UKCA Standard 70

sp ire
PAYMENTS™

Transaction. Interaction. Convergence.

SPc5 · SPg7
User Manual

Introduction
Accessories

SPp10 PIN Pad
(Colour may vary)

Charging Stand
(Product may vary)

For more information regarding these accessories and how to obtain them, please contact your terminal leasing company. Additional accessories (such as mounting poles) may also be available from third party suppliers.

Introduction
Spire Payments SP terminal family

Thank you for choosing your new Spire Payments terminal.

The terminal range offers simple operation combined with ability to perform fast and secure payment transactions. Please read through this User Manual which contains important information to help you install, use and maintain your payment terminal. Content includes step-by-step guides for all the transaction types, running reports and end-of-day procedures.

If you requested any additional services such as Mobile Top Up, these will be explained in supplementary documentation supplied with your terminal.

Introduction
Spire Payments SP terminal family *(cont.)*

Spire Payments manufacture a wide range of terminals to meet all retail environments:

Countertop terminal SPc5 with optional SPp10 PIN Pad

The SPc5 countertop terminal is designed to operate on a countertop and can be connected to an optional PIN Pad (SPp10). The terminal is powered by a mains power supply.

Countertop terminal with PIN Pad
SPc5 with optional SPp10 PIN Pad

Power supply
Mains power supply

Communication method
Via the Internet and/or analogue phone line

Introduction
Spire Payments SP terminal family *(cont.)*

Portable terminals SPg7 Wi-Fi and SPg7 GPRS

The SPg7 Wi-Fi and SPg7 GPRS terminals have been designed to meet the needs of those merchants requiring portable payment. In the case of the SPg7 Wi-Fi, this is designed to be used in a shop or restaurant. The SPg7 GPRS is completely mobile and utilises the latest GPRS technology. Both the SPg7 Wi-Fi and SPg7 GPRS are powered by an internal lithium battery.

The SPg7 Wi-Fi and SPg7 GPRS have the option of being supplied with a charging stand, but an alternative charging solution is to plug a mains power supply directly into the rear of the terminal. The option provided with your SPg7 Wi-Fi and SPg7 GPRS will depend on the agreement with your terminal leasing company.

Portable Terminal
SPg7 Wi-Fi

Power supply
Battery module with optional mains-powered charging stand or plug-top power supply

Communication method
Wi-Fi

Portable Terminal
SPg7 GPRS

Power supply
Battery module with optional mains-powered charging stand or plug-top power supply

Communication method
GPRS

Introduction
Safety information and battery guarantee

General safety information

- Do not use if visibly damaged.

- Do not apply power/operate below 0 °C and above 50 °C.

- Do not store in an unpowered state below –20 °C and above 70 °C.

- Do not expose to moisture and do not store or operate in high-humidity environments.

- Do not disassemble.

- Do not incinerate or crush.

- This product is not suitable for use in hazardous environments such as petrol stations, chemical depots, etc.

- Keep out of reach of children and pets.

Battery module safety for the SPg7 portable terminals

- Recharge the battery module only with the supplied power supply or charging stand.

- Do not short-circuit battery module contacts by placing metal objects across the connections.

- Use only batteries supplied by Spire Payments as a replacement.

- Do not drop or impact.

- Do not disassemble, puncture or breach.

- Do not leave in direct sunlight.

- Do not moisten or throw into water.

- Keep any spare batteries in a cool, dark, dry place such as a refrigerator.

- Do not expose to fire or incinerate.

- Never expose to temperatures less than –20 °C or greater than 70 °C. You must dispose used or faulty batteries using either your local battery disposal facility in accordance with local laws, or by return to Spire Payments. Do not discard with general waste and do not incinerate. Insulate the battery module contacts with electrical tape prior to disposal. This battery module is a lithium-ion battery.

Safety information and battery guarantee (cont.)

General caution and safety instructions

- Do not attempt to disassemble, service or repair any part.

- Do not use if damaged or with signs of tampering.

- Only use the supplied power adapter with electrical outlet of the correct rating.

- To avoid the potential hazard of electrical shock do not use in wet environments or during an electrical storm.

- Do not use in the proximity of potentially flammable gases or substances.

- Ensure cables used do not cause a trip hazard or risk the device being dropped on to a hard surface.

- Do not expose to excessive heat or cold. Only operate between 0 °C and 50 °C.

- Before cleaning disconnect from electrical outlet. Use only a dry or dampened soft cloth.

- Do not immerse, use liquids, sprays or aerosol cleaners. Clean all spillages quickly.

- This device is intended for handheld use only (SPg7 Wi-Fi and SPg7 GPRS terminals).

- Dispose any part in an environmentally sound manner and in accordance with local laws.

Spire Payments will not be held liable for any damage resulting from user operation that does not comply with the guidance stated.

How to Clean Your Terminal

WARNING: DO NOT USE UNDILUTED AMMONIA OR ABRASIVE CLEANERS

Switch off and unplug the mains power supply units from the terminal, PIN Pad, charging stand and Wi-Fi access point where applicable. Carefully note how all the cables are connected and disconnect all cables before cleaning.

Apply denatured alcohol (methylated spirits) to a clean, soft, non-abrasive, low-lint cloth. Wipe carefully.

Use an air duster (compressed air) to clean in and around the printer mechanism.

Introduction
Safety information and battery guarantee (cont.)

Battery module guarantee

- Unless the terms & conditions of your terminal supply differ, the battery module is excluded from the Spire Payments terminal warranty and is guaranteed for one year. If your battery module fails after this period you must purchase a replacement battery module from Spire Payments.

- Battery module performance does degrade over time and you will need to purchase a replacement when the battery module performance becomes unacceptable.

PCI-PTS

PCI SSC's approval only applies to PEDs that are identical to the PED tested by a PCI Security Standards Council recognized laboratory. If any aspect of the PED is different from that which was tested by the laboratory – even if the PED conforms to the basic product description contained in the letter — the PED model should not be considered approved, nor promoted as approved. For example, if a PED contains firmware, software, or physical construction that has the same name or model number as those tested by the laboratory, but in fact are not identical to those PED samples tested by the laboratory, then the PED should not be considered or promoted as approved.

No vendor or other third party may refer to a PED as "PCI Approved," nor otherwise state or imply that PCI SSC has, in whole or part, approved any aspect of a vendor or its PEDs, except to the extent and subject to the terms and restrictions expressly set forth in a written agreement with PCI SSC, or in an approval letter. All other references to PCI SSC's approval are strictly and actively prohibited by PCI SSC.

When granted, an approval is provided by PCI SSC to ensure certain security and operational characteristics important to the achievement of PCI SSC's goals, but the approval does not under any circumstances include any endorsement or warranty regarding the functionality, quality, or performance of any particular product or service. PCI SSC does not warrant any products or services provided by third parties. Approval does not, under any circumstances, include or imply any product warranties from PCI SSC, including, without limitation, any implied warranties of merchantability, fitness for purpose or non-infringement, all of which are expressly disclaimed by PCI SSC. All rights and remedies regarding products and services, which have received an approval, shall be provided by the party providing such products or services, and not by PCI SSC or the payment brand participants.

EU Compliance Statement: Spire Payments Holdings S.a.r.l. hereby declares that this device is in compliance with the essential requirements and other relevant provisions of the R&TTE Directive.

A copy of the EU Declaration of Conformity is available online at www.spirepayments.com.

Introduction
Additional services available for your terminal

Card types accepted
The terminal is configured as standard to support Visa and Mastercard scheme credit and debit cards. For some merchant categories, credit card support may not be allowable. The terminal can support American Express, Diners Club, and JCB scheme cards depending upon your bank agreements with these schemes.

Sale (Purchase) with cashback
The terminal can be configured to offer Sale with Cashback.

Tipping
The terminal can be configured for a tipping service.

Pre-authorisations (hotel and rental)
The terminal can be configured for Pre-Authorisations and Completion transaction types that are widely used in the hotel and rental business sectors.

Force authorisations
The terminal can be configured to accept Force Authorisations. This feature is used to capture any paper-based transactions for submission, and is only available if permitted by your bank.

