

# User Manual

Racketclub Powershot 3



**Powershot 3**

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# 1. First use of machine

When using the Powershot 3 for the first time, there are some parts to think of. Some parts need to be installed in the machine and you should think about some things before using the machine:

- First, you will find some fuses with the machine, one of these need to be installed in the machine panel. Disconnect the 220V cable! Then turn the fuse-holder to the left so you can add the fuse into it and put back in the machine panel and turn to the right to lock in the machine panel.
- The Remote Control (RC) uses 2 pcs 1.5 V batteries which need to be installed in the RC. Open the battery holder and install the batteries and close the holder.
- When you want to use the machine with the internal battery, it need to be fully charged first. Use the charger by putting the power cable in a 220V connection and connect the other round connector to the round connector of the machine panel. The machine could be turned off when charging. The lamp of the charger shows if the battery is still charging (red) or if it is fully charged (blue). You can also hear the fan of the charger when charging. When the machine is turned on, the display shows the percentage charged of the batteries but keep in mind that a machine in standby shows a higher percentage when the machine is used.
- When the Remote Control is “On”, the batteries will slowly be empty, even though the RC uses very low energy. That’s why it is better to turn off the RC, when you stop working with the machine. To turn ON/OFF the RC, you should press the “Power button” for about 3 seconds, till you see the few marks on the RC display appear/disappear.
- When using the Powershot 3 with the battery, you should turn the “Power button” on the machine panel to “DC”. When using the machine with a 220V cable connected to 220V and to the flat connection of the machine panel, the “Power button” should be turned to “AC”. When not using the machine, the Power button should be set in the middle. When the power is set right, the power lamp, on the machine panel, will light.
- The ball bucket could be easily turned upside down by moving the flat hole of the ball bucket over the handle so it easily fit on the ball machine. Then the ball bucket could be filled with balls.
- As soon as the Power supply is set correctly, the power light on the control panel lights up and the shooting wheels start to rotate but the machine does not start shooting. The remote control can be switched on by pressing the powerbutton on the remote control for 3 seconds. If the machine and remote control are "On", do not stand in front of the machine. The shooting wheels are started with a press of the "> / ||" button on the remote control and the machine start shooting the balls after 3 seconds (a safety for accidental pressing). Shooting is stopped again (standby) by pressing the "> / ||" button again. If you want to only put the machine into standby mode but do not yet use it and want first make some settings on the remote control or make a program, you can already set it on the remote control. Only when

you start shooting ("> /" button), all new settings at the remote control are sent to the machine and the shooting is started (with a delay of 3 seconds).

- The front feet of the machine determine the angle of the machine itself. A small change higher / lower determines the exact depth of the different balls, these can be adjusted with a wrench (nr 17) by the nuts on the inside of the machine (left and right of the shooting wheels on the inside bottom of the machine) holding the key and then turning the legs at the bottom by hand or using a hex key. For more beginning players, who use the machine at a lower speed, the legs will have to be set "longer" (higher) so that the balls will go over the net at a lower speed, and for high level players these will have to be set shorter, so that the machine shoots sharply over the net at high speed so that the balls are not shot into the fence at maximum speed. It is not the intention to change the feet continuously but only a first / single time to make the machine suitable for the correct level of players. The correct depth can also be adjusted by adjusting the speed. You can adjust the setting of the front feet only if you have already played with the machine a few times and want to "finetune" the machine for your level. You can also contact De Racketclub for questions about this.
- Another good way to determine the correct height of the forefeet is to set the machine "random". The order is as follows:
  1. Allow machine to shoot in "random mode".
  2. Check whether the machine shoots balls into the net. If, after speeding up, balls still get in the net, put forefeet longer (higher).
  3. Check whether the machine shoots balls behind the baseline. If this is the case, set the speed lower or set top spin.
- The right position of the machine horizontally could be determined by:
  1. Set the machine on the baseline in the horizontal middle
  2. Set the machine to F (fixed position) and the horizontal position to "40" (middle) with the arrows.
  3. The machine should now shoot in the horizontal middle of the court (direction of the service line between the 2 service fields).

## 2. Speed, Frequency, Topspin and Slice balls

All exercises, in the machine, can be adjusted by speed. Just like a tennis player, topspin or backspin (slice) can also be given to the ball. With more topspin to the ball, the balls will bounce shorter behind the net, with more slice the balls will get deeper and with more speed the balls will also get deeper. When changing the speed, the top spin or slice is stopped. The speed can't be mixed with spin. When setting the topspin or slice, the speed of the 2 different shooting wheels are a fixed value "around" 80km/h. With topspin or slice, the depth of the ball should be changed by setting the height. The height, amount of topspin and backspin influence the height / depth of the ball. The amount of wind can also influence the direction and depth of the ball, you have to adjust it yourself or you can put the ball cannon in the field shorter / deeper. The ball machine normally is positioned on the baseline on the other side of the net of the player.

