

# Handpoint\*

## HiLite card reader User Guide



# HiLite card reader User Guide

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# 1. QUICK GETTING STARTED GUIDE

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This guide will help you get to know your HiLite card reader and make your first transaction.

## 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 HiLite card reader and a USB mini-B connector.






## 1.2. GETTING TO KNOW YOUR HiLITE CARD READER

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



#	Name	Description
0	Near-field Communication (NFC) Status Lights	These lights indicate the status of a contactless transaction
1	Clock	Shows the time, hours : minutes : seconds
2	Icons	Here on the screen are icons which show battery life and other info
3	Bluetooth name	Look for this name in your Bluetooth device list on your smartphone, tablet or computer, the last nine digits of this number is also your serial number.
4	Keypad	To input the pin number or other info
5	Power	To turn on and off, hold down this button for a couple of seconds
6	Up/down arrows	To move up and down menus, to select press  [OK button]
7	Cancel	To cancel transactions when applicable, or other actions
8	Back	To erase keyed numbers

<b>9</b>	OK	To select or confirm actions
<b>10</b>	Charging Cable	Plug in the charging cable (USB mini-B connector) to a plug to charge the battery
<b>11</b>	Magnetic stripe reader	Swipe card with the magnetic stripe facing forward
<b>12</b>	Europay, MasterCard and Visa (EMV) chip reader	Insert card with chip into the slot
<b>13</b>	Hardware label	Shows the Hardware Version (HW ver), Serial Number (SN) and barcode, which shall be required for identifying your card reader for updates or support questions.

## 1.3. GET STARTED

The first time you connect, you have to register the HiLite card reader to the point of sale application. Please follow the instructions in your POS app to connect and register. Each version of the POS app does this differently.

If you are using the HiLite card reader with a linked mPOS application, please view section 1.3.1. Otherwise, if you are using a third party POS software application, skip straight to 1.3.2.

### 1.3.1. GET STARTED WITH MPOS

#### 1. Download the mPOS app

This could be on either the Play Store for Android or the App Store for iOS, so please check with your provider.

#### 2. Account Set-up

In order to use the mPOS app to accept card payments, you need to be set up with your own merchant account. If you are unsure if you have an activated account, please get in touch with your provider of the mPOS solution.

#### 3. First Time Login

When you open the mPOS app for the first time, you must sign up with the same e-mail you address provided for setting up your Merchant Account and a unique, safe password. If you wish to use an alternative e-mail address, contact your provider to update your account.

#### 4. Connect your Card Reader and the App

a) The mPOS app will prompt you to pair your card reader. Ensure your device (smartphone, computer or tablet) has Bluetooth turned on and that your card reader is switched on. Select the correct card reader from the options provided (identifiable from the serial number which is also at the back of your card reader).

b) If your card reader's serial number does not appear when prompted, you can go into 'Settings', select 'Device', and you should find your card reader's serial number as an option there.

c) Wait until you see the Bluetooth icon on the HiLite card reader screen. When that icon

appears, the HiLite card reader is connected. This may take a few seconds.

#### 5. Card Reader Initialization

a) Initiate a transaction in the mPOS app on the device.

b) When the message "UPDATING READER" appears, the HiLite card reader will start downloading and installing the update.

c) When the HiLite card reader has finished, the message "UPDATE COMPLETE" will appear.





d) Your card reader will automatically restart

#### 6. Live Transactions

Once your card reader has restarted, you can start accepting payments with your mPOS solution!

### 1.3.2. GET STARTED WITH POS: YOUR FIRST TRANSACTION

The first transaction:

1. Make sure that the smartphone, computer or tablet you're using with the HiLite card reader has Bluetooth turned on
2. Turn on the HiLite card reader by pressing and holding  [Power button] for a couple of seconds
3. Pair the HiLite card reader to the Bluetooth device
4. Follow the instructions on your POS app to register the HiLite card reader
5. Wait until you see the Bluetooth icon (📶) on the HiLite card reader screen (see #2 in section 1.2). When that icon appears, the HiLite card reader is connected. This may take a few seconds
6. Initiate a transaction in the POS app on the smartphone, computer or tablet
7. When the message "UPDATING READER" appears, the HiLite card reader will start downloading and installing the update. When the HiLite card reader has finished, the message "UPDATE COMPLETE" will appear
8. When the message "INSERT CARD" is displayed, insert the card in the EMV chip reader (see #12 in section 1.2) with the chip facing up and towards the HiLite card reader
9. 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), or cancel by pressing  [Cancel button]
10. When message "REMOVE CARD" appears, remove the card from the EMV chip reader

The POS app is responsible for providing the customer with the receipt created by the HiLite card reader.

