



# SPARK

## Operator Manual



Revision: 3.0  
Date: 2/18/26

# SPARK - Operator Manual 3.0



[Terminal Audit](#) | [Events](#) | [Bill Hist.](#) | [Rcpt Hist.](#) | [Game Stats](#) | [Game Rec.](#) | [Terminal Set.](#) | [Game Set.](#) | [SAS](#) | [Support](#) | [Recycler](#) | [AFT](#) | [Lic.](#)

# SPARK - Operator Manual 3.0



[Terminal Audit](#) | [Events](#) | [Bill Hist.](#) | [Rcpt Hist.](#) | [Game Stats](#) | [Game Rec.](#) | [Terminal Set.](#) | [Game Set.](#) | [SAS](#) | [Support](#) | [Recycler](#) | [AFT](#) | [Lic.](#)

## Table of Contents

Introduction.....	5
Access.....	5
Screen Rotation .....	7
Updating the EFCO Board .....	8
Navigation.....	9
Main Menu .....	11
Terminal Audit (Meters).....	12
Event Log .....	14
Bill History.....	15
Receipt History.....	20
Game Statistics .....	22
Game Recall .....	23
Terminal Settings .....	24
Address Fields .....	25
Alarm.....	25
Enable TITO Server / TITO Server Address .....	25
Ticket on Purchase .....	26
Auto Rebuy .....	26
Ticket Interval .....	26
Minimum Ticket .....	26
Max Ticket (\$) .....	27
Ticket QR Code.....	27
Special Win.....	27
Pin Code / Attendant Pin.....	28
Interactive Attract .....	28
Attract Advertisements.....	29
Tilt Subtext .....	29
Volume .....	29
Printer Type.....	30
Printer Port.....	30
Calibrate Touchscreen .....	31
Bill Acceptor Type .....	32
Bill Acceptor Port.....	32
Community Game Configuration .....	32
RAM Clear .....	33
Recycler Config.....	33
Set Date/Time.....	34
Game Settings.....	35
Match 2 Feature .....	36
Generic Symbols.....	36
Payback .....	36
Payback Rounds.....	36
Lose Remaining Credit .....	37
Timeout To Clear.....	37
Preview.....	37
Hand Count Clear .....	38
Hand Count.....	38
Game RTP .....	38
Use Skill Meter .....	38
Denomination Selection .....	39
Denomination Default.....	39
SAS Settings .....	40
Port Enable / Disable .....	41
Serial Port.....	41
SAS Address .....	41
Validation .....	41
AFT Enabled .....	41
Enhanced 8 Bit.....	42
Asset ID .....	42
Connection Status .....	42
Support Tools.....	43
Internet Status.....	43
WIFI Setup.....	44
Reboot.....	45
AnyDesk .....	46
Footer Information.....	46
Recycler Settings.....	47
Recycler Stats.....	48
Recycler Summary .....	49
Target Bills .....	50
Refill Mode .....	51
Bleed.....	53
Logs .....	55
Settings.....	56
Help .....	58
AFT History.....	59
License Management .....	60
Player Menu .....	61
Appendix A: Cabinet Set Up .....	63
Bill Acceptors .....	63
Cables.....	63
Hard Drive Requirements.....	63
Appendix B: PA7, TAO Apex Pulse Diagram.....	64
Appendix C: ICT PA7 and TAO Settings for Serial....	69

### Disclaimer

The information contained in this instruction manual is for information purposes only. Primero Games, LLC ("Primero") is not responsible for any errors or omissions, or for the results obtained, from the use of this information. All information in this instruction manual is presented "as is" with no guaranty of completeness, accuracy, or for the results obtained from its use. This instruction manual is not intended to be a safety guide. You must take all safety precautions that you believe are necessary. Your use of this information is at your own risk. This instruction manual is not a product warranty. PRIMERO MAKES NO EXPRESS OR IMPLIED WARRANTY AND DISCLAIMS ALL OTHER WARRANTIES WITH RESPECT TO THE INFORMATION CONTAINED HEREIN.

# SPARK - Operator Manual 3.0

[Terminal Audit](#) | [Events](#) | [Bill Hist.](#) | [Rcpt Hist.](#) | [Game Stats](#) | [Game Rec.](#) | [Terminal Set.](#) | [Game Set.](#) | [SAS](#) | [Support](#) | [Recycler](#) | [A/T](#) | [Lic.](#)



## Document Navigation

This document is designed for use as a PDF and is self-referential with links to related sections for ease of use.

Tap or Click to Navigate to the Main Headings

Tap or Click to Return to the Table of Contents

The links below the page headers can be used to jump to the main headings to quickly navigate to the necessary information and instructions. Tap or Click on the Primero Logo to return to the Table of Contents.

## Symbols Used in This Guide

Indicates a **Warning** in which the Operator should pay close attention as an error may occur, damage to the machine, software or injury to the Operator may also occur.

Indicates a **Note** or tip that the Operator should be aware of or may be helpful during the set up.

## Revisions

Version	Author / Contributors	Date	Changes / Comments
1.0	Shawn Lucci – Technical Writer Darren Breese – Director of Business Development Erin Skidmore - Sr. SQA Tester II Denise Buckhana – Junior Software QA Charles East – Junior Software QA Apprentice Alex Delapena – Game Programmer David King – Head of Tech Ops/AWS Infra/DevOps	5.13.24	First Edition
1.1	Shawn Lucci – Technical Writer Darren Breese – Director of Business Development	7.23.24	Added Configuration Page functions.
2.0	Shawn Lucci – Technical Writer Robert Curtis – Sr Back End Developer	2.6.25	Added New Screenshots and Functionality.
2.1	Shawn Lucci – Technical Writer Darren Breese – Director of Business Development Chris Ward – Technical Services Supervisor	3.28.25	Updated support instructions.
3.0	Shawn Lucci – Technical Writer Darren Breese – Director of Business Development Robert Curtis – Sr Back End Developer Brett Prank – Quality Assurance	2.18.26	Updated UI Screenshots and some functionality

# SPARK - Operator Manual 3.0



[Terminal Audit](#) | [Events](#) | [Bill Hist.](#) | [Rcpt Hist.](#) | [Game Stats](#) | [Game Rec.](#) | [Terminal Set.](#) | [Game Set.](#) | [SAS](#) | [Support](#) | [Recycler](#) | [AFT](#) | [Lic.](#)

## Introduction

SPARK - More Than a Game Platform. A Smarter Machine.

Spark transforms every game machine into a connected, intelligent, upgradable platform, delivering long-term value beyond the game itself.

The Spark Operator Menu system provides a simple and easy method for Operators to navigate and set some basic functions for both the Cabinet and Games installed. The Operator can quickly view Reports on Game Results and Cabinet Events as well as Financials, adjust Game Play and Audit the Game set up.

This Manual will describe all the available Operator Menus and functions as well as the basic options available to Players. The document was designed to be used in PDF format but may be printed if necessary. Referential links are in **blue font** to help the Operator jump to other sections for additional information.



# SPARK - Operator Manual 3.0



Terminal Audit | Events | Bill Hist. | Rcpt Hist. | Game Stats | Game Rec. | Terminal Set. | Game Set. | SAS | Support | Recycler | AFT | Lic.

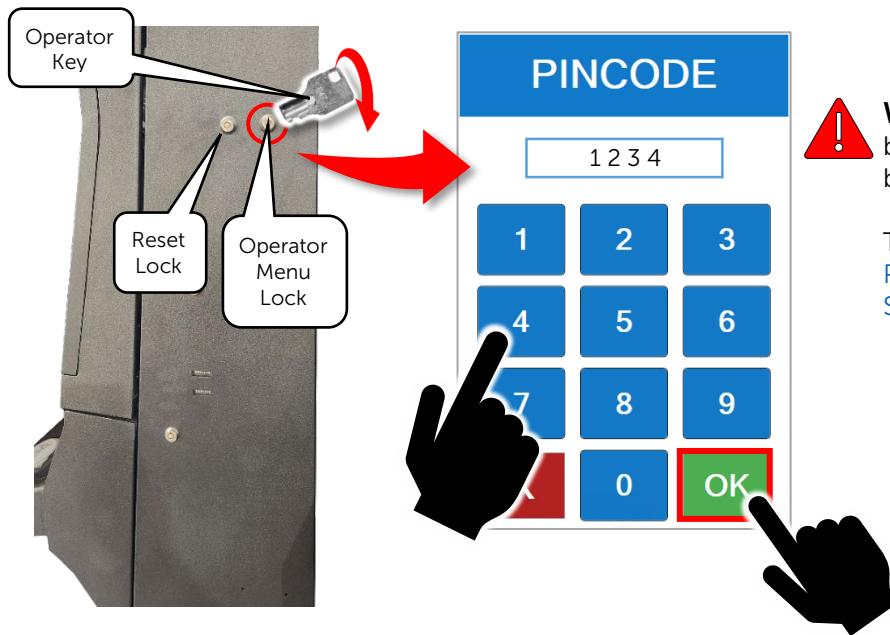
## Access

The Operator will need an **Operator Menu Key** (#1247) and Passcode to access the various Menus and Features of the Spark Operator Menu system.



To Access the Operator Menu:

1. Insert the Operator Key into the Operator Menu Lock and Turn the Key Clockwise.
2. Enter the Pin Code on the Keypad and Tap OK. Default Code = 1234



**Warning:** Default Pin Codes may be public information and should be changed for improved security.

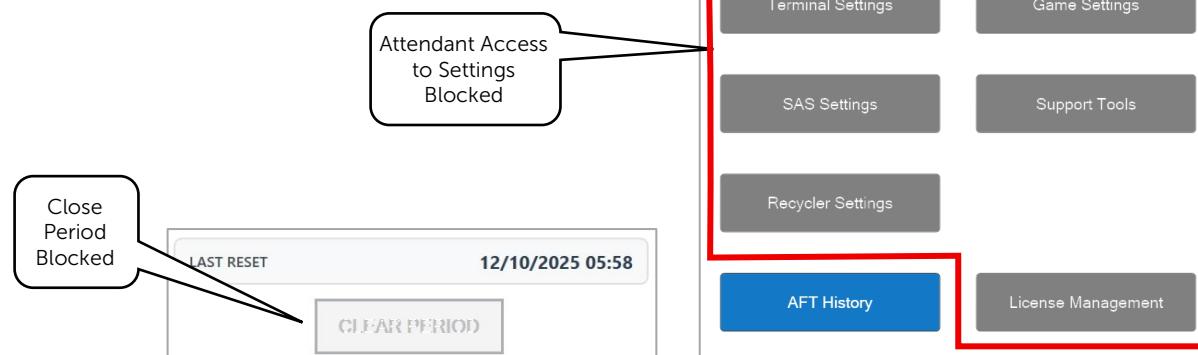
To change the Default Code, see [Pin Code](#) under the [Terminal Settings](#) page.

## Access Levels

There are 2 access levels with separate PIN that may be setup by the Operator, an Operator PIN and Attendant PIN.

The **Operator PIN** has access to the entire Operating Menu and All Settings.

The **Attendant PIN** limits access to Viewing Only and blocks access to Close a Period on the [Terminal Audit](#) Menu.



# SPARK - Operator Manual 3.0

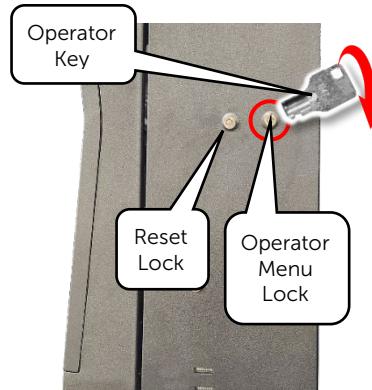


Terminal Audit | Events | Bill Hist. | Rcpt Hist. | Game Stats | Game Rec. | Terminal Set. | Game Set. | SAS | Support | Recycler | AFT | Lic.

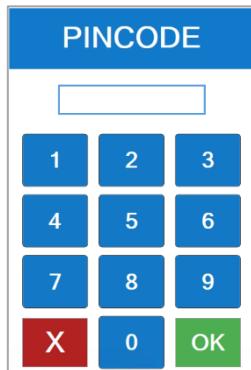
## Screen Rotation

If Necessary, it is possible to rotate the screen to Landscape or Portrait.

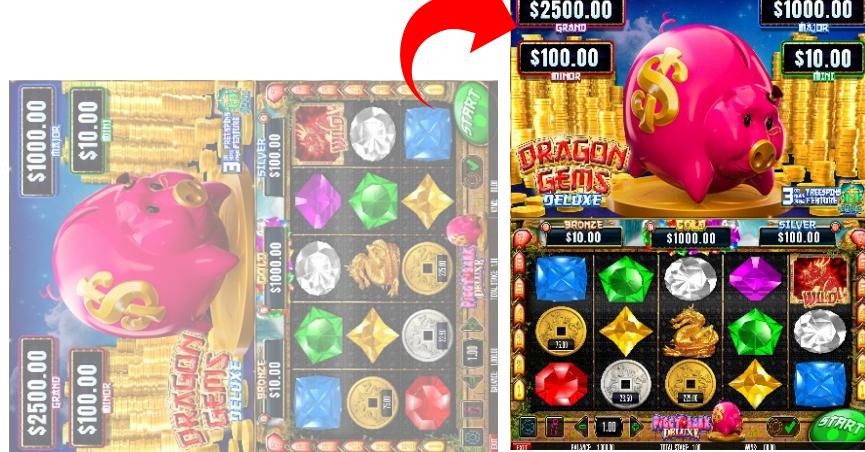
1. Insert and Turn the Operator Menu Key.



The PINCODE Login Screen Appears.



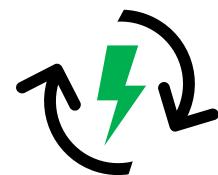
2. Tap the Play Button to Rotate the Screen.



3. Power Cycle the Cabinet by Turning it Off and back On.



**Note:** The Cabinet may need to be Power Cycled Several Times for the screen to reset properly.



# SPARK - Operator Manual 3.0



[Terminal Audit](#) | [Events](#) | [Bill Hist.](#) | [Rcpt Hist.](#) | [Game Stats](#) | [Game Rec.](#) | [Terminal Set.](#) | [Game Set.](#) | [SAS](#) | [Support](#) | [Recycler](#) | [AFT](#) | [Lic.](#)

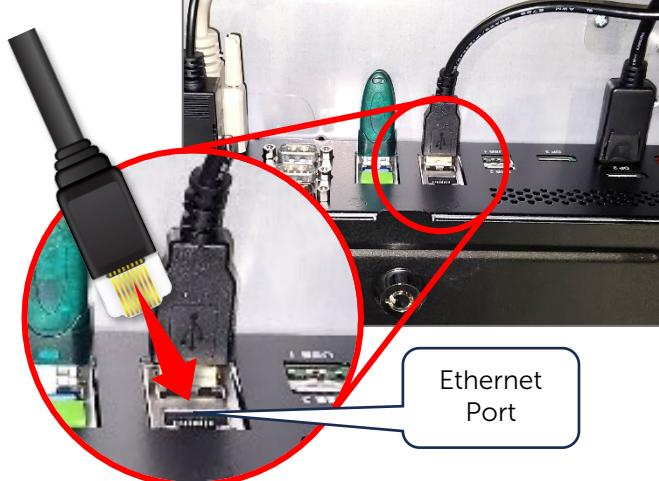
## Updating the EFCO Board

Before setting up the game machine, be sure the EFCO Board is up to date.

1. Power off the Cabinet.



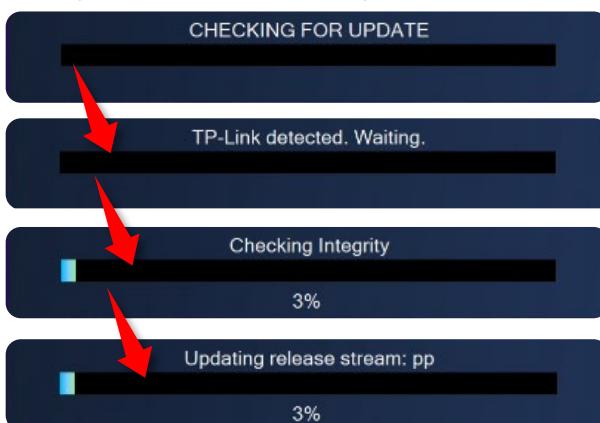
2. Insert an Internet Cable into the available Ethernet Port on the Game Board.



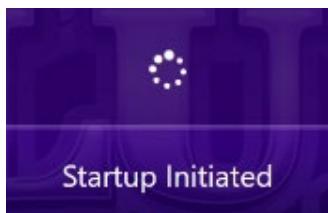
3. Power on the Cabinet.



4. The system will pass through several steps during the update process.



5. Once the update is complete, the Game will Start.



# SPARK - Operator Manual 3.0



Terminal Audit | Events | Bill Hist. | Rcpt Hist. | Game Stats | Game Rec. | Terminal Set. | Game Set. | SAS | Support | Recycler | AFT | Lic.

## Navigation

The Spark Operator Menu system has a number of common navigational features throughout the various menus and pages.

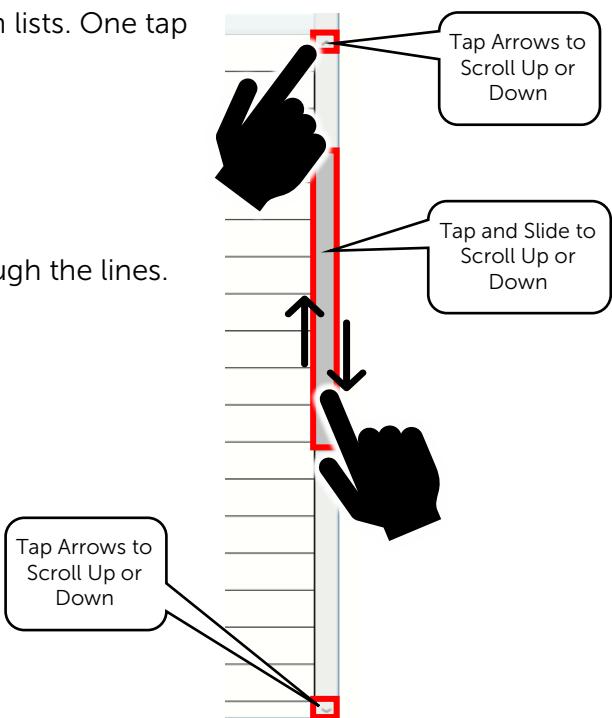
Tap a Header on a list to Sort the list Ascending Alphanumerically and Tap again to Sort the list Descending. Then Tap a Line to Highlight and Select for more actions.

Event	When			
belly door was Closed	9/12/2024 1:13:50 AM			
belly door was Closed	9/12/2024 1:38:50 AM			
belly door was Closed	9/12/2024 2:03:50 AM			
belly door was Closed	9/12/2024 2:28:51 AM			
belly door was Closed	7/1/2024 3:19:51 PM			
Date	Game Name	Wager	Win	Id
11/15/2024 4:09:19 PM	TicketToFortune	1.00	0.00	33
11/15/2024 4:09:14 PM	TicketToFortune	1.00	0.00	32
11/15/2024 4:09:08 PM	TicketToFortune	1.00	0.00	31
11/15/2024 4:09:04 PM	TicketToFortune	1.00	0.00	30
11/15/2024 4:08:59 PM	TicketToFortune	1.00	1.00	29
11/15/2024 4:08:48 PM	TicketToFortune	1.00	0.00	28
11/15/2024 4:08:43 PM	TicketToFortune	1.00	0.00	27
11/15/2024 4:08:37 PM	TicketToFortune	1.00	0.25	26
11/15/2024 4:07:11 PM	FreespinsMob	1.00	0.00	25
11/15/2024 4:07:05 PM		1.00	0.00	24
11/15/2024 4:06:58 PM		1.00	0.00	23
11/15/2024 4:06:46 PM		1.00	0.00	22
11/15/2024 4:06:40 PM		1.00	0.00	21
11/15/2024 4:06:34 PM	FreespinsMob	1.00	0.00	20
11/15/2024 4:06:05 PM	ScarabRiches	1.00	0.00	19
11/15/2024 4:05:59 PM	ScarabRiches	1.00	0.00	18
11/15/2024 4:05:54 PM	ScarabRiches	1.00	1.00	17
11/15/2024 4:05:46 PM	ScarabRiches	1.00	0.00	16
11/15/2024 4:05:39 PM	ScarabRiches	1.00	0.00	15

Use the Up and Down Arrows to Scroll through lists. One tap will equal one line.

Holding the Up arrow will scroll continually.

Slide the Scroll Bar up and down to scroll through the lines.

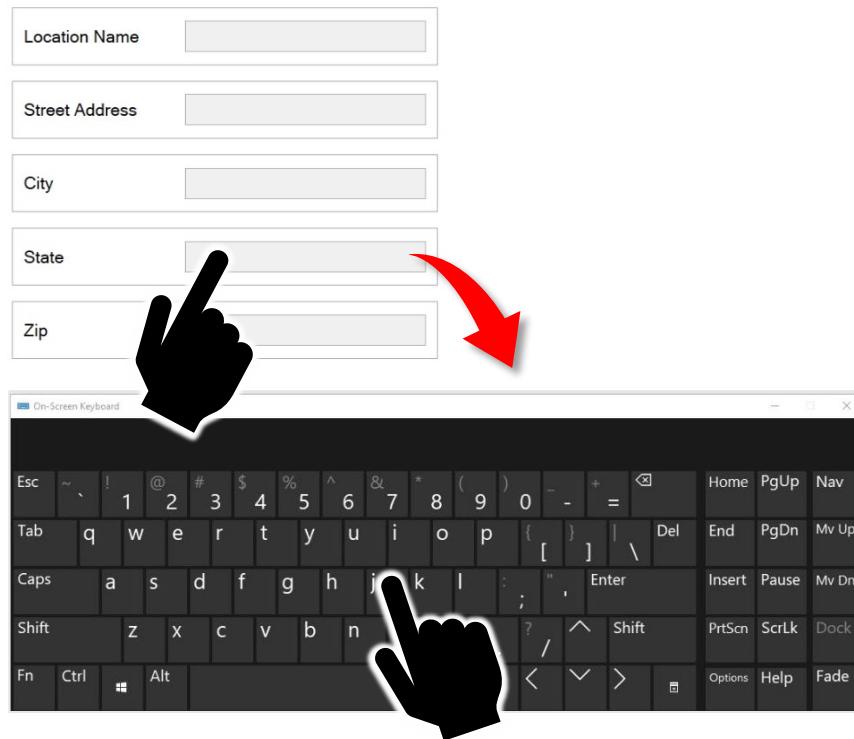


# SPARK - Operator Manual 3.0



Terminal Audit | Events | Bill Hist. | Rcpt Hist. | Game Stats | Game Rec. | Terminal Set. | Game Set. | SAS | Support | Recycler | AFT | Lic.

