

# BULL'S<sup>®</sup>

THE DART SIDE OF LIFE

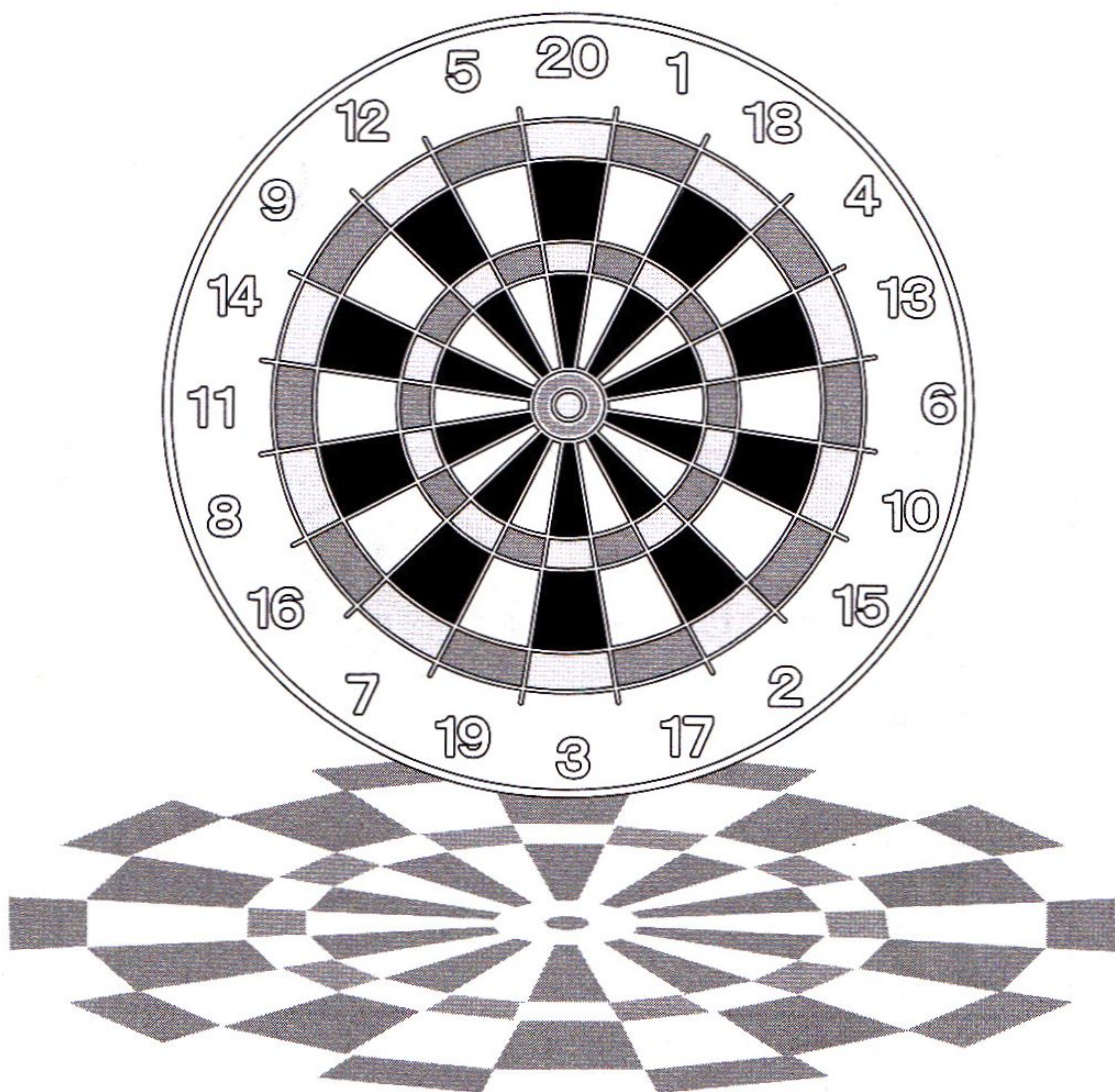


## 19 GAMES

ELECTRONIC DARTBOARD

LED

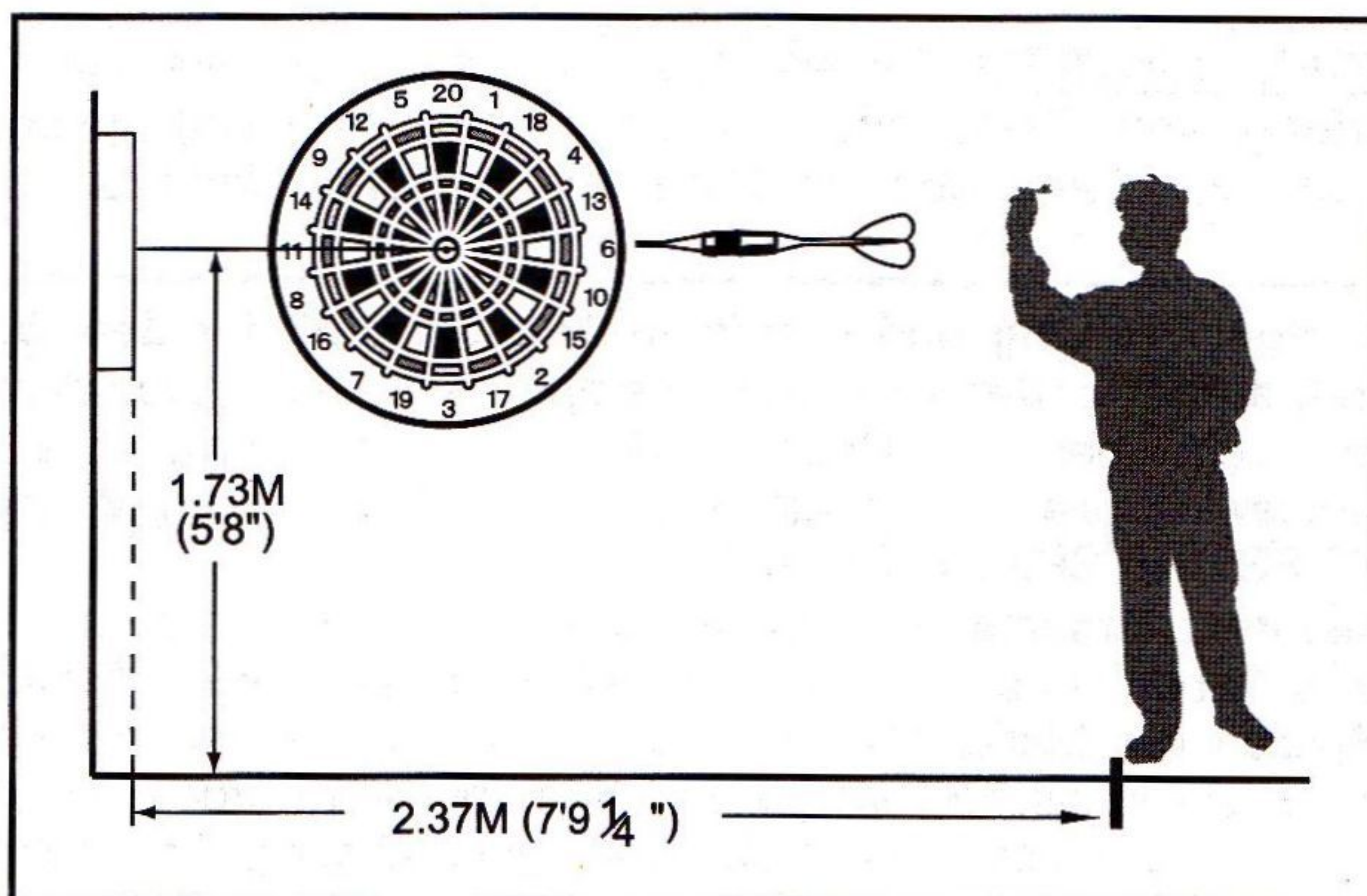
MODEL: HAWK





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English

## SOFT-TIP ELECTRONIC DART GAME

**WARNING: DARTS IS AN ADULT SPORT. NOT A TOY FOR USE BY CHILDREN WITHOUT ADULT SUPERVISION. PLEASE READ INSTRUCTIONS CAREFULLY. PROPER USE OF DARTS CAN AVOID DAMAGE OR INJURY.**

### MOUNTING INSTRUCTIONS

1. Select a suitable location with about 2.5 m (8 feet) of open space and a household AC outlet nearby. "Toe-line" should be 2.37 m from the face of the board for throwing distance.
2. Hold the dartboard against the wall so the mounting holes are centered over the studs, and the center of Bull's Eye is 1.73 m (5 feet 8 inches) from the floor. Mark the holes with a pencil.
3. Drill pilot holes where you have marked.
4. Mount the dartboard securely using the mounting screws provided.
5. Connect the AC adapter to the wall outlet and the DC plug to the dartboard. Now, you are ready to play.

Carefully unpack your new dartboard and familiarize yourself with its function and controls before use. Should you suspect the dartboard does not work correctly, please refer to the TROUBLE SHOOTING section in this manual first.

### CARING FOR YOUR DARTBOARD

**IMPORTANT!** This game is designed for use with **SOFT-TIP DARTS ONLY**. *Use of steel tip darts will cause permanent damage to the board.*

- ⇒ **Apply proper force and stance to throw darts.** It is not necessary to throw hard for the darts to stick in the board. The recommended weight of soft-tip dart is no more than 16 grams (official standard for many dart organizations and tournaments). (See TIPS AND TECHNIQUES.)
- ⇒ **Use proper replacement tips.** To reduce bounce-outs, you shall use the same kinds of soft tips as those come with the game or those packed with official label. Long tips are not recommended for electronic dartboards. They break or crook more easily. (See TROUBLE SHOOTING for removing broken tips.)
- ⇒ **Use only the AC adapter that comes with the game set.**
- ⇒ **Avoid dartboard being subjected to extreme weather or temperature.**
- ⇒ **Avoid dartboard being subjected to liquid or excessive moisture.**
- ⇒ **Clean dartboard with damp cloth and/or mild detergent only.**

