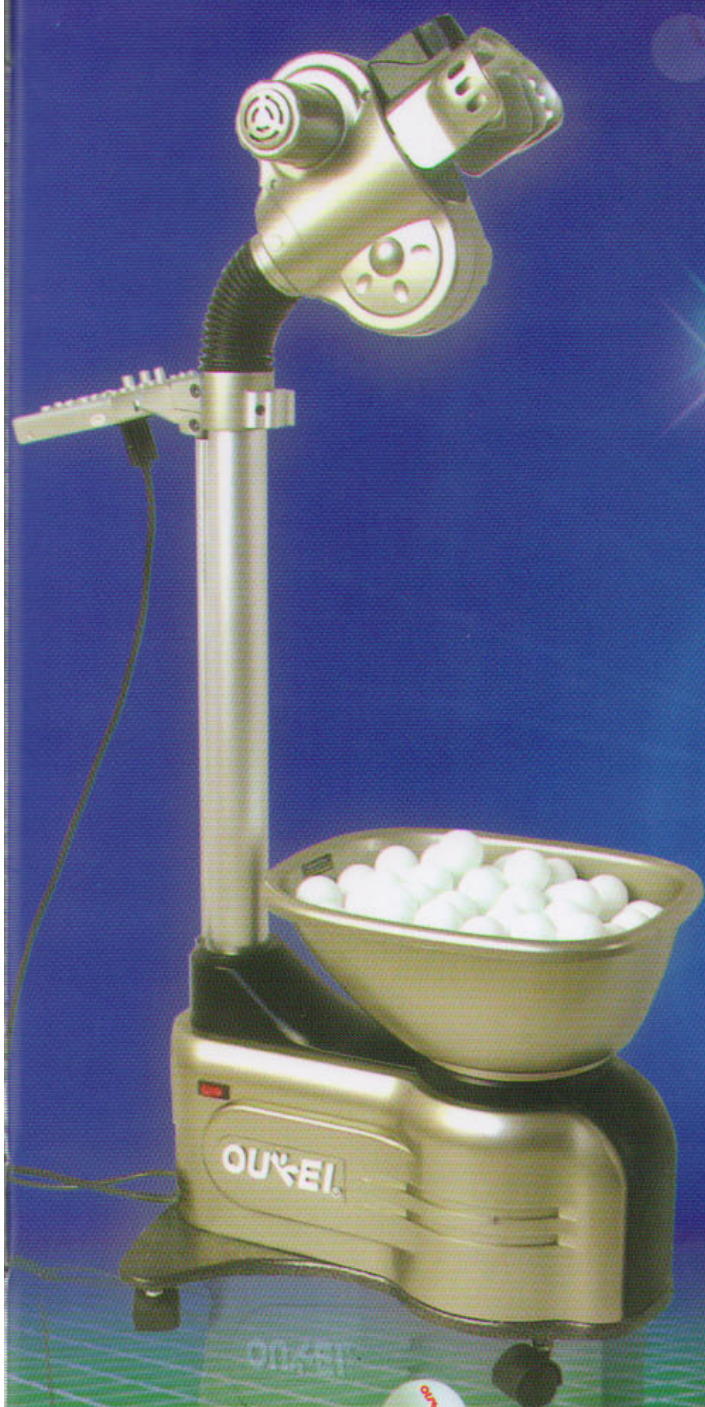


# OUKEI®

● 使用前请阅读此手册

● Please read this manual before operation



使用手册  
Instruction Manual

乒乓球发球机  
Serving Robot For Table Tennis

奥奇TW-2700-08



## Basic Features and Functions of TW-2700-08 Table Tennis Serving Robot

### Three intelligent serving modes

- ★ 1. **Regular mode.** Continuous serving from one fixed ball falling position among 1-9 horizontal falling positions of long balls or among 1-9 horizontal falling positions of short balls;
- ★ 2. **Random mode.** (The computer will control the fixed ball falling position mode)
  - I. Horizontal random mode**
    - a. random serving from 1-9 horizontal positions; under this mode long ball and short ball may be chosen;
    - b. random serving from left five positions; under this mode long ball and short ball may be chosen;
    - c. random serving from right five positions; under this mode long ball and short ball may be chosen;
  - II. Horizontal random mode & mixed random mode of long ball and short ball**
    - a. random serving from 1-9 horizontal positions and mixed random mode of long ball and short ball;
    - b. random serving from left five positions and mixed random mode of long ball and short ball;
    - c. random serving from right five positions and mixed random mode of long ball and short ball;
