

IGT Progressive Controller Operator's Guide



IGT Progressive Controller Operator's Guide

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Comprehensive Documentation List

For a complete listing of all IGT documentation, refer to the Related IGT Documentation section at the back of this manual.

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Table of Contents

Section 1	Introduction	
1.1	IGT Progressive Controller Overview	2
1.2	IGT Progressive Controller Features	3
Section 2	IGT Progressive Controller Components and Keypad	
2.1	IGT Progressive Controller Components	6
2.2	IGT Progressive Controller LEDs	7
2.3	Using the IGT Progressive Controller Keypad	8
Section 3	IGT Progressive Controller Menus	
3.1	Understanding Security Access Levels	10
3.2	Main Menu Overview	11
3.3	Mode Menu Overview	12
3.4	Configure Menu Overview	19
3.5	Status Menu Overview	20
3.6	Reports Menu Overview	22
Section 4	Operating the IGT Progressive Controller	
4.1	Powering Up the IGT Progressive Controller	36
4.2	Using the Mode Functions	37
4.3	Using the Configure Function	48
4.4	Using the Status Functions	49
4.5	Using the Report Functions	52
Section 5	Troubleshooting and Maintenance	
5.1	Performing Basic Troubleshooting	56
5.2	Responding to Alarms	58
5.3	Performing Preventive Maintenance	59
	Related IGT Documentation	61
	Glossary	69
	Index	89

Section 1

Introduction

This guide is intended for operators of the IGT Progressive Controller (IPC). The IPC is a communication controller, designed to enable operators to configure and run up to 32 progressive levels on a bank of up to 63 linked and local IGT slots, video slots, and video poker machines.

Refer to the Glossary on page 69 for definitions of any unfamiliar terms.

The information in this section includes:

- **Section 1.1, IGT Progressive Controller Overview**
- **Section 1.2, IGT Progressive Controller Features**

Note: *Gaming machines are referred to differently depending on the state or jurisdiction in which the gaming machines are located and the regulations that exist there. References to machines that appear on IPC message displays vary depending upon what the machines are called in certain jurisdictions. For purposes of this guide, the word “machine” is used in reference to game machines and IPC message displays.*

1.1 IGT Progressive Controller Overview

A typical linked local progressive configuration using the IPC consists of a computer running the EZ Setup software (computer not included), IGT machines, the controller, a printer, and a progressive display (progressive display not included.) Together, these components allow you to configure and run Multi-Denomination™ progressives on up to 63 local IGT machines.

As shown in Figure 1-1, machines are connected together to form a “loop” of machines. The connection between the machines, as well as the connection from the IPC to the machines and the progressive display, consists of fiber-optic cables.

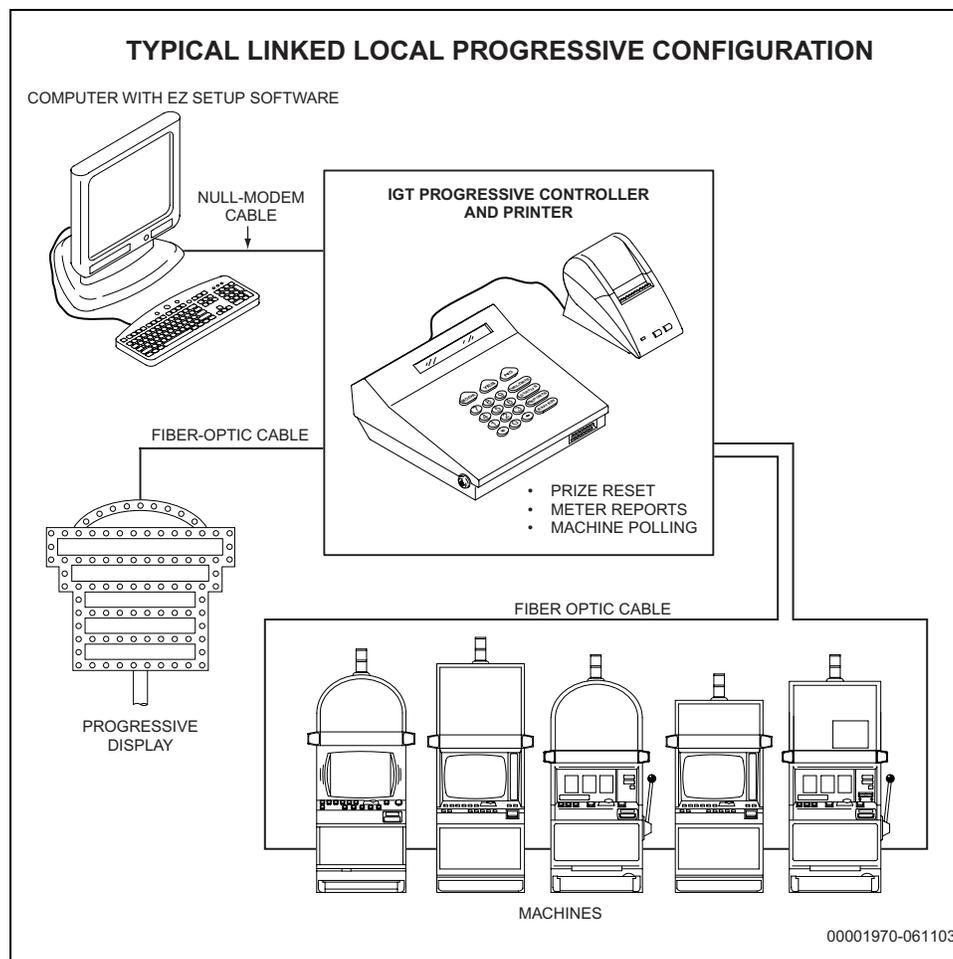


Figure 1-1. Typical Linked Local Progressive Configuration

1.2 IGT Progressive Controller Features

The easy-to-use IPC is designed to give you the flexibility to configure and run up to 32 progressive levels on a bank of up to 63 linked and local IGT machines. An illustration and explanations of IPC component functions are provided in Section 2 on page 5.

The IPC:

- Downloads configuration data from the EZ Setup software
- Sends configuration data to machines on demand
- Sends prize amount updates to machines every poll cycle
- Calculates the appropriate increment amounts for all progressives and sends new amounts to machines
- Progresses up to 32 different prize amounts in any number of denominations
- Controls and supports up to 63 machines
- Makes changing progressives as easy as changing the denomination
- Reports and stores prize hit data
- Resets prize amounts after prize hits
- Requires no central system
- Uses high-security fiber-optic loop for data transfer (fiber-optic cable not included)
- Alerts operator when progressive prizes hit
- Offers a wide range of reports including security events and progressive group data
- Reports nonresponding machines and events
- Allows access restriction with two levels of security
- Operates with any game supporting Type 8 protocol
- Allows operator breaks without logging out or creating a shift change

Section 2

IGT Progressive Controller Components and Keypad

This section details the IPC keypad, along with a brief explanation of each IPC component.

The information in this section includes:

- **Section 2.1, IGT Progressive Controller Components**
- **Section 2.2, IGT Progressive Controller LEDs**
- **Section 2.3, Using the IGT Progressive Controller Keypad**

2.1 IGT Progressive Controller Components

The IPC is in charge of communication with the machines. It communicates configuration data to machines and controls progressive prize hits. It also generates reports for authorized users.

Figures 2-1 and 2-2 identify IPC components and connections.

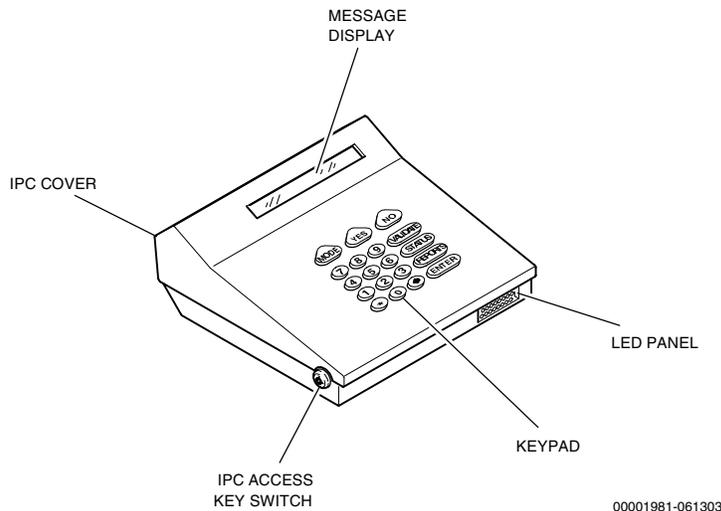


Figure 2-1. IGT Progressive Controller Components

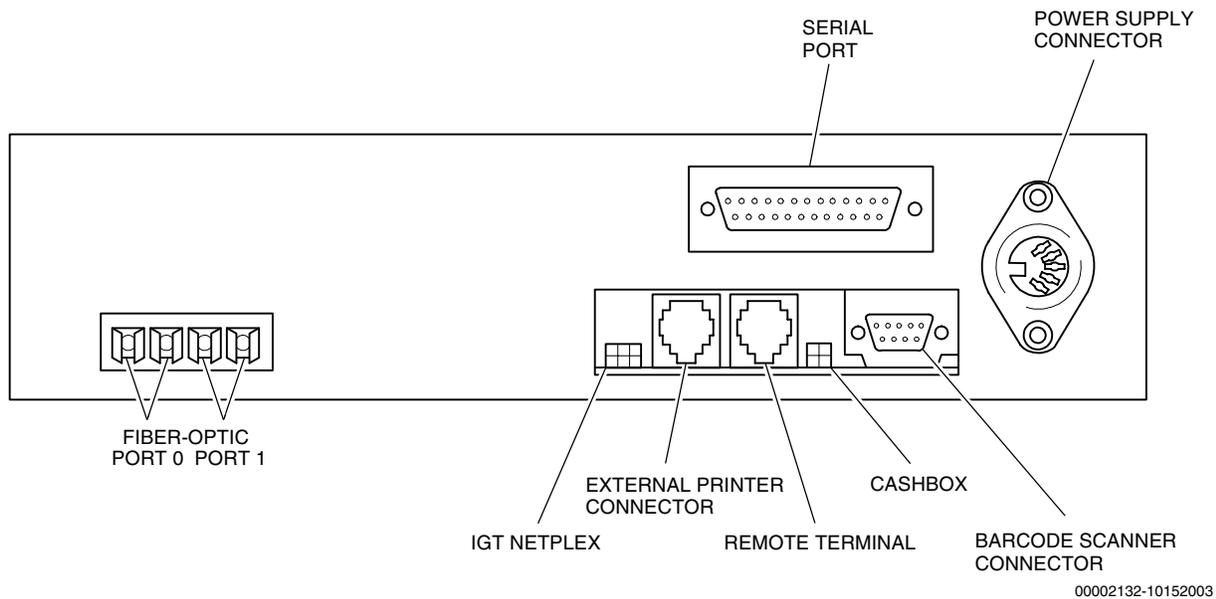
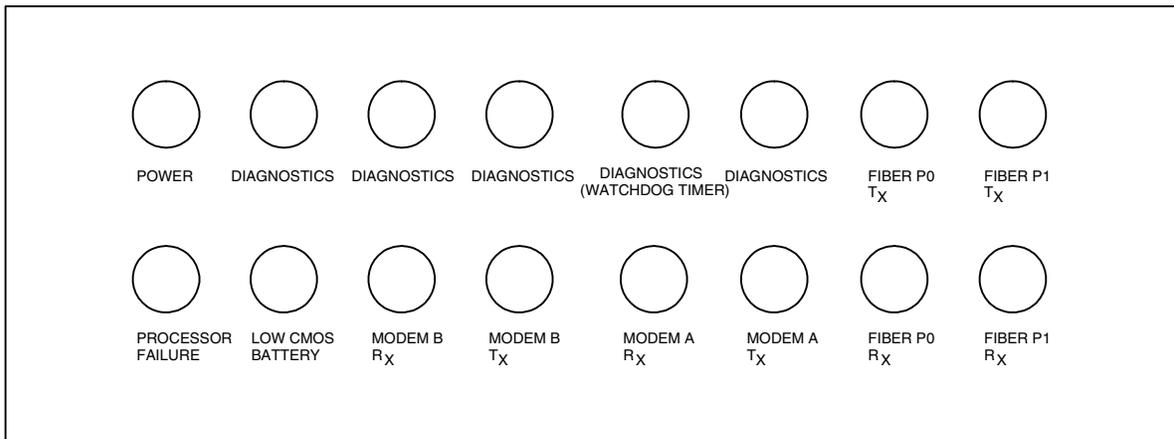


Figure 2-2. IGT Progressive Controller Connections

2.2 IGT Progressive Controller LEDs

LEDs are used to signal various events and operating conditions. See Figure 2-3 for an illustration of the LED panel. For more information about the function and/or indication of each light, refer to the *CVT-Plus Field Service Manual*.



T_X = Transmitter R_X = Receiver

00002133-10152003

Figure 2-3. IGT Progressive Controller LED Arrangement

2.3 Using the IGT Progressive Controller Keypad

Figure 2-4 shows the IPC keypad and describes each key according to how it is used. Refer to Section 4 on page 35 for step-by-step procedures using the command keys to perform various operations.

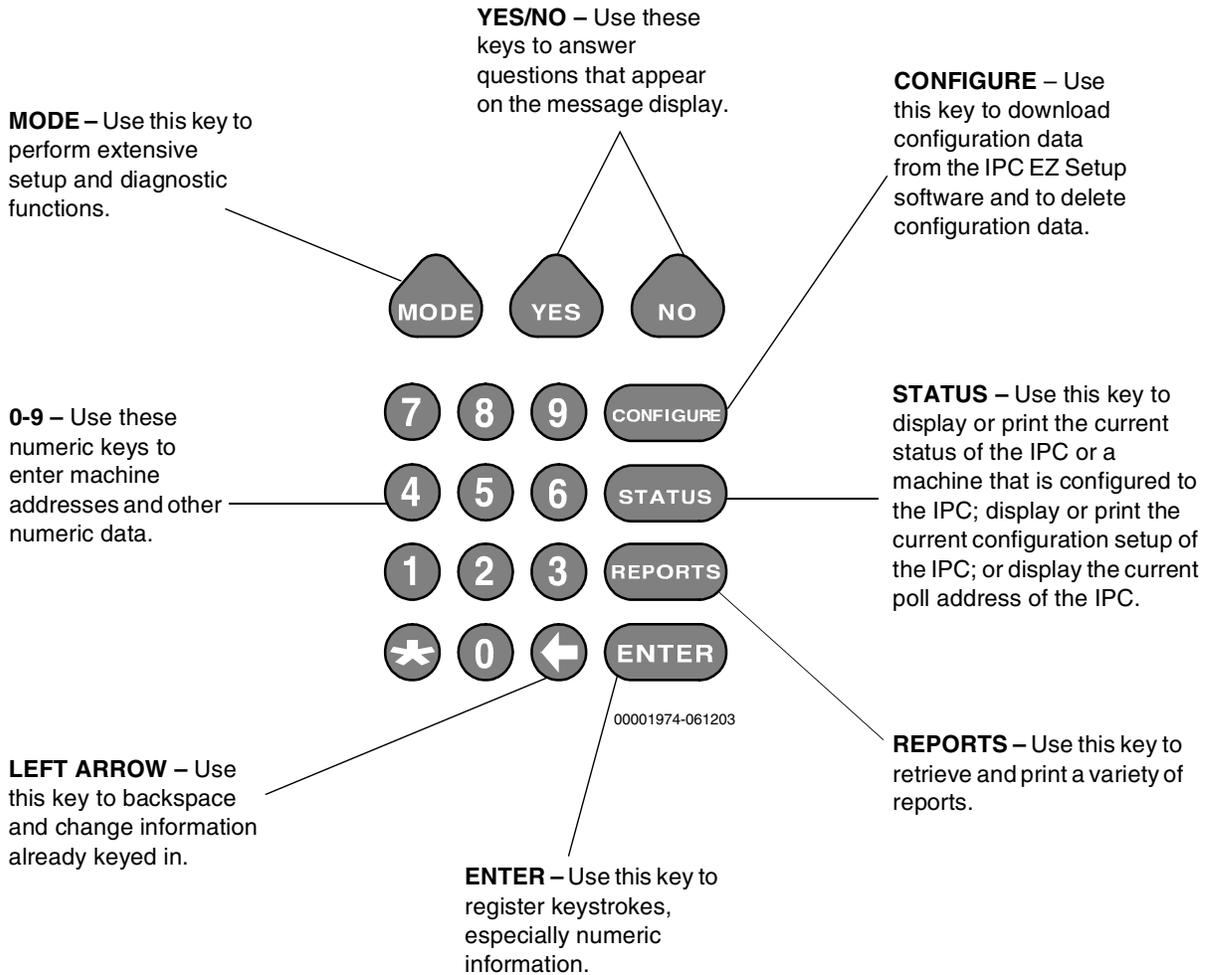


Figure 2-4. IGT Progressive Controller Keypad

Section 3

IGT Progressive Controller Menus

Use the IPC menus to communicate progressive configuration data, enter information, request reports and data, and control progressive prize hits and prize amount resets. This section describes and illustrates the menu structure and functions. Refer to Section 2 on page 5 for basic command key functions. Refer to Section 4 on page 35 for step-by-step instructions.

Note: *The default prompt or “home” position for the software varies depending upon jurisdiction.*

The information in this section includes:

- **Section 3.1, Understanding Security Access Levels**
- **Section 3.2, Main Menu Overview**
- **Section 3.3, Mode Menu Overview**
- **Section 3.4, Configure Menu Overview**
- **Section 3.5, Status Menu Overview**
- **Section 3.6, Reports Menu Overview**

3.1 Understanding Security Access Levels

Security access levels are associated with operator IDs. The following levels of security access are available:

- | | |
|----------------------------|--|
| Open Access | Allows access to diagnostics, printer tests, and limited setup functions without an operator logging in or entering a password. |
| Operator Access | Provides access to setup options and basic print functions, including printing log-in/log-out events, jackpot receipts, and an operator ID list. |
| Supervisor Access | Allows access to all operator functions and supervisor-only functions, such as printing reports. |
| System-Level Access | Requires entry of the system-level password, which may be entered between shifts when no operator is logged on – or while an operator- or supervisor-level user is logged on – without causing a log-out event. Provides access to all IPC administrative features and IPC hardware settings. These include setup of operator IDs and passwords, system-level password modification, display and/or print an operator ID list with access levels, add or delete operators, modify operator access privilege and/or passwords, etc. |

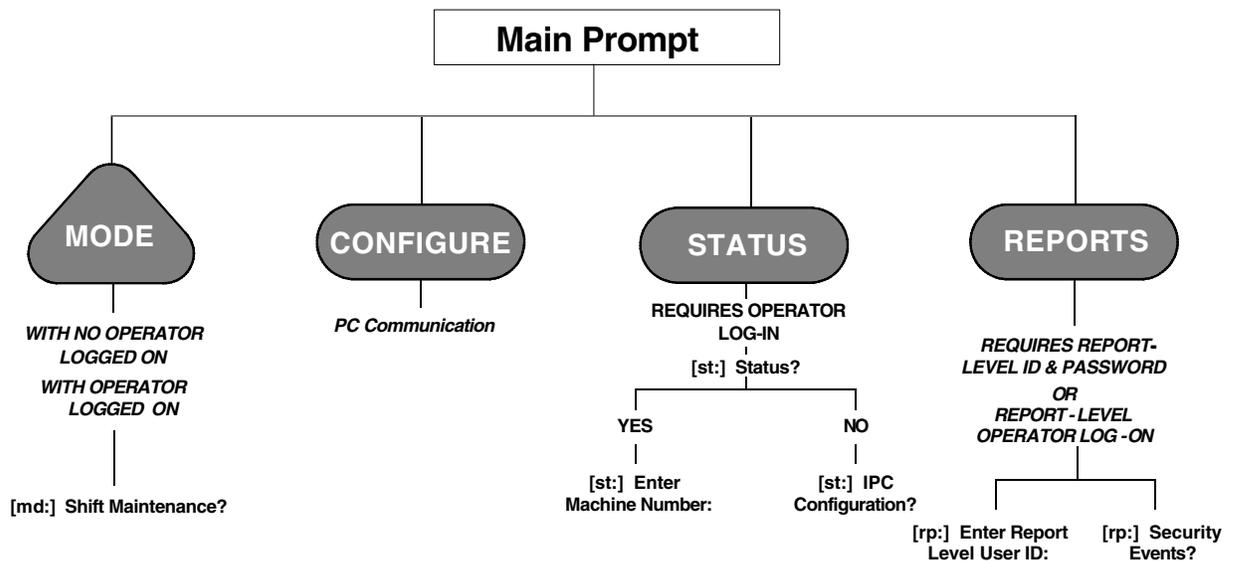
The information in this section reflects all features of the IPC; however, the availability of each function depends on security access level.

Note: *Just as the main prompt may vary, specific menus and other prompts that appear on the IPC message display may also vary depending upon jurisdiction.*

3.2 Main Menu Overview

Figure 3-1 shows the IPC main menu structure. Understanding this structure enables you to move to a particular IPC function quickly and easily.

Note: Some IPC message displays use the abbreviation "EGM" to indicate an electronic game machine.

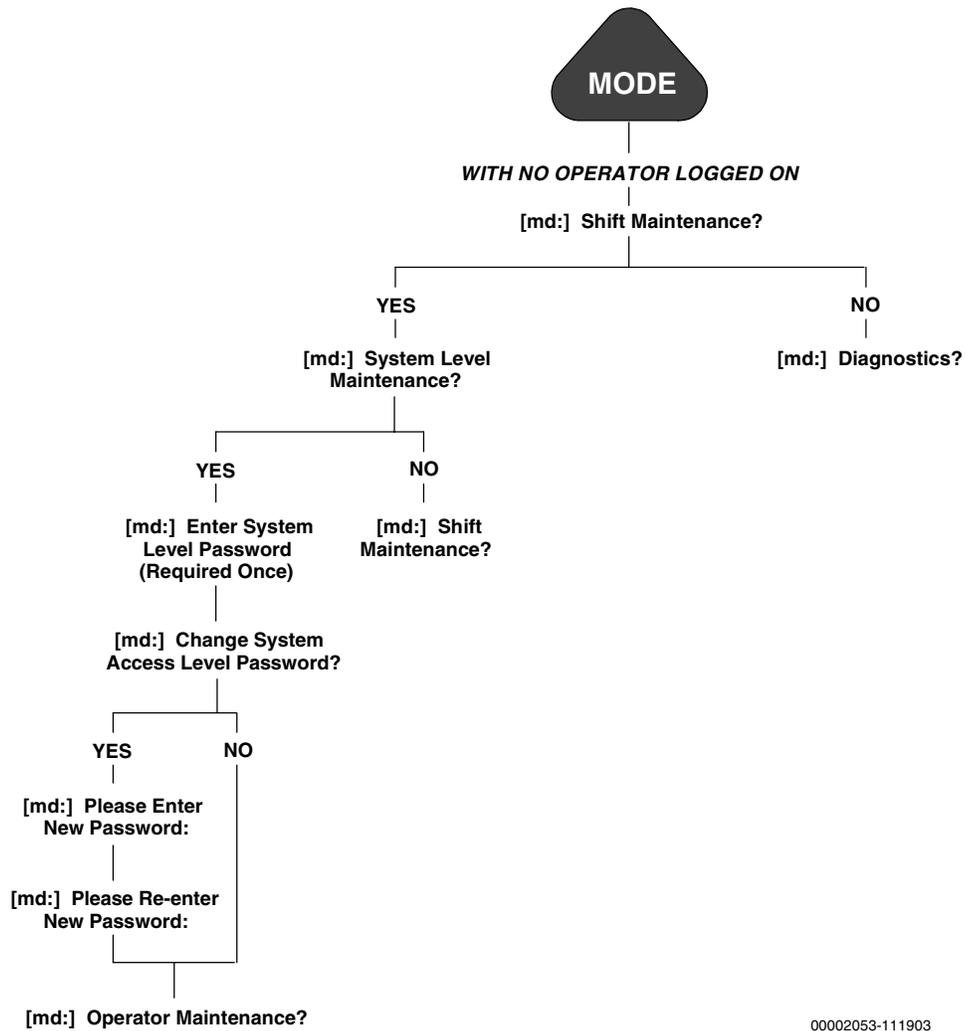


00002004-062503

Figure 3-1. IGT Progressive Controller Main Menu

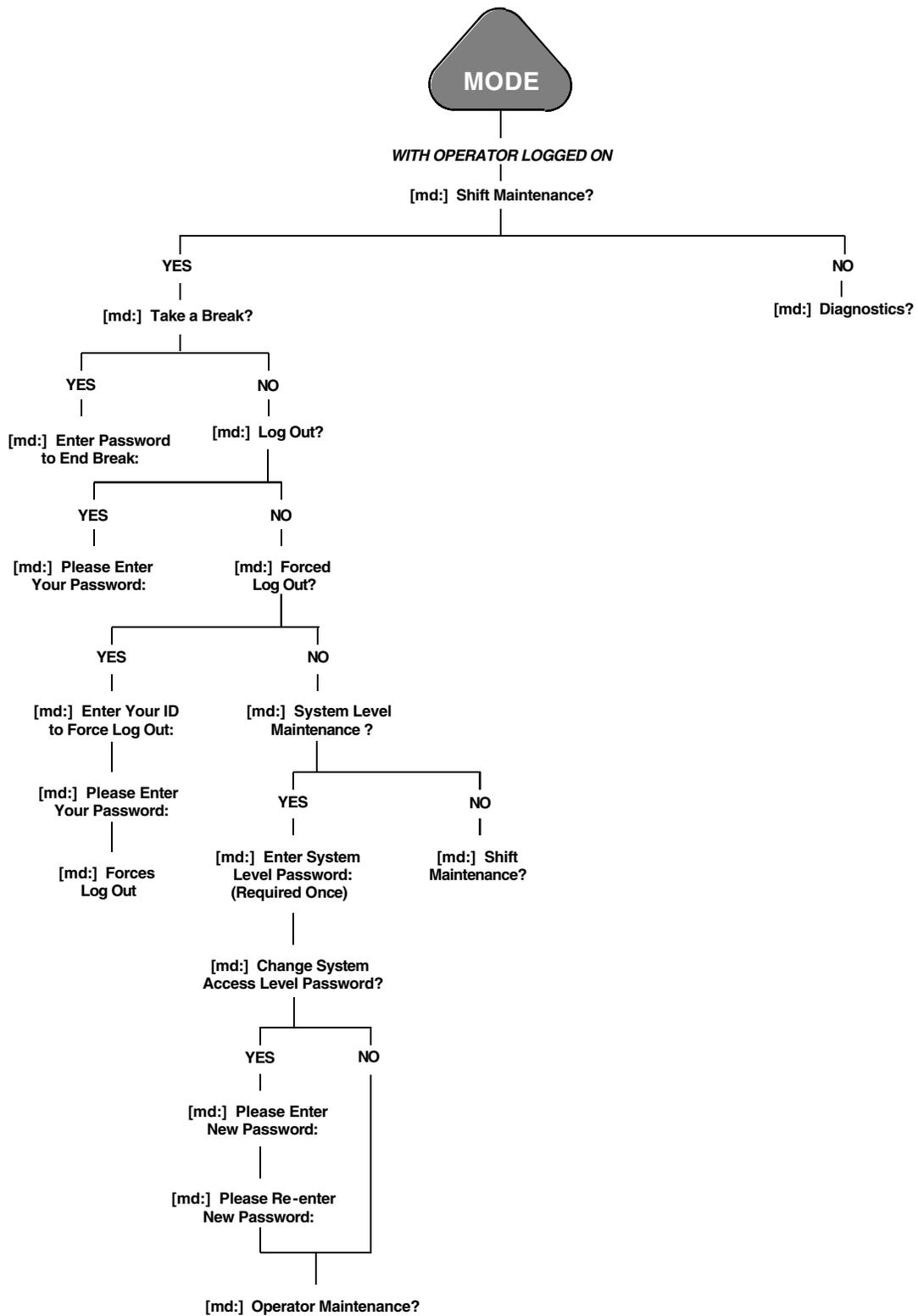
3.3 Mode Menu Overview

Figures 3-2 through 3-8 show all of the functions available using the **MODE** menu command key. For detailed instructions on performing these functions, refer to Section 4 on page 35.



