Handpoint

Standalone Hi5 Card Reader
User Guide

Hi5 card reader User Guide

CONTENTS

1. QUICK GETTING STARTED GUIDE

This guide will help you get to know your Hi5 card reader and make your first transaction as a standalone payment terminal.

1.1. WHAT'S IN THE BOX?

When you receive the box, check if the Handpoint seal is still intact. It should show you if someone has opened the box before you. Inside the box you should find your Hi5 card reader and a USB mini-B connector. Depending on your specification, you may also have included a regular-sized SIM card.

1.2. GETTING TO KNOW YOUR HI5 CARD READER

Here is your Hi5 card reader from all angles. The table below describes what you see.

#	Name	Description
1	Printer paper slot	Receipts print out from here. The printer paper should be inserted with the paper sticking out of this slot before use.
2	Clock	Shows the time - hours : minutes : seconds
3	Charging port	The round port is for battery charging, using the included charger

4	USB port	The USB cable used for this port is for device programming and debugging so not relevant for live card transactions
5	Up/down arrows	Move up and down the menus, then select by pressing the OK button (see n. 10)
6	Cancel button	To cancel transactions when applicable, or other actions
7	NFC Status Lights	These lights indicate the status of a contactless transaction
8	EMV chip reader	Insert card with the chip into the slot (facing up)
9	Back button	To erase keyed numbers
10	OK button	To select or confirm actions
11	Power button	To turn on and off, hold button down for a couple of seconds and follow commands
12	Magnetic stripe reader	Swipe card with the magnetic stripe facing left
13	Icons	Here on the screen are icons which show battery life and signal strength (once your SIM card is inserted and connected)
14	Device Label	This label provides you with important information about your card reader such as its serial number (SN) and hardware version (HW ver)
15	SIM card cover	Remove this cover and you will find the slot to insert your SIM card.

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1.3. GET STARTED

To enable the GPRS standalone feature and start a transaction with your Hi5 card reader, you will need to follow the below steps:

1. Your card reader needs to be set up and activated under your Merchant Account by your card payment provider. Please confirm with that provider that this has been completed.

2. Insert the SIM card at the back of the device (see #15 in section 1.2). It is a regular size slot and does not fit micro or nano SIM cards.

3. Press [Power button] to turn on the device and it may prompt you to enter the date and time settings. Please configure both accurately (unless it has been pre-configured).

4. The reader will try to connect automatically to the mobile network using default parameters.

5. Just in case, if the device can't connect to the mobile network it means that your SIM card needs specific APN settings or username/password which can be entered manually by clicking:

    a) (Up arrow)
    b) 'Settings'
    c) 'Mobile network'
    d) 'Set up a new network'

6. Once the reader has successfully connected to the mobile network, a signal strength bar should appear on the top right corner of the device screen (next to the battery sign). If the signal strength bar isn't displayed, it unfortunately means the connection to the mobile network was unsuccessful. So please turn off the device and try again.

7. When the device has successfully connected to the mobile network, you are ready to fetch the initial update:

    a) (i)To do that you just need to press (OK button) to start the update.
       (ii) Alternatively you can go to the main menu by clicking (Up arrow),
          'Settings', 'Update card reader'.

    b) Press (OK button) to initiate download of the correct payment terminal software and merchant configuration.

8. Once the card reader has downloaded the software and configuration, it should re- start automatically. If the reader does not re-start automatically and just turns off after the downloads, you will need to push (Power button) to re-start the device and finish the installation.

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9. At this point you should be prompted to enter the first 6 digits of your shared secret. These 6 digits can be numeric from 0 – 9 or letters A – F. As the keypad on the Hi5 only contains numbers, in order to enter the alphanumeric characters please use:

 [Up arrow] to opt for upper case letter.

 (Key number 2) to enter characters: A, B, C, 2.
Press once for "A", twice for "B", three times for "C" and four times for "2".

 (Key number 3) to enter characters: D, E, F, 3.
Press once for "D", twice for "E", three times for "F" and four times for "4".

