## SERVICE MANUAL



## FACTORY CONTACT INFORMATION

## BAY文TEK. <br> entertainment

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## WELCOME TO SKEE-BALL

## Congratulations on your Skee-Ball purchase!

Skee-Ball has been entertaining audiences at boardwalks, fairs and entertainment centers for over 110 years.

Please take a moment to read through this manual as it contains a lot of helpful information. Be sure to contact our factory if you have any questions, or would like more information.

Thank you for your purchase! Your business is important to us and we hope you enjoy this game as much as we do!


## GAME INSPECTION

Please inspect the game for any damaged, loose, or missing parts.
If damage is found, please contact your freight carrier first.
Then, contact Bay Tek Entertainments' Service Department at (920) 822-3951 Ext. 1102

Or email them at service@baytekent.com for further assistance.

| CAME SPECIFICATIONS |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| WEIGHT |  |  | POWER REQUIREMENTS |  |  |
| NET WEIGHT | 645 lbs | 293 kg |  |  |  |
| SHIP WEIGHT | 695 lbs | 318 kg | RANGE | 100 to 120 VAC | $\begin{aligned} & 220 \text { to } 240 \\ & \text { VAC } \end{aligned}$ |
| SHIPPING DIMENSIONS (1 Pallet) |  |  | INPUT FREQUENCY RANGE | 60 Hz | 50/60 Hz |
| 80 " $\times 32$ " $\times 92$ "at 695 lbs (Class 125) |  |  |  |  |  |
| GAME DIMENSIONS |  |  | MAX OPERATING CURRENT |  |  |
| WIDTH | 30 | 77 cm | 2 AMPS @ 110 VAC / 1.3 AMP @ 220VAC |  |  |
| DEPTH | 122 " | 310 cm | OPERATING TEMPERATURE |  |  |
| HEIGHT | 92 " | 234 cm | FAHRENHEIT | 45-80 F |  |
| Individual Dimensions: <br> Ramp: 30 " Wide X 87 " Deep X 27 " Height Head: 30" Wide X 43.5" Deep X 92" Height |  |  | CELSIUS | 7-27 C |  |
|  |  |  | GAME HEIGHT WITH MARQUEE |  |  |
|  |  |  | 130 ( 330 cm ) |  |  |

## SAFETY PRECAUTIONS

Modifications to the mechanical, electrical and structural components of this game
may void its compliance certifications.

## SKEEBALL GLOW SET UP

The game will arrive on 1 pallet.
Dimensions of pallet is 80 " long by $32^{\prime \prime}$ wide by 92 " tall.
Please inspect the pallet for shipping damage and report immediately to the freight company if any damage is found.
There will be about $1 / 2$ hour of assembly time needed.
Unbox the pallet and proceed to the assembly instructions.


## Tools Needed:

9/16" Wrench 7/16" Wrench \# 2 Square Bit 2-3 people Phillips Screwdriver

## Important:

Portions of this game are heavy, bulky and large. Assembly requires 2-3 people to lift and move heavy game sections.

## Working on the Ramp section:

Remove the screws holding the retaining block in place using a \# 2 square bit. Remove the retaining block, it is not needed.

Remove the 2 lag bolts using a $9 / 16$ " Wrench.
Remove the cardboard box. Open box to access:

- 9 game balls (A5BA5810)
- Game keys
- Game manual
- Locking Wrench (A5WR3800)

A Link Box or Overhead Sign may be included with your shipment, please refer to their individual Set Up Guide.


## Working on the rear Target section:

Remove the 2 lag bolts using a $9 / 16$ " Wrench.


Remove the screws holding the retaining block in place using a \# 2 square bit. Remove the retaining block, it is not needed.

Remove the rear target section from the pallet and place in the final game position in the game room. It is advisable to leave some distance from the wall.

Remove the front ramp section from the pallet and position 2 feet away from the rear target section.

Pull the cable bundles through the holes in the cabinets so that they may be connected.


## SKEEBALL GLOW SET UP

Begin plugging the connectors from the ramp into the appropriate connectors from the target section.

The green ground wire is located inside the target section
There are 2 of the red, white, and black 3 pin connectors. It does not matter how these plugs are connected.

There are 2 of the red, blue, red, and black 4 pin connectors. It does not matter how these plugs are connected.

Slide the ramp section closer to the target section - making sure that the cables slide neatly into the holes and do not get pinched in between the cabinet sections.

## Secure Ramp and Target Sections Together:

Locate the large 5/16" Allen hex tool (A5WR3800) from the cardboard box.

Push the two game sections together completely so both sides are flush.

Insert the large Allen wrench into the right side hole and turn clockwise until latch is completely locked in place.

Similarly, insert the large Allen wrench into the left side hole, but turn counter-clockwise until latch is completely locked in place.

## SKEEBALL GLOW SET UP

## Install Top Marquee:

The top marquee is lowered and reversed for shipping.
This will now be removed and installed.
Remove the hardware kit from the box with the balls.


Remove the screws securing marquee for shipping using a Phillips screwdriver.
Flip the marquee upright and install the top marquee with the 4 A5SCPH017 bolts using a Phillips screwdriver.


Unlock the 2 side locks and flip down the assembled marquee. Plug in the lights. Cable CE18083 to CE18033


Locate the game's AC power cord from the cardboard box, plug into the back of the cabinet, and plug into the wall socket.

Power on game:
Flip rocker switch located at the top of the game. The game is now set up and ready for play!

Use the menu buttons (located inside the lower alley center front door)
to adjust setting to your specific price per play and ticket payout.
Refer to "Motherboard Dipswitch Settings" to change the color of the front plexi and lane covers to BLUE if desired.

If a Grand Marquee Sign or Link Box is included with your purchase, please refer to their individual Set Up Guide.


The game is now set up and ready for play!

This unit is capable of producing sound levels hazardous to human hearing.
Consult local sound regulations and adjust volume accordingly.

## AVAILABLE OPTIONS TO LINK GAMES

The games can be linked with an Overhead Sign Part \# AASIGN-SBG

Linking features:

- Adjustable jackpot ticket increment per game.
- Adjustable jackpot ticket win.
- Synchronizes scrolling of displays during attract mode.
- Auto selects alley color lighting so each alley is alternating red/blue.
- Enables Bay Tek Go app custom messages.

A Linking Box Part \# AAKIT-SBGP may be used instead
 in a room with low ceiling height.
Please refer to their individual Set Up Guide.

Only available when using the Glow Marquee or link box, the Bluetooth connectivity can be used to with the BayTek Go App. (Available for download on Android) (Not Available on Apple iOS)

This feature allows the locations to program the scrolling marquees of each alley to show a customized message, such as birthday announcements and daily specials.

## BAYTEK GO APP

Locate the BayTek Go app icon on your device.
Allow App to load. (Not Available on Apple iOS)


## BAYTEK GO APP

Expand the menus to view current message settings.

Turn messages on or off by hitting the red buttons.

You can add up to 5 custom messages by clicking the + message tab at the bottom of the screen.

Edit messages and select the display color.


Default Messages
$\checkmark$ Custom Messages

## BAY TEK GO!!

Text Color
over-Scroll
OFF
Press "Preview" to view the message on the game's display.
Press "Delete" to remove it.
$\checkmark$ Preview
$\times$ Delete
$\sqrt{ }$ Preview

Press "Apply" to save message.
$\checkmark$ Custom Messages
Enter and enable all desired messages.


## BAYTEK GO APP

"Over-Scroll" is an option which the selected message will override the game's display.
(Including during game play)
Messages can then be shown even in a busy game room.


Press the "Override Scroll" tab to open the "Over Scroll Menu"

Select how often the messages will scroll on the game's displays.

Press "OK"

Note: Only the messages in which "Over Scrol" was selected will be enabled.


Hit the red "Apply" tab to enable all custom messages.

Be sure to hit "OK" in the confirmation menu.


## CARD SWIPE INSTALLATION

The Skee Ball game is pre-wired with a UCL (Universal Card Link) connector to accept Card Swipe systems from many different manufactures.
Please follow these instructions to make full use of this capability.


Option \#2:
If your card swipe systems does not have a standard 9 pin Molex connector, then you will have to splice wires into the AACE18014 harness.

