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Program Summary Report for Vision Slot Version SG000380

COMPLETE SET OF SLOT GAME CHIPS

- Game PROM** The main game logic is stored on a set of two programmable read-only memory chips (PROMs), which are 27C801 or 27C080 devices. The labels indicate STEPPER GAME, GME1 or GME2, and the game version (SG000380).
- Base PROM** The companion base PROM, which is a 27C240, 27C4002, or 27C4096 device, contains some of the game sounds and the payable information. The base PROM should match the reel strips and top glass installed on the machine. The label indicates STEPPER BASE and the SB number, which identifies the payable (SBxxxxxx).
- Key Chip** The key chip is required to change some game options, such as the denomination. The key chip is a 27C4002 or a 27C240 device and is labeled with the key chip number KEY00031.
- Clear Chip** This IGT utility program enables the operator to clear the game memory. Use IVC00223 (or replacement) to clear RAM or use IVC00224 (or replacement) to clear RAM and EEPROM.
- Version PROM** The version PROM controls what is available to meet special jurisdictional requirements and controls what certain features and options are available. The label indicates STEPPER VERSION and the version number:

VERSION	DESCRIPTION
VS011CX0	single denomination – Colorado ONLY
VS011CX1	multi-denomination – Colorado ONLY
VS011GX0	single denomination
VS011GX1	multi-denomination
VS011GX2	multi-denomination with denomination-plus mode
VS011IH0	single denomination – Netherlands ONLY
VS011IH1	multi-denomination – Netherlands ONLY
VS011IX0	single denomination – International
VS011IX1	multi-denomination – International
VS011NX4	single denomination – New Jersey ONLY
VS011NX5	multi-denomination – New Jersey ONLY

- VFD** The VFD program controls the vacuum fluorescent display. The label indicates VACUUM FLOR DISPLAY and the VFD number. VFD00007 is required for controller boards with part number 75117700. VFDF3001 is required for controller boards with part number 75120400. Some game themes require an additional display. The number (VFD1xxxx) is dependent on the game theme.
- LCD System Driver** The multi slave program is responsible for playing sounds and displaying information such as tilt messages and menu options. The label indicates the factory-installed ATA

number and the bonus game modules (BGM). SG000380 requires ATA10065 (or their replacements).

Optional

Spectrum Display SDF100 is required for controller boards with part number 75512602.
SD0111 or SD0112 is required for controller boards with part number 75512600.
SD0092 is required for controller boards with part number 75508400.

NOTE: For spectrum text messaging capability, SDF100, SD0112, or later versions must be used.

GAME TYPE

This version supports Vision games with MD3 O/S capabilities. The available games are:

VISION GAMES

Bonus Wheel	Heartbreaker	Pink Slip
Cash Advance	Mata Hari 3-Reel	Quest
Cleopatra 3-Reel	Mata Hari 5-Reel	Run For Your Money
Cleopatra 5-Reel	Ms. Little Green Men 3-Reel	Sea Treasure
Dick Clark's New Year'Rockin' Eve	Ms. Little Green Men 5-Reel	Shooting Gallery
Double Diamond Run 3-Reel	Mystery Diamond Multiplier	Slingo
Double Diamond Run 5-Reel	Munster Match	Star Gazer
Double Ringer	Palio Pix	Tee Time
Five Time Pay Bonus Spin	Panther Bucks	The Fishin' Game
Fox 'N' Hound	Pick a Panther	Two Ways to Win
Hook Line & Winner	Pinball	

FEATURES AND CAPABILITIES

Advanced Fund Transfer	To use Advanced Fund Transfer (AFT) capabilities, a terminal asset number must be entered and saved. AFT transactions can include downloading and uploading cashable, non-restricted promotional, and restricted promotional amounts; bonus awards; and debit transfers, depending on the host system configuration. NOTE: If SAS disables the game, AFT transactions will not be allowed except for AFT cash outs.
Bill Validator	Uses ID-024. The settings in the pay mode submenu determine how accepted bills are paid.
Candle Operation	On a two-stage candle, the top level lit signifies a change request or machine-disabled mode. A slow flash on the top level signifies a tilt or hand-pay condition. A fast flash on the top level signifies the Operator or Attendant Menu is being accessed. A medium flash on the bottom level signifies the main door is open. A fast flash on the bottom level signifies the drop door is open. On a four-stage candle, the top level signifies a hand-pay condition, the second (from top) level signifies a request for change/service, the third (from top) level signifies a tilt condition, and the bottom level signifies a door-open condition.

The candle can be set to progressively increase the flash rates listed above for hand pays, non-door tilts, and system errors. The number of minutes that the candle flashes at each rate can be set in the Reactive Candle Timer submenu.

NOTE: The international version PROM is required for the four-stage candle.

Coins In

Multi-Denomination - Inserted coins are directed to the credit meter.

Single Denomination – Coin handling is set in Key Chip Menu 7.1.10.2.

Inserted coins can be directed to the credit meter only up to the credit limit or to the coins played meter up to the maximum bet with additional coins directed to either the player or the credit meter. If using a multi-coin, multi-line payable, coins are always directed to the coins/credit meter.

Credit Roll Up

After a winning game, the player can press the SPIN or BET buttons to speed up or immediately complete the credit roll up.

Delayed Hand-Pay Reset

The purpose of this feature is to prevent an inadvertent entry into the Attendant Menu when clearing a hand-pay condition. When the reset key is turned to clear the hand-pay lockup, the Attendant Menu cannot be accessed for five seconds.

Denomination

Acceptable denominations are 0.01, 0.02, 0.03, 0.05, 0.10, 0.20, 0.25, 0.50, 1, 2, 2.50, 5, 10, 20, 25, 50, 100, 200, 250, 500, 1,000, 2,000, 2,500, and 5,000.

A Select Credit Value button is present with the 7-Segment display type “5-5-2” (IGT p/n 7511790x). Pressing the Select Credit Value button changes the denomination value displayed on the VFD.