10. Once the first 6 digits of the shared secret have been successfully entered, you will be asked to create a 4-digit password to protect the refund/reversal menu. This is important to prevent someone stealing a device and carrying out a refund to their own card.
If your card payment provider managed this process on your behalf, then they will be able to securely share this password with you.

11. Once the shared secret key and the refund menu password have been entered, the device is fully set up and ready to start transacting.
Please remember that in order to start a transaction you have to click (OK button) before entering an amount. Alternatively you can also go to the main menu, by selecting (Up arrow) and clicking "Sale".

1.4. HOW IT WORKS

This section shall demonstrate a short version of how the Handpoint solution technically works.

1. Merchant initiates a transaction directly on the Hi5 card reader

2. Customer inserts card and follows the directions on the Hi5 card reader screen

3. The Hi5 card reader sends the encrypted transaction information via GPRS to the Handpoint gateway in the cloud on Amazon Web Services (AWS).

4. The transaction is processed using the acquirer

5. The Handpoint gateway receives a response from the acquirer and forwards the encrypted response to the Hi5 card reader

6. The Hi5 card reader reads the response and finalises the transaction.

7. Customer removes card and the merchant provides the customer the receipt, as issued and printed by the Hi5 card reader. Then, the merchant can also print the merchant receipt for their records.

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2. HI5 CARD READER SPECIFICATIONS

Below are the technical specifications of the Hi5 card reader and information about the software and configurations.

2.1. HARDWARE TECHNICAL SPECIFICATION

Display	320 x 240 px TFT Color LCD
Card readers	Landing type smart card reader, triple track bi-directional magnetic card reader
Battery	Rechargeable Li-ion 7.4V, 1300 mAh
Connectivity	GPRS, 3G
Certifications	CE, FCC, PCI PTS 3.x, EMV Level 1 Contact, EMV Level 2 Contact, EMV Level 1 Contactless, VISA payWave, MasterCard Contactless, American Express Expresspay, Discover Zip, Apple® MFi
Dimensions (LxWxH), mm	172 x 76 x 49
Weight, g	320
Operational temperature range	-10 ˚C to +40 ˚C / 5 to 90% RH
Storage temperature range	-15 ˚C to +50 ˚C / 5 to 90% RH
Power Supply	9V through power supply

2.2. TERMINAL SOFTWARE AND CONFIGURATIONS

Handpoint develops the terminal software as well as the terminal configurations. The configuration is specific to each merchant and cannot be seen or modified by the user. The configurations are created by the Handpoint system and remotely pushed to your Hi5 card reader.

In the case of a critical update, Handpoint can automatically and remotely push the latest software or configuration version onto your Hi5 card reader.

Section 3.4 shows you how to find which software and configuration versions your Hi5 card reader has.

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2.3. SECURITY

All card information is encrypted using Triple Data Encryption Algorithm (3DES) with a Derived Unique Key Per Transaction (DUKPT) key management process. Each transaction is encrypted with 3DES using a unique key per transaction before being sent to the Handpoint gateway. The Handpoint's terminal software is certified as PCI Point-to-Point Encryption (P2PE) compliant.

For security reasons, it is essential that during a transaction the merchant and all employees must not request a cardholder to divulge their PIN nor accept the PIN from the cardholder in an oral or written manner.

3. HI5 CARD READER USER GUIDE

Here are further instructions how to use the different functions of your Hi5 card reader.

3.1. TRANSACTIONS

Transactions are initiated by Hi5 card reader. Depending on your card payment provider, the following features may be enabled.

3.1.1. Chip & Pin

The Hi5 card reader supports Chip & PIN cards. For Chip & PIN transactions use the EMV chip reader (see #8 in section 1.2).

This is an example of what happens in a Chip & PIN transaction:

1. Transaction is initiated directly on the Hi5 card reader by clicking [image] (OK button) before entering an amount. Alternatively you can also go to the main menu, by selecting [image] (Up arrow) and clicking "Sale".

2. When message "INSERT CARD" appears, insert card in the EMV chip reader (see #8 in section 1.2) with the chip facing up and towards the Hi5 card reader

3. Enter PIN using the keypad and press [image] [OK button] (Use [image] [Back button] to erase and then use the keypad to re-enter pin if you make a mistake), or cancel by pressing [image] [Cancel button]

4. When message "REMOVE CARD" appears, remove the card from the EMV chip reader

The merchant is responsible for providing the customer with the receipt from the Hi5 card reader.

