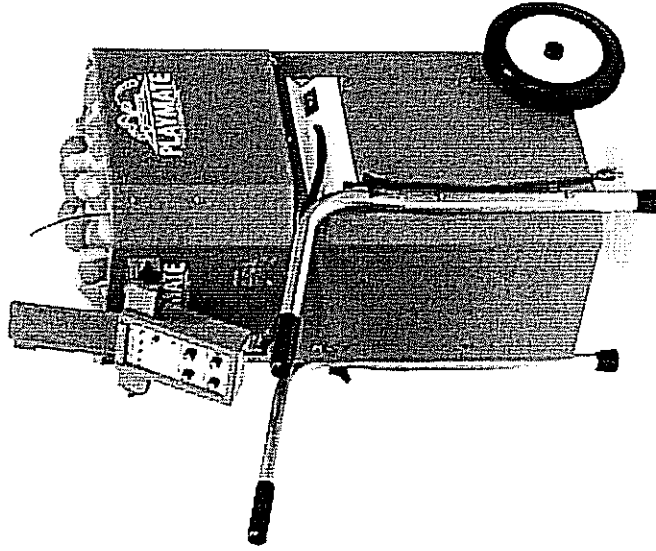


800.776.6770

[www.playmatetennismachines.com](http://www.playmatetennismachines.com)



Metaltek  
455 Kitty Hawk Drive  
Morrisville, NC 27560  
919.544.0344 tel  
919.544.1430 fax

Owner's Manual: The Playmate Ace

## Warranty and Limitations of Liability

**FULL THREE –YEAR WARRANTY** - The PLAYMATE tennis machine is warranted against defects in materials and workmanship for three (3) years from the date of delivery. During the warranty period, METALTEK will repair or, at its option, replace at no charge components that prove to be defective, provided the parts are returned, shipping prepaid, to METALTEK.

This warranty does not apply to the normal wear and tear to the machine or its components as received from proper use.

Nor does this warranty apply to any damage to the machine or remote control, or to any other components caused by accident or misuse or as a result of service or modification by any persons other than those certified by METALTEK. No other express warranty is given by METALTEK.

### **METALTEK SHALL NOT BE LIABLE FOR CONSEQUENTIAL DAMAGES.**

**OBLIGATION TO MAKE CHANGES** – Products are sold on the basis of specifications applicable at the time of sale. METALTEK shall have no obligation to modify or update products once sold.

**METALTEK'S PLANT:**      **REPAIR POLICY**  
455 Kitty Hawk Drive  
Morrisville, NC 27560  
USA

**REPAIR TIME** – Parts are normally repaired and returned within five (5) working days of receipts at METALTEK'S plant.

**SHIPPING INSTRUCTIONS** – Parts should be returned in a protective package to avoid in-transit damage. Such damage is not covered by warranty.

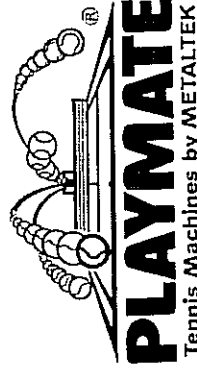
**SHIPPING CHARGES** – Whether the machine is in warranty or out of warranty, the customer should prepay shipment to METALTEK.

**FURTHER INFORMATION** – Service contracts are not available. Machine control circuitry and design are proprietary to METALTEK and manuals are not available to customers. Should other problems or questions arise regarding repairs, please call METALTEK.

# Playmate Ace Basic

## Owner's Manual

Second Edition, January 2003



**METALTEK**  
455 Kitty Hawk Drive  
Morrisville, NC 27560  
Tel: 919.544.0344  
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Serial #: \_\_\_\_\_

WARRANTY

# **Playmate Ace Basic**

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Dear Valued Customer,

*Congratulations on the purchase of your new Playmate Tennis Ball Machine. We have packed over 30 years of experience and dedication into the production of each and every ball machine that leaves our high-tech facility in Raleigh, North Carolina.*

*It is our mission to build the most durable, dependable, and player-friendly machines. Quality is assured from the gear motors and pitching wheels, to the fully programmable control boxes and remote controls.*

*We hope that you enjoy your new ball machine as much as we enjoyed building it. We encourage your comments and suggestions on how we could better serve you in the future. Please feel free to contact us on our Consumer Connection Line at 1-800-776-6770.*

Sincerely,

Alfred F. Yarur  
President and CEO

## Introduction

The best way to improve your tennis game is to practice. That may sound like simple advice, but it's advice we take very seriously here at METALTEK. We believe that the best way to practice your game is to spend some quality time on the court with a ball machine. Only by utilizing a ball machine as a constant partner will you be able to repeatedly attack all the shots that make up your range as a player, whether that means strengthening your weaknesses or perfecting your strengths. A ball machine is your best choice or practice partner when it comes to developing a well-rounded game.