An *EZ Play Selectable Multi-Denomination Keypad* is present with the 7-Segment display type “6-6-3” (IGT p/n 7512840x and 7512830x).

Touching the touchpad buttons changes the denomination.

The denominations that are displayed are set with the key chip. When the Bet One Credit or Play x Credits button is pressed, the game uses the selected denomination for the wager. The denomination cannot be changed until the current game is completed.

EZ Pay (Voucher In/ Voucher Out)

The EZ Pay feature validates voucher redemption and voucher pay outs through SAS communication with a host machine. To redeem vouchers, the following are required: the bill acceptor/validator has voucher acceptance firmware; the validation type is set to enhanced in the Key Chip Menu; the validation security option is enabled in the Options Menu; voucher redemption set to either SAS or Distributed in the Key Chip Menu; SAS communications supporting EZ Pay is installed; a unique SAS address is set; and the machine is enrolled by the EZ Pay system. If the machine is to print vouchers, a thermal printer and appropriate printer software must be installed and enabled. EZ Pay features vary, depending on the printer, enhanced validation, validation security, and voucher redemption option settings. For more detailed information, refer to the CONFIGURATION TABLE.

Information System

Bally Miser (SDS), (IGT) SAS 6.0, and Wide Area Marketing Monitoring system (WAMM).

Jackpot to Credit	<p>The purpose of this feature is to minimize the number of jackpot hand pays that must be made with high denomination machines. To use this feature, a second reset key must be installed on the machine.</p> <p>Jackpots can be reset to the credit meter only if the following conditions are met: The win must be equal to or greater than the jackpot limit and the win must be less than both the credit limit and the W-2G limit. If, in the W-2G controller menu, the reset option is configured to “SAS Controller” the jackpot cannot be reset until authorization is sent to the machine by the SAS system, and the operator must turn the second reset key to place the win on the credit meter. If the reset option is set to “USER Controller,” system authorization is not required, and the operator has the option of turning the first reset key to hand pay the win, or turning the second reset key to reset it to the credit meter. Whenever the jackpot does not meet the eligibility requirements, the operator must hand pay it.</p>
Mechanical Meters	<p>The default meters are total amount played, total amount won, and amount to drop. If installed on the machine, the fourth meter displays the number of jackpots x 10, the fifth meter displays total games played, and the sixth meter displays canceled amounts.</p> <p>NOTE: <i>If using an international version PROM, the fifth meter displays the credit value of the bills inserted</i></p>
Out of Service Mode	The service menu is available from the Operator Menu only and renders the machine inoperable without turning the power off.
Player Cashout Menu	If this option is enabled, this menu item allows player-selectable cash out options. If a ticket printer is available, the player can divide the cash out between the hopper and ticket. Upon cash out, the game uses the limits selected by the operator (hopper, credit, and jackpot) to determine the eligible devices and prompts the player to select from the available options.
Progressive Features/Displays	Standalone, link, and SAS progressive capabilities can be enabled, provided that the payable used includes progressive awards.
Receipts and Vouchers	<p>To print vouchers and receipts, a thermal printer configured with the appropriate software must be installed, and the printer option must be enabled.</p> <p>Receipts for jackpots & hand pays. If this option is enabled, accounting receipts are printed for jackpot and hand-pay conditions.</p> <p>Voucher rejection. If a validated voucher is inserted into a hopper-only machine whose player-selected denomination(s) are not compatible, the voucher is rejected. For example, if a player inserts a voucher for \$0.15 into a machine whose minimum player denomination is set for \$0.25, the voucher is rejected. There is no limit to the number of times a voucher can be inserted into and rejected by the machine. Numerous voucher rejections do not cause the change lamp to light.</p>
Reel Stops	The machine uses 22 physical stops per reel.
System Bonusing Capabilities	To use the bonus features, the communication system must support SAS 4.0 or later, the SAS polling address must be set to 001, and the system

bonusing option must be set to System Bonus Legacy with the key chip. When the Legacy bonusing option is selected, two bonus features are enabled at the same time: bonus pays and multiplied jackpot mode. These features cannot be enabled or disabled individually. Wins from game play and pending bonuses are awarded at the end of each game. The multiplied jackpot mode allows wins to be multiplied by a number (one to ten) that is supplied by the SAS host. The minimum and maximum win amounts that are eligible to be multiplied are also sent by the SAS host.

Wins and Cash Outs

If a player wins a system bonus, the Winner Paid window indicates the total amount won, which is the sum of the base game win and the system bonus win. The amount of just the bonus win appears on the VFD. If a player is awarded credits and cashes out prior to beginning another game, the Winner Paid window alternately displays the amount won and the amount cashed out.

CONFIGURATION TABLE

Printer		Validation Mode			Validation Security		Features
Off	On	Std	Enh	Sys	Off	On	
EZ Pay Configuration with Printer							
	x		x			x	<ul style="list-style-type: none">Fixed denomination or multi-denomination.EZ Pay communication system enrollment required.Cash vouchers may be validated and printed.Hopper operation is optional.Hand pays are validated, and optional accounting receipts may be printed.Vouchers are accepted by the machine when authorized by the system.If communication with the EZ Pay system is lost, cash vouchers will not be printed. The machine validates hand pays and prints optional accounting receipts until the validation buffer is full. When the buffer is full, the gaming machine is disabled.
	x		x			x	<ul style="list-style-type: none">This is a temporary recovery mode to be used when the EZ Pay system is not available. Information on hand pays that occur while in this mode is lost. Information in the validation buffer is reported when the EZ Pay system becomes available.Fixed denomination or multi-denomination.EZ Pay communication system enrollment not required.Hopper-only operation. No cash vouchers are printed.Hand pays are not validated, and accounting receipts are not printed.Vouchers are accepted by the machine when validated by system.
EZ Pay Configuration without Printer							
x			x			x	<ul style="list-style-type: none">Fixed denomination or denomination plus.EZ Pay communication system enrollment required.Standard hopper operation.Hand pays are validated.Vouchers are accepted by the machine when validated by system.If communication with the EZ Pay system is lost, the machine validates hand pays until the validation buffer is full. When the buffer is full, the gaming machine is disabled. Information in the validation buffer is reported when the EZ Pay system becomes available.

