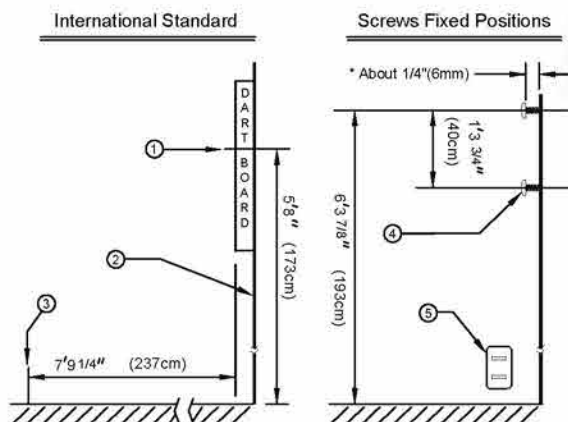
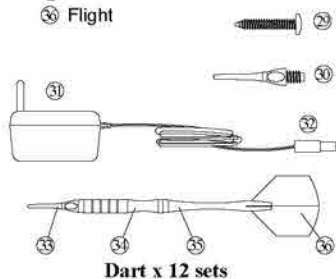
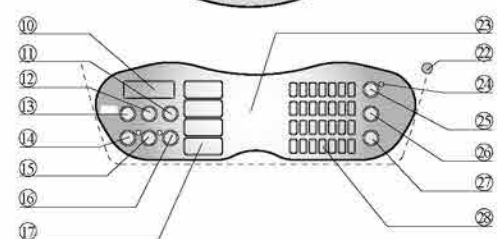
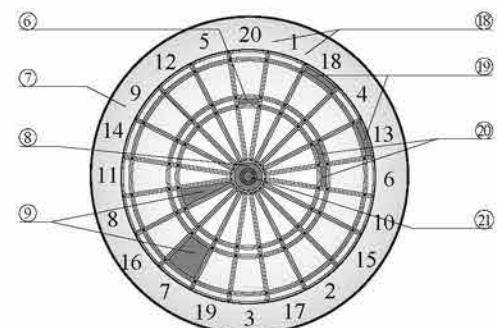


INSTALLATION



- ① Center Of Bull's-eye
- ② Wall
- ③ Throwing Line
- ④ Fixed Screw
- ⑤ Electronic Outlet
- ⑥ Triple 20 Top Score (60 points)
- ⑦ Catcher (0 points)
- ⑧ Outer Bull's-eye (25 points)
- ⑨ Singles (X1)
- ⑩ Temporary Score Display
- ⑪ Player Button
- ⑫ Option Button
- ⑬ Game Button
- ⑭ B/Delete Button
- ⑮ DOUBLE
- ⑯ SCORE Button
- ⑰ CUMULATIVE Score Display
- ⑱ Segment Numbers
- ⑲ Double Ring (X2)
- ⑳ Triple Ring (X3)
- ㉑ Inner Bull's-eye (50 points)
- ㉒ Adapter Jack
- ㉓ Display Panel
- ㉔ Hold LED indicator
- ㉕ HOLD/RESET Button
- ㉖ PLAYER CHANGE Button
- ㉗ SOUND/POWER OFF Button
- ㉘ LED ARRAY Display
- ㉙ Screws X 2pcs
- ㉚ Spare Tips X 28 pcs
- ㉛ Adapter
- ㉜ Plug
- ㉝ Soft - Tip
- ㉞ Barrel
- ㉟ Shaft
- ㊱ Flight

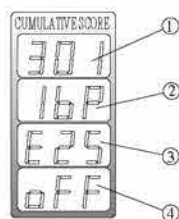
PHYSICAL DESCRIPTION



Dart x 12 sets

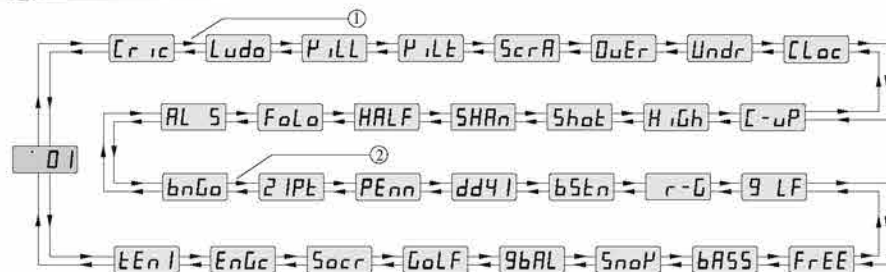
SETTING a GAME and OPTIONS

① SETTING PANEL



- ① GAME OPTION DISPLAY
- ② PLAYERS OPTION DISPLAY
- ③ DOUBLE/SINGLE BULL'S-EYE OPTION
- ④ SOUND ON/OFF DISPLAY

② GAME SERIES SELECTIONS



① A LOOP SEQUENCE

② A REVERSE LOOP SEQUENCE

③ PLAYERS OPTIONS



PLAY A GAME

① SCORE PANEL



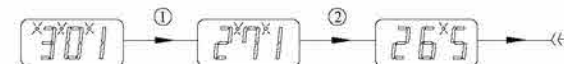
- ① TEMPORARY SCORE
- ② CUMULATED SCORE
- ③ LED ARRAY DISPLAY
- ④ HOLD/START LED

② TEMPORARY SCORE DISPLAY



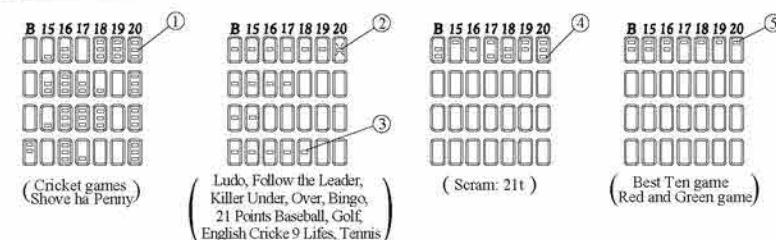
- ① Auto Change
- ② 1st: hit 2-15
- ③ 2nd: hit 1-6

③ CUMULATIVE SCORE and DART NUMBER



- ① 1st Dart "2-15"
- ② 2nd Dart "1-6"

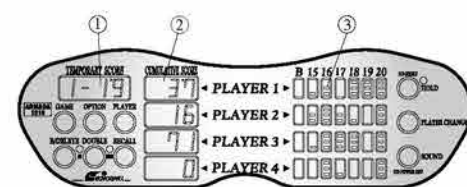
④ LED ARRAY DISPLAY



- ① Closed Status
- ② Flash 2 Seconds
- ③ One Life
- ④ Eraded Status
- ⑤ Residual Darts

GAME RULES

① SCORE CRICKET (Cr ic)



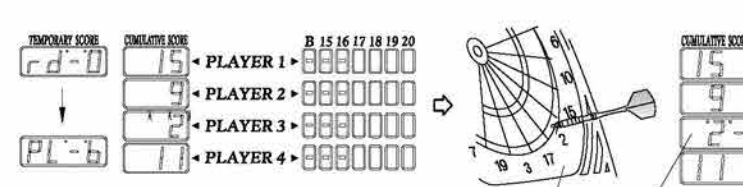
- ① TEMPORARY SCORE
- ② CUMULATIVE SCORE
- ③ CLOSE STATUS

④ KILLER TEAM (P iLt)



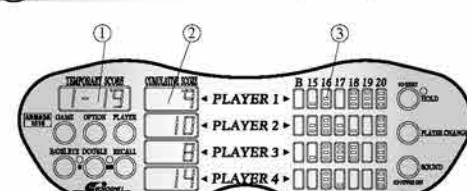
- ① team 2
- ② team 1

⑤ KILLER (dbl, 2-4 players options) (P iLL)



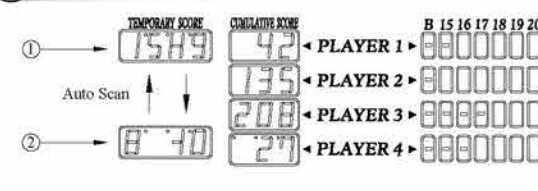
- ① the player hits the 2-2, and becomes the killer
- ② "killer" mark

② NO SCORE CRICKET (Cr ic)

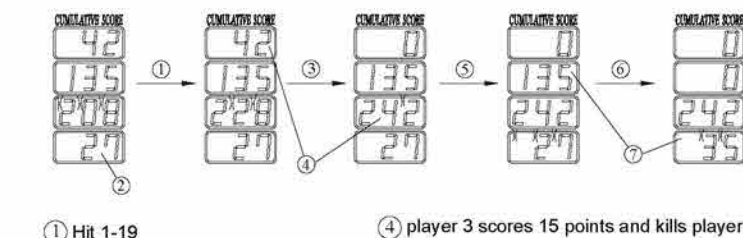


- ① TEMPORARY SCORE
- ② CUMULATIVE SCORE
- ③ CLOSE STATUS

⑥ LUDO (Ludo)



- ① Score 15 points to Hit (Kill) player 9.
- ② Score 8 points to Hit (Kill) Player 10.



- ① Hit 1-19
- ② player 3 scores 19 points but can't kill player 4, because he/she is in the safe zone (0-29 points).
- ③ Hit 1-15
- ④ player 3 scores 15 points and kills player 1.
- ⑤ Press PLAYER CHANGE
- ⑥ Hit 1-8
- ⑦ player 4 scores 8 points and kills player 2.

7 OVER (OvEr)

1 LEADER'S SCORE 3 LEADER'S SYMBOL
2 CUMULATIVE SCORE 4 LIFE MARK

8 Follow the Leader (FoLo)

1 Random Number 3 hit the target number 1-18
2 Life Mark 4 issue a new target number

9 21 POINT (21Pt)

1 Hit 1-15
2 Bust: Score (9+15=24) is over 21 point.
3 Exact 21 Points get a Mark.

10 BEST TEN (bStEn)

1 Random Target Number 3 Getting Score
2 Hit 4 Residual Dart Mark from 10

11 RED vs GREEN (r-G)

RED Segments GREEN Segments

12 9 LIVES (9LF)

1 Target Number 2 Residual Lives

13 DOUBLE DOWN 41 (dd41)

1 Target Number 12 4 Score in a Round
2 Beginning Score 41 5 3 Darts lost and Score Cut in Half
3 Hit

14 ALL 51 By 5 (AL 5)

1 Hit
2 Reducing Score: 45 / 5 = 9
3 Score count down from 51 to 42
4 Bust: Score 65/5=13 is Over 12.

15 GOLF (GoLF)

1 Hole Number ; Target Number 3 Marks in a Hole until 3 5 Hit
2 Total Clubs 4 Getting Total Marks in a Round

16 SOCCER (SoCr)

1 Bull's Eye: Target Number to take Possession 3 Double Segment to get Score
2 A Ball Possession Bar 4 Getting Total Score until Possession Changing
5 Hit

17 SHOVE HA PENNY (PEnn)

1 Hit 2-15 5 Hit
2 Mark Number in one dart 6 Change to Next Target Number 16
3 Target Number 15 7 Total Getting 5 Marks over 3 in No.15, dominates 2 Marks to the Next Player
4 2 Marks at No.15

18 BASEBALL (bASS)

1 The Pitcher of Team 2 5 B: 1st Bass; No.15: 2nd Bass 9 Hit
2 Target Number of Straight Ball 6 Current Batter 3 of Team 1 10 PLAYER CHANGE
3 Score of Team 1 7 Hitting Number of Batter 3
4 Out Number of the Batter Team 8 No.16: 3rd Bass

19 BILLIARD 9 BALL (9bAL)

1 Target Numbers from 1 to 9 in a Loop 3 Target Number missed by the former player
2 Throw Darts not only 3 Darts but also as many as continue Hitting the Number in a Round 4 Hitting "No. 9 Ball" get 1 Point
5 Hit

20 ENGLISH CRICKET (EnGc)

1 Target Number of Pitchers (Bull's eye) 5 Hitting Scores in a Round.
2 Getting 2 Marks in a Round 6 Cumulative Effect Scores (Effect Scores are Over 40 Points of Hitting Scores per Round)
3 Cumulative Marks of Bull's Eye until 9
4 Hit

21 TENNIS (tEni)

1 Target Number 4 Winning Ball Number 7 Win : (General Rule)
2 Winning Set Number 5 Ball Deuce : 1 Set = 6 Games
3 Winning Game Number 6 Hit Both Balls are same from 3 to 9. 1 Game = 4 Balls
Win a Game after Deuce : Ahead 2 Balls continually.

