

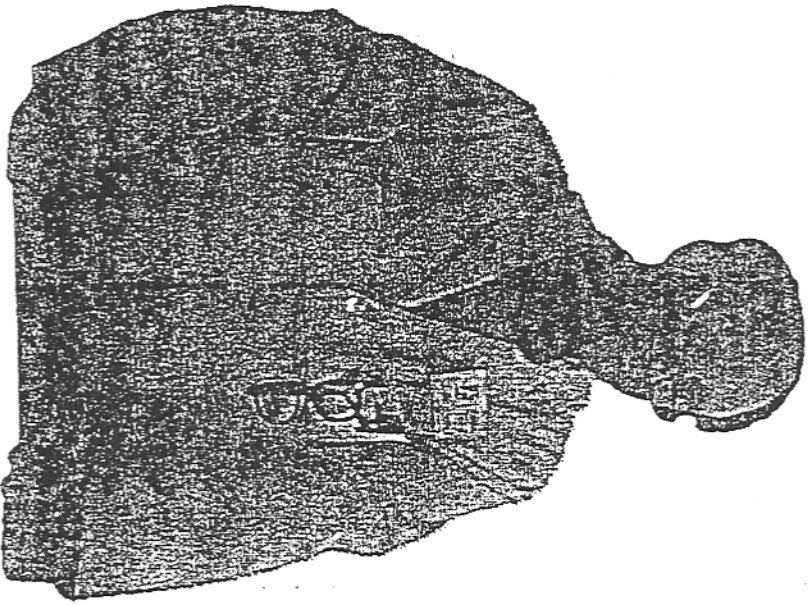
Welcome to

# Odyssey Technical Training

An Introduction to the Odyssey

# What We'll Learn Today

- Customer Support Operations
- Game Overview and Bonus Awards
- Machine Management System Overview
- Component Discussion
- Safestore Clear and Game Selection
- Monitor Adjustments
- Removal and Replacement of Components



# Warranty and Spare Parts Kit

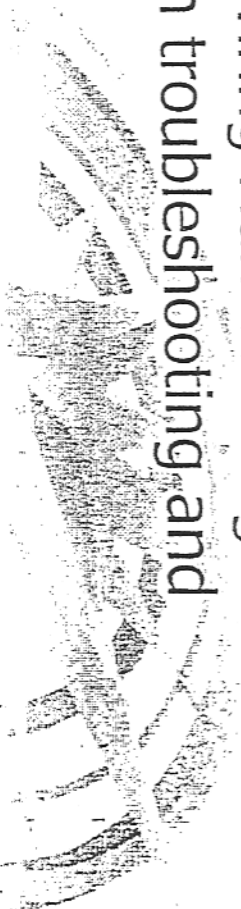
- Warranty: 90 days parts and labor at the conclusion of the trial period.
- Spare Parts Kits:
  - Recommended spares kit are provided at time of install, based upon the number of slot machines installed.
  - At the end of the warranty period, any or all unused parts may be returned at no charge or keep any or all the parts and be invoiced for just those items.

# Return Material Authorization (RMA) Process

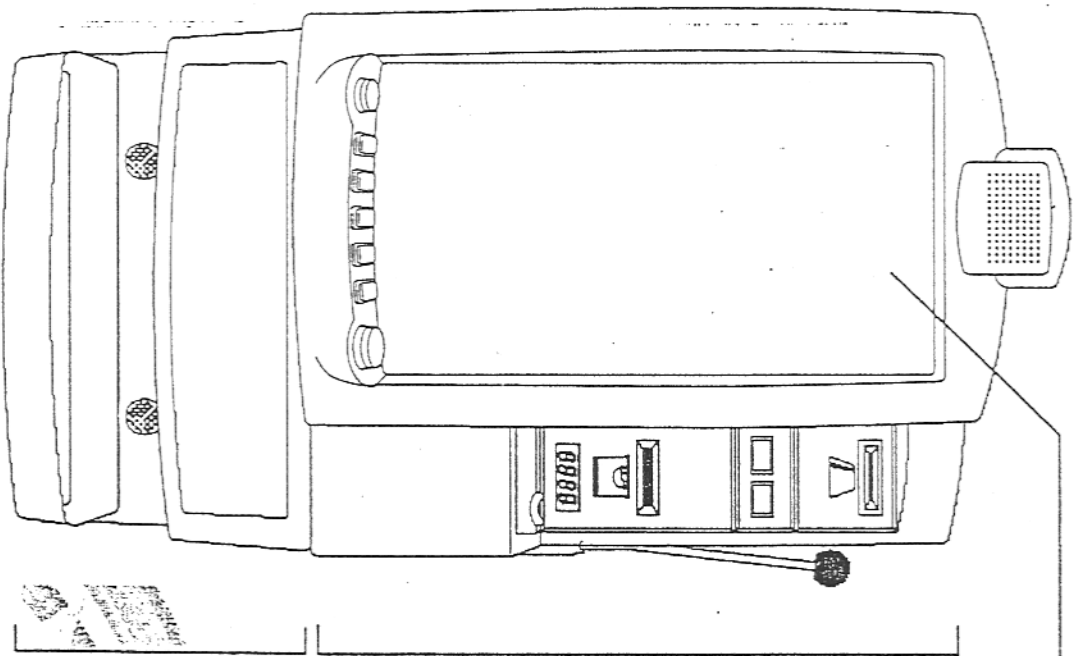
- Call the Customer Support Center at 1-888-44-SLOTS.
- Describe the malfunction.
- The Customer Support Representative will issue an RMA number.
- A new part will be mailed to you by the next business day.
- Include the RMA number on the part or the shipping container to ensure proper crediting.
- Return the malfunctioning part to Silicon Gaming.

# Operations and Service Guide

- An easy to use reference guide to explain system functionality, configuration, operation, calibration, and maintenance
- Includes a very detailed removal and replacement section
- Illustrated Parts Breakdown, Circuit Board Schematics, and complete Wiring Harness Diagrams are also included to assist in troubleshooting and repairs



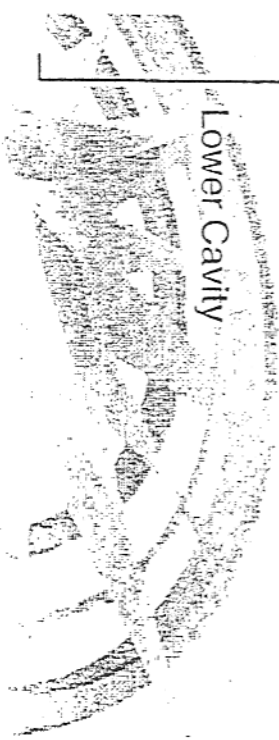
# Odyssey Functional Areas



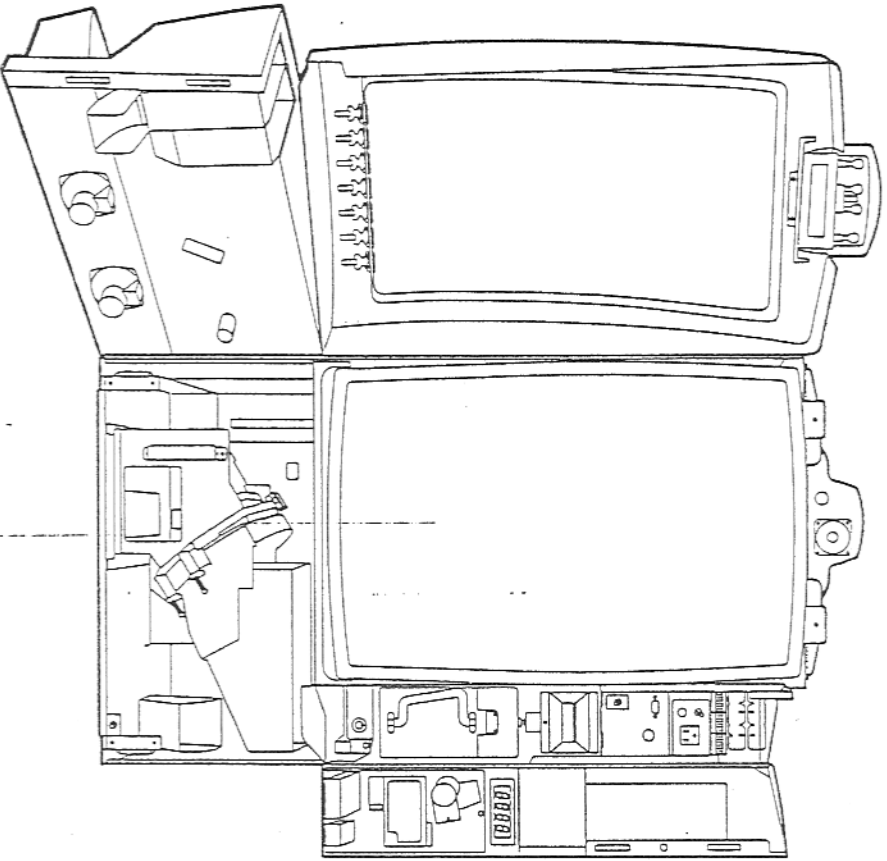
Display Cavity

Currency Column

Lower Cavity

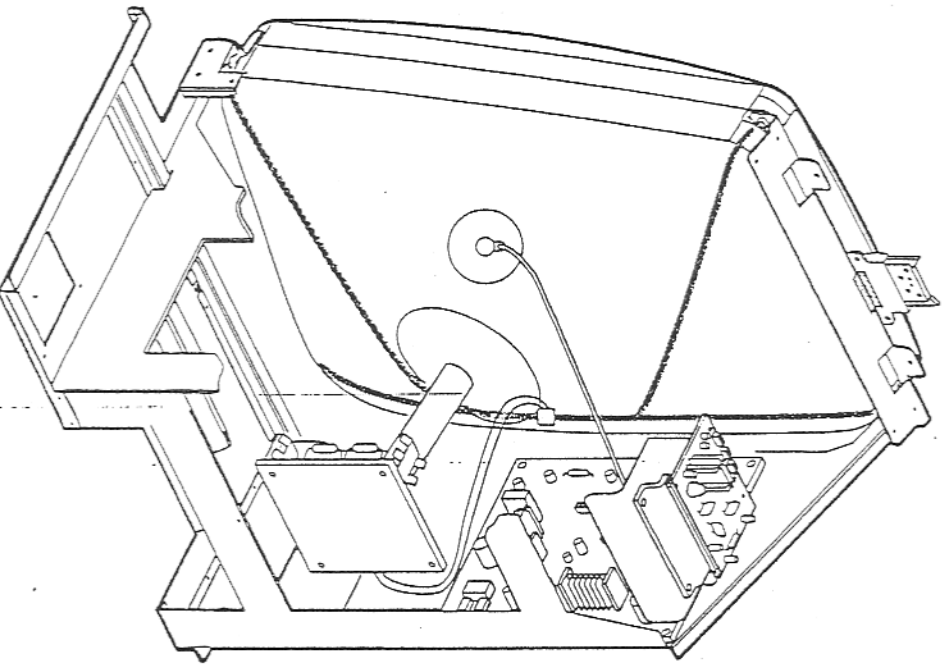


## Odyssey Front View with Doors Open



- Bezel door hinged for access to monitor and buttons
- Button switches/bulbs are wired in parallel
- **All button bulbs are 14 VAC**
  - Round buttons: #C161
  - Square buttons: #73
  - Service Candle: #68
- Service candle lamps have unique duty cycles when illuminated