## 1.4. HOW IT WORKS

This section shall demonstrate a short version of how the Handpoint solution technically works, whether you are using a linked mobile Point of Sale (mPOS) application or an alternative Point of Sale (POS) software application.



1. The mPOS/POS app downloaded on your device initiates a transaction on the HiLite card reader using Bluetooth
2. Customer inserts card and follows the directions on the HiLite card reader screen
3. The HiLite card reader sends the transaction information encrypted via Bluetooth to the POS app
4. The POS app forwards the encrypted transaction information to the Handpoint gateway via an internet connection which processes the transaction using your acquirer
5. The Handpoint gateway receives a response from the acquirer and forwards the encrypted response to its internet connection
6. The POS app forwards the encrypted response to the HiLite card reader via Bluetooth
7. The HiLite card reader reads the response, finalises the transaction and sends a receipt to the POS app
8. Customer removes card and the merchant provides the customer the receipt through the POS app

## 2. HiLITE CARD READER SPECIFICATIONS

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

### 2.1. HARDWARE TECHNICAL SPECIFICATION

<i>Display</i>	LCD, monochrome, 128x32
<i>Card readers</i>	Landing type smart card reader, triple track bi-directional magnetic card reader
<i>Battery</i>	Rechargeable Li-po 3.7V, 620 mAh
<i>Connectivity</i>	Bluetooth 3.0 Class 2
<i>Certifications</i>	CE, FCC, PCI PTS 3.x, EMV Level 1 Contact, EMV Level 2 Contact, EMV Level 1 Contactless, VISA, MasterCard and potentially other card schemes, depending on the selected acquirer
<i>Dimensions (LxWxH), mm</i>	110 x 69 x 17
<i>Weight, g</i>	123
<i>Operational temperature range</i>	-10 °C to +40 °C / 5 to 90% RH
<i>Storage temperature range</i>	-15 °C to +50 °C / 5 to 90% RH
<i>Drop test</i>	1.5 m, 6 faces + 4 edges on concrete
<i>Power Supply</i>	5V through mini USB

### 2.2. TERMINAL SOFTWARE AND CONFIGURATIONS

Handpoint develops the terminal software as well as the terminal configurations. The terminal software communicates with your POS app (Point of Sale application) using Bluetooth.

The configuration is specific to each merchant and cannot be seen or modified by you. The configurations are created by the Handpoint system and remotely pushed to your HiLite card reader.

In the case of a critical update, Handpoint can automatically and remotely push the latest software or configuration version onto your HiLite card reader. See section 3.6 to see what happens if an update is pushed.

To find which software and configuration versions your HiLite card reader has, please refer to section 3.4.

## 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 through the POS app. 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. HILITE CARD READER USER GUIDE

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

## 3.1. CONNECTING YOUR HILITE CARD READER

To be able to take payments your HiLite card reader needs to be connected via Bluetooth to a smartphone, computer or tablet with a POS app (Point of Sale application) that works with it.

The first time you connect you have to register the HiLite card reader to your POS app. Please follow the instructions from your POS app to connect and register. Each POS app does this differently.

Connecting via Bluetooth:

11. Make sure that the smartphone, computer or tablet you're using with the HiLite card reader has Bluetooth turned on
12. Turn on the HiLite card reader by pressing and holding  [Power button] for a couple of seconds
13. Pair the HiLite card reader to the Bluetooth device
14. Wait until you see the Bluetooth icon (  ) on the HiLite card reader screen (see #2 in section 1.2). When that icon appears, the HiLite card reader is connected



Your device and the HiLite card reader should find each other every time as long as the Bluetooth of your device is on. If you are prompted to enter a pairing code, enter "0000" as the code.




## 3.2. TRANSACTIONS

Transactions are initiated by the POS app on your smartphone, tablet or computer. Depending on your acquirer and or agreement with your POS app provider, the following features may be enabled.

### 3.2.1. Chip & Pin

The HiLite card reader supports Chip & PIN cards. For Chip & PIN transactions use the EMV chip reader (see #12 in section 1.2).