3.1.2. Chip & Signature

The Hi5 card reader supports chip & signature cards. For chip & signature transactions use the EMV chip reader.

This is an example of what happens in a chip & signature transaction:

1. Transaction is initiated by the Hi5 card reader

2. When message "INSERT CARD" appears, insert card in the EMV chip reader (see #8 in section 1.2) with the chip facing up and towards the Hi5 card reader

3. Confirm the amount by pressing [OK button] or cancel by pressing [Cancel button]

The merchant is responsible for providing the customer with the receipt from the Hi5 card reader. The customer should sign for the receipt on the signature line.

3.1.3. Fallback to Magnetic Stripe

If the Hi5 card reader cannot read the chip for some reason it will fallback to magnetic stripe. The Hi5 card reader will prompt you to remove the card from the EMV chip reader (see #8 in section 1.2) and swipe the card using the magnetic stripe reader (see #12 in section 1.2). The Hi5 card reader might ask you to remove and insert the card into the EMV chip reader a couple of times before falling back to magnetic stripe.

This is an example of what happens if a transaction falls back to magnetic stripe:

1. Transaction is initiated by the Hi5 card reader

2. When message "INSERT CARD" appears, insert card in the EMV chip reader (see #8 in section 1.2) with the chip facing up and towards the Hi5 card reader

3. If the Hi5 card reader cannot read the chip message "REMOVE CARD" appears, remove the card

4. When message "INSERT CARD" appears, insert card in the EMV chip reader

5. If the Hi5 card reader cannot read the chip message "REMOVE CARD" appears, remove the card

6. When message "INSERT CARD" appears, insert card in the EMV chip reader

7. If the Hi5 card reader cannot read the chip message "REMOVE CARD" appears, remove the card

8. When message "SWIPE CARD" appears, swipe card using the magnetic stripe reader with the magnetic stripe facing to the front

9. Confirm the amount by pressing [OK button] or cancel by pressing [Cancel button]

The merchant is responsible for providing the customer with the receipt from the Hi5 card reader. The customer should sign for the receipt on the signature line.

3.1.4. Magnetic Stripe

The Hi5 card reader supports cards that only have magnetic stripes. To do a transaction with a magnetic stripe card use the magnetic stripe reader (see #12 in section 1.2). If the card has a chip the Hi5 card reader will prompt you to use the EMV chip reader.

This is an example of what happens in a magnetic stripe transaction:

1. Transaction is initiated by the Hi5 card reader

2. When message "INSERT CARD" appears, swipe card using the magnetic stripe reader with the magnetic stripe facing to the front

3. Confirm the amount by pressing [OK button] or cancel by pressing [Cancel button]

The Hi5 card reader produces the receipt which the merchant is responsible for giving to the customer who, in turn, should sign the receipt.

3.1.5. Pin Bypass

Pin bypass is only enabled for specific acquirers. Pin bypass allows the customer to choose if they want to enter pin or not.

This is an example of what happens in a Chip & PIN transaction with pin bypass:

1. Transaction is initiated by the Hi5 card reader

2. When message "INSERT CARD" appears, insert card in the EMV chip reader (see #8 in section 1.2) with the chip facing up and towards the Hi5 card reader

3. To bypass the pin, press [OK button] instead of entering the pin (if pin bypass is not enabled, the Hi5 card reader will show the message "NOT ALLOWED")

4. When message "REMOVE CARD" appears, remove the card from the EMV chip reader

The merchant is responsible for providing the customer with the receipt from the Hi5 card reader.

3.1.6. Gratuity/Tips

To get the gratuity/tips feature, you have to ask for it especially from your card payment provider. If you request to include gratuity/tips as an option during the transaction process, the menu appears before pin entry where the customer can choose the amount.