- ★ 3. **Self program mode.** Program 18 positions according to the training need. One program can edit 32 falling positions.

### Long and short ball function

- ★ Long and short ball function:
  - 1. Under the regular mode long ball or short ball can be chosen for serving of fixed position.
  - 2. Under the horizontal random mode long all or short ball or long and short ball auto serving can be chosen.
  - 3. Under the self program mode can freely choose any edit.

### Three auxiliary functions

- ★ **Timing/counting function.** Digital display. Can be chosen by the user;
- Memory function.** Can auto memorize and save the using mode, program and serving position before switching off.
- Auto collecting function.** Can auto collect the balls into the collection dish of the machine and serve a cycle, which can save ball picking time and raise the training efficiency.

### 18 ball falling positions

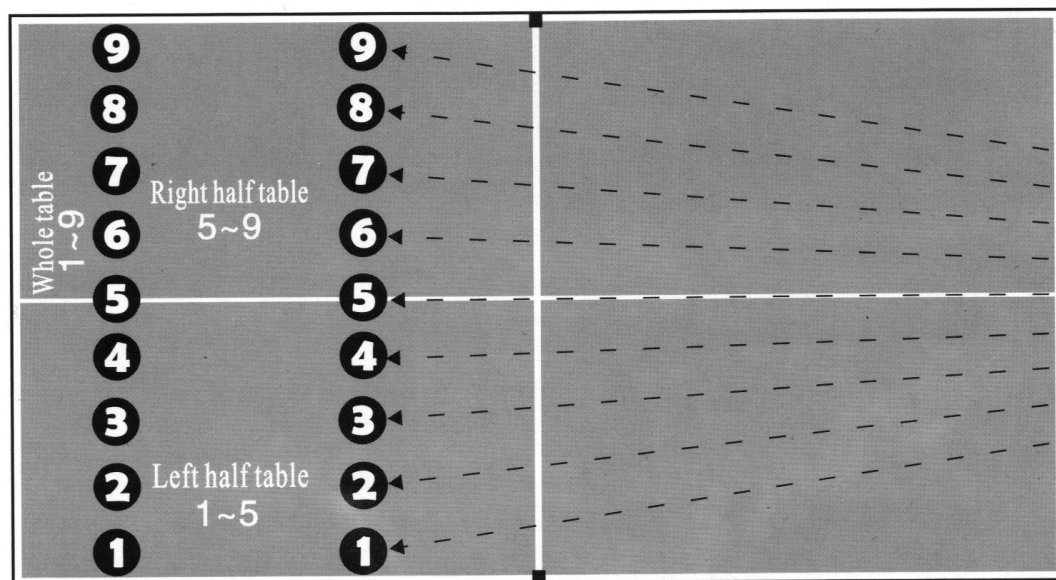
- ★ There are all together 18 ball falling positions for long ball and short ball on the table:
  - a. 1-9 ball falling positions for long ball;
  - b. 1-9 ball falling positions for short ball;

### 9 spinning balls

Top spin, bottom spin, left spin, top left spin, bottom left spin, right spin, top right spin, bottom right spin and non-spin (straight ball).

