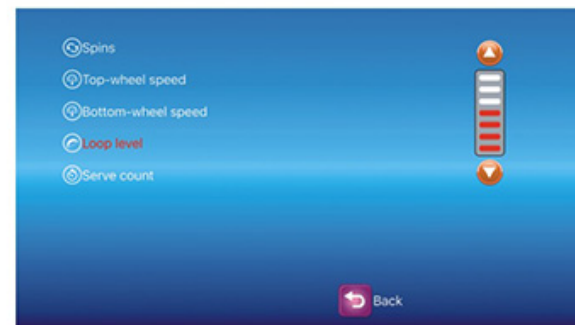
Picture 6



Picture 7



Picture 8



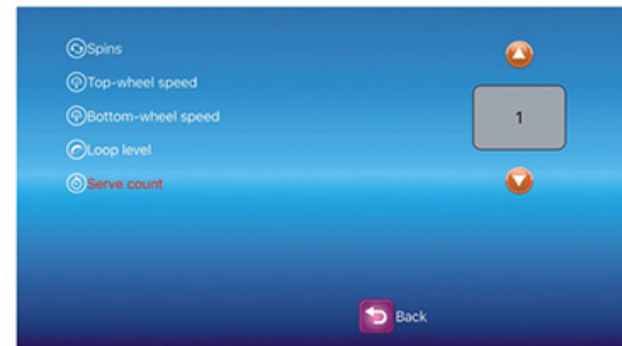
Picture 9

Landing spots/Functions (Serve count)

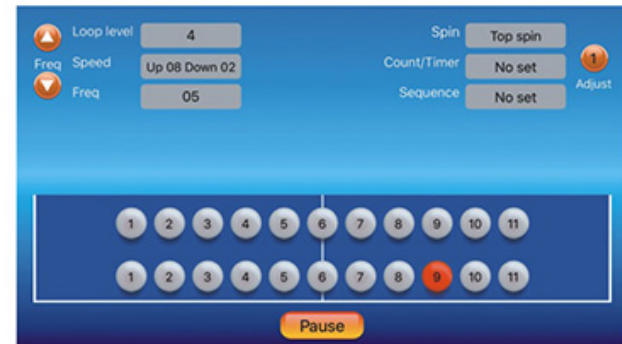
Press “Serve count” (see Picture 10), and then press Up and Down arrow to choose how many ball counts (from 1–9) in that particular serving set. (If “0” is selected, the system will skip this serving set). You can make adjustment on some of the functions or all five functions on this menu. If no adjustment made on the function, then it'll show the default setting. After setting the functions, press “Back” to save all the current setting, and then return to the previous menu (see Picture 4 on Page 7). You can use the same procedure to program the second serving set – ninth serving set. If you don't want to make any adjustment, press “Back” (see Picture 4) to return to the Main Menu (see Picture 3 on Page 6). Press “Start” on the Main Menu, the robot begins to serve ball according to your setting. And the Touchscreen LCD panel starts displaying the working interface at this point. The working interface shows the current setting including: Loop, Top/Bottom wheel speed, Frequency, Spins, Count/Timer, Sequences and Landing spot.

Frequency

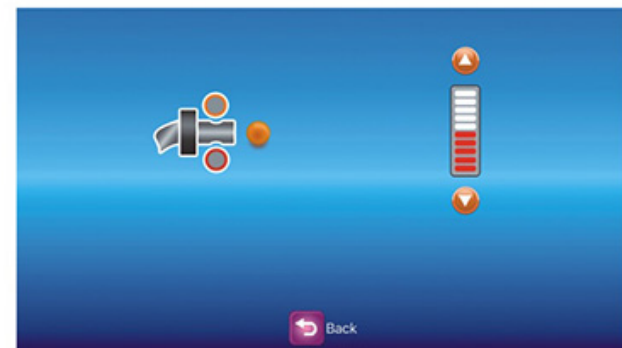
Press the “Frequency” on the Main Menu while the robot in standby mode, enter into the Frequency screen. Press Up or Down to increase or decrease the ball frequency. There are totally 10 stages you can choose from. After setting the frequency and press “Back”, the system will automatically save this setting and return to the Main Menu (see Picture 3). Press “Start” on the Main Menu, the robot begins to serve ball. If you need to adjust the ball frequency while the robot is still running, you may press the Frequency Up and Down arrow from the working interface (see Picture 11). You don't need to go to the Main Menu to make the adjustment. The ball frequency of this robot is approximately 28–90 balls per minute. In Settings screen, you can make a fine-tuning for the frequency (See Page 12 for details)



