SERVICE MANUAL



FACTORY CONTACT INFORMATION



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

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

All games are proudly manufactured at our factory in Pulaski, Wisconsin, USA

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WELCOME TO WILLY CRASH

Congratulations on your purchase!

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 Entertainment

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 baytek.service@thevillage.bz for further assistance.

	GAN	ME SPEC		FICATION	S
	WEIGHT			POWER RI	EQ
NET WEIGHT	400 lbs.	182 kg			
SHIP WEIGHT	500 lbs.	227 kg		INPUT VOLTAGE	11
GAM		DNS	I	NPUT FREQUENCY	
WIDTH	53"	135 cm			
DEPTH	57"	145 cm		MAX OPERA	TII
HEIGHT	107"	272 cm		3.3 AMP	S @
OPERAT		RATURE		1.9 AMP	S @
FAHRENHEIT	,	- 80 F			
CELSIUS	7.2 -	26.7 C		Note: The marqu	
SHIPP	ING DIMENS	SIONS		removed to low (86 lr	
PALLET	62"x 58"x 88"	500 lbs. class 250			

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POWER REQUIREMENTS

INPUT VOLTAGE	115 VAC	230 VAC
INPUT FREQUENCY	60 Hz	50 Hz

MAX OPERATING CURRENT

3.3 AMPS @ 115 VAC

1.9 AMPS @ 230 VAC

Note: The marguee artwork can be removed to lower game to 7' 2" (86 Inches)

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.

DANGER

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

WARNING

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

CAUTION

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

ATTENTION

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

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

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UNPLUG THE POWER CORD. The power cord must be accessible at all times in case of an emergency.

WILLY CRASH GAME SETUP

The game will arrive on one pallet. Please inspect the pallet for shipping damage and report immediately to the freight company if any damage is found.



Unbox the pallet and remove the plastic from the top of the player console. This is the marquee.

Please unwrap the marquee and proceed to assembly instructions.

Tools Needed:

1 step ladder (4-6 foot) # 2 Square bit

Remove the keys from the small plastic bag taped to the top console.

Unlock the front door using a H95 key.

Unlock the coin box door using a E00 key.

Remove the hardware kit and power cord from the coin box.

Close and lock coin box door, remove key to allow the front door to close fully.



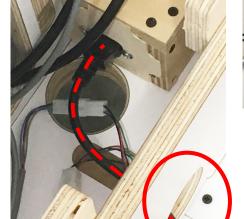
WILLY CRASH GAME SETUP

Unlock and remove the back door using a H95 key.

Route the power cord through the hole in the back of cabinet, and plug into the line filter inside the game.

Replace the back door.

Peel the protective plastic film from the marquee artwork, and apply the bonus ticket value desired to the white outline as shown.



Bonus Tick

Using a ladder, position the marquee artwork on top of the game and secure using 8 of the black # 2 square drive screws from the hardware kit. (4 per side)

The artwork is notched to ease installation.



Power on game: Open the front door and turn on the rocker switch on the power strip.

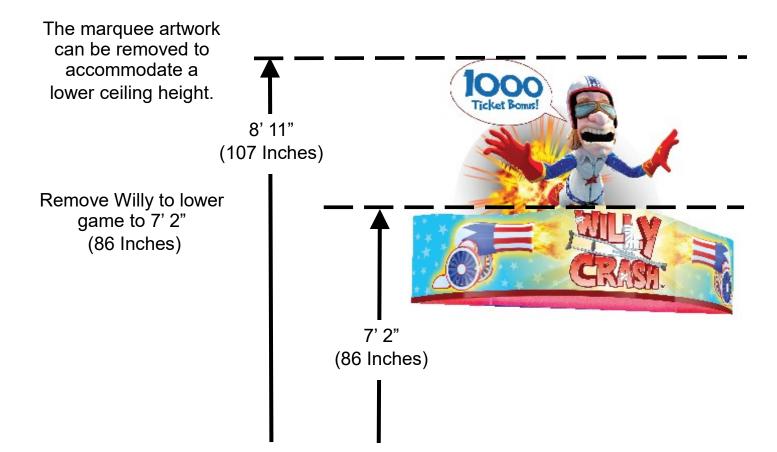
The game is now set up and ready for play! Enter menu to adjust settings to your location specific price per play and ticket payout.







ADJUSTABLE MARQUEE



AVAILABLE BLANKING PLATES



A5PL4200 DBA Plate for 12V Upstacker Bill Acceptor



A5PL8900 Plate used for Bill Validator



A5PL9998 Plate used instead of Coin Mechanisms

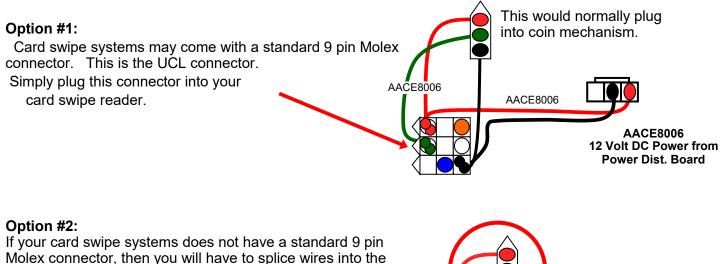


A5PL9995 Plate used instead of ticket dispenser

CARD SWIPE SYSTEM INSTALLATION

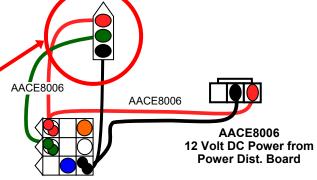
The Willy Crash game is pre-wired with a UCL (Universal Card Link) connector to accept Card Swipe systems from many different manufactures.

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



AACE8006 harness.

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



Notes:

- Many card swipe systems have a voltage threshold that can be adjusted in the card swipe menu. Please set this "Game Drive Threshold" to 2 Volts.

Menu Changes

Enter menu, go to "Game" Menu Set "Game Mode" to desired option

Go to "Payout" Menu Verify "Credits" set to 1 Verify "Card Reader" set to "Enabled"

Check dipswitches on the I/O Aux Board in the front of game. Verify Dipswitch # 5 ON

HOW TO PLAY

Time your launch to shoot Willy into the air, aiming to land on a building.

Press plunger down to launch Willy from the cannon!







Collect tickets!