Invoice numbers
This feature adds invoice numbers to your receipts. It is used to keep track of your orders and accounts.

Mobile Phone Top Up
Your terminal can be upgraded to include a Mobile Phone Top Up service that offers your cardholders a valuable service and generates revenue for your business.

Please contact your terminal leasing company if you require any of the above additional services. The above configuration options are only available if permitted by your bank.

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Important information

Terminal Identification (TID)
Each terminal contains an electronically programmed eight digit number known as a Terminal Identification (TID). This is printed in full on the merchant's copy of all transaction receipts.

Merchant Identification (MID)
Your bank will have issued you with a MID, supplied in a separate documentation pack directly from them. If you do not have this number, please contact your bank.

Before taking transactions you should confirm the MID printed on your Terminal Report matches the MID issued by your bank. If not, please contact your helpdesk. You may have separate MIDs for American Express, Diners Club, JCB, and Duet cards, and the mobile Top Up service, if you have requested these.

Merchant (Local) Password
Your terminal contains a merchant password that you are encouraged to change from the default setting. Please refer to the password section for a full explanation.

Voice Referral Password
Your terminal contains a voice referral password that you are encouraged to change from the default setting. Please refer to the separate password documentation for a full explanation.

'Batch' end-of-day banking (settlement)
At the end of each business day, the Settlement procedure **must** be performed on the terminal. If you do not complete this procedure you may experience delays in funds being transferred to your bank account.

Cash Register Interface
If you have an SP terminal or PIN Pad integrated with your cash register/till system, many of the functions of the terminal will be carried out by cash register functions.

Certain functions described in this user manual may not be available via the cash register interface.

If your terminal operates in conjunction with a cash register, your head office or the product manufacturer will have provided additional instructions.

Monthly Updates
Once a month your terminal will connect to the Spire Payments Terminal Management System to download any new software and any important configuration changes. This update will typically occur during the night. For this reason, Spire Payments recommends you leave your terminal powered on at all times. If you have a portable device, we recommend it is left on the charging stand or connected to the power supply when not in use. In the event of a terminal being switched off when the update tried to take place (or having a flat battery in the case of portable models), it will notify you that it has failed. Please leave your terminal on the following night to ensure the upgrade is completed, or call the your helpdesk for assistance. These calls will be charged should your terminal use a dial-up connection method. Charges may vary depending on your phone provider.

Page 12
Data Security Standard (PCI DSS) advice

The Spire Payments SP terminal family contains a payment application that stores, processes and transmits cardholder data. It therefore falls within the scope of the Payment Card Industry Data Security Standards (PCI DSS).

This section contains advice to assist you with PCI DSS compliance.

Please note it is the responsibility of the merchant to ensure the merchant copies of receipts and reports showing cardholder details are stored securely for the period of time specified by your bank. Please also ensure they are disposed of in a secure manner at the end of that period. Failure to do so may result in charge-backs or fraudulent activity.

1. Retention of full magnetic stripe, card validation code or PIN block data
The payment application within the Spire Payments SP family of terminals does not retain such data. You need take no further action to ensure your PCI DSS compliant environment meets this specific requirement.

2. Protection of stored cardholder data
The payment application within the Spire Payments SP family of terminals protects stored cardholder data in a secure manner.

You must ensure you give the correct copy of the receipt to the cardholder (clearly marked CARDHOLDER COPY) and retain the merchant receipts in a secure area with limited access to authorised staff. The merchant receipts must be destroyed by incineration or by cross-shredding when they become obsolete. Your bank will advise on the period necessary for retention of receipts.

You should perform an End of Day Banking/Settlement every day, and must settle at least once a week to purge the payment application of cardholder data. Your terminal may be configured to perform this process automatically every day; if you are unsure how your terminal is configured, please contact the your helpdesk.

3. Provision of secure authentication features
The payment application operates in the Spire Payments SP hardware environment and does not require username or password access. You need take no further action to ensure your PCI DSS compliant environment meets this specific requirement.

4. Secure payment applications
The Spire Payments terminal and its software applications have been designed in line with PCI DSS and industry best practices. You need take no further action to ensure your PCI DSS compliant environment meets this specific requirement.

5. Protection of wireless transmissions
The Spire Payments SPg7 Wi-Fi utilises Wi-Fi wireless transmissions in accordance with PCI DSS and industry best practices.

Data Security Standard (PCI DSS) advice

6. Testing payment applications to address vulnerabilities
Spire Payments have a process to identify newly discovered security vulnerabilities and have timely development and deployment of security patches and upgrades. You need take no further action to ensure your PCI DSS compliant environment meets this specific requirement.

7. Secure network implementation
The payment application operates in the Spire Payments SP hardware environment and does not need to log application activity.

8. Ensuring cardholder data must never be stored on a server connected to the Internet
If you are using the Spire Payments SP device on a Local Area Network for the payment transaction interface and you are using a local server to store and forward the transaction data, you must take steps to protect the transaction data in accordance with DSS requirements.

9. Secure remote software updates
Software updates will be carried out automatically by the Spire Payments terminal management system. This system ensures only authenticated payment software is loaded onto your terminal.

10. Secure remote access to payment application
There is no remote access to the payment application.

11. Encryption of sensitive traffic over public networks
Transactions sent over network connections are always encrypted by the payment application using Secure Socket Layer (SSL) technology.

You may engage your business with 3rd party agents who provide services that are part of your overall payment process, e.g. shopping cart providers, web design firms (often referred to as Common Points of Service or Service Providers). Agents acting as a Service Providers must be compliant with PCI DSS and be registered with the card schemes. Refer to www.serviceprovidersurvey.com (correct at the time of publication) for more information about Service Provider registration.

You must never communicate sensitive cardholder data by any means unless it is encrypted. Spire Payments will never request such data from you. Sensitive cardholder data means:

- the Card Number (often known as Primary Account Number or PAN),

- the Cardholder Name, the card Expiration Date,

- the card CV2 number (the last three digits printed on the card signature strip, or for American Express, the four digit value printed on the front of the card).

Your helpdesk may request the first six digits of a card number from you to assist with troubleshooting a problem. This should be provided along with the name of the card issuer when requested, to enable the your helpdesk to assist.

You will not be asked for a full card number by your helpdesk.

Data Security Standard (PCI DSS) advice

12. Encrypt all non-console administrative access
This is not applicable to the Spire Payments payment application.

13. Maintain instructional documentation/training programs for cardholders, resellers, & integrators
As well as the information in this user manual, Spire Payments will make further information regarding PCI DSS compliance available to you via its website www.spirepayments.com.

Understanding your equipment SPg7

Portable Terminals SPg7 GPRS and SPg7 Wi-Fi Overview

Four status LEDs
Refer to the contactless section on page 39 in this User Manual for details

Colour display
Displays merchant menu system and transaction progress

USB port
For connecting peripheral equipment

Chip card reader
Use when the cardholder presents a chip card

Keypad
For merchant & cardholder data entry

Serrated paper cutter
Receipts will emerge from this slot and can be removed by pulling across the serrated cutter

Paper roll compartment
More information about your printer and how to load a paper roll can be found on page 22 in this User Manual and in the Quick Reference Guide

Power button
Press button to turn the terminal on

Swipe card reader
Use when the cardholder presents a debit or credit card without a Chip or when prompted by the terminal

Battery compartment
Battery replacement is detailed on page 19 in this User Manual and in the Quick Reference Guide

Understanding your equipment SPc5

Countertop Terminal SPc5 Overview

Four status LEDs
Refer to the contactless section on
page 39 in this User Manual for details

Colour display
Displays merchant menu system
and transaction progress

Power button
Press button to turn the terminal on

USB port
For connecting
peripheral equipment

Serrated paper cutter
Receipts will emerge from this slot and
can be removed by pulling across the
serrated cutter

Paper roll compartment
More information about your printer
and how to load a paper roll can be
found on page 22 in this User Manual
and in the Quick Reference Guide

Power supply socket
This is where the power supply
plugs into the terminal

Terminal connections
his is where the PIN Pad, telephone line,
network and serial cables attach

Chip card reader
Use when the cardholder
presents a chip card

Cable tidy
A removable clamp keeps cables in
place & prevents disconnection

Keypad
For merchant & cardholder data entry

Swipe card reader
Use when the cardholder presents
a debit or credit card without a Chip
or when prompted by the terminal

SIM/SAM compartment
Please do not open unless instructed

Understanding your equipment SPp10

PIN Pad SPp10 Overview

Four status LEDs
Refer to the contactless section on
page 39 in this User Manual for details

Display
Displays transaction instructions for
cardholder which entails prompting
for PIN

Cable access hatch
Please do not remove

Chip card reader
Use when the cardholder presents
a chip card

Keypad
For merchant & cardholder
data entry

Privacy shield

The PCI Security Standards Council specifies International Standard ISO9564 for protection against fraudulent observation of the PIN during PIN entry. To comply with this standard, your terminal may be supplied with either a pre-fitted privacy shield or as an optional accessory. If you require a privacy shield and one has not been supplied, please contact your service provider's helpdesk.