*Tips: the shift of serving mode of the machine, the option of ball falling positions and the curve of serving can all be adjusted during the normal operating situation.*

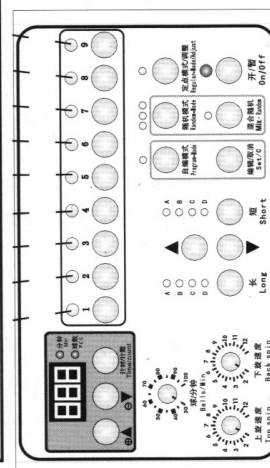
Fixing of ball falling position



Long ball

Short ball

Ping-Pong table



Control panel

Factory setting and the recommended parameters

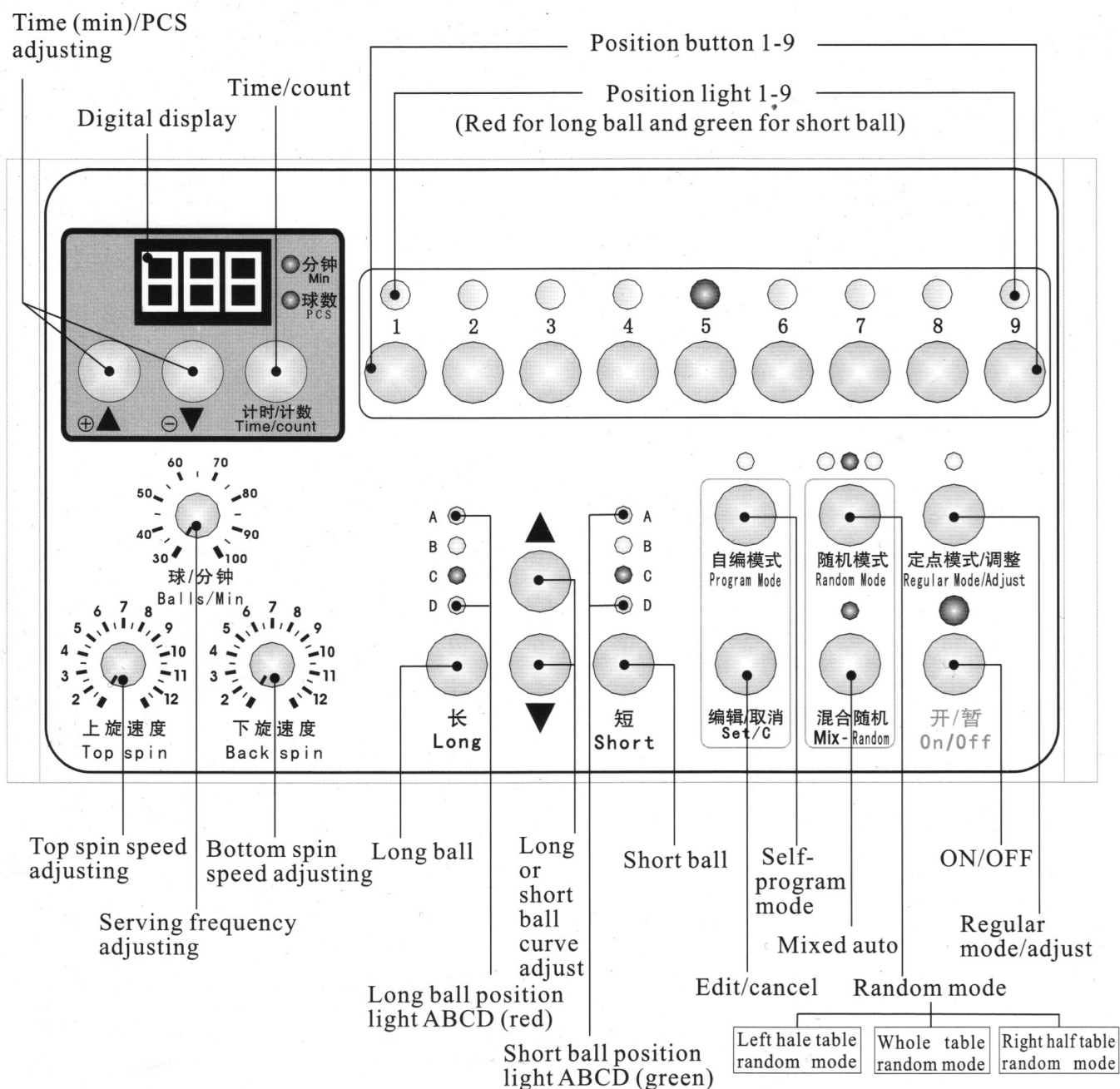
Spin mode		Top spin speed (knob calibration)	Bottom spin speed (knob calibration)	Serving frequency	Falling position of long or short ball
Factory setting		6	3	45	Long: C short: B
Recommended parameters	Straight ball	6	3	45~70	When adjusting the speed of top spin or bottom spin, the ball falling positions of ABCD of long ball or short ball shall be respectively adjusted. See details on p8 for the steps of adjusting the serving cure (arc).
	Top spin	7~9	3	45~70	
	Bottom spin	1.5~2.5	6.5~9	40~50	
	Top left spin	7~9	3	45~70	
	Top right spin	7~9	3	45~70	
	Bottom right spin	1.5~2.5	6.5~9	40~50	
	Bottom left spin	1.5~2.5	6.5~9	40~50	
	1-18	7~9	3	45~70	
	Auto-mode	7	3	45~60	
Starting serve	Top spin	4.5~5.5	2	≤ 50	
	Bottom spin	1	5~6	≤ 50	