Below is an example of the default gratuity/tip menu for a £20,00 sale:

Menu item
No tip
18% £3,60
20% £4,00
25% £5,00
Enter amount

This is what happens in a Chip & PIN transaction with gratuity/tips enabled:

1. Transaction is initiated by the Hi5 card reader

2. When message "INSERT CARD" appears, insert card in the EMV chip reader (see #8 in section 1.2) with the chip facing up and towards the Hi5 card reader

3. When the gratuity/tips menu appears, scroll menu using [Up arrow] and [Down arrow] to select how much you want to tip

4. Press [OK button] to select tip amount, if you select "ENTER AMOUNT":

   a. Enter tip amount using the keypad (use [Back button] to erase and then the keypad to re-enter amount if you make a mistake)

   b. Press [OK button]

5. Enter PIN using the keypad and press [OK button] (use [Back button] to erase and then the keypad to re-enter pin if you make a mistake)

6. When message "REMOVE CARD" appears, remove the card from the EMV chip reader

The merchant is responsible for providing the customer with the receipt from the Hi5 card reader.

3.1.7. Account Type Selection

The account type selection is only enabled for specific acquirers and only appears for cards that have multiple accounts. The menu appears before pin entry where the customer can choose which account he wants to use for that transaction.

Below is an example of menu items. Please note that they differ between acquirers and cards:

Menu item
Default
Savings
Cheque/debit
Credit

This is what happens in a Chip & PIN transaction with the account type selection enabled:

1. Transaction is initiated by the Hi5 card reader

2. When message "INSERT CARD" appears, insert card in the EMV chip reader (see #8 in section 1.2) with the chip facing up and towards the Hi5 card reader

3. When the account type menu appears, scroll menu using [Up arrow] and [Down arrow] to find the right account type

4. Press [OK button] to select account type

5. Enter PIN using the keypad and press [OK button] (use [Back button] to erase and then the keypad to re-enter pin if you make a mistake)

6. When message "REMOVE CARD" appears, remove the card from the EMV chip reader

The merchant is responsible for providing the customer with the receipt from the Hi5 card reader.

3.1.8. Cardholder Application Selection

The cardholder app selection is only enabled for specific acquirers. A menu appears before PIN entry where the customer can choose which payment application is used for that transaction. Here is a list of menu items:

Menu item
Credit
Debit
Cash Benefit
Food Stamp
Gift Card
Private Label

This is what happens in a Chip & PIN transaction with the cardholder point of sale application selection enabled:

1. Transaction is initiated by the Hi5 card reader

2. When message "INSERT CARD" appears, insert card in the EMV chip reader (see #8 in section 1.2) with the chip facing up and towards the Hi5 card reader

3. When the Application Selection menu appears, scroll menu using [Up arrow] and [Down arrow] to find the correct payment application

4. Press [OK button] to select that payment application

5. Enter PIN using the keypad and press [OK button] (use [Back button] to erase and then the keypad to re-enter pin if you make a mistake)

6. When message "REMOVE CARD" appears, remove the card from the EMV chip reader

The merchant is responsible for providing the customer with the receipt from the Hi5 card reader.

3.3. ADMINISTRATION MENU

To access the administration menu:

1. Press ❌ [Cancel button] and then 🔙 (back button)

2. Enter password: **746723** and press 🟢 [OK button]

3. Scroll menu using 🔼 [Up arrow] and 🔽 [Down arrow]

4. To go into sub-menus press 🟢 [OK button]

5. To select menu items press 🟢 [OK button]

6. To go out of menus press ❌ [Cancel button]

Administration menu password:
746723

About each menu item:

Menu item	Sub-menu items	Description
Version info	-	Terminal software version e.g. mPOS v.1.7.1 (236)
Device type	Save and Reset	Select to save any changes you have made in this sub-menu, the Hi5 card reader restarts.
Config	Reset flash	Resets to factory settings, next time you do a transaction the Hi5 card reader will download and install the software and configurations again.
	Save and Reset	Select to save any changes you have made in this sub-menu, the Hi5 card reader restarts.
Beep	Toggle	Turn beep on or off by selecting toggle.
Save and Reset	-	Select to save any changes you have made in the administration menu, the Hi5 card reader restarts.

