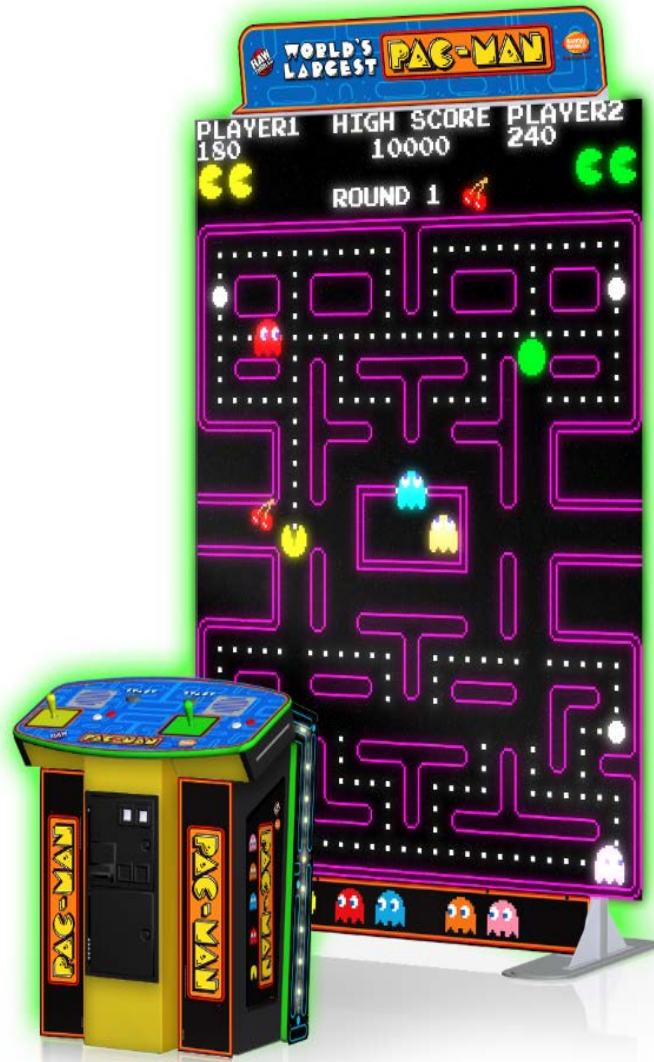


# World's Largest Pac-Man™

## Operator's Manual



# World's Largest Pac-Man™

# World's Largest Pac-Man™

## Safety

### OPERATION

Before operating game, read this manual. Failure to properly install and operate this game could result in malfunction or accident. Operate the game in accordance with the manual.

### TRANSPORTING

The cabinet is very heavy. Because the monitor is high, the cabinet is also very top-heavy. Use appropriate care when moving or transporting cabinet. It contains fragile glass and electronic components. Avoid rough handling.

### HANDLING COMPONENTS

Many components are extremely sensitive to handling, environmental and Electrostatic Discharge (ESD) events—especially the computer. Do not handle it roughly. Before servicing, call your distributor and inquire about the PC warranty. Use proper ESD procedures when servicing. Protect components from harmful environmental conditions, such as extreme temperatures, excessive moisture or other damaging effects.

### DISCONNECT POWER

Always turn the power off and unplug the unit before servicing or making adjustments unless otherwise instructed. Installing or repairing components while power is on can damage the components and void the warranty.

### GROUNDING

Avoid electrical shock. Do not plug in AC power until you have inspected and properly grounded the unit. Only plug into a grounded, three-wire outlet. Do not use a “cheater” plug or cut off the ground pin on the line cord.

### ELECTRICAL SHOCKS

There is no isolation transformer in the cabinet. Disconnect AC power before servicing. However, be aware that lethal voltages can remain in the electronic components even when AC power is disconnected. Use extreme caution when servicing. Verify that there is a working ground connection. If the unit sustains water damage, cease using it immediately and unplug AC power.

### POWER CORD

If the power cord is damaged or lost, replace it with an identical cord as supplied by the manufacturer or an authorized service agent.

### SURGE SUPPRESSOR

It is recommended that you plug your game's power cord into a surge suppressor to help protect from power surges that may damage sensitive electronic components.

### WATER AND OTHER LIQUID SOURCE

Do not install game near sprinkler or other water jet sources. Do not use water jet to clean game. Keep minimum clearance behind game and wall for proper ventilation but also prevent access of liquid from spills and sprays from entering ventilation holes.

### CONNECTORS

When servicing machine, ensure all connectors mate properly. If connectors do not slip in easily, do not force them. Connectors are often keyed and only connect one way. Check for correct orientation.

### COMPUTER

The computer contains sensitive components, including a hard drive. Do not handle it roughly. Call your distributor before servicing its internal components. Ask about warranty information as it relates to the PC.