MAIN MENU FUNCTIONS

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

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

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



	MAIN MENU				
Clear Tickets & Credits	Press the MENU SELECT button 3 times to clear credits and tickets owed				
Volume & Attract Menu	Press MENU SELECT to enter the Volume & Attract Menu				
Game Menu	Press MENU SELECT to enter the Game Menu				
Payout Menu	Press MENU SELECT to enter the Payout Menu				
Statistics Menu	Press MENU SEL Statistics				
Diagnostics Menu	Press MENU SEL Diagnostic	-			
Reset Factory Defaults	Press MENU SELEC reset factor				
Mute	ON (No sound from game)	OFF			
Exit	Press MENU SELECT button to exit menu				

MAIN MENU

Clear Tix & Credits: [3x] Volume & Attract Menu >> Game Menu >> Payout Menu >> Statistics Menu >> Diagnostics Menu >> Reset Factory Defaults: Reset Mute: OFF Exit PC Version: 1.0.5 Door Board Version: 1.7 Light Board Version: 1.3

*** Default settings are highlighted in yellow

Software versions are shown on the bottom of the main menu screen.

PC Version: 1.0.5 Door Board Version: 1.7 Light Board Version: 1.3

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

VOLUME AND ATTRACT MENU

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.

VOLUME & ATTRACT SETTINGS MENU

Attract Volume: 4

Game Volume: 6

- Jackpot Volume: 8
 - Attract Timing: 3

Back

ATTRACT VOLUME										
0	1	2	3	4	5	6	7	8	9	10
	Sata t			the ettre	ot loop w	han tha a	ama ia n	at baing r	loved	

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

				GAN	IE VOL	UME				
0	1	2	3	4	5	6	7	8	9	10
		Cata tha	a a ma a 'a	مامیراسم بر	aluma "	0"	بريامير مطب	no io off		

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

				JACK	POT VO	LUME				
0	1	2	3	4	5	6	7	8	9	10

Sets the volume level of the celebration when Willy lands on a rooftop. "0" means the volume is off.

	ATTRACT TIMING								
1	2	3	4	5	6	7	8	9	10

Sets the time in minutes between attract sound cycles.

GAME SETTINGS MENU

GAME SETTINGS MENU

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 Mode: Tickets Repeat Reward: 4 Cannon Speed: Auto Bonus Building: Normal

Back

	GAME MODE	
Tickets	Points	Coupons

"Tickets" means the game will pay out tickets, and show the word "Tickets" on screen. "Points" means the game will pay out tickets, and show the word "Points" on screen. "Coupons" means the game will pay out tickets, and show the word "Coupons" on screen.

REPEAT REWARD					
Disable	2	3	4	5	6

Sets the number of repeat plays needed before Willy changes his helmet/outfit. "Disable" means no change.

CANNON SPEED						
Auto	Easy	Normal	Hard			
		nent. "Auto" means the sp ormal" is a constant medi				

"Hard" is a constant fastest speed.

BONUS BUILDING

Auto Easy <mark>Normal</mark>	Hard	Very Hard	Move After Win
-------------------------------	------	-----------	----------------

Sets the location of the "Bonus Building"

"Auto" adjusts the building location depending on the number of games played since the last win.

"Easy" sets the 3rd building as the Bonus Building.

"Normal" sets the 4th building as the Bonus Building.

"Hard" sets the 5th building as the Bonus Building.

"Very Hard" sets the 6th building as the Bonus Building.

"Move After Win" moves the Bonus Building to the right after a win.

PAYOUT MENU

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.

Credits: 1 Card Reader: Disabled Bonus Building: 1000 Large Building: 100 Medium Building: 35 Small Building: 25 Alley Value: 5 Fixed Tickets: Disabled

Back

		CREDITS									
0	1	2	3	4	5	•••	17	18	19	20	

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

CARD READER									
ENABLED	DISABLED								

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

		BONUS BUILDING								
100	250	500	1000	1500	2000	2500				

Sets the amount of tickets for the Bonus Building

		LARGE VALUE BUILDING										
10	20	30		80	90	100	110	120		230	240	250

Sets the amount of tickets for building 3 and 5

		MEDIUM VALUE BUILDING										
5	10	15		25	30	35	40	45		140	145	150

Sets the amount of tickets for building 2 and 6

		SMALL VALUE BUILDING										
1	2	3		23	24	25	26	27		23	24	25

Sets the amount of tickets for building 1 and 7

				ALL	EY VA	LUE			
1	2	3	4	5	6	7	 24	25	26

Sets the amount of tickets for the alleys between the buildings

	FIXED TICKETS								
Disabled	1	2	3	4	5		28	29	30

Sets every ticket value to be the same, if desired. "Disabled" will use the above menu settings

TICKET PATTERNS

These are estimates of Average Tickets per Game using the shown ticket values for building and alleys.

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

	Pattern 1	Pattern 2	Pattern 3	Pattern 4	Pattern 5	Pattern 6	Pattern 7
Bonus Building Value	1000	1500	500	500	100	100	1000
Large Value Building	100	150	100	75	25	10	100
Medium Value Building	35	75	75	50	10	5	35
Small Value Building	25	50	50	25	5	3	25
Alley Value	5	25	20	5	3	1	5
Recommended Cost per Play	\$1.00	\$2.00	\$1.50	\$0.75	\$0.50	\$0.25	\$1.50
Average Tickets per Game	30-40	50-60	40-50	20-30	10-20	3-5	40-50

GAME STATISTICS MENU

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 STATISTICS MENU

Total Games: 0 Total Tickets: 0 Average Tickets: 0 Bonus Winners: 0

> Reset Stats: Cleared Back

TOTAL GAMES

Reports the actual games played since last reset

TOTAL TICKETS

Reports the actual tickets dispensed since last reset

AVERAGE TICKETS

Reports the current average tickets per game since last reset

BONUS WINNERS

Reports the number of bonus winners since last reset

RESET STATS

Press the menu select button 3 times to reset statistics

DIAGNOSTICS MENU

GAME DIAGNOSTICS MENU

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.

Plunger Input: Off Low Ticket Input: On Credits On DB: 0 Tickets On DB: 0

Ticket Dispenser: Test Test Monitor Light: Red

Back

PLUNGER INPUT

Shows ON when plunger is down, and sensor beam is blocked. LED on sensor board will light.

LOW TICKET INPUT

Shows ON when tickets are sitting on top of the low ticket switch in the ticket tray. (Unless dipswitch # 5 is on)

CREDITS ON DB

Shows the amount of credits currently on the game.

TICKETS ON DB

Shows the amount of tickets to be dispensed on the game.

TICKET DISPENSER

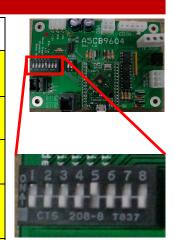
Press MENU SELECT to test dispense a ticket from the ticket dispenser.

TEST MONITOR LIGHT

Press MENU SELECT to cycle through various colors showing around the perimeter of the monitor.