22 BINGO (bNGo)

1 Random Number among 1 to 5 4 Each Miss of the Issued Number Halves the Cumulative Score 6 Total Score
2 Random Number 2 same as one of hitting darts gets 1 Score 5 Select Stop Throwing and PLAYER CHANGE
3 Each Hitting the Issued Number Double the Score 7 Hit

23 BILLIARD SNOOKER (SnOoP)

1 Red Balls: 8, 9 ...20 and Bull's Eye 3 Hitting Red Ball get 1 Point 5 Hitting Color Ball get the Same Points as Ball's Number
2 Hit 4 Color Balls: 2, 3, 4, 5, 6 and 7 6 Player Change

INDEX

• SAFTY NOTICES	E0
• QUICK SET UP INSTRUCTIONS	E0
• INTRODUCTION	E1
• DARTS and TIPS	E2
• INSTALLATION	E2
• SETTING a GAME and OPTIONS	E3
• PLAY A GAME	E6
• GAME RULES	E10
SOME GENERAL DART RULES	E10
1. 01-GAMES	E10
2. LUDO	E11
3. CRICKET	E13
4. KILLER	E15
5. KILLER TEAM	E16
6. SCRAM	E17
7. OVER	E18
8. UNDER	E19
9. AROUND THE CLOCK	E20
10. HIGH SCORE	E20
11. COUNT UP	E21
12. SHANGHAI	E21
13. RANDOM SHOOT	E22
14. HALVE IT.....	E22
15. FOLLOW THE LEADER.....	E23
16. ALL 51 BY 5.....	E24
17. BINGO	E25
18. 21 POINT	E25
19. SHOVE HA PENNY.....	E26
20. DOUBLE DOWN 41 (DD41)	E26
21. BEST TEN	E26
22. RED vs GREEN	E27
23. 9 LIVES	E27
24. TENNIS	E28
25. ENGLISH CRICKET	E29
26. SOCCER.....	E29
27. GOLF.....	E30
28. BILLARD 9 (Ball)	E30
29. SNOOKER.....	E31
30. BASEBALL	E32
31. FREE	E33
• TROUBLE SHOOTING.....	E33
• WARRANTY CERTIFICATE	E36



*** SAFETY NOTICE ***

1. This game is designed for soft-tipped darts only, the steel-tipped dart will damage the dartboard.
2. Darts are an adult game. Includes functional sharp points/edge, children should play with adult supervision.
3. Always pay attention to the game, never throw a dart without first looking to make sure the playing area is clear.
4. This device includes small parts and is not intended for children under 3 years old.
5. This device must only be used with attached transformer (9V DC/500 mA output).
6. The attached transformer is not a toy.
7. Disconnected the device from the transformer before cleaning. Disconnected the device from the transformer before cleaning.

*** Please save this user's manual in its entirety because it not only contains detailed information for this dart game, but is also evidence for product warranty.

*** QUICK SET UP INSTRUCTIONS ***

1. Insert the Adapter into an electric outlet then insert the Plug into the jack on the right-side of the dartboard.
2. Press any button to stop the LED auto-test scanning.
3. Press GAME to select a desired game series.
4. Press OPTION to select a desired game option.
5. Press PLAYER to choose 1 to 16 players or 2 teams/players.
6. Press B/DELECT for single (E50) or double (E25) bulls'-eye.
7. Press PLAYER CHANGE to start the game.
8. Press PLAYER CHANGE after each round for player change.
9. Press and hold RESET to re-start a new game.

Not suitable for children under 3 years contain small parts.



Take out the batteries before scrapping the product.



INTRODUCTION



- Thank you for purchasing Echowell's electronic dart game ECHO-1016/AMMO-1016/ARMADA-1016.
- Congratulations! You own an electronic dartboard allows the most players to play the most games of any similar home-dart-game on the market, and has features as following.
- One to 16 players can play 31 game series with more than 2,200 variations.
- The 31 game series are 301 to 1001, Score Cricket, No-Score Cricket, Cut-throat Cricket, Ludo (Mensch Ärgere Dich Nicht), Killer, Killer Team, Scram, Scram Cricket, Over, Over Leader, Under, Under Leader, Count Up, High Score, Around the Clock, Random Shoot, Shanghai I, II & III, Half It, Follow The Leader, Free, All 51 By 5, Bingo, 21 Point, Penny, DD41, Best Ten, Red & Green, 9 Lives, English Cricket, Soccer, Billiards (9 Ball), Snooker, Baseball, Golf, Tennis.
- The dartboard not only includes the most games when compared to other home dartboards, but we have modified many fun and exciting games (patents pending), such as Ludo (patented), Killer Team, Over Leader, Under Leader, Scram 21 target, Tennis, Billiards (9 Ball), Snooker, Baseball, Bingo, and many others. Our main design concept for these games not to always contest the player's skill. But we have modified them to increase the "Fun Degree", allowing the player to enjoy throwing the darts.
- The patented Ludo dart game is created by Echowell. Originally the Ludo (Mensch Ärgere Dich Nicht) game is a thrown dice game and it is very popular in Germanic countries. We have absorbed the essence of the Ludo dice game and have re-designed it to make it suitable as a dart game. This new Ludo dart game is very fun and exciting game, with the "excitement degree" above the famous Score Cricket game. Score Cricket is a highly competitive game and its focus is to compare the players' skill and strategy, but the Ludo's focus is on fun and excitement. Ludo also requires good strategy but it does not require the high skill level as with Score Cricket. Everyone can easily play, even a beginner, making this an enjoyable family dart game.
- The '01 games and the Score Cricket are 2 tournament games that are played worldwide. We designed these 2 games not only following the standard rules but also including P.P.D. and M.P.R. data. The NDA (National Dart Association, one of the American dart associations) began using the P.P.D. (Points Per Dart for '01 games) and M.P.R. (Marks Per Round for Score Cricket) as the official classification and ranking format for their members beginning in 1996. It is an important index for dart skill, like the index for golf. The ECHO-1016 displays all players' PPD data for '01 games and MPR data for Score Cricket game after the first player wins the game.
- Nine sets of LED displays are for easy game setting, the Score review design and player's and the Score review design are for easy game setting and readout of score for the current player and opponents. The extra LED array not only displays the marks of Cricket games, but also displays the "Lives" of the other games.
- Patented large "DIAMOND™" catch area traps missed darts.
- Seventeen sound effects and sound on/off option.
- Double bull 25/50 or single 50/50 selectable, allowing practice to be the same as tournament play.
- B/Delete button allows the player to eliminate score of bounce-out or mistaken operations.

- Aesthetic design and durable ABS structure. Not just an excellent dart game, but a good decoration for the house.
- Layout of the control panel is logical and easy to operate.
- Automatic and manual power On or Off.
- "Stuck" indication allows the player to quickly and easily correct stuck segment of the dartboard.
- Includes AC/DC adapter, 12 soft-tipped darts and 28 spare tips.
- This dartboard complies with 89/336/EEC standards of EN55014, EN 55022, EN61000-3-2, EN61000-3-3, EN71-1/2/3/6 and EN50088/A1. Operation is suitable to following conditions:
 1. This dartboard may not cause harmful interference.
 2. This dartboard must accept any interference, including interference that may cause undesired operation.

DARTS AND TIPS

1. The plastic tips will break easily and it also hard to remove the dart from the dartboard if you use heavy darts. Soft-tipped darts weighting 12 to 16 grams are most suitable for the electronic dartboard. Do not use darts weigh over 19 grams.
2. Do not attempt to push the broken tips into the inner part of the dartboard when the plastic tip is broken and stuck on the holes of the target segments. In this way, the broken tip which is at the inner part of the dartboard will obstruct the target segment from moving smoothing and sensing the signal exactly. Please refer to the descriptions in the Trouble Shooting section of this book. Release the screws on the bottom cover of the board to take up the bottom cover, holding the broken tip with a needle-nose plyers, then push it out from the inner side of the target segment.

INSTALLATION

1. Select a suitable location that complies the international standard for height and distance shown in the figure, and be sure the cable length of the adapter is long enough to extend from the dartboard to an electrical outlet.
2. Drill the upper screw hole at a height of $6' 3 \frac{7}{8}"$ (193cm) from the floor, and the lower screw is $1' 3 \frac{3}{4}"$ (40cm) below the upper screw vertically.
3. Hang the dartboard securely on the 2 screws. Pull on the dartboard to be sure that it is hung securely before letting go of the dartboard.
4. The 2 fixed screws should be no longer than 8mm in length from screw gaps to the wall to avoid damaging the inner circuit, and to fix the dartboard firmly.

*** **SETTING a GAME and OPTIONSN** ***

INITIATE THE POWER

1. Insert the adapter into an electrical outlet and then insert the plug into the jack of the dartboard.
2. The displays will begin scanning automatically and a start melody will play after the power is turned on.
3. Press any button to stop the LED auto-test scanning and the display panel will change to the setting panel.

SETTING PANEL

1. All the selecting data are shown in one display panel simultaneously. It is quick and easy to set the desired selections.
2. Scoring is not possible when the display is at setting status.

GAME SERIES SELECTIONS

1. Press the GAME button to select the game series you wish to play, it will display in Temporary Score window and in a loop sequence by each press of the GAME button. Stop to push the GAME button when the desired game appears.
2. The loop sequence of the game selection is reversible. Press and hold the GAME button until the dartboard sounds the "Bi-Bi" then release the button. It will reverse the display sequence of the game selection.

GAME OPTION SELECTION

1. Press the OPTION button to select a desired game option till the desired game series is selected.
2. Each press of the OPTION button will change the following game options in a loop sequence.

PLAYERS OPTIONS

1. This dartboard is suitable for 1 to 16 players in generally, but some games are for 2 to 16 players or for 2 players/teams, you can combine all players into 2 team to play 2 player/team games according to rules.
 - a). 2 to 16 Player Games: Cricket, Under, Over, Killer, Ludo, Follow the Leader, Scram, 9 Lives, Soccer, Billiards 9 Ball, Snooker.
 - b). 2 players/teams games: English Cricket, Tennis, Baseball, Red & Green, English Cricket, Killer Team.
2. Press the PLAYER button to select the number of players. (4-P, 3-P, 2-P, 1-P, 16P, 15P....4-P).
3. The loop sequence of the player option is reversible. Press and hold the Player button until the dartboard sounds the "Bi-Bi" sound, then release the button. It will reverse the display sequence of the player selection.