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3.4. VIEW INFORMATION

To view information about your Hi5 card reader:

1. Press [Cancel button] then   [Up   arrow] on the keypad

2. Scroll to see information using   [Up arrow] and   [Down arrow]

3. To exit, either wait a couple of seconds or press   [Cancel button]

About the information you see:

Menu item	Description
SN	Serial number of Hi5 card reader e.g. 1916009227
mPOS	Terminal software version e.g. v.10.1.2
TAG	Compilation type e.g. HI5
COMs	Type of connection used e.g. Bluetooth*
BT	The name of your Bluetooth connection e.g. PP0615009227*
Pass	Bluetooth password e.g. 0000*
Addr	MAC address of the bluetooth module*
Config	Configuration version e.g. 2
Flash	This has information about the flash memory, used by Handpoint quality assurance
EMV	EMV version e.g. 2.00 03 210514
Pinutil	Software library version, such as for communications
PayEngine	Software library version (regarding EMV programming)

* This information is not relevant for when the Hi5 card reader is being used as a standalone as it uses GPRS rather than Bluetooth communication

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3.6. UPDATING THE HI5 CARD READER

If you need to manually update the card reader, you can go to the main menu by clicking

[Up arrow icon] (Up arrow), 'Settings', then 'Update card reader'.

Handpoint may also push updates automatically and remotely to your Hi5 card reader.
This is what happens when Handpoint pushes a non-critical update to your Hi5 card reader:

1. Transaction is initiated by the Hi5 card reader

2. When message "INSERT CARD**"** appears, insert card in the EMV chip reader (see #8 in section 1.2) with the chip facing up and towards the Hi5 card reader

3. Enter PIN using the keypad and press [OK button icon] [OK button] (use [Back button icon] [Back button] to erase and then the keypad to re-enter pin if you make a mistake)

4. When message "REMOVE CARD" appears, remove the card from the EMV chip reader

5. The message "UPDATING READER" appears and the Hi5 card reader starts downloading and installing the update, this only takes a couple of seconds. When the Hi5 card reader has finished the message "UPDATE COMPLETE" appears.

This is what happens when Handpoint pushes a critical update to your Hi5 card reader:

1. Transaction is initiated by the Hi5 card reader

2. When message "INSERT CARD" appears, insert card in the EMV chip reader (see #8 in section 1.2) with the chip facing up and towards the Hi5 card reader

3. Enter PIN using the keypad and press [OK button icon] [OK button] (use [Back button icon] [Back button] to erase and then the keypad to re-enter pin if you make a mistake)

4. The message "TRANS. DECLINED" appears will appear on the screen

5. When message "REMOVE CARD" appears, remove the card from the EMV chip reader

6. The message "UPDATING READER" appears and the Hi5 card reader starts downloading and installing the update which only takes a couple of seconds. When the Hi5 card reader has finished the message "UPDATE COMPLETE" appears

7. After the Hi5 card reader has finished updating, you can initiate the transaction again to charge the customer.

4. TROUBLESHOOTING

In this section are tools to help you troubleshoot. It includes instructions on how to troubleshoot communication errors between the Hi5 card reader and the backend system. There is also a section with tables with some of the possible messages that can appear on your Hi5 card reader. If you are having a problem, you can try searching these tables for the message and see what you can do.

4.1. TROUBLESHOOTING ISSUES

Here are some instructions to help you troubleshoot issues.

4.1.1. Communication Errors

If the Hi5 card reader shows a communication error message it means that the Hi5 card reader detected a communication failure. Here is what you can do to try to troubleshoot it:

1. Firstly, try to turn the Hi5 card reader off and on again

2. Check to see that the card reader has successfully connected to the network (the signal bar will appear on the screen, besides the battery icon)

3. Check to make sure there is strong signal bar strength

4. Try to initiate a transaction again.

If the problem persists, please request support from your provider (see section 5).

4.1.2. Flash Corruption Errors

If the Hi5 card reader is behaving badly in some way, it is always a good idea to reset the flash to see if it fixes the issue. Resetting the flash erases the working memory of the card reader clearing out any corrupted flash. After the flash has been reset on a card reader it needs to fetch the terminal software and terminal configurations again and will restart.