Printer		Validation Mode			Validation Security		Features
Off	On	Std	Enh	Sys	Off	On	
x			x		x		<ul style="list-style-type: none"> This is a temporary recovery mode to be used when the EZ Pay system is not available. Information on hand pays that occur while in this mode is lost. Information in the validation buffer is reported when the EZ Pay system becomes available. Fixed denomination or denomination plus. EZ Pay communication system enrollment not required. Hopper only operation. Hand pays are not validated. Vouchers are accepted by the machine when authorized by the system.
Non-EZ Pay, Secure Validation Configurations							
	x			x	Not available		<ul style="list-style-type: none"> Fixed denomination or multi-denomination. Appropriate secure validation communication system required. Cash vouchers may be validated by the system and printed. Hopper operation is optional. Hand pays are not validated by the gaming machine, and accounting receipts are not available. Vouchers are accepted by the machine when authorized by the system.
x				x	Not available		<ul style="list-style-type: none"> Not a valid configuration.
Other Configurations							
	x	x				x	<ul style="list-style-type: none"> Fixed denomination or multi-denomination. Communication system required. Cash vouchers may be validated and printed. Hopper operation is optional. Optional accounting receipts may be validated and printed. Gaming machine becomes disabled when five or more validations are in buffer.
	x	x			x		<ul style="list-style-type: none"> Fixed denomination or multi-denomination. No communication system required. Cash vouchers may be validated and printed. Hopper operation is optional. Optional accounting receipts may be validated and printed.
x		x			No effect		<ul style="list-style-type: none"> Fixed denomination or denomination plus. No communication system required. Standard hopper operation.

MENU ACCESS

Four buttons are used to navigate through the menus. Press CHANGE to move up through the menus, and press CASH OUT to move down through the menus. Press SPIN REELS to enter a submenu when the desired submenu is highlighted on the LCD, if present, or displayed on the VFD. Press PLAY MAX CREDITS to exit menu screens. If present, the LCD displays the Up, Down, Enter, Exit, etc., icons, which serve as prompts to indicate the function of the corresponding player buttons. The icons cannot be used for navigation

Attendant Menu

To enter this menu, turn the jackpot reset key while the machine is in a tilt condition or while it is idle without any coins wagered. The submenus are:

- Accounting
- History Displays
- I/O Tests

The Attendant Menu can still be accessed during a communication failure between the LCD, if present, and the machine.

Operator Menu

This menu can be entered only while the machine is idle. Options that do not require the key chip can be accessed from the Operator Menu. To enter this menu, open the door and press the Self Test switch.

Key Chip Menu

If credits are not accumulated, open the main door and turn the machine power off. Remove the base PROM from the processor board. Insert the key chip into the base PROM socket. Turn the power on. If the processor board has green LEDs, wait until the two green LEDs are lit; otherwise, wait until the first two amber LEDs are lit. Turn the power off. Remove the key chip. Re-insert the base PROM. Turn the power on. The options displayed in the Key Chip Menu vary by jurisdiction.

1 ACCOUNTING

This submenu is available from the Operator and Attendant Menus. The meters are displayed in dollars and cents for multi-denomination or in credits for single denomination depending on the version program used.

NOTE: The master and period bill accounting meter pages display different bill sets depending on the version PROM used (e.g., international versus domestic).

1.1 Terminal Accounting

1.1.1 Terminal Master Accounting

These meters provide information that is accumulated from all of the games played on the machine, regardless of the game payable.

1.1.1.1 Terminal Master Money Accounting: Contains the meters required to balance the machine and to verify that the payback and hold percentages match their theoretical values. Examples of the meters are coins in, coins out, drop, and payback percentages.

1.1.1.2 Master Statistics: Contains statistical data. Examples of the meters are games played, games won, and games lost.

1.1.1.3 Master Bill Accounting: Contains a record of accepted bills.

1.1.1.4 Master Cashless Accounting: The submenus within this page contain the amount downloaded and uploaded through the cashless systems.

- **1.1.1.4.1 Master Legacy Cashless Meters:** Contains the amount downloaded through the EFT system.
- **1.1.1.4.2 Master AFT Meters:** Contains the amount downloaded and uploaded through the AFT system.
- **1.1.1.4.3 Master Current Cashless Meters:** Contains the current cashable credits, cashable promotional credits, and non-cashable promotional credits.
- **1.1.1.4.4 Master Cashless Total Meters:** Contains the total amounts uploaded and downloaded through the cashless systems.

1.1.1.5 Master Voucher Accounting: The submenus within this page contain the amounts of vouchers printed and redeemed through the SAS or Bally host systems.

- **1.1.1.5.1 Master SAS Voucher Meters:** Contains the current amount of vouchers printed or redeemed through the SAS host system.
- **1.1.1.5.2 Master Bally Voucher Meters:** Contains the current amount of vouchers printed or redeemed through the Bally host system.
- **1.1.1.5.3 Master Voucher Total Meters:** Contains the total amount of vouchers printed or redeemed through the SAS and Bally host systems.

1.1.2 Period Accounting

The submenus within 1.1.2 provide the same information as the terminal master accounting meters described above. However, they only represent totals accumulated since the meters were last reset and exclude the Master Current Cashless Accounting meters. To reset the meters, enter the 1.1.2.6 Clear Period Meters page and press the Spin Reels button. Once the page is exited, the reset function cannot be canceled.

1.2 Game Accounting

1.2.1 Game 1 Meter This page displays meters that track game statistics, such as coins in, coins out, and games played.

1.4 Security Accounting

Examples of the security-related events displayed in this page are the number of games played since the main door was opened, the number of times the main door was opened, and the last time the Key Chip Menu was accessed.

1.5 Error Accounting

1.5.1 Error Accounting Displays the meters that provide the number of times each of the tilt conditions occurred.

1.6 Version Accounting

1.6.1 Version Accounting Displays the program version numbers of the various programs running the different devices in the machine.