Red wire is +12 Volts DC
Green wire is coin signal Black wire is ground (common)

This provides 12 VDC and Ground (Com)


This plugs into the I/O Aux Board

## Game Adjustments:

Enter game menu, Set "Set Credits" to 1 (1 Credit per play), Set "Credit Type" to Swipe, or Tap Set "Game Mode" to Tickets.

On the I/O Aux Boards, set dipswitches \#5 and \#8 to ON. (Disables low ticket input)

## Notes:

- Many card swipe systems have a voltage threshold that can be adjusted in the card swipe menu. Please set this "Game Drive Threshold" to 2 Volts.
- The Bill Acceptor harness can also be used as an alternative to provide a coin-in signal to the game.

Cable part \# AACE18008: White wire is signal, Black wire is ground (common).
Danger: Red wire is 12VDC

## HOW TO SET COIN COMPARITOR MECHS

Coin comparators come standard on a Skee Ball game that is not specifically ordered for use with a card swipe system. These mechs are specifically designed to work with any size coin or token. Coin mechs can be swapped between games to identify a faulty mech.

## 3 items to check on the coin mech:


1.) Slide back the housing and replace the yellow plastic chip with the coin or token you are using. The mech will compare the coin inserted to this coin.
2.) Ensure this switch is up - to the N.C. position. (For normally closed operation)

## 3.) Pulse speed position.

Set to the middle position for 50 ms

Ensure game makes sound when coin switch is triggered.

Verify communication between Motherboard and I/O Aux Board.
Game set to large amount of credits per game.

Faulty coin mech

Check coin switch—Should be wired normally closed. (NC) Switch should be up.

Check wiring to I/O Aux Board. Part \#'s CE18004 \& CE18005
Refer to "Game does not coin up" troubleshooting section. Check options in menu.

Swap mech between games to identify a faulty mech

## AVAILABLE BLANKING PLATES




## GAME PLAY THEORY OF OPERATION

The game is designed to give points for balls scored through the target playfield.

The Playfield Sensor under each hole will score the points, and will flash the light strip surrounding the score hole.


Balls not reaching the target playfield will return to the ball track and the Ball Count Sensor will register them as zero points.

After the desired amount of balls (usually 9) are counted by the Ball Count Sensor and the Playfield Sensors, the game will end.

Upon coin up, the ball release motor will turn as the Ball Release Sensor counts the balls released.

When the sensor releases the desired amount of balls (usually 9), the motor will stop.

The Ball Release Motor will not turn if the Overflow Sensor is
blocked. This will prevent damage to the motor.
There are spacers on top of these sensors - these are important as they prevent the sensors from raising in the track.


## HOW TO ACCESS MENU BUTTONS \& I/O AUX BOARD

Unlock the lock in the bottom, middle door below the ramp.
Menu buttons, Speaker, and I/O Aux Board can now be accessed.


## HOW TO ACCESS MOTHERBOARD AND POWER SUPPLY

Unlock the 2 locks in the marquee on the top of game.
Tilt the marquee down.
The marquee may be removed completely from the cabinet by unplugging cables, pivoting the hinge pins from
 black plastic blocks, and carefully removing the marquee from the cabinet.

Motherboard, Display Boards, Power Supply, and Power Distribution Board can now be accessed.


## MAIN MENU FUNCTIONS

The Menu and Menu Select buttons are located inside the lower alley front door.
Press the "Menu Select" button during attract mode to dispense balls. This is useful to balance the amount of balls in each alley.
Hold the MENU button down for 1 second to open the main menu on the display.


This will also automatically clear the credits and tickets owed.
Press MENU to scroll through the options, and MENU SELECT to change the settings.
Press and hold the "SELECT" button to scroll faster.
Exit the menu at any time by pressing both the Menu button and Menu Select buttons at same time.

| MENU | DESCRIPTION | MENU | DESCRIPTION |  |
| :---: | :---: | :---: | :---: | :---: |
| N1 | SOFTWARE VERSION | N7 | BALLS PER GAME |  |
| N2 | SET CREDITS | N8 | GAME TIMEOUT |  |
| N3 | CREDIT TYPE | N9 | LOCAL HIGH SCORE RESET MODE |  |
| N4 | SET VOLUME | N10 | RUN DIAGNOSTICS |  |
| N5 | ATTRACT TIMER | N11 | TEST BALL RELEASE |  |
| N6 | ATTRACT VOLUME |  |  |  |
|  |  |  |  |  |

The following menu options (N12-N27) are available if dipswitch \# 4 is OFF (Refer to Motherboard Dipswitch Settings page)

| MENU | DESCRIPTION | MENU | DESCRIPTION |
| :---: | :---: | :---: | :---: |
| $\mathbf{N} 12$ | EXTRA LAST BALL | $\mathbf{N} 20$ | CREDIT PER DISCOUNT |
| $\mathbf{N 1 3}$ | SCORE END OF GAME | $\mathbf{N} 21$ | GAMES PER DISCOUNT |
| $\mathbf{N 1 4}$ | MERCY TICKETS | $\mathbf{N} 22$ | LOCAL HIGH SCORE BASE |
| $\mathbf{N 1 5 ~}$ | FIRST TICKET SCORE | $\mathbf{N} 23$ | GAME MODE |
| $\mathbf{N 1 6 ~}$ | SCORE SPAN | $\mathbf{N} 24$ | WIN OUTPUT TIMER |
| $\mathbf{N 1 7 ~}$ | TICKETS PER SPAN | $\mathbf{N} 25$ | DISPLAY LAST SCORE |
| $\mathbf{N 1 8 ~}$ | GAME STATS | $\mathbf{N} 26$ | DISPLAY HIGH SCORE |
| $\mathbf{N 1 9 ~}$ | CLEAR STATS | $\mathbf{N} 27$ | MIDWAY PAYMENT TYPE |

The following menu options (N28-N36) are available if dipswitch \# 4 is OFF on Motherboard AND
An overhead sign is attached and only accessible from the right hand game.

| MENU | DESCRIPTION | MENU | DESCRIPTION |
| :---: | :---: | :---: | :---: |
| N28 | USE BONUS | N33 | SIGN ATTRACT TIMER |
| N29 | BONUS SCORE BASE | N34 | CELEBRATION TIMER |
| N30 | WIN BONUS TICKET VALUE | N35 | NEW HIGH SCORE <br> BECOMES BONUS SCORE |
| N31 | BONUS MAX TICKETS |  | N36 |
| N32 | BONUS INCREMENT | RESTORE FACTORY SETTINGS |  |

## GAME MENU

Scroll through the menu with the "MENU" button. Make your selection with the "SELECT" Button. Hold the "SELECT" button to scroll faster. Default settings are highlighted in yellow below.

## N1 - SOFTWARE VERSION

Shows the software version of the game.


## N2 - SET CREDITS

| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

Sets the amount of coin pulses needed to start a game. "0" will be free play. Note: Default menu settings are shown at $\$ 1$ per play.

## N3 - CREDIT TYPE

| SWIPE | TAP | COINS | TOKENS | BILLS |
| :---: | :---: | :---: | :---: | :---: |

Scrolls on the display to instruct player the method of coin up.

| N4-SENOL |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |

Sets the game's playing volume. " 0 " means volume is off.

N5 - ATTRACT TIMER

| OFF | 30 s | 1 m | 5 m | 10 m | 15 m |
| :---: | :---: | :---: | :---: | :---: | :---: |

Sets the time between attract sound cycles. "OFF" means no attract sounds.

| $N 6$ | N |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |

Sets the volume level of the attract loop when the game is not being played. "0" means volume is

## GAME MENU

Scroll through the menu with the "MENU" button. Make your selection with the "SELECT" Button. Hold the "SELECT" button to scroll faster. Default settings are highlighted in yellow below.

## N7 - BALLS PER GAME

Sets the amount of balls to be played per game.

## N8 - BALL TIMEOUT

Sets the time the game will wait before going to "Game Over" if the balls are not thrown. OFF means no game timeout.

\section*{N9 - LOCAL HIGH SCORE RESET MODE <br> | POWER | 99 PLAYS | NEVER |
| :---: | :---: | :---: |}

Determines if the high score will reset.
99 - It will reset the high score after 99 games.
POWER - The high score will reset when the game is shut down and powered back on. NEVER The high score will never reset.

