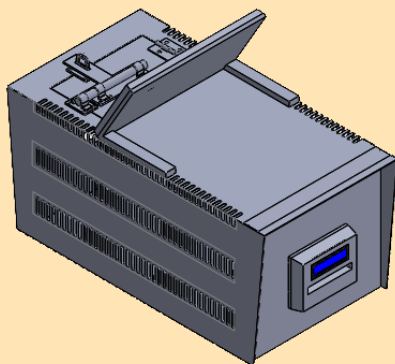


Operation & Safety Manual

version 2 - July 13, 2023

CashGrab

Payment Peers



Redefining Cash Transactions



*Payment
Peers, Inc*

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Introduction

The CashGrab system is an automated cash payment solution designed specifically for Canadian street food vendors. CashGrab ensures a higher level of accuracy, security, and food sanitation by eliminating the need for employees to physically handle banknotes. Reading the operation manual is crucial for efficient, proper, and most importantly safe operation of the CashGrab system.

Quick Start Guide

Caution: Improper use of the machine can result in damage, injury, or voiding the warranty.

System Setup

1. Set up the CashGrab device on a flat surface.
2. Plug the power adapter cable into a standard North American power outlet (see table 1 for power outlet specifications).
3. Connect to a Wi-Fi network.
4. On the touch screen interface, launch the CashGrab application from the desktop (see figure 18). Initial start-up may take several minutes.



User Interface

1. Login or register with the CashGrab Manager application.
2. Navigation to the various CashGrab Manager menu pages is facilitated by the capacitive touch screen.
3. On the left side of the user interface, there is a list of menu pages that are accessible.

User Interface

1. Login or register with the CashGrab Manager application.
2. Navigation to the various CashGrab Manager menu pages is facilitated by the capacitive touch screen.
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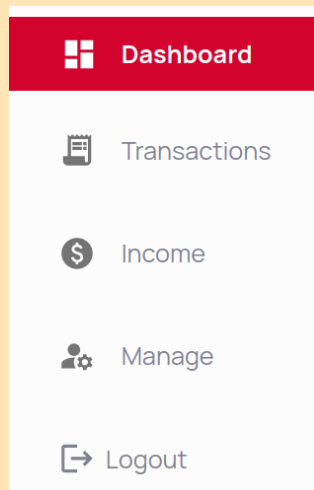


Figure 1 Menu Pages



Key Features

The CashGrab product suite supports the following features and operations:

- Processing cash transactions with the use of automated denomination identification and counterfeit detection.
- Safe storage of customer banknote deposits.
- Cancelling transactions in progress.
- Viewing total customer deposit history.
- Viewing revenue breakdown by denomination.
- Registering / removing employee profiles.
- Registering / removing menu entries.
- Authenticated access to the CashGrab Manager interface.

Product Overview

This section provides an overview of the device, highlighting its major user facing components. The information presented here will help users gain a comprehensive understanding of the device's features and functionalities.

CashGrab Manager

The CashGrab Manager is a web application that serves as the de facto method of interacting with the CashGrab device. It offers a comprehensive set of features that allows users to manage transactions, track income, and perform various administrative tasks. The following list provides an overview of the key web pages available:

Login Page

The Login Page is the initial access point to the CashGrab Manager, where users can securely authenticate their credentials to gain authorized access to the system.

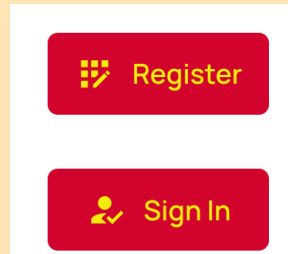


Figure 2 Login Page

Dashboard Page

The Dashboard Page serves as a central hub for the CashGrab Manager, offering various statistics of transaction-related information for monitoring.



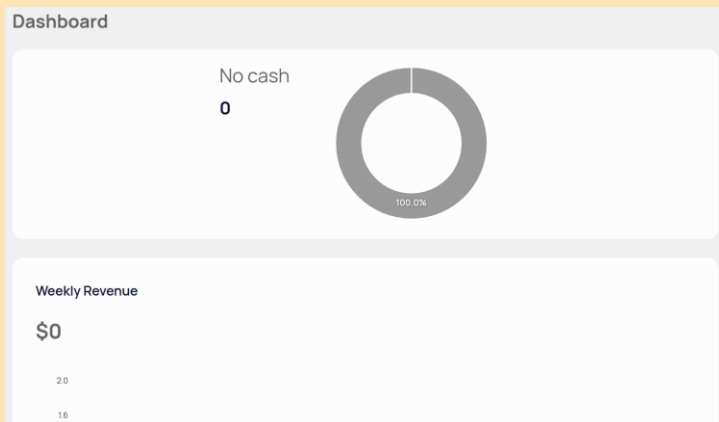


Figure 3 Dashboard

Transaction Page

The Transaction Page is dedicated to managing and processing transactions carried out using the CashGrab device. Users can initiate new transactions, and view transaction history.