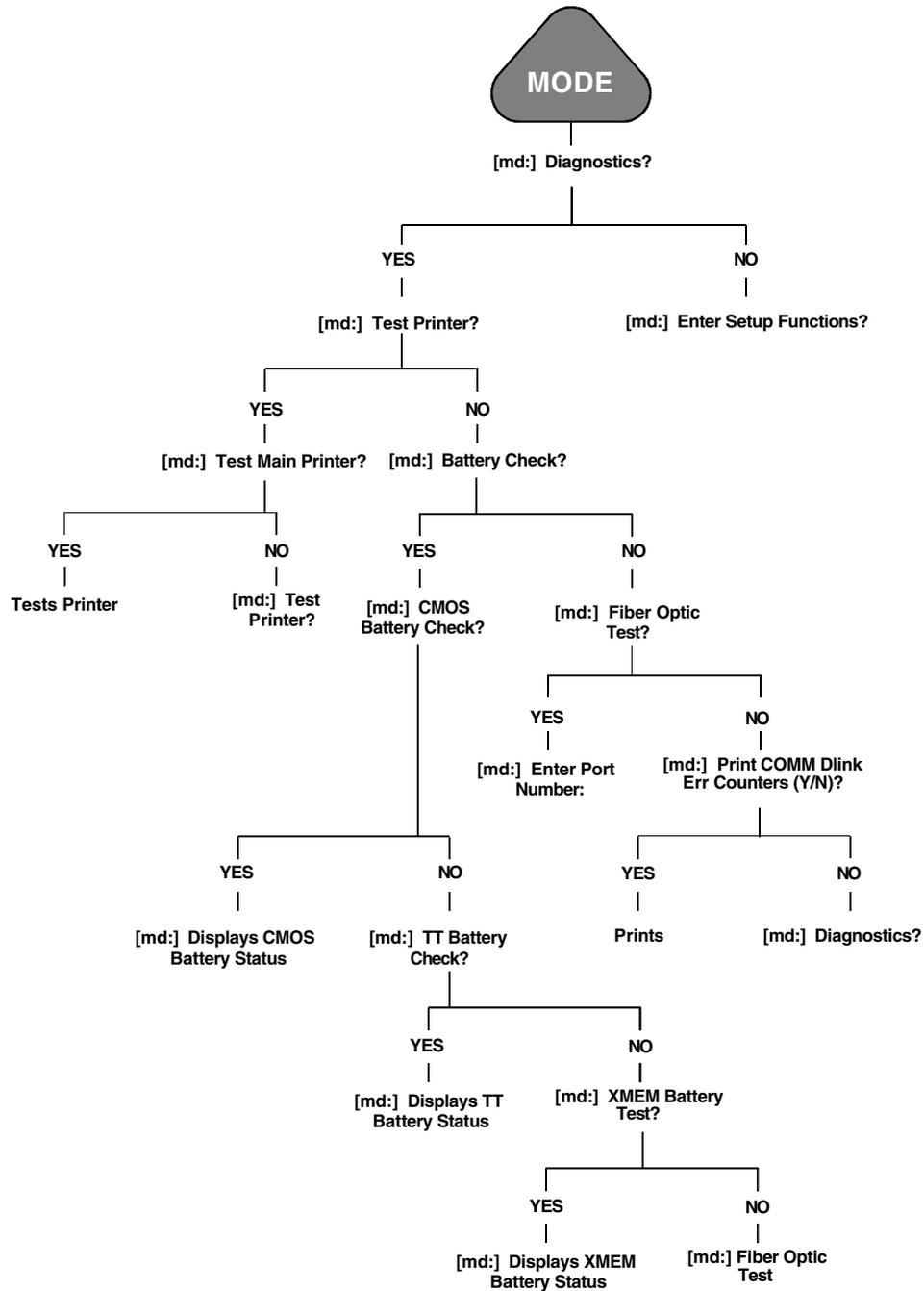
00002053-111903

Figure 3-2. Mode Menu with No Operator Logged On



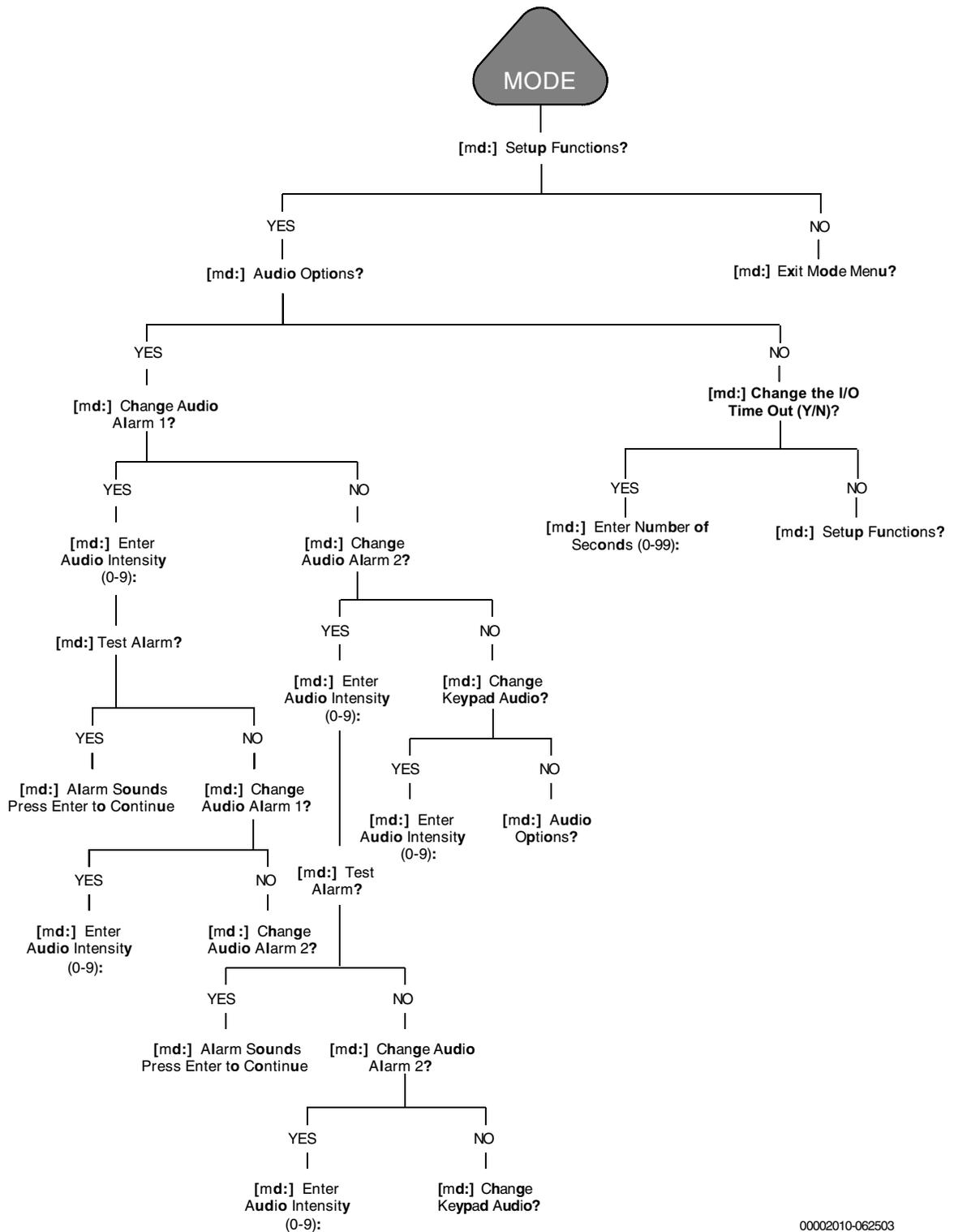
00002005-062503

Figure 3-3. Mode Menu with Operator Logged On



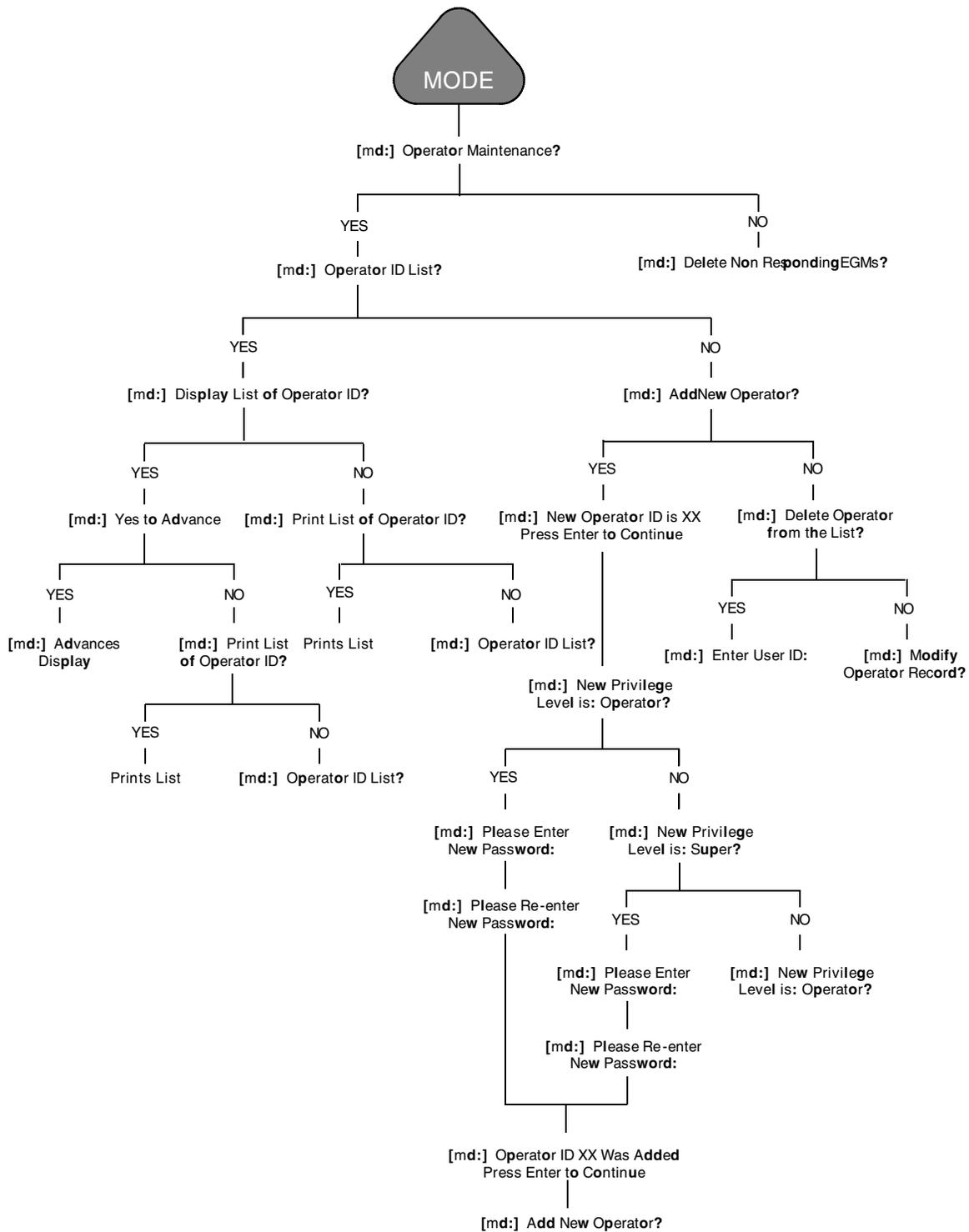
00002006-062503

Figure 3-4. Mode Menu – Diagnostics



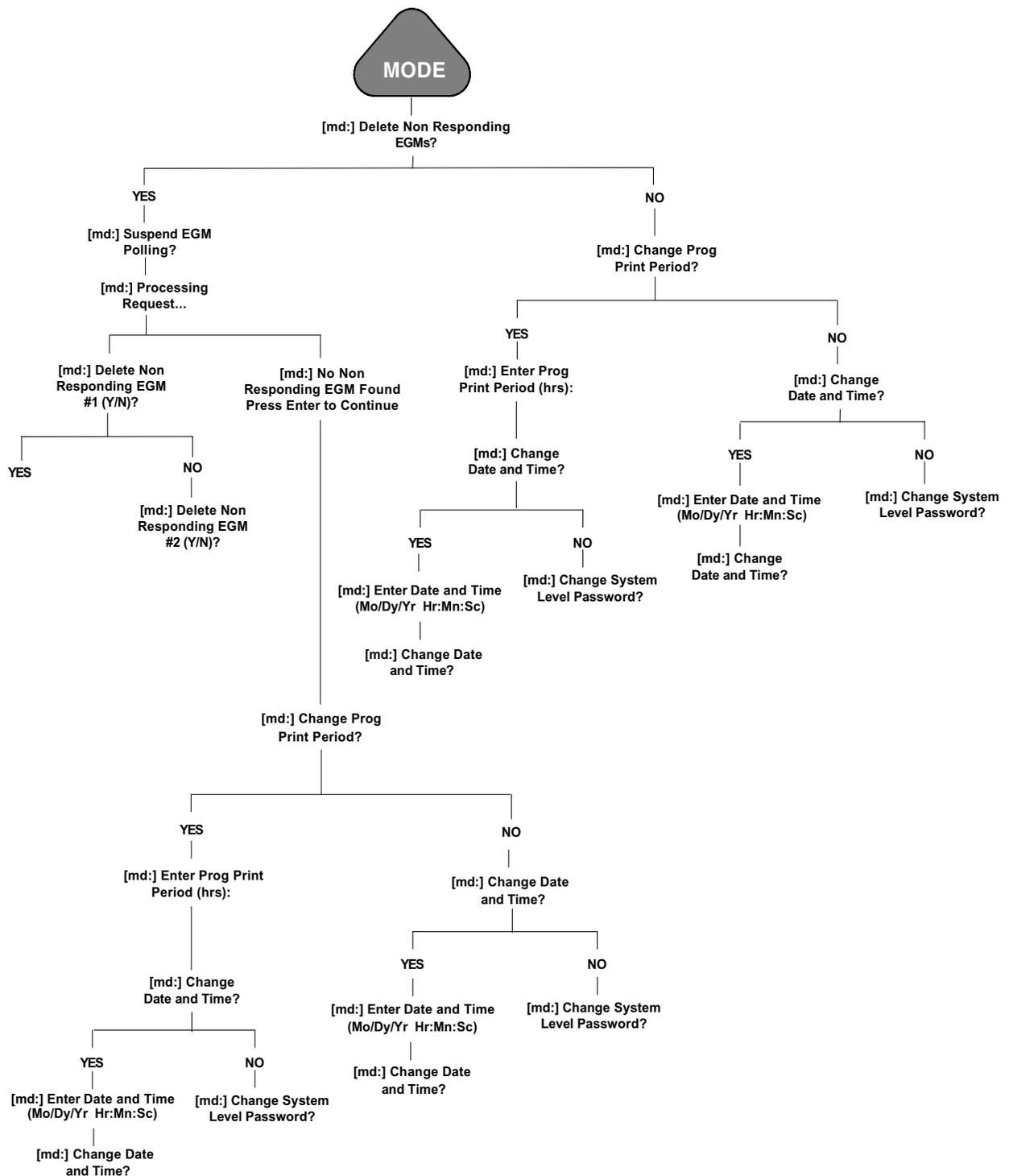
00002010-062503

Figure 3-5. Mode Menu – Setup Functions



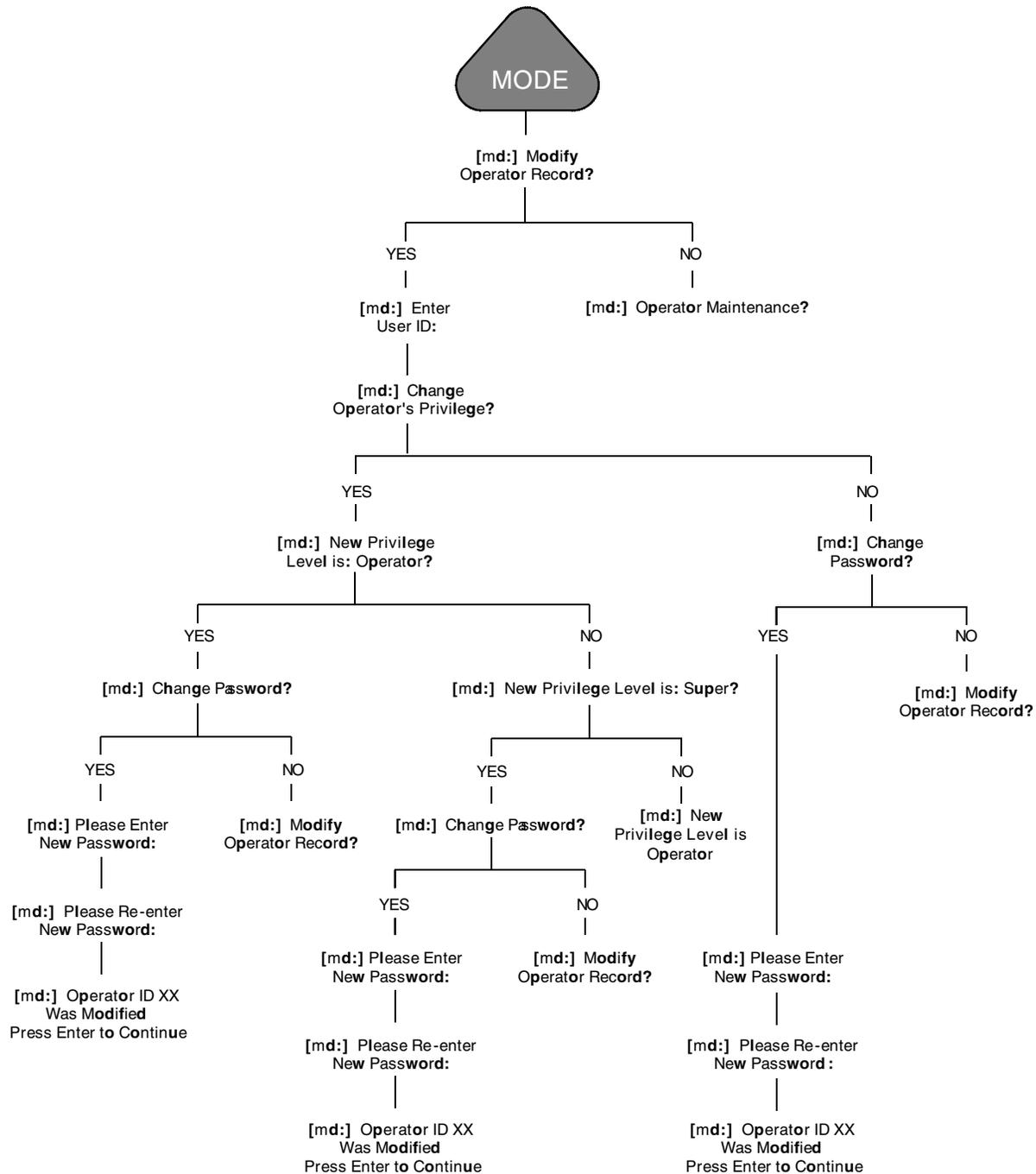
00002008-062503

Figure 3-6. Mode Menu – Operator Maintenance



00002009-062503

Figure 3-7. Mode Menu – Operator Maintenance (continued)

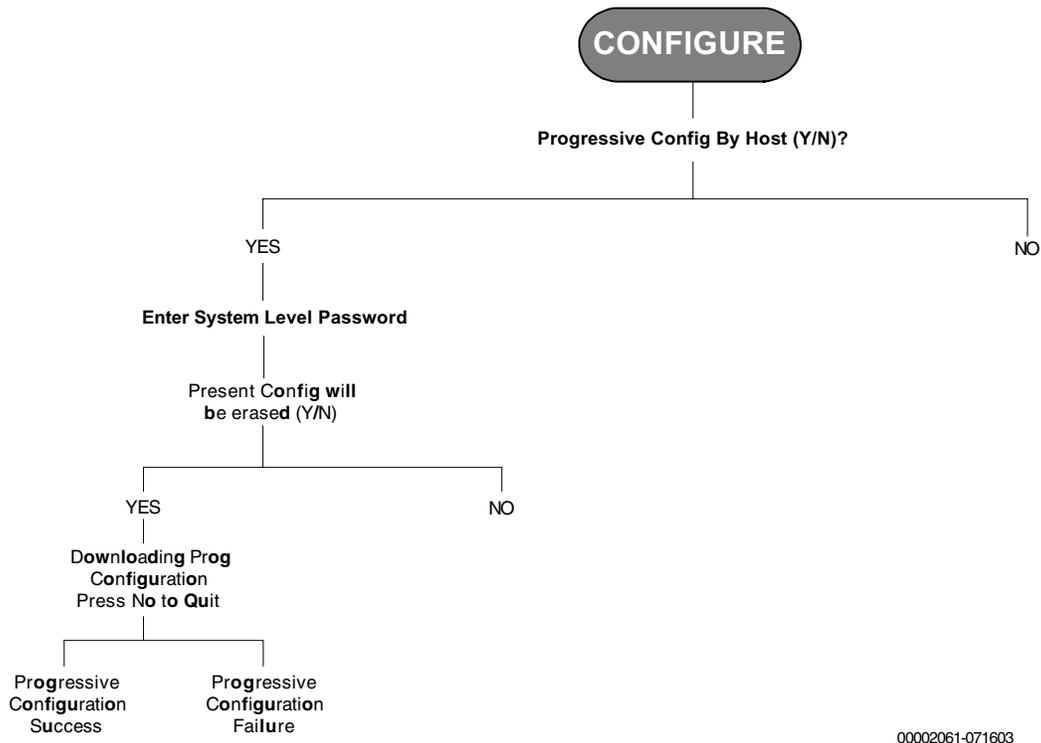


00002007-062503

Figure 3-8. Mode Menu – Modify Operator Record

3.4 Configure Menu Overview

Figure 3-9 shows the functions available using the **CONFIGURE** menu command key. For detailed instructions on performing these functions, refer to Section 4 on page 35.

