International Game Technology

Program Summary Report: S+ Stepper Slot Version SP611

COMPLETE SET OF SLOT GAME CHIPS

Game EPROM	Erasable Programmable Read-Only Memory. The game program is stored on this EPROM. The EPROM is a 27C512 device, and the label indicates S-PLUS GAME, the EPROM version (SP611), and the game type.
Data EPROM	The companion data EPROM is a 27C64 device that identifies the reel strip symbols and determines the game type, the pay table values, the number of reels, the maximum bet, and whether the game is a multi-line game, multi-coin game, scattered pay, or buy-a-pay game. The label indicates S-PLUS REEL and the SS number that identifies the pay table.
Set-chip	IGT utility program SET005, or later versions, is required to modify the denomination or enable/disable the bill acceptor. If the bill acceptor is disabled, the denomination can be set in the self test mode.

GAME TYPES

Type 0 (no special features), Type 1 (Slam Dunk, Balloon Bars, etc.), Type 4 (Spin 'Til You Win), Type 5 (4th of July) and Type 12 (Fever).

FEATURES AND CAPABILITIES

Bill Acceptor	JCM compatible; can accept $1 to $100 bills. Rowe compatibility limited; can accept $1 to $20 bills. Enable/disable with the set-chip. If the credit only option for paying bill credits is selected, the bill is paid as credits regardless of the current player initiated credit/noncredit selection.
Bill Rejection Feature	Bills will be rejected if one of the following conditions occur: if a $5 bill is inserted and the game denomination is $2; if a $50 bill is inserted and the game denomination is $20; if the game denomination is higher than the bill denomination; or if the credit value of the accepted bill plus any credits on the game exceeds the bill limit that is set in the self test mode.
Credit Limit	Automatically matches the maximum hopper setting that can be set by DIP switch or in the self test mode.
Denomination Modifications	Requires the denomination set-chip, unless the bill acceptor is disabled, in which case the denomination may also be set in the self test mode. When the denomination is set to zero (none), the bill acceptor is disabled (if present). The game will not display progressive amounts and all progressive wins will cause the game to

go into a hand-pay lockup condition. The denomination can be set at
S.05, S.10. S.25, $.50, $1, S2, $5, S10, S20, S25, $50, S100 or zero
(none).

Information Systems Compatibility	SIS/SDS (SMART). IGT serial SAS, Bally's serial SDS (XMISER), and Wide Area Marketing Monitoring system (WAMM/CCOM).
Mechanical Meters	Counts coins in, coins out, drop, jackpots x 10, canceled credits and games played.
Progressive Features/Displays	Link or standalone progressive. two-level Rapid Bonus Progressive (RBP), 8 x 8 progressive display, single level, single level alternating, or double level.
Reel Stops	Capable of handling 256 stops per reel.
Reel Tilt	If a tilt occurs while the reels are spinning, the reels spin very slowly until the tilt is cleared. When a tilt occurs any time other than during the random spinning period, the game will soft tilt and automatically reset itself three times. The fourth tilt is considered a hard tilt and requires an attendant to reset the machine. The soft tilt counters are independent for each reel and are cleared after each game or door closure.
Two Stage Candle	The top level signifies tilt/change conditions; the bottom level signifies jackpot/door open conditions. If the drop door is opened while the drop door option is enabled, the door open candle flashes at twice the normal door open rate. If the game is disabled, both levels are lit.

DIP SWITCH OPTIONS

The dual in-line package switch selection chart is located on the processor board tray. The options
for this machine are: max hopper pay, reel spin sound, fast or normal game speed, progressive
enable, high/low or alternating progressive, double or single progressive, and link or standalone
progressive. The DIP switch configuration is displayed in the self test mode.

SELF TEST MODE

Pressing the self test switch or the Bet One Credit player switch "pages" forward through the self
test mode, and pressing the Play Max Credits player switch pages backward. Changes or
selections in the options pages may be made by pressing the Change switch or turning the jackpot
reset key. During a tilt condition, only the WAMM/CCOM machine address may be selected or
altered. The numbers appearing below enclosed in < > represent the self test page number, [ ]
represent the option number, and { } represent the setting. The self test pages appear in the
following order:

Accounting System Communication Type	Determines the communication type on channel A (DCS port). Options are none {0}, Bally's serial SDS (XMISER) {1}, or IGT SAS {2}.

**SAS Communication
Address <0>**

This page is displayed only if the communication type is SAS. When using the SAS protocol, a machine address is required to distinguish one machine from another. The valid address range is {001} to {127}.