GAME BUTTON		PRESS THE OPTION BUTTON	PLAYER
01-GAMES	(. 01)	301, 501, 601, 701, 801, 901 and 1001 (A01)	1 - 16
CRICKET	(Cric)	Score Cricket, Cut Throat Cricket and No Score Cricket	2 - 16
LUDO	(Ludo)	300, 400, 500, 600, 700, 800, and 900	2 - 16
KILLER	(KILL)	3LF, 4 LF, 5 LF, 6 LF, 7 LFdbL: Double ring, 3LF	2 - 16
KILLER TEAM	(KiLt)	3LF, 4 LF, 5 LF, 6 LF, 7 LF	4
SCRAM	(ScrA)	7t, 21t (total 21 targets)	2 - 16
OVER	(OuEr)	Ldr (Leader), Con (Continue)	2 - 16
UNDER	(Undr)	Ldr (Leader), Con (Continue)	2 - 16
AROUND THE CLOCK (Cloc)		—, -2-, -3-	1 - 16
COUNT UP	(C-uP)	100, 200, 300, 400, 500, 600, 700, 800, 900	1 - 16
HIGH SCORE	(HiGh)	6rd, 7rd, 8rd, 9rd, 10r, 11r, 12r, 13r, 14r, 15r	1 - 16
RANDOM SHOOT	(Shot)	6rd, 7rd, 8rd, 9rd, 10r, 11r, 12r, 13r, 14r, 15r	1 - 16
SHANGHAI	(SHAn)	I, II, III	1 - 16
HALVE IT	(HALF)	12r (Round) rAn (Random)	1 - 16
FOLLOW THE LEADER (FoLo)		Ldr (Leader), Con (Continue)	2 - 16
ALL 51 BY 5	(AL 5)	31, 41, 51, 61, 71, 81, 91	1 - 16
BINGO	(bnGo)	6rd, 7rd, 8rd, 9rd, 10r, 11r, 12r, 13r, 14r, 15r	1 - 16
21 POINT	(21Pt)	3rd, 4rd, 5rd, 6rd, 7rd, 8rd, 9rd	1 - 16
SHOVE HA PENNY	(PEnn)	—	1 - 16
DOUBLE DOWN 41	(dd41)	12r (Round), rAn (Random)	1 - 16
BESTEN	(bStn)	—, -2-, -3-, -E-	1 - 16
RED vs GREEN	(r-G)	—, -2-, -3-	2
9 LIVES	(9 LF)	3LF, 4 LF, 5 LF, 6 LF, 7 LF, 8LF, 9LF	2 - 16
TENNIS	(tEni)	2-G, 3-G, 4-G, 5-G, 1-t, 3-t, 5-t	2
ENGLISH CRICKET	(EnGc)	—	2
SOCCER	(Socr)	6rd, 7rd, 8rd, 9rd, 10r, 11r, 12r, 13r, 14r, 15r	2 - 16
GOLF	(GoLF)	9H, 10H, 11H, 12H, 13H, 14H, 15H, 16H, 17H, 18H	1 - 16
BILLIARD 9 BALLS	(9baL)	4, 5, 6, 7, 8, 9, 10, 11, 12, 13	2 - 16
SNOOKER	(SnoK)	—	2 - 16
BASEBALL	(bASS)	3rd, 4rd, 5rd, 6rd, 7rd, 8rd, 9rd	2 - 16
FREE	(FrEE)	10d, 20d, 30d (Darts)	1 - 16

DOUBLE BULL/SINGLE BULL OPTION

1. According to some tournament rules, the score of the outer bull's-eye is 50 points, the same as the inner bull's-eye for '01 game series, but it is 25 points in the Cricket game that is different from the inner bull's-eye 50 points. The dartboard is 25/50 double or 50/50 single bull selectable, allowing practice to be the same as tournament play.
2. Press the 'B/DELETE' button to select either "E25" (25/50 Double bull's-eye" or "E50" (50/50 Single bull's-eye).

DOUBLE IN/DOUBLE OUT OPTION

1. The double in/double out option is effective on '01 game series only.
2. Press the DOUBLE button to select the desired Double In/Out option.
3. Four options are available, the IN LED and OUT LED indicators will be On or Off to indicate the following status.
4. For the operations of the DOUBLE IN/OUT and the OPEN IN/OUT, please refer to the '01 game rules.

SOUND ON/OFF

1. The dartboard has 17 sound effects:
 - a). Scoring Sound: Single, Double ring, Triple ring, Top Score(Triple 20), Inner bull, Outer bull and ineffective target.
 - b). Button sound: Effective and ineffective action.
 - c). Others; Start, Bust, Stuck, the Winning melody and 4 other dub-in melodies while playing games.
2. Press the SOUND button to turn the sound on or off alternatively.

***** PLAY A GAME *****

BEGIN THE GAME

1. Press the Player Change button to begin the game after all desired game selections appear on the setting panel.
2. Change from the setting panel to the scoring panel to begin the game. It is shown in the figure of Score Panel.

HOLD LED INDICATOR and START SOUND

1. A bi-color LED indicator indicates the dartboard is at HOLD status (freeze to score the game) or START status (ready to score the game). The LED appears in red color when it is at HOLD status, and changes to green when in the START status.
2. The HOLD LED will change to green automatically after pressing the Player Change button.
3. At the same time, it sounds a "da- da- da- dan—" START melody to remind the player that the board is ready to score the game.

TEMPORARY SCORE DISPLAY

1. The Temporary Score window appears "rd #" for 2 seconds then displays "PL #" automatically after press the Player Change button, to indicates which round of the game is being played and which player's turn it is.
2. After the player throws their darts, it indicates the scored segment position for 2 seconds, then the total score of the current player in the round.
3. Figures explanation:
The first scored dart is "2-15", 2 is double ring, 15 is the segment number, and the total is 30 points, the second scored dart is "1-6" which means single 6 segment, and the total score of this round so far is $30+6=36$.
4. Different display styles will be shown for Random Shoot, Ludo, Under, Over, Shanghai, Free, Half It, Follow the Leader, Scram, Bingo, DD41, Best Ten, 9 Lives, Tennis, English Cricket, Golf, Billiards (9 Ball), Snooker and Baseball. Please refer the description in the Game Rules section.

CUMULATIVE SCORE and DART NUMBER

1. The Cumulative Score windows display the cumulative score of each player from the beginning of the game.
2. For a different game with a different beginning score, please refer to the description in the GAME RULES section.
3. The cumulative score will flash between the previous cumulative score and the new cumulative score, then display the current cumulative score when darted.
4. Three flickering dots appear on the "Cumulative Score" window of the current player after press the Player Change button. It indicates the residual darts of this round to be thrown. Each scored dart will eliminate one flickering dot.

5. Different display styles will be shown for Red & Green, Tennis and baseball games. It indicates the target number for players in Red & Green game, displays winning numbers of Set, Game and Ball for the Tennis game, and shows the number of out for the batting team in the Baseball game. Please refer to the Game Rules section for detail.

LED ARRAY DISPLAY

1. Any marks of LED array will flash for 2 seconds to indicate the number of the mark is hit.
2. It displays "close" status of Cricket and Penny games when a specific number is hit.
3. A mark of the LED array turns on to indicate the player adds one life when the player hits his/her own number in a Killer game, or a cumulative score with the same unit's and ten's places as another in a Ludo game, or the player get one mark in a Bingo, 21 Points, English Cricket, Golf game, or the player wins a ball in Tennis game, or a runner reaches a base in the Baseball game.
4. Each player's LED array will display the preset lives or the defined lives of the games Under, Over, 9 Lives and Follow the Leader after pressing the Player Change button. Each LED mark indicates one life.
5. All 21 LEDs array of the Player 1 will display to indicate the erased status of Scram games after pressing the Player Change button.
6. Ten marks of the LED array will display to indicate residual darts status of best ten game, or to indicate residual targets status of red and green game after pressing the Player Change button.

AUTOMATIC HOLD

1. Under the following conditions the dartboard will change to HOLD status automatically and freeze to score.
 - a). Three darts of a round have been scored.
 - b). The current player finished his/her game.
 - c). It is at ending a round in Under, Over and Follow the Leader games.
 - d). It is at game setting status.
 - e). It is at "STUCK" status.
2. There are not any changes when a dart is thrown during HOLD status.

MANUAL HOLD

1. The dartboard will remain in the START status until all three darts strike scoring area of the board. To freeze the board before all three darts are thrown, the player must press the HOLD button to freeze the board's sensor. This is to prevent the board from adding additional scores while removing darts.
2. Press the HOLD button again to unfreeze the board, or press the Player Change button to change to the next player.

REMOVE the DART and PLAYER CHANGE

1. Each player can throw 3 darts in a "ROUND" even when darts only partially strike on scoring area, and when all players have to throw 3 darts, a round is completed.
2. The Cumulative Score window will flash and the Hold LED turns to red automatically after 3 darts are scored. The current player has to remove the darts from the dartboard and press the Player Change button to change to the next player.
3. It will be easier to remove darts from the dartboard by turning the dart in a Clockwise direction slightly, then to pull the dart straight out.
4. The display changes to a new START status after pressing the Player Change button, and continues with the game in the same cycle as the above descriptions till the finish of the game.

DELETE THE BOUNCE-OUT or MISTAKEN SCORE

1. During the course of a game, scores of bounce-out or a score counted by a mistaken touch of the scoring area can be deleted by this operation.
2. Press the B/DELETE button to eliminate a mistaken score, it will remove the points from the cumulated score.
3. A mistaken score must be deleted before you throw the next dart.

STUCK

1. During the playing of a game, a segment of the dartboard may become "STUCK". This means that the sensor cannot register any further scores until the stuck segment is released.
2. A segment generally becomes stuck when 2 darts strike across one.
3. The board will emit a warning sound when a segment is stuck. Also, the temporary score window will display "Stuc" and the stuck position alternatively. Example: "Stuc" and "3-18" display alternatively, indicating that the triple ring on number 18 is stuck.
4. Remove the dart from the stuck segment, and the board then automatically returns to start status and is exactly the same way as during normal conditions.

SCORE REVIEW

1. The dartboard has 9 sets of LED displays, one Temporary Score, 4 Cumulative Score and 4 LED array displays. It can display 4 sets of scores at the same time. We designed the score review feature to review all players' scores when over 4 players play together.
2. Press the Score button to review the scores of other players.
3. The Temporary Score window flashing "Scor" and displays ·, ··, ··· or ···· to indicate it is at score review status after pressing the Score button. The number of dots indicate players' page as following: ·1-4P, ··5-8P, ···9-12P, ····13-16P. The Cumulative Score and the LED array windows display score and marks of relative players.
4. Each press of the Score button scroll a page of 4 players' score in a loop.
5. Press the Player Change button to continue the game after score review.