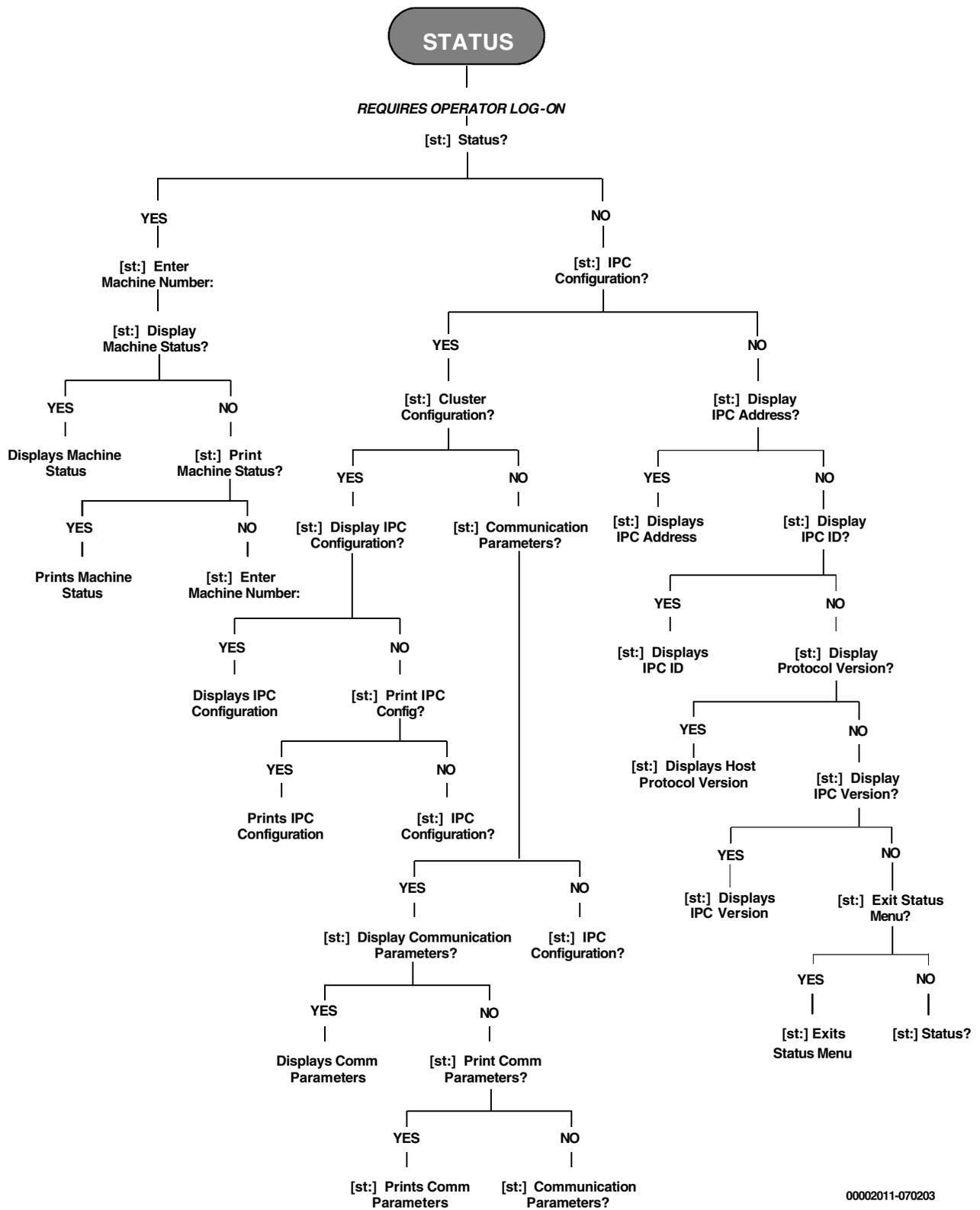


00002061-071603

Figure 3-9. Configure Menu

3.5 Status Menu Overview

Figure 3-10 shows the functions available using the **STATUS** menu command key. For detailed instructions on performing these functions, refer to Section 4 on page 35.



00002011-070203

Figure 3-10. Status Menu

3.6 Reports Menu Overview

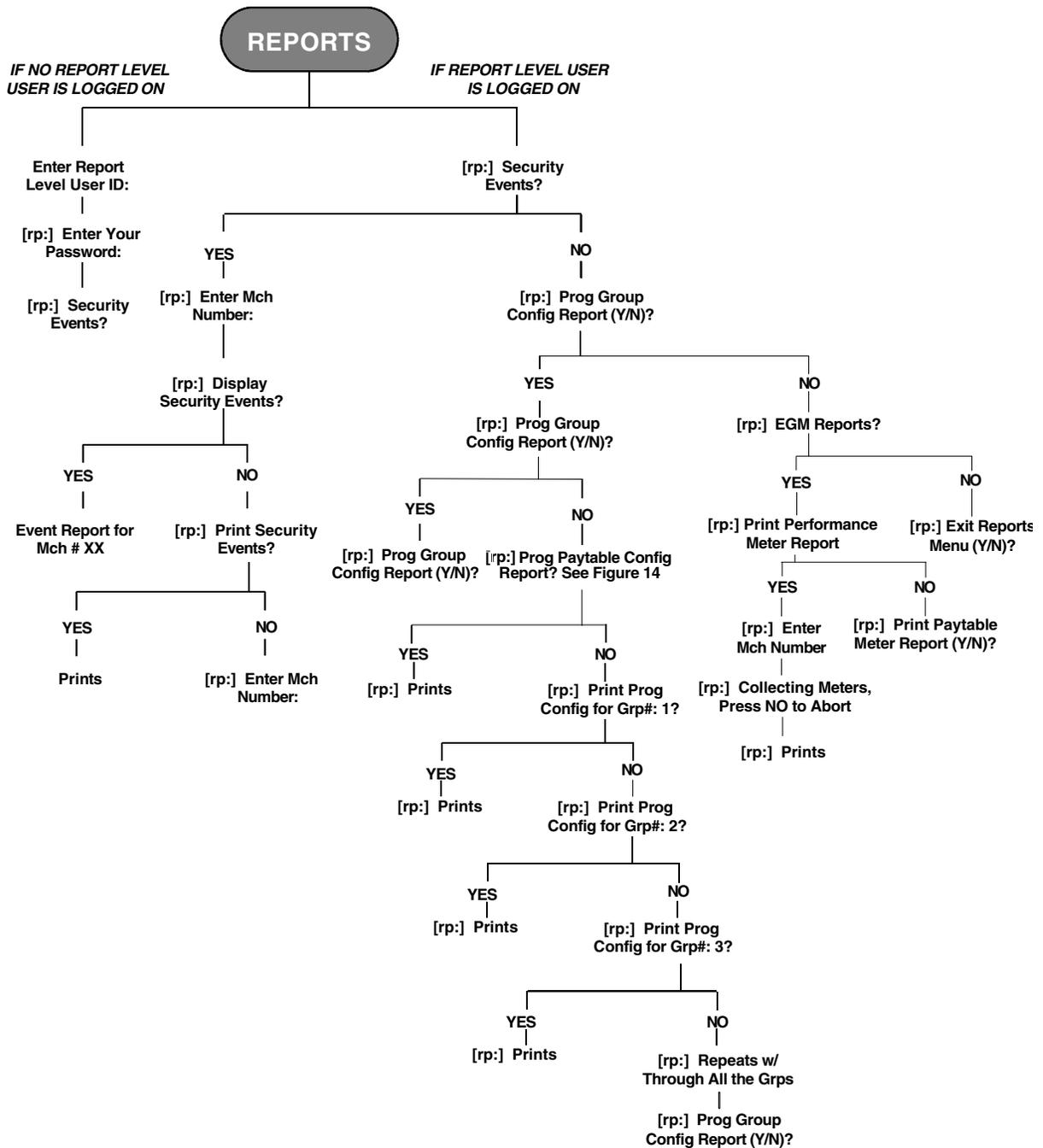
Note: A supervisor-level operator ID and password is necessary to access reports and the printer must be connected and online in order to print reports.

The IPC is capable of producing a wide range of reports. For detailed instructions on printing these reports using the IPC, refer to Section 4 on page 35.

Figures 3-11 through 3-13 show a typical **REPORT** menu structure. Figures 3-14 through 3-23 show examples of these reports.

Security Event Report	Displays or prints a machine event report that includes the machine ID and the date and time of the machine event. For example, door open, machine not responding, etc.
Progressive Group Configuration Report	Prints the progressive level number, prize identifier, maximum amount, starting amount, reset amount, and contribution percentage.
Progressive Paytable Configuration Report	Prints the paytable ID, number of denominations, denominations, total number of win categories, win category, and progressive prize ID for the paytable.
Progressive Meter Report	Prints the total amount wagered (group meter) for machines.
Progressive Current Prize Hit Report	Prints all or select progressive levels including the progressive prize ID, prize amount, date, time, and the number of the meter with the progressive hit.
Progressive Previous Prize Hit Report	Prints the past prize-hit events for a progressive prize level. The last ten prize hits for each progressive level are available to print.
Performance Group Meter Report	Prints amount wagered, amount won (not including progressive jackpots), jackpot, handpays, games played, max bet games played, and bonus event information for a performance group.
Paytable Meter Report	Prints amount wagered, amount won (not including progressive jackpots), jackpot, handpays, games played, max bet games played, and bonus event information per paytable.

Terminal Meter Report	Prints amount wagered, amount won (not including progressive jackpots), games played, and coin-to-drop information for a select machine.
Jackpot Meter Report	Prints amount wagered since last jackpot and progressive wins for all levels per progressive group.
Game Machine (EGM) Paytable List	Prints a list of supported paytables for a select machine.



00002012-070203

Figure 3-11. Reports Menu

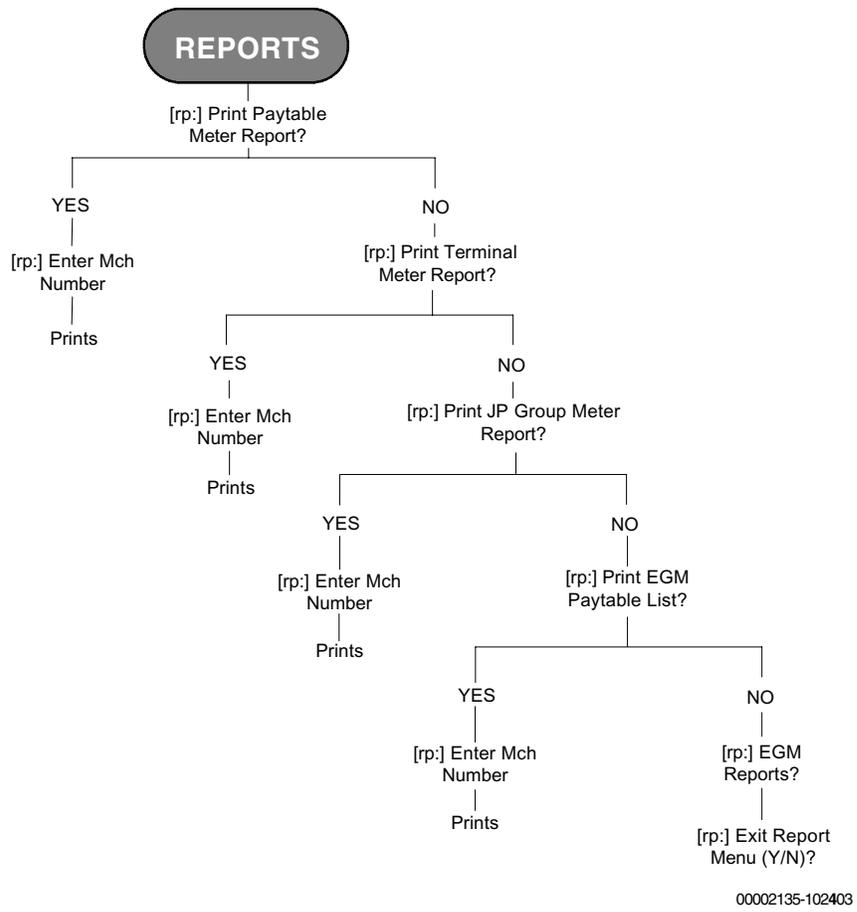
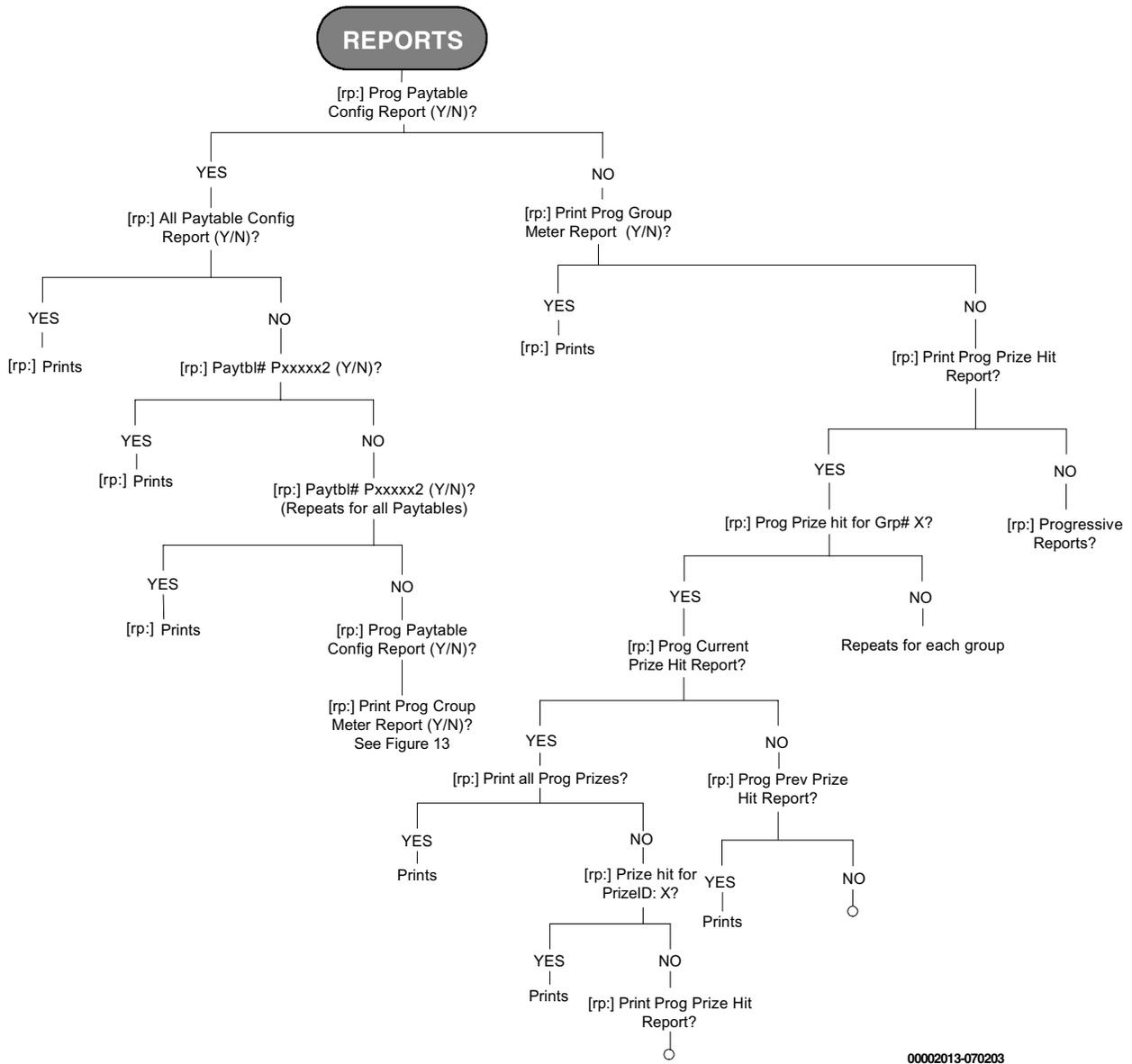


Figure 3-12. Reports Menu (continued)



00002013-070203

Figure 3-13. Reports Menu (continued)

3.6.1 Security Event Report

Display or print a machine event report that includes the machine ID and the date and time of machine event. For example, door open, machine not responding, etc.



Figure 3-14. Security Event Report

3.6.2 Progressive Reports

Progressive reports include the Progressive Group Configuration, Progressive Paytable Configuration, and the Progressive Meter reports.

Progressive Group Configuration Report

Print the progressive level number, prize identifier, maximum amount, starting amount, reset amount, and contribution percentage.

```
***PROGRESSIVE GROUP CONFIG REPORT***
For IPC #1
@ 09/06/2002 00:17:23
Total Progressive Groups #: 5
Progress Group ID: 1
Total Progressive Levels: 4
Unreasonable Inc (cents): 5000

Prize ID#: 0101
Max Amount: $30000.00
Base Amount: $13000.00
Reset Amount: $13000.00
Current Amount: $13000.00
Contribution %: 2.00
Escrow Amount (cents): 106700

Prize ID#: 0102
Max Amount: $30000.00
Base Amount: $4000.00
Reset Amount: $4000.00
Current Amount: $4000.00
Contribution %: 0.25
Escrow Amount (cents): 108200

Prize ID#: 0103
Max Amount: $30000.00
Base Amount: $4000.00
Reset Amount: $4000.00
Current Amount: $4000.00
Contribution %: 0.25
Escrow Amount (cents): 106700

Prize ID#: 0104
Max Amount: $30000.00
Base Amount: $4000.00
Reset Amount: $4000.00
Current Amount: $4000.08
Contribution %: 0.25
Escrow Amount (cents): 106700

Prize ID#: 0105
Max Amount: $30000.00
Base Amount: $4500.00
Reset Amount: $4500.00
Current Amount: $4500.75
Contribution %: 0.25
Escrow Amount (cents): 83050

*END PROGRESSIVE GROUP CONFIG REPORT*
```

00002056-07162003

Figure 3-15. Progressive Group Configuration Report

Progressive Paytable Configuration Report

Print the payable ID, number of denominations, denominations, total number of win categories, win category, and progressive prize ID for the payable.

```

*PROGRESSIVE PAYTBL CONFIG RPRT*
IPC:      1   @7/31/2003 17:34:39

Total Paytable IDs#: 1
Progressive Paytable ID: p03972b4
  Denom      WinCat  Prize ID
  0.05       xff    x500
  0.05       xb0    x501
  0.05       x50    x502
  0.05       x60    x503
  0.05       x70    x504
  0.05       x80    x505
  0.05       x90    x506
  0.05       xa0    x507

***END PROG PAYTABLE CONFIG REPORT***
    
```

00002057-07162003

Figure 3-16. Progressive Paytable Configuration Report

Progressive Meter Report

Print the total amount wagered (known as the group meter in the report) for each machine.

```

****PROGRESSIVE GRP METER REPORT****

For IPC #1
@ 05/14/2003 22:25:56

Total Progressive Groups: 5

Progressive Group ID: 1
Total # of EGMs: 1
EGM #: 3007 Grp Mtr: 0

Progressive Group ID: 2
Total # of EGMs: 1
EGM #: 3007 Grp Mtr: 0

Progressive Group ID: 1
Total # of EGMs: 1
EGM #: 3007 Grp Mtr: 0

Progressive Group ID: 4
Total # of EGMs: 1
EGM #: 3007 Grp Mtr: 0

Progressive Group ID: 5
Total # of EGMs: 1
EGM #: 3007 Grp Mtr: 0

*END PROGRESSIVE GRP METER REPORT*
    
```

00001765-020603

Figure 3-17. Progressive Meter Report

3.6.3 Prize Reports

Prize reports include the Progressive Current Prize Hit and the Progressive Previous Prize Hit reports.

Progressive Current Prize Hit Report

Print the total progressive levels, progressive prize ID, prize amount, date, time, the number of the machine with the progressive hit, and total contributing meters for a progressive group.

```

PROGRESSIVE CURRENT PRIZE HIT REPORT
FOR PROGRESSIVE GROUP#: 1

For IPC #1
@ 05/14/03 15:47:37
Total Progressive Levels: 4

Progressive Prize ID: 0101
Prize: $125000.00
@08/04/2003 07:54:20
Progressive Hit on:
    EGM addr#: 1
    EGM Serial#: 3007

Progressive Prize ID: 0102
Prize: $4728.84
@08/04/2003 07:54:20
Progressive Hit on:
    EGM addr#: 3
    EGM Serial#: 3008

Progressive Prize ID: 0103
Prize: $5703.31
@08/04/2003 16:06:31
Progressive Hit on:
    EGM addr#: 3
    EGM Serial#: 3009

Progressive Prize ID: 0104
Prize: $6877.26
@08/04/2003 16:06:31
Progressive Hit on:
    EGM addr#: 3
    EGM Serial#: 3010

*END PROGRESSIVE PRIZE HIT REPORT*
    
```

00002055-07162003

Figure 3-18. Progressive Current Prize Hit Report

Progressive Previous Prize Hit Report

Print the past prize-hit events for a progressive prize level. The last ten prize hits for each progressive level are available to print.

3.6.4 Machine Reports

Machine reports include the Performance Group Meter, Paytable Meter, Terminal Meter, Jackpot Meter, and Game Machine (EGM) Paytable reports.

Performance Group Meter Report

Print amount wagered, amount won (not including progressive jackpots), jackpot, handpays, games played, max bet games played, and bonus event information for a performance group.

```

**EGM PROG PERFORMANCE MTR RPT**
IPC #1
@ 07/31/2003 17:35:20
EGM Addr: 1
EGM Cabinet Serial#: 10001
1AU = 1 Cent(s)

Progressive Group Num: 01
Money Wagered (AU): 575,525,617,766
Money Won (AU): 578,820,585,062
Jackpot (AU): 584,115,552,358
Handpays: 588,410,519,654
Games Played: 596,732,018,790
Max Bet Games Played: 64,424,509,542
Bonus Events: 102

Money Wagered (AU): 575,525,617,767
Money Won (AU): 578,820,585,063
Jackpot (AU): 584,115,552,359
Handpays: 588,410,519,655
Games Played: 596,732,018,791
Max Bet Games Played: 64,424,509,543
Bonus Events: 103

Money Wagered (AU): 575,525,617,768
Money Won (AU): 578,820,585,064
Jackpot (AU): 584,115,552,350
Handpays: 588,410,519,654
Games Played: 596,732,018,792
Max Bet Games Played: 64,424,509,544
Bonus Events: 104

Total Progressive Group: 3
*END EGM PROG PERFORMANCE MTR RPT*
    
```

00002049-07162003

Figure 3-19. Performance Group Meter Report

Paytable Meter Report

Print amount wagered, amount won (not including progressive jackpots), jackpot, handpays, games played, max bet games played, and bonus event information per paytable.

```

**EGM PROG PAYTBL MTR RPT**
IPC #1
@ 10/10/2003 12:33:39
EGM ADDR: 2
DGM Cabinet Serial#: 1007
1 AU = 1 Cent(s)

Paytable ID: 12345678
Money Wagered (AU): Bad Mtr Rxd
Money Won (AU) : 47,000,000,101
Jackpot (AU) : Bad Mtr Rxd
Hand Pays (AU) : 0257,000,000,101
Games Played : 101
Max Bet Gme Played : 101
Bonus Events : 101

Paytable ID: 12345671
Money Wagered (AU): 0
Money Won (AU) : 0
Jackpot (AU) : 0
Hand Pays (AU) : 0
Games Played : 0
Max Bet Gme Played : 0
Bonus Events : 0

Paytable ID: 12345672
Money Wagered (AU): 0
Money Won (AU) : 0
Jackpot (AU) : 0
Hand Pays (AU) : 0
Games Played : 0
Max Bet Gme Played : 0
Bonus Events : 0

Paytable ID: 12345673
Money Wagered (AU): 0
Money Won (AU) : 0
Jackpot (AU) : 0
Hand Pays (AU) : 0
Games Played : 0
Max Bet Gme Played : 0
Bonus Events : 0

Paytable ID: 12345674
Money Wagered (AU): 0
Money Won (AU) : 0
Jackpot (AU) : 0
Hand Pays (AU) : 0
Games Played : 0
Max Bet Gme Played : 0
Bonus Events : 0

Total Count: 5

***END EGM PROG PAYTBL MTR RPT***
    
```

00002050-07162003

Figure 3-20. Paytable Meter Report

Terminal Meter Report

Print amount wagered, amount won (not including progressive jackpots), games played, and coin to drop information for a select machine.

```

**START EGM PROG TERMINAL MTR RPT**
IPC #1
@ 05/14/2003 22:26:30
EGM Addr: 1
EGM Cabinet Serial#: 3007
1 AU = 1 Cent(s)

Money Wagered (AU): 155
Money Won (AU): 1,275
Games Played: 012
Coin to Drop: 4,000

Total Count1

**END PROG TERMINAL METER REPORT**
    
```

00002051-07162003

Figure 3-21. Terminal Meter Report

Jackpot Meter Report

Print amount wagered since last jackpot and progressive wins for all levels per progressive group.

```

**START EGM PROG JP GRP MTR RPT**
For IPC #1
@ 05/14/2003 22:26:37
EGM Addr: 1
EGM Cabinet Serial#: 98589
Total Progressive Groups: 3
1 AU = 1 Cent(s)

Progressive Group ID: 1
Money Wagered (AU)
  Since Last JP: 0
Progressive Wins: 0

Progressive Group ID: 3
Money Wagered (AU)
  Since Last JP: 0
Progressive Wins: 0

Progressive Group ID: 2
Money Wagered (AU)
  Since Last JP: 0
Progressive Wins: 0

Total Count: 3

**END EGM PROG JP GRP MTR RPT**
    
```

00002052-07162003

Figure 3-22. Jackpot Meter Report

EGM Paytable List

Print a list of supported paytables for a select machine.

```
***** EGM PAYTABLE LIST *****  
For IPC #1  
Addr 2  
EGM Serial # 2  
@ 06/03/2003 15:00:49  
  
Total Supported Paytables: 12  
  
p04183a2      p04483a2  
p03982a2      p04583a2  
p04082a2      p04683a2  
p04282a2      p03986a2  
p03984a2      p03987a2  
p03985a2      p03988a2  
  
***** END EGM PAYTABLE LIST *****
```

00002058-07162003

Figure 3-23. EGM Paytable List

Section 4

Operating the IGT Progressive Controller

This section includes detailed instructions for operating the IPC. The information is grouped by IPC command key function. For general information about IPC menus, including illustrations and IPC report examples, refer to Section 3 on page 9. For troubleshooting information, refer to Section 5 on page 55.