1.7 Master Progressive Accounting

Displays the number of times each progressive level was hit.

1.8 WAMM Accounting

Displays the WAMM machine address and the meter information, such as total coins in, total credits won, and total games won, that is sent to the CCOM.

2 HISTORY DISPLAYS

This submenu is available from the Operator and Attendant Menus.

2.1 Game

2.1.1 Game History This page displays the last 10 base games played, beginning with the most recently completed game. The reels spin to the stops for the game, and the LCD, if present, displays the bonus activity or the stops for the game. The VFD displays game information, beginning with the game type or game

viewed (i.e., current, # game(s) back) and payable selected, and the date and time the game was played. Pressing the Spin Reels button displays further game information, such as the virtual reel stops, cash won, player cash-out information, up to the last 50 bonus steps or the itemized win amounts for the total bonus win. The seven-segment displays show the state of the winner paid, the credits, and the coins bet at the completion of the game. Press the Change button to move back through the game history, and press Cash Out to move forward through the game history.

2.1.2 Game State

History

This page contains IGT service utility information.

2.2 Main Event History

This page displays a record of all machine activity, and the date and time of each event for the last 100 events. Examples of these events are entry into and exit from a menu, errors, and option changes.

2.3 Security History

2.3.1 Generic Security

History

Displays security-related events, and the date and time they occurred. Examples of these events are power up, door access, and Key Chip Menu access.

2.4 Tilt History

This page displays tilt events, and the date and time they occurred.

2.5 Money-In History

2.5.1 Bill-In History

This page displays a description of each bill accepted, and the date and time it was accepted for the last 25 accepted bills.

2.5.2 Voucher-In

History

This page displays a description of each voucher accepted, and the date and time it was accepted for the last 50 accepted vouchers.

2.5.3 Cashless-In

History

This page displays when money was downloaded from and uploaded to the cashless controller for the last 25 transactions. This page displays the amount of the transaction, the type of credits and, the controller.

2.6 Money Out History

2.6.1 Ticket History

This page displays a record of the last 50 tickets printed by the game.

2.6.2 Others

This page displays a record of payments from cash outs or wins from hand pays, hopper and printer.

2.7 Progressive History

2.7.1 Terminal

Displays the date and time the progressive was hit, the progressive level, and the amount won for the last 25 progressives.

2.8 System Bonus History

This page displays the last 25 bonuses awarded by the SAS host; each entry lists the total amount awarded, the tax status (deductible, non-deductible, or wager matching) and the bonus type (system or link).

2.9 AFT History

This page displays the last 100 AFT transactions; each entry lists the time, account number, transaction ID, transfer type, transfer status, receipt status, total amount, cashable amount, restricted amount, and non-restricted amount.

3 OPTIONS

This submenu can be entered only while the machine is idle. Options that do not require the key chip can be accessed from the Operator Menu. The options appear under submenus, which appear below.

3.1 Machine Options

3.1.1 Credit Option This option is not programmable. All inserted money is directed to the credit meter.

3.1.2 Candles This option is used to set candle operation.

3.1.2.1 Reactive Candle Timer: If this option is enabled, the candle flash rate progressively increases for the following conditions: hand pays, any non-door tilts and for system errors. The candle will increase its flash rate to the next flash rate after the period set expires.

***NOTE:** This menu is not available when using version program VS011NX4 and VS011NX5.*

3.1.2.2 Door Closure Candle On/Off: If this option is enabled, the candle flashes indicating main or bill door closure for the period of one complete uninterrupted game.

3.1.2.3 Drop Door Candle: If this option is enabled, the bottom level of the candle flashes at twice the normal door-open rate when the coin drop door is opened. If disabled, the candle is not affected when the coin drop door is opened.

3.1.3 Set Time The time and date can be set on the machine's real-time clock (RTC).

3.1.4 Limits This page allows the setting of the following machine limits: hopper limit, credit limit, jackpot limit, and bill/voucher limit.

3.1.5 Partial Pay This page is displayed only when the printer is disabled.

3.1.5.1 Partial Pay Amount: When a single win exceeds the hopper limit, the partial pay amount is paid from the hopper before the machine locks up for a hand pay. This amount cannot be set to a value greater than the hopper limit.

3.1.6 Handpay Display

If this option is enabled, the hand-pay message and the amount to be hand paid are displayed. If disabled, only the hand-pay message, not the amount, is displayed.

3.1.7 Cashout

3.1.7.1 Player Cashout Menu: For an overview of this feature, refer to PLAYER CASHOUT MENU in the FEATURES AND CAPABILITIES section. If this feature is enabled, the Cashout, Change, Spin Reels, and Max Bet buttons activate the cashout options.

- **3.1.7.1.1 Enable/Disable:** This page enables or disables player access to the Cashout Menu.

- **3.1.7.1.2 Player Coin Limit:** To use this option, the player Cashout Menu must be enabled, a thermal printer with the appropriate software must be installed, and the printer option must be enabled. This page determines the maximum hopper pay value (not to exceed the hopper limit) when pays are to be split between the hopper and printer.

3.1.8 W-2G Setup

For an overview of this feature, refer to JACKPOT TO CREDIT in the FEATURES AND CAPABILITIES section.

3.1.8.1 W-2G Controller: If set to “SAS Controller,” SAS authorization is required to reset eligible jackpots to the credit meter. If set to “USER Controller,” no authorization is required to reset eligible jackpots to the credit meter.

***NOTE:** If SAS authorization is required, SAS must communicate on the primary channel.*

3.1.8.2 W-2G Limit: Determines the W-2G credit limit (a.k.a.) upper jackpot limit). Wins that exceed the jackpot limit, but are less than the W-2G credit limit, can be directed back to the credit meter by turning the second reset key. Wins above this limit must be hand paid.

3.1.9 Machine Serial Number

This option allows setting of a nine-digit machine serial number.

3.1.10 Printer

This page is displayed only if the printer is enabled.