# Display Monitor, Touchscreen, and NeoTec Chassis



## Monitor

- Philips W66ESF001X CRT
- 16/9 aspect ratio

## Touchscreen

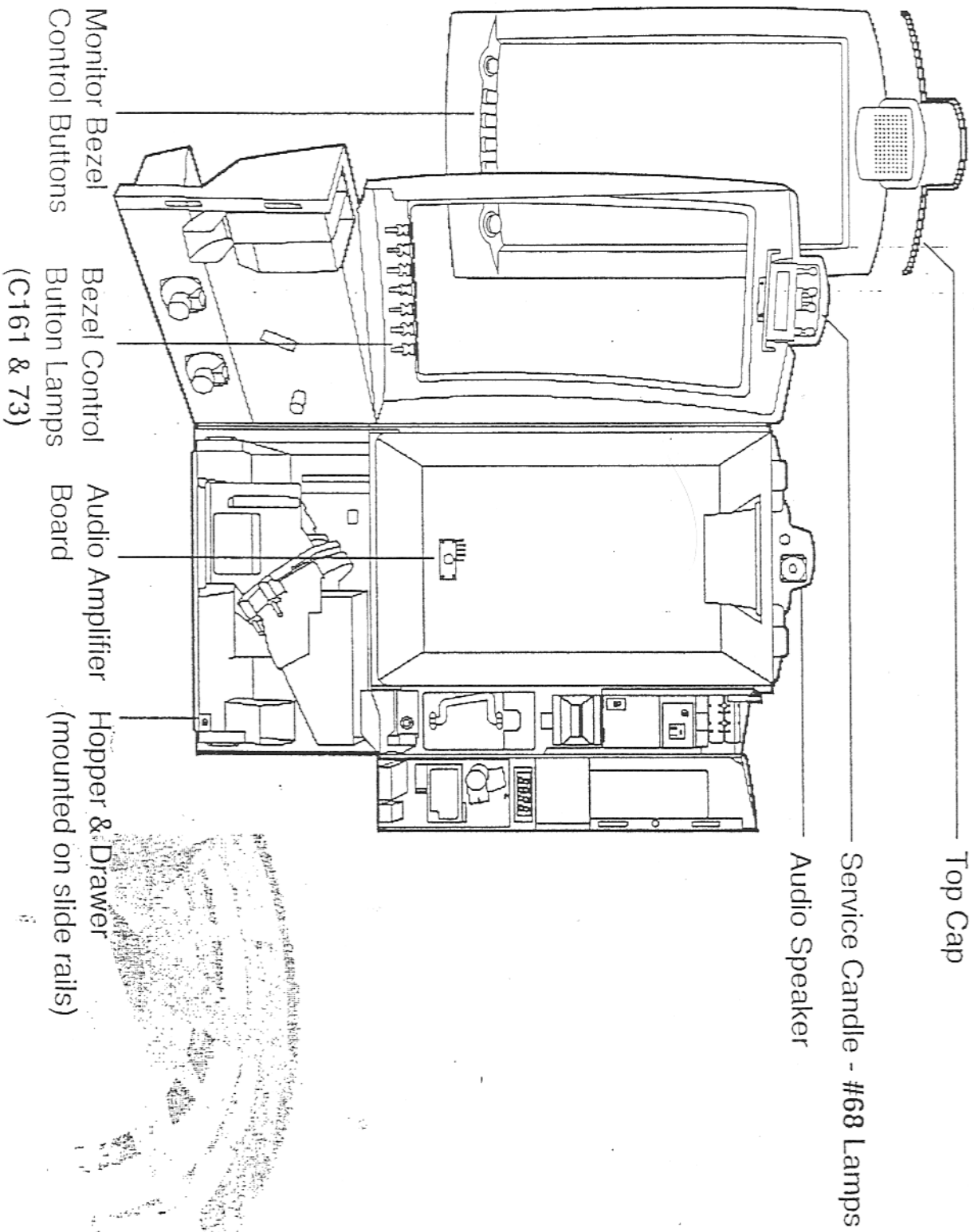
- Microtouch capacitive-type
- Clean with isopropyl alcohol and not with ammonia-based cleaning solutions
- Taped to CRT

## Chassis

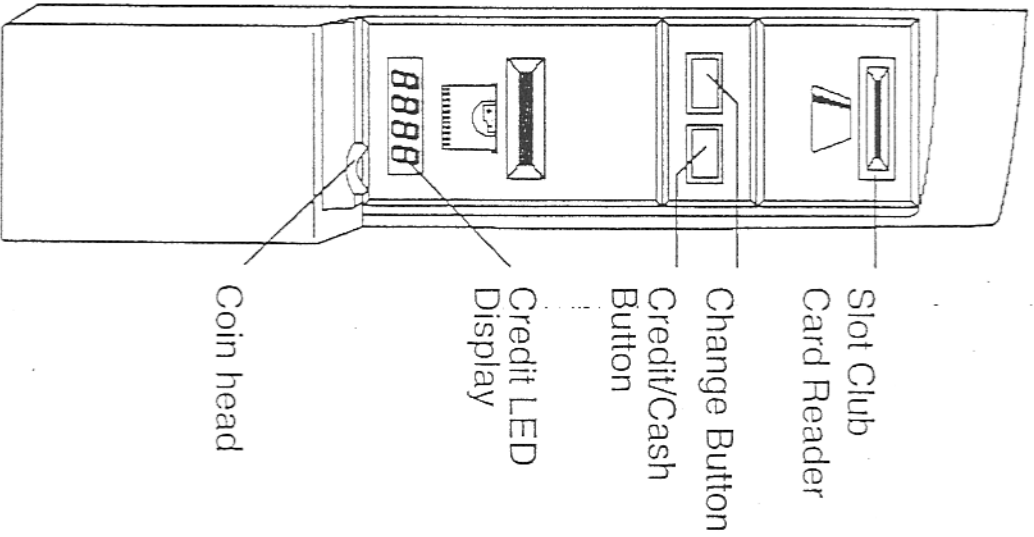
- Manufactured by NeoTec
- No internal degauss
- Many controls accessible by opening the bezel door
- Equipped with a cooling fan mounted below the neck board
- 80 pounds as assembled



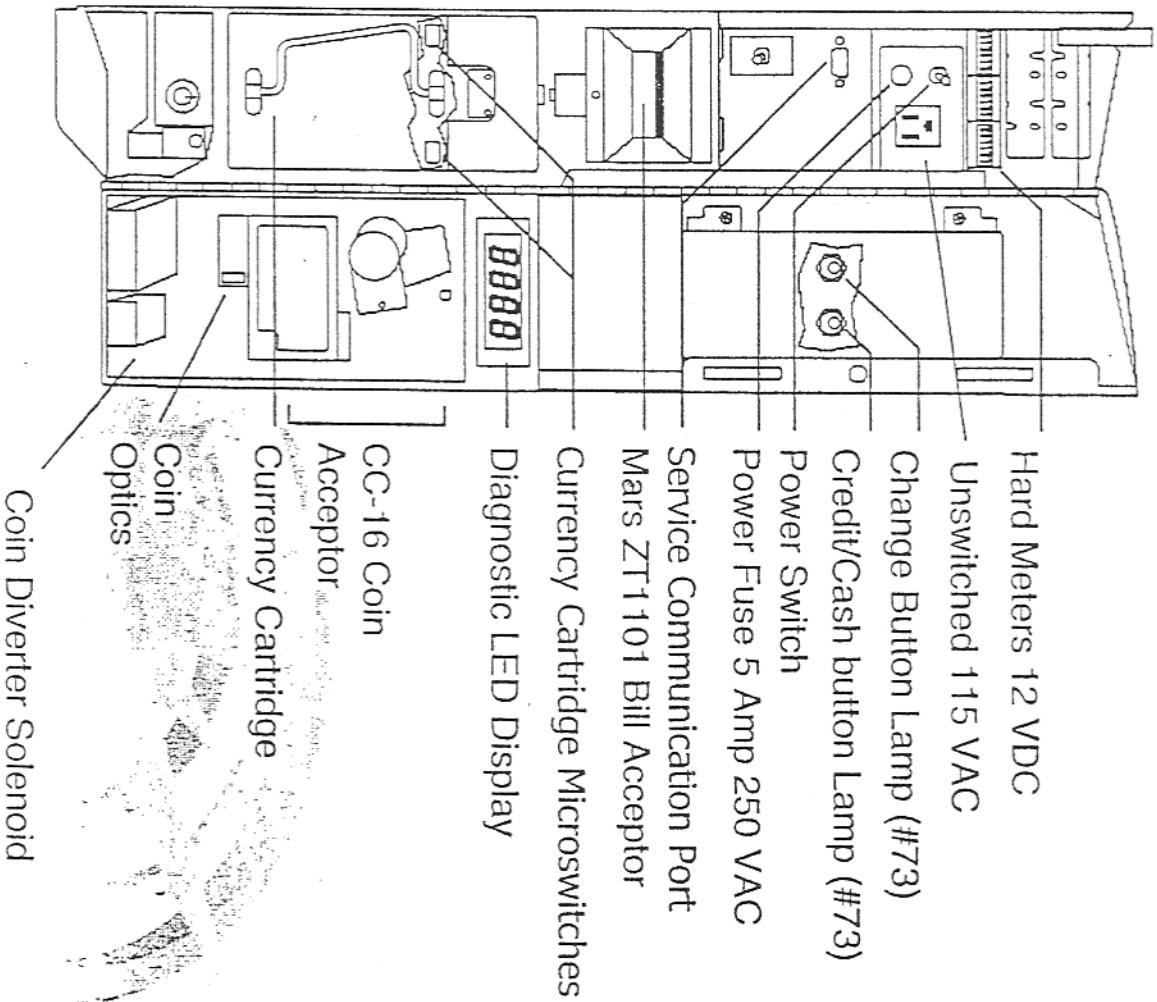
# Odyssey Front View with Display Monitor Removed



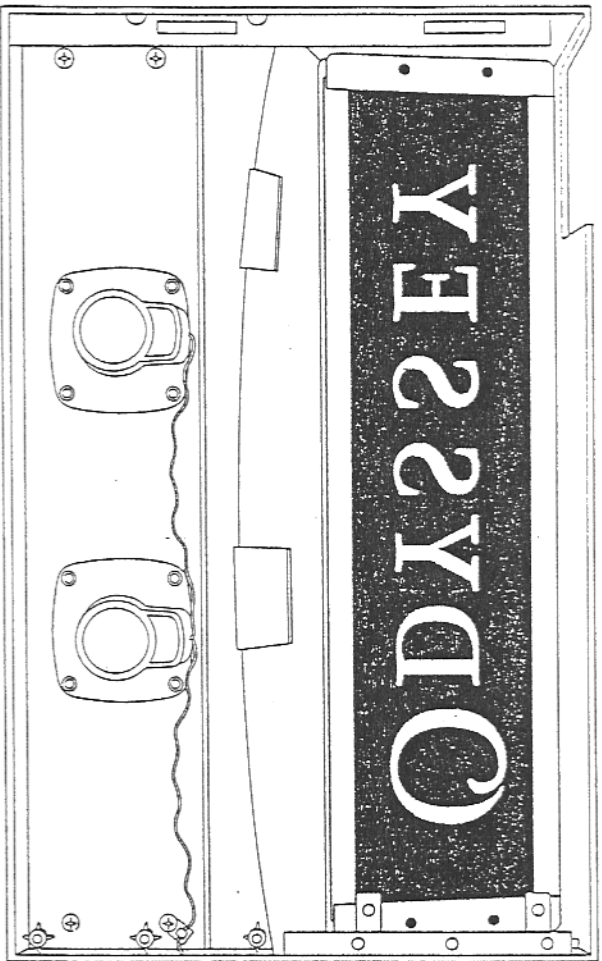
# Currency Column Components



Cash/Credit button functions as an on/off switch to control the hopper when credits are on the machine.