The information in this section includes:

- **Section 4.1, Powering Up the IGT Progressive Controller**
- **Section 4.2, Using the Mode Functions**
- **Section 4.3, Using the Configure Function**
- **Section 4.4, Using the Status Functions**
- **Section 4.5, Using the Report Functions**

Note: *The following operations may or may not be available based on security access level. For more information regarding security access levels, refer to Section 3.1 on page 10.*

4.1 Powering Up the IGT Progressive Controller

If the IPC is deliberately shut down or an unexpected power failure occurs, the IPC performs an internal memory check and polls the machines to establish and verify communications. If any problems are found, the IPC displays a message indicating the cause of the problem.

1. Power up the IPC.

If no problems are found, the IPC displays the following message:

Initializing the IPC

Flash System Booting ... Please Wait

Enter User ID

IGT Progressive Controller Mo/Dy/Yr @ Hr:Mn:Sc

IPC - or - No Active User

2. At the prompt **Enter User ID**: enter an operator ID.

Note: *If problems are found, refer to Section 5 on page 55, or Related Documentation on page 61.*

4.2 Using the Mode Functions

Figures 3-2 through 3-8 on pages 12 through 18 illustrate all of the functions available using the **MODE** menu command key.

4.2.1 Changing the System-Level Password

Enter and confirm a new four-digit system-level password.

Note: *The password cannot be set to 0000.*

1. Press **MODE**.
2. At the prompt **Shift Maintenance (Y/N)**: press **YES**.
3. If an operator is logged on, at the prompt **Take a Break (Y/N)**: press **NO**.
4. If an operator is logged on, at the prompt **Log Out (Y/N)**: press **NO**.
5. If an operator is logged on, at the prompt **Forced Log Out (Y/N)**: press **NO**.
6. At the prompt **System Level Maintenance (Y/N)**: press **YES**.
7. Enter the current system-level password and press **ENTER**.
8. At the prompt **Change System Access Level Password (Y/N)**: press **YES**.
9. At the prompt **Please Enter New Password**: enter a new four-digit system-level password and press **ENTER**.
10. At the prompt **Please Reenter New Password**: enter the password again, then press **ENTER** to confirm.

4.2.2 Checking the Batteries

Verify the performance capabilities of the CMOS, Tell Tale (TT) and Extended Memory Card (XMEM) batteries.

1. Press **MODE**.
2. At the prompt **Shift Maintenance (Y/N)**: press **NO**.
3. At the prompt **Diagnostics (Y/N)**: press **YES**.
4. At the prompt **Test Printer (Y/N)**: press **NO**.
5. At the prompt **Battery Check (Y/N)**: press **YES**.
6. To test the CMOS battery:
 - At the prompt **CMOS Battery Check (Y/N)**: press **YES**.
7. To test the TT battery:
 - At the prompt **CMOS Battery Check (Y/N)**: press **NO**.
 - At the prompt **TT Battery Check (Y/N)**: press **YES**.
8. To test the XMEM battery:
 - At the prompt **CMOS Battery Check (Y/N)**: press **NO**.
 - At the prompt **TT Battery Check (Y/N)**: press **NO**.
 - At the prompt **XMEM Battery Check (Y/N)**: press **YES**.

4.2.3 Checking the Fiber-Optic Loop Status

Perform a fiber-optic transmission test. Data is sent and received by the IPC. An error is counted if the transmitted data is not equal to the received data, indicating an error in transmission.

1. Press **MODE**.
2. At the prompt **System Level Maintenance (Y/N)**: press **NO**.
3. At the prompt **Diagnostics (Y/N)**: press **YES**.
4. At the prompt **Test Printer (Y/N)**: press **NO**.
5. At the prompt **Battery Check (Y/N)**: press **NO**.
6. At the prompt **Fiber Optic Test (Y/N)**: press **YES**.
7. Enter the port number you want to check, then press **ENTER**.

4.2.4 Logging In and Out

Log in to start a shift and log out to end a shift. A log-in/log-out record prints. The record includes the operator number and date and time of the event.

Logging In

Log in to start a shift.

1. At the prompt **Enter User ID:** enter an operator ID, then press **ENTER**.
2. At the prompt **Enter User Password:** enter the password associated with the operator ID and press **ENTER**.

Logging Out

Log out to end a shift.

Note: *An operator must be logged in.*

1. Press **MODE**.
2. At the prompt **Shift Maintenance:** press **YES**.
3. At the prompt **Take A Break:** press **NO**.
4. At the prompt **Log Out (Y/N):** press **YES**.
5. Enter the password associated with the active operator ID and press **ENTER**.

Forcing Log Out

Override and log out the current operator's shift. This operation requires a supervisor-level operator ID and associated password. It also creates a record of the log-out event on the printer.

Note: *A user with operator privileges cannot force the log-out of another operator or supervisor.*

1. Press **MODE**.
2. At the prompt **Shift Maintenance:** press **YES**.
3. At the prompt **Take A Break:** press **NO**.
4. At the prompt **Log Out (Y/N):** press **NO**.

5. At the prompt **Forced Log Out**: press **YES**.
6. Enter the operator ID and press **ENTER**.
7. Enter the password associated with the active operator ID and press **ENTER** to force the log-out and create a record of the log-out event on the log printer.

Taking a Break

Lock the IPC without logging out (ending a shift). Jackpots, cashouts and machine entry events are buffered until the break ends.

Note: *An operator must be logged in.*

1. Press **MODE**.
2. At the prompt **Shift Maintenance**: press **YES**.
3. At the prompt **Take A Break**: press **YES**.
4. To end a break, enter the password associated with the active operator ID and press **ENTER**.

4.2.5 Operator Maintenance Functions

Operator Maintenance functions require the entry of a system-level password and include adding and deleting operators, changing operator passwords and privileges, as well as generating an operator ID list.

Adding Operators

Add a new operator and password, then select a security access level. The IPC assigns operator IDs in a numerical sequence from 1 to 25. Individual operators select the password they want to associate with their operator ID.

Note: *Passwords must contain four digits and cannot be set to 0000.*

For security reasons, this function is only available upon entering the correct system-level password.

1. Press **MODE**.
2. At the prompt **Shift Maintenance**: press **YES**.
3. If an operator is logged on, at the prompt **Take A Break (Y/N)**: press **NO**.

4. If an operator is logged on, at the prompt **Log Out (Y/N)**: press **NO**.
5. If an operator is logged on, at the prompt **Forced Log Out (Y/N)**: press **NO**.
6. At the prompt **System Level Maintenance (Y/N)**: press **YES**.
7. Enter the current system-level password and press **ENTER**.
8. At the prompt **Change System Access Level Password (Y/N)**: press **NO**.
9. At the prompt **Operator Maintenance (Y/N)**: press **YES**.
10. At the prompt **Operator ID List (Y/N)**: press **NO**.
11. At the prompt **Add New Operator (Y/N)**: press **YES**.

The IPC automatically assigns and displays the next available operator ID.

12. Press **ENTER** to continue.

Note: For more information regarding security access levels, refer to Section 3.1 on page 10.

13. To assign the user operator-level access, at the prompt **Operator (Y/N)**: press **YES**.
14. To assign the user supervisor-level access:
 - At the prompt **Operator (Y/N)**: press **NO**.
 - At the prompt **Supervisor (Y/N)**: press **YES**.
15. At the prompt **Please Enter New Password**: enter a password to assign to the new operator ID and press **ENTER**.
16. At the prompt **Please Reenter New Password**: enter the password again then press **ENTER** to confirm.

Changing Operator Passwords

Passwords must contain four digits and cannot be set to 0000. For security reasons, this function is only available upon entering the correct system-level password.

1. Press **MODE**.
2. At the prompt **Shift Maintenance (Y/N)**: press **YES**.
3. If an operator is logged on, at the prompt **Take A Break (Y/N)**: press **NO**.

4. If an operator is logged on, at the prompt **Log Out (Y/N)**: press **NO**.
5. If an operator is logged on, at the prompt **Forced Log Out (Y/N)**: press **NO**.
6. At the prompt **System Level Maintenance (Y/N)**: press **YES**.
7. Enter the system-level password and press **ENTER**.
8. At the prompt **Change System Access Level Password (Y/N)**: press **NO**.
9. At the prompt **Operator Maintenance (Y/N)**: press **YES**.
10. At the prompt **Operator ID List (Y/N)**: press **NO**.
11. At the prompt **Add New Operator (Y/N)**: press **NO**.
12. At the prompt **Delete Operator from the List (Y/N)**: press **NO**.
13. At the prompt **Modify Operator Record (Y/N)**: press **YES**.
14. Enter the operator ID you want to change the password for, then press **ENTER**.
15. At the prompt **Change Operators Privilege (Y/N)**: press **NO**.
16. At the prompt **Change Password (Y/N)**: press **YES**.
17. At the prompt **Please Enter New Password**: enter a new password to assign to the operator ID and press **ENTER**.
18. At the prompt **Please Reenter New Password**: enter the password again then press **ENTER** to confirm.
19. Press **ENTER** to continue.

Changing Operator Privileges

Change a *logged off* operator ID to have operator- or supervisor-level access.

1. Press **MODE**.
2. At the prompt **Shift Maintenance (Y/N)**: press **YES**.
3. If an operator is logged on, at the prompt **Take A Break (Y/N)**: press **NO**.
4. If an operator is logged on, at the prompt **Log Out (Y/N)**: press **NO**.
5. If an operator is logged on, at the prompt **Forced Log Out (Y/N)**: press **NO**.
6. At the prompt **System Level Maintenance (Y/N)**: press **YES**.

7. Enter the system-level password and press **ENTER**.
8. At the prompt **Change System Access Level Password (Y/N)**: press **NO**.
9. At the prompt **Operator Maintenance (Y/N)**: press **YES**.
10. At the prompt **Operator ID List (Y/N)**: press **NO**.
11. At the prompt **Add New Operator (Y/N)**: press **NO**.
12. At the prompt **Delete Operator from the List (Y/N)**: press **NO**.
13. At the prompt **Change Operator Record (Y/N)**: press **YES**.
14. Enter the operator ID you want to change privileges for, then press **ENTER**.
15. At the prompt **Change Operator Privilege (Y/N)**: press **YES**.
16. To set the user's privilege level to Operator:
 - At the prompt **New Privilege Level is Operator**: press **YES**.
17. To set the user's privilege level to Supervisor:
 - At the prompt **New Privilege Level is Operator**: press **NO**.
 - At the prompt **New Privilege Level is Supervisor**: press **YES**.
18. Press **ENTER** to continue.

Deleting Operators

Remove the password associated with a *logged off* operator ID and make the ID available for reassignment.

1. Press **MODE**.
2. At the prompt **Shift Maintenance (Y/N)**: press **YES**.
3. If an operator is logged on, at the prompt **Take A Break (Y/N)**: press **NO**.
4. If an operator is logged on, at the prompt **Log Out (Y/N)**: press **NO**.
5. If an operator is logged on, at the prompt **Forced Log Out (Y/N)**: press **NO**.
6. At the prompt **System Level Maintenance (Y/N)**: press **YES**.
7. Enter the system-level password and press **ENTER**.
8. At the prompt **Change System Access Level Password (Y/N)**: press **NO**.

9. At the prompt **Operator Maintenance (Y/N)**: press **YES**.
10. At the prompt **Operator ID List (Y/N)**: press **NO**.
11. At the prompt **Add New Operator (Y/N)**: press **NO**.
12. At the prompt **Delete Operator from the List (Y/N)**: press **YES**.
13. Enter the operator ID you want to delete, then press **ENTER**.

Generating an Operator ID List

Display or print a list of operator-level and supervisor-level operator IDs.

Note: *You cannot print or display passwords.*

1. Press **MODE**.
2. At the prompt **Shift Maintenance (Y/N)**: press **YES**.
3. If an operator is logged on, at the prompt **Take A Break (Y/N)**: press **NO**.
4. If an operator is logged on, at the prompt **Log Out (Y/N)**: press **NO**.
5. If an operator is logged on, at the prompt **Forced Log Out (Y/N)**: press **NO**.
6. At the prompt **System Level Maintenance**: press **YES**.
7. Enter the system-level password and press **ENTER**.
8. At the prompt **Change System Access Level Password (Y/N)**: press **NO**.
9. At the prompt **Operator Maintenance (Y/N)**: press **YES**.
10. At the prompt **Operator ID List (Y/N)**: press **YES**.
11. To display a list of operator IDs:
 - At the prompt **Display List of Operator ID (Y/N)**: press **YES**.
12. To print a list of operator IDs:
 - At the prompt **Display List of Operator ID (Y/N)**: press **NO**.
 - At the prompt **Print List of Operator ID (Y/N)**: press **YES**.

4.2.6 Setting the Audio Levels

Adjust the audio levels (volume) of event alarms, and the audio level of the keyboard feedback tone. Alarm #1 signifies low-profile events, and any time the IPC awaits operator input. Alarm #2 signifies high-profile events, and is differentiated from audio alarm #1 by a different, more intense sound. The Keypad Audio setting provides audible feedback to entries made on the IPC keypad.

1. Press **MODE**.
2. At the prompt **Shift Maintenance**: press **NO**.
3. At the prompt **Diagnostics (Y/N)**: press **NO**.
4. At the prompt **Setup Functions (Y/N)**: press **YES**.
5. At the prompt **Audio Options (Y/N)**: press **YES**.
6. To change Audio Alarm #1:
 - At the prompt **Change Audio Alarm 1 (Y/N)**: press **YES**.
 - Enter the desired audio intensity from 0 (silent mode) to 9 (high), and press **ENTER**.
 - To test the alarm, at the prompt **Test Alarm (Y/N)**: press **YES**, then press **ENTER** to stop the test.
7. To change Audio Alarm #2:

Note: Alarm #2 cannot be set to zero.

- At the prompt **Change Audio Alarm 1 (Y/N)**: press **NO**.
 - At the prompt **Change Audio Alarm 2 (Y/N)**: press **YES**.
 - Enter the desired audio intensity, from 1 (low) to 9 (high), and press **ENTER**.
 - To test the alarm, at the prompt **Test Alarm (Y/N)**: press **YES**, then press **ENTER** to stop the test.
8. To change the Keypad Audio:
 - At the prompt **Change Audio Alarm 1 (Y/N)**: press **NO**.
 - At the prompt **Change Audio Alarm 2 (Y/N)**: press **NO**.

- At the prompt **Change Keypad Audio (Y/N)**: press **YES**.
- Enter the desired audio intensity, from 0 (silent mode) to 9 (high), and press **ENTER**.

The new keypad volume is evident when the **ENTER** key is pressed.

4.2.7 Setting the Date and Time

Change the IPC date and time.

1. Press **MODE**.
2. At the prompt **Shift Maintenance**: press **YES**.
3. If an operator is logged on, at the prompt **Take A Break**: press **NO**.
4. If an operator is logged on, at the prompt **Log Out**: press **NO**.
5. If an operator is logged on, at the prompt **Forced Log Out**: press **NO**.
6. At the prompt **System Level Maintenance (Y/N)**: press **YES**.
7. Enter the system-level password and press **ENTER**.
8. At the prompt **Change System Access Level Password (Y/N)**: press **NO**.
9. At the prompt **Operator Maintenance (Y/N)**: press **NO**.
10. At the prompt **Delete Non-Responding EGM (Y/N)**: press **NO**.
11. At the prompt **Change Prog Print Period (Y/N)**: press **NO**.
12. At the prompt **Change Date and Time (Y/N)**: press **YES**.
13. At the prompt **Enter Date and Time (Mo/Dy/Yr Hr:Mn:Sc)**: enter the date and time.
14. Press **ENTER** to continue.

4.2.8 Setting the I/O Timeout

Change the IPC I/O Timeout to control when the IPC terminal automatically reverts to the main prompt after no keyboard entries are made.

1. Press **MODE**.
2. At the prompt **Shift Maintenance**: press **NO**.
3. At the prompt **Diagnostics (Y/N)**: press **NO**.
4. At the prompt **Setup Functions (Y/N)**: press **YES**.
5. At the prompt **Audio Options (Y/N)**: press **NO**.
6. At the prompt **I/O Timeout (Y/N)**: press **YES**.
7. Enter the number of seconds (0 to 99) you want the IPC to wait without keypad entry before returning to the main operator prompt.

Note: *Setting this value to zero disables the I/O Timeout function.*

8. Press **ENTER** to confirm your selection.

4.2.9 Testing the Printer

Check the status and performance of the printer. This test provides a physical print test of the printer.

1. Press **MODE**.
2. At the prompt **Shift Maintenance (Y/N)**: press **NO**.
3. At the prompt **Diagnostics (Y/N)**: press **YES**.
4. At the prompt **Test Printer (Y/N)**: press **YES**.
5. At the prompt **Test Main Printer (Y/N)**: press **YES**.

4.3 Using the Configure Function

Figure 3-9 on page 19 illustrates the **CONFIGURE** menu command key function. Use the following steps to download configuration information from the PC utility to the IPC.

1. Press **CONFIGURE** to access the Progressive Configure function.
2. At the prompt **Progressive Config by Host (Y/N)**: press **YES**.
3. Enter the system-level password and press **ENTER**.
4. At the prompt **Present Config will be Erased (Y/N)**: press **YES**.

The IPC alternately displays **Downloading Prog Configuration** with **Press NO to Quit**.

If the download is successful, the IPC displays **Progressive Configuration Success**.

If the download is not successful, the IPC displays **Progressive Configuration Failure**.

5. Press **ENTER** to continue.
6. At the prompt **Progressive Config by Host (Y/N)**: press **NO** to exit.

4.4 Using the Status Functions

Figure 3-10 on page 21 illustrates the functions available using the **STATUS** menu command key.

4.4.1 Checking Machine Status

Display or print machine status.

1. Press **STATUS**.
2. At the prompt **Status (Y/N)**: press **YES**.
3. At the prompt **Enter Mch Number**: enter the number of the machine you want to check, then press **ENTER**.
4. To display machine status:
 - At the prompt **Display Machine Status (Y/N)**: press **YES**, then press **YES** to advance or press **NO** to stop.
5. To print machine status:
 - At the prompt **Display Machine Status (Y/N)**: press **NO**.
 - At the prompt **Print Machine Status (Y/N)**: press **YES**.

4.4.2 Displaying the IGT Progressive Controller Address

Display the IPC address.

1. Press **STATUS**.
2. At the prompt **Status (Y/N)**: press **NO**.
3. At the prompt **IPC Configuration (Y/N)**: press **NO**.
4. At the prompt **Display IPC Address (Y/N)**: press **YES**.
5. Press **ENTER** to continue.

4.4.3 Displaying the IGT Progressive Controller Communication Parameters

Display or print IPC communication ports, devices and baud rate information.

1. Press **STATUS**.
2. At the prompt **Status (Y/N)**: press **NO**.
3. At the prompt **IPC Configuration (Y/N)**: press **YES**.
4. At the prompt **Cluster Configuration (Y/N)**: press **NO**.
5. At the prompt **Communication Parameters (Y/N)**: press **YES**.
6. To display communication parameters:
 - At the prompt **Display Comm Parameters (Y/N)**: press **YES**.
7. To print communication parameters:
 - At the prompt **Display Comm Parameters (Y/N)**: press **NO**.
 - At the prompt **Print Comm Parameters (Y/N)**: press **YES**.

4.4.4 Displaying the IGT Progressive Controller Configuration Parameters

Display or print IPC configuration details.

1. Press **STATUS**.
2. At the prompt **Status (Y/N)**: press **NO**.
3. At the prompt **IPC Configuration (Y/N)**: press **YES**.
4. At the prompt **Cluster Configuration (Y/N)**: press **YES**.
5. To display the IPC information:
 - At the prompt **Display IPC Configuration (Y/N)**: press **YES**.
6. To print the IPC information:
 - At the prompt **Display IPC Configuration (Y/N)**: press **NO**.
 - At the prompt **Print IPC Cfg (Y/N)**: press **YES**.

4.4.5 Displaying the IGT Progressive Controller Host Protocol Version

Display the IPC host protocol version.

1. Press **STATUS**.
2. At the prompt **Status (Y/N)**: press **NO**.
3. At the prompt **IPC Configuration (Y/N)**: press **NO**.
4. At the prompt **Display IPC Address (Y/N)**: press **NO**.
5. At the prompt **Display IPC ID (Y/N)**: press **NO**.
6. At the prompt **Display Protocol Version (Y/N)**: press **YES**.
7. Press **ENTER** to continue.

4.4.6 Displaying the IGT Progressive Controller ID

Display the IPC identification number.

1. Press **STATUS**.
2. At the prompt **Status (Y/N)**: press **NO**.
3. At the prompt **IPC Configuration (Y/N)**: press **NO**.
4. At the prompt **Display IPC Address (Y/N)**: press **NO**.
5. At the prompt **Display IPC ID (Y/N)**: press **YES**.
6. Press **ENTER** to continue.

4.4.7 Displaying the IGT Progressive Controller Version

Display the IPC software version.

1. Press **STATUS**.
2. At the prompt **Status (Y/N)**: press **NO**.
3. At the prompt **IPC Configuration (Y/N)**: press **NO**.
4. At the prompt **Display IPC Address (Y/N)**: press **NO**.
5. At the prompt **Display IPC ID (Y/N)**: press **NO**.
6. At the prompt **Display Protocol Version (Y/N)**: press **NO**.
7. At the prompt **Display IPC Version (Y/N)**: press **YES**.
8. Press **ENTER** to continue.

4.5 Using the Report Functions

Note: A supervisor-level operator ID and password is necessary to access reports and the main printer must be connected and online in order to print reports.

The following reports are available. For detailed information regarding each report, refer to Section 3.6 on page 22.

- Security Event Report
- Progressive Group Configuration Report
- Progressive Paytable Configuration Report
- Progressive Meter Report
- Progressive Current Prize Hit Report
- Progressive Previous Prize Hit Report
- Performance Group Meter Report
- Paytable Meter Report
- Terminal Meter Report
- Jackpot Meter Report
- Game Machine (EGM) Paytable List

4.5.1 Printing Reports

Note: *The main printer must be connected to the IPC and on line in order to print reports.*

1. Press **REPORTS**.

Note: *If the current operator has supervisor-level privileges, the IPC automatically accesses the report menu without requiring an operator ID or password.*

2. If the prompt **Enter Report Level User ID** displays: enter a supervisor-level operator ID and password, then press **ENTER**.

Note: *This overrides the current operator's privileges until the Report menu is exited, or the I/O timeout period is exceeded – it does not cause a log-out event.*

3. If you want to print a Security Event Report:
 - At the prompt **Security Events (Y/N)**: press **YES**.
 - At the prompt **Enter Mch Number**: enter the number of the machine you want to print a security event report for, then press **ENTER**.
4. If you want to print one of the machine reports:
 - At the prompt **Security Events (Y/N)**: press **NO**.
 - At the prompt **EGM Reports (Y/N)**: press **YES**.The IPC displays available reports sequentially.
 - If you want to print a particular report, press **YES** or press **NO** skip to the next report.

