# SERVICE MANUAL



### **FACTORY CONTACT INFORMATION**



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

#### SIGN UP TO RECEIVE OUR E-MAILS!

Stay up to date on the latest game information, new products launches, early notification of parts specials, updates of retro fit parts, software upgrades, best practices and more!

Visit baytekent.com and enter your email to sign up!

You can also register your new game at <u>baytekent.com/register</u>

#### **SALES**

Phone: (920) 822-3951 Fax: (920) 822-8936

Email: sales@baytekent.com

#### **PARTS**

Phone: (920) 822-3951 Ext 1101

Fax: (920) 822-8936

Email: parts@baytekent.com

#### **SERVICE**

Phone: (920) 822-3951 Ext 1102

Fax: (920) 822-8936

Email: service@baytekent.com

Open Monday - Friday 8 AM - 5PM C.S.T.

### **TABLE OF CONTENTS**

FACTORY CONTACT INFORMATION		2
TABLE OF CONTENTS		
WELCOME TO Connect 4 Hoops HD		. 4
GAME SPECIFICATIONS		
SAFETY PRECAUTIONS		5
GAME SET UP	6	- 21
HOW TO PLAY		22
MAIN MENU FUNCTIONS		23
VOLUME & ATTRACT		24
GAME SETTINGS	. <b></b> .	. 25
PAYOUT SETTINGS		26
TICKET PATTERNS		
STATISTICS		27
DIAGNOSTICS		28
CARD SWIPE INSTALLATION		29
CIRCUIT BOARD LAYOUT		30
WIRING DIAGRAMS		- 38
DIAGNOSTICS		
AAIMB1 MOTHERBOARD		45
HOOPS NOT SCORING		46
POWER SUPPLY DIAGNOSTICS		47
BILL ACCEPTOR DIAGNOSTICS		48
I/O AUX BOARD PINOUT		48
HOW TO ACCESS BALL SENSOR		49
HOW TO ACCESS REAR CONTROL BOARD		49
HOW TO ACCESS BALL GATE MOTOR & SENSOR		49
MONITOR DEFAULT SETTINGS		50
HOW TO REPLACE MONITOR		- 55
HOW TO MOVE MARQUEE TO TOP OF GAME		56
HOW TO REPLACE SOFTWARE		
AVAILABLE BLANKING PLATES		
DIPSWITCH SETTINGS		58
BALL GATE EXPLODED VIEW		
PARTS LIST		
PARTS PICTURES		
ART DIAGRAM		65
MAINTENANCE LOG		66
TECHNICAL SUPPORT		67
WARRANTY		67

### **WELCOME TO CONNECT 4 HOOPS HD**

#### Congratulations on your purchase!

Please take a moment to read through this manual and be sure to contact us 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!

Your Friends at Bay Tek Entertainment



Licensed by:



### **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 us at service@baytekent.com for further assistance.

### **GAME SPECIFICATIONS**

WEIGHT						
NET WEIGHT	1000lbs.	454 kg				
SHIP WEIGHT	1270 lbs.	576 kg				
<u> </u>						
GAME DIMENSIONS						
WIDTH	61"	155 cm				
	4.4.5.11					

GAME DIMENSIONS						
WIDTH	61"	155 cm				
DEPTH	112"	285 cm				
HEIGHT	108"	275 cm				

OPERATING TEMPERATURE						
FAHRENHEIT	45	5 - 80 F				
CELSIUS	7.2	- 26.7 C				
SHIPPING DIMENSIONS						
PALLET # 1	76"x 54"x 86"	860 lbs. class 125				
PALLET # 2	76"x 34"x 86"	410 lbs. class 250				

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

#### MAX OPERATING CURRENT

3.3 AMPS @ 115 VAC / 1.9 AMPS @ 230VAC

UN-ASSEMBLED CABINET DIMENSIONS						
Front Cabinet	61" Wide x 28.5" Deep x 42" Tall					
Middle Cabinet	61" Wide x 60" Deep x 23" Tall					
Lower Rear Cabinet	61" Wide x 24.5" Deep x 77" Tall					

### **SAFETY PRECAUTIONS**



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.

#### A

#### 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.

#### A

#### 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.

#### A

#### 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.

#### 4



UNPLUG THE POWER CORD.

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

### **SECTION ASSEMBLY**





### Connect 4 Hoops HD Shipping Checklist Game Serial #



Bentembertiser (1997) 14

Large Pallet Parts List:  Large Pallet 76"x 54"x 86" 860 lbs. class 125  2 Side Cages Part 5 (Part # AAME15019)  Middle Cabinet Part B  Lower Rear Cabinet Part N	Middle Cabinet  B
Cardboard Box # 2 (76 1/2" by 30" by 9 1/2")  (Box packed in this order:)  Right Side Front Upright Part H  Left Side Front Upright Part K  Top Front Part L  2 of Wood Corner Pieces Part J	
2 of Front Top Connector Plate Part 4 (Part # A5N Round Marquee Assembly Part P	ME15001)  4  P  CONNECTOR  P
Inspected By:	Inspected Date:



# **Connect 4 Hoops HD** Shipping Checklist Game Serial #



Sma	all Pallet Parts List:	
	Small Pallet 76"x 34"x 86" 410 lbs. class 250	Upper Rear Cabinet
П	Front Console Part M	0
$\overline{\Box}$	6 Game Balls (Part # A5BA15000)	Wood Platform
$\Box$	Service Manual	A
	Hardware Kit (Part # A5KIT-HOOPS/HD)	SAA
	AC Power Cord (Part # A5CORD5-A)	
	Game keys	Front
	Upper Rear Cabinet Part O	M overthe
	Wood Platform Part A	
	Cardboard Box # 1 (64" by 30" by 7") (Box packed in this order:)	
	Front Windshield (Part # WACA15014)	G
	3 of Game Roof Boards Part G	
Ш	Left Side of Middle Section Part E	
	Right Side of Middle Section Part F	E A F
	Wood Diverter Part C	D
	Wood Diverter Part D	C
	2 of Rear Connector Plates Part 1 (Part # A5ME15010)	
A5ME	2 of Middle Connector Plates Part 2 (Part # 15004)	1
	2 of Middle Connector Plates Part 3 (Part # A5ME15004)	
Ш		2
		3
In	spected By:	Inspected Date:

The game will arrive on 2 pallets with 2 cardboard boxes of parts. Please inspect the pallets for shipping damage and report immediately to the freight company if any damage found. There will be about 5 hours of assembly time needed.

#### Tools Needed:

1 step ladder (6 foot) 2 of 9/16" Wrenches 1" Crescent Wrench

3 people 7/16" Wrench

# 3 Phillips screwdriver bit # 2 Square head screwdriver bit

#### Important:

Portions of this game are heavy, bulky and large. Assembly requires 3 people to lift heavy components, and ladders that are tall and strong enough to position components to the top of the game.

The 6 Game Balls, Service Manual, Hardware Kit, and Power Cord are located in this area of the front console.

Game keys are also located in this area.



From the large pallet, unwrap and unbox the following parts:

Cardboard Box # 2 - set aside for later use.

2 sections of side cages - set aside for later use.

Middle cabinet - Remove the wood blocks holding this to the pallet.

Set middle cabinet aside for later use.

Lower rear cabinet - Remove the wood blocks holding this to the pallet. Position the lower rear cabinet in position upright about 6 feet away from the wall.



From the small pallet, unwrap and remove Cardboard Box # 1 - set aside for later use.

Using 3 people, remove the wood platform (Part A) from the shipping configuration by removing the 4 Phillips bolts. (2 on each side)

2 people should hold and support the wood as bolts are removed.

Remove the part A and set aside for later use.

The 6 Game Balls, Service Manual, Hardware Kit, and Power Cord are located in this area of the front console.

Game keys are also located in this area.

Using 3 people, remove the Upper rear Cabinet from the shipping configuration by removing the 8 Phillips bolts. (4 on each side)

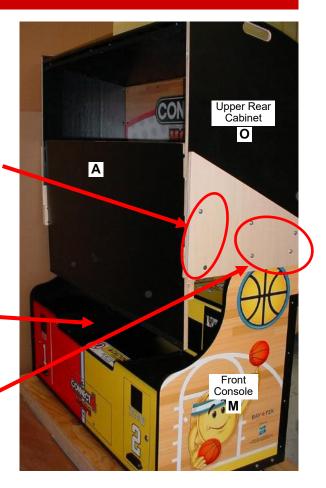
2 people should hold and support the wood as bolts are removed.

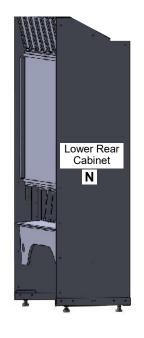
Set the Upper Rear Cabinet aside for later use.

The support wood should be removed from the Front Console. This support wood is not used in game assembly.

Remove the Front Console from the pallet by removing the wood blocks holding this to the pallet. Set aside for later use.

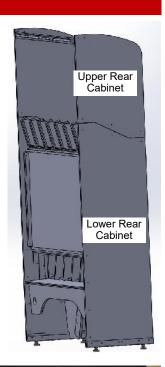
Using 2 people, position upper rear cabinet behind lower rear cabinet, which is in place, about 6 feet away from the wall.







Carefully lift upper rear cabinet up onto the top of the bottom rear cabinet. It will slide into position as shown.



Locate the 2 of metal rear connector plates. Part 1 from box # 1.

Install the plates on both sides of the cabinet with 12 of the black 1/4-20 X 1 Phillips head bolts using a # 3 Phillips Head bit. (6 per side)



A5BOPH312

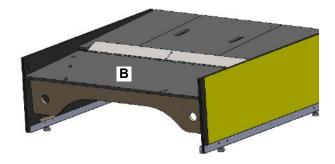
Locate the power cord from the front console and plug from the line filter in back of the game to the wall outlet.



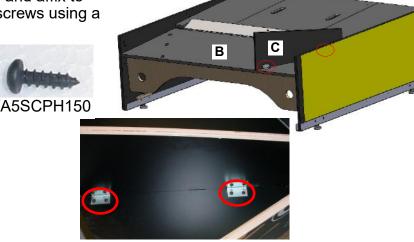


#### Assemble middle cabinet section:

Tip middle section down horizontal as shown:

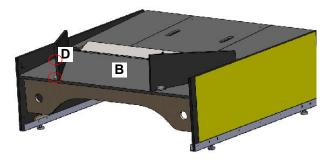


Locate part C (wood diverter) from box # 1 and affix to part B as shown with 4 of black 10 X 5/8" screws using a # 2 Square Head bit.



Similarly, locate part D (wood diverter) from box # 1 and affix to part B as shown with 4 of black 10 X 5/8" screws using a # 2 Square Head bit.



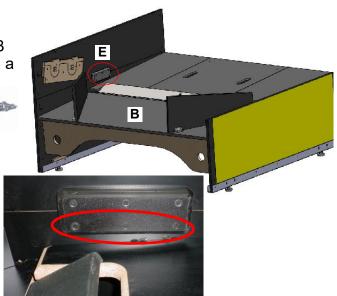


Locate part E (left side) from box # 1 and affix to part B as shown with 3 of black #8 X 1½" Bugle screws using a # 2 Square Head bit

A5WALO010

Ensure the front and rear edge of part E is aligned properly with the lower cabinet.

This will be carefully balanced until the other side and top plate is attached.



Similarly, locate part F (right side) from box # 1 and affix to part B as shown with 3 of black #8 X 1½" Bugle screws using a # 2 Square Head bit.



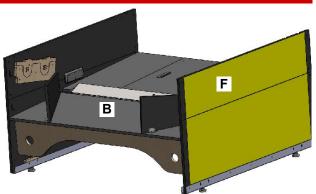
Make sure the front and rear edge of part F is aligned properly with the lower cabinet.

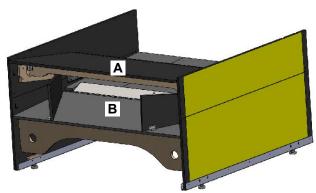
This will be carefully balanced until the top plate is attached.

Locate part A (wood platform removed from small pallet)

Affix to part B as shown with 4 of black #8 X 1½" Bugle screws using a # 2 Square Head bit. (2 per side)

A5SCFH040







Move the middle cabinet into position close to rear assembled cabinet. Snip plastic wire ties holding cables carefully to avoid cutting wires.

On the left side - uncoil the USB cable - push this through the middle cabinet section and through the front cabinet when the time comes and plug into the motherboard.