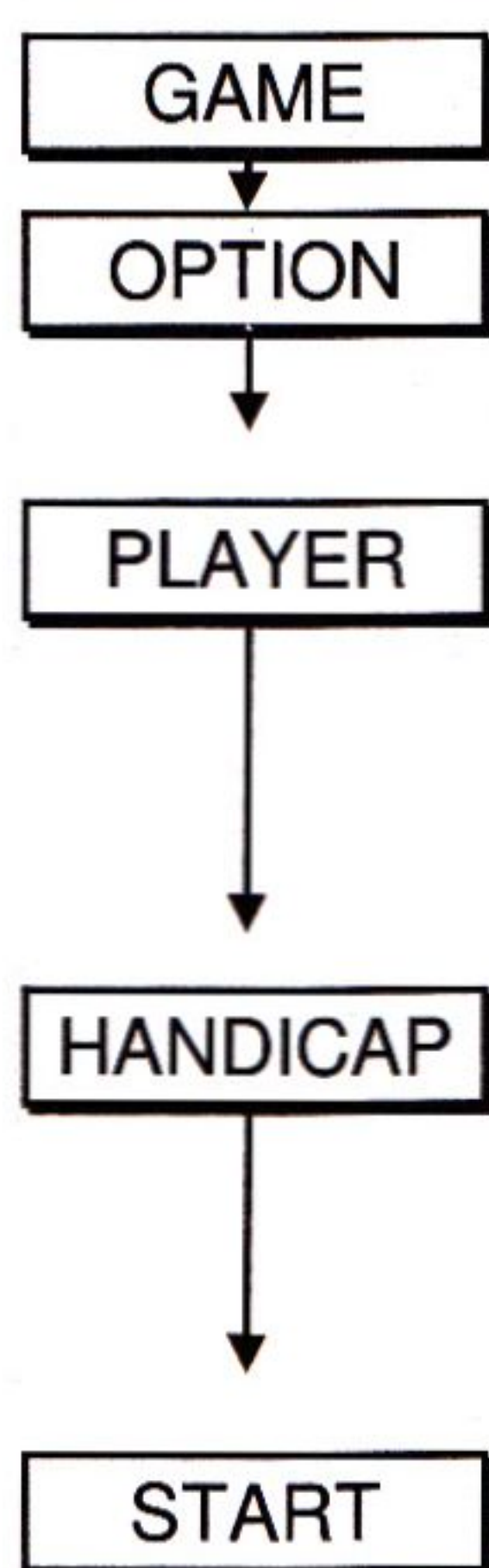
This electronic dartboard is equipped with automatic turn-off function (sleeping mode). There is no power switch. Simply plug in the AC adapter and the DC plug, and then the board is turned on. If the board is left inactive over 5



minutes, the displays and peripherals will shut off automatically, into the sleeping mode. As long as the power is remained connected, the board will remember the state of the game where it was left. By pushing the GAME button, the board will wake up and resume playing.

## GETTING STARTED

### GAME SETUP



Push this button to select one of the game groups. The first option of the group will appear on the display.

Push this button to select other options in the group. The games are code-named. Check with **TABLE 1** for available games.

Push this button to select the number of players. Each display being lit up means a player is selected.

**Team Play:** When you have more guests in the game, you may team up with a partner to play on the same score against others.

If desired, you may set the difficulty level of the game differently for each player. Following each selection of a player, push this button to change the degree of difficulty. Each push on this button changes the level by one step (see **TABLE 1**).

When finishing game setup, push the HOLD/START button to begin playing.

### Example:

1. Push GAME and then OPTION to select 501 game.
2. Select Player 1 and then push HANDICAP twice to set starting point at "701", for Player 1 is a better player.
3. Select Player 2. Player 2's score shows "501" as the starting point.
4. Select Player 3, a novice player, and then push HANDICAP several times to set starting point at "301"
5. Assuming only three players are participating, then push HOLD/START to start the game.

**TABLE 1:** Game Selection and Handicapping List

GAME	OPTION		HANDICAP	
Group	Code	Dart Game	Range	Step
301	301	301	301 to 1001	change by 100 points
	501	501	301 to 1001	change by 100 points
	601	601	301 to 1001	change by 100 points
	701	701	301 to 1001	change by 100 points
	801	801	301 to 1001	change by 100 points
	901	901	301 to 1001	change by 100 points
	1001	1001	301 to 1001	change by 100 points
lea	301	League 301	301 to 1001	change by 100 points
	501	League 501	301 to 1001	change by 100 points