In this age of technological development, we have tried to find a happy balance between technical complexity and ease of operation. We have worked hard to maintain the clean simple appearance of our design and the utility of our controls, while generating machines that can offer full game simulation and programmability. Even if you are still having trouble programming the VCR, we hope that our machines will present themselves without difficulty. After only a short while with this manual you should be able to have your new Playmate up and running and be practicing the shots that you want to be practicing!

## Safety Instructions

**WARNING!** To reduce the risk of electrical shock, fire, injury to persons, and other damage when using this product, please follow these basic safety precautions.

1. Read all instructions carefully before operating this machine.
2. To protect against the risk of electrical shock, never immerse any part of this machine in water or any other liquid.
3. Always use a grounded three-prong extension cord to supply power to this ball machine.
4. Close supervision is necessary when operating this machine near children.
5. Never walk in front of this machine when it is operating. Tennis balls leave the machine at high speeds and could cause serious injury.
6. Always stand to the side, or behind the machine when attempting to alter the settings of the various controls.
7. **If it is necessary to free a jammed tennis ball, make sure that the machine is turned OFF and unplugged.**
8. Always wear protective eyewear when attempting any repairs or adjustments on this machine.
9. **Never attempt any repairs or adjustment on this machine when it is plugged in. Always turn the power switch OFF and unplug the power cord.**
10. **This machine is intended for pitching tennis balls only. Never attempt to use this machine with any other type of ball, or any foreign objects whatsoever.**
11. Always make sure to turn this machine OFF when it is not in use.

## Electrical Requirements

A heavy-duty power cord (not included) is recommended for use with the Playmate Ball Machine. All machines should be plugged into a 120V 50/60 Hz outlet (220V 50/60 Hz outlet for overseas machines equipped with transformers). If you are using an extension cord of 100 feet long or less, we recommend that you use a 16 gauge or heavier extension cord that is grounded. For longer distances, a 14 gauge grounded extension cord is recommended.

## Getting Started

Your new Playmate should have arrived securely packed. Make sure to inspect the machine for any damages that could have occurred during shipment. If machine is damaged please save all packing and box for inspection purposes. Inside the packing box, you should have found the owner's manual, warranty card, and hand held remote control. If any of these are missing, please notify Metaltek immediately. Your new Playmate should be ready for use in only a few minutes by completing the following easy steps.

- 1. ASSEMBLING THE HANDLES** - The handles are reversed along the sides of the machine for compact shipment. To place them in their proper position, loosen the black triangular head screws until they are free. Swing the handles around 180 degrees until they are running parallel to each other behind the machine. Line up the holes and replace the triangular head screws, tightening until snug. **DO NOT OVERTIGHTEN.**
- 2. ASSEMBLING CRANK HANDLES** - If you have purchased an ACE BASIC equipped with a large hopper, it will be necessary to assemble the crank handles for the Oscillation and Elevation controls. To do this you will need a 1/8 hexagonal wrench. While facing the back of the machine, check to see that the two shafts exiting the cabinet just below the hopper are protruding as far as possible. Place the crank handle onto the shaft for the Oscillation control, making sure to line up the flat surface of the shaft and the set screw. Tighten the set screw securely. Repeat the above for the Elevation control.
- 3. SUPPLYING POWER** – Plug an extension cord into a grounded three-prong outlet of the proper ratings (see **ELECTRICAL REQUIREMENTS**), and attach the other end to the power cord on the left side of the machine.
- 4. FILL THE HOPPER** – Depending on whether your machine has a large or small hopper, it will hold anywhere from 200 to 300 tennis balls. We recommend using pressureless tennis balls because they respond better for a longer period of time. Pressureless tennis balls are available from Metaltek by the gross.

## The Playmate Oscillation System (ACE-BP)

You can manually program your machine to oscillate between any of three shot positions on the court. To manually program the machine, simply place the supplied feeding disk pegs into the two slots on either side of the four openings of the feeding disk. Place them firmly into these slots so that the peg is held securely in place across the center of the opening. By blocking off different openings, you can set the machine to produce different patterns of left, right, and center shots. The following seven blocking arrangements will create the seven possible oscillation patterns.