Plug both pink connectors (CE15011 to CE15012 and CE15015 to CE15016), HDMI connectors, and yellow connectors (CE15018 to CE15019) together.







On the right side, plug the orange connectors (CE15021 to CE15022) and power cords together.

Position the middle cabinet up tight against the rear cabinet.

Locate the 2 of the middle connector plates. Part 2 from box # 1.



Install the plates on the side of the cabinet with 16 of the black 1/4-20 X 1" Phillips head bolts using a # 3 Phillips Head bit. (8 per side) Install bolts loosely, until all are started.



Note: Use crescent wrench to raise the rear section if cabinet sections do not line up properly.

Tighten all 16 bolts.



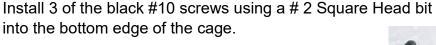
#### **Install Cages:**

Position a side cage part 5 (they are interchangeable) along the side of the cabinet with the longer bracket on top.

Using a 6 foot ladder, install 2 of the black \( \frac{1}{4} - 20 \text{ X 1" Phillips head bolts} \) using a # 3 Phillips Head bit on the top rear end of cage.







Repeat the process for the other side cage.





Move the front console into position close to rear assembled cabinet. Snip plastic wire ties holding cables carefully to avoid cutting wires.

On the left side, continue routing the USB cable into the front cabinet and plug into the motherboard.

Plug gold connectors (CE15016 to CE15017), HDMI connectors, and green connectors (CE15019 to CE15020) together.



On the right side, plug the white connectors (CE15022 to CE15023) and power cords together.



Position the front console up tight against the middle cabinet assembly.

Locate the 2 of the middle connector plates. Part 3 from box # 1.



Install the plates on the side of the cabinet with 16 of the black ¼-20 X 1" Phillips head bolts using a # 3 Phillips Head bit. (8 per side)

Install bolts loosely, until all are started.



3 BAY

Note: Use crescent wrench to raise the rear section if cabinet sections do not line up properly.

Tighten all 16 bolts.

#### Install 3 top roof boards:

Locate the 3 Game Roof Boards (Part G) from box # 1.

These can be brought inside the cabinet and positioned from the inside.

Place each on top of game in the cage channel. Ensure the T-nuts are facing upward. Align holes in wood with holes in metal cage.

Install 4 of the black ½-20 X 1" Phillips head bolts using a # 3 Phillips Head bit into each roof board. (2 in each side, 12 total)

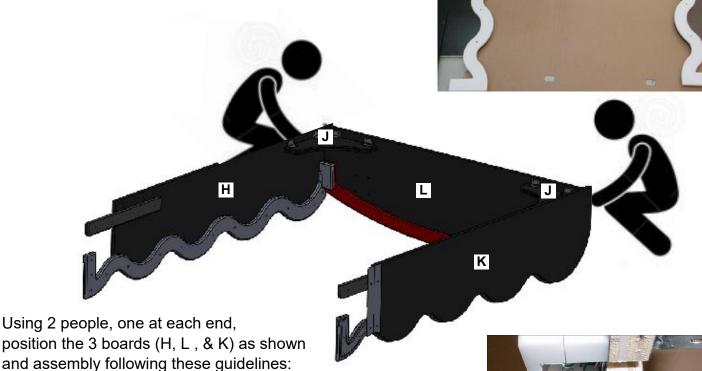




#### **Build Marquee:**

Locate parts H, K, L, and the 2 J's from box # 2. Lay out the boards on the floor as shown:

(The 2 J pieces are interchangeable.)



When assembling L to K - this left side has an extra power connector going to the top of the game:

Plug the 4 pin Molex connector together.

Route the extra power cable through the hole in the top panel L





Κ

A5SCPH150

Carefully stuff the wire light cables inside the gap of the white cover as the notches are lined up and wood is slid together.

This will provide the corner with a nice, clean finish.

Install corners (J) on assembly with 8 of black 10 X 5/8" screws using a # 2 Square Head bit.

The corners are interchangeable and have notches to help in positioning.

Install 2 more of black 10 X 5/8" screws into the bracket on other side of top wood piece using a # 2 Square Head bit.





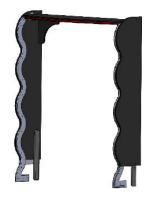
Repeat this process for the other corner using the other J piece.

Remove the circular marquee from Box # 2.

#### Install circular marquee:

Using 2 people, stand the assembly upright on the floor in front of the game.

Be sure the white plastic is facing out into the game room. Ensure the red artwork in on the left side.



#### Marquee Mounting Options:

The marquee can either be mounted under the rood of the cabinet, or on top.

If you have at least 9 inches of clearance above your game (total of 117"), the round marquee may be installed on top of the game. This is a matter of personal preference:





Optional mounting on top



#### Option A: Standard mounting under the roof



Remove the circular marquee from Box # 2.

#### Install circular marquee:

Using 2 people, stand the assembly upright on the floor in front of the game.

Be sure the white plastic is facing out into the game room. Ensure the red artwork in on the left side.

Using 3 people, lift the circular marguee up into position on top of the front section.

Push the power cable from marquee into the hole in top wood.

Secure marquee onto assembly using 8 of 1/4-20 X 1 1/2" Phillips head bolts using a # 3

Phillips Head bit into each support bracket.

(4 per side) Place a 1/4" split washer onto the bolt then insert into the metal support bracket.



A5WASI020

Place bracket up against the wood. bolt/split washer through holes.

push

Place a 1/4" flat washer and 1/4" nut on top of wood a and tighten using a 7/16" wrench.

Repeat process for other support bracket.









A5WAFL060

#### **Option B: Mounting on top of game**



The brackets will have to be flipped on the marquee. Remove the circular marguee from Box # 2. Lay on floor as shown.

On yellow side - Remove the 4 bolts using a Phillips screwdriver. Rotate the bracket 180 degrees and re-install, from this to this.

On red side - Remove the 4 bolts using a Phillips screwdriver.

Pull the cable from the center of the support, it will be moved to under the bracket, against the marguee.

Remove the support bracket.





Route wires in the channel so the wires do not get pinched. as shown. Rotate the bracket 180 degrees and re-install.

#### Install circular marquee:

Using 2 people, stand the assembly upright on the floor in front of the game.

Be sure the white plastic is facing out into the game room. Ensure the red artwork in on the left side.

Using 3 people, lift the circular marquee up into position on top of the front section.

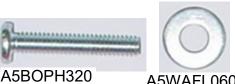
Secure marquee onto assembly using 8 of 1/4-20 X 1 1/2" Phillips head bolts using a # 3 Phillips Head bit into each support bracket. (4 per side)

Place a bolt with flat washer up into the wood, through metal bracket,

Secure with a 1/4" split washer and 1/4" nut bolt and

tighten using a 7/16" wrench.

Repeat process for other support bracket.









#### **Continuing Assembly with either option:**

Plug in the marquee power cable to the cable on the top left side of assembly.

There is also a coiled cable there that will be used later in the installation.



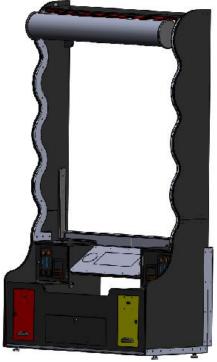
Using 3 people, carefully lift the marquee on top of the front cabinet.

The left side will have 2 cables that will feed down into the lower front cabinet.

The right side will have 1 cable that will feed down into the lower front cabinet.

As the marquee assembly is lifted up, feed these cables down into the holes on both left and right sides.





Locate the 2 of metal front connector plates. Part 4 from box # 2.

Install the plates on both sides of the cabinet with 8 of the black 1/4-20 X 1 Phillips head bolts using a # 3 Phillips Head bit. (4 per side)

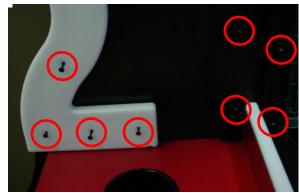




Install 16 of 1¼" black bugle screws using a # 2 Square Head bit to secure the white and black plastic to the lower cabinet on both sides.

(8 per side)





Using a 6 foot ladder, install 2 of the black ½-20 X 1 Phillips head bolts using a # 3 Phillips Head bit on the top front end of cage. This will secure the cage to the front marquee.

Repeat on other side.





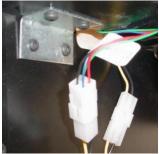
Locate the coiled cable in the front left roof of the cabinet.

Snip plastic wire ties holding cables carefully to avoid cutting wires.

Stretch this cable to the rear left corner of the game to plug into the rear lights cable part # AALB15044



Open the left red coin door and connect the 2 cables from marquee: 2 pin connector CE15005 to CE15006 4 pin connector CE15039 to CE15007



Open the right yellow coin door and connect the 1 cable from marquee: 4 pin connector CE15039 to CE15009



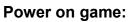
Locate the Clear Acrylic ball guard from box # 1. Remove the protective paper from both sides of the Acrylic plexi.

The flat edge bottom of the plexi will fit into the groove between the white plastic and wood lip.



Slide acrylic plexi down in between the black plastic pieces into this groove.

The plexi shield is held in place by gravity.



Open the front middle door, and ensure the USB cable from the rear controller board is plugged into any of the USB slots on the motherboard.

Turn on rocker switch on the power strip.





The game is now set up and ready for play!

Enter menu to adjust settings to your location specific price per play and ticket payout.

### **HOW TO PLAY**

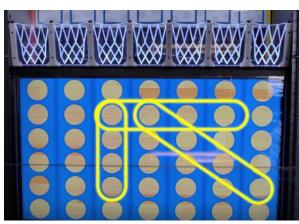
Choose a side and insert your credits; 6 balls will appear in the ball area. Wait for a partner to join, or shoot a ball to play solo!



Shoot when it is your turn.



Be the first to align 4 of your basketballs horizontally, vertically, or diagonally to win!



Collect your tickets once you Connect 4!



### **MAIN MENU FUNCTIONS**

The Menu and Menu Select buttons are located inside the center lower front door.

Hold the MENU button down for 1 second to open the main menu on the display.

Press MENU to scroll through the options, and MENU SELECT to change the settings.

Default settings are highlighted in yellow below.





MAIN MENU						
CLEAR CREDITS / TICKETS		3 times to clear any accumulated nd tickets.				
VOLUME & ATTRACT SETTINGS		Press the Menu Select button to enter the Volume & Attract Settings Menu				
GAME SETTINGS	Press the Menu Select button to	Press the Menu Select button to enter the Game Settings Menu				
PAYOUT SETTINGS	Press the Menu Select button to enter the Payout Settings Menu					
STATISTICS	Press the Menu Select button to enter the Statistics Menu					
DIAGNOSTICS	OFF	ON Set to "ON" and exit menu to enter Diagnostic Menu				
RESET FACTORY DEFAULTS	Press Menu Select button 3 times to Reset Factory Defaults					
MUTE	OFF Set to "ON" and exit menu entire game.					
EXIT MENU	Press the Menu Select button to exit menu.					

Software version is shown on the display as you enter the menu.

PC Version: 2.1.1 Aux Version: 2.6

Red Door: 1.5

Yellow Door: 1.5

If one shows "Not Found" then the circuit board is not communicating to motherboard.

Yellow Door: Not Found

### **VOLUME & ATTRACT SETTINGS**

Scroll through the options by pressing the "MENU" button.

Change selection with the "SELECT" button.

Scroll to "BACK" and press the "SELECT" button to go back to the main menu.

Default settings are highlighted in yellow below.



#### **GAME VOLUME**

Change selection with the "SELECT" Button. Default settings are highlighted in yellow below.

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

### **ATTRACT VOLUME**

Change selection with the "SELECT" Button. Default settings are highlighted in yellow below.

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 the volume is off.

### **ATTRACT TIMING**

Change selection with the "SELECT" Button. Default settings are highlighted in yellow below.

Sets the time in minutes between attract sound cycles.

### **GAME SETTINGS**

Scroll through the options by pressing the "MENU" button.

Change selection with the "SELECT" button.

Scroll to "BACK" and press the "SELECT" button to go back to the main menu.

Default settings are highlighted in yellow below.

#### **GAME SETTINGS**

Game Mode / Payment: Turn Timeout: Game Timeout: Full Column Shoot Again: Al Difficulty:

Normal/Tickets 10 120 Disabled Player Picks

BACK

### **GAME MODE / PAYMENT**

NORMAL / TICKETS NORMAL / POINTS NORMAL / COUPONS AMUSEMENT ONLY SHOW MODE

"NORMAL / TICKETS" means the game will pay out tickets, and show the word "TICKETS" on screen.

