Connect 4

★ BONUS ★ ROUND

WIN 500 BONUS TICKETS

UP TO 2 PLAYERS

Connect 4™

PLACE SERIAL NUMBER LABEL HERE

Licensed By:

Hasbro

BAY TEK
GAMES

passion in ★ fun out

TABLE OF CONTENTS

WELCOME TO: CONNECT 4!

Congratulations on your Connect 4™ purchase!

Everyone young and old loves the nostalgic gameplay of Connect 4™, and Bay Tek has brought the spirit of family fun to your game room with this larger-than-life version of Hasbro's classic game of vertical checkers.

With it's attractive presence, fun and competitive two-person game play, and the familiarity of the Hasbro brand, Connect 4™ is sure to be a big attraction!

Please take a moment to read through this manual and be sure to contact our factory if you have any questions, or would like some 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 Games

Licensed By:

GAME INSPECTION

Inspect the game for any damaged, loose, or missing parts.
If damage is found, please contact your freight carrier first.
Then, contact Bay Tek Games' Service Department at 920.822.3951
or e-mail them at service@baytekgames.com for further assistance.

GAME SPECIFICATIONS

WEIGHT	
NET WEIGHT	325 lbs.
SHIP WEIGHT	380 lbs.
DIMENSIONS	
WIDTH	44"
DEPTH	34"
HEIGHT	88"
OPERATING TEMPERATURE	
FAHRENHEIT	80-100
CELSIUS	26.7-37.8

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

MAX START UP CURRENT	OPERATING CURRENT
3 AMPS @ 115 VAC	2 AMPS @ 115 VAC
1.5 AMPS @ 230 VAC	1 AMP @ 230 VAC

SAFETY PRECAUTIONS

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

⚠ 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.

⚠ IN CASE OF EMERGENCY ⚠
UNPLUG THE POWER CORD.
The power cord must be accessible at all times in case of an emergency.

HOW TO PLAY

Pick a color and insert credits to play against the game or a friend.

Move your chip left and right at the top of the grid with the arrow buttons, and hit the big button to drop your chip before the time runs out!

Be the first to align 4 of your chips horizontally, vertically, or diagonally to win and enter the bonus round.
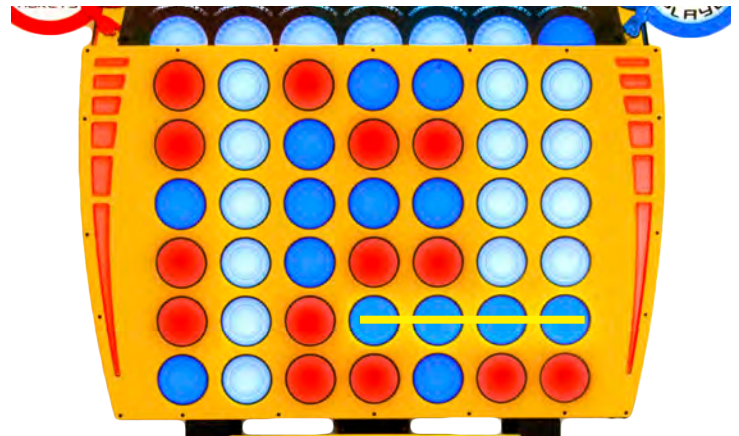
In the bonus round, win up to 500 tickets by hitting the stop button to stop the moving light on the target!

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QUICK SET UP (marquee installation)

Remove the back panel of the playfield (8 screws) and set aside.
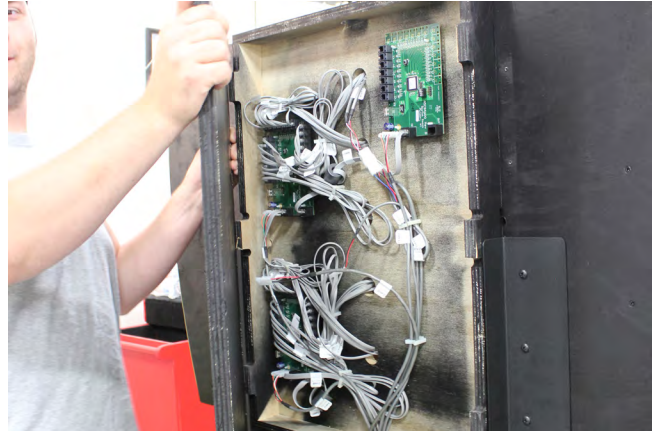
Lift the marquee into place and drop the cables down through the hole in the top of the playfield.

Align the marquee with the back edge of the playfield and secure the brackets with included black wood screws.
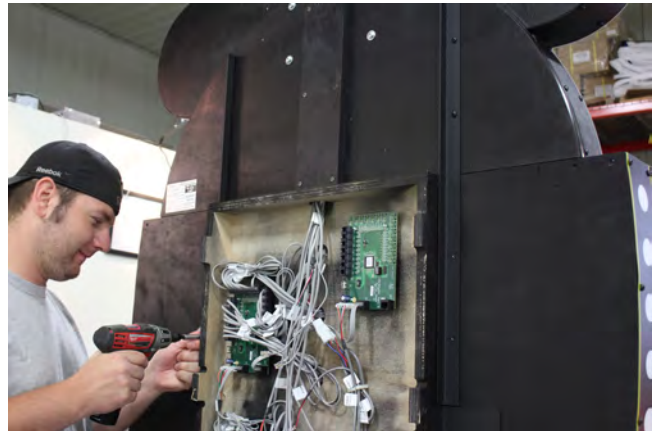
Plug phone cables 1-7 into the corresponding ports on the playfield control board, as well as the 2- and 3-pin housings shown.
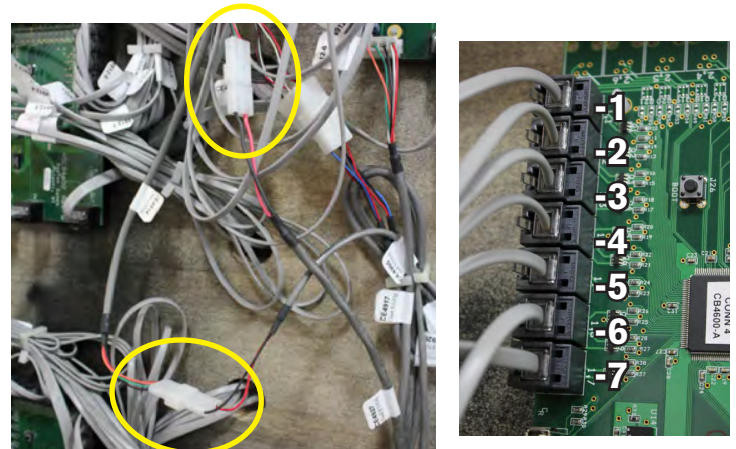
Replace the back panel, re-inserting the 8 screws removed earlier.

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QUICK SET UP

Place the game near its final location.

Plug the power cord into a standard 110V electrical outlet.

Wait for the game to boot up, then adjust settings accordingly if desired.

