

Sandvault Inc.

**SmartVend
Console Reload
User's Manual**

Version 1.06

Notice

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3	All	Update for Cale (Remove POS references)	AJL 01/2004
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Limited Warranty

Terms

SmartVend warrants each new SmartMx/J cpf 'J g'f and/or accessory to be free from defects in materials and workmanship to the original purchaser for a period of twelve (12) months from the date of shipment. Our responsibility is limited to repair or replacement of the **SmartMx** and/or accessory or part thereof at our option. Warranty coverage for repairs shall include both parts and labor.

This limited warranty does not extend to any defect, malfunction or failure caused by or resulting from improper service, repacking, maintenance or repair, abuse, neglect, problems with electrical power, accident or any other cause beyond the control of Sandvault or to any product whose serial number has been removed, altered, replaced, defaced or rendered illegible. If, in our opinion, repairs, replacement or service are not covered by warranty, the customer will be billed at our standard rates in effect at that time.

Sandvault shall not be liable to the purchaser or to any other person or firm for any specified or consequential damages of any kind which result from the use or misuse by any person or loss of profits or product resulting from any defect in, malfunction or failure of this product. No person, agent, distributor, service facility or company is authorized to change, modify or amend the terms of this limited warranty.

Warranty Procedure

If common troubleshooting cannot resolve your equipment problem, notify Sandvault by telephone, FAX or E-mail.

Describe the problem in detail. You may be asked to provide the make, model and software revision of the equipment interfaced to SmartVend Products.

If the trouble requires the return of the unit or components y g' will issue a **Return Material Authorization number (RMA#)** and will fax an **RMA Report** to be completed and enclosed with the returning merchandise.

Packing and Shipping

Do not return a unit before contacting our Service Department. We will issue a Return Material Authorization number. This number should be prominently displayed on the package and packing slip. Without an RMA#, shipments will be refused.

Complete and enclose the RMA Report with the returning merchandise. Be as specific as possible. Reference the unit's Model and Serial numbers. If non-warranty, specify whether an estimate of repairs is desired before work is performed and to whom this estimate should be sent.

Pack the unit in its original carton, using the original packing materials. If they are not available, be sure to pack the unit securely. Poor packaging may cause damage, adding cost and delay to repairs.

Ship prepaid to the address specified on the RMA report form. Collect shipments will be refused and returned. Customer must insure or accept all risk of loss or damage due to shipping. The customer is responsible for all shipping costs for warranty and non-warranty repairs or replacements.

Items Repaired by Manufacturer or Authorized Service Centers

Sandvault personnel do not repair the following items; rather, they are returned to the manufacturer or a designated service center for repair and return to Sandvault. Additional time is required for this secondary servicing point.

Bill Acceptors, Coin Mechs, UPSs, PCs & Printers

The most expedient and cost effective method of having bill acceptors, coin mechs, UPSs, PCs and printers repaired after the warranty period has expired is to have them serviced locally by a servicing center authorized by the manufacturer of the unit. If you need assistance in locating a service center, please contact our Customer Service Department.

Items Excluded from Repair Services

The following items are non-repairable, and will probably need to be replaced if they become damaged after the 12-month limited warranty period has expired:

- All cables and harnesses (including comms link cable)
- Pinpads/Pinpad Assemblies
- Card connector in the card reader

Additionally, any unit that has been vandalized, or has been mistreated whether intentional or accidental, is exempt from the flat fees posted in this Repair Policy. Such items will be considered on a case-to-case basis, and, if determined repairable, you will be contacted with the repair costs prior to QI performing repairs.

Overnight Shipping Requests

All repair prices include return shipping via ground collect. If you request return via overnight service, we will honor your request and will bill you the actual freight charges incurred in addition to the standard flat rate, plus an administration fee for 25% of the actual freight charges.

Conventions

The following conventions are used in this manual.

Screen text
[Key]

This font is used to represent all text printed to the screen.
Characters in brackets indicate keyboard input.



CAUTION! PROVIDES AN ADVISORY WARNING REGARDING CERTAIN SAFETY PROCEDURES.