**WAMM/CCOM
Address <0>**

WAMM/CCOM is always installed on channel B (printer port). This page allows the setting of the CCOM address. The valid address range is {00} to {63}. Once the valid range is selected, the new value must be saved by pressing the Change switch. A bell will sound when the new address is accepted.

**Player Selectable
Credit <0> [5]**

This page is not displayed if credits are accumulated on the credit meter. Options are standard credit or noncredit {0}, player initiated credit {1} and player initiated noncredit {2}. The player initiated credit option will default to the noncredit mode when the credit meter remains at zero for more than 30 seconds, or when any accumulated credits are cashed out. The player initiated noncredit option defaults to the credit mode if the game is idle for 30 seconds, and remains in the credit mode when credits are cashed out.

Mechanical Bell <0> [6]

Options are ring on hand-pays only {0} or ring on all pays {1}.

**Drop-Door Switch
Enable/Disable <0> [7]**

This page is always displayed, but can only be programmed under the following conditions: if there is no communication, if the communication type is XMISER or WAMM, or if the communication type is SAS with a zero mini system address. (The drop-door option is automatically enabled with a non-zero SAS mini system address.) Options are enabled {1} or disabled {0}. If enabled, opening the drop (cash) door causes the door open candle to flash at twice the door open rate, and the number of times the drop door is opened will be displayed in the statistical data mode.

**Bill Acceptor
Pay Mode <0> [8]**

This option can be set so that bills are always converted to credits on the machine {1}, or to follow the player selected credit {0}. If set to follow the player selected credit, bills will be converted to credits if the player has selected the credit mode, or paid from the hopper if the player has selected the noncredit mode.

Bill Acceptor Enabled/ Disabled Display <0> [9]	Indicates whether the bill acceptor is enabled {1} or disabled {0}.
DIP Switch Configuration Display <0>	Displays whether the processor board DIP switches are on {1} or off {0}. The status of DIP switches 1 through 4 appears in the Winner Paid window, and the status of DIP switches 5 through 8 appear in the Credits window.
Input Tests <1>	Tests whether inputs (coin in optics, Bet One Credit player switch, etc.) are active or inactive.
Output Tests <2>	Tests whether outputs (Insert Coin lamp, Coin Accepted lamp, etc.) are active or inactive.
Sound Test	Tests sounds (coin insertion, maximum coins in, etc.).
Song Test	This page is displayed only if the game is Type 4, Type 5, or Type 12. Activates songs and allows selection of the song to be played during the idle mode.
Display Test <8>	Tests illumination on the player digital display and verifies that the digital display is receiving correct signals from the processor board.
Hopper Test <3>	Tests the hopper operation by paying out ten coins.
Pay Table Test <4>	The game type (0, 1, 4, 5, or 12) and reel strip numbers are alternately displayed in the Winner Paid window. The EPROM version number is displayed in the Credits window. To test the pay table values, press the Spin Reels player switch. The award for a one coin bet alternates with the award for the max coin bet in the Credits and Winner Paid windows. If the game type is 12, the Fever pay table test begins after the standard pay table test <5>. The lamps around the Fever display will flash to indicate that the Fever pay table is being tested.
Reel Strip Test <5>	Verifies that the symbols appearing on the reels are correct and that the reels spin to the correct stops.
Denomination Selection/ Display <6>	Displays the current denomination. The denomination selection is available only if the bill acceptor is disabled; otherwise, the set-chip must be used.
Max Hopper Pay <7>	Programmable only if DIP switches 1 and 2 are set for self test selection (on position); otherwise, this page is for display purposes only. Determines the maximum number of coins that may be paid out of the hopper.

Bill Acceptor Credit Limit <7>	Determines the maximum amount of credits that can be accumulated before the bill acceptor is disabled. The limit must be less than the max hopper size or $2,500, whichever is less.
Partial Pay Selection <8>	Determines the amount of coins paid from the hopper when a jackpot is hit, before a hand-pay lockup condition occurs. The value cannot be set for an amount that is greater than the maximum hopper pay setting.
Progressive #1 Selection <9>	This page is displayed only if DIP switch 5 is set for progressive (on position) and 8 is set for standalone progressive (off position). This page determines the progressive reset value [1], maximum progressive amount [2], progressive percentage [3], and current progressive amount [4] for the single-level progressive.
Progressive #2 Selection <9>	This page is displayed only if DIP switch 5 is set for progressive (on position), 7 is set for double level progressive (on position), and 8 is set for standalone progressive (off position). This page determines the progressive reset value [5], maximum progressive amount [6], progressive percentage [7], and current progressive amount [8] for the double-level progressive.
Link Progressive Display <9>	This page is displayed only if DIP switch 5 is set for progressive (on position) and DIP switch 8 is set for link progressive (on position). Winner Paid window indicates which levels are enabled {1} or {2}, Coins Played window = 9. Press the Spin Reels player switch to display progressive information. Winner Paid window = first 3 digits of the progressive dollar amount, Credits window = last 4 digits of the progressive dollar amount (does not include decimal amounts). Both external displays also show the progressive amount. Coins Played window = progressive level 1 or 2.