DIP SWITCH SETTINGS

The dip switch bank is located on the mainboard,
inside the center of the player console.

*factory default settings are highlighted below
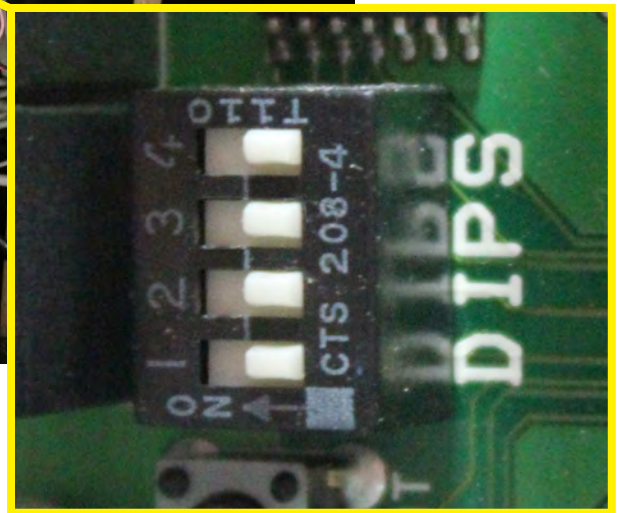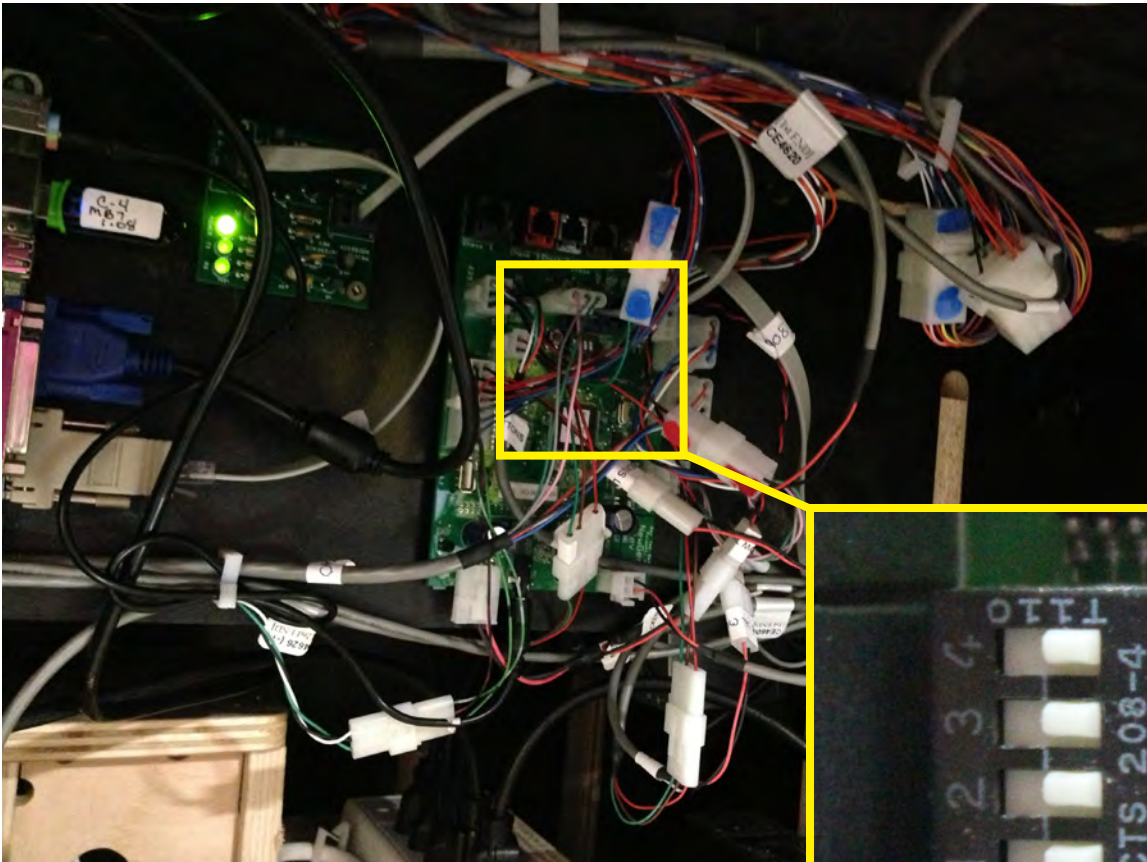
SWITCH	DESCRIPTION	ON	OFF
1	unused		
2	unused		
3	Jersey Shore (credit lockout/tickets owed)		
4	unused		

MAIN MENU FUNCTIONS

Press the MENU BUTTON, located inside the cabinet below the red player station, to enter the Main Menu.

Scroll through the menu with the MENU BUTTON, and make your selections with the MENU SELECT* button.
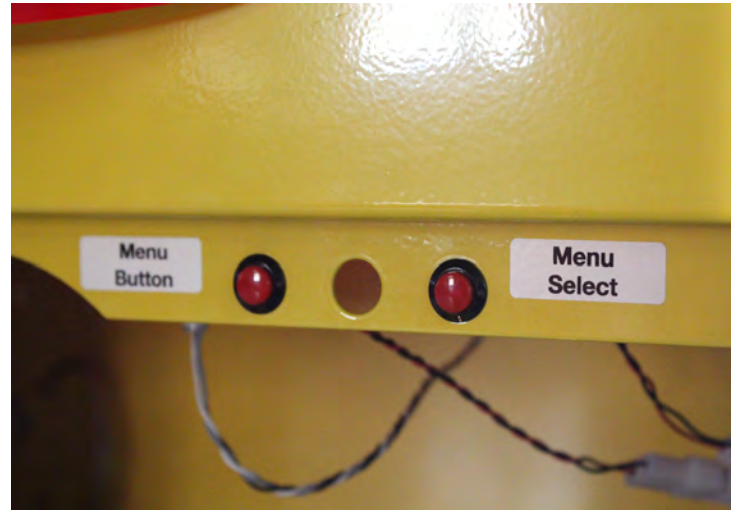
Connect 4 Main Menu
Game Setup
Statistics Menu
Diagnostic Menu
Exit Menu

PC SW Version = 1.00
Minigen SW Version = NONE

* to clear credits, press the Menu Select button while not in the menu.