Picture10



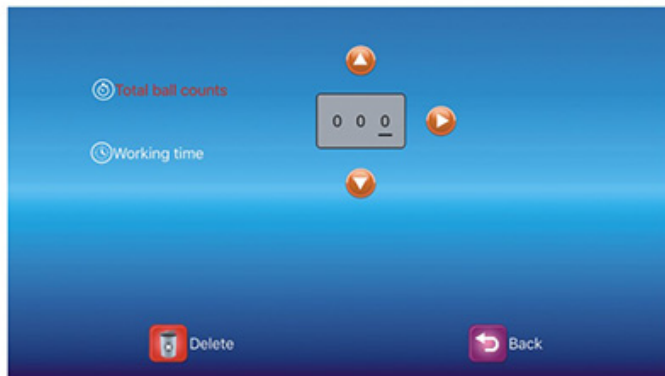
Picture11



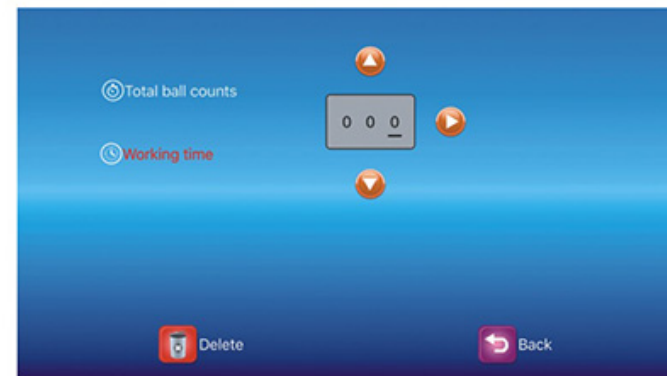
Picture12

Total ball counts/Timer

In this menu, you have two options to choose from, either make selection for Total balls counts or Working time. You can not make both selections at the same time. To select “Total ball counts” : press “Total ball counts/Timer” on the Main Menu (Picture 3), enter into the following screen (Picture 13). The default setting for Total ball counts is 000, means “Infinite” serve/ball. Press Up and Down arrow to select 3 digit numbers for total ball counts (from 001–999). Press right arrow to move from units to tens and hundreds. To select “Working time” (see Picture 14): set the timer accordingly from 1–180 minutes. 000 means “Unlimited” time. After setting the ball counts or timer, press “Back” to save the current setting and return to the Main Menu. Press “Start” on the Main Menu, the robot begins to serve ball until the Total ball counts/Timer reaches 0. You may hear a “beep” sound when the machine stops, and the Main Menu will show on the touch screen. You can repeat the setting according the above procedure. Press “Start” to play directly at default setting if you don't want to set the Total ball counts/Timer.



Picture 13



Picture 14

Custom sequences

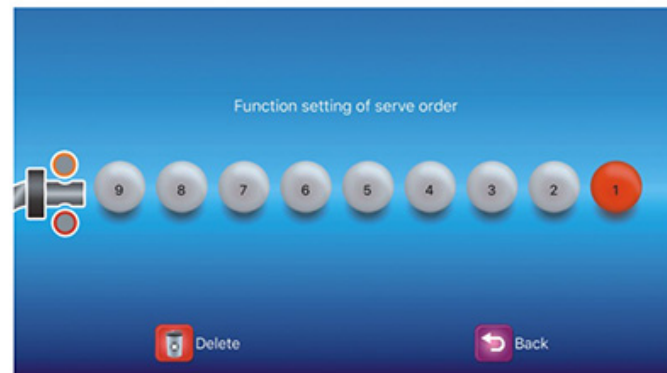
Press the “Custom sequences” on the Main Menu and enter into the Custom sequence selection screen (see Picture 15). After one Custom sequences number (#1–#9, “Off” means no setting applied) being selected, press “Set functions” to enter into the screen in Picture 4A. Now you may set the serving set the Landing spot, Spin, Top–wheel speed, Bottom–wheel speed, Loop level, And Serve count (see Picture 5– Picture 10). After setting the function of the first serving set, press “Back” to return to the screen in Picture 4A, set the functions of second, third...,ninth serving set if needed. Press “Save” to save the current setting and return to the Main Menu. Press “Start” in the Main Menu to start the routine. To have the same sequence for next use, you only need to choose that Custom Sequence number from the Custom Sequence selection menu, and return to the Main Menu to begin. (If pressing “Reset” button, the memory of Custom Sequence will be erased.)