Resetting the flash:

1. Press [Cancel button] and then [< (back button)

2. Enter password: **746723** and press [OK button]

3. Scroll menu using [Down arrow] to **Config** and press [OK button]

4. Select "RESET FLASH" and press [OK button]

5. Scroll down to "Save and Reset" and press [OK button]

6. The card reader should now restart

If the problem persists then please request support from your provider (see section 5).

4.2. HI5 CARD READER MESSAGES

Here are tables with some of the possible messages that can appear on your Hi5 card reader. If you are having a problem you can try searching these tables for the message and see what you can do.

4.2.1. Successful Transaction Messages

These are messages that can appear during a successful card transactions, in alphabetical order.

Hi5 card reader display text	Why it is displayed	Required action
AMOUNT: [amountvalue]	The Hi5 card reader needs the cardholder to validate that the correct amount has been used.	The cardholder must confirm that the amount is correct by pressing [OK button] or cancel by pressing [Cancel button].
AUTHORISED	A transaction has completed successfully.	No further actions are required.
COMPLETING TRANSACTION	The Hi5 card reader is finalising a completed transaction with your device.	Please wait for further instructions on the Hi5 card reader display.
PIN VERIFIED	The PIN has been verified successfully.	No further actions are required.

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PIN: [amountvalue]	The Hi5 card reader is waiting for the card PIN.	The cardholder must enter their PIN and press the [OK button] to continue or press the [Cancel button] to cancel the transaction.
PLEASE SIGN	The cardholder must sign their name on the app or slip (depending on the app's features).	The cardholder must sign the slip.
PLEASE WAIT...	The Hi5 card reader is processing an operation.	Please wait while the Hi5 card reader completes the operation.
PRESS OK button or Cancel button	The Hi5 card reader needs confirmation to continue.	The cardholder must read all information on the display and then press either the [OK button] or [Cancel button] as applicable.
PROCESSING...	Cardholder authentication has completed and a financial card transaction is being processed.	Please wait for further instructions on the Hi5 card reader display.
REMOVE CARD	The card is in the Hi5 card reader and either the transaction has completed or the Hi5 card reader cannot read the chip.	Please remove the card from the Hi5 card reader.
SALE	Indicates that the current operation is a SALE transaction.	No further actions are required.
SWIPE CARD	The Hi5 card reader is waiting for a card to be swiped against the magnetic stripe reader.	Please swipe a card through the magnetic stripe card reader.
USE CHIP READER	The Hi5 card reader is waiting for a card to be inserted into the chip reader.	Please insert a card into the chip reader.

4.2.2. Other Transaction Messages

These are messages that can appear during other selected card transactions, such as refunds or reversals, in alphabetical order.

Hi5 card reader display text	Why it is displayed	Required action
REFUND	Indicates that the current operation is a REFUND transaction.	No further actions are required.
REFUND ACCEPTED	A REFUND transaction has completed successfully.	No further actions are required.
REFUND VOID	Indicates that the current operation is a reversal/voiding of a REFUND transaction.	No further actions are required.
REVERSAL ACCEPT.	Reversal/voiding of a SALE/ REFUND transaction has completed successfully.	No further actions are required.

4.2.3. Error Transaction Messages

These are messages that can appear during an unsuccessful card transactions, in alphabetical order.

Hi5 card reader display text	Why it is displayed	Required action
CANCELLED	The current operation was cancelled by either the cardholder or the merchant. Or the Hi5 card reader timed out while waiting for the card and automatically cancelled the operation.	No further actions are required.
CARD BLOCKED	The card that was used has been blocked.	Please ask the customer to retry the transaction with another card (non-blocked). No additional action required beyond this.

CARD REMOVED	The card was removed too soon during a financial transaction operation.	Please restart the operation.
COMM. ERROR CHECK CONNECTION	Indicates that the Hi5 card reader detected a communication failure between itself and the device that it was paired/connected to.	If a SALE or a REFUND transaction was in progress when this occurred then you MUST contact your provider's support team (see section 5) and verify whether the transaction went through or not (as they can check with their real-time terminal management system). *If you fail to do so then you may be liable for any costs incurred due to any double charges.* Once you have verified that the transaction did not go through then please retry the operation.
FALLBACK TO MSR	The cards chip has failed. The data on the magnetic stripe will be used instead.	Please wait for further instructions on the Hi5 card reader display.
INCORRECT PIN	An incorrect PIN was entered.	The cardholder must re-enter their PIN.
INVALID CARD	The Hi5 card reader could not read any data from the card.	Please retry the operation. If the issue persists the card may be faulty, please try another card. If the issue still persists the Hi5 card reader may require replacement, please your provider's support team for assistance (see section 5).