The frequency determines the pause between each shot ball, it can be set between 1 (long pause) and 9 (short break, balls very quickly in succession).

The frequency also plays a role in the horizontal and vertical movement. The machine continuously moves right / left with horizontal variation. The frequency then determines when the ball is actually shot. This can have a lot of influence on the weight of the exercise. Sometimes the machine is moving left/right to the other side but not shooting the ball because the frequency is set low.

### 3. The functions of the machine

The machine has many different functions that allow the balls to be shot in different ways:

- With different speed
- With different frequency
- With different effect (topspin or slice)
- At different locations:
  1. 1 fixed point (F)
  2. At different depths ("high / low")
  3. Horizontal on 2-line or 3-line (2 or 3 fixed positions) and vertical in 2 different distances (short or deep)
  4. Random, the balls are randomly shot at 28 different positions.
  5. Cross, here 6 different combinations of 2 cross balls (1 bal short, 1 deep and at 2 horizontal positions)
  6. By your own program of up to 28 positions

## 1. Fixed point

The ball can be set at a fixed horizontal and vertical position on the court. This position can be set horizontally via the "<" and ">" buttons on the remote control between position 10 (left for the player) and 70 (right for the player). The vertical position can be set via the "^" and "v" buttons between position 10 (low) and 40 (lobs).

- Note that a preferable speed and spin can be combined with the fixed point
- Once the altitude is set to 20 or higher, the speed can only be set to 50 or lower. This is a security that the balls are not accidentally shot over the fence.

## 2. Horizontal and vertical movement

The Powershot 3 has several ways to vary horizontally:

- Random between the 2 “tram rails”
- 2 line function (on 2 fixed positions left and right)
- 3 line function (on 3 fixed positions left, middle and right)

The Powershot 3 can vary vertically in 2 ways:

- Random between 2 depths (eg serviceline and baseline)
- At 2 fixed positions short and long (eg serviceline and baseline)

The variations can not be combined with each other, for this is the "random function". However, the vertical variation can be set to a fixed horizontal position, for example on the forehand or the backhand, via the "<" and ">" buttons.

Horizontal variation, press the "horizontal" button each time:

- Random between the 2 tram rails (remote control shows: .....)
  - The ball is played randomly across the entire width of the field. The frequency setting has a big influence on the weight of this exercise. If the machine always moves to the other side but only shoots again when it is back to the player, it is easier than the machine just shoots when it is positioned towards the other tram rails.
  - The height of the horizontal balls can be adjusted as desired (depth) with the vertical buttons "^" and "v".
- 2-line wide (remote control shows: “. .”)
  - The 2-line wide is often used for training of 2 (groups) players. Group1 gets 1 ball and then shoots the machine to group2, leaving group1 time to prepare for the next stroke or to join the back of the row again
- 2-line middle (remote control shows: “. .”)
- 2-line narrow (remote control shows: “. .”)
  - The 2-line narrow shoots at 2 positions close together so that it is suitable for 1 player resp. forehand, backhand, forehand, etc.
- 3-line (remote control shows: “. . .”)
  - the middle position gets more balls than the left / right positions, making the 3-line function more suitable for 1 player who gets the balls in a fixed pattern over the entire court

Vertical variation, press the "vertical" button each time:

- Random (about 4 degrees in height difference), the ball is randomly shot between the short and long position (remote control shows several points above each other)
- 2-line (about 4 degrees in height difference), the ball is shot short and long (remote control shows: “:” )

During the vertical variation, the horizontal position can be set at a fixed horizontal point with "<" and ">".

To turn off the variation, press the "F" button.

→ Note that speed and spin can be combined with the different variations according to your own insight.

### 3. Random balls

The machine can shoot the balls at 28 random positions in the field, 7 (horizontal) x 4 (vertical) positions.

As soon as the "Random" button is pressed, the machine will move between these 28 positions. The machine has a unique random function, not just left/right and up/down movement but real random! The speed of the frequency, for the moment of shooting the ball, is of great importance here. Sometimes the balls are shot at the same position a number of times, but then it is purely coincidental because the machine has already moved to different positions on the court but has not shot there because of the frequency setting.

Random function:

1. Press "Random"

To switch off the random function, press the "F" button.

- Note that speed and spin can be combined with the variations as you like, the position is fixed.
- If the speed is very low, the machine may have to be moved closer to the net. The height over the net can not be changed at "Random", so if this would be necessary for children, this should be done by manually set the front feet of the machine a bit higher.

