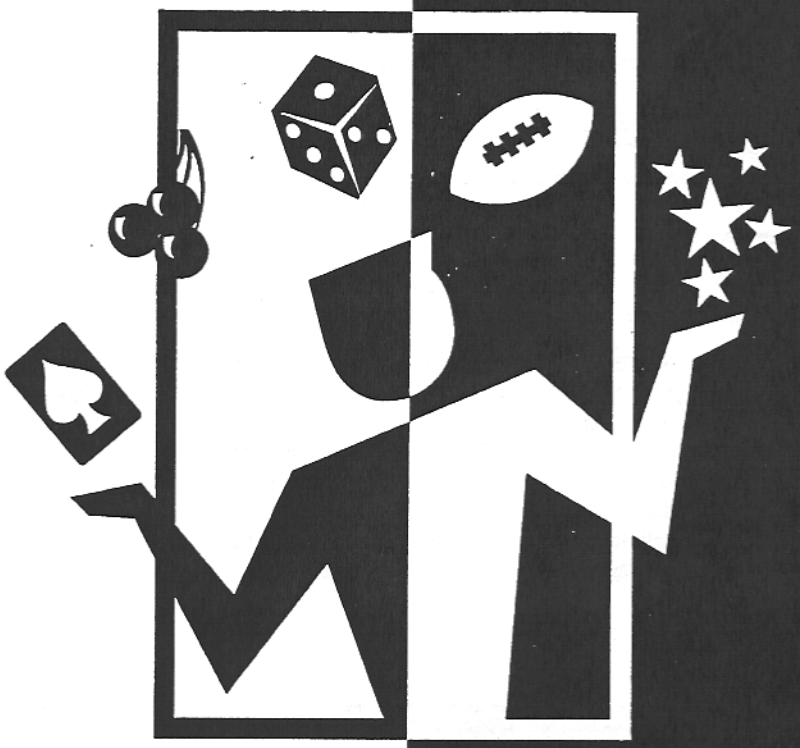

SILICON GAMING

Odyssey Operation and Service Guide

Publication Number: 820-0002-02, Rev. B
October 22, 1998

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 operated in a commercial environment. This equipment generates, 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 residential areas is likely to cause harmful interference, in which case the user will be required to correct the interference at his own expense.

Print History

Publication No.	Revision	Chapter/Pages Affected	Date
820-0002-0		First Printing	July 15, 1996
820-0002-00	D	Chapters 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, App. B, C	February 1, 1997
820-0002-01		Chapters 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, App. B, C	February 21, 1997
820-0002-01	A	Chapters 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, App. B, C	April 24, 1997
820-0002-01	B	Chapters 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, App. B, C, D	August 1, 1997
820-0002-01	C	Chapters 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, App. B, C, D	November 1, 1997
820-0002-01	D	Chapters 1, 2, 7, 8, 10, 11, 12, 13, 14 App. C, D	December 19, 1997
820-0002-02		Chapters 1, 2, 3, 4, 5, 6, 7, 8, 10, 11, 12, 13, 14 App. C, D	February 1, 1998
820-0002-02	A	Chapters 1, 2, 3, 4, 5, 6, 7, 8, 11, 12, 13, 14 App. B, C	June 11, 1998
820-0002-02	B	All	October 22, 1998

Description of Document Changes in This Release

Chapter organization has changed for this revision. For a description of chapter contents, see "Content Overview" on page xxxiii.

Chapter	New Chapter Name	Information/Pages Affected
1	Functional Overview	Added "Software Update Support (SWUS) Module" on page 1-12. Added "Ethernet Board" on page 1-14.
2	Machine Service and Component Replacement Basics	Previously in Chapter 10. Added video patch cable information to "Removing the Display Monitor Chassis" on page 2-16 and "Removing the Electronics Box" on page 2-12.
3	Installation	Previously Chapter 2.

Reference Documentation

The documents listed below provide supplementary information.