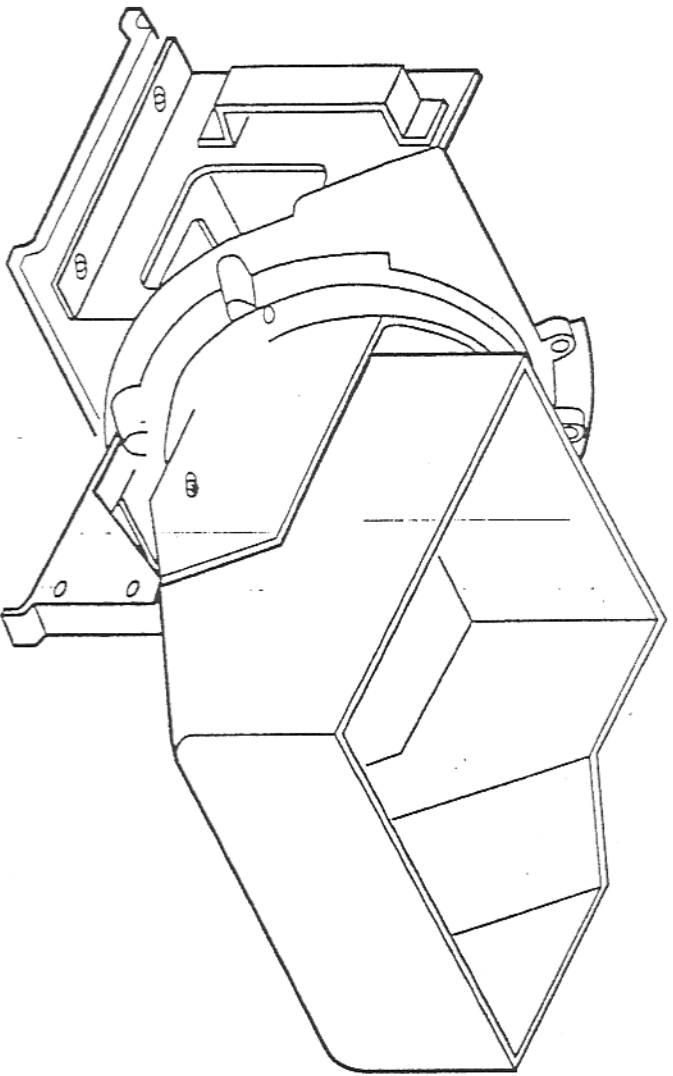


## Belly Door - Back View



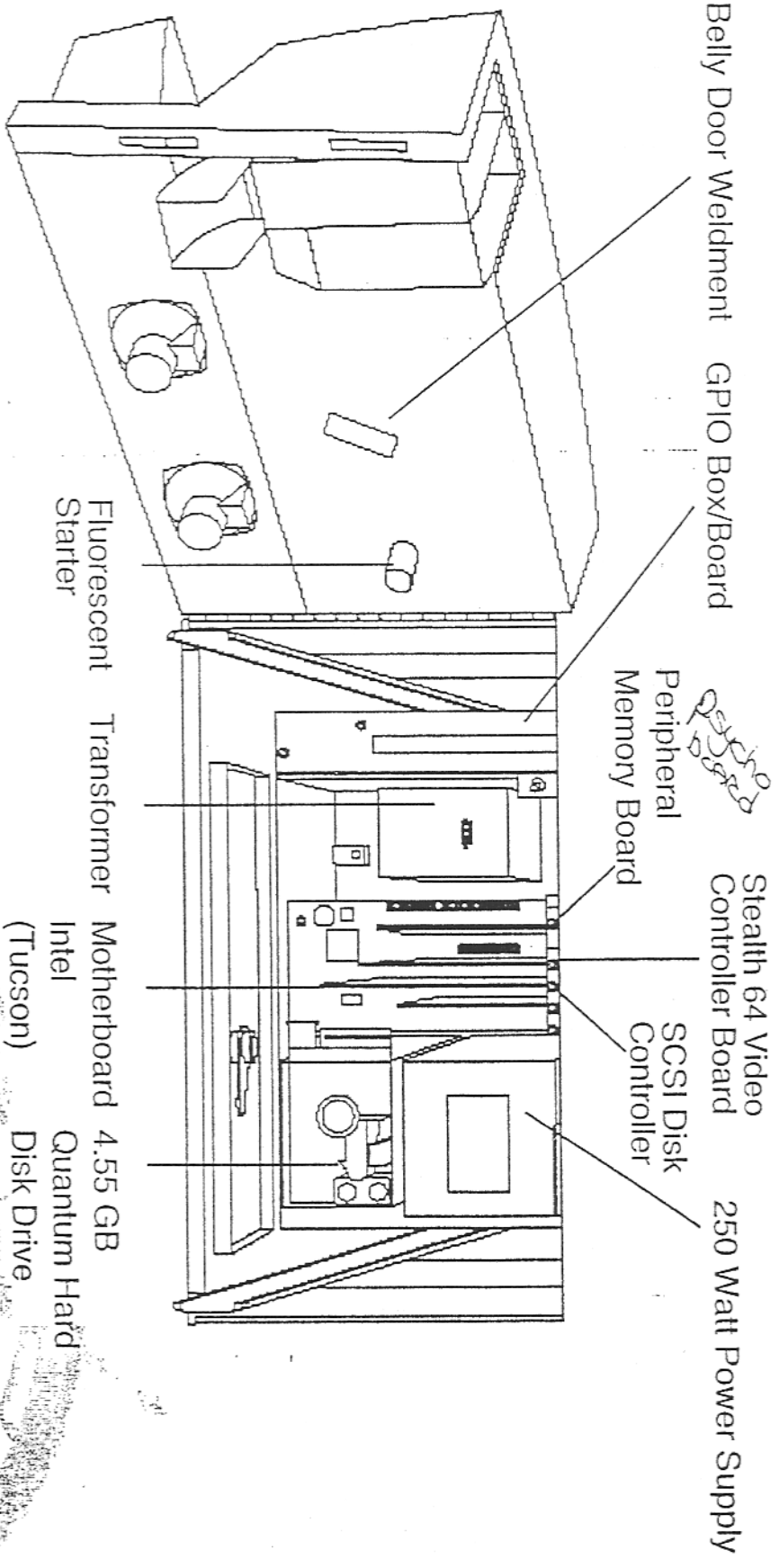
- Belly glass back-lit by a 18" - 15 watt fluorescent lamp, ballast, and starter
- Contains two 3" speakers driven by the audio amplifier
- Odyssey Machine Code sheet attached to inside of door listing all tilt codes

## Coin Hopper

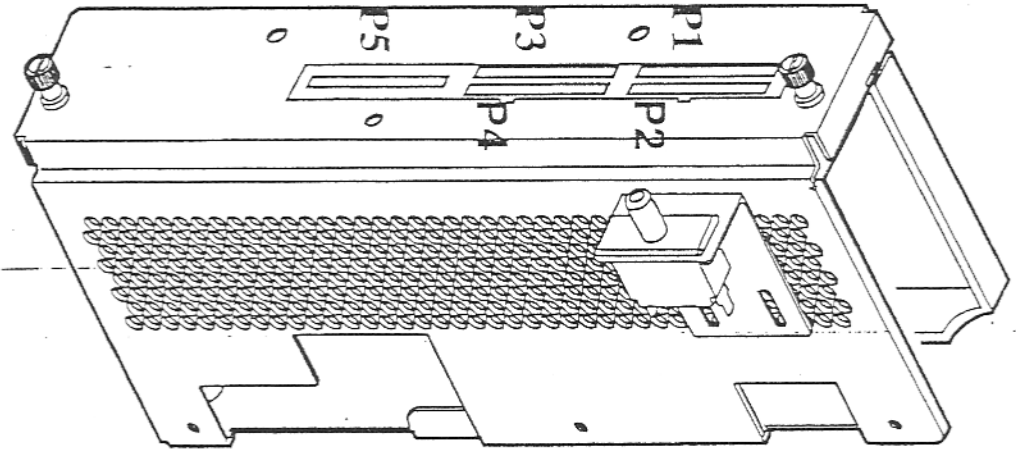


- Asahi Seiko DH750
- 115 VAC
- Bowl Capacity: 4500 Nickels, 3000 Quarters, 700 Dollars, or 250 \$5 tokens
- Can dispense up to 380 quarters per minute
- Brake Release on top of motor
- Mounted on a slide rail-equipped tray rated at 250 pounds

# Lower Cavity with Electronics Box Open

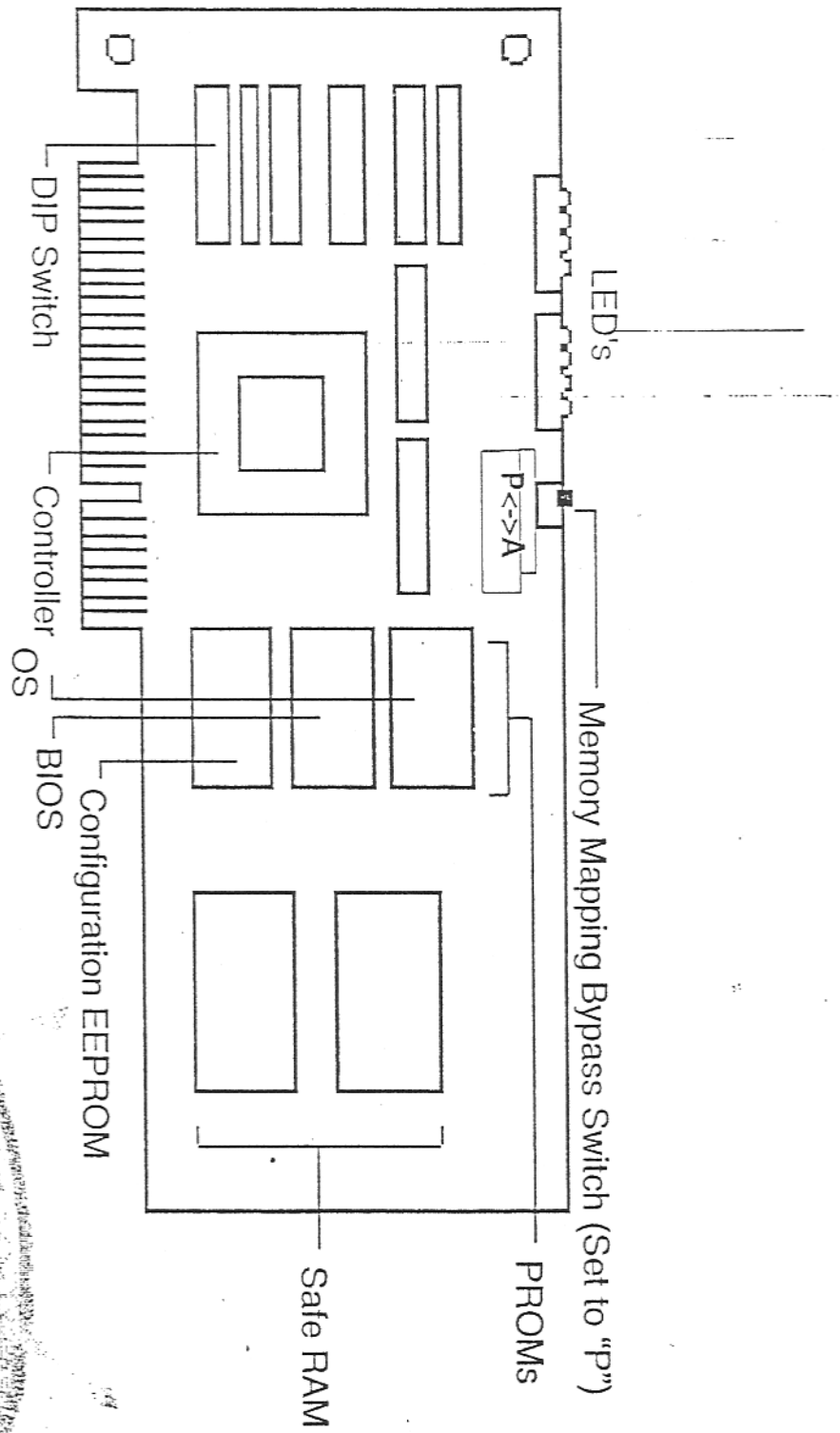


## GPIO (General Purpose In/Out) Box/Board



- Isolates the motherboard from electrostatic discharge from any of the I/O devices
- Controls power distribution to all I/O devices
- Connector order is left to right - top to bottom P1-P5
- System soft reset switch located next to J5. Depressing the button will reboot the Odyssey

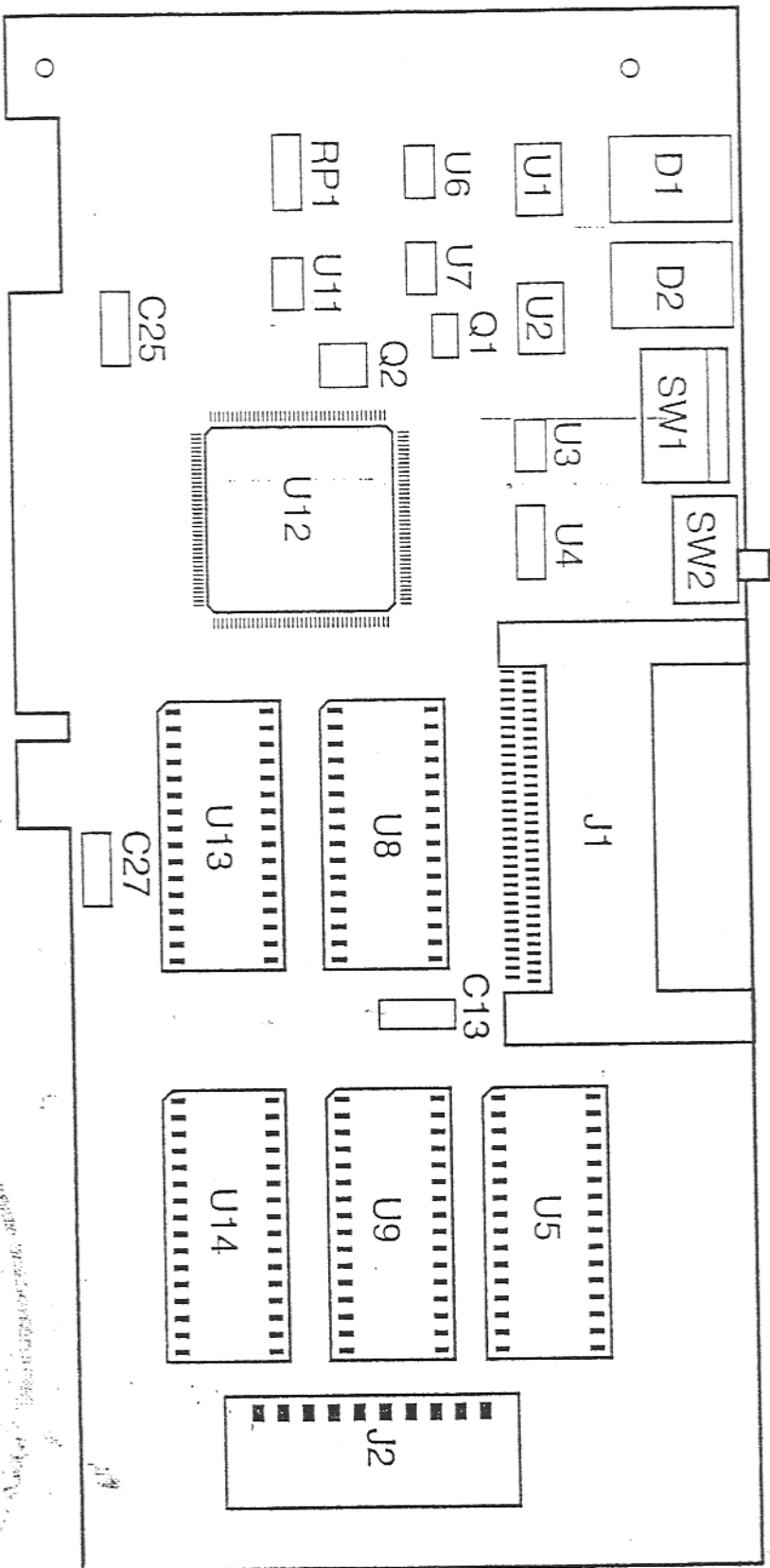
# Peripheral Memory I Board Layout



T  
O  
P



# Peripheral Memory Board II Layout



- D1& D2:** Displays Power-On-Self-Test Code Descriptions
- SW1:** 8-Bit DIP Switch
- SW2:** Memory Bypass - Set to up position
- U12:** Peripheral Memory Controller
- J1:** Not used
- U8:** OS ROM - 512Kb
- U13:** BIOS ROM - 512 Kb
- U5:** Configuration EEPROM - 128 Kb
- U9 & U14:** NVRAM Modules - 128 Kb
- J2:** Debugging Port (SGI use only)