Transactions					+ Add Transaction
Employee	Item	Price	Money Deposited	Customer Email	
John Doe	pizza: 2	10	10		
Jane Doe	pizza: 5	25	50		
John Smith	pizza: 7	35	5		
1 row selected					Rows per page: 100 1-5 of 5 < >
🗑 Abort Transaction					

Figure 4 Transaction Page

Income Page

The Income Page focuses on managing the income generated through the CashGrab device. It allows users to monitor transaction details.

Income			
Type	\$5 Bills	\$10 Bills	\$20 Bills
Deposit	0	1	0
Deposit	0	0	0
Deposit	1	0	0

Figure 5 Income Page



Management Page

The Management Page enables users to efficiently manage employee profiles and item listings. Users can add, edit, and remove employee profiles, ensuring proper level authorization level of staff using the CashGrab device. Additionally, users can manage item listings by adding new items, updating details, adjusting pricing information, and removing items as needed.

Employee Management

+ Employees

First Name	Last Name	Ph
Jane	Smith	1

Rows per page: 100 1-1 of 1

Delete Employee

Item Management

+ Items

Item Name	Price
Pizza	5
Sandwich	5
Hamburger	10

Rows per page: 100 1-3 of 3

Delete Items

Figure 6 Management Page

CashGrab Device

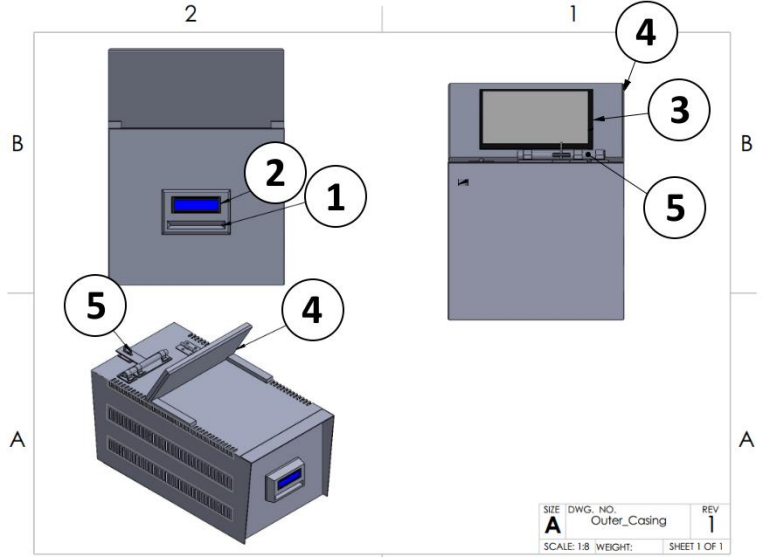


Figure 7 CashGrab Device Render

Insertion slot (figure 7 - part 1)

The insertion slot (part 1) serves as a designated area for users to securely insert Canadian banknotes.



Transaction Display (figure 7 - part 2)

The transaction LCD display (part 2) is a simple visual interface on the customer-facing side of CashGrab Device. During transactions, it displays the current balance owed by the customer. The transaction display helps facilitate a smooth transaction process.



Figure 8 Transaction Display

Touch Screen (figure 7 - parts 3 & 4)

The touch screen interface (parts 3 & 4) on the CashGrab Device allows users to seamlessly operate the CashGrab Manager application. Providing a user-friendly platform for inputting data, making selections, and navigating through the various menu pages offered by the software.

Cash Storage (figure 7 - part 5)

The cash storage (part 5) is a banknote storage location in the CashGrab that can be accessed via a hinged door located on the top of the device. This feature ensures safeguarding of the cash slot's contents from unauthorized access while still allowing for managers to easily withdraw cash.

Power Adapter Cable

The power adapter cable is an essential component that supplies electrical power to the CashGrab Device. It should be handled with care and properly connected to a standard 120V 15A 60Hz power outlet.