You must have a privacy shield fitted to your PIN entry device unless one of the statements below is true:

• You only perform keyed transactions, e.g. in a mail-order business without the cardholder present.

• Cardholders enter his/her PIN into the separate handheld SPp10 PIN Pad.

• Cardholders can enter his/her PIN while holding the terminal in his/her hand.

Battery module SPg7 GPRS and SPg7 Wi-Fi terminals

If you have a portable terminal it will use a removable, rechargeable lithium ion battery module. The battery module will need to be charged when you receive a new terminal, a replacement battery, and during day-to-day use. Charging instructions are detailed elsewhere in this User Manual and in the Quick Reference Guide supplied with the terminal.

Battery maintenance

The standby time for the battery fitted to the SPg7 GPRS and SPg7 Wi-Fi is approximately 120 hours depending on settings and operational environment. It is recommended to always return the terminal to the charging base or connect to the power supply when not in use to maintain maximum charge. While handling the battery module ensure you do not short the connections with metallic objects.

Battery module installation and replacement

Step 1

Place the terminal face down on a flat surface and remove the battery cover by applying pressure on the tab and pulling upward.

Step 2

Remove any packaging and insert the battery into the terminal.

Step 4

Place battery compartment cover back into position.

Loading a paper roll

The SPg7 GPRS, SPg7 Wi-Fi, and SPc5 terminals are all supplied with a paper roll. It may be loose in the box or can be found in the terminal's paper compartment. It is critical that only approved paper rolls are used and these can be obtained from authorised paper roll supplier.

Paper roll loading procedure

Step 1

With the terminal facing up, gently pull upwards on the lever located in the middle of the printer door.

Step 2

Discard any packing material from the paper roll. Place the roll in the compartment as shown in the diagram. The paper must feed from underneath the roll. The correct orientation of the paper is critical (if you experience blank receipts, the paper may be incorrectly inserted or of the wrong specification). Pull a length of paper until it protrudes from the top of the terminal.

Step 3

Close the printer door until an audible 'click' is heard.

Step 4

Remove the excess paper by pulling down and tearing along the serrated edge.

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Cable connection SPc5 countertop terminal with optional SPp10 PIN Pad

Step 1

Place the terminal face down on a flat surface, push the two tabs upwards and remove the rear cover

Step 2

Remove the cable tidy.

Step 3

Thread the black power supply cable to the right of the cable tidy recess and insert the plug into the rear of the terminal.

Thread the telephone cable through the cable tidy recess and insert the plug into the socket identified with the blue **LINE** label. Alternatively if you are connecting the terminal to an Internet connection point, thread the network cable to the left of the cable tidy recess and insert the plug into the socket identified with LAN. If a PIN Pad has been supplied, plug its black curly cable into the socket identified with the PIN PAD label.

(IP with dial backup: Please note both a telephone and network cable can be connected simultaneously. Refer to page 80 of this user manual for more details)

Step 4

Refit the cable tidy and rear cover until you hear a 'click'. Connect the telephone cable to the telephone socket, and the network cable (if required) to your Internet connection point. Power: finally, connect the power supply to a live mains socket.

Page 22
Communications information

Analogue phone line connections

The SPc5 countertop terminal utilises an analogue phone line (dial-up) or Internet connection to communicate with acquiring systems and the Spire Payments terminal management system. The choice of communication method will be dependent upon the configuration requested by the terminal leasing company. In some situations an Internet connection may be chosen as the primary communication method, with an analogue phone line being an alternative in the event of a network problem.

The following points must be observed:

- Terminals using dial-up connections are designed for use on analogue telephone lines such as those provided by the Public Switched Telephone Network (PSTN) and some Private Branch Exchanges (PBX/PABX). These terminals will not operate on a proprietary digital telephone extension.

- The terminal will need to be configured (see *Appendix E*) if your line requires a prefix number to dial externally (a '9' is a typical example).

- Using double adaptors, extension cables and/or telephone cables not supplied by Spire Payments may cause communication problems.

- Installing the terminal on a line using a third party call service may cause communication problems.

Broadband Internet access compatibility

If the telephone line you wish to use is also shared with other devices (including telephones), ensure all sockets are fitted with ADSL or DSL filters. This does not just apply to the socket your Internet access point is connected to.

Incorrect installation may cause communication problems.

Wired network (SPc5 countertop terminal only)

The SPc5 countertop terminal can connect over a network connection via a local area network.

The SPc5 countertop terminal connection is on the back of the terminal (white NET port). This is connected to your Internet connection point (see previous section).

Communications information *(cont.)*

GPRS (SPg7 GPRS portable terminal only)

The SPg7 communicates through the mobile telephone network using a GPRS connection. A Subscriber Identity Module (SIM) is pre-installed into the terminal by Spire Payments to control this connection.

The following points should be noted:

- **Do not remove the SIM unless instructed by your helpdesk. Unauthorised removal of the SIM may render your terminal inoperable and/or may result in late/non-payment of funds into your account.**

- **Spire Payments reserves the right to charge for unauthorised use of your SIM. Spire Payments may charge an administration fee for misuse or replacement of a lost or locked SIM.**

Wi-Fi (SPg7 Wi-Fi portable terminal only)

The SPg7 Wi-Fi is a portable device which utilises the wireless technology known as Wi-Fi. This is ideal for retail environments such as restaurants where waiters can take payment at the table.

To install the SPg7 Wi-Fi you must note the following:

- Your terminal will be pre-configured for use on standard networks featuring DHCP (automatic allocation of IP addresses). In the unlikely event that your network does not have this feature, please call the your helpdesk for assistance.

- Please ensure the specific IP addresses and TCP ports provided by your terminal supplier are not blocked by a network firewall.

Wi-Fi access point

To operate the SPg7 Wi-Fi within your premises you may also be provided with a Wi-Fi access point. Both the Wi-Fi access point and terminal will be pre-configured with all the necessary information to allow the devices to communicate. Should the terminal or Wi-Fi access point be replaced or the link between the terminal and Wi-Fi access point fail, reconfiguration may be needed. See Appendix F for details of the Wi-Fi access point pairing procedure.

Please note: If you are not using the Spire Payments' provided Wi-Fi access point then you may have to configure your router to support the payment terminal, e.g. for MAC address filtering.

Wi-Fi (SPg7 Wi-Fi portable terminal only)

Wi-Fi access point models

The exact model of Wi-Fi access point may vary from that pictured here. However, the installation procedure is identical.

Wi-Fi access point siting recommendations

The design of the Wi-Fi access point allows it to be placed on a counter or shelf.

Please bear the following in mind when choosing an installation location:

- Select a location close to an electrical power outlet.

- Select a location close to a network connection point.

- Select a location where there will be no physical obstructions between the Wi-Fi access point and the SPg7 Wi-Fi operating area. This includes brick and block walls.

- Do not install or place the Wi-Fi access point on a metal or metallised material surface.

- Avoid close proximity to cordless phones, Bluetooth devices, microwave ovens and other mobile devices.

Wi-Fi access point cable connection

Please follow this procedure carefully and only power on the terminal and Wi-Fi access point when instructed.