Build-in sequences

Press the “Build-in sequences” on the Main Menu and enter into the Build-in sequence selection screen (see Picture 16). There are total 30 numbered sets of pre-programmed sequences (#1–#10 for beginner, #11–#20 for intermediate player, #21–#30 for advanced player, “Off” means no setting applied). They all have default setting and parameter (Landing spot, Spin, Long/Short ball, Serve count). If you need to modify the Build-in sequence, you can press “Change confirm” to load that sequence to the Function setting screen (see Picture 4), then you can make the change on each function. The modified Build-in sequences can be used temporarily. If exiting this sequence or pressing “Reset” button, the modified setting will be erased, and the setting and parameter of Build-in sequence should restore to factory default.



Picture15



Picture4A

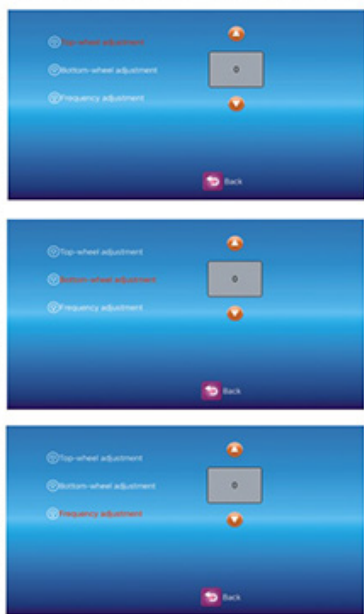


Picture16

General settings

Click on the “Settings” on the Main menu to enter into the following screen, you can make a fine-tuning for the Top Wheel Speed, Bottom Wheel Speed, and Frequency (these three values can be tuned for a small range of value based on the factory setting. After RESET to the Factory setting, those values will change back to the default). For iOS device, the Volume and Language can be set in the device settings itself. This model support languages including Simplified Chinese, Traditional Chinese and English. For LCD panel, you can use Up, Down, Right arrow to adjust the time by moving the cursor to the right position. (If the Time does not show correctly, or not able to show at all, the battery on the circuit board may run down, replace the battery according to the right model)

iOS device settings



Android device settings

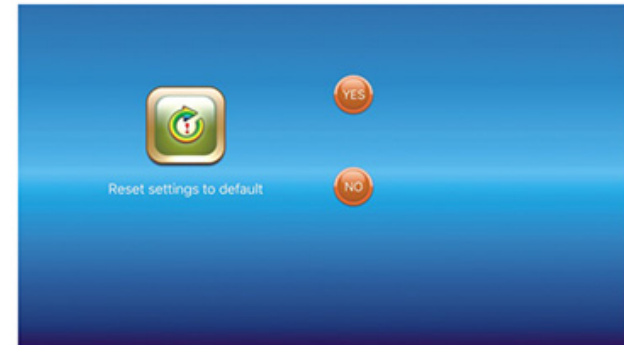


LCD panel settings



Reset default

Press the “Reset” on the Main Menu to enter into the reset screen (see Picture 21). Press “Yes” to restore all setting to factory default. Warning: when you press the “Yes” button, all settings in the Custom sequence, modified Build-in sequence, and Landing spots/Functions will be cleared. After hearing beeps several times, the system should finish the process of resetting.



Picture21

Robot Maintenances

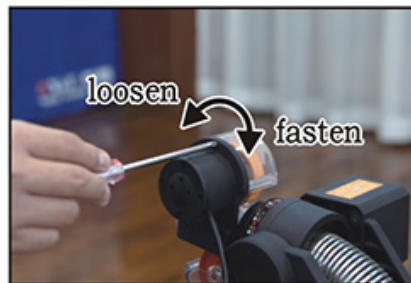
Electric component: Electric component in this product consists mainly of the circuit boards and LCD panel (or mobile device), which is the command center of the table tennis robot. Therefore, it should avoid any strong oscillation. The LCD panel (mobile device) must be attached to the support at the side of table (or inside the cell phone box) to avoid any dropping and breaking. Do not spread any liquid to its surface to prevent electric leakage from damaging the internal electronic units.