3.1.10.1 Data Entry: Stores the site name and address.

3.1.10.3 Remainder: Determines the minimum amount that remains on the credit meter when the machine automatically cashes out due to an exceeded credit limit.

***NOTE:** This option only appears if the hopper limit is set to zero.*

3.1.10.4 Printer Tilts: If set to Soft tilt, the top level of the candle flashes, and the reason for the tilt is displayed on the VFD when the main door is opened. If set to Hard tilt, game play halts until the tilt is cleared.

3.1.11 Split Pay

To use this option, a thermal printer with the appropriate software must be installed, the printer option must be enabled, and the hopper limit must be greater than zero.

3.1.11.1 Enable/Disable: If the split pay option is enabled, a pay out equal to or less than the coin pay limit is made from the hopper and the amount above the coin pay limit, if any, is paid by voucher. If the split pay option is disabled, the entire pay out amount is paid from the hopper if the amount is equal to or less than the coin pay limit. If the pay out amount is above the coin pay limit, the entire pay out amount is paid by voucher.

3.1.11.2 Limits: When the split pay option is disabled, a cashout occurs when any amount below the split pay limit is paid through the hopper, and any amount over the split pay limit is paid through the printer.

When the split pay option is enabled, a cashout occurs when any amount below the split pay limit is paid through the hopper and any amount over the split pay limit is paid through the hopper and printer. The hopper pays up to the split pay limit, and the remainder is printed on a ticket.

When the printer is not available (soft tilt), the game no longer uses the split pay limit. It uses the hopper limit to determine how to perform the cash out.

NOTE: If the pay out is not divisible by the hopper denomination, the coin pay limit is ignored, and the entire amount is paid by voucher.

3.2 Sound Options

3.2.1 Volume Control

3.2.1.1 Game Volume: Although this menu appears, it has no affect.

3.2.1.2 Money Volume: Although this menu appears, it has no affect.

3.2.2 Reel Spin Sound If this option is enabled, a random note melody plays while the reels are spinning. If disabled, no sound is made while the reels spin.

3.2.3 Reel Stop Sound Determines the sound made when the reels come to a stop. Options are none or solenoid (handle-solenoid clicks).

3.2.4 Mechanical Bell Determines when the bell rings. Options are Off, rings for all wins, or rings for hand pays only.

3.3 Bill Acceptor

3.3.1 Enable/Disable Determines whether the bill/voucher acceptor is enabled or disabled.

3.3.2 Bill Pay Mode This option is available in a hopper-only configuration. Determines how accepted bills are paid. The “bills pay to credit always” option directs bills to the credit meter, even if the player has selected the noncredit mode. The “bills pay according to credit mode” option follows the credit type set in the credit option page of the machine options submenu. The “bills pay to hopper always” option exchanges bills for coins paid from the hopper, even if the player has selected the credit mode.

3.3.3 Bill Tilts Determines the action taken when any bill acceptor tilt occurs. Options are Ignored, Soft, or Hard. If ignored is selected, bill acceptor tilts have no effect on the machine. If Soft is selected, the top level of the candle flashes, and the reason for the tilt is displayed on the VFD when the main door or bill door is opened. If Hard is selected, game play halts until the tilt is cleared.

3.3.4 Bill Rejection Limit

This option notifies an attendant when a player is having difficulty inserting a bill into the bill validator. When the bill rejection limit is reached, the change lamp on the candle is automatically turned on. If this option is set to zero, the change lamp is not affected by rejected bills.

3.4 Communication Options

3.4.1 SAS Setup

Both **3.4.1.1 SAS Primary** controller and **3.4.1.2 SAS Secondary** controller provides the following submenus:

3.4.1.x.1 SAS (Primary/Secondary) Address: Sets the SAS polling address. Valid values are from 0 to 127. If set to zero, SAS communications are disabled. Typically, the address is set to 1 if there is a player tracking (PT) device inside the machine. Addresses 2 through 127 are used when the machine is connected directly to a site controller.

- **3.4.1.x.2 SAS (Primary/Secondary) Channel:** Determines which channel is used by the SAS communication protocol. The default for the primary controller is channel 2 (DCS port on the machine's motherboard). The default for the secondary controller is Off.
- **3.4.1.x.3 SAS (Primary/Secondary) Link Down:** If this option is enabled, the machine remains operational during a communications

failure. If disabled, the machine locks up during a communication failure. The lock-up condition is automatically cleared when communications are re-established.

- **3.4.1.x.4 SAS (Primary/Secondary) Hand Pay:** Determines if the game repeatedly sends out a hand-pay notification. If Hand Pay Multiple Report is enabled, the game sends out a notification every 15 seconds until the host requests the hand-pay information. If Hand Pay Single Report is enabled, the game sends the notification once.
 - **3.4.1.x.5 SAS (Primary/Secondary) Game Events:** If enabled, this option reports to the SAS host non-critical game play events, such as “game has started” and “game has ended”
 - **3.4.1.3 SAS Config:** Allows the operator to set SAS options, such as EFT/AFT (cashless) and system bonus, on either the primary or secondary communication channel.
- 3.4.1.4 AFT:** Allows the operator to set the SAS AFT options.
- **3.4.1.4.1 Asset Number:** This page allows the operator to assign an asset number to the terminal.
 - **3.4.1.4.2 Register Gaming Machine:** This page allows the operator to register the machine for SAS AFT debit transfer capability. To register the machine SAS AFT must be enabled. Registration and point-of-sale (POSID) numbers must be supplied by the host system.
 - **3.4.1.4.3 Partial Transfer to Game:** Determines whether partial transfers are allowed.
 - **3.4.1.4.4 Ticket Transfer Limit:** Allows the operator to set the maximum amount that can be transferred from the host system to a ticket.

3.4.2 Bally Miser Setup

3.4.2.1 Miser Protocol: Determines which protocol is used. The machine requires the 906912 protocol. If the machine is configured to play only generic bonus games, a third protocol option, Bally Miser Protocol With Bonus Support, allows the controller to select the machine’s bonus game.

3.4.2.2 Miser Channel: Determines which channel is used by the Miser communication protocol. The default is channel 3 (RS232 port on the machine's communication board).