1. By blocking the opening marked "**C 1**", the Playmate will oscillate alternately between all three shot positions in the following order: **Left, Center, Right**. By blocking the opening marked "**C 2**", the machine will produce these shots in the reverse order.
2. By blocking both the openings marked "**C 1**" and "**C 2**", the Playmate will oscillate alternately between two shot positions; **Left and Right**.
3. By blocking the opening marked "**R**", the Playmate will oscillate alternately between two different shot positions; **Center (twice) and Left (once)**.
4. By blocking both the openings marked "**R**" and "**C**" (either "**C 1**" or "**C 2**"), the Playmate will oscillate alternately between two shot positions; **Left and Center**.
5. By blocking the opening marked "**L**", the Playmate will oscillate to two shot positions; **Center (twice) and Right (once)**.
6. By blocking both the openings marked "**L**" and "**C**" (either "**C 1**" or "**C 2**"), the Playmate will oscillate alternately between two shot positions; **Right and Center**.
7. By blocking both the openings marked "**R**" and "**L**", the Playmate will produce only **center** shots.

5. **SET THE CONTROLS** — Your machine is just about ready for use. The last thing you will need to do is set the controls to a specific program. Make sure to carefully read the **OPERATING INSTRUCTIONS** before attempting to use this machine.

**NOTE:** If possible, save the shipping box that your Playmate arrived in. Not only will it provide a safe place for long term storage, but will also provide proper protection if it is ever necessary to ship your Playmate in the future.

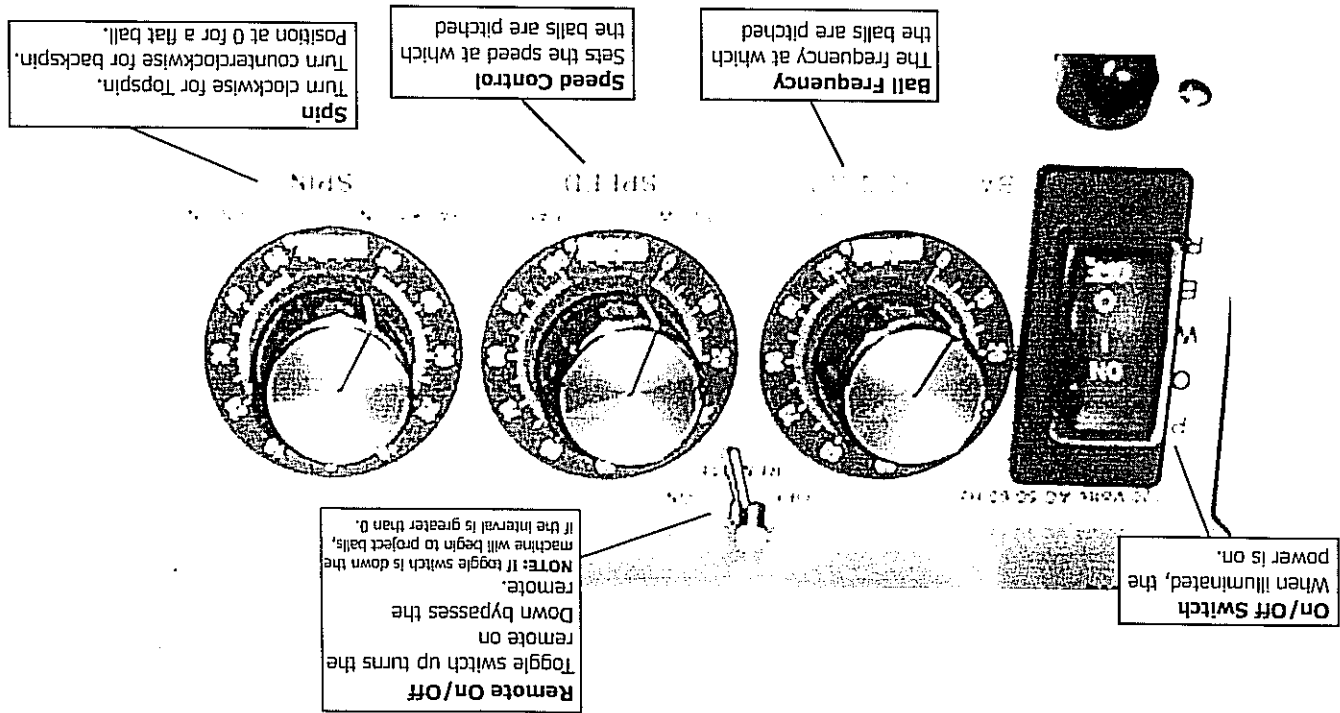
# Operating Instructions

The control box is located on the right side of the Playmate cabinet.