## 4. Cross balls

The machine can play two balls in a cross (diagonally) in two different places. There are 6 different combinations, the number of times the "Cross" button stands for each combination:

1. Right short, Left deep \*)
2. Left short, Middle deep
3. Middle short, Right deep
4. Right short, Middle deep
5. Middle short, Left deep
6. Left short, Right deep

To stop the cross exercises, the "F" must be pressed.

\*) The starting order of these trainings could differ, dependant on what training last time stopped.

## 4. Programming

With the Powershot 3 you can create your own program. One program could be made after the remote control is turned on, and it couldn't be saved. As long as the remote control is on, the program is still there, even when you moved in between to other trainings. There are 28 positions on the court (7 horizontal and 4 vertical). Each position can be used once, which means that a maximum of 28 positions can be programmed in a program.

To start programming, press the "Program On" button for 3 seconds until a flashing dot appears on the screen. The desired position can then be selected with the 4 arrow keys. Every position is saved when pressing "Program On", an already programmed position is deleted with "Program Off" (go first to the position to be deleted). To start a new program (delete old program), press the "Program Off" button for 3 seconds.

The speed, frequency and spin can be adjusted as desired for the program. Because the 28 positions on the court are fixed, the front feet of the machine may need to be adjusted once at the correct height. This is only necessary if the machine, in case of short balls, shoots into the net or in case of long balls, outside the baseline.

The program is made from the position of the player (left is left on tennis court and right is right on tennis court), however the short balls are at the bottom of the screen and the deep balls above. This takes some time of getting used to and it is good to "play with" here.

Sequence of programming:

1. Program On (3 sec): Start programming
2. Program Off (3 sec): Delete previous program
3. Use the arrow keys to move to the desired position
4. Program On: store position in program
5. Repeat 3-4 until the program is complete
6. Start shooting (>||)

→ Inserting a position into an existing program is difficult. The program may have to be executed and stopped at the moment where an extra position needs to be inserted. Then add position. We are still figuring this out. It is easier to create a new program (see sequence above).

## 5. Commands for on court

^ High

< F > Left/Fixed//Right

v Low

VERT = High/Low (Vertical) button

HOR = Horizontal button

RAN = Random button

CROSS = Cross button

PRO = Program button

# press button →	1	2	3	4	5	6	
Training   v							
1 fixed point hor (10-70) ver (10-40)	F						
To Right		>					
To Left		<					
To above		^					
To below		v					
Horizontal							
Hor. movement	HOR						
2-line wide		HOR					
2-line mid			HOR				
2-line narrow				HOR			
3-line					HOR		
Vertical							
random	VER						
2-line		VER					
Random	RAN						

Cross							
2 cross balls (seen from sight of player)							
1 right short 2 left deep	CROSS						
1 left short 2 mid deep		CROSS					
1 mid short 2 right deep			CROSS				
1 right short 2 mid deep				CROSS			
1 mid short 2 left deep					CROSS		
1 left short 2 right deep						CROSS	
Programming	PRO ON (3 secs)						
Position - left		<					
position - right		>					
position - deep		^					
position - short		v					
Position - save		PRO on					
Position - clear		PRO off					
Run program		">/="					

(shoot)							
Change speed		Speed +/-					
Topspin +/-		Topspin	Topspin	Topspin	....		
Slice		Backspin	Backspin	Backspin	....		
Change Frequency		Frequency +/-					

**Fixed:**

< en > : set horizontal position (10 – 70, 10=left en 70=right, 40=mid)

v en ^ : set height (10 – 40, 10=low, 40=lobs)

All settings could be set before start shooting (as long as remote control is on).

**Vertical (4 degrees):**

1x: 2 positions

2x: random

All settings could be set before start shooting (as long as remote control is on).

**Horizontal:**

1x: variable horizontal movement

2x: 2-line wide

3x: 2-line middle

4x: 2-line narrow

5x: 3-line

→ horizontal couldn't be mixed with vertical (choose "random" for this training). It could be mixed with topspin or slice balls or a different height.

**Random:**

The machine shoot random at 4 depths and 7 horizontal positions:

.....  
.....  
.....  
.....

→ could be mixed with topspin or slice

→ F is stop random play

**Cross:**

1x: short BH, deep MID

2x: deep BH, short MID

3x: deep FH, short MID

4x: short FH, deep MID

5x: short BH, deep FH

6x: short FH, deep BH

→ F is stop cross balls

**Topspin:**

1x: a bit topspin

6x: most topspin

after 6x, set back to less topspin

→ when changing speed, topspin stops

**Backspin:**

1x: a bit backspin

6x: most backspin

after 6x, set back to less topspin

→ when changing speed, backspin stops

**Program:**

Program on: Press 3sec Program on

- blinking point at display for court position

After about 1 minute, programming stops

- change position on court with arrow buttons

- save a position with Program On button

- remove position (of the current position on display) with Program Off button

- press Program Off button 3 secs: remove program