Do not turn the PC power switch on or off. It should remain permanently in the ON position.

Cycle AC power on or off with the cabinet power switch.

A dongle has been inserted into one of the USB ports. This is required for game play.

Do not remove the dongle except for troubleshooting purposes.

### HAZARD TO EPILEPTICS

A small portion of the population has an epileptic condition that may cause seizures. Affected persons experience seizure while watching some television pictures or playing certain video games. People who have not had seizures may still have an undetected epileptic condition. If anyone in your family has experienced epilepsy symptoms (seizures or loss of awareness), consult your physical before using video games. While children play video games, a parent should observe. Be alert to the following symptoms: dizziness, altered vision, eye or muscle twitching, involuntary movements, loss of awareness, disorientation or convulsions. If you or your child experiences these symptoms, discontinue use immediately and consult your physician.

### MANUAL

Keep this manual available and ready for use. If the game fails to function properly, turn off the machine and unplug the AC line cord. Contact your local distributor. Your warranty, when applicable, lasts 60 days from your purchase date. You may not reproduce this document or any of its contents without written authorization from Raw Thrills, Inc. or Play Mechanix™ Inc.

### SPECIFICATIONS

For reasons such as performance, this product's specifications may change without notice. Federal patent, copyright and other intellectual property laws protect the content, devices and design of the game and its equipment.

# World's Largest Pac-Man™

## Product Specifications

### Electrical Power

United States, international and Japan  
V Inrush AC Current: 5 Amps  
Operating AC Current: 5/2.5 Amps Voltage:  
115/230 ~ VAC 50/60Hz

### Temperature

50° F to 104° F  
(10° C to 40° C)

### Humidity

Must not exceed 95% relative humidity

### Pedestal Dimensions

Height: 41" (1.04 meters)  
Width: 33" (.83 meters)  
Depth: 28" (.71 meters)

### Display Dimensions

#### (Assembled)

Height: 104" (2.6 meters)  
Width: 67" (1.70 meters)  
Depth: 28" (.71 meters)

### FUSE REPLACEMENT GUIDE:

NOTE: FOR CONTINUED PROTECTION AGAINST  
FIRE AND ELECTRICAL DAMAGE, USE ONLY  
SPECIFIED FUSE TYPE AND VALUE.

#### **RIO:**

5VDC = 3A 250V SLO-BLO  
12VDC = 5A 250V SLO-BLO

#### **GAME LIGHTING:**

5A 250V SLO-BLO (4X)

#### **LED DISPLAY PANEL:**

5A 250V SLO-BLO (9X PER PANEL)

# World's Largest Pac-Man™

## Setup

Note: This manual is accompanied by a separate document: "Giant Pac-Man Display Assembly and Repair Document". Please refer to this document when installing, servicing and troubleshooting the LED display. Keep this and other documentation for future reference. Additional information regarding the latest version of software and documents can also be found on our website: [www.rawthrills.com](http://www.rawthrills.com) or [www.bandainamco-am.com](http://www.bandainamco-am.com)

## Unpack Materials

1. Place the shipping crates on a flat, stable surface.
2. Cut the banding straps and remove the cardboard lids.
3. Lift off the large cardboard containers surrounding the front pedestal and monitor assemblies and remove any shipping cleats.
4. Remove the coin door key from the coin return slot.
5. Open the top coin door.
6. Locate the keys for the back door and the cash box door.
7. Open the cash box door and remove the cash box.
8. Check for shipping damage to the following:
  - Marquee and monitor
  - Cabinet decals
9. Check the AC line cord for visible signs of damage.  
*Pay particular attention to the plug and line cord insulation.*

## Check Electrical Settings

1. Verify the voltage in the nearest AC outlet.
2. Verify the AC outlet ground connection is present and working.
3. Open the back door of the monitor assembly.
4. Near the AC power transformer, verify the voltage selector switch is set to correct AC voltage.
5. Route the line cord so that the plug is near the AC outlet.
6. Replace the back door of the monitor assembly.

## Startup Game

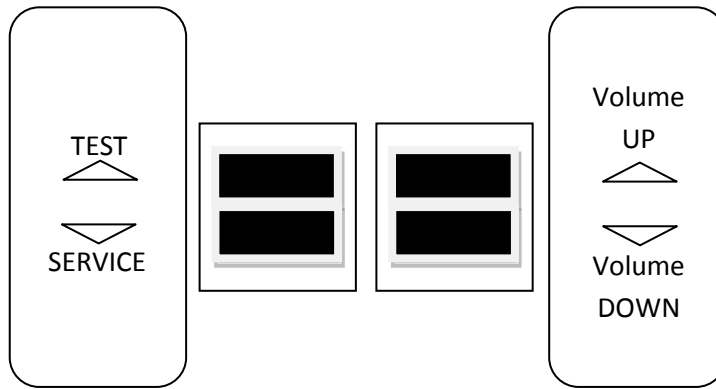
1. Plug in line cord to AC outlet.
2. Turn the power switch to ON.
3. Verify game display, sound, lights and controls are operating normally.  
*If not, turn off AC power and disconnect line cord. Refer to the diagnostic section of this manual.*

# World's Largest Pac-Man™

## Diagnostics and Adjustments

The Service Button Panel has four buttons, three of which can navigate the menu system.