NOTE: *A note provides information that is, or may be, of special interest.*

1. Introduction

1.1 Purpose

This document is designed to let the first time user easily set up and configure the QI SmartKit Console device. It is also meant to be a reference for using, configuring and troubleshooting the device.

1.2 Abbreviations, Acronyms and Terms

Abbreviations and Acronyms

CAD	Card Accepting Device, comprises the relevant components of the SmartKit Console , allowing the dispensing machine to accept cash cards for payment.
PIN	Personal Identification Number, used as a password to authorize users.

2. Installation

2.1 Required Hardware

The following components are needed to successfully operate SmartKit Console:

- SmartKit Console hand held device.
- Power Supply

The following additional components are needed to successfully upload transaction records to a PC:

- RS-232 cable (NOT a crossover cable)
- RS-232 to serial adapter

2.2 Assembly

To start using the SmartKit Console unit, plug the power adapter into the power socket on the upper left hand corner of the unit. Plug the 2-prong end of the power adapter into a standard 110vAC power source.

Wait until the bottom line of the Console display reads “Insert Card.” The unit is now ready to be configured.

3. Changing Settings

3.1 Configuring SmartKit Console for First Use

SmartKit Console should be configured for accounting and security purposes before it is deployed for use.

The administration menu structure appears in Appendix B.

To enter the administration menu system, press the [QI] and [BALANCE] keys simultaneously. The LCD screen will display a “_” character in the lower left of the screen. At this prompt, enter your password using the numeric keypad. The underscore character will advance across the screen with each keypress. The default (level 3) password is 1 1 2 3 4 4 3 3.

3.1.1 Setting the Date & Time

To set the SmartKit Console’s internal date and time, navigate to the Set Date & Time menu in the administration menu system, and press [OK]. The date and time will be displayed. Enter the current date and time using the numeric keypad.

To increment the currently selected value, press the blue [Balance] key. To decrement the currently selected value, press the black [QI] key. To advance to the next digit, press the green [OK] key.

3.1.2 Changing the Password (IMPORTANT!)



CAUTION! It is *VERY* important that you choose a new administration password for your SmartKit Console before people without administration privileges have access to it. Otherwise, they may use this manual to modify any of the settings described herein.

To change the administration access password, navigate to the Level 3 Password menu (see Appendix B), and press [OK]. You will be prompted to enter and then re-enter a new 8 digit password using the numeric keypad. Keep this password secure.

3.1.3 Setting the CAD ID



NOTE: A Card Accepting Device (CAD) ID is a unique 16-digit value associated with a specific SmartKit Console. This ID is used in generating transaction reports for the SmartKit Console, and so each SmartKit Console should contain a unique CAD ID.

To set the CAD ID, navigate to the Edit CAD ID entry in the administration menu (see Appendix B), and press [OK]. The current CAD ID will be displayed, with a blinking block cursor over top of the first digit. Use the numeric keypad to enter a unique 16 digit CAD ID for this SmartKit Console. When you have entered all 16 digits, you will return to the main administration menu. If you decide not to change the CAD ID, pressing [C]ancel will abandon all changes and return you to the main menu.

3.2 Adjusting SmartKit Console Features

3.2.1 Adjusting the Balance Limit

Adjusting the balance limit sets the maximum balance allowable on any card after loading value to the card from the SmartKit Console. This means that if the maximum value on the Console is set to \$500, and the Console operator attempts to load \$20 to a card that currently has \$490 on it, the load value request will be refused with the message “Invalid Amount. Please Reenter”. The maximum allowable balance limit is \$50,000.

To adjust the balance limit, navigate to the Card Setup menu (see appendix B), press [OK], and press [OK] once more to enter the Balance Limit menu. To increase the balance limit, press the [Balance] key. To decrease the balance limit, press the [QI] key. From \$0 to \$100, the limit increments by values of \$5. From \$100 to \$1,000, the limit increments by values of \$25. From \$1,000 to \$10,000, the limit increments by values of \$500. From \$10,000 to \$50,000 the limit increments by values of \$1,000.

3.2.2 Clearing the Datastore

Clearing the datastore clears all transaction records from the SmartKit Console. This means that all previous transaction information will be lost. Blacklist records are not affected by clearing the datastore.

