



SuperCoach Manual

Thank You for Buying SuperCoach Tennis Ball Machine!

You have selected the most advanced tennis ball machine available on the market. Your SuperCoach is ready to play with you on the tennis court. This machine can be your coach or your tennis partner. You can play an entire game, because you can program it to place a different kind of ball (FLAT, LOBE, TOPSPIN, SLICE) for each stroke to a different location on the court. You can save your programs, which can contain 30 strokes, and you can have 28 different programs.

SuperCoach has two programming modes. One, which we will cover in **this manual** uses preprogrammed ball characteristics, such as speed, spin and trajectory and the difficulties of a game is controlled by LEVEL selection.

The second programming method allows coaches, tennis professionals and sophisticated users to create totally customized routines. It is called "OldMate Simulator" (Rut8 or OM depending on the control panel version) and its operation is detailed in a **separate manual**.

Important Precautions

- It is using 110 OR 220 Volts. Always use three (3) prong, grounded, Ground Fault Interrupter AC outlets only!!!
- Do NOT operate the machine under extreme WET conditions such as heavy rain or snow.
- Do NOT let anyone stand in the front of the machine while power is applied.
- Children under 12 should NOT be around the machine while in operation.
- Do NOT touch the ejection wheels while power is applied. Serious injury can occur.
- Our tennis ball machine will perform the best, if the balls are from the same manufacturer, the same age and pressure. We highly recommend to use **PRESSURELESS** balls. They will bring more consistent results and will last very, very long.
- Contact us or our local distributor before you try to solve any major problems!!!!!!!



You can customize your SuperCoach:

Your ball machine comes precalibrated from the factory. This is done, so you can use the machine immediately, but as you become more familiar with its features, it is up to you how to set up the different levels. As you will see later, the machine has ten (10) different difficulty levels. These levels differ in ball ejection speeds, ball trajectory, and ball repetition (ejection) times. Level 0 is for beginners, Level 9 is the professional level. Using the CALIBRATION mode (pages 16, 17) the ball speeds, spins and trajectories can be changed and saved according to your needs or preferences.

Please Follow These Basic Procedures.

After unpacking the machine, please SAVE the packaging of the machine. You can use it again if you have any problems and you need to send it back to our authorized warranty service center.

1. Position the machine in the middle of the tennis court at the baseline. (Later on you can place the machine anywhere on the court as you develop special coaching setups).
2. Connect the enclosed coiled cable to the Control Panel and to the machine (the connector is located under the power switch).
3. Take off the ball hopper, turn it upside down and place it on the top as shown on the front picture. Tighten the four (4) screws.
4. Take the stirring mechanism with the plastic tubes, place it in the hole at the top center of the machine and turn it a few time counter clock wise until it stops.
5. Use an extension cord if needed and connect it to the cord supplied with the machine. Use only grounded connector to supply power.
6. Turn on the main switch to 1(ON) position
7. Feed 5 tennis balls to the machine.
8. Program 3 strokes on the Control Panel (see page 11) and initiate the strokes by pushing the PLAY button.
9. Feed the ball holder with tennis balls, program your play and enjoy your machine. If everything is OK, you are ready to go.

Please, read the entire manual to learn about the final details of operating your SuperCoach.



The SuperCoach

The Pro Tennis SuperCoach Ball Machine is a microcomputer controlled, direct-access programmable tennis ball machine. It is the most advanced ball machine in the World.

The machine consists of:

- Main unit
- Control Panel
- Control Panel cable
- Remote contro
- Removable handle
- Removable ball hopper with alignment pins (4)

Status LEDs:

GREEN is power on.

BLUE or WHITE blinks 0.5 sec before a ball is ejected.