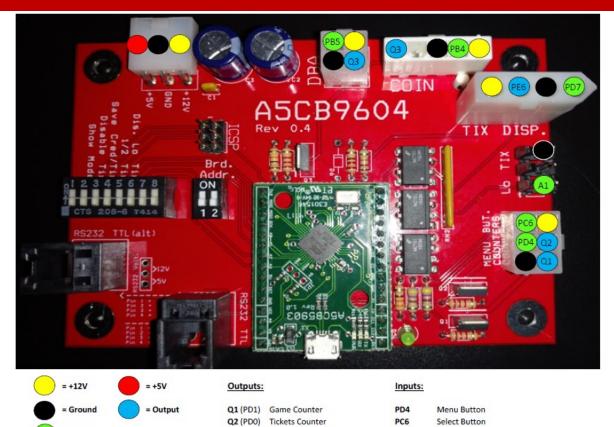
DIPSWITCH SETTINGS

SWITCH	DESCRIPTION	ON	OFF
1	SHOW GAME Does not dispense tickets and clears all accumulated credits		х
2	AMUSEMENT ONLY Does not dispense tickets		х
3	NJ LOCKOUT Saves tickets owed and unused credits after a power loss		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		х
5	DISABLES LOW TICKET INPUT Disables the low ticket message on screen. This option should be enabled when using a card swipe system		x
6	NOT USED		
7	NOT USED		
8	NOT USED		



