Copyright by METALTEK

All rights reserved. This document is supplied to the user with the understanding that no part of the contents may be reproduced or transmitted in any form or by any means without the written permission of METALTEK.

METALTEK has attempted to insure that the information included in this document was accurate and correct at the time of printing. METALTEK cannot be held accountable for typographical errors or mistakes. The information in this document is subject to change without notice.

Disclaimer

Information in this document is subject to change without notice and does not represent a commitment on the part of METALTEK.

METALTEK provides this document “as is”, without warranty of any kind, either expressed or implied, including, but not limited to, the particular purpose. METALTEK reserves the right to make improvements and/or changes to this manual or the product(s) described herein at any time.

Information provided in this manual is intended to be accurate and reliable. However, METALTEK assumes no responsibility for its use, or any infringements on the rights of fourth parties that may result from its use.

This manual could include unintentional technical or typographical errors. Changes are periodically made to the information herein, with the changes incorporated into new editions of the publication.
Dear Valued Customer,

Congratulations on the purchase of your new PLAYMATE Tennis Ball Machine. We have packed over 40 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 yours,

Alfred F. Yarur
President and CEO
Contents

Introduction ............................................. 6
Safety Instructions ................................... 7
Electrical Requirements ........................... 8
Getting Started........................................ 9
Operating Instructions ............................... 10
Getting to Know your GRAND SLAM........... 14
7 FAVORITE SHOTS ................................. 15
Drill #1 ................................................... 16
Drill #2 ................................................... 17
Care and Maintenance ............................. 18
Troubleshooting ...................................... 19
PLAYMATE Consumer Connection ............ 20
Warranty and Limitations of Liability ...... 22
Introduction

The best way to improve your tennis game is to practice. That may sound like simple advice, but it is 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. By utilizing a ball machine as a constant partner, you will 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 of 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. After only a short while with this manual you should 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 grounded three-prong 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 50 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. 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 back of the machine.

3. FILL THE HOPPER – For consistency, we recommend that all the balls used in the machine at one time be of the same type and approximate wear. DO NOT USE WET TENNIS BALLS.

4. 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.
2. **Remote/Bypass**
   - Toggle switch up turns the remote on; down bypasses the remote.
   - **NOTE:** If toggle switch is down, the machine will begin to throw balls if the interval is greater than 0.

4. **Height**
   - Controls overall height of the ball. Turn clockwise for a lob. Turn counterclockwise for a volley.

4. **Speed**
   - Sets the overall speed at which the balls are thrown. Turn clockwise to increase; turn counterclockwise to decrease.

4. **Spin**
   - Turn the knob clockwise for topspin. Turn the knob counterclockwise for backspin. Position at 0 for a flat ball.

4. **Slice**
   - Turn clockwise for left-handed slice. Turn counter-clockwise for right-handed slice. Position at 0 for no slice.

4. **Delay**
   - The amount of time reduced from the ball frequency to create the correct rhythm of a drill.

5. **Random Shot On/Off**
   - Toggle up - shots at random
   - Toggle down - shots in sequence

6. **Direction Thumb Wheel**
   - Work with diagram to determine placement of balls across the width of the court.

3. **Shot Sequence**
   - Thumb wheels 1-7 allow a designated sequence of the programmed shots.

1. **Feed Rate**
   - Sets the interval at which the balls are thrown.

7. **Random Direction On/Off**
   - Toggle up - direction at random
   - Toggle down - direction in sequence

8. **Spread Angle**
   - Lateral distance between shots. Turn clockwise to increase distance, counterclockwise to decrease.
Operating Instructions

The GRAND SLAM control box can be hand held, attached to a fence, or attached to the back of the Playmate cabinet.

**POWER** – This switch controls the power to the machine. When it is illuminated, power is being supplied. The Power switch is located on the ball machine cabinet.

1. **FEED RATE** – This knob determines how frequently 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.

2. **REMOTE** – This machine is equipped with a radio remote control system. By selecting the REMOTE position, the hand held remote becomes activated. By selecting the BYPASS position, the hand held remote becomes deactivated. For more information on the radio remote control system, please see below.

**SHOT SEQUENCE AND DIRECTION CONTROLS**
The SHOT SEQUENCE and DIRECTION controls work together to program the direction at which shot leaves the ball machine. The DIRECTION control determines the horizontal placement of the ball across the width of the tennis court. The SHOT SEQUENCE control allows you to select shots from the SHOT SETUP and place them in the order in which they are to be thrown. Using these controls in combination, the machine can be programmed to pitch the same exact shot repeatedly, or to produce infinite variations and game-like conditions.