1. **POWER**- The power switch controls the power to the machine. When it is illuminated, power is being supplied.
2. **BALL FREQUENCY** - This knob determines the frequency at which the balls are pitched. Turning the knob clockwise increases the number of balls pitched to a maximum of approximately one ball per second. Turning the knob counterclockwise decreases the number of balls per minute.
3. **SPEED** - The speed knob controls how fast the balls are being pitched. Turning this knob clockwise will increase the speed at which the ball is thrown and turning it counterclockwise will slow it down.
4. **SPIN** - Turning this knob clockwise will increase the topspin of the ball, thereby increasing both the speed at which the ball is pitched, and the amount of topspin placed on it. Turning this knob counterclockwise will increase the amount of backspin, as well as the overall speed at which the ball is pitched. For a flat ball set the knob at 12 o'clock or 0.
5. **REMOTE** - This machine is equipped with a radio remote control system. By selecting the ON position of the REMOTE toggle switch, the hand held remote becomes activated. By selecting the OFF position of the REMOTE toggle switch, the hand held remote becomes deactivated. For more information of the radio remote control system please see next page.

## OTHER CONTROLS

**RADIO REMOTE CONTROL** - The hand held remote control unit activates and deactivates the ball delivery system of the Playmate tennis machine. Push the button once to activate the delivery system, and once more to deactivate it. The remote control is only active when the POWER switch is illuminated, and the REMOTE toggle switch is in the ON position. The radio antenna is located in the back of the ball hopper. Make sure this antenna is pointing upward in order to increase the range of the remote control system.





**OSCILLATION AND ELEVATION** – The crank handles controlling the vertical and horizontal angle of the ball are located on the backside of the machine's cabinet. When the OSCILLATION crank handle is turned clockwise, the horizontal angle of the ball's delivery is increased from a single direction to full court coverage using a programmed sweeping action to one, two, or three different hit positions. When the OSCILLATION crank handle is turned counterclockwise, the horizontal angle decreases. There are approximately 15 full turns between the minimum and maximum oscillation.

The ELEVATION crank handle controls the vertical angle, or shot elevation of the ball's delivery. When this handle is turned clockwise, the vertical angle decreases. As the handle is turned counterclockwise, the vertical elevation of the ball's delivery increases. There are approximately 23 full turns between the minimum and maximum elevation.

**NOTE:** Any control adjustments can be made while the machine is running provided the safety precautions are being followed.

PLEASE SEE PLAYMATE'S MANUAL OSCILLATION SYSTEM

## Care and Maintenance

With proper care and maintenance, your Playmate tennis ball machine should last for years and years of effortless operation. These few basic steps will help to keep your machine in great shape, and deter any future mechanical problems.

**1. PERIODIC CLEANING** – Over a period of use, various debris, and ball fuzz will begin to build up on the interior of the ball machine cabinet. This should be cleared away periodically to avoid excessive build-up that could clog mechanical parts. Use a damp cloth to wipe down both the interior and exterior surfaces of the machine. Very gently use a dull object to help break away large clumps of debris. Never scrape at the surface of your Playmate ball machine with a sharp object, or use any harsh abrasives or solvents. Loose debris can be vacuumed out of the ball machine cabinet. Never use a hose to attempt to spray debris out of the interior of the machine. Excessive water pressure can damage the sensitive electrical components, as well as increase the risk of electric shock.

**2. PERIODIC LUBRICATION** - The majority of the moving parts inside the ball machine are lubricated and sealed at the factory. These parts should require no lubrication at all. In order to maintain the ease of operation however, periodic lubrication of the Oscillation and Elevation crank arm linkage is recommended. To do this, turn the machine upside down, resting the hopper on a piece of cardboard or other protected surface. Turn the Oscillation crank handle a few times while inspecting to see that the threaded linkage is free of debris and obstruction. Place a few dabs of lubrication (we recommend a white lithium grease) on both sides of the plastic seat and continue to rotate the Oscillation crank handle several times to assure the even distribution of the lubricant. Repeat with the Elevation linkage.

**3. STORING** – When the machine is not in use, it should be stored in a proper and secure fashion. Ideally, it should be placed in a dry and clean area that offers shelter from the elements. Even though the ball machine is constructed from anti-rust aluminum, excessive exposure to wind, rain, sunlight, etc., can often interfere with the operation of the sensitive electrical components, and cause fading and/or other damage to the finish.