3.4.3 WAMM Setup

3.4.3.1 WAMM Address: Sets the WAMM polling address. Valid values are from 0 to 63. Address 0 is typically not used because machines default to that address after memory tilts.

3.4.3.2 WAMM Channel: WAMM communications can use channel 8 only, which is the fiber-optic channel on the machine's communication board.

3.5 Download

- | | |
|-----------------------|---|
| 3.5.1 Netplex Devices | The pass-through operation is reserved for special purposes only, such as reprogramming a display device or the bill validator. |
| 3.5.2 Video Display | The pass-through operation is reserved for special purposes only, such as reprogramming the multi slave. |

3.7 Game Play

3.7.1 Spin Repeat

Domestic: If enabled, this option allows repeat of the last game wager. For each game the player must press and release the Spin Reels button to repeat the last bet.

NOTE: When a multi-line, multi-coin payable is used, repeat of the last game wager is always enabled and this option is not available.

International: If enabled, and when using an international version PROM, this option allows repeat of the last game wager without releasing the player panel button after being pressed. The button remains active as long as it is pressed. The Bet Max player panel button starts the game with maximum number of coins wagered. The Spin Reels button starts the game, repeating the previous wager.

NOTE: When a multi-line, multi-coin payable is used, repeat of the last game wager is always enabled; only the option to activate repeat spin is available.

4 I/O TESTS

This submenu is available from the Operator and Attendant Menus. However, some of the following submenus and test pages are not available from the Attendant Menu.

4.1 Input Tests

This submenu provides access to the input diagnostic test pages and is available from the Attendant and Operator Menus. Each input circuit is listed by name and is followed by a one (active) or zero (inactive).

4.1.1 Door Input Test Allows tests on the player panel buttons located on the main door.

4.1.1.1 Standard: This page tests the Change, See Pays, Cashout, Spin Reels, Play Max Credit and, if present, the Select Credit Value and Bet One buttons.

4.1.1.2 10 Button: This page tests the 10-button player panel used to select the number of lines and bet per line.

4.1.1.4 Denom Panel: This page tests the denomination touch panel used to select the player denomination.

4.1.2 Cabinet

Input Test

Allows tests on circuits located on or in the cabinet, such as the slot handle and the hopper.

4.1.3 Processor

Input Test

Allows tests on circuits that provide input to the processor, such as machine doors and reel optics.

4.2 Output Tests

This submenu provides access to the output diagnostic test pages and is available from only the Operator Menu. The output circuit toggles between activated and deactivated when the Spin Reels (Enter) button is pressed.

4.2.1 Door

Output Test

Allows output tests on the player panel buttons located on the main door. The following buttons are used for navigation and may not appear to respond to the test: Change (Up), Cash Out (Down), Spin Reels (Enter), and Play Max Credits (Exit).

4.2.1.1 Standard: This page tests the Change, See Pays, Cashout, Spin Reels, Play Max Credit and, if present, the Select Credit Value and Bet One lamps.

4.2.1.2 10 Button: This page tests the 10-button player panel lamps used to select the number of lines and bet per line.

4.2.1.3 Paylines: This page tests the payline lamps. Press the Change and the Cashout button to select the payline. Press the Play Max Credits button to turn on the payline lamp and, press the Play Max Credits again to turn off the lamp.

4.2.1.5 Denom Panel: This page tests the lamps on the denomination touch panel used to select the player denomination.

4.2.2 Cabinet

Output Test

Allows tests on output circuits located on or in the cabinet, such as the hopper brake, the candle, and the mechanical meters.

4.2.3 Processor

Output Test

Allows tests on the processor LEDs.

4.3 Auto-Configure Netplex Devices

This submenu is available through the Operator Menu only. Pressing the Spin Reels (Enter) button automatically configures the bill validator, VFDs, printers, bonus device, and spectrum display.

4.4 Sound Test

This submenu is available from the Attendant and Operator Menus.

4.4.1 Sound Test Pressing the Spin Reels (Play) button plays the selected sound.

4.5 7-Seg Display Test

This submenu is available from the Attendant and Operator Menus. Pressing the Spin Reels (Enter) button tests all segments of the seven-segment displays installed on the machine including the payline indicator if applicable.

4.6 Dot Matrix Display Test

This submenu is available from the Attendant and Operator Menus.

4.6.1 Primary Dot

Matrix Display Test

Pressing the SPIN REELS (Enter) button tests the VFD dot matrix on the player panel.

4.7 Hopper/Printer

This submenu is available only from the Operator Menu.

4.7.1 Hopper Test This page tests the hopper operation by paying out ten coins.

4.7.2 Print Test This page tests the printer operation by advancing the ticket, cutting the paper, or printing a test ticket.

4.8 Bill Acceptor

This submenu is available from only the Operator Menu.

4.8.1 Bill Test The bill validator can be set to accept and stack or to scan and reject a test bill. The value of the test bill is displayed on the LCD and/or VFD.

4.8.2 CRC Checks Technicians can verify a validator CRC (cyclic redundancy check) by entering the starting seed value (and address if desired).

4.8.2.1 4 Digit CRC: Performs a four-digit CRC.

4.8.2.2 8 Digit CRC: Performs two four-digit CRCs.

4.9 Bonus Device Test

Although this submenu appears, it has no effect.

4.10 Reel Lamps Test

This page is available from only the Operator Menu. It allows the operator to test the lamp operation on the back lit reels.

5 GAME TESTS

This submenu is available from only the Operator Menu.

5.1 Reel Strip Test

This page allows the operator to verify that the reels spin to the correct stops. To access this test, a reset key is required. Press the Cash Out (Next) button to advance to the next reel stop and press the Change (Previous) button to return to the previous stop. Press the Spin Reels (Enter) button to cycle through the virtual stops in numeric order automatically.