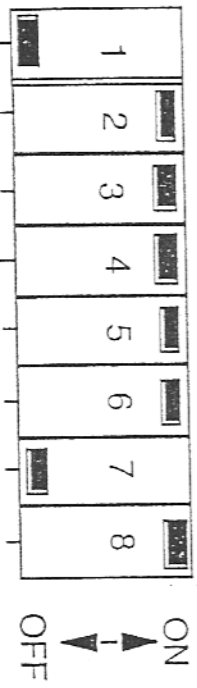


# Peripheral Memory Board Normal DIP Switch Settings

## DIP Switch Orientation

**Board I Layout:** Switch 1 is toward the top of the machine

**Board II Layout:** Switch 1 is toward the bottom of the machine



Cloning Switch A: Must be set OFF to clone

Boot Mode: ON = boot with debugger,  
OFF = boot from local hard disk

**SafeStore Partial Clear:** On = No, OFF = Yes  
(Recover from machine crash or tilt events)  
Minimal boot mode: ON = No, OFF =  
boot from 206.79.123.250\appd\minimal.sli

**SafeStore Full Clear:** On = No, OFF = Yes  
(Game Change, Denom Change, Board Change)  
Switch not defined: Should be set to ON

Cloning Switch B: Must be set OFF to clone

ROM Type: ON = FLASH, OFF = EPROM

Safe Store Partial Clear has proven to be unreliable and should not be used.

## Performing a Full SafeStore Clear

- Power off the machine.
- Disconnect the wiring harness to the AC transformer.
- Open the electronics box.
- Set the DIP switch #4 on the peripheral memory board to the off position. Reconnect the wiring harness to the AC transformer.
- Power on the machine.
- Allow the machine to boot and cycle through diagnostic codes until 4000 is displayed.
- Power off the machine.
- Reset the DIP switch #4 on peripheral memory board to the normal on position.
- Close the electronics box and reconnect the wiring harness to the AC transformer. Power on the machine.
- Reconfigure the machine in the MMS to select denomination, games, and menu options.

## Motherboard, Video Board, and SCSI Board

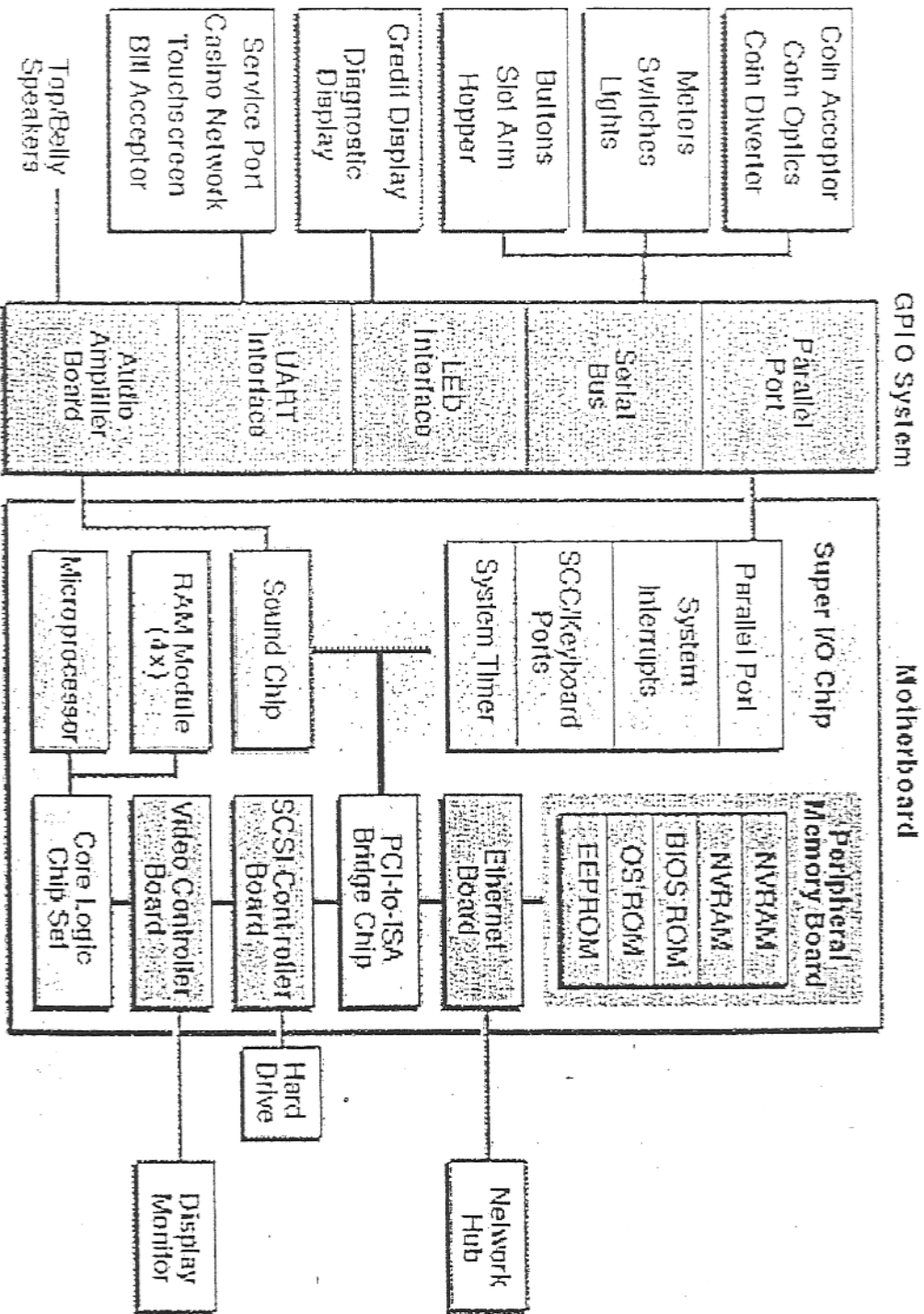
- Intel Tucson Motherboard equipped with:
  - » 166 MMX Pentium processor
  - » 4 - 16 MB EDO SIMMs (Single In-Line Memory Module) for a total of 64 MB RAM (Random Access Memory)
  - » Clock speed 133 MHz
- Diamond Multimedia Systems Stealth 64 Video Controller Board
  - » 4 MB RAM
  - » Converts digital video signals to analog RGB for display on monitor
  - » Up to 60 frames per second display rate
- SCSI (Small Computer System Interface) Board
  - » Provides the interface from the hard disk drive to the motherboard with a ribbon cable

## Hard Disk Drive and Power Supply

- Quantum Viking 4.55 GB Hard Disk Drive
  - » Partitioned into three MS-DOS volumes
    - Volume 1 - System Level Files
    - Volume 2 - Game Program Code ~ 2 GB
    - Volume 3 - Game Artwork and Configuration Data ~ 2 GB
  - » Average seek time of 8.0 milliseconds
  - » Average data transfer rate of 10.7 MB/s maximum
  - » All games, video, and audio originates from the hard disk drive
  - » **Must not be moved for 30 seconds after power is removed or at anytime while powered up.**
- Power Supply
  - » Sunpower SPG-5250ATX 250 watt switching power supply
  - » Provides regulated DC voltages for the circuit boards and hard disk drive
  - » Equipped with a fan that provides secondary cooling to the Pentium processor

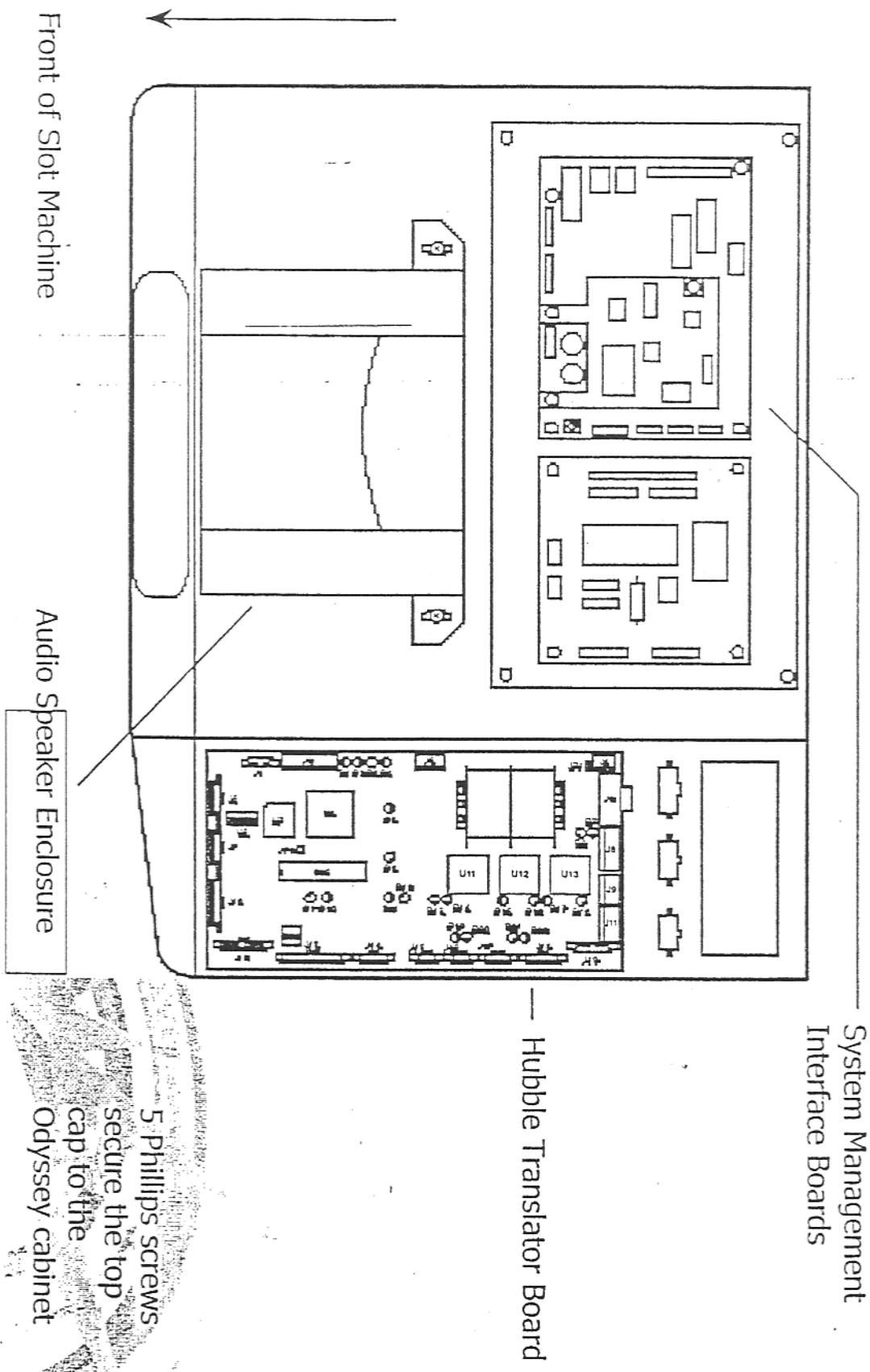
# Hardware Architecture

Electronics Box Assembly



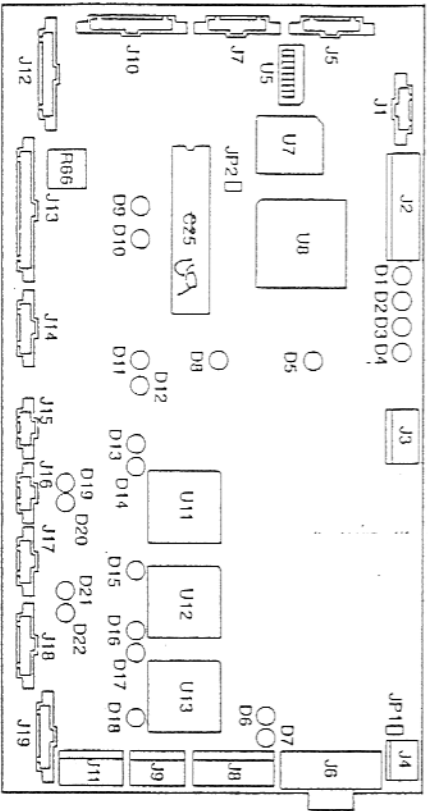
Note: Ethernet board and Network Hub are not present unless the machine is part of a wide area progressive link.