GAME SETUP MENU

FACTORY DEFAULTS ARE HIGHLIGHTED IN YELLOW BELOW

Coins/Credits per Game	Number of credits per game, per player	0	1	1 (card swipe)	2	4	6	8
Time Per Turn	Seconds allowed per chip drop before auto-drop	6	8	10	12	20	30	60

Tickets (see page 31 for replacement ticket patterns)	Tickets awarded to winner/ loser/ draw	5/1/1 6-10 avg	10/5/5 10-14 avg	20/5/10 15-20 avg	30/10/15 22-26 avg	40/10/20 27-30 avg	50/10/20 31-35 avg	50/20/25 36-40 avg
		60/20/30 41-45 avg	80/30/40 55-60 avg	80/40/40 61-65 avg	100/40/50 70-75 avg		0/0/0 Entertainment only	

Jackpot Value	Tickets awarded for a bonus win (requires artwork change)	500						
Double Tickets	Pays out one physical ticket for every 2 tickets won	OFF				ON		
Use Coupons	Changes the wording on the monitors from "tickets" to "coupons"	OFF				ON		

CPU Difficulty	Changes game intelligence in one-player mode	1 (EASY)	2	3	4	5 (NORMAL)	6	7	8	9 (HARD)	AUTO-ADJUST
Game Volume	Volume of game while in play	0	1	2	3	4	5	6	7	8	9	10	11	12
Attract Volume	Volume of game while not in play	0	1	2	3	4	5	6	7	8	9	10	11	12

Bonus Type	Changes game play of bonus round	ONE HIT BONUS		BONUS DISABLED	
Bonus pattern	Lowest ticket value offered in bonus round	5		6	

GAME SETUP MENU- WASHINGTON STATE

FACTORY DEFAULTS ARE HIGHLIGHTED IN YELLOW

Coins/Credits per Game	Number of credits per game, per player	0	1	1 (card swipe)	2	4	6	8			
*Time Per Turn	Seconds allowed per chip drop before auto-drop	8		10		12		20			
Tickets	Tickets awarded to winner/ loser/ draw	5/1/1 6-10 avg	10/5/5 10-14 avg	20/5/10 15-20 avg	30/10/15 22-26 avg	40/10/20 27-30 avg	50/10/20 31-35 avg	50/20/25 36-40 avg			
		60/20/30 41-45 avg	80/30/40 55-60 avg	80/40/40 61-65 avg	100/40/50 70-75 avg		0/0/0 Entertainment only				
Jackpot Value	Tickets awarded for a bonus win (requires artwork change)	500									
Double Tickets	Pays out one physical ticket for every 2 tickets won	OFF					ON				
Use Coupons	Changes the wording on the monitors from "tickets" to "coupons"	OFF					ON				
*CPU Difficulty	Changes game intelligence in one-player mode	1 (EASY)	2	3	4	5 (NORMAL)	6	7	8	9 (HARD)	
Game Volume	Volume of game while in play	0	1	2	3	4	5	6	7	8	9	10	11	12
Attract Volume	Volume of game while not in play	0	1	2	3	4	5	6	7	8	9	10	11	12
Bonus Type	Changes game play of bonus round	ONE HIT BONUS				BONUS DISABLED						
Bonus Pattern	Lowest ticket value offered in bonus round	5				6						

* THESE OPTIONS REQUIRE A SOFTWARE VERSION CHANGE

STATISTICS MENU

Connect 4 Statistics Menu

Clear Statistics (Press 5 times)
Exit Menu

Total Games	0
Avg. Time Per Game	0
Total Red Games	0
Total Blue Games	0
Total Tickets	0
Avg. Tickets Per Game	0
Total CPU Games	0
Total CPU Wins	0
Total CPU Loses	0
Total CPU Draws	0
CPU Win Percent	0
Bonus Rnd Plays	0
Bonus Tickets	0
CPU Easy Total Games	0
CPU Easy Total Wins	0
CPU Normal Total Games	0
CPU Normal Total Wins	0
CPU Hard Total Games	0
CPU Hard Total Wins	0

Total Games	Displays how many games have been played
Average Time per Game	Displays how long the average game lasts
Total Red Games	Displays how many games were played on the red side
Total Blue Games	Displays how many games were played on the blue side
Total Tickets	Displays how many tickets the game has given out
Average Tickets per Game	Displays an average value of tickets dispensed per game (includes bonus tickets)
Total CPU Games	Displays how many single-player games have been played against the computer
Total CPU Wins	Displays how many times the computer beat the player
Total CPU Losses	Displays how many times the player beat the computer
Total CPU Draws	Displays how many times the player and the computer tied
CPU Win Percentage	Displays a percentage of CPU wins out of total single-player games
Bonus Round Plays	Displays how many times the bonus round was played, single- and two-player
Bonus Tickets	Displays the total number of tickets dispensed from the bonus round
CPU Easy Total Games*	Displays how many times the computer played as "easy"
CPU Easy Total Wins*	Displays how often the computer won against the player in "easy"
CPU Normal Total Games*	Displays how many times the computer played as "normal"
CPU Normal Total Wins*	Displays how often the computer won against the player in "normal"
CPU Hard Total Games*	Displays how many times the computer played as "hard"
CPU Hard Total Wins*	Displays how often the computer won against the player in "hard"

* When the game is set to auto-adjust, this will help you determine the skill-level of your clientele.
The largest number will occur in the skill-level most of your players fall into.

Press the "Menu Select" button 5 times to clear the statistics.
ALL statistics in this menu will be reset to 0.

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DIAGNOSTIC MENU

Connect 4 Diagnostics Menu
Change Playfield Color
Toggle Bonus Lights
Exit Menu

Left Arrow Red	OFF
Right Arrow Red	OFF
Select Red	OFF
Left Arrow Blue	OFF
Right Arrow Blue	OFF
Select Blue	OFF
Service 1	OFF
Service 2	OFF
Coin Red	OFF
Coin Blue	OFF
Low Tickets 1	OFF
Low Tickets 2	OFF

Change Playfield Color	Selecting this diagnostic will light up the playfield in solid red, blue, and white to test for dim or burned out LED circuit boards
Toggle Bonus Lights	Selecting this diagnosic will turn the bonus value lights on and off to test for dim or burned out LED circuit boards
Left Arrow Red	
Right Arrow Red	
Select Red (drop)	
Left Arrow Blue	
Right Arrow Blue	When any of these inputs are activated, it will show ON in the right column.
Select Blue (drop)	
Service 1	
Service 2	This is useful to determine if the inputs are fuctioning correctly.
Coin (mech) Red	
Coin (mech) Blue	
Low Ticket Switch 1 (Red)	
Low Ticket Switch 2 (Blue)	