LAST ATTEMPT	This is the customers last available attempt for correct PIN entry.	Please do one of the following: • Enter the correct PIN. • Press the [Cancel button] to abort the transaction. • Press the [OK button] to activate PIN bypass mode (if available).
NOT PROCESSED	This is a generic error message that indicates that the current operation was not completed due to an unexpected error. Reasons can include: • Communication failure between the Hi5 card reader and the back end system during an update operation. • Invalid request object at the start of an operation. • Invalid response object during an operation.	Please retry the operation. If the issue persists please contact your provider's support team for assistance (see section 5).
PIN IS BLOCKED	The maximum number of PIN entry retries has been reached.	Please wait for further instructions on the Hi5 card reader display (The Hi5 card reader may fall back to signature processing). The cardholder needs to contact their bank/issuer for instructions on how to get the PIN unblocked.
PROCESSING ERROR	An unexpected error was encountered during transaction processing.	Please retry the operation. If the issue persists please contact your provider's support team for assistance (see section 5).

READ ERROR	The Hi5 card reader was unable to establish a valid communication channel with the cards chip.	Please wait for further instructions on the Hi5 card reader display.
REQUEST INVALID	A financial transaction was attempted with a magnetic stripe card that is cash only.	No further actions are required.
SALE VOID	Indicates that the current operation is a reversal/voiding of a SALE transaction.	No further actions are required.
TRANS. DECLINED	A transaction has been declined.	No further actions are required. Further information may be displayed on the Hi5 card reader screen or receipt that might indicate why the transaction was declined.
TRANSACTION VOID	A financial transaction was cancelled due to a cardholder not responding in time to an action or directly, by the cardholder or the merchant or the card itself. Or a signature was rejected by the merchant.	No further actions are required.
USING SIGNATURE	The card has indicated that cardholder signature is required. This can be either due to fall back (e.g. max PIN retries reached) or because the card is a signature or a signature & PIN card.	Please wait for further instructions on the Hi5 card reader display.

4.2.2. Updating Messages

These are messages that can appear while the Hi5 card reader is updating in alphabetical order.

Hi5 card reader display text	Why it is displayed	Required action

CONNECTION ERROR	The Hi5 card reader detected a communication failure between itself and the processing system during an update operation.	Please verify that your device has an internet connection and then retry the operation.
DOWNLOADING	Indicates that the Hi5 card reader is downloading its update.	No further actions are required.
INSTALLING	A configuration update for the Hi5 card reader has been validated and the Hi5 card reader is applying it.	Please wait for the completion of the update process.
NO UPDATE	An update procedure was started, but there is no pending update to downlad.	No further actions are required.
RESTARTING…	The Hi5 card reader is about to restart after a software update.	Please wait for further instructions on the Hi5 card reader display.
SOFTWARE x%	The Hi5 card reader is updating itself and has completed x% of the update.	Please wait for the completion of the update process.
UPDATE COMPLETE	An update operation has completed successfully.	No further actions are required.
UPDATE FAILURE!	An update has failed to complete.	Please retry the operation. If the issue persists, please your provider's support team for assistance (see section 5).
UPDATES x%	The Hi5 card reader is updating itself and has completed x% of the update.	Please wait for the completion of the update process.
UPDATING READER	Indicates that the Hi5 card reader has started an operation to update itself.	No further actions are required.
VALIDATING	A configuration update has been found for the Hi5 card reader and the Hi5 card reader is verifying its correctness.	Please wait for the completion of the update process.

4.2.3. Administration Messages

These are messages that can appear while the Hi5 card reader is idle or while you are in the administration menu.