# Top Cap Layout



# Hubble Signals

## LEDS



Hubble-1.eps

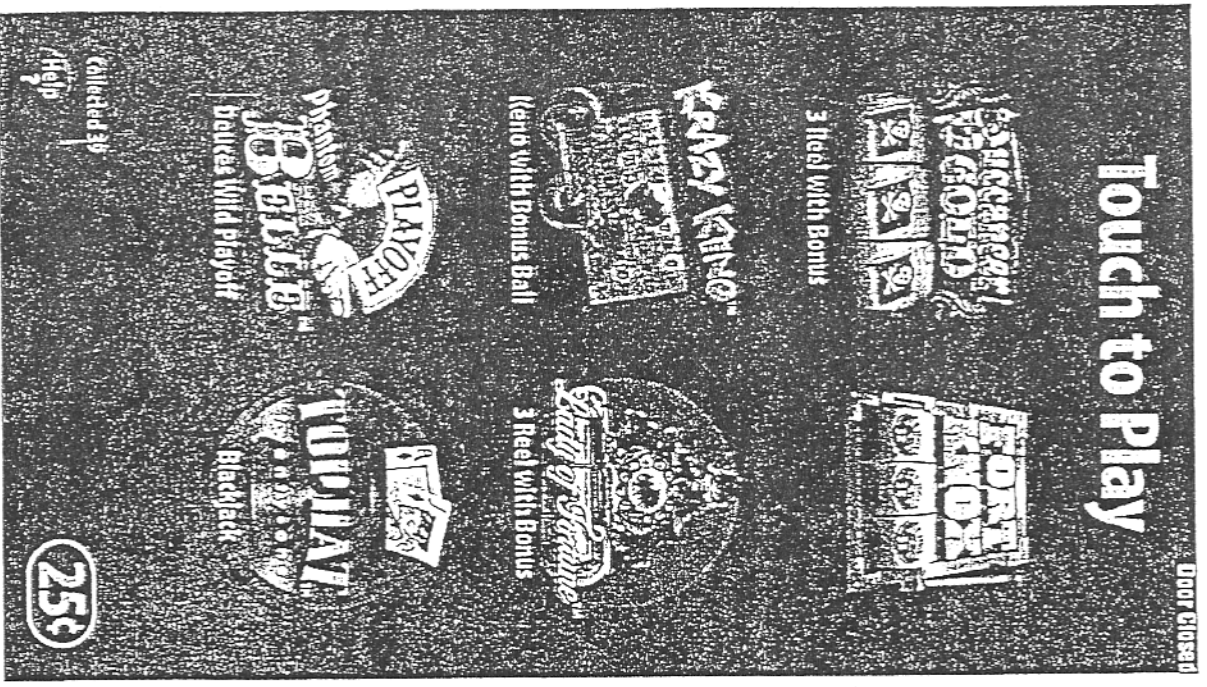
### J2: Door Sensors

- Pin 1: Belly Door Signal
- Pin 2: Belly Door Common
- Pin 3: Currency Column Door Signal
- Pin 4: Currency Column Door Common
- Pin 5: Drop Door Signal
- Pin 6: Drop Door Common
- Pin 7: Cash Box Signal
- Pin 8: Cash Box Common

### U5-Eight-bit DIP Switch: The Hubble

board can be reset by setting the eighth switch to the On position, then Off to return to its normal operating mode

- **D1:** Not Used
- **D2:** Handshake (Bally)
- **D3:** Acres-SGI Concept C3 protocol
- **D4:** Pulse-Hubble Initialized
- **D5:** Power in
- **D6:** Debug
- **D7:** Debug
- **D8:** Power in
- **D9:** Spare SAS Serial Receive (CDS)
- **D10:** Spare SAS Serial Transmit (CDS)
- **D11:** IGT-SAS Receive
- **D12:** IGT-SAS Transmit
- **D13:** Bally-ESSP Transmit
- **D14:** Bally-ESSP Receive
- **D15:** GPIO (Sparky) Transmit
- **D16:** Mikohn Receive
- **D17:** Mikohn Transmit
- **D18:** GPIO (Sparky) Receive
- **D19:** Not used
- **D20:** Not used
- **D21:** Not used
- **D22:** Not used

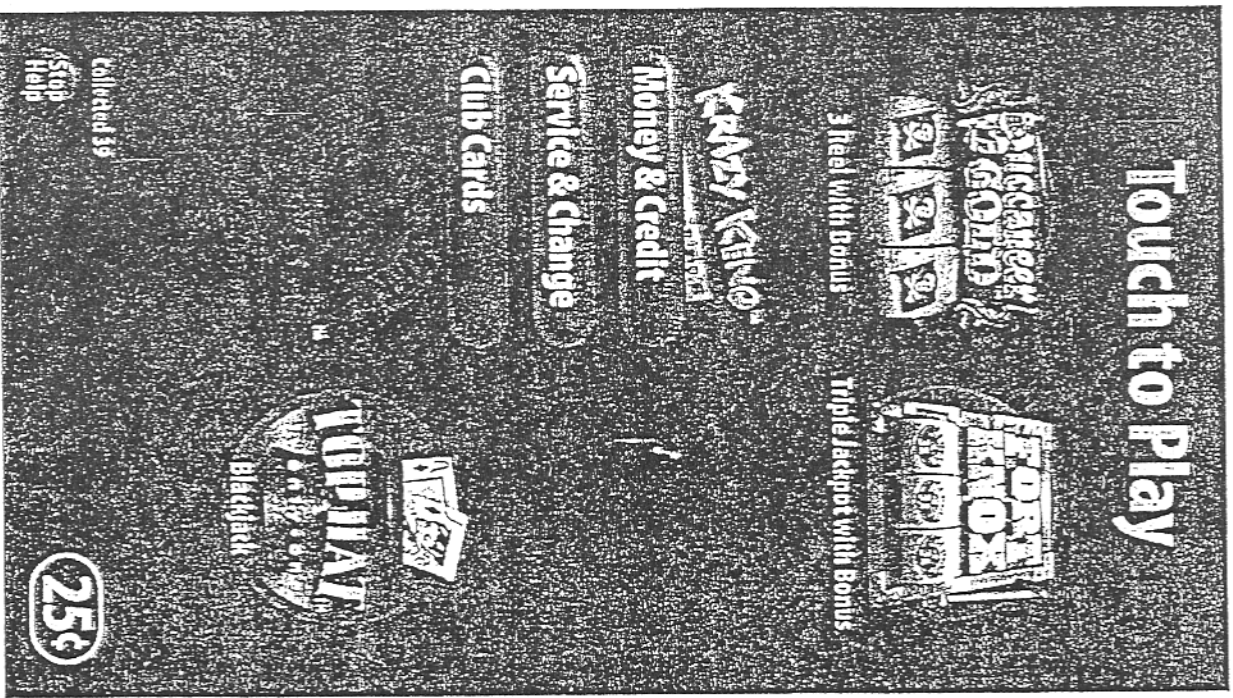


## Game Menu

- Offers the player an intuitive and fun way to explore the Odyssey games
- The game menu will automatically cycle through the game icon animations
- The Odyssey can be configured to automatically cycle between the menu and the games during idle times



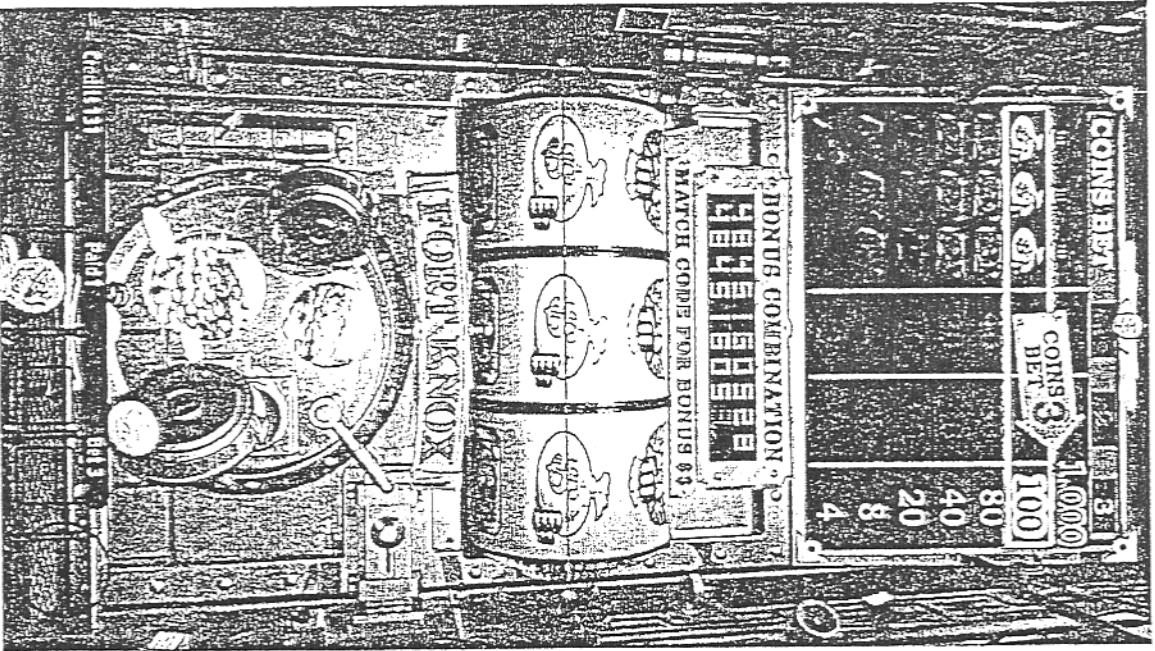




## Game Menu Help

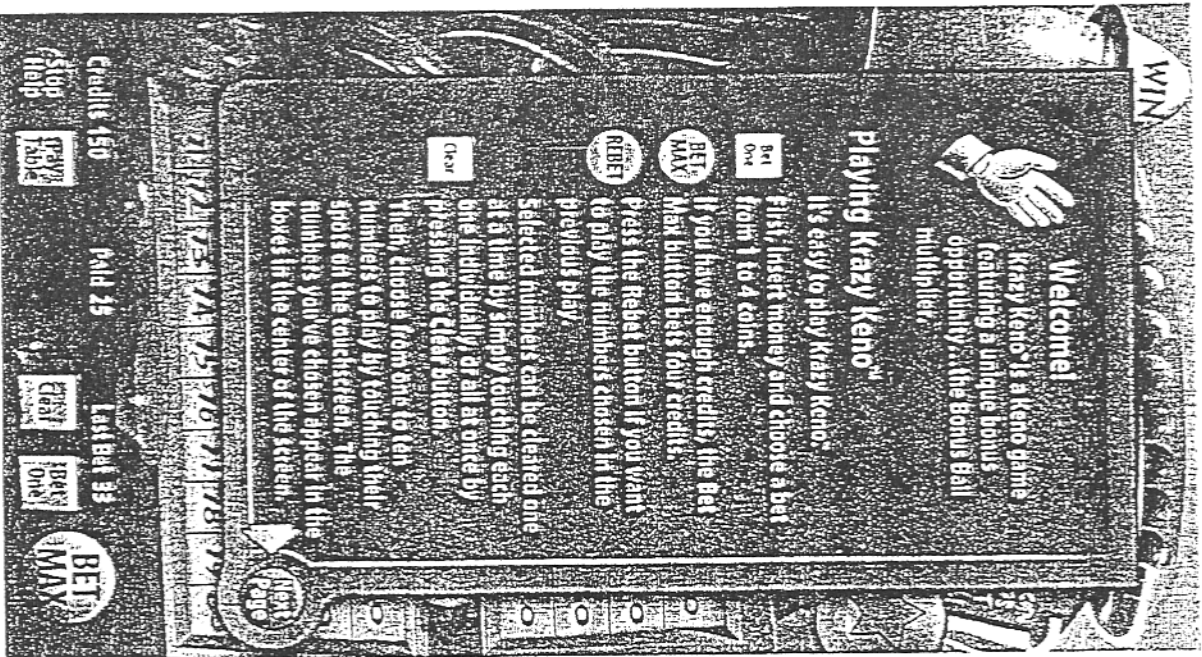
- Accessed by pressing the blue screen or bezel button
- Interactive online help allows players to broaden their knowledge by explaining the basic functions of the Odyssey with onscreen animations
- Can be enabled to run automatically





## Games

- Each game includes a pay table/winning combination display area, a proposition area, and game controls
- Second screen animations can appear once the bonus round is reached
- Bonus combinations only erase once the bonus has been reached
- Individual games may also be highlighted by enabling featured game mode



## Game Help

- Accessible in all games by pressing the blue screen or bezel button
- An help overlay on the game screen appears, describing the rules of play, bonus features, and any disclaimers
- Instructions are specific for each game title
- Use help to learn more about new titles and bonus features