3. **SHOT SEQUENCE** – This control features seven thumb wheels. Each thumb wheel is numbered “1” through “7”, with thumb wheels “2” through “7” having an extra letter “A” after the last number. Once the letter ‘A’ is selected, it will limit the shots to those set to the left of it. These thumb wheels correspond to the shots programmed using the SHOT SETUP controls. All seven differently programmed shots can be selected, or any combination of them.

4. **SHOT SETUP** – The shot setup panel features seven independently programmable shots, each utilizing four different control knobs. These knobs can be used to set the HEIGHT, SPEED, SPIN, SLICE, and DELAY of each shot.
**HEIGHT:** This knob controls the overall height of the ball being pitched. Turning this knob to the right increases the height of the ball. Turning it to the left decreases it.

**SPEED:** This knob controls the speed of the ball being pitched. Turning this knob clockwise will increase the speed of the ball being pitched; turning it counterclockwise will decrease it.

**SPIN:** This knob controls the TOPSPIN and BACKSPIN of the ball being pitched. Turning this knob clockwise will give TOPSPIN, counterclockwise BACKSPIN; if this knob is at 0, it will be a flat ball.

**SLICE:** This knob controls the amount of slice applied to the ball as it is pitched. Turning this knob clockwise will put a left-handed slice on the ball; counter-clockwise will put a right-handed slice on the ball. If this knob is set to 0, there will be no slice.

**DELAY:** This knob allows you time to return to the baseline or create the appropriate intervals between shots during a drill.

---

5. **SHOT SEQUENCE – RANDOM ON/OFF** – Once all the shots in the setup have been programmed and the shot sequence thumb wheels have been set, the order in which they are pitched by the ball machine can be selected with the RANDOM ON/OFF mode toggle switch. If this toggle switch is placed on RANDOM OFF, the shots will be pitched in the exact order in which they have been selected on the SHOT SEQUENCE thumb wheels. If the RANDOM ON mode is selected, the machine will produce the selected shots in a completely random order, automatically producing up to 800,000 possible combinations. To increase the probability of a specific shot, set at least two of the shot selection memory controls to that shot. To triple the probability, set at least three of the shot selection memory controls to that shot.

6. **DIRECTION PROGRAM** – The direction control features seven built-in directions. The seven numbers across a base line graphically represent the direction of each of the shots from left to right on a standard doubles court. There are seven thumb wheels, labeled “1” through “7” which recall the seven specific directions in any order, producing different patterns. Each thumb wheel switch features any of the seven directions for your selection.

To set a pattern of directions, turn each of the thumb wheel switches up or down to the number of the corresponding direction you desire. Thumb wheel switches “2” through “7” feature the extra letter ‘A’. If this letter is selected, it will limit the directions to those set to the left of it.
7. DIRECTION RANDOM ON/OFF – Once you have set the thumb wheels to any combination of the possible directions, you can select the order in which the machine will produce the directions. If you put the RANDOM ON/OFF toggle switch on the RANDOM OFF mode, the machine will pitch the directions in the exact order that they have been selected on the seven thumb wheels.

If you put the RANDOM ON/OFF toggle switch on the RANDOM ON mode, the machine will produce the selected directions in a random order, automatically arranging them in up to 800,000 different patterns. This will add an element of surprise, and is especially useful when you want to practice a variety of directions without being able to predict what the next one will be. If you want to increase the probability of any given direction, simply set the same direction on two of the thumb wheel switches. In order to triple the probability of a direction, set it three times, and so on.

8. SPREAD ANGLE – The lateral distance, or SPREAD ANGLE, between the seven different shots can be adjusted with the SPREAD ANGLE knob. In order to increase the lateral distance between the shots, turn the SPREAD ANGLE knob clockwise. To decrease the lateral distance between shots, turn the SPREAD ANGLE knob counterclockwise. Turning the SPREAD ANGLE to 0 will force all shots to be fed straight ahead.

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. Hold the button down for 3 seconds to reset the machine. The remote control is only active when the POWER switch is illuminated, and the REMOTE toggle switch is in the REMOTE 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.

SAFETY PRECAUTION: If the machine is turned ON and the REMOTE ON/OFF switch is in the BYPASS position the machine will begin to pitch balls.

NOTE: Any control adjustments can be made while the machine is running provided the safety precautions are being followed.
Getting to Know Your GRAND SLAM

If you have never used a PLAYMATE Tennis Machine, or are unfamiliar with the programmable possibilities of the GRAND SLAM, please take a moment to follow these easy steps to better comprehend the features of your new ball machine.