COMPLETE THE GAME

1. Game continues in the above sequence throughout the game until one player finally wins the game.
2. The "F-1" and the final cumulative score are displayed alternatively on the winner's window.
3. The total number of rounds played is displayed in the Temporary Score window to indicate in how many rounds the winner finished the game. The dots displayed on the winner's window indicates how many darts in the final round were not thrown. Combine the rounds with the dots, and the winner can easily know how many darts he/she threw to finish the game.
4. A melody plays for the winner. The player can press any button to stop the melody before the melody automatically stops.
5. The PPD data for '01 games and the MPR data for Score Cricket will be displayed with one press the Player Change button after the first player wins.
6. Press the Player Change button so that the remaining players can complete their games.
7. Some games with options of rounds such as High Score, Random Shoot, Shanghai, Half It, Bingo, 21 Points, dd41, and Soccer. will end when the last player has thrown the 3rd dart of the present round, so all the players finish the game at the same time. The dartboard will automatically list places in the competition by F-1, F-2, ...F-16 according to their score.
8. The dartboard can not be compare the player's score automatically if the last player strike only part of the 3 darts on the scoring area in the final round when playing a game with options of rounds. So press the Player Change button to finish the game and compare the result.
9. Press the Player Change button to change it to the setting status after all players finish their game to select a new game and options.

RESET THE GAME

1. Press and hold down the RESET button till the entire display panel indicates the setting panel and sound "Bi—Bi—" to stopped the current game then select a new desired game.
2. Press the Player Change button again to begin the new game when the desired new game and options appears on the setting panel.

REVIEW THE GAME SETTING STATUS

1. Press and hold the GAME button to review the game setting data again when a game is in progress.
2. Release the GAME button and the display will return to the playing game status.

AUTOMATIC and MANUAL POWER ON/OFF

1. This electronic dartboard will turn off power automatically to conserve energy after play is suspended for about 8 minutes.
2. The power also can be turned off by pressing and holding down the Power Off button until all displays are turned off.
3. The power will be turned on and the game will be resumed later at a touch of a button.

*** GAME RULES ***

SOME GENERAL DART RULES

1. The dartboard should be hung on the wall vertically, and the center of the bull's-eye should be 5' 8" (172.72 cm) height from the floor. the minimum throwing distance should be 7' 9 1/4" (236.86 cm) from the board face to the throwing line.
2. A round (turn) shall consist of 3 darts. Any dart bouncing off, or falling out of the dartboard shall not be re-thrown.
3. All players throw in sequence.
4. The dartboard shall be of the standard 1-20 clock pattern and the bull's-eye. The singles shall score as the face number of the segment, the double (or triple) rings shall score double (or triple) the segment number, the outer bull shall score 25 points and the inner bull shall score 50 points (double 25).

'01 GAMES (with P.P.D.): 301, 501... to 1001(A01), 1-16 Player

1. The '01 games are the most famous and popular dart game played in most leagues and tournaments around the world.
2. Each player starts at a beginning score of 301, 501...901 or 1001. The object of the game is to reducing each round's score from the beginning score. When the player reaches zero exactly, they finish the game.
3. The round is a "BUST" when a player throws a dart resulting a score higher than the residual score that can not reach a zero score exactly. It will stop the current round and return the player's score to the last round's score of the current player.
4. There are 4 DOUBLE IN/OUT options in each '01 game.
 - a). **DOUBLE IN:** The player must hit a number in the double ring or the inner bull to start the game.
 - b). **OPEN IN:** Hit any number to start the game.
 - c). **DOUBLE OUT:** The player must hit a number in the double ring or the inner bull to get the score to zero exactly and finish the game. It will be the "buSt" round when the player's score falls to 1 point under the double out option status.
 - d). **OPEN OUT:** A number is hit that reaches the score of zero exactly to finish the game.
5. On the '01 game series, all players can continue to play to finish the game.
6. P.P.D. indications: (Points Per Dart):
 - 6.1. According to the N.D.A. formulas, P.P.D. (Points per Dart) is total Points divided by Actual Darts Thrown. The first winner uses the total points and the other players use the actual scored points.
 - 6.2. Press the PLAYER CHANGE button to display the P.P.D. after the first player wins the game.
 - 6.3. The Temporary Score window flashing "PPd" to indicate P.P.D. data on each player's Cumulative Score windows.
 - 6.4. Press the PLAYER CHANGE again to continue the game for other players.
 - 6.5. The P.P.D. data are calculated after the first player wins the game only.

LUDO (Mensch Ärgere Dich Nicht) (Patented): 300 to 900, 2 to 16 Player

1. This patented LUDO dart game is created and exclusive by ECHOWELL ELECTRONIC CO., LTD. Originally the LUDO (Mensch Ärgere Dich Nicht) game is a thrown dice game and it is very popular in Germanic countries. We have absorbed the essence of the LUDO dice game and have designed it to make it suitable for the dartboard. This new LUDO dart game is a very fun and exciting game, even better than the famous SCORE CRICKET game. SCORE CRICKET is a highly competitive game and its focus is to compare the player's skill and strategy, but the LUDO game's focus is on fun and excitement, and it does not require a high skill level. Everyone can easily play, even a beginner, making this an enjoyable family dart game.
2. Rules of the LUDO dart game:
 - a). 2 to 16 players can play, but LUDO is most fun with 4 or 6 players.
 - b). Each player starts the game with 0 points and adds to their cumulative score with each scored dart, but any previous player's cumulative score may fall back to 0 points again when the previous player is "killed" by the current player. To kill an opponent (making the opponent re-start from 0 points) by scoring the current player's score as the same value of the tens places and unit (compare 2 digital value of the 10' and 1' only, do not need to compare 100') as the previous player's cumulative score. Each scored dart can kill an opponent, and it is possible to kill all 3 opponents in a round.
 - c). The current player will increase 1 "Life" when he/she kills an opponent one time.
 - d). Any cumulative score between 0 to 29 points is in the safety zone, and the current player can not kill the opponent's score back to 0 points when the previous player's cumulative score is less than 30 points.
 - e). There are two ways to win the LUDO dart game:
 - The cumulative points reach or go over a target score. The target score can be preset from 300, 400,...to 900 points (in 100 points increments).
 - Kill the opponent(s) 7 times (amounting to 7 lives).
3. Displays:
 - a). The previous cumulative score and the new cumulative score will display on the current player's CUMULATIVE SCORE window alternatively for about 2 seconds when the current player throws scored dart, and it will flash the previous score and 0 points when a previous player is killed by the current player.
 - b). The LED array window displays the cumulative marks and it will flash a new mark on the current player's window for about 2 seconds when the current player kills a previous player.
 - c). The TEMPORARY SCORE window not only displays the "rd##" and "PL#" data but also displays the "SCORE GAP" data, making it easy for the current player to decide which segment to hit in order to, kill the previous player. The dartboard compares the 2 digital value of the 10' and 1' of the current player's score with the others. If the score gap is less than 60 points, then it shows the score gap with the previous player number. It will display all the score gaps alternatively if there are over 2 score gaps less than 60 points. It will show the "—H—" symbol if no score gap is less than 60 points.

4. Figure 6 explanation:

4.1. Left figure: It is the turn of player 16, he/she has 2 targets to kill, the "15H9" and "8-10", that means he/she can score 15 points to hit (kill) player 9 and score 8 points to hit player 10.

4.2. Right figure: Player 3 accumulates scores to 227 but can't kill player 4 since 27 points is in the safety zone (0-29). Player 4 accumulates 242 points and kills player 1 (42 points).

5. The Echo-1016 sounds a "Da, Da, Di-, Da, Da, Di-" melody for each scored dart if the current player's score has reached the last 100 points or he/she kills the opponents more than 5 times; either one can make the current player near to winning the game, so a melody sounds to warn the other players to watch out and try to "kill" this player, or to prevent this player from having a chance to kill you.

6. This game allows each remaining player to finish the game after one player wins.

7. Strategies to win the LUDO dart game:

LUDO is a very fun dart game, and the whole process is very exciting. In every round, almost, you have a chance to "kill" the opponents, forcing them to re-start from 0 points, conversely the others can kill you. Therefore, the STRATEGY is more important than scoring the higher points. Some strategies for reference are listed below:

- The player can shoot for as many points as possible to reach the preset score or to enlarge the score gap with the other players to avoid being killed.
- But sometimes, players have to aim at the suitable low point segments, even shoot on the catch ring (0 points), to let your score fall behind the other opponents to prevent the others from killing you, especially when your score reaches the last 100 points.
- When you just start or re-start from 0 points, you can shelter under the "SAFTY ZONE" (0-29 points) if you can not get a high score or it is at danger status.
- When a player cumulates their marks over 5 times, the other opponents have to cumulate their score behind this player to prevent him/her from killing you again and reaching 7 marks to win the game.
- When a player has reached the last 100 points, all the other opponents have to cooperate together to besiege the leader, otherwise the leader will easily win. All the others have to disregard that they may be killed by the leader. They have to let their score "STANDING" remain at different values with a suitable gap between each other, to be sure that although the first opponent fails to kill the leader, the others still have the chance to kill him. Sometimes they have to wait and wait (shoot for the 0 points catch ring) for the leader to enter the kill zone.

CRICKET

1. Cricket involves the element of strategy used against the opponent.
2. There are 3 Cricket game options: Score Cricket, Cut-throat Cricket, and No Score Cricket.
3. Score Cricket and Cut Throat Cricket are designed for 2 to 16 players; No Score Cricket id design for 1 to 16 players.
4. To play cricket games, 2 players/teams playing score cricket is more exciting than if more individuals play score cricket. But you will find more individuals playing cut throat is more exciting than 2 players playing the game.

SCORE CRICKET (SUPER CRICKET) (With MPR): 2 to16 Player Option

1. The object of Score Cricket is for each player/team to "close" each number from 15 through 20 plus the bull's-eye. The first player/team to "CLOSE" all numbers and the bull's-eye, and to be even or ahead on points wins.
2. A player "closes" a specific number or the bull's-eye by hitting 1 triple, 1 double plus 1 single, or 3 singles. The outer bull is considered a single and the inner bull is a double.
3. The player to "close" a specific number "owns" the number and can score points on this number until all of the players also close it.
4. The target number can be hit in any order. Within several three-dart rounds, the player must decide which to attempt first - points or closing number. The game becomes a fascinating cat-and-mouse game of offense and defense, as each player tries to close the necessary numbers, score points, and make the right strategy decisions.

5. M.P.R. indications:

The Score Cricket games displays MPR (Marks Per Round) data according to the following process:

- 5.1. According to the N.D.A formulas, M.P.R. (Marks per Round) is Total Marks scored divided by the Total Number of Rounds a player actually plays.
 - 5.2. Press the PLAYER CHANGE button to display the M.P.R. after the first player wins.
 - 5.3. The Temporary Score window flashes "nPr" to indicate MPR data on each player's window.
 - 5.4. Press the PLAYER CHANGE button again to continue the game for other players.
 - 5.5. The MPR data are calculated after the first player wins the game only.
6. Displays: ECHO-1016 indicates the score of a Cricket game as below:
- a). Closed Status Indications
 - The marks of the closed status is displayed in the LED array window and each player starts with 0 marks.
 - Each specific number of a player has 3 LED marks, and there are 21 marks for every player.
 - Each flashing mark of a number indicates that the player has hit the number one mark, 2 or 3 flashing marks indicates the player hit a double or a triple of a specific number with one dart.

- b). Cumulated Score
 - Each player has a cumulated score window to display the cumulated score from 0 points.
 - The previous cumulated score and the new cumulated score will be displayed for 2 seconds alternatively when the player scores.
 - The board will flicker the dots on the current player's window to indicate the residual darts to be thrown in the current round.
 - c). Temporary Score
 - It shows the segment position for 2 seconds after the current player throws a dart, then automatically changes to display the total score of the current round.
7. Figure 1 explanation:
- No. 15 & Bull's-eye; No one has closed the number.
 - No. 16: Player 2, 3, 4 can "score" points.
 - No. 17: Player 3 can "score" points.
 - No. 18: Player 1,3 can "score" points.
 - No. 19: Player 1 can "score" points.
 - No. 20: All of the players have "closed" the number, so not any one of them can score points from No. 20.