MOTHERBOARD PINOUT

Chase Lights (J11,J12,J13,J14)
Pin 1 - Chase Output
Pin 2 - Chase Output
Pin 3 - +12V
Pin 4 - Chase Output
Pin 5 - Chase Output
Pin 6 - +12V
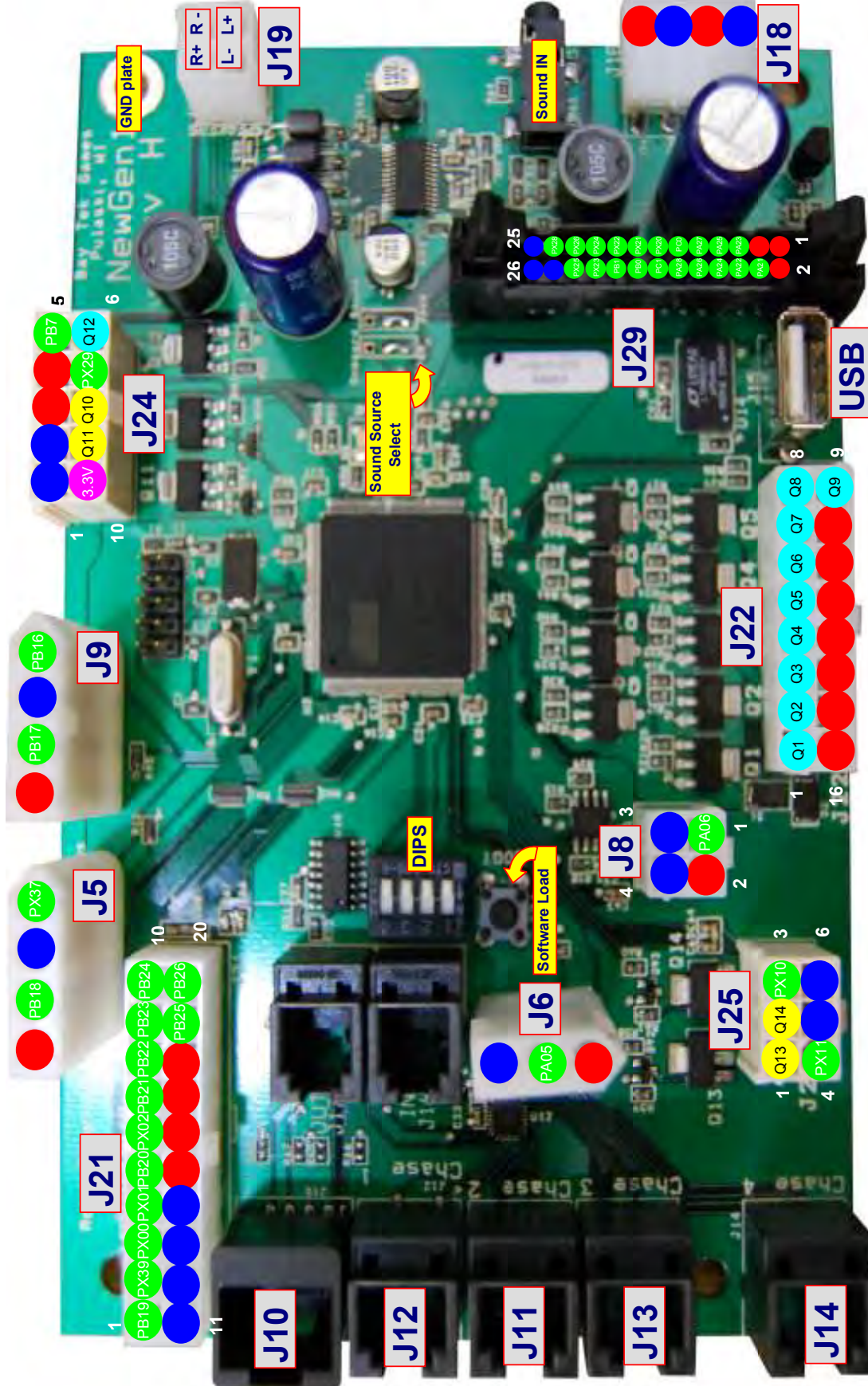
SPI Out - Display - (J10)
Pin 1 & Pin 3 - +12V
Pin 2 - SCLK_BUS2
Pin 4 - SMOSI_BUS2
Pin 5 & Pin 7 - Ground
Pin 6 - SCS2_BUS2
Pin 8 - SMISO_BUS2

J29
HEADER 26
+12

1
2
3
4 — PA21
5 — PA23
6 — PA22
7 — PA25
8 — PA24
9 — PA27
10 — PA26
11 — PC0
12 — PA28
13 — PX20
14 — PC1
15 — PX21
16 — PB0
17 — PX22
18 — PB1
19 — PX24
20 — PX23
21 — PX26
22 — PX25
23 — PX28
24
25
26

R+ R -   L- L+
J19
GND plate
Bay Tek Games Pulaski, WI
NewGen V H
Sound IN

J18

26 25   PX...   2 1
J29
USB

J24
PB7   Q12
PX29
Q10
Q11   Q10
3.3V   Q11
1   10

J9
PB16
PB17

J22
Q8   Q9
Q7
Q6
Q5
Q4
Q3
Q2
Q1
8   9

Sound Source Select

J5
PX37
PB18

J21
PB19 PX39 PX00 PX01 PB20 PX02 PB21 PB22 PB23 PB24 PB25 PB26
1   10   20   11

DIPS

J8
PA06
1
2   4   3

Software Load

J6
PA05

J25
PX10
Q14
Q13   PX11
1   3   4   6

J10   J12   J11   J13   J14
Chase   Chase 2   Chase 3   Chase 4

Ground
+12V
Low Side Driver
High Side Driver
TTL Logic
+3.3V

MOTHERBOARD PINOUT

Legend:
- = Low Side Driver
- = High Side Driver
- = TTL Input/Output
- = LED Constant Current Drive
- = 12 Volts
- = Ground

BayTek Connect 4 NEWGEN1 Hardware REV D Pinout - Version 1

Pin Type	Purpose	Ref	Pin #
LOWSIDE #1, w diode	Upper White Bonus Lights	J22	1
LOWSIDE #2, w diode	Red Player ButtonLamp Station #1	J22	2
LOWSIDE #3	Blue Player ButtonLamp Station #1	J22	3
LOWSIDE #4	Red Side_Lighting	J22	4
LOWSIDE #5	Blue_Side_Lighting	J22	5
LOWSIDE #6		J22	6
LOWSIDE #7		J22	7
LOWSIDE #8	Mechanical Counter #1	J22	8
LOWSIDE #9	Mechanical Counter #2	J22	9
+12 Volts		J22	11
+12 Volts		J22	12
+12 Volts		J22	13
+12 Volts		J22	14
+12 Volts		J22	15
+12 Volts		J22	16
+12 Volts		J22	17
+12 Volts		J22	18
+12 Volts		J22	19
+12 Volts		J22	20

Pin Type	Purpose	Ref	Pin #
HIGHSIDE #13	LED Glow Station #1	J25	1
HIGHSIDE #14	LED Glow Station #2	J25	2
PX10	Service Button #1	J25	3
PX11	Service Button #2	J25	4
Ground		J25	5
Ground		J25	6

Pin Type	Purpose	Ref	Pin #
+12 Volts	Coin Door Power Station #1	J6	1
PA05	Coin Input Station #1	J6	2
Ground	Coin Ground Station #1	J6	3

Pin Type	Purpose	Ref	Pin #
Ground		J24	1
Ground	Coin Ground Station #2	J24	2
+12 Volts		J24	3
+12 Volts	Coin Door Power Station #2	J24	4
PB7	Coin Input Station #2	J24	5
LOWSIDE #12	Lower White Bonus Lights	J24	6
PX29	DBA Input Station #2	J24	7
HIGHSIDE #10		J24	8
HIGHSIDE #11		J24	9
3.3V		J24	10