	601 701 801 901 1001	League 601 League 701 League 801 League 901 League 1001	301 to 1001 301 to 1001 301 to 1001 301 to 1001 301 to 1001	change by 100 points change by 100 points change by 100 points change by 100 points change by 100 points
<i>rc</i>	<i>rc</i> S_O SH 1-2	Round the Clock Shoot-Out Shanghai Halve-It	No. 1 to 9 0 to 9 points No. 1 to 9 0 to 950 points	advance 1 number add 1 point advance 1 number add 50 points
<i>Cu2</i>	<i>Cu2</i> <i>Cu4</i> <i>Cu6</i> <i>Cu8</i> <i>Cu0</i> <i>Hi</i>	Count Up 200 Count Up 400 Count Up 600 Count Up 800 Count Up 1000 High Score	0 to 150 points 0 to 350 points 0 to 550 points 0 to 750 points 0 to 950 points 0 to 500 points	add 50 points add 50 points add 50 points add 50 points add 50 points add 50 points
<i>O<sup>-</sup></i>	<i>O<sup>-</sup></i> U_ b-6	Overs Unders Big-6	3 to 7 lives 3 to 7 lives 3 to 7 lives	add 1 life add 1 life add 1 life
<i>Cri</i>	<i>Cri</i> <i>no</i> <i>Cut</i> <i>PuP</i>	Cricket No Score Cricket Cut Throat Cricket Killer Cricket <b>Note:</b> "0": no specific order. "20": must close numbers from 20, 19, 18, 17, 16, 15 to Bull. "25": must close numbers from Bull, 15, 16, 17, 18, 19 to 20.	0, 20, 25 0, 20, 25 0, 20, 25 0, 20, 25	(see Note) (see Note) (see Note) (see Note)
<i>biL</i>	<i>biL</i> <i>mf</i> PAC Hot	Billiard Minefield Pachisi Hot Potato	spot No. 20 to 11 spot No. 20 to 11 spot No. 20 to 11 spot No. 20 to 11	fill 1 spot fill 1 spot fill 1 spot fill 1 spot

## SPECIAL FUNCTIONS

### DOUBLE

For the games, 301-1001 and League 301-1001, you can choose additional settings to make the game more challenging (see GAME INSTRUCTIONS). You may change this setting anytime before or during the game to give the less skillful player a break. The available settings are:

Open In / Open Out                      Double In (*DI*) / Open Out  
Open In / Double Out (*DO*)          Double In(*DI*) / Double Out (*DO*)  
Open In / Master Out (*MO*)          Double In(*DI*) / Master Out (*MO*)

### SCORES

Push this button to view other players' scores at anytime during the play. The game is paused when viewing scores.



**SOLITAIRE**

Push this button to turn on the automatic player change function. When 3 throws are registered on the board, the computer will change player automatically. This is ideal for a single player with a handful of darts in practice.

**SOUND  
VOLUME**

This button allows you to adjust speaker volume. There are 7 levels between sound-off and the maximum volume.

**HOLD**

During a play, a push on the HOLD/START button provides a pause to the game. This is typically useful to avoid accidentally touching off scoring when removing darts. A push on the button again will resume the game.

**RESET**

A push on this button will cause interruption and prompt up the setup mode. All the settings remain the same as the last game. You may choose to change settings, or you may simply push the START button to start the same game again. Push the RESET button twice will clear the HANDICAP settings.

**PLAYING GAME**

1. A larger dot on the display is indicating who is up for the turn. Each player is entitled to throw up to 3 darts per turn. The three small dots on the display are showing remaining throws available for the turn.
2. Besides tracking total scores, this smart dart game will automatically show the target or hints, such as Dart Out hint. The target or hint is indicated on the display with the number and a precursor to mark for single, double, or triple. A single is shown with a lower bar before the digits, for example "\_18" is indicating Single 18. A double is marked with 2 bars or a "d", such as "=18" or "d18". A triple is marked with 3 bars or a "t". Single Bull's Eye is indicated by its face value - "25".
3. Always wait for the finish of the ready signal before throwing darts.
4. At the end of one's turn, the board is automatically on hold (unless you have turn on the Solitaire function). Pull out the darts and press the PLAYER button to advance the play.
5. The game ends when the finishing placement of all players becomes determined. Each display will then alternately show the final score and the placement of the player.

**GAME INSTRUCTIONS****301-1001**

This is the most popular dart game, played in most leagues and tournaments. Each player starts the game with 301 points (or 501, 601, etc.). At the end of each player's turn, the sum of the three darts thrown is subtracted from the player's score. The player who reaches exactly zero first wins. The play can continue until the 2nd, 3rd, and 4th places are determined.

*Busting Rule:* When a player exceeds the score needed to reach exactly zero, the turn is a "bust" and the score reverts back to what it was before the turn.

To make the game more challenging, you may use the DOUBLE button to set additional restrictions on how to start and end the game. The choices are:

*Open In:* The scoring begins when any number is hit.

*Open Out:* The player can finish the game with a hit on any number that



reduces the score to exactly zero.

*Double In:* To start, the player must hit a number in the double ring or a double Bull's Eye. No score will be counted until this condition is satisfied.

*Double Out:* To win, the player must hit a double or a double Bull's Eye that reduces the score to exactly zero. A score leaving the player with "1" will BUST.

*Master Out:* To win, the player must hit a double, a double Bull's Eye, or a triple that reduces the score to exactly zero. A residual score of "1" will BUST.