Mechanical component: Mechanical component in the table tennis robot is concentrated mainly on the mechanisms for ball service and delivery. Special attention should be paid that any foreign substances should not put into the ball container except for the balls. Otherwise, they would block the delivery wheel in the robot, and would result in no ball delivery and even make damage to the robot. There is a view window fixed that the under side of the movable door. So that you can open the movable door, remove the transparent guard plate, and take out any foreign objects if such things have entered, thus returning the robot to its normal operation. When the poke bar inside the ball container has worked for a long time, it should be checked for loose screws and/or broken poke bar, so as to prevent any trouble from happening which would lead to rough delivery of balls.



Robot Maintenances

Keep the table tennis robot clean. The top and bottom friction wheels may become dirty after long use. To ensure a quality serve, please clean the wheels often with a wet towel. Always turn off the robot's power before cleaning. Under normal condition, the top and bottom friction wheels are able to work for 5000 hours or longer before they need to be replaced. When performing the replacement, power off the robot, remove the protective cover and remove the screws from the friction wheel with a screwdriver (clockwise to tighten, counter-clockwise to loosen). Do not use force to adjust the direction of the shooting head, so as to prevent damage to the internal parts. During an operation and/or transportation, protect the robot against any strong impact or oscillation. Turn off the power and unplug the robot after you finish using the robot.



LCD panel usage and maintenance

1. The touchscreen panel is a precise device that requires careful operation. And the touchscreen is fragile, so any strong impact or oscillation may damage the touchscreen. Do not press too hard on the display area of the touchscreen. When using or storing the panel, please avoid any scratches caused by the hard objects on the surface of touchscreen.
2. Please use and store the touchscreen panel within the acceptable temperature range. The normal operating temperature of the touchscreen panels is at $-10^{\circ}\text{C} \sim 60^{\circ}\text{C}$. The relative humidity for storing and transporting is at $20\% \sim 80\%$ (30°C). If use or store the touchscreen panel below the acceptable temperature/relative humidity, the surface may crystallize which leads to unrecoverable damage. If use or store the touchscreen panel above the acceptable temperature/relative humidity, the liquid crystal on the touchscreen may liquefy which leads to unrecoverable damage.
3. Do not open, disassemble, and reconfigure the panel. Otherwise it may damage the touchscreen, and cause malfunction of the control panel.
4. Keep the surface of touchscreen clean. The surface may change color or have spot/blot if water spilled and sit on the surface for a long time. If the touchscreen have spot or become dirty, please clean it with a pure-cotton or soft cloth. Do not use gasoline, alcohol or any chemical to wipe the surface.
5. If any reason that you need to store the touchscreen panel for a long period, we suggest you to do the following:
 - ① Place it in the dark area, keep away from the strong light.
 - ② Do not put anything on the surface.
 - ③ Do not store it in the area that exceeds the acceptable temperature/relative humanity.

Troubleshooting

Failure	Cause	Solution
Machine doesn't work	<ul style="list-style-type: none"> ● Did not press the "Start" button on the Main Menu to start ● The number in total ball counts/ timer has reached 0 ● The plug and socket are not properly contacted ● Bluetooth has been disconnected. ● Malfunction on the touchscreen due to strong impact or oscillation 	<ul style="list-style-type: none"> ● Press "Enter" or "Start" ● Press "Start" ● Check the electric socket ● Reconnect to the Bluetooth ● Replace
Machine works, but does not release table tennis balls	<ul style="list-style-type: none"> ● The poke bar in ball container is lax ● The ball duct is jammed by foreign objects ● The amount of balls in the container is not enough ● It takes time to transport the balls from container to shooting head 	<ul style="list-style-type: none"> ● Fasten the poke bar ● Clear away the foreign objects(see page13) ● The amount should be 50–100 balls ● Wait for a while
Pressed key failure	<ul style="list-style-type: none"> ● The robot' s power is off or Bluetooth has been disconnected ● Did not remove the protective film from the touchscreen panel ● The cable connecting to motor is loosen ● The screen on the mobile device or LCD panel has stains. 	<ul style="list-style-type: none"> ● Turn on the robot' s power, and reconnect to the Bluetooth ● Remove the protective film ● Connect it with the original method ● Clean it with soft cloth
Landing spot is unstable	<ul style="list-style-type: none"> ● There would be dirt and wear on the top and bottom wheel after long use ● The long and short ball mode is selected ● The shooting head is deflected by external force 	<ul style="list-style-type: none"> ● Clean or replace the friction wheel ● Cancel the long and short ball mode ● Restart the robot

The company has the right to amend the description of products in this manual without any notice in advance.