RED remote is activated

Documentation:

SuperCoach User Guide

OldMade Simulator programming guide

My Programs (blank programming sheets)

Fast, Easy, Visual - Tutorials

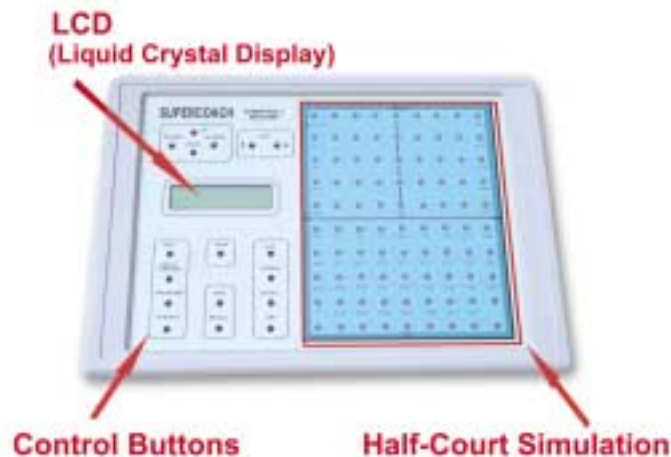




Operation

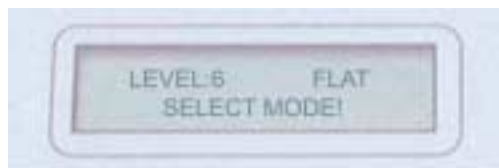
Control Panel

The Control Panel contains control buttons, an LCD (Liquid Crystal Display) on the left side, and the half-court simulation on the right side. Every button (represented by solid dots on the control panel's right side) is a tennis ball impact point location. Almost all of these buttons have dual functions.



Liquid Crystal Display

The LCD display is the heart of the user interface. It communicates with the user, displaying what he/she has just entered, or what is the next proper step. For example, the LCD displays the following message after you turn on the machine:

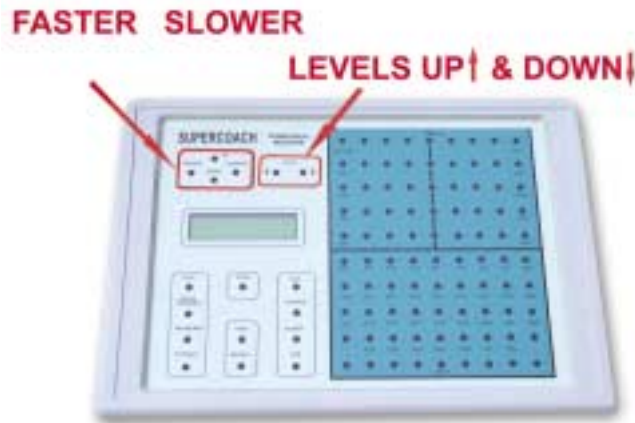


Please always pay attention to the display, because it will make you experience with SuperCoach much easier and more pleasant.



Calibration Buttons

The main purpose of calibration is to adjust any (or all) of the 10 different levels to fit your court conditions or to calibrate them for various ball pressures or manufacturer types. It is used to adjust the ball speed or spin using the FASTER, SLOWER buttons and you can change the vertical angle of a stroke using the UP, DOWN buttons. The calibration is done at positions of ADJ1, ADJ2 and T-LINE center Pr4 (see page 9).



Level up & down Arrows

As shown above the UP & DOWN arrow buttons select the levels from "0" (beginner) to "9" (professional). Each level varies the speed of the strokes (ball ejection speed) and the trajectory of the balls. Follow the arrows to select levels and watch them changing on the LCD.

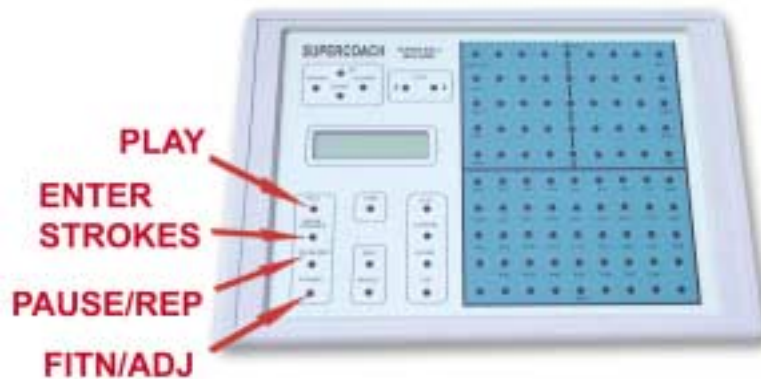
We mentioned before that these LEVELS are precalibrated at the factory, but they are not set in "stone". The SuperCoach tennis ball machine is very flexible due to its programmability. The only thing that is preset for these levels is the ball repetition time, which are the following:

LEVEL 0 - 4.5 sec	LEVEL 1 - 4.2 sec	LEVEL 2 - 4.0 sec
LEVEL 3 - 3.8 sec	LEVEL 4 - 3.6 sec	LEVEL 5 - 3.4 sec
LEVEL 6 - 3.2 sec	LEVEL 7 - 3.0 sec	LEVEL 8 - 2.8 sec
LEVEL 9 - 2.6 sec		

All other parameters can be changed! We will get into more details when we describe later how the calibration is done.



Mode Buttons



PLAY Starts one of the programs or initiate and individual stroke.

ENTER STROKES

Initiates programming activities. After you pushed it, select the ball TYPE and the impact location. Every push on an impact point button will advance the program to the next stroke.

PAUSE/REP

This is a multiple function switch. During operation pushing this button stops the program. During programming one push on the button instructs the machine to repeat the programmed sequence after seven (7) seconds. Any additional push adds another three (3) seconds to the pause. The maximum is thirty one (31) seconds.

FITN/ADJ

This is a multiple function switch. One push on the button displays information on your calorie loss while playing the last game.

Pushing this button twice activates the calibration procedure.



Program Control Buttons

- SAVE** Saves your programmed strokes at locations Pr1-Pr28
- RECALL** Recalls any of the 28 saved programs (Pr1-Pr28). It recalls also the preprogrammed professional styles (Top1 - Top7), coaching routines (Rut1 - Rut8) and the RANDOM mode.
- STOP** Stops any programming as well as PLAY activities



Stroke Types:

FLAT, TOPSPIN, SLICED (underspin), LOB

SuperCoach is the only tennis ball machine in the World which can vary the stroke type from one ball to the next. While you programming, you can change (but don't have to) the ball type any time before selecting its location on the court.





HALF COURT Simulation

On page 4 we showed the Control Panel where the right side represents your side of the court. Each black dot represent a point on the court where your ball will land if you select that location. **The bottom side is the BASELINE where you stand to play against the machine.**

You have to keep this in mind, because if you are doing the programming at the machine everything seems to be a mirror image. So if you are right handed and want to receive a fore-hand do not look at the other side of the court, just look at the control panel.

During programming you usually select the ball type first then select the impact point. If you don't want to change the ball type just select a new impact location and the program automatically advances to the next stroke.

Program selection

As you can see some of the buttons - which have a label attached to them - have double functions (see next page for diagram):

RANDOM

Starts the program by ejecting various types of strokes in a random fashion.

Top1 - Top7

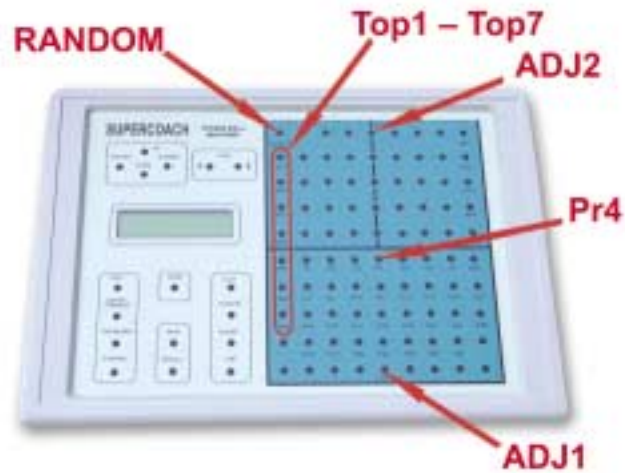
Preprogrammed professional players' styles. The Top programs are fixed sequences and can not be changed.

Special Functions

ADJ1 Base line calibration point. In the calibration mode pushing this button will send a ball to toward the base line center.

ADJ2 This button is similar to ADJ1, but corresponds to the center behind the net.

Pr4 This is the calibration point for the T-Line.