1. Place the machine at the center of the base line.

2. Check to make sure that the machine is plugged into an electrical outlet of the proper specifications (120 V AC 50/60 Hz, or 230 V AC 50/60 Hz for overseas machines equipped with transformers).

3. Load the hopper with tennis balls, making sure to stay clear of the ball exit in the front of the machine.

4. Go to pg. 16 and follow directions to DRILL #1 to set up a Flat Groundstroke or Volley to your Forehand and Backhand.

5. Now move on to DRILL #2, which will incorporate the DELAY feature, allowing you to return to the baseline following a short ball.

To help you familiarize yourself with the machine, we recommend you try the 7 FAVORITE SHOTS we have included.
# 7 Favorite Shots

## Grand Slam Set-Up

<table>
<thead>
<tr>
<th>Shot #</th>
<th>1 Flat Groundstroke or Volley</th>
<th>2 Moonball or Offensive Lob</th>
<th>3 High Approach Shot</th>
<th>4 Low Approach Shot or Half Volley</th>
<th>5 High Lob or Defensive Lob</th>
<th>6 Topspin Groundstroke or Volley</th>
<th>7 Backspin Groundstroke or Volley</th>
</tr>
</thead>
<tbody>
<tr>
<td>Height</td>
<td>3</td>
<td>7</td>
<td>6</td>
<td>4</td>
<td>10</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>Speed</td>
<td>6</td>
<td>5</td>
<td>4</td>
<td>5</td>
<td>4</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Spin</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>41</td>
<td>48</td>
</tr>
<tr>
<td>Slice</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

T = topspin  B = backspin
Drill #1
Flat Groundstroke or Volley to Forehand/Backhand
(Based on shot settings from page 15)

Set Remote to *REMOTE*
Push Red *On/Off Switch* on Ball Machine to *ON*
Set *Random Direction* to *Off*
Set *Random Sequence* to *Off*
Set *Shot Sequence*
  First thumb wheel  1
  Second thumb wheel  1
  Third thumb wheel    A
Set *Direction* thumb wheels to 3, 5, A
Set *Feed Rate* to 4

Now walk to the other side of the court and use your remote control to start your drill. When balls are depleted or you tire, turn machine feeder off with remote before loading balls.

As a variation, switch *Random Direction* to *On* to receive forehand/backhand in *Random*.

**TIP**
REMEMBER TO PLACE THE MACHINE WHERE THE BALL WOULD COME FROM IN A MATCH, DOUBLES PLAYERS SHOULD PLACE MACHINE IN THE AD OR DEUCE COURT AND PLAY OPPOSITE THE MACHINE.
GOOD LUCK!
DRILL #2
Flat Groundstroke or Volley followed by a High Approach Shot
(Based on shot settings from page 15)

Set Remote to REMOTE
Push Red On/Off Switch on Ball Machine to ON
Set Random Direction to Off
Set Random Sequence to Off
Set Shot Sequence
  First thumb wheel  1
  Second thumb wheel  3
  Third thumb wheel  A
Set Direction thumb wheels to 3, 5, A
Set Delay on Shot 1 to 6
Set Feed Rate to 4

Now walk to the other side of the court and use your remote control to start your drill. After hitting your approach the machine will Delay and allow you to return to the baseline. When balls are depleted or you tire, turn machine feeder off with remote before loading balls.

As a variation, switch Random Direction to On to receive forehand/backhand in Random, or reverse Direction to 5,3,A.

TIP
REMEMBER TO ALWAYS USE TARGETS WHEN TRAINING WITH THE BALL MACHINE. AN AREA OF FOUR 8” CONES IS GOOD. YOU SHOULD COMFORTABLY HIT YOUR TARGET AREA 70% OF THE TIME.
GOOD LUCK!
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. Water can damage the sensitive electrical components, as well as increase the risk of electric shock.

NOTE: On a regular basis, compressed air should be used to blow ball fuzz and/or debris away from the ball sensor area located underneath the black feeding disk near the ball drop hole on the top of the ball machine. Ball fuzz also builds up underneath the same area which can be accessed by turning the ball machine completely upside down and blowing with compressed air. The ball feed wire that goes over and across the feeding disk should be inspected to make sure that it is perfectly straight and not bowed in any way. These maintenance steps are essential for the proper function of the ball machine as well as the safety of ball machine users.

