

V-989 D

使用手冊

Instruction Manual

使用前請閱讀此手冊
Please read this manual before operation

使用前的注意事項
CARE BEFORE USE

發球機及集球網的各部位名稱	第 2 頁
Components name of the table tennis robot and ball collecting net	page 2
集球網的安裝方法	第 3 頁
How to assemble the ball collecting net	page 3
發球機的擺放位置	第 4 頁
How to position the table tennis robot	page 4
使用電源	第 5 頁
What power supply to use	page 5

發球機的功能介紹
INTRODUCTION TO
FUNCTIONS OF THE
TABLE TENNIS ROBOT

發球形式	第 5 頁
Ways to serve the ball	page 5
速度調節	第 6 頁
Speed modulation	page 6
頻率調節	第 6 頁
Frequency modulation	page 6
旋轉選擇	第 7 頁
How to select spin	page 7
角度調節	第 8 頁
Angle modulation	page 8
任意點調節	第 9 頁
Random point modulation	page 9
弧度調節	第 10 頁
Loop modulation	page 10

注意事項與保養
CAUTIONS AND MA-
INTENANCE

儲球器的容量	第 10 頁
Capacity of the ball Container	page 10
發球機的保養	第 11 頁
How to maintain the table tennis robot	page 11
故障的排除方法	第 13 頁
Trouble shooting	page 13
安全使用注意事項	第 14 頁
Safe utilization and the regulations	page 14

弧度調節旋鈕
Loop modulation knob

上輪
Top-wheel

角度調整旋鈕
Angle modulation knob

A旋鈕
Knob A

下輪
Bottom-wheel

支承架
Support frame

儲球器
Ball container

控制盒
Control box

B旋鈕
Knob B



發球機及集球網的各部位名稱

Components name of the table tennis robot and ball collecting net

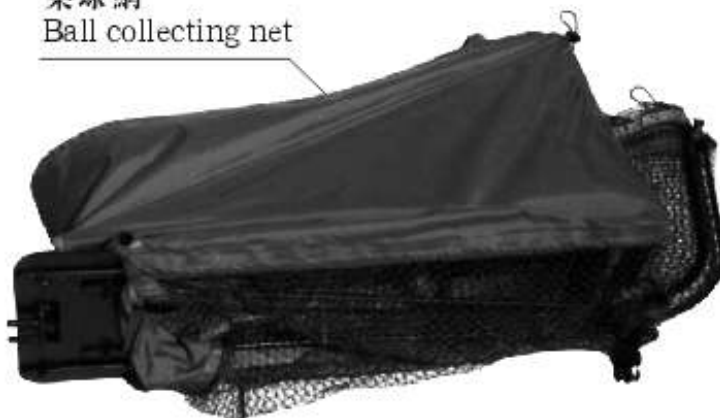


網架
Net Support

控制盒支架
Control box's support



集球網
Ball collecting net



集球網的安裝方法

How to assemble the ball collecting net



1、先將集球網的鎖扣打開。

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



3、將集球網向兩邊推開。

Spread out the ball collecting net with both sides



2、將集球網略分開，網的方孔套進發球機的機頭。然後集球網插銷插入發球機的支承架上。

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.

支承架
Support frame

4、將發球機移至球臺邊緣，移動時應把腳輪鎖緊器打開。

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

鎖緊器
Wheel Lock

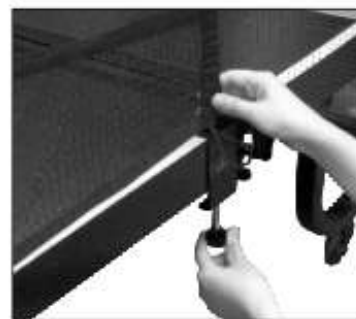


發球機的擺放位置 How to position the table tennis robot



5、將集球網兩側的尾端套進網架上。

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



6、網架分別夾在球臺近球網的兩側。

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



7、橡皮筋扣在網架的側邊。

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



The presenting picture of a completed installation
全部安裝完畢展示圖

8、訓練結束，將集球網按原來程序收疊，將鎖扣扣好，移放在任意位置。

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.