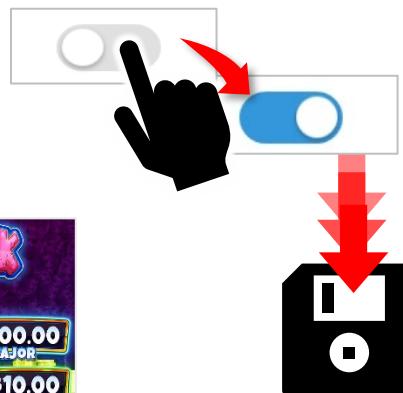
Use the Pop-Up Keyboard to Enter Alphanumeric information into various fields.



## Exit and Saving Settings

Unless otherwise stated, Settings are saved automatically once a setting is changed.

To exit the Operator Menus, turn and remove the Operator Key and the system will exit to Game Play



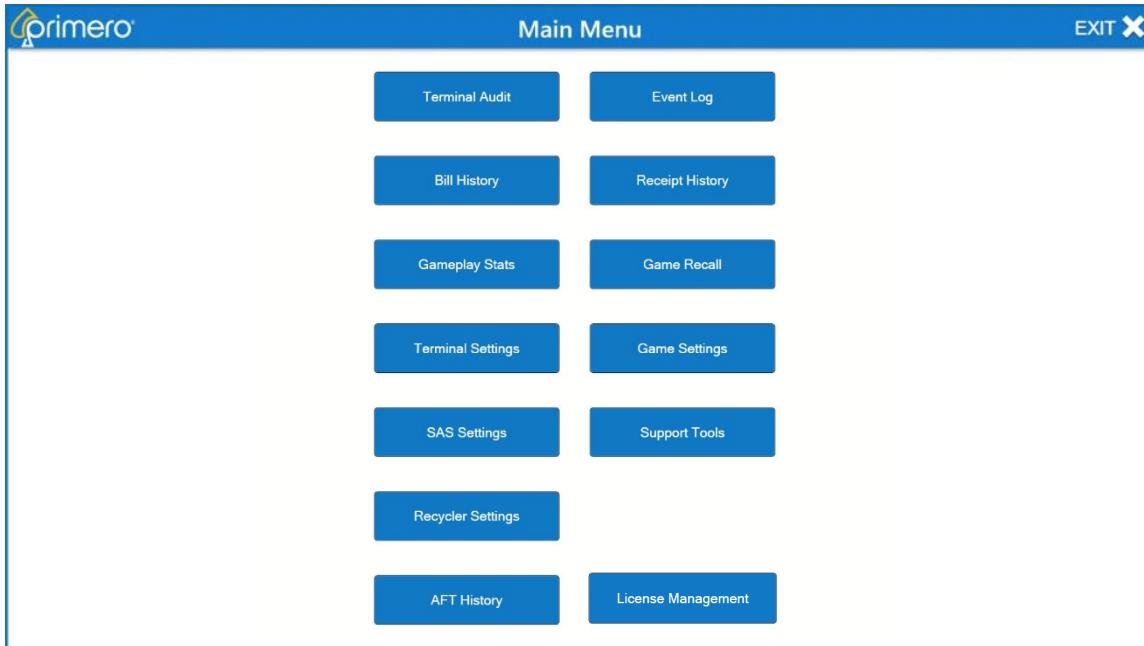
# SPARK - Operator Manual 3.0



[Terminal Audit](#) | [Events](#) | [Bill Hist.](#) | [Rcpt Hist.](#) | [Game Stats](#) | [Game Rec.](#) | [Terminal Set.](#) | [Game Set.](#) | [SAS](#) | [Support](#) | [Recycler](#) | [AFT](#) | [Lic.](#)

## Main Menu

Once logged in, the Main Menu appears. This menu allows access to the various pages and settings within the Spark Operator Menu system.



From the Main Menu, the Operator can access the following:

[Terminal Audit \(Meters\)](#) – Shows the Meter Information readings

[Event Log](#) – Displays both Physical Events and Menu Actions taken by the Operator.

[Bill History](#) – Provides a list of bills accepted by the Game Machine.

[Receipt History](#) – Shows a list of the last 20 printed receipts.

[Gameplay Stats](#) – Displays some basic financial and play statistics for the various games.

[Game Recall](#) – Shows a list of the wagers and wins for the various games.

[Terminal Settings](#) – Allows the Operator to set some parameters for the Game Machine.

[Game Settings](#) – Lets the Operator change some of the Game Settings.

[SAS Settings](#) – Sets up the Slot Accounting System when applicable.

[Support Tools](#) – Helps the Operator access support tools and information.

[Recycler Settings](#) – Allows the Operator to set up and perform actions to manage the Recycler (Optional).

[AFT History](#) – Shows a log of the AFT Transactions.

[License Management](#) – For adding funds to licensed games.

# SPARK - Operator Manual 3.0



Terminal Audit | Events | Bill Hist. | Rcpt Hist. | Game Stats | Game Rec. | Terminal Set. | Game Set. | SAS | Support | Recycler | AFT | Lic.

## Terminal Audit (Meters)

The Terminal Audit Menu or Meters Menu displays information read from the Meters inside the Game Machine for both the current Period and Totals to date.

The screenshot shows the 'Meters' screen with two main sections: 'PERIOD' and 'TOTAL'. The 'PERIOD' section displays current game statistics, while the 'TOTAL' section shows the cumulative data for the current period. The screen also includes a 'CLEAR PERIOD' button, a 'RECEIPT AUDIT' button, and a timestamp of '10/09/2025 09:07'.

PERIOD		TOTAL	
MONEY IN	\$5.00	MONEY IN	\$5.00
MONEY OUT	\$464.00	MONEY OUT	\$464.00
NET	(\$459.00)	NET	(\$459.00)
HOLD %	0%	HOLD %	0%
VALUE PLAYED	\$6,351.20	VALUE PLAYED	\$6,351.20
VALUE WON	\$6,065.01	VALUE WON	\$6,065.01
WIN %	95%	WIN %	95%
GAMES PLAYED	5265	GAMES PLAYED	5265
GAMES WON	1234	GAMES WON	1234
GAMES AVERAGE	23%	GAMES AVERAGE	23%

LAST RESET: 10/09/2025 09:07 CREDIT BALANCE: \$0.00

**CLEAR PERIOD** **RECEIPT AUDIT**

The Terminal Audit Menu has the following buttons:

**CLEAR PERIOD**

Tap to Clear the current data and start a new period.



**RECEIPT AUDIT**

**Note:** Totals will Remain.

! **Note:** Totals will Remain.

Tap to Print a receipt showing the Terminal Audit Data.



Printed Audit Receipt

**PIGGY BANK DELUXE**  
Audit: Tuesday, May 7, 2024 1:27 PM  
PGQA  
4260 Communications Dr.  
Norcross  
GA  
30093  
PGQA  
  
**PERIOD**  
Total Drop - in 75400  
Cancelled 111100  
Hold % 147%  
Net -35700  
Out(Device) 111100  
Out(Attend) 0  
Total In - Played 197840  
Total Out - Win 168625  
Won (%) 85%  
Games Played 756  
Games Won 659  
Average 87%  
Last Reset Tuesday, April 30, 2024  
  
**LONG TERM**  
Total Drop - in 160600  
Cancelled 271600  
Hold % 169%  
Net -111000  
Out(Device) 271600  
Out(Attend) 0  
Total In - Played 659740  
Total Out - Win 542444  
Average 82%  
Games Played 4955  
Games Won 4115  
Average 83%

# SPARK - Operator Manual 3.0



Terminal Audit | Events | Bill Hist. | Rcpt Hist. | Game Stats | Game Rec. | Terminal Set. | Game Set. | SAS | Support | Recycler | AFT | Lic.

The Terminal Audit Menu displays the following information:

**Money In:** Shows the Cash or Credit inserted into the Machine with a Total at the top and a breakdown when expanded showing Cash, Tickets and AFT.

**Money Out:** Shows the Cash or Credit paid out to the players with a Total at the top and a breakdown when expanded showing Cash, Tickets and AFT.

**Net:** The net amount of cash or credit retained by the machine after payouts.

**Hold %:** Is Calculated by dividing the Net by the Money In, multiplied by 100 and Rounded.

For Example, if the Net is \$11 and the Money In is \$43 the Hold % will be 26%.

$$11 \div 43 = .256 \times 100 = 25.6 \approx 26\%.$$

**Value Played:** The total amount of cash or credits played.

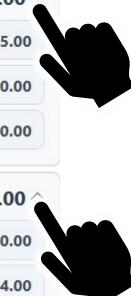
**Value Won:** The amount of cash or credit paid out to players as winnings.

**Win %:** Percent of Cash or Credit paid back to the player from winning plays.

**Games Played:** Number of Games Played in Total and for the current period.

**Games Won:** Number of Games Won in Total and for the current period.

**Games Average:** Percent of Games won from the number of games played.



MONEY IN	
Cash In	\$5.00
Ticket In	\$0.00
AFT In	\$0.00
MONEY OUT	
Cash Out	\$464.00
Ticket Out	\$0.00
AFT Out	\$0.00
NET	
(\$459.00)	
HOLD %	
0%	
VALUE PLAYED	
\$6,351.20	
VALUE WON	
\$6,065.01	
WIN %	
95%	
GAMES PLAYED	
5265	
GAMES WON	
1234	
GAMES AVERAGE	
23%	

LAST RESET	10/09/2025 09:07	CREDIT BALANCE	\$0.00
------------	------------------	----------------	--------

**Last Reset:** The Time and Date of the last reset.

**Credit Balance:** The Players current credit balance.

# SPARK - Operator Manual 3.0



Terminal Audit | Events | Bill Hist. | Rcpt Hist. | Game Stats | Game Rec. | Terminal Set. | Game Set. | SAS | Support | Recycler | AFT | Lic.

## Event Log

The Events Log page displays the various physical actions taken by the Operator triggered by the Intrusion Switches inside the Cabinet and Cabinet Components. It also displays some Menu actions such as accessing the Operator Menu and Clearing of the Credit Timer. Each event is date and time stamped.

Event	Date and Time Stamp
main door was Closed	12/1/2025 10:17:35 AM
main door was Opened	12/1/2025 10:17:35 AM
main door was Closed	12/1/2025 10:17:35 AM
main door was Opened	12/1/2025 10:17:34 AM
main door was Closed	12/1/2025 10:17:34 AM
main door was Opened	12/1/2025 10:17:34 AM
main door was Closed	12/1/2025 10:17:34 AM
main door was Opened	12/1/2025 10:17:32 AM
Operator menu was Opened	12/26/2025 10:38:30 AM

The Types of Events displayed are:

- Physical Cabinet Events
- Menu Events
- Game Events

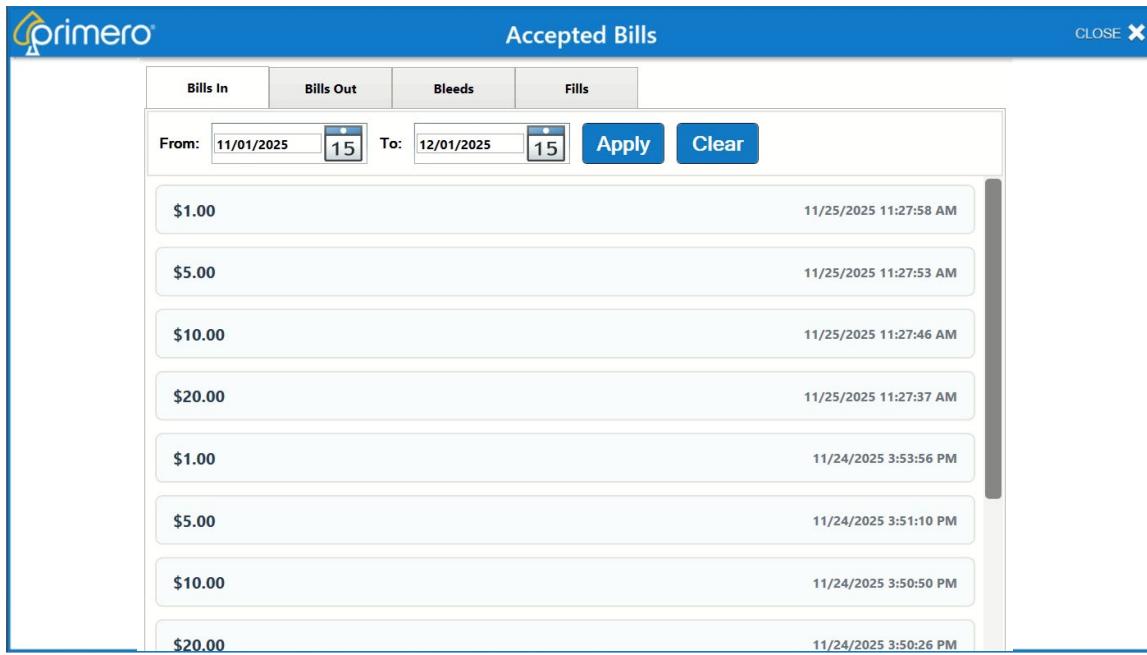
# SPARK - Operator Manual 3.0



Terminal Audit | Events | Bill Hist. | Rcpt Hist. | Game Stats | Game Rec. | Terminal Set. | Game Set. | SAS | Support | Recycler | AFT | Lic.

## Bill History

The Bill History page shows information about the game machines accepted bills via the Bill Acceptor or Recycler (if installed) and displays 4 Tabs to breakdown the information, Bills In, Bills Out, Bleeds, and Fills.



Amount	Date
\$1.00	11/25/2025 11:27:58 AM
\$5.00	11/25/2025 11:27:53 AM
\$10.00	11/25/2025 11:27:46 AM
\$20.00	11/25/2025 11:27:37 AM
\$1.00	11/24/2025 3:53:56 PM
\$5.00	11/24/2025 3:51:10 PM
\$10.00	11/24/2025 3:50:50 PM
\$20.00	11/24/2025 3:50:26 PM

The Accepted Bills page shows the following Tabs:

- [Bills In](#)
- [Bills Out](#)
- [Bleeds](#)
- [Fills](#)

# SPARK - Operator Manual 3.0



Terminal Audit | Events | Bill Hist. | Rcpt Hist. | Game Stats | Game Rec. | Terminal Set. | Game Set. | SAS | Support | Recycler | AFT | Lic.

## Bills In

Denomination	Date and Time Stamp
\$1.00	11/25/2025 11:27:58 AM
\$5.00	11/25/2025 11:27:53 AM
\$10.00	11/25/2025 11:27:46 AM
\$20.00	11/25/2025 11:27:37 AM
\$1.00	11/24/2025 3:53:56 PM
\$5.00	11/24/2025 3:51:10 PM
\$10.00	11/24/2025 3:50:50 PM
\$20.00	11/24/2025 3:50:26 PM

The Bills In Tab shows a list of the bills inserted into the Bill Acceptor during the specified date range. Each line shows the denomination of the Bill inserted with a Time and Date Stamp.

To select a data range:

1. Tap the Calendar Icon.

From: 11/01/2025 15 To: 12/01/2025 15 Apply Clear

2. Select the Date and Tap Apply.

From: 11/01/2025 15 To: 12/01/2025 15 Apply Clear

S	M	T	W	T	F	S
26	27	28	29	30	31	1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	1	2	3	4	5	6

Tap Clear to remove the Date Range.

From: 11/01/2025 15 To: 12/01/2025 15 Apply Clear

# SPARK - Operator Manual 3.0



Terminal Audit | Events | Bill Hist. | Rcpt Hist. | Game Stats | Game Rec. | Terminal Set. | Game Set. | SAS | Support | Recycler | AFT | Lic.

## Bills Out

Date & Time	Status	Req: \$	1 bills	\$
11/24/2025 14:37:03	Completed	\$5	1 bills	\$5
11/24/2025 14:36:21	Completed	\$5	1 bills	\$5
11/24/2025 14:23:59	Completed	\$10	1 bills	\$10

The Bills Out Tab shows a list of any bills dispensed from a collection. Each line displays the Total amount dispensed, Number of Bills, Amount Requested from the Collection, the Status, and a Time and Date Stamp.

Tap the Arrow to expand a line for more information about the event.

Date & Time	Status	Req: \$	1 bills	\$
11/24/2025 14:36:21	Completed	\$5	1 bills	\$5
		\$5	1 bills	\$5
		<b>TOTAL</b>	<b>1 bills</b>	<b>\$5</b>

If there are any issues with the collection, the line will be highlighted and display the issue status of the collection.

Date & Time	Status	Req: \$	2 bills	\$
12/01/2025 16:07:05	Completed w/ Retry	\$40	2 bills	\$40
		\$20	2 bills	\$40
		<b>TOTAL</b>	<b>2 bills</b>	<b>\$40</b>

# SPARK - Operator Manual 3.0



Terminal Audit | Events | Bill Hist. | Rcpt Hist. | Game Stats | Game Rec. | Terminal Set. | Game Set. | SAS | Support | Recycler | AFT | Lic.

## Bleeds

Accepted Bills

CLOSE X

Bills In Bills Out Bleeds Fills

12/01/2025 10:53:59 Completed Req: \$70 6 bills \$70 Total Dispensed

Arrow to Expand Date and Time Stamp Status Total Requested Number of Bills Dispensed Total Dispensed

The Bleeds Tab shows a list of the bleeds performed and the results including the Total, Number of Bills, Amount Requested, Status, and a Date and Time Stamp.

Tap the Arrow to expand a line for more information about the event.

12/01/2025 10:53:59	Completed	Req: \$70	6 bills	\$70
\$20			2 bills	\$40
\$10			2 bills	\$20
\$5			2 bills	\$10
<b>TOTAL</b>			<b>6 bills</b>	<b>\$70</b>

# SPARK - Operator Manual 3.0



Terminal Audit | Events | Bill Hist. | Rcpt Hist. | Game Stats | Game Rec. | Terminal Set. | Game Set. | SAS | Support | Recycler | AFT | Lic.

## Fills

Accepted Bills

CLOSE X

Bills In	Bills Out	Bleeds	Fills
			<p>12/01/2025 10:55:09    Completed    3 bills    \$35</p> <p>Arrow to Expand    Date and Time Stamp    Status    Number of Bills Dispensed    Total Dispensed</p>

The Fills Tabs displays a list of the Fills performed and the results including the Total, Number of Bills, Status, and a Date and Time Stamp.

Tap the Arrow to expand a line for more information about the event.

12/01/2025 10:55:09	Completed	3 bills	\$35
\$20		1 bills	\$20
\$10		1 bills	\$10
\$5		1 bills	\$5
<b>TOTAL</b>		<b>3 bills</b>	<b>\$35</b>

# SPARK - Operator Manual 3.0



Terminal Audit | Events | Bill Hist. | Rcpt Hist. | Game Stats | Game Rec. | Terminal Set. | Game Set. | SAS | Support | Recycler | AFT | Lic.

## Receipt History

The Receipt Recall Page has 2 tabs and displays the last 20 Win Receipts printed on the Receipts Out Tab as well as any tickets entered for the TITO System when activated on the Receipts In Tab.

Voucher ID	Win Amount	Date and Time
1004481000004	\$60.00	11/26/2025 9:30:25 AM
1004481000003	\$36.00	11/24/2025 3:40:04 PM
1004481000002	\$41.00	11/24/2025 2:38:11 PM
1004481000001	\$10.00	11/24/2025 2:12:31 PM

**REPRINT**

The Receipt Out Tab shows the following:

- Voucher ID
- Win Amount
- Date and Time of Receipt

To Reprint a Receipt:

1. Select the Receipt.

2. Tap Reprint.

The system will reprint the selected receipt.

**Note:** It is possible to Select more than one Receipt from the list, however, the system will only print one receipt at a time.



# SPARK - Operator Manual 3.0



Terminal Audit | Events | Bill Hist. | Rcpt Hist. | Game Stats | Game Rec. | Terminal Set. | Game Set. | SAS | Support | Recycler | AFT | Lic.

## Receipt In

Receipt Out	Receipt In		
010095993337606751	<span>Cashable</span>	\$65.00	12/15/2025 3:31:59 PM
012313020040131043	<span>Cashable</span>	\$108.00	12/15/2025 10:55:10 AM
019282373433845891	<span>Cashable</span>	\$100.00	12/12/2025 11:23:11 AM
004054504974162392	<span>Cashable</span>	\$39.00	12/11/2025 3:46:31 PM
004054504974162392	<span>Cashable</span>	\$39.00	12/11/2025 3:00:55 PM
004606241320544008	<span>Cashable</span>	\$10.00	12/10/2025 11:44:36 AM
004454485213653200	<span>Cashable</span>	\$10.00	12/10/2025 11:43:59 AM
001553049347404912	<span>Cashable</span>	\$10.00	12/10/2025 11:43:45 AM
010194690074094985	<span>Cashable</span>	\$90.00	12/5/2025 2:44:58 PM
010965144460116944	<span>Cashable</span>	\$60.00	12/5/2025 11:29:37 AM
012248146434797187	<span>Cashable</span>	\$8.00	12/4/2025 5:00:20 PM

Voucher ID      Status      Ticket Amount      Date & Time

The Receipts In Tab shows any receipts entered when the TITO system is activated. It displays the Ticket ID, Ticket Status, Amount and the Date and Time the Ticket was entered.

See [Enable TITO Server](#) to Setup TITO and Enable or Disable TITO Tickets.

# SPARK - Operator Manual 3.0



Terminal Audit | Events | Bill Hist. | Rcpt Hist. | Game Stats | Game Rec. | Terminal Set. | Game Set. | SAS | Support | Recycler | AFT | Lic.

## Game Statistics

The Game Statistics Page displays some basic financial and play statistics for the various games including the number of plays for each game, coin in and coin out as well as the profit collected and return to player percentages.