2. 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

<table>
<thead>
<tr>
<th>PROBLEM</th>
<th>POSSIBLE CAUSE</th>
<th>APPROPRIATE ACTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inconsistent ball speed</td>
<td>- Pitching wheels are heavily worn; the pitching surface is dirty</td>
<td>- Wheels need to be sanded and/or cleaned. Use medium grit sandpaper to restore the textured surface of the wheels.</td>
</tr>
<tr>
<td>Ball is not pitched</td>
<td>- Tennis balls and/or pitching wheels are wet</td>
<td>- Wheels and/or balls require cleaning and drying. Remove any wet balls from hopper.</td>
</tr>
<tr>
<td></td>
<td>- A ball is jammed</td>
<td>- Turn off power and remove any jammed balls.</td>
</tr>
<tr>
<td>Feeding disk does not turn</td>
<td>- Loose electrical connection</td>
<td>- Turn machine upside down; check connection of cord #3 at side of control box.</td>
</tr>
<tr>
<td></td>
<td>- Problem with the remote relay</td>
<td>- Turn REMOTE/BYPASS switch to BYPASS. If feeding disk works properly, check the remote (see remote troubleshooting below).</td>
</tr>
<tr>
<td>Balls jam repeatedly</td>
<td>- Ball feed wire is damaged or missing</td>
<td>- Inspect the position of the feed wire over the feeding disk. Make sure only one ball is allowed to enter at one time. If feed wire is missing, call METALTEK for service.</td>
</tr>
<tr>
<td>Remote does not function properly</td>
<td>- Antenna is not facing upward</td>
<td>- Reposition antenna</td>
</tr>
<tr>
<td></td>
<td>- Battery is dead</td>
<td>- Replace battery in handheld remote</td>
</tr>
<tr>
<td></td>
<td>- REMOTE/BYPASS is switched to BYPASS</td>
<td>- Set Remote switch to REMOTE (see pg.10 #2)</td>
</tr>
<tr>
<td>Pitching motors and/or Feed motor do not operate properly</td>
<td>- Loose electrical connection</td>
<td>- Turn machine upside down; check connection of cords #1 and #2 at side of control box.</td>
</tr>
</tbody>
</table>
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.

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

Visit our website at:  
www.playmatetennis.com

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

**Authorized Sales & Service Center**
This page has been intentionally left blank.
METALTEK LIMITED WARRANTY

WARRANTY COVERAGE - This warranty applies to new PLAYMATE Commercial tennis machines (ACE, SMASH, DEUCE, GENIE, GRANDSLAM, and SERVELIFT). PLAYMATE Portable Series tennis machines (VOLLEY, HALF VOLLEY) are warranted under separate warranty. This warranty covers defects in materials and workmanship for **three (3) years** from the date of purchase. During the warranty period, METALTEK will repair or, at its option, replace components that are determined to be defective, and shall do so at no charge. However, you must pay any applicable labor and inspection charges, and shipping charges to METALTEK. This warranty only applies to original purchasers. On PC versions of the PLAYMATE Commercial tennis machines, the handheld PC units are not warranted by METALTEK, but subject to a separate warranty by its manufacturer.

WHAT WARRANTY DOES NOT COVER - This warranty does not cover damage to the machine or any part or component thereof caused by or resulting from: misuse, abuse, accidents, acts of God (such as floods or hurricanes), normal wear and tear, failure to follow operating instructions, service or modifications by any persons other than those certified by METALTEK, and damage during shipment (all claims must be presented to the shipper within 7 days of receipt of merchandise).

TO OBTAIN SERVICE – In order to be eligible for service under this warranty, you **MUST** return the attached warranty registration card within ten (10) days of purchase. If something goes wrong, you can contact METALTEK directly at:

**METALTEK’S PLANT:**
455 Kitty Hawk Drive
Morrisville, NC  27560
USA
Toll Free No: (800) 776-6770

METALTEK may refer you to an Authorized Sales and Service Representative for consultation and/or inspection of the problem and to correct if possible. There may be an inspection charge for on-site inspection. You will be responsible for any labor charges and for prepayment of the costs of returning the machine or part(s) to METALTEK. Parts should be returned in a protective package to avoid in-transit damage. Such damage is not covered by this warranty.

THIS LIMITED WARRANTY IS IN LIEU OF ALL OTHER EXPRESS WARRANTIES. ANY IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE SHALL COINCIDE IN DURATION WITH THE THREE-YEAR LIMITED WARRANTY. IN NO EVENT SHALL METALTEK BE LIABLE FOR CONSEQUENTIAL AND INCIDENTAL DAMAGES. (Note: Some states do not allow exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you.) This warranty gives you specific legal rights, and you may also have other rights which vary from state to state. No dealer has the right to modify this warranty or to make any representation or promise on behalf of METALTEK.