But it is easiest to navigate with a Start button.



- Service Panel TEST/BACK button enters diagnostic system.
- Either Start button selects the highlighted option.
- Service Panel VOL DOWN button moves down through menu or setting choices.
- Service Panel VOL UP button moves up through menu or setting choices.
- Highlight and select Exit to return to previous screen.

An on-screen message acknowledges changes or when you exit a selection without making a change.

At the bottom of each screen there is a brief description of the menu option's function. A complete description is available here for all menu functions.

## Basic Functional Test On Initial Power Up

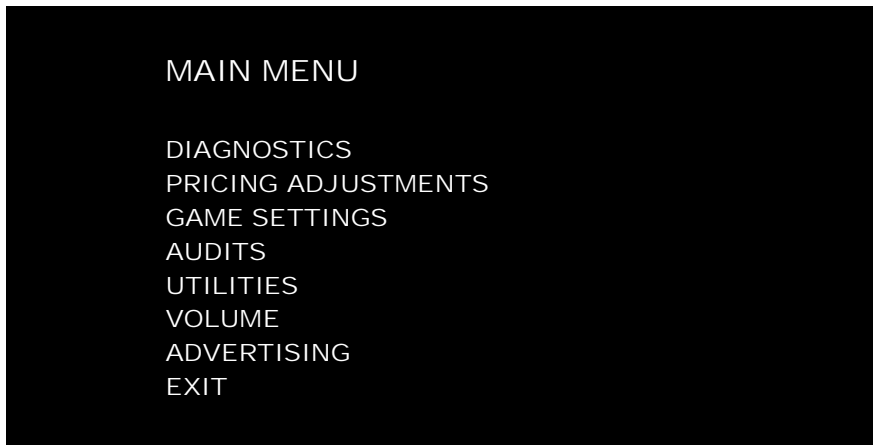
See the Diagnostic Section for further information.

1. Enter the Switch Test menu and verify all switches function.
2. Enter the Sound Test menu and verify the audio works and is not distorted.
3. Enter the Coin Meter Test menu and verify the operation of the coin meter.
4. Enter the Cabinet Lamps Test menu and verify that all cabinet lights work correctly.
5. Enter the Watchdog Test menu, which reboots the game.
6. Upon a successful reboot, you are ready to make adjustments to pricing, volume and other functions found in the Adjustments, Audits and Diagnostics section.

# World's Largest Pac-Man™

## Adjustments, Audits and Diagnostics

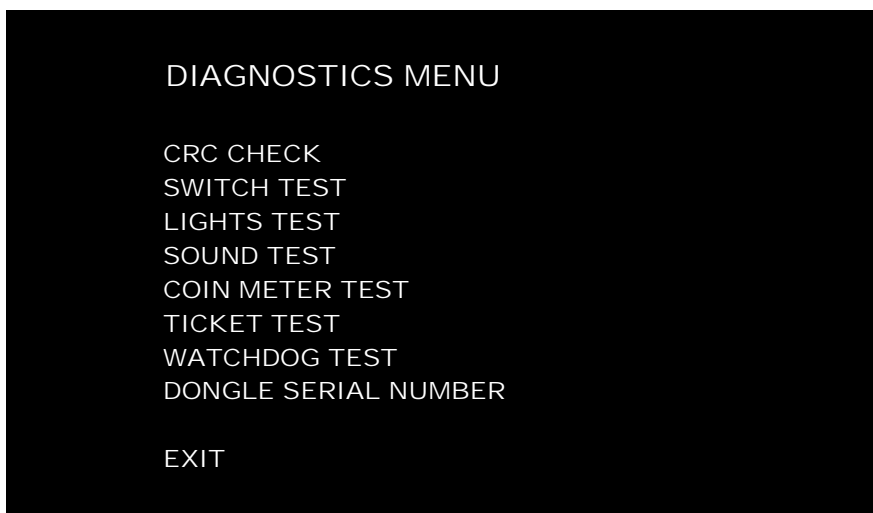
### Main Menu



### Main Menu

#### Diagnostics Menu

This menu allows all game functions to be verified or diagnosed.