## N10 - RUN DIAGNOSTICS

Normally shows a 0 - meaning the sensor is clear.
A sensor will show " 1 " when blocked. This will help determine a faulty sensor.

| Gutter Sensor |  | Ball Release Sensor |  | Overflow Sensor |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1000 | 2000 | 3000 | 4000 |  |  |
| 5000 | 10000 Left |  | 10000 Right |  |  |



## N11 - TEST BALL RELEASE

While in this Test mode, press the "Menu Select" button to activate the ball release.
This will also turn on/off the celebration light/bell.
Press the "Menu Select" button again to turn off light and bell.
To run ball release without entering menu, press the "Menu Select" button while in attract mode.

## GAME MENU

## The following menu options (N12-N27) are available if dipswitch \# 4 is OFF

Scroll through the menu with the "MENU" button. Make your selection with the "SELECT" Button. Hold the "SELECT" button to scroll faster. Default settings are highlighted in yellow below.

\section*{N12 - EXTRA LAST BALL <br> | OFF | 10 Sec | 20 Sec |
| :---: | :---: | :---: |}

This option applies when the "Balls per Game" set in N7 were not detected.
Sets the amount of time before a ball is given to the player.
"OFF" means no ball will be given, and game will then end at the "Game Timeout" setting.

\section*{N13 - SCORE END OF GAME <br> | OFF | 5 s | 10 s | 15 s | 20 s |
| :---: | :---: | :---: | :---: | :---: |}

Set the time that the player's score will show on the display after the game is over.
"OFF" means the score will not display at the end of the game.

| N14- MERCM |  |  |  |  |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |

Sets the number of tickets paid out if the player's score is below the first ticket score.

| 0 | 1000 | 2000 | ... | 29000 | 30000 | 35000 | 40000 | 45000 | ... | 85000 | 90000 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |

Sets the amount of points that must be scored before the first ticket is dispensed.
N16-SCORE SPAN

| 0 | 1000 | 2000 | 3000 | 4000 | 5000 | 6000 | $\ldots$. | 27000 | 28000 | 29000 | 30000 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

Sets the additional score needed to dispense the "Tickets Per Span" ticket amount. Example: If the FIRST TICKET SCORE is set to 1000 and the SCORE SPAN is set to 1000 , the first ticket is issued at 1000 and the next one would be at 2000, then 3000, and every 1000 points thereafter.

## N17 - TICKETS PER SPAN

| 0 | 1 | 2 | 3 | $\ldots$ | 18 | 19 | 20 | 30 | $\ldots$ | 100 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

Sets the amount of tickets given for every "Score Span" past the "First Ticket Score"

## GAME MENU

Scroll through the menu with the "MENU" button. Make your selection with the "SELECT" Button. Hold the "SELECT" button to scroll faster. Default settings are highlighted in yellow below.

## N18-GAME STATISTICS

Reports:
The total number of games. Average score of these games.
Number of Bonus Wins. (If equipped with optional sign)
An attached sign will also show statistics, if accessed by the far right game.


## N19 - CLEAR STATISTICS

Press the "MENU SELECT" button 3 times to clear the Game Statistics. An attached sign will also clear statistics, if accessed by the far right game. Audio chime will sound when cleared.

## N20 - CREDIT PER DISCOUNT

| 0 | 1 | 2 | 3 | 4 | 5 | 6 | $\ldots$ | 97 | 98 | 99 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

This option is used to give the player free games for every X credits they buy at once. (Bill Acceptor)
Example: If the option is set to 4 , then for every 4 credits bought at the same time, "Games Per Discount" games are given for free.
If the option is set to 20, then for every 20 credits bought at the same time, "Games Per Discount" games are given for free.

## N21 - GAMES PER DISCOUNT

| 0 | 1 | 2 | 3 | 4 | 5 |
| :--- | :--- | :--- | :--- | :--- | :--- |

Sets the number of free games given when a player utilizes the "Credit Per Discount" option.


Sets the initial high score shown on the game.
Game may be set to show and reset this high score with the "Local High Score Reset" menu option

## GAME MENU

Scroll through the menu with the "MENU" button. Make your selection with the "SELECT" Button. Hold the "SELECT" button to scroll faster. Default settings are highlighted in yellow below.

## N23 - GAME MODE

| TICKETS | POINTS / AMUSEMENT ONLY | PRIZES | COUPONS |
| :---: | :---: | :---: | :---: |

Tickets - Will show tickets won on screen, and dispense tickets.
Points / Amusement Only - Will not show anything on screen, and not dispense tickets. Prizes - If score set in "First Ticket Score" is reached, win beacon will flash for time setting in "Win Output Timer" below.


Sets the number of seconds an available bell and/or beacon will remain for win celebration.

## N25 - DISPLAY LAST SCORE

YES $\quad$ NO

Determines if the game will show the last score on display during the attract mode

## N26 - DISPLAY HIGH SCORE

| YES | NO |
| :--- | :--- |

Determines if the game will show the high score on display during the attract mode

## N27 - MIDWAY PAYMENT TYPE

| DISPENSE | ATTENDANT | WAIT |
| :---: | :---: | :---: |

Sets how the game will pay tickets.
Dispense - Attract mode/next game can be played while tickets are dispensed.
Attendant - Plays the win sound continually until an attendant presses the "Select" menu button.
Wait - Attract mode/next game will not begin until all tickets are dispensed.

## SIGN MENU

The following menu options (N28-N36) are available if dipswitch \#4 is OFF AND
An overhead sign is attached and only accessible from the right hand game.
Scroll through the menu with the "MENU" button. Make your selection with the "SELECT" Button. Hold the "SELECT" button to scroll faster. Default settings are highlighted in yellow below.

## N28 - USE BONUS <br> NO <br> YES

Determines the verbiage used on the jackpot sign display. If No - the jackpot sign will scroll "Keep the Good Times Rollin" If Yes - all of the Bonus/Jackpot features below are enabled.

| N29 - BONUS |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 0 | 1000 | 2000 | $\ldots$ | 39000 | 40000 | 41000 | 42000 | $\ldots$ | 88000 | 89000 | 90000 |

Sets the score at which the overhead sign will pay the bonus value tickets.


Sets the minimum sign ticket value. Sign will also reset to this value after a win.

## N31 - BONUS MAX TICKETS

| 0 | 50 | 100 | 150 | 200 | 250 | $\ldots$ | 1400 | 1450 | 1500 | 2000 | 2500 | 3000 | $\ldots$ | 9000 | 9500 | 9999 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

Sets the maximum Jackpot value when using progressive jackpot

## N32 - BONUS INCREMENT

| 0 | 1 | 2 | 3 | 4 | 5 |
| :--- | :--- | :--- | :--- | :--- | :--- |

Set the amount of tickets that the bonus will increment with every game played. 0 means a fixed jackpot (no increment)

## SIGN MENU

Scroll through the menu with the "MENU" button. Make your selection with the "SELECT" Button. Hold the "SELECT" button to scroll faster. Default settings are highlighted in yellow below.

N33 - SIGN ATTRACT TIMER

| OFF | 30 s | 1 m | 3 m | 5 m | 10 m |
| :---: | :---: | :---: | :---: | :---: | :---: |

Sets the amount of time that the sign celebration will remain on when the Bonus Score is reached.

## N34 - CELEBRATION TIMER

| OFF | 5 s | 10 s | 15 s | 45 s | 1 m | 1 m 30 s |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |

Sets the amount of time that the sign celebration will remain on when the Bonus Score is reached.

## N35 - NEW HIGH SCORE BECOMES BONUS SCORE

 NO $\quad$ YESDetermines if the high score will become the sign bonus score.

## N36 - RESTORE FACTORY SETTINGS

Press the "MENU SELECT" button 3 times to reset all settings to factory defaults. Audio chime will sound when cleared.
This will also reset the overhead sign settings to factory defaults.