Other Program Locations

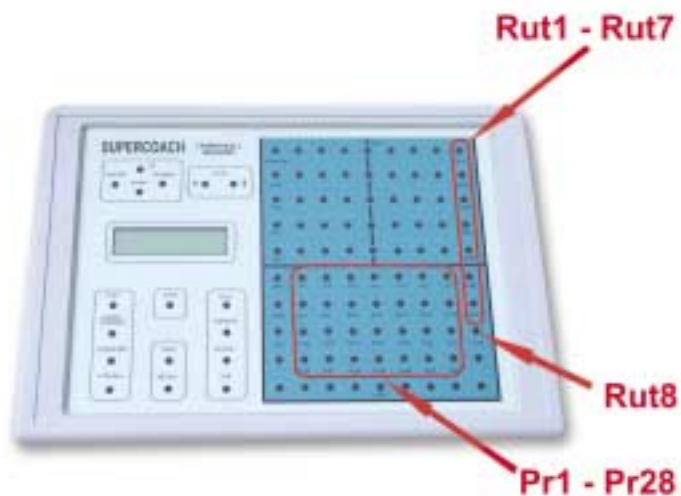
Pr1 - Pr28

Individually saved programs in memory up to 30 strokes per program. They can be changed any time.

Rut1 - Rut7

Preprogrammed coaching routine plays baseline and T-Line strokes.

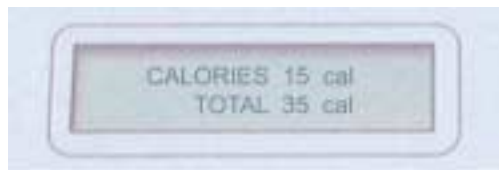
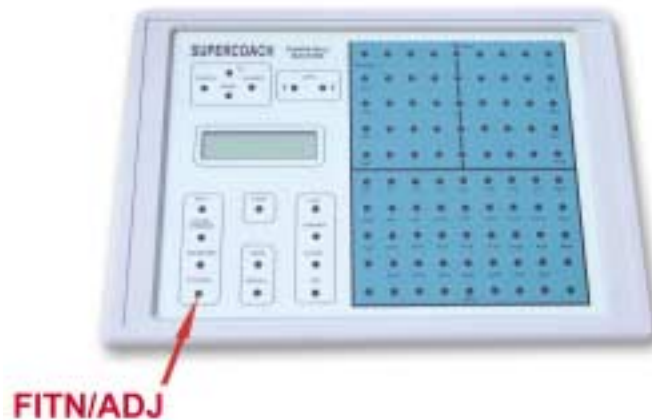
Rut8 OldMate Simulator Program. It allows you absolute flexibility to select the type of strokes, repetition times, balls impact points, trajectories speeds, and spins up to 16 balls per program. You can save eight (8) of these routines. Coaches, tennis professionals and sophisticated users will love this program.





Fitness Button

Pushing the FITNESS button ONCE, the LCD displays the calorie you have burned during your playing time.



First row shows the calories you have burned during the last game you have selected. The second row shows the total calories since you have turned the machine on.

If you press this button twice by accident, the program goes into a calibration mode. Push STOP to return to an idle state.



Programming

The SuperCoach was designed for “easy to use”. There are two programming modes. One of them is for pre-calibrated levels. This makes it easy to program, because the parameters of the balls, such as speed, spin and trajectory over the net are already preprogrammed.

You just select the TYPE of the ball and decide where you want to place it on the court. The right side of the control panel simulates YOUR side of the court, that is, where you are standing as you are playing against your partner, in this case the machine.

For the next balls you just do it again and again, up to thirty (30) times per program. If you like your program you can save it, and play it again next time.

Programming steps:

1. Select the LEVEL of playing on the Control Panel. Check your selection on the LCD.
2. Push the ENTER STROKES switch.
3. Select the type of stroke (FLAT, TOPSPIN, SLICED, LOB) and select the tennis ball impact point on the tennis court. The LCD shows the number and type of the selected strokes.
4. Repeat programming steps No. 3 up to maximum of 30 times.
5. If you want to repeat this programmed sequence push the PAUSE/REP button. See details on the next page.
6. Push the STOP button to finish programming.
7. Push the PLAY button to experience your programmed strokes.
8. If you like what you have programmed, push the SAVE button, and one of the program locations Pr1- Pr28.

