# SERVICE MANUAL



# FACTORY CONTACT INFORMATION



BAY TEK ENTERTAINMENT Pulaski Industrial Park 1077 East Glenbrook Drive Pulaski, WI 54162 USA

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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.

## **GAME SPECIFICATIONS**

	WEIGHT	
NET WEIGHT	645 lbs	293 kg
SHIP WEIGHT	695 lbs	318 kg

## SHIPPING DIMENSIONS (1 Pallet)

80" x 32" x 92" at 695 lbs (Class 125)

## GAME DIMENSIONS

WIDTH	30"	77 cm
DEPTH	122"	310 cm
HEIGHT	92"	234 cm

#### Individual Dimensions:

Ramp: 30" Wide X 87" Deep X 27" Height Head: 30" Wide X 43.5" Deep X 92" Height

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## POWER REQUIREMENTS

INPUT VOLTAGE RANGE	100 to 120 VAC	220 to 240 VAC
INPUT FREQUENCY RANGE	60 Hz	50/60 Hz

## MAX OPERATING CURRENT

2 AMPS @ 110 VAC / 1.3 AMP @ 220VAC

OPERATI	NG TEMPERATURE
FAHRENHEIT	45-80 F
CELSIUS	7 - 27 C

## GAME HEIGHT WITH MARQUEE

130" (330 cm)

# SAFETY PRECAUTIONS

## NOTICE

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

This appliance is suitable for INDOOR, DRY locations only.

### DANGER

DO NOT perform repairs or maintenance on this game with the power ON. Unplug the unit from the wall outlet or shut off the power strip located inside the cabinet.

## WARNING

Use of flammable subtances can cause sever burns or serious injury. Always use NON-FLAMMABLE solvents for cleaning. DO NOT use gasoline kerosene or thinners.

### CAUTION

Lifting heavy objects can cause back, neck or other injuries. Be sure adequate lifting and moving devices are available when unloading, unpacking and moving this game.

### ATTENTION

Be sure the electrical power matches the game requirements. See the serial number located on the back of the game cabinet. Always plug into a grounded circuit. If the supply cord is damaged, it must be replaced by an approved cord or assembly provided by the manufacturer.

A shielded power cable must be used for the game to retain EU/EMC compliance.

## **IN CASE OF EMERGENCY**



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UNPLUG THE POWER CORD.

The power cord must be accessible at all times in case of an emergency.

#### WARNING

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

# **SKEEBALL GLOW SET UP**

The game will arrive on 1 pallet. Dimensions of pallet is 80" long by 32" 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

h 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.

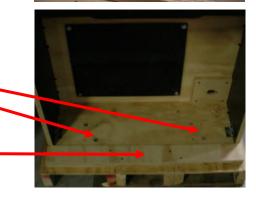
Remove the rear target section from the pallet and place in the final game position in the game room. It is advisable to leave some distance from the wall.

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:

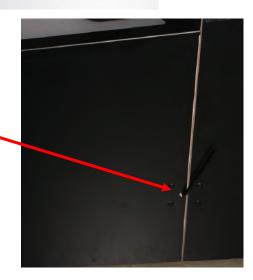
Locate the large 5/16" Allen hex tool (A5WR3800) from the cardboard box.

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. .

Not to scale



# **SKEEBALL GLOW SET UP**

### **Install Top Marquee:**

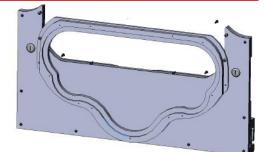
The top marquee is lowered and reversed for shipping. This will now be removed and installed.

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!

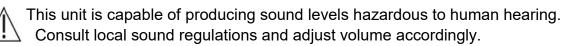
Use the menu buttons (located inside the lower alley center front door)

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!





# **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.

VINNER VINNER VINNER

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	
	இ ч∰         83% ■ 9:01 AM           BAY TEK
Locate the BayTek Go app icon on your device.	
Allow App to load. (Not Available on Apple iOS)	
Select desired machine. Enter the Pin # 0815	v 0.9.4  Charge CD:DC:02:14:58:45  Enter Pin
Press Connect	V Connect
Press the "Refresh List" button to find your games.	> Demo Mode Runs the demo mode. Refresh List

# **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.

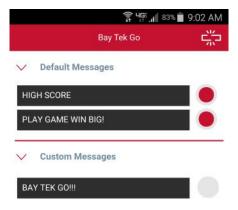
Edit messages and select the display color.

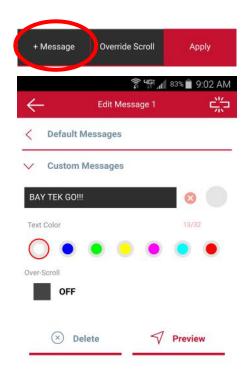
Press "Preview" to view the message on the game's display. Press "Delete" to remove it.

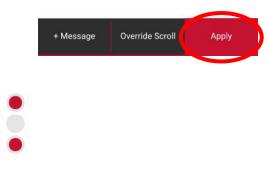
Press "Apply" to save message.

Enter and enable all desired messages.

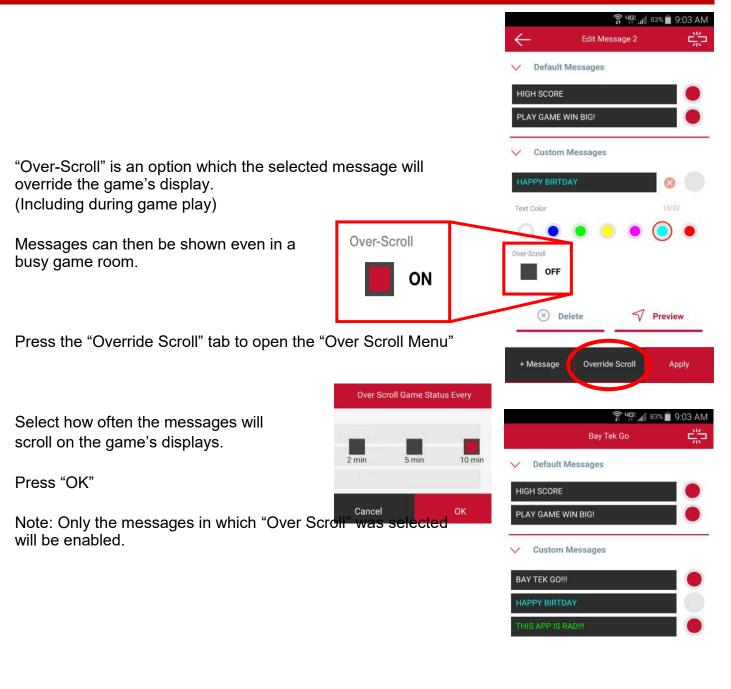




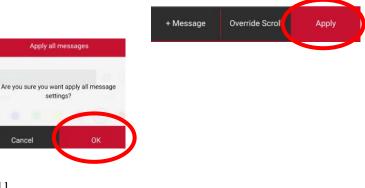




# **BAYTEK GO APP**



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

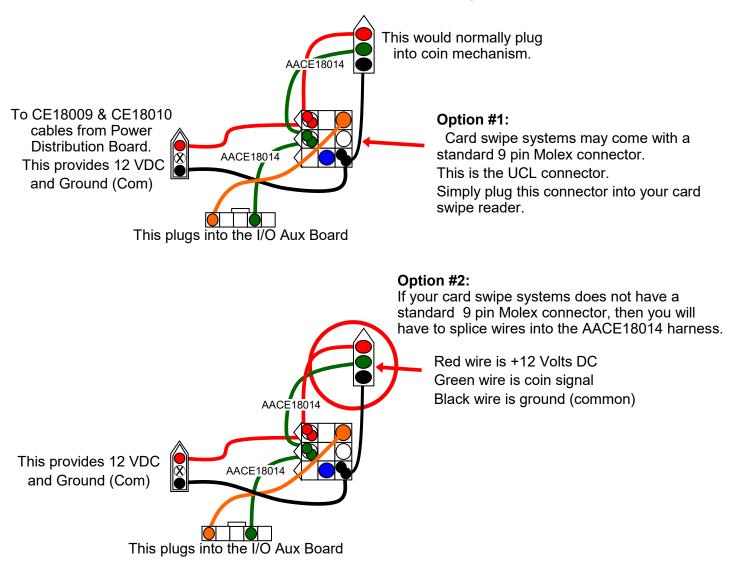


Be sure to hit "OK" in the confirmation menu.