Operating Instructions

Task: Navigating the CashGrab Manager application

1. Navigation to the various CashGrab Manager menu pages is facilitated by the capacitive touch screen. On the left-hand side of the screen, touch the menu page that you would like to navigate to.

Task: Adding menu items

1. Navigate to the “Manage” menu page.



2. Select the red button labeled “+ Items” to add a new menu item.



3. In the pop-up window, enter a name and price for the menu item.



New Item

Enter Item Details

Item Name

Pizza

Price

5

Cancel
Submit

Figure 9 New Item Pop-up

4. Select the button labeled “Submit”.

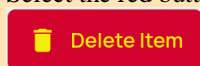
Task: Removing menu items

1. Navigate to the “Manage” menu page.
2. In the table of menu items, select a row to be deleted.

Item Name	Price
Hamburger	15
Pizza	5

Figure 10 Selected Column in Menu Table

3. Select the red button labeled “Delete Item”.

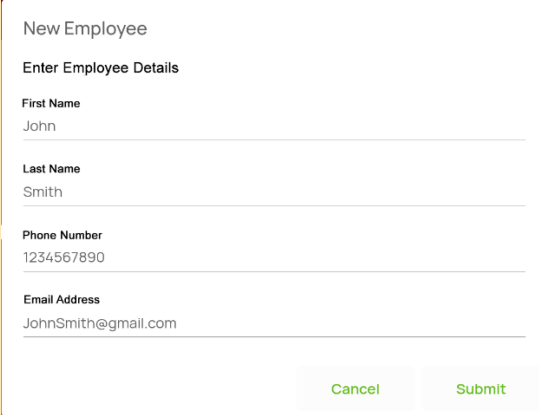


Task: Adding employees

1. Navigate to the “Manage” menu page.
2. Select the red button labeled “+ Employees”.



3. In the pop-up window, enter the following information: First Name, Last Name, Phone Number, and Email.

A white rectangular pop-up window with a light gray border. At the top, it says "New Employee" in bold. Below that is "Enter Employee Details" in bold. There are four input fields: "First Name" with the text "John", "Last Name" with the text "Smith", "Phone Number" with the text "1234567890", and "Email Address" with the text "JohnSmith@gmail.com". At the bottom right, there are two buttons: "Cancel" and "Submit", both in green text on light gray backgrounds.

New Employee

Enter Employee Details

First Name
John

Last Name
Smith

Phone Number
1234567890

Email Address
JohnSmith@gmail.com

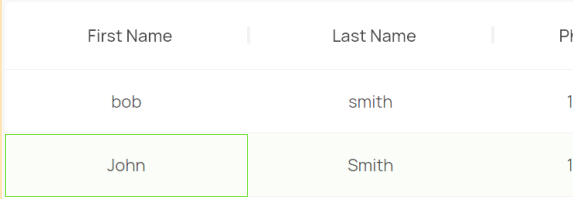
Cancel Submit

Figure 11 New Employee Pop-up

4. Select the button labeled “Submit”.

Task: Removing employees

1. Navigate to the “Manage” menu page.
2. In the table of employees, select a row to be deleted.

A table with three columns: "First Name", "Last Name", and "Phone Number". The first row has "bob", "smith", and "1234567890". The second row has "John", "Smith", and "1234567890". The second row is highlighted with a green border.

First Name	Last Name	Phone Number
bob	smith	1234567890
John	Smith	1234567890

Figure 12 Selected Column in Employee Table

3. Select the red button labeled “Delete Employee”.



Task: Handling a transaction

1. Navigate to the “Transactions” menu page.



2. Select the red button labeled “+ Add Transaction”.



3. In the pop-up window, enter the following information: Employee, Item(s), Quantity(s), Customer Email, and Comments.

New Transaction

Employee
John Smith

Item
Pizza, Hamburger

Pizza Quantity *
5

Hamburger Quantity *
3

Price
55

Customer Email

Cancel Submit

Figure 13 Add Transaction Pop-up

4. Select the button labelled “Submit”. This step will cause the motors to begin spinning and the total balance to appear on customer facing display.
5. (Optional): To cancel the current transaction, select the row with the current transaction and press the red button labelled “Abort Transaction”.

 **Abort Transaction**

6. Allow the customer to sequentially insert their banknotes into the machine until the full transaction balance has been paid.

Task: Inserting banknotes (Customer)

1. Wait until the balance owed appears on the transaction display.
2. At the insertion slot of the CashGrab machine, slowly insert a single banknote until it is pulled by the internal belts.