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



1. Transaction is initiated in the POS app on the smartphone, computer or tablet
2. When message "INSERT CARD" appears, insert card in the EMV chip reader (see #12 in section 1.2) with the chip facing up and towards the HiLite card reader
3. Enter PIN using the keypad and press  [OK button] (Use  [Back button] to erase and then use the keypad to re-enter pin if you make a mistake), or cancel by pressing  [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 POS app.

### 3.2.2. Chip & Signature

The HiLite card reader supports chip & signature cards. For chip & signature transactions use the EMV chip reader (see #12 in section 1.2).

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



1. Transaction is initiated in the POS app on the smartphone, computer or tablet
2. When message "INSERT CARD" appears, insert card in the EMV chip reader (see #12 in section 1.2) with the chip facing up and towards the HiLite 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 POS app. The customer should sign for the receipt, either on the smart device screen or on the paper receipt, depending on your POS solution.

### 3.2.3. Fallback to Magnetic Stripe

If the HiLite card reader cannot read the chip for some reason it will fallback to magnetic stripe. The HiLite card reader will prompt you to remove the card from the EMV chip reader (see #12 in section 1.2) and swipe the card using the magnetic stripe reader (see #11 in section 1.2). The HiLite 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 in the POS app on the smartphone, computer or tablet
2. When message "INSERT CARD" appears, insert card in the EMV chip reader (see #12 in section 1.2) with the chip facing up and towards the HiLite card reader
3. If the HiLite 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 HiLite 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 HiLite 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 POS app. The customer should sign for the receipt, either on the smart device screen or on the paper receipt, depending on your POS solution.

### 3.2.4. Magnetic Stripe

The HiLite card reader supports cards that only have magnetic stripes. To do a transaction with a magnetic stripe card use the magnetic stripe reader (see #11 in section 1.2). If the card has a chip the HiLite 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 in the POS app on the smartphone, computer or tablet
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 POS app is responsible for providing the customer with the receipt created by the HiLite card reader. The customer should sign the receipt.

### 3.2.5. 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 in the POS app on the smartphone, computer or tablet
2. When message "INSERT CARD" appears, insert card in the EMV chip reader (see #12 in section 1.2) with the chip facing up and towards the HiLite card reader
3. To bypass the pin, press  [OK button] instead of entering the pin (if pin bypass is not enabled, the HiLite 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 POS app.








### 3.2.6. Gratuity/Tips

To get the gratuity/tips feature, you have to ask for it especially from your POS app 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 in the POS app on the smartphone, computer, or tablet
2. When message "INSERT CARD" appears, insert card in the EMV chip reader (see #12 in section 1.2) with the chip facing up and towards the HiLite 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 POS app.






### 3.2.7. 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 in the POS app on the smartphone, computer or tablet
2. When message "INSERT CARD" appears, insert card in the EMV chip reader (see #12 in section 1.2) with the chip facing up and towards the HiLite 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 POS app.

### 3.2.8. Cardholder Point of Sale Application Selection

The cardholder POS app selection is only enabled for specific acquirers. The menu appears before pin entry where the customer can choose which payment application he wants to use 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 in the POS app on the smartphone, computer, or tablet
2. When message "INSERT CARD" appears, insert card in the EMV chip reader (see #12 in section 1.2) with the chip facing up and towards the HiLite card reader
3. When the POS application menu appears, scroll menu using  [Up arrow] and  [Down arrow] to find the right POS app
4. Press  [OK button] to select POS app
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 POS app.

### 3.3. ADMINISTRATION MENU

To access the administration menu:

1. Press  [Cancel button] and  (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	Bluetooth	A connection type, supported - there should be star next to Bluetooth which means it is selected.
	Save and Reset	Select to save any changes you have made in this sub-menu, the HiLite card reader restarts.
Config	Reset flash	Resets to factory settings, next time you do a transaction the HiLite 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 HiLite card reader restarts.
Screen	Font	Select either Normal (6x8) or Big (8x16).
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 HiLite card reader restarts.