## I/O AUX BOARD DIPSWITCH SETTINGS

| SWITCH | DESCRIPTION | ON | OFF |
| :---: | :---: | :---: | :---: |
| 1 | SHOW GAME <br> Set to ON to not dispense tickets and clears all accumulated credits |  | X |
| 2 | AMUSEMENT ONLY <br> Set to ON to not dispense tickets |  | X |
| 3 | NJ LOCKOUT <br> Set to ON to save tickets owed and unused credits after a power loss |  | X |
| 4 | 1/2 TICKET PAYOUT <br> Dispenses $1 / 2$ the amount of tickets as shown on screen, rounding up odd amounts. |  | X |
| 5 | DISABLES LOW TICKET INPUT <br> Disables the low ticket message on screen. Set to ON when using a card swipe system |  | X |
| 6 | NOT USED |  |  |
| 7 | NOT USED |  |  |
| 8 | USB POWER TO BOARD Set to ON if no USB input | X |  |

## Note: <br> UP is ON



## I/O AUX BOARD PINOUT



## MOTHERBOARD DIPSWITCH SETTINGS

All dipswitches on the Motherboard are normally set to OFF

| DIP | DESCRIPTION | ON | OFF |
| :---: | :---: | :---: | :---: |
| $\mathbf{1}$ | Set to OFF to have RED lane covers <br> and front plexi lights |  | $X$ |
| $\mathbf{2}$ | Rlue Lane Lights <br> Set to ON to have BLUE lane covers <br> and front plexi lights | $X$ |  |
| $\mathbf{3}$ | Not Used | $X$ |  |
| $\mathbf{4}$ | Set ON to simplify the menu by only displaying <br> the options most used by home owners. | $X$ |  |



## MOTHERBOARD JUMPERS

Motherboard Jumpers are pre-installed at the factory.
Adjustment is not necessary.

Jumper on the 12 V side for cable going to the sign.



## ERROR CODES

## ROLL BALLS MESSAGE

The game thinks there are balls in the ball track waiting to be rolled. This will disable the motor from releasing more balls.
Remove right side lane cover and check the overflow sensor in ball track. Clean or replace if needed.
Part \# AACB3850A


ROLL BALLS

## RED DOT ON LOWER LEFT CORNER OF DISPLAY

The game thinks there are no tickets in the ticket tray.

Check the low ticket switch in the left front side of game.

Replace switch if using tickets. Part \# AASW200 Unplug one of the wires if using not using tickets.
(Card Swipe systems)


GREEN DOT ON LOWER RIGHT CORNER OF DISPLAY
The game thinks there are too many balls in the ball track. This will result in the game miss-scoring or giving 0 points for the first few balls rolled.

Most of the time, one alley will be missing balls while this alley has extra balls.
To balance the balls in each alley:
Open the middle lower door to access the menu buttons and hold the "Menu Select" button to engage ball release motor.

If the correct number of balls (9) are in the track, remove right side lane cover and check the ball count sensor at the far end of the ball track. Clean or replace if needed. Part \# AACB3850A



## ALLEY CIRCUIT BOARD OVERVIEW



Boards located in top of game behind the display.

Board located in bottom of game in front of ramp.


## TICKET DISPENSER, COIN MECH, COUNTERS, AND MENU BUTTONS



## COMMUNICATION, PLAYFIELD AND RAMP LIGHTS



Important: When replacing sensors, ensure the spacers are reinstalled on wood block. These will prevent wood blocks from rising in slot.

## ALLEY LED LIGHTS \& BANG SENSOR



ACE18042


## AC POWER \& POWER SUPPLY WIRING



## DISPLAY WIRING



## PLAYFIELD SENSOR WIRING DIAGRAM



| TROUBLESHOOTMGE |  |  |
| :---: | :---: | :---: |
| Problem | Probable Cause | Remedy |
| No power to the game | Unplugged. <br> Faulty Line Filter <br> Faulty Cable <br> Rocker Switch on top of game or power supply turned off, or plugs unplugged. <br> Circuit breaker tripped <br> Bad power supply. | Check wall outlet to line filter in back of game. (A5FI9011) Replace Line Filter. (A5FI9011) <br> Refer to wiring diagram. Check cables CE18035, CE18034 <br> Check rocker switch on top of game. Check rocker switch on power supply. Ensure power cords are pushed up into the back of the power supply and line filter securely. Replace Rocker Switch if needed. Part \# A5SW 18000 <br> Reset power strip breaker switch or building circuit breaker. Attempt to determine cause. <br> Refer to Power Supply Diagnostics |
| LED's lighting up front window plexi not working | Faulty wire or connection. <br> Faulty LED light strip. | Check cables CE18050 and CE18041 from Motherboard Check continuity. Check for damaged connector Refer to wiring diagram. <br> Replace LED light strip if needed. CE18050 |
| Front lower door lights not working | Faulty wire or connection. <br> Faulty LED light strip. | Check cables from LED strips to Motherboard. Refer to wiring diagram for the cable path. CE18049, CE18044, CE18042 Check Molex connector at the rear of the ramp. Verify CE18042 is plugged securely to Motherboard. <br> All ramp lights are supplied by the motherboard If only one light is out, remove and examine LED strip. Replace if needed. Part \# CE18049 |
| Alley lane LED lights not chasing up ramp following the ball | Verify lane lights are connected and operational <br> Faulty LED light strip. <br> Faulty Bang Detector or wiring to Motherboard | Check cables from LED strips to Motherboard. Refer to wiring diagram for the cable path. CE18046, CE18039, CE18040, CE18038 Check Molex connector at the rear of the ramp. Verify both CE18038 cables are plugged securely to Motherboard. Ensure supplement 5 VDC from Power Dist Board is OK. 2 of CE18045, CE18080, CE18081 <br> If only one light is out, swap to other side to verify. <br> Replace if needed. Part \# CE18046 <br> Refer to wiring diagram for the cable path. AACE8811A, CE18037, \& CE18036. Check Molex connector at the rear of the ramp. Replace Detector if needed. AACE8811A |
| Alley side lights not working | Faulty wire or connection. <br> Faulty LED light strip. | Check cables from LED strips to Motherboard. Refer to wiring diagram for the cable path. CE18051, CE18043, CE18044, \& CE18042. Check Molex connector at the rear of the ramp. Verify CE18042 is plugged securely to Motherboard. <br> All ramp lights are supplied by the motherboard If only one light is out, remove and examine LED strip. Replace if needed. Part \# CE18051 |

## TROUBLESHOOTING GUIDE

Problem
Probable Cause
Remedy

| LED marquee lighting not working | Faulty Cable <br> Verify 12 Volts DC from Power Distribution Board LED strip faulty | Check cables from LED strips to Power Distribution Board (CE18083, CE18033) <br> Check for 12 volts DC on CE18033 on Power Distribution Board <br> Replace LED strip. AACE18083 |
| :---: | :---: | :---: |
| LED's lighting up playfield rings not working | LED's in rings will light up when hole is scored. <br> Faulty wire or connection. <br> Faulty LED light strip. <br> Faulty Sensor Board. | Ensure hole is scoring, if not - refer to Game Scores Wrong Section. <br> Check for proper connection from LED's to scoring sensor. Check continuity. Check for damaged connector Refer to wiring diagram. <br> Swap LED light from a different spot. <br> Replace LED light strip if needed.. <br> Refer to Playfield diagram for part numbers. <br> Replace sensor board. (AACB3851A-B) |
| No AudioVolum <br> low <br> Loose <br> Faulty <br> speake | Volume too <br> low$\quad$Increase the volume by pressing Menu button, <br> scroll to "Game Volume" and adjust. <br> Check audio cable connections from motherboard to speaker. <br> (AACE8811A, AACE18013, \& AACE18012) <br> Check Molex connector at the rear of the ramp. |  |
| Balls are not released <br> To test motor: Enter menu and scroll to Test Ball Release | Pinched, broken, or disconnected wiring. <br> Track Sensor faulty. A blocked sensor will cause ball motor to stop to protect motor. If 12 Volts DC and motor is not moving. <br> Motherboard defective. | Refer to Wiring Diagram. Verify 12 Volts DC at motor at game coin up. Check Molex connector at the rear of the ramp. Check cables CE18007 \& CE18006 <br> Check Overflow Sensor. <br> Replace if needed. AACB3850A <br> Faulty motor. Replace AAMO18000 <br> Replace Motherboard. (AAMB18000-SBG) |
| Too many balls are released. | Sensor at ball release blocked, dirty, or faulty. Pinched, broken, or disconnected wiring. | Clean sensor at ball release. Green LED should only come on when blocked. Replace if needed. (AACB3850A) <br> Check connections from sensor board to main board. Check continuity on wires. CE18007 \& CE18006 Check Molex connector at the rear of the ramp. |
| Not enough balls are released <br> Game is waiting for player to throw balls and there are none left in track | Ball count opto sensor is defective at far end of ramp. <br> Pinched, broken, or disconnected wiring. <br> Opto sensor at ball release is defective. | If this sensor misses a ball, the game will continue waiting until game time-outs. Replace sensor. (AACB3850A) <br> Check connections from sensor board to main board. <br> Check continuity on wires. CE18007 \& CE18006 <br> Check Molex connector at the rear of the ramp. <br> If this sensor "sees" 2 balls instead of one. <br> Replace sensor. (AACB3850A) |