If you wish, for future reference, make a written note about your programs using our pre-printed programming sheets.



Selecting routine repetition time delay:

During your programming you have the capability to build in a repeated playback into your program pushing the PAUSE/REP button. It means that when your program finished the last stroke, the computer repeats the same program all over again until you push the STOP button. If you push the PAUSE/REP button once (r1 appear on the LCD), that means the program will repeat itself after 7 seconds. Every additional push adds 3 seconds on to the delayed time. Here are the repeating times with the associated letters:

r1= 7s delay	r2= 10s delay	r3= 13s delay
r4= 16s delay	r5= 19s delay	r6= 22s delay
r7= 25s delay	r8= 28s delay	r9= 31s delay

This allows the player or the coach to select the desired resting time depending on the routine programmed. If you save a program, this delay time will be saved with it.

Professional Programs

In order to operate the TOP PROGRAMS follow these steps:

1. Select LEVEL 6, 7, 8, or 9 on the Control Panel. (Check the selection on the LCD.)
2. Push the RECALL button and one of the buttons for Top1-Top7.

Each program contains 8 strokes. These programs are preprogrammed and can not be changed. The selected program repeats itself until pushing the STOP button. The Top1-Top7 programs are real professional players' style. These programs are extremely challenging.

Routine Programs

In order to operate the ROUTINE PROGRAMS follow these steps:

1. Select the LEVEL of playing on the Control Panel (check the selection on the LCD). Here the levels do **NOT** control the repetition time. (You can change the ball speed and elevation buy recalibrating any of the levels. You also can reproduce these routines with a greater flexibility using the OldMate Simulator (Rut8 or OM) routine.



2. Push the RECALL button and select one of the coaching routines Rut1-Rut8. The LCD shows the name of the routine program, the repetition time between strokes and the number of the program. You can change the repetition time with the FASTER and the SLOWER buttons between 1.4 - 5.8 seconds.
3. Push the PLAY button to initiate the program.

These programs are pre-programmed and can not be changed. The selected program repeats itself until pushing the STOP button. These programs can be recalled in every level. The following list describes the sequences of these routines.

- Rut1 = T - Line Center - FLAT
- Rut2 = T - Line Alternating (sides and center) - FLAT
- Rut3 = T - Line Sides - FLAT
- Rut4 = Baseline Center - FLAT
- Rut5 = Baseline Alternating (corners and center) - FLAT
- Rut6 = Baseline Corners - FLAT
- Rut7 = Center of the court - LOB
- Rut8 = "OldMate" (Playmate, Matchmate, etc.) simulation program

"OldMate" Simulator Program (Rut8 or OM)

This program is designed to simulate the low-tech, analog controlled ball machines on which you can set a parameter of a stroke, such as speed, spin, trajectory, location and repetition time. Since those machines have only one "knob" for each of these parameters, once you set it, that is all you get. In other words you can practice one type of stroke at one speed and maybe several locations along a single line.

SuperCoach can customize **EACH stroke differently** and each stroke can be a different type, different spin, different trajectory and at a different place on the court.

This program is capable of holding up to 16 **different types** of strokes. Each stroke can be modified separately. You can program and change the repetition time (FASTER, SLOWER buttons), vertical height of the ball trajectory over the net (UP and DOWN buttons), the speed and spin of the balls (FASTER and SLOWER buttons), and of course the impact point on the court. You can even fine tune the horizontal positions. You can save eight (8) of these ball sequences. These programs remain in the memory, so you can turn the machine off and recall them after you turned it on the next time.



This program doesn't use LEVELs, since every stroke can be totally different.

The way to program these routines are very similar to the previously described programming method, but a bit more sophisticated and complicated. Please, refer to the separate "OldMate Simulator (Rut8 or OM) Manual" which is supplied with your machine.

(In case you misplace or damage it, you can download it from our WEB site in PDF format, along with any other documentation, including this manual.)