"NORMAL / POINTS" means the game will pay out tickets, and show the word "POINTS" on screen.

"NORMAL / COUPONS" means the game will pay out tickets, and show the word "COUPONS" on screen.

"AMUSEMENT ONLY" means the game will not pay out tickets.

"SHOW MODE" means the game will not pay out tickets and will only allow 1 credit at a time.

### **TURN TIMEOUT**

NO TIMEOUT	2	4	6	8	10	12		34	36	38
---------------	---	---	---	---	----	----	--	----	----	----

Sets the time in seconds that a player will forfeit their turn if a basket is not scored. "NO TIMEOUT" means the turn will end only with a basket scored.

### **GAME TIMEOUT**

NO	30	60	90	120	150	180		240	270	300
TIMEOUT	30	00	90	120	130	100	••••	240	210	300

Sets the time in seconds that the game will end if a basket is not scored. "NO TIMEOUT" means the game will never end until the game is completed by the player.

### **FULL COLUMN SHOOT AGAIN**

DISABLED ENABLED

"DISABLED" means the game will change to next player if a full column is scored. "ENABLED" means the game will allow the player to shoot again if a full column is scored.

### **AI DIFFICULTY**

PLAYER PICKS EASY MEDIUM HARD
-------------------------------

"PLAYER PICKS" means the player will pick computer difficulty (Either easy and hard) for 1 player game. Game will wait indefinitely for 2nd player to join.

Other options are hard coded with our estimate of computer difficulty for 1 player game. Game will wait 10 seconds for 2nd player to join before starting the 1 player game.

### **PAYOUT SETTINGS**

Scroll through the options by pressing the "MENU" button.

Change selection with the "SELECT" button.

Scroll to "BACK" and press the "SELECT" button to go back to the main menu.

Default settings are highlighted in yellow below.



_					_
	_		_	_	
		_			

_											
ĺ	0	1	2	3	4	5	6	7	8	9	10

Sets the amount of credit pulses needed to start a game. "0" will be free play.

### **SWIPE PROMPT**

DISABLED

**ENABLED** 

"ENABLED" will show "Swipe Card to Play" verbiage on the screen.

### **PAPER TICKETS RATIO 2:1**

**DISABLED** 

**ENABLED** 

"ENABLED" will pay out 1 physical ticket for every 2 tickets won.

### **WINNER TICKETS**

Sets the amount of tickets the winner will receive.

See payout table on next page for recommended settings for average tickets per game.

### **LOSER TICKETS**

Sets the amount of tickets a non-winner will receive.

See payout table on next page for recommended settings for average tickets per game.

### **FIXED TICKETS**

DISABLED ENABLED

"ENABLED" will pay out the same amount of tickets for every game.

### **TICKET PATTERNS**

WINNER TICKETS	LOSER TICKETS	AVERAGE TICKETS PER GAME	PRICE PER PLAY		
20	10	14-16	\$.50 PER PLAY		
50	20	34-36	\$1.00 PER PLAY		
100	20	48-52	\$1.50 PER PLAY		
110	30	68-72	\$2.00 PER PLAY		
140	40	88-92	\$2.50 PER PLAY		
160	50	100-110	\$3.00 PER PLAY		

These are estimates of Average Tickets per Game using the shown ticket values for game winner and game loser.

Change ticket values in the "Payout Settings" menu to change your individual payout percentages.

### **STATISTICS**

Scroll through the options by pressing the "MENU" button.

Change selection with the "SELECT" button.

Scroll to "BACK" and press the "SELECT" button to go back to the main menu.

Default settings are highlighted in yellow below.

# Total Red Games: 0 Total Yellow Games: 0 Total Red Tickets: 0 Total Yellow Tickets: 0 Reset Statistics: cleared BACK

#### **TOTAL RED GAMES**

Shows the total number of Red (left side) games played.

#### **TOTAL YELLOW GAMES**

Shows the total number of Yellow (right side) games played.

### **TOTAL RED TICKETS**

Shows the total number of Red (left side) tickets dispensed.

#### **TOTAL YELLOW TICKETS**

Shows the total number of Yellow (right side) tickets dispensed.

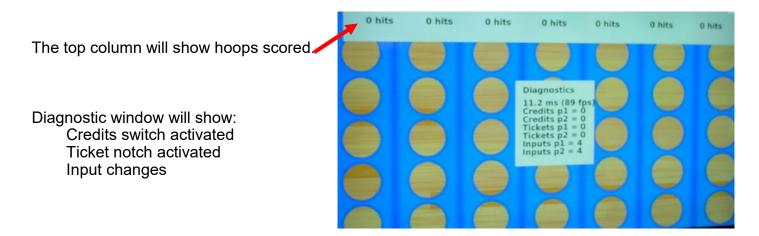
#### RESET STATISTICS

Press the "SELECT" button 3 times to reset statistics.

### **DIAGNOSTIC MENU**

The Diagnostic Menu can be entered by selecting ON in the Main Menu, and then exiting the menu.

The ball gate motor will cycle open, and this screen will appear:



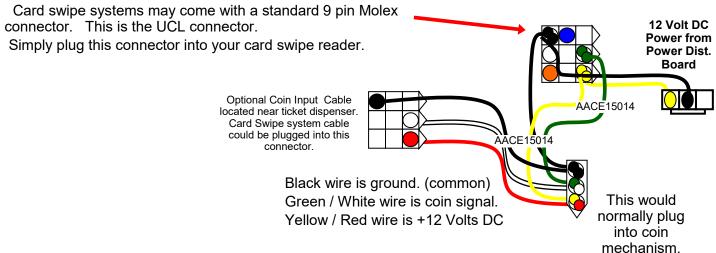
Press the Menu Button to exit diagnostics and return to the main menu.

### CARD SWIPE SYSTEM INSTALLATION

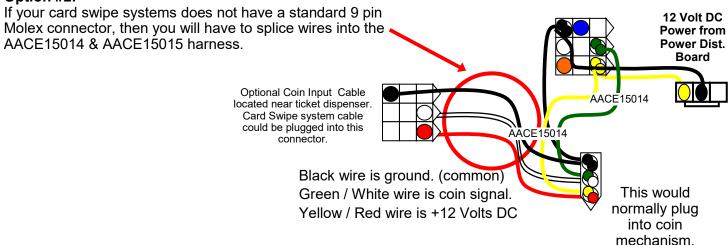
The Connect 4 Hoops game is pre-wired with a UCL (Universal Card Link) connector to accept Card Swipe systems from many different manufactures.

Please follow these instructions to make full use of this capability.

#### Option #1:



#### Option #2:



#### Notes:

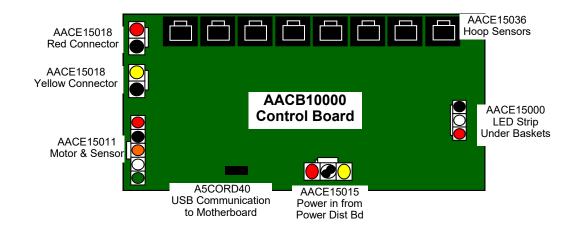
- 1.) Many card swipe systems have a voltage threshold that can be adjusted in the card swipe menu. Please set this "Game Drive Threshold" to 2 Volts.
- 2.) There are ticket dispenser extension cables located in the left side coin door if needed.

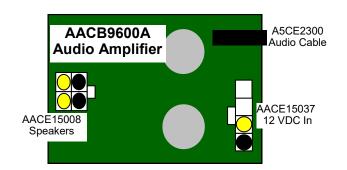
#### Menu Changes

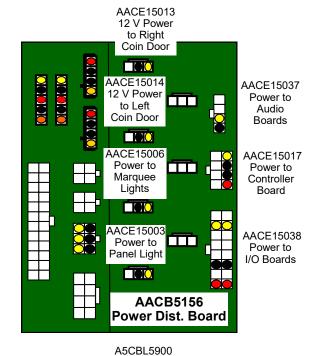
Enter menu, Go to "Game Settings" Menu Set "Game Mode/ Payment" to desired option

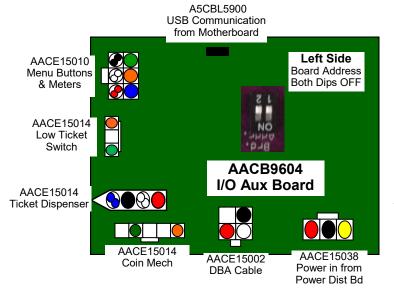
Go to "Payout Settings" Menu Change "Credits" to 1 Change "Swipe Prompt" to "Enabled"