Note: *You may be prompted to enter information specific to a particular machine report.*

5. To exit the Reports menu, press **REPORTS**.

Section 5

Troubleshooting and Maintenance

This section includes common troubleshooting and maintenance procedures for the IPC.

The information in this section includes:

- **Section 5.1, Performing Basic Troubleshooting**
- **Section 5.2, Responding to Alarms**
- **Section 5.3, Performing Preventive Maintenance**

Note: *This guide is intended to assist with resolving common IPC operations. For information related to the IPC EZ Setup software program, refer to the **IGT Progressive Controller EZ Setup User's Manual**. For information related to machine setup, refer to the **IGT Progressive Controller Game Software Setup card**.*

5.1 Performing Basic Troubleshooting

Table 5-1 is intended to assist with resolving some common IPC error messages.

Table 5-1. Common Error Messages		
Error Message	Reason	Possible Resolution
Mch not responding	The machine power is turned off or the machine is malfunctioning.	<p>Make sure the machine's power is turned on and the machine is functioning properly.</p> <p>If the IPC is trying to reset a prize amount (remote reset) then try to manually reset the jackpot prize amount using a jackpot reset key on the machine.</p>
Mch loop down	The fiber-optic loop communication between the IPC and the machine is broken.	<p>Check the fiber-optic loop between the IPC and machine.</p> <p>Check to make sure the machine is plugged in.</p>
Passwords do not match	When adding a new operator, the first entry of the operator's new password does not match the second, confirming entry of the same password.	<p>Re-enter the correct password twice. If you cannot recall the correct password, then press NO and begin the Add New Operator process again.</p> <p>For more information on adding an operator, see Section 4.2.5 on page 40.</p>
Invalid password	When logging in or out, the entered password does not match the operator ID.	Re-enter the correct password. If you cannot recall the correct password, then see a supervisor-level operator with system-level password access to change your password.
Invalid entry	An invalid data or time entry.	If you are entering the date, then re-enter using the correct format: (Mo/Dy/Yr Hr:Mn:Sc) .
Invalid EGM Serial # or Invalid Mch	An invalid machine number entry.	The IPC does not recognize the machine number entered. Make sure to enter a valid machine number (up to ten digits).

Testing the Printer

Check the status and performance of the printer. This test provides a physical print test of the printer.

1. Press **MODE**.
2. At the prompt **Shift Maintenance (Y/N)**: press **NO**.
3. At the prompt **Diagnostics (Y/N)**: press **YES**.
4. At the prompt **Test Printer (Y/N)**: press **YES**.
5. At the prompt **Test Main Printer (Y/N)**: press **YES**.

5.2 Responding to Alarms

IPC alarms indicate security events such as:

- Prize hits
- Coin tilts
- Open doors
- Nonresponding machines

These events are classified either as a high-profile or a low-profile event.

The IPC sounds an alarm and displays a message. When the alarm is cleared, a record of the event is logged by the IPC.

Responding to Low-Profile Events

1. At the prompt **Display Low Profile Event (Y/N)**: press **NO** to bypass the display and return to the main prompt, or press **YES** to display the event.
2. After viewing the event message, press **ENTER** to return to the main prompt.

Responding to High-Profile Events

Note: *It is not possible to bypass a high-profile event.*

- At the prompt, press **ENTER** to return to the main prompt.

5.3 Performing Preventive Maintenance

The IPC requires little maintenance. Refer to the instructions below to perform preventive maintenance procedures on the IPC.

5.3.1 Performing a Visual Inspection

Perform a quick visual inspection periodically to ensure proper functioning.

- Verify the green LED on the front of the IPC illuminates when the IPC power is on. (See Figure 2-3 on page 7 for an illustration of the IPC LED panel.)
- Check the cleanliness of the area around the IPC and the IPC keypad, message display and cover. Be sure to prevent dust and liquids from contacting the IPC. (Refer to *Cleaning the IPC* below for more information.)
- Verify the cords and cables are firmly connected to the IPC and they are not in a position to be damaged (pinched, cut, frayed, overheated, etc.). See Figure 2-2 on page 6 for an illustration of the IPC connections.
- Check the machine power cords, fiber-optic cables and connectors.

5.3.2 Cleaning the IPC

Clean the IPC periodically to ensure proper functioning.

1. Dampen a soft cloth with a mild nonabrasive cleaner made for use on plastic.
2. Clean the exterior of the IPC, including the keypad, cover, and message display.

Note: *Be sure to keep the wall and counter area around the IPC clean.*

5.3.3 Changing the Printer Paper

The following procedures explain how to change the printer paper.

Note: For more information regarding how to clear paper jams, refer to the manufacturer documentation that came with the printer.

1. Lift the printer cover.
2. Remove the empty plastic receipt paper core from the printer, and replace it with a new roll of thermal paper.
3. Cut the leading edge of the paper in a straight line and position the paper as in shown in the illustration.
4. Feed the paper by hand into the back of the paper guide, applying enough pressure on the paper to engage it in the feed mechanism.
5. Press the **PAPER FEED** button to advance the paper.
6. Close the printer cover.

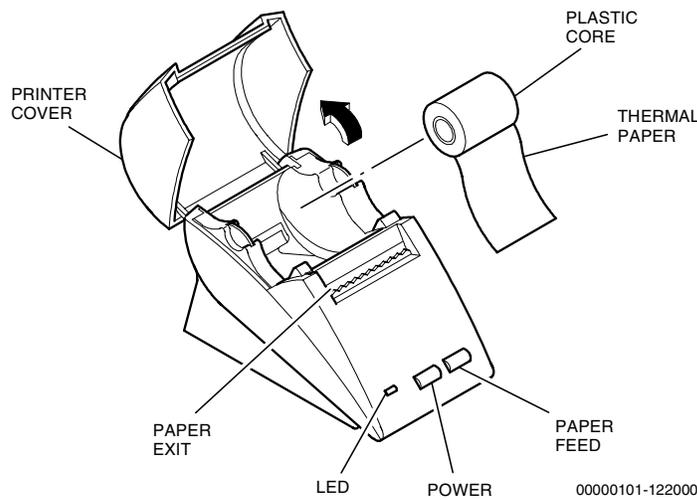


Figure 5-1. Printer Components

Related IGT Documentation

Machine Documentation

IGT machine documentation consists of a series of manuals. Each manual addresses different aspects of field service as follows:

- Machine specifications – provide environmental, electrical, dimensional, stand, and lock specifications for IGT machines.
- Machine installation – contains installation instructions for all IGT machines.
- Troubleshooting – contains procedures to diagnose and rectify common problems with hardware components of gaming machines.
- Game software – contains program information required to select options, test, diagnose and record cumulative data.
- Maintenance procedures – provide complete field service instructions, including removal/replacement, maintenance and adjustments, disassembly and assembly, and functional verification, for both optional and standard components.
- Mechanical parts – contain exploded view illustrations and parts lists.
- Electronic diagrams and parts – contain connector overviews, wiring diagrams, board assembly parts lists, and schematics.

Note: *IGT machines may be manufactured with components from a third-party vendor. For those components not documented in this manual, contact the component manufacturer directly.*

Systems Documentation

IGT systems documentation provides detailed information about systems operation:

- User's guides – furnish information regarding system configuration, operations, and accounting procedures, and provide events lists and report samples.
- System hardware guides – contain system-specific hardware information.
- Quick reference cards – offer easy-to-use instructions about systems hardware and software.

Currently Available Documentation

Refer to the following lists for information about currently available documentation.

Visit the IGT Web site, www.IGT.com, for documentation prices and to view selected documentation online.

All Machine-Related Products

Title	Part Number
• Machine Installation Procedures	821-287-XX
• Troubleshooting Game Machines	821-283-XX

Game King Machines

All Game King Machines

Title	Part Number
• 80960 Tester Operator's Manual	821-333-XX
• Game King Release 3 Software Quick Reference Cards	821-310-XX
• Game King Release 4 Software Quick Reference Cards	821-318-XX
• Game King/Vision Series Peripheral Device Download Procedure	821-198-XX
• Game Software: Game King Products – Release 4	821-321-XX
• Machine Specifications: 80960 Products	821-356-XX

Upright Machines

Title	Part Number
• Electronic Diagrams & Parts: Game King 17" Gaming	821-307-XX
• Electronic Diagrams & Parts: Game King 19" Gaming	821-242-XX
• Electronic Diagrams & Parts: Game King 19" Lottery (w/Printer)	821-237-XX
• Electronic Diagrams & Parts: Game King 13" Gaming	821-246-XX
• Electronic Diagrams & Parts: Game King 19" European Lottery (w/Printer)	821-239-XX
• Machine Specifications: 80960 Products	821-356-XX
• Maintenance Procedures: Game King 17" Upright	821-332-XX
• Maintenance Procedures: Game King/Winner's Choice 19"	821-236-XX
• Maintenance Procedures: Winner's Choice 13"	821-247-XX
• Mechanical Parts: Game King 13" Gaming	821-244-XX
• Mechanical Parts: Game King 17" Upright with Hopper	821-306-XX
• Mechanical Parts: Game King 19" Upright with Hopper or Printer	821-301-XX
• Winner's Choice 19" Field Service Supplement (ARMY)	821-196-XX

Slant-Top Machines

Title	Part Number
• Electronic Diagrams & Parts: Game King 13" Slant-Top Gaming	821-250-XX
• Electronic Diagrams & Parts: Game King 17" Slant-Top Gaming	821-269-XX
• Electronic Diagrams & Parts: Game King 19" Slant-Top	821-302-XX
• Machine Specifications: 80960 Products	821-356-XX
• Maintenance Procedures: Game King 13" Slant-Top	821-266-XX
• Maintenance Procedures: Game King 19" Slant-Top	821-337-XX
• Maintenance Procedures: Vision Series/Game King 17" Slant-Top	821-293-XX
• Mechanical Parts: Game King 13" Slant-Top	821-251-XX
• Mechanical Parts: Game King 17" Slant-Top	821-270-XX
• Mechanical Parts: Game King 19" Slant-Top	821-338-XX

Flat-Top and Drop-in-bar Machines

Title	Part Number
• Electronic Diagrams & Parts: Game King 13" Flat-Top Gaming	821-273-XX
• Machine Specifications: 80960 Products	821-356-XX
• Maintenance Procedures: Game King 13" Flat-Top	821-282-XX
• Mechanical Parts: Game King 13" Flat-Top	821-274-XX

Game King Plus Machines

Title	Part Number
• Electronic Diagrams & Parts: Game King Plus 19" Upright (Preliminary)	821-352-XX
• Machine Specifications: 80960 Products	821-356-XX
• Maintenance Procedures: Game King Plus 19" Upright (Preliminary)	821-353-XX
• Mechanical Parts: Game King Plus 19" Upright (Preliminary)	821-351-XX

Player's Edge-Plus Machines

All Player's Edge-Plus Machines

Title	Part Number
• Game Software: Player's Edge-Plus Products	821-227-XX
• Machine Specifications: 8032 Products	821-357-XX
• Player's Edge-Plus International Software Guide	821-038-XX
• Player's Edge-Plus Video Tester – Euro Supplement	821-289-XX
• Player's Edge-Plus Video Tester Operator's Manual	821-052-XX
• S-Plus/Player's Edge-Plus Electronics Repair Manual	821-126-XX

Upright Machines

Title	Part Number
• Electronic Diagrams & Parts: Player's Edge-Plus 13" IBA	821-231-XX
• Electronic Diagrams & Parts: Player's Edge-Plus 13" Non-IBA	821-232-XX
• Euro Supplement – Player's Edge-Plus 13"	821-193-XX
• Euro Supplement – Player's Edge-Plus 13" with Touchscreen /Hopper	821-264-XX
• Euro Supplement – Player's Edge-Plus 13" with Touchscreen /Printer	821-268-XX
• Euro Supplement – Player's Edge-Plus 19"	821-208-XX
• Euro Supplement – Player's Edge-Plus IBA	821-191-XX
• Euro Supplement – Player's Edge-Plus 19" with Touchscreen /Hopper	821-261-XX
• Large Screen Player's Edge-Plus Manual	821-095-XX
• Machine Specifications: 8032 Products	821-357-XX
• Maintenance Procedures: Player's Edge-Plus 13" Upright IBA	821-229-XX
• Mechanical Parts: Player's Edge-Plus 13" IBA	821-230-XX
• Mechanical Parts: Player's Edge-Plus 13" Non-IBA	821-233-XX
• Player's Edge-Plus Brazil Field Service Supplement (Upright)	821-221-XX
• Player's Edge-Plus Dual Monitor Keno (Upright)	821-069-XX
• Player's Edge-Plus Touchscreen Keno Supplement (Upright)	821-092-XX
• Player's Edge-Plus Montana Field Service Supplement (Upright)	821-072-XX

Slant-Top Machines

Title	Part Number
• Electronic Diagrams & Parts: Players Edge-Plus Slant-Top	821-276-XX
• Euro Supplement – Player's Edge-Plus Slant-Top	821-195-XX
• Machine Specifications: 8032 Products	821-357-XX
• Maintenance Procedures: Player's Edge-Plus Slant-Top	821-275-XX
• Mechanical Parts: Player's Edge-Plus Slant-Top	821-277-XX
• Player's Edge-Plus Dual-Monitor Slant-Top Supplement	821-064-XX

Flat-Top and Drop-in-bar Machines

Title	Part Number
• Electronic Diagrams & Parts: Player's Edge-Plus Flat-Top IBA	821-199-XX
• Euro Supplement – Player's Edge Plus Drop-In-Bar	821-263-XX

- Machine Specifications: 8032 Products 821-357-XX
- Maintenance Procedures: Player's Edge-Plus Flat-Top 821-331-XX
- Mechanical Parts: Player's Edge-Plus Flat-Top IBA 821-320-XX
- Player's Edge-Plus Drop-In-Bar Field Service Manual (Flat-Top) 821-158-XX
- Player's Edge-Plus Montana Flat-Top Supplement 821-068-XX

Player's Choice Machines

Title	Part Number
• Player's Choice Arcade Bingo – Game Software Guide	821-094-XX
• Player's Choice Arcade Field Service Manual (use with 821-077-01)	821-077-00
• Player's Choice Arcade Field Service Manual Addendum (use with 821-077-00)	821-077-01
• Player's Choice Classic Field Service Manual	821-070-XX
• Player's Choice Software Guide (all games)	821-127-XX

S-Plus Machines

All S-Plus Machines

Title	Part Number
• Game Software: S-Plus Products	821-206-XX
• Machine Specifications: 8032 Products	821-357-XX
• S-Plus Diagnostic Card Set	821-154-XX
• S-Plus International Software Guide	821-047-XX
• S-Plus Stepper Tester – Euro Supplement	821-290-XX
• S-Plus Tester Operator's Manual	821-051-XX
• S-Plus Tournament Game Set-up Quick Reference Card	821-292-XX
• S-Plus/Player's Edge-Plus Electronics Repair Manual	821-126-XX

Upright Machines

Title	Part Number
• Electronic Diagrams & Parts: S-Plus Upright IBA	821-204-XX
• Electronic Diagrams & Parts: S-Plus Upright Non-IBA	821-225-XX
• Euro Supplement – S-Plus IBA	821-189-XX
• Machine Specifications: 8032 Products	821-357-XX
• Maintenance Procedures: S-Plus Upright Machines	821-203-XX
• Mechanical Parts: S-Plus Upright IBA	821-205-XX
• Mechanical Parts: S-Plus Upright Non-IBA	821-226-XX
• Supplement – Bonus Wheel Machine	821-265-XX

Slant-Top Machines

Title	Part Number
• Electronic Diagrams & Parts: S-Plus Slant-Top	821-259-XX
• Euro Supplement – S-Plus Slant	821-194-XX
• Machine Specifications: 8032 Products	821-357-XX
• Maintenance Procedures: S-Plus Slant-Top	821-267-XX
• Mechanical Parts: S-Plus Slant-Top	821-258-XX
• Totem Pole Supplement	821-272-XX

S-Plus Limited Machines

Title	Part Number
• S-Plus Limited Supplement – Hit the Top	821-312-XX
• S-Plus Limited Supplement – Jewel in the Crown	821-325-XX
• S-Plus Limited Supplement – Little Devil	821-324-XX
• S-Plus Limited Supplement – Pinball	821-305-XX
• S-Plus Limited Supplement – Run For Your Money	821-323-XX
• S-Plus Limited Supplement – Top Dollar	821-311-XX

S2000 Machines

All S2000 Machines

Title	Part Number
• Game Software: Vision Series/S2000 Products – Release 8	821-339-XX
• Machine Specifications: 80960 Products	821-356-XX
• Quick Reference Cards: Vision/S2000 Software Release 8	821-345-XX

S2000 Upright Machines

Title	Part Number
• Electronic Diagrams & Parts: Vision/S2000 Slot Upright	821-340-XX
• S2000-I Field Service Supplement (Upright)	821-354-XX
• Maintenance Procedures: Vision/S2000 Slot Upright	821-294-XX
• Mechanical Parts: Vision/S2000 Slot Upright	821-303-XX
• Top Box Dice Configurations Supplement	821-362-XX

S2000 Slant-Top Machines

Title	Part Number
• Electronic Diagrams & Parts: Vision/S2000 Slot Slant-Top	821-341-XX
• Maintenance Procedures: Vision Series/S2000/Game King 17" Slant-Top	821-293-XX
• Mechanical Parts: Vision/S2000 Slot Slant-Top	821-304-XX

Vision Series Machines

All Vision Series Machines

Title	Part Number
• 80960 Tester Operator's Manual	821-333-XX
• Game King/Vision Series Peripheral Device Download Procedure	821-198-XX
• Game Software: Vision Series/S2000 Products – Release 8	821-339-XX
• Game Software: Vision Series/S2000 Products – Release 9	821-359-XX
• Machine Specifications: 80960 Products	821-356-XX
• Quick Reference Cards: Vision/S2000 Software Release 8	821-345-XX
• Quick Reference Cards? Vision/S2000 Software Release 9	821-361-XX

Upright Machines

Title	Part Number
• Electronic Diagrams & Parts: Vision/S2000 Slot Upright	821-340-XX
• Machine Specifications: 80960 Products	821-356-XX
• Maintenance Procedures: Vision/S2000 Slot Upright	821-294-XX
• Mechanical Parts: Vision/S2000 Slot Upright	821-303-XX

Slant-Top Machines

Title	Part Number
• Electronic Diagrams & Parts: Vision/S2000 Slot Slant-Top	821-341-XX
• Machine Specifications: 80960 Products	821-356-XX
• Maintenance Procedures: Vision Series/S2000/Game King 17" Slant-Top	821-293-XX
• Mechanical Parts: Vision/S2000 Slant-Top	821-304-XX

EZ Pay Products

Title	Part Number
• EZ Pay Hardware Supplement	821-220-XX
• EZ Pay Thermal Printer Quick Reference Cards	821-358-XX

Additional Component Products

Bill Acceptor Products

Title	Part Number
• JCM Tester Training Guide	821-450-XX
• Quick Reference Card, Mars BA-ZT1200	821-342-XX
• World Bill Acceptor Calibration Procedures	821-271-XX
• World Bill Acceptor Field Service Manual	821-256-XX
• World Bill Acceptor Quick Reference Card	821-257-XX

CVT and CCOM Products

Title	Part Number
• CVT Operations Guide (Clerk Validation Terminal)	821-093-XX
• CVT/LCT Field Service Manual (use with supplement 821-108-10 or 821-108-20)	821-108-01
• CVT/LCT Gaming Field Service Supplement (use with 821-108-01)	821-108-20
• CVT/LCT Lottery Field Service Supplement (use with 821-108-01)	821-108-10
• CVT-Plus Field Service Manual	821-255-XX
• CVT-Plus Operator's Guide	821-254-XX
• Euro Supplement – CCOM	821-245-XX
• Euro Supplement – CVT	821-260-XX
• EZ Route CVT Operator's Guide	821-249-XX
• EZ Route CVT-Plus Operator's Guide	821-348-XX
• IGT Progressive Controller Game Software Setup	821-364-XX

All SMART Related Products

Title	Part Number
• SMART Keyboard Template – Club Workstation	821-183-XX
• SMART Keyboard Template – Hard Count	821-181-XX
• SMART Keyboard Template – Jackpot/Hopper Fill	821-180-XX
• SMART Keyboard Template – Security Display	821-179-XX
• SMART Keyboard Template – Soft Count	821-182-XX
• SMART System Training – Accounting & Auditing Manual	821-162-XX
• SMART System Training – Advanced Marketing Workstation Manual	821-167-XX
• SMART System Training – Casino Floor Manager	821-174-XX
• SMART System Training – Club Functions Manual	821-163-XX
• SMART System Training – Club Management Manual	821-164-XX

• SMART System Training – End of Period Manual	821-166-XX
• SMART System Training – Floor Management Manual	821-169-XX
• SMART System Training – Jackpot/Fill Functions Manual	821-168-XX
• SMART System Training – Marketing Manual	821-173-XX
• SMART System Training – MIS Manual	821-172-XX
• SMART System Training – Security Manual	821-165-XX
• SMART System Training – System Configuration Manual	821-159-XX

SMART 2 System Products

Title	Part Number
• SMART 2 Quick Reference Card – Jackpot/Fills	821-575-XX
• SMART 2 Quick Reference Card – Maintenance	821-576-XX
• SMART 2.0.5 Club Manager Flow Guide	821-515-XX
• SMART 2.0.5 Club Operator Flow Guide	821-516-XX
• SMART 2.0.5 End of Period Flow Guide	821-517-XX
• SMART 2.0.5 Gateway Manual	821-520-XX
• SMART 2.0.5 Jackpot/Fill Flow Guide	821-518-XX
• SMART 2.0.5 SE Guide	821-519-XX
• SMART 2.0.5 System Configuration Flow Guide	821-514-XX
• SMART 2.0.5 User's Guide	821-512-XX
• SMART 2.1.1 Casino Floor Manager User's Guide	821-532-XX
• SMART 2.1.1 Club Manager Flow Guide	821-526-XX
• SMART 2.1.1 Club Operator Flow Guide	821-527-XX
• SMART 2.1.1 End of Period Flow Guide	821-528-XX
• SMART 2.1.1 Gateway Manual	821-531-XX
• SMART 2.1.1 Jackpot/Fill Flow Guide	821-529-XX
• SMART 2.1.1 SE Guide	821-530-XX
• SMART 2.1.1 System Configuration Flow Guide	821-525-XX
• SMART 2.1.1 User's Guide	821-523-XX
• SMART 2.1.3 Update Package, SE Guide	821-533-XX
• SMART 2.1.3 Update Package, User/Flow Guide	821-534-XX
• SMART 2.5.2 Update Package on CD-ROM	821-578-XX
• SMART 2X Club Manager Flow Guide	821-503-XX
• SMART 2X Club Operator Flow Guide	821-504-XX
• SMART 2X End of Period Flow Guide	821-505-XX
• SMART 2X Floor Guide	821-501-XX
• SMART 2X Jackpot/Fill Flow Guide	821-506-XX
• SMART 2X System Configuration Flow Guide	821-502-XX
• SMART 2X System Hardware (replaces 821-513-XX, 821-160-XX, 821-161-XX, 821-170-XX)	821-278-XX
• SMART 2X User's Guide	821-500-XX

SMART 3 System Products

Title	Part Number
• SMART 3 Quick Reference Cards – Jackpot and Fill	821-542-XX
• SMART 3 Quick Reference Cards – System Maintenance	821-543-XX
• SMART 3 Stored Value Card (SVC) Reader	821-248-XX
• SMART 3 System Hardware Guide (replaces 821-553-XX)	821-574-XX
• SMART 3.3 Cashless Supplement to SMART 3 Documentation	821-571-XX

IGS Manuals and Products

Title	Part Number
• IGS V3.4.X CD-ROM (documentation)	821-661-XX
• IGS V3.5.X CD-ROM (documentation)	821-663-XX
• IGS 3S Gateway User Guide	821-662-XX
• IGS Collection on CD-ROM (documentation)	821-660-XX
• IGS Demo CD-ROM (system demonstration)	821-675-XX
• IGS Keyboard Template	821-650-XX
• IGS LED Sticker – Bank Controller	821-314-XX
• IGS Quick Reference Card – ABS/IGS Bonusing Overview	821-317-XX
• IGS Quick Reference Card – GUI Jackpot/Fill by Attendant	821-656-XX
• IGS Quick Reference Card – Jackpot/Fill by Attendant	821-655-XX
• IGS Quick Reference Card – Jackpot/Fill by Coin Bank	821-316-XX
• IGS Quick Reference Card – System Reference Guide	821-313-XX
• IGS Quick Reference Card – Wireless Handheld Device	821-665-XX
• IGS/Acres System Hardware Manual	821-279-XX
• IGS Slot Information Gateway (SIG) User's Guide	821-670-XX
• IGS Real-Time Data Interface (RDI) User's Guide (Preliminary)	821-671-XX
• IGS Table Touch User's Guide Version 1.1	821-676-00
• IGS Table Touch User's Guide Version 1.2	821-676-01
• IGS Data Management Module (DMM) User's Guide Version 1.0	821-669-01
• IGS Data Management Module (DMM) User's Guide Version 2.0	821-669-02

Additional Systems Products

Title	Part Number
• CMS Collection on CD-ROM (Version 3.1-5 documentation)	821-690-XX
• System Maintenance 8s Card	821-657-XX
• System Maintenance 9s Card	821-658-XX

EZ Pay Ticket System Products

Title	Part Number
• EZ Pay Software Cashier Operations Quick Reference Cards	821-691-XX
• EZ Pay Hardware Quick Reference Cards)	821-745-XX
• EZ Pay Hardware Quick Reference Cards – Spanish	821-820-XX
• EZ Pay Overview CD (system demonstration)	821-680-XX
• EZ Pay Floor Operations Quick Reference Cards	821-692-XX
• EZ Pay Software Soft Count Quick Reference Cards	821-693-XX
• EZ Pay Software Quick Reference Cards – Spanish	821-821-XX
• EZ Route CVT Plus Guide	821-348-XX
• EZ Route Quick Reference Cards	821-347-XX
• EZ Pay Ticket System: User's Guide Version 1.3	821-681-XX
• EZ Pay Ticket System: User's Guide Version 1.4.2	821-683-XX
• EZ Pay Ticket System: User's Guide Version 1.5	821-684-XX

Glossary

ABS Acres Bonusing System™ This is a complete data collection and bonusing system using Acres Gaming, Inc. proprietary technology. It gathers information from a casino's gaming machines and distributes it to third-party slot accounting systems, such as IGS.

