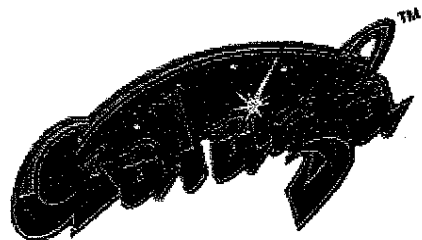
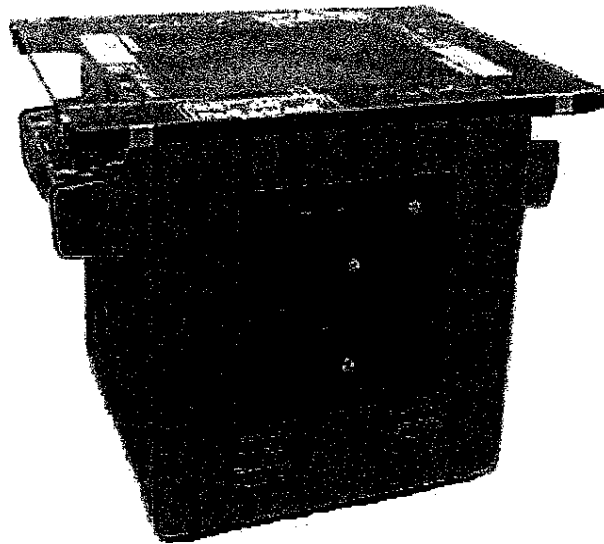


namco® America Inc.

MS. PAC-MAN / GALAGA COCKTAIL



Operator's Manual

Important

**Read PRECAUTIONS and INSTALLATION
Sections before operating game**

FCC Notice

Note: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operating in a commercial environment. This equipment uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

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1.0 SPECIFICATIONS

Input Power:	120 VAC, 60 Hz, 3 Amp 200 Watts Maximum
Installed Dimensions:	37" W 27 ½" D 30" H
Monitor	Wells-Gardner 19 inch monitor Model # WGM 1973-HOGSO2H

WARNING

REMOVAL OF SERIAL NUMBERS AND/OR BAR-CODES FROM PRODUCT OR COMPONENTS WILL VOID THE WARRANTY

2.0 PRECAUTIONS

2.1 INSTALLATION

This game is designed for indoor use only. It must *not* be installed outdoors. The following conditions must be avoided.

1. Direct exposure to sunlight, high humidity, direct water contact, dust, high heat, or extreme cold.
2. Vibration. The game must be installed on a level surface with levelers and/or casters in place.

Do not install in an area such that the game would present an obstacle in case of an emergency (i.e., near fire equipment or emergency exits).

2.2 HANDLING

1. Before operating the game, make sure that the main AC power hookup includes a safety ground. This will ensure safe operation as well as compliance with FCC regulations. Measure the AC power line voltage. Verify that the voltage source is between 110 and 125 VAC.
2. Before replacing any parts, turn the AC power OFF and unplug the game.
3. When unplugging the game from an electrical outlet, always grasp the plug, not the line cord.

4. The game power supply includes areas of high voltage. Take care at all times to avoid electrical shock whenever inspecting or adjusting the game.
5. Do not attempt to repair the Printed Circuit Boards (PCBs) on-site. They contain sensitive integrated circuit chips that could be easily damaged, even by the small internal voltage of a multimeter. Always return the PCBs to your distributor for any repairs.
6. Always raise the leg levelers before attempting to move the game.

WARNING

When packing PCB's for shipment, enclose in anti-static wrap. NAMCO America Inc. is not responsible for damage to components due to static discharge.

3.0 INSPECTION

To ensure a successful startup following shipment, the MS PACMAN/GALAGA game cabinet should be inspected before initial power-up.

1. Carefully remove the game cabinet from its shipping platform and inspect it for visible signs of damage.

If your game exhibits signs of damage be sure to document it and contact your distributor and transportation carrier immediately.