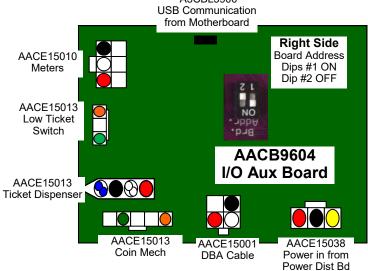
### **CIRCUIT BOARD LAYOUT**





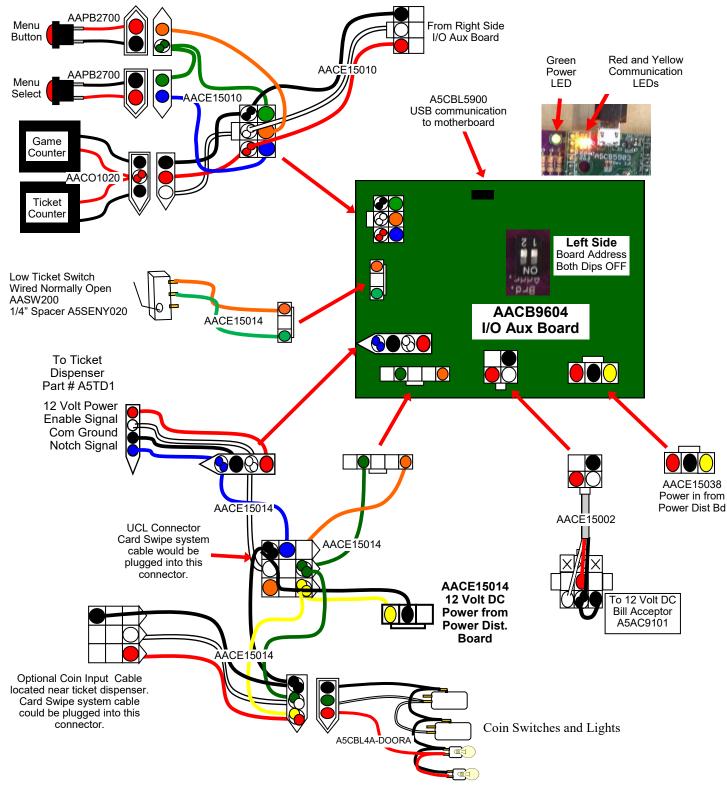






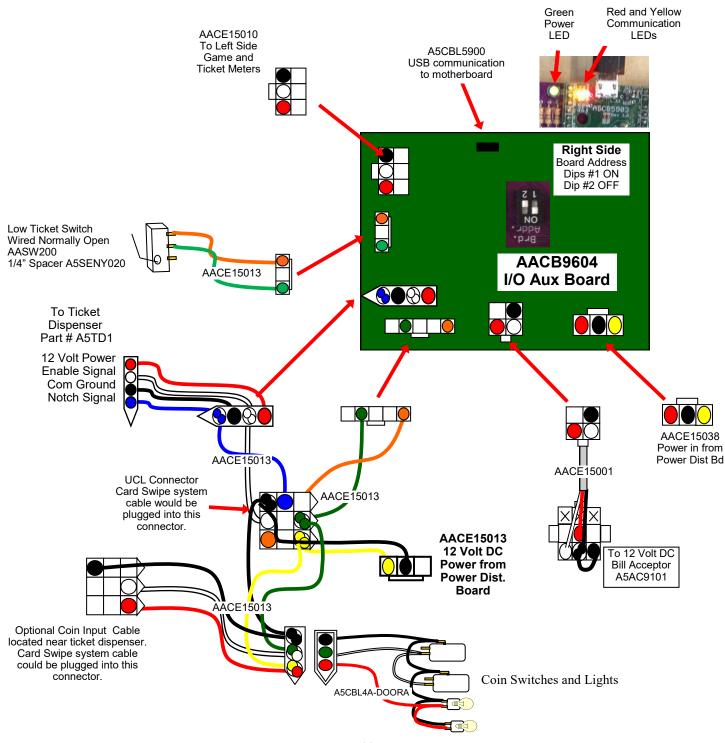
### **WIRING DIAGRAM**

### LEFT SIDE (RED) : TICKET DISPENSER, MENU BUTTONS, METERS, DBA AND COIN MECH

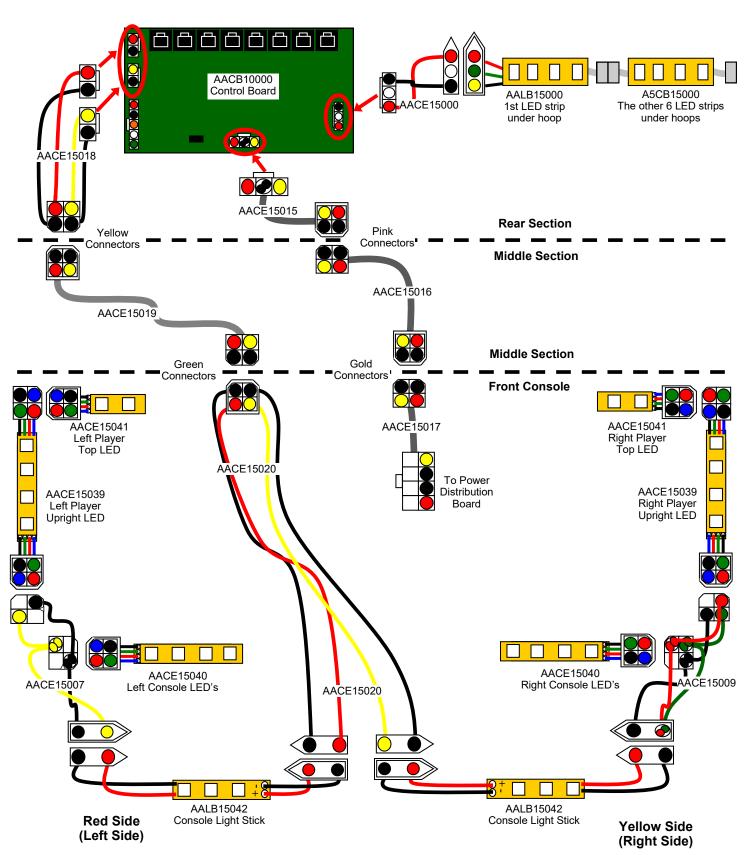


### **WIRING DIAGRAM**

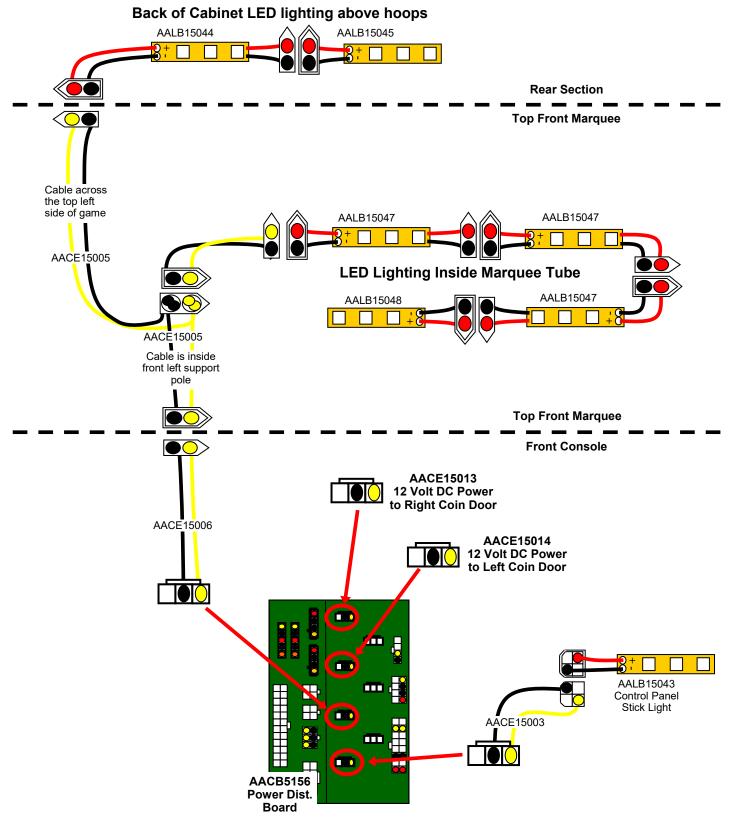
# RIGHT SIDE (YELLOW): TICKET DISPENSER, DBA AND COIN MECH



### LED LIGHTING WIRING DIAGRAM

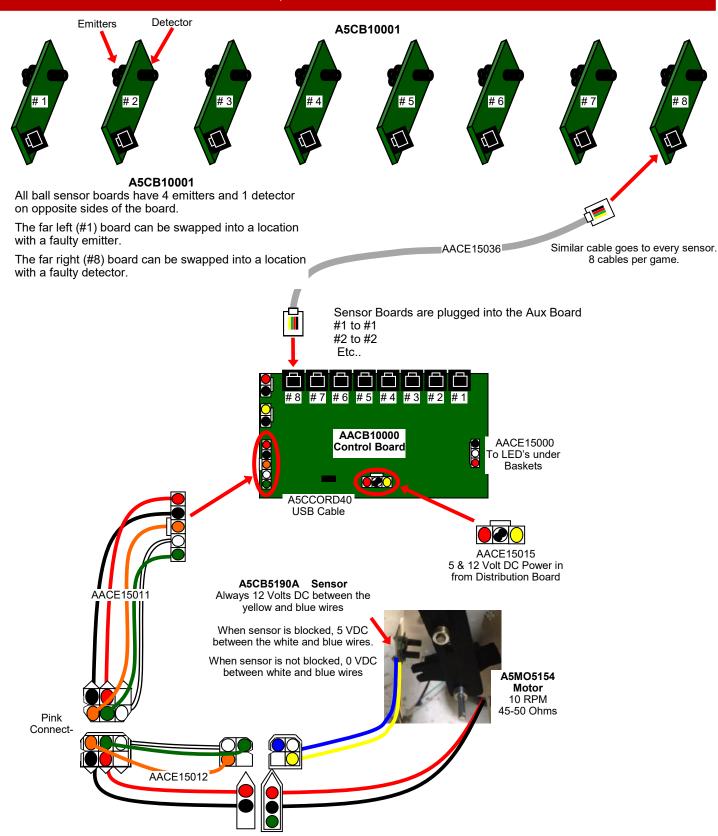


### **LED LIGHTING WIRING DIAGRAM**

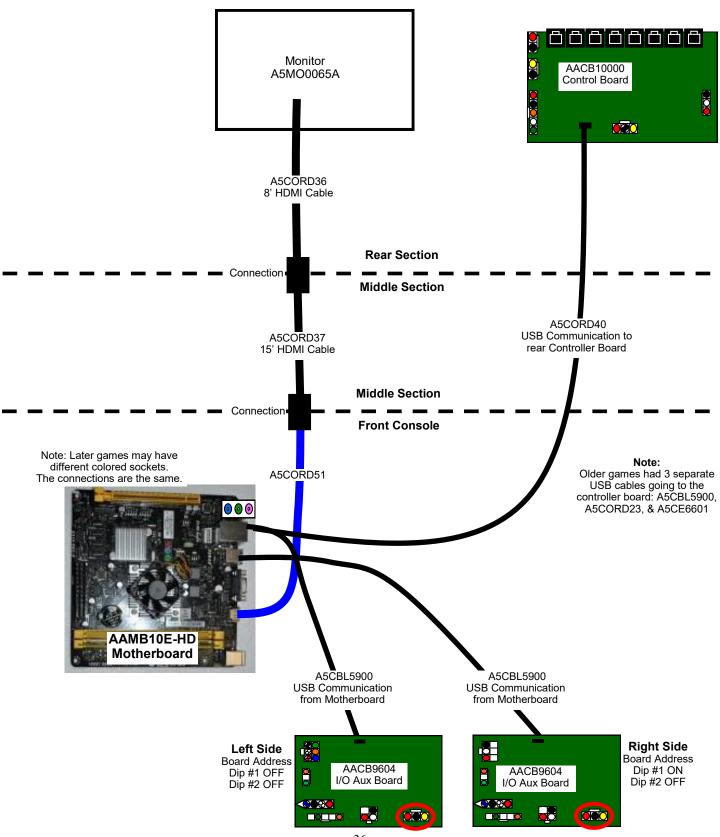


### **WIRING DIAGRAM**

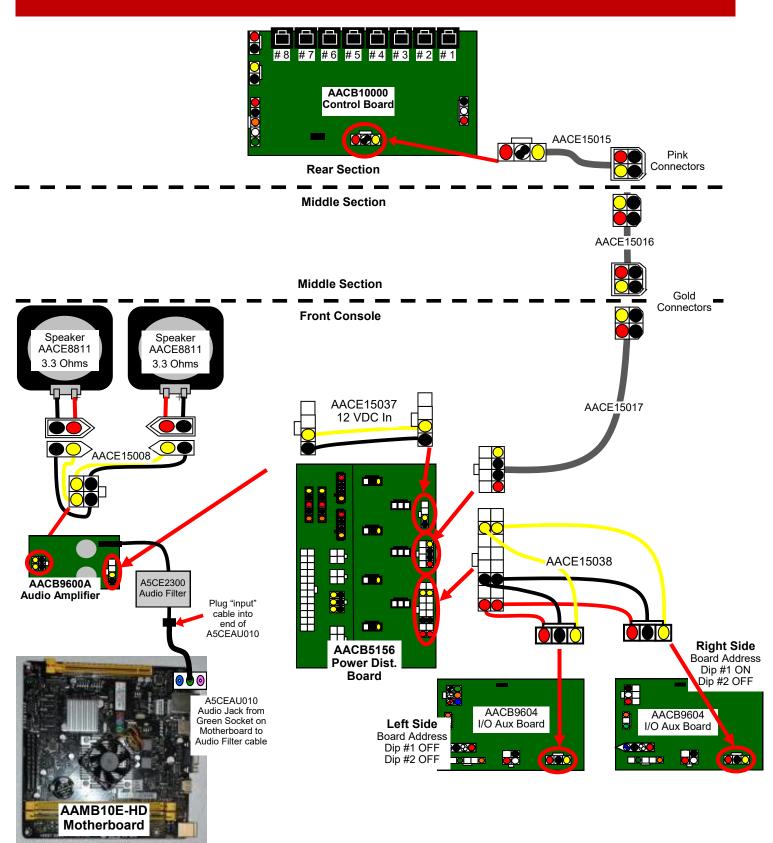
### **BALL GATE MOTOR, SENSOR AND HOOP SENSORS**



### **COMMUNICATION WIRING DIAGRAM**

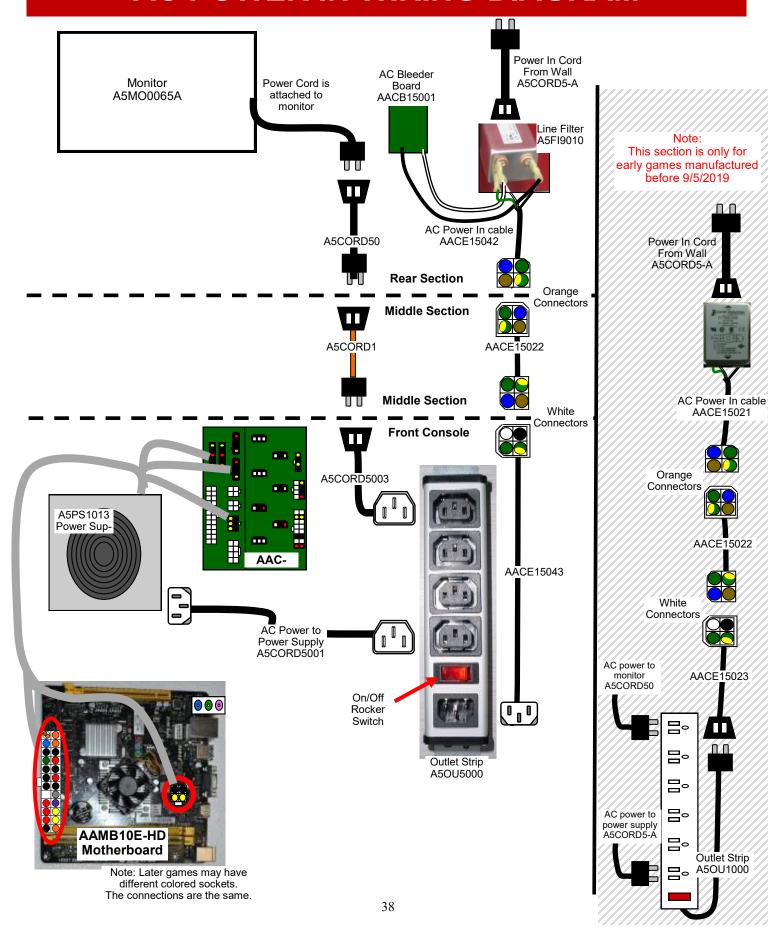


## 12 V POWER SUPPLY & SOUND WIRING DIAGRAM



Note: Later games may have different colored sockets. The connections are the same.