# **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.



#### 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)

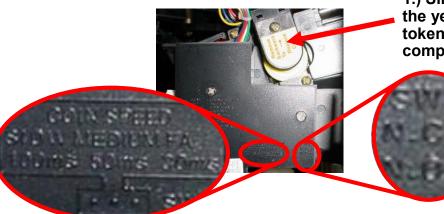
#### Notes:

- 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.	Check coin switch—Should be wired normally closed. (NC) Switch should be up.	
	Check wiring to I/O Aux Board. Part #'s CE18004 & CE18005	
and I/O Aux Board. Game set to large amount of credits per game.	Refer to "Game does not coin up" troubleshooting section. Check options in menu.	
Faulty coin mech	Swap mech between games to identify a faulty mech	

# **AVAILABLE BLANKING PLATES**

A5PL5150	plate used instead of Coin Mech Coin Comparator

A5PL9995 Plate used instead of ticket dispenser

AAME17016 Plate used instead of Bill Acceptor



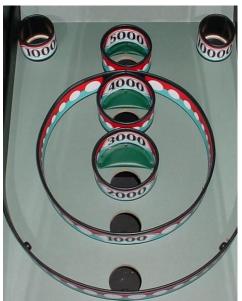




# **GAME PLAY THEORY OF OPERATION**

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.

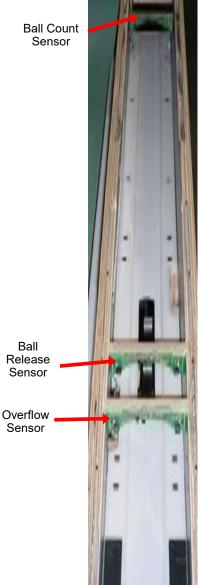
#### The Ball Release Motor will not turn if the Overflow Sensor is blocked. This will prevent damage to the motor.

There are spacers on top of these sensors - these are important as they prevent the sensors from raising in the track.

Ball Count Sensor

Ball

Sensor



## 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.

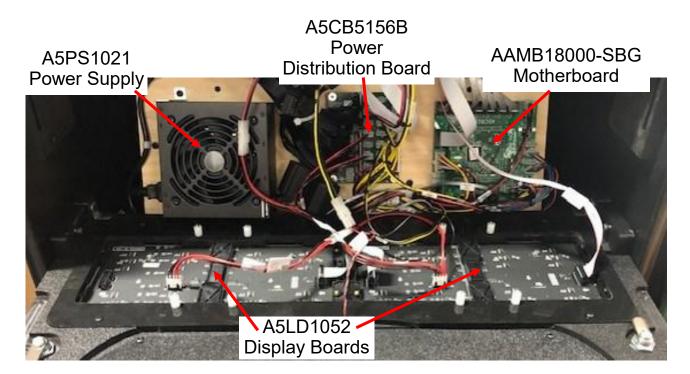


Unlock the 2 locks in the marquee on the top of game.

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
N12	EXTRA LAST BALL	N20	CREDIT PER DISCOUNT
N13	SCORE END OF GAME	N21	GAMES PER DISCOUNT
N14	MERCY TICKETS	N22	LOCAL HIGH SCORE BASE
N15	FIRST TICKET SCORE	N23	GAME MODE
N16	SCORE SPAN	N24	WIN OUTPUT TIMER
N17	TICKETS PER SPAN	N25	DISPLAY LAST SCORE
N18	GAME STATS	N26	DISPLAY HIGH SCORE
N19	CLEAR STATS	N27	MIDWAY PAYMENT TYPE
		N36	RESTORE FACTORY SETTINGS

#### The following menu options (N28-N36) are available if dipswitch # 4 is OFF on Motherboard AND

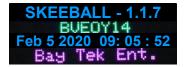
#### An overhead sign is attached and only accessible from the right hand game.

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
N31	BONUS MAX TICKETS	1135	BECOMES BONUS SCORE
N32	BONUS INCREMENT	N36	RESTORE FACTORY SETTINGS

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 -	SE	ET C	RED	ITS		
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	- CI	RED	IT TY	ΈE
SWIPE	TAP	COINS	TOKENS	BILLS

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

N4 - SET VOLUME										
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	30s	1m	5m	10m	15m				

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

	N6 - ATTRACT VOLUME											
0	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

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.

7

6

# N8 - BALL TIMEOUT OFF 20s 30s 1m 2m 3m 5m

Sets the time the game will wait before going to "Game Over" if the balls are not thrown.

OFF means no game timeout.

# **N9 - LOCAL HIGH SCORE RESET MODE**

POWER 99 PLAYS

NEVER

9

8

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 S	Gutter Sensor 1000 200		lease Sensor	<b>Overflow Sensor</b>		
1000	20	3000		4000		
500	5000 10		000 Left		10000 Right	

3

4

5



# **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.

# 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.

# N12 - EXTRA LAST BALL

OFF 10 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.

## N13 - SCORE END OF GAME

OFF 5s 1

s 10s 15s

20 Sec

20s

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.

		N	114 -	ME	RCY	TIC	KET	S		
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.

	N15 - FIRST TICKET SCORE											
0	0 <u>1000</u> 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	0 1000 2000 3000 4000 5000 6000 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 18 19 20 30 100												

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

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.

0



# **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	- CR	EDI	<b>PE</b>	R DI	SCO	UNT		
1	2	3	4	5	6		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.

N22 - LOCAL HIGH SCORE BASE												
0	1000	2000		24000	25000	26000		40000	45000		85000	90000

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

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.

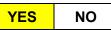
Points / Amusement Only - Will not show anything on screen, and not dispense tickets.

Prizes - If score set in "First Ticket Score" is reached, win beacon will flash for time setting in "Win Output Timer" below.

N24 - WIN OUTPUT TIMER									
OFF	5s	10s	15s	20s	25s	30s	1m	1m 30s	

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

# N25 - DISPLAY LAST SCORE



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

NO 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 SCORE BASE										
0	1000	2000		39000	40000	41000	42000		88000	89000	90000

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

# N30 - WIN BONUS TICKET VALUE

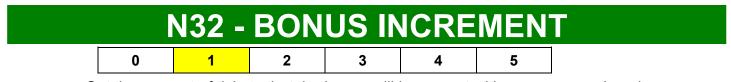
0

 10
 25
 50
 75
 100
 150
 200
 250
 300
 350
 400
 450
 500
 1000
 1500
 2000
 2500

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

N31 - BONUS MAX TICKETS										
0	0         50         100         150         200         250          1400         1450         1500         2000         2500         3000          9000         9500         9999									

Sets the maximum Jackpot value when using progressive jackpot



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.

N3	3 - SIC	GN AT	TRAC <sup>-</sup>	T TIME	R	
OFF	30s	1m	3m	5m	10m	

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

# N34 - CELEBRATION TIMER OFF 5s 10s 15s 45s 1m 1m 30s

YES

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

Determines if the high score will become the sign bonus score.

