# owner's manual

#### About Telesensory Systems, Inc.

Telesensory Systems, Inc. was established in 1970 following several years of research on the Optacon, a reading machine for the blind. Today TSI is a world leader in the development of sensory aids for the handicapped. TSI's main objective is to be responsive to the needs of the handicapped community and to bring a highly competent staff and the latest technology to bear on these needs.



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#### LIMITED WARRANTY

For one year from the date of delivery, Telesensory Systems, Inc. (TSI) warrants that The Game Center (and accessories) will be free from defects in material or workmanship. TSI's obligation under this warranty is limited to the exclusive remedies of repair or replacement of defective parts or refunding the purchase price as TSI may elect. To obtain warranty service, the product or accessory must be shipped transportation pre-paid to Telesensory Systems, Inc., 3408 Hillview Avenue, Palo Alto, California 94304, U.S.A., or to TSI's authorized service center for your area. The address of the service center for your area can always be obtained by writing to TSI at the above address or by telephoning (415) 493-2626 (this is not a toll free number). TSI will pay shipping costs for returning the product to you.

This warranty shall not apply to any part of the product or accessory which has been abused or misused physically or electrically. This warranty shall not apply to any part of the product which has been damaged by use of parts and service not authorized by TSI.

All warranties, whether expressed or implied, including any implied warranty of merchantability or fitness for a particular purpose are limited to a duration of one year from the date of delivery. Some states do not allow limitations on how long an implied warranty lasts, so the above limitation may not apply to you.

In no event shall TSI be liable for incidental or consequential damages. Some states do not allow the 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.

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#### LOCATION OF CONTROLS

#### INTRODUCTION

Whether it's beating the electronic dealer in *Blackjack*, the clock in *Number Run*, or your opponent in *Tug O'War*, **The Game Center** can fill your leisure time with excitement and fun. A miniature computer generates electronically synthesized speech and other audible game cues—and even announces the winner with a cheer, "root,root,root," using the **SPEECH+ Calculator** voice.

The Game Center has eight games which are described in this booklet. You can challenge the machine, compete with your own scores, compete with another player, or try for a record.

The location of the controls of The Game Center as described below are illustrated in Figure 1 on page 5.

#### The Back of the Game Center

The **Power Cord** is at the back of The Game Center, just right of center. Connect the Power Cord *only* to a grounded 115 volt AC outlet.\* If a grounded AC outlet is not available, a NEMA type adapter must be used to make proper AC power connection.

The **Fuse Holder** is to the right of the Power Cord. It uses a ½ amp 250 volt fuse. If the fuse should blow out, the machine will not operate; do not replace it while the unit is plugged in. If the fuse continues to blow out, contact a TSI service center. Other than replacing a fuse, do not attempt to make any repairs to The Game Center yourself.

To the right of the fuse holder is an **Eyelet** that can be used to secure The Game Center by cable to a table or post.

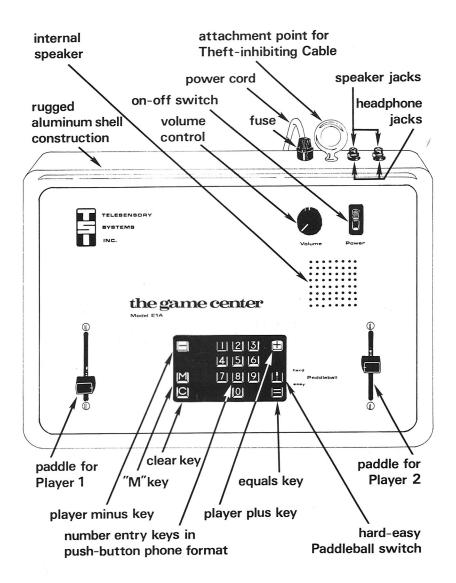
Next to this eyelet are the two **Headphone Jacks**. They are used in the Paddleball game. The headphones supplied plug directly into these female sockets.

Two **Speaker Jacks** are directly below the headphone jacks and can be connected to any standard stereo system when playing Paddleball. RCA type phonograph plugs will connect here to your amplifier "Aux input" and allow you to get the necessary stereo effect without wearing the headphones.