## **AC POWER IN WIRING DIAGRAM**



Troubleshooting Strategy
Use common sense and a systematic method of troubleshooting to determine the exact problem, probable cause and remedy. Use the process of elimination to find the faulty component. Always check for the simple and obvious causes first such as unplugged, loose or broken wires and bad sensors, bent, pinched, stuck or jammed components.

	Troubleshootin	g Chart
Problem	Probable Cause	Remedy
No novembre the same	Unplugged.	Check wall outlet.
No power to the game No lights on at all	Circuit breaker tripped.	Reset power strip breaker switch or building circuit breaker.
	Line Filter Faulty.	Replace Line Filter (Part # A5FI9010)
	Power strip faulty.	Change plug position, replace power strip if a section does not work. Part # A5OU5000
	Disconnected, loose or broken wires.	Refer to wiring diagram. Check connections and reseat cables from line filter to outlet strip. Cables # AACE15042, AACE15022, and AACE15043
Monitor is on	Power supply unplugged.	Insure power supply is plugged into power strip
But everything else off	Rocker Switch.	Make sure rocker switch is set ON.
(Power Supply not ON)	Power supply shutting down because of 12 V overload.	See power supply diagnostics to isolate bad component. A bad motor or 12 volt short would cause this.
	Faulty power supply.	See Power Supply Diagnostic below.
	Faulty Power Dist Board	Replace Power Distribution Board (AACB5156)
Dollar Bill Acceptor not functioning	Check for power to Bill Acceptor.	Acceptor should cycle stacker at game power up. If not, check cable connections.
Ensure Bill Acceptor is set to "Always Enable"	Dirt or debris in acceptor slot.	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.  Model # AE 2454 U5E	Pinched, broken, or disconnected wiring.	Check wiring from bill acceptor to I/O Aux Board. (AACE15001 & AACE15002) Repair or replace wiring harness. Make sure wires are secure in connectors.
Part # A5AC9101	Bill acceptor problem. Part # A5AC9101	Refer to troubleshooting section of dollar bill acceptor manual included with this game or the diagnostics label of the back of the unit.
Meters does not work Game meter will click at the end of	Ensure correct number of tickets are being dispensed	Check ticket values in menu. Refer to Tickets not dispensing troubleshooting section.
the game. Ticket meter will click as tickets come out of game and notch is "seen" by dispenser.	Disconnected, loose or broken wires.	Refer to wiring diagram. Check connections and reseat cables from meters to left I/O Aux Board Cables # AACE15010 and AACO1020
	Faulty counter.	Replace counter. AACO1020.

#### **Probable Cause Problem** Remedy Refer to "I/O Aux Board Issue" Game not coining up Look for communication and power on the I/O Aux Board diagnostic section. Enter Diagnostic Mode (Turn for that player. diagnostics on, then exit menu) to see if Credits Ensure game makes sound Check coin switches—both should be wired nor-Increment when coin is when coin switch is triggered. mally open. If one switch is "closed" the other will inserted. not work either. Check wiring to I/O Aux Board. (AACBL4A-DOORA, AACE15013 or AACE15014) Diagnostics 18.8 ms (53 fps) Credits p1 = 0 Credits p2 = 0 Tickets p1 = 0 Game set to large amount of Check Game Setup Menu. Ensure Credits is set to proper value. credits per game. Ensure only 5 volts on coin switch green and If Coin Input stays ON black wires. I/O Aux board may be faulty. Swap I/O Aux board with other player side, making sure to change dipswitch settings. (Left side both off, Right side dip 1 is on, 2 is off) Volume set to mute in menu or Enter Main Menu and verify: game volume/attract volume set to Game Volume & Attract Volume is not zero. Mute is set to OFF zero. Disconnected, loose or broken Refer to wiring diagram. Check connections No Sound wires. and reseat audio cable from motherboard to speakers. Cables # A5CEAU010, A5CE2300, Motherboard creates AACE15008, AACE8811 sound, the Audio Amplifier boards amplifies it. Unplug audio cable (A5CEAU010) from motherboard, plug into MP3 player or phone and see if music is amplified and comes out of Verify 12 Volts DC to Audio speaker. Amplifier Boards If Yes - then motherboard is faulty. If No - then cable or amplifier board is faulty Faulty speaker. Replace speaker. AACE8811 Green power LED should be If it is off, then check 12 & 5 Volts DC coming I/O Aux Board Issue flashing. into board on cable AACE15013 or One blink for left side, 2 blinks for AACE15014 from Power Distribution Board. One side of the game right side) If solid on, then it is not communicating with does not coin up, and the motherboard. Check A5CBL5900 USB has no other functions. cable. Swap cables with other side. If they are off, it is not communicating with the motherboard. Check A5CBL5900 USB cable. Red and Yellow LED's should be Swap cables with other side. flashing. Swap I/O Aux board with other player side, making sure to change dipswitch settings.

Faulty I/O Aux Board.

Green

Power

LFD

Red and

Yellow LEDs (Left side both off, Right side dip 1 is on, 2 is

off) Replace if needed. Part # AACB9604

Problem	Probable Cause	Remedy
LED white rear	LED's receive 12 Volts DC from power supply through	Check for proper connection from power supply to Power Distribution Board.
cabinet lighting above hoops not working	The Power Distribution Board.	Refer to wiring diagram. Check connections and reseat cables from Power Distribution Board to LED lights. Cables # AACE15006, AACE15005, AALB15044, and AALB15045.
	Faulty LED light.	Light strips are wired in series. Swap the 2 light strips to identify a faulty LED strip. Replace as needed. Part # AALB15044 or AALB15045
LED white front	LED's receive 12 Volts DC from power supply through	Check for proper connection from power supply to Power Distribution Board.
panel light not working	The Power Distribution Board.	Refer to wiring diagram. Check connections and reseat cable from Power Distribution Board to LED lights. Cables # AACE15003, and AALB15043
	Faulty LED light.	Replace Panel Stick Light. Part # AALB15043
Upper marquee	LED's receive 12 Volts DC from power supply through	Check for proper connection from power supply to Power Distribution Board.
LED's not working	The Power Distribution Board.	Refer to wiring diagram. Check connections and reseat cables from Power Distribution Board to LED lights. Cables # AACE15006, AACE15005, and AACE10045
	Faulty LED light.	Light strips are wired in series. Swap the 2 light strips to identify a faulty LED strip. Replace as needed. Part # AALB15047 or AALB15048
One of the left side, red colored LED strips	If all colored cabinet lights are not functioning, check power into the Control Board from the Power Distribution Board.	Refer to wiring diagram. Check connections and reseat cables from Power Distribution Board in the front of the cabinet to Control Board in the back. Cables # AACE15017, AACE15016, and AACE15015
not working  LED's receive 12  Volts DC from  Control Board in the rear of the	If single LED strip is out, check cable. LED's are wired in series. Refer to wiring diagram.	Check for 12 volts coming from Power Distribution Board in the rear of the cabinet on red and black wires. If no 12 volts DC, ensure 12 volts is coming into board on cable # AACE15018. If voltage is present - replace Control Board part # AACB10000
game.  Refer to "How to	Faulty LED	Refer to wiring diagram. Cables # AACE15018, AACE15019, AACE15020, AALB15042, AACE15007, AACE15040, AACE15039, and AACE15041
Access Rear Control Board"		Swap LED connector from one socket to the other to verify. Replace LED as needed.

Probler	n	Probable Cause	Remedy
One of the rig side, yellow colored LED strips not working LED's receive Volts DC from Control Board	12	If all colored cabinet lights are not functioning, check power into the Control Board from the Power Distribution Board.  If single LED strip is out, check cable. LED's are wired in series. Refer to wiring diagram.	Refer to wiring diagram. Check connections and reseat cables from Power Distribution Board in the front of the cabinet to Control Board in the back. Cables # AACE15017, AACE15016, and AACE15015  Check for 12 volts coming from Power Distribution Board in the rear of the cabinet on red and black wires. If no 12 volts DC, ensure 12 volts is coming into board on cable # AACE15018. If voltage is present - replace
the rear of the game.  Refer to "How Access Rear Control Board"	to	Faulty LED	Control Board part # AACB10000  Refer to wiring diagram. Cables # AACE15018, AACE15019, AACE15020, AALB15042, AACE15007, AACE15040, AACE15039, and AACE15041  Swap LED connector from one socket to the other to verify. Replace LED as needed.
LED color str under the hod are not working LED's receive voltage from Control Board in the rear of the game.	ops ng	Ensure Control Board is receiving voltage from Power Distribution Board.  Faulty LED	Refer to wiring diagram. Check connections and reseat cables from Power Distribution Board in the front of the cabinet to Control Board in the back. Cables # AACE15017, AACE15016, and AACE15015 Refer to wiring diagram. Cables # AACE15000, AALB15000 and A5CB15000
Menu Buttons not work.	s do	Swap connectors at the 2 buttons. Pinched, broken, or disconnected wiring I/O Aux board faulty.	Replace button if problem stays with button.(AAPB2700) Inspect crimp to ensure good connection. Check connections from menu buttons to left I/O Aux Board. Check cables (AAPB2700, AACE15010) Swap I/O Aux board with other player side, making sure to change dipswitch settings. (Left side both off, Right side dip 1 is on, 2 is off) Replace I/O Aux Board. Part # AACB9604
Low Tickets message on monitor	Tickets are empty in ticket tray  Faulty cable. Disconnected, loose or broken wires.  Faulty low ticket switch.  Faulty I/O Aux Board.		Load tickets into tray. Ensure tickets hold down micro switch wire.  Check connectors from low ticket switches to Newgen board. Check for continuity. (AACE10014 or AACE10015)  Inspect switch and replace if needed. (AASW200)  Swap I/O Aux board with other player side, making sure to change dipswitch settings. (Left side both off, Right side dip 1 is on, 2 is off) Replace I/O Aux Board.  Part # AACB9604

Proble	m F	Probable Cause	Remedy	
Tickets do not dispense		Opto Sensor on ticket dispenser dirty.	Blow dust from sensor and clean with isopropyl alcohol.	
or Wrong amount	Tickets on monitor does	Faulty ticket dispenser.	Replace with working dispenser to isolate the problem. (A5TD1)	
dispensed.	not match tickets coming	Notch on tickets cut too shallow.	. ,	
Check for the correct amount of	out of game.	Faulty cable. Disconnections or broken wires.	Cted, Check connectors from ticket dispensers to I/O Aux board. Check for continuity. Cables AACE15013 or AACE15014	
tickets showing on Monitor		Faulty I/O Aux Board.	Swap I/O Aux board with other player side, making sure to change dipswitch settings. (Left side both off, Right side dip 1 is on, 2 is off) Replace I/O Aux Board. Part # AACB9604	
	Tickets on monitor does match tickets coming out of game.	Settings in Menu are incorrect.	Enter Menu and check certain areas: Game Mode / Payment to Normal/ Tickets Paper ticket ratio 2 to 1 Winner Tickets Loser Tickets - Note: A tie is a loser. Fixed tickets	
Monitor not working.	Screen shows "No Signal Input"  Note: Monitor must be plugged in for motherboard to boot up.	Monitor HDMI cable unplugged. There are 3 cables that are connected together - A5CORD36, A5CORD37, and A5CORD51 Faulty or loose RAM Large power connector unplugged on motherboard  Note: Later games may have different colored sockets. The connections are the same.  Small power connector unplugged on motherboard Faulty power supply - Refer to Power Supply diagnostic section Faulty motherboard - Replace faulty board. (AAMB10E-HD)		
down, wait 5 minutes and power up again.	Screen has nothing at all on power up.	Power cable unplugged from Monitor.  Turn on Monitor.  Faulty monitor.	Ensure power is plugged into back of monitor, down to power strip. There are multiple power cords. A5CORD5003, A5CORD1, and A5CORD50 Install batteries in remote control and try using remote control to power on monitor. Replace monitor. (A5MO0065A)	
	Error on screen at power up. Re-Boot game to see if problem still exists.	Display shows "Kernel panic – unable to mount root" Display stuck on "Biostar"	Faulty or loose RAM, faulty software, faulty motherboard  No SATA drive in motherboard. Check for power connector	