NO

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

Note: UP is ON



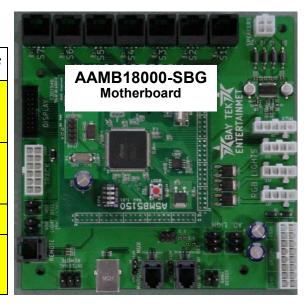
# **I/O AUX BOARD PINOUT**

0					
=+12V	= +5V	Outputs:		Inputs:	
= Ground		Q1 (PD1)	Game Counter	PD4	Menu Button
		Q2 (PD0)	Tickets Counter	PC6	Select Button
= Input		Q3 (PD6)	Coin Lockout	PD7	Ticket Notch
and the second sec		PE6	Ticket Enable	PB4	Coin In
				PB5	DBA In
				D15 (A1)	Low Ticket Switch Input
			<b>A</b> 4		

# **MOTHERBOARD DIPSWITCH SETTINGS**

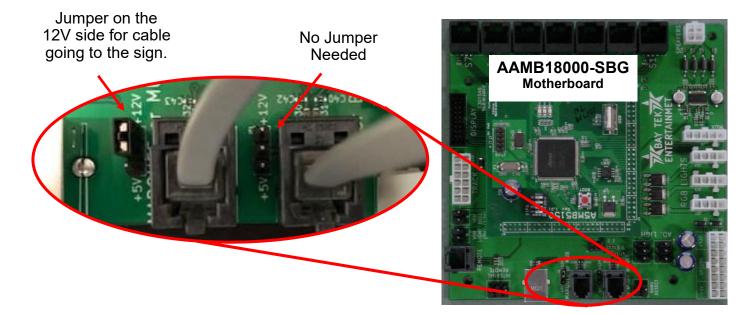
All dipswitches on the Motherboard are normally set to OFF

DIP	DESCRIPTION	ON	OFF
1	<b>Red Lane Lights</b> Set to OFF to have RED lane covers and front plexi lights		х
2	<b>Blue Lane Lights</b> Set to ON to have BLUE lane covers and front plexi lights		х
3	Not Used		Х
4	Home Use Game Set ON to simplify the menu by only displaying the options most used by home owners.		x



## **MOTHERBOARD JUMPERS**

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



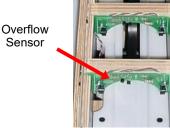
# **ERROR CODES**

#### 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



## 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





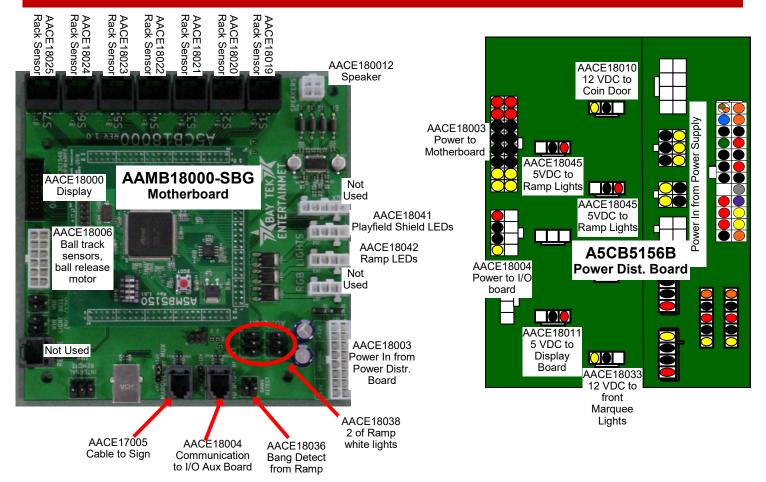




**Ball Count** Sensor

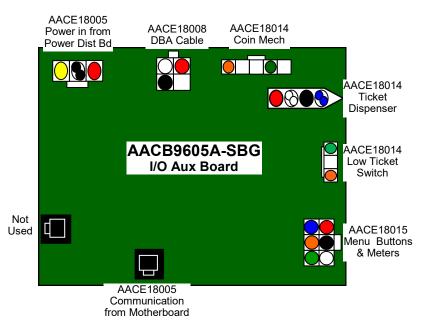


## **ALLEY CIRCUIT BOARD OVERVIEW**



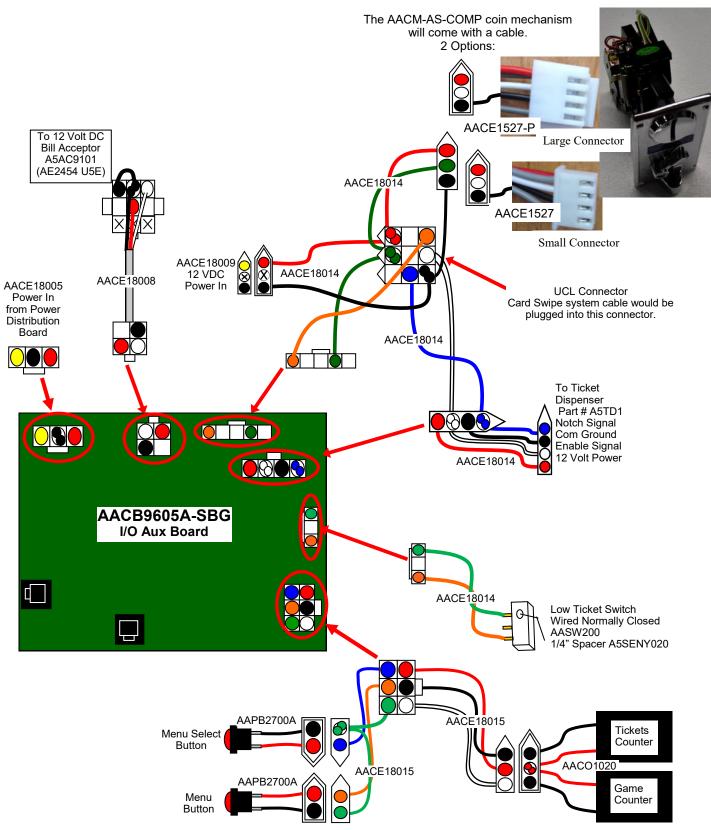
Boards located in top of game behind the display.

Board located in bottom of game in front of ramp.