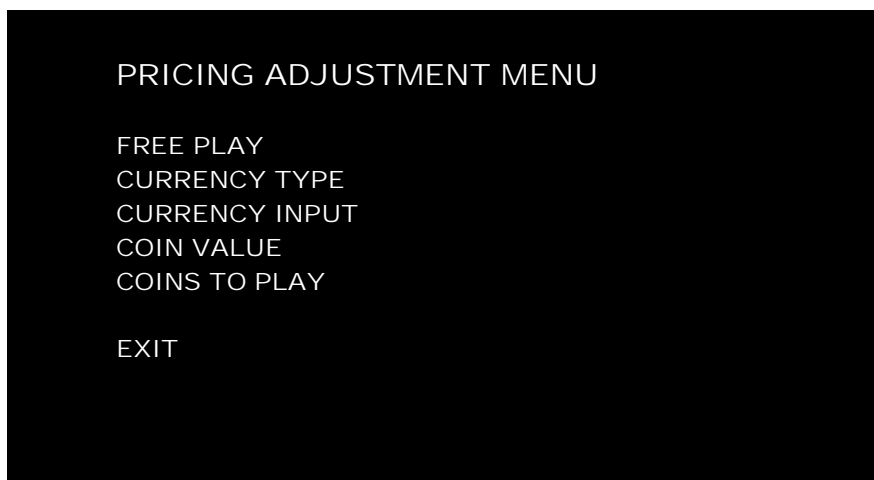


You can improve collections by periodically verifying proper game function and operation. This includes periodic CRC checks to verify that software has not been corrupted or reporting an error.

### Main Menu

#### Pricing Adjustments Menu

This allows customization of coin values, currency denominations, bill pulse and swipe credits.

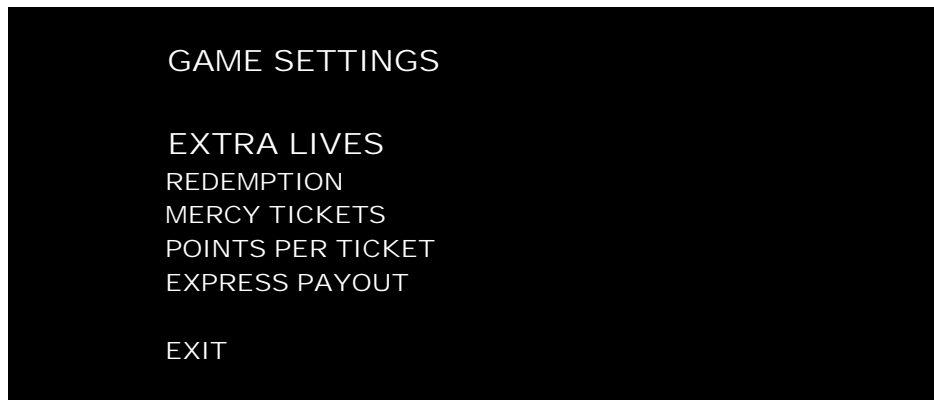


# World's Largest Pac-Man™

Main Menu

Game Settings Menu

This menu allows for customization of target compensation. You can set your points conversion to tickets here.



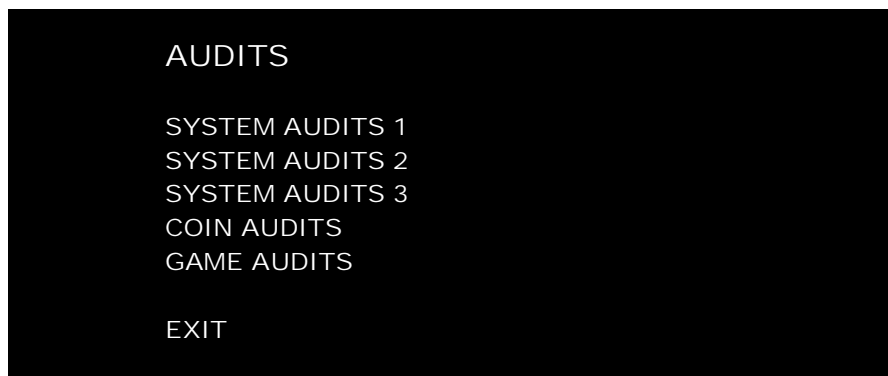
Express Payout- when set to ON, allows for tickets to be dispensed as tickets are earned. When it is set to OFF, ticket payout is done after the completion of the current game.

Mercy Tickets- A mercy ticket awards at least 1 ticket to anyone who plays the game regardless of score while redemption mode is active. This feature can be deactivated.