**Dart Out Feature:** In professional competitions, the game is usually played with Double Out. When the score dropped below 170 points, the player can get a double out and win the game within the three throws for that turn. The board will automatically calculate and show hints for Dart Out. The hints will be shown, one at a time per throw, in its suggested order. If the player misses the first suggestion and still has the chance to finish with the remaining two throws, the board will re-calculate hints for Dart Out. No hints will be provided for score below 40, since it will be very easy to figure out the combination.

### **LEAGUE 301-1001**

This is a team play of the 301-1001 game, very popular among dart leagues. There are always 2 teams and 4 scores to track. Player 1 and Player 3 play against Player 2 and Player 4. The game is played the same way as the individual 301-1001 game. Any player reducing his/her score to exact zero first makes his/her team a winner, BUT a "*Freeze Rule*" applies.

*Freeze Rule:* A player can not go out the game when the partner's residual score is higher than the sum of their opponents' residual scores. (A tie is OK to go out.) A "frozen" player can only try to get his/her score as low as possible and hope his/her partner can win. If a player is frozen and reaches zero, then the game is *Burst* on that player.

The rule is to ensure that the winning team has the best combined performance, and none can win the game without the help of his/her partner. Moreover, this dartboard allows handicapping each player separately for the League play. The team play can also take 8 players, with two each on one score and four in a team.

### **ROUND THE CLOCK**

The player tries to hit the numbers from 1 to 20 in order. When a number is hit, then the game is advanced for shooting the next number. The player reaches and hits 20 first is the winner. Double and triple are treated the same as a single, being counted as one hit.

### **SHOOT-OUT**

With the help of smart electronics, this game is invented and is more exciting than *Round-The-Clock*. The target is being randomly picked by the on-board computer. There are 10 seconds for you to throw the dart. A hit on the target counts as 1 point. Double and triple are treated the same as a single. If the 10-second time expires, it is considered a throw has made and missed. The target is renewed after each throw. The player to accumulate 15 points first wins.

### **SHANGHAI**

The game is similar to *Round-The-Clock*, except scores are being cumulated and the game is limited to 7 rounds, or 21 shots. Player starts shooting with the



number 1 and progress toward 20 and Bull's Eye. No hit is counted when it is out of the numbering sequence. A hit on a double or a triple is counted as 2x or 3x the number. Example: A hit on double 3 counts as  $2 \times 3 = 6$  points. By the end of the 7th round, the player who accumulates the most points wins.

### **HALVE-IT**

The game is like playing Jeopardy. A total miss with three throws can send your score tumbling down. Everybody starts the game by shooting the number 12, and then 13, 14, any Doubles, 15, 16, 17, any Triples, 18, 19, 20 and Bull's Eye. Each player throws three darts at the same number, and then progress to the next number in the next round. A hit on a double or triple counts as 2x or 3x the points. If a player misses all three throws on the specific target in a round, his/her scores will be cut in half. The more score you have accumulated, the more serious is the result, should you miss any hit completely in a turn. At the end of the game, the player who accumulates the most points is the winner.

### **COUNT-UP**

This is a simple game that anybody can play. The objective is to beat other players by reaching a preset score first. The available settings are: 200, 400, 600, 800 and 1000. Each player tries to score as high as possible in his/her turns, and the final total score is allowed to be more than the preset score.

### **HIGH SCORE**

This game is much like *Count-Up*, except that the game ends at the finish of the 7th round. The player who accumulates the highest total scores wins.

### **OVERS**

This is a simple and quick game. The player should try to score higher than or equal to the previous highest score made in a turn. When a player scores less than the record of three-dart total, a "Life" is then taken away from the player. By default, each player has 3 lives to spare. However, Handicapping can extend the player's lives up to 7. The last player stands to be alive in the game is the winner.

### **UNDERS**

The game is similar to *Overs*, except the objective is to beat the lowest record of three-dart total. When the three-dart total is higher than the record, then a "Life" is taken away from the player. A pass of a throw, a hit outside the scoring area, or a discarded bounce-out dart (i.e., the bounce-out button was pushed) is penalized with 60 points ( $3 \times 20$ , the highest possible one-dart score). The last player stands to be alive in the game is the winner.

### **BIG-6**

The player tries to earn the chance of picking the next target by making a hit on the current target first. Single-6 is the first target when the game starts. Within the three throws, the player has to hit the target once to save his/her lives. As long as the hit is made by the first or the second throw, the player has a chance with one throw to select the next target. Singles, Doubles and Triples are all considered as different targets. The strategy is to pick the toughest target for the opponents as possible, such as "triple-20" or "double-Bull's Eye". The last player stands to be alive in the game is the winner.

### **CRICKET**

*Cricket* is a game that is extremely popular in America and Central Europe. Players adopt defensive or attacking strategy, depending on the state of the



game. At any point in the game, each player can make effort to increase the score or to attempt blocking other players from scoring.