### 3.4. VIEW INFORMATION

To view information about your HiLite 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 HiLite card reader e.g. 615009227
mPOS	Terminal software version e.g. v.1.7.1(236)
COMs	Type of connection used e.g. Bluetooth
BT	The name of your Bluetooth connection e.g. PP0615009227
Pass	Bluetooth password e.g. 0000
Config	Configuration version e.g. 1
Flash	This has information about the flash memory, used by Handpoint quality assurance
EMV	EMV version e.g. 1.09 03 210514

### 3.5. SCREEN CONTRAST CONTROL

There might be a need to change the contrast on the HiLite card reader screen to make the text clearer.

- To increase the contrast press  [Down arrow] repeatedly until the contrast is at preferred level
- To decrease the contrast press  [Up arrow] repeatedly until the contrast is at preferred level





### 3.6. UPDATING THE HILITE CARD READER



It depends on the POS app (Point of Sale application) if you can update the HiLite card reader manually. Then the update is initiated through the POS app on your smartphone, computer or tablet.

Handpoint pushes updates automatically and remotely to your HiLite card reader.

This is what happens when Handpoint pushes a non-critical update to your HiLite card reader:

1. Transaction is initiated in the POS app on the smartphone, computer, or tablet
2. When message "INSERT CARD" appears, insert card in the EMV chip reader (see #12 in section 1.2) with the chip facing up and towards the HiLite card reader
3. 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)
4. When message "REMOVE CARD" appears, remove the card from the EMV chip reader
5. The message "UPDATING READER" appears and the HiLite card reader starts downloading and installing the update, this only takes a couple of seconds. When the HiLite card reader has finished the message "UPDATE COMPLETE" appears.

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

1. Transaction is initiated in the POS app on the smartphone, computer, or tablet
2. When message "INSERT CARD" appears, insert card in the EMV chip reader (see #12 in section 1.2) with the chip facing up and towards the HiLite card reader
3. 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)
4. The gateway declines the transaction and tells the HiLite card reader to update, message "TRANS. DECLINED" appears
5. When message "REMOVE CARD" appears, remove the card from the EMV chip reader
6. The message "UPDATING READER" appears and the HiLite card reader starts downloading and installing the update, this only takes a couple of seconds. When the HiLite card reader has finished the message "UPDATE COMPLETE" appears
7. After the HiLite card reader has finished updating initiate the transaction again to charge the customer.

## 4. TROUBLESHOOTING

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In this section are tools to help you troubleshoot. It includes instructions on how to troubleshoot communication errors between the HiLite card reader and your smartphone, computer, or tablet, and flash corruption issues. There is also a section with tables with some of the possible messages that can appear on your HiLite 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 HiLite card reader shows a communication error message it means that the HiLite card reader detected a communication failure between itself and the device that it was paired/connected to. Here is what you can do to try to troubleshoot it:

Firstly, try to turn the HiLite card reader off and on again:

1. Make sure that the smartphone, computer, or tablet you're using with the HiLite card reader has Bluetooth turned on
2. Turn off the HiLite card reader by pressing and holding  [Power button] for a couple of seconds and pressing  [OK button]
3. Turn the HiLite card reader back on by pressing and holding  [Power button] for a couple of seconds
4. Wait for the HiLite card reader to connect or follow the connection instruction from your POS app. When you see the Bluetooth icon (📶) on the HiLite card reader screen (see #2 in section 1.2) the HiLite card reader is connected to the POS app
5. Try to initiate a transaction again.

Secondly, disconnect the Bluetooth connection and reconnect

1. Make sure that the smartphone, computer, or tablet you're using with the HiLite card reader has Bluetooth turned on
2. Look for the Bluetooth name (#3 in section 1.2 or BT menu item in section 3.4) in your smartphone, computer, or tablet's Bluetooth list and disconnect according to the directions of your device
3. Reconnect the HiLite card reader according to the directions of your device

4. Wait for the HiLite card reader to connect or follow the connection instruction from your POS app. This may take a few seconds. When you see the Bluetooth icon (📶) on the HiLite card reader screen (see #2 in section 1.2) the HiLite card reader is connected to the POS app
5. Try to initiate a transaction again.