Main Menu

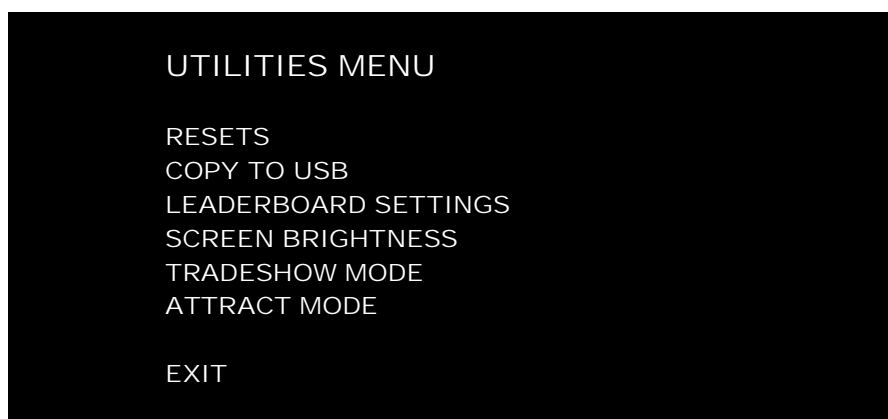
Audits Menu

Audit screens help assess game performance, find intermittent problems, decide whether to adjust game difficulty and free game award and help maximize game earnings.



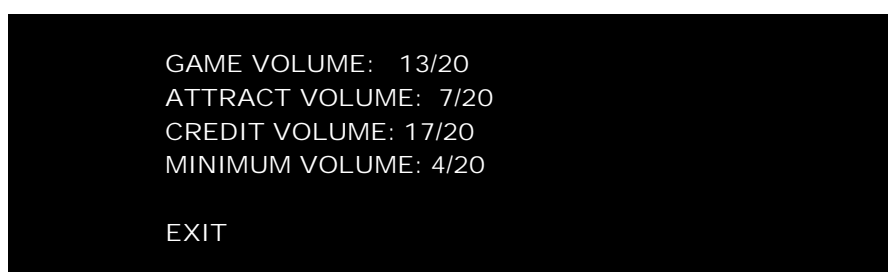
Main Menu

Utilities Menu



in Menu

Volume

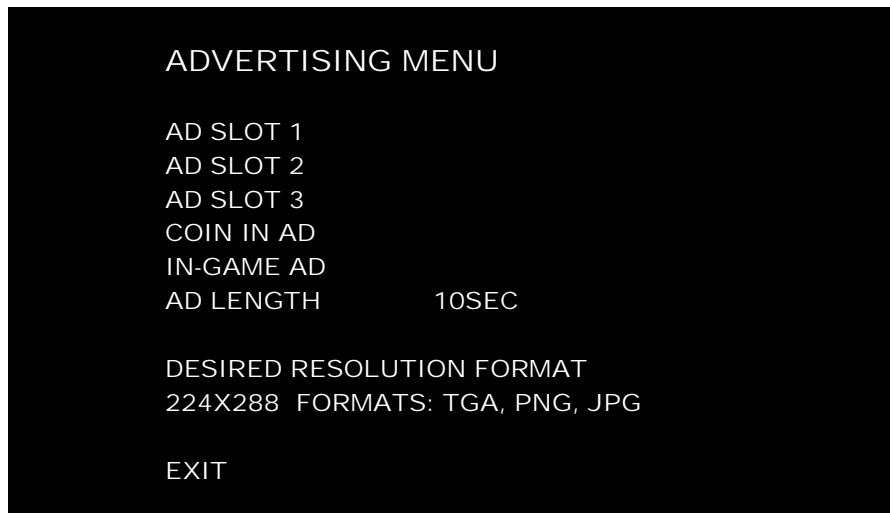




# World's Largest Pac-Man™

in Menu

Advertising Menu



## ADVERTISING IMAGE UPLOAD INSTRUCTIONS:

1. Add 1-3 images to a USB Flash Drive. Images should be tga, png, or jpg. For best quality, images should have a resolution of 224x288
2. Insert the flash drive into an empty USB slot and enter the Advertising Menu in the Test Menu
3. Select one of the 3 ad slots and then select load image
4. Navigate to the file you wish to upload and select it
5. You will be presented with a preview of the image, which you can accept or decline
6. If accepted, the ad will now show up in the attract cycle
7. The "ad length" option allows you to adjust the length of time that your ad displays on screen

## Dell 3050 BIOS

### NOTICE

The PC ships with correct BIOS settings. Making changes to the BIOS different from the description below may adversely affect game functions.

Do **not** use the PC on/off **button**. Turn AC power on or off with the cabinet power switch.