# Game Play Monitor

Time 03/7/98  
Date 7-24-99  
Lit 0

There are no bills or stoppages

### Game Recall Summary

Time	Event	Amount	Balance	Game	Level
7:24:99	3:43:02	0.05	0.05	235	
7:24:99	3:43:11	0.05	0.10	235	
7:24:99	3:43:21	0.05	0.15	235	
7:24:99	3:43:31	0.10	0.25	235	
7:24:99	3:43:41	0.05	0.30	235	
7:24:99	3:43:51	0.05	0.35	235	
7:24:99	3:44:01	0.00	0.35	235	
7:24:99	3:44:11	0.00	0.35	235	
7:24:99	3:44:21	0.15	0.50	235	
7:24:99	3:44:31	0.00	0.50	235	

### Volume Settings

2 bills have been accepted

Lowest

Volume Leveling

Adjustment

Global

Game Menu

### Event Log

Time	Event	Description
7:24:99	8:33:02	MUS Entered Service Mode (Door Opened)
7:24:99	8:33:03	Launched 4.768/MMSmmr.exe
7:24:99	8:33:37	Stoppage: Operator menu activated
7:24:99	8:33:56	MMSKey
7:24:99	8:33:56	Stoppage/Candle (Printer Error)
7:24:99	8:33:33	Return/Ink/Joligator
7:24:99	8:33:32	currency/Column/door/open
7:24:99	8:33:30	Relly/door/open
7:24:99	8:33:30	Cold/Restart
7:24:99	8:33:30	Launched 4.768/STOPPAGE/stoppage.exe
7:24:99	8:33:33	Printer/Err
7:24:99	8:33:33	Launched 4.768/MMSmmr.exe
7:24:99	8:33:22	Service port enabled (COM)
7:24:99	5:53:29	Relly/door/open
7:24:99	5:53:28	Relly/door/closed
7:24:99	5:53:24	Relly/door/open
7:24:99	4:38:10	MUS Entered Service Mode (Door Opened)
7:24:99	4:37:57	Launched 4.768/MMSmmr.exe
7:24:99	4:37:55	MMSKey

Calibrate Screen    Take Machine Out of Service    Next Page

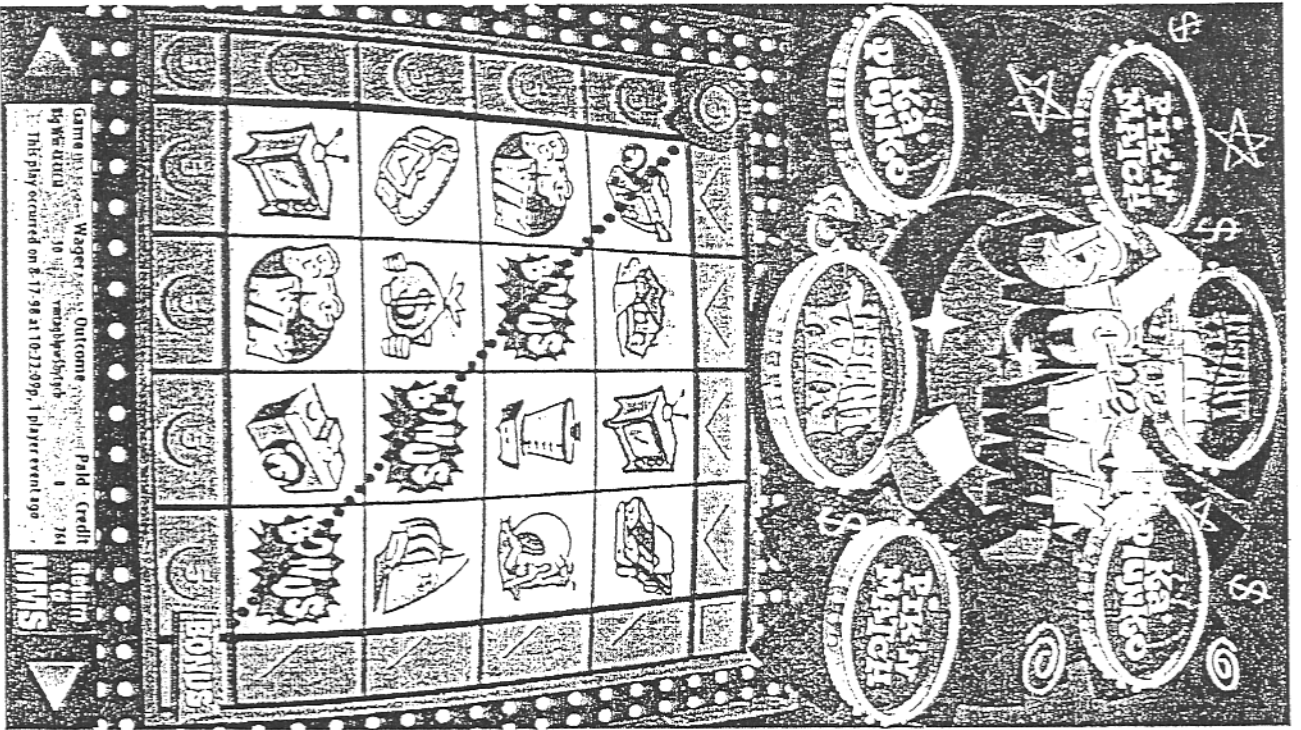
## Game Play Monitor

- Game Recall Summary includes the last 25 games in order of play, 25 cashouts and 25 EFTs

- Variable Volume Leveling: Volume settings have three areas of adjustment; global, games, and game menu

- Last 10 bills accepted includes a date and time stamp

- The Event Log only includes the information displayed in the on-screen log and is the first of three logs that can be downloaded by an SGI tech



## Game Play Monitor/ Last Game Recall

- An exact replication of each of the game screens as called back
- The page footer includes a time and date stamp as well as machine/game statistics
- Games appear in the order of play and not 25 of each game

# Accounting

Time: 8:51:19  
Date: 8/14/98  
Loc: 0

Machine Games Logs

## Period Meter

## SafeStore

## Machine Accounting

Coin In	0.00	0.00
Physical Coin Out	0.00	0.00
Coin Out	0.00	0.00
Physical Card Out	20.00	20.00
Other Instrumentality In	0.00	0.00
Credits Cancelled	0.00	0.00

## Machine Statistics

Number of Games Played	0.00	12:00:00	0
Cold Start	8:13:58	12:56:00	2
Warm Resets	0.00	12:00:00	0
Refill/door Access	8:20:58	2:57:16	2
Electronic Box Door Access	0.00	12:00:00	0
Electronic Glass Door Access	8:21:58	2:54:25	9
Emergency Cardlock Access	0.00	12:00:00	0
Emergency Cardlock Bypass	8:14:58	9:24:45	1
Drop Door Access	0.00	12:00:00	0

Since Machine Power-On: 0

Since Last Door Closed: 0

Bill Accepted  
Hewlett

Bill Not Accepted  
Bill has been accepted

## Bill Acceptor Statistics

\$1 Bill	0
\$2 Bill	0
\$5 Bill	0
\$10 Bill	0
\$20 Bill	0
\$50 Bill	0
\$100 Bill	0

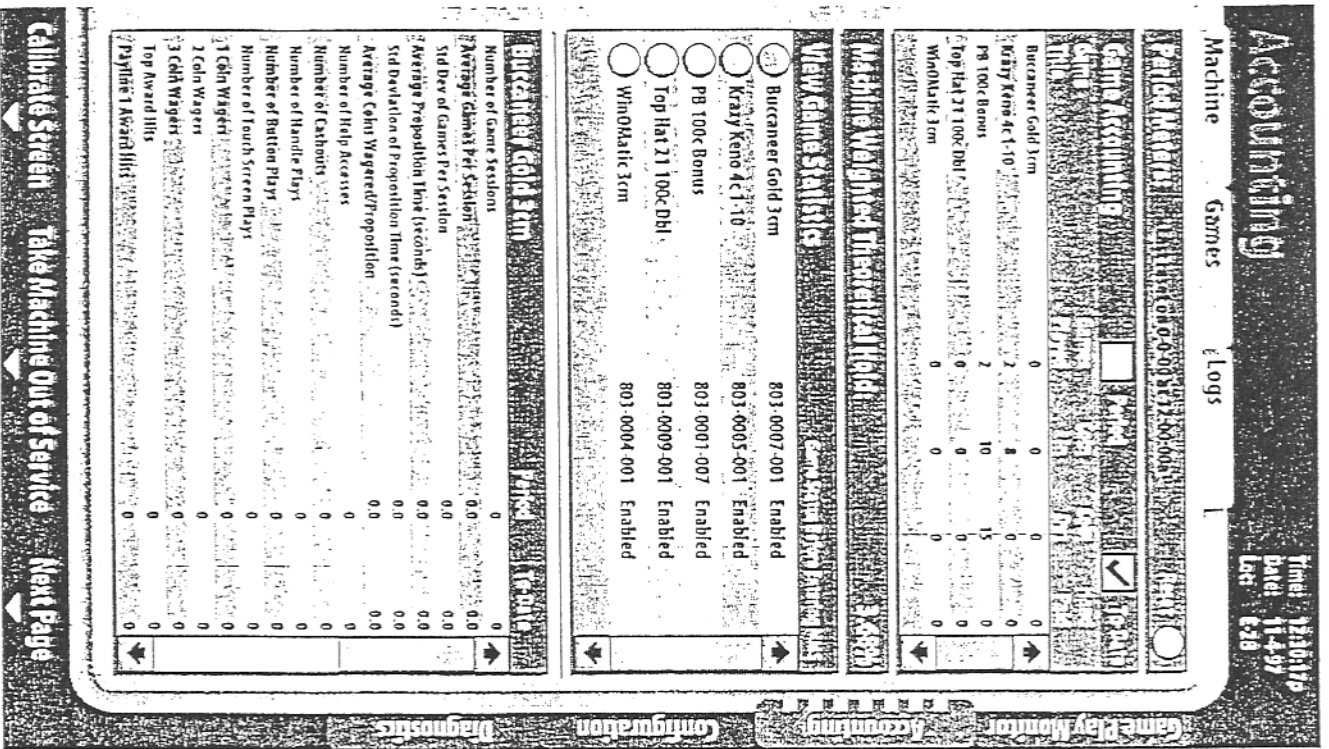
Calibrate Screen

Take Machine Out of Service

Next Page

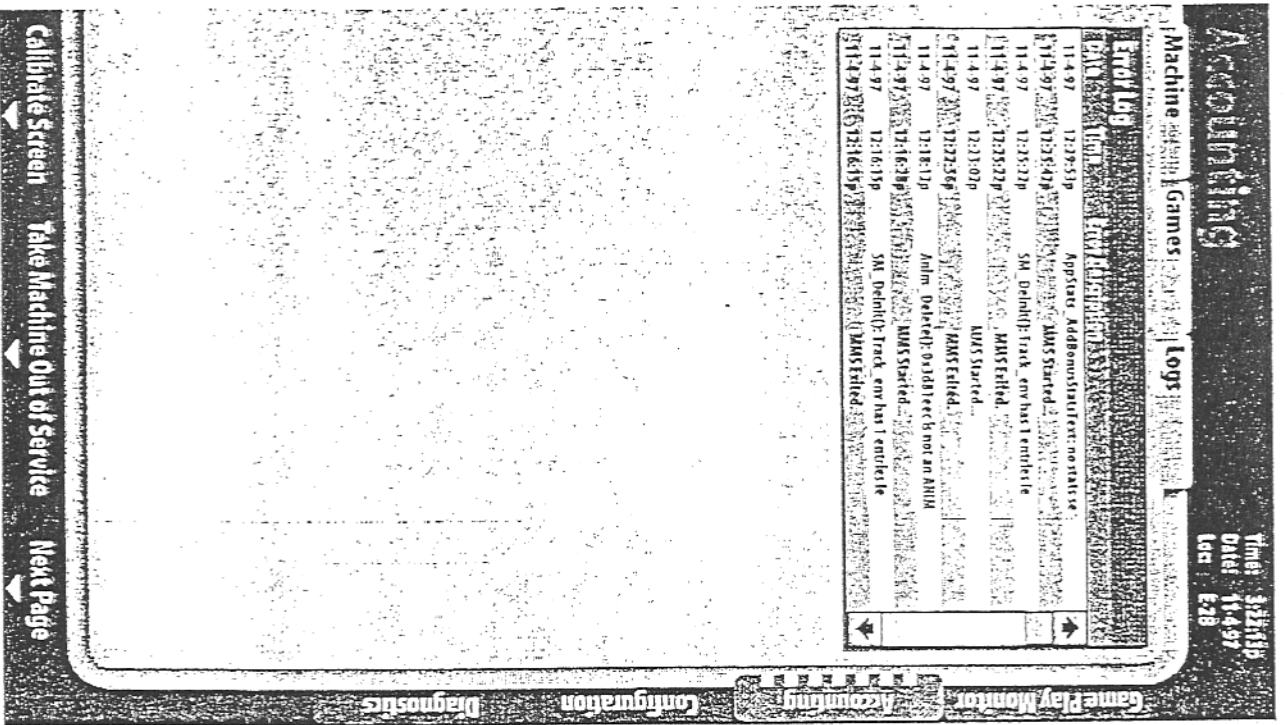
# Accounting/Machine

- To Date meters can only be reset by completing a full SafeStore clear
- Other Instrumentality's In represents the value of credits transferred to the Odyssey as a result of an EFT
- Credits Cancelled represents those credits removed from the Odyssey as a result of an EFT
- Bill Acceptor Statistics period meter resets whenever the cash can is removed