## Troubleshooting

| PROBLEM  | POSSIBLE CAUSE  | APPROPRIATE ACTION  |
|--|---|---|
| <b>Inconsistent ball speed</b>                                       | -Pitching wheels are heavily worn. The pitching surface has become dirty.                                   | -Wheels need to be sanded and/or cleaned. Use medium grit sandpaper to restore the textured surface of the wheels.  |
| <b>Ball is not pitched</b>   | -Tennis balls and/or pitching wheels are wet.<br>-A ball has jammed.  | -Wheels and/or tennis balls require cleaning and drying. Remove any wet balls from the hopper.<br>-Turn off power and remove any jammed balls.  |
| <b>Feeding disk does not turn</b>                                    | -Loose electrical connection.<br>-There is a problem with the remote relay.                                 | -Turn the machine upside down and check the connection of cord #3 at the side of the control box.<br>-Turn the Remote ON/OFF switch to off. If the feeding disk works properly, check the remote. See remote troubleshooting below. |
| <b>Balls repeatedly jam</b>  | -The ball feed wire is damaged or missing.  | -Inspect the position of the feed wire over the feed disk. Make sure it allows only one ball to enter each slot in the feed disk as a time. If it is missing, call Metaltek for a replacement.                                      |
| <b>Remote does not function properly</b>                             | -Antenna is not facing upward.<br>-Battery is dead.<br>-Remote ON/OFF switch on control panel is set to OFF | -Reposition antenna<br>-Replace battery in hand held remote.<br>-Set Remote switch to ON  |
| <b>Elevation and Oscillation handles do not turn easily</b>          | -Threaded linkage arms are clogged with debris, or lack proper lubrication.                                 | -Clean debris from the threaded linkage arms and lubricate with a light coating of lithium grease.  |
| <b>Pitching motors and/or interval motor do not operate properly</b> | -Loose electrical connection  | -Turn machine upside down and check the connection of cords #1 and #2 at the side of the control box.   |

## Playmate Consumer Connection

We are here during business hours to help provide technical assistance to our customers.

**Hours of Operation:** Monday - Friday  
8:00am - 4:30pm (EST)

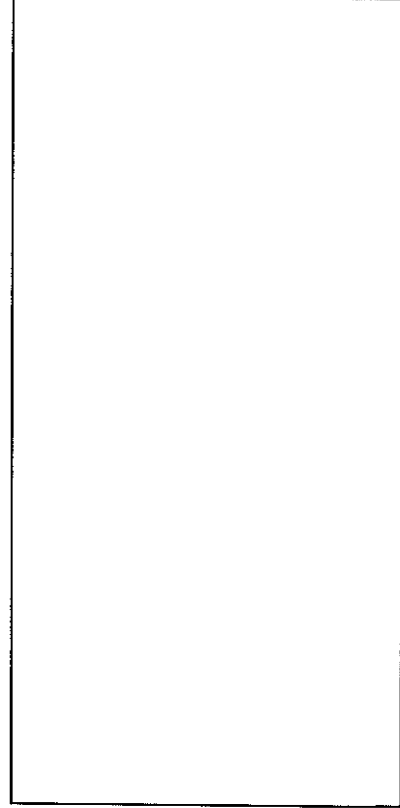
If you experience difficulty with your Metaltek Products please feel free to contact us at one of the following numbers.

Phone: (919) 544-0344  
Toll Free (USA): 1-800-776-6770  
Fax: (919) 544-1430

Or write us at:  
METALTEK  
455 Kitty Hawk Drive  
Morrisville, NC 27560  
USA

Or e-mail us at:  
metaltek@msn.com

## Authorized Sales & Service Center



# Ace Basic Drill

Developed by Stan Oley

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## Drill #1

Flat Groundstroke or Volley to Deuce Court then Ad Court

Set *Remote Toggle Switch* above *Ball Frequency Knob* to ON  
Push *Red On/Off Switch* on *Ball Machine* to ON  
Set *Ball Frequency* to 40/Groundstroke and 50/Volley  
Set *Spin Knob* to 0/Flat  
Set *Speed Knob* to 60  
Set Direction by blocking Feedtray holes C1 and C2 with included rod  
plugs  
Turn *Oscillation Crank Handle* towards minus sign until it stops.  
Turn *Elevation Crank Handle* towards minus sign until it stops.

Using your remote, turn the ball feed ON and turn the *Elevation Crank Handle* towards the plus sign until the ball suits your needs. Next, turn *Oscillation Crank Handle* towards the plus sign until desired oscillation range is reached. Turn feed tray off with remote.

Now walk to the other side of the court and use your remote to start your drill. When balls are depleted or you tire, turn ball feed off with remote before reloading balls.

### TIP

**REMEMBER TO PLACE MACHINE WHERE THE BALL WOULD COME FROM IN A MATCH. DOUBLES PLAYERS SHOULD PLACE MACHINE IN AD OR DEUCE COURT AND PLAY OPPOSITE OF MACHINE. GOOD LUCK!**