Note: Before you use the machine for the first time, please set the parameters as the factory setting ones provided above, and then press the ON/OFF button to start training. Later on, you can adjust the parameters (top spin speed, bottom spin speed and serving frequency) according to your own level and needs.

**I.Name of all parts of the Table Tennis Robot**

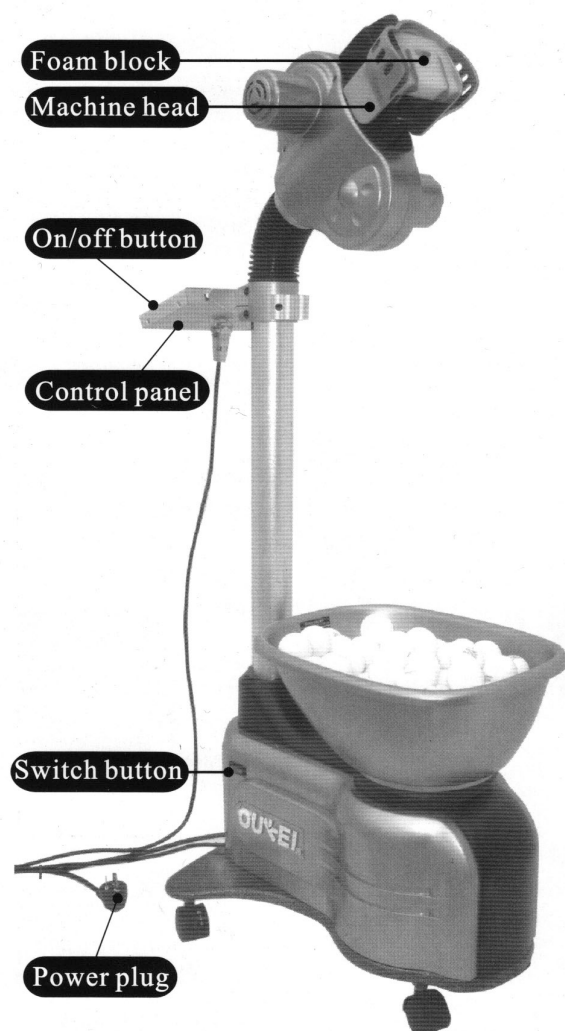


## II.Name of all parts of the control panel



## IV. Starting and stopping the Table Tennis Robot

**Tips** when using the machine for the first time, please take out, from the machine head, all the foam blocks which are used to protect the steering board.