Step 1

Plug the supplied network cable into the WAN socket in the Wi-Fi access point.

Connect the other end of the network cable to your Internet connection point.

Step 2

Plug the power supply into the Wi-Fi access point.

Step 3

Plug the Wi-Fi access point power supply into the mains power socket and switch on.

Note: Multiple SPg7 Wi-Fi terminals can communicate with a single Wi-Fi access point.

SPg7 Wi-Fi portable terminal's expected range

The range of a SPg7 Wi-Fi from the Wi-Fi access point should be in the region of 100 feet in all directions, but this can vary due to internal obstructions and potential interference from other equipment. (See page 24 for siting recommendations.)

Once the system is powered, it is best to carry the terminal to the extremes of your premises where you would expect to take payment and check operation. If necessary, relocate the Wi-Fi access point. Alternatively, it is possible to boost the Wi-Fi signal strength by purchasing an aftermarket repeater.

Installation

Please read and follow the separate Quick Reference Guide received with your terminal. This User Manual and the Quick Reference Guide contain instructions on how to:

- Connect the cables and accessories, e.g. power supply, telecoms cable and PIN Pad.

- Install the paper roll.

- Charge the battery module (SPg7 GPRS and SPg7 Wi-Fi).

- Switch on your terminal.

Page 27
Using your terminal

Please note: The screens-shots and receipt examples on your terminal may differ in detail from those depicted in this manual.

Turning the terminal on

Connect power supply to a nearby electrical outlet. Hold down the power button (located on the right of the menu buttons) until the display illuminates. Remove the protective film from the display if present.

09/11/13   12:00

**ENTER AMOUNT
TO START PAYMENT**

£0.01

Cancel   Clear   Enter

Main Menu
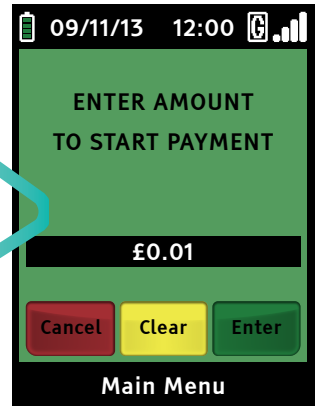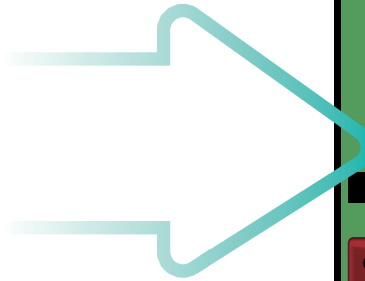
Welcome screen

Turning the terminal off

To turn the terminal off press the power button for three seconds, ensure **'SHUTDOWN'** is highlighted and press the green **'ENTER'** key.

Please note: Highlighting **'RE-START'** will re-start the payment application.

Using your terminal *(cont.)*

Terminal keypad

The SPg7 Wi-Fi, SPg7 GPRS and SPc5 all share a common keypad layout.

- The **'MAIN MENU'** key represented by a square and positioned above the **'2'** key toggles between menus.

- The **'ARROW'** keys either side of **'MAIN MENU'** key are used to move to the next and previous menu screens. When activated, an arrow will also be seen on the display above the appropriate key.

- The numeric keys.

Keypad

The **'#'** key allows the cycling of character selection on the numeric keys during text entry. For example pressing **'1'** and then **'#', '#', '#'** will cycle through **1, Q, Z, 1.**

The star key is used to cycle through the following nine characters: **. , / @ * # ( ) –** during text entry.

The action of the green **ENTER** key will be displayed in a **green** box at the bottom of the display.

The action of the red **CANCEL** key will be displayed in a **red** box at the bottom of the display.

The action of the yellow **CLEAR** key will be displayed in a **yellow** box at the bottom of the display.

The green **ENTER** key will select **YES.**

The yellow **CLEAR** key will select **NO.**

Using your terminal *(cont.)*

Terminal Display

The SP products all share a common graphical display. The display is separated into three specific areas:

Status bar

At the top of the display is a black bar with white text and coloured icons. This is known as the status bar and it displays the following information from left to right:

- Battery level indicator (only portable terminals). See icon index.

- Date in dd/mm/yy format.

- Time in hh:mm format.

- Connection method icon. See icon index.

- Signal strength icon (SPg7 GPRS portable terminal only). See icon index.

Middle of screen

The middle of the screen (largest area) is used to display choices for data entry requests, instructions, transaction progress and any other relevant information.
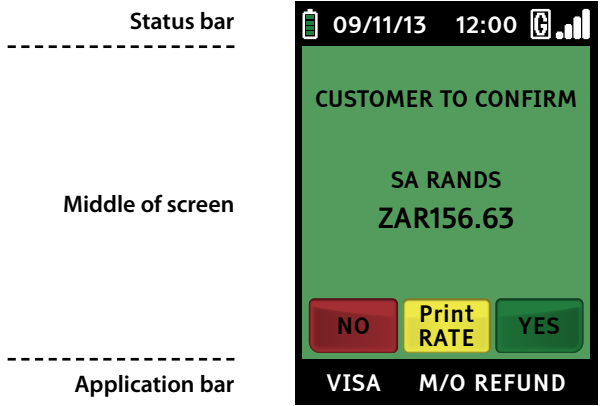
To represent specific operating modes, this part of the displays different colour backgrounds:

- Green: Transaction flow screens

- Blue: Reports and menus

Application bar

At the bottom of the screen there is a black bar with white text. This is known as the application bar and it displays information about the transaction in progress.

Using your terminal *(cont.)*

Status bar

Middle of screen

Application bar

```
┌──────────────────────────┐
│ 🔋 09/11/13   12:00 Ⓖ ▃▅▇ │
├──────────────────────────┤
│                          │
│   CUSTOMER TO CONFIRM    │
│                          │
│                          │
│        SA RANDS          │
│       ZAR156.63          │
│                          │
│          ┌──────┐        │
│   NO     │Print │   YES  │
│          │RATE  │        │
│                          │
│  VISA    M/O REFUND      │
└──────────────────────────┘
```

Screen saver

If a key has not been pressed for 30 seconds, the terminal's display will automatically revert to a screen saver. This will be displayed for a further 3 minutes, after which the display will go blank (SPg7 Wi-Fi and SPg7 GPRS). Pressing any key will turn the display back on.

Page 31
Icons index

The following is an index to the icons shown in the status bar:

Battery level indicator
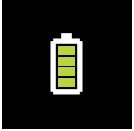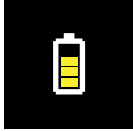
100% Charge	75% Charge	50% Charge	25% Charge	Warning	Charging
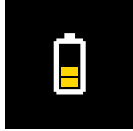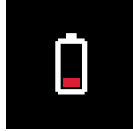
Signal strength indicator

100% Signal	75% Signal	50% Signal	25% Signal	Under 10% Signal	GPRS Connected

Connectivity indicators

Wi-Fi 100%	Wi-Fi 75%	Wi-Fi 50%	Wi-Fi 25%	LAN connection	LAN disconnected
Serial Connected	Serial Disconnected	PSTN Connected	PSTN Disconnected	Pin-Pad Connected	Pin-Pad Disconnected
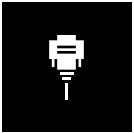
Icons index *(cont.)*

The following is an index to the miscellaneous icons

Additional icons

| SHIFT Engaged | Numbers | Lowercase | Uppercase |
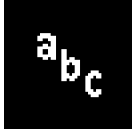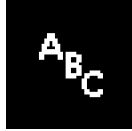
Welcome screen graphics

Screen buttons
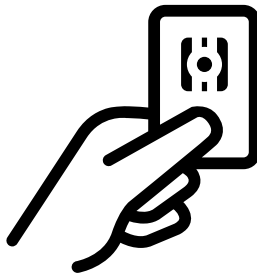
Contactless icon   Chip & Pin icon   Swipe Card icon
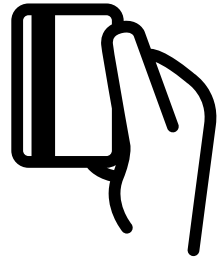
Menu operation

Reports and terminal menu

The screens below show the Reports and Terminal Menu. This is displayed by pressing the **MAIN MENU** key when the Transaction Menu or Welcome Screen is displayed. As there are more than five menu options it is split between two screens. To access the second screen press the **ARROW** key below the arrow icon at the bottom of the display. This operation can be repeated from the second screen to return to the first part of the menu.