Note: **UP is ON**

DOOR BOARD PINOUT



Ticket Enable

PD7

PB4

PB5

Ticket Notch

Coin In

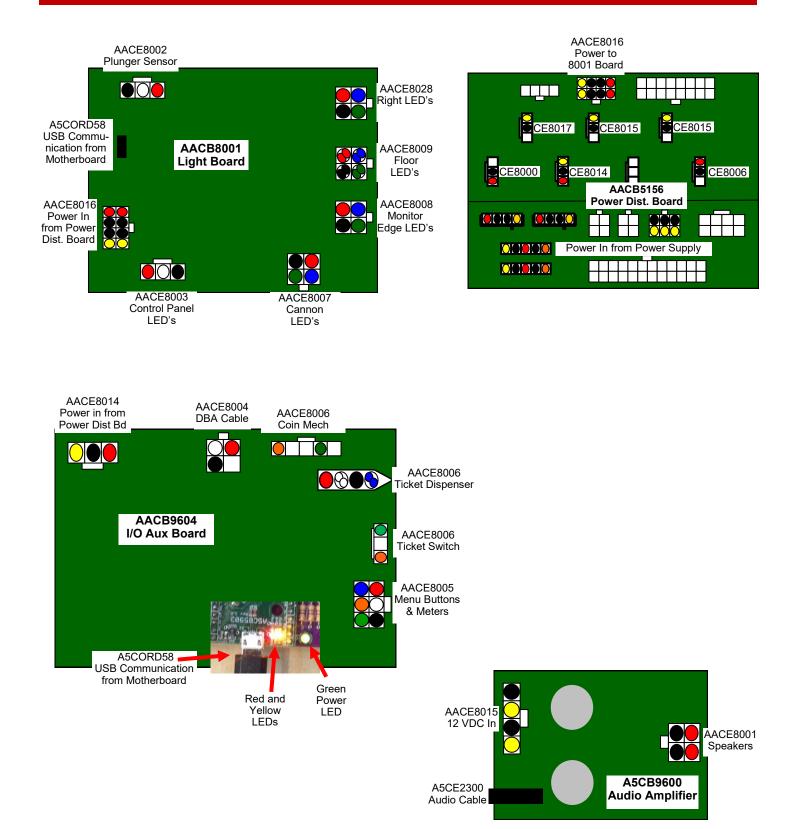
DBA In D15 (A1) Low Ticket Switch Input

Q3 (PD6) Coin Lockout

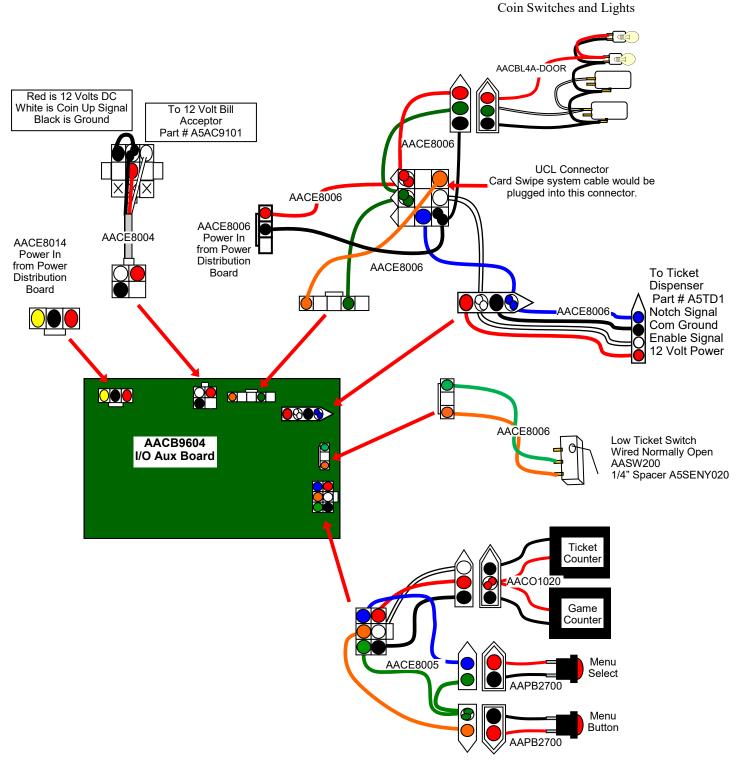
PE6

= Input

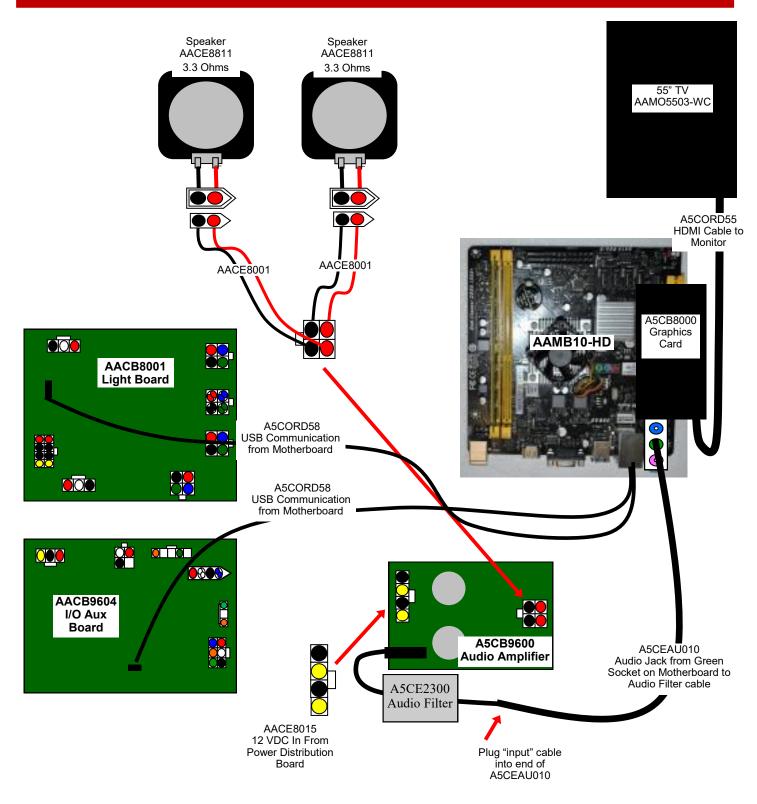
CIRCUIT BOARD LAYOUT



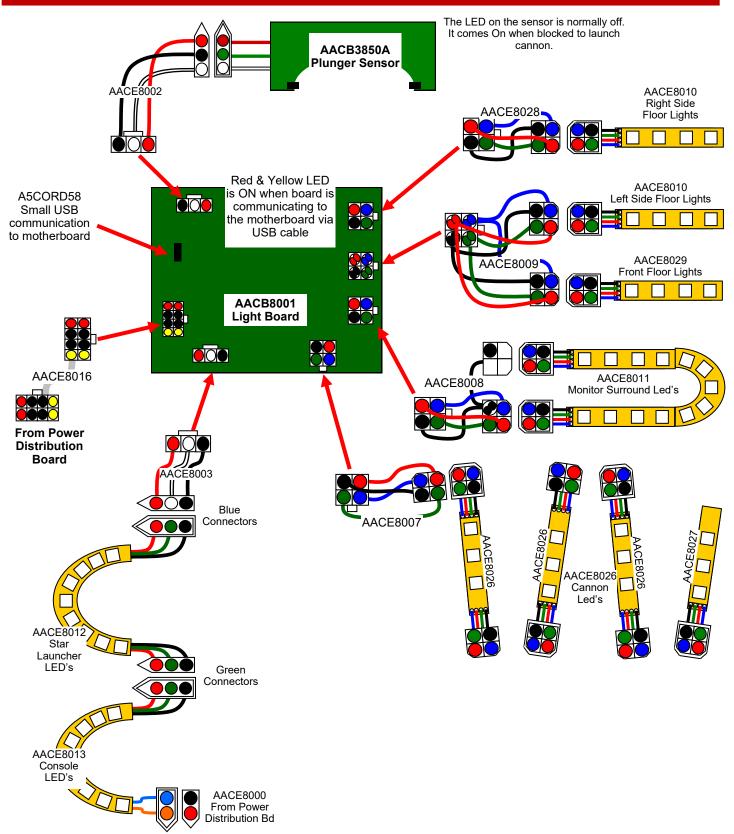
COIN MECH, MENU AND COUNTER



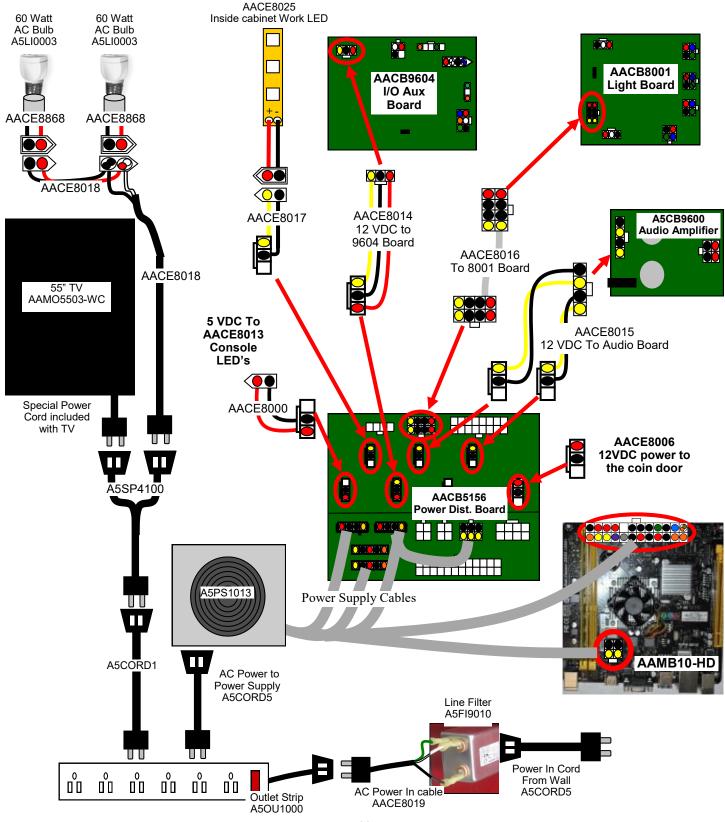
SPEAKERS AND MOTHERBOARD COMMUNICATION



SENSORS AND LEDS



AC IN AND POWER SUPPLY



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 power to the game. No lights on at all.	Unplugged. Circuit breaker tripped. Line Filter Faulty. Power strip faulty. Faulty cable/power supply	Check wall outlet. Reset power strip breaker switch or building circuit breaker. Replace Line Filter (Part # A5FI9010) Swap positions, replace if needed AACE8020 Refer to wiring diagram. Check cables AACE8019 & AACE8020. Refer to Power Supply diagnostic section
Monitor on, but everything else off. (Power Supply not ON)	Power supply unplugged. Rocker Switch. Power supply shutting down because of 12 V overload. Faulty power supply. Faulty Power Dist Board	Ensure 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. See Power Supply Diagnostic section. Replace Power Distribution Board (AACB5156)
Dollar Bill Acceptor not functioning. Ensure Bill Acceptor is set to "Always Enable" Important : Only 12 Volt DBA is to be installed. Model # AE 2454 U5E Part # A5AC9101	Check for power to Bill Acceptor. Dirt or debris in acceptor slot. Pinched, broken, or disconnected wiring. Bill acceptor problem. Part # A5AC9101	Acceptor should cycle stacker at game power up. If not, check cable connections. Refer to "How to Clean Bill Acceptor" Or clean with bill reader cleaning card. (A5CC9000) Check wiring from bill acceptor to NewGen Board. (AACE8004) Repair or replace wiring harness. Check J8 connector on Main Board Make sure wires are secure in connectors. Refer to troubleshooting section of dollar bill acceptor manual included with this game or the diagnostics label of the back of the unit.
Meters do not work. Game meter will click at the end of the game. Ticket meter will click as tickets come out of game and notch is "seen" by dispenser.	Ensure correct number of tickets are being dispensed Disconnected, loose or broken wires. Faulty counter.	Check ticket values in menu. Test Ticket Dispense in Diagnostic menu. Refer to Tickets not dispensing troubleshooting section. Check connections to I/O board. Cables # AACE8005 and AACO1020 Replace counter. AACO1020.