The screenshot shows a 'Game Statistics' page with a table of game performance data. The table has columns for Name, Plays, Coin In, Coin Out, Profit, and RTP %. The data includes various games like Magic Tricks, P G\_ Buffalo Blazing Plains, P G\_ Diamond Duchess, etc. At the bottom, there are 'Totals' for each column: 8097 Plays, \$7,857.25 Coin In, \$6,618.38 Coin Out, \$1,238.87 Profit, and 84.23% RTP %.

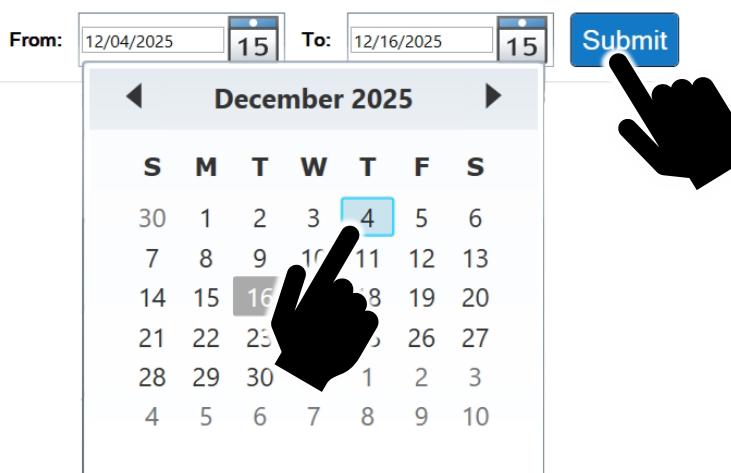
Name	Plays	Coin In	Coin Out	Profit	RTP %
Magic Tricks	1	\$1.00	\$0.00	\$1.00	0.00%
P G_ Buffalo Blazing Plains	1493	\$1,492.20	\$1,292.28	\$199.92	86.60%
P G_ Diamond Duchess	573	\$573.00	\$545.60	\$27.40	95.22%
P G_ Divine Pearl	2542	\$3,177.25	\$2,804.58	\$372.67	88.27%
P G_ Flaming7	1975	\$827.80	\$711.77	\$116.03	85.98%
P G_ Little Devil	43	\$43.00	\$14.80	\$28.20	34.42%
P G_ Magic Tricks	531	\$658.75	\$461.31	\$197.44	70.03%
P G_ Midnight At The Moulin	569	\$710.50	\$564.33	\$146.17	79.43%
P G_ Safari Wonders	65	\$68.75	\$24.82	\$43.93	36.10%
P G_ Scarab Riches	305	\$305.00	\$198.89	\$106.11	65.21%
<b>Totals</b>					
	8097	\$7,857.25	\$6,618.38	\$1,238.87	84.23%

The Game Statistics Page displays the following:

- **Name** – The Name of the Game being played.
- **Plays** – The number of times the game was played.
- **Coin In** – The total amount of credits played in the game.
- **Coin Out** – The total amount of credits won by players.
- **Profit** – The amount of profit collected by the game. (Coin In – Coin Out = Profit)
- **RTP %** – A percentage of the amount won verses the amount wagered.
- **Totals** – Shows the Totals for each column.

To change the Dates displayed:

1. Tap the Calendar Icon.
2. Select the Date.
3. Tap Submit.



# SPARK - Operator Manual 3.0



Terminal Audit | Events | Bill Hist. | Rcpt Hist. | Game Stats | Game Rec. | Terminal Set. | Game Set. | SAS | Support | Recycler | AFT | Lic.

## Game Recall

The Game Recall Page displays information for each play of each game and includes the date and time of the play, game name, wager, win and play ID.

The screenshot shows a 'Game Recall' page with a list of plays. Each play entry includes a date and time, a play ID, a game name, a wager amount, and a win amount. A 'Submit' button is at the top. Callouts point to specific fields: 'Date & Time' points to the date and time in the header and the play times; 'Play ID' points to the play ID column; 'Game Name' points to the game name column; 'Wager' points to the wager amount; and 'Win Amount' points to the win amount.

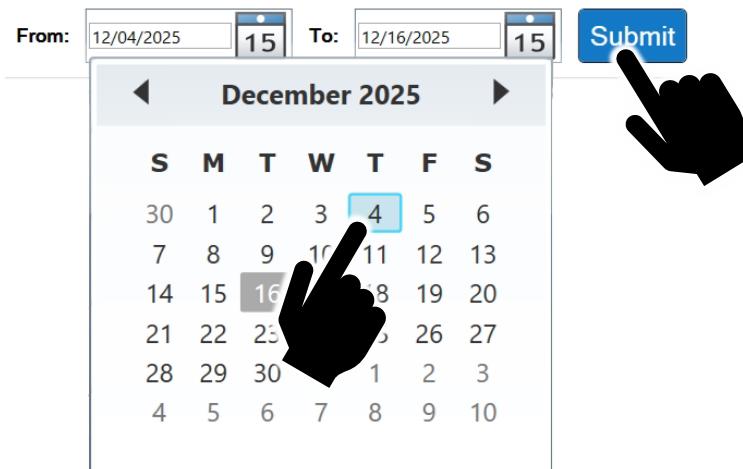
Date & Time	Play ID	Game Name	Wager	Win Amount
11/26/2025 1:59:57 PM	8097	PG_BuffaloBlazingPlains	\$0.20	\$0.00
11/26/2025 1:59:24 PM	8096	PG_DivinePearl	\$1.00	\$0.00
11/26/2025 1:59:12 PM	8095	PG_DivinePearl	\$1.25	\$0.00
11/26/2025 1:59:11 PM	8094	PG_DivinePearl	\$1.25	\$0.00
11/26/2025 1:59:09 PM	8093	PG_DivinePearl	\$1.25	\$0.00
11/26/2025 1:59:08 PM	8092	PG_DivinePearl	\$1.25	\$0.00
11/26/2025 1:59:06 PM	8091	PG_DivinePearl	\$1.25	\$0.00
11/26/2025 1:59:05 PM	8090	PG_DivinePearl	\$1.25	\$0.00
11/26/2025 1:59:03 PM	8089	PG_DivinePearl	\$1.25	\$1.25
11/26/2025 1:59:02 PM	8088	PG_DivinePearl	\$1.25	\$0.00

The Game Recall Page shows the following information:

- Date** – Shows the Date and Time of the Play.
- Game Name** – Displays the name of the game that was played.
- Wager** – Shows the amount wagered on the play.
- Win** – Displays the win amount.
- ID** – Shows the unique numeric identifier of the play.

To change the Dates displayed:

1. Tap the Calendar Icon.
2. Select the Date.
3. Tap Submit.



# SPARK - Operator Manual 3.0



Terminal Audit | Events | Bill Hist. | Rcpt Hist. | Game Stats | Game Rec. | Terminal Set. | Game Set. | SAS | Support | Recycler | AFT | Lic.

## Terminal Settings

The Terminal Settings page allows the Operator to change some Cabinet Component settings such as Printer settings, Monitor Calibration and change the access Pin Code.

The screenshot shows the 'Terminal Settings' page with the following sections:

- General Configuration:** Includes fields for Location Name (My Company), Street Address (123 Fourth Street), City (City), State (State), Zip (30321), Ticket Interval (1), Minimum Ticket (1), Max Ticket (\$10), Ticket QR Code (on), Special Win (\$50000), Pin Code (\*\*\*\*), Attendant Pin (\*\*\*\*), Tito Server Address (http://localhost:5005), Test button, Auto Rebuy (on), Interactive Attract (on), and Attract Advertisements (on).
- Hardware Configuration:** Includes fields for Tilt Subtext, Calibrate Touchscreen (Select Manufacturer), Volume (49), Bill Acceptor Type (ID003), Bill Acceptor Port (COM1), Printer Type (Pyramid), Printer Port (COM2), and Initialize button.
- Community Game Configuration:** Includes fields for Community Game (on), Server URL (http://localhost:5009), and Test button.

At the bottom are buttons for RAM CLEAR, Recycler Config, and Set Date/Time.

The Terminal Settings page has the following options:

- Location / Address
- Alarm
- Tito Server
- Ticket on Purchase
- Auto Rebuy
- Ticket Interval
- Minimum Ticket
- Max Ticket
- Ticket QR Code
- Special Win
- Pin Code / Attendant Pin
- Interactive Attract
- Attract Advertisements
- Tilt Subtext
- Volume
- Printer Type / Port
- Calibrate Touchscreen
- Bill Acceptor Type / Port
- Community Game Config
- RAM Clear
- Recycler Config
- Set Date/Time

# SPARK - Operator Manual 3.0

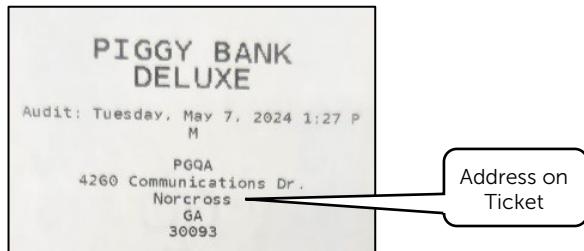


Terminal Audit | Events | Bill Hist. | Rcpt Hist. | Game Stats | Game Rec. | Terminal Set. | Game Set. | SAS | Support | Recycler | AFT | Lic.

## Address Fields

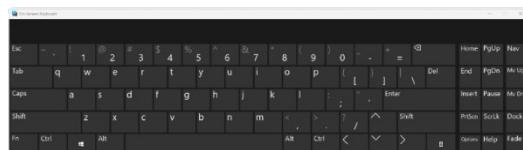
Sets the Address that appears on Tickets.

Location Name	<input type="text"/>
Street Address	<input type="text"/>
City	<input type="text"/>
State	<input type="text"/>
Zip	<input type="text"/>



Address on Ticket

Tap a Text Box and use the Pop Up Keyboard to Enter the information.



## Alarm

Alarm	<input type="checkbox"/>
Alarm	<input type="checkbox"/>



Tap to Turn On or Off.

Activates or Deactivates the Door Alarm which is triggered when the Main Door is opened.

## Enable TITO Server / TITO Server Address

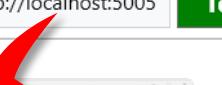
Enable Tito Server	<input type="checkbox"/>
Enable Tito S	<input type="checkbox"/>



Tap to Enable or Disable the TITO Server.

Once enabled, the Server Address will become available. Use the Pop-Up Keyboard to enter the address if necessary and Tap Test to ensure the connection is successful.

Tito Server Address	<input type="text" value="http://localhost:5005"/>	<input type="button" value="Test"/>
---------------------	--	-------------------------------------



Connection Successful

Successfully connected to TITO server at:  
http://localhost:5005

OK

# SPARK - Operator Manual 3.0



Terminal Audit | Events | Bill Hist. | Rcpt Hist. | Game Stats | Game Rec. | Terminal Set. | Game Set. | SAS | Support | Recycler | AFT | Lic.

## Ticket on Purchase



When enabled, this feature prints a Promo Ticket for the Gold Rush City App. The QR Code on the Ticket will send the player to the App Store to Download the Gold Rush City App unless the player already has a Gold Rush City account in which case the QR Code will open the App.

For each Dollar added to the game, the player will receive 1000 Gold Coins for play in Gold Rush City.

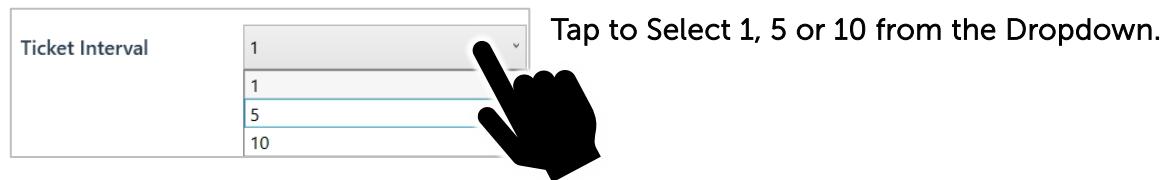


## Auto Rebuy



For Sweepstakes Games, this feature allows the buyback of remaining Awards as Credits.

## Ticket Interval

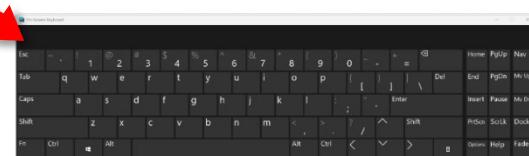


Sets the amount by which a payout on a ticket will increase and therefore the remaining cash or credit left in the machine when a ticket is printed. For Example, if the Ticket Interval is set to 5 and the player has \$6.50 in winnings, the ticket will only print for \$5, leaving \$1.50 to play in the game. See [Lose Remaining Credit](#) for additional settings.

## Minimum Ticket



Sets the minimum amount for a payout on a ticket when printed. For example, if set to 5, the player must have winnings of at least \$5 or no ticket will print.

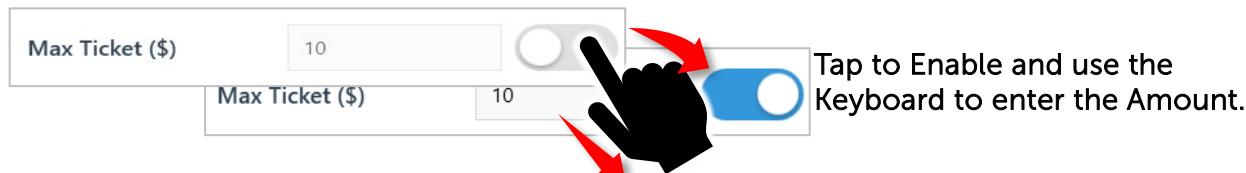


# SPARK - Operator Manual 3.0



Terminal Audit | Events | Bill Hist. | Rcpt Hist. | Game Stats | Game Rec. | Terminal Set. | Game Set. | SAS | Support | Recycler | AFT | Lic.

## Max Ticket (\$)

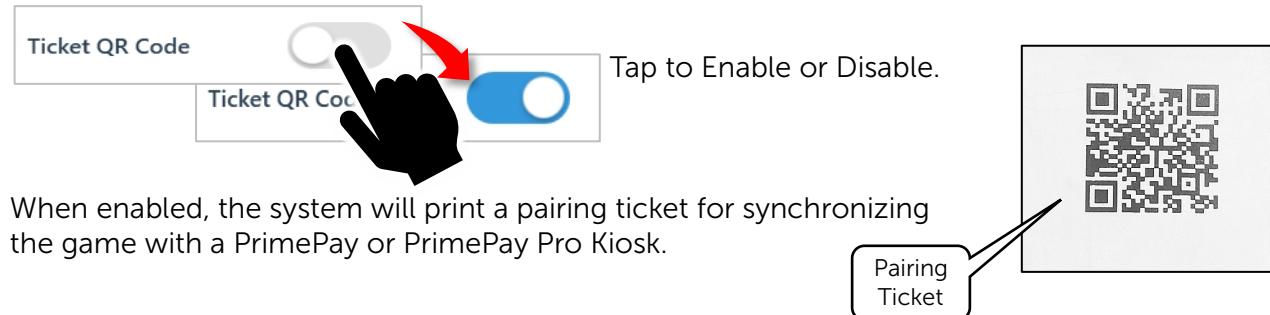


When enabled, the system will dispense the amount set and print a ticket for the remainder of the amount to be redeemed by an attendant or cashier.

For example, if set to 10 and the player attempts to collect \$50, the system will dispense \$10 from the machine and print a ticket for the remaining \$40 for redemption.



## Ticket QR Code



When enabled, the system will print a pairing ticket for synchronizing the game with a PrimePay or PrimePay Pro Kiosk.

## Special Win



To prevent awarding winnings that exceed a specific amount. If applicable, this limit must be set according to the laws of the jurisdiction in which the machine will be placed.

# SPARK - Operator Manual 3.0



Terminal Audit | Events | Bill Hist. | Rcpt Hist. | Game Stats | Game Rec. | Terminal Set. | Game Set. | SAS | Support | Recycler | AFT | Lic.

## Pin Code / Attendant Pin

Pin Code

Attendant Pin

Tap the Text Box and use the Pop-Up Keyboard to Enter a Numeric Value. Tap the Eye symbol to view the PIN.

Sets the Pin Codes for access to the Operator Menu. See [Access](#) for more information.



## Interactive Attract

Interactive Attract

Tap to Enable or Disable.

This feature sets the Game in a Demo Mode after a period of time depending on the interaction with the game. If the Game has no credits, Demo Mode will start after 5 minutes or 10 minutes if the game has credits.

**Demo Mode starts after:**

5 min = With no Credits on Game.  
10 min = If Credits remain on Game.



Demo Mode

# SPARK - Operator Manual 3.0



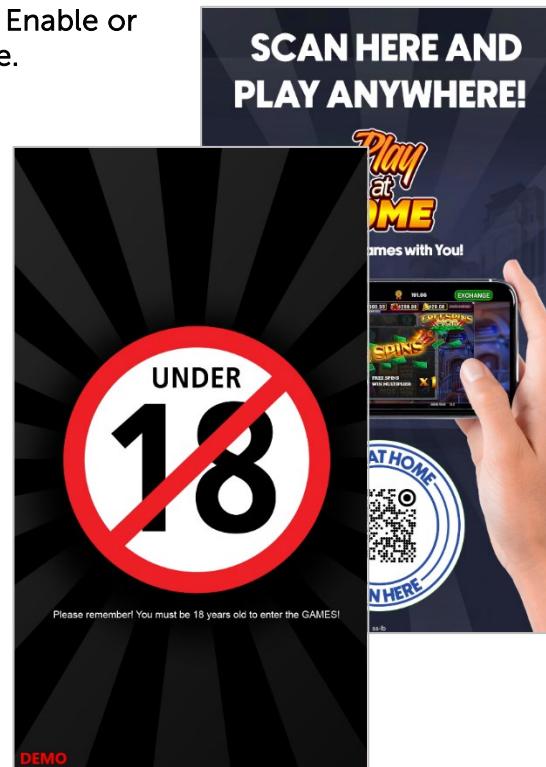
Terminal Audit | Events | Bill Hist. | Rcpt Hist. | Game Stats | Game Rec. | Terminal Set. | Game Set. | SAS | Support | Recycler | AFT | Lic.

## Attract Advertisements



Tap to Enable or Disable.

When activated, the Game will display a series of advertisements and an Age Verification notice.



## Tilt Subtext

Tilt Subtext

Please Call 800-555-1234

Enter a custom message that will appear with any Tilts that may occur.



## Volume

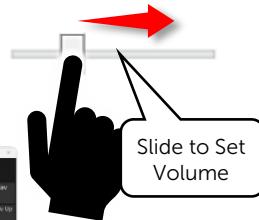
Volume

49



Tap the Text Box to enter a value or Use the Slider to increase or decrease the volume setting.

Sets the Volume for the Game sounds and music.



# SPARK - Operator Manual 3.0



Terminal Audit | Events | Bill Hist. | Rcpt Hist. | Game Stats | Game Rec. | Terminal Set. | Game Set. | SAS | Support | Recycler | AFT | Lic.

## Printer Type

Printer Type Pyramid

Tap to open the Printer Type Dropdown and Select a Printer Type.



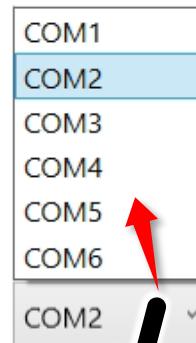
## Printer Port

Printer Port COM2 INITIALIZE

Tap to open the Printer Port Dropdown and Select a Printer Port.

See [Appendix A: Printers](#) for supported printers and printer set up.

To start the Printer without the need to restart the Machine, Tap Initialize.



# SPARK - Operator Manual 3.0



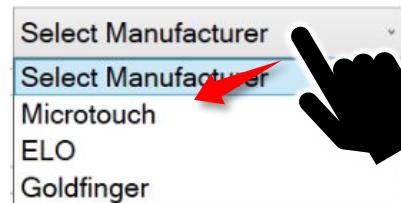
Terminal Audit | Events | Bill Hist. | Rcpt Hist. | Game Stats | Game Rec. | Terminal Set. | Game Set. | SAS | Support | Recycler | AFT | Lic.

## Calibrate Touchscreen

Calibrate Touchscreen Select Manufacturer

Tap to Select the Manufacturer of the Monitor from the Dropdown and the Calibration settings will automatically open.

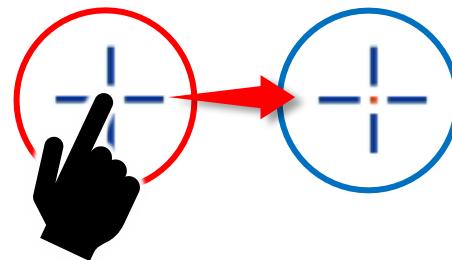
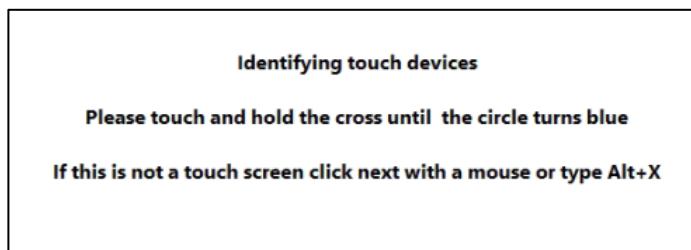
This will calibrate the Touch settings for the Selected Monitor.



To Calibrate the Touchscreen Monitor:

Blue crosshairs with a Red center dot will appear on the screen.

Touch and hold the crosshair and a Red Circle will appear. When the Red Circle turns Blue, the crosshair will move to another part of the screen. Repeat until the screen is calibrated.

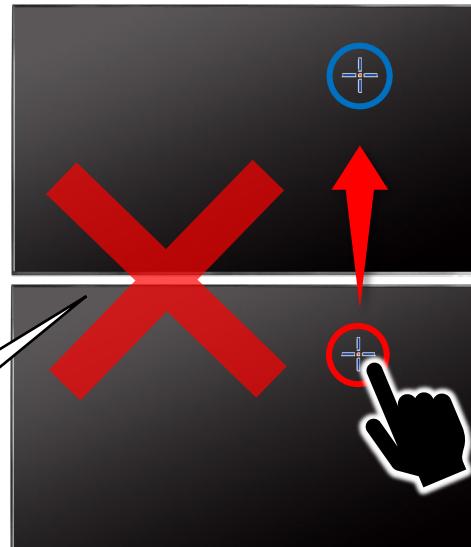


**Warning:** The system does not support calibration on a Dual Monitor system.

If Selecting a Monitor Manufacturer on a Dual Monitor System, Do Not attempt to calibrate, avoid touching the monitors and allow the calibration settings to Time Out.