NO SCORE CRICKET: 1 to 16 Player

1. The game of No Score Cricket is simpler than Score Cricket. The object of this game is to only "Close" the numbers 15 through 20, plus the bull's-eye. The first player to close all the target numbers wins the game. There is no need to compare the scores.
2. This can be a game in and of itself.
3. The display panel is slightly different than in Score Cricket as below:
 - a). Close Status
 - It is the same as the status indications in Score Cricket.
 - b). Cumulative Score
 - The cumulated score of the no score cricket starts from the beginning score of 21 points. The object of this game is for each player to hit three of each number- 15 through 20 - plus three bull's-eyes. Three hits on all 7 numbers total 21 points. The cumulated score will count down to zero after the player closes all the numbers.
 - The board will flicker dots on the current player's window to indicate the residual darts of the current round to be thrown.
 - c). Temporary Score
 - The player must hit a number in the double ring or the inner bull to get the score to zero exactly and finish the game. It will be the "buSt" round when the player's score falls to 1 point under the double out option status.
4. The figure 2 explanation:
 - a). The cumulative score starts from the beginning score of 21 points, and will count down to zero.
 - b). You can count the marks on the LED array plus the cumulated score of each player and will find the total is 21.

CUT-THROAT CRICKET: 2 to 16 Player Option

1. The game plays the same as Score Cricket, except that when a player closes a number, the score for all further hits to that number are given to the opponents with that same number open. The first player with all his/her numbers closed and lowest score wins.
2. The player is automatically out of the game if his/her score is over 1000 points before other players finish the game.
3. All the displays for Cut Throat are the same as the Score Cricket game.

KILLER

1. Killer is a spirited, competitive game. The object of the game, as the name suggests is to "kill" the opponents' lives before your own is eliminated. The last player/team remaining "alive" is the winner.
2. The game can play all numbers except the bull's-eye.
3. At the beginning of the game, each player should throw one dart with the opposite hand to select his/her own number. Every player must have a different number. If a player misses the board or hits a number already taken or a bull's-eye, he/she must throw again.
4. Every player must make himself/herself a killer firstly, then he/she can kill the opponents.
5. There are 2 game options: Killer (Double Ring), Killer (3-7 Life).

KILLER: dbl (double ring), 2 to 16 players options

1. The "dbl" option is the traditional killer game, meaning:
 - a). A player must hit the "double ring" of his/her own number once, then he/she becomes a killer.
 - b). The killer also must hit the "double ring" of the opponents' numbers to kill their lives. The killer may kill himself/herself by accident and lose one life if a player hits his/her own number.
 - c). A killer is always a killer unless he/she loses all lives and is out.
 - d). Each player begins with 3 lives on the LED array.
2. At the zero round, each player throws one dart alternatively to set his/her own number. These target numbers must be different and will display on the players' Cumulative Score windows. In the period of setting target number, the player doesn't need to press the Player Change button.
3. Each player tries to hit the double ring of his/her own number after each player owns a number. A killer marker "-" displayed at the right side of the killer's number and the dartboard sounds "Da Da Di-, Da Da Di-" to indicate that this player is a killer.
4. A killer begins aiming for the double of other player's numbers, one mark of the player is turned off to indicate that the player has lost one life and a "Da-Da Da, Da-Da Da, Da-Da Di-" sounds when a killer hits the "Double Ring" of the other players' numbers. It will sound "Ha, Le, Lu, Ya" if he/she kills himself/herself.
5. A symbol "End" and the number of the player flashing, and a melody "Don-Don Don Don- Don, Don-Don" sounds to indicate the player is out of the game because he/she has lost all lives.
6. The last one to have any lives left wins, and the winning melody will sound.

7. Figure 5 explanation:

- 7.1. Players 1, 2, 3 and 4 own numbers 15, 9, 2 and 11. It is the turn of the player 3.
- 7.2. The player hits double 2 and becomes a killer, one killer marker indicates the player 3 is a killer.

KILLER : (3-7LF, 2-16 PLAYERS OPTION)

1. In 3-7 LF option:
 - a). Each player owns no lives at the beginning of the game.
 - b). The player will become a killer if he/she has accumulated the preset number of lives by hitting his/her own number. Players can set the number of lives from 3LF to 7LF.
 - c). A killer won't add or lose his/her lives any longer by hitting his/her own number.(i.e. The dart will be ineffective if a killer shoots himself / herself).
 - d). A killer may lose the title of killer if his/her number is hit by other killers, but he/she can become a killer again if he/she can reach the preset number of lives.
 - e). All of doubles and triples count as singles.
2. Each player tries to hit his/her own number after players select their own number. A mark of the player's LED array will be turned on to indicate the player has added one life. A player may add one life to another player by accident before the player becomes a killer if he/she hits another player's number and a melody "Ha, Le, Lu, Ya" sounds.
3. A "-" symbol displayed on the right side of a player's number and the dartboard sounds "Da, Da, Di- Da, Da, Di-" to indicate this player is a killer.
4. A killer begins aiming for other player's numbers, one LED array mark of the player will be turned off to indicate the player has lost one life and a "Da-Da Da Da- Da Da, Da- Da Di" sounds when a killer hits a player's number.
5. A killer can not throw a dart to kill a player out of the game before the player gets his/her first mark. The first hit of the player's number by a killer will add one life mark to the player. The player will be "Out" if the killer hits the number again with any residual darts.
6. A symbol "End" and the number of the player flashing, and a melody "Don-Don Don Don- Don, Don- Don" sounds to indicate that the player is out of the game because he/she has lost all lives.
7. The last one to have any lives left wins. The winning melody then sounds.

KILLER TEAM: 3-7LF, 4 PLAYER/ 2 TEAMS OPTIONS

1. The "killer Team" is a new game designed by ECHOWELL CO., LTD.
2. This is designed for teams, so it is very competitive and emphasizes team spirit.
3. The game plays the same as killer (3-7LF option), except for the following points:
 - a). There are 2 teams in this option. Player 1&3 are one team (with "Red" LED display), player 2&4 are another (with "Green" LED display).
 - b). Each player can add to his/her own lives by hitting his/her own number before he/she has become a killer. (A killer means the player has cumulated to the preset number of lives.)

- c). A player can add to the partner's lives by hitting the specific number even if the player has become a killer.
- d). It will be an ineffective dart if the killer hits his/her own number or if the partner hits this killer's number.
- e). A killer can kill the lives of any player of another team by hitting their numbers.
- 4. Figure 4 explanation:
 - 4.1. Four lives are preset, player 2 has become the killer.
 - 4.2. Player 1 can hit his/her own number in order to become the killer. But it is more important to help his/her partner by hitting the number (14) because the partner is in a dangerous position.
 - 4.3. Player 2 can "kill" the lives of any one of his/her opponents because he/she is a killer. He / She can also add to the partner's lives by hitting the number (5). It is no use hitting his/her own number.
 - 4.4. Player 3 must add his/her own number because he/she is in danger.
 - 4.5. Player 4 can hit his/her own number in order to become a killer. The dart will be ineffective if he/she hits the partner's (killer) number.
- 5. The last team to have any lives remaining wins the game, and the winning melody then sounds.
- 6. Strategy:
 - a). Make someone (you or your partner) the killer as soon as possible, so that your team can achieve the advantage.
 - b). If your opponent(s) have become the killer(s), both of you (you and your partner) must help each other, especially the one who is in the most danger.

SCRAM : 21t (21 Targets), 2-16 Player Options

- 1. Scram is an exciting and highly competitive game played in 2, 3,...or 16 separated rounds of play.
- 2. The game plays all the numbers, 1 through 20 and bull's-eye. Each player uses the 21 marks on the LED array display to indicate the 21 numbers in play. Each mark indicates one number as shown below.
- 3. A player acts as the Scorer and other players act as Stoppers during a separated round. The Temporary Score window displays PL-1, 2, 3 ...or 16 to indicate that player 1, 2, 3... or 16 is the Scorer and the other players are acting as Stoppers by a displayed StP1, 2, 3... or 16. Players shall take turns throwing darts as the instruction display on the "Temporary Score" window shows below.
- 4. The task for the Scorer is to score as many points as possible by hitting any one of the numbers. The stoppers' task is to hit each number 1-20 and the bull's eye one time in any order.
- 5. When a number is hit by any one of stoppers, the number is erased by the stopper and indicated by the turn off of the LED mark of the number, and the Scorer can no longer get a score on that number.
- 6. The Scorer round is finished when all numbers are erased, and the final score of the Scorer and the symbol "End" is displayed alternatively on the player's window and the sound End melody is played.
- 7. Press the PLAYER CHANGE button to change to the next Scorer round.
- 8. The game progresses until the last Scorer round is finished. The dartboard will compare the final score amount of all players and list F-1, F-2, F-3... or F-16 according to their score to indicate who has the highest score.

SCRAM CRICKET: 7t (7 targets), 2-16 Player Options

1. The game plays the same as Scram, except that the game uses the cricket numbers 15 to 20 and the bull's-eye. Each must be hit three times to erase the number.
2. Stoppers erase a specific number of the bull's-eye by hitting 1 triple, 1 double plus 1 single, or 3 singles. The outer bull is considered a single and the inner bull is a double.
3. This is a good practice game for Cricket.

OVER: Con, Ldr, 2 to 16 Player Options

1. The Over game is modified from the HIGH SCORE game. The HIGH SCORE game compares the highest score when ending the last round only, but the Over game compares the higher score after every round, so it is more competitive and exciting during the process of the game.
2. General rules of the Over game:
 - a). The object of this game is for players to take turns shooting for a 3-dart score that is equal or higher than the "LEADER'S SCORE".
 - b). Your score will become the new leader's score and you do not lose a life when your score of a round is equal or higher than the previous leader's score. Otherwise, you will lose a life.
 - c). Each player starts with 7 lives, and the last player alive wins the game.
3. This dartboard has 2 over game options, the "Continue" option is designed with the traditional rules, but the "LEADER" option is created by ECHOWELL. You will find the LEADER Over game is more fun and exciting, and it is easy for the low-skill players to play.

OVER: Ldr (Leader), 2 to 16 Player Option

1. Displays and descriptions:
 - a). The "Leader's Score" displays on the Temporary Score window it will flash the previous leader's score and the new leader's score for 2 seconds when displaying a new leader's score.
 - b). There are 7 life marks for each player that is displayed on the LED array window at the beginning. It will flash a mark for 2 seconds, then it disappears when the player loses a life.
 - c). A "-H-" leader's symbol is displayed on the Cumulative Score window to indicate the current leader.
 - d). The current player's Cumulative Score window shows the cumulative score of the current round, and the flashing dots indicate the residual dart numbers.
2. If there is not any opponents who have become the new leader after a round, the dartboard will display a new leader's score when the previous leader shoots 3 darts, although the new score is lower the previous leader's score, and the leader does not lose any lives.
3. When the board flashes the "End" symbol and the round score on the Cumulative Score window alternatively, and sounds the "End Melody", this indicates that the current player has lost all lives and is out of the game.
4. Figure 7 Explanation:
 - 4.1. Player 3 is the leader and the leader's score is 45 points.
 - 4.2. Player 2 gets 23 with 2 darts, he/she must get more than 22 to equal or move beyond the leader's score 45, otherwise he/she will loss 1 life.