	TR	OUBLESH	100	TING GUIDE				
Problem		Probable Caus	se	Remedy				
Game not coining u	up.	Check for I/O board U cable communication.		Refer to "I/O Aux Board Issue" diagnostic Section.				
		Ensure game makes s when coin switch is tr		Check coin switches—both should be wired normally open. If one switch is "closed" the other will not work either. Check wiring to I/O Board. (AACBL4A-DOORA, AACE8006)				
		Game set to large am credits per game.	ount of	Check Game Setup Menu. Ensure Coins/Credits per Game is set. Default = 4.				
No Sound		/olume set to zero in m Ensure "Mute" is set to (Enter Volume & Attract Settings Menu and verify: Game Volume & Attract Volume is not zero				
Motherboard creates sound, Audio board amplifies it.	[Disconnected, loose or l vires.	broken	Check connections and reseat audio cable from motherboard to Audio Amplifier board to speakers. Cables # AACE8811, AACE8001, A5CE2300 and A5CEAU010 to green socket. Ensure 12 volts at CE8015 cable from power supply.				
				Unplug audio jack cable (A5CEAU010) from motherboard, plug into MP3 player and see if music is amplified and comes out of speaker. If Yes - then motherboard is faulty. If No - then Newgen may be faulty.				
	F	aulty speaker.		Replace speaker. AACE8811				
Menu Buttons do not work.	Swap buttor	connectors at the 2 is.	Replace	e button if problem stays with button.(AAPB2700)				
		ed, broken, or nnected wiring	Check c	crimp to ensure good connection. connections from menu buttons to I/O board. continuity on wires. (AAPB2700, AACE8005)				
	Main	poard faulty.	Replace	e I/O Board. (AACB9604)				

		Main board faulty.		Replace I/O Board. (AACB9604)	
I		Faulty Light Bulb	Replace bulb. Part # A5LI0003 (60 Watt 110 VAC)		
	Marquee Lights are not on. (60 Watt 110 VAC)	Faulty Cable	Check for proper connection from bulb to Power Strip. Check continuity. (AACE8868, AACE8018, A5SP4100, A5CORD1)		
		Faulty outlet strip	Swap power cord into next socket. Replace strip (AACE8020		

Problem	Probable Ca	use	Remedy		
Inside LED cabinet lighting not working.	LED's to light up playfie receive 12 Volts DC fro power supply through t Power Distribution Boa	om he	Check for proper connection from power supply to Power Distribution Board and then to LED strips. Check continuity. (AACE8025, AACE8017, AACB5156, AAPS1013-PTL) Refer to "AC In, Power Supply Wiring Diagram section"		
Colored player console lighting not working. LED's power the star first, then the outside edge of player console	If all colored cabinet lig are not functioning, che Light Board (AACB800 If LED strip is out, chec cable. Refer to "Light Board Wiring Diagram" No 5 VDC power being back fed into LED strip Faulty LED Faulty Light Board	eckBoard. Cable # AACE8016. Check USB cable to Light Board from motherboard. Cable # A5CORD5801)Check for proper connection from Light board to LED strips. Check continuity. Refer to "Light Board Wiring Diagram" (AACE8003, AACE8012, AACE8013)0Verify 5 volts DC on cable AACE8000 from Power			
Colored LED's around monitor do not work.	Faulty Cable No USB communication Faulty LED Faulty Light Board	Check for proper connection from Light Board to LED st Check continuity. (AACB8001, AACE8008, AACE8011) Refer to "Light Board Wiring Diagram" Ensure the A5CORD58 is connected to the motherboar socket. Red and yellow LED's should be on. Replace LED strip AACE8011 Replace Light board if needed. (AACB8001)			
Floor LED's do not work.	Faulty Cable No USB communication Faulty LED Faulty Light Board	Che Refe Ensi sock Rep Swa	Check for proper connection from Light Board to LED strips. Check continuity. (AACB8001, AACE8009, AACE8028, AACE8010, AACE8029) Refer to "Light Board Wiring Diagram" Ensure the A5CORD58 is connected to the motherboard USB socket. Red and yellow LED's should be on. Replace LED strip AACE8010 Swap connectors on board. Replace Light board if needed. (AACB8001)		
Cannon LED's do not work.	Faulty Cable No USB communication Faulty LED Faulty Light Board	Che AAC Ensu sock Rep Swa	Check for proper connection from Light Board to LED strips. Check continuity. (AACB8001, AACE8007, AACE8026, AACE8027) Refer to "Light Board Wiring Diagram" Ensure the A5CORD58 is connected to the motherboard USB socket. Red and yellow LED's should be on. Replace LED strip AACE8026 or AACE8027 Swap connectors on board. Replace Light board if needed. (AACB8001)		

Probler	n	Probable Cause			Remedy	
Tickets do not dispense		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 comir	Notch on tickets on g shallow.	Notch on tickets cut too shallow.		Flip tickets and load upside-down to have large cut notch toward opto sensor.	
Check for the correct amount of	out of game.	loose or broken v	vires.		Check connectors from ticket dispensers to Newgen board. Check for continuity. Cables AACE8006	
tickets showing on		Enter Diagnostic test Dispenser	Enter Diagnostic menu and test Dispenser			
Monitor		Check dipswitche Aux Board	Check dipswitches on I/O Aux Board		There are many options that affect ticket payout using the dipswitches. Refer to Dip Switch Setting page.	
		Faulty I/O Board	Faulty I/O Board		Replace I/O Board. AACB9604	
Tickets or monitor do match tick					Enter Menu and check certain areas: Preset Payout Pattern Fixed tickets Tickets per payout hit	
	coming out c game.				Tickets earned every X hits	
Low Tickets message on	Tickets are e	e empty in ticket tray		Load tickets into tray. Ensure tickets hold down mid switch wire.		
monitor	Faulty cable loose or bro			nectors from low ticket switch to I/O board. continuity. (AACE8006)		
	Faulty low ti	-		itch and replace if needed. (AASW200)		
	Faulty I/O B			k dipswitches on I/O Board, Replace I/O Board if ed. AACB9604		
Plunger does		Inspect assembly for physical obstruction			re arm is breaking the beam. The LED on the I will come ON when beam is blocked.	
cannon		Disconnected, loose	or	Check connections from opto sensor to I/O board.		
Bottom of plunge breaking the opt		oroken wires. Enter Diagnostic Mer	•		e # AACE8002, AACB3850A) n should go to ON when button is pushed.	
	s	see if game recognizes button.				
				Replace sensor. AACB3850A		
Cannon is firing all by itself Opto Sensor is blocked, dirty, or faulty.		Faulty sensor. by C		Ensure the LED is OFF and opto beam is not blocked by plunger arm. Clean emitter and detector on sensor board.		
				Replace the sensor board. AACB3850A		