To clear the datastore, navigate to the Clear Datastore menu (see appendix B), press [OK], and press [OK] once more to confirm. After a few seconds, the screen will display “Datastore Empty.” All transaction data has now been cleared.

3.2.3 Editing the Blacklist

The Blacklist is used to lock out lost, stolen, or expired cards. Cards whose serial numbers are contained in the Blacklist will not be accepted in SmartKit Console devices. The Blacklist stored on any Console unit can store up to 128 unique card IDs.

Card IDs entered into the Blacklist are made up of the last 4 digits of the serial number on the back of the QI card.

To edit the Blacklist, navigate to the Blacklist menu (see appendix B), and press [OK]. Use the blue [Balance] key and black [QI] key to scroll between the menu options.

Menu options include the following:

1. View

- View all cards in list one at a time.

To view the Blacklisted cards, press the [OK] key. Use the blue [Balance] key to scroll forward through the card IDs, and the black [QI] key to scroll backward through the card IDs. When finished, use the red [C]ancel key to exit to the main Blacklist menu.

2. Remove

- Removes one card ID at a time.

To remove a Blacklisted card, press the [OK] key. When prompted, enter the ID of the card to be removed using the numeric keypad. When finished, press [OK] to remove the card from the Blacklist.

3. Add

- Add card IDs to list one card at a time.

To add a card to the Blacklist, press the [OK] key. When prompted, enter the ID of the card to be added using the numeric keypad. The card ID is the last four digits of the card's serial number. When finished, press [OK] to add the card to the Blacklist.

4. Clear

- Delete all card IDs from the list.

You will not be prompted to delete all IDs; they will be deleted as soon as you press the [OK] key when in the `Exit <- -> Clear` menu. All previous entries in the Blacklist are cleared.

3.2.4 Restoring Defaults

Restoring defaults resets all settings on the SmartKit Console to their original settings. This means that the unit will be configured as it was prior to initial setup, and all previous setting modifications will be lost.

To restore defaults, navigate to the Restore Defaults menu (see appendix B), press [OK], and press [OK] once more to confirm. After a few seconds, the screen will display “Default Restored.” All settings now have their default values:

- Date & Time – will not change
- Password – 11234433
- CAD ID – 0000000000000000
- Blacklist – not affected

4. Using SmartKit Console

- After 780 transactions, a transaction upload is required in order to continue processing transactions. If the transaction data is not required, clearing the datastore will erase the records and transaction processing will resume.
- All user prompts time out after 15 seconds. The operation will be cancelled and the entire transaction will have to be restarted if no response is received from the user when prompted to enter a value or press a function key.
- If an error occurs, the entire transaction will be cancelled. The only exception occurs when an incorrect or invalid number/amount is entered. In this case, the user will be prompted to re-enter the number/amount.
- The user can end their current transaction at any time by pressing and releasing the cancel key.
- The card balance is automatically displayed when a card is inserted.
- Only successful transactions on a per-card basis are recorded.
- A user has fifteen seconds to enter an amount or accept/decline an operation before the console resets.
- Messages which do not require user response are displayed from 1.5 to 3 seconds.
- Maximum card balance is 15000 units, although it may be set lower for specific sites.
- Cards with incorrect site codes are automatically declined.

4.1 Loading Value on Console

SmartKit Console allows an authorized attendant to add value to a customer's smart card.

The following is a standard transaction sequence used for loading value with the Reload Console.

```
QI Systems POS2
Insert Card
```

{Attendant inserts Key card}

```
INSERT USER
      CARD
```

{Customer hands Attendant their card, attendant inserts customer card}

```
$56.00 Avail.
Enter Amount
```

{Customer advises attendant of amount to be added to card, and pays for the specified amount.}

{Attendant enters amount on Reload Console}

```
[1] [4] [0] [0] [OK]
```

```
Add $14.00?
No           Yes
```

```
[OK]
```

```
$70.00 Avail.
Thank You
```

{Console credits the value, and reports the new balance to the customer. After a short delay, the screen displays the following announcement. The customer may now remove their card.}

```
Remove Card
Have a Nice Day
```

4.2 Collecting Value on Console

SmartKit Console allows an authorized attendant to debit value from a customer's smart card.