- **ZT1000 Bill Acceptor User Manual**
  This manual describes the installation, calibration and maintenance of the bill acceptor. To order it, contact

  Mars Electronics International
  1301 Wilson Drive
  West Chester, PA 19380
  Phone: 610-430-2500
  Fax: 610-430-2694

- **Replenishment and Maintenance Guide for the IPI Series 70 Printer**
  This manual contains information about ordering supplies, clearing paper jams, changing paper, replacing the supply roll, installing the journal takeup roll, changing the ribbon cassette, and changing the print head on the ticket printer. To order, contact

  Ithaca Peripherals
  20 Bomax Drive
  Ithaca, NY 14850
  Phone: 607-257-8901 (Ask for Sales)
  Fax: 607-257-8922

- **Coin Comparitor Model CC-16**
  This manual contains specifications and operating instructions for the coin comparator. Contact

  Coin Mechanisms Inc.
  P.O. Box 5128
  400 Regency Drive
  Glendale Heights, IL 60139-5128
  Phone: 630-924-7070 or 1-800-323-6498 in US and Canada
  Fax: 630-924-7088

- **Asahi Seiko USA Inc. DH-750 Hopper Series Conversion Manual**
  This manual contains hopper conversion instructions. Contact

  Asahi Seiko
  6644 Paradise Road
  Las Vegas, NE 89119
  Phone: 702-260-6666
  Fax: 702-260-6493

  web site: www.asusainc.com

- **Neotec Manuals**
  Contact

  Neotec Graphic International Inc.
  2721 North Towne Avenue
  Pomona, CA 91767
  Phone: 909-626-9889

Chapter	New Chapter Name	Information/Pages Affected
4	Configuring the Slot Machine	Moved "Updating Software: to *ServicePoint User Guide.* Added "Enabling Featured Game Mode" on page 4-18. Added "Changing Icon Position and Animation Sequence" on page 4-16 Added "Configuring the Progressive Interface" on page 4-23. Deleted "Setting Player Tracking Parameters."
5	Auditing the Machine	Added "Printing Accounting Tickets" on page 5-8.
6	Resolving Player Conflicts	Revised "Accessing Information to Resolve Player Conflicts" on page 6-5
7	Periodic Maintenance	Updated all procedures.
8	Diagnostics and Troubleshooting	Updated flowchart, procedure, and Table 8-1, "Machine Events and Action(s) Required to Clear Them," on page 8-6.
9	Component Replacement: Display Hardware	Integrated alignment, calibration, and replacement procedures for display hardware.
10	Component Replacement: Wagering and Monetary Hardware	Integrated "Adjusting the Hopper Coin-Out Sensor" on page 10-18 with replacement procedures. Added "Replacing the Ticket Printer" on page 10-70.
11	Component Replacement: System Electronics Hardware	Added video patch cable information to "Replacing the Motherboard" on page 11-24 and "Replacing the Power Supply" on page 11-56.
12	Component Replacement: Networking Hardware	Added player tracking cabling to "Replacing the Hubble Board" on page 12-3. Added "Replacing the Software Update Support (SWUS) Module" on page 11-41. Added "Replacing the Ethernet Board" on page 12-38.
13	Component Replacement: Switches, Lamps, and Locks	Revised "Replacing a Bezel Control Button Microswitch" on page 13-4.
D	Wiring Harness	Revised Figure D-1, "System Wiring Harness," on page D-3.

Conventions Used in This Guide

The following type and punctuation conventions are used in this guide:

Bold	Machine Management System (MMS) pages and tabs.
Italics	Screen items, such as buttons, messages, scroll boxes, options, parameters, and banners. Also, document titles.
" "	Chapter names and procedures.

Warnings, Cautions, and Notes

The following notations are used throughout this guide to alert you to helpful or relevant information:


Warning: Information that, if ignored, could result in injury to personnel.


Caution: Information that, if ignored, could result in damage to equipment.


Important: Specific information that, if overlooked, could affect system performance.


Note: Additional information about the subject that can be overlooked but may be useful to some readers.


Example: Used to clarify a procedure or narrative passage.


Tip: A tip is specific information that may aid you in performing a task.

Content Overview

This section provides a brief description of the topics covered in this guide.