AC Alternating Current An electric current that reverses its direction at regularly recurring intervals.

access path The procedure used by a database management system to access data stored in a database.

access time The time a computer takes to locate and transfer data to or from storage. Composed of seek time and transfer rate.

Account Control Executive (ACE) This software consists of the processes and databases used to define and maintain configuration details, accounting information and reporting.

Accounting Analysis System (AAS) The computer software system used to provide a database of information. The AAS uses various menu options to create and print reports.

accounting option The software option that displays statistics accumulated in game play, such as the number of coins-in or the number of credits won.

address 1) The unique number assigned to each component of a larger system. 2) In data transmission, a code for a specific terminal.

ADSC Accounting Data System Communicator Used with the IGT Wide Area Progressive Security And Accounting System to receive and transmit data between the ADS and CCOM.

agent file A program that performs an information gathering or processing task in the background. This type of program is typically given a very small and well-defined task.

aging period A time period during which information (usually video lottery ticket information) is held in a readily accessible database for verification purposes.

algorithm A procedure for solving a particular mathematical problem in a finite number of steps.

alternating progressive A progressive system in which there are two meters each associated with the top award on the gaming machine(s). One meter is set to a higher base amount than the other. During play on the machine(s), the meters both progress at the same rate and an arrow, or other indicator, flashes back and forth between the two meters. When the jackpot is ultimately hit, the player wins whichever amount the arrow is indicating.

analog Varying smoothly and continuously over a range, rather than changing in discreet jumps. For example, a 12-hour clock face is an analog device that shows the time of day by continuously changing the position of the clock's hands.

archive 1) To copy programs and data onto an auxiliary storage medium, such as a disk or a tape, for long-term retention. 2) To store data for anticipated normal long-term use. 3) A procedure for transferring image information from an online optical storage medium to an offline medium.

asynchronous Not synchronized by a mutual timing signal or clock.

asynchronous transmission A method of data transmission in which the receiving and sending devices don't share a common timer, and no timing data is transmitted. Each information character is individually synchronized, usually by the start and stop of bits. The time interval between characters isn't necessarily fixed.

ATA Advance Technology Attachment ATA cards are used in Vision machines to program the LCD. These programs are responsible for playing sounds and displaying information such as tilt messages and Operator and Attendant Menu options. The Bonus Game Module (BGM) is an ATA card that programs the LCD to perform bonus game functions.

attendant The person who has access to accounting, diagnostics and other attendant functions by turning the attendant key switch on the machine.

attendant menu The menu entered by turning the attendant key switch on a machine which allows access to accounting, diagnostics and other attendant functions. This menu appears on the screen and shows what options are available.

attract mode Visual and/or music options intended to attract players when the machine is in the idle mode.

autobet An option that enables a player to wager the same number of credits as the previous game simply by pressing the Deal-Spin-Start switch.

autocycle The machine automatically cycles through each test without operator or attendant intervention.

autohold An option that, when selected in the self test mode, automatically holds suggested winning combinations of cards and displays a HELD message above the cards in a game.

award insert A separate piece of glass or film used when the exterior glass panel has an opening for an award insert, such as "4000 coins."

axiohm printer A small, thermal printer utilizing 62 mm (2.5) paper to print both receipts and reports off of the CVT, the cashier, and the audit station. It prints at a rate of 50 mm (2) per second.

background color The screen color surrounding the game elements and the game-related information.

backup 1) A term pertaining to procedures or standby equipment available for use in the event of failure or overloading of the normally used procedures or equipment. 2) To make a copy of a program or data in case the original is lost, damaged or otherwise inaccessible.

bank controller Data condenser; responsible for communication between DCNs and other system components.

banner A setup or downloadable message which is scrolled across the main menu screen to attract or inform a player.

bar machines A collective term referring to slant-top and bar top machines, as opposed to upright machines.

bar top A type of machine designed for installation in a horizontal bar counter-top or contained in a bar cabinet. The game is viewed from above the machine while the player is typically seated.

barcode scanner *See handheld terminal.*

base amount The starting amount for a progressive jackpot which is also the amount that is displayed after the progressive is hit.

battery backup Auxiliary power provided to a computer so that volatile information is not lost during a power failure.

battery-backed RAM A RAM chip with a built-in battery for preserving the contents if machine power is turned off.

baud A unit of data transmission speed.

belly glass The lower glass on the door of some machines that shows the denomination, payable or game theme.

Bet Down A screen button that, when touched, decrements the number of credits wagered toward a game and returns them to the credit meter. If the button remains touched, the bet will continue to decrement at a determined rate until the bet reaches one.

Bet Max (Bet Five, etc.) A player panel switch or screen button that wagers either the maximum number of credits the machine will accept or, if insufficient credits exist, all remaining credits.

Bet One A player panel switch or screen button that wagers one credit each time it is pressed.

Bet Up A screen button that, when touched, increments the number of credits wagered toward a game and decrements them from the credit meter. If the button remains touched, the bet will continue to increment at a determined rate until the bet reaches maximum coins-in or the credit meter reaches zero.

bill acceptor (*same as bill validator*) Optional assembly that accepts valid paper bills and causes the host machine to either dispense change or issue credits.

bill acceptor pay mode The available options are credit only (pays only in the form of credits), player initiated (pays either credits or cash depending on the player initiated selection) and noncredit.

bill validator (*same as bill acceptor*) Optional assembly that accepts valid paper bills and causes the host machine to either dispense change or issue credits.

bill validator door The door which prevents access to the bills accumulated by the bill validator.

binary Characterized by having two different components or by having only two alternatives or values available.

binary system 1) A number system that uses only 0 and 1 as digits. 2) The representation of numbers in the base-2 system, using only the two digits 0 and 1. A single binary digit – a 0 or a 1 – is called a *bit*.

bit A contraction of binary digit. The smallest unit of information that a computer can hold. The value of a bit is either 1 or 0.

bit rate The speed at which bits are transmitted, usually expressed as bits per second or bps.

BITBLITZ IGT proprietary designed video controller on the processor board which provides unmatched speed, resolution and animation capabilities.

- bonus** An adjustment built into the paytable of a gaming machine to pay the player additional coins for a given win as a reward for playing the maximum coins. For example, on a three coin multiplier game, a particular combination might pay 100 coins with one coin played, 200 coins with two coins played, and 500 coins with the maximum of three coins played. The 500 coin pay in this case contains a 200 coin bonus for playing with the maximum coins.
- Bonus button** Used for interaction with ABS. Allows the player to confirm receipt of bonus.
- bonus pay** Expanded pay for top awards won with maximum coins bet, greater than a linear multiple of the wager. If the top award multiplier (number of coins paid per coin bet) is 300 for one to four coins bet, it might be 900 for five (max) coin bet. *See multiplier pay.*
- bonus server** Microcomputer used for bonusing applications.
- boot** (*same as power up*) To start up a computer.
- bps (bits per second)** (*same as bit rate*) The speed at which bits are transmitted, usually expressed as bits per second or bps.
- browse** An option in various menus that allows the user to view data in a file without changing the information.
- buffer** 1) An area of memory set aside for the specific purpose of holding data until it is needed. 2) A holding area of the computer's memory where information can be stored by one program or device and then read at a different rate by another.
- bus** 1) A path along which information is transmitted electronically within a computer. 2) An electrical or electronic connection between devices.
- bus specification** The specification describing the physical characteristics of the bus and the protocol that governs the use of the bus.
- buy-a-pay** A type of game in which the player buys various paying combinations by playing more coins. Usually, buy-a-pay games will pay their top award only if the maximum coins have been played.
- byte** A unit of information consisting of eight bits.
- cabinet** The exterior, laminated wood shell that surrounds the metal enclosure on some machines.
- cage** A secure area in a casino used to handle and store large amounts of money.
- cancel** 1) A keyboard operation that deletes the line currently being typed. 2) To end a task before it is completed.
- candle** *See Service Light.*
- CAP Color Attribute PROM** Contains color definitions used to build images on the screen during each phase of a video game.
- card** 1) A printed-circuit board that plugs into one of the computer's expansion slots, allowing the computer to use one or more peripheral devices such as disk drives. 2) A printed-circuit board or card connected to the bus in parallel with other cards.
- card box (Player Tracking or PT unit)** The card box (PT unit) has a card reader that scans a member's card and sends the card ID number to the system so the records can be accessed. It also has a display unit to greet the member, show points, etc.
- card cage** A sealed box in the machine that houses the programmed information for the game type being played. It requires a key to access it. This is also called the lower module.
- card reader** This is basically a player tracking input function although LEDs (ERR and OK) are available as outputs for a reader without a display. There are currently two different types of cards and card readers: 1) The Hollerith type that uses a card with punched holes for encoding and a reader utilizing LEDs and phototransistors to read it. 2) The mag stripe that uses a card with up to three magnetically encoded tracks and a reader equipped with a magnetic head to read card data.
- carousel** A collection of machines with a common jackpot linked together via fiber-optic cables in one specific area or location.
- cash out** A switch that converts machine credits to cash or payable vouchers. The Cash Out switch on the player panel activates this machine function.
- cash slip** A printed ticket from a video lottery terminal (VLT) that is redeemed for cash in lieu of direct payment as with a gaming machine.
- Cathode Ray Tube (CRT)** An electronic tube with a screen, such as a television picture tube, upon which information can be displayed.
- CC Cluster Controller** 1) A down-line processor that collects data from a number of machines, then transmits concentrated data over a single communications channel. 2) A communication device that stores, validates and forwards accounting and security data to the central system. The most common cluster controllers are CVTs, LCTs, and LCOMs. 3) An intelligent communications device at a remote site that is responsible for polling the machines.
- CCITT Consultative Committee on International Telegraphy and Telephony** An international committee that sets standards and makes recommendations for international communication.

CCOM Casino Communicator Used with all wide area progressive systems, such as Megabucks® or Quartermania® systems.

central computer The central processor located at a central site.

Central Computer System (CCS) In linked games, monitors game machine operation and collects accounting and security information.

Central Processing Unit (CPU) The brain of the computer; the microprocessor that performs the actual computations in machine language.

central site The physical place where the central system is located.

central system The hardware at the central site, along with the software used to operate and control the retail sites.

CFE Communications Front-End 1) A processor on the network that is between the Real Time System's processor and the cluster controllers at the remote site. The CFE is responsible for communicating with and polling the cluster controllers. When it is polled by the real time system it responds with the data gathered from the CCs. 2) A computer system that controls the transfer of data from the cluster controller to the central system.

CG Character Generator chip. A character generator chip located on a processor board that generates images on video monitors.

character Any symbol that has a widely understood meaning and thus can convey information. Some characters include letters, numbers and punctuation.

checksum The result of an arithmetic operation on the number of bits in a sequence, used to verify the integrity of game data in the EPROM.

circuit board A board containing embedded circuits and an attached collection of integrated circuits (chips).

circuitry A network of wires, chips, resistors and other electronic devices and connections.

CISC Complex Instruction Set Computer A type of central processing unit found in the majority of personal computers. It requires several clock pulses to complete one instruction.

Clerk Validation Terminal (CVT) A cluster controller that has a keyboard and the ability to print sales reports. The cluster controller stores the data collected from the machines located at a particular location. Used by a cashier to validate printed cash-out tickets (for lottery games) prior to cash redemption.

Clerk Validation Terminal Plus (CVT-Plus) A cluster controller having an 80960 processor and a keyboard (as opposed to the original CVT's 8032 processor, keyboard, and built-in printer). The cluster controller stores the data collected from the machines located at a particular location. Used by a cashier to validate printed cash-out tickets (for lottery games) prior to cash redemption.

clock 1) A timing device that generates the basic periodic signal used to control the timing of all operations in a computer. 2) A device that records the progress of real time, or some approximation of it, and whose contents are available to a computer program.

clock chip A special chip in which parameter RAM and the current setting for the date and time are stored. This chip is powered by a battery when the system is off, thus preserving the information.

clock speed The rate at which a microprocessor executes instructions.

Cluster Controller (CC) 1) A down-line processor that collects data from a number of machines, then transmits concentrated data over a single communications channel. 2) A communication device that stores, validates and forwards accounting and security data to the central system. The most common cluster controllers are CVTs, LCTs, and LCOMs. 3) An intelligent communications device at the remote site that is responsible for polling the machines.

CMOS memory Complementary Metal Oxide Semiconductor memory RAM chips used to store data for most IGT games. These can also come in a package with a built-in battery to preserve the contents if machine power is lost. See *Battery-Backed RAM*.

coaxial cable A special type of communications cable that permits transmission of data at high speed. Usually employed by local networks.

coin comparitor An electronic coin acceptor mechanism that receives and validates coins deposited in the machine. A coin comparitor uses a sample coin against which incoming coins are compared for validity.

coin drop box The container in the bottom of the cabinet that catches and holds coins from the coin-in assembly.

coin drop-box sensor switch This switch monitors the number of times the drop (cash) door is opened.

coin tray Metal tray on a machine where coins are paid out or returned.

coin-in Coins wagered. The coin-in assembly receives, verifies, counts and appropriately routes coins deposited in the machine. The coin-in meters (mechanical and software) accumulate total coin-in numbers.

coin-out Coins or credits won and paid, or credits won and wagered. The coin-out meters (mechanical and software) accumulate total coin-out numbers.

collective remote candle Several machines connected to one candle.

communication 1) The flow of information from one point (the source) to another (the receiver). 2) The act of transmitting or making known. 3) The process by which information is exchanged between individuals through the use of a commonly accepted set of symbols.

communication mode An operating state in which a serial card or port is prepared to exchange data and signals with a modem or other type of data communication equipment (DCE).

communication system Any one of several system configurations linking machines and a control device (LCOM, CVT or modem) via fiber-optic cables to a central computer for the purpose of gathering accounting data.

communications channel The physical means of connecting one location or device to another for the purpose of transmitting and receiving data. Coaxial cables, fiber optics, microwave signals, telephone lines and satellite communications all serve as communication channels.

Communications Front-End (CFE) 1) A processor on the network that is between the Real Time System's processor and the cluster controllers at the remote site. The CFE is responsible for communicating with and polling the cluster controllers. When it is polled by the real time system it responds with the data gathered from the CCs. 2) A computer system that controls the transfer of data from the cluster controller to the central system.

communications protocol A set of communication rules that provides for error checking between devices and ensures that transmitted data are not lost.

concentrator Data control switch to route data flow to/from the slot bank(s) and bonus server, and to/from the slot bank(s) to IGS.

configuration 1) A general-purpose computer term that can refer to the way a computer is set up. 2) The total combination of hardware components that make up a computer system. 3) The software settings that allow various hardware components of a computer system to communicate with one another.

configuration workstation Console for ABS and the only user interface with the system; configures parameters for ABS.

configure To change software or hardware actions by changing settings.

contribution The percentage of total play into a machine that is applied to the progressive jackpots and reserve funds. The number is divided by all locations on line based on the amount of play per each game at that location.

control character A non printing character that controls or modifies the way information is printed or displayed.

controlling central agency The entity that has full responsibility for the operation and maintenance of the gaming system.

coprocessor An auxiliary processor that is designed to relieve the demand on the main processor by performing a few specific tasks.

CPU Central Processing Unit The major component of a computer system with the circuitry to control the interpretation and execution of instructions.

CRC Cyclic Redundancy Check Signals, sent between microprocessor devices, to prevent tampering or incorrect data being sent.

credit One credit is equal to the denomination of the game being played. Games are played using credits for ease of displaying the amount bet and won.

credit limit The maximum number of credits the machine will accumulate before causing either a hopper-pay, handpay or cashout ticket situation.

credit play Allows all awards, except the top award and handpays, to accumulate on the Credits display rather than dispensing from the hopper. Some game versions allow player-selected credit or noncredit play.

credits cancelled Credits handpaid (but not won), that are cashed out of the credit meter. These credits could come from either a coin-in or a bill acceptor.

credits collected The sum of credits won and credits cancelled that are paid out during cashout.

Cross Validation Unit (XVU) A device that allows several clerk validation terminals (CVTs) to share ticket data so that patrons can redeem tickets at any other system-linked CVT or machine.

CRT Cathode-Ray Tube An electronic tube with a screen, such as a television picture tube, upon which information can be displayed.

current contribution amount The value of the prize contribution at the current point of time.

cursor 1) The moving, sliding, or blinking symbol on a CRT screen that indicates where the next character will appear. 2) A symbol displayed on the video monitor in the self test mode indicating where the user's next action will take effect.

CVT Clerk Validation Terminal A cluster controller that has a keyboard and the ability to print sales reports. The cluster controller stores the data collected from the machines located at a particular location. Used by a cashier to validate printed cash-out tickets (for lottery games) prior to cash redemption.

CVT-Plus Clerk Validation Terminal Plus A cluster controller having an 80960 processor and a keyboard (as opposed to the original CVT's 8032 processor, keyboard, and built-in printer). The cluster controller stores the data collected from the machines located at a particular location. Used by a cashier to validate printed cash-out tickets (for lottery games) prior to cash redemption.

DACOM Dutch Asynchronous Communication System A data collection system used only in Holland.

daisy chain A colloquial term for a group of devices connected to a host device, where the first device in the chain is connected to the host, the second device is connected to the first and the third device is connected to the second, and so on. To link together sequentially.

data Information.

data bits In the stream of bits being sent from a computer to a peripheral device or another computer, the bits that contain meaningful information.

data bus The path along which general information is transmitted within the computer.

data byte The bytes that contain meaningful information in the stream of bytes sent from the computer to a peripheral device or another computer.

data communications 1) The movement of encoded information by means of electrical transmission systems. 2) The entire process and science of enabling digital devices, such as computers, to communicate with each other.

data encryption A coding technique used to secure sensitive data by mixing or jumbling the data according to a predetermined format.

database A collection of information organized in a form that can be readily manipulated and sorted by a computer user.

database management system A software system for organizing, storing, retrieving, analyzing and modifying information in a database.

day meters The data resulting from the last daily poll of the machines. They provide the data on the number of games played and won, dollars played and won, and other critical information.

DC Direct Current An electric current flowing in one direction.

DCN Data Collection Node An electronic circuit board connected to each game in the Acres Bonusing System™. It handles communication between the host and machine, receives bonus promotions from bonus servers, and sends bonus-related information to bonus servers, concentrator and host.

DCS Data Communication System One of several optional communication systems whereby the machine sends selected data to an external accounting device.

DCU Data Collection Unit A device capable of collecting and storing information (real-time data) from up to 32 card boxes. It also receives data and messages from the FEC for transfer to the card boxes.

decimal number A numeral, usually of more than one digit, representing a sum in which the quantity represented by each digit is based on a radix of 10. The digits used are 0, 1, 2, 3, 4, 5, 6, 7, 8, 9.

decimal system The commonly used form of number representation, in which numbers are expressed in the base-10 system, using the ten digits 0 through 9.

default A value, action, or setting that a computer system assumes, unless the user gives an explicit instruction to the contrary.

degauss To correct video display discoloration by neutralizing the magnetic field of a video monitor using a special degaussing tool.

delete 1) To remove or eliminate, as to erase data from a field or to eliminate a record from a file. 2) A method of erasing data.

denomination A factor that determines the monetary value of one unit of credit.

diagnostics The mode in which the machine can be tested for module replacement. Tests for I/O (input/output), peripherals, display devices, and other hardware may be included.

dialog box A window that appears over the main screen to provide information to the user or to request information from the user. The dialog box normally requires a response or acknowledgment from the user.

digital Represented in a discrete (noncontinuous) form, such as numerical digits or integers.

Digital-to-Analog Converter (DAC) A device that converts quantities from digital to analog form.

DIP switch Dual In-line Package switch A small switch that can be manually set for one of two different values (usually on or off). DIP switches are used on PC boards for setting up various machine configurations.

disable When machines are disabled, games cannot be played, but security event information is still communicated to the central computer.

disk A flat, circular, magnetic surface, serving as a medium for storing information.

Disk Operating System (DOS) An operating system whose principal function is to manage files and communicate with one or more drives.

display A general term to describe what is seen on the screen of the display device of a computer.

display board This is the player tracking output accessory to the SMIB logic board. It contains an encased vacuum fluorescent display, the driver and negative power supply for the display, a VIP light, a display control chip and a connection to the logic board.

diverter The portion of the coin-in assembly that channels coins to either the hopper or the drop box.

double up An extended game play available to the player to double his current winnings.

download To transfer files or information from one computer to another, or from a computer to a peripheral device such as a printer.

drop Coins or bills in the drop box.

drop box The container in the bottom of the cabinet that catches and holds coins when the hopper is full. In bill acceptors, the lower compartment where bills are deposited.

drop door The door normally on the bottom of the machine or in the stand which prevents access to the coin drop.

drop-door sensor switch Monitors the number of times the drop (cash) door is opened.

drop hold percentage Also referred to as coin room percentage. Expression used in some casinos to denote what percentage of the total drop of a gaming machine is money actually won. Calculated as follows:

$$\frac{\text{Total Drop} - (\text{Fills} + \text{Jackpots})}{\text{Total Drop}}$$

dual-monitor module Optional video monitor assembly made to attach to and work with a video machine.

DUART/UART *Dual Universal Asynchronous Receiver/Transmitter and Universal Asynchronous Receiver/Transmitter* A communication IC that can interface between a microprocessor and a serial channel.

E-Squared See *EEPROM*.

EEPROM *Electrical Erasable Programmable Read-Only Memory* Many IGT machines utilize an EEPROM chip on the motherboard to store backup game data.

EGM *Electronic Gaming Machine* A gaming machine that collects and dispenses credits, and houses the games. This term is also synonymous with VGM, VGD, VLT, machine and gaming machine.

EISA *Extended Industry Standard Architecture* A 32-bit wide bus architecture designed for PCs that supports multiprocessing and uses either an Intel 80386, 80486, or Pentium microprocessor.

Electronic Funds Transfer (EFT) A cashless method of paying for goods or services. Electronic signals between computers are used to adjust the accounts of the parties involved in a transaction. Commonly used to make periodic payments, such as insurance premiums.

enable To activate, usually with a software command.

enclosure The metal body that houses internal machine components. The enclosure is often installed in a cabinet.

encryption The password used to encrypt a message in communications.

End of Day (EOD) See *End of Period*.

End of Period (EOP) A period of time after which game play, coin-in, coin-out and other gaming performance parameters are verified to provide operational control and management information.

enrollment The process of qualifying a component for participation in a network.

Enter key A key that confirms an entry or sometimes a command.

EPROM *Erasable Programmable Read-Only Memory* A non-volatile medium for program instructions. Game programs and video graphics are stored on EPROMs.

error A data processing problem. The machine enters the tilt mode, an error message displays and game play is suspended until the problem is corrected.

escalator In slant-top and bar top machines, the part of the hopper that carries coins up to the coin tray.

ESD *Electrostatic Discharge* The discharge of electrical energy that occurs when a charged body comes into close proximity to an object of lesser or opposite charge.

Ethernet A high-speed local area network that consists of a cable technology and a series of communication protocols.

Ethernet cable systems A system of high-performance coaxial cables widely used in the communications industry.

Eurocredit A coin-in/credit system used in some gaming machines that allows the player to insert coins over and above the maximum number that is playable on a per-game basis. There is an operator-selectable maximum credit limit on the Eurocredit machines and players can insert coins at their discretion until this limit is reached. Eurocredit machines are most popular in casinos outside the U.S.