Hi5 card reader display text	Why it is displayed	Required action
----- no config ----	No configuration is present on the Hi5 card reader and the operator has entered the administration menu and selected the version information option.	No further actions are required.
--- no ipek loaded ---	No cryptographic keys can be found on the Hi5 card reader and the operator has entered the administration menu and selected the version information option.	Please return the Hi5 card reader back for replacement.
BATTERY LOW	The battery charge level is low.	Please recharge the Hi5 card reader.
BATTERY TOO LOW	An operation was started, but the battery charge level is too low to complete the operation.	Please recharge the Hi5 card reader.
TO TURN OFF PRESS OK button or Cancel button	The power button has been pressed.	Please press the [OK button] button to turn off the Hi5 card reader or press the [Cancel button] to keep the Hi5 card reader turned on.

5. GETTING SUPPORT

Your provider of this standalone card payment solution should provide you with support for the whole solution, including the Hi5 card reader. They can contact Handpoint on your behalf, if needed.

Here is a table of information you can provide which can help you card payment provider or Handpoint solve your issue:

Information	Details	How it helps
Clear description of issue	step by step description of what you do and how the Hi5 card reader behaves	The support provider can follow your directions to reproduce the issue and experience it themselves
	error message(s)	Error message(s) give an indication of where the issue lies, the support provider can look up the error message(s) in the Hi5 card reader message List to get more details
	where and when the error is appearing	To determine at what stage during a transaction there is an error which, in turn, helps to identify if the issue is at the terminal level (your Hi5 card reader) or the back-end systems.
	contact information of the parties involved	Issues get resolved faster when all contact information is available
Information about the solution	Type of terminal	Handpoint's different card readers have different features
	Serial number of terminal (see #14 in section 1.2 or section 3.4)	Information about terminals configurations and their transactions can be retrieved by using the serial number
	Terminal software version (see section 3.3 or 3.4)	New versions of the terminal software may fix known issues

	Connection type e.g. GPRS	Different connection types may have various issues such as connectivity, driver problems, configuration etc.
Screenshots of issue	error/warning messages or receipts	The receipts can include both information and error messages from the backend systems to help identify the issue

6. GLOSSARY

3DES	Triple Data Encryption Algorithm is a security measure
DUKPT	Derived Unique Key Per Transaction is a security measure
EMV	Europay, MasterCard and Visa. Technical standard for smart payment cards.
MOTO	Mail Order/Telephone Order. It is a type of card-not-present transaction in which services are paid for and delivered via telephone, mail, fax, or internet communication.
NFC	Near-field Communication is the technology that enables contactless payments.
P2PE	Point-to-Point Encryption is a security standard established by the PCI Security Standard Council
PCI-DSS	Payment Card Industry Data Security Standard. It is an information security standard for organizations that handle branded credit cards from the major card schemes.
Provider	The contact/company who you have had direct communication with to set up your card payment solution with the Handpoint card reader(s).

7. FAQs

Questions	Answers
Can I accept Mail Order/Telephone Order (MOTO) payments with my card reader?	No, the card must be present to make a transaction with the card reader.
Can I lend my card reader to a friend?	No, only your business has been approved for using this device, so it is not possible to lend the card reader to someone else.
Can I sell my card reader to someone else?	No, it is advised not to resell your card reader, as it is only set up for your business and would not be transferable for someone else's business. If you are considering not to use your card payment solution any longer, please contact your provider.
Can I use Handpoint abroad?	It depends on your provider and your account configuration. Please contact your provider to find out your options in using your card payment solution abroad.
Do I need an internet connection to use the Hi5 card reader?	Yes, you will need to use a nano SIM so that the Hi5 standalone can connect to the bank via GPRS for transacting.
How are my card transactions settled?	Batches of your transactions are automatically closed and sent to the acquirer for settlement at midnight each day, so you don't need to carry this out.
What about receipts?	The Hi5 card reader creates a receipt for each transaction. Both the customer and merchant receipts can be printed from the integrated printer
What happens if my card reader is lost or stolen?	There is no way to access money or card information through the card reader, so your money and information will stay safe. If your card reader is lost or stolen, get in touch your provider to let them know and discuss your card reader replacement options.

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