## TROUBLESHOOTING GUIDE

| Problem |  | Probable Cause |  | Remedy |
| :---: | :---: | :---: | :---: | :---: |
| Display not working | Pinched, broken, or disconnected wiring. <br> Faulty Display Module |  | Refer to wiring diagram. Ensure 5 volts DC on CE18011, CE18002 \& CE18001 cables from power distribution board. Check communication ribbon cable from Motherboard to Display Boards. Part \# CE18000 <br> Swap display modules inside cabinet to isolate the issue. Replace display if needed. A5LD1052 |  |
| Dollar Bill Ac functioning Ensure Bill Ac "Always Enab Important: O DBA is to be | eptor not <br> eptor is set to <br> ly 12 Volt DC stalled. | Check for power to Bill Acceptor. <br> Dirt or debris in acceptor slot. <br> Pinched, broken, or disconnected wiring. <br> Bill acceptor problem Part \# A5AC9101 (AE2454 U5E) |  | eptor should cycle stacker at game power up. t, check cable connections. <br> er to "How to Clean Bill Acceptor" Or clean bill reader cleaning card. (A5CC9000) <br> ck wiring from bill acceptor to I/O Board. 18008) Repair or replace wiring harness. ke sure wires are secure in connectors. <br> er to troubleshooting section of Bill Acceptor nual itself, the diagnostics label of the back of unit. |
| Tickets do not dispense or Wrong amount dispensed | Tickets on monitor does not match tickets coming out of game. | Opto Sensor on ticket dispenser dirty. <br> Faulty ticket dispenser. <br> Notch on tickets cut too shallow. <br> Faulty cable. Disconnected, loose or broken wires. <br> Enter Diagnostic menu and test Dispenser <br> Check dipswitches on I/O Aux Board <br> Faulty I/O Board |  | Blow dust from sensor and clean with isopropyl alcohol. <br> Replace with working dispenser to isolate the problem. (A5TD1) <br> Flip tickets and load upside-down to have large cut notch toward opto sensor. <br> Check connectors from ticket dispensers to I/O Aux board. Check for continuity. <br> Cables AACE18014 <br> There are many options that affect ticket payout using the dipswitches. Refer to Dip Switch Setting page. <br> Replace I/O Board. AACB9605A-SBG |
|  | Tickets on monitor do match tickets coming out of game. | Settings in Menu are incorrect. |  | Enter Menu and check certain areas: <br> First Ticket Score <br> Score Span <br> Tickets per Span Mercy Tickets <br> Check Dipswitches on I/O Aux Board Ensure only Dip \# 8 is set to ON. |
| Low Tickets Red Dot on monitor | Tickets are empty in ticket tray <br> Faulty cable. Disconnected, loose or broken wires. <br> Faulty low ticket switch. <br> Faulty I/O Board |  | Load tickets into tray. Ensure tickets hold down micro switch wire. <br> Check connectors from low ticket switch to I/O board. Check for continuity. (AACE18014) <br> Inspect switch and replace if needed. (AASW200) Check dipswitches on I/O Board, Replace I/O Board if needed. AACB9605A-SBG |  |

## TROUBLESHOOTING GUIDE

| Problem | Probable Cause | Remedy |
| :---: | :---: | :---: |
| Menu Buttons not working | Game also does not Check <br> coin up? CE18 <br> ramp  <br> Pinched, broken, or Refer <br> disconnected wiring. CE18 <br> Check <br>  Saulty Menu Button | munication cable from Motherboard to I/O Aux Board. CE18005. Check Molex connector at the rear of the ure power to I/O Aux Board. <br> ring diagram. Ensure 12 \& 5 volts DC on CE18004, cables from power distribution board. 15 cable from I/O Aux Board to Menu Buttons. ns to isolate the issue, replace if needed.AAPB2700A |
| Counters /Meters do not work | The 2 wires crimped together may be faulty Pinched, broken, or disconnected wiring I/O Aux board faulty. | ct crimp to ensure good connection on meter cable <br> k connections from counters to I/O Aux board. continuity on wires. (AACO1020, CE18015) <br> ace I/O Aux board. (AACB9605A-SBG) |
| Game scores wrong | Game starts with a score already on display or scores double points. <br> Faulty Score Sensor | Sensor is defective under score hole. Enter menu, go to Diagnostics Menu to check sensors. <br> Refer to wiring diagram. <br> Sensors cables plug into pass-thru board (AACB18001) to ease removal of playfield. Ensure cables are properly connected to it. <br> Replace defective sensors (AACB3851A-B) |


| Game does not coin up <br> Game will have | Check power into I/O Board - CE18004 \& CE18005 from power distribution board. <br> Check for 12 Volts DC into CE18014 cable from CE18009 cable. Also check 12 VDC on CE18010 from Power Distribution Board Check wiring from coin switch to I/O board. CE18014 Card swipe systems must tie into the green and black wires. |  |
| :---: | :---: | :---: |
| Game will have an audio track sound from speakers when coin switch triggered. | Communication to Motherboard faulty. (Motherboard is located behind display) | Ensure CE18005 cable is plugged into correct phone socket on I/O board. Replace if needed. <br> Check CE18004 cable to motherboard behind the |
| Ensure 12 VDC on CE18009 \& CE18010 from | Game will not coin up, and will not go into menu if the communication is faulty. | Display. Ensure this cable is plugged into the correct socket on motherboard. |
| Power Dist Board |  | Check Molex connection at the rear of the ramp. |
|  | Coin Mech issue. | Swap coin mech from different game. Replace if needed. |

## TROUBLESHOOTING GUIDE

Problem
Lane matting or target area is dirty

| dirty |
| :--- |
| Green Dot on |
| Display |
| Game miss- |
| scoring or |
| giving 0 points for |
| the first few balls |
| rolled. |

Probable Cause
Remedy

Clean with "Scrubbing Bubbles" brand cleaner. use.

Too many balls in the ball track.

Faulty cable. Disconnected, loose or broken wires. Faulty Ball Count Sensor. Faulty Motherboard.

Open the middle lower door to access the menu buttons and hold the "Menu Select" button to engage ball release motor.

Faulty cable. Disconnected, loose or broken wires.
CE18007, CE18006 to Motherboard
Replace Ball Count Sensor. AACB3850A
Replace Motherboard. (AAMB18000-SBG)

The game thinks there are balls in the ball track waiting to be rolled.

Faulty sensor.

Remove right side lane cover and check the overflow sensor in the ball track.
This will cause the motor not to release balls.
Replace sensor. AACB3850A
Important: When replacing sensors, ensure the spacers are reinstalled on wood block.
These will prevent wood blocks from rising in slot, and possibly damaging the ball release motor.

## POWER SUPPLY DIAGNOSTICS

1.) Verify $A C$ power to game. Check the rocker switch on top of the cabinet.
2.) Check power in connection to power supply.
3.) Ensure Power Supply switch is set to 115 V (or 230 V ) (Some model power supplies may not have this)
4.) Ensure Power switch is on.
5.) Ensure fan is turning.

- If power supply fan is turning and there is no 12 Volt out:

Check power supply cables to the Power Distribution Board.
This board takes the power in, and directs it to the different 12 volt loads.