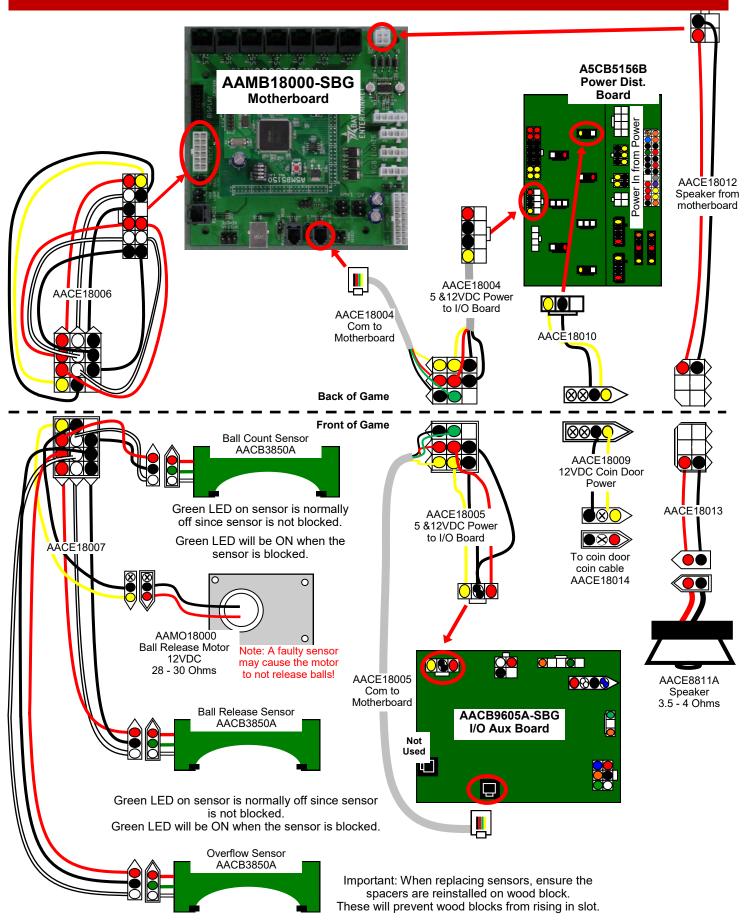


# TICKET DISPENSER, COIN MECH, COUNTERS, AND MENU BUTTONS

AACM-AS-COMP Coin Mechanism

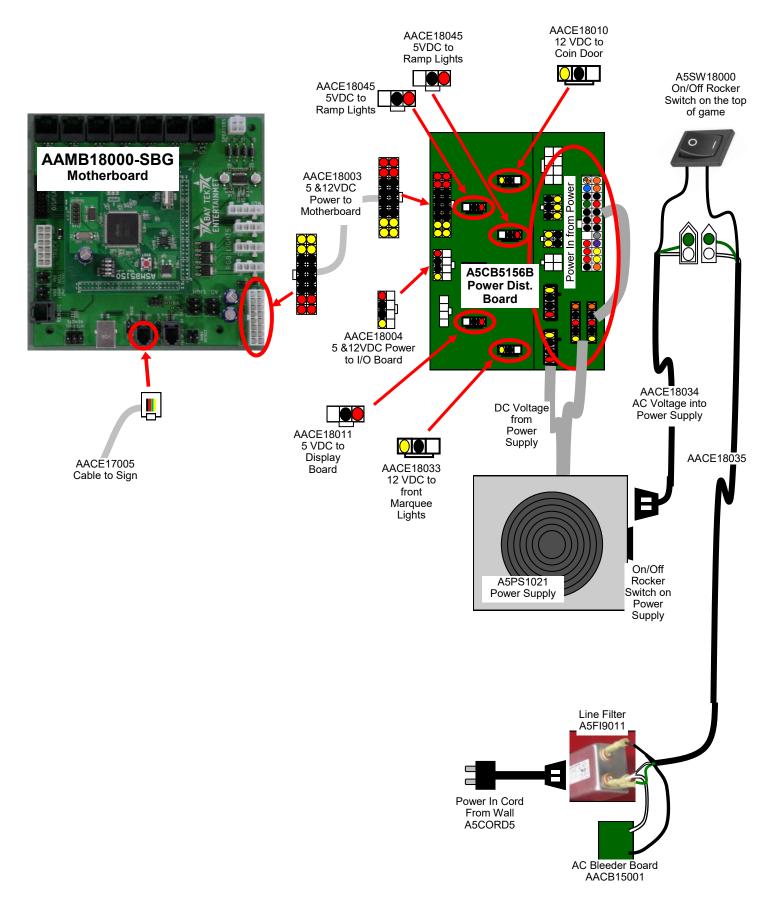


## **COMMUNICATION, PLAYFIELD AND RAMP LIGHTS**

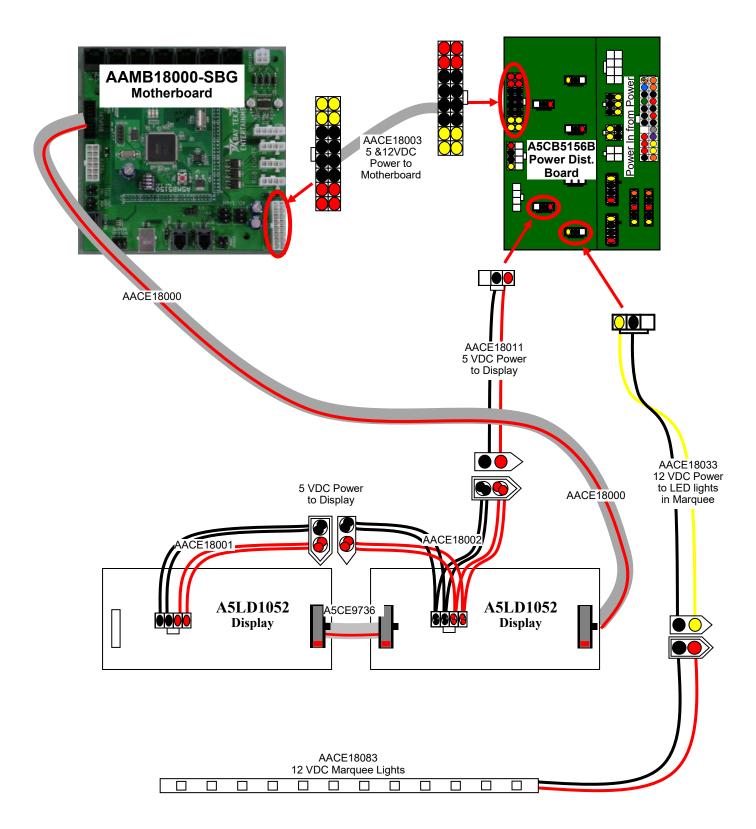


#### **ALLEY LED LIGHTS & BANG SENSOR** A5CB5156B AAMB18000-SBG Power Dist. Motherboard AACE18041 Board AACE18050 Front Window LED's •<mark>8</mark>0 Ŧ đ AACE18045 AACE18042 AACE18045 5 VDC Power 5 VDC Power to Ramp Lights to Ramp Lights AACE18038 AACE18036 AACE18038 $\left| \right\rangle$ **Back of Game** Housings are colored RED Front of Game AACE18044 AACE18080 AACE18081 AACE18043 AACE1 Ramp Lights Ramp Lights 18051 18051 Ramp Lights Ramp AACE18051 AACE18051 $\Box$ Lights AACE18037 AACE18039 AACE18051 Ramp Lights ta ta ≩⊡ Ramp Light 18051 Ramp Ramp AACE18051 18051 AACE18040 In AACE18046 AACE18046 AACE18 Π Ligh Lights Ball Chase **Ball Chase** LEDs LEDs ភ П Ť П AACE8811A Ramp Bang 000 Detect Sensor Ramp Bang Detect Sensor located under ramp here. This sensor feels vibration and AACE18044 AACE18048 Ball Track Lighi tells the alley lights to start chasing the ball up the ramp. 3.5 - 4 Ohms AACE18049 AACE18049 Front Door Light Front Door Light