If the Game Machine has Dual Monitors that need to be calibrated, please contact Primero Support at **833-503-1724**.

Do Not Calibrate Dual Monitors



# SPARK - Operator Manual 3.0



Terminal Audit | Events | Bill Hist. | Rcpt Hist. | Game Stats | Game Rec. | Terminal Set. | Game Set. | SAS | Support | Recycler | AFT | Lic.

## Bill Acceptor Type

Bill Acceptor Type ID003

Tap the dropdown to select the Bill Acceptor.

None  
ID003  
PyramidApex  
ICT  
Mei  
MeiSerial  
SpectralPayout  
ID003

## Bill Acceptor Port

Bill Acceptor Port COM1 **INITIALIZE**

Tap the Dropdown to Select the Bill Validator Port.

To start the Bill Validator without the need to restart the Machine, Tap Initialize.

INITIALIZE

COM1  
COM2  
COM3  
COM4  
COM5  
COM6  
COM1

See [Appendix A: Bill Validators](#) for supported Bill Validators and Bill Validator set up.

## Community Game Configuration

Community Game Configuration

Community Game

Server URL  **Test**

Community Game

Server URL  **Test**

When enabled, activates the community games access for downloading games from a server.

This feature is not currently supported.

# SPARK - Operator Manual 3.0



Terminal Audit | Events | Bill Hist. | Rcpt Hist. | Game Stats | Game Rec. | Terminal Set. | Game Set. | SAS | Support | Recycler | AFT | Lic.

## RAM Clear

RAM CLEAR

Tap the RAM CLEAR button to perform a RAM Clear on the Game Machine.

A RAM Clear will reset the game machine's memory, meter information, some configuration settings, and any data stored in the random-access memory.

## Recycler Config

Recycler Config

Tap to access the Recycler Settings.

The Recycler Config button provides quick access to the Recycler Settings menu from the Terminal Settings.

See [Recycler Settings](#) for more information.

# SPARK - Operator Manual 3.0



Terminal Audit | Events | Bill Hist. | Rcpt Hist. | Game Stats | Game Rec. | Terminal Set. | Game Set. | SAS | Support | Recycler | AFT | Lic.

## Set Date/Time

### Set Date/Time

Tap the Set Date/Time button to set the date and time for the Game Machine.

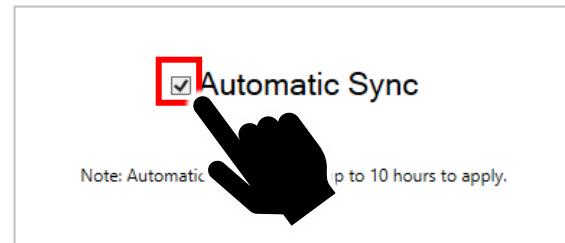
Current System Date/Time:

06-Mar-2025 10:54 AM

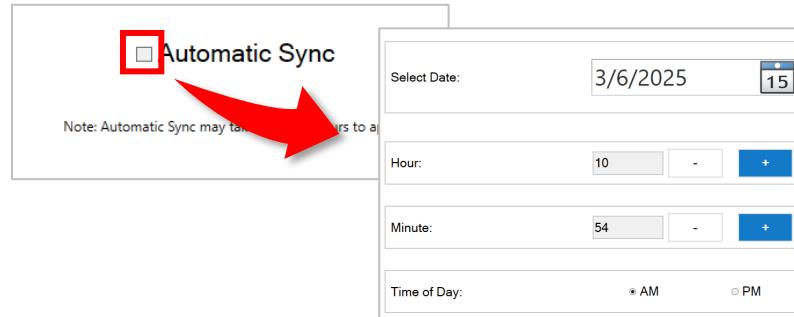
## Automatic Sync

If the Machine is connected to the internet, Tap the Automatic Sync check box to synchronize the time with the internet.

 **Note:** Automatic Sync may take up to 10 hours to apply.

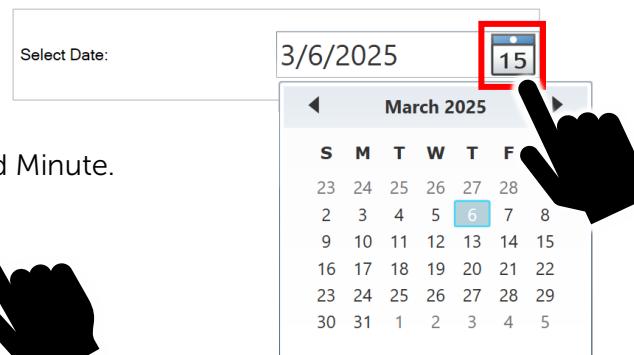


If Automatic Sync is unchecked or turned off, the Time and Date may be set manually.

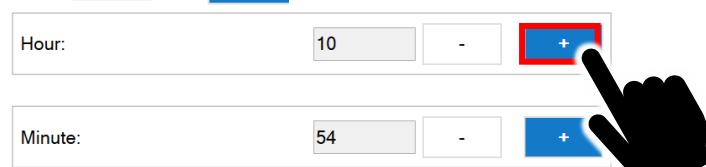


## Manual Time and Date Settings

Tap the Calendar button to select a date.



Tap  or  to change the Hour and Minute.



Tap the Radio Button to select AM or PM.



Tap Save Date/Time to set the time.

**Save Date/Time**



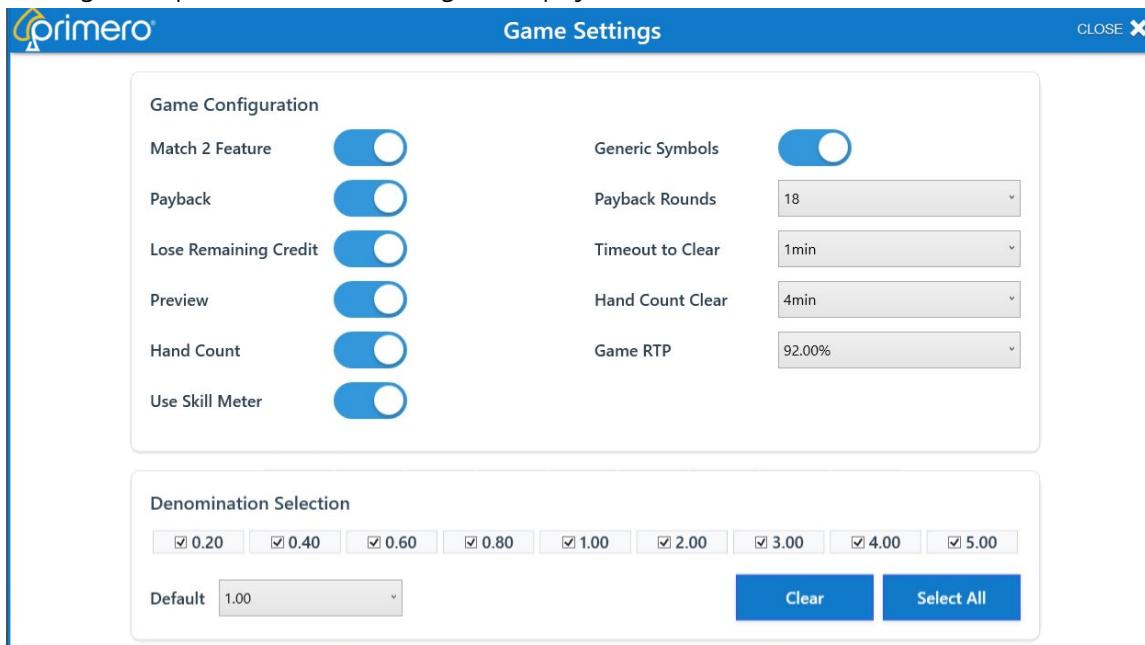
# SPARK - Operator Manual 3.0



Terminal Audit | Events | Bill Hist. | Rcpt Hist. | Game Stats | Game Rec. | Terminal Set. | Game Set. | SAS | Support | Recycler | AFT | Lic.

## Game Settings

The Game Settings page allows the Operator to activate features or set some of the Game settings and parameters including skills, payout and denominations.



The screenshot shows the 'Game Settings' dialog box. At the top right is a 'CLOSE' button. The main area is divided into two sections: 'Game Configuration' and 'Denomination Selection'.

**Game Configuration:**

- Match 2 Feature: On (blue toggle switch)
- Generic Symbols: On (blue toggle switch)
- Playback: On (blue toggle switch)
- Playback Rounds: 18 (dropdown menu)
- Lose Remaining Credit: On (blue toggle switch)
- Timeout to Clear: 1min (dropdown menu)
- Preview: On (blue toggle switch)
- Hand Count Clear: 4min (dropdown menu)
- Hand Count: On (blue toggle switch)
- Game RTP: 92.00% (dropdown menu)
- Use Skill Meter: On (blue toggle switch)

**Denomination Selection:**

- Denominations: 0.20, 0.40, 0.60, 0.80, 1.00, 2.00, 3.00, 4.00, 5.00 (checkboxes, all checked)
- Default: 1.00 (dropdown menu)
- Buttons: Clear, Select All

The Game Settings page has the following settings:

- Match 2 Feature
- Generic Symbols
- Playback
- Playback Rounds
- Lose Remaining Credit
- Timeout to Clear
- Preview
- Hand Count
- Hand Count Clear
- Game RTP
- Use Skill Meter
- Denomination Selection
- Denomination Default

# SPARK - Operator Manual 3.0



Terminal Audit | Events | Bill Hist. | Rcpt Hist. | Game Stats | Game Rec. | Terminal Set. | Game Set. | SAS | Support | Recycler | AFT | Lic.

## Match 2 Feature

Match 2 Feature  Tap to Turn On or Off.

Activates or Deactivates the Match 2 Skill which may be required by some jurisdictions.



## Generic Symbols

Generic Symbols  Tap to Turn On or Off.

When turned on the game will display generic symbols in place of the Game Specific symbols on the Reels.



Game Symbols      Generic Symbols

## Payback

Payback  Tap to Turn On or Off.

Pay-Back is a feature of some games that allows the player to win back the amount of credits or cash lost on a particular play by completing a skill or set of skills.



Pay-Back Skill Game

## Payback Rounds

Payback Rounds  18 Tap the Dropdown to Select the Number of Rounds.

Sets the number of Rounds for the Payback game.

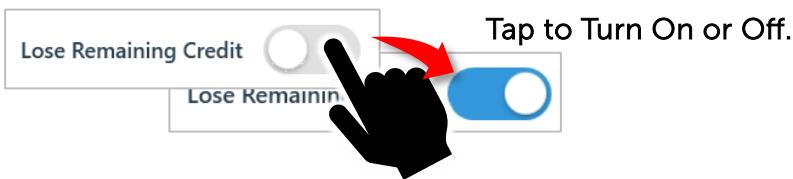


# SPARK - Operator Manual 3.0



Terminal Audit | Events | Bill Hist. | Rcpt Hist. | Game Stats | Game Rec. | Terminal Set. | Game Set. | SAS | Support | Recycler | AFT | Lic.

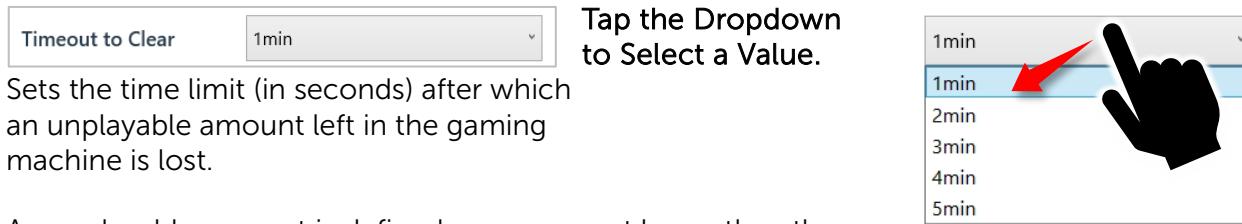
## Lose Remaining Credit



Any amount to be collected that is lower than the Ticket Hand Value that is not paid to the player.

For example, if the player has \$0.10 left in the gaming machine and the Ticket Value is set to \$0.25, they lose \$0.10.

## Timeout To Clear



Sets the time limit (in seconds) after which an unplayable amount left in the gaming machine is lost.

An unplayable amount is defined as an amount lower than the minimum credit value for each of the games, including the system base value.

For example, if the smallest playable amount is \$0.25 and the gaming machine contains \$0.10, the player must insert money within the time limit or the \$0.10 is lost to the player and the gaming machine goes back to \$0.00.

## Preview



Activates the Potential Win Preview, which lets the player know in advance the next prize available to win.

# SPARK - Operator Manual 3.0



Terminal Audit | Events | Bill Hist. | Rcpt Hist. | Game Stats | Game Rec. | Terminal Set. | Game Set. | SAS | Support | Recycler | AFT | Lic.

## Hand Count Clear

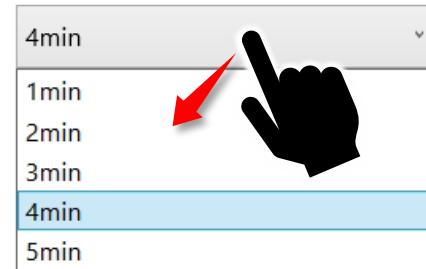
Hand Count Clear

4min

Tap the Dropdown to Select the time to Clear the Hand Count.

Sets the count down time to lose the hand from when the game has been idle for 3 minutes.

For example, if the Hand Count Clear is set to 1 minute and the player steps away from an active game leaving the game idle, after 3 minutes passes a 1 minute count down will start and clear the players hand once it reaches zero.



## Hand Count

Hand Count



Tap to Turn On or Off.

When active, the Hand Value will Increment with each game played.

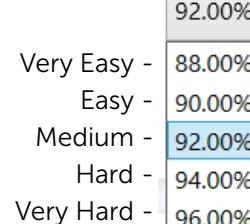
## Game RTP

Game RTP

92.00%

Tap the Dropdown to Select the Payout Percent.

The Payout Percentage setting for a game reflects the Return to Player Percentage or RTP for the games. The higher the difficulty the lower the RTP.



## Use Skill Meter

Use Skill Meter



Tap to Turn On or Off.

This feature is for Sweepstakes Games and activates or deactivates the Skill Meter as an additional skill for players to win a percent of the play.



# SPARK - Operator Manual 3.0



Terminal Audit | Events | Bill Hist. | Rcpt Hist. | Game Stats | Game Rec. | Terminal Set. | Game Set. | SAS | Support | Recycler | AFT | Lic.

## Denomination Selection

<input checked="" type="checkbox"/> 0.20	<input checked="" type="checkbox"/> 0.40	<input checked="" type="checkbox"/> 0.60	<input checked="" type="checkbox"/> 0.80	<input checked="" type="checkbox"/> 1.00	<input checked="" type="checkbox"/> 2.00	<input checked="" type="checkbox"/> 3.00	<input type="checkbox"/> 4.00	<input checked="" type="checkbox"/> 5.00
--	--	--	--	--	--	--	-------------------------------	--

These will set the available currency or credit denominations available for game play.

Tap each Check Box to enable a Denom.



Tap Clear to unselect all Denominations.

**Clear**



Tap Select All to select all Denominations.

**Select All**



## Denomination Default

Default **1.00**

Tap the Dropdown to Select the Default Denom.

This will set the default denomination for game play.

1.00

0.20

0.40

0.60

0.80

**1.00**

2.00

3.00

4.00

5.00



# SPARK - Operator Manual 3.0



Terminal Audit | Events | Bill Hist. | Rcpt Hist. | Game Stats | Game Rec. | Terminal Set. | Game Set. | SAS | Support | Recycler | AFT | Lic.

## SAS Settings

The SAS Page allows the Operator to set up the Slot Accounting System when applicable.

The screenshot shows the 'Sas Configuration' dialog box. It has two main sections: 'PORT 1' and 'PORT 2'. Each section contains the following fields:

- Serial Port: PORT 1 is set to COM5, PORT 2 is set to COM4.
- SAS Address: Both are set to 1.
- Validation: PORT 1 is set to 'None', PORT 2 is set to 'System'.
- AFT Enabled: PORT 1 is unchecked, PORT 2 is checked.
- Enhanced 8 Bit: Both are unchecked.
- Asset ID: Both are set to 777.

At the bottom of the dialog, there are buttons for 'START', 'RESET SAS METERS', and 'Engine Stopped'. A 'Connection Status' bar shows 'NOT CONNECTED'. A large blue 'SAVE' button is on the right.

The SAS Page has the following settings:

- Port Enable / Disable
- Serial Port
- SAS Address
- Validation
- AFT Enabled
- Enhanced 8 Bit
- Asset ID
- Connection Status

# SPARK - Operator Manual 3.0



Terminal Audit | Events | Bill Hist. | Rcpt Hist. | Game Stats | Game Rec. | Terminal Set. | Game Set. | SAS | Support | Recycler | AFT | Lic.

## Port Enable / Disable

Port will turn **Green** when Enabled.

Tap to Enable or Disable a SAS Port.

PORT 1      Disabled

PORT 2      Disabled

PORT 1      Enabled

Serial Port:      1

SAS Address:      0

Validation:      None

AFT Enabled:     

Enhanced 8 Bit:     

Asset ID:      7

PORT 2      Enabled

Serial Port:      1

SAS Address:      0

Validation:      None

AFT Enabled:     

Enhanced 8 Bit:     

SAS Port Enabled

## Serial Port

Tap the Dropdown and Select the Serial Port.

Sets the Port on the machine to which the SAS Host will communicate. SAS will use ports 1-6.

Serial Port:     

COM4

COM3

COM1

COM6

## SAS Address

Tap and use the Keyboard to Enter a Value.

SAS Address must match the address of the SAS system being used.

SAS Address:      0

SAS Address must match the address of the SAS system being used.

## Validation

Set the Validation method for SAS Ticketing.

Tap the Dropdown to Select the Validation method.

Validation:      None

None

System

SecureEnhanced

## AFT Enabled

Tap to Check or Uncheck to Enable or Disable.

Enables or Disables the Account Fund Transfer option for SAS.

AFT Enabled:

# SPARK - Operator Manual 3.0



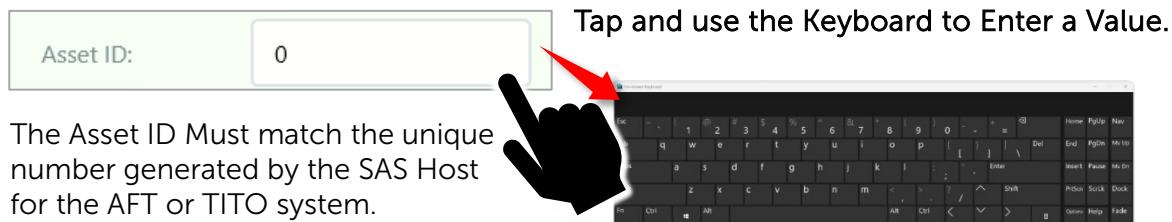
Terminal Audit | Events | Bill Hist. | Rcpt Hist. | Game Stats | Game Rec. | Terminal Set. | Game Set. | SAS | Support | Recycler | AFT | Lic.

## Enhanced 8 Bit



Enables or Disables Enhanced 8 Bit Communication for RS-232 connections.

## Asset ID



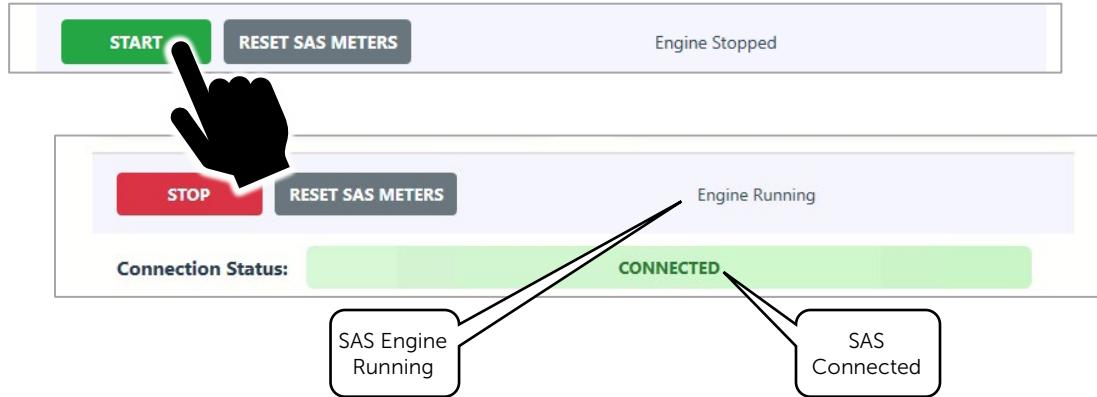
The Asset ID Must match the unique number generated by the SAS Host for the AFT or TITO system.

## Connection Status



Shows if the SAS Engine is connected and running.

Once all the settings are completed. Tap Start to start the SAS Engine. The system will show the Engine Running and the Connection Status as Connected.



Tap to Reset the SAS Meters in the SAS Engine back to zero.