OVER: Con (Continue), 2 to 16 Player Options

With the "Con" option of the Over game, the leader will also lose a life when he/she has a score in a round that is lower than the leader's score (it is scored by himself), and the leader's score is kept at the Highest value always. The score can only be increased.

UNDER : Continue, Leader, 2-16 Player Options

1. General rules of the Under game:
 - a). The object of this game is for players to take turns shooting for a 3- dart score that is equal to or lower than the "LEADER'S SCORE".
 - b). Your score will become the new leader's score and you do not lose a life when your score after a round is equal to or lower than the previous leader's score. If it is not, you will lose a life.
 - c). Each player starts with 7 lives, and the last player alive wins the game.
 - d). Each missed dart counts as the top score of 60 points.
2. This dartboard has 2 under game options, the "Continue" option is designed with traditional rules, but the "LEADER" option has been created by the ECHOWELL. You will find the LEADER under game is very fun and exciting and it is easy for the low-skill players to play.

UNDER: (Ldr: Leader option)

1. Displays and descriptions:
 - a). The "LEADER'S SCORE" is displayed on the TEMPORARY SCORE window. It will flash the previous leader's score and the new leader's score for 2 seconds when displaying a new leader's score.
 - b). There are 7 life marks for each player that are displayed on the LED array window at the beginning. It will flash a mark for 2 seconds, then it disappears when the player loses a life.
 - c). An "L-" leader's symbol displays on the Cumulative Score window.
 - d). The current player's Cumulative Score window shows the cumulative score of the current round, and the flashing dot indicates the residual dart numbers.
2. If there is not any opponents who have become the new leader after a round, the dartboard will display a new leader's score after the previous leader. Shoot 3 darts, although the new score is over the previous leader's score, and the leader does not lose any lives.
3. It will move up to end a round if it is over the leader's score even when hit with 1 or 2 darts only.
4. Each missed dart counts as 60 points and will be added to the player's score automatically after pressing the Player Change button, so the player can not throw away a dart on the floor or hit on the catch ring to get a lower score. It also counts as 60 points when you delete a dart score.
5. When flashing the "End" symbol and the score alternatively, and sounds an "End Melody", this indicates that the current player has lost all lives and is out of the game.

Under: Con (Continue), 2-16 Player Options

At the Continue option of the under game, the leader will also lose a life when he/she has a score in a round that is over the leader's score (it is scored by himself), and the leader's score remains at the "BOTTOM" value. It can be changed to a lower score only.

AROUND THE CLOCK: —, -2-, -3-, 1-16 Player OPTION

1. The game is suitable for experienced players and practicable to beginners.
2. The object of this game is to hit each number (in order) one time from 1 through 20 in sequence, then the bull's-eye. After hitting the number in play, the player may proceed to the next number. The first player to reach the number 20 and then hit the bull's-eye wins the game.
3. There are 3 options for this game:
 - a). "—" Around The Clock
All doubles and triples count as singles.
 - b). "-2-" Double Around The Clock
This game is more difficult but it is suitable for practice of the double IN/OUT of the '01 games. Each player must hit each double number one time, from double 1(D1) to double 20 (D20) in sequence, then the bull's-eye (E50).
 - c). "-3-" Triple Around The Clock
Each player must hit each triple number one time from triple 1 (T1) to triple 20 (T20) in sequence, then the bull's-eye (E50) in order to finish the game.
4. Cumulative Score windows of player 1 to player 16 will show the number that each player has to hit on segment. It advances the number by 1 after the player hits the number. The symbol "-E-" or "E50" is the last segment bull's-eye.
5. All players can continue play to finish his Around the Clock game after the first player wins the game.



HIGH SCORE : 6-15rd, 1-16 PLAYER OPTION

1. This game is designed for beginners, and anyone can easily play. The object of this game is to get highest total score.
2. First, preset a round number. Each player begins the game with 0 points and adds to the score with each dart. The dartboard will display the "F-1, F-2...F16" symbols on each player's window after the last player throws the 3rd dart in the final preset round, and the winning melody sounds.
3. The dartboard can not compare the player's score automatically if the last player strike only part of the 3 darts on the scoring area in the final round. So press the Player Change button to finish the game and compare the result.

COUNT UP (C-Up): 100, 200 ... to 900, 1-16 PLAYER OPTION

1. This game is designed for beginners. and anyone can play fast and easily.
2. The object of this game is to be first to reach or go over the preset score.
3. Each player starts the game with 0 points and adds to their score with each scored dart. The first player to reach or go over the preset target score wins the game.
4. This dartboard allows each remaining player to finish the game after one player wins.

SHANGHAI I

1. This game plays numbers of 1 through 7 in sequence.
2. Players take turns throwing in 1 at the 1st round, then 2 in the 2nd round and so on to 7 in the 7th round.
3. Only darts hitting the number in play count for score, doubles and triples count. Three darts of all players hit the same number in the same round.
4. The player with the highest score wins the game after the last player throws the 3rd dart in the 7th round, and the winning melody sounds.
5. The dart board can not compare the player's score automatically if the last player has missed any darts during the final round. So press the PLAYER CHANGE button to finish the game and compare the results.

SHANGHAI II

The game plays by the same format as Shanghai 1, except that a player can win instantly in any three dart round by hitting a single, double and triple, in any order, during play.

SHANGHAI III

1. This game plays all numbers except the bull's-eye.
2. Players take throwing at numbers 1 through 20 in sequence.
3. Each player starts on number 1. After hitting number 1, then shoot for number 2, and so on.
4. Only darts hitting the number in play count for score. Doubles and triples count.
5. A player can win instantly by hitting a single, double and triple, in any number order, during a round.
6. The player with the highest score after the last player throws the 3rd dart in the 7th round, or the first player to reach and hit 20 wins, and the winning melody sounds.
7. The dart board can not compare the player's score automatically if the last player has missed any darts during the final round. So press the PLAYER CHANGE button to finish the game and compare the results.

RANDOM SHOOT: 6-15 Round, 1-16 PLAYER OPTION

1. The game is designed to practice accuracy shooting.
2. The object of Random Shoot is to hit the segment that the dartboard issues automatically. It will score points as follows when the player hits the issued number:

SEGMENT	SINGLE	DOUBLE	TRIPLE	E25	E50
POINTS	1	2	3	3	5

3. It will issue a new number after the number is hit or at the beginning of each player's round. It will receive no score and keep the same number when the player does not hit the target number.
4. The issued number is displayed on the Temporary Score window. Two flickering marks on the sides of a number (-##-) indicate the player shall shoot this number to score points. The "-bE-" indicates the bull's-eye.
5. The player with the highest score wins the game.

HALVE IT (HALF): rAn (Random), 1-16 PLAYER OPTION

1. This game is designed to practice accuracy and stable shooting.
2. The dartboard issues a random number and automatically displays it on the TEMPORARY SCORE window at the beginning of each round.
3. The issued number does not change during the entire round. All players can continue to hit their 3 darts on this segment to cumulate their score, and doubles and triples count.
4. A player's score will be automatically cut in half if he/she does not hit the issued number with at least one of the 3 darts per round, and sound the "Ha, Le, Ya" melody. But if one or more dart(s) hit the catcher, the player must press PLAYER CHANGE, the score will be cut in half.
5. The dartboard will re-issue a random number for each round, and the game progresses until the last player throws the 3rd dart in the 7th round.
6. Figure 3 explanation:
 - a). The dartboard issues a random number 15, and player 3 misses all 3 darts and the score of 46 is cut in half to 23 points.
 - b). Player 1 misses all 3 darts on the target 18 and the original score of 45 is cut in half to 23 points.

HALVE IT (HALF): 12 Round, 1-16 PLAYER OPTION

1. The game is played with the same format as random Halve It, except that the dartboard issues fixed numbers of 12, 13, 14, -db-, 15, 16, 17, -tr-, 18, 19, 20, and -bE- for each round in sequence, for a total of 12 rounds.
2. The Temporary Score window will show the "-db-" symbol at the 4th round, players hit any double (D1 to D20 or the inner bull's-eye) to score. Any double must be hit with at least one of the 3 darts per round, otherwise the thrower's score is cut in half.
3. The Temporary Score window will display a "-tr-" symbol in round 8, meaning players can hit any triple (T1 through T20).
4. Players have to hit either the outer or inner bull's-eye during the last round when the dartboard displays -bE-, otherwise their score is also cut in half.

FOLLOW THE LEADER: Continue, Leader, 2 to 16 Player Options

1. Follow the leader is also a competitive game. It compares the accurate shots of the players.
Game rules of the Follow the Leader are written below:
 - a). The object of this game is to hit on a "Target Number". This target number is issued by the "leader".
 - b). The player shall hit on the target number with at least one of the 3 darts per round, otherwise the player will lose one life.
 - c). You will become a new leader, and without losing a life, if you hit on the target number, and you have to issue a new target number by hitting a dart on the score area again.
 - d). The single, double and triple are different numbers. For example, the target number is "2-18", the player can become a leader by hitting on the double ring of the number 18 only.
 - e). If the player hits on the target number with the 3rd dart of a round, then it keeps the previous target number with no change. The leader does not throw the dart again to issue a new target number.
 - f). If the player hits on the target number with the 1st or 2nd dart of a round and he/she misses all the residual darts of his/her current round, then the dartboard will issue an easy target number of "1-3" automatically after pressing the PLAYER CHANGE button. This design is to prevent the leader from intentionally throwing away darts on the floor to get a new target number that is the same as the previous high difficult number.
 - g). Each player starts with 7 lives, and the last player alive wins.
2. There are 2 options for Follow the Leader: the "Continue" option follows traditional rules, and the "Leader" option is modified by the ECHOWELL and it is more suitable for low-skilled players.

FOLLOW THE LEADER : (Ldr: Leader option)

1. Establishing the leader and starting the game.
 - a). Each player begins with 7 lives displayed on the LED array window.
 - b). The dartboard will issue a random number as the first target number.
 - c). Each player shoots a dart in sequence until one hits on the random number and becomes the first leader.
 - d). If the player fails to hit the random number, they will not lose any lives until a leader is established.
 - e). The "LEA" symbol displays on the Cumulative Score window to indicate the current leader.
 - f). The Temporary Score window display the "—" symbol, meaning it is waiting for the leader to issue a new target number.
 - g). The new target number will show on the Temporary Score after the leader hits a new dart on the score area again, and it sounds melody to remind the player to press the Player Change button to start the game.
2. Figure 8 explanation:
 - 2.1. The dartboard issues a random number 18, a player hits 1-18 and becomes player 1. He/she is the leader, and the Temporary Score window displays "—" for the leader to issue a new target number.
 - 2.2. The leader hits 1-12, so the next player shall follow the leader and throw 1-12.

3. If a player fails to hit the target number during round, he/she loses one life indicated by the turn-off of one LED life mark. The next player continues shooting for this segment number, and so on.
4. If all other players do not hit on the target number after a round, the TEMPORARY SCORE window will display "—" symbol, waiting for the leader to issue a new target number by hitting a dart on the score area. The leader does not lose any lives when he/she issues the new target number.
5. The Temporary Score window also displays "1-3" target number automatically after pressing the PLAYER CHANGE button if a player hits on the target number and becomes a leader, but misses all residual darts during his/her round.
6. A symbol "End" and "0" flashing on the player's window, and a melody "Don- Don Don Don- Don, Don- Don" sounds to indicate that the player is out of the game because he/she has lost all lives.
7. The winner is the last player left with any lives remaining, and a winning melody plays.