Unplug all power out connectors from the left side of the Power Distribution Board.

Turn on game and if it boots correctly, plug one cable in at a time until the issue is found.
Replace power supply if this board is not receiving 12 volts. (A5PS1021)

- If power supply fan is not turning, replace power supply part \# A5PS1021


## BILL ACCEPTOR INFORMATION

There are many different models and brands of Bill Acceptors that are used on redemption games. Your Bill Acceptor may differ from the unit shown. A 12 Volt DC Bill Acceptor must be used. Standard 12 Volt DBA is MEI \# AE2454-U5E Part \# A5AC9101

Determine if Bill Acceptor has power:
Turn game ON-The bill acceptor should make noise as stacker cycles and green lights on outside bezel should flash.
If NO power:
Use meter to measure 12 VDC voltage at cable going into Bill Acceptor from I/O Aux Board If power is OK:
Clean Bill Acceptor path to make sure there is nothing jamming unit.
Check dipswitch settings on side of acceptor.
Make sure switch \#8 is OFF for Always Enable

## ERROR CODES

Count the number of flashes on front bezel of Bill Acceptor and follow chart for repair.


## HOW TO ACCESS TARGET SENSORS

Remove the 4 bolts (A5SCBH027) from the front plexi using a $5 / 32$ " Allen Wrench.

Lower front plexi slightly and unplug the square Molex connector and then remove front plexi from cabinet.
 cables into the right side of jumper board as shown.


## HOW TO CHANGE BALL RELEASE MOTOR

Unlock the lock on the right lane cover of the alley using a H95 Key.

Slide lane cover up and remove from alley.

Remove the balls in the track.

Slide up both wood blocks holding the sensors.

Unplug the connectors, and remove the sensors from the cabinet.

Remove the 4 mounting screws using a \#2 Square Bit screwdriver.
Remove the white plastic ball track from cabinet.

Remove the small cotter pin from the motor shaft, and remove the black plastic wheel.

Remove roll pin and save for re-installation of new motor.

Remove the 4 bolts attaching the motor bracket to the wood cabinet using a $7 / 16$ " wrench.


## HOW TO CHANGE BALL RELEASE MOTOR

Pivot motor/bracket and lift upward out of channel.

Remove 4 bolts using $5 / 16$ " wrench to remove old motor from bracket.

Unplug motor power from the yellow \& black wire connector.


Install new motor onto bracket, plug new motor into yellow \& black wire connector and re-install into channel as before.

Important: Ensure the roll pin is installed into the new motor before attaching the black plastic wheel. Make sure the slot for the roll pin is facing to the left, toward the roll pin.

Slide the black plastic wheel onto the shaft of the motor so the roll pin is fully seated into the slot.

The cotter pin can now be installed into the motor shaft and bent to prevent the black plastic wheel from sliding off.

Re-install the white plastic
 ball track and both sensors.

Make sure the sensor's cable is tucked down away from the path of the ball.


## HOW TO UPDATE SOFTWARE

The motherboard software can be easily updated with a USB flash drive stick.


## AAMO18005 BALL RELEASE ASSEMBLY



| Part \# | Description | Quantity on <br> Assembly | Part \# | Description | Quantity on <br> Assembly |
| :---: | :--- | :--- | :--- | :--- | :---: |
| A5BOHH030 | Hex Head Bolt 10-32 X 3/4" | 4 | A5PIRO015 | Roll Pin 3/16" Dia X 1 1/4" | 1 |
| A5BOHH040 | Hex Head Bolt 25-20 X 1" | 4 | A5WAET020 | \#10 Tooth Lock Washer | 4 |
| A5ME17015 | Ball Release Motor Bracket | 1 | A5WASI020 | $1 / 4$ " Split Washer | 4 |
| AAMO18000 | Ball Release Motor, 10 RPM, | 1 | WARR0019- | Black Plastic Cogged <br> Wheel | 1 |
| A5CL3401 | Cotter Pin 3/32" Dia X 1/2" | 1 | SBGP |  |  |

## PLAYFIELD PARTS



AABU8101
Bumper for 100/10000 Score Rings


AABU8100
Bumper \& Post

Additional Parts for Playfield

| Part \# | Description | Quantity on <br> Assembly | Part \# | Description | Quantity on <br> Assembly |
| :---: | :--- | :---: | :---: | :---: | :---: |
| A5DE18003 | Ring Value Set of Decals | 1 | AACE18053 | Playfield Ring Lights, Glow | 1 |
| AACB3851A-B | Score Sensors | 7 | AACE18054 | Playfield Ring Lights, Glow | 1 |
| AAPF18000 | Entire Playfield Assembly, Glow |  | AACE18055 | Playfield Ring Lights, Glow | 1 |
| AACE18052 | Playfield Ring Lights, Glow | 5 | AACE18056 | Playfield Ring Lights, Glow | 1 |


| PART \# | DESCRIPTION | PART \# | DESCRIPTION |
| :---: | :---: | :---: | :---: |
| A5BA5810 | Blue Ball (9 Per Game) | AABK1013 | Push Buttons/Counter Bracket W/Decal |
| AACM-AS-COMP | Coin Comparator with Cable | A5ME8123 | Metal Rear Carpet Clamp |
| W5TM4000 | 7/8" Black T-Molding (18 feet per game) | A5ME8714 | Metal Plate for Obstacle Bumpers (2/game) |
| A5FO8103 | Foam Black Neoprene Set | A5ME15005 | Ticket Holder Tray Inserts (2 per game) |
| A5PL8600 | Round Plastic Plug | A5ME17011 | Metal Rail Bracket Latches (2 per game) |
| A5CL3401 | Clip Hitch Pin, Ball Release \& lock mech | A5ME17012 | Metal Front Ramp Guard |
| A5PIRO015 | Roll Pin for Ball Release (3/16" $\times 1$ ') | A5ME17013 | Metal Ball Track Side (2 per game) |
| A5PICV015 | Clevis Pin, Front Doors lock into (2/game) | A5ME17014 | Metal Ball Ramp Front Plate |
| A5SCBH027 | Front Plexi Bolts (4 per game) | A5ME17015 | Metal Motor Ball Release Bracket |
| A5WR3800 | Allen Wrench 5/16" | A5ME17018 | Coin Door Metal, SBG22 |
| A5FC0080 | Ferrite Core Suppressor for Power Supply | A5ME17019 | Ticket Door Metal, SBG22 |
| AASW200 | Low Ticket Switch | A5ME17020 | Cash Box Holder Metal, SBG22 |
| A5SW18000 | On \& Off Rocker Switch on Top of Game | A5ME17021 | Cash Box Metal, SBG22 |
| A5LK2001 | A05 Lock and Keys | A5ME18002 | Ramp Left Metal Cover, SBG22 |
| A5LK5002 | H95 Lock and Keys (7 per game) | A5ME18003 | Ramp Right Metal Cover, SBG22 |
| A5HA3850 | Handle for Cashbox | AAPB2700A | Push Button Assembly (2 per game) |
| A5KIT-SBG22 | Hardware Kit, 22 Glow (4 of A5SCPH017) | A5CORD5 | AC Cord |
| A5BU8100 | Rubber Bumper in Ball Track | A5CE9736 | Ribbon Display Jumper Cable |
| AABU8100 | Bumper \& Post for 1000 Point Ring (9/game) | AACE1710 | Door Ground Cable |
| AABU8101 | Bumper for 10000 Point Target (2 Per game) | AACE17005 | Communication Sign Cable |
| AABU8701 | Anti-Ball Jam Obstacle Bumper (Set of 2) | AACE18000 | Display Ribbon Cable |
| A5BA17000 | Small Sand Bag (50 POINT) | AACE18001 | Display Power Jumper Cable |
| A5BA17001 | Medium Sand Bag (40 POINT) | AACE18002 | Display Power Jumper Cable |
| A5BA17002 | Large Sand Bags (30 POINT) | AACE18003 | Main Board Power Cable |
| AABA8100-SET | Skeeball Sand Bag Set | AACE18004 | Communication to I/O Aux Board Cable |
| AACA8103-L/D | Left Ball Defelector Small Piece of Carpet | AACE18005 | Power in From Power Dist. Board Cable |
| AACA8103-R/D | Right Ball Defelector Small Piece of Carpet | AACE18006 | Sensor \& Motor Power From Head Cable |
| AACA8104-D | Playfield Cork Only (Duck Egg) | AACE18007 | Sensors \& Motor Power From Ramp Cable |
| AACA17000-D | Ramp Cork Carpet | AACE18008 | 12 Volt DBA Power Cable |
| AADE17001-I | Backboard Carpet and Print Assy | AACE18009 | 12 Volt Coin Door Power From Ramp Cable |
| AATA18000-1000 | U Shaped 1000 Target for Playfield | AACE18010 | 12 Volt Coin Door Power From Head Cable |
| AATA18000-2000 | 2000 Target Ring for Playfield | AACE18011 | 5V Display Power Cable |
| AATA18000-3000 | 3000 Target Ring for Playfield | AACE18012 | Speaker Power From Head Cable |
| AATA18000-4000 | 4000 Target Ring for Playfield | AACE18013 | Speaker Power From Ramp |
| AATA18000-5000 | 5000 Target Ring for Playfield | AACE18014 | Ticket Dispenser \& Coin Door Cable |
| AATA18000-10000L | 10000 Left Target Ring for Playfield | AACE18015 | Menu Buttons \& Counter Cable |
| AATA18000-10000R | 10000 Right Target Ring for Playfield | AACE18016 | Line Filter to Stud Ground Cable |
| AAMO18000 | Ball Release Motor With Cotter Pin | AACE18017 | Right Ramp \& Coin Door Grounding Cable |
| AAMO18005 | Ball Release Motor Assembly | AACE18018 | Left Ramp \& Ticket Ground Cable |
| AAKIT-SBG | Linking Kit | AACE18019 | Playfield Sensor \#1 From Head Cable |
| AAPF18000 | Playfield Assembly | AACE18020 | Playfield Sensor \#2 From Head Cable |
| A5LA3850 | Receptacle End Latch for Ramp (2/game) | AACE18021 | Playfiled Sensor \#3 From Head Cable |
| A5LA3851 | Panel Fastening Latch for Head (2/game) | AACE18022 | Playfiled Sensor \#4 From Head Cable |
| W5HG1070 | 18" Single Bend Hinge | AACE18023 | Playfield Sensor \#5 From Head Cable |
| A5CA2102 | Lock Cam for Coin Mech Door (2 per game) | AACE18024 | Playfield Sensor \#6 From Head Cable |
| A5PL5150 | Coin Mech Blanking Plate | AACE18025 | Playfield Sensor \#7 From Head Cable |
| AAME17016 | DBA Blanking Plate w/Plug | AACE18026 | Playfield Sensor \#1 From Playfield Cable |
| A5BK6035 | Light Bracket (2 per game) | AACE18027 | Playfield Sensor \#2 From Playfield Cable |
| A5BK9999 | Power Supply Mounting Bracket | AACE18028 | Playfield Sensor \#3 From Playfield Cable |