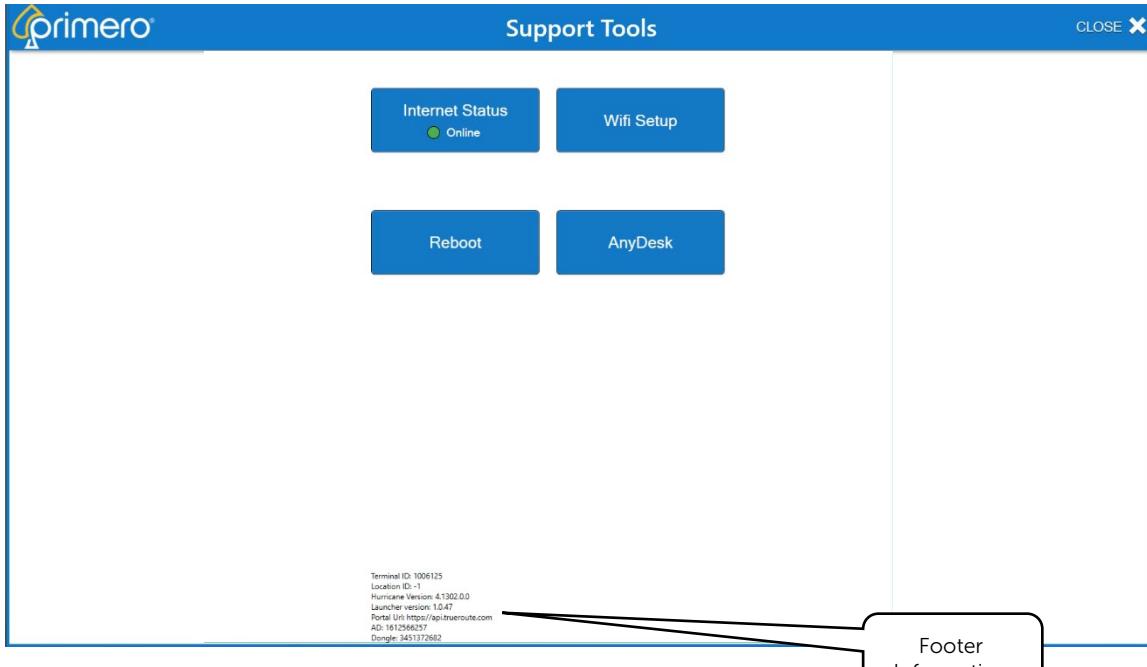
# SPARK - Operator Manual 3.0



Terminal Audit | Events | Bill Hist. | Rcpt Hist. | Game Stats | Game Rec. | Terminal Set. | Game Set. | SAS | Support | Recycler | AFT | Lic.

## Support Tools

The Support Tools page is employed by Operators for some support functions of the Game Machine such as internet and remote support as well as updates and system reboot.



The Support Tools page has the following buttons:

- Internet Status
- Wifi Setup
- Reboot
- AnyDesk
- Footer Information

### Internet Status



Displays the status of the Internet or WiFi connection.

# SPARK - Operator Manual 3.0



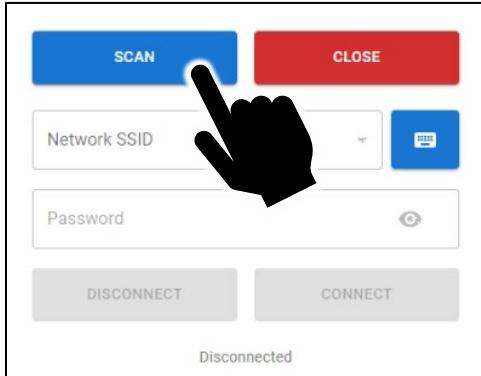
Terminal Audit | Events | Bill Hist. | Rcpt Hist. | Game Stats | Game Rec. | Terminal Set. | Game Set. | SAS | Support | Recycler | AFT | Lic.

## WIFI Setup

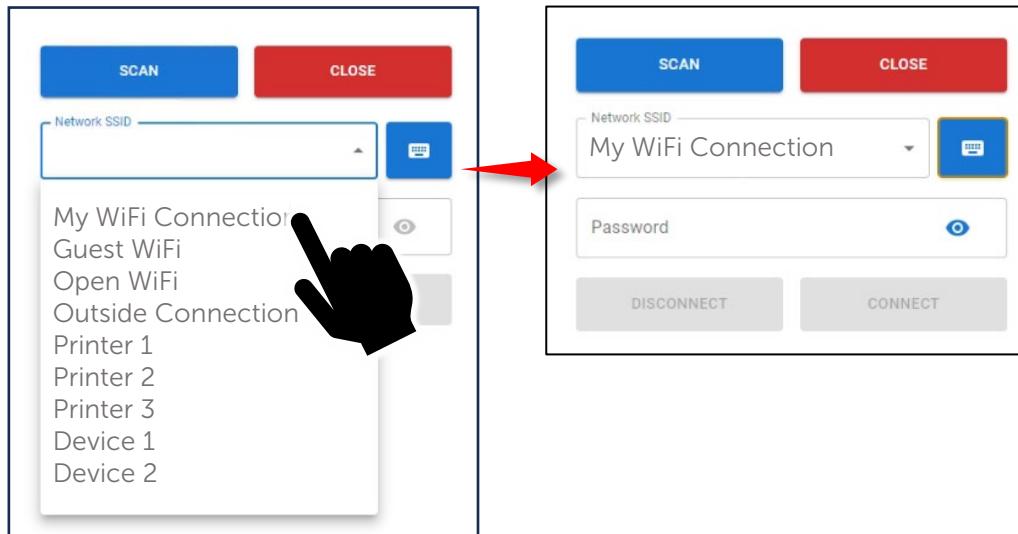
**Wifi Setup**      Tap to set up a Wi-Fi Connection.

Connects the Cabinet to a Wi-Fi internet connection.

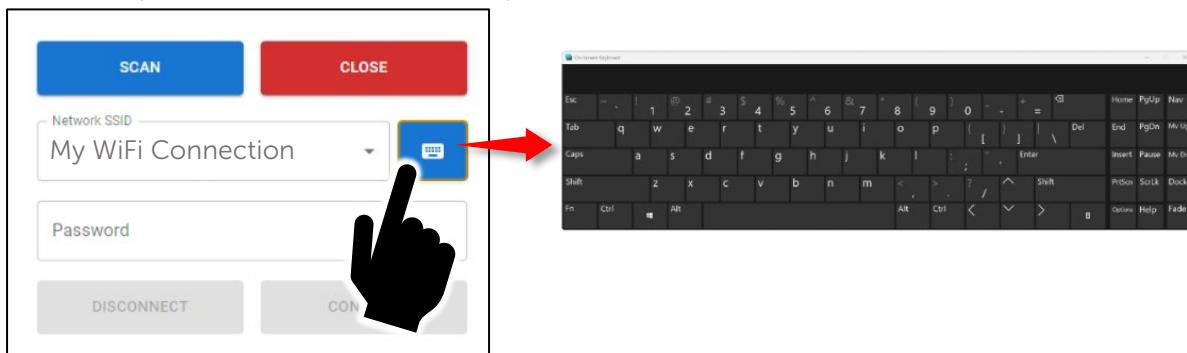
1. Tap Scan to locate the available Wi-Fi connections.



2. Tap the Network SSID dropdown and select the appropriate Network connection.



3. Tap the Keyboard Icon to open the Keyboard.

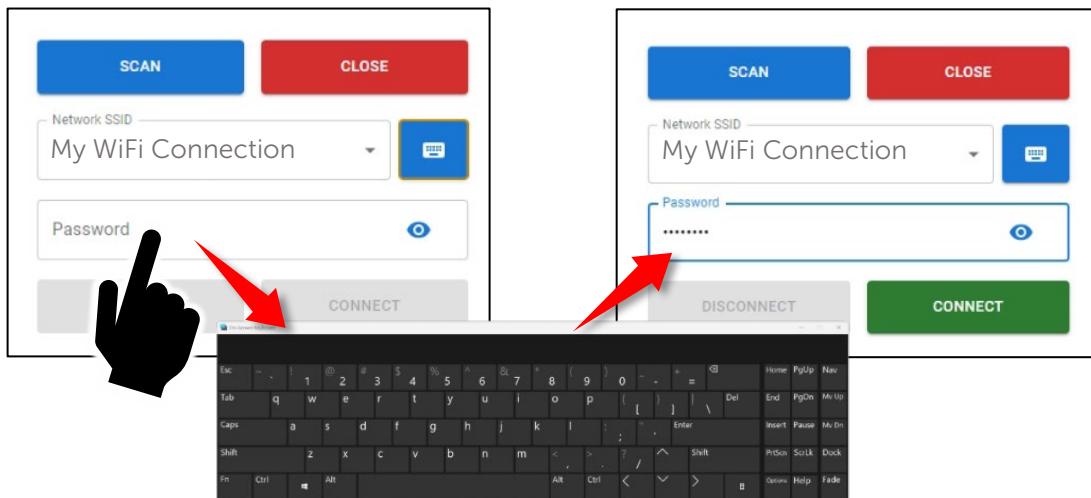


# SPARK - Operator Manual 3.0

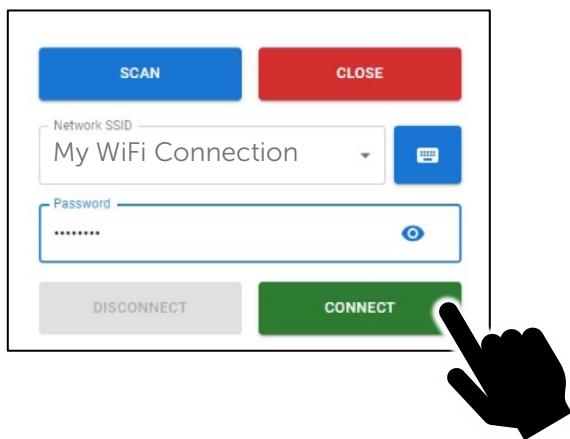


Terminal Audit | Events | Bill Hist. | Rcpt Hist. | Game Stats | Game Rec. | Terminal Set. | Game Set. | SAS | Support | Recycler | AFT | Lic.

4. Tap the Password Field and Use the Keyboard Enter the SSID Password.



5. Tap Connect and the system will connect to the Selected Wi-Fi connection.



## Reboot



Tap to Reboot the Machine.

This does not perform a **RAM Clear**, it will only Reboot the Machine.

# SPARK - Operator Manual 3.0

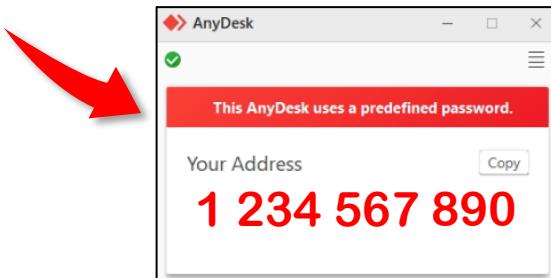


Terminal Audit | Events | Bill Hist. | Rcpt Hist. | Game Stats | Game Rec. | Terminal Set. | Game Set. | SAS | Support | Recycler | AFT | Lic.

AnyDesk



This address is used by Support Technicians for remote connections during support calls.



## Footer Information

The Footer of the Support Tools page displays some basic data about the machine including the Terminal ID, Location ID, Firmware Versions, Portal URL, AnyDesk Address and Dongle Serial Number.

Terminal ID: 1006125

Location ID: -1

Hurricane Version: 4.1698.0.0

Launcher version: 1.0.48

Portal Url: <https://api.trueroute.com>

AD: 1117225034

Dongle: 3451372682

# SPARK - Operator Manual 3.0



Terminal Audit | Events | Bill Hist. | Rcpt Hist. | Game Stats | Game Rec. | Terminal Set. | Game Set. | SAS | Support | Recycler | AFT | Lic.

## Recycler Settings

The Recycler Settings page allows the Operator to view some recycler statistics and data, control some functions of the recycler, and perform Fills and Bleeds when necessary.

Recyclers are Optional on some Game Machines. If a Game Machine has a Recycler the system will automatically recognize the Recycler and allow access to the Recycler Settings from the [Main Menu](#). If not, the option will be grayed out.

**Recycler Settings**

Denom	Stored	Target Level	Short	R
\$1	0 (\$0)	0 (\$0)	0 (\$0)	C
\$5	4 (\$20)	10 (\$50)	6 (\$30)	R
\$10	6 (\$60)	20 (\$200)	14 (\$140)	R
\$20	46 (\$920)	50 (\$1000)	4 (\$80)	R
\$50	0 (\$0)	0 (\$0)	0 (\$0)	C
\$100	0 (\$0)	0 (\$0)	0 (\$0)	C
<b>TOTALS</b>	<b>56 (\$1000)</b>	<b>80 (\$1250)</b>	<b>24 (\$250)</b>	

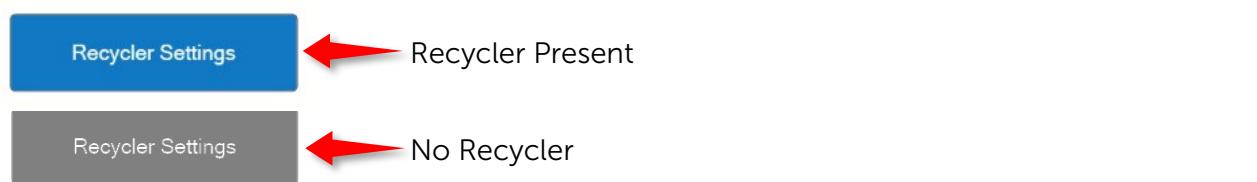
**Recycler Summary**

Period Recycler Metrics		Recycler Status
Cash to Recycler:	\$5	Connection: <span>Connected</span>
Cash to Cashbox:	\$0	<span>Disconnect</span>
Fills:	\$35	
Bleeds:	\$70	
Tickets In:	\$0	Started: <span>Started</span>
Tickets Out:	\$0	<span>Stop</span>
Recycler Cash Out:	\$10	
Recycler to Cashbox:	\$70	Status: <span>OK</span>

Last Updated: 12/01/2025 11:07:17

The Recycler Settings page has the following options:

- [Recycler Stats](#)
- [Recycler Summary](#)
- [Target Bills](#)
- [Refill Mode](#)
- [Bleed](#)
- [Logs](#)
- [Settings](#)
- [Help](#)



# SPARK - Operator Manual 3.0



Terminal Audit | Events | Bill Hist. | Rcpt Hist. | Game Stats | Game Rec. | Terminal Set. | Game Set. | SAS | Support | Recycler | AFT | Lic.

## Recycler Stats

Denom	Stored	Target Level	Short	R
\$1	0 (\$0)	0 (\$0)	0 (\$0)	C
\$5	4 (\$20)	10 (\$50)	6 (\$30)	R
\$10	6 (\$60)	20 (\$200)	14 (\$140)	R
\$20	46 (\$920)	50 (\$1000)	4 (\$80)	R
\$50	0 (\$0)	0 (\$0)	0 (\$0)	C
\$100	0 (\$0)	0 (\$0)	0 (\$0)	C
<b>TOTALS</b>	<b>56 (\$1000)</b>	<b>80 (\$1250)</b>	<b>24 (\$250)</b>	

The Recycler page shows real time statistics for the various denominations stored in the recycler. The data is broken down into 5 columns for the Denomination, amount Stored in the Recycler, the Target Level for the denomination, the amount Short and if bills are held in the Recycler or Cashbox as well as the totals for each column below.

**Denom** Denom = Shows the Denomination of the bills.

**\$5**

**Stored** Stored = Shows the number of bills Stored in the Bill Acceptor and the Total dollar amount.

**4 (\$20)**

**Target Level** Target Level = Displays the target levels for each denomination as set on the [Target Bills](#) tab below.

**10 (\$50)**

**Short** Short = Indicates the number of bills the Recycler is short to be at the Target Level.

**6 (\$30)**

**R** R = Shows if the bills are held in the Recycler.

**C** C = Shows if the bills are held in the Cashbox.

# SPARK - Operator Manual 3.0



Terminal Audit | Events | Bill Hist. | Rcpt Hist. | Game Stats | Game Rec. | Terminal Set. | Game Set. | SAS | Support | Recycler | AFT | Lic.

## Recycler Summary

The screenshot shows the 'Recycler Summary' tab. At the top, there are tabs for 'Summary', 'Targets', 'Refill Mode', 'Bleed', 'Logs', 'Settings', and 'Help'. The 'Summary' tab is selected. Below the tabs is a table with 'Period Recycler Metrics' and 'Recycler Status' sections. The metrics table includes rows for Cash to Recycler (\$5), Cash to Cashbox (\$0), Fills (\$35), Bleeds (\$70), Tickets In (\$0), Tickets Out (\$0), Recycler Cash Out (\$10), and Recycler to Cashbox (\$70). The status table shows 'Connection: Connected' (green), 'Started: Started' (green), and 'Status: OK' (green). A large red button at the bottom right says '⚠️ RESET RECYCLER ⚠️'. At the bottom left, it says 'Last Updated: 12/01/2025 11:07:17'.

The Summary tab shows some Metrics for the Bill Acceptor and allows the Operator to Reset and change the Status of the Recycler. Disconnecting, Stopping or Resetting the Recycle may be used to clear errors, bill jams or other minor issues.

The Summary Tab shows the following Metrics:

- Cash to Recycler
- Cash to Cash Box
- Fills
- Bleeds
- Tickets In
- Tickets Out
- Recycler Cash Out
- Recycler to Cashbox

The diagram shows the 'Recycler Status' screen with a 'Disconnected' connection status. A large black hand icon with a red arrow points to the 'Connect' button. To the right, text says 'Tap Connect or Start to connect and start the Recycler.' Below this, another 'Recycler Status' screen shows a 'Connected' connection status. A red arrow points to the 'RESET RECYCLER' button. To the right, text says 'Tap the Reset Recycler button to cycle and reset the Recycler.' A callout box with a circular loading icon says 'Resetting Recycler...' and 'Please wait while the recycler is being reset.'

# SPARK - Operator Manual 3.0



Terminal Audit | Events | Bill Hist. | Rcpt Hist. | Game Stats | Game Rec. | Terminal Set. | Game Set. | SAS | Support | Recycler | AFT | Lic.

## Target Bills

Target bills 80/80

\$1	▼	0	▲	\$5	▼	10	▲
\$10	▼	20	▲	\$20	▼	50	▲
\$50	▼	0	▲	\$100	▼	0	▲

**Apply Targets** **Reset**

The Targets Tab allows the Operator to set the Target Levels for the various denominations held by the Recycler. Once a Target Level is met by the Recycler any new bills inserted will be moved to the Cashbox. If set to zero all the bills will go directly to the Cashbox.

To change the Target Levels for a Denomination:

1. Tap the Arrows to increase or decrease the Target Amount.



2. Tap Apply Targets to save the Levels.



3. Tap Reset to revert the Target Levels back to Zero.

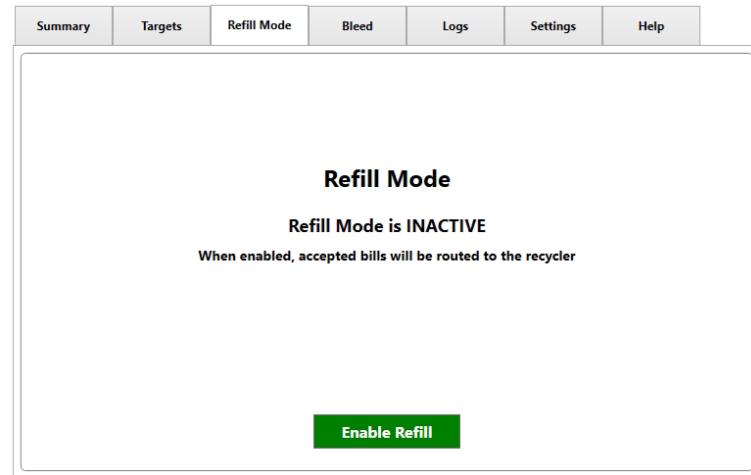


# SPARK - Operator Manual 3.0



Terminal Audit | Events | Bill Hist. | Rcpt Hist. | Game Stats | Game Rec. | Terminal Set. | Game Set. | SAS | Support | Recycler | AFT | Lic.

## Refill Mode



Refill Mode allows the Operator to perform a Fill to add funds to the Recycler when necessary.

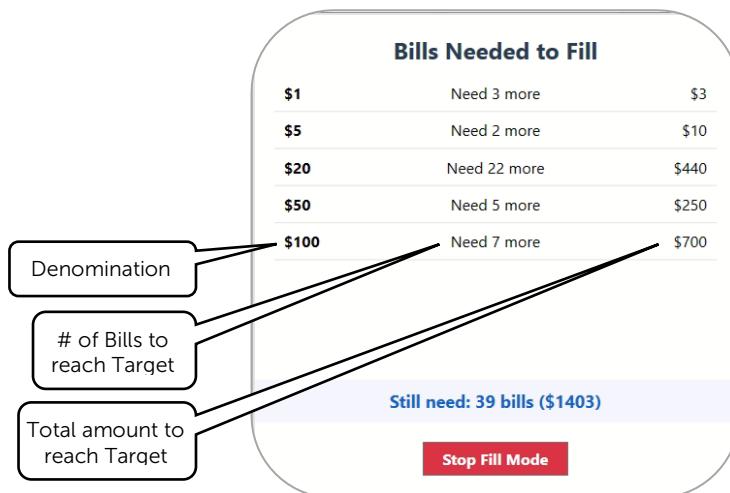
To perform a Fill:

1. Tap Enable Refill.
2. The "Bills Needed to Fill" list will pop up.



This list is based on the [Target Bills](#) Settings and shows the Denomination, Number of Bills and Total Amount needed to reach the desired Targets.

Once a Target is reached, the line will disappear.



# SPARK - Operator Manual 3.0



[Terminal Audit](#) | [Events](#) | [Bill Hist.](#) | [Rcpt Hist.](#) | [Game Stats](#) | [Game Rec.](#) | [Terminal Set.](#) | [Game Set.](#) | [SAS](#) | [Support](#) | [Recycler](#) | [AFT](#) | [Lic.](#)

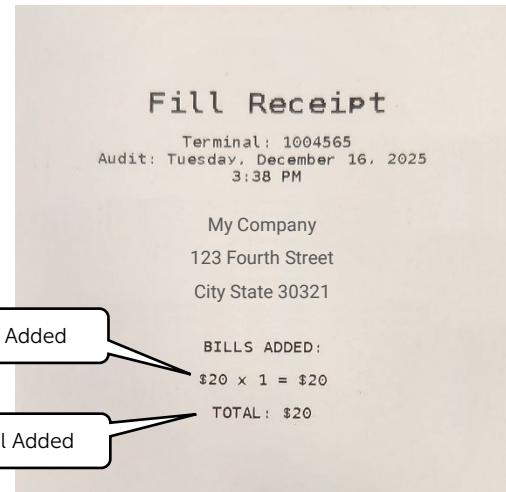
3. Insert the Bills into the Bill Acceptor.



4. Tap Stop Fill Mode when complete.



The Game Machine will print a Fill Receipt showing the amounts added to the Recycler.



**Note:** If a Bill Target is reached a Bill Rejected warning will appear and the bill will be rejected by the Recycler.



# SPARK - Operator Manual 3.0



Terminal Audit | Events | Bill Hist. | Rcpt Hist. | Game Stats | Game Rec. | Terminal Set. | Game Set. | SAS | Support | Recycler | AFT | Lic.