5.2 Base Paytable Test

This page allows the operator to enter a reel-stop number on each of the three reels and a bet amount to determine the award amount, if any, for the reel combination. To access this test, a reset key is required. To increment the selected digit, press the Cash Out button. To advance to the next digit or reel, press the Change button. Press the Spin Reels button to position the reels in the requested combination and to move the cursor to the bet amount field. Press the Cash Out or Change button to change the bet amount. Press the Spin Reels button again to display the win amount on the VFD for the revised wager and to move the cursor back to the reel numbers. For multi-line games, set the reel stops for the center payable so that the appropriate symbols line up on the desired payable.

6 OUT OF SERVICE MODE

If the machine is in the in-service mode, press the Change (Up) button and press the Play Max Credits (Exit) button to place the machine in the out-of-service mode. To return the machine to the in-service mode, return to this menu, press the Cash Out (Down) button, press the Play Max Credits (Exit) button, and close the main door. The machine can be placed in the out-of-service mode when credits are accumulated.

7 KEY CHIP CONFIG

The options appearing on the Key Chip Menu vary by jurisdiction. The operator can set some options after turning the machine on for the first time; however, most of the following options typically require the key chip and cannot be changed from the Operator Menu.

There are three Key Chip Menu choices used with this version: Key Chip, Key Chip II, and Progressive.

7.1 Key Chip Config

7.1.1 Denomination

7.1.1.1 Accounting Denomination: This page determines the denomination of accounting units. The denomination selected determines which denominations are available for the hopper/coin acceptor and player-selectable denominations. The available accounting denominations are 0.01,

0.02, 0.05, 0.10, 0.20, 0.25, 0.50, 1, 2, 2.50, 5, 10, 20, 25, 50, 100, 200, 250, 500, 1,000, 2,000, 2,500, or 5,000.

NOTE: RAM and EEPROM must be cleared prior to changing the accounting unit denomination.

7.1.1.2 Coin Denomination: This value must be set to the denomination of the hopper and coin acceptor. The value can be set from the Operator Menu after turning the machine on for the first time; subsequent changes require the key chip. The available denominations are 0.01, 0.02, 0.03, 0.05, 0.10, 0.20, 0.25, 0.50, 1, 2, 2.50, 5, 10, 20, 25, 50, 100, 200, 250, 500, 1,000, 2,000, 2,500 or 5,000.

NOTE: The coin denomination cannot be set below the accounting denomination.

7.1.1.3 Player Denomination: This page determines the denominations that will be available to the player. Use the CHANGE button to select Player Denom 1 through 4 and use the CASH OUT button to select the denomination to be associated with that Player Denom. The available player-selectable denominations vary, depending on the selected accounting-unit denomination. Example: When the accounting unit equals 0.01, the possible player-selectable denominations are 0.01, 0.02, 0.03, 0.05, 0.10, 0.20, 0.25, 0.50, 1, 2, 2.50, 5, 10, 20, or 25. When the accounting unit equals 1, the possible player-selectable denominations are 1, 2, 5, 10, 20, 25, 50, 100, 200, 250, 500, 1,000, 2,000, 2,500, or 5,000.

7.1.2 Game Selection

The number of paytables available depends on the base PROM installed. This page determines which payable is available to the player and which denomination is assigned to the selected payable. At least one denomination must be enabled.

If more than one payable is available, each payable can be assigned a unique denomination. For example, the \$0.05 and \$0.10 denominations could have a lower payback percentage than the \$1 denomination, and the \$5 denomination could have a higher payback percentage than the \$1 denomination.

To select a denomination, press the CHANGE button. To select a payable for the denomination, press the CASH OUT button. To disable a denomination, press the CHANGE button until the selected denomination appears and press the CASH OUT button until the payable name that is associated with that denomination is replaced with DISABLED. Press the SPIN REELS button to change the first payable to the default payable and the 2nd, 3rd, and 4th paytables to DISABLED.

NOTE: If using VS011GX2 and the hopper is the only method available for paying the player, the machine is automatically placed in the denomination-plus mode. This mode automatically disables denominations that are less than, or not a multiple of, the hopper/coin acceptor denomination.

7.1.3 Bonus Menu

7.1.3.4 Global Setup: If a game-specific bonus game is installed, this page allows the operator to set the User Input Timeout option. This option determines how long the game waits for the player to push the Spin Reels button before automatically starting the non-linked bonus game. If a User Input Timeout is not desired, set this option to zero.

7.1.3.5 System Bonus: Options are Disabled, System Bonus Legacy, and System Bonus AFT. Enabling System Bonus Legacy activates both the bonus pays and the multiple jackpot modes at the same time. To enable System Bonus AFT, the cashless controller must be set to AFT. If this option is disabled, the game ignores all SAS bonus messages.

7.1.5 Cashless Controller

Enables or disables the Cashless option and determines the Cashless controller (SAS EFT, SAS AFT, or Bally Miser).

- SAS EFT operation for promotional credit downloads is selectable in all jurisdictions where allowed.
- SAS EFT operation for non-cashable credit downloads is selectable only for jurisdictions using an international version PROM.
- SAS EFT operation for cashable credit downloads is selectable only for New Jersey and jurisdictions using an international version PROM.

The EFT/AFT option is not allowed in some jurisdictions. Check your jurisdictions requirements to determine if this option is allowed.

7.1.6 Machine Type

Allows the operator to select one of the following machine types: unknown, upright, or slant top. If the selected type does not match the hardware, the machine is disabled. This option can be set from the Operator Menu after turning the machine on for the first time.

7.1.7 Tokenization

7.1.7.1 Token Setup: This page allows the operator to set the token value. The range is 1 to 100 and when the token value is set to 1, tokenization is disabled. The token value cannot be set greater than the hopper, the credit, or the jackpot limit. If this option is enabled, the machine automatically defaults to the credit mode.

7.1.7.2 Token Payout: Allows the operator to disable player-initiated cash outs of partial token credits. Tokenization must be enabled.

7.1.8 Candle Stage Setup

Allows the operator to select a two-, three-, or four-stage candle.

NOTE: This option requires an international version PROM.

NOTE: Although the three-stage candle option can be selected, this candle type is not available.