## PARTS LIST

| AACE18029 | Playfield Sensor \#4 From Playfield Cable | A5DE18009 | Plexi Light Covers on holes (4") (4 per game) |
| :---: | :---: | :---: | :---: |
| AACE18030 | Playfield Sensor \#5 From Playfield Cable | A5DE18010 P | Plexi Light Covers on holes (7 1/4") (2 per game) |
| AACE18031 | Playfield Sensor \#6 From Playfield Cable | A5DE18011 | Window Cling Decal |
| AACE18032 | Playfield Sensor \#7 From Playfield Cable | A5DE18013 | Marquee Top Printed Plexi, Glow 22 |
| AACE18033 | Power To Marquee Light Cable | A5DE18014 | Marquee Bottom Printed Plexi |
| AACE18034 | Power Switch To Power Supply Cable | A5VF17000 | Ball Hop |
| AACE18035 | Power Switch To Line Filter Cable | WACA18087 F | Front Window Covering Targets 1/4" Acrylic, SBG22 |
| AACE18036 | Bang Detect Speaker From Head Cable | WACA18087-COMPLETE Complete Front Window with Black Plastic, SBG22 |  |
| AACE18037 | Bang Detect From Ramp Cable | A5LD1052 | LED Display Board (2 per game) |
| AACE18038 | Addr. Light Power Head Cable (2/game) | A5FI9011 | Inline Filter |
| AACE18039 | Left Addressable Light Power Cable | AACO1020 | Counters |
| AACE18040 | Right Addressable Light Power Cable | AACE8811A | Game Speaker With Cable (2 per game) |
| AACE18041 | Acrylic Playfield Light Power Cable | A5TD1 | Ticket Dispenser |
| AACE18042 | RGB Lights Power From Head Cable | A5PS1021 | Power Supply |
| AACE18043 | Left Ramp RGB Lights Power Cable | AACB3850A | Ball Track Sensor (3 per game) |
| AACE18044 | Right Ramp RGB Lights Power Cable | AACB3851A-B | Score Sensor w/Bumpers(7 per game) |
| AACE18045 | 5 Volt Addr. Lights Power, Head (2/game) | A5CB5156B | Power Distribution Board |
| AACE18046 | Addressable Ramp Lights Cable (2 per game) | AACB15001 | Bleed Resistor Board |
| AACE18048 | Ball Track Light Cable | AACB18001 | 7 Position RJ12 Pass-Thru Board |
| AACE18049 | Front Door Lights Cable (2 per game) | AACB9605A-SBG | G I/O Aux Board (Door Interface) |
| AACE18050 | Front Window LED Lights Cable | AAMB18000-SBG | G Mother Board |
| AACE18051 | Ball Track Ramp Lights Cable (8 per game) |  |  |
| AACE18052 | Playfield Ring Lights Cable (5 per game) |  |  |
| AACE18053 | Playfield Ring Lights Cable |  |  |
| AACE18054 | Playfield Ring Lights Cable |  |  |
| AACE18055 | Playfield Ring Lights Cable |  |  |
| AACE18056 | Playfield Ring Lights Cable |  |  |
| AACE18077 | Front Door Hinge To Stud Cable |  |  |
| AACE18080 | Left 5 Volt Addressable Lights Power Jumper |  |  |
| AACE18081 | Right 5 Volt Addressable Lights Power Jumper |  |  |
| AACE18083 | Marquee Light LED Cable |  |  |
| AACE8625-P | Free Play Button Assembly |  |  |
| A5DE0048 | Universal Card Link Decal |  |  |
| A5DE0056 | Hazardous Voltage Decal |  |  |
| A5DE0114 | Ground Stud Symbol Decal |  |  |
| A5DE18002 | Playfield Decal, Install over Cork on playfield |  |  |
| A5DE18003 | Ring Number Values Set |  |  |
| A5DE18003-1000 | 2000 Ring, 1000 Point Decal |  |  |
| A5DE18003-1000/O | 1000 Ring Outside Decal |  |  |
| A5DE18003-10000 | 10000 Ring, 10000 Point Decal (2 per game) |  |  |
| A5DE18003-10000// | 10000 Ring, Inside Decal (2 per game) |  |  |
| A5DE18003-2000 | 3000 Ring, 2000 Point Decal |  |  |
| A5DE18003-2000/L | 2000 Ring, Inside Left Decal |  |  |
| A5DE18003-2000/R | 2000 Ring, Inside, Right Decal |  |  |
| A5DE18003-3000 | 3000 Ring, 3000 Point Decal |  |  |
| A5DE18003-4/5000/O | 4000 \&5000 Rings, Outside Decal (2/game) |  |  |
| A5DE18003-4000 | 4000 Ring, 4000 Point Decal |  |  |
| A5DE18003-5000 | 5000 Ring, 5000 Point Decal |  |  |
| A5DE18005 | Ball Return Light Covers Black Plastic |  |  |
| A5DE18008 | Plexi Light Covers on holes (2 5/8") (3/game) |  |  |

## PARTS PICTURES




A5ME17012
A5ME17013


A5ME17014


A5ME17015


A5ME17018


## PARTS PICTURES








AACE18041


A5DE18003-1000 A5DE18003-10000 A5DE18003-2000 A5DE18003-3000 A5DE18003-4000 A5DE18003-5000 A5DE18005 A5DE18008

## PARTS PICTURES



## REPAIR/MAINTENANCE LOG

If you need to make repairs or order replacement parts it is a good idea to keep a log. Below is a chart you can use to track repairs and maintenance.