## Bleed

Summary	Targets	Refill Mode	Bleed	Logs	Settings	Help	
\$1	▼	0	▲	\$5	▼	0	▲
\$10	▼	0	▲	\$20	▼	0	▲
\$50	▼	0	▲	\$100	▼	0	▲
<b>Start Bleed</b> <b>All</b> <b>Clear</b>							

Bleed allows the Operator to remove or Bleed bills from the Recycler to the Stacker or Cash Box when necessary.

To Perform a Bleed:

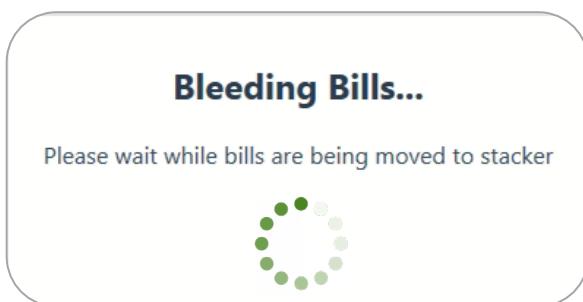
1. Use the Up and Down Arrows to select the number of bills for each denomination to be bled to the Stacker.



2. Tap Start Bleed.



3. The Bill Acceptor will move the Bills from the Recycler to the Stacker.



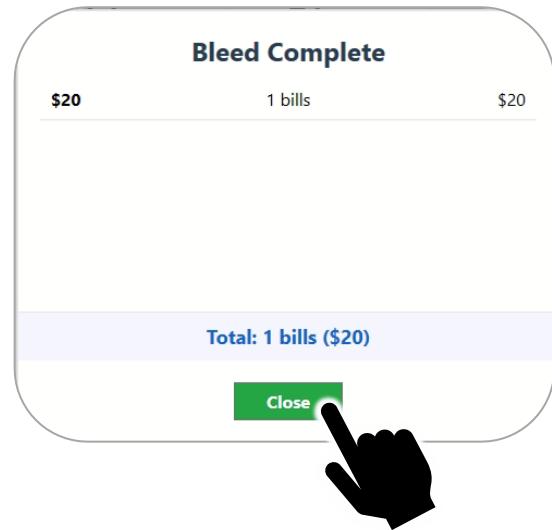
# SPARK - Operator Manual 3.0



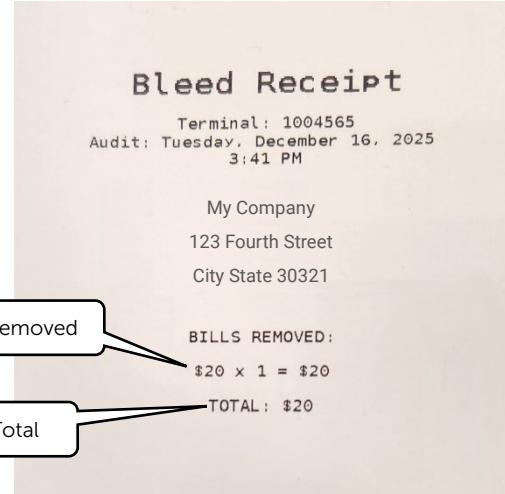
Terminal Audit | Events | Bill Hist. | Rcpt Hist. | Game Stats | Game Rec. | Terminal Set. | Game Set. | SAS | Support | Recycler | AFT | Lic.

4. Once complete a Bleed Complete message will appear.

Tap Close to finish the Bleed.



The Game Machine will print a Bleed Receipt showing the bills and total moved to the Stacker.



# SPARK - Operator Manual 3.0



Terminal Audit | Events | Bill Hist. | Rcpt Hist. | Game Stats | Game Rec. | Terminal Set. | Game Set. | SAS | Support | Recycler | AFT | Lic.

## Logs

**Spectral Payout Logs**

Clear Logs

Real-time logs from SpectralPayout device • 45 entries  Auto-scroll

```
2025-12-01 10:45:52.963 [1] INFO Storm.IO.Spectral.SpectralPayout - Starting SpectralPayout
2025-12-01 10:45:52.975 [6] INFO Storm.IO.Spectral.SpectralPayout - Attempting initial connection
2025-12-01 10:45:52.977 [6] INFO Storm.IO.Spectral.SpectralPayout - Creating new device
2025-12-01 10:45:53.348 [6] INFO Storm.IO.Spectral.SpectralPayout - Device opened
2025-12-01 10:45:53.348 [6] INFO Storm.IO.Spectral.SpectralPayout - Exchanging keys
2025-12-01 10:45:54.108 [6] INFO Storm.IO.Spectral.SpectralPayout - Getting unit info
2025-12-01 10:45:54.109 [6] INFO Storm.IO.Spectral.SpectralPayout - Connecting
2025-12-01 10:45:54.937 [6] INFO Storm.IO.Spectral.SpectralPayout - DevStateChangedEventHandler: Device State Change Event : CONNECTING
2025-12-01 10:45:54.938 [6] INFO Storm.IO.Spectral.SpectralPayout - Waiting for CONNECTED state...
2025-12-01 10:45:55.844 [cashDeviceConnectionThread] INFO Storm.IO.Spectral.SpectralPayout - DevStateChangedEventHandler: Device State Change Event : CONNECTED
2025-12-01 10:45:55.845 [6] INFO Storm.IO.Spectral.SpectralPayout - Device CONNECTED state confirmed
2025-12-01 10:45:55.847 [6] INFO Storm.IO.Spectral.SpectralPayout - InternalConnect successful, starting Run()
2025-12-01 10:45:55.848 [6] INFO Storm.IO.Spectral.SpectralPayout - Starting run
2025-12-01 10:45:55.861 [6] INFO Storm.IO.Spectral.SpectralPayout - Device initialization successful, clearing any tilt...
2025-12-01 10:45:55.862 [6] INFO Storm.IO.Spectral.SpectralPayout - Exiting initialization retry loop.
Connected: True, m_KeepRunning: True
2025-12-01 10:45:56.019 [cashDeviceSystemThread] INFO Storm.IO.Spectral.SpectralPayout - DevStateChangedEventHandler: Device State Change Event : STARTING
2025-12-01 10:45:56.420 [cashDeviceSystemThread] INFO Storm.IO.Spectral.SpectralPayout - DevStateChangedEventHandler: Device State Change Event : STARTED
```

The Logs Tab displays a list of the Recycler events that have occurred with a highly accurate date and time stamp. These logs may help the Operator in determining the cause of issues or errors that may prevent the Recycler from functioning properly and the means of resolving the issue.

To clear the logs, Tap Clear Logs.

**Spectral Payout Logs**

Clear Logs

Real-time logs from SpectralPayout device • 45 entries  Auto-scroll

Check or Uncheck the Auto-scroll to allow the logs to scroll in real time.

Auto-scroll

# SPARK - Operator Manual 3.0



Terminal Audit | Events | Bill Hist. | Rcpt Hist. | Game Stats | Game Rec. | Terminal Set. | Game Set. | SAS | Support | Recycler | AFT | Lic.

## Settings

Recycler Settings

**Max Cashout Before Ticket**

Amount: \$ 1000

When a player's cashout is greater than or equal to this amount, a ticket will be printed instead of dispensing cash from the recycler.

**Dispenser Recovery**

Enable recovery:

Timeout (min): 5

When enabled, if a cashout fails, the system will automatically attempt to dispense the remaining amount when the recycler becomes available again (within the timeout period).

**Save Settings**

The Settings Tab allows the Operator to set the Max Cashout for Tickets and a Timeout for Recycler Recovery in the event of a failure.

### Max Cashout Before Ticket

Max Cashout Before Ticket

Amount: \$ 1000

When a player's cashout is greater than or equal to this amount, a ticket will be printed instead of dispensing cash from the recycler.

Use the Keyboard to Enter a Dollar Amount.

**Save Settings**

Tap Save Settings when Complete.

The Operator can set an amount at which a Ticket is printed rather than cash being dispensed from the Recycler. This helps manage the cash in the dispenser and can act as a security feature to prevent large fraudulent transactions.



# SPARK - Operator Manual 3.0



Terminal Audit | Events | Bill Hist. | Rcpt Hist. | Game Stats | Game Rec. | Terminal Set. | Game Set. | SAS | Support | Recycler | AFT | Lic.

## Dispenser Recovery

**Dispenser Recovery**

Enable recovery:

Timeout (min):

When enabled, if a cashout fails, the system will automatically attempt to dispense the remaining amount when the recycler becomes available again (within the timeout period).

When enabled Dispenser Recovery allows the Operator to set a Timeout in Minutes at which the Recycler will attempt to dispense any remaining amount should a system or Bill Acceptor failure occur such as a power failure or service interruption during the cashout.

If unable to recover, the system will print a ticket with the remaining amount.

To set a Recovery Timeout:



Tap the Check Box to Enable



Use the Keyboard to Enter the Minutes before Timeout.



Tap Save Settings when complete.



# SPARK - Operator Manual 3.0



Terminal Audit | Events | Bill Hist. | Rcpt Hist. | Game Stats | Game Rec. | Terminal Set. | Game Set. | SAS | Support | Recycler | AFT | Lic.

## Help

Help & Support

Scan for help

Use your mobile device to scan the QR code above for technical support

The Help Tab displays a QR Code that will direct the Operator to a website with User Manuals and other documentation.

To Download Documents:

1. Scan the QR Code with a cell phone.

The QR Code URL is:

<https://info.primerogames.com/storm-games-documentation>



2. Navigate to the appropriate document.



3. Tap Download.



# SPARK - Operator Manual 3.0



Terminal Audit | Events | Bill Hist. | Rcpt Hist. | Game Stats | Game Rec. | Terminal Set. | Game Set. | SAS | Support | Recycler | AFT | Lic.

## AFT History

**AFT History**

**CLOSE X**

AFT In	AFT Out
11/26/2025 1:31:42 PM 12	Cashable: \$100.00 Restricted: \$0.00 Non-Restricted: \$0.00 Expires: 0 days
11/26/2025 11:44:04 AM 11	Cashable: \$100.00 Restricted: \$0.00 Non-Restricted: \$0.00 Expires: 0 days
11/26/2025 11:29:34 AM 10	Cashable: \$100.00 Restricted: \$0.00 Non-Restricted: \$0.00 Expires: 0 days
11/26/2025 10:34:24 AM 9	Cashable: \$100.00 Restricted: \$0.00 Non-Restricted: \$0.00 Expires: 0 days
11/26/2025 9:56:18 AM 8	Cashable: \$100.00 Restricted: \$0.00 Non-Restricted: \$0.00 Expires: 0 days
11/26/2025 9:37:31 AM 7	Cashable: \$100.00 Restricted: \$0.00 Non-Restricted: \$0.00 Expires: 0 days
11/26/2025 9:12:45 AM 6	Cashable: \$100.00 Restricted: \$0.00 Non-Restricted: \$0.00 Expires: 0 days
11/26/2025 9:08:38 AM 5	Cashable: \$100.00 Restricted: \$0.00 Non-Restricted: \$0.00 Expires: 0 days

**Date and Time**   **Transaction Number**   **Cashable Amount**   **Restricted Amount**   **Non- Restricted Amount**   **Expiration**

The Advanced Funds Transfer History shows a list of the AFT transactions including the date and time of the transaction, transaction number, cashable amounts, restricted amounts, non-restricted amounts and the expiration time.

The AFT Out feature is not currently supported.

The AFT In Tab shows the following:

- Date and Time
- Transaction Number
- Cashable Amount
- Restricted Amount
- Non-Restricted Amount
- Expiration Time

# SPARK - Operator Manual 3.0



Terminal Audit | Events | Bill Hist. | Rcpt Hist. | Game Stats | Game Rec. | Terminal Set. | Game Set. | SAS | Support | Recycler | AFT | Lic.

## License Management

**License Management**

**Scan QR Code to Add Profit License**

1. Scan the QR code with your smartphone
2. Complete payment on the website
3. Enter the 24-character license code in the 3 boxes below

Machine ID: CSTUSA\_420586588

Machine License Status	
Cap. Capacity <b>\$300.00</b>	
Net Profit <b>\$2389.87</b>	
F/T Usage <b>100.0%</b>	
License Remaining <b>0%</b> remaining	
Fill required immediately - capacity exceeded	

**Enter License Code**

Part 1      Part 2      Part 3

1	2	3	4	5	6	7	8	9	0			
A	B	C	D	E	F	G	H	I	J	K	L	M
N	O	P	Q	R	S	T	U	V	W	X	Y	Z
<input type="button" value="VALIDATE CODE"/> <input type="button" value="CLEAR"/>												

**VIEW LICENSE HISTORY**

Coming Soon!

# SPARK - Operator Manual 3.0



Terminal Audit | Events | Bill Hist. | Rcpt Hist. | Game Stats | Game Rec. | Terminal Set. | Game Set. | SAS | Support | Recycler | AFT | Lic.

## Player Menu

Player Menu buttons may appear different on the various games, but functionality should remain the same.



**Play or Spin button** – Tap to engage one play or spin of the Reels.



**Autoplay or Auto-Spin** – Tap to continually spin the reels. The Autoplay Counter will appear and count down from 99 spins. Tap again to stop.



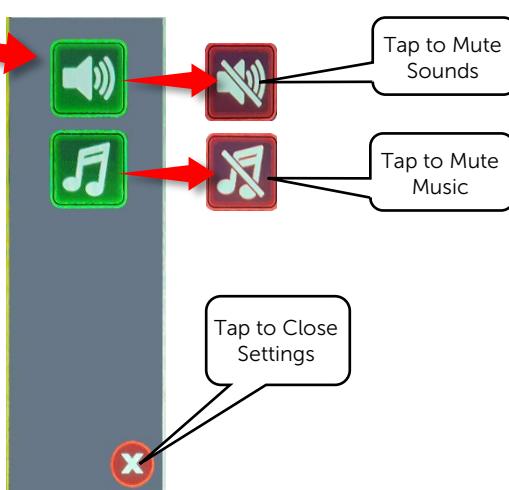
**Play Amount** – The Amount of credit or cash played for each spin of the reels. Tap to Increase or Tap to Decrease.



**Preview** – Tap to know in advance the next prize available to win.



**Player Settings** – Tap to access available player settings.



Tap to Mute Sounds

Tap to Mute Music

Tap to Close Settings

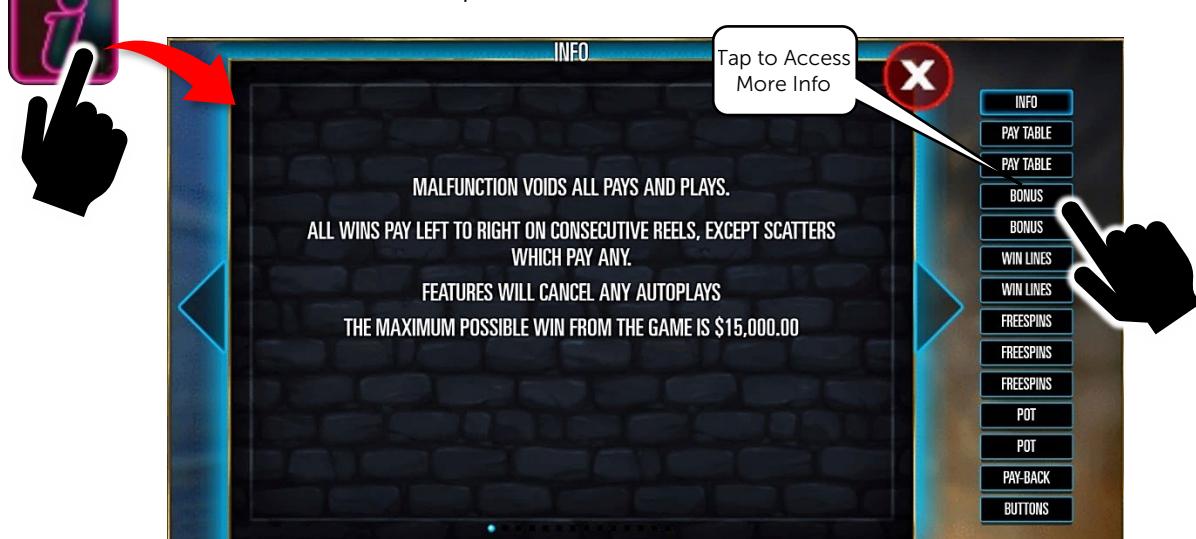
# SPARK - Operator Manual 3.0



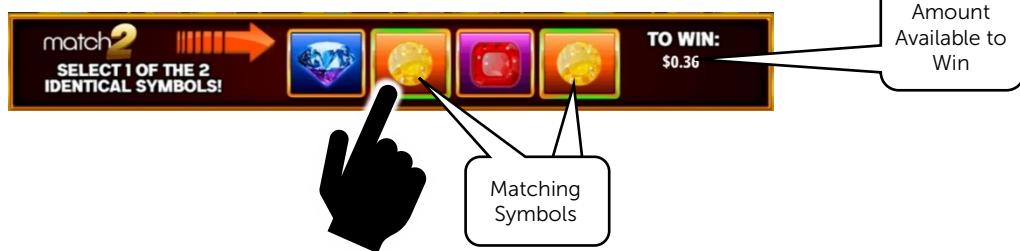
Terminal Audit | Events | Bill Hist. | Rcpt Hist. | Game Stats | Game Rec. | Terminal Set. | Game Set. | SAS | Support | Recycler | AFT | Lic.



Game Information – Tap to access the Game Information screens.



Match 2 Skill – Tap one of the Identical Symbols.



Pay-Back – Tap to access the Pay-Back Skill feature on some games. Pay-Back is a feature that allows the player to win back the amount of credits or cash lost on a particular play by completing a skill or set of skills.



Exit Game – Tap to exit the Game and Collect winnings.



# SPARK - Operator Manual 3.0



[Terminal Audit](#) | [Events](#) | [Bill Hist.](#) | [Rcpt Hist.](#) | [Game Stats](#) | [Game Rec.](#) | [Terminal Set.](#) | [Game Set.](#) | [SAS](#) | [Support](#) | [Recycler](#) | [AFT](#) | [Lic.](#)

## Appendix A: Cabinet Set Up

### For Spark on EFCO 8657

#### Bill Acceptors

**Innovative NV200 on Serial** - Connect to Any Valid COM Port. ID003\_V2  
Select COM4 from the Bill Acceptor Port dropdown and Select

**JCM UBA on Serial** - Connect to Any Valid COM Port. ID003\_V2  
Select COM4 from the Bill Acceptor Port dropdown and

**Pyramid Apex 7600 USA on Serial** - Connected to COM3.  
Select PyramidApex from the Bill Acceptor dropdown and Select COM3 from the Bill Acceptor Port dropdown.  
Firmware: USA 1.16 SS5.

#### Cables

180038 Bill Acceptor - UBA Data Cable (Rev. B)  
180081 Bill Acceptor - NV200 Cable Harness  
530310 Cable - Pyramid Apex 7600, TTL RS232 [8 ft], ["MEI Bypass"]

#### Hard Drive Requirements

Transcend 256GB TS256GMTE712P-PRI

# SPARK - Operator Manual 3.0



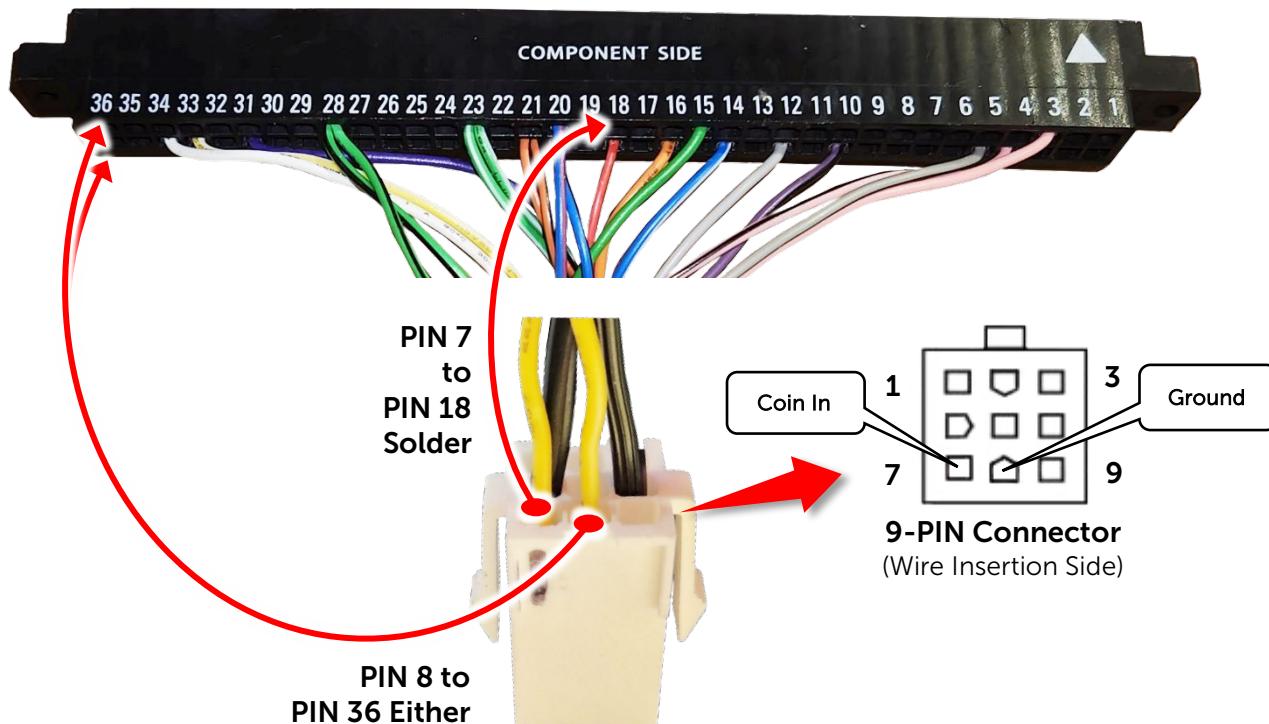
Terminal Audit | Events | Bill Hist. | Rcpt Hist. | Game Stats | Game Rec. | Terminal Set. | Game Set. | SAS | Support | Recycler | AFT | Lic.

## Appendix B: PA7, TAO and Apex Pulse Connector Diagram

This diagram shows the wiring setup for the 9-Pin Connector when using PA7, TAO and Apex Pulse Bill Acceptors.