STATISTICAL DATA MODE

Turn the jackpot reset key clockwise to enter the statistical data mode. Press the Bet One Credit player switch, the Change switch, or turn the jackpot reset key to move forward from one function to the next, and press the Play Max Credits player switch to move backward.

Display Meters Function <01>:

The Coins Played window shows the category numbers 01 through 53. The Credits window and the Winner Paid window show the category totals. Press the Spin Reels player switch or pull the handle to move forward through the categories. The categories appear in the following order:

01	Coins in (total wagers)	
02	Coins out	
03	Coins dropped	
04	Canceled credits (hand-paid cash out amount in coins)	
05	Games played	
06	Amount of jackpots in coins	
07	Door opens	
08	Games won	
09	Games lost	
10	Coin-in tilts	
11	Coin-out tilts	
12	Power resets	
13	Hopper empty tilts	
14-15	(Reserved)	
16	Games played since last door closed	
14	Games played since last power up	
18-27	Games played with 1 to 10 coins in (number of coins in displayed depends on options)	
28	$1 bills accepted	
29	$5 bills accepted	
30	S10 bills accepted	
31	$20 bills accepted	
32	Bills accepted	
33	Coins or credits dispensed for bills	
34	$1 bills accepted since last meter reset	
35	S5 bills accepted since last meter reset	
36	$10 bills accepted since last meter reset	
37	$20 bills accepted since last meter reset	
38	Bills accepted since last meter reset	
39	Coins or credits dispensed for bills since last meter reset	
40	Dollar value of all bills accepted since last meter reset	
41	Dollar value of all bills accepted	
42	Drop door opens	
43	Credits played	
44	Credits won	
45	Credits paid	

46   Physical coins inserted

47   Coins dispensed by the hopper

48      $2 bills accepted

49      $50 bills accepted

50      $100 bills accepted

51      $2 bills accepted since last meter reset

52      $50 bills accepted since last meter reset

53      $100 bills accepted since last meter reset

Last 5 Games Played Function <2>:

Winner Paid = the number and the virtual position of the reel before any "nudging" is done, beginning with the most recently completed game. Credits = game being displayed. If the game type is 1, the Credits window also indicates the number and virtual position of the reel after any "nudging" is done. If the game is type 4 or type 5, the Credits window also indicates either 0 (standard game) or 1 (free spin). If the game type is 12, the Credits window indicates either 0 (standard game) or 1 (bonus pay table was used). The reels spin to the reel positions of the completed game. After the last reel has been displayed, the Coins Played, Winner Paid and Credits windows contain their normal information for the last game.

Bill Acceptor Transaction <9>:

All LED displays show 9 until the Spin Reels player switch is pressed. Coins Played = last bill transaction 1 (most recent) through 5 (oldest). Winner Paid = number of coins dispensed or credits given beginning with the most recent transaction. Credits = bill denomination.

IGT Service Utility Information <3>:

Coins Played = 3.

Progressive Jackpot Recall <4>:

Winner Paid = a number from 50 to 1. The progressive display shows the amount won, beginning with the most recent jackpot awarded.

Clearing Resettable Bill Meters <10>:

The resettable bill meters keep a count of the bill acceptor transactions since the last time the meters were cleared. If any of the resettable bill meters are not equal to zero, {8888} is displayed in both the Credits and Winner Paid windows. Press the Spin Reels player switch to clear the resettable meters. {0000} is displayed in the Credits and Winner Paid windows when the meters are cleared.

REFERENCES

Refer to the appropriate IGT publication for detailed information about S-Plus software and error resolutions: S-PLUS GAME SOFTWARE p/n 821-206-01, S-PLUS TROUBLESHOOTING p/n 821-207-00, or S-PLUS DIAGNOSTICS CARD SET p/n 821-154-04. Refer to the Reel Strip Listing for exact pay table information and symbol alignment on each reel.

For additional information or to order manuals, contact IGT Customer Service, 9295 Prototype Drive, Reno, Nevada, (USA) 89511; telephone 702-448-0364, between 8 a.m. and 4 p.m. PST, FAX 702-448-0675.

For viewing and downloading technical information, call the 24-hour bulletin board: 1-800-448-1221.