使用電源

What power supply to use

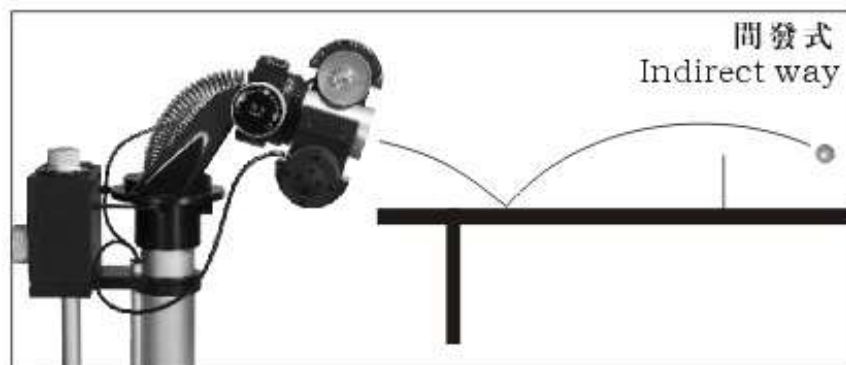
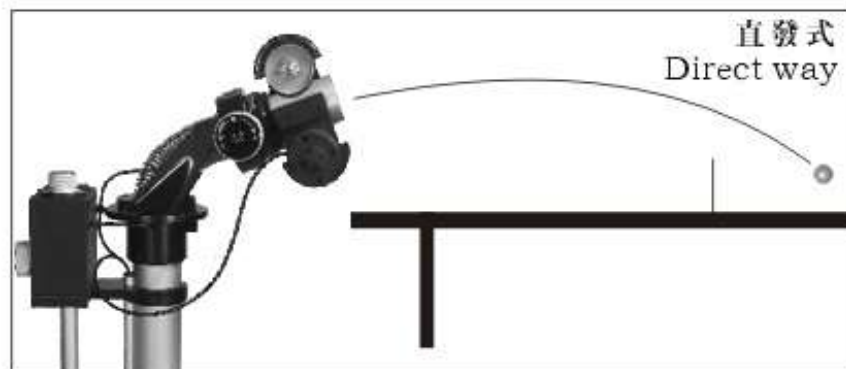


發球機的適用電源在主機側面有標注，請選擇使用，電源插頭與插座要接觸良好，使用完畢則要拔開切斷電源。

The data of proper power source for robot is marked on the side of machine body, which may be selected and used optionally. The connection between plug and socket should be perfect. They must be pulled and separated completely after use.

發球形式

Ways to serve the ball



發球機的發球形式分為直發式和間發式，直發式發出的球速度和旋轉都比間發式稍強，調整時通過弧度調節旋鈕進行。

The ways of serving the balls consists in the direct way and indirect way. The speed and spin of the former will be stronger than those of the latter. They may be adjusted with the loop adjustment knob.

速度調節 Speed modulation

當發球機接通電源時，控制盒上數字在閃爍，如顯示的檔位符合您的要求，可直接按啓動鍵工作，如不符您的要求，可預先調節好您所選定的上、下輪速度檔位，再按啓動鍵工作，發球速度共分10個檔位，“0”檔是表示電機停止狀態“1”檔最慢，“9”檔最快，速度快慢與乒乓球的旋轉強弱基本成正比，即速度快，則旋轉強，速度慢則旋轉弱。另外控制盒具備記憶功能，停機或切斷電源后重新開機，速度與頻率都能保持在關機前的相同檔位。

The number on the display screen on the control box will flash when the robot is plugged in. If the stage is right for you, press directly start key to begin operation. If not, please adjust the frequency and speed of top-wheel and bottom-wheel beforehand, and then press start key to begin operation while you finish the adjustment. Serve speed is adjusted on control box that has 10 stages. The digit “0” in the display indicates the engine is not in the operating mode. The digit “1” is the slowest stage and “9” is the fastest stage. In general, the speed is proportional to the strength of ball spin. In other words, the faster speed the stronger spin the ball has. The slower speed the weaker spin the ball has. In addition, the control box has memory function. When restarted after stop or switch-off, it can keep the speed and frequency in the same stages as they have been before.



頻率調節 Frequency modulation

調節方法與速度調節相同。發球機的頻率也是通過控制盒的輕觸按鍵進行調節，分9個檔位，顯示窗顯示“1”檔時出球頻率最慢（每分鐘出球約30個），顯示“9”檔時最快（每分鐘出球約85個）。

The way to adjust frequency is the same as the way to adjust speed. Frequency of balls served is also adjusted with touch key on control box that has 9 stages, too. The digital “1” in the display is the lowest stage (30 balls per minute), “9” is the fastest stage (85 balls per minute).