FOLLOW THE LEADER: Con (Continue), 2-16 Player Options

1. The game is played with the same format as the Leader option, except the leader also has to hit on the target number if all other players do not hit on the target number after a round, otherwise he/she will also lose a life. The game always "Continues" on the same target number until one player hits on this target number, then it can be changed to a new target number.
2. Some different displays:
 - a). The LEA leader's symbol is displayed temporarily when a player hits on the target number only, and it will disappear after pressing the PLAYER CHANGE button to change to the next player's round.
 - b). The symbol "—" is displayed on the TEMPORARY SCORE only when a player hits the target number. There is no "—" symbol displayed again after one round if no other players can hit this target number. The leader must hit on the target number too, otherwise he/she also loses one life.

ALL 51 BY 5: 31, 41 ... to 91, 1-16 PLAYER OPTION

1. The object of the game is to reducing each round's score from the preset score of 31, 41, 51...or 91.
2. The game appears very simple, but it is difficult to master and requires considerable accuracy. since the total points for each round must be divisible by 5 to receive any score. For example, if a player gets 25 points on a round, the score is 5 ($25/5=5$).
3. Any round score not divisible by 5 is not counted, for example if a player gets a total of 47 points, the score is 0 since 47 is not divisible by 5. If any one of the 3 darts miss it is counted as a no score.
4. The round is a "bust" when a player gets a score higher than the residual score that can not reach a zero score exactly.
5. The first player that reaches zero exactly is the winner.
6. Figures 14 Explanation:
 - a). The player 9 gets 9 score by hitting Double 3, Single 19 and Single 17 equals 45 points, $45/5=9$.
 - b). After several rounds, the player 9 has a bust since score 13 ($65/5$) is over 12.

BINGO: 6-15 rd(Round), 1-16 PLAYER OPTION

1. The Bingo game combines accuracy throwing skill, luck and a little of gambling.
2. First, the player must aim at playing numbers 1, 2, 3, 4 or 5 to get a chance of BINGO if he/she hits 1, 2 or 3 darts at any number in play.
3. The dartboard will issue a number among 1, 2, 3, 4 or 5 if the player hits any one of playing numbers. The player will get 1, 2 or 3 points if the issued number is the same as the number hit by the player 1, 2 or 3 times in the round. The player's round is over if all 3 darts missed.
4. The player can gamble the score by continue throw the issue number. His/her score will double with each hit of the issued number, or the score will be half in case of a missed dart. The maximum score per round is 10 points, and the minimum is 0 point. The score will be the not change if the player selects not to gamble and changes to the next player.
5. The player with the highest score wins the game after the game over.
6. Figures 22 explanation:
 - 6.1. The dartboard issues number 2 after the player 1 hits 1-3, 2-4 and 1-2, player 1 gets 1 point since the number 2 matched the issued number.
 - 6.2. The player continues to throw darts, with each hit of the target doubling the score, and each miss of the target halving the current round's score. So he/she gets 2 points on this round.
7. The player shall press the Change button to let the dartboard issues a Bingo number if he/she misses any one of the 3 darts.

21 POINT : 3 to 9 Round, 1-16 PLAYER OPTION

1. This game is modified from poker.
2. The object of this game is to get more marks to win the game.
3. All the numbers are in play, doubles and triples count.
4. A player can get 1 mark in 2 ways:
 - a). Gets 21 points exactly with 1, 2 or 3 darts.
 - b). Has highest but less than 21 points if nobody gets 21 points in this round.
5. The round is a "buSt" when score is over 21 points or any dart misses and the "Player Change" button is pressed.
6. The player with the most marks wins the game after game over.
7. Figures 9 explanation:
 - 7.1. Player 2 gets one mark in the round since he/she hits 21.
 - 7.2. It is the turn of player 3, he/she gets 9 points by 1st dart then hit a single 15, it is a bust round since the total score 24 is over 21 points.

SHOVE HA PENNY (Penn): —, 1-16 Player Option

1. The object of this game is for each player to fill 3 marks in each number from 15, 16 ... 20 to the bull's-eye in sequence. The first player to fill all numbers in sequence wins.
2. The player can get 1, 2 or 3 marks by a hit within the single, double or triple ring of the number in play.
3. If a player scores more than 3 marks in the number in play, the excess marks are given to the next player.
4. The last mark shall be finished by the player his/her self.
5. Note: The scores (marks) of Shove Ha Penny game can not be deleted when pressing the B/DELETE button.
6. Figures 17 explanation:
The player 1 has 2 marks at no. 15. If he/she hits Triple 15 and gets more 2 marks than required, he dominates 2 to the player 2.

DOUBLE DOWN 41 (dd41): 12 rd 9Round), rAn (Random), 1-16 PLAYER

1. This game is designed to practice accuracy and stable shooting.
2. There are 2 options, one is 12 Round option and another is Random option.
3. The option of 12-round Double Down 41 is similar to the 12 round Halve It game except each player is given 41 points to start the game instead of 0 points.
4. The option of Random Double Down 41 is similar to the Random Halve It game except each player is given 41 points to start the game instead of 0 point.
5. Please refer to the game rules of Halve It for details.
6. Figures 13 explanation:
 - 6.1. Each player starts from 41 points. The 1st round target is 12, the player 1 shall throw 12 but missed all 3 darts.
 - 6.2. The player 1's score halves.

Best Ten : —, -2-, -3-, -E-, 1-16 Player Option

1. The object of the game is to keep track of the best of 10 darts at a number issued by the dartboard.
2. Select a —, -2-, -3- or -E- first, the symbol of "—" , "-2-" or "-3-" indicates whole segments, double ring or triple ring of the issued number to be thrown by all players through the round. You can have a practice of the bull's-eye when you select "-E-".
3. The dartboard issues a random number at the beginning of the game. All players must continue to throw 10 darts in a round on the target segment of this number.
4. Each hit of the target segment gets 1 point. Each thrown dart will eliminate one mark of "numbers of dart" on the LED array.
5. The player with highest points wins after all players have thrown 10 darts.
6. Figures 10 explanation:
 - 6.1. The dartboard random issues no. 6, all players shall throw the number 6.
 - 6.2. It is the player 5's turn, he/she hit the target by the 1st dart and gets 1 point, also a dart mark be eliminated.

RED vs GREEN (r-G): —, -2-, -3-, 2 PLAYER OPTION

1. The purpose of this game is to let the player 1 hit each number one time from 20, 18, 13, 10, 2, 3, 7, 8, 14 to 12 in sequence, and player 2 has a hit of each number from 5, 9, 11, 16, 19, 17, 15, 6, 4 to 1 in sequence. After hitting a number in play, the player may proceed to the next number.
2. Select a —, -2- or -3- option firstly. Players can throw whole segments of the number in play when select “—”, players must hit the double or triple segment of the number if selecting “-2-” or “-3-”.
3. The first player to reach the final number wins the game.
4. Displays:
 - a). Each player's Cumulative Score window displays the target number for the player.
 - b). The LED array displays 10 marks for each player. Each hit of the target will eliminate one mark.
5. Figures 11 explanation:
 - 5.1. Left: Target numbers of the player 1 in sequence.
 - 5.2. Right: Target numbers of the player 2 in sequence.

9 LIVES: 3-9LF (lives), 2-16 Player Option

1. The game plays numbers 1 through 20 and bull's-eye in a sequence loop.
2. Each player starts with the preset 3, 4,... or 9LF (Lives).
3. Players take turns throwing in 1 in the 1st round, then 2 in the 2nd round, and so on to “-bE-” in the 21st round, then 1 in the 22nd round and so on.
4. Each player shall hit the target number one dart in each round. The player will lose a life if all 3 darts missed.
5. The last player remaining alive is the winner.
6. Displays:
 - a). Lives Bars: Displays on the LED array.
 - b). Remaining Lives: Displays on each player's Cumulative Score window.
 - c). Target Number: Indicated on the Temporary Score window.
7. Figures 12 explanation:
 - 7.1. It is the turn of player 4 in 12th round, the target number is 12.
 - 7.2. Player 3 has ended the game, the residual lives of player 1, 2, and 4 are 2, 5, and 9 lives.

TENNIS: 2-5G (Games), 1, 3, 5t (Sets), 2 PLAYER OPTION

1. The game has similar rules as the actual game of tennis. In the real tennis rules, there are 3 sets for female and 5 sets for male. But in order to reduce the playing time, you can choose the option of 1 set, 2, 3, 4 or 5 games; 3 or 5 sets are also available.
2. The game is designed for 2 players only, and game rules are as below:
 - a). One is the server (display SEr 1 or SEr 2) and another is the receiver (display PL-2 or PL-1).
 - b). The SEr 1 serves first. Each server serves one game alternatively in general. The server's target is to have a hit on any number among Nos. 15, 16,...20 or the Bull's-eye within 3 darts, otherwise the receiver wins 1 ball.
 - c). The receiver shall return the same darted number with 1 of the 3 darts, otherwise the server wins 1 ball. The play number will change to the next number for the opponent automatically after the receiver succeeds with a "return".
 - d). For example, the SEr 1 hits no. 20, the PL-2 succeeds return by hitting no. 20, then the target number changes to "-bE-" (Bull's-eye) for server 1 automatically, then no. 1 for the PL-2, no. 3 for the SEr 1 and so on, until one player misses the target number and another player wins a ball, then the server re-serves a new target, and so on.
3. A player shall must win 4 balls to win a game, and then win 6 games to win a set.
4. Deuce: When the score is 3:3 in a game, a player has to be ahead of the opponent by 2 balls to win the game, or the first player to get 10 balls wins the game if the deuce continues to 9:9 in the game.
5. To finish their round if his/her total score is over 1,000 points.
6. Tie-breaker: When it is 6:6 games in a set, the player to get 7 balls and is ahead by 2 balls wins the set, or the first player to get 10 balls wins the set if it continues to 9:9 in the game. The first player to reach 6 games serves 1 ball, then each player serves 2 balls alternatively when playing a tie-breaker.
7. Displays:
 - a). Ball: The digital LED on the right side of the cumulative score displays the winning number of balls. A ball bar also indicates on the LED array when the current player wins a ball. The ball indication will go back to zero when one player wins a game.
 - b). Game: The digital LED on the middle of the cumulative score displays the number of winning games. The number of games will go back to zero when one player wins a set.
 - c). Set: The digital LED on the left side of the cumulative score displays the number of winning sets.
8. Figures 21 explanation:
 - a). The PL-1 has won 1 set, 5 games and 4 balls, the PL-2 has won 3 games and 3 balls, it is deuce 1, 4:3 advantage receiver.
 - b). The PL-2 (SEr 2) serves on D16 (Double 16), then the PL-1 succeeds on the return and so on until PL-2 misses on -bE- and loses one ball. The PL-1 wins the deuce 2 and wins the game.