#### To Access BIOS Settings:

With the computer powered off, hold 'F12' on the keyboard and turn the computer on. Continue holding the 'F12' key until a menu with a blue background appears. From the menu select 'BIOS Setup'

#### Main

- Nothing

#### Advanced

- Intel (R) SpeedStep (TM).....[Enabled]
- Virtualization.....[Enabled]
- Integrated NIC.....[Enabled]
- SATA Operation.....[AHCI]
- Adapter Warnings.....[Enabled]

#### + Miscellaneous Device

- Nothing

#### + Power Options

- Wake Up by Integrated LAN.....[Disabled]
- AC Recovery.....[Power On]
- Auto Power On.....[Disabled]

#### Security

- Nothing

#### Boot

- Boot List Option.....[Legacy]
- File Browser Add Boot Option
- File Browser Del Boot Option
- Secure Boot.....[Disabled]
- Load Legacy Option Rom.....[Enabled]
- 1<sup>st</sup> Boot Priority.....[USB Storage Device]

#### Exit

- Nothing

# World's Largest Pac-Man™

## Dell 3050 Software Flash Install Procedure:

1. A) Create a USB flash drive with the new version of the game software using the "Raw Thrills Flash Creator" or  
B) Use an existing USB flash restore drive that came with the game.
2. If you are simply re-installing an existing version, skip step 1 and proceed to step 2 of this procedure.
3. Insert the USB flash drive into the USB port near the test/service bracket located inside the coin door.
4. Power cycle the game. (Turn the game off and wait a 10 seconds and then turn in on again).
5. Follow the step by step installation instructions as it appears on the game screen.
6. Please note the version of the game you are installing for later reference.
7. Remove must the USB flash drive from the USB Port once you see the prompt on the display. Do not leave the USB flash drive on the USB port.
8. Power cycle the game and wait for the attract screen to appear. This may take up to 3 minutes on the boot up after an install.
9. Set your desired game settings and perform a functional test to make sure the game operates correctly.

# World's Largest Pac-Man™

## **ELECTRICAL AND MECHANICAL ILLUSTRATIONS**

NOTE: PLEASE CHECK FOR THE LATEST VERSION OF GAME SOFTWARE AND MANUAL AT [WWW.RAWTHRILLS.COM](http://WWW.RAWTHRILLS.COM)

# World's Largest Pac-Man™

## Troubleshooting

**Warning:** Review safety chapter before making any adjustments to game.

Problem	Possible Cause	Solution
No video or bad video	Faulty HDMI/DVI cable or connection	Verify HDMI to DVI video cable connection between PC and LED controller card in pedestal (RT# 380-00002-01).
	Faulty network cable connection between pedestal and LED screen	Verify network cable connection between the LED controller card in pedestal (RT# 380-00002-01) and the network pass-through jack in the back of the pedestal. Verify network cable connection between the pedestal and the LED screen. To verify the pedestal network cable pass-through connector, plug the LED screen network cable directly into the LED control card (RT# 380-00002-01).
	LED quadrant not powered on	Verify that all four LED screen quadrant power supply boxes are switched to the "ON" position - the power supply fan will spin when powered on.
	Game booted before the LED screen was turned on	Make sure all four quadrants of the LED screen are powered. Leave the LED screen powered and power-cycle the pedestal.  <i>Always make sure to power the pedestal at the same time or after the screen. Never power the pedestal before the screen.</i>
	Faulty network cable connection between LED screen quadrants	Verify network cables are connected between quadrants as shown in <FIGURE ??>. Power cycle pedestal if any corrections are made.

Problem	Possible Cause	Solution
Game will not power up.	Game not plugged in	Plug game into AC outlet.
	Game not turned on	Turn on main power switch.
	Game fuse is blown.	Check and replace fuse. See Specification page for fuse values.
	No power to receptacle	Test AC outlet and plug game into powered outlet.
	PC not turned on.	Turn PC power switch on. Ensure IEC cable tightly plugged in. Trace cable back to source to ensure

# World's Largest Pac-Man™

	continuity.
PC BIOS set incorrectly.	See BIOS Settings chapter.
Flash Drive Installer is left connected to PC.	Disconnect Flash Drive Installer

Buttons do not work	Faulty micro switch	Replace the micro switch on the button and re-test. Verify that the wires are connected to the correct spades on the micro switch
	Faulty wiring	Disconnect the cabinet from AC power. Verify that all wires are firmly connected to each button and the PCB. Verify that no wires are frayed or improperly shorting to ground. Verify that wires are connected to the correct spades on the micro switches.
	Faulty PCB	Ensure all connections to PCB are secure. Replace PCB if faulty.