Calibration

Your tennis ball machine is calibrated at the factory, therefore, its calibration is free of external influences, such as wind and ball pressure. If you want to calibrate your machine to fit your environment, **or want to customize your LEVELs**, please use the following procedure:

The calibration process is a simple but time consuming, so you don't have to calibrate all the groups, just the ones you want to change. In this process you calibrate **3 points** for each Group. These points are called ADJ1, ADJ2 & Pr4 as marked on the Control Panel (see page 9).

Calibration groups:

Group #1:	Levels 0 & 1	FLAT
Group #2:	Levels 2, 3, & 4	FLAT
Group #3:	Levels 5, 6, & 7	FLAT
Group #4:	Levels 8 & 9	FLAT
Group #5:	all levels	Topspin
Group #6:	all levels	Sliced
Group #7:	all levels	Lob

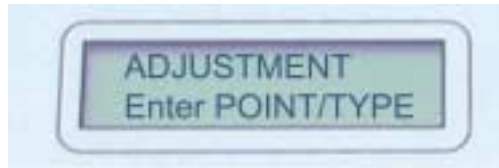
The computer uses these three points to calculate the location of all other impact points on the court. If one point is incorrect the machine will seem to be doing "crazy" things, so in that case check you calibration.

NOTE: You can restore the factory calibration by turning the machine OFF, then while holding the Pr4 button turn it back ON. Wait a few seconds. When the display intructs you, press Top2 then ENTER STROKES.



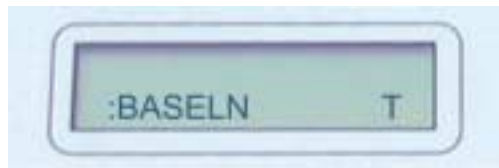
Calibration Steps:

If you want to calibrate a FLAT stroke, select the the desired LEVEL (Group) first. The calibration mode is entered by pressing FITN/ADJ twice. The following display will appear on the LCD.

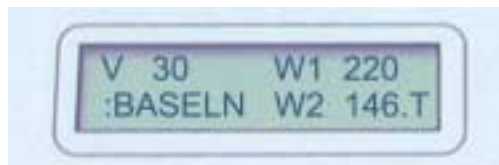


Select the stroke type you want to valibrate. (While you are in this mode you can change the ball type (F, T, S, L) but not the LEVEL for FLAT strokes. You need to terminate this mode by pushing STOP to change LEVEL.)

Let's assume you want to calibrate TOPSPIN at the baseline first. Press TOPSPIN then ADJ1. The display first changes to:



letting you know that it is playing a TOPSPIN ball to the baseline, then it will change to:



This is the most important display during calibration. It will be different depending on which group or ball type you are calibrating. The displayed numbers do not represent any actual parameters, they are just for reference, so you can see which way you are adjusting a particular parameter. Here is what they represent (for adjustment buttons, see page 5):

V the value next to it represents the relative vertical angle of the ejection gun. The UP & DOWN buttons will increase or decrease it. You probably have to play with this value while you are adjusting the speed of the wheels.

W1 & W2 - the values next to them represent the relative speed of the upper and lower ejection wheels, respectively. During calibrating a FLAT or LOB stroke these two values are the same, and change together if you press the FASTER & SLOWER buttons. Naturally, for TOPSPIN W1 will be larger than W2 and the other way around for SLICE.



- . **(dot)** next to the wheel speed number indicates that the FASTER & SLOWER buttons will increase or decrease its speed. This is how you can adjust your SPIN. The smaller the difference between W1& W2 the smaller the spin is and vice verse. You can alternate between W1 & W2 by using the up & down arrows of the LEVEL buttons. Changing the wheel speeds while alternating between them gives you the ultimate flexibility to select your SPIN.

- T in this case shows that you are calibrating a TOPSPIN stroke. For FLAT, SLICE & LOB it will change to F, S & L respectively.

Calibration of the FLAT type strokes for Group1:

Step 1 Locate the tennis ball machine in the middle of the tennis court's baseline. Fill-up the ball holder with tennis balls, and turn on the main switch.

Step 2 Select Level 0 or 1 for Group #1 pushing the LEVEL button up or down on the Control Panel. (The FLAT stroke type is automatically selected by the computer when you turn on the machine.)