09/11/13 12:00
1 New trans
2 Batch
3 Reports
4 Terminal
5 CL Receipt
Main Menu

09/11/13 12:00
1 Setup
2 Function
3 Tests
4 Re-Print
Main Menu
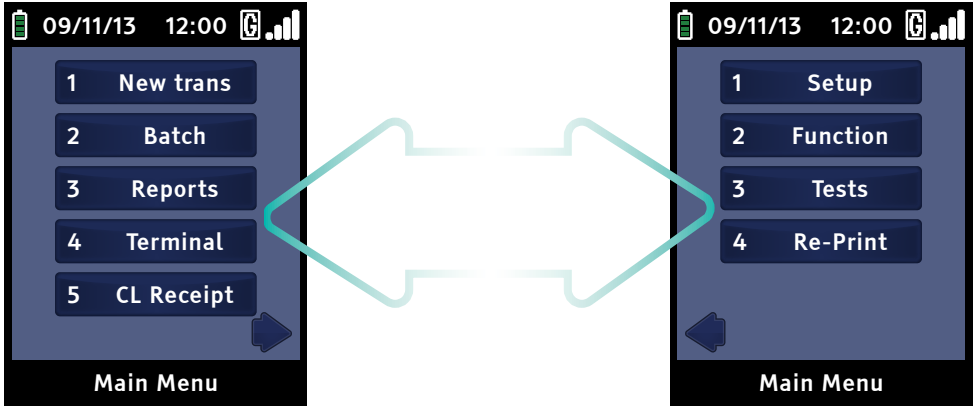
Selection of an item from a menu can display a sub-menu with more options (see right for an example). You may return to the original menu by pressing the **ARROW** key under the upward pointing arrow icon.

09/11/13 12:00
1 X
2 Z
3 Audit
4 Summary
Reports

Training mode

Please note: The Training Payment Card is not supplied with the terminal as standard.

Once the terminal is switched to Training Mode it enables the user to perform all transaction types without the actual transfer of funds. You may use normal Chip and PIN cards to perform these training transactions.

How to switch to Training Mode

Ensure the terminal is displaying the Welcome screen.

*   Press the '**MAIN MENU**' key to display the Transaction Menu.

*   Select '**TERMINAL**' from the menu.

*   Select '**TRAINING**' from the menu.

*   Type in the local password (default is 0000) and press the green '**ENTER**' key.

*   The screen will display '**SWITCH TO TRAIN MODE**'.

*   Select '**YES**' by pressing the green '**ENTER**' key.

Press the '**MAIN MENU**' key to return to the Welcome screen.

Using Training Mode

Once in Training Mode, the text '**TRAINING MODE**' will be printed on all receipts. Depending on the amount entered, the simulated response will be different, allowing staff to simulate all transaction outcomes. Use the Training Payment Card to start a transaction.

*   0.01 to 100 (£0.01 to £1.00 or €0.01 to €1.00 in ROI) will display **AUTH CODE *XXXX*.**

*   200 (£2.00 or €2.00 in ROI) will display **REJECTED.**

*   300 (£3.00 or €3.00 in ROI) will display **DECLINED BY CARD.**

*   400 (£4.00 or €4.00 in ROI) will display **PICK UP CARD.**

*   Any other amount will display **INVALID AMOUNT.**

*   If you are prompted for a cardholder PIN, use **1234.**

Page 35
Training mode *(cont.)*

How to leave Training Mode

Ensure the terminal is displaying the Welcome screen.

* Press the '**MAIN MENU**' key to display the Reports and Terminal Menu.

* Select '**TERMINAL**' from the menu.

* Select '**TRAINING**' from the menu.

* Type in the local password (default is 0000) and press the green '**ENTER**' key.

* The screen will display '**LEAVE TRAINING MODE**'.

* Select '**YES**' by pressing the green '**ENTER**' key.

Press the '**MAIN MENU**' key to return to the Welcome screen.

Please note: Ensure you do not attempt live transactions in Training Mode as the funds will not be transferred into your bank account.

Page 36
Setting the merchant password

You may be asked to enter a password to perform certain functions. Different passwords protect different terminal functions and it is best to change these from the factory default to protect against potential fraudulent usage of the terminal.

Please note: To protect against fraudulent activity with regard to voice referred transactions, you must amend your merchant password to your own value.

Local (merchant) password

The local password (sometimes referred to as a merchant password) is used to protect certain terminal functions, such as enabling Training Mode. This password comprises of four digits and has a factory default of 0000. If you forget this password, please contact your helpdesk. To change the local password follow the procedure below:

- Ensure the terminal is displaying the Welcome screen.
- Press the '**MAIN MENU'** key to display the Reports and Terminal Menu.
- Press the right '**ARROW**' key to show the additional menu items.
- Select '**SETUP**' from the menu.
- Select '**PASSWORD**' from the menu.
- Select '**CHANGE**' from the menu.
- Type in the old password and press the green '**ENTER**' key.
- Type in the new local password (default is **0000**) and press the green '**ENTER**' key.
- Repeat the previous step.
- The terminal will beep and display '**TRANSACTION ACCEPTED**'.

The local password is now updated.

Maintenance password

The maintenance password is used to protect supervisory terminal functions. This password comprises of six digits. You will to need call your helpdesk to obtain this password.

Page 37
Transactions

Your terminal is able to provide the following transaction types:

- Sale

- Sale with Cashback

- Sale with Tip

- Force Authorisation Pre-Authorisation

- Completion

- Refund

Please note: By default, your terminal will not be configured to accept all transaction types. Please contact your terminal leasing company for further details on how to add other transactions.

Please note: There are multiple configurable options on the SP range of terminals which are set by the acquirers. As such the transaction flows within this manual may vary slightly to those displayed on your terminal.

How to insert a chip card

If your terminal is fitted with a PIN Pad, the card reader in the terminal is disabled. In this situation the cardholder inserts his/her Chip Card into the PIN Pad card reader. If no PIN Pad is fitted, the cardholder can insert his/her Chip Card into the terminal or, if preferred, they can ask you to perform the operation.

How to insert a chip card

If the card has a Chip on the front, insert the card either in the main terminal or separate PIN Pad (SPp10) with the Chip facing up and towards the terminal/PIN Pad. When the card is inserted correctly you should feel some resistance and hear an audible soft 'click'.

Transactions *(cont.)*

What happens if the cardholder has forgotten his/her PIN?

The cardholder usually has 3 attempts to enter his/her PIN correctly. If they enter it incorrectly 3 times in a row (even on different days and in different locations), the card will lock the PIN and the cardholder must contact his/her card issuer or have it unlocked at an ATM.

If the cardholder forgets his/her PIN and does not want to continue, you can cancel the transaction by pressing the red '**CANCEL**' key on the '**ENTER PIN**' screen. Alternatively, you may be allowed to continue and 'bypass' the PIN.

If you select '**BYPASS**', the terminal will ask for the cardholder to sign the merchant's copy of the receipt which you will be asked to verify.

Please note: Signature verification is not as secure as Chip and PIN and you may incur charge-backs from your acquirer if you use it.

How to swipe a card

If the card presented is a Chip Card, it must be inserted into the terminal or PIN Pad. If your terminal cannot read the Chip you may be given the option to swipe the card's magnetic stripe. As an additional security measure you may be requested to enter the last 4 digits of the card number.

If a Chip Card is swiped prior to being inserted into the terminal or PIN Pad, the terminal will request the card is inserted into the Chip Card reader.

Swipe the card with the magnetic stripe facing down and towards the terminal. Swipe the card quickly in either direction.