The game is played with the numbers 15 through 20 and the Bull's Eye. Each player must mark a number 3 times to *CLOSE* it. A hit of a single counts as 1 mark; a double counts as 2 marks and a triple counts as 3 marks. After a number is closed, additional "markings" are converted into scores that is equal to the number. However, when a number is closed by all players (*ALL CLOSED*), that number is then no longer available for cumulating scores. The winner is who has the highest score and closed all the numbers first. If scores are even, the player who closes all the numbers first wins.

The strategy can be very different if the game is being played with the restriction that is to close each number in a specific order. Use *HANDICAP* function to choose such variations: playing "20 down to 15 then Bull" or "Bull and then 15 up to 20". Close the numbers in the set sequence. You will see the difference after playing couple games in this fashion.

**NOTE:** See the *DESCRIPTION* section for notes on Cricket Score Board.

### ***NO SCORE CRICKET***

This is a simplified version of *Cricket*. The objective is to close all the numbers as soon as possible. No score is given for hit on a closed number at any time.

### ***CUT THROAT CRICKET***

This is a reversed version of *Cricket* in scoring. Most popularly being played with 3 players. Two of the players may joint up and sack another player before they turn to each other for a fight.

After a number is closed, a hit for the scoring is being add to the opponents' scores. The higher cumulative score is on the losing side. However, no score will be added to a player who has the number already closed. The winner is who has the lowest score and closed all the numbers first. If a player closed all the numbers first but also has a higher score, he/she must keep on scoring to bring opponents' scores surge over or equal to his/her score. Hence, the best strategy is to close the numbers as soon as possible to block others from giving you points, while adding the chance to penalize others.

### ***KILLER CRICKET***

This game is much like the *No Score Cricket* with an added twist. When a number is closed, the player has a chance to eliminate opponents' marking by hitting the same number again. However, if the opponent has the number closed as well, then no marks will be taken away from that player. Noticing that, instead of turning on a light, each positive marking will turn off a light on the Cricket Score Board.

The player who closes all the numbers first is the winner.

*Example:* For the number 19, Player 1 has 1 hit (hence 1 light off), Player 2 has 2 hits (hence 2 lights off), and Player 3 has number 19 closed (3 lights off). Player 4 comes up and hits a triple 19, closed number 19 too. Player 4 then aims and hits single 19 again. In consequence, Player 1 and 2 are being put back one light on 19, and Player 3 is not affected. Which means, Player 1 and 2 are being pushed back 1 hit away from closing 19.

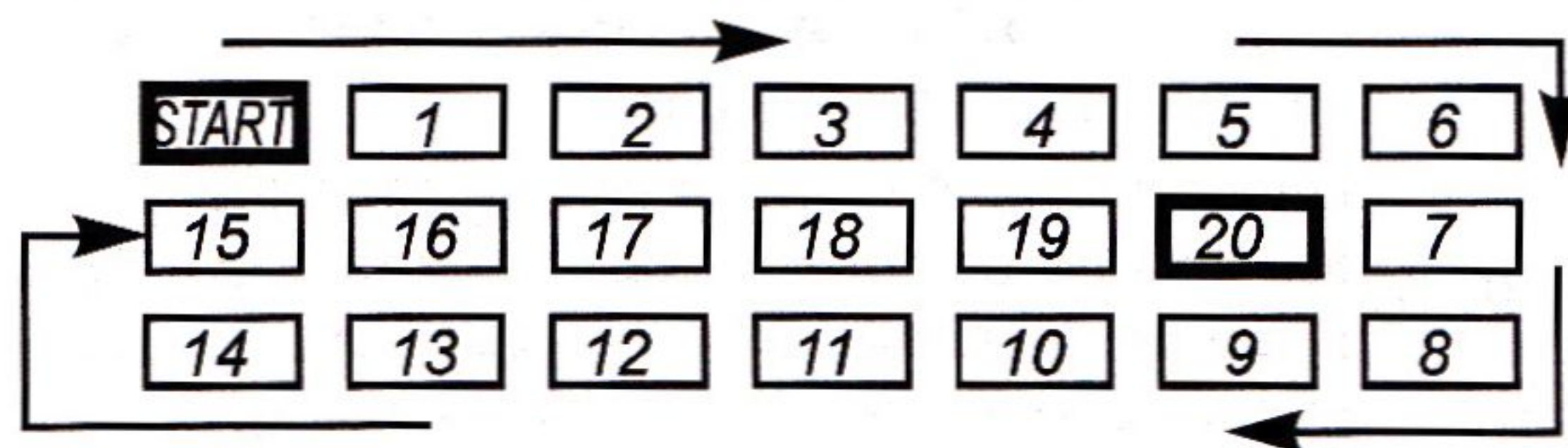
### ***BILLIARD***



This and the next 3 games are new creations that belong to a whole new ballpark. The goal is to move the cursor from the starting position to fill a vacant spot at the end point. A hit on any number will move the cursor the exact steps as the number indicates. Double and triple are no differences than a single. If the move falls short from landing the cursor on the end point, then make another throw and try to make up the steps. If a hit overshoots the number of steps needed, the cursor will then rebound with the excessive steps from the end point. The cursor is moved along the path as shown in the illustration. When the spot at the end point is filled, the end point is then moved one step closer toward the starting point. The winner is who fills all the vacant spots and moves the end point to the starting point first.