2. Remove the keys from the coin return. Open and remove the rear access panel.
3. Inspect the game PCB and display boards, verifying that all connections are properly seated. Inspect the power supply area for any loose components.
4. Insure all leg adjusters contact the floor and adjust the height to keep the game level.
5. After adjusting, rotate the leg adjuster nut upward to secure this position.
6. Connect the main AC power cord and turn on the power.

4.0 INTRODUCTION

MS PACMAN/GALAGA is an exciting new game developed by Namco America Inc. It contains two of the wildly popular games in game world history, Ms Pac-Man and Galaga.

A more challenging version of the well-known Pac-Man maze game, Ms Pac-Man is sure to be the most popular girl in the game world. Pursued by the familiar Inky, Blinky, Pinky and the newest ghost, Sue, Ms. Pac-Man goes through 4 changing mazes that increase in difficulty and offer varying side exit locations. Each of the 4 mazes has an additional 2 side exits that give Ms. Pac-Man a total of 4 ways out of the maze.

Bonus fruit symbols indicate how many times a player has cleared the screen of dots. Ms. Pac-Man boasts additional bonus fruit symbols that also float freely through the maze and have higher point values when gobbled.

Dots score 10 points each with Power Dots serving 50 points each. Points double for each ghost Ms. Pac-Man munches. 200 points for the first, 400 for the second and 800 and 1600 points consecutively for the third and fourth ghosts. When Ms. Pac-Man is caught herself, she dramatically swoons and falls.

Along with a cool sound track, players may witness the touching love story of Ms. Pac-Man's meeting Pac-Man himself, their courtship and marriage and even the delivery of Pac-Baby in the three act, between-maze cartoon series.

In Galaga, players control the fighter's movements left and right and defend against the missiles and suicide attacks of the Galaga aliens and the Galaga Commander through infinite levels of play, with every third level having a challenging stage! Retrieve captured fighters from the descending Galaga Commander tractor-beam and double your fire power.

5.0 GAME PLAY

MS. PAC-MAN

The object of the game is to score as many points as you can while Ms. Pac-Man eats dots, fruit, pretzels, energy pills and ghosts. Score 10,000 points and earn a bonus Ms. Pac-Man life.

The game starts with three Ms. Pac-Man lives, which are indicated by three Ms. Pac-Man symbols at the lower left corner of the screen. When game play begins, Ms. Pac-Man is located close to the center of the screen, just below the ghosts' reincarnation chamber in the center of the maze.

Use your joystick controller to guide Ms. Pac-Man around the maze. When she passes over dots, she gobbles them up, and you score points. If she eats all the dots on the screen, the maze flashes momentarily, and you start playing on a new maze.

Ms. Pac-Man encounters floating fruit and pretzels while traveling around the maze. Gobble up these munchies and you score bonus points. But watch out! Fearful ghosts scurry about trying to gobble up Ms. Pac-Man. Her only recourse is to eat an energy pill and then go after the ghosts.

As soon as she gulps down the energy pill, the ghosts turn blue with fright. You earn 200 points for the first ghost, 400 points for the second ghost, 800 for the third ghost, and a whopping 1600 points for the fourth ghost, all on the same energy pill.

Unfortunately, the effects of the energy pills are short-lived, so you'll have to move fast. After the ghosts are gobbled up, their eyes head back to the chamber in the center of the screen for reincarnation. If you don't gobble up the ghosts, they start to blink just before they turn back to their original colors.

HINTS FOR SURVIVAL

Practice clearing the maze of dots before trying to gobble up the ghosts.

Stay close to an energy pill before eating it, and tease the ghosts into moving toward you. When the ghosts get close, eat the energy pill and gobble up as many ghosts as you can.

Use the openings in the maze as escape tunnels. Move to either side to quickly evade the ghosts. Don't forget, different mazes have different tunnels.

GALAGA

Score – The player gets points by defeating the “Galaga”. Points scored vary depending on the type of attacks and the condition of the enemy. It may be in the waiting position, an offensive mode, or flying in formation.