Euro noncredit A credit mode where once the maximum bet is reached, all inserted coins are accumulated as credits in the credits meter up to the credit limit. Any single win greater than the hopper limit is hand paid. All other wins are paid from the hopper to the coin tray. The credit limit is set in self test.

event log Allows an operator or attendant to view metered events recorded by the machine.

exception log A paper record of all reported abnormal events generated on a wide area progressive system.

exception message A message that is printed on the exception printer for any abnormal conditions that cause status to alter from normal.

expanded payable glass The lower glass on a machine that shows an extension of the upper glass payable.

expanded reel The term used to describe an electronic slot machine in which the number of reel stops in the computer program is greater than the number of stops on the actual reels of the slot machine.

extended industry standard architecture (EISA) A 32-bit wide bus architecture designed for PCs that supports multiprocessing and uses either an Intel 80386, 80486, or Pentium microprocessor.

EZ Pay System which allows ticket validation at the electronic gaming machine (EGM), clerk validation terminal (CVT), and cashier's window.

FAT *File Allocation Table* The table that the operating system (OS) uses to locate files on a disk.

FCON *Fiber Converter* An electronic device that converts fiber-optic light signals to electrical signals for 4-wire transmission.

FEC *Front-End Controller* A dedicated computer that polls machine data from the DCUs for transfer to the Transaction Processor (TP). It also sends information from the TP back through the DCUs to the card boxes. All messages and data, whether received or sent by the FEC, must be in RS-232 computer readable code.

fiber optics The transmission of information with light energy as the transmission carrier and plastic or glass as the medium.

fiber-optic cable A transmission medium that carries pulses of light over strands of glass. Fiber optics can carry hundreds of millions of bits per second over thousands of miles. Since the glass fibers are carrying light, they do not receive outside interference and do not lose appreciable strength. Fiber-optic transmission reduces errors in transmission. A fiber-optic cable contains two glass strands. Each strand or fiber is covered in a sheath made of plastic.

fiber-optic interface board Any one of several optional PC boards that convert electronic digital data to light for fiber-optic transmission.

Fiber T A device for branching fiber-optic communication runs or amplifying a fiber run that exceeds 80 feet.

field A single piece of information, the smallest unit normally manipulated by a database management system. A record is made up of one or more fields.

Field Service Manual (FSM) An IGT service publication covering machine hardware, including: installation, maintenance, troubleshooting, disassembly and assembly, parts lists, wiring diagrams and schematics.

field service supplement An IGT service publication that describes hardware and software specific to a certain machine or jurisdiction.

file Any named ordered collection of information stored on a disk.

File Allocation Table (FAT) The table that the operating system (OS) uses to locate files on a disk.

filename The name that identifies a file.

fill Coins that are added to the hopper of a gaming machine that has become empty as a result of player wins.

firmware Programs stored permanently in read-only memory (ROM).

FLASH Also referred to as programmable and erasable read-only memory which is a device that allows data to be rewritten.

flash card A credit card-sized memory device used in the LCD unit for bonus game and attract message storage.

floppy disk A disk made of flexible plastic, as opposed to a hard disk made of metal.

fluorescent flasher Controls the fluorescent lights on the machine that indicate the player is in bonus mode.

- format** 1) The form in which information is organized or presented. 2) The general shape and appearance of a printer's output. 3) To divide a disk into tracks and sectors where information can be stored.
- frequency** The number of complete cycles transmitted per second, usually expressed in hertz.
- full-duplex communication** A method of data transmission where two devices transmit data simultaneously. This method allows the receiving device to echo back each character of the message as it is received.
- function keys** Specially designed keys that, when pressed, initiate a function on a computer keyboard, word processor or graphics terminal.
- funding entity** The entity that accounts for and finances a prize amount.
- game** A program designed to offer a player chances to win prizes by betting some unit of credit of the correct denomination. There can be several games in one machine.
- game closed mode** In linked games, describes suspension of normal game play by the central computer system.
- game code** The second half of the model code; it refers to which game type is represented by glass or software (i.e., Joker Poker = XX65.)
- Game King® machine** IGT Class III video gaming device powered by the Intel® 80960 processor. Firmware options include multi-game or single game themes. Available in bar top, slant top, and upright models.
- game play mode** The operational mode that exists when the machine is functioning properly and a customer is playing a game.
- game speed** The pace at which a game is played. This may be set by a player or an operator in the setup mode.
- ghost** A stop on a slot reel which does not contain a slot symbol.
- gigabyte (GB)** A unit of measurement equal to 1024 megabytes.
- group** A set of progressive prizes with a reserve fund. The prizes all have the same base denomination and funding entity.
- half-duplex communication** A way of communicating between one computer and another computer, or a peripheral device in which data can only be sent or received, not both at one time.
- hand** In video poker games, one set of five cards. A standard poker game consists of an original hand, and after the player keeps or rejects cards, a final hand. Wins or losses are based on the final hand.
- handpay** Money award paid by an attendant rather than being dispensed by the machine.
- handheld terminal** (*same as wand or scanner*) A portable device used to read machine data and then download the information to a computer.
- handle pulls** The total number of pulls of the machine handle. Also known as games played.
- hard count** The counting of money generated by gaming operations in the form of coins.
- hard drop** The controlled process of removing coins from gaming machines.
- hard meters** An internal accounting system that is displayed on mechanical meters on all video and reel gaming machines. These meters are not resettable, i.e. they are at zero when the machine is built and they continue to count the cumulative number of coins in, out, etc. throughout the life of the machine.
- hertz (Hz)** An expression used to describe the frequency of the power line voltage supplied to the gaming machine, e.g., 50 hertz, 60 hertz.
- hexadecimal system** The representation of numbers in the base-16 system using the ten digits, 0 through 9, and the six letters, A through F.
- hit frequency** A term used to describe the average frequency at which winning game outcomes will occur on a gaming machine. It is calculated by dividing the number of individual hits, or winning games, by the number of possible game outcome combinations.
- Hold** The physical button on video poker machines that, when pressed, allows the player to keep cards in a poker game.
- hold percentage** The percent of coins played that are retained or won by the gaming machine. It is calculated by subtracting the payback percentage from 100 percent.
- holeywheel hopper** A type of hopper mechanism, initially developed for large, heavy coins, that uses a punched rotating wheel to collect coins from the hopper bowl, and separate them from the other coins for transport to the eject area.
- hopper** An assembly inside the machine that receives, holds and dispenses coins. When the hopper is full, coins are diverted to the drop box.
- hopper probe** A simple electromechanical sensing element located in the coin hopper. When the coin mass in the hopper bowl reaches and touches the hopper probe, a signal is sent to the microcomputer indicating that the hopper is full. *See diverter.*

host computer 1) A central processing unit that provides the computing power for the remote terminals and peripheral devices connected to it. 2) The computer that is in charge during a telecommunications or local area network session. 3) The central controlling computer in a network of computers.

host machine A machine used in conjunction with another assembly that cannot stand alone, such as a dual-monitor module or a bill acceptor.

hybrid A term utilized by phone companies to define the unit in telephone rooms where a phone company circuit ends and the in-house wiring begins.

IBA Imbedded Bill Acceptor The bill acceptor is considered imbedded whether it is in a cabinet or top box format. *See bill acceptor.*

icon 1) A symbol that graphically represents an object, a concept, or a message. 2) A pictorial representation of a software function.

idle mode The condition that exists when a game is not being played and no credits exist on the credit meter.

IGS IGT Gaming Systems A comprehensive group of casino management products used by gaming sites for accounting and player tracking purposes.

IGT Progressive Controller IPC A progressive controller that has the ability to control up to 32 progressives on a bank of up to 63 local IGT game machines.

initialize 1) To set to an initial state or value in preparation for some computation. 2) To prepare a blank disk to receive information by organizing its surface into tracks and sectors (*format*).

input The introduction of data from an external storage medium into a computer's internal storage unit.

input/output (I/O) The inputs and outputs of a machine. Typically, inputs are from switches, etc., and outputs are to lamps, etc.

insert A separate piece of glass or film that contains information not printed on the exterior glass panel. This can be award amounts, a paytable, or other important information.

Intel 8032 Microprocessor The microprocessor used in certain SMART System floor devices, SMIB, DCU, and SMART card reader, as well as the CVT, S-Plus and PE-Plus machines.

interface 1) The point at which independent systems or device groups interact. The devices, rules or conventions by which one component of a system communicates with another. 2) The part of a program that defines constants, variables, and data structures, rather than procedures. 3) The equipment that accepts electrical signals from one part of a computer system and renders them into a form that can be used by another part. 4) Hardware or software that links the computer to a device. 5) To convert signals from one form to another and pass them between two pieces of equipment.

interface card A card that handles the interface (or connection) between the computer and a particular peripheral device.

IPT Imbedded Player Tracking Enables the owner/operator to identify and gather information about playing patterns on individuals through the use of customer membership cards.

jackpot reset switch (*same as reset switch*) A key-activated switch that: (a) enables option selections within some self test pages; (b) enters and advances through the statistical data mode; and (c) resets the machine's internal progressive parameters (as applicable) after a jackpot.

Java™ A cross-platform, object-oriented programming language developed by Sun Microsystems.

jurisdiction An authority within which all gaming regulations are governed.

K (*same as kilobyte*) A unit of measurement consisting of 1024 bytes. K can also stand for the number 1024 in which case Kbyte is used for kilobyte.

Kbyte (*same as kilobyte*) A unit of measurement consisting of 1024 bytes. K can also stand for the number 1024 in which case Kbyte is used for kilobyte.

kilobyte (K) A unit of measurement consisting of 1024 bytes. K can also stand for the number 1024 in which case Kbyte is used for kilobyte.

kilohertz (kHz) A unit of measurement of frequency, equal to 1,000 hertz.

LAN Local Area Network A group of computers connected for the purpose of sharing resources.

LCD Liquid Crystal Display A color active-matrix display similar to a laptop personal computer. This display is located in the top box and is used for bonus games, custom attract messages and a variety of diagnostic and setup displays.

- LCT** *Local Communication Terminal* A cluster controller that collects data from machines and transmits it to a central computer.
- LED** *Light Emitting Diode* An electronic component that glows when supplied with a specified voltage, commonly used in digital displays and as status indicators.
- light box** A plastic bracket containing fluorescent lights to illuminate the display glass.
- light pen** A device used to make game selections directly on the screen in some video games, such as keno.
- line lights** The payline lamps located adjacent to the pay lines in the reel glass of a multi-line slot machine. As coins are inserted, the lamps light in sequence, indicating the paylines that are activated.
- line up** A type of game that utilizes spinning slot reels or a video simulation of reels. A win occurs when reel symbols line up in a specified manner.
- link** Two or more machines that are connected to a progressive meter.
- link/standalone progressive** Link progressive applies when the machine is connected in series with a group of machines and also connected to a progressive controller. When correctly installed and active, the current progressive top awards are the same for all machines in that link. Standalone progressive applies when the machine is not connected in any way to other machines. Internal progressive amounts must be set for each machine.
- live system** A computer that runs the wide area progressive games and displays the main system window.
- Local Area Network (LAN)** A group of computers connected for the purpose of sharing resources.
- Local Area Progressive (LAP)** A group of prizes that is paid by a funding entity other than the controlling central agency.
- lockout** A solenoid device for disallowing coin or token acceptance.
- lockup** This situation occurs during some tilt and error conditions. Game play is suspended but self test and statistical data modes are operational.
- log in** (*same as log on*) To sign-in on a computer.
- log off** (*same as log out*) 1) To stop using the computer.
2) The process of signing off the system.
- log on** (*same as log in*) To sign-in on a computer.
- log out** (*same as log off*) 1) To stop using the computer.
2) The process of signing off the system.
- logic door** An electronics cage and lock which prevent access to the main processor board. *See card cage.*
- lottery** A jurisdiction in which some form of gambling is allowed, but typically more restricted than gaming jurisdictions. A system usually connected to a central computer via a communication system.
- loud bowl** A large coin tray designed to resound loudly as coins are paid out.
- lower module** A removable assembly within the machine. The chassis houses the power supply, motherboard, processor board, connector panels and various optional assemblies or PC boards.
- LSAMS** *Lottery Security, Accounting, Management System*
One of IGT's lottery systems, including the communication protocol from the CS (central computer) to the CC (Cluster Controller) and from the CC to the machine.
- machine** A gaming machine. This term is also synonymous with EGM, gaming machine, VGD, VGM and VLT. Sometimes a lottery terminal.
- machine address** (*same as polling address*) A unique hexadecimal number resident on a processor board or communication board, and used by some accounting and communication systems for machine identification.
- machine door** On machines, the main access door typically contains the player switches and/or other input devices, coin entry, key lock and various other assemblies.
- main door** The door on the front of the machine which prevents access to the printer, hopper, front panel switches and other operator accessible items.
- main menu** In a video game or software program, an initial selection screen where the player or operator chooses which game to play or portion of the program to run.
- master file** Data stored in a computer system concerning relatively stable information such as machine serial numbers and denominations or personal data on club players for a player tracking system.
- max bet** (*same as max coin*) The maximum number of coins or credits the game will accept for a single play.
- max coin** (*same as max bet*) The maximum number of coins or credits the game will accept for a single play.
- max hopper pay** The determined amount of coins that the hopper will pay out before a handpay is needed. Should correspond with the amount that appears on the glass insert.
- max pay** (*same as max win*) The highest award on the game payable.

max win (*same as max pay*) The highest award on the game payable.

megabyte (MB) A unit of measurement equal to 1024 kilobytes, or 1,048,576 bytes.

megahertz (MHz) A measure of transmission frequency equal to one million hertz.

memory A hardware component of a computer system that can store information for later retrieval.

memory location A unit of main memory that is identified by an address and can hold a single item of information of a fixed size.

menu item A choice in a menu, usually a command to the current application.

meters Counters. IGT machines utilize both mechanical and software meters to collect game play data. Hardware meters collect lifetime totals and cannot be reset. Software meters are displayed in the statistical data mode, and can be reset to zero.

microprocessor An integrated circuit on the computer's main circuit board. The microprocessor carries out software instructions by directing the flow of electrical impulses through the computer.

MIDI *Musical Instrument Digital Interface* An industry standard for music being produced digitally.

mix The game types (poker, keno, reel slots, etc.), configurations (upright, slant-top, or bar top machines), and denominations on the casino floor. An empirical ratio adjusted continuously by slot management.

mode An operational state of the machine. IGT machines typically have five modes: game play, idle, statistical data, self test and tilt.

modem (*acronym for modulator/demodulator*) A device that provides communication capabilities between pieces of computer equipment over common telephone lines.

monitor A display device similar to a television screen used in video games to receive and display game and service information.

monitor mask A molded plastic frame that surrounds the outside edges of the video monitor (or monitors) and enhances the screen display by reducing glare and light reflections from inside the machine.

Montana-style credit A credit mode where all inserted coins are directed to the credits meter up to the credit limit. In order to place a bet toward the next game, the player must play a credit. A win that would cause the credits meter to exceed the credit limit is hopper paid. If this hopper pay amount is greater than the hopper limit, the amount is hand paid. All other wins are paid to the credits meter. The credit limit is set in self test. Anytime when coins are inserted, the player must play at least one game before they are allowed to cash out the accumulated credits.

motherboard A PC board on the lower module that acts as an interface between the processor board and the electrical machine assemblies.

MS-DOS *Microsoft Disk Operation System* An operating system that governs the IBM PC and compatible computers.

multi-coin game Allows the player the opportunity to increase the amount awarded by increasing the amount wagered.

multi-denomination gaming A type of gaming that allows players to choose the value of each credit they wager from a denomination set configured by the operator.

multi-line game Allows the player the opportunity to play multiple paylines on reel slots by increasing the amount wagered.

multiple level progressives Progressive amounts added to second, third, etc., pay levels and displayed. Limited only by machine program capability.

multiplier pay Each win amount is a linear multiple of the number of coins or credits bet. *See bonus pay.*

multiplexer (MPX or MUX) A device that allows several communications lines to share one computer data channel.

NETPLEX An IGT proprietary multidrop serial communication link between the processor and all installed peripheral devices used to transfer information and allow control of peripherals.

network 1) The result of two or more computers being connected to allow them to share the same software and information. 2) A system of interconnected computers and terminals.

network administration Management of software and hardware that connects computers in a network.

- network administrator** The person responsible for setting up and maintaining a network.
- Nevada-style credit** A credit mode where coins may only be inserted up to the maximum bet amount. Any single win greater than the hopper limit is hand paid. All other wins are paid to the credits meter up to the maximum hopper setting.
- Nevada-style noncredit** A credit mode in an S-Plus International game where coins may only be inserted up to the maximum bet amount. Any single win greater than the hopper limit is hand paid. All other wins are paid from the hopper to the coin tray.
- node** 1) Any terminal, computer, or peripheral in a computer network. 2) The connecting point on a component, printed circuit board, or logic element where electrical connections can be made.
- noncredit mode** The machine will accept no more than the max bet allowed per game, and all wins are paid out in coins or by an attendant at the time of the win. If a bill acceptor is present, it functions as a changer only.
- noncredit play** The machine will accept no more than the max bet allowed per game, and all wins are paid out in coins or by an attendant at the time of the win. If a bill acceptor is present, it functions as a changer only.
- note acceptor** (*same as note validator*) Optional assembly that accepts valid paper notes and causes the host machine to either dispense change or issue credits.
- note acceptor pay mode** The available options are credit only (pays only in the form of credits), player initiated (pays either credits or cash depending on the player initiated selection), and noncredit.
- note validator** (*same as note acceptor*) Optional assembly that accepts valid paper notes and causes the host machine to either dispense change or issue credits.
- note validator door** The door which prevents access to the notes accumulated by the note validator.
- NT File System (NTFS)** A type of system used by the Windows NT operating system that organizes and keeps track of files.
- NTFS NT File System** A type of system used by the Windows NT operating system that organizes and keeps track of files.
- NTSC decoder board** An optional PC board that allows video machines to display an NTSC (National Television Standards Committee) signal. DIP switches on the board allow various configurations.
- nudge** The reels in this slot game move up or down one symbol when a nudge symbol hits. Examples of a nudge game are Slam Dunk, Balloon Bars and Knock Down.
- ODBC *Open Database Connectivity*** A standard database access method developed by Microsoft that makes it possible to access any data from application, regardless of which database management system (DBMS) is handling the data.
- ODBC DSN *Open Database Connectivity Data Source Name*** See also *ODBC* or *Open Database Connectivity*. The name of the source directory from which data is taken.
- offline** Not currently communicating with host system.
- online** Communicating with host system.
- Open Database Connectivity (ODBC)** A standard database access method developed by Microsoft that makes it possible to access any data from any application, regardless of which database management system (DBMS) is handling the data.
- operator** A machine operator, owner, service technician or any other person with access to the interior of the machine by opening the front door.
- operator menu** The menu entered by pressing the test switch with the main door open that allows access to accounting, diagnostics, setup and other operator functions. This menu has an on screen display that shows what options are available.
- operator selectable** A value or option that is selectable only by the operator from the operator menu. The default value is one selected at machine configuration.
- optic sensor** An electronic device used to sense mechanical motion and provide an electrical signal of this motion to the microcomputer system. In most of the optic devices used throughout IGT products, there is an infrared (invisible) light source that emits a beam of light on a phototransistor. The device is strategically placed in the machine so that the mechanical motion which is being sensed will block the light path, thus causing a signal change in the output of the phototransistor.
- optical coin detection** The technique of validating coins being put in or being paid out of a gaming device using optical detectors.
- optimum** A calculated payout percentage range for a poker game assuming an optimum (skilled) play strategy for each and every hand.
- optimum player return** The theoretical payback percentage on a poker machine being played according to the best case strategy for each and every hand.
- ordered royal flush** A poker game hand consisting of a royal flush positioned from left to right on the screen.
- OTP *One-Time Programmable*** A memory device that only allows information to be loaded once and must be replaced if a change is needed. See *ROM*.

out of service mode The machine is rendered inoperable without turning the power off.

output 1) Data transferred from a computer's internal storage unit to some storage or output device. 2) The final result of data that have been processed by the computer.

page In video games, one full screen display of information as presented in the self test and statistical data modes.

parallel interface A personal computer interface that uses a multiple-path communication line, often used for printer connection.

partial pay A predetermined number of coins that is paid to the player from the machine coin hopper upon hitting a jackpot. The balance of the jackpot is paid by an attendant. The number of coins paid in the partial pay is usually operator selectable.

partitioned software A slot machine architecture in which the machine's software program is broken down into two separate sections and stored in two separate memories. The overall machine operation instructions are stored separately from the reel strip and payable information.

password A special word, code or symbol that must be presented to the computer system to gain access to its resources. Used for identification and security purposes.

paytable A chart of pay amounts as a function of each winning combination and number of coins or credits bet.

paytable glass The top and/or bottom glass that shows the paytable for that machine.

paytable insert A separate piece of glass or film used when the exterior glass has a grid printed on it, but needs an additional paytable insert behind it representing the paytable.

payback percentage The amount of money the player is expected to win divided by the amount of money played over a long period of time, expressed as a percentage. On games where there is a bonus pay on jackpots won with maximum coins played, the payback percentage will vary slightly, depending on how many coins per game are played.

payout An award from a game.

PCON *Plastic Fiber Universal Converter* A SMART System accessory that converts fiber-optic light signals from the DCUs to RS-232 computer readable code for the FEC. It also converts signals the other way (RS-232 to light).

peripheral An intelligent input/output device connected to the machine such as a touchscreen, a printer, or a bill validator that communicates to the main processor via cables and proprietary interface software.

PEROM *Programmable and Erasable Read-Only Memory* A device that allows data to be rewritten (*same as FLASH*).

Personal Computer-Slot Accounting System (PC-SAS) A data collection package that involves machines linked together via fiber optics.

physical coins-in The number of actual coins physically deposited into a game (differentiated from coin-in, which can be either a coin or a credit that is wagered).

physical stop The actual places where the spinning reel can stop. There is a stop for each symbol shown on the reel strip.

pinwheel A rotating steel disc used in coin hoppers to dispense coins. Small metal pins or raised points located along the outer circumference of the pinwheel provide individual pockets where coins can ride along as the pinwheel rotates. As the coins reach the exit point of the hopper, they are stripped off the pinwheel by the hopper knife.

Play Max (*same as Play X*) A screen button or a physical button. The Play Max function bets the maximum number of credits allowed provided there are enough credits on the credit meter.

Play X (*same as Play Max*) A screen button or a physical button. The Play Max function bets the maximum number of credits allowed provided there are enough credits on the credit meter.

player digital display In reel slot machines, game information is presented as an LED digital display through windows on the slot glass.

player panel switch (*same as player switch*) An input switch that communicates player selections to the processor board. Some player switches also have functions in self test and statistical data modes.

player selectable credit A gaming machine feature that allows the player to play the machine in either credit or noncredit mode.

player server Controls displayed messages that go to the vacuum fluorescent display.

player switch (*same as player panel switch*) An input switch that communicates player selections to the processor board. Some player switches also have functions in self test and statistical data modes.

Player Tracking System (PTS) A data collection package that enables the owner/operator of IGT machines to identify and gather information about players via ID cards and readers.

Player's Edge-Plus® machine IGT Class III video gaming device powered by the Intel® 8032 processor. This machine is no longer manufactured by IGT. Parts and service are available on a limited basis.