Proble	m	F	Probable Cause		Remedy	
	keeps running.		It signal return. blue w 5 volts		There should always be 12 volts on the yellow and blue wires.  5 volts on the white and blue wires when blocked and	
game power on Sensor not bein seen.			broken, or cted wiring	0 volts when not blocked.  Refer to wiring diagram. Check connections sensor to Control Board. Cables AACE15011 & AACE15012		
Sensor receives signals through t Control Board in of game.			ontrol Board. "How to Access Rear ard"	Ensure Control Board is receiving 12 volt power. Refeto wiring diagram. 12 Volts DC should be between yellow and black wires on cables AACE15017, AACE15016, and AACE15015  Replace Control Board if needed. # AACB10000		
Ball Gate Motor not working. Motor will cycle at game power on.	Motor powe the C Board game Refer Acces	or does urn at er on. receives r through ontrol d in rear of e. to "How to ss Rear ol Board"	Check for 12 volts DC at motor.  Faulty cable. Disconnected, loose or broken wires.		If the motor is receiving power, but not turning, replace the motor. A5MO5154  Check connectors from motor to Control Board. Check for continuity on cables AACE15012 & AACE15011 to Control Board.  Ensure Control Board is receiving 12 volt power. Refer to wiring diagram. 12 Volts DC should be between yellow and black wires on cables AACE15017, AACE15016, and AACE15015  Ensure Control Board is receiving USB communication. Refer to wiring diagram. Change USB cables A5CBL5900, A5CORD23, A5CE6601 OR use 1 piece A5CORD40  Replace Control Board if needed. # AACB10000	
	power does in co	Faulty Control Board.  Mechanical linkage/ space on, but issue.  Position Sensor is not working correctly.		spring	Check springs on each end of the ball gate. Replace if needed. Part # A5SREX050  Clean sensor. Refer to "Ball Gate Motor keeps running" Replace sensor if needed.AACB5190A	

Ball Gate does not go down all the way. Loosen the 2 bolts on the motor assembly, and slide bracket with slotted holes to adjust height of ball gate.



## **AAIMB1 MOTHERBOARD**

Newer Connect 4 Hoops HD games use the AAIMB1 motherboard.

There are a few differences from Baytek's other games' motherboards.

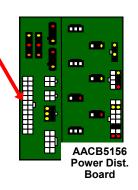
#### Difference #1:

The power in from the power supply connection is only a 4 pin plug.



Power In from Power Supply

The 24 pin connector from the power supply MUST be plugged into the power distribution board for the game to power up.



#### Difference # 2:

Jumpers on the motherboard need to be in these positions:



#### Difference #3:

The M.2 software drive (Part # AAHD0032-HOOPS/HD) location.



#### Difference # 4:

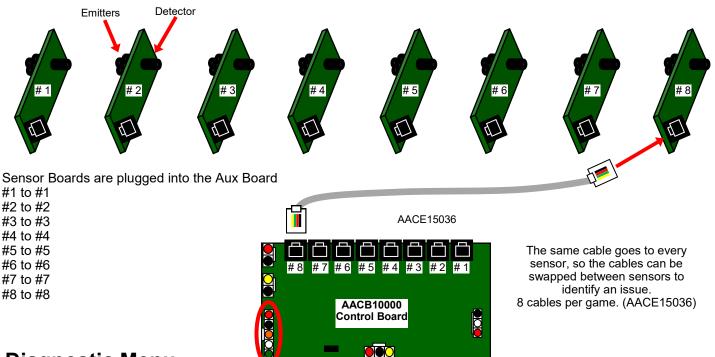
There are fewer jacks on the motherboard, but the sound jack still plugs into the green socket.



## **HOOPS NOT SCORING**

All ball sensor boards have 4 emitters and 1 detector on opposite sides of the board. These infrared sensors create a beam which the ball breaks to score a hoop.

Because these are interchangeable, the far left (#1) board can be swapped into a location with a faulty emitter. The far right (#8) board can be swapped into a location with a faulty detector.



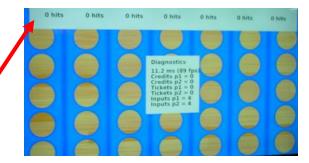
#### **Diagnostic Menu**

To Enter the Diagnostic Menu:

Enter Main Menu and scroll down to "Diagnostics:" turn to ON Exit Menu

The ball gate motor will cycle open, and this screen will appear:

The top column will show hoops scored.



#### **How to Access Sensors:**

The ball hoop sensors are accessed through the back of the cabinet, or through the middle platform access panel. If the game is up against the wall, carefully climb over the plexi shield (or remove the plexi) and enter the middle section of the game.

Remove the 4 screws (using a # 2 square bit) in the center bottom wood and lift center wood up and place aside.

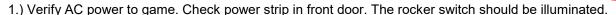
The sensors are located underneath and behind the monitor.

Remove the 2 of # 2 square bit screws and pull down the sensor.





### POWER SUPPLY DIAGNOSTICS



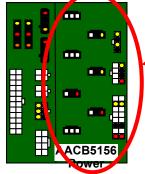


- 2.) Check connection to power supply.
- 3.) Ensure Power Supply switch is set to 115V (or 230V)

  (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 right 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. (A5PS1013)

- If power supply fan is not turning, then continue to "Verify Power to Motherboard"

### **Verify Power to Motherboard**

The motherboard will turn on power supply.

If your game has no 12 volts, it may be the motherboard not turning on.

Also - there may be a 12 volt short somewhere in cabinet that is not allowing the power supply to turn on.



#### AAMB10E

Make sure the 4 pin power connector is plugged in. (Black, Black, Yellow, Yellow)

As well as 24 pin power in connector.

Note: Later games may have different colored sockets. The connections are the same.

### Minimize load on power supply and isolate short

Unplug the power supply cables going to the Power Distribution Board.

This will leave the power supply, motherboard, and monitor left plugged in together.

If power supply, motherboard, and monitor now turn on:

Plug in the Power Distribution Board to power supply, but unplug all of the outputs from the board.

Turn on game and verify the 12 volts is good.

Then plug in one component at a time to power supply to locate short.

If power supply still does not power on:

Replace power supply (A5PS1013), or motherboard. (AAMB10E-HD)

### **BILL ACCEPTOR DIAGNOSTICS**

Note: 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. Standard 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 front 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





lways Enable

larness Enable

#### **ERROR CODES**

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



### I/O AUX BOARD PINOUT



### **HOW TO ACCESS BALL SENSORS**

The ball hoop sensors are accessed through the back of the cabinet, or through the middle platform access panel. If the game is up against the wall, carefully climb over the plexi shield (or remove the plexi) and enter the middle section of the game.

Remove the 4 screws (using a # 2 square bit) in the center bottom wood and lift center wood up and place aside.

The sensors are located underneath and behind the monitor.

Remove the 2 of # 2 square bit screws and pull down the sensor.



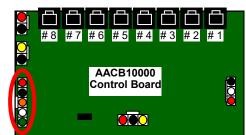


### HOW TO ACCESS REAR CONTROL BOARD

The control board is accessed through the back of the cabinet, or through the middle platform access panel. If the game is up against the wall, carefully climb over the plexi shield (or remove the plexi) and enter the middle section of the game.

Remove the 4 screws (using a # 2 square bit) in the center bottom wood (as pictured above) and lift center wood up and place aside.

The control board is located in the rear section underneath the cabinet.



### **HOW TO ACCESS BALL GATE MOTOR & SENSOR**

The ball gate motor and sensor are accessed through the back of the cabinet, or through the middle platform access panel. If the game is up against the wall, carefully climb over the plexi shield (or remove the plexi) and enter the middle section of the game.

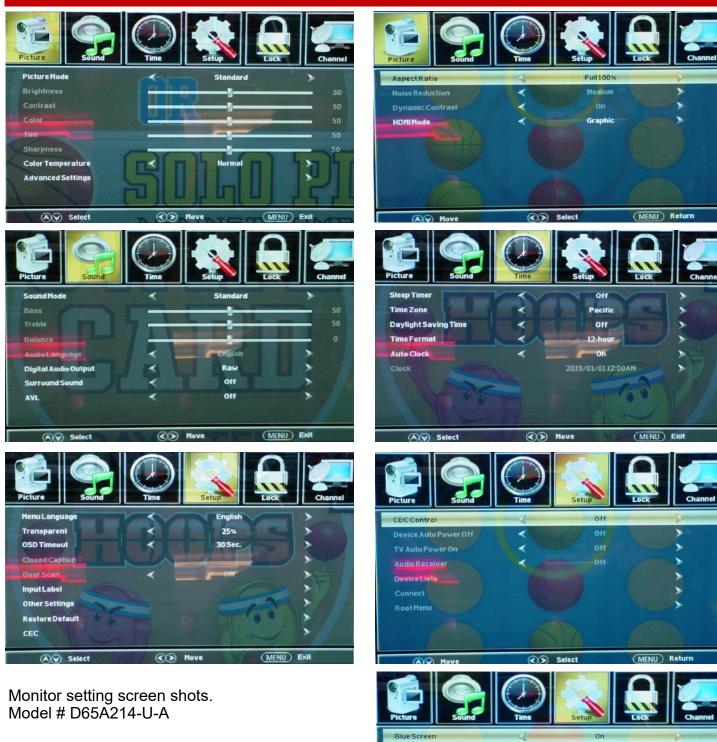
Remove the 4 screws (using a # 2 square bit) in the center bottom wood (as pictured above) and lift center wood up and place aside.

**Ball Gate does** not go down all the way.

Loosen the 2 bolts on the motor assembly, and slide bracket with slotted holes to adjust height of ball gate.



## **MONITOR DEFAULT SETTINGS**



The monitor is protected by tempered glass. The glass will be removed first, then the monitor.

Tools needed:

Phillips bit screwdriver

# 2 Square bit

7/16" Wrench

6mm Hex Bit

Remove the plexi shield from game and set aside. Climb into the middle section of the game.

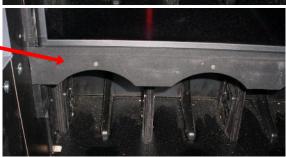
To remove the front tempered glass:
Remove the 6 Philips screws from top rail.
Remove the left and right sides by removing 4 of # 2 square bit screws on each side.

Carefully remove the tempered glass covering monitor. We recommend having one person inside the cabinet and hand the glass to a person standing outside the cabinet.

Remove the 6 screws in the lower black plastic piece using a Phillips bit.



Slide forward and out the bottom black plastic piece with the rounded design.



Remove the 2 bolts under the bottom edge of the monitor using a 7/16" wrench.

Remove the 6 screws on the top edge of the monitor using a Phillips screwdriver. Do not remove the foam attached to these metal pieces.

Note: The screws are installed at a 45 degree angle.



Remove the 2 Phillips screws on each upper left and right corner black plastic piece. This plastic piece can be thrown out as it will not be re-used.

Under the monitor, remove this piece of arched plastic by unscrewing it from the smaller support pieces it's sitting on top of. The attached wood and all hardware needs to be removed. Save the wood and hardware to reuse later.

The support pieces can also be removed from the cabinet as your new monitor has come with new pieces.

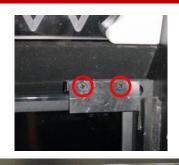
Lift up on monitor to unhook the wood attaching the monitor to the cabinet's back wall. Carefully set the monitor down to unhook cables.

Remove the cable clamp on HDMI cable on the left side of monitor using # 2 square bit. Disconnect the HDMI cord from the HDMI #1 socket.

Remove the cable clamp on the power cable on the right side of monitor using # 2 square bit. Unplug the power cord from the plug on right side of cabinet.

Carefully remove the monitor from the cabinet. We recommend having one person inside the cabinet and hand the monitor to a person standing outside the cabinet.

A wood piece will be attached to the back of the monitor as it is removed from the cabinet. This will be reused to mount the new monitor











Remove the new monitor from its box, carefully lay it face down on a flat surface and remove the plastic wrapper from the back.

Find the wood mount that was previously attached to the old monitor. Lay the H shaped wood sent with your new monitor on top of the mount with the threaded inserts facing upward as pictured. Line the threaded inserts up with he countersunk holes in the monitor mount.