Thirdly, remove the HiLite card reader from Bluetooth devices and pair again








1. Make sure that the smartphone, computer, or tablet you're using with the HiLite card reader has Bluetooth turned on
2. Look for the Bluetooth name (#3 in section 1.2 or BT menu item in section 3.4) in your smartphone, computer, or tablet's Bluetooth list and remove device/forget device according to the directions of your device
3. Make sure that the HiLite card reader is turned on
4. Look for the Bluetooth name (#3 in section 1.2 or BT menu item in section 3.4) in your smartphone, computer, or tablet's Bluetooth list and pair according to the directions of your device
5. Wait until you see the Bluetooth icon (📶) on the HiLite card reader screen (see #2 in section 1.2). This may take a few seconds. When that icon appears the HiLite card reader is connected.
6. 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 HiLite 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.

Resetting the flash:

1. Press  [Cancel button] and  (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. HiLite CARD READER MESSAGES

Here are tables with some of the possible messages that can appear on your HiLite 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.

HiLite card reader display text	Why it is displayed	Required action
<b>AMOUNT:</b> [amountvalue]	The HiLite 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].
<b>AUTHORISED</b>	A transaction has completed successfully.	No further actions are required.
<b>COMPLETING TRANSACTION</b>	The HiLite card reader is finalising a completed transaction with your device.	Please wait for further instructions on the HiLite card reader display.
<b>PIN VERIFIED</b>	The PIN has been verified successfully.	No further actions are required.
<b>PIN:</b> [amountvalue]	The HiLite 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.
<b>PLEASE SIGN</b>	The cardholder must sign their name on the app or slip (depending on the app's features).	The cardholder must sign the slip.
<b>PLEASE WAIT...</b>	The HiLite card reader is processing an operation.	Please wait while the HiLite card reader completes the operation.

<b>PRESS OK button or Cancel button</b>	The HiLite 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.
<b>PROCESSING...</b>	Cardholder authentication has completed and a financial card transaction is being processed.	Please wait for further instructions on the HiLite card reader display.
<b>REMOVE CARD</b>	The card is in the HiLite card reader and either the transaction has completed or the HiLite card reader cannot read the chip.	Please remove the card from the HiLite card reader.
<b>SALE</b>	Indicates that the current operation is a SALE transaction.	No further actions are required.
<b>SWIPE CARD</b>	The HiLite 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.
<b>USE CHIP READER</b>	The HiLite 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 card transactions, such as refunds or reversals, in alphabetical order.



HiLite card reader display text	Why it is displayed	Required action
<b>REFUND</b>	Indicates that the current operation is a REFUND transaction.	No further actions are required.
<b>REFUND ACCEPTED</b>	A REFUND transaction has completed successfully.	No further actions are required.
<b>REFUND VOID</b>	Indicates that the current operation is a reversal/voiding of a REFUND transaction.	No further actions are required.

<b>REVERSAL ACCEPT.</b>	Reversal/voiding of a SALE/ REFUND transaction has completed successfully.	No further actions are required.
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#### 4.2.3. Error Transaction Messages

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

<b>HiLite card reader display text</b>	<b>Why it is displayed</b>	<b>Required action</b>
<b>CANCELLED</b>	The current operation was cancelled by either the cardholder or the merchant. Or the HiLite card reader timed out while waiting for the card and automatically cancelled the operation.	No further actions are required.
<b>CARD BLOCKED</b>	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.
<b>CARD REMOVED</b>	The card was removed too soon during a financial transaction operation.	Please restart the operation.

<p><b>COMM. ERROR CHECK CONNECTION</b></p>	<p>Indicates that the HiLite card reader detected a communication failure between itself and the device that it was paired/ connected to.</p>	<p>If a SALE or a REFUND transaction was in progress when this occurred then you <b>MUST</b> 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). <i>If you fail to do so then you may be liable for any costs incurred due to any double charges.</i> Once you have verified that the transaction did not go through then please retry the operation.</p>
<p><b>FALLBACK TO MSR</b></p>	<p>The cards chip has failed. The data on the magnetic stripe will be used instead.</p>	<p>Please wait for further instructions on the HiLite card reader display.</p>
<p><b>INCORRECT PIN</b></p>	<p>An incorrect PIN was entered.</p>	<p>The cardholder must re-enter their PIN.</p>
<p><b>INVALID CARD</b></p>	<p>The HiLite card reader could not read any data from the card.</p>	<p>Please retry the operation. If the issue persists the card may be faulty, please try another card. If the issue still persists the HiLite card reader may require replacement, please your provider’s support team for assistance (see section 5).</p>
<p><b>LAST ATTEMPT</b></p>	<p>This is the customers last available attempt for correct PIN entry.</p>	<p>Please do one of the following:</p> <ul style="list-style-type: none"> <li>• Enter the correct PIN.</li> <li>• Press the  [Cancel button] to abort the transaction.</li> <li>• Press the  [OK button] to activate PIN bypass mode (if available).</li> </ul>