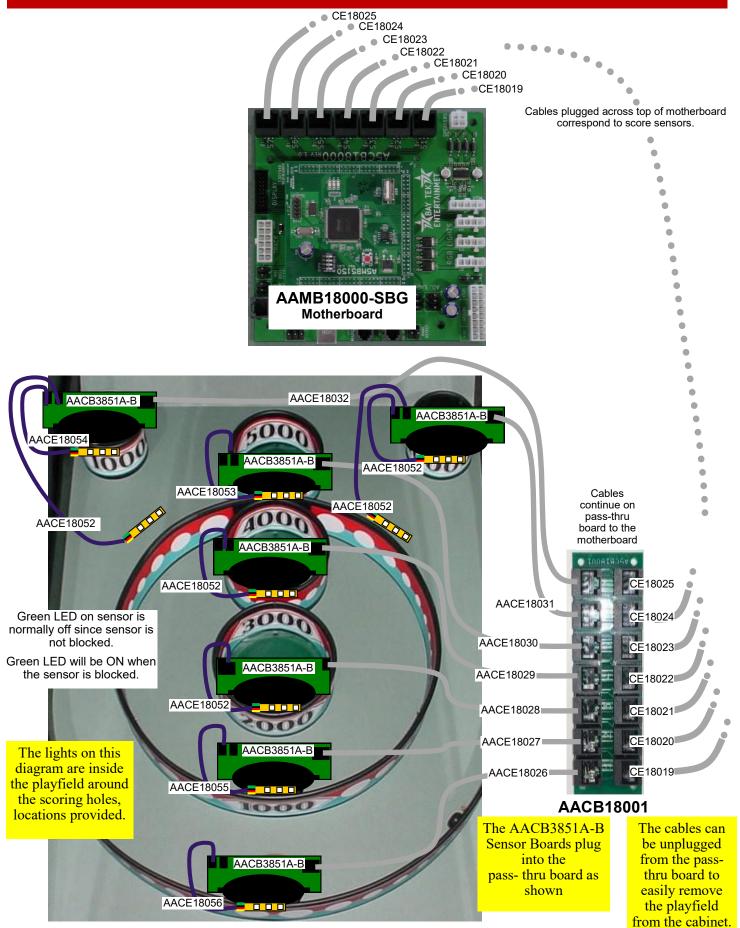
# **AC POWER & POWER SUPPLY WIRING**



## **DISPLAY WIRING**



# PLAYFIELD SENSOR WIRING DIAGRAM



	TROUBLE	SHOOTING GUIDE				
Problem No power to the	Probable Cause Unplugged. Faulty Line Filter	Remedy Check wall outlet to line filter in back of game. (A5FI9011) Replace Line Filter. (A5FI9011)				
game	Faulty Cable Rocker Switch on top of game or power supply turned off, or plugs unplugged.	Refer to wiring diagram. Check cables CE18035, CE18034 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 # A5SW18000				
	Circuit breaker tripped	Reset power strip breaker switch or building circuit breaker. Attempt to determine cause.				
	Bad power supply.	Refer to Power Supply Diagnostics				
LED's lighting up front window plexi	Faulty wire or connection.	Check cables CE18050 and CE18041 from Motherboard Check continuity. Check for damaged connector Refer to wiring diagram.				
not working	Faulty LED light strip.	Replace LED light strip if needed. CE18050				
Front lower door lights not working	Faulty wire or connection.	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 th ramp. Verify CE18042 is plugged securely to Motherboard.				
	Faulty LED light strip.	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	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				
	Faulty LED light strip.	If only one light is out, swap to other side to verify. Replace if needed. Part # CE18046				
	Faulty Bang Detector or wiring to Motherboard	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.	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.				
	Faulty LED light strip.	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**

Pro	olem		Probable Cause	Remedy				
		Faulty	/ Cable	Check cables from LED strips to Power Distribution Board				
LED marqu lighting not working		Verify Powe	12 Volts DC from r Distribution Board	(CE18083, CE18033) Check for 12 volts DC on CE18033 on Power Distribution Board				
		LED s	strip faulty	Replace LED strip. AACE18083				
LED's light playfield rir			s in rings will light up hole is scored.	Ensure hole is scoring, if not - refer to Game Scores Wrong Section.				
working		Faulty	/ wire or connection.	Check for proper connection from LED's to scoring sensor. Check continuity. Check for damaged connector Refer to wiring diagram.				
		Faulty	/ LED light strip.	Swap LED light from a different spot. Replace LED light strip if needed Refer to Playfield diagram for part numbers.				
		Faulty	/ Sensor Board.	Replace sensor board. (AACB3851A-B)				
	Iowscroll to "Game VoluLoose wireCheck audio cable coNo Audio(AACE8811A, AAC			by pressing Menu button,				
No Audio			(AACE8811A, AAC	connections from motherboard to speaker. E18013, & AACE18012)				
Faulty		r	Check Molex connec Replace speaker (A/	ctor at the rear of the ramp. ACE8811A)				
Balls are n released	ot	Pinched, broken, or disconnected wiring.		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				
To test moto Enter menu scroll to		blocked	Sensor faulty. A sensor will cause ball stop to protect motor.	Check Overflow Sensor. Replace if needed. AACB3850A				
Test Ball Re	elease		olts DC and motor moving.	Faulty motor. Replace AAMO18000				
		Mothe	rboard defective.	Replace Motherboard. (AAMB18000-SBG)				
Too many	balls		r at ball release d, dirty, or faulty.	Clean sensor at ball release. Green LED should only come on when blocked. Replace if needed. (AACB3850A)				
are release			ed, broken, or nected wiring.	Check connections from sensor board to main board. Check continuity on wires. CE18007 & CE18006 Check Molex connector at the rear of the ramp.				
Not enoug are release	ed		ount opto sensor is ive at far end of	If this sensor misses a ball, the game will continue waiting until game time-outs. Replace sensor. (AACB3850A)				
Game is wa for player to balls and th none left in	o throw ere are	Pinche	ed, broken, or nected wiring.	Check connections from sensor board to main board. Check continuity on wires. CE18007 & CE18006 Check Molex connector at the rear of the ramp.				
			ensor at ball e is defective.	If this sensor "sees" 2 balls instead of one. Replace sensor. (AACB3850A)				

# **TROUBLESHOOTING GUIDE**

Problem	n F	Probable C	ause			Remedy			
Display not working	Pinched, brok disconnected		CE180 Check	002 & comr	CE1 nuni	liagram. Ensure 5 volts DC on CE18011, 8001 cables from power distribution board. cation ribbon cable from Motherboard to Display E18000			
	Faulty Display	y Module				odules inside cabinet to isolate the issue. if needed. A5LD1052			
Dollar Bill Acce functioning	-	Check for Bill Accept	or.	Ö	lf no	Acceptor should cycle stacker at game power up. f not, check cable connections.			
	Ensure Bill Acceptor is set to "Always Enable"		oris in lot.	Refer to "How to Clean Bill Acceptor" Or clean with bill reader cleaning card. (A5CC9000)					
	Important : Only 12 Volt DC DBA is to be installed.		disconnected wiring (CE			Check wiring from bill acceptor to I/O Board. (CE18008) Repair or replace wiring harness. Make sure wires are secure in connectors.			
		Bill acceptor problem Re Part # A5AC9101 ma			mar	er to troubleshooting section of Bill Acceptor nual itself, the diagnostics label of the back of unit.			
		Opto Sensor on ticket dispenser dirty.				Blow dust from sensor and clean with isopropyl alcohol.			
	Tickets on monitor does <b>not</b> match tickets coming	Faulty ticket dispenser.				Replace with working dispenser to isolate the problem. (A5TD1)			
		Notch on tickets cut too shallow.				Flip tickets and load upside-down to have large cut notch toward opto sensor.			
Tickets do not dispense or	out of game.	Faulty cable. Disconnected, loose or broken wires.			ted,	Check connectors from ticket dispensers to I/O Aux board. Check for continuity. Cables AACE18014			
Wrong amount		Enter Diagnostic menu and test Dispenser			and	<b>-</b>			
dispensed		Check dips Aux Board	Check dipswitches on I/O			There are many options that affect ticket payout using the dipswitches. Refer to Dip Switch Setting page.			
		Faulty I/O E	Board			Replace I/O Board. AACB9605A-SBG			
	Tickets on monitor do match tickets coming out of game.	Settings in incorrect.	Settings in Menu are incorrect.			Enter Menu and check certain areas: First Ticket Score Score Span Tickets per Span Mercy Tickets Check Dipswitches on I/O Aux Board Ensure only Dip # 8 is set to ON.			
Low Tickets	Tickets are em	pty in ticket		_oad switch		ts into tray. Ensure tickets hold down micro			
Red Dot on monitor	Faulty cable. I loose or broke		я, С	Check	con	nectors from low ticket switch to I/O board. continuity. (AACE18014)			
6	Faulty low tick					itch and replace if needed. (AASW200)			
	Faulty I/O Boa	rd		Check dipswitches on I/O Board, Replace I/O Board if needed. AACB9605A-SBG					

		TROUBLI	ES	HC	OTING GUIDE		
Problem Probable Cause					Remedy		
Menu Buttons not working	-	me also does not n up?	CE1	Check communication cable from Motherboard to I/O Aux Board. CE18004, CE18005. Check Molex connector at the rear of the amp. Ensure power to I/O Aux Board.			
	dis	isconnected wiring. CE18 Check			ring diagram. Ensure 12 & 5 volts DC on CE18004, cables from power distribution board. 15 cable from I/O Aux Board to Menu Buttons. ons to isolate the issue, replace if needed.AAPB2700A		
Counters /Mete do not work	ounters /Meters			Inspect crimp to ensure good connection on meter cable Check connections from counters to I/O Aux board. Check continuity on wires. (AACO1020, CE18015) Replace I/O Aux board. (AACB9605A-SBG)			
Game scores wrong		Game starts with a score already on display or scores double points.		6	Sensor is defective under score hole. Enter menu, go to Diagnostics Menu to check sensors. Refer to wiring diagram. Sensors cables plug into pass-thru board (AACB18001) to ease removal of playfield. Ensure cables are properly connected to it.		
		Faulty Score Sensor			Replace defective sensors (AACB3851A-B)		
Game does not coin up Game will have an audio track sound from speakers when coin switch triggered. Ensure 12 VDC on CE18009 & CE18010 from Power Dist Board Check for "Roll balls" message on display		Check power into I/O Board - CE1 power distribution board. Check for 12 Volts DC into CE180 Also check 12 VDC on CE18010 for Check wiring from coin switch to I/ Card swipe systems must tie into t			14 cable from CE18009 cable. rom Power Distribution Board O board. CE18014		
		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. Check CE18004 cable to motherboard behind the		
		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. Check Molex connection at the rear of the ramp.		
		Coin Mech issue.			Swap coin mech from different game. Replace if needed.		