**Note:** No settings in the Operator Menu need to be changed.

PIN	Connector Function
1	(No Connection)
2	(No Connection)
3	(No Connection)
4	120 VAC Hot Power (Not used for +12 VDC Model)
5	(No Connection)
6	120 VAC Neutral Power (24 VAC Neutral for +12 VDC Model)
7	Bill Acceptor Relay Contact – Coin In (Normally Open) (Connects to 18 Solder on Harness)
8	Bill Acceptor Relay Contact (Ground) (Connects to either PIN 36 on Harness)
9	(No Connection)
Greyed Out = Not Used	



**Note:** Wire colors may differ depending on the cabinet or game machine.

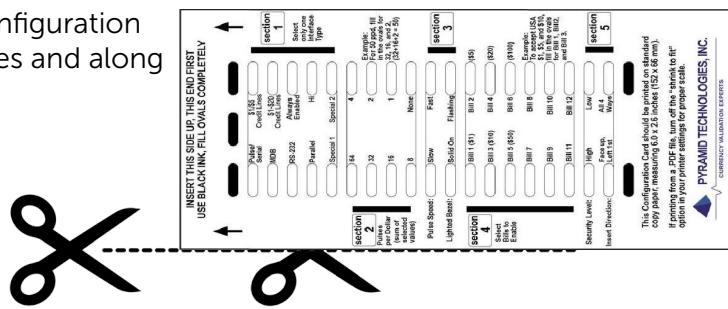
# SPARK - Operator Manual 3.0



Terminal Audit | Events | Bill Hist. | Rcpt Hist. | Game Stats | Game Rec. | Terminal Set. | Game Set. | SAS | Support | Recycler | AFT | Lic.

## Pyramid Apex 7600 Serial on HD

1. Print the Configuration Cards below.
2. Carefully Cut out the appropriate Configuration Card, being careful to cut straight lines and along the black frame of the card.



# SPARK - Operator Manual 3.0

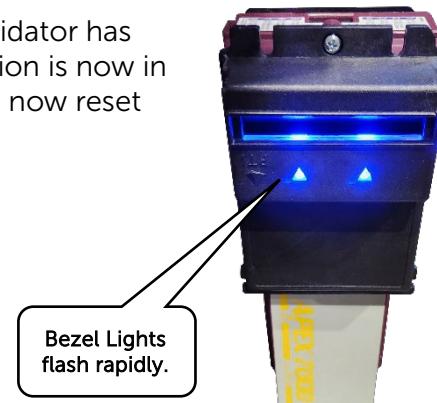


Terminal Audit | Events | Bill Hist. | Rcpt Hist. | Game Stats | Game Rec. | Terminal Set. | Game Set. | SAS | Support | Recycler | AFT | Lic.

5. Insert the appropriate Configuration Card into the validator, arrows first, printed side face up. The validator will hold the Configuration Card for a second or two and then feed it back out again.



6. The bezel lights should flash rapidly, indicating the validator has read the Configuration Card correctly. The configuration is now in permanent memory in the Bill Acceptor which should now reset itself by doing a stacker cycle.



**Warning:** If the Bill Acceptor has not read the Configuration Card correctly, it will quickly reject the card and / or the bezel lights will flash slowly. Should this occur, check to make sure the Configuration Card was printed correctly, clearly and in the correct size. Also, make sure the card was cut out correctly with straight lines and is the proper width in line with an actual bill.



**Note:** The Bill Acceptor will stay in the Configuration Mode until it has correctly read a Configuration Card or powered off.

# SPARK - Operator Manual 3.0



Terminal Audit | Events | Bill Hist. | Rcpt Hist. | Game Stats | Game Rec. | Terminal Set. | Game Set. | SAS | Support | Recycler | AFT | Lic.

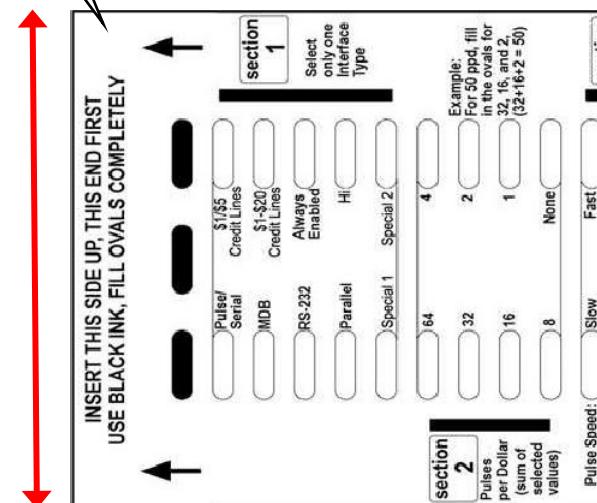
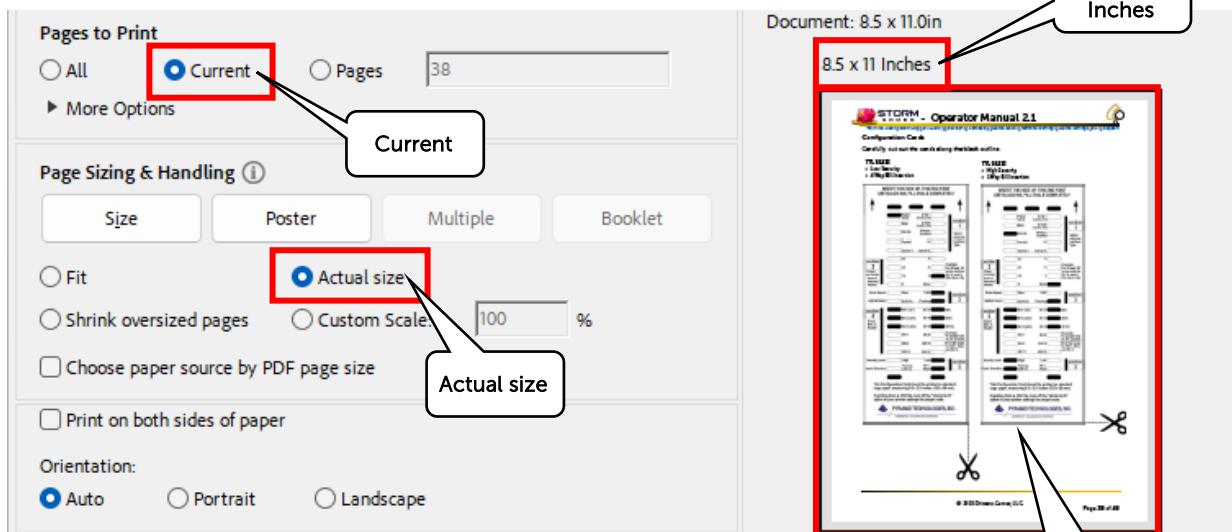
## Print Instructions

It is critical that the Configuration Cards print in the correct size for the Bill Acceptor to read them precisely. Print on 8.5 x 11-inch paper. The Configuration Card should be the same width as a standard Bill. Be sure to print only the Configuration Cards page and set the Page Sizing and Handling to Actual size. Once printed, carefully cut out the appropriate card along the black outline. Cards may be printed in Black and White.

Pages to Print = Current

Page Sizing & Handling = Actual size

Paper Size = 8.5 x 11 inches



# SPARK - Operator Manual 3.0



## Configuration Cards

Carefully cut out the cards along the black outline.

## TTL RS232

- Low Security
  - 4 Way Bill Insertion

**INSERT THIS SIDE UP, THIS END FIRST  
USE BLACK INK, FILL OVALS COMPLETELY**

**section 1**

<input type="checkbox"/> Pulse/Serial	\$1/\$5	<input type="checkbox"/> Credit Lines
<input type="checkbox"/> MDB	\$1-\$20	<input type="checkbox"/> Credit Lines
<input type="checkbox"/> RS-232	Always	<input type="checkbox"/> Enabled
<input type="checkbox"/> Parallel	Hi	<input type="checkbox"/>
<input type="checkbox"/> Special 1	Special 2	<input type="checkbox"/>

Select  
only one  
Interface  
Type

**section 2**

<input type="checkbox"/> Pulses per Dollar (sum of selected values)	64	4	<input type="checkbox"/>
	32	2	<input type="checkbox"/>
	16	1	<input type="checkbox"/>
	8	None	<input type="checkbox"/>

Example:  
For 50 ppd, fill in the ovals for  
32, 16, and 2.  
(32+16+2 = 50)

**Pulse Speed:**  Slow  Fast

**Lighted Bezel:**  Solid On  Flashing

**section 3**

<input type="checkbox"/> Bill 1 (\$1)	Bill 2 <input type="checkbox"/> (\$5)
<input type="checkbox"/> Bill 3 (\$10)	Bill 4 <input type="checkbox"/> (\$20)
<input type="checkbox"/> Bill 5 (\$50)	Bill 6 <input type="checkbox"/> (\$100)
<input type="checkbox"/> Bill 7	Bill 8 <input type="checkbox"/> Example: To accept USA \$1, \$5, and \$10, fill in the ovals for Bill 1, Bill 2, and Bill 3.
<input type="checkbox"/> Bill 9	Bill 10 <input type="checkbox"/>
<input type="checkbox"/> Bill 11	Bill 12 <input type="checkbox"/>

**section 4**

<input type="checkbox"/> Select Bills to Enable	<input type="checkbox"/> Bill 1 (\$1)	Bill 2 <input type="checkbox"/> (\$5)
	<input type="checkbox"/> Bill 3 (\$10)	Bill 4 <input type="checkbox"/> (\$20)
	<input type="checkbox"/> Bill 5 (\$50)	Bill 6 <input type="checkbox"/> (\$100)
	<input type="checkbox"/> Bill 7	Bill 8 <input type="checkbox"/> Example: To accept USA \$1, \$5, and \$10, fill in the ovals for Bill 1, Bill 2, and Bill 3.
	<input type="checkbox"/> Bill 9	Bill 10 <input type="checkbox"/>
	<input type="checkbox"/> Bill 11	Bill 12 <input type="checkbox"/>

**section 5**

<input type="checkbox"/> Security Level:	High <input type="checkbox"/>	Low <input type="checkbox"/>
<input type="checkbox"/> Insert Direction:	Face up, <input type="checkbox"/>	All 4 Ways <input type="checkbox"/>
	Left 1st <input type="checkbox"/>	

**This Configuration Card should be printed on standard copy paper, measuring 6.0 x 2.6 inches (152 x 66 mm).**

**If printing from a .PDF file, turn off the "shrink to fit" option in your printer settings for proper scale.**

 **PYRAMID TECHNOLOGIES, INC.**

CURRENCY VALIDATION EXPERTS

## TTL RS232

- High Security
  - 1 Way Bill Insertion

**INSERT THIS SIDE UP, THIS END FIRST  
USE BLACK INK, FILL OVALS COMPLETELY**

↑      ↑

**section 1**

<input type="checkbox"/> Pulse/ Serial	<input type="checkbox"/> \$1/\$5 Credit Lines
<input type="checkbox"/> MDB	<input type="checkbox"/> \$1-\$20 Credit Lines
<input type="checkbox"/> RS-232	<input type="checkbox"/> Always Enabled
<input type="checkbox"/> Parallel	<input type="checkbox"/> Hi
<input type="checkbox"/> Special 1	<input type="checkbox"/> Special 2

**section 2**

<input type="checkbox"/> Pulses per Dollar (sum of selected values)	<input type="checkbox"/> 64	<input type="checkbox"/> 4
	<input type="checkbox"/> 32	<input type="checkbox"/> 2
	<input type="checkbox"/> 16	<input type="checkbox"/> 1
	<input type="checkbox"/> 8	<input type="checkbox"/> None

Example:  
For 50 ppd, fill  
in the ovals for  
32, 16, and 2,  
( $32+16+2 = 50$ )

**Pulse Speed:**  Slow  Fast

**Lighted Bezel:**  Solid On  Flashing

**section 3**

<b>section 4</b>	<input type="checkbox"/> Bill 1 (\$1)	<input type="checkbox"/> Bill 2 <input type="checkbox"/> (\$5)
Select Bills to Enable	<input type="checkbox"/> Bill 3 (\$10)	<input type="checkbox"/> Bill 4 <input type="checkbox"/> (\$20)
	<input type="checkbox"/> Bill 5 (\$50)	<input type="checkbox"/> Bill 6 <input type="checkbox"/> (\$100)
	<input type="checkbox"/> Bill 7	<input type="checkbox"/> Bill 8 <input type="checkbox"/> Example: To accept USA \$1, \$5, and \$10, fill in the ovals for Bill 1, Bill 2, and Bill 3.
	<input type="checkbox"/> Bill 9	<input type="checkbox"/> Bill 10 <input type="checkbox"/>
	<input type="checkbox"/> Bill 11	<input type="checkbox"/> Bill 12 <input type="checkbox"/>

**Security Level:**  High  Low

**Insert Direction:**  Face up,  All 4  
 Left 1st  Ways

**section 5**

↑      ↑

This Configuration Card should be printed on standard copy paper, measuring 6.0 x 2.6 inches (152 x 66 mm).

If printing from a .PDF file, turn off the "shrink to fit" option in your printer settings for proper scale.

 **PYRAMID TECHNOLOGIES, INC.**

CURRENCY VALIDATION EXPERTS



# SPARK - Operator Manual 3.0



Terminal Audit | Events | Bill Hist. | Rcpt Hist. | Game Stats | Game Rec. | Terminal Set. | Game Set. | SAS | Support | Recycler | AFT | Lic.

## Appendix C: ICT PA7 and TAO Dip Switch Settings for Serial

Both PA7 and TAO Bill Acceptors have been tested for the WEL-RV706 Serial Cable only.



**Warning:** Power Off the Cabinet or Game Machine prior to making any changes to the Bill Acceptor Dip Switches or Cables.

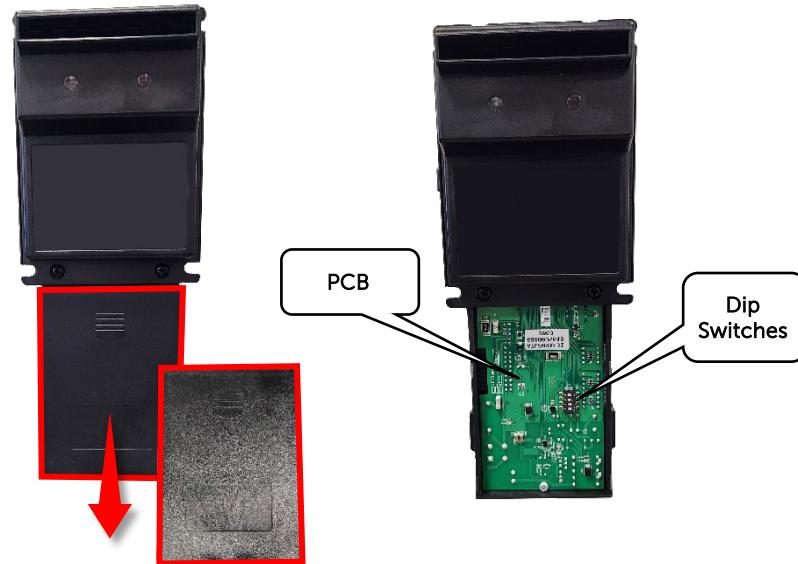


### ICT PA7 Dipswitch and Menu Settings

There are two sets of dip switches, internal and external, that need to be addressed for Serial Cables to function as well as the Bill Acceptor settings in the Operator Menu.

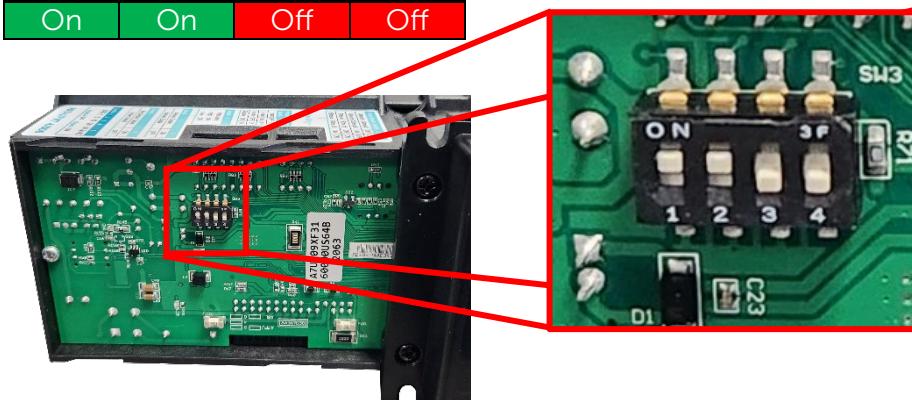
#### PA7 Internal / External Dip Switch Settings

1. Remove the PCB Cover.



2. Set the Dip Switches to the settings below.

1	2	3	4
On	On	Off	Off



# SPARK - Operator Manual 3.0

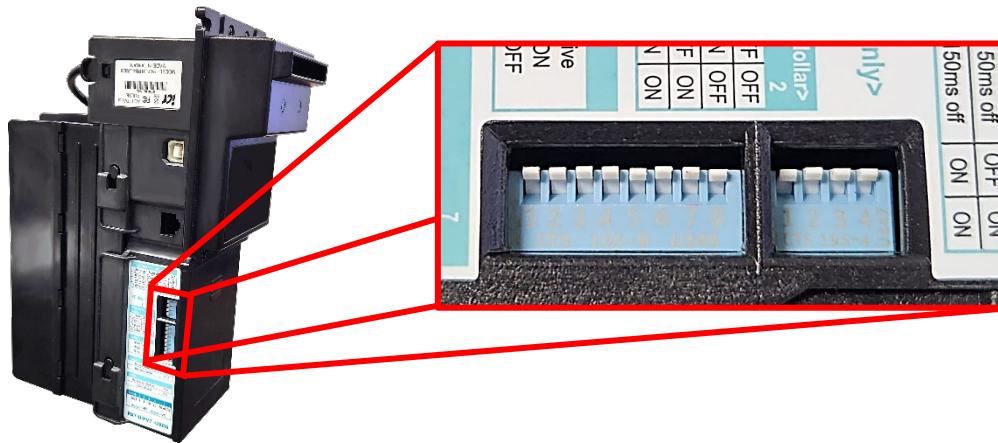


[Terminal Audit](#) | [Events](#) | [Bill Hist.](#) | [Rcpt Hist.](#) | [Game Stats](#) | [Game Rec.](#) | [Terminal Set.](#) | [Game Set.](#) | [SAS](#) | [Support](#) | [Recycler](#) | [AFT](#) | [Lic.](#)

3. Replace the PCB Cover.

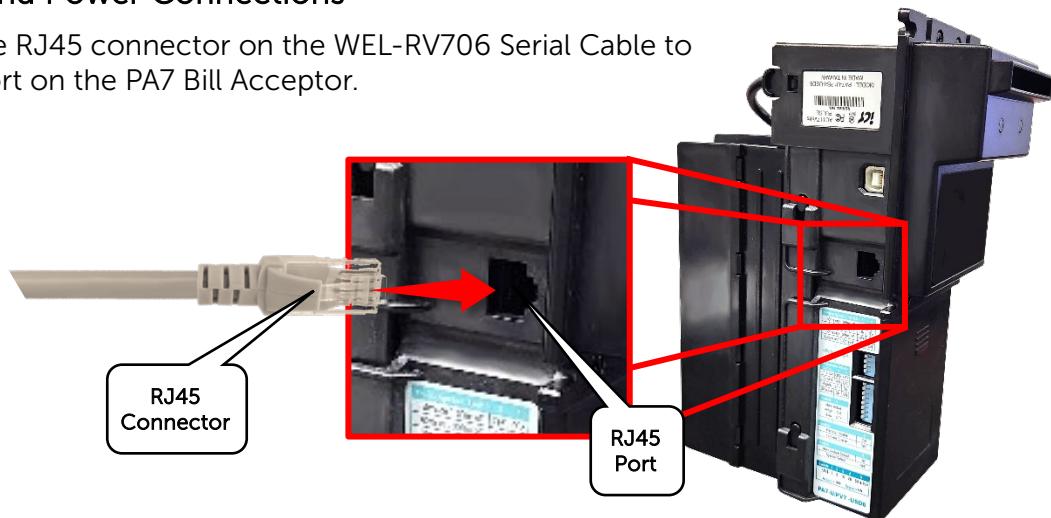


4. External Dip Switches should all be set to Off.



## Serial Cable and Power Connections

5. Connect the RJ45 connector on the WEL-RV706 Serial Cable to the RJ45 Port on the PA7 Bill Acceptor.



# SPARK - Operator Manual 3.0

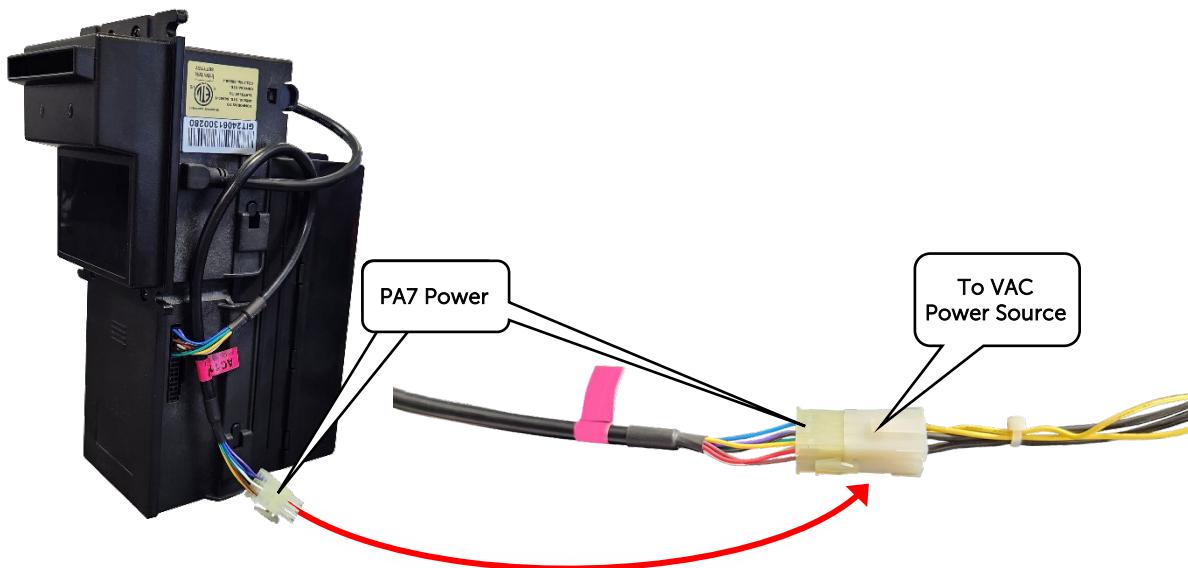


Terminal Audit | Events | Bill Hist. | Rcpt Hist. | Game Stats | Game Rec. | Terminal Set. | Game Set. | SAS | Support | Recycler | AFT | Lic.