旋轉選擇

How to select spin

發球機的旋轉由調節上、下輪速度和左右調節機頭方向來選擇，可發9種旋轉球：包括上旋、下旋、不旋、左側旋、右側旋、左側上旋、左側下旋、右側上旋、右側下旋。

The spin is selected by adjusting both the top-wheel and bottom-wheel speed, and rotating the head of robot. There are 9 different spin you can select. Those are Top spin, Under spin, No spin, left side spin, right side spin, left-side top spin, left-side under spin, right-side top spin and right-side under spin.



角度調節 Angle modulation

發球機的出球角度由A旋鈕和角度調整旋鈕控制，A旋鈕控制出球的定點和兩點(最小角度的起點)，角度調整旋鈕是調整出球角度的大小，在調整時，先將A旋鈕的紅點調到“定點”位置，然後，根據銘牌的指示選擇好角度的大小，最後再把A旋鈕的紅點調回到“兩點”的位置上。

The angle, at which the robot shoots the ball out, is controlled by knob A and the angle modulation knob. For knob A controls fixed point to shoot the ball at and the alternative point (start point of a minimal angle) to shoot the ball with, while the angle modulation knob is to regulate the size of a certain angle for the ball to shoot out. When modulating, first turn knob A to move its red dot to the fixed point position. Then, select the size of an angle according to data in the nameplate. Finally, turn knob A with its red dot returning to the alternative point position.



任意點調節 Random point modulation

當選擇出球任意點的時候，首先將A旋鈕的紅點調到“兩點”的位置（參閱第8頁），然后再將B旋鈕的紅點調到“任意點”的位置，這樣發球機出球就會是任意點。如果將B旋鈕的紅點調在“標準點”位置，這樣就是有規律的兩點。



When choosing to make the ball shoot randomly, first turn knob A to move its red dot to the alternative course position (see page 8). Then turn knob B to move its red dot to the random point position. The robot will shoot the ball out randomly in this way. If turning the knob B to move its red dot to standard point position, the ball shooting position will back to regular alternative point position.

弧度調節 Loop modulation



調整出球弧度的高低時，首先用左手鬆開弧度鎖緊旋鈕，右手握住弧度調節旋鈕任意調整，達到自己所需的弧度後，將弧度鎖緊旋鈕鎖緊。

When modulating the loop of the serve, loosen the loop lock knob with your left hand, while adjusting the loop modulation wheel with your right hand. When achieving your desired loop, lock the knob.

儲球器的容量 Capacity of the Ball Container



儲球器裝40mm球約100個。放球時不能超過儲球器內側標籤所示黃綫位，不能將其它雜物也倒入儲球器內，否則會損壞機內零件，并影響發球機的正常工

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.

發球機的保養

How to maintain the table tennis robot



電器部份：本產品的電器部分主要由主機線路板及控制盒組成，是發球機的指揮中心，所以盡可能避免受強烈震蕩，控制盒一定要按要求插在球檯邊的支架上，以免摔壞。任何液體都不能灑在上面，防止漏電及損壞內部的電子元件。

機械部份：發球機的機械部份主要集中在輸送球機構方面，特別注意的是除了乒乓球以外，任何雜物不能放入儲球器內，否則雜物會卡住發球機的輸送輪，造成不出球甚至損壞發球機，主機活動門下側安裝有方便觀察的視窗，如果發現有雜物，先打開活動門，拆下透明保護板，將雜物取出即可正常工作。儲球器內撥條使用長時間后，需檢查是否有螺絲鬆動或撥條斷裂等，以防止有下球不順暢故障發生。

Electric component: Electric component in this product consists mainly of the base machine's circuit boards and the control box, which is the command center of the table tennis robot. Therefore, it should avoid any strong oscillation as much as possible. The control box must be inserted to the support at the side of the table to avoid any dropping and breaking. Never spread any liquid to its surface, in order to prevent electric leakage and/or damage to its 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 at 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 the balls.

發球機的保養

How to maintain the table tennis robot

正常情況下使用，上、下輪能用5000小時以上，使用時間過長則需要更換新的。更換時，首先松開保護罩，用螺絲批取下摩擦輪的螺絲，順時針鎖緊，逆時針松開。

Under normal conditions, the friction wheel can work for 5000 hours or longer. However, the friction wheel should be replaced after over time use. When replacing, first of all, loosen the protective cover and take out the screw at the friction wheel with a screwdriver, which is to be tightened clockwise and to be loosened counter-clockwise.