Galaga – It takes two hits for the player to destroy the boss Galaga. Among the many other “Galagas” is one special hidden “Galaga” which changes shape and can split into many pieces. Destroy all of the transformed Galaga and gain 1,000 – 3,000 additional bonus points!

Challenging Stage – The player has a chance to obtain bonus points every third stage. A total of nine different “Galaga” appear on the screen, and they all fly in unexpected directions. If you destroy all of them, 10,000 perfect score bonus points will be added to your score.

Tractor-Beam – When the fighter is struck by the tractor-beam of the boss Galaga, the fighter will be captured. When the attacking boss “Galaga” is destroyed, any captured fighter will be released and become a dual fighter, doubling your fire power. (When you are captured and there are no fighters left, the game is over).

Hit Ratio – When the game ends, the score board indicates the number of missiles fired, the number of “Galaga” destroyed and the percentage number of targets hit.

The number of stages is indicated in the lower right hand corner of the screen. The number of remaining fighters is indicated on the right side of the screen.

At scores of 30,000, 70,000, and every 70,000 points thereafter, one additional fighter is added.

CHARACTERS

Fighters – Fighters are the spaceships operated by the player. They move to the right and left and can destroy “Galaga” by firing a series of missiles. “Dual fighters” can shoot the enemy with two parallel missiles.

Galaga – The “Galaga” are an unknown alien, which has an insect shape. They fly in formation and begin attacking. The boss “Galaga”, in the highest position, is the only one capable of shooting the tractor-beam. If the boss “Galaga” is destroyed, the remaining “Galagas” attack power is temporarily weakened.

WINNING STRATEGIES

Fire when “Galaga” is weakened (unable to fire missiles) – When the player destroys the boss “Galaga”, the enemy is temporarily weakened. You should take advantage of this moment and attempt to destroy the remaining “Galaga”. You need only to avoid the “Galaga” crashing into you.

Escape Plans – Attack the right and left sides of the enemy formation while they are trying to organize to create escape zones for your fighters. If not, you may be surrounded by the enemy and lose opportunities to escape. (Caution: “Galaga” may still attack in the escape zones).

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"Dual fighters" are the key – If you attack with the "dual fighters", your fire power doubles. When the enemy attack escalates, it will be very difficult to defend your position or obtain a perfect score, particularly during the "challenge stage", without dual fighters.

The Blue Boss is your best chance. When you hit the boss "Galaga" with your missile and turn it blue, it will be easier for you to destroy it even if it has captured fighters.

3 GENERAL ADJUSTS

COIN 1 CREDITS	1, 2, 3, OR 4
COIN 2 CREDITS	1, 2, 3, OR 4
CREDITS TO START	FREE PLAY / 1 / 2 / 3 / 4
CREDITS TO CONTINUE	BUY-IN DISABLED / 1 / 2 / 3
BONUS CREDITS	NONE / 3 / 4 / 5
DEFAULT PRICING SETTING	COIN 1 CREDIT -- 1 COIN 2 CREDIT -- 4 2 CREDITS TO START 1 CREDIT TO CONTINUE NO BONUS CREDITS
CLEAR HIGH SCORES	
CABINET	UPRIGHT / COCKTAIL
EXIT	

4 SHOW AUDITS

LEFT COINS
RIGHT COINS
MS. PACMAN STARTS
MS. PACMAN CONTINUES
PACMAN STARTS
PACMAN CONTINUE
GALAGA STARTS
GALAGA CONTINUES

5 SWITCH TESTS

TESTS ALL SWITCHES -- PRESSING ANY SWITCH TURNS DISPLAY FROM WHITE TO RED

6 MONITOR ALIGNMENT

CROSS HATCH

7 FACTORY DEFAULTS

ALL SETTINGS TO DEFAULTS

(NOTE: GAME REVERTS BACK TO UPRIGHT SETTING, RETURN TO 3. GENERAL ADJUSTS -- CABINET, TO RESTORE A COCKTAIL MODE.)