## Accounting/Games

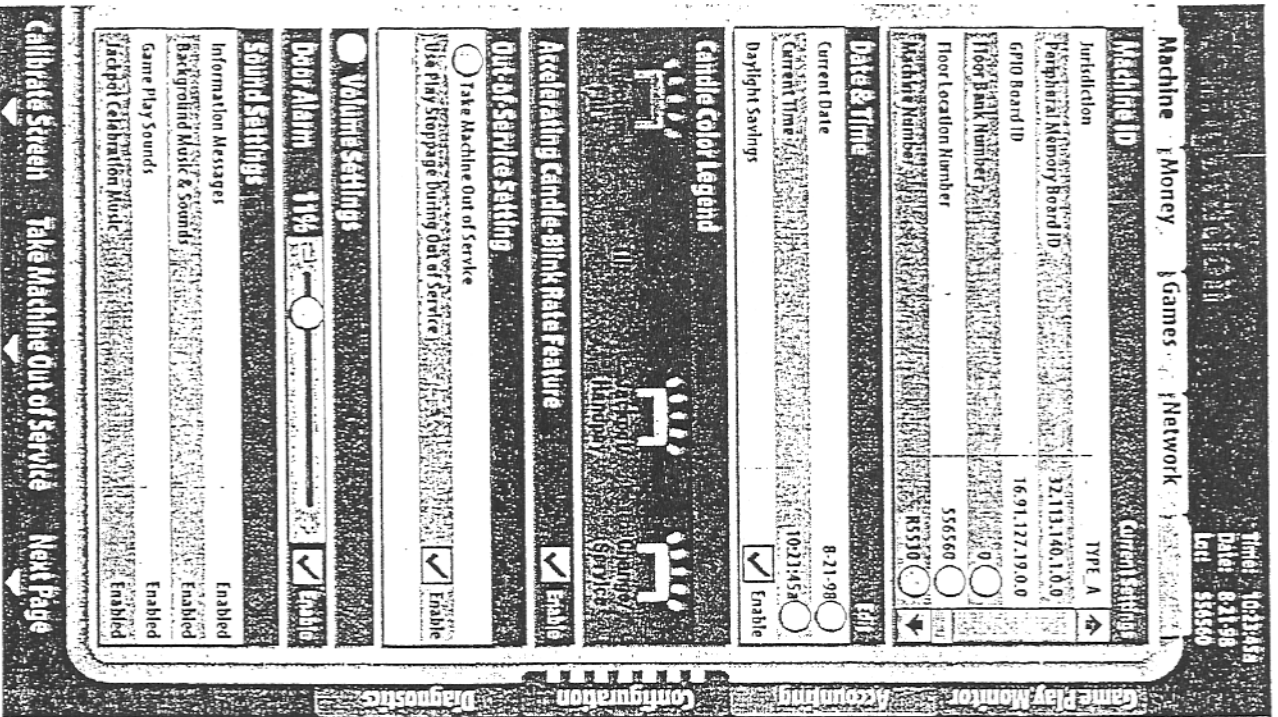
- Game Accounting will display accounting for all games enabled after a full SafesStore clear
- Machine Weighted Theoretical Hold is the theoretical hold of the system across all games played
- View Game Statistics allows insight into how the games are being played



## Accounting/Logs

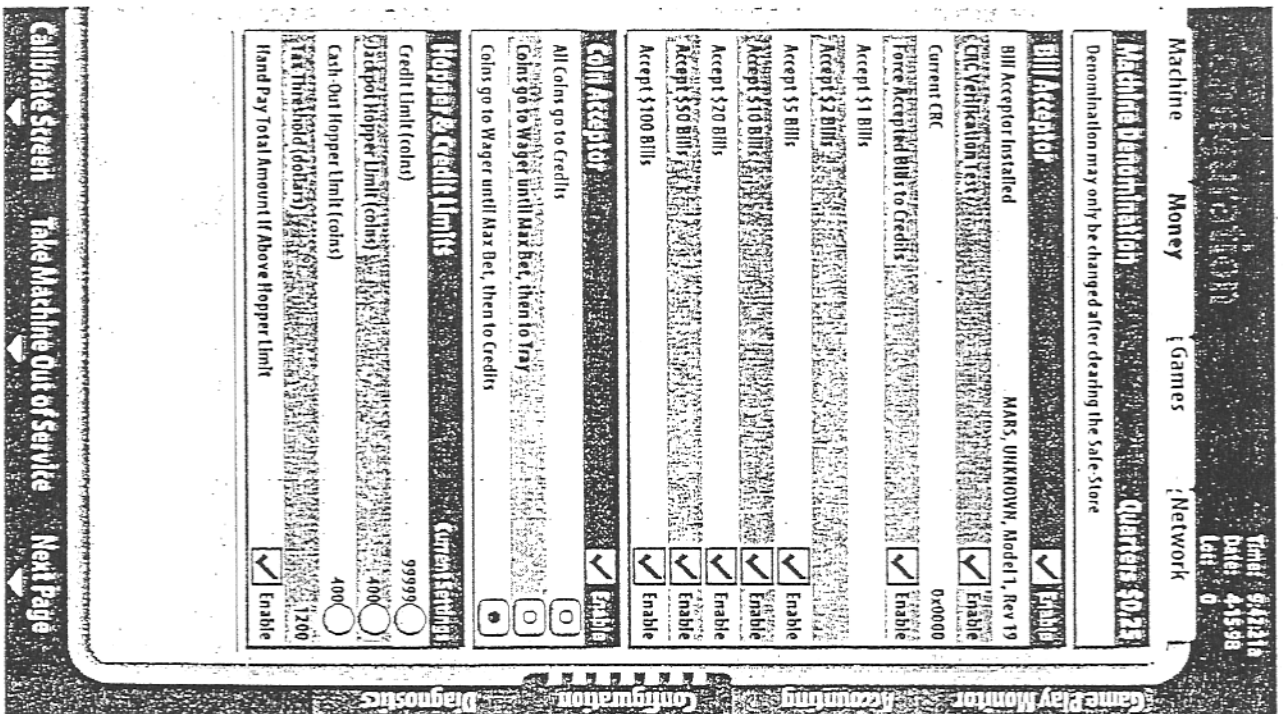
- Error log is not an accurate description of the log because it contains more than just software errors
- The second of three logs that can be downloaded by an SGI tech





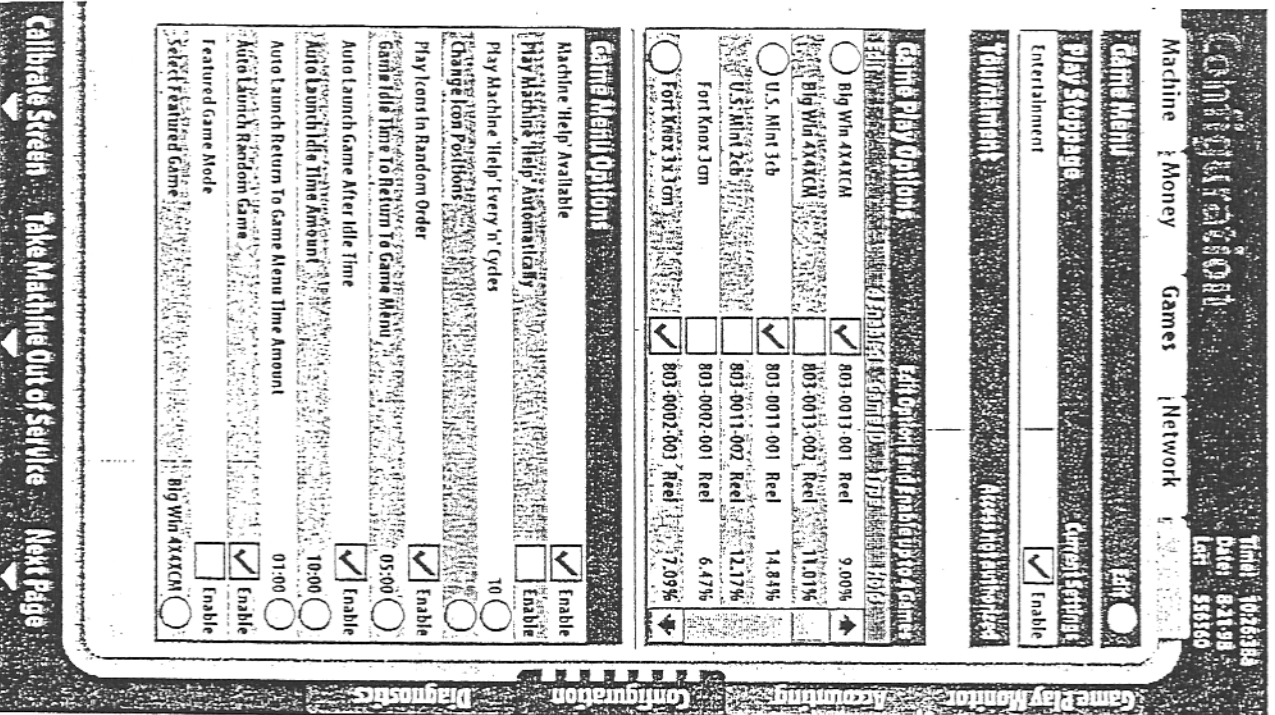
## Configuration/Machine

- A machine door must be opened before the Configuration or Diagnostics tab can be accessed
- Machine serial number may only be entered by SGI
- Use Play Stoppage During Out of Service disabled will display "Out to Lunch"
- Sound settings default to enabled and cannot be changed



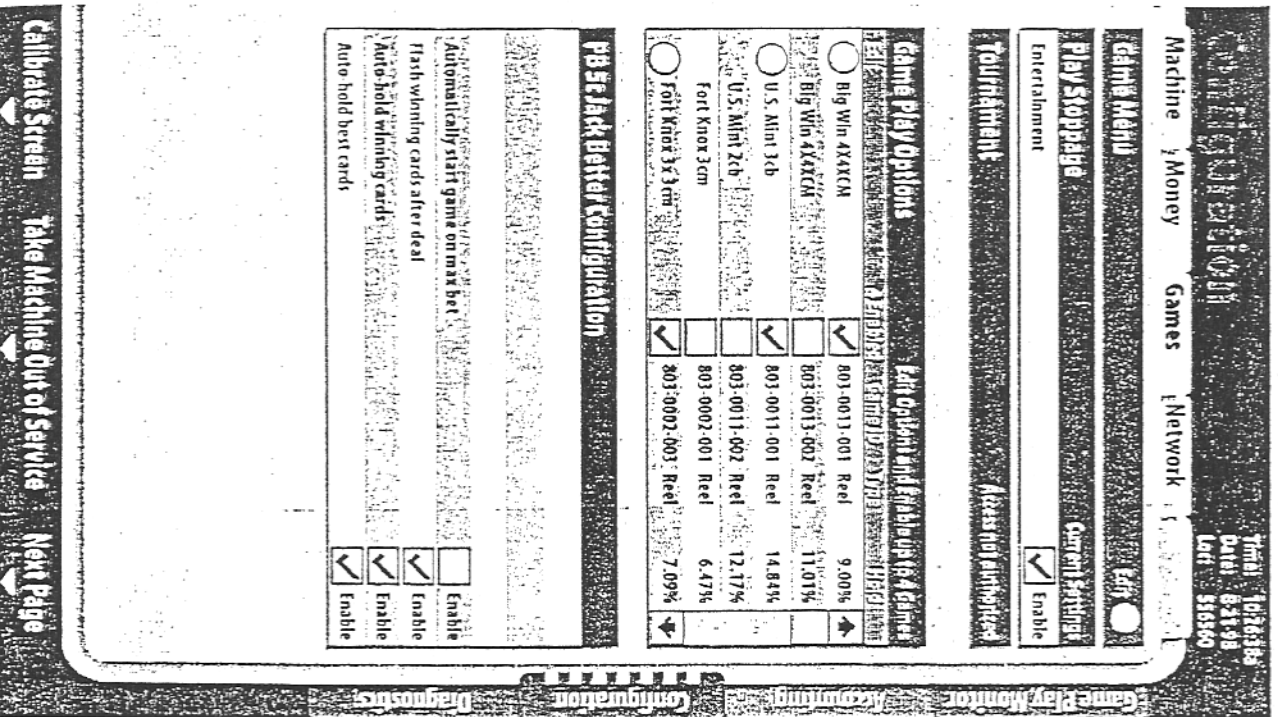
## Configuration/Money

- Machine denomination may only be changed after a full SafeStore clear
- CRC value must be entered for the validator to operate
- Hopper & Credit limits will change to default settings if the denomination is changed after a full SafeStore clear