Chapter 1, "Functional Overview"	Describes the system architecture and components of the system, including the hardware, system software, and the applications comprising the wagering experience. The Machine Management System is also described. You use this graphic interface to perform many of the tasks described in this book, such as configure the slot machine, monitor its operation, and invoke machine diagnostic routines and functions.
Chapter 2, "Machine Service and Component Replacement Basics"	Explains how to identify the machine version, how to return defective components, and describes equipment needed for component replacement. Shows the machine cabinet layout and main harness connectors. Describes commonly used procedures.
Chapter 3, "Installation"	Provides the requirements and procedures necessary for installation of the slot machine in a casino. Included are machine dimensions, weight, and input power requirements. Also provided are procedures for connecting the slot machine to a casino network, applying main power, and performing diagnostics to confirm major component functionality.
Chapter 4, "Configuring the Slot Machine"	Provides the Machine Management System (MMS) configuration procedures necessary to enable the service technician to set up and customize the configuration of the slot machine.
Chapter 5, "Auditing the Slot Machine"	Provides the Machine Management System (MMS) accounting procedures necessary to enable the casino staff to view audit information for both the slot machine and each installed game.
Chapter 6, "Resolving Player Conflict"	Provides the Machine Management System (MMS) procedures necessary to enable the casino staff to resolve disputes on their floor.
Chapter 7, "Periodic Maintenance"	Provides preventive maintenance procedures for all major hardware components.
Chapter 8, "Diagnostics and Troubleshooting"	In the event of play stoppage caused by a machine problem, this chapter provides troubleshooting guides, which rely on the use of the diagnostic section of the Machine Management System (MMS).
Chapter 9, "Component Replacement: Display Hardware"	Provides component replacement procedures for display hardware. Describes calibration and alignment procedures for all major hardware components used on the slot machine.
Chapter 10, "Component Replacement: Wagering and Monetary Hardware"	Provides component replacement procedures for wagering and monetary hardware.
Chapter 11, "Component Replacement: System Electronics Hardware"	Provides component replacement procedures for system electronics hardware, including electronics box components, the power system, and the audio system.
Chapter 12, "Component Replacement: Networking Hardware"	Provides component replacement procedures for networking hardware, including translator, network, and Ethernet boards. Card reader, keypad, and display replacement procedures are also included.
Chapter 13, "Component Replacement: Switches, Lamps, and Locks"	Provides component replacement procedures for microswitches, lamps, and locks.
Appendix A, "Specifications"	Provides environmental requirements, electrical specifications, mechanical specifications, and so on.
Appendix B, "Illustrated Parts Breakdown"	Provides exploded views of all replaceable components, with item designators that tie each part to the slot machine's bill of materials.
Appendix C, "Schematics"	Provides schematics for major hardware assemblies, such as circuit boards and monitor display, that are used on the Odyssey slot machine. System wiring diagrams are also supplied for reference.
Appendix D, "Wiring Harness Tables"	Provides diagrams of the main wiring harness and tables listing signals and pinouts for the harness connectors.

Contents

Who Should Use This Guide

There are a number of different users who should use this guide to learn how to operate or service the Silicon Gaming slot machine. Each group of users is described below.

- **Operations Personnel**
  The operations personnel include the slot attendants who conduct basic machine transactions and are responsible for system maintenance. For example, slot attendants perform hopper fills and hand pays of jackpots.
- **Accounting and Audit Staff**
  The accounting and audit staff consists of the casino operator's accountants who perform software audits and conduct meter readings (soft and hard).
- **Technical Staff**
  The technical staff consists of field engineers and casino service technicians who install and configure the slot machine, conduct tests, and execute repairs as necessary.
- **Gaming Control Personnel**
  The gaming control personnel include Gaming Control Lab employees, field technicians, and Gaming Control Board members who participate in the evaluation and testing of the slot machine.

How to Use This Guide

This book is organized to quickly locate task procedures, including information necessary to operate and service the slot machine. A summary of the tasks described in this book, and where to find the applicable information needed to perform each task, is listed below. The contents of each chapter is described in more detail following this summary.

Note: To quickly find information about a specific topic, use the index at the back of this book.

Task	What to Read
Learn about the design and functionality of the slot machine	Chapter 1
Learn about machine basics and commonly performed procedures	Chapter 2
Install the slot machine	Chapter 3
Configure the slot machine, perform a SafeClear, update game software, etc.	Chapter 4
Access audit and accounting information	Chapter 5
Access information that may be needed to resolve player conflicts during game play	Chapter 6
Perform periodic maintenance on hardware components	Chapter 7
Diagnose/troubleshoot system problems	Chapter 8
Replace, align, and calibrate display hardware	Chapter 9
Replace and adjust wagering and monetary hardware	Chapter 10
Replace electronics box, power system, and audio system hardware	Chapter 11
Replace networking hardware	Chapter 12
Replace switches, lamps, and locks	Chapter 13
Access system specifications	Appendix A
View exploded and detail views of assemblies and listings of replaceable hardware	Appendix B
View circuit board schematics	Appendix C
View main wiring harness diagrams, schematics, and connector pinouts	Appendix D

3 Installation

Introduction

This section describes the organization of the *Operation and Service Guide* and provides tips for locating information about the operation, maintenance, and service of the Silicon Gaming slot machine.

4 Configuring the Slot Machine

10 Component Replacement: Wagering and Monetary Hardware

Tables

A Specifications

Figures