Neither buttons nor audio work	PCB connected to faulty USB port (boot message may indicate not detected)	To test a USB port, turn off the game, disconnect the device from the port, and then connect the game dongle to the port. Reboot the game. A No Dongle message indicates the port is bad. If the game starts, the port is working. After the test, reconnect all devices to the correct USB ports and reboot.
--------------------------------	---	---

No sound or bad sound	Bad connection	Check connection to speakers.
	Volume set too low	Use VOL UP button on Test panel to raise volume
	Faulty wiring	Verify all wires are firmly connected to the speakers, PCB, and green computer audio port. Verify that each wire is connected to the correct port and no wires are frayed or improperly shorting to ground.
	Blown speakers	Remove the grill and inspect each speaker for visible damage. Run the Sound Test from System Tests in the Operator Menu to verify each speaker is working.
	Reversed wires	A weak or low muffled sound is a sign of reversed speaker wires. Check for reversed wires on each speaker.

# World's Largest Pac-Man™

Faulty PCB	To verify audio is working at the computer, connect stereo headphones to the green computer audio port.
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Constant low audio hum	Faulty power supply	Check external DC supply and the PC supply.
	Open ground	Check all ground wires in cabinet. Ensure AC wall outlet is properly grounded

Game does not load.	PC Drive failure	Recover hard drive.  See Flash Installer Document or visit <a href="http://www.rawthrills.com">www.rawthrills.com</a> for latest software version download.
PC Drive test reports "bad" or "missing" files.		
Game fails to finish loading.		
After resetting, game still reports an error.		
Erratic game mode or attract mode.		
WARNING! Data Files Corrupted. (Game Operation May Become Unstable.) Use "Test" Switch to Enter Test Mode and Run "File Test." Press Start To Continue.		
<b>Problem</b>	<b>Possible Cause</b>	<b>Solution</b>
Game resets.	Bad file.	Run Flash Installer.

Coin meter does not click during Test.	No pulse to meter	Check wiring from meter to RIO board
	Faulty meter	Replace coin meter

Improper number of credits given when coins or bills are inserted	Incorrect setting in Adjustments	Adjust settings
	Faulty wiring	Disconnect cabinet from AC power. Verify wires are firmly connected to coin mech and bill validator and ground wires are properly connected. Verify no wires are frayed or shorting to ground.
	Faulty coin mech	Verify coin mech is not jammed. Ensure coin mech is properly aligned and latched to coin door.