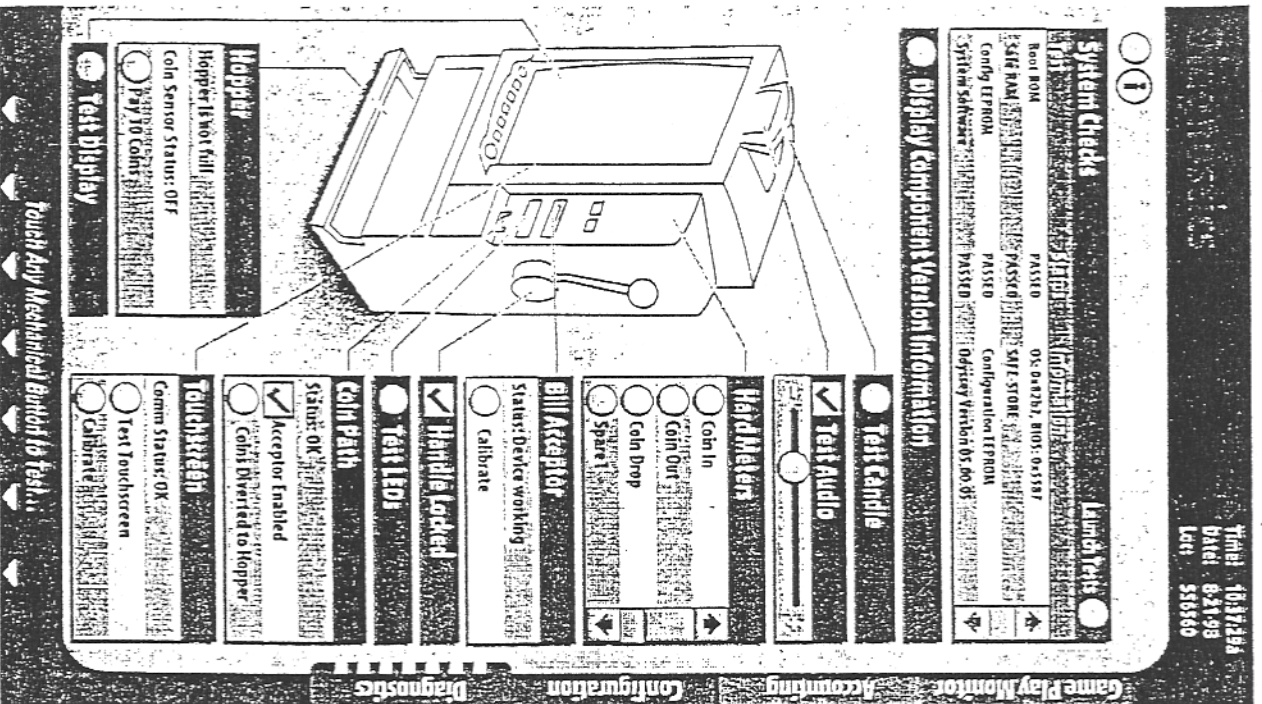
## Configuration/Games/ Game Menu Options

- Play Stoppage  
entertainment enabled  
activates "Professor Potts"
- Tournament mode can be  
enabled/disabled only after  
a full SafeStore clear
- Game Menu Options  
appear as is after a full  
SafeStore clear
- Featured game mode  
enabled will allow one  
game to be the default  
screen image when the  
machine is idle, rather  
than returning to the game  
menu screen



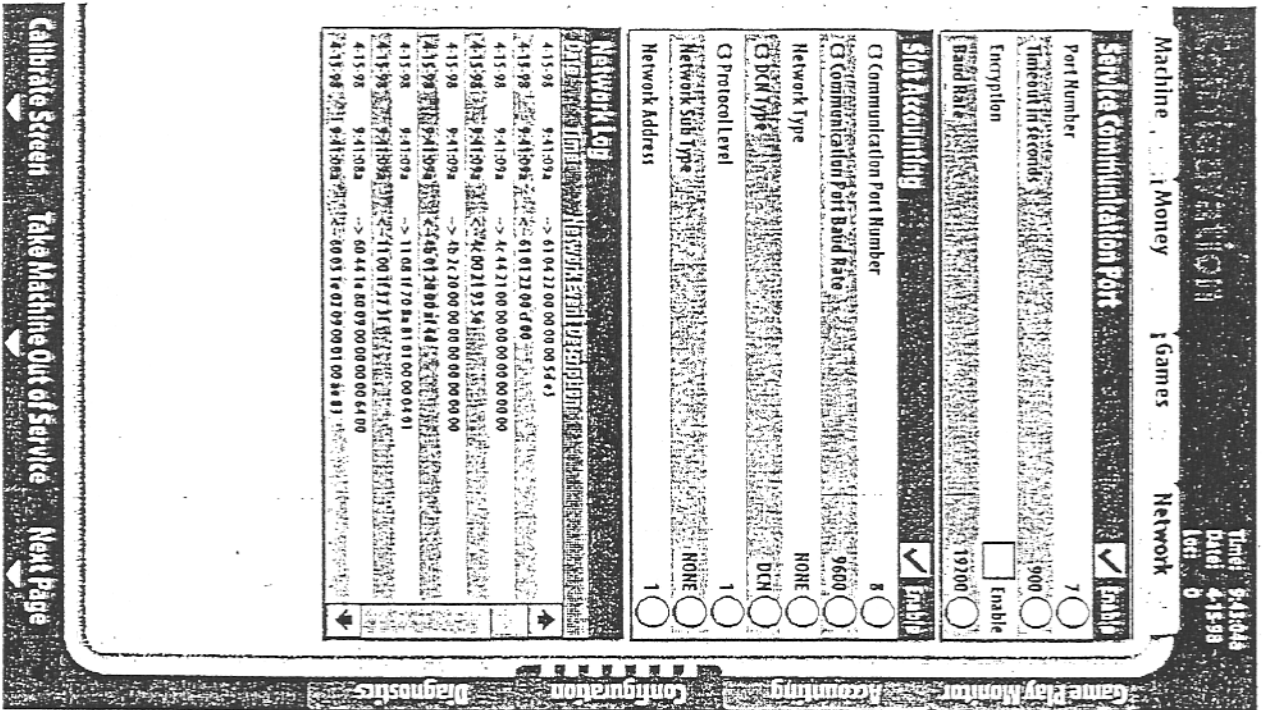
## Configuration/Games/ Game Play Options

- One to six games may be enabled after a full SafeStore clear
- Game may be disabled, but a different game cannot be activated in its space
- Games may only be changed after a full SafeStore clear when all games choices are visible



## Diagnostics

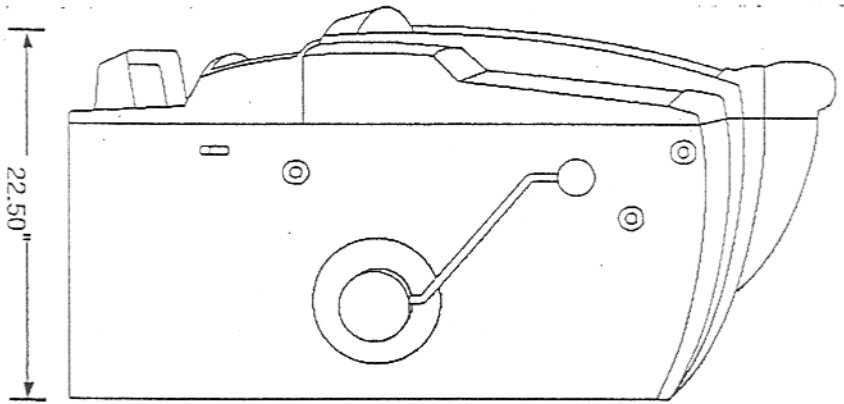
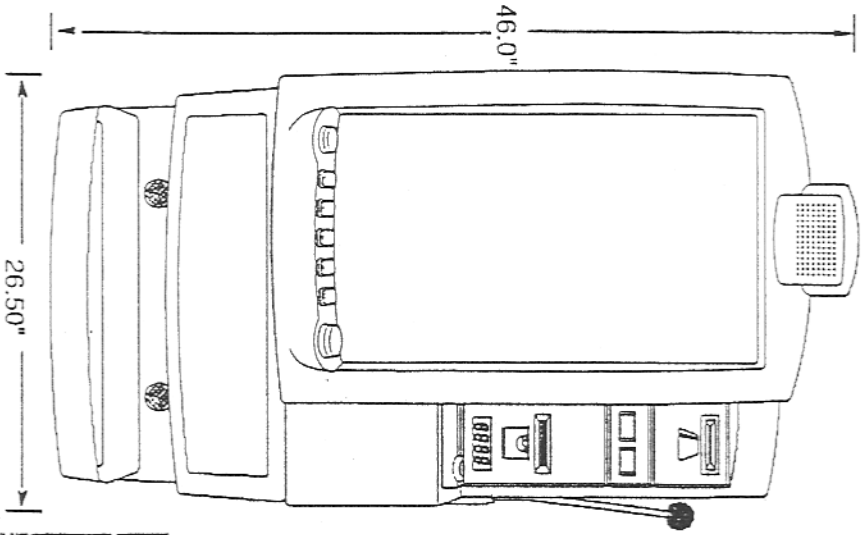
- Easy-to-use troubleshooting assistance on one page
- Touching any button on the Odyssey will activate the corresponding button on the machine rendering displayed on the screen
- Use the Test Touchscreen feature after calibrating



## Configuration/Network

- Service Communication Port settings allow the Odyssey to communicate to a PC to download various logs
- Slot accounting settings correspond to the casinos player tracking system in use
- > Communication from the Odyssey to the player tracking system
- < Communication from the player tracking system to the Odyssey
- The Network Log currently tracks C3 communication between the Odyssey and the player tracking system interface boards and vice versa, and is the third log that may be downloaded

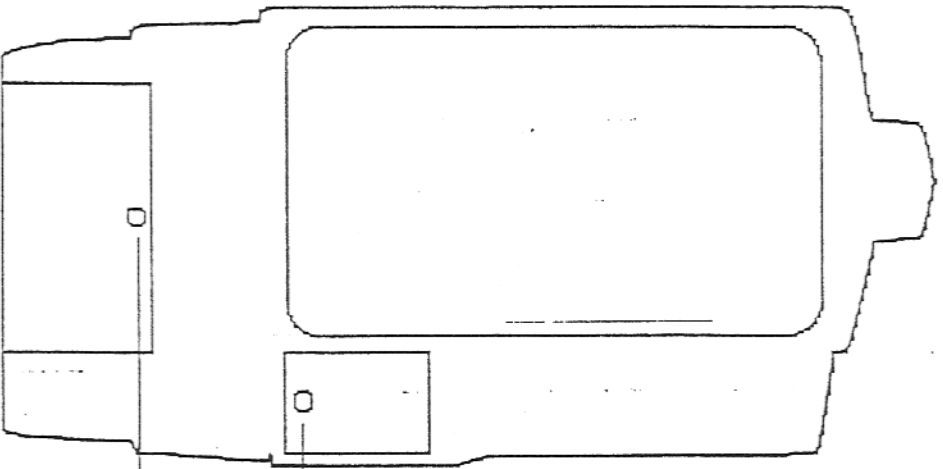
## Odyssey Specifications



- Must be mounted on a stand with a minimum width of 28 inches
- Weight: 275 pounds
- Voltage: 110-120 VAC
- Power: 240 Watts or approximately 2 Amps



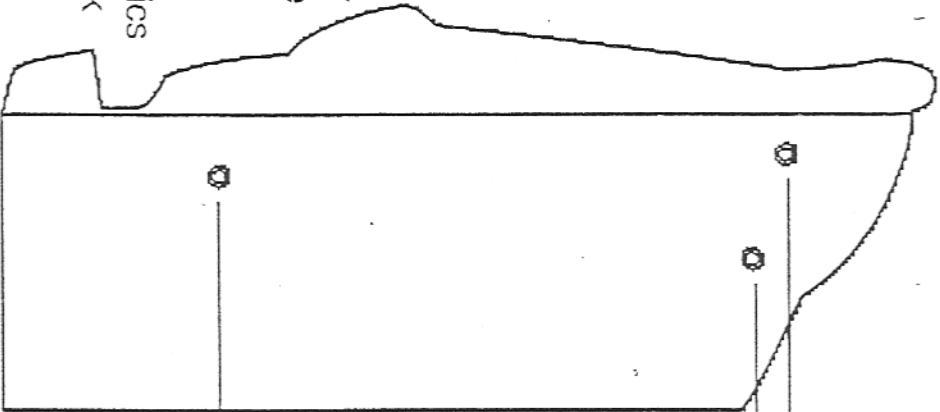
# Door Lock Locations



Currency Cartridge Lock

Electronics Box Lock

Currency Cartridge Lock must be a short left-hand-turn lock



Currency Column Door Lock  
MMS keyswitch (Reset)

Belly Door Lock

Currency Column Door Lock must be a right-hand- turn lock



# Doorswitch Locations