Presenting a contactless card

Presenting a contactless card

Some card types support contactless technology. This is the ability for a payment to be taken by simply holding the card in close proximity (a few millimetres) to the terminal. This is known as 'presenting' the card. This method of payment is for small transactions and is designed to speed up the entire process.

Contactless technology is available as standard on the Spire Payments SP terminal family.

How to present a contactless card

The card must be placed close to the display area (within a few millimetres) for several seconds during which time the LEDs will indicate the read status (see LED status table below).

Contactless limits

You will be prompted to perform a Chip and PIN or Swipe transaction if the amount entered is not suitable for completion as a Contactless transaction.

Please refer to your Acquirer for further details.

Cardholder authentication

A contactless transaction will neither prompt for the cardholder's PIN nor signature. However, depending on previous contactless use on the card, it may prompt the terminal to revert to a Chip and PIN transaction for security purposes.

Contactless transactions supported

The following transactions are permissible with a contactless card:

- Sale
- Refund

If a transaction type not listed above is requested by a contactless card, the terminal will prompt for a Chip and PIN (or Swipe) transaction.

Receipts

A merchant receipt is printed with every contactless transaction, but the printing of a customer receipt is optional. The skipping of this step speeds up the transaction process further.

Presenting a contactless card *(cont.)*

Card reading status

Four LEDs are present above the display, providing feedback on the success of the operation.

Contactless status	LED 1	LED 2	LED 3	LED 4
NOT READY The reader is not ready to read a card. This can be caused by lack of power or failure in communicating with the terminal.	OFF	OFF	OFF	OFF
IDLE The reader has power, but is waiting for information from the terminal before being able to read contactless cards.	BLINKING	OFF	OFF	OFF
READY TO READ CARD The reader is ready to start the transaction and can read contactless cards.	ON	OFF	OFF	OFF
CARD READ SUCCESSFULLY STAGE 1 This indicates the first stage of card reading has been successful.	ON	ON	OFF	OFF
CARD READ SUCCESSFULLY STAGE 2 This indicates the second stage of card reading has been successful.	ON	ON	ON	OFF
CARD READ SUCCESSFULLY STAGE 3 This indicates the third stage of card reading has been successful.	OFF	OFF	OFF	OFF
CARD READ SUCCESSFULLY STAGE 4 All lights will turn off within a quarter of a second. This means the cardholder may remove their card.	OFF	OFF	OFF	OFF
CONTACTLESS CARD READING HAS NOT BEEN SATISFIED POSSIBLY CAUSED BY A problem with the contactless read process. The reason for this error will be displayed. The process has not satisfied all the criteria and the cardholder will be asked to insert the card in the chip reader to perform the transaction.	OFF	OFF	OFF	OFF

Typing in card numbers

Customer present

If the terminal cannot read the Chip or the magnetic stripe on the card, you can type in the long number on the front of the card. Once all the information has been entered and the transaction approved by the acquirer the terminal will ask for the cardholder to sign the merchant's copy of the receipt.

Please note: Signature verification is not as secure as Chip and PIN and you may incur charge-backs from your acquirer if you use it.

Customer *not* present

If the cardholder is not present (e.g. a mail order customer) you can also type in the long number on the front of the card.

If you select '**CANCEL**' by pressing the yellow '**CLEAR**' key when the terminal asks whether the cardholder is present, you will be asked to type in the 3 digit CVV2 code and address details.

A response will be given, at which point you can choose to accept or cancel the transaction (See *Appendix A* for transaction responses.)

Typing in amounts

When you or the cardholder are requested to enter an amount, it is entered in pence (or cents in ROI).

Example: Typing in 1000 would equate to a value
of £10.00 (€10.00 in ROI).

If a mistake is made, press the yellow '**CLEAR**' key to delete the last number entered.

Typing in other data

If a mistake is made entering any other data such as card number, expiry date, authorisation code, etc., the entire field can be deleted by pressing the yellow '**CLEAR**' key once.

Please note: Pressing the yellow '**CLEAR**' key twice will cancel the transaction.

Sale – Inserting a chip card

Step 1

When the terminal is ready to perform a Sale transaction it will show the Welcome screen.

You can start a Chip and PIN Sale transaction in one of two ways:

Option 1

Enter the Sale amount in pence (or cents in ROI) and press the green '**ENTER**' key.

Example: Typing in 1000 would equate to a value of £10.00 (€10.00 in ROI).

Please note: If a mistake is made entering data, the the last digit can be deleted by pressing the yellow '**CLEAR**' key.
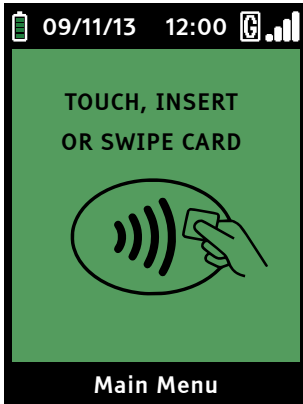
Insert the Chip Card into the terminal's Chip Card reader or PIN Pad (if fitted).

Sale – Inserting a chip card *(cont.)*

Option 2

Insert the Chip Card into the terminal's Chip Card reader or PIN Pad (if fitted). A Sale transaction will be initiated. Type in the Sale amount in pence (or cents for ROI) and press the green '**ENTER**' key.

Example: Typing in 1000 would equate to a value
of £10.00 (€10.00 in ROI).

Please note: If a mistake is made entering data, the entire field can be deleted by pressing the yellow '**CLEAR**' key once.

Step 2

The cardholder must type in his/her PIN (Personal Identification Number) on the terminal's keypad or the optional PIN Pad. After the PIN has been entered, the cardholder should press the green 'ENTER' key on the PIN entry device.

The terminal will now connect to your acquirer and display progress.

If the transaction is approved, the Approval Code will be displayed and the terminal will print the merchant's copy of the receipt.

(See *Appendix A* for possible transaction responses.)

09/11/13 12:00
TOTAL   £10.00
ENTER PIN
****
Pinpad

09/11/13 12:00
APPROVAL   123456
RESPONSE

Sale – Inserting a chip card *(cont.)*

09/11/13   12:00

PLEASE REMOVE CARD

SMART CARD

Step 3

Remove the card.

09/11/13   12:00

REMOVE MERCHANT COPY

Ok
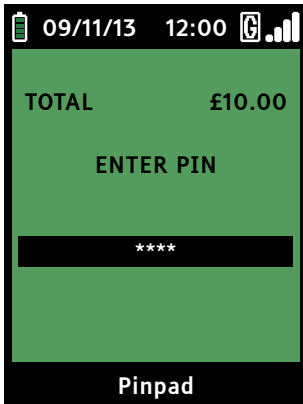
SMART CARD

Step 4

The terminal will then print the merchant's copy of the receipt. Then press the green '**ENTER**' key.

Step 5

The terminal will then print the customers copy of the receipt. Hand this receipt to the card holder and return their card. The transaction is now complete. The terminal will automatically return to the Welcome screen.

Example of sale receipts

Merchant's copy

```
    SPIRE PAYMENTS
        SALISBURY
         SP1 2UD

TERMINAL ID:        91234567
MERCHANT ID:        123000123
CREDITODEVISA
1234000012345678            ICC
PAN SEQ NO: 01
AID: A00000000123456
START 07/95 EXPIRY 12/20


SALE
AMOUNT              £10.00
        PIN VERIFIED

AUTH: 12345
DATE: 09/11/13 TIME: 12:00 TXN 1234
```

Merchant name, address

Transaction information
Terminal ID
Merchant ID
Card type
Card number (full) ICC signifies Chip Card used
Card sequence number
Card AID
Card start and end dates
Transaction type
Transaction Amount

Date and time
Transaction number
Verification method
Auth Code

Customer's copy

Card number truncated for security

Payment methods
ICC – Chip Card
SWIPED – Card was swiped
KEYED – Keyed entry

Customer's copy of receipt

```
    SPIRE PAYMENTS
        SALISBURY
         SP1 2UD

TERMINAL ID:        ****4567
MERCHANT ID:        ****00123
CREDITODEVISA
************5678             ICC
PAN SEQ NO: 01
AID: A00000000123456


SALE
AMOUNT              £10.00
    ***CUSTOMER COPY***
  PLEASE RETAIN FOR YOUR RECORDS
        PIN VERIFIED

AUTH: 12345
DATE: 09/11/13 TIME: 12:00
```
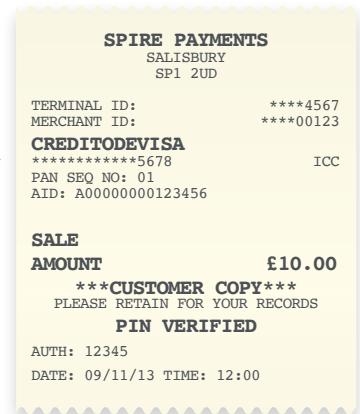
Sale – Swiping a card

If your terminal cannot read the Chip on the presented Chip Card (or one is not present) you may be given the option to swipe the card's magnetic stripe (located on the rear of the card).