Step 3 Push the FITN/ADJ button on the control panel TWO (2) times. The LCD indicates the selection of the adjustment procedure.

Step 4 Push the ADJ1 (BASELINE) button. The machine will serve a ball to the BASELINE center on the tennis court at every activation. If the impact of the ball on the tennis court is far from the BASELINE, push the FASTER (ball was too short) or SLOWER (ball was too long) buttons in the CALIBRATION section. Push the ADJ1 button again to see the result. Continue until the impact point on the tennis court as close to the BASELINE as you like it.

Note: If the FASTER and SLOWER buttons can NOT accomplish the desired result, use the UP (if the ball is too short) or DOWN (too long) buttons to adjust the angle of the balls' trajectory.

Step 5 Push the ADJ2 (net) button. Repeat the procedure as in step 4.

Step 6 Now calibrate the T-LINE (labeled Pr4) the same way.

Step 7 If you are satisfied with your calibration, push the SAVE button to save it. (If you do not save your calibration you will lose your data after the machine is turned off.)

Step 8 Push the STOP button. The calibrations for GROUP #2, #3 and #4 are exactly the SAME as GROUP #1. Just select the appropriate LEVEL, then repeat Steps 3-7.



Note: The calibrations for TOPSPIN,, SLICE, and LOB are independent of the LEVEL. The calibration sets the SPIN for all levels. This means, if you want to change the spin for a particular player, enter the calibration mode, change the spin up or down as required and if you don't save it, (by pushing the SAVE button) it is just a TEMPORARY change. It disappears when the machine is turned off.

A few words about **SPIN**: The amount of topspin or slice that someone can produce is dependent on player's skill. Amateurs and recreational players can produce very small spin and also have difficulties returning a ball with a lot of spin. Professional level players thrive on them and have difficulty practicing their return since it is not easy to produce. SuperCoach can accommodate your needs. You can adjust the spin from almost FLAT to very high. So, don't be afraid to change it to fit your players' requirements.

TOPSPIN Calibration

- Step 1 Select TOPSPIN on the Control Panel
- Step 2 Push the FITN/ADJ button on the control panel two times. The LCD indicates the selection of the adjustment procedure.
- Step 3 Calibrate the SPIN at the three points (ADJ1, Pr4 & ADJ2) as it is described on pages 15, 16.

If You want to make this spin permanent (you can change it again as above) push the SAVE button.

SLICE Calibration

- Step 1 Select SLICE on the Control Panel
- Step 2 & 3 same steps as for TOPSPIN

If You want to make this spin permanent (you can change it again as above) push the SAVE button.

LOB Calibration

Select LOB on the control panel and repeat steps 3 through 7 for FLAT calibration.

Enjoy your SuperCoach and if you have ANY questions, please contact us at:

info@tennismachine.com
or call: (408) 855-9644

The SuperCoach Team



Specifications

- 110/220 Volts, 6A max.
- Microcomputer controlled tennis ball machine, fully programmable.
- Ten (10) selectable levels (0-9) to fit the players' experience level.
- Mode selection (Play, Enter Strokes, Pause/Repeat, Fitness/Adjustment).
- Program Control (Save, Recall)
- Ball Type selection (Flat, Topspin, Sliced, Lob).
- Calibration mode to adjust the speed, spin and vertical angle a stroke.
- 28 programs can be saved. Each program can contain maximum of 30 strokes.
- 7 preprogrammed Professional Programs.
- 7 preprogrammed Coaching Routine Programs.
- OldMate Simulator Program allows you to customize every stroke (up to 16) with an additional eight (8) program locations.
- Random capability.
- Fitness/Calories burned monitoring.
- Size: H= 36" (91cm), L= 27" (68cm), W= 22" (56cm)
- Weight= 85 lbs (38.5kg)
- Ball speed: up to 85mph/136 kph
- Ball capacity: 200 balls (350 balls optional)
- Optional LED status indicators

Warranty

The Pro Tennis SuperCoach Ball Machine comes with 12 months of warranty for parts and labor, under normal operating conditions. Unauthorized repairs or abusing operating conditions, including rain and snow will result in losing the warranty coverage. Only authorized service stations are allowed to service the machines!

SuperCoach International, Inc.

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