*Example:*

1. Player 1 starts the game. The display is showing "\_20" that advises Player 1 to hit 20 in order to fill the first spot. Player throws the first dart and hits 5. The cursor is moved to the spot marked "5" in the illustration.
2. The board automatically calculates the difference and advises Player 1 with "\_15" to shoot at. Player 1 aims at 15, but hits 17. The cursor moves 15 steps and bounces off the end point 2 steps to land on the spot "18".



3. Now, the display is showing "\_2". Player 1 throws a third dart and hits the number "2". The cursor lands exactly on the spot "20" and a cheering tune played. The display is now showing "19", indicating the end point has moved a step forward, and flashing for player change.

### **MINEFIELD**

Essentially, this game is played the same way as *Billiard*. The exception is that there are 6 mines being planted randomly. You can pass over a mine but do not stop on it. If the cursor happened to land on a mine, the mine explodes and a "Life" is lost. Each player has 3 lives for spare. If the player loses all 3 lives before finishing filling spots, he/she is then out of the game. After the explosion, the spot is safe as a regular one.

When the end point encounters a mined spot, the end point passes the mine and settles on the next spot. Hence, you do not need to fill the mined spots. However, if explosion happens, the spot is then evacuated and needs to be filled. The player who fills all the spots first or stays to be the last one alive is the winner.

### **PACHISI**

The concept was inspired from an old Indian game with the same name and that has a German name equivalent to say "Don't Bother Me!" The rules are similar to *Billiard*. In addition, there is a barrier between the cursor and the end point. You need to land on the barrier in order to pass this trouble to the next player. Otherwise, the cursor can only be bouncing between the starting point and the barrier but never get over to the end point. The player who finishes filling



spots and moves the end point to the starting point first is the winner.

The trouble barrier is always located between the cursor and the end point. When the next player gets the barrier, its position is being calculated with the rules as follows: (a) Count the barrier's previous position from the starting point as "x". (b) Count "x" steps starting from the cursor's location of the player who receives it. (c) If "x" is more than the steps between cursor and end point, the barrier is bouncing back and forth between the two points for "x" steps. These rules ensure that the barrier will not always appear on the same spot.

### **HOT POTATO**

This game is similar to *Pachisi*, only that the barrier is now called "Hot Potato" and does more harm. During relocation, if the "Hot Potato" bounces a filled spot, it will dig out the fill and push the end point one step back.

### **TROUBLE SHOOTING**

<b>No Power</b>	Check and make sure the AC adapter is properly plugged in to the electrical outlet, and the DC plug is properly connected to the DC Jack on the board.
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<b>Game Will Not Score</b>	Check to see if the game is in the setup mode or if the game is on hold. You may also check to see if any scoring segments or function buttons are stuck.
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<b>Stuck Segment or Button</b>	During shipping or in the course of normal play, it is possible for the scoring segments to become temporarily jammed. If such situation happens, all automated scoring ceases. A warning signal sounds and the display begins flashing with the indication of which number is stuck. By gently removing the dart or wiggling the segment with your finger, you will be able to free the segment. The game may then be resumed and scoring will not be affected.
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A stuck function button will result in a frozen board as well. The flashing display shows "-F-" with a warning sound. Apply the same technique gently to free the stuck button.