6. Connect the DB9 on the WEL-RV706 Serial Cable to COM 1 on the Board.

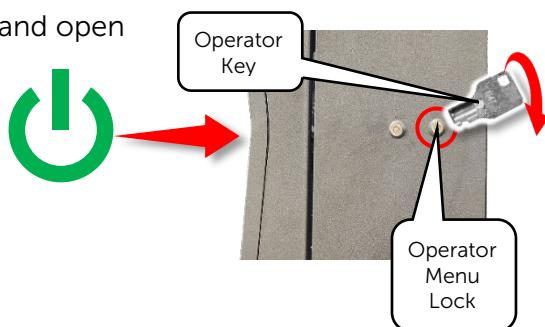


7. Connect the PA7 Power cable to the VAC Power Source inside the Cabinet or Game Machine.



## PA7 Menu Settings

8. Power up the Cabinet or Game Machine and open the Operator Menu via the Operator Key.

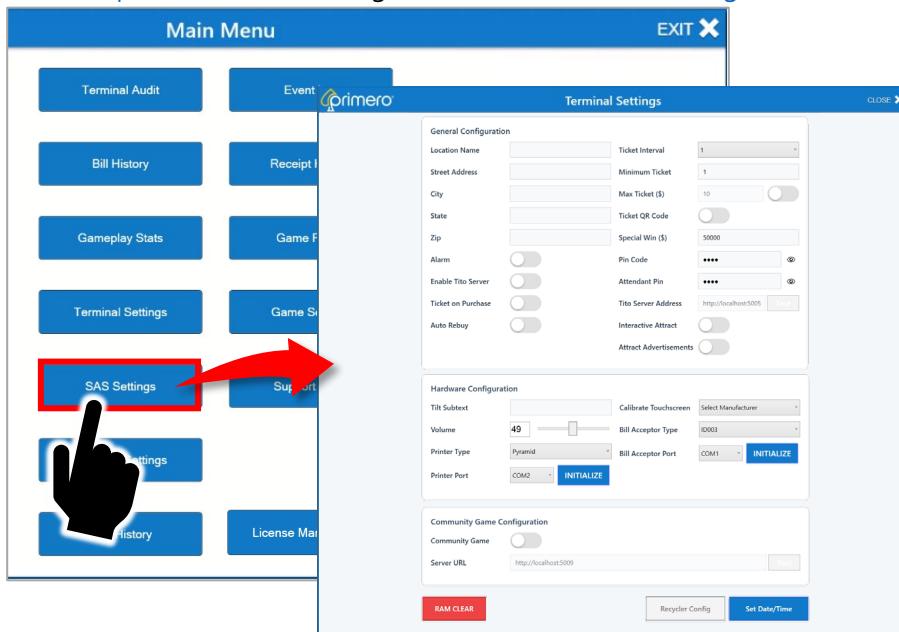


# SPARK - Operator Manual 3.0

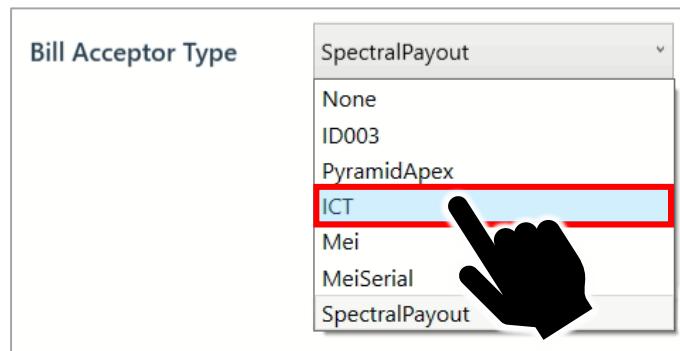


Terminal Audit | Events | Bill Hist. | Rcpt Hist. | Game Stats | Game Rec. | Terminal Set. | Game Set. | SAS | Support | Recycler | AFT | Lic.

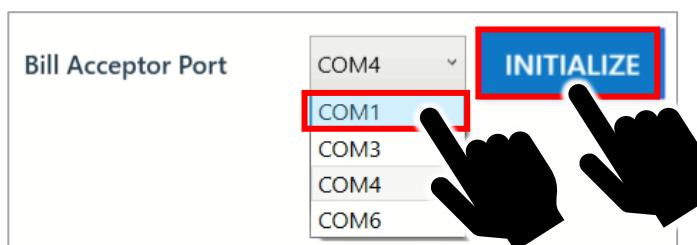
## 9. In the Operator Menu, Navigate to the Terminal Settings.



## 10. From the Bill Acceptor Type dropdown, Select ICT.



## 11. From the Bill Acceptor Port dropdown, Select COM 1 and Tap Initialize.



## 12. Insert Bills to Test the Bill Acceptor.



# SPARK - Operator Manual 3.0



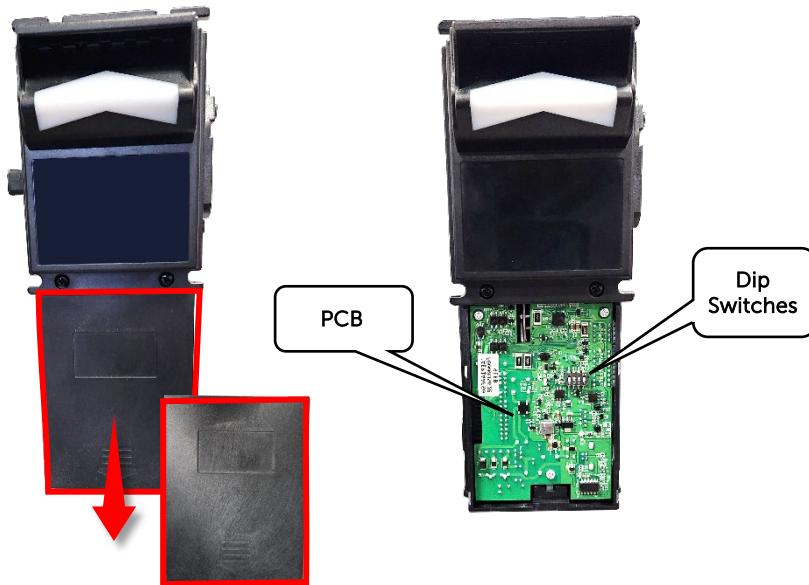
Terminal Audit | Events | Bill Hist. | Rcpt Hist. | Game Stats | Game Rec. | Terminal Set. | Game Set. | SAS | Support | Recycler | AFT | Lic.

## ICT TAO Dipswitch Settings

There are two sets of dip switches, internal and external, that need to be addressed for Serial Cables to function as well as the Bill Acceptor settings in the Operator Menu.

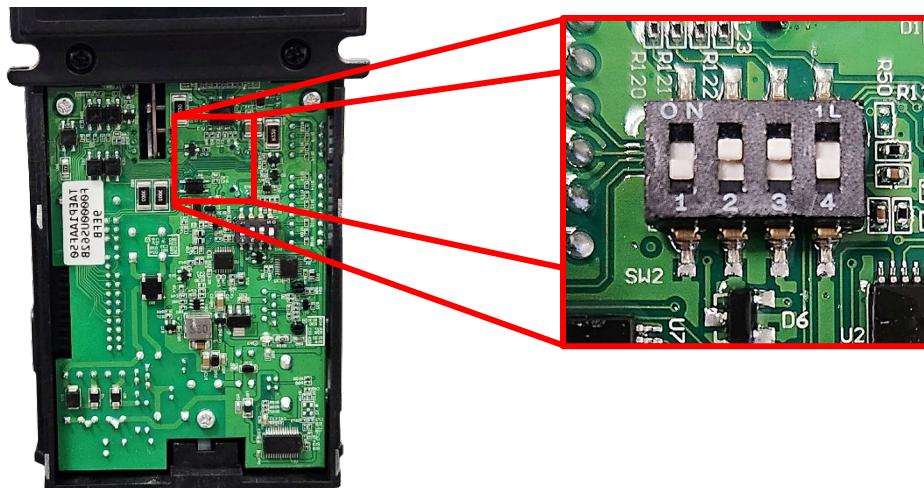
### TAO Internal / External Dip Switch Settings

1. Remove the PCB Cover.



2. Set the Dip Switches to the following settings.  
For more Dip Switch Settings see the chart below.

1	2	3	4
Off	On	On	Off



# SPARK - Operator Manual 3.0



[Terminal Audit](#) | [Events](#) | [Bill Hist.](#) | [Rcpt Hist.](#) | [Game Stats](#) | [Game Rec.](#) | [Terminal Set.](#) | [Game Set.](#) | [SAS](#) | [Support](#) | [Recycler](#) | [AFT](#) | [Lic.](#)

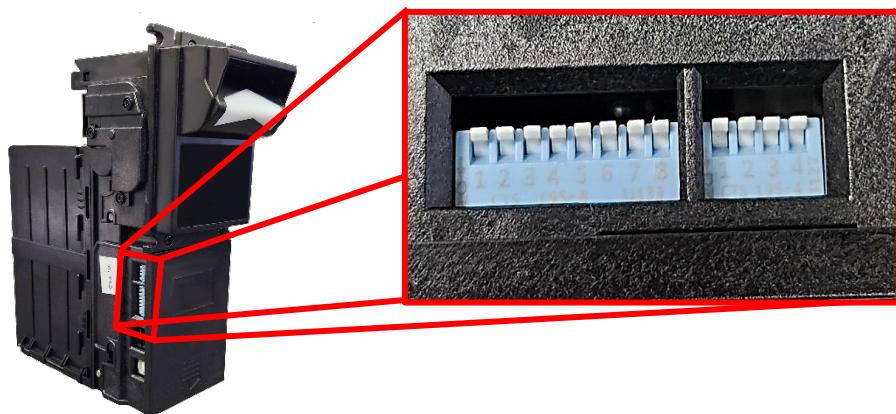
Function	1	2	3	4
Credit-Pulse Normal HIGH*	On			
ICT Mode	Off	On	On	Off
PULSE Mode		On	Off	

\* Not Used in ICT Mode

3. Replace the PCB Cover.



4. External Dip Switches are set to Off by default.  
The charts below show the Dip Switch positions for various Bill Acceptor settings.



# SPARK - Operator Manual 3.0



Terminal Audit | Events | Bill Hist. | Rcpt Hist. | Game Stats | Game Rec. | Terminal Set. | Game Set. | SAS | Support | Recycler | AFT | Lic.

Main 8 Bit Dip Switch Settings								
Function	1	2	3	4	5	6	7	8
Settings Based on Location Requirements	Reject \$1	On						
	Accept \$1	Off						
	Reject \$5		On					
	Accept \$5		Off					
	Reject \$10			On				
	Accept \$10			Off				
	Reject \$20				On			
	Accept \$20				Off			
	Reject \$50 & \$100					On		
	Accept \$50 & \$100					Off		
	Reserved						Off	
	Harness Disable*							On
	Harness Enable							Off
	Inhibit Low Activity							Off

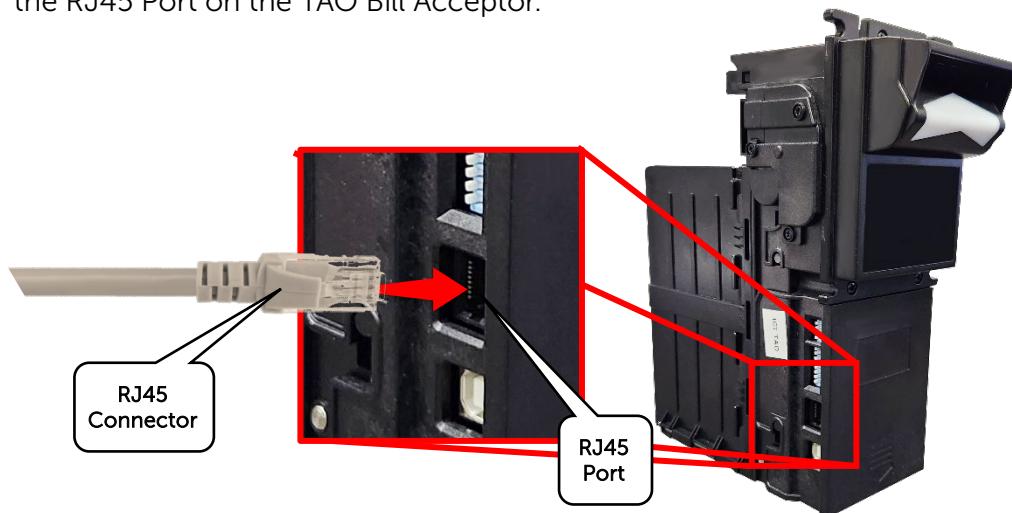
**Note:** All currency in US Dollars    \*Only On when connected by Pulse.

Main 4 Bit Dip Switch Settings				
Function	1	2	3	4
1 Pulse / \$1	Off	Off		
Interface Timing Conversion 50ms on/ 50ms off			Off	Off

**Note:** All currency in US Dollars

## Serial Cable and Power Connections

5. Connect the RJ45 connector on the WEL-RV706 Serial Cable to the RJ45 Port on the TAO Bill Acceptor.

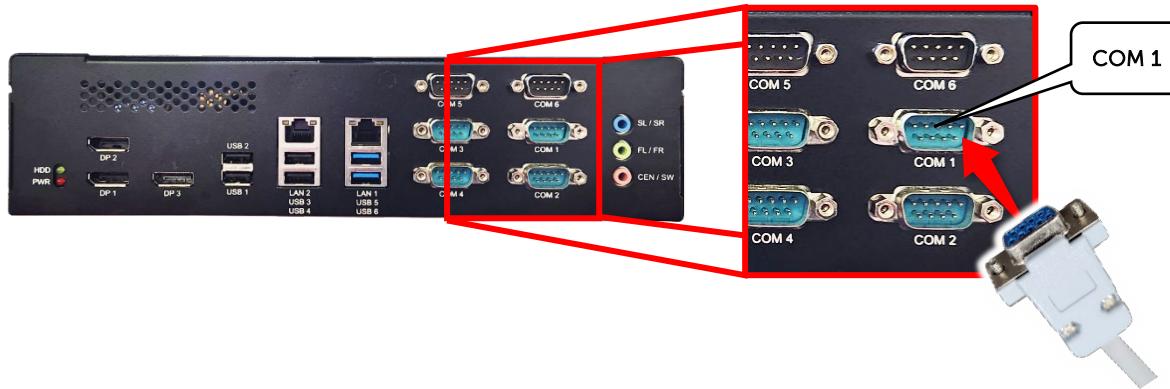


# SPARK - Operator Manual 3.0

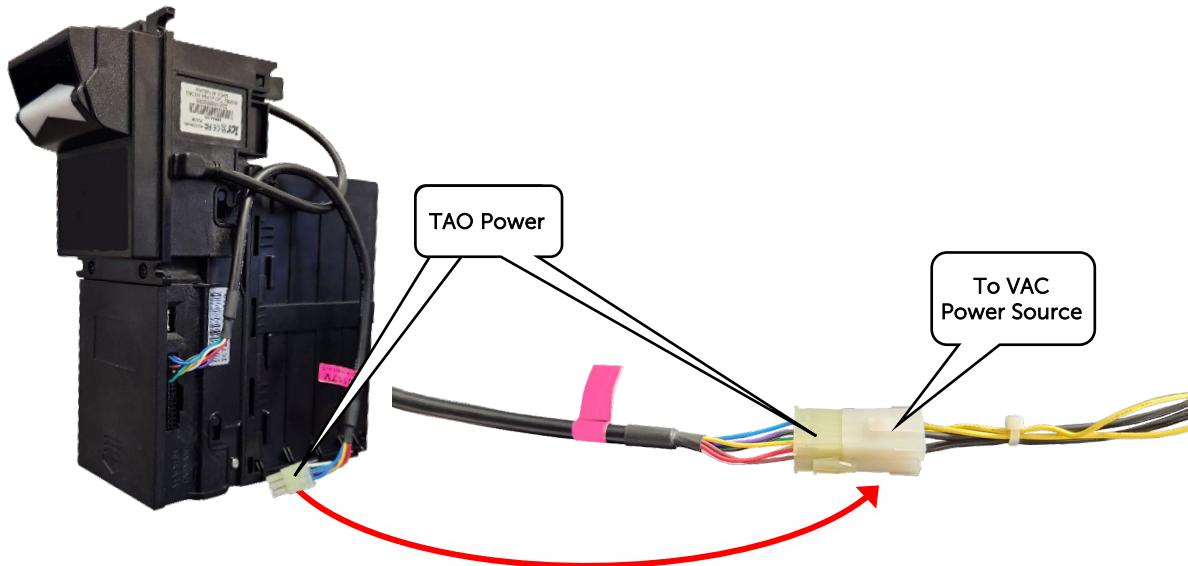


Terminal Audit | Events | Bill Hist. | Rcpt Hist. | Game Stats | Game Rec. | Terminal Set. | Game Set. | SAS | Support | Recycler | AFT | Lic.

6. Connect the DB9 on the WEL-RV706 Serial Cable to COM 1 on the Board.

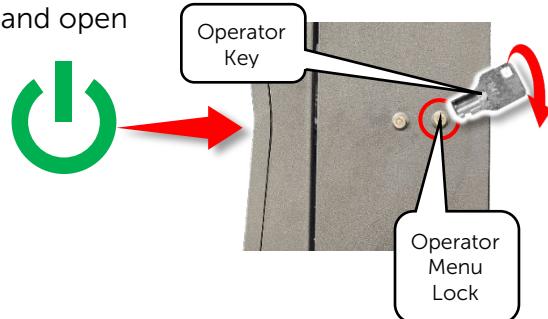


7. Connect the TAO Power cable to the VAC Power Source inside the Cabinet or Game Machine.



## TAO Menu Settings

8. Power up the Cabinet or Game Machine and open the Operator Menu via the Operator Key.

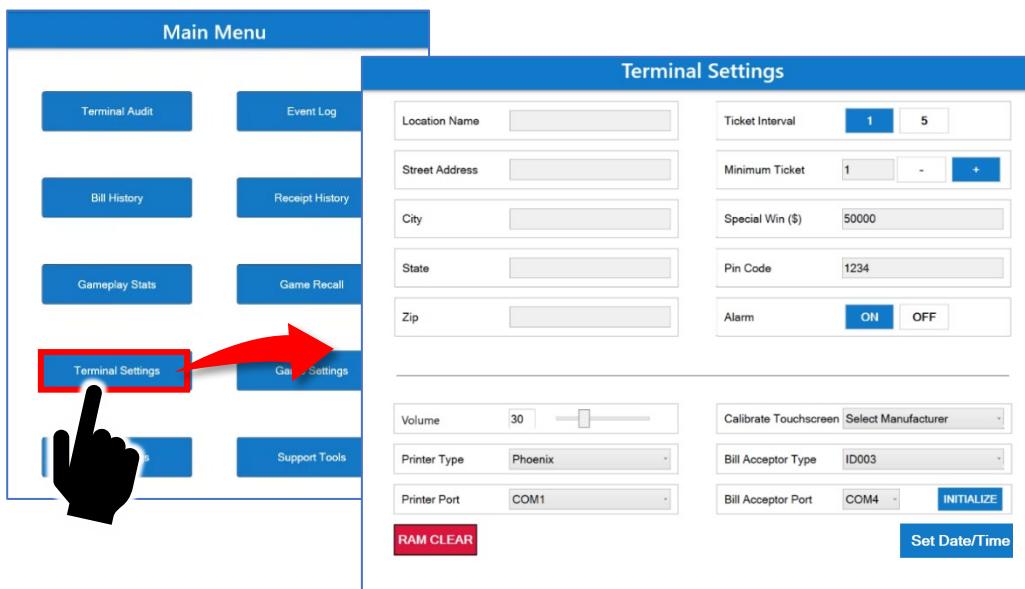


# SPARK - Operator Manual 3.0

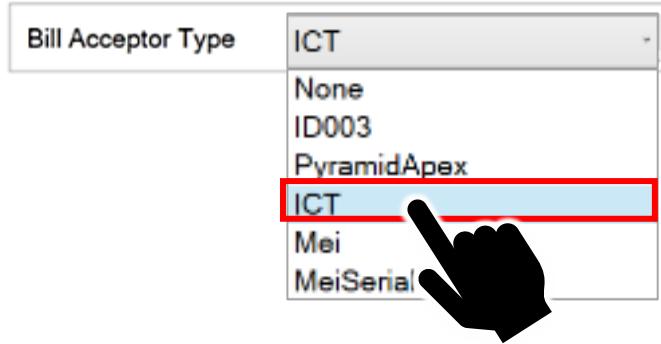


Terminal Audit | Events | Bill Hist. | Rcpt Hist. | Game Stats | Game Rec. | Terminal Set. | Game Set. | SAS | Support | Recycler | AFT | Lic.

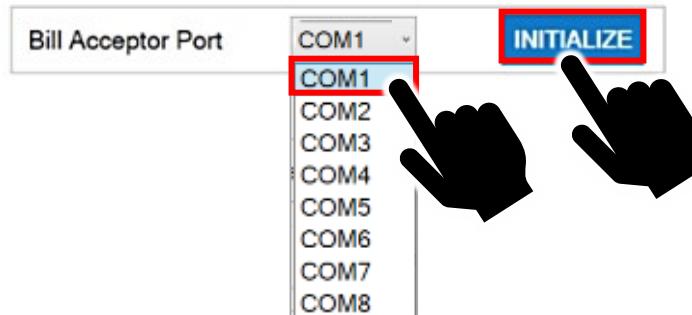
9. In the Operator Menu, Navigate to the Terminal Settings.



10. From the Bill Acceptor Type dropdown, Select ICT.



11. From the Bill Acceptor Port dropdown, Select COM 1 and Tap Initialize.



12. Insert Bills to Test the Bill Acceptor.