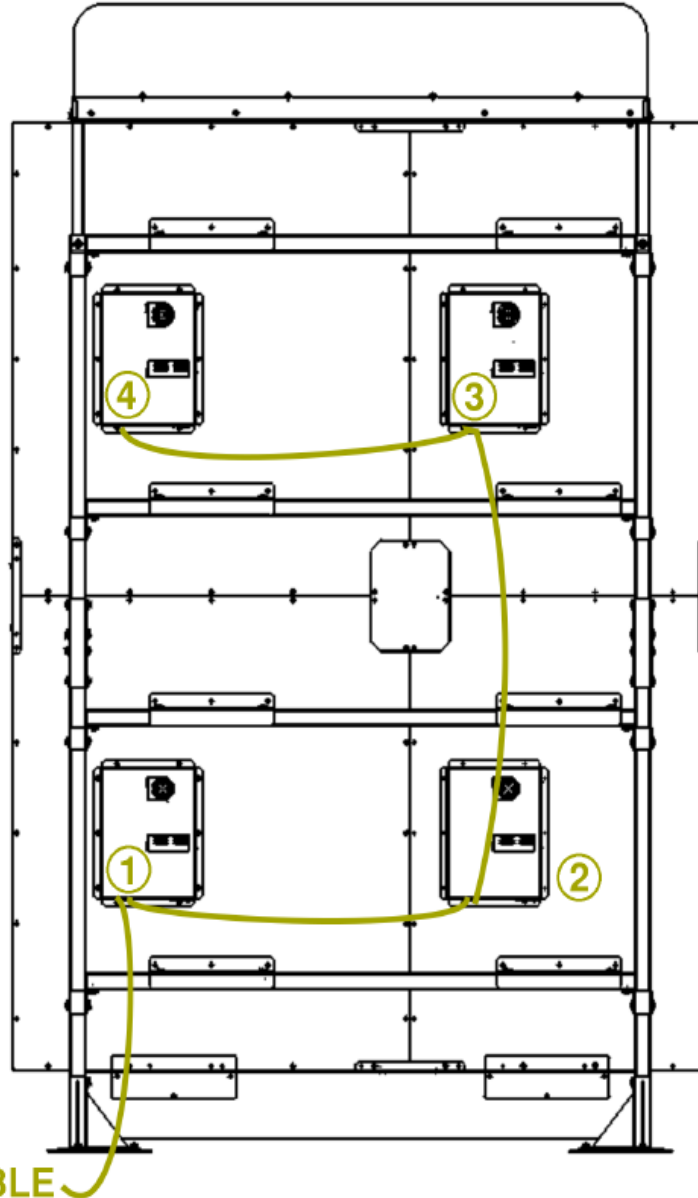
# World's Largest Pac-Man™

Coin meter does not work	Blown fuse(s) on PCB	Replace 12vdc 5A fuse(s) on PCB
Exits Test Mode every 3 seconds	Test button stuck in ON position	Slide or toggle button off after Test Menu appears
<i>NO VIDEO</i> message	Video cables not plugged in properly	Reattach and tighten power and video cable to display adaptor.
<i>No Signal</i>	Video or network cable not secure	Check and secure cable.
	PC not turned on	Turn PC power switch on. Ensure IEC cable tightly plugged in. Trace cable back to source to ensure continuity.
<i>Dongle Not Present</i>	Dongle missing or disconnected	Find dongle cable and reseal in USB port
	Faulty USB port	Insert dongle cable in different USB port
<i>Connect RIO Board or RIO Board Missing</i>	USB cable disconnected	Check USB connection from PC to RIO board
	No power to RIO board	Check for proper voltage (+5V, +12V) at RIO P1 connector

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## NETWORK CABLE CONNECTIONS

*NETWORK CABLES MUST BE CONNECTED  
IN THE ORDER SHOWN BELOW*



**NETWORK CABLE  
FROM PEDESTAL**



# World's Largest Pac-Man™

ISSUE	POSSIBLE PROBLEM	SOLUTIONS
Defective single pixel	Defective LED module	<ul style="list-style-type: none"> <li>• Tap gently on defective pixel</li> <li>• Replace LED module</li> </ul>
Several defective pixels, but not all in the same row or same column	Defective LED module	Replace LED module
Entire row or column of defective pixels	Faulty data transmission	<ul style="list-style-type: none"> <li>• Check ribbon cable between malfunctioning module and module to the left (from the back)</li> <li>• Check/replace module to the left (from the back)</li> <li>• If module is left-most in quadrant (from the back):                             <ul style="list-style-type: none"> <li>○ Check ribbon cable between module and LED display controller.</li> <li>○ Check quadrant LED display controller</li> </ul> </li> </ul>
	Defective LED module	Replace LED module
Entire module malfunctioning	Faulty data transmission	<ul style="list-style-type: none"> <li>• Check ribbon cable between malfunctioning module and module to the left (from the back)</li> <li>• Check/replace module to the left (from the back)</li> <li>• If module is left-most in quadrant (from the back):                             <ul style="list-style-type: none"> <li>○ Check ribbon cable between module and LED display controller.</li> <li>○ Check quadrant LED display controller</li> </ul> </li> </ul>
	Bad power	<ul style="list-style-type: none"> <li>• Check power connection to LED module</li> <li>• Check quadrant fuse block for blown fuse</li> </ul>
	Defective LED module	Replace LED module
Entire row of modules in quadrant malfunctioning	Faulty data transmission	<ul style="list-style-type: none"> <li>• Check ribbon cable between left-most (from the back) LED module and LED display controller</li> <li>• Check quadrant LED display controller</li> </ul>
	Bad power	<ul style="list-style-type: none"> <li>• Check quadrant fuse block for blown fuse</li> <li>• Check power connection to all LED modules in malfunctioning row</li> </ul>

Screen Note- World's Largest Pac-Man uses over 65,000 LEDs on its giant screen. It is normal for a few LEDs to fail over the course of operating the game. This will not effect normal operation or viewing of the game and most will not be noticeable to the eye.

Note: This manual is accompanied by a separate document: "Giant Pac-Man Display Assembly and Repair Document". Please refer to this document when servicing and troubleshooting the LED display. Additional information regarding the latest version of software and documents can also be found on our website: [www.rawthrills.com](http://www.rawthrills.com) or [www.bandainamco-am.com](http://www.bandainamco-am.com)

# World's Largest Pac-Man™

## Contact Information

For an authorized distributor near you, check the Bandai Namco website at [www.BandaiNamco-am.com](http://www.BandaiNamco-am.com)

### **BANDAI NAMCO Amusement America Contacts and Personnel:**

**MAIN NUMBER:** 847-264-5610

**MAIN FAX:** 847-264-5611

**PARTS SALES:** 847-264-5637

**TECH SERVICES:** 847-264-5636

**PARTS & TECH SERVICES FAX:** 847-264-5613

**GENERAL INFORMATION:** [arcadeinfo@bandainamco-am.com](mailto:arcadeinfo@bandainamco-am.com)

**PARTS:** [parts@bandainamco-am.com](mailto:parts@bandainamco-am.com)

**SERVICE:** [service@bandainamco-am.com](mailto:service@bandainamco-am.com)