Pin Type	Purpose	Ref	Pin #
PX37	Ticket Notch #1	J5	1
Ground	Ground for Ticket Dispensor	J5	2
PB18	Ticket Motor #1	J5	3
+12 Volts	Power for Ticket Dispensor	J5	4

Pin Type	Purpose	Ref	Pin #
PB16	Ticket Notch #2	J9	1
Ground	Ground for Low Ticket Switch	J9	2
PB17	Ticket Motor #2	J9	3
+12 Volts	Power for Ticket Dispensor	J9	4

Pin Type	Purpose	Ref	Pin #
PA06	DBA Input Station #1	J8	1
+12 Volts		J8	2
Ground		J8	3
Ground		J8	4

MOTHERBOARD PINOUT

Connector	Pin	Signal
J12	1	Driver 1
J12	2	Driver 2
J12	3	+12 Volts
J12	4	Driver 3
J12	5	Driver 4
J12	6	+12 Volts

Connector	Pin	Signal
J11	1	Driver 5
J11	2	Driver 6
J11	3	+12 Volts
J11	4	Driver 7
J11	5	Driver 8
J11	6	+12 Volts

Connector	Pin	Signal
J13	1	Driver 9
J13	2	Driver 10
J13	3	+12 Volts
J13	4	Driver 11
J13	5	Driver 12
J13	6	+12 Volts

Connector	Pin	Signal
J14	1	Driver 13
J14	2	Driver 14
J14	3	+12 Volts
J14	4	Driver 15
J14	5	Driver 16
J14	6	+12 Volts

Connector	Pin	Signal	Label
J21	1	Arrow Left Button Station #1	PB19
J21	2	Arrow Right Button Station #1	PX39
J21	3	Select Button Station #1	PX00
J21	4	Arrow Left Button Station #2	PX01
J21	5	Arrow Right Button Station #2	PB20
J21	6	Select Button RIGHT Station #2	PX02
J21	7	Low Tickets Switches	PB21
J21	8		PB22
J21	9	Jersey LockOut Station #2	PB23
J21	10	Jersey LockOut Station #1	PB24
J21	11		Ground
J21	12		Ground
J21	13		Ground
J21	14		Ground
J21	15		+12 Volts
J21	16		+12 Volts
J21	17		+12 Volts
J21	18		+12 Volts
J21	19		PB25
J21	20		PB26

HOW TO: Replace Player Button Switches

Player Station Pushbuttons can be accessed from the player station front door—
reaching up underneath the player station.

The switches must be removed first before button can be removed and /or replaced.

Important: The switches do not pull straight off!
They must be given a slight twist, then removed—as follows:

Left and Right Buttons:

To Remove Switch:

Original Locked Position

Twist to Unlock

Un-Locked Position Ready to Remove

To Install Switch:

Un-Locked Position Insert Switch

Twist to Lock

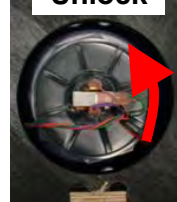**Final Locked Position**

Center Drop Button:

To Remove Switch:

Original Locked Position

Twist to Unlock

Un-Locked Position Ready to Remove

To Install Switch:

Un-Locked Position Insert Switch

Twist to Lock

Final Locked Position

HOW TO: Update Software

Needed for Software Updated:

1 USB stick with motherboard software

1 USB stick with minigen software

1- Minigen Software Load:

Game must be powered on for this procedure.

Open the front door of the cabinet and locate the minigen board.

Insert the USB stick marked G1 (for minigen) into the USB port.

Push the boot button located next to the dip switches.

The software will load quickly; the USB stick will flash and the game will reset, resuming normal function within a few seconds.
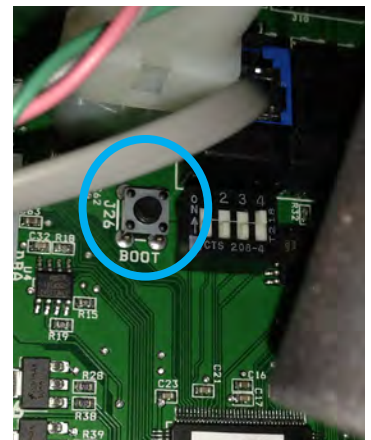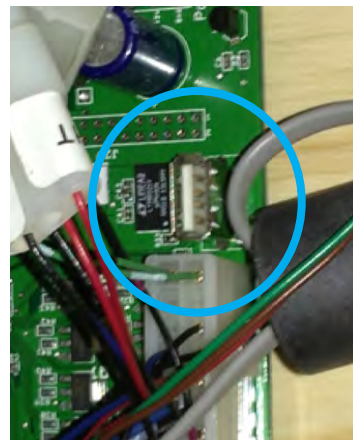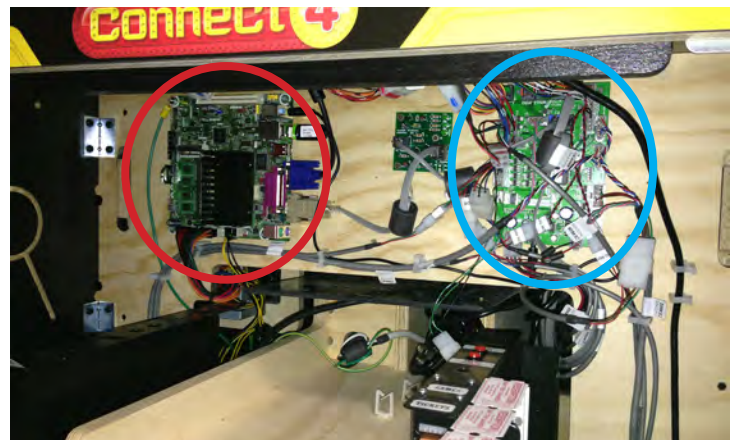
2- Motherboard Software Installation:

Power down your game and uplug it from the main power source before proceeding.

Locate the USB port on the motherboard and remove the old software stick.

Replace the stick with the new USB labeled PC.

Plug in the game and power it back on.

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DIAGNOSTICS: Motherboard Power Supply

Monitor not coming on?

1.) Verify AC power to front of game.
Check power strip in bottom front of game for light ON inside rocker switch.
 If light is not ON, remove back panel of cabinet and check AC power in and Power Strip in that location.

2.) Check AC power 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.
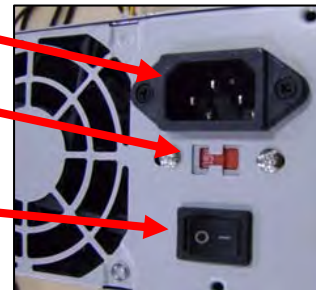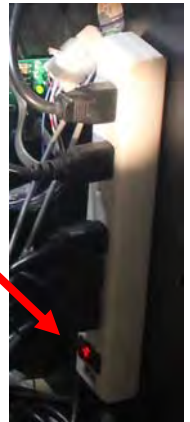
5.) Examine top left corner of motherboard. There is green LED ON.
        If LED is not ON, replace power supply. (AAPS4600)

6.) Check connections from power supply.
        Make sure these 2 connections are secure.