**1** Plug in the power supply and then switch on the Robot.

**2** Once the Robot is on, the on/off light on the control panel will light up (red), the selected mode lights and the currency position lights will all light up. When using the machine for the first time, please adjust the parameters according to the *Factory setting and the recommended parameters*. Then press the on/off button on the control panel and a green light will appear. The Robot will start serving balls.

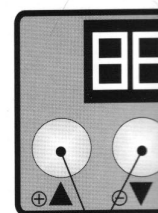
Factory setting	Spin mode	Top spin speed (knob calibration)	Bottom spin speed (knob calibration)	Serving frequency
	Straight ball	6	3	45

**3** When you press the on/off button again, the on/off light will light up as red and the Robot will stop serving.

**Caution**

After pressing the on/off button, do not get close to the serving point of the machine head in case that it hurts your body.

## V. Timer/co

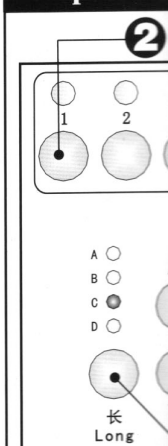
**2****3**

**Tips** If push O number b

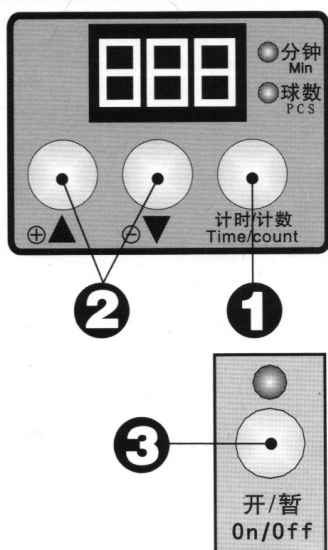
## VI. Adjusting



## VII. Operatin



## V. Timer/counter



### Operating steps of the timer/counter

When choose the timer function:

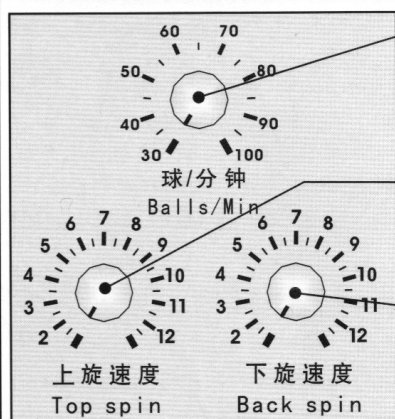
- ① Push the timer/counter button until the corresponding light is on.
- ② a. Push once the ⊕▲ button, the set time will be added one minute. Push the ⊕▲ button long; the set time will increase quickly. The maximum set time can be 120 minutes.  
b. Push once the ⊖▼ button, the set time will be deducted one minute. Push the ⊖▼ button long; the set time will decrease quickly.

When choose counter function:

- ① Push the timer/counter button until the corresponding light is on.
- ② a. Push once the ⊕▲ button, the set number of balls will be added 10 more. Push the ⊕▲ button long; the set number will increase quickly. The maximum set number can be 990.  
b. Push once the ⊖▼ button, the set number of balls will be deducted 10. Push the ⊖▼ button long; the set number will decrease quickly.
- ③ Push ON/OFF button to start the machine and the countdown will start. When the timer/counter reaches the set time or number the machine will stop automatically.

**Tips** If push ON/OFF without setting the time or number, the counter will start automatically and display the number beginning with 001.

## VI. Adjusting knob of serving parameters



### Adjusting the serving frequency

Turn the serving frequency knob clockwise and the serving ball numbers will increase 30-100/min. the calibration shows the numbers of serving per minute.