Figure 14 Insertion Slot



3. Wait until the transaction display has updated to reflect the change in the total amount due.
4. Repeat step 2 until the total transaction balance has been paid.

Task: Recovering cash from the CashGrab machine

1. Open the hinged panel on top of the device.
2. Remove the bank notes from cash slot.

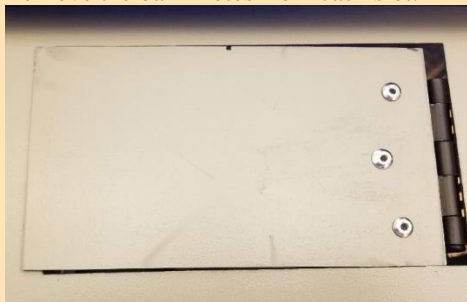


Figure 15 Hinged Panel

3. Close the hinged panel the latch on the top of the device.

Task: Registering an account

1. On the login page, select the red button labeled “Register”.



2. In the “Register Account” pop-up window, enter your account details: First Name, Last Name, Email Address, and Password.

Register Account

Enter Details

First Name
Abdul

Last Name
Khan

Email Address
AbdulKhan@gmail.com

Password
.....

Cancel

Submit

Figure 16 Register Account Pop-up

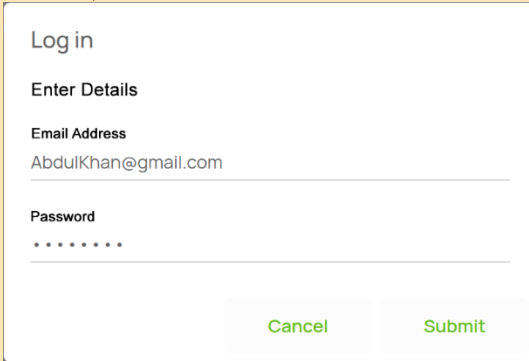
3. Select the button labeled “Submit”.

Task: Signing into an account

1. On the login page, select the red button labeled “Sign In”.



2. In the “Log in” pop-up window, enter your login credentials: Email Address, and Password.

A white rectangular pop-up window titled "Log in". Below the title is the text "Enter Details". There are two input fields: "Email Address" containing "AbdulKhan@gmail.com" and "Password" containing seven dots. At the bottom are two buttons: "Cancel" and "Submit".

Log in

Enter Details

Email Address
AbdulKhan@gmail.com

Password
.....

Cancel Submit

Figure 17 Log-in Pop-up

3. Select the button labeled “Submit”.

Task: Logging out of an account

1. On the menu panel, select the button labelled “Logout”.



Task: Running Initial Startup Scripts

1. On the touch screen interface upon system boot, double tap the application labeled as “CashGrab Manager”.



Figure 18 Initial Startup Script Desktop Icon

2. Wait several minutes until the CashGrab Manager software opens in the browser.

Task: Viewing captured banknote images

1. On the touch screen interface desktop, double tap the folder labelled “Captured Images”.
2. Observe that accepted banknotes are labeled with their associated denomination and timestamp.
3. Observe that rejected banknotes are labelled with timestamps.

Task: Using the on-screen keyboard

- Select a text field on the CashGrab Manager application and observe the on-screen keyboard appear.



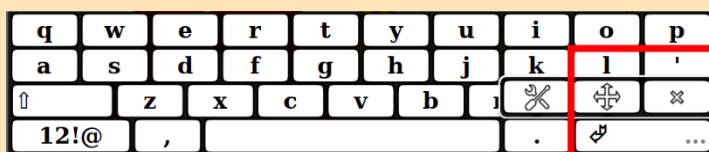


Figure 19 On-screen Keyboard

- To hide the on-screen keyboard, hold down on the “...” characters on the return key, then select the button labelled “X”.

Task: Using the included physical keyboard



Figure 20 Physical Keyboard

- The right-side of the keyboard is a touchpad for moving the cursor on the touch-screen interface.
- The mouse right-click and left-click keys are located on the bottom left hand-side of the keyboard.

Maintenance and Troubleshooting

This section provides instructions for the maintenance and troubleshooting of the CashGrab device. It covers essential maintenance items: adjusting belt tension, and lubrication.