The following is a standard transaction sequence used for debiting value using the SmartKit Console.

```
QI Systems POS2
Insert Card
```

{Customer hands Attendant their card, attendant inserts customer card}

```
$56.00 Avail.
Enter Amount
```

{Attendant advises customer of amount to be debited from card.}

{Attendant enters amount on Reload Console}

```
[1] [4] [0] [0] [OK]
```

```
Debit $14.00?
No          Yes
```

```
[OK]
```

```
$42.00 Avail.
Thank You
```

{Console credits the value, and reports the new balance to the customer. After a short delay, the screen displays the following announcement. The customer may now remove their card.}

```
Remove Card
Have a Nice Day
```

4.3 Transaction Logging Feature

SmartKit Console units log all customer card transactions for auditing on a desktop computer. The data logged for each transaction is as follows:

1. Card serial number,
2. CAD ID,
3. Value of transaction,
4. Ending balance of transaction,
5. Date and time of transaction,
6. Terminal type (POS, UPOS, RELOAD),
7. Number of records or transactions stored in Console,
8. Date and time of upload.

There are a few things to note about the SmartKit Console logging feature:

- Only user card records are stored. The attendant card insertions are not saved.

- Records are stored on the SmartKit Console until uploaded to a PC. Once the QI collecting software for Windows is started, it will upload all records and AUTOMATICALLY DELETE them from the Console if the upload is successful.

-Transaction data can only be read from uploaded records on a Windows PC.

To collect transaction data from the Console device:

1. Power on the Console device.
2. Connect the RS-232 cable (NOT a crossover cable) to the socket on the top of the SmartKit console farthest from the power socket.
3. Connect the RS-232 to serial adapter to the other end of the cable.
4. Plug the other end of the serial adapter into your PC.
5. Configure the QI Data Management software to connect over the COM port you plugged the serial adapter into
6. Initiate data collection from the QI Data Management software.

All records will now be on the PC, and deleted from the SmartKit Console.

5. Maintenance

5.1 What To Look For

Check regularly to ensure that:

- The front panel of the SmartKit Console device is not punctured or torn.
- All buttons are readable.
- The display is readable and not cracked or faded.
- The RS232 cable is not frayed or torn, and no wires are visible from it.
- The plugs on the cable still attach securely at both ends.
- There is no visible damage to the SmartKit Console case.



NOTE: *If any components are damaged, contact QI Systems Inc. for replacements.*

5.2 Cleaning

To clean the outside of the SmartKit Console case, wipe clean with a cloth dampened with a mild glass cleaner.



CAUTION! **DO NOT IMMERSE SMARTKIT CONSOLE IN ANY LIQUID, AND DO NOT SPRAY WITH LIQUID, AS LIQUID MAY GET INSIDE THE DEVICE AND CAUSE DAMAGE..**

Appendix A: Troubleshooting

Possible Problems and Solutions

Table 1 Problems & Solutions

Screen does not light up.	Verify that power adapter is securely plugged into a live 110vAC power outlet, and securely plugged into power socket on the top of the Console unit.
Inserted cards are "Invalid".	<p>Verify that the cards are inserted with the gold contact up, and on the end inserted into the Console card accepting slot.</p> <p>An "invalid card" response may also mean any of the following:</p> <p>i. While administering the Blacklist:</p> <ul style="list-style-type: none"> - not in list (when removing from list) - already in list (when adding to list) - invalid card number entered <p>ii. During standard POS/Reload transaction:</p> <ul style="list-style-type: none"> - incorrect site code - invalid card
"Com error" occurs during operation.	<ul style="list-style-type: none"> - Card chip is damaged. - Card reader contacts in Console unit are damaged. - Communications failed. Ensure all cables are firmly connected. If error persists, contact QI's RMA department.
File collection will not work if a card is in the Console unit when beginning data collection.	Remove card and the QI Data Software will immediately begin the data collection process.