8 EXIT

EXIT TO GAME MODE

PACMAN / GALAGA TEST SCREEN

■ SELECT WITH JOYSTICK -- EXECUTE WITH ANY CONTROL PANEL BUTTON

TEST MENU

- 1 MS. PACMAN ADJUSTS
- 2 GALAGA ADJUSTS
- 3 GENERAL ADJUSTS
- 4 SHOW AUDITS
- 5 SWITCH TESTS
- 6 MONITOR ALIGNMENT
- 7 FACTORY DEFAULTS
- 8 EXIT

1 MS. PACMAN ADJUSTS

MS. PACMAN PER GAME	1,2,3,OR 5
BONUS MS. PACMAN	NONE, 10K, 15K, 20K
DIFFICULTY	NORMAL, HARD
SPEED	NORMAL, FAST
DEFAULT SETTINGS	FACTORY DEFAULTS: 3-PACMAN, 10K BONUS NORMAL DIFFICULTY, NORMAL SPEED
EXIT	

2 GALAGA ADJUSTS

ATTRACT SOUNDS	ON / OFF
FIGHTERS PER GAME	2, 3, 4, OR 5
BONUS AT	20K / 60K / NONE 30K / 80K / NONE NONE 20K / 60K / 60K 20K / 70K / 70K 20K / 80K / 80K 30K / 100K / 100K 30K / 120K / 120K 30K / 150K / 150K 30K / 100K / NONE 30K / 120K / NONE 30K / 150K / NONE 30K / NONE / NONE
RAPID FIRE	ON / OFF
SHOT SPEED	NORMAL / FAST
DIFFICULTY	EASY / NORMAL / HARDER / HARDEST
DEFAULT SETTINGS	SOUNDS -- OFF FIGHTERS -- 3 BONUS -- 20K / 60K / 60K RAPID FIRE -- OFF SHOT SPEED -- NORMAL DIFFICULTY -- NORMAL

EXIT

WARRANTY

Seller warrants that its printed circuit boards and parts thereon are free from defects in materials and workmanship under normal use and service for a period of ninety (90) days from the date of shipment. Seller warrants that its video displays (in games supplied with video displays) are free from defects in material and workmanship under normal use and service for a period of thirty (30) days from the date of shipment. None of the Seller's other products or parts thereof are warranted. Seller's sole liability shall be, at its option, to repair, replace, or credit Buyer's account for such products which are returned to Seller during said warranty period, provided:

- a) Seller is promptly notified in writing upon discovery by Buyer that said products are defective.
- b) Such products are returned prepaid to Seller's plant; and
- c) Seller's examination of said products discloses to Seller's satisfaction that such alleged defects existed and were not caused by accident, misuse, neglect, alteration, improper repair, improper installation, or improper testing.

In no event shall Seller be liable for loss of profits, loss of use, incidental or consequential damages.

Except for any express warranty set forth in a written contract between Seller and Buyer which contract supersedes the terms herein, this warranty is in lieu of all other warranties expressed or implied, including the implied warranties of merchantability and fitness for a particular purpose, and all other obligations or liabilities on the Seller's part, and it neither assumes nor authorizes any other person to assume for the Seller any other liabilities in connection with the sale of products by Seller.

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SERVICE

If you have questions regarding any **Namco America Inc.** product or require technical support:

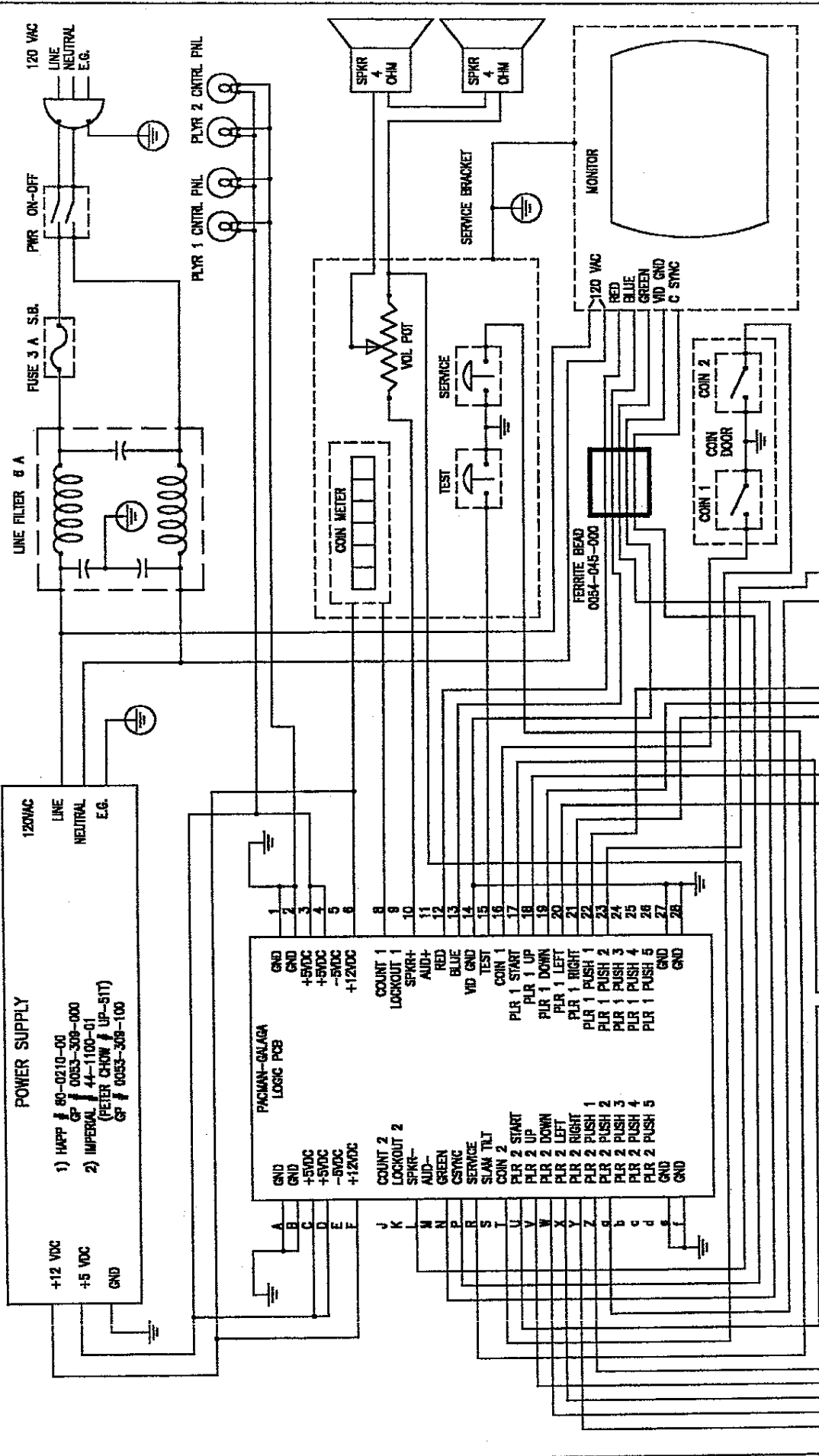
Contact **Namco America Inc.** Customer Service at:

1 (800) 326-4263 or FAX (408) 232-3060

Hours: 8:00 am - 4:00 pm PDT

Parts and repair services for **Namco America Inc.**

products are available through your distributor.



GRAND PRODUCTS INC.
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 TITLE: PACMAN-GALAGA GAME: PACMAN-GALAGA
 SCALE: COCKTAIL
 QTY PER GAME: DRAWING: JERRY
 DATE: 11-22-00 MATERIAL: MATZ
 TOL: .X ±.030 .XX ±.015 .XXX ±.005
 HOLES: +.002 -.0
 ANGLE: +°