TROUBLESHOOTING GUIDE						
Probler	n	Probable Cause	Remedy			
Lane matting or target area is dirty		Matting will get dirty with use.	Clean with "Scrubbing Bubbles" brand cleaner.			
Green Dot on Display <b>Game miss-</b>		Too many balls in the ball track.	Open the middle lower door to access the menu buttons and hold the "Menu Select" button to engage ball release motor.			
scoring or giving 0 points the first few ba	for Ills	Faulty cable. Disconnect- ed, loose or broken wires.	Faulty cable. Disconnected, loose or broken wires. CE18007, CE18006 to Motherboard			
rolled.		Faulty Ball Count Sensor.	Replace Ball Count Sensor. AACB3850A			
		Faulty Motherboard.	Replace Motherboard. (AAMB18000-SBG)			
Roll Ball Message on Display	Message on balls in the ball track waiting to		Remove right side lane cover and check the overflow sensor in the ball track. This will cause the motor not to release balls.			
ROLL BALLS		Ilty sensor.	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.			

#### 00-345-1 39

## **POWER SUPPLY DIAGNOSTICS**

- 1.) Verify AC 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 115V (or 230V) (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.

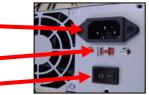
Make sure switch # 8 is OFF for Always Enable

#### **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.



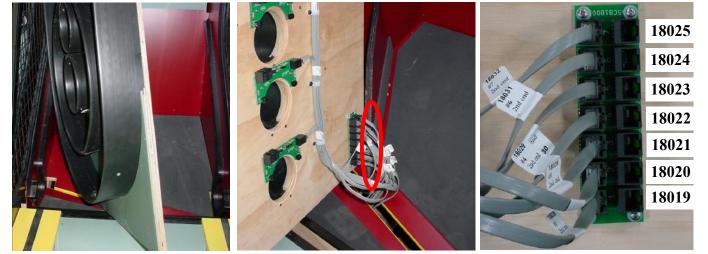
Remove the 2 screws in the left and right rubber ends using a Phillips screwdriver

Pivot and pull the playfield to the left to access the cables on the lower left corner.

Unplug the game harness cables from the right side of the jumper board to free the playfield from the cabinet. The playfield can now be removed from the game, and sensor boards can be replaced.

For installation: position playfield into cabinet and plug 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.

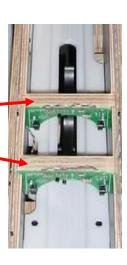
Remove the small cotter pin from the motor shaft, and remove the black plastic wheel.

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.







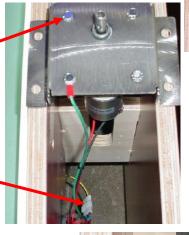




## HOW TO CHANGE BALL RELEASE MOTOR

Pivot motor/bracket and lift upward out of channel.

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.

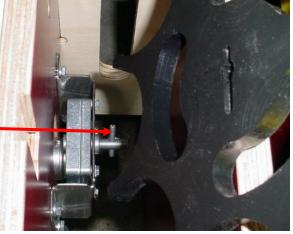
Slide the black plastic wheel onto the shaft of the motor so the roll pin is fully seated into the slot.

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 **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.

DURDENIEVI (1)

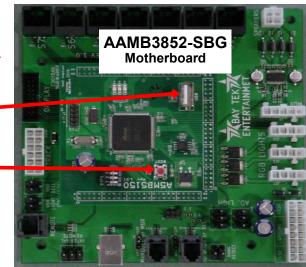
Instructions:

Copy the program file onto a blank USB thumb drive stick. Make sure the game is turned ON.

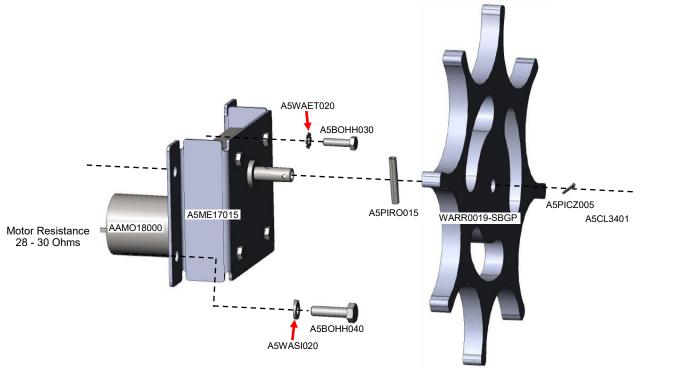
Insert the USB thumb drive into the slot on the motherboard assembly.

Press the red "Boot" button on the board.

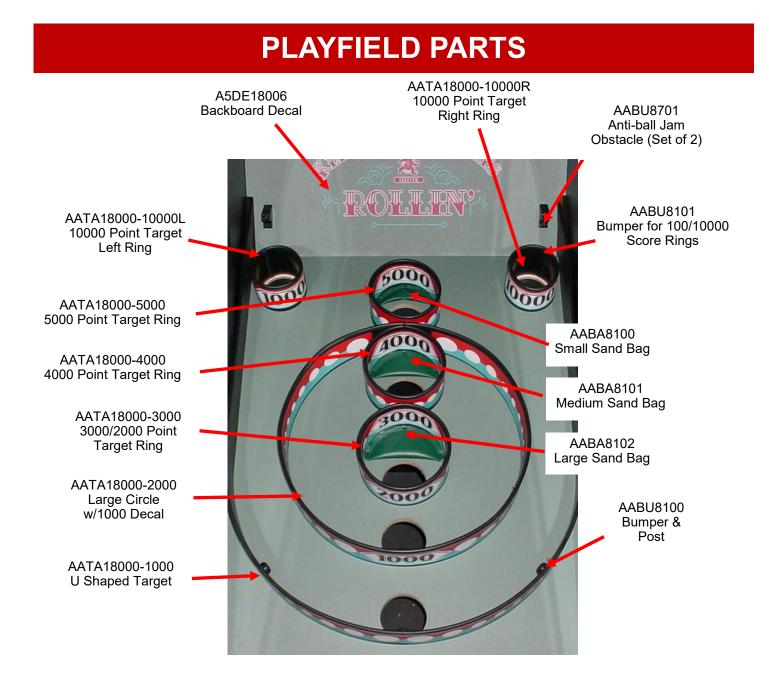
The process will be complete in seconds. Remove the USB stick, the software has been update.