#### **Controls and Keyboard**

The **On/Off Switch** is at the top right corner. To turn on The Game Center, flip this rocker switch toward the back. The

<sup>\*</sup>Game Centers provided to users in countries with 220 volt power supplies have been equipped with 220 volt transformers and continental plugs.



unit will complete a self-check and say "equals" when finished. You can then select the game you wish to play.

To the left of the On/Off switch is the **Volume Control Knob**. To increase the volume, turn the knob clockwise. *NOTE: The knob does not control volume when playing Paddleball.* 

Just below these two controls is the **Speaker**; there is a series of holes in the cabinet at its location. When cleaning the surface of the unit, never use an abrasive cleanser and be sure that no water enters through the holes in the cabinet.

The Keyboard is centered in the lower half of the cabinet and is similar to a push-button telephone: 11, 2 and 3 going from left to right in the top row; 41, 5 and 6 from left to right in the second row; and 72, 8 and 9 in the third row. O is the only key in the bottom row, centered under the 83. The Game Center says "oh" not "zero." Key 5 has a bump to be used as a tactile reference point.

The **Plus Key** (H) is at the top right corner of the keyboard next to the top row of number keys; the **Minus Key** (H) is in the top left corner of the keyboard. These keys are used to identify players' moves in several games.

The **Clear Key** () is at the bottom left hand corner of the keyboard. It clears The Game Center when you change games.

Directly above the Clear Key is the "M" Key ( $\square$ ) which begins play after you have selected the proper key for each game. It is also used to replay the same game. Do not press  $\square$ , however, when you want to replay a game.

The Equals Key ( $\blacksquare$ ) is at the bottom right corner of the keyboard; when you select a game, press  $\bigcirc \blacksquare$  and then the game number key.

The Hard-Easy Paddleball Switch is directly above the Equals Key. For easy play, push the switch towards the Equals Key; to increase the difficulty of the game, pull the switch away from the Equals Key.

#### OPERATION

The **Paddleball Slide Controls** are on either side of the keyboard. The Slide Control on the left is for Player 1; the Slide Control on the right is for Player 2.

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Plug in the power cord. Adjust the volume control knob to 12 o'clock. Turn on The Game Center by flipping the On/Off switch toward the back of the unit.

After a three second delay, you will hear a "crunch" sound followed by the spoken word "equals," indicating that the procedure is successfully completed. The microcomputer has performed a self-test program of over 5,000 steps. Do not be alarmed by the "static" noises emitted during this procedure.

**NOTE:** If the "crunch...equals" sequence does not occur, turn off the power for at least 3 seconds. Be sure the unit is securely plugged in and turn on the Power Switch again. Re-check the volume setting. **Do not** use The Game Center if it does not complete the self-test sequence after re-checking. Disconnect it and arrange for service.

#### To Begin Play

To select a game, follow these steps:

- 1. Press 🖸 and wait for the words "clear ... equals."
- 2. Press =; wait for the word "equals."
- 3. Press the appropriate number key for the game you want to play. The game keys are listed on page 10.
- 4. After the voice announces the game number press M to begin play.

Follow the above sequence each time you select a new game. To replay the same game, press M; do not clear. The Game Center automatically announces the score and designates the winner, saying "times . . . equals" followed by the score or winner designation.

#### GAME INSTRUCTIONS

#### USER HINTS

1. Always turn off the unit when not in use.

2. If the self-check procedure fails (the speaker does not announce "equals"), turn the unit off for 3 seconds and start the re-check procedure again. If the problem persists, check with a TSI service center. Do not use the machine.

3. Except for replacing the fuse; do not make any repairs on the unit (see warranty).

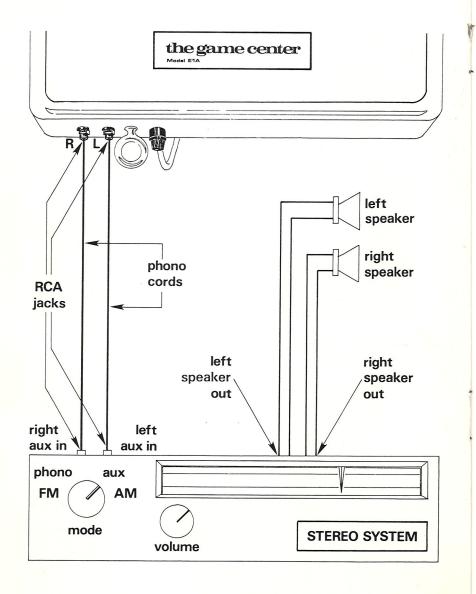
4. Keep the top of The Game Center clean and avoid spills that will damage the machine. Clean the surface carefully with a soft cloth and mild detergent.