<b>NOT PROCESSED</b>	<p>This is a generic error message that indicates that the current operation was not completed due to an unexpected error.</p> <p>Reasons can include:</p> <ul style="list-style-type: none"> <li>• Communication failure between the HiLite card reader and the back end system during an update operation.</li> <li>• Invalid request object from the POS app at the start of an operation.</li> <li>• Invalid response object from the POS app during an operation.</li> </ul>	<p>Please retry the operation. If the issue persists please contact your provider's support team for assistance (see section 5).</p>
<b>PIN IS BLOCKED</b>	<p>The maximum number of PIN entry retries has been reached.</p>	<p>Please wait for further instructions on the HiLite card reader display (The HiLite card reader may fall back to signature processing).</p> <p>The cardholder needs to contact their bank/issuer for instructions on how to get the PIN unblocked.</p>
<b>PROCESSING ERROR</b>	<p>An unexpected error was encountered during transaction processing.</p>	<p>Please retry the operation. If the issue persists please contact your provider's support team for assistance (see section 5).</p>
<b>READ ERROR</b>	<p>The HiLite card reader was unable to establish a valid communication channel with the cards chip.</p>	<p>Please wait for further instructions on the HiLite card reader display.</p>
<b>REQUEST INVALID</b>	<p>A financial transaction was attempted with a magnetic stripe card that is cash only.</p>	<p>No further actions are required.</p>



<b>SALE VOID</b>	Indicates that the current operation is a reversal/voiding of a SALE transaction.	No further actions are required.
<b>TRANS. DECLINED</b>	A transaction has been declined.	No further actions are required. Further information may be displayed on the HiLite card reader screen or receipt that might indicate why the transaction was declined.
<b>TRANSACTION VOID</b>	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.
<b>UNSUPPORTED CUR.</b>	A currency has been selected in the POS app that your HiLite card reader has not been set up for.	Select the correct currency and retry the operation.  Alternatively, please your provider's support team for assistance (see section 5) to find out if that specific currency can be supported.
<b>USING SIGNATURE</b>	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 HiLite card reader display.

**4.2.2. Updating Messages**



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

<b>HiLite card reader display text</b>	<b>Why it is displayed</b>	<b>Required action</b>
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<b>CONNECTION ERROR</b>	The HiLite 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.
<b>DOWNLOADING</b>	Indicates that the HiLite card reader is downloading its update.	No further actions are required.
<b>INSTALLING</b>	A configuration update for the HiLite card reader has been validated and the HiLite card reader is applying it.	Please wait for the completion of the update process.
<b>NO UPDATE</b>	An update procedure was started, but there is no pending update to download.	No further actions are required.
<b>RESTARTING...</b>	The HiLite card reader is about to restart after a software update.	Please wait for further instructions on the HiLite card reader display.
<b>SOFTWARE x%</b>	The HiLite card reader is updating itself and has completed x% of the update.	Please wait for the completion of the update process.
<b>UPDATE COMPLETE</b>	An update operation has completed successfully.	No further actions are required.
<b>UPDATE FAILURE!</b>	An update has failed to complete.	Please retry the operation. If the issue persists, please contact your provider's support team for assistance (see section 5).
<b>UPDATES x%</b>	The HiLite card reader is updating itself and has completed x% of the update.	Please wait for the completion of the update process.
<b>UPDATING READER</b>	Indicates that the HiLite card reader has started an operation to update itself.	No further actions are required.
<b>VALIDATING</b>	A configuration update has been found for the HiLite card reader and the HiLite 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 HiLite card reader is idle or while you are in the administration menu.