Find 4 Hex Head bolts and 4 Flat washers and fit them together. Flip the wood pieces over and bolt the two pieces together from behind.

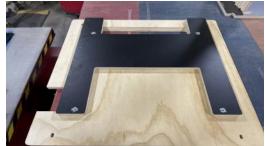
Using a 6mm hex bit, remove the metal bracket from the back of your new monitor.

This bracket will be used so do not throw it away.

Put the bolts that were removed with the bracket back in place on the back of the monitor. Do not tighten these bolts all the way down. Using a silver flat washer as a reference, leave a gap between the head of the bolt and the back of the monitor.

Find six black panhead screws and six black flat washers and put them together as pictured. Using these screws attach the bracket removed from the monitor and to the mounting assembly from earlier.









Fit the monitor mount assembly into the cabinet by by slotting together the angled cut of the main mount onto the angled wooden support left behind when the old monitor was removed.

Place 2 spring washes and 2 flat washers onto 2 hex head bolts. Use these to secure the mount into the cabinet via the holes at the bottom of the mount. Use a 7/16" socket to tighten.



Before putting the new monitor on the mount, plug the Power and HDMI cables into their respective ports. Make sure that the power switch is flipped to the "-" instead of "O" before mounting the monitor or it will not turn on.



Place the tv onto the mount by slotting the bolts on the back of the tv into the holes cut out of the metal bracket. Peel off the protective plastic from the front of the monitor at this point.



Clamp the cables down to the cabinet's back wall with the plastic clamps that were removed earlier.

I ocate the new support piece among the plastic materials.

Locate the new support piece among the plastic materials sent with the new monitor. There will be one for both sides of the cabinet. Install these now.



Locate the wood and hardware previously attached to the old arched plastic removed earlier. Fit the tabs of the wood into the new arched piece that came with the new monitor.



Flip the assembly over and secure the pieces together with the 2" black bugle screws used earlier.



Both sides of the plastic rail get a silver metal bracket in order to secure it to the supports installed earlier.



Slide the wood of the completed arched rail assembly into the grooves cut into the new supports. Secure the assembly in place by screwing a 3/4" bugle through the attached bracket and into the slotted support.



Put the metal brackets removed from the cabinet earlier back into place. With the shape of the new monitor, the plastic pieces that were in place with the old monitor will no longer be necessary.



Find the long rail previously attached to the arced plastic and attach it to the new assembly.



Locate these two rails.



Using the hole at the bottom of each rail, attach them to the cabinet on either side of the TV. Do not overtighten as you want the rails to be able to rotate outward to make it easier to slide the tempered glass into place. Slide the glass into place now.



Once the glass is in place, secure the rails to the cabinet by inserting bugles into the remaining holes.



Reattach the long rail previously secured to the metal brackets.



The installation of our new monitor is now complete. Turn on the game and ensure that everything operates normally.

55

## **HOW TO MOVE MARQUEE TO TOP OF GAME**

If you have at least 9 inches of clearance above your game, the round marquee may be installed on top of the game. This is a matter of personal preference:

#### Standard mounting under the roof



#### Optional mounting on top



#### Tools needed:

7/16" Wrench

Phillips Screwdriver

2 people

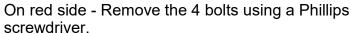
#### Instructions:

Using 2 people, carefully climb up into the cabinet and remove the 8 nut and bolts attaching the marquee to the game using a Phillips screwdriver and 7/16" wrench.

Unplug the 2 pin connector, and set on the floor.

On yellow side - Remove the 4 bolts using a Phillips screwdriver.

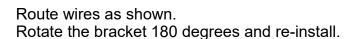
Rotate the bracket 180 degrees and re-install, from this to this.



Pull the cable from the center of the support, it will be moved to under the bracket, against the marquee.

Remove the support bracket.

If there is no channel to route wire, uses a spade drill bit to create a channel so the wires do not get pinched.







Using 2 people, carefully bring the marquee back up onto the top of the game and re-install the bolts, washers, and nuts. Make sure these are all tightened completely. Plug in the power connector. Installation is complete.

## **HOW TO INSTALL SOFTWARE**

#### **New Software Installation:**

The hard drive contains all the information about the game: Credits per play, ticket pattern, etc.

Be sure to check this information after finishing installing new software.

Turn off game by flipping the power switch on the power strip.

Locate hard drive on motherboard.

Press tab on far side of hard drive and gentle remove from motherboard.

Unplug power supply jumper connector and remove old hard drive from unit.

Install new hard drive by gently pushing straight onto motherboard until it "clicks". Turn the game back on by flipping the power switch on the power strip.

Note: The I/O boards will automatically be updated by the motherboard software.



It will require part AAHD0032-HOOPS/HD version 2.1.1 software

To replace the game software, this M.2 drive will need to be replaced on the motherboard.

#### Instructions:

Power down the game by unplugging it from the wall.

Carefully remove the small Phillips head screw holding down the M.2 drive. Set aside for later installation.

The M.2 drive will now slide out of it's socket and be removed from the motherboard. Install the new M.2 drive in the socket and secure it by re-installing the small Phillips screw.



Motherboard

Note: Later games may have different colored sockets.
The connections are the same.



### **BLANKING PLATES AVAILABLE**



A5PL4200 DBA Plate used for Upstacker Bill Acceptor



A5PL9998 Plate used instead of Coin Mechanisms



A5PL8900

Plate used for Bill Validator



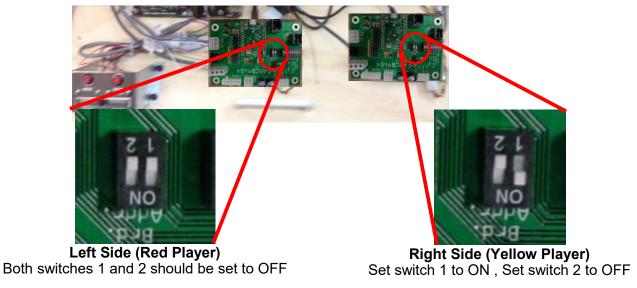
A5PL9995

Plate used instead of ticket dispenser

## **DIPSWITCH SETTINGS**

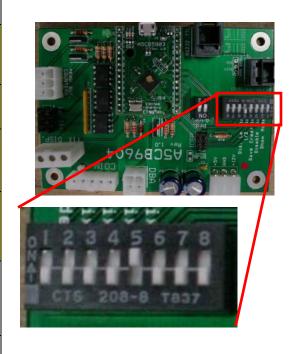
Dipswitches must be set correctly on the I/O Aux Boards or game will not know which is left or right player.

Turn off game by flipping the power switch on the power strip. Set dipswitches as shown:

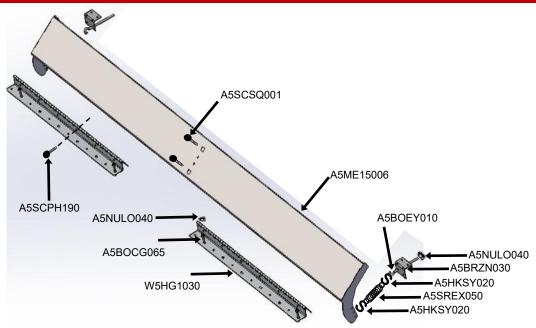


There are also a 8 dip bank of dipswitches on the I/O Aux Boards.

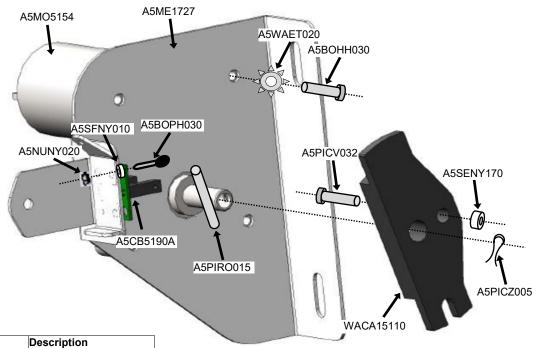
			•
SWITCH	DESCRIPTION	ON	OFF
1	SHOW GAME  Does not dispense tickets and clears all accumulated credits if ON		X
2	AMUSEMENT ONLY Does not dispense tickets if ON		Х
3	NJ LOCKOUT Saves tickets owed and unused credits after a power loss if ON		Х
4	1/2 TICKET PAYOUT Dispenses 1/2 the amount of tickets as shown on screen. It will round up odd amounts of tickets if ON		х
5	DISABLES LOW TICKET INPUT Disables the low ticket message on screen if ON. This option should be enabled when using a card swipe system	X	
6	NOT USED		
7	NOT USED		
8	NOT USED		



## **BALL GATE EXPLODED VIEW**

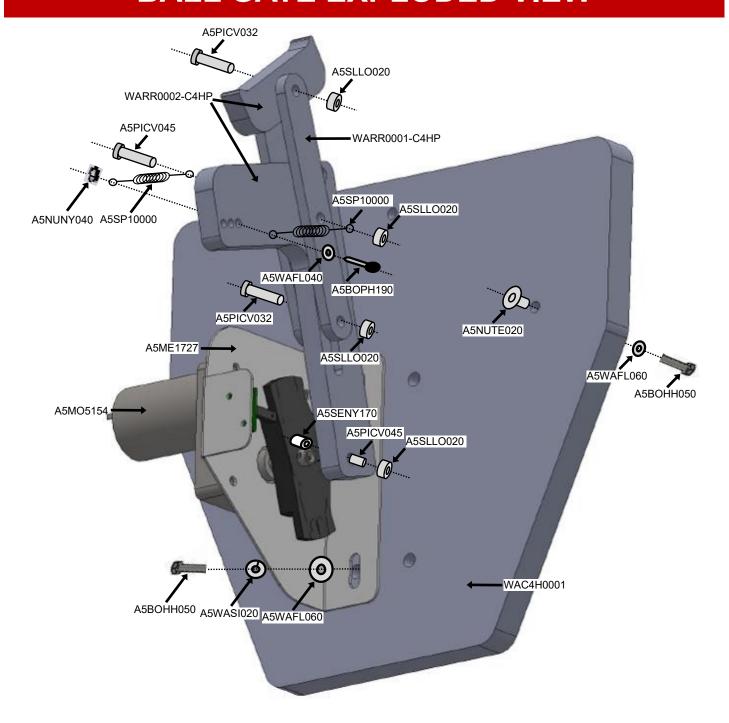


Part #	Description	A5HKSY020	S Hook	A5SCSQ001	#6 X 3/4" Screw
A5BOCG065	10-24 x 1 1/4" Bolt	A5ME15006	Ball Gate	A5SREX050	3/8" X 6" Spring
A5BOEY010	10-24 Eye Bolt	A5NULO040	10-24 Nut	W5HG1030	23" Hinge
A5BRZN030	1" X 1" X 2 " Bracket	A5SCPH190	10-24 X 1/2" Screw		



Part # A5BOHH030 10-32 X 3/4" Bolt A5MUNY010 Sticky Tab A5SENY170 1/4" X 1/4" Spacer 4-40 X 1/2" Bolt A5BOPH030 A5NUNY020 4-40 Nylon Hex Nut A5SFNY010 #4 X 1/4" Standoff 4" Wire Tie A5CB5190A Sensor A5PICV032 1/4 X 1 5/8" Clevis Pin A5TWNY010 A5ME1727 Motor Bracket A5PICZ005 3/32" X 1/2" Cotter Pin A5WAET020 #10 Tooth Lock Washer A5MO5154 A5PIRO015 3/16" X 1 1/4" Roll Pin WACA15110 Black HDPE 1/2" Thick Motor

# **BALL GATE EXPLODED VIEW**



Part #	Description	A5SENY170	1/4 " X 1/4" Nylon Spacer
A5BOHH050	25-20 x 1 1/4" Bolt	A5SLLO020	1/4" Bore Shaft Collar, 3/32" Allen
A5BOPH190	10-24 X 1 3/4" Bolt	A5SP10000	7/16" X 2 3/4" Spring
A5ME1727	Motor Bracket	A5WAFL040	#10 Zinc Flat Washer
A5MO5154	Motor	A5WAFL060	1/4" Flat Washer
A5NUNY040	8-32 Hex Nylon Nut	A5WASI020	1/4" Split Washer
A5NUTE020	1/4 -20 T Nut	WAC4H0001	Wood for Ball Gate
A5PICV032	1/4 X 1 5/8" Clevis Pin	WARR0001-C4HP	Black HDPE 1/4" Thick Arms
A5PICV045	1/4 X 2 3/8" Clevis Pin	WARR0002-C4HP	Black HDPE 1/2" Thick Pivots