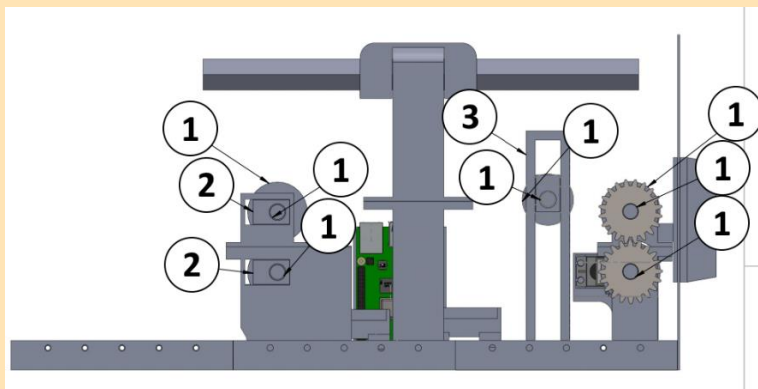


Figure 21 Internal Components Side View

Adjusting Roller Belt Tension

This section provides instructions for adjusting and maintaining roller belt tension in a conveyor system.



1. Use a #2 Phillips-head screwdriver to remove all visible screws on the casing. Be mindful of any cables while removing the top of the case.
2. Unplug the power adapter to prevent accidental activation.
3. Identify the tensioning mechanism: CashGrab's tension mechanism is located on back motor holder (figure 21 - part 2) and damper (figure 21 - part 3).
4. Inspect the belt tension: Visually examine the conveyor belt for any signs of damage, excessive wear, or misalignment. Check the tension of the conveyor belt by pressing it firmly with your hand.
5. Adjust the tension: To adjust the tension for the top belts, adjust the damper and its holder (figure 21 - part 3) height where the belts have enough tension. To adjust the tension for the bottom belts, tighten the roller supports (figure 21 - part 2), using an M2 Allen key, to the distance where the belts have enough tension.

Lubrication

This section describes the process of lubricating the conveyor system which is required once every five hundred operating hours.

1. Use a #2 Phillips-head screwdriver to remove all visible screws on the casing. Be mindful of any cables while removing the top of the case.
2. Lubrication procedures: Unplug the power adapter to prevent accidental activation. Apply a small amount of lubricant on all rollers and bearings (figure 21 - parts 1).
3. Perform routine inspections: Regularly inspect the conveyor system to identify any signs of excessive wear, or inadequate lubrication.

Safety Considerations

The following collection of safety instructions and precautions is intended to guide users on how to safely operate a product, specifically the CashGrab system.

- Ensure the CashGrab system is securely positioned on a level surface to maintain stability and prevent tipping during operation.
- Prior to performing any maintenance, cleaning, or adjustments, ensure the device is off and disconnect the power source.
- Refrain from making unauthorized modifications or tampering with the internal components of the CashGrab.
- Always use the appropriate power cord or adapter provided with the CashGrab.
- Unauthorized repairs or modifications can pose electrical hazards, void the product warranty, and compromise safety. Such actions should be strictly avoided.
- Adhere to local regulations for the safe disposal of electrical devices, including the CashGrab.



- Securely lock the cash slot of the CashGrab to prevent unauthorized access or tampering.
- Ensure the device is firmly secured to a structure or fixed object using the given cable lock.
- Conduct regular maintenance and inspections to uphold the integrity of the device's locking mechanisms, security features, and overall theft prevention measures.

Technical Specifications

Dimensions			North American Power Outlet Type A/B Outlet		
Height	Length	Width	AC Voltage	Frequency	Amperage
223 mm	457 mm	257 mm	120 V	60 Hz	15 A
Unit Weight			Operating Temperature		CashGrab Power Draw
14.6 kg			0-50 °C		~ 20 W

Table 1: Technical Specifications

Warranty Information

Standard Warranty

Payment Peers will provide warranty up to one year after purchase of the device. To be eligible for a full replacement, the product must meet the following criteria:

- The product must have been purchased directly from Payment Peers.
- The warranty period must not have expired.
- The defect or malfunction must be covered under the warranty terms.

Exclusions

The warranty does not cover damages or defects caused by misuse, accident, unauthorized modifications, natural disasters, or any other circumstances beyond normal usage. Additionally, any damage resulting from the use of non-authorized accessories or software not provided by Payment Peers will void the warranty.

Transferability

This warranty is non-transferable and is only valid for the original purchaser of the CashGrab.

Contact Information

For feedback, questions, concerns or to make a warranty claim contact us through our chief communications officer, Dakota Crozier at:

dakota_crozier@sfu.ca or (778) 839-4139





Redefining Cash Transactions