To begin play, follow the instructions on page 8 under **Operation**. Use the following game key to select the number for the game you want to play.

Paddleball ORAPS skeet-shoot tic-toc-toe the-chain-game BLACKJACK TUG Ø V/AR Game Key

ar





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Press is to start paddleball, an auditory variation of a ping pong game between two contestants. This game involves two players who use the headphones or an external stereo speaker system to follow the play. (See Figure 2 for connection to amplifier). You can also play against yourself using both paddle controls. Headphones are put on properly if the left paddle controls the beeping tone in the left ear and the right paddle controls the beeping tone in the right ear.

You will hear two tones. The motion of the ball is represented by a continuous tone. The back and forth ball motion during play is represented by the stereo separation of the headphones or speakers. The pitch of the tone represents the height of the ball's flight path. The beeping tone, representing the paddle position-high pitch for a high paddle position, low pitch when the paddle is low-is controlled by the slide control next to the keyboard. The left slide control is for Player 1; the right slide control is for Player 2. The object is to follow the pitch of the continuous tone of the ball with the beeping tone of the paddle by moving the slide control away from you to raise the pitch and position of the paddle, or towards you to lower the pitch and position of the paddle. You are always able to hear the movement of the ball across the court and the sound of either your paddle or your opponent's, depending on whose turn it is. You can only control the paddle sound with your control when it is your turn to play the ball.

In Paddleball, the ball keeps moving whether or not it is hit. When the ball is to the left, you only hear the tone in your left ear; if it is straight ahead, you hear it with equal loudness in both ears; and when it is to the right, you hear it only in your right ear. You will hear a "tick" sound whenever the ball changes horizontal direction.

The object of the game is to match the pitch of the ball and paddle tones at the precise moment the ball changes dir-

### CRAPS

This game simulates the dice game **craps**. Press ∑ to **cast the dice**. The speaker announces two numbers representing the face value of the dice, and then gives their sum to set the **point** to play against. If the sum is 7 or 11 (a **natural**), you win and the speaker will say "root, root, root." If the sum is 2, 3 or 12, you lose and the speaker will say "overflow." If you get any other total (4, 5, 6, 8, 9, 10), you must continue casting the dice by repeating ∑ until the score of your cast equals the original point set, and you win—announced by "root, root, root." If your throw 7 anytime except on the first throw, the speaker will say "overflow" and you lose or **crap out**.

# skeet-shoot 2

This game simulates skeet-shooting; you try to shoot down a clay pigeon as it follows a randomly-selected flight path—a straight line across three digits (horizontally, as in ■ - 2 - 3; vertically, as in ■ - 4 - 7; or diagonally, as in ■ - 5 - 9). Press M to start the game. The speaker announces a 3 number flight path. To score a hit you must press the key for one of the numbers along this flight path *at the same time* the voice announces that number. You will hear a gun shot sound when you press the key. After a successful try you will hear a shot followed by another sound representing the fallen clay pigeon. As the number of hits increases, the birds fly faster. You have 16 chances—initiating each turn by pressing M. The game is over after 16 tries, when the voice announces your score by saying "times equals" followed by the number of hits.

ection at your end of the court. To do this, you should follow the pitch of both tones as soon as you can control your paddle tone. You will hear a loud beep when you score a hit. The speaker will then announce the point, first giving Player 1's score, then Player 2's score. When one player has scored at least 10 points with a 2 point spread, the speaker announces ''times equals,'' followed by the winner, either ''one'' or ''two.'' If there is not a 2 point spread, the game will continue until there is.