Step 1

When the terminal is ready to perform a Sale transaction it will show the Welcome screen.

You can start a Sale transaction in one of two ways:

Option 1

Enter the Sale amount in pence (or cents in ROI) and press the green '**ENTER**' key.

Example: Typing in 1000 would equate to a value of £10.00 (€10.00 in ROI).

Please note: If a mistake is made entering data, the the last digit can be deleted by pressing the yellow '**CLEAR**' key.

09/11/13   12:00
ENTER AMOUNT **TO START PAYMENT**
£0.01
Cancel   Clear   Enter
Main Menu

09/11/13   12:00
TOUCH, INSERT **OR SWIPE CARD**
Main Menu
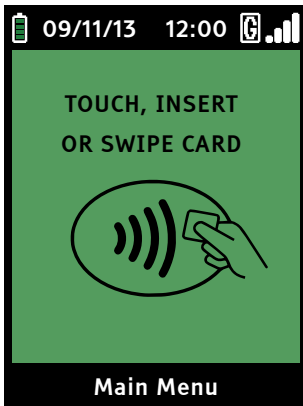
Swipe the card in the terminal's magnetic stripe reader (see *Transactions (cont.)* on page 38).

Sale – Swiping a card *(cont.)*

Option 2

Swipe the Card in the terminal's magnetic stripe reader (see page 38). A Sale transaction will be initi-
ated. Type in the Sale amount in pence (or cents for ROI) and press the green '**ENTER**' key.

Example: Typing in 1000 would equate to a value
of £10.00 (€10.00 in ROI).

Please note: If a mistake is made entering data, the the last digit can be deleted by pressing the
yellow '**CLEAR**' key.

09/11/13   12:00 🔋 📶

**ENTER LAST 4 No OF
CUSTOMER CARD**

3456

Cancel   ⬅   Enter

VISA   SALE

Step 2

You may be asked to enter the last 4 digits of the card number
for an additional security check. Enter the four digits and press
the green '**ENTER**' key.

The terminal will display the card type.

09/11/13   12:00 🔋 📶

REMOVE MERCHANT COPY

Ok
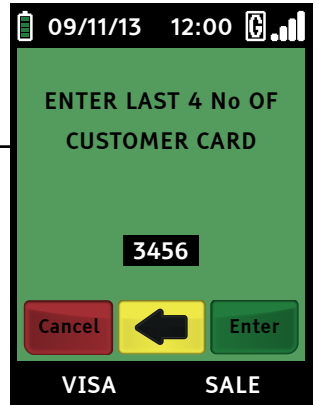
RECEIPT

Step 3

The terminal will now connect to your acquirer and display pro-
gress.

Once complete, the terminal will print the merchant's copy of
the receipt.

Tear off the receipt and press the green '**ENTER**' key. Ask the
cardholder to sign on the dotted line.

Sale – Swiping a card *(cont.)*

Step 4

Compare the cardholder's signature on the receipt to that on the rear of the card.

If you are happy with the signature comparison, select '**YES**' by pressing the green '**ENTER**' key. The transaction will be approved and a customer copy of the receipt will be printed. Go to step 5.

If you are not happy with the signature, select '**NO**' by pressing the yellow '**CLEAR**' key.

The terminal will print a merchant reversal receipt for the original transaction amount. Tear off and keep for your records. Press the green '**ENTER**' key.

```
 09/11/13    12:00

SIGNATURE
CORRECT?




              No    Yes
        SIGNATURE
```
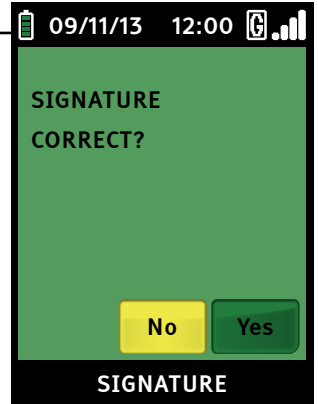
Step 5

Tear off the customer's copy and hand it to the cardholder along with his/her card. The transaction is now complete. The terminal will automatically return to the Transaction Menu.

Page 49

Example of sale receipts (swiped card)
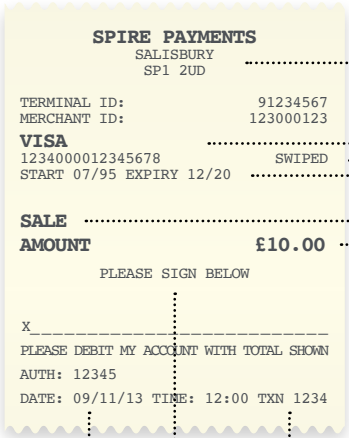
Merchant's copy

```
        SPIRE  PAYMENTS
             SALISBURY
              SP1 2UD

TERMINAL ID:            91234567
MERCHANT ID:            123000123
VISA
1234000012345678          SWIPED
START 07/95 EXPIRY 12/20

SALE
AMOUNT                    £10.00

        PLEASE SIGN BELOW


X_____
PLEASE DEBIT MY ACCOUNT WITH TOTAL SHOWN
AUTH: 12345
DATE: 09/11/13 TIME: 12:00 TXN 1234
```

Merchant name, address

Transaction information
Terminal ID
Merchant ID
Card type
Card number (full) SWIPED signifies swiped card
Card start and end dates
Transaction type
Transaction Amount

PLEASE SIGN BELOW

Auth Code
Date and time
Transaction number

Customer's copy

Card number truncated for security

Payment methods
ICC – Chip Card
SWIPED – Card was swiped
KEYED – Keyed entry

Customer's copy of receipt

```
        SPIRE  PAYMENTS
             SALISBURY
              SP1 2UD

TERMINAL ID:            ****4567
MERCHANT ID:            ****00123
VISA
************5678           SWIPED
SALE
AMOUNT                    £10.00

      ***CUSTOMER COPY***
    PLEASE RETAIN FOR YOUR RECORDS
     SIGNATURE  VERIFIED
AUTH: 12345
DATE: 09/11/13 TIME: 12:00
```

Sale – Presenting a contactless card

The terminal will offer contactless payment if:

- the terminal supports the functionality;

- the card supports the functionality;

- and the transaction amount is suitable.

Step 1

When the terminal is ready to perform a Sale transaction it will show the Welcome screen.

If the cardholder requests a contactless payment you must first enter the Sale amount in pence (or cents in ROI) and press the green '**ENTER**' key.

Example: Typing in 1000 would equate to a value of £10.00 (€10.00 in ROI).

Please note: If a mistake is made entering data, the the last digit can be deleted by pressing the yellow '**CLEAR**' key.
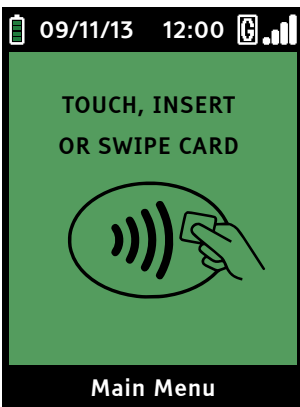
Ask the customer to place his/her card in close proximity to the terminal display (or PIN Pad display if fitted). The four LEDs at the top of the display will indicate a successful read (see page 40).

Once the card is successfully read, ask the cardholder to remove the card.