### Adjusting the top spin speed

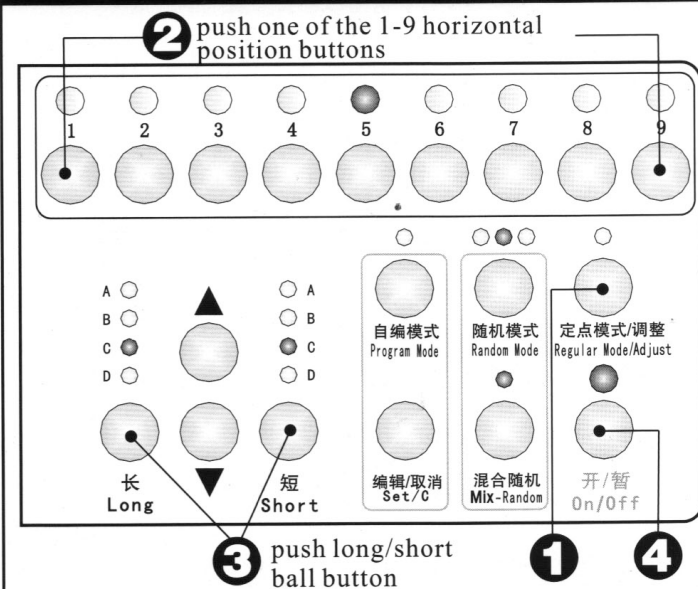
Turn the top spin speed knob clockwise and the top spin motor speed will change from low to high.

### Adjusting the bottom spin speed

Turn the bottom spin speed knob clockwise and the bottom spin motor speed will change from low to high.

**Tips:** please refer to *Factory setting and the recommended parameters*

## VII. Operating steps of the serving function



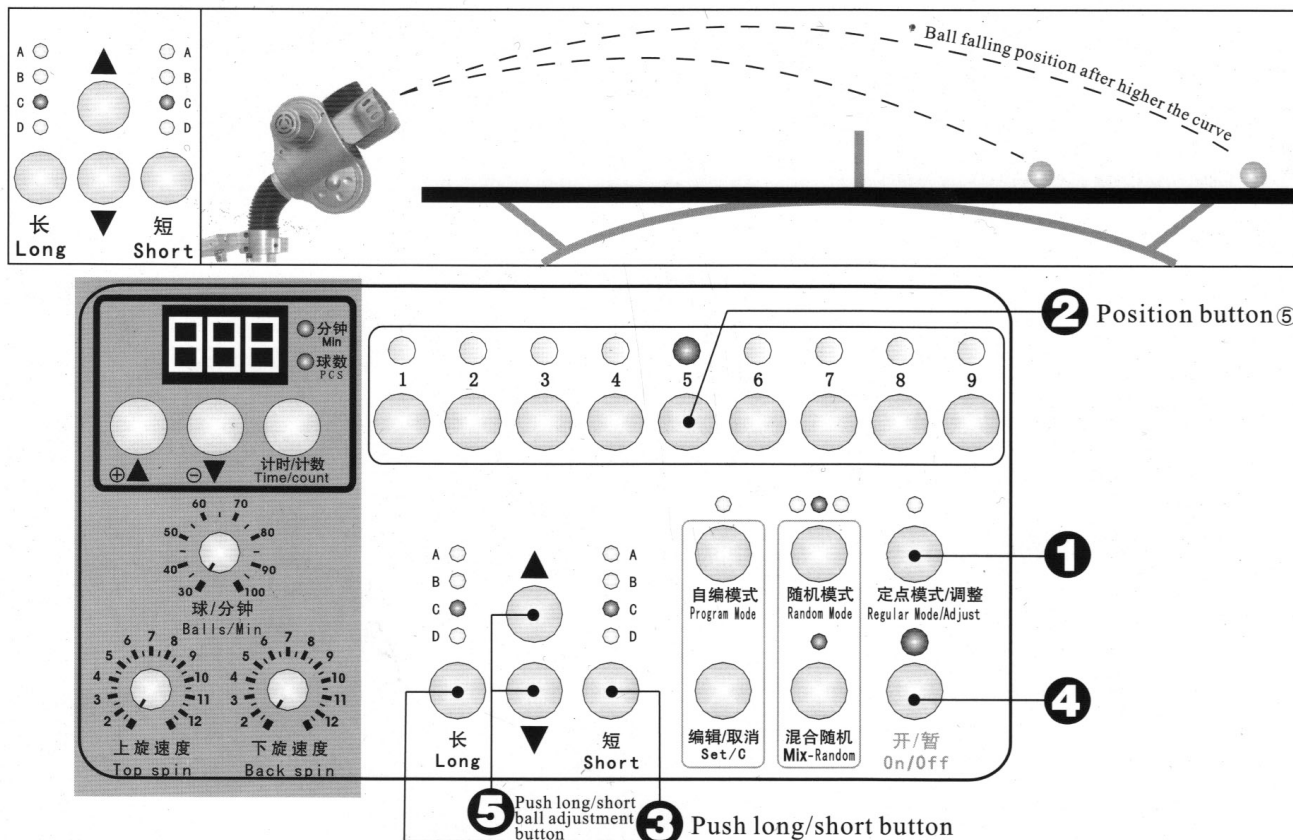
### A. Operating steps of the serving function of regular mode