Probler	n Probabl	e Cause Remedy			
	Monitor shows "No Signal"	Monitor HDMI cable unplugged from video card. The game will not boot up with the monitor disconnected			
Monitor not working.		Faulty or loose RAM on mothe	E PURCH		
Power down, wait 5		Large power connector unplugged on motherboard Small power connector unplugged on motherboard			
minutes and power up again.		Faulty power supply - Refer to Power Supply diagnosus section Faulty Graphics Card - Replace Graphics Card (A5CB8000)			
There is also a		Faulty motherboard - Replace			
small access hole drilled into the middle of	Monitor has nothing at all on power up.	Power cable unplugged from monitor.	Ensure power is plugged into back of monitor, down to power strip.		
the underside of plastic frame		Faulty monitor.	Replace monitor. (AAMO5503-WC)		
A small screw- driver can be used to access the power button.	Error on screen at power up.	Display shows "Kernel panic – unable to mount root"	Faulty or loose RAM, faulty software, faulty motherboard		
	Re-Boot game to see if problem still exists.	Display shows "ASROCK Setup Utility Menu"	No SATA drive in motherboard. Check for power connector		

I/O Aux Board Issue Game does not coin up, and has no other functions.	Green power LED should be flashing.	If it is off, then check 12 & 5 Volts DC coming into board on cable AACE8014 from Power Distribution Board. If solid on, then it is not communicating with the motherboard. Check A5CORD58 USB cable. Swap cable with the light board.
	Red and Yellow LED's should be flashing.	If they are off, it is not communicating with the motherboard. Check A5CORD58 USB cable. Swap cable with the light board.
Red and Green Yellow Power LEDs LED	Faulty I/O Aux Board.	Replace I/O Aux board Replace if needed. Part # AACB9604-WC

POWER SUPPLY DIAGNOSTICS

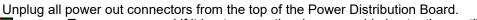
- 1.) Verify AC power to game. Check power strip in front door. The rocker switch should be illuminated.
- 2.) Check connection to power supply.

AACB5156 Power Dist. Board

- 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.



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.

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, then replace power supply (A5PS1013), or replace motherboard. (AAMB10-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 Only use 12 Volt DC Bill Acceptor

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

ERROR CODES

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





HOW TO UPDATE 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.

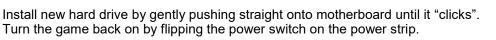
Turn off game by flipping the power switch on the power strip.

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.





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



USB CABLE COMMUNICATION ISSUE

It is possible that a USB communication issue may develop where the motherboard does not see the door board or the light board.

The symptom may be fixed by unplugging the USB cable that is not communicating from the motherboard, and plug into a different socket. If the board starts working, first replace the USB cable itself. If the issue persists, follow the instructions below to remedy.

First - make sure the SATA drive software is version 1.0.5.

This is written on the SATA itself, or is shown at the bottom of the game menu. If the version is lower than 1.0.5, purchase a new SATA drive, part # AAHD1900-WCM

Tools Needed:

USB Keyboard USB Mouse

Instructions:

Ensure the new SATA drive software has replaced the existing software on the motherboard.

Power on the game and enter the menu. The software versions should show:

PC Version: 1.0.5 Door Board Version: 1.7 Light Board Version: 1.3

If they show correctly, the software has loaded completely, and no further action is required. Test play the game, the update is complete.

If they do not show correctly, an I/O board is not communicating at power up and is not receiving the software update.

To fix:

Turn the game on and enter the menu.

Unplug the USB cable that is not communicating from the motherboard, and plug into a different socket. It should start communicating, and the Aux version will show on the screen.

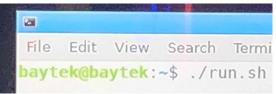
Play the game and ensure everything is working correctly.

Grab a keyboard and mouse, and press the Alt key and F4 key at the same time. This will close the game program.

Right click with the mouse anywhere on the screen

and select "Terminal"

Using the Keyboard, type ./run.sh Press Enter





The game should reboot automatically. Enter the menu and check the software version again.

Test play the game, the update is complete.

HOW TO FIT THROUGH 39" DOOR

Description:

The monitor surround assembly with wood can be removed from a Willy Crash game to allow the game to fit through a narrow opening door.

Tools Needed:

2 Square bit screwdriver

7/16" Socket Wrench

Instructions:

Unplug the game's power cord from the wall.

Unlock and remove the back door of the game.

Locate the access panel on the right side of the back of game. Remove the 6 screws using a # 2 Square bit screwdriver. Unplug the HDMI cable from the HDMI 1 slot and pull sticky tabs from the back of the monitor.

The 4 bolts in the recessed holes must be left in place. Do not remove! They hold the monitor to the wood board.

Unplug the monitor power cord from the Y connector inthe back. Remove cable clamp to free monitor power cord using a # 2 Square bit screwdriver.

Unplug the bottom 2 four pin molex connectors.

Tuck the light cables, HDMI cable, and the monitor power cord inside the access hole so it can be removed with the wood and monitor.

The monitor wood frame will be attached to the monitor and the wood will come out with the monitor as it is removed from cabinet.

The old monitor can now be removed from the cabinet:

Using 2 people - Remove the 4 nuts & washers with a 7/16" wrench.

Carefully pull the wood off the front of the cabinet and place on a soft flat surface.

Reinstall monitor onto cabinet using reverse process.



HOW TO REPLACE AAMO5504 MONITOR

Description:

As monitors become obsolete, a different model monitor must be used. The current monitor has differences and some modification to the mounting will be needed. These instructions will walk you through replacing the monitor on the Willy Crash Game.

This kit will included a small square piece of wood attached to a large piece of wood. All of the components from the old piece of wood will swap over to the new piece.

Tools Needed:

2 Square bit screwdriver7/16" Socket Wrench

Phillips Screwdriver Possibly Jigsaw

Instructions:

Unplug the game's power cord from the wall. Unlock and remove the back door of the game.

The back panel needs to be cleared by: Unplug the top 2 connectors.

Remove the 3 white plastic wire saddles from the wood by twisting and pulling. Save to be reinstalled later.

Remove the 2 wood screws using a # 2 Square bit screwdriver.

Unplug the bottom 2 connectors.

Unplug the monitor power cord from the Y connector in the back.

The HDMI cable must be unplugged from the front of the game and be removed as the monitor is removed.

Open front door.

Remove the 1 black screw on HDMI cable using a # 2 square bit. Unplug the HDMI cable from the video card.

Pull this cable to the back of cabinet.