7.1.9 Money Format

Allows the operator to select the currency symbol and to set the thousand and the decimal separator for all Key Chip, Attendant, and Operator Menus, and player-viewable displays. This option defaults to the following currency format: \$1,000.00.

NOTE: This option requires an international version PROM.

7.1.10 Options

7.1.10.1 Hard Meters: Allows the operator to set whether the third mechanical meter displays a coins-only or a coins-plus-bills drop.

NOTE: This option requires an international version PROM.

7.1.10.2 Coin-In Option: This submenu determines how inserted coins are handled.

- COIN IN TO GAME ONLY = Directs coins to the coins played meter, up to the maximum bet; returns additional coins to the player.

- COIN IN TO GAME AND CREDIT = Directs coins to the coins played meter, up to maximum bet; directs additional coins to the credit meter, up to the credit limit.
- COIN IN TO CREDIT ONLY = Directs coins to the credit meter only, up to the credit limit.

NOTE: This option is only available when (1) the game is in single denomination mode and, (2) the payable program is not a multi-line, multi-coin payable.

7.2 Key Chip Config II

7.2.1 Validation

This page controls and displays the validation information and options. The submenus are:

7.2.1.1 Validation Type: Options are system, enhanced, or standard validation mode. For more detailed information, refer to the CONFIGURATION TABLE.

NOTE: For the EZ Pay system to work properly, the validation type must be set to enhanced, and the validation security option must be enabled.

7.2.1.2 Validation Security: This option is not available when the validation type is set to system. Allows the machine to protect validation information if communications with the EZ Pay system are interrupted. When the validation buffer is full, the machine locks up and displays TERMINAL DISABLED BY SAS. The machine also locks up if the host has not sent the proper validation ID number. If disabled, the machine does not write additional information to the validation buffer or send it to the EZ Pay system, and therefore, additional hand-pay information is lost.

NOTE: For the EZ Pay system to work properly, the validation type must be set to enhanced, and the validation security option must be enabled.

7.2.1.3 Validation Controls: View and reset current validation control state. It contains the following submenus:

- **7.2.1.3.1 View Validation Controls:** Displays the current setting of the Validation Controls.
- **7.2.1.3.2 Reset Validation Controls:** The page allows the operator to clear the Validation Controls. This submenu can only be viewed in the Key Chip menu.

7.2.1.4 Handpay Validation: Options are Validate Handpay (No Receipt), Validate and Print Handpay Receipt, and Don't Validate Handpay/Receipt. This option determines whether the handpay will be validated and if the handpay receipt will be printed.

NOTE: For games with a progressive jackpot amount set to zero, such as a non-cash prize, a ticket with a value of zero will be printed for the jackpot award.

7.2.2 Printer

7.2.2.1 Enable/Disable: Determines whether the printer is enabled or disabled.

7.2.2.2 Restricted Tickets: Determines whether restricted tickets are printed.

- 7.2.3 Voucher **7.2.3.1 Voucher Redemption:** Determines how the machine handles the voucher redemption. Options are Voucher Redemption Disabled, Voucher Redemption SAS, Voucher Redemption Bally, and Voucher Redemption Distributed.
- NOTE: When vouchers are Distributed, the SAS Host redeems vouchers with numbers beginning with zero and the Bally host redeems vouchers that begin with a non-zero value.*
- 7.2.3.2 Voucher Limit:** The voucher limit can be set to either follow the credit limit or follow the bill limit.
- 7.2.3.3 Change Voucher:** Determines if the game accepts vouchers that are not divisible by the accounting denomination. If this option is enabled and the voucher is not divisible by the accounting denomination, the amount in accounting units (AUTs) is directed to the credit meter, and a voucher is printed for the fractional amount. If this option is disabled, the game rejects any voucher with an amount that is not in whole AUTs.
- 7.2.4 Handpay **7.2.4.1 Remote Handpay Reset:** If this option is enabled, the operator can remotely reset the machine from the SAS host after a hand-pay condition.
- NOTE: SAS must use the primary controller to enable this option.*
- 7.2.5 Coinless Mode If this option is enabled, the coin acceptor is disabled and the hopper limit is set to zero, and all credits become non-cashable. When disabling this option, the hopper limit must be reset to a non-zero value to re-enable the hopper.
- 7.2.7 7-Segment Display Type Although this option appears, it has no affect. The only available 7-segment display for this version is 5-5-2, which refers to the number of digits in the Winner Paid, Credits, and Credits Played windows, respectively.

7.3 Progressive

The progressive submenus can only be configured and/or displayed when the payable program supports progressive awards.

- 7.3.1 Controller Select Displays a list of levels to be configured. For each level, the operator must select from a list of progressive types (e.g., none, SAS, link, and standalone).
- NOTE: Before the operator can select SAS as the controller, the SAS group must be set.*
- 7.3.2 Progressive Display Setup Options are None or Video Display. To display the progressive screen on the LCD, select “Video Display” in the display setup submenu and select No Bonus in the bonus game selection page of the Key Chip Menu.
- 7.3.3 Stand Alone Setup This page determines the limit amount, the current amount, the add percentage, and the base amount for each progressive level.
- 7.3.4 SAS Progressive Group This page sets the SAS progressive group. If set to zero, SAS progressive capabilities are disabled. The operator can set the SAS group from 1 to 255.

8 SETUPS & INFO

The options displayed in this submenu depend on the LCD System Driver program used to run the multi slave device. Refer to the LCD System Driver Program Summary Report (PSR) for detailed information about this submenu.

REFERENCES

Refer to the appropriate IGT publication for detailed information about Vision/S2000 software and error resolutions: ***Game Software: Vision Series/S2000 Release 9*** p/n 821-359-0x, ***Troubleshooting: Game Machines*** p/n 821-283-0x, and ***Quick Reference Cards: Vision/S2000 Release 9*** p/n 821-361-0x.

For additional information or to order manuals, contact IGT Customer Service; telephone 1-888-777-5101 or FAX 1-888-999-0668.

For viewing and downloading technical information, visit the IGT web site (www.igt.com).

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