Sale – Presenting a contactless card *(cont.)*

Step 2

The terminal will now connect to your acquirer and display progress.

If the transaction is approved, the Approval Code will be displayed and the terminal will print the merchant's copy of the receipt.
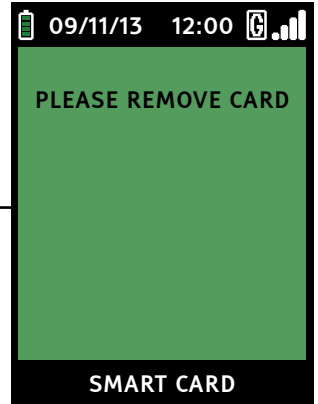
(See *Appendix A* for possible transaction responses.)

Step 3

The merchant's copy of the receipt will be printed.

Step 4

The terminal will automatically return to the 'ENTER AMOUNT' screen.

Step 5

If a customer requests a receipt, please refer to page page 75 of this user manual.

09/11/13   12:00

APPROVAL   123456

RESPONSE
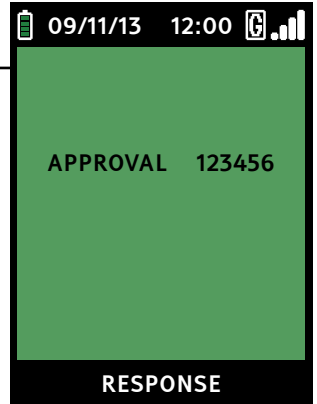
Example of sale receipts (presented contactless card)

The receipt is identical to the Chip Card Sale receipt, except '**CONTACT**' replaces '**ICC**', and '**VERIFIED BY PIN**' is removed.

Sale and cashback (inserting a chip card)

This is similar to a regular Sale transaction and, if enabled, replaces the standard Sale transaction described previously. There is a facility to enter an additional figure for Cashback.

Please note: This is a service that must be requested from your acquirer. Cashback is only allowed on Debit Cards, not Credit Cards.

Step 1

When the terminal is ready to perform a Sale and Cashback transaction it will show the Welcome screen.

You can start a Chip and PIN Sale and Cashback transaction in one of two ways:

Option 1

Enter the Sale amount in pence (or cents in ROI) and press the green '**ENTER**' key.

Example: Typing in 1000 would equate to a value of £10.00 (€10.00 in ROI).

Please note: If a mistake is made entering data, the the last digit can be deleted by pressing the yellow '**CLEAR**' key.

```
09/11/13   12:00

ENTER AMOUNT
TO START PAYMENT

£0.01

Cancel   Clear   Enter

Main Menu
```

```
09/11/13   12:00

TOUCH, INSERT
OR SWIPE CARD

Main Menu
```

This screen will be displayed

Page 53
Sale and cashback *(cont.)*

Insert the Chip Card into the terminal's Chip Card reader or PIN Pad (if fitted).

Option 2

Insert the Chip Card into the terminal's Chip Card reader or PIN Pad (if fitted). Type in the Sale amount in pence (or cents for ROI) and press the green '**ENTER**' key.

Example: Typing in 1000 would equate to a value of £10.00 (€10.00 in ROI).

Please note: If a mistake is made entering data, the the last digit can be deleted by pressing the yellow '**CLEAR**' key.

Step 2

Type in the Cash amount. If the cardholder decides he/she does not want Cashback at this stage of the transaction, do not enter an amount and press the green 'ENTER' key.

Example: Typing in 1000 would equate to a value of £10.00 (€10.00 in ROI).

Please note: If a mistake is made entering data, the the last digit can be deleted by pressing the yellow '**CLEAR**' key.

09/11/13 12:00
CASH BACK AMOUNT?
£20.00
Cancel Enter
CREDITODEVISA SALE

09/11/13 12:00
TOTAL £30.00
ENTER PIN
****
Pinpad

Step 3

You may be asked to confirm the amount, after which the cardholder must type in his/her PIN (Personal Identification Number) on the terminal keypad or the optional PIN Pad. After the PIN has been entered, the cardholder should press the green '**ENTER**' key.

The terminal will now attempt to connect to your acquirer and the rest of the transaction will continue in the same way as for a normal Chip and PIN sale.

Example of sale and cashback receipts

Merchant's copy

```
        SPIRE  PAYMENTS
            SALISBURY
             SP1 2UD

TERMINAL ID:           91234567
MERCHANT ID:           123000123
CREDITODEVISA
1234000012345678              ICC
PAN SEQ NO: 01
AID: A0000000012345
START 07/95 EXPIRY 12/20


SALE+CASH
SALE AMT                  £10.00
CASH BACK                 £20.00
TOTAL                     £30.00

        PIN VERIFIED
AUTH: 12345
DATE: 09/11/13 TIME: 12:00 TXN 1234
```

Merchant name, address

Transaction information
Terminal ID
Merchant ID
Card type
Card number (full) ICC signifies Chip Card used
Card sequence number
Card AID
Card start and end dates
Transaction type
Transaction Amount & Cashback Amount

Verification method

Date and time
Transaction number

Auth Code

Customer's copy

Card number truncated for security

Payment methods
ICC – Chip Card
SWIPED – Card was swiped
KEYED – Keyed entry

Customer's copy of receipt

```
        SPIRE  PAYMENTS
            SALISBURY
             SP1 2UD

TERMINAL ID:           ****4567
MERCHANT ID:           ****00123
CREDITODEVISA
************5678               ICC
PAN SEQ NO: 01
AID: A0000000012345


SALE+CASH
SALE AMT                  £10.00
CASH BACK                 £20.00
TOTAL                     £30.00

     ***CUSTOMER COPY***
  PLEASE RETAIN FOR YOUR RECORDS
        PIN VERIFIED
AUTH: 12345
DATE: 09/11/13 TIME: 12:00
```

Sale and tip – Inserting a chip card

This is much the same as a regular Sale transaction but with the added ability of including a tip in addition to the transaction amount.

Please note: This is a service that must be requested from your acquirer. When activated, tipping will be set by default for all Sale transactions.

Step 1

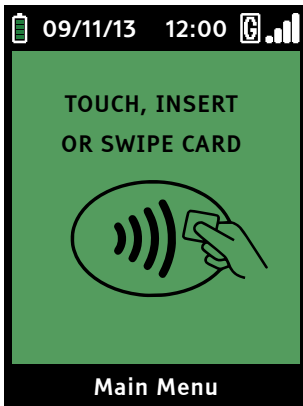When the terminal is ready to perform a Sale and Tip transaction it will display the Welcome screen.

You can start a Chip and PIN Sale and Tip transaction in one of two ways:

Option 1

Enter the Sale amount in pence (or cents in ROI) and press the green '**ENTER**' key.

Example: Typing in 1000 would equate to a value of £10.00 (€10.00 in ROI).

Please note: If a mistake is made entering data, the the last digit can be deleted by pressing the yellow '**CLEAR**' key.

```
┌─────────────────────────────┐
│ 🔋 09/11/13   12:00  G ▂▃▅   │
│                             │
│      ENTER AMOUNT           │
│    TO START PAYMENT         │
│                             │
│                             │
│         £0.01               │
│                             │
│  Cancel   Clear   Enter     │
│                             │
│        Main Menu            │
└─────────────────────────────┘
```

```
┌─────────────────────────────┐
│ 🔋 09/11/13   12:00  G ▂▃▅   │
│                             │
│      BASE AMOUNT            │
│                             │
│                             │
│                £100.00      │
│                             │
│  Cancel    ◄───   Enter     │
│                             │
│   VISA          SALE        │
└─────────────────────────────┘
```
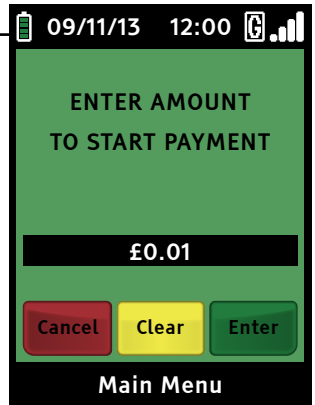
Option 2