ENGLISH CRICKET (—, 2 Player Option)

1. This game is for 2 players only, one player acts as the pitcher and another one is the batter. The pitcher's object is to cumulate 9 marks as soon as possible to stop the batter get more score, and the batter's object is to get as more score as possible before the pitcher accumulates 9 marks.
2. Game rules:
 - a). The pitcher's (Pit 1 or 2) target is the bull's-eye, each hit of the outer bull counts 1 mark, inner bull counts 2 marks, other numbers are in-effect. Each bar on the LED array indicates 1 mark.
 - b). The batter (bAt 1 or 2) can throw any number, doubles & triples counts. Score counts only the total score per round is over 40 points, for example $46-40=6$ points, total score less than 40 counts as 0 point.
 - c). The score round is finished when the pitcher cumulates 9 marks, press the PLAYER CHANGE button to change to another score round.
 - d). The game ends when 2nd score round is finished. The dartboard will compare the final score amount of the 2 players and list F-1 or F-2 according to their score to indicate who has the highest score.
3. Figures 20 explanation:
 - a). The player 1 (Pit 1) is defensive team, his/her target is the bull's-eye. He/she hits one inner bull's-eye and gets 2 marks.
 - b). The player 2 (bAt 2) is offensive team, he get 63 points in the round and receives score of 23 ($63-40=23$).

SOCCER : 6-15rd (Round), 2-16 PLAYER OPTION

1. This is an excellent game for practice in hitting the bull's-eye and the double ring. The object of the SOCCER game is to take possession of the ball by a hit of the bull's-eye firstly, then take a kick for a goal by hitting any double segment except the inner bull's-eye to get as many as possible to accumulate a high score.
2. A ball possession bar will display for the player if he/she hit bull's-eye. That means he/she can take a kick for goal by hitting any double segment except the inner bull's-eye. Only one ball possession bar is displayed when the game is in progress.
3. The player can continue to hit any double segment to get a score until another player takes possession of the ball. Each hit of a double segment scores 1 point.
4. The player with the most scores wins the game after the game is over.
5. Figure 16 explanation:
 - 5.1. The player 1 hits the inner bull's-eye and gets the ball possession bar, he/she can hit any segment in double rings to get score.
 - 5.2. The player 1 hits a double 11 and gets 1 point, he/she can continue to throw any double segment until the ball possession be taken by another player.

GOLF: (9H-18H, 1-16 Player Option)

1. The game is modified from the actual game of golf, an excellent game for golfers.
2. The object of the Golf game is to use as few strokes as possible to get 3 marks in each hole (displayed Ho #).
3. Each player shall continue to throw the specific number until they get 3 marks by hitting 1 triple, 1 double plus 1 single, or 3 singles, then go to the next number after all players have 3 marks on the number.
4. The specific numbers are No. 1 on Ho 1, No. 2 on Ho 2... and No. 18 on Ho 18 in sequence. Each thrown dart counts as 1 club no matter if it is a hit or miss.
5. The player with the least number of strokes wins the game.
6. Figures 15 explanation:
 - a). It is player 3's turn on Ho. 4, He/she has a total of 10 clubs till now and has 1 mark on the no. already.
 - b). PL-3 finishes 3 marks by hits a D4 and the cumulative number of strokes is 11. He/she has to wait until all other players complete 3 marks, then move go to Ho 5

BILLIARDS (9 Ball): (4-13 points, 2-16 Player Option)

1. This is an innovate game similar to the actual billiard 9 balls game, and is an exclusive game from ECHOWELL. The object of this game is to hit as many "No. 9 balls" as possible to accumulate a score to the preset points.
2. All players throw numbers 1 through 9 in sequence in a loop. Each hit of the number moves to the next number, Nos. 1, 2,..., 8 are 0 point, only a hit of the No. 9 results 1 point, then hit from No. 1 again in loop.
3. The game is not limited to 3 darts per round. The current player can continue to throw darts if he/she can hit each target number in play with each dart.
4. The current player's round will end and change to the next player under the following conditions:
 - a). The player misses 3 darts in a row at the beginning of a round.
 - b). The player suspends a hit of the number in play after his/her 1st hit. It is possible that a player ends his round by throwing only 2 darts if he/she hits the target number with the 1st dart but misses the next number with the 2nd dart.
5. The next player shall throw for the number missed by the current player. The first player to reach the preset point number wins the game.
6. Figure 19 explanation:
 - a). Player 1 throws darts first. The continues hitting 8 darts on numbers 1 through 8 in sequence, but fails to hit no. 9 and receive no score.
 - b). The player 2 continues on the number missed by player 1 and hits it, so he/she gets 1 point.

SNOKER (—, 2-16 PLAYER OPTION)

1. This also an innovate game from the real billiard snooker game and exclusive by ECHOWELL.
2. The game of this object is to **cross hit one red ball in order then any one of the 6 color balls and so on to get score**. The color balls from 2 to 7 shall be hit in order after the last red ball (bull's-eye) and a color ball be hit (if the player can hit it after bull's-eye). The player with highest points wins the game when game ends.
3. **Red Balls:** 8, 9, 10...20 & Bull's-eye. It shall be hit in order, each hit of a red ball in play gets 1 point.
Color Balls: 2, 3, 4, 5, 6, 7. Each hit of color ball counts the same face value of the ball.
4. The game does not limit 3 dart per round, the current player can continue to throw darts as many as if he/she can continue to hit the number in play.
5. It will stop the current player's round and change to the next player in the following status:
 - a). The player misses all 3 darts at the beginning of the round.
 - b). The player suspends a hit of the number in play after his/her 1st hit.
 - c). It is possible that the player throw 2 darts only then change to the next player's 1st if a player hit a target but miss on the 2nd dart.
6. Displays:
 - a). Target Number: The target number in play appears on the TEMPORARY SCORE window, player shall throw the indicated number. The player shall throw any one of numbers 2 to 7 when it display "2 to 7".
 - b). SCORE: The score is indicated on each player's Cumulative Score window.
7. Figures 23 explanation:
 - 7.1. The player 1 gets 8 points by continue hits a double 8 (red ball) then a single 7 (color ball), but miss at 9 (red ball) so change to the Player 2.
 - 7.2. The player 2 continues to throw the no. 9, he/she finishes the game by cross hits all targets continuously, the 2 to 7 color balls shall be hit in sequence after the last red ball "bull's-eye" and a color ball be hit.

BASEBALL: 3-9RD, 2-16 PLAYER (COMBINED IN 2 TEAMS)

1. The version of BASEBALL created by ECHOWELL is different from other versions. You will find it is more similar the actual game rules.
2. The game is designed for 2 to 16 players and separated into 2 teams, the game rules are as below:
 - a). Each team assigns a "pitcher" (display Pit 1 or Pit 2) to throw ball for batters of another team, the pitcher shall throw numbers from 15 through 20 or bull's-eye. The pitcher of the team 2 (Pit 2) starts the game by throw darts.
 - b). Other players are batters, team 1 displays t1-1, t1-2... to t1-8, team 2 displays t2-1, t2-2... to t2-8.

- c). The ball is a straight if the pitcher hit any one of target numbers, the batter shall throw specific segment of this number darted by the pitcher, the details are as the list below:

Pitcher hits on 15, 16, 17, 18, 19, 20 or Bull	The batter hits the segment darted by the pitcher.			
	SINGLE	DOUBLE	TRIPLE	BULL
SINGLE	Go to bass 1	Go to bass 2	Go to bass 3	missed
DOUBLE	missed	Home Run	missed	missed
TRIPLE	missed	missed	Home Run	missed
BULL	missed	missed	missed	Home Run

- d). The batter team gets 1 point when one runner reaches to the home bass.
 e). The current batter will be sent to the 1st bass in case the pitcher misses all 3 darts.
 f). The batter will be out if he/she has 3 misses on the specific segment, the role will be change when 3 outs. Both teams have 3 outs completed a round.
 g). The residual runners on basses get 0 point when 3 outs.
 h). The team with highest score wins the game when game is over.
3. Displays:
- a). RUNNER INDICATION: The 1st, 2nd and 3rd runners indicate under B, 15 & 16 LED array.
 b). SCORE: The score displays on the current player's cumulative score window.
 c). OUT: The # of "o-#" indicates how many batters be out.
4. Figure 18 explanation:
- a). The Pit 2 throws darts for the t1-3, the team 1 has 1 point, 2 runners are on the 1st & 2nd bass, and 2 outs.
 b). The Pit 2 hits single 17, then the t1-3 runs to the 3rd bass by hit a double 17, he moves the 1st bass runner to 3rd bass and the 2nd bass runner return to home bass gets 1 point.

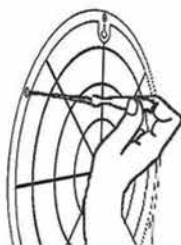
FREE

- In general, each player throws 3 darts per round. But this game is designed for beginners and anyone who wishes to practice. This game allows players to throw 10, 20 or 30 darts per round and to get the highest scores.
- This game plays all the numbers, and the bull's-eye, doubles and triples count.
- First, preset 10dt, 20dt or 30dt (darts). Each player begins the game with 0 points and adds to their score with each thrown dart. And at one time, players have to throw all preset darts in this round, then change to next player.
- The dartboard will display "F-1, F-2, F-3... or F-16" symbols on each player's window to compare the result after the last player throws all the preset darts, and the winning melody sounds. The F-1 means the player has the highest score.
- The player will win the game before the later player's finish their round if his/her total score is over 1,000 points.

*** TROUBLE SHOOTING ***

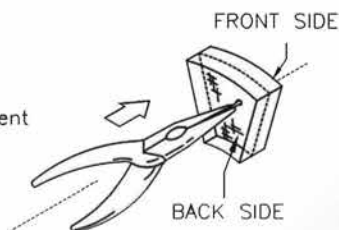
Check the following before taking the unit in for repairs.

PROBLEMS	CHECK ITEMS	REMEDY
No power or displays	Does the plug insert into the jack and the adapter insert into the electrical outlet securely?	Re-install it again.
Irregular		Pull the plug from the jack and wait for about 2 seconds. then insert the plug into the jack again.
Displays "Stuc" and sounds "Du- Du-"		Remove the darts from the dartboard.
Broken dart tips		Open the bottom cover of the dartboard with a screw driver, push out the broken tips from the back side of the target segment. Never attempt to open electronic circuits. (Illustration below)



Unscrew the bottom case of the dartboard and open it.

take the segment



Clamp the broken tip with a needle-nose pliers, then push the tip out from the back side to the front side.

WARRANTY CERTIFICATE

Please keep this warranty and it must be duly completed and signed or stamped by the dealer to validate the warranty.

Model.No. (ECHO-1016 Electronic Dartboard)

Unit Serial No.: (Stamped on the bottom case)

Purchaser's Name/ Address/ Telephone:

Name: _____

Address: _____

Telephone: _____

Date of Purchase

(Month/Day/Year) / /

Dealer's Name/Address:

Name: _____

Address: _____

Sign or Stamp: _____

LIMITED WARRANTY

1. ECHOWELL ELECTRONIC CO., LTD. hereby warrants the original purchaser that this electronic dartboard will under normal usage, be free from defects in workmanship and materials for one year from the date of purchase.
2. This warranty must be duly completed and signed or stamped by the dealer to validate this warranty.
3. This warranty shall be limited to the repair or replacement of the main unit, with the exception of the dart accessories, including tips, barrels, shafts and flights.
4. For this warranty you must pack the product securely and return the product together with the warranty certificate to the shop from which you purchased the product. The person desiring service must pay shipping and handling charges.
5. This warranty becomes void if this product shows evidence that the electronic circuits have been opened, used contrary to the instruction manual, damaged by fire, acts of God or earthquake, dropped or impacted by the end user and \ or the like.
6. The warranties contained herein are expressly in lieu of any other warranties, including implied warranty of merchantability.

ECHOWELL ELECTRONIC CO., LTD.