Large power supply connection

7.) **"Jump Start" Motherboard:**
If green LED is ON, but monitor is not ON, you may start motherboard by quickly touching these 2 red pins at the same time.

2 Black and 2 yellow wires
(12 Volts DC)

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DIAGNOSTICS: Dollar Bill Acceptor

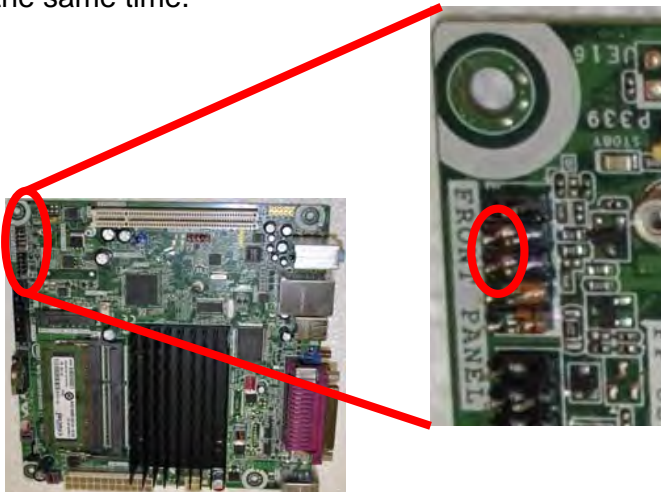**Note: There are many different models and brands of Bill Acceptors that are used on redemption games. Your Bill Acceptor may differ from the unit shown.**

First 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:
Due to the different models and brands of Bill Acceptors that are used:
Examine Bill Acceptor and determine if acceptor is 12 Volt DC or 110 VAC
Use meter to measure voltage at cable going into Bill Acceptor.

If power is OK:
Clean Bill Acceptor path to make sure there is nothing jamming unit.
Enter DBA Diagnostics Mode -

Important—Do not hold button down to long or Bill Acceptor will enter programming mode.
  If accidentally entered programming mode by mistake—Unplug game and plug back in.

        To enter Diagnostic Mode, press and hold the
  Diagnostic Button on the back left corner of the DBA for
                    1-3 seconds.
        The lights above the bill slot will flash the code.

ERROR CODES
 Count the number of flashes on front bezel of Bill Acceptor and follow chart for repair.
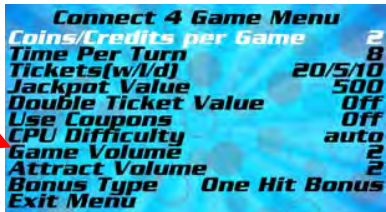
FLASHING CODE	DESCRIPTION	CORRECTIVE ACTION
LEDs off	Power off	Turn on power
LEDs on	Acceptor is OK	
1 flash	Bill path blockage	Un-jam bill path
2 flashes	Stacker jam	Un-jam stacker
3 flashes	Cassette is full of bills	Empty the cassette
4 flashes	Cassette is removed	Replace the cassette
5 flashes	Acceptor is defective	Replace the acceptor
6 flashes	Acceptor not enabled	See service manual
10 flashes	Configuration Mode	Power down to exit
Rapid flashing during operation	Stringing attempt detected; or sensors dirty	Clean the sensors

TROUBLESHOOTING GUIDE

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.

Symptom	Probable Cause	Remedy
No power to the game. No lights on at all. No light on front power strip.	Unplugged. Circuit breaker tripped. Power strip **in back of game** is faulty. Faulty cable/power supply.	Check wall outlet, power cord to back of game (A5CORD5) Line Filter (A5FI9010) Reset power strip breaker switch or building circuit breaker. Remove back wood panel, change plug position, replace if needed. Refer to AC Power to Game Section.
AC Light and Bill Acceptor on. But everything else off. (Power Supply not ON)	Power supply unplugged. Rocker Switch on power supply is Off. Power supply shutting down because of 12 V overload. Faulty power supply.	Insure unit is plugged into power strip. Make sure rocker switch is set ON. See power supply diagnostics to isolate bad component. A bad motor or 12 volt short would cause this. Refer to Monitor/Motherboard Power Supply Diagnostics section.
LED cabinet lighting not working.	LED's under player stations and on rear playfield should turn on with the associated power supplies.	Refer to "Back of Game LED Wiring" section and "Lights under Player Station Wiring" section.
No Audio	Volume too low. Loose wire. Faulty main Board Faulty motherboard	Increase the volume by pressing Menu button, scroll to "Game Volume" and adjust. Check audio cable connections from motherboard to main board to speakers. Check audio cable connections from speaker(AACE8811), cable(AACE4604), main circuit board(AANEWGEN1-PJ), cable(A5CEAU010), motherboard (AAMB7) Replace Main Board. (AANEWGEN1-PJ) Main board amplifies sound from motherboard. Replace Motherboard. (AAMB7) Motherboard creates sound. Cable can be removed from motherboard to MP3 player to test for sound amplification. If the MP3 player works, then motherboard is faulty.


```
Connect 4 Game Menu
Coins/Credits per Game         2
Time Per Turn                  8
Tickets(w/l/d)          20/5/10
Jackpot Value               500
Double Ticket Value         Off
Use Coupons                 Off
CPU Difficulty             auto
Game Volume                   2
Attract Volume                2
Bonus Type       One Hit Bonus
Exit Menu
```

TROUBLESHOOTING GUIDE

Symptom	Probable Cause	Remedy
Tickets do not dispense. Swap cable from one output on main board to the other to verify cable/ dispenser problem or main board problem.	Ticket tray empty due to faulty low ticket switch or broken/ loose wires. Switch stuck or switch wire bent out of position.	Fill ticket tray. Replace low ticket switch(AASW200). Repair wiring. Clean ticket tray of dirt, loose tickets or debris. Bend switch wire to correct position under tickets.
	Faulty cable to dispenser.	Check wiring continuity from dispenser to main board (AACE4606, AACE4605, AACE4600) Check for pinched, broken or disconnected wires. Replace as necessary.
	Dirty opto-sensor or paper dust buildup in ticket dispenser	Clean with compressed air and if necessary wipe sensor with isopropyl alcohol on a cotton swab.
	Notch on tickets too shallow.	Flip tickets and load upside-down to have large cut notch toward opto sensor.
	Ticket dispenser faulty.	Replace dispenser with spare working dispenser (A5TD1)
	Main circuit board malfunction.	Replace main board if possible to isolate the problem to the main circuit board. (AANEWGEN1-PJ)
Wrong number of tickets dispensed.	Ticket Pattern set wrong.	Enter menu and cycle to Game Menu. Verify correct settings for Ticket Patterns, Jackpot Value, and Double Ticket Value
	Dirty opto-sensor on ticket dispenser.	Clean with compressed air or wipe with isopropyl alcohol on a cotton swab.
	Many tickets in memory. If ticket meter is counting the tickets coming out, then reset game.	Turn game off, wait 10 seconds, and turn game back on.
	Notch on tickets cut too shallow.	Flip tickets and load upside-down to have large cut notch toward opto sensor.
	Faulty ticket dispenser.	Replace with spare working dispenser (A5TD1).
	Main circuit board malfunction.	Swap cable from one output on main board to the other to verify cable/dispenser problem or faulty main board. (AANEWGEN1-PJ)
Menu buttons do not work.	Stuck pushbutton.	Inspect pushbutton to make sure it is not stuck. Check continuity on connector.
	Cable problem.	Check cable from pushbutton to main board. (AAPB2700 & AACE4608)
	Faulty pushbutton.	Replace pushbutton. (AAPB2700)