You can control the difficulty of play by adjusting the paddle **size** with the Hard-Easy Paddleball Switch, located just above the equals key. It represents paddle size, i.e.: how closely paddle and ball pitches must be matched to score a point. For easy play, push the switch towards the equals key; for more difficult play, push the switch away from the equals key. The hard game is considerably more difficult than the easy game.

### the chain game

3 tic-toc-toe

Tic-Tac-Toe is played by two players—represented by the plus key () for X and the minus key () for O—who alternate turns until one player places three symbols in a straight line (including diagonals) on the keyboard. Press to begin play. To make a move, each player must first press his/her key () or ) and then press a number key. The Game Center will announce the number of the space chosen. It will announce "overflow" if the chosen space has already been taken.

A player can check if a number has been chosen before playing by pressing the number key *without* pressing  $\bigcirc$  or  $\bigcirc$  first. The speaker will announce the position number and previously entered symbol, if the number has already been played and "clear" if it has not been played. To make the game more difficult, the players can agree to allow no checks. A player then loses a move if the speaker announces "overflow." When one player successfuly plays three symbols in a row, the speaker announces "over . . . times equals" then "plus" or "minus," depending on the sign of the winner. The speaker announces "times . . . equals . . . equals" for a tied (cat's) game. The object of this game is to remember a **chain** of numbers, and accurately duplicate them in the order given. Press M to start the game. The speaker will announce a number. Press the corresponding number key. If you have pressed the correct key, the speaker will repeat that number and give another. As you continue to repeat accurately the chain of numbers given (up to 99 digits), the speed of the game increases. The game ends when you cannot duplicate the series. Your score is then automatically announced by the words "over . . . times . . . equals" followed by the number of digits in the longest series you correctly repeated.

#### Dear Customer:

We have noticed an error in your Game Center Owner's Manual. Please note the following correction:

PAGE 16: As you continue to repeat accurately the chain of numbers given (up to 50 digits), the speed of the game increases.

Telesensory Systems, Inc.

## **5 BLACKJACK**

The game simulates the card game **Blackjack**, with the player competing against an electronic **dealer**. Press M to begin play. The dealer deals you two cards face up. The speaker will announce the numerical value of the cards. Tens, jacks, queens and kings are counted as 10 points and are announced as "one—oh." All other cards have their face value except the ace which is counted as 11, or 1 if 11 would cause the total to exceed 21. (Ace is always announced as "one," even if it counts 11.)

Press M again and the dealer takes his cards—one face up, one down. The speaker announces the number for the face up card and a "whisk" sound for the card face down.

You must now play your cards against the dealer. Press to get another card; repeat for each additional card you want. The object of the game is to get a higher point total than the dealer without exceeding 21. When you are satisfied with your point total, press to stand. The speaker will then announce the dealer's total. If the dealer's total is 17 or more he cannot take any more cards; if 16 or less, he must draw another card. Each card drawn by the dealer is announced by "plus (new card) equals (new total)." If the dealer's total is higher than your total and does not exceed 21, he wins and the speaker will announce "buzz." If his total exceeds 21, the speaker says "overflow, root, root"—and you have won. If there is a tie, the dealer wins, and you will hear "buzz."

## TUG Ø WAR 6

This game is a numerical Tug O'War that challenges players' reaction times. It is played by two persons: one using the and the other using the \_\_\_\_. Press M to start the game. The mid-point number 5, is announced, followed between one and four seconds later by a brief electronic "beep". A player wins a point by being the first to hit his/her key after the "beep." There is a two point penalty for pressing the key prior to the "beep." The speaker announces a running point total followed one to four seconds later by another "beep" for another trial. The game ends when the minus player reaches zero or the plus player 10. The winner is announced by the words "over, times, equals . . . 'plus' or 'minus'."



This game is a race against the clock in which 20 random digits must be verified within approximately 15 seconds. Press Into start. You will hear a number which you must repeat on the keyboard. If you choose the wrong number, you will hear a "beep" tone—correct your error and go on. The speaker will not call out the next number until you have correctly verified the previous number. As soon as you correctly verify the number, the speaker announces the next number in the series. After 20 digits have been announced and verified within the time limit, the speaker gives the score which represents the percentage of the total time you took; the lower the score the better your performance. The speaker announces "overflow" if time runs out before you have verified the 20 digits.