- poll** 1) An electronic request for information, usually from a central PC or other computer to various peripheral devices. 2) The process of gathering the meter information from each game and reporting it to the central computer.
- polling address** (*same as machine address*) The address to which the machine responds during communication.
- pop-up menu** A menu that appears on the screen anywhere other than in the standard menu bar location.
- port** The connection that allows communication between a digital system on a PC board and an external device.
- power supply** A circuit that supplies the DC voltages required for the operation of an electronic system. Usually a power supply will convert AC line voltage to the needed DC voltage for a particular system.
- printed-circuit board** A hardware component of a computer or other electronic device, consisting of a flat, rectangular piece of rigid material, commonly fiber glass, to which integrated circuits and other electronic components are connected.
- printed ticket** Some machines utilize a ticket printer rather than a coin hopper. When a win occurs and the player presses the Collect Winnings switch, a printed ticket dispenses from the machine and can then be redeemed for cash.
- prize amount** An amount of money that can be won by playing a game. This could be a fixed amount or in the case of a progressive prizes, an amount that increases based on player activity.
- prize base** The initial prize amount for a progressive prize.
- prize base reset** This value replaces the prize base value when a progressive prize is won.
- prize base revert** When a progressive prize is hit this value is copied to the prize base reset. This allows for a lower prize base reset when prizes are hit close together.
- prize cap** The absolute maximum dollar amount that a prize amount can reach.
- prize contribution** Each progressive prize has a contribution percentage associated with it. This factor is applied to each unit of credit played on the games associated with the progressive prize. The resulting contribution amount is used to increment the prize amount.
- prize maximum** The highest amount a prize can reach.
- prize maximum boost** The maximum dollar amount a prize amount can grow during a 24-hour period.
- probability** A number expressing the likelihood of an occurrence of a specific event.
- processor** The hardware component of a computer that performs the actual computation by directly executing instructions represented in machine language and stored in main memory.
- processor board** The printed circuit board assembly in IGT gaming machines that contains all of the microcomputer system circuitry, and sometimes the interface circuitry associated with the game inputs and outputs.
- Programmable Read-Only Memory (PROM)** A type of ROM device that is programmed after fabrication, unlike ordinary ROM devices, which are programmed during fabrication.
- progressive** A system of pooling a fraction of each wager into a cumulative fund that is available for a top-pay win. A game that increments the prize amount based on player participation. The three kinds of progressives are wide area, local area, and standalone.
- progressive controller** Controls all progressive functions in a progressive link system (several machines linked together to increment progressive totals equally).
- progressive meter** A display meter, linked to the progressive machine(s), that shows the potential prize amounts.
- PROM** *Programmable Read-Only Memory* Memory that can be programmed by electrical pulses. Once programmed, it is read-only.
- protocol** Generically the communication standard between two serial devices. Often used to reference the type of security, accounting and management systems that the machine is designed to communicate with.
- PRTS** *Progressive Real Time System* This is the live or active system. It is in constant communication with all the devices that make up the online progressive system. The main communications interface of the PRTS is the system window.
- PSR** *Program Summary Report* A three or four page report that describes the features, capabilities, self test pages and statistical data information for a game's program version.
- PTS** *Player Tracking System* A data collection package that enables the owner/operator to identify and gather information about players via ID cards and readers.
- pull-down menu** A menu, usually used as an extension to the menu bar, that is hidden until you move the pointer to its title and press the mouse button.
- QUART** *Quad Universal Asynchronous Receiver Transmitter* A communication device that provides four independent full-duplex asynchronous receiver/transmitter channels in one single package.

RAID *Redundant Array of Independent (or Inexpensive) Disks*

A type of disk drive that uses two or more drives in tandem for performance and fault tolerance (the system's ability to respond to an unexpected hardware/software failure.) The following RAID levels provide: Level 0: data striping (spreading out blocks of each file across multiple disks) but no redundancy. This improves performance but does not deliver fault tolerance. Level 1: disk mirroring. Level 3: same as Level 0, but reserves one dedicated disk to be used for error correction data. This level provides good performance and some level of fault tolerance. Level 5: data striping (at the byte level) and also stripe error correction information. This results in superior performance and good fault tolerance.

RAM *Random Access Memory* A memory into which the user can enter information (write) and extract information (read). It is the working memory of the computer as well as the backup memory of game information that is stored in the CMOS RAM chip on the processor board.

random A sample drawn from a population so that each member of the population has an equal chance of being drawn.

Random Access Memory (RAM) Volatile, digital, read/write memory that can easily have its bit pattern changed.

RBP *Rapid Bonus Progressive* A progressive configuration that can increment and pay on up to six levels of winning combinations, rather than just the top and second levels.

Read-Only Memory (ROM) Memory whose contents can be read but not changed; used for storing firmware.

real time A term describing online computer processing systems that receive and process data quickly enough to produce output to control, direct, or affect the outcome of an ongoing activity or process.

real time clock An optional battery-backed clock on the processor board used by some games.

Redundant Array of Independent (or Inexpensive) Disks (RAID) A type of disk drive that uses two or more drives in tandem for performance and fault tolerance (the system's ability to respond to an unexpected hardware/software failure.) The following RAID levels provide: Level 0: data striping (spreading out blocks of each file across multiple disks) but no redundancy. This improves performance but does not deliver fault tolerance. Level 1: disk mirroring. Level 3: same as Level 0, but reserves on dedicated disk to be used for error correction data. This level provides good performance and some level of fault tolerance. Level 5: data striping (at the byte level) and also stripe error correction information. This results in superior performance and good fault tolerance.

reel strip A plastic strip with a set of symbols on a slot reel.

reel strip list Provides exact payable information and symbol alignment on each reel, and is shipped with the machine or with new reel program orders.

Reel Touch Bingo™ Series machine IGT Class II gaming device powered by the Intel® 80960 processor. May be configured for either a touchscreen video monitor or spinning reels. A touchscreen LCD is included in the top box. Available in upright model only.

Reel Touch™ Series machine IGT Class III spinning reel gaming device powered by the Intel® 80960 processor. Includes touchscreen LCD located in the top box. Available in upright model only.

replicated install During the server configuration process, SmartStart gives the user the option of creating a "Replicated Install" diskette which allows the user to save configuration information into "profiles," which can then be used over and over to accelerate the installation process.

reserve fund This account is used by the funding entity to accumulate prize contributions to pay for the prize base. As prize amounts are won, the prize base reset is used to decrement the amount.

reset amount The starting amount for a progressive jackpot which is also the amount that is displayed after the progressive is hit.

reset switch A key-activated switch that: enables option selections within some self test pages; enters and advances through the statistical data mode; and resets the machine's internal progressive parameters (as applicable) after a jackpot.

retail site An establishment where gaming machines are played. This term is also synonymous with location, venue, and retail location.

RFA *Resident Flash Array* This is an onboard flash memory for the Vision LCD operating system that needs periodic updating to function with new releases of the bonusing game software.

RISC *Reduced Instruction Set Computer* A type of central processing unit that usually has a smaller number of instructions that can be completed in 1-2 clock pulses.

ROM *Read-Only Memory* Memory whose contents can be read but not changed; used for storing firmware.

royal flush A poker game hand consisting of a 10, Jack, Queen, King, and Ace of the same suit.

RS-232 A common standard for serial data communication interfaces.

- RS-232 cable** Any cable that is wired in accordance with the RS-232 standard.
- RS-422** A standard for serial data communication interfaces, different from the RS-232 standard in its electrical characteristics and in its use of differential pairs for data signals.
- RS-485** The electrical interface for a high-speed serial port.
- RTS *Real Time System*** The software which controls the collection of data from the CVT.
- S2000™ machine** IGT Class III spinning reel gaming device powered by the Intel® 80960 processor. This machine is available in a 3-reel slant top, and 3- or 5-reel upright models.
- S2000™ Barcrest Series machine** IGT Class III spinning reel gaming device featuring a Barcrest top box fitted on an S2000™ base machine. Powered by the Intel® 80960 processor. Available in an upright model only.
- S2000™ Bonus Reel Series machine** IGT Class III spinning reel gaming device powered by the Intel® 80960 processor. Includes three conventional spinning reels and one bonus reel. Available in upright model only.
- S-Plus™ machine** IGT Class III spinning reel gaming device powered by the Intel® 8032 processor. This machine is no longer manufactured by IGT. Parts and service are available on a limited basis.
- S-Plus™ Limited machine** IGT Class III spinning reel gaming device featuring a Barcrest top box fitted on an S-Plus™ base machine. Powered by the Intel® 8032 processor. No longer manufactured by IGT. Parts and service are available on a limited basis.
- SAMS *Security Accounting Management System*** A system that provides a secure environment to operate electronic gaming devices at a remote location using a cluster controller for communications with the EGMS.
- SAS *Slot Accounting System*** A data collection and accounting package developed by IGT. Data on machine activity is transmitted to a controller which, in turn, transmits the collected data to a computer.
- scanner** See *handheld terminal*.
- schematic** An abstract representation of a complex device or concept, such as an electrical schematic.
- screen button** The graphical representation of a button drawn on the video screen simulating the function of a physical button when the screen is touched within the screen button boundary.
- scrolling** The vertical or horizontal movement of information (text or graphics) on a display screen in order to display additional information.
- SDS™ *Slot Data System*** An accounting system product of Bally Gaming Systems®.
- self test mode** The software mode that allows processor board input and output tests and enables option selections.
- self test switch** A service control switch that enters and advances through the self test mode, and enables data transfer between the CMOS RAM and EEPROM chips.
- Semi-Euro credit** A credit mode where coins may only be inserted up to the maximum bet amount. Any single win greater than the hopper limit is hand paid. A win that would cause the credits meter to exceed the credit limit is hopper paid. All other wins are paid to the credit meter. The credit limit is fixed at 9999.
- SENET *Synchronous Expansion Network*** An IGT proprietary I/O controller capable of handling 256 inputs and 256 outputs (switches, lamps). An auxiliary multiplexed channel providing 2,048 additional outputs.
- serial communication** Data communicated over a single-path communication line, one bit at a time.
- serial interface** An interface driver that controls communication via serial ports, between application and serial peripheral devices.
- serial number** The machine serial number which is stamped into the serial number tag on the outside of the machine.
- server** A network computer or device that manages the network's resources. Servers are often dedicated (they perform only their server tasks.) However, on multiprocessing operating systems, a single computer can simultaneously execute several programs. In this case, the server would refer to the program that is managing the network's resources rather than the entire computer.
- service light (candle)** A light assembly that mounts either on top of the machine or in a remote location and indicates various machine modes and game conditions. Most service lights have two or more stages, or sections, stacked vertically.
- seven-segment display** An LED display device that is composed of seven separate straight bars of light that displays the digits 0 to 9 when the appropriate bars are illuminated.
- shelf wheel** A round metal disc attached to the hopper pinwheel. The shelf wheel works with the pinwheel to position coins for ejection.
- side eject hopper** The standard type hopper in most upright gaming machines that ejects coins in a sideward direction.

Simple Network Management Protocol (SNMP) A set of protocols used to manage complex networks by sending messages, protocol data units (PDUs), to different parts of a network. SNMP-compliant devices, known as agents, store data about themselves in Management Information Bases (MIBs). When requested, agents send their MIBS, which report whether a device is functioning properly, to the SNMP requesters.

single/double progressive Refers to the progressive operations of one or two top awards. Single progressive allows only the top award to be progressive. Double progressive allows the top two awards to be progressive.

SIS Slot Information System A data collection package that enables the owner/operator of machines to keep information on players, as well as accounting information and statistical information related to machine events.

site An establishment where gaming machines are played. This term is also synonymous with location, venue, retail site, and retail location.

site ID A number used by the system to identify a location data record based on the ADSC, modem and CCOM numbers.

slant-top A type of machine with a slanted top from which the game is viewed while the player is typically seated.

slave monitor board A processor board that controls the video functions of the upper monitor in a dual-monitor machine or module.

slot game A type of machine that utilizes spinning slot reels or a video simulation of reels. A win occurs when reel symbols line up in a specified manner.

slot handle An optional handle located on the right side of a slot machine. Pulling the handle after a wager causes the reels to spin.

Slot Information System (SIS) A data collection package that enables the owner/operator of machines to keep information on players, as well as accounting information and statistical information related to machine events.

slot reel The part of a slot machine that holds one reel strip and spins. Machines generally have three or more independent slot reels.

SMART card reader A device, connected to a workstation computer, that reads player or employee cards and allows access to player or employee records for display or update.

SMART System Slot Marketing And Revenue Tracking System Modular system that is capable of providing player tracking, automating the accounting of a slot department, strengthening casino slot security and defining marketing targets.

SmartStart The XVU server configuration process is guided by Compaq's SmartStart®, a graphical interface program. This program prepares the system for the loading of Microsoft's Windows NT Server and its service pack. Next, SmartStart prompts for the loading of Microsoft's SQL Server 7 and its service pack, and finally the EZ Pay Ticket System is installed.

SMIB Slot Machine Interface Board A device containing logic and interface boards inside the card box or gaming machine. These boards store machine data until polled by the DCU.

SNMP Simple Network Management Protocol A set of protocols used to manage complex networks by sending messages, protocol data units (PDUs), to different parts of a network. SNMP-compliant devices, known as agents, store data about themselves in Management Information Bases (MIBs). When requested, agents send their MIBs, which report whether a device is functioning properly, to the SNMP requesters.

soft count The counting of paper currency and financial instruments (e.g., markers) generated by gaming operations.

soft drop The controlled process of removing bills from bill acceptors located in gaming machines.

soft meter An internal accounting system that can be displayed on the screen of a video machine, or in the coin window on a reel slot machine. The signals that increment or drive the hard meters are derived from the soft meter data, and the soft meters can be reset to zero.

solenoid An electromagnetic device used to convert electrical energy into mechanical energy. The solenoid consists of a coil which, when energized, becomes a magnet. The magnet then causes a metal component to move in order to activate a mechanical device.

spectrum display A dot-matrix, multi-color display device used to display the amounts in a progressive system.

split pay An option that makes it possible to divide the game's cash-out amount between the hopper and the printer.

SQL Structured Query Language A standardized query language that allows a user to request information from a database.

SSR Solid State Relay A relay built primarily from integrated circuits and other electronic systems containing no moving parts as part of their prime functions.

stand The wood or metal base, housing the drop box, to which a standard upright machine is attached.

standalone progressive A progressive game played for a prize amount that can only be won on one machine.

- Standard Euro credit** A credit mode where once the maximum bet is reached, all inserted coins are accumulated as credits in the credits meter up to the credit limit. A win that would cause the credits meter to exceed the credit limit is hopper paid. If this hopper pay amount is greater than the hopper limit, the amount is hand paid. All other wins are paid to the credits meter. The credit limit is set in self test.
- statistical data mode** The software mode that displays statistics accumulated in the game play mode, such as the number of coins in or the number of credits won.
- stepper motor** A motor used for precision motion control. Stepper motors rotate by applying a pulsed voltage to their windings. Each pulse causes the stepper motor shaft to rotate only a few degrees.
- straight flush** A poker game hand consisting of five cards of the same suit with consecutive values.
- Structured Query Language (SQL)** A standardized query language that allows a user to request information from a database.
- subdirectory** A directory within a directory.
- super cap** The large capacitors, C14 (.22F) on the SMIB logic board, and C26 (.47F) on the DCU board, which act as battery backup to RAM. They can maintain RAM up to seven days.
- synchronous** Two or more procedures occurring at the same time controlled by a mutual timing signal or clock.
- synchronous transmission** A data transmission in which the bits are transmitted at a fixed rate. The transmitter and receiver both use the same clock signals for synchronization.
- tape backup** A mechanism that reads and writes information on magnetic tape to provide a copy of user's data in case of an accident.
- telecommunication** Transmitting information in a telegraphic or telephonic manner by line or radio transmission.
- Telltale-Plus** The circuitry which allows the machine to determine if any of the high security doors, including the main door, and processor board on the machine were opened while the power was turned off.
- terminal** The main console (keyboard and screen) of a system.
- terminator** A component used at the end of a daisy-chain cable run to complete the circuit.
- theoretical hold** The percentage of each credit that the machine will keep as gross profit.
- tilt** An error in machine operation that suspends game play. Tilts can be caused by hardware or software problems and must be corrected before game play can continue.
- Token credit** A credit mode only available when the appropriate set chip has been used to select the credits per coin (token) amount. By selecting a nonzero number for the credit amount, the token credit mode can be selected in self test, while selecting a zero disables the credit mode. If the game was in token credit mode before using the set chip to change the credit amount to zero, the game defaults to Montana-style credit mode when powered up. (Refer to Montana-style credit.)
- top box** An enclosed area at the top of the machine that typically contains a light box and display glass, a candle and/or various optional assemblies.
- top glass** A silkscreened piece of glass that fits into the top part of a game and usually shows the payable.
- top panel** The main machine door on bar top and slant-top machines. The top panel typically contains the player switches and/or other player input devices, coin entry, coin tray, video or slot glass and other components.
- touch panel** A player input device on some video games, such as touch-panel keno. When the player touches a designated area on the panel, a corresponding area on the video screen is activated.
- touchscreen** A video monitor that also acts as an input device by the action of touching specific locations of the screen to perform some activity or action.
- touchscreen button** The graphical representation of a button drawn on the screen simulating the function of a physical button when the screen is touched within the screen button boundary.
- Transaction Processor Engine (TPE)** A set of programs that monitor and control the machines and are responsible for coordinating prize amounts, accumulating group meters, gathering game meters data and ensuring the integrity of the system.
- translator** Compatibility buffer between ABS and IGS.
- Transistor-Transistor Logic (TTL)** 1) A family of integrated circuits having bipolar circuit logic. 2) A standard for interconnecting such circuits, which defines the voltages used to represent logical 0s and 1s.
- twisted-pair wire** A type of wire that is made up of a pair of insulated copper wires twisted around each other to equalize, and therefore negate, outside electromagnetic interference. There are two varieties shielded twisted pair and unshielded twisted pair.

UART/DUART *Universal Asynchronous Receiver/Transmitter and Dual Universal Asynchronous Receiver/Transmitter* These are integrated circuits that are used to communicate data from gaming machines to various accounting and security systems. The UART is a single device, i.e., one per package. The DUART is a dual device, i.e., two per package.

unit of credit One unit of credit is equivalent to one unit of the base denomination associated with the game.

upright machine A type of machine that stands erect, usually attached to a stand. The machine door is hinged on the side and the game is viewed from the front.

Vacuum Fluorescent Display (VFD) A small graphic display used to convey game play, diagnostic, status and other messages to the player, attendant or operator.

VBatt Battery voltage.

Version 1 CVT The term used to refer to CVTs that are connected to video/reel machines with hoppers.

Version 2 CVT The term used to refer to CVTs that are connected to video/reel machines with ticket printers.

VGD *Video Gaming Device* A gaming machine. This term is also synonymous with EGM, machine, gaming machine, VGM and VLT.

VGM *Video Gaming Machine* A gaming machine. This term is also synonymous with EGM, machine, gaming machine, VGD and VLT.

video monitor A display device similar to a television screen used in video games to receive and display game and service information.

Vin Voltage in.

virtual reel The term used for electronic slot machines in which the number of reel stops in the computer program is greater than the number of stops on the actual reels of the machine.

Vision Series® machine IGT Class III spinning reel machine powered by the Intel® 80960 processor. Includes LCD located in the top box. Available in slant top and upright models.

VLT *Video Lottery Terminal* A type of game that is connected to a central computer system via a communications system. Video lottery customers often receive payment in the form of printed tickets that can be redeemed for cash.

voucher A printed ticket from a video lottery terminal (VLT) which is redeemed for cash in lieu of direct payment as with a gaming machine.

Vout Voltage out.

WAN *Wide Area Network* A network of geographically distant computers and terminals.

wand See *handheld terminal*.

WAP System *Wide Area Progressive System* A group of progressive games that are played for a prize amount funded by the controlling agency. Refers to games such as Megabucks® and Quartermania®.

Wide Area Network (WAN) A network of geographically distant computers and terminals.

win Usually refers to the dollar value of a gaming machine's hold percentage. It is calculated by multiplying the coin-in value in dollars times the hold percentage.

window A portion of the video display area dedicated to some specified purpose. Special software allows the screen to be divided into multiple windows that can be moved around and made bigger or smaller. Windows allow the user to treat the computer display screen like a desktop where various files can remain open simultaneously.

workstation 1) An individual work area that includes one or more devices on a network 2) A node through which a user can access a server or other nodes.

XVU *Cross Validation Unit* A device that allows several clerk validation terminals (CVTs) to share ticket data so that patrons can redeem tickets at any other system-linked CVT or machine.

Index

A

- Access
 - Changing 42
 - Levels 10
- Adding Operators 40
- Address, IPC 49
- Alarms
 - Responding 58
 - Setting Audio Levels 45
 - Troubleshooting 58
- Audio Levels, Setting 45

B

- Batteries, Checking 38
- Break, Taking 40

C

- Changing
 - Access 42
 - Date and Time 46
 - I/O Timeout 47
 - Operator Passwords 41
 - Operator Privileges 42
 - Printer Paper 60
 - Security Levels 42
 - System-Level Password 37
- Checking
 - Batteries 38
 - CMOS Battery 38
 - Fiber-Optic Loop 38
 - TT Battery 38
 - XMEM Battery 38
- Cleaning the IPC 59
- Communication Parameters, IPC 50
- Components
 - IPC System 2
 - IPC Unit 6
- Configuration Parameters 50

- Configuration Reports
 - Progressive Group Configuration Report 28
 - Progressive Paytable Configuration Report 29
- Configure Function 48
- Configure Menu Overview 19
- Customer Services iii

D

- Date and Time 46
- Deleting Operators 43
- Displaying
 - IPC Address 49
 - IPC Communication Parameters 50
 - IPC Configuration Parameters 50
 - IPC Host Protocol Version 51
 - IPC ID 51
 - IPC Version 51
- Documentation
 - Related Manuals 61

E

- EGM
 - Paytable List 34
 - Status 49

F

- Features 3
- Fiber-Optic Loop
 - Checking Status 38
 - Overview 2
- Forcing Log Out 39
- Functions
 - Configure Menu 48
 - Mode Menu 37
 - Reports Menu 52
 - Status Menu 49

G

- Game Machine Paytable List 34
- Game Machines, Checking the Status 49
- Generating an Operator ID List 44

H

- Host Protocol Version 51

I

- I/O Timeout 47
- ID
 - IPC 51
 - Operator 40
 - Operator List 44
- Inspecting the IPC 59
- Introduction 1
- IPC 50
 - Address 49
 - Cleaning 59
 - Communication Parameters 50
 - Configuration Parameters 50
 - Features 3
 - Forcing Log Out 39
 - Host Protocol Version 51
 - ID 51
 - Inspecting 59
 - Keypad 8
 - LEDs 7
 - Logging In and Out 39
 - Maintenance 55, 59
 - Overview 2
 - Powering Up 36
 - Setting Audio Levels 45
 - System Components 2
 - Taking a Break 40
 - Troubleshooting 55
 - Unit Components 2
 - Version 51

J

Jackpot Meter Report 33

K

Keypad

- Overview 8
- Setting Audio Levels 45

L

LEDs 7
Levels of Access 10
Logging In and Out 39

M

Machines

- Checking the Status 49
- Game Machine (EGM) Paytable List 34

Maintenance 55, 59

Menus

- Configure Menu 19
- Main Menu 11
- Mode Menu 12
- Reports Menu 22
- Status Menu 20

Mode Menu 40

- Adding Operators 40
- Changing
 - Operator Passwords 41
 - Operator Privileges 42
 - System-Level Password 37

Checking

- Batteries 38
- Fiber-Optic Loop Status 38

Deleting Operators 43

Forcing Log Out 39

Functions 37

Generating an Operator ID List 44

Logging In and Out 39

Overview 12

Setting

- Audio Levels 45
- Date and Time 46

Taking a Break 40

Testing the Printer 47

Modifying

- I/O Timeout 47

O

Operator ID Functions

- Adding Operators 40
- Changing Operator Passwords 41
- Changing Operator Privileges 42
- Deleting Operators 43
- Generating an Operator ID List 44

Operator ID List 44

Operator Maintenance Functions 40

Operator Privileges 42

Operators

- Adding 40
- Changing Passwords 41
- Changing Privileges 42
- Deleting 43

Overview, IPC 2

P

Paper

- Changing 60
- Jams 60

Parameters

- IPC Communication 50
- IPC Configuration 50

Parts Ordering (Customer Services) iii

Passwords

- Operator 41
- System-Level 37

Paytable Meter Report 32

Performance Meter Report 31

Powering Up the IPC 36

Printer

- Paper 60
- Paper Jams 60
- Testing 47, 57
- Troubleshooting 56

Printing Reports 53

Prize Reports 30

- Progressive Current Prize Hit Report 30

- Progressive Previous Prize Hit Report 31

Progressive Current Prize Hit Report 30

Progressive Group Configuration Report 28

Progressive Meter Report 29

Progressive Paytable Configuration Report 29

Progressive Previous Prize Hit Report 31

Protocol Version 51

R

Report Functions 52, 53

Reports 52

- Game Machine (EGM) Paytable List 34

Jackpot Meter Report 33

Overview 22

Paytable Meter Report 32

Performance Meter Report 31

Printing 53

Prize Reports 30

Progressive Current Prize Hit Report 30

Progressive Group Configuration Report 28

Progressive Meter Report 29

Progressive Paytable Configuration Report 29

Progressive Previous Prize Hit Report 31

Security Event 27

Terminal Meter Report 33

Reports Menu Overview 22

Responding to Alarms 58

S

Security Access Levels 10

Security Event Report 27

Setting

- Audio Levels 45
- Date and Time 46
- I/O Timeout 47

Status Menu

- Checking Game Machine Status 49
- Displaying the IPC Address 49
- Displaying the IPC Communication Parameters 50
- Displaying the IPC Configuration Parameters 50
- Displaying the IPC Host Protocol Version 51
- Displaying the IPC ID 51
- Displaying the IPC Version 51
- Functions 49
- Overview 20

Status of Game Machines 49

Support Calls (Customer Services) iii

System-Level Password, Changing 37

T

Taking a Break 40
Technical Support (Customer Services) iii
Tell Tale (TT) Battery, Checking 38
Terminal Meter Report 33
Testing the Printer 47, 57
Time 46
Timeout 47
Troubleshooting 55, 56
 Alarms 58
 Changing Printer Paper 60
 Printer 56, 57

V

Version, IPC 51

W

Web Site iii
www.IGT.com iii

X

XMEM Battery, Checking 38