TROUBLESHOOTING GUIDE

Symptom	Probable Cause	Remedy
Dollar Bill Acceptor not functioning. **Caution – 110 Volts AC** Cable can be moved between left and right sides to isolate problem to DBA.	Ensure bill acceptor has 110 Volts AC. Dirt or debris in acceptor slot. Ensure acceptor dipswitch is set to "always enable" Pinched, broken, or discon-nected wiring. Bill acceptor problem.	Acceptor should cycle stacker at game power up. If not, check cable connections to power strip. Clean with bill reader cleaning card(A5CC9000) There are dips on side of acceptor. Set to "always enable", not harness enable Check wiring from bill acceptor to main board. Repair or replace wiring harness. (AACE4626, AACE4627, AAACE4602) Refer to troubleshooting section of dollar bill acceptor manual included with this game or the diagnostics label of the back of the unit.
Monitor not working. Power down, wait 10 seconds and power up again.	Error on screen at power up. Display stops at "No bootable device - insert boot disk and press any key" Re-Boot game to see if problem still exists.	Flash drive unplugged from board or faulty. Re-seat and try power on to game again. Insert USB stick in different slot on motherboard Replace USB software stick. Replace motherboard. (AAMB7)
	Monitor says "NO SIGNAL" for 5 seconds after power-up. Then dark.	Refer to Monitor/Motherboard Power Supply Diagnostics Section
	Monitor has nothing at all on power up. Power cable unplugged from monitor. Faulty monitor.	Ensure power is plugged into back of monitor, down to power strip. Replace monitor. (A5MO2200)
Monitor does not come back up after a power loss	Voltage variation in power network	Turn off the power strip, wait 30 seconds, then turn power strip back on

TROUBLESHOOTING GUIDE

Symptom	Probable Cause	Remedy
Monitor problems	Blurry Monitor - Too bright, or dim.	Monitor will have to be removed from game, and adjusted from front of screen. Refer to "How to Remove Monitor" Section Use menu buttons to access monitor adjustment
Both sides do not coin up. Menu buttons do not work.	Communication between motherboard and main board disrupted. I/O Aux Board may be faulty, wires disconnected from main board, or not receiving 12 VDC power.	Refer to Motherboard to MiniGen Board Communication troubleshooting section for details on cable connections. Check I/O Aux Board for any disconnected wires. Ensure phone cable is plugged into blue socket on main board.
Game does not coin up. **Note:** To clear Credits: Press Menu Select button while not in menu.	One of coin switches jammed, or held down. Short in coin door harness. There should be 5 Volts between grey and green wires. Switch faulty in coin mech. Disconnected, loose or broken wires. Mini-Gen Main Board faulty.	If one coin switch is "closed" the other one will not work either. Unplug white molex from door, and jump between grey and green wires to simulate coin-up. Unplug one coin switch at a time and verify coin switch is wired normally open. Replace coin mech if coin is always rejected. (A5CM- ...) Check connectors. Check for continuity. (AACE4601, AACE4602, AACBL4A-DOOR) Replace main board. (AANEWGEN1-PJ)
Low tickets displays on monitor.	Stack of tickets not resting properly on either of the low ticket switches Faulty switch. Faulty wire or connection. Faulty main board.	Adjust stack of tickets so they hold both the switch actuators down. Replace low ticket switch. (AASW200) Check for proper connection from switch to main board. Check continuity. (AACE4605, AACE4606, AACE4600) Replace main board. (AANEWGEN1-PJ)
Sound cuts out and display goes blank.	Voltage variation in power network	Unplug both console & playfield. Wait 30 seconds. Plug console & playfield back in.

TROUBLESHOOTING GUIDE

Symptom	Probable Cause	Remedy
Bonus Lights do not come on at end of game.	Bonus Feature not enabled in menu.	Enter menu and set "Bonus Type" to "One Hit Bonus"
	Faulty cable from bonus light boards in top back of game to main board in front of game.	Check wiring continuity from light boards to main Board. (AACE4625, AACE4607, AACE4600) Check for pinched, broken or disconnected wires. Replace as necessary.
	Faulty center bonus light board Power comes into this board.	Replace center bonus light board. (AACB4602) Refer to Back of Game Wiring Diagram.
	Faulty main board.	Replace main board. (AANEWGEN1-PJ)
All Bonus Lights stay ON.	Surface mounted transistor blown on main board caused by 12 Volt dead short on one of the bonus light circuit boards.	Locate 12 Volt short. Refer to Back of Game Wiring Diagram. Repair cable (AACE4624) or replace bonus light board (AACB4602) Replace main board. (AANEWGEN1-PJ)
Some Bonus Lights stay ON.	Faulty bonus light circuit board.	Refer to Back of Game Wiring Diagram. Replace bonus light board (AACB4602)
Arc Light Boards do not come on, or stay on.	Cable is plugged into wrong socket.	Refer to Back of Game Wiring Diagram, and Connect Four Playfield Wiring Diagram for proper connection.
	Faulty cable from Arc Light Board to Controller Board.	Ensure cable is secure, swap cable to isolate problem. Replace as needed. (AACE4624)
	Faulty arc light boards.	Swap arc light boards to isolate problem, replace if needed. (AACB4603)
	Faulty Controller Board.	Ensure Dip's 3 & 4 are ON for top board. Swap boards to isolate problem, replace if needed. (AACB4600)
Purple or Pink lights on playfield.	Dipswitches set wrong on Controller Boards	Refer to Connect Four Playfield Wiring Diagram - make sure that 2 lower boards have Dip 4 ON, and top board has Dip 3 & 4 ON
	RGB Light Board Faulty	Refer to Target Wiring Example- Cables can be swapped into different sockets to isolate problem to rear controller board or front RGB Light Board.
	One of power supplies is faulty.	Refer to AC Power to Game - If one power supply is faulty, it will not power RGB board correctly. Replace power supply if needed. (AAPS4600)
	Controller Board faulty.	Refer to Back of Game Wiring Diagram, and Connect Four Playfield Wiring Diagram - Controller boards can be swapped to isolate problem. (Make sure dips are set correctly) Replace controller board if needed. (AACB4600)