# **PARTS LIST**

PART#	DESCRIPTION	PART#	DESCRIPTION
94639A207	Spacer, Nylon 1/4"Od,5/16"Lg,#4	A5DE15020	Decal, Left Red Shelf Decal
A5BA15000	Basketball W/Logo, Mini, Size 3	A5DE15014-1	Decal, Cab Side Left Bottom Panel
AABK1013	Bracket, Pushbutton/Counters	A5DE15014-2	Decal, Cab Side Left Top Panel
A5BK9999	Bracket, Power Supply Mounting	A5DE15021	Decal, Right Yellow Shelf Decal
A5CB2050	Coin Box, Black Plastic Cash Box	A5DE15015-1	Decal, Cab Side Right Bottom Panel
A5FI9010	Filter, F1700ca06, Inline	A5DE15015-2	Decal, Cab Side Right Top Panel
A5HA1200	Handle, Cash Box, White Plastic	A5DE15016	Decal, Front Cover, Plexi PETG
A5HO1003	Holder For Light Bars	A5DE15019	Decal, Marquee, Polycarb
A5KIT-HOOPSHD	Hardware Kit, C4 Hoops HD	A5DE10021	Decal, Caution, Ball Trough
A5LK2001	Lock, Cash Box, A05/E00 Key Code	A5ME10001	Metal, Top Lock Bracket
A5LK5002	Lock, 7/8", H95 Key Code	A5ME10008	Metal, Center Side Guard
A5LV10000	Levelers, C4 Hoops Cabinet	A5ME10016	Metal, Right Coin Guide
A5OU5000	Outlet Strip, Four Positions	A5ME10017	Metal, Left Coin Guide
A5PL4200	Plate, Upstacker Bill Acceptor Plate	A5ME10018	Metal, Cage Panel Bracket
A5PL8900	Plate, Bill Validator Blanking Plate	AAME15019	Metal, Side Cages
A5SLLO020	1/4" Bore, Shaft Collar 3/32" Allen	A5ME15000	Metal, Marquee Mount
A5SP10000	Spring, Extension, 7/16 X 2-3/4	A5ME15001	Metal, Top Front Cab. Connector Plate
A5SREX050	Spring,6",3/8"Od,.041"	A5ME15002	Metal, Front Side Rail
AASW200	Low Ticket Switch	A5ME15003	Metal, Front Rail
A5TG15000	Tempered Glass, 3/16" X 33.56" X 58.38"	A5ME15004	Metal, Side Cab. Connector
A5VF4604	Vacuum Form, Cup Holder	A5ME15005	Metal, New Tray Insert
AACO1020	Counter Assy	A5ME15006	Metal, Lift Gate
W5HG1025	Hinge,16",Double Bend	A5ME15007	Metal, Back Side Rail
W5HG1030	Hinge,23",Single Bend	A5ME15008	Metal, Window Rail Mount
W5HG1040	Hinge,8-3/8"Single Bend	A5ME15009	Metal, Light Bracket
W5HG1065	Hinge, 5-75, Single Bend	A5ME15010	Metal, Back Cab. Top Connector
W5KE5000	Keeper, Lock	A5ME15011	Metal, Top Rail
W5TM4000	T-Mold,7/8"Black	A5ME1727	Metal, Motor Bracket
A5DE15000	Decal, Speaker Panel, Polycarb	A5ME4179	Metal, Ticket Tray Bracket
A5DE15001	Decal, Backboard, Polycarb	A5CBL4A-DOOR	Cable, Double Coin Door
A5DE15002	Decal, Cabinet Front	A5CBL5900	Cable, USB, Male A To Male Micro
A5DE15003	Decal, Left Ticket Door Decal	A5CE2300	Cable, Audio Isolator
A5DE15004	Decal, Right Ticket Door Decal	A5CE6601	CABLE,USB,6',EXTENSION,Black
A5DE15005	Decal, Cash Box Door Decal	A5CEAU010	Cable, Audio Stereo,3.5mm
A5DE15006	Decal, Mech Door Left, Red	A5CORD1	Cord,Power,10'
A5DE15007	Decal, Mech Door Right, Yellow	A5CORD23	Cord,10' USB,A Male To A Female
A5DE15008	Decal, Left Red Platform With Caution	A5CORD36	Cord, 8' HDMI To HDMI
A5DE15009	Decal, Right Yellow Platform W Caution	A5CORD37	Cord, 15' Male To Female HDMI
A5DE15010	Decal, Cab Side Top Left	A5CORD50	Cord, Power, 3ft
A5DE15011	Decal, Cab Side Bottom Left	A5CORD51	Cord, HDMI, 6ft, Male To Female
A5DE15012	Decal, Cab Side Top Right	A5CORD5-A	Cord, Ac Computer Cord
A5DE15013	Decal, Cab Side Bottom Right	AALB15000	Cable Assy, 1st Hoop Addressable Board

# **PARTS LIST**

PART#	DESCRIPTION	PART#	DESCRIPTION
A5CB15000	Hoop Light Board, not 1st	AACE15037	Cable Assy,Cb9600 To Power Distribution
AACE15000	Cable Assy, Hoop Addressable Light Power	AACE15038	Cable Assy, Power Distribution To Boards
AACE15001	Cable Assy, Right Dba	AACE15039	Cable Assy, Side Rail Led
AACE15002	Cable Assy, Left Dba	AACE15040	Cable Assy, Player Panel Led
AACE15003	Cable Assy, Power To Panel Stick Light	AACE15041	Cable Assy, Top Player Led
AACE15005	Cable Assy, Top Light Pwr Side Jumper	AALB15042	Cable Assy, Small Panel Lights
AACE15006	Cable Assy, Top Light Pwr From Board	AALB15043	Cable Assy, Underside Panel Light
AACE15007	Cable Assy, Red Light Power From Panel	AALB15044	Cable Assy, Back Cabinet Stick Light
AACE15008	Cable Assy, Speakers	AALB15045	Cable Assy, Back Cabinet Stick Light
AACE15009	Cable Assy, Yellow Light Pwr Jmp From Panel	AACE1710	Cable, Door Ground Cable
AACE15010	Cable Assy, Menu/Counters	AACE1715	Cable, Door Ground Cable
AACE15011	Cable Assy, Lifter Sensor From Board	A5MO0065A	TV, 65" 4k Ultra HD
AACE15012	Cable Assy, Lifter Sensor To Sensor	A5MO5154	Motor, Ball Gate,10 Rpm
AACE15013	Cable Assy, Right Coin Door/Ticket Disp	A5PS1013	Power Supply, EVGA 500
AACE15014	Cable Assy, Left Coin Door/Ticket Disp	A5TD1	Ticket Dispenser, Entropy
AACE15015	Cable Assy, Back Door Board To Center	AACE8811	Cable Assy, Speaker
AACE15016	Cable Assy, Center Cable For Door Board Pwr	AAPB2700	Push Button Assembly
AACE15017	Cable Assy, Back Door Board Pwr From Front	A5CB10001	PCB, Hoop Sensor, 8 Per Game
AACE15018	Cable Assy, Panel Stick Light From Board	A5CB5190A	PCB, Sensor
AACE15019	Cable Assy, Center Panel Stick Light Pwr	AACB9600A	PCB, Audio Amplifier Board
AACE15020	Cable Assy, Center Split To Panel Lights	AACB10000	Board, PCB, C4 Hoops Controller
AACE15042	Cable Assy, Line Filter From Power Box	AACB5156	PCB, Power Dist. Board
AACE15022	Cable Assy, Line Filter Center Connection	AACB9604	Board, Door Interface Board
AACE15043	Cable Assy, Line Filter To Power Strip	AAMB10E-HD	Mother Board,Qc5000-Itx/Ph W/Hard Drive
AACE15024	Cable Assy, Power Supply Grd To Main Brd	WACA15014	Front Clear Plexi Ball Guard
AACE15025	Cable Assy, Right Coin Door Ground	WACA15090	Basket Hoop Etched Plexi
AACE15026	Cable Assy, Left Coin Door Ground	AACB15001	Bleed Resistor Board
AACE15027	Cable Assy, Left Ticket Dispenser Ground	A5CORD5001	Power Cord 2 feet
AACE15028	Cable Assy, Right Ticket Dispenser Ground	A5CORD5003	Power Cord, 6 feet
AACE15036	Cable Assy, Hoop Sensor		

# **PARTS PICTURES**

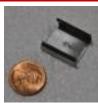














A5BA15000

**AABK1013** 

A5BK9999

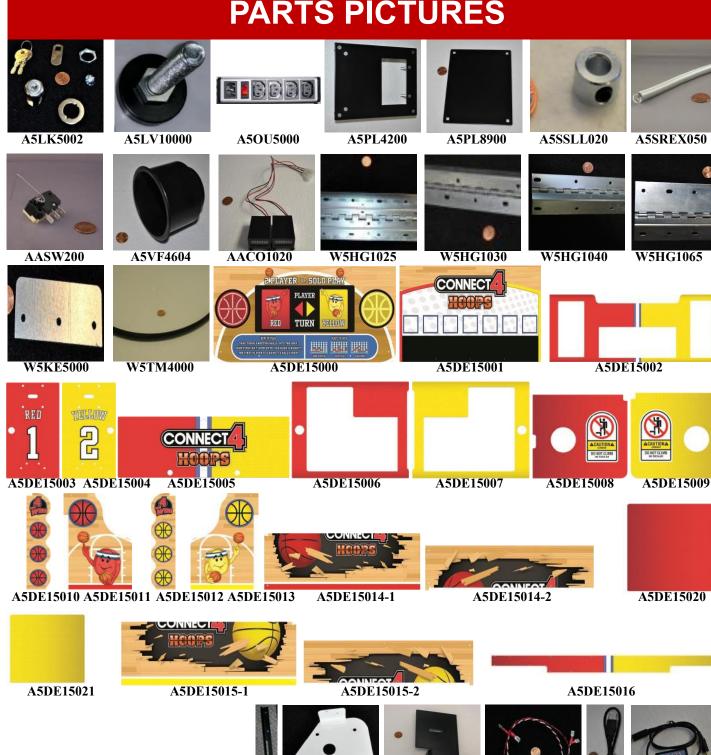
A5CB2050

A5FI9010

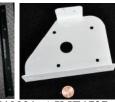
A5HO1003

A5LK2001

## **PARTS PICTURES**























A5CE6601









A5CORD5-A

## **PARTS PICTURES**



**AACB5156** 

## **ART DIAGRAM**



**DECAL DIAGRAM** 



## **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.

NOTES
66

### **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 12 months 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

## **CONNECT 4 HOOPS HD PARTS LIST**

4

#### **Parts List:**

**Large Pallet** 76"x 54"x 86" 860 lbs. class 125

2 Side Cages Part 5 (Part # AAME15019)

Middle Cabinet Part B

Lower Rear Cabinet Part N

Cardboard Box # 2 (76 1/2" by 30" by 9 1/2")

(Box packed in this order:)

Right Side Front Upright Part H

Left Side Front Upright Part K

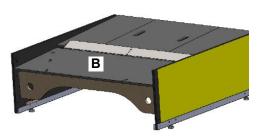
Top Front Part L

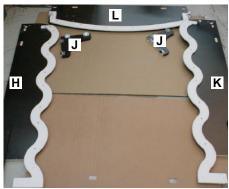
2 of Wood Corner Pieces Part J

2 of Front Top Connector Plate Part 4 (Part # A5ME15001)

Round Marquee Assembly

Part P





#### Small Pallet 76"x 34"x 86" 410 lbs. class 250

Front Console Part M

6 Game Balls (Part # A5BA15000)

Service Manual

Hardware Kit (Part # A5KIT-HOOPS/HD)

AC Power Cord (Part # A5CORD5-A)

Game keys

Upper Rear Cabinet Part O

Wood Platform Part A

Cardboard Box # 1 (64" by 30" by 7")

(Box packed in this order:)

Front Windshield (Part # WACA15014)

3 of Game Roof Boards Part G

Left Side of Middle Section Part E

Right Side of Middle Section Part F

Wood Diverter Part C

Wood Diverter Part D

2 of Rear Connector Plates Part 1 (Part # A5ME15010)

2 of Middle Connector Plates Part 2 (Part # A5ME15004)

2 of Middle Connector Plates Part 3 (Part # A5ME15004)