- ① Push the regular mode button until the corresponding light is on.
- ② Push 1-9 horizontal position button and choose one of the falling position. The corresponding position indicating light will be on (red for long ball and green for short ball).
- ③ Push long ball or short ball button to choose long ball or short ball falling position. One of the corresponding ABCD lights will be on.
- ④ Push ON/OFF button, the corresponding light will change from red to green and the chose position will serve continuously.

## X. Operating steps of adjusting the serving curve (arc)

When the long ball of the machine is out of boundary or the short ball falls into the net, or the falling positions are changed due to the adjustment of serving force and spin, the serving curve needs to be adjusted. First adjust the top spin speed and bottom spin speed according to own training needs. Please refer to the Factory setting and the recommended parameters in this manual and adjust the serving frequency to 30 balls/min.

The adjustment of serving curve (arc) should be carried out under the regular mode (void in random mode and self program mode). When higher the serving curve (arc) the ball falling position will move outward the table. On the contrary, when lower the serving curve (arc), the ball falling position will move inward the table. (See the figure below)



### 1. Operating steps of adjusting the long ball falling position

- ① Push regular mode/adjust button. The corresponding light will be on;
- ② Push horizontal position button 5. The corresponding position light will be on; (adjustment based on the middle position 5)
- ③ Push long ball button. One of the corresponding lights ABCD will be on;
- ④ Push ON/OFF button to start the machine. Observe the falling position;
- ⑤ If need to higher the serving curve (arc), push ▲ button. Each push will make the corresponding position light move one space toward A direction, and the serving ball falling position will move outward the table; If need to lower the serving curve (arc), push ▼ button. Each push will make the corresponding position light move one space toward D direction, and the serving ball falling position will move inward the table; adjust until the falling position meets your requirement.

### 2. Operating steps of adjusting the short ball falling position

- ① Push regular mode/adjust button. The corresponding light will be on;
- ② Push horizontal position button 5. The corresponding position light will be on; (adjustment based on the middle position 5)
- ③ Push short ball button. One of the corresponding lights ABCD will be on;
- ④ Push ON/OFF button to start the machine. Observe the falling position;
- ⑤ If need to higher the serving curve (arc), push ▲ button. Each push will make the corresponding position light move one space toward A direction, and the serving ball falling position will move outward the table; If need to lower the serving curve (arc), push ▼ button. Each push will make the corresponding position light move one space toward D direction, and the serving ball falling position will move inward the table; adjust until the falling position meets your requirement.

**Tips**

when the falling position of long ball or short ball reaches position A and still can not meet your requirement, you may push longer the ▲ button, the serving ball's falling position will move outward the table to the limitation but the light A will not change. The same, the serving ball's falling position can move inward the table to the limitation but the light D will not change.