<b>Removing Broken Tips</b>	Plastic tip is safer but does not last forever. If a tip breaks and remains in the board, try to pull it out gently with a pair of pliers. However, for a short broken tip that sticks flush with the segment surface, you may push it through the hole into the board. The soft tip will not hurt the circuit behind the segment. Nevertheless, we recommend you to use a good <i>SOFT TIP</i> on a dart to push the broken one through. Be careful, not to use a pointed metal object to do the job. A pointed object may cause damage if being stuck too deep into the board. Remember, the heavier the dart is, the higher the chance that the tip will break.
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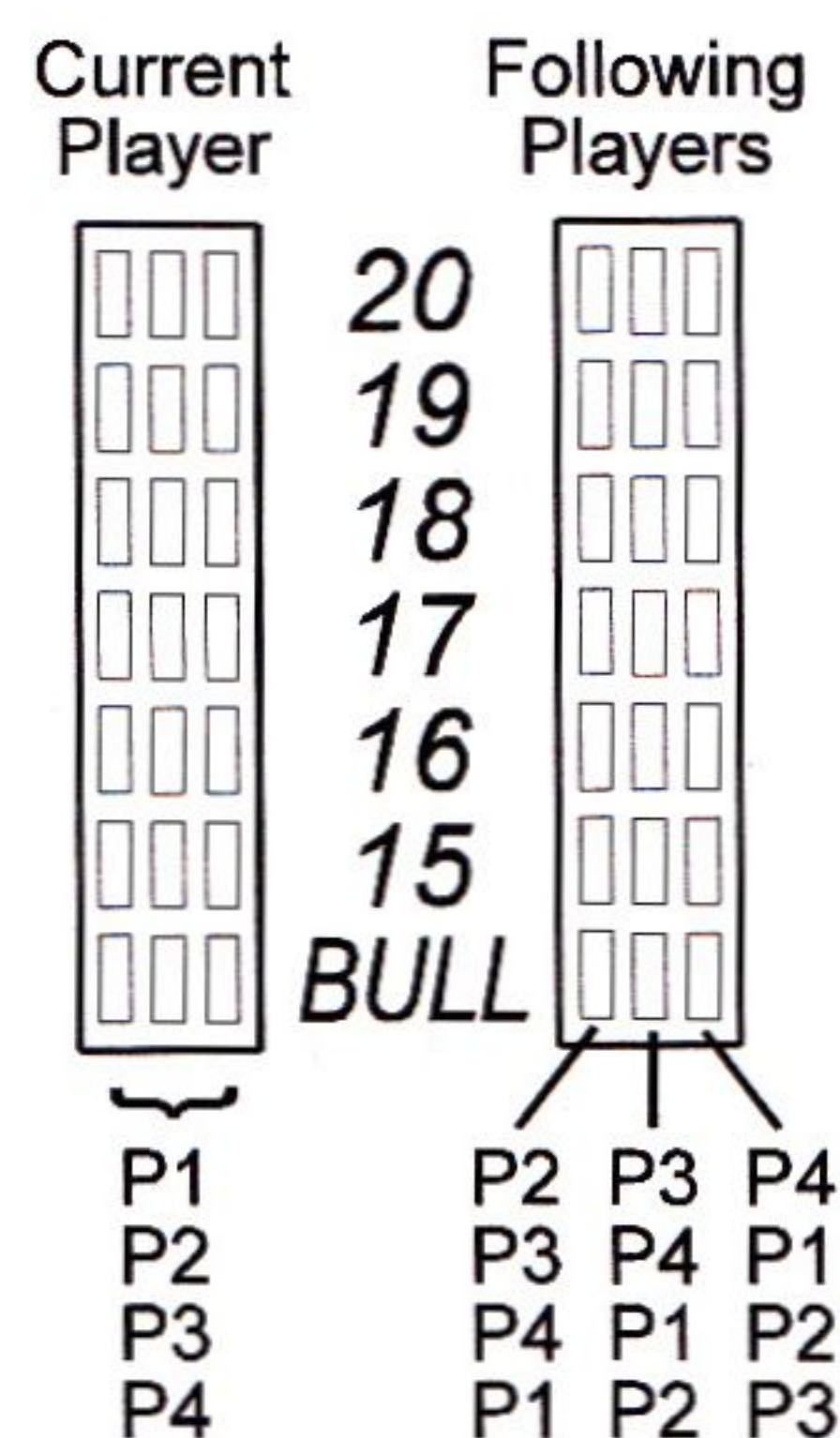


**Power or Electro-magnetic Interference** Under extreme situation of electromagnetic interference, the electronics of the dartboard may show erratic behavior or fail to continue working. The examples of these situations may be: heavy thunderstorm, power line surge, rolling brown out, or too close to an electrical motor or microwave. To restore the game to normal operation, unplug the AC adapter for several seconds and then reconnect the power again. Be sure to remove the source that causes the interference as well.

### DESCRIPTIONS

- 1) **Single:** Score as number shown.
- 2) **Double:** Score x 2.
- 3) **Triple:** Score x 3.
- 4) **Bull's Eye:** The outer bull is 25 points; the center double bull is 50 points.
- 5) **Catch-Ring:** Catch missed dart, no score.
- 6) **Function Buttons:** (see sections of GETTING STARTED).
- 7) **Score Display:** alternately showing  
*Target or Hint → Dart Hit → Cumulative Score.*
- 8) **Turn indicator:** show who is up for the throw.
- 9) **Dart Indicators:** Show how many throws remain for the turn.
- 10) **Cricket Score Board:**

- (i) **Cricket:** Show status of marking cricket numbers. When there are only two players in the game, the display on the left is for Player 1 and the display on the right is for Player 2. One light marks for a hit. However, when more than two players are in the game, the left display shows the current player's marking status in detail. While on the right display, each column shows the closing status of a corresponding player in line for the following turns (see illustration). *Example:* If the current player is Player 2, then, the three columns on the right display, starts from the left, show closing status of Player 3, 4 and 1, in that order. A light in the column indicates a number is closed, which is a significant condition for planing strategies.



- (ii) **Billiard, Minefield, Pachisi & Hot Potato:** Show positions of different elements on the path of the game. A blinking spot is a live mine or a barrier. When more than two players are in the game, the board uses the same system in displaying players' progressive information as in the *Cricket* game. On the cricket score board over the right-hand side, each column shows the last 7 spots on the path of the corresponding player.
- (iii) **Overs, Unders and Big-6:** Mark player's remaining "Lives".
- 11) **Indicators for Double In (DI), Double Out (DO) and Master Out (MO).**
- 12) **DC Jack:** For connecting AC adapter.