### AAMO18005 BALL RELEASE ASSEMBLY



Part #	Description	Quantity on Assembly	Part #	Description	Quantity on 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,	-	WARR0019-	Black Plastic Cogged	1
A5CL3401	Cotter Pin 3/32" Dia X 1/2"	1	SBGP	Wheel	



AABU8101 Bumper for 100/10000 Score Rings



AABU8100 Bumper & Post



#### **Additional Parts for Playfield**

Part #	Description	Quantity on Assembly	Part #	Description	Quantity on 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 # A5BA5810 AACM-AS-COMP	DESCRIPTION		
		PART #	DESCRIPTION
	Blue Ball (9 Per Game)	AABK1013	Push Buttons/Counter Bracket W/Decal
	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" X 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 Cab
AATA18000-1000	U Shaped 1000 Target for Playfield	AACE18010	12 Volt Coin Door Power From Head Cabl
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
ATA18000-10000L	10000 Left Target Ring for Playfield	AACE18015	Menu Buttons & Counter Cable
ATA18000-10000R	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	AACE18019 AACE18020	Playfield Sensor #2 From Head Cable
A3FF18000 A5LA3850	Receptacle End Latch for Ramp (2/game)	AACE18020 AACE18021	Playfiled Sensor #3 From Head Cable
A5LA3851	Panel Fastening Latch for Head (2/game)	AACE18021 AACE18022	Playfiled Sensor #4 From Head Cable
W5HG1070	18" Single Bend Hinge	AACE18022 AACE18023	Playfield Sensor #5 From Head Cable
		AACE18023 AACE18024	-
A5CA2102	Lock Cam for Coin Mech Door (2 per game)		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 AACE18027	Playfield Sensor #1 From Playfield Cable Playfield Sensor #2 From Playfield Cable
	A5BK6035 Light Bracket (2 per game)		Elavield Sensor #7 From Plavield Cable

	PAR1	IS LIST		
AACE18029	Playfield Sensor #4 From Playfield Cable	A5DE18009	Plex	i Light Covers on holes (4") (4 per game)
AACE18030	Playfield Sensor #5 From Playfield Cable	A5DE18010	Plexi	i Light Covers on holes (7 1/4") (2 per game)
AACE18031	Playfield Sensor #6 From Playfield Cable	A5DE18011	Win	dow Cling Decal
AACE18032	Playfield Sensor #7 From Playfield Cable	A5DE18013	Marquee Top Printed Plexi, Glow 22	
AACE18033	Power To Marquee Light Cable	A5DE18014	Mar	quee Bottom Printed Plexi
AACE18034	Power Switch To Power Supply Cable	A5VF17000	Ball	Нор
AACE18035	Power Switch To Line Filter Cable	WACA18087	Fron	t Window Covering Targets 1/4" Acrylic, SBG22
AACE18036	Bang Detect Speaker From Head Cable	WACA18087-COM	IPLETE	E 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-S	BG	I/O Aux Board (Door Interface)
AACE18050	Front Window LED Lights Cable	AAMB18000-S	BG	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	1		
A5DE18003	Ring Number Values Set	1		
A5DE18003-1000	2000 Ring, 1000 Point Decal	1		
A5DE18003-1000/O	1000 Ring Outside Decal	1		
A5DE18003-10000	10000 Ring, 10000 Point Decal (2 per game)	1		
A5DE18003-10000/I	10000 Ring, Inside Decal (2 per game)	-		
A5DE18003-2000	3000 Ring, 2000 Point Decal	-		
A5DE18003-2000/IL	2000 Ring, Inside Left Decal	-		
A5DE18003-2000/IR	2000 Ring, Inside, Right Decal	-		
A5DE18003-3000	3000 Ring, 3000 Point Decal	-		
A5DE18003-4/5000/O	4000 &5000 Rings, Outside Decal (2/game)	1		
A5DE18003-4000	4000 Ring, 4000 Point Decal	-		
A5DE18003-5000	5000 Ring, 5000 Point Decal	-		
A5DE18005	Ball Return Light Covers Black Plastic	1		



AACE18000

AACE18001 AACE18002 AACE18003 AACE18004 47

AACE18005

AACE18006

AACE18007

### **PARTS PICTURES**

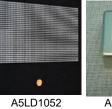


### **PARTS PICTURES**











A5DE18009 A5DE18010 A5DE18011



A5DE18013

A5TD1



A5PS1021







AACO1020

AACE8811A





AAMB18000-SBG

AACB3850A

A5CB5156





## **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.

DATE	MAINTENANCE PERFORMED	PARTS ORDERED	MISC.



## **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:**

• <u>Spare Parts</u> – 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 isn'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