Appendix B: Administration Menu

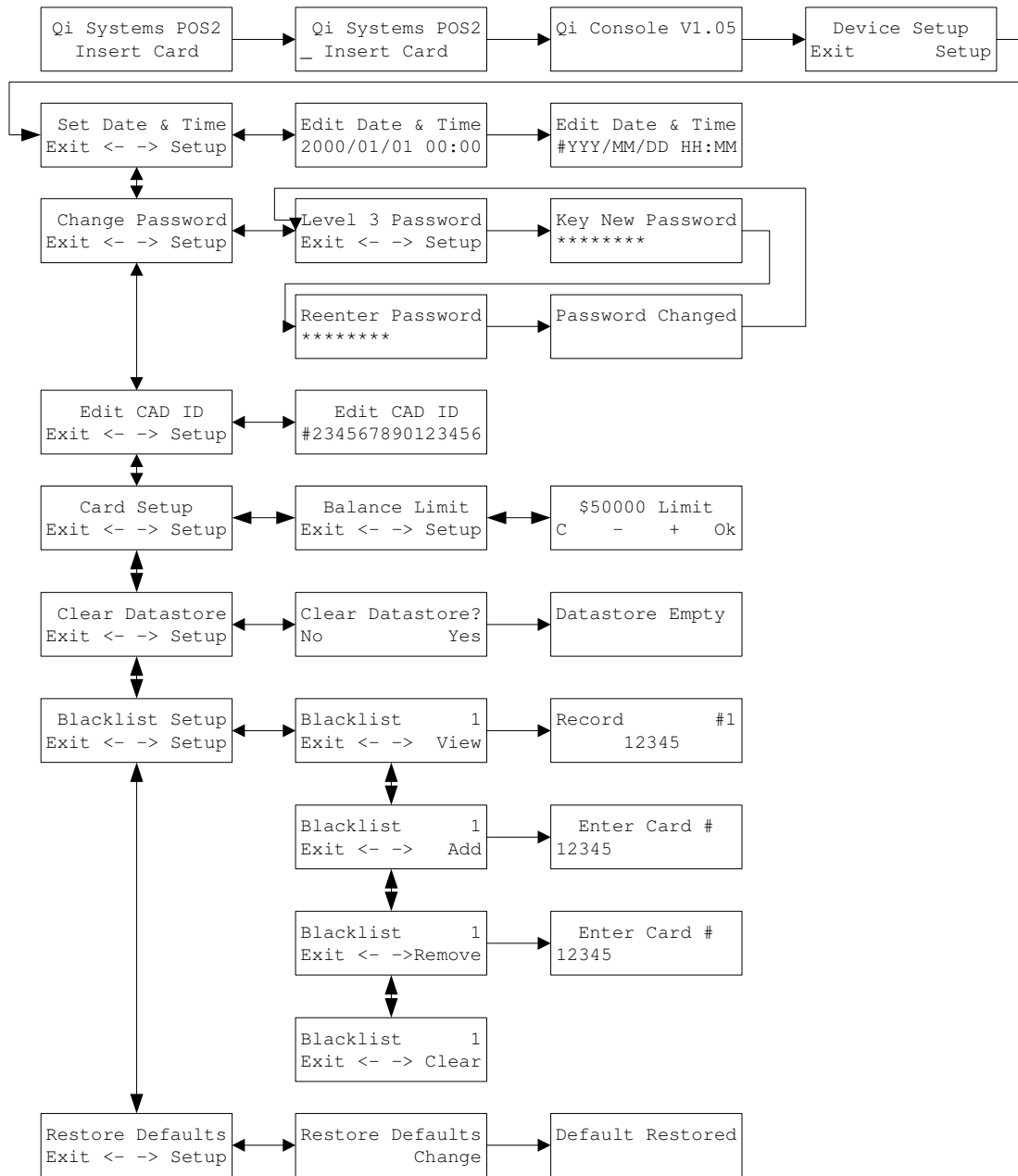


Figure 5-1 Administration Menu

Appendix C: Specifications

Source Materials

The SmartKit Console consists of:

- 120vAC to 24vDC 500mA adapter
- SmartKit Console
 - Moulded plastic case
 - Touch pad
 - LCD screen
 - PCB

The Console unit may also come with a cable and adapter to connect the device to a desktop PC communications port, and MS Windows-based collection software.

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