TROUBLESHOOTING GUIDE

Symptom	Probable Cause	Remedy
Lights under player stations do not light up.	LED strip under faulty	Remove plastic cover and examine LED strip.
	Faulty Cable	Check cables from LED strips to main board. (AACE4620, AACE4621, AACE4608)
	Faulty Main Board	Replace main board. (AANEWGEN-PJ)
Lights under player stations stay on all the time.	Surface mounted transistor blown on main board.	Replace main board. (AANEWGEN-PJ)
Lights under Arrow & Drop Pushbutton do not come on. **Light under button should be ON in attract, flashing when coined up, and during players turn, and off during computers turn.**	Burnt out LED bulb.	Replace switch/bulb assy. (A5PB460x)
	Faulty Cable	Check cables from pushbutton to main board. (AACE4603, AACE4600) Refer to Left and Right Player Stations, Counters Wiring Diagram
		Swap AACE4600 cable molex connectors from left and right to isolate problem to one side.
	Faulty Main Board	Replace main board. (AANEWGEN-PJ)
Lights under Arrow & Drop Pushbutton stays on.	Surface mounted transistor blown on main board.	Replace main board. (AANEWGEN-PJ)
Arrow & Drop Pushbuttons do not work.	Pushbutton itself is broken or stuck down	Refer to "How to Replace Player Station Switches" to remove switch to inspect.
	Faulty Cable	Check cables from pushbutton to main board. (AACE4603, AACE4600) Refer to Left and Right Player Stations, Counters Wiring Diagram
	Faulty Main Board	Replace main board. (AANEWGEN-PJ)
Meters do not work. **Game counter clicks at start of each game.** **Ticket counter clicks as tickets come out of game.**	The 2 wires crimped together may be faulty	Inspect crimp to ensure good connection.
	Faulty Cable.	Check cables from counters to main board. (AACO1000, AACE4603, AACE4600)
	Faulty Main Board.	Replace main board. (A5NEWGEN1-PJ)

MAINTENANCE LOG

If repairs are necessary, it is good practice to keep a log of repairs done and parts ordered.
The chart below will assist you in tracking your game's maintenance.

DATE	MAINTENANCE PERFORMED	PARTS ORDERED	INITIALS

TECHNICAL SUPPORT

Excellent customer service is very important to Bay Tek Games!
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. We offer options that fit your needs.

Electronics / Circuit Boards - Repair Options

Repair & Return – If you have Circuit Board issues with your Bay Tek game, you can send the board to us and we'll repair it right away. Most items sent to us are repaired and returned to you within two days. This option is your best value as we offer this fast turn-around service at the most reasonable price.

Advance Replacement – If you have Circuit Board issues with your Bay Tek game, but you don't have time to send in your board in for repair, give us a call and ask for an Advance Replacement. We'll send you a replacement board that same day (pending availability). When you get your new board, just repackage the defective board in the same box and send it back to us. We make it easy by including a UPS Return Shipping label for you to put on the box (not available for international shipments). This is your best option when you need to get your game up and running as quickly as possible!

Spare Parts – Take matters into your own hands and purchase new spare Circuit Boards for your Bay Tek games. Many of our games share the same main-board electronics. This means you can buy one set of spare electronics to support many of your Bay Tek games. Spare boards allow you to get your game up and running the quickest and provide you a valuable troubleshooting option. Call our technicians to get recommendations for what you should keep on hand for spare parts!

Technical Support:

"You" are the best tool for troubleshooting! Your abilities to understand the game and your skills to repair the game are invaluable to us! If you need help, you know you can call us. It's not easy to diagnose a game remotely by phone, but our technicians do a great job. They'll need your help to perform some troubleshooting steps and convey to them exactly what's happening with your game.

Returns, Credits, & Fees:

NOTICE! ALL ITEMS being sent to Bay Tek Games for repair or return, etc. require prior Return Authorization! Bay Tek Games will provide a Product Return Form with an authorizing Ticket Number for each item to be returned. Please be certain to include this document with all shipments!

Late Fees and Non-Return Fees - Advance Replacement and Warranty Replacement items require the defective items to be returned by Bay Tek games promptly to avoid Late Fees. We expect items to be returned with 10 working days. Late fees are invoiced monthly. Late fees are non-refundable under any circumstance! Any item not returned within 90 days will be invoiced in full as a replacement part.

Bench Fees - Bench fees will apply for each electronic item returned to Bay Tek Games (this includes unused Advance Replacement items). This charge covers our cost to inspect, evaluate and retest each item. Please note that returned items that do not pas our tests will be charged accordingly as replacement items or advance replacements.

Restocking Fees - Unused items returned for credit will be credited minus a restocking fee. Items must be returned with in 30 days of purchase in order to qualify for any credit amount. No shipping charges will be credited.

WARRANTY

Bay Tek Games warrants to the original purchaser that all game components will be free of defects in workmanship and materials for a period of 6 months from the date of purchase. If you fill out the registration card in the cashbox of the game, Bay Tek will add another 3 months to your warranty, free of charge.

Bay Tek Games will, without charge, repair or replace defective component parts upon notification to the parts/service department while the game is under warranty.

Warranty replacement parts will be shipped immediately, via ground service, along with a Product Return Form for the return of defective parts.

Defective parts must be shipped back to Bay Tek Games unless otherwise instructed. Items not returned to Bay Tek Games will be invoiced as replacement parts.

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 any serial number decal is altered, defaced, or removed from its original position.

⚠️ ATTENTION ⚠️

In order to maintain the safety & compliance certifications of this game, ONLY approved parts may be used. For approved replacement parts, refer to the parts list in this manual.

Should you need your game serviced, determine the serial number from the decal placed on the front of this manual, or locate it on the back of the game. Then contact our Service Department at: 920.822.3951 or e-mail: service@baytekgames.com

NON-WARRANTY

Options and estimated charges will be provided to you for your approval.
Please remember that any items being sent to Bay Tek Games must include prior return authorization from our Parts & Service Department.
This approval will include a Product Return Form which is required to be included with any incoming shipments. Repaired parts will be shipped back using the same method in which they were received. Repairs are warranted for 30 days from the date of return shipment.

REPLACING TICKET PATTERNS

Locate the ticket pattern cover up decal and clear acrylic faceplate in the cashbox.

Select and cut out your desired pattern from the following pages. *This must match the settings selected in the Game Setup Menu.*

Tape the cut out ticket values to the back of the cover up decal, making sure the numbers line up with the holes.

Peel the protective coating from the acrylic faceplate.

Remove the screws from the top of the player station, and secure the decal underneath the acrylic faceplate by replacing the screws. The beveled edge of the faceplate should be facing up.

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: **5** *tickets* | *Loser:* **1** *t*

nce to win **500** *Bonus ticke*

: **10** *tickets* | *Loser:* **5** *t*

nce to win **500** *Bonus ticke*

: **20** *tickets* | *Loser:* **5** *t*

nce to win **500** *Bonus ticke*

: **30** *tickets* | *Loser:* **10** *t*

nce to win **500** *Bonus ticke*

: **40** tickets | Loser: **10** t

nce to win **500** Bonus ticke

: **50** tickets | Loser: **10** t

nce to win **500** Bonus ticke

: **60** tickets | Loser: **20** t

nce to win **500** Bonus ticke

: **80** tickets | Loser: **30** t

nce to win **500** Bonus ticke