Tuck the light cables, HDMI cable, and the monitor power cord inside the access hole so it can be removed with the wood and monitor.



HOW TO REPLACE MONITOR

The monitor wood frame will be attached to the monitor and the wood will come out with the monitor as it is removed from cabinet.

The old monitor can now be removed from the cabinet.

Using 2 people - Remove the 4 nuts & washers with a 7/16" wrench. Carefully pull the wood off the front of the cabinet and place face down on a soft flat surface. Save to be reinstalled later.

Remove the 12 small black screws on the white plastic surround by using a # 2 Square bit screwdriver. Save to be reinstalled later.

Use the included large piece of wood and swap all of the components from the old piece of wood to the new piece. Be sure to install the components exactly as was on the old board.

Remove the HDMI cable from the back of the old monitor.

Pull off the sticky tabs to be reused on the new monitor.

Remove the old monitor from the surround.

Using 2 people:

Unbox the new monitor, remove the plastic protector from the edges of the monitor.

Carefully place the new monitor face down in the white plastic surround.

Plug the HDMI cable into the HDMI1 spot on the new monitor.

Place the new wood onto the back of the new monitor. Make sure the T-nut inserts are down against the monitor and the arrow under the wood is pointing to the top of the monitor.

Make sure the large oval hole is toward the bottom of the monitor.

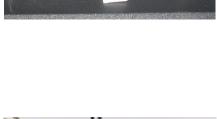
Ensure the power cord, HDMI cable, and light cables are pulled through the large oval hole as shown

Hand thread the 4 bolts, spacers, and washers through the slots in the wood into the TV itself.

Do not use the old spacers - do not tighten fully until all bolts are inserted.

Push wood piece upward to the top of the monitor as shown, then tighten bolts using a Phillips screwdriver.

The new TV should now be securely attached to the new large piece of wood.









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HOW TO REPLACE MONITOR

Reinstall the 12 small black screws on the white plastic surround by using a # 2 Square bit screwdriver.

Note: Some cabinets may need the receiving holes to be enlarged to accommodate the new bolt pattern. The easiest way to do this is cut the entire square out from the cabinet.

On the cabinet itself, draw lines connecting the 4 holes as shown. Carefully cut on this line using a jigsaw to create a large opening in the cabinet.

The new monitor assembly can now be installed onto the cabinet.

Using 2 people - Carefully lift and position so the 4 long bolts are aligned into the cabinet.

Reinstall the 4 nuts/washers and tighten using a 7/16" wrench

Plug the monitor's power cord back into the Y connector.

Route the HDMI cable to the front of the cabinet and plug back into the video card. Tape the HDMI cable to a long stick to help get it to the front of the cabinet.

From the back door:

Reconnect the top 2 connectors.

Reinstall the 3 white plastic wire saddles into the wood, and clip cables in place.

Reinstall the 2 wood screws using a # 2 Square bit screwdriver.

Reconnect the bottom 2 connectors.









HOW TO REPLACE MONITOR

Set up Monitor - Plug game into wall and power on. At power on, the TV will have this screen. Locate the remote control and install the batteries.

Aim the remote at the TV and press the "Menu" button.

Once the screen has the "Picture" option highlighted, press the "OK" button.

Arrow down to "Advanced Settings" and press the Right Arrow on the remote control.

Arrow down to "HDMI Mode" and set to "Graphic" Press the "Exit" button on the remote, and store remote in cabinet for future use.







MONITOR SETTINGS

There have been 2 different versions of TV used in Willy Crash:

Full HDTV: Press "MENU" on the remote control to access the menu.

- Set screen options as shown:





0 LG

LG Model LGE-55UK6090

- Press "GUIDE" button on remote control to access menu.
- Press "OK" button on remote control to clear this screen.

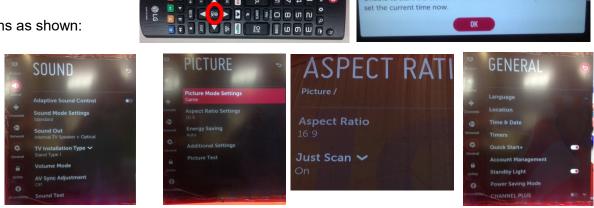


set the current time now

Unable to start the Guide without current time being set. Pleas

OK

- Set screen options as shown:

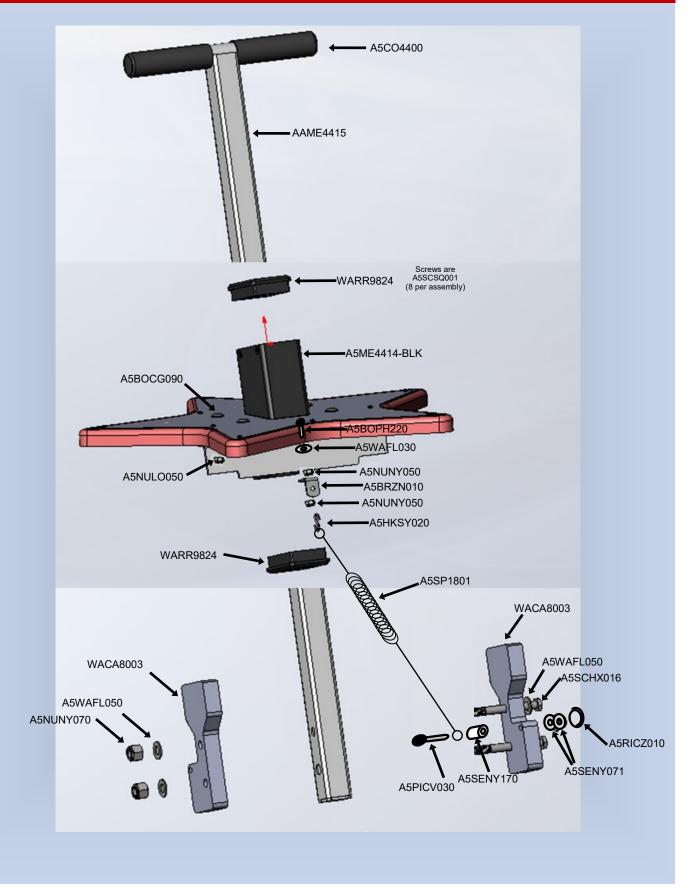


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HANDLE ASSY EXPLODED VIEW



PARTS LIST

PART #	DESCRIPTION	PART #	DESCRIPTION			
A5BK1013	Bracket, Pushbutton/Counters	A5CORD1	Cord, Power, 10' Works W/Outlet Strip			
A5BK6035	Bracket, Light	A5CORD55	Cord, 10' HDMI To HDMI			
A5BK9999	Bracket, Power Supply Mounting	A5CORD5	Cord, AC Computer Cord, 6.5'			
A5BTRT010	#4 Nylon Push Pins	A5CORD58	Cable, USB, Male A To Micro, 3ft			
A5BURU075	Bumper,Rubber,2 1/4x2 5/8,Black	A5SP4100	Splitter, Detach Power Supply Cord Y			
A5CB1499	Coin Box, White	AACE8000	Cable Assy, Addressable Light Power			
A5CO4203	Cover, Speaker	AACE8001	Cable Assy, Speaker Power			
A5CO4400	Cover Grip, Slide On, Handle	AACE8002	Cable Assy, Plunger Sensor			
A5FI9010	Filter, F1700ca06, Inline	AACE8003	Cable Assy, 5V Addressable Light Power			
A5HO1003	Holder, For Light Bars	AACE8004	Cable Assy, Dba			
A5LI0003	Light,A19,9 Watt,60w	AACE8005	Cable Assy, Menu/Select/Counters			
A5LK2001	Lock, Cash Box, A05/E00 Key Code	AACE8006	Cable Assy, Coin Door/Ticket Dispenser			
A5LK5002	Lock, 7/8", H95 Key Code	AACE8007	Cable Assy, Cannon Led Power			
A5ME2035	Ticket Tray, Metal	AACE8008	Cable Assy, Monitor Lights Power			
A5ME4182	Metal, Cashbox Guide	AACE8009	Cable Assy, Left Bottom Side RGB			
A5ME4414-BLK	Metal, Handle Guide Assy	AACE8010	Cable Assy, Bottom Sides RGB Light			
AAME4415	Metal, T-Handle, w/ grips & bumpers	AACE8011	Cable Assy, Monitor RGB Blue Light			
A5ME5508	Metal, Bracket, Graphics Card	AACE8012	Cable Assy, Star Light Power			
A5PICV032	Pin,Clevis,1.4"D X 1-5/8"L	AACE8013	Cable Assy, Control Panel Light Power			
A5PL4200	Plate, Up Stacker	AACE8014	Cable Assy, Door Board To Power Distribution			
A5PL8900	Plate, Blanking, Bill Validator	AACE8015	Cable Assy, Audio Board Power			
A5RICZ010	Ring,Cotter,7/16"-1/2" Shaft	AACE8017	Cable Assy, Power To Service Light			
AASW200	Low Ticket Switch	AACE8018	Cable Assy, Power To Marquee Lights			
A5VF8000	Vacuum Form, Monitor Cover	AACE8019	Cable Assy, Line Filter			
A5DE0042	Decal, Menu/Vol	AACE8020	Cable Assy, Ground, T-Handle To Ground Stud			
A5DE8010	Decal, Marquee Back	AACE8021	Cable Assy, Ground, Coin Door To Hinge			
A5DE8011	Decal, Cannon Wrap	AACE8022	Cable Assy, Ground, Ticket Dispenser To Hinge			
A5DE8012	Decal, Floor Cover, Right	AACE8023	Cable Assy, Ground, Hinge To Ground Stud			
A5DE8013	Decal, Floor Cover, Left	AACE8024	Cable Assy, Ground, Power Supply To Stud			
A5DE8014	Decal, Marquee Front	AACE8025	Cable Assy, Servicing Stick Light			
A5DE8015	Decal, Marquee Cover	AACE8026	Cable Assy, RGB Cannon Stick Lights			
A5DE8016	Decal, Control Panel	AACE8027	Cable Assy, Cannon RGB Stick Light			
A5DE8017	Decal, Control Panel Star	AACE8028	Cable Assy, Bottom Right Side Jumper			
A5DE8018	Decal, Outer Door	AACE8029	Cable Assy, Front Floor LED lights			
A5DE8019	Decal, Inner Door	AACE8811	Cable Assy, Speaker			
A5DE8020	Decal, Monitor Pillar	AACE8868	Cable Assy, Fluorescent			
A5DE8021	Decal, Left Cabinet Side	A5PS1013	Power Supply, EVGA 500			
A5DE8022	Decal, Right Cabinet Side	A5GC8000	Graphics Card			
W5HG1025	Hinge,16",Double Bend	AAMO5503-WC	Monitor, 55" TV			
W5HG1065	Hinge,5-75,Single Bend	A5TD1	Ticket Dispenser, Entropy			
W5KE5000	Keeper, Lock	A5CB9600	PCB, Audio Amplifier			
W5TM4002	T-Molding,7/8"Blue	AACB9604	Board, Door Interface			
AACO1020	Counter Assy, No Feet	AACB5156	PCBA, Power Dist.			
AAPB2700	Push Button Assembly	AACB8001	PCBA, Light Driver Board			
A5CE2300	Cable, Audio Isolator	AACB3850A	Board, Launch Sensor			
A5CEAU010	Cable, Audio Stereo,3.5mm , M-M 2ft	AAMB10-HD 39	Mother Board, W/Hard Drive			

PARTS PICTURES



PARTS PICTURES





AACE8001

AACE8002











AACE8005

AACE8006



AACE8008



AACE8009

AACE8010







AACE8013



AACE8014





AACE8016



AACE8017





AACE8020









AACE8023



AACE8025





AACE8027



A5PS1013



A5CB9600

AACB5156







AACB3850A



AAMB10-HD



AACB9604

AACB8001



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.



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>Repair & Return</u> – If you have Circuit Board issues with your Bay Tek product 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.

•<u>Advance Replacement</u> – If you have Circuit Board issues with your Bay Tek product, 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.

This is your best option when you need to get your game up and running as quickly as possible!

• <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 chose the Advance Replacement option and now need to return that 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. If you choose the Repair and Return option, we'll test your board before we begin. If no problems are found, you will only be charged the bench fee.

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 6 months from the date of installation.

Register your new game for an extra 3 months on your warranty.

Log on to : http://www.baytekent.com Then click on the Register tab.

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.

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: **baytek.service@thevillage.bz**

REPAIR OF NON-WARRANTY PARTS

Should your game need servicing, determine the serial number from the decal on the back of the game cabinet, inside front door, or the cover of this manual and call 920.822.3951 Ext. 1102 or e-mail to: baytek.service@thevillage.bz

An estimate of the repair charges will be quoted to you for approval. You may now proceed in one of two ways.

Option 1: Request immediate shipment of advance replacement part(s). You will receive the part(s) with an **RMA** for the return of the faulty part(s). You must return the faulty part(s) in 14 days to avoid additional charges.

Option 2: Call the Service Dept at (920) 822-3951 Ext. 1102 to receive a RMA to send the faulty part(s) in for repair Please include the following information NAME ADDRESS PHONE # SERIAL # PURCHASE ORDER NUMBER or AUTHORIZATION to perform service.

Repaired part(s) will be shipped back using the same method in which they were received. Repairs are warranted for 30 days from the date of installation.