## SIGN MANUAL SUPPLEMENT

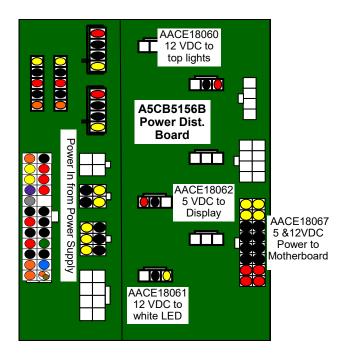


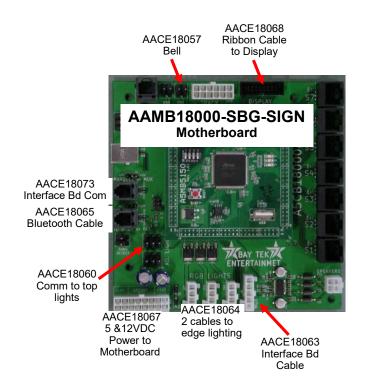


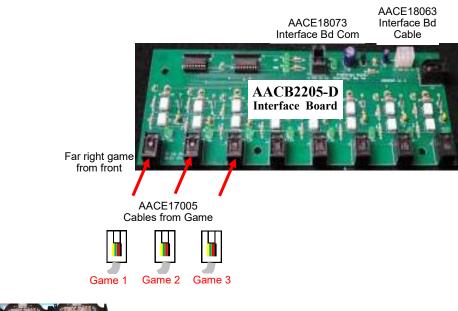
**GRAND MARQUEE** 



### **SKEEBALL GLOW OVERHEAD SIGN**

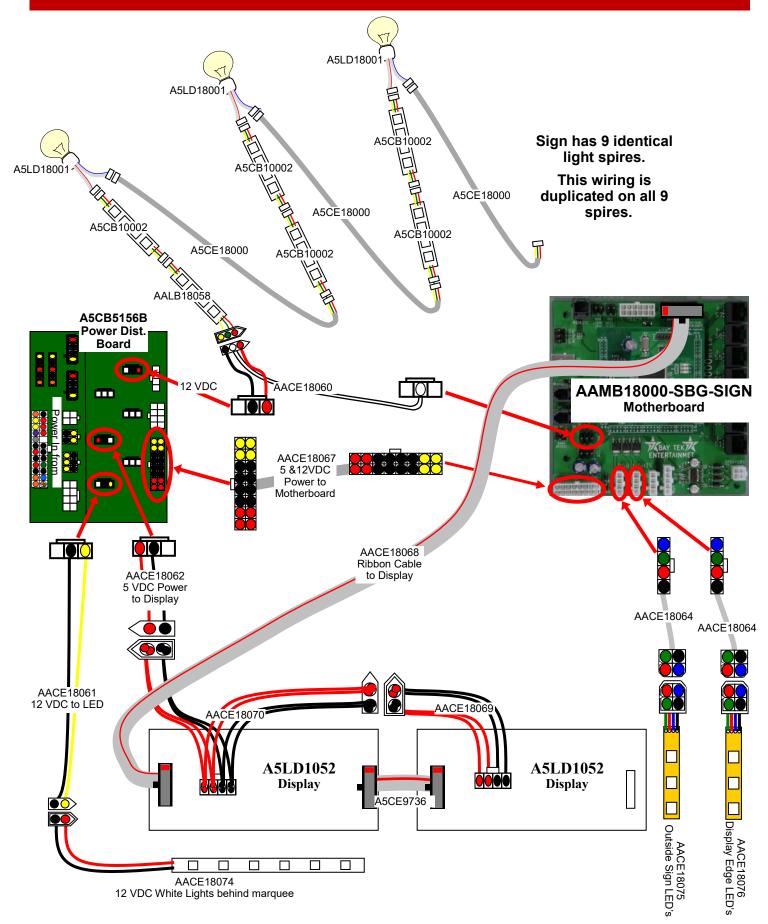




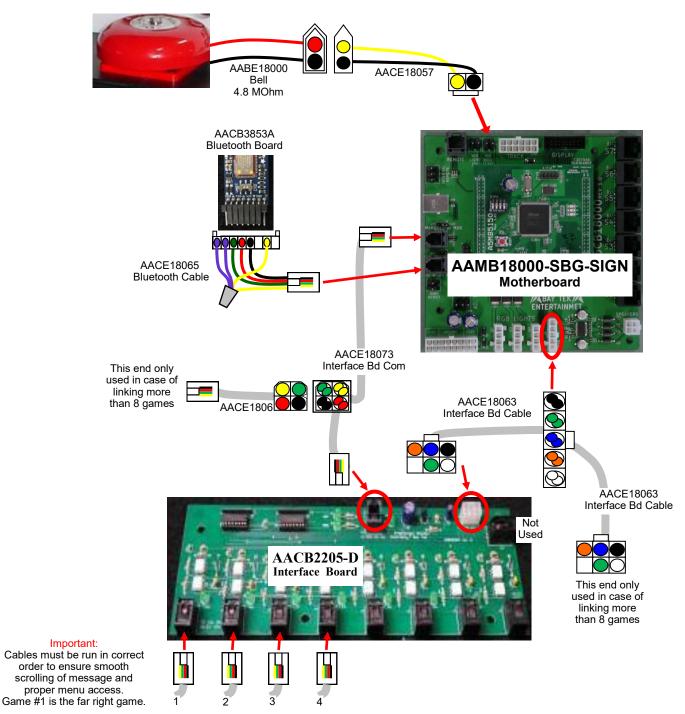




### **SKEEBALL GLOW OVERHEAD SIGN**



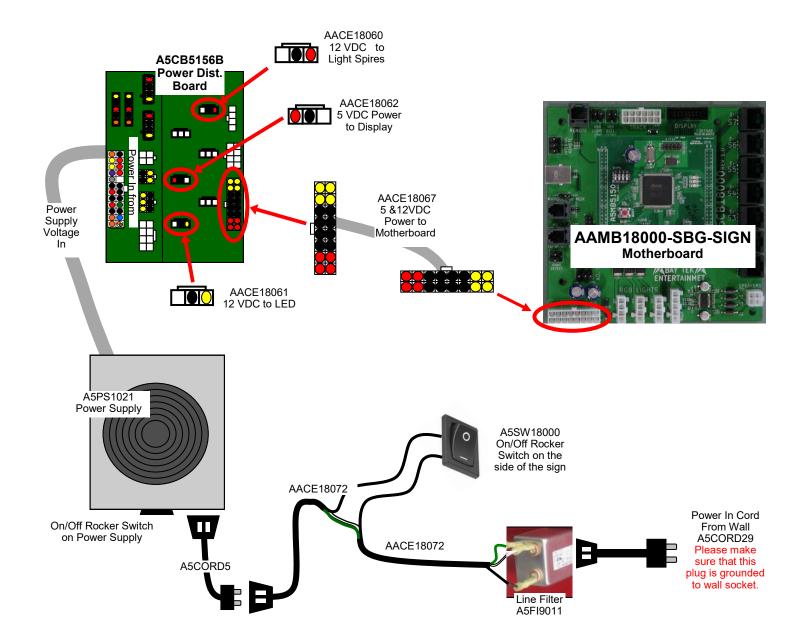
## LINKING GAMES, BLUETOOTH & BELL



AACE17005 Cables from Games



## **POWER IN**



	TROUBI	_E	SHOOTING GUIDE
Problem No power to the sign	<ul> <li>Probable Cause</li> <li>Unplugged.</li> <li>Faulty Line Filter</li> <li>Faulty Cable</li> <li>Rocker Switch onside of sign or power supply turned off, or plugs unplugged.</li> <li>Circuit breaker tripped</li> <li>Bad power supply.</li> </ul>		RemedyCheck wall outlet to line filter in back of sign. (A5FI9011 )Replace Line Filter. (A5FI9011 )Refer to wiring diagram. Check cable CE18072Check rocker switch on side of sign. Check rocker switchon power supply. Ensure power cords are pushed up into theback of the power supply and line filter securely.Reset power strip breaker switch or building circuit breaker.Attempt to determine cause.Refer to Motherboard/Power Supply Diagnostics
Light bulbs on top of sign do not light up There are 9 identica spires on the sign.	LED bulb faulty Faulty Cable		<ul> <li>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.</li> <li>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</li> <li>If the bulbs have stopped flashing, check cable CE18060 to motherboard.</li> <li>If the bulbs do not work after a certain point, there is a faulty Bulb # A5LD18001 or light stick # A5CB10002</li> <li>It may be the last lit bulb or the next bulb in the series.</li> <li>If all bulbs do not work, it may be a faulty 1st strip. AALB18058</li> </ul>
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 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 Remove and examine LED strip. Replace if needed.# CE18076
White marquee lighting not working	Verify 12 Volts DC	Chec	k cables from LED to Power Dist Board CE18074 & CE18061 k for 12 volts DC on CE18061 on Power Dist. Board ace LED strip. AACE18074
Display not working	Pinched, broken, or disconnected wiring. Faulty Display Module	Refer to wiring diagram. Ensure 5 volts DC on CE18062, CE18070 & CE18069 cables from power distribution board. Check communication ribbon cable from Motherboard to Display Boards. Part # CE18068 Swap display modules inside cabinet to isolate the issue. Replace display if needed. A5LD1052	
Bell not working	disconnected wiring.		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. Replace bell. Part # AABE18000

TROUBLESHOOTING GUIDE					
Problem	Probable	Cause Remedy			
Divetestin net	Loose connection	Check cable connections at Bluetooth Board and at motherboard. Ensure the phone cable is plugged into the top socket on the motherboard.			
Bluetooth not communicating	Does the phone "See" the Bluetooth transmitting?	If not - replace the Bluetooth Board. Part # AACB3853A			
	Does the Baytek Go App connect?	If not - make sure you are using the correct pin # 0815			
	Does the Baytek Go App load?	If not - reload the app, or download new version of app.			

## **GAME PLAY THEORY OF OPERATION**

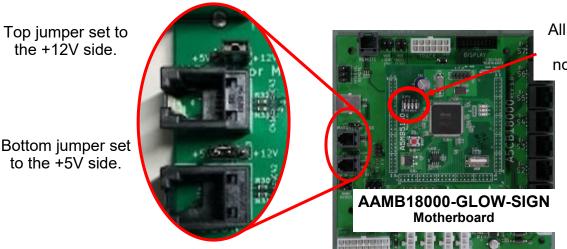
The sign is designed to link the games below it to provide the following features:

- 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.

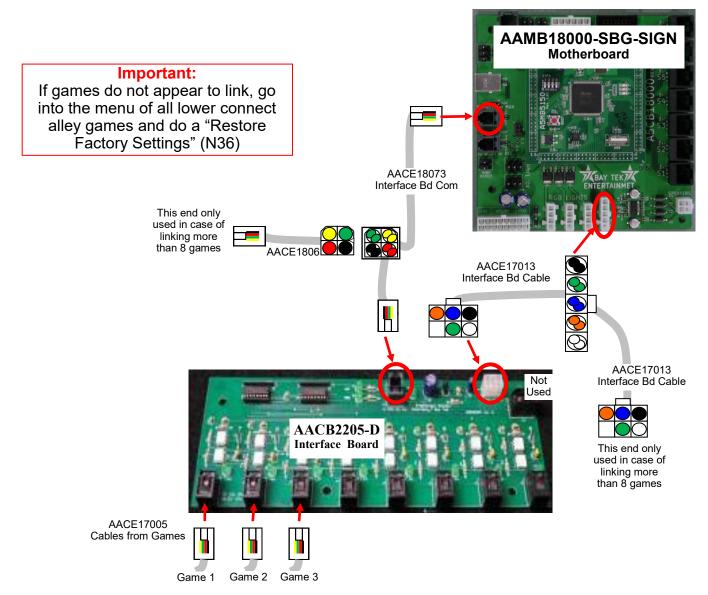
## SIGN DIPSWITCH SETTINGS



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

All dipswitches on the Motherboard normally set to OFF.

## HOW TO LINK GAMES



#### 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.