## TECHNICAL SUPPORT

Excellent customer service is very important to Bay Tek Entertainment! We know that keeping your games in great operating condition is important to your business. When you need us, we are here to help. You can call us for free technical assistance, and you can count on us to have parts on-hand to support your game. When you do need us, it's important that you know what to expect.

We offer options that fit your needs.

## Electronics / Circuit Boards:

Spare Parts - Take matters into your own hands and purchase new spare Circuit Boards for your Bay Tek games. Many of our games share the same main-board electronics. This means you can buy one set of spare electronics to support many of your Bay Tek games. Spare boards allow you to get your game up and running the quickest and provide you a valuable troubleshooting option.
Call our technicians to get recommendations for what you should keep on hand for spare parts!
Technical Support:
"You" are the best tool for troubleshooting! Your abilities to understand the game and your skills to repair the game are invaluable to us! If you need help, you know you can call us. It's not easy to diagnose a game remotely by phone, but our technicians do a great job. They'll need your help to perform some
troubleshooting steps and convey to them exactly what's happening with your game.

## Returns \& Credits:

Sometimes the issue inn't what it seemed to be. If you need to return a circuit board, just give us a call to get Return Authorization. You will be credited for the cost of the board and charged only the bench fee for our processing and retesting that board.
Note: Bench fees apply regardless of whether the repair was your choice or a recommendation from a Bay Tek Entertainment technician.
It's a small price to pay for troubleshooting the issues with your game.
You can count on our Technical Support Team for service and support!

## WARRANTY OPTIONS

Bay Tek Entertainment warrants to the original purchaser that the game will be free of defects in workmanship and materials for a period of 2 years from the date of shipping
Bay Tek Entertainment will, without charge, repair or replace at it's option defective product or component parts upon notification to the parts/service department.

New, purchased parts have a 30 day warranty.
Any labor expended is not included in this warranty.
Warranty replacement part(s) will be shipped immediately via ground service, along with a Return Material Authorization (RMA) number for the return of defective part(s). Defective part(s) must be shipped back to Bay Tek Entertainment unless otherwise instructed.
This warranty does not apply in the event of any misuse or abuse to the product, or as a result of any unauthorized repairs or alterations. The warranty does not apply if the serial number decal is altered, defaced, or removed from it's original position.
Should you need your game serviced, determine the serial number from the decal on the back of the game cabinet or main board, and call 920.822.3951 Ext. 1102 or e-mail to: service@baytekent.com

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## SIGN MANUAL SUPPLEMENT

# BAY方TEK <br> entertainment 



GRAND MARQUEE


## SKEEBALL GLOW OVERHEAD SIGN



AACE17005
Cables from Game
Game 2


## SKEEBALL GLOW OVERHEAD SIGN



## LINKING GAMES, BLUETOOTH \& BELL

Important:
Cables must be run in correct order to ensure smooth scrolling of message and proper menu access.
Game \#1 is the far right game.


AACE18073
This end only used in case of linking more than 8 games


AACE18063 Interface Bd Cable


AACE17005
Cables from Games


## POWER IN



| TROUBLESHOOMNGE |  |  |
| :---: | :---: | :---: |
| Problem | Probable Cause | Remedy |
| No power to the sign | Unplugged. <br> Faulty Line Filter <br> Faulty Cable <br> Rocker Switch onside of sign or power supply turned off, or plugs unplugged. <br> Circuit breaker tripped Bad power supply. | Check wall outlet to line filter in back of sign. (A5FI9011 ) Replace Line Filter. (A5FI9011 ) <br> Refer to wiring diagram. Check cable CE18072 <br> Check rocker switch on side of sign. Check rocker switch on power supply. Ensure power cords are pushed up into the back of the power supply and line filter securely. <br> Reset power strip breaker switch or building circuit breaker. Attempt to determine cause. <br> Refer to Motherboard/Power Supply Diagnostics |
| Light bulbs on top of sign do not light up <br> There are 9 identical spires on the sign. | LED bulb faulty <br> Faulty Cable | Bulbs receive 12 VDC from Power Distribution Board and signal to flash from motherboard. Lights are daisy chained so if one light goes out the remaining bulbs will not light. <br> If all lights are out, check cables from first bulb to Power Distribution Board and motherboard. Refer to wiring diagram for the cable path. Check for 12 volts DC on CE18060 <br> If the bulbs have stopped flashing, check cable CE18060 to motherboard. <br> If the bulbs do not work after a certain point, there is a faulty Bulb \# A5LD18001 or light stick \# A5CB10002 <br> It may be the last lit bulb or the next bulb in the series. <br> If all bulbs do not work, it may be a faulty 1st strip. AALB18058 |
| Outside edge lights of sign do not work | Faulty Cable LED strip faulty | Check cable from LED strip to Motherboard. Refer to wiring diagram for the cable path. CE18075 \& CE18064 <br> Remove and examine LED strip. Replace if needed.\# CE18075 |
| Outside edge lights of display do not work | Faulty Cable LED strip faulty | Check cable from LED strip to Motherboard. Refer to wiring diagram for the cable path. CE18076 \& CE18064 <br> Remove and examine LED strip. Replace if needed.\# CE18076 |
| White marquee lighting not working | Faulty Cable Verify 12 Volts DC LED strip faulty | ck cables from LED to Power Dist Board CE18074 \& CE18061 ck for 12 volts DC on CE18061 on Power Dist. Board lace LED strip. AACE18074 |
| Display not working | Pinched, broken, or Re <br> disconnected wiring. CE <br>  Ch <br>  Bo <br> Faulty Display Sw <br> Module Re | fer to wiring diagram. Ensure 5 volts DC on CE18062, 18070 \& CE18069 cables from power distribution board. eck communication ribbon cable from Motherboard to Display ards. Part \# CE18068 <br> ap display modules inside cabinet to isolate the issue. place display if needed. A5LD1052 |
| Bell not working | Pinched, broken, or disconnected wiring. <br> Faulty Bell | Enter menu and scroll to Test Ball Release N11. Press Menu Select button to engage ball release and bell. Ensure 12 volts DC on CE17018, Press Menu Select again to turn off bell. <br> Replace bell. Part \# AABE18000 |

# TROUBLESHOOTING GUIDE 

| Problem | Probable Cause | Remedy |
| :--- | :--- | :--- |
| Bluetooth not <br> communicating | Loose connection <br> (oes the phone <br> "See" the Bluetooth <br> transmitting? <br> Does the Baytek Go <br> App connect? <br> Does the Baytek Go <br> App load? | Check cable connections at Bluetooth Board and at motherboard. <br> Ensure the phone cable is plugged into the top socket on the <br> If not - replace the Bluetooth Board. Part \# AACB3853A |
| If not - make sure you are using the correct pin \# 0815 |  |  |

## GAME PLAY THEORY OF OPERATION

The sign is designed to link the games below it to provide the following features:

- Adjustable jackpot ticket win and ticket increment per game.
- Synchronizes scrolling of displays during attract mode.
- Synchronizes the alley color lighting.
- Allows custom messages using the BayTek Go App (via Bluetooth connection)

There is one linking cable from each game below, up to the sign.
Each of these game cables must be plugged into the Interface Board of the sign in the correct order to ensure smooth scrolling of message and proper menu access.

## SIGN DIPSWITCH SETTINGS

Motherboard Jumpers are pre-installed at the factory.
Adjustment is not necessary.

Top jumper set to the +12 V side.

Bottom jumper set to the +5 V side.


All dipswitches on the Motherboard normally set to OFF.

## HOW TO LINK GAMES

## Important:

If games do not appear to link, go into the menu of all lower connect alley games and do a "Restore Factory Settings" (N36)


Important:
Cables must be run in correct order
to ensure smooth scrolling of message and proper menu access.

Game \#1 is the far right game.

Bring the phone cable from the top of each alley (Part \# AACE17005) and plug into the bottom of the Interface board as shown.
The phone cables must plug into the left side of the board as shown.