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

## 5. GETTING SUPPORT

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

Here is a table of information you can provide which can help the POS app provider or Handpoint solve your issue:

Information	Details	How it helps
<b>Clear description of issue</b>	step by step description of what you do and how the HiLite 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 HiLite card reader message List to get more details
	where and when the error is appearing	The error can be coming from: Terminal (HiLite card reader) POS app (Point of Sale application) Gateway Acquirer
	contact information of the parties involved	Issues get resolved faster when all contact information is available
<b>Information about the solution</b>	Type of terminal	Handpoint has two types of terminal, HiLite card reader and HiPro which have different features
	Serial number of terminal (see no.3 in section 1.2 or section 3.3)	Information about terminals configurations and their transactions can be retrieved by using the serial number
	Terminal software version (see section 3.3)	New versions of the terminal software may fix known issues

	<p>Info about device connected to the terminal e.g. iphone6 with iOS 9.2, samsung galaxy S6 edge with Android 5.1.1 etc...</p>	<p>Type of device and operating system version may not be supported or some known issues with the operating system version</p>
	<p>Connection type e.g. Bluetooth, lightning</p>	<p>Different connection types may have various issues such as connectivity, driver problems, configuration etc.</p>
<b>Log files</b>	<p>Terminal Software Audit log files. It is the responsibility of the POS app to fetch logs from the terminal. Your POS app provider should be able to help you send them to support</p>	<p>Logs are used for troubleshooting</p>
<b>Screenshots of issue</b>	<p>error/warning messages or receipts</p>	<p>The receipts can include both information and error messages from the Handpoint gateway or the acquirer</p>

## 6. GLOSSARY

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<b>3DES</b>	Triple Data Encryption Algorithm is a security measure
<b>Device</b>	The hardware you are using to run the mPOS/POS application: smartphone, computer or tablet
<b>DUKPT</b>	Derived Unique Key Per Transaction is a secu
<b>EMV</b>	Europay, MasterCard and Visa. Technical standard for smart payment cards.
<b>MOTO</b>	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.
<b>mPOS</b>	Mobile Point of Sale. Specifying a payment app running on smart devices to accept card payments (as opposed to a full, third party POS app)
<b>NFC</b>	Near-field Communication is the technology that enables contactless payments.
<b>P2PE</b>	Point-to-Point Encryption is a security standard established by the PCI Security Standard Council
<b>PCI-DSS</b>	Payment Card Industry Data Security Standard. It is an information security standard for organizations that handle branded credit cards from the major card schemes.
<b>POS</b>	Point of Sale. An application which acts as cash register, typically going beyond just accepting card payments by also including other features such as basket handling (as opposed to just an mPOS app).
<b>Provider</b>	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

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Questions	Answers
<b>Are smartphones and tablets secure enough to accept card payments?</b>	No, not alone. That is why we have a separate device for reading the card and PIN entry. Card detail information is not saved within the app on the smartphone or tablet. All card information is encrypted with point-to-point encryption (P2PE) and stored in Handpoint's secure environment, as certified by the Payment Card Industry Data Security Standard (PCI DSS).
<b>Can I accept Mail Order/Telephone Order (MOTO) payments with my card reader?</b>	No, the card must be present to make a transaction with the card reader.
<b>Can I lend my card reader to a friend?</b>	No, only your business has been approved for using this device, so it is not possible to lend the card reader to someone else.
<b>Can I sell my card reader to someone else?</b>	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.
<b>Can I use Handpoint abroad?</b>	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.
<b>Can I use multiple phones with my card reader ?</b>	Yes you can. But everytime you connect the HiLite card reader to a new device you need to register it according to the POS app instructions.  However the HiLite card reader can only connect with one device at a time.

<p><b>Do I need an internet connection to use the HiLite card reader?</b></p>	<p>Yes, you will need to connect to the internet through 3G or Wifi on your smartphone, computer or tablet for the HiLite card reader to process payments.</p> <p>The HiLite card reader sends the encrypted transaction to your smartphone, computer or tablet using Bluetooth and the POS app forwards the transaction to the Handpoint gateway using 3G or Wifi.</p>
<p><b>How are my card transactions settled?</b></p>	<p>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.</p>
<p><b>What about receipts?</b></p>	<p>The HiLite card reader creates a receipt for each transaction and sends to the POS app.</p> <p>The POS app is responsible for showing you and providing you a way to access the receipt e.g. through text message, email or printer (depending on the functionality of your POS app)</p>
<p><b>What happens if my card reader is lost or stolen?</b></p>	<p>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.</p>
<p><b>Why a separate card reader?</b></p>	<p>We use a separate secure card reader for reading the chip and entering the PIN to protect your customers card details. This method is the most secure way to accept payments today. No card data is ever stored on the HiLite card reader, smartphone, computer or tablet.</p>