發球機應保持清潔，上、下輪使用時間長會有污垢，需用濕布抹掉，以保證出球的質量，另外各部位的旋鈕在使用過程中，調整力度要適當，不能粗暴強力操作，防止損壞內部零件。使用及運輸時需防止對發球機的強力撞擊或震蕩，練習結束後，將電源插頭拔開切斷電源。

The table tennis robot should be kept clean. There would be some dirt in the friction wheel after a long time of operation. But such dirt can be wiped off with a wet rag, so as to ensure a quality shoot of the ball. Suitable strength should be used when turning the regulation knobs at the other places during an operation. Never do it with a rough or shock force, so as to prevent damage to the internal parts. During an operation and/or transportation, protect the table tennis robot against any strong impact or oscillation. Unplug and cut off the power supply when you have finished your exercise.



故障的排除方法 Trouble Shooting

故障 Failure	故障原因 Cause	排除方法 Solution
主機不工作 Machine doesn't work	<ul style="list-style-type: none"> ● 電源綫插頭與插座接觸不良 The plug and socket are not properly contacted ● 控制盒輕觸開關未按 The key on the control box is not pressed ● 控制盒因強烈震蕩而失靈 The control box doesn't work due to fierce shake 	<ul style="list-style-type: none"> ● 檢查電源插座 Check the electric socket ● 按下開關到顯示窗內數字亮 Press the switch until the number display ● 更換控制盒 Replace the control box
主機工作但不出球 Machine works, but does not release the table tennis balls	<ul style="list-style-type: none"> ● 儲球器內撥條鬆動 The poke bar in ball container is lax ● 有雜物堵塞輸球管道 The ball duct is jammed by foreign objects 	<ul style="list-style-type: none"> ● 鎖緊撥條 Fasten the poke bar ● 清除雜物(見第11頁中的機械部份) Clear away the foreign objects(see page 11)
速度、頻率失調 Speed and frequency cannot be adjusted	<ul style="list-style-type: none"> ● 控制盒內零件暫時失靈 The parts in control box do not work temporarily ● 連接電機的電綫鬆脫 The cable connecting to motor is loosen 	<ul style="list-style-type: none"> ● 斷開電源5秒后啓動 Start up again after shut-off for 5 Seconds ● 按原樣接駁 Connect it with the original method
落點不穩定 There would be dirt and wear on the top-wheel and bottom-wheel after a long time of operation	<ul style="list-style-type: none"> ● 上、下輪因長時間使用積污垢或磨損 so the hitting position may be unstable. 	<ul style="list-style-type: none"> ● 清潔上、下輪或更換 The top-wheel and bottom-wheel should be cleaned or replaced if that condition occurs.

本公司有權未經事先聲明對本手冊中的產品描述進行改進。

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

安全使用注意事項

Safe utilization and the regulations

1. 使用前請詳細閱讀說明書，并按說明書指示操作發球機。
 2. 兒童需在成人指導下使用。
 3. 室外使用時，須避免在風沙和雨雪環境下進行。
 4. 移動發球機與裝拆集球網，請小心輕放。
 5. 發球機工作時，請勿開啓活動門及觸摸上、下輪和儲球器內撥條。
 6. 發球機工作時，請勿與出球口近距離正面接觸，防止乒乓球射出傷及人體。
 7. 發球機工作時，如聞到異味或冒烟等非正常現象，請立即停機及拔開電源插頭，請具維修資格人員檢修。
 8. 使用結束，請拔開電源插頭。
-
1. Please read the instruction manual carefully before using the robot, and follow the instruction to operate the robot.
 2. Instructive advice should be given when machine used by children
 3. Avoid the windy and rainy day for the outdoor use
 4. Be careful when connecting and disconnecting the ball collecting net
 5. When the robot is operating, please don't open the movable door and touch the top and bottom wheel, poke bar either.
 6. When the robot is operating, please keep away from the shooting head of the robot to avoid the ball harm the body.
 7. When the robot is operating, if you found something abnormal, such as some smoke come from the machine, please stop the robot and unplug it immediately. Repair or service must be performed by a qualified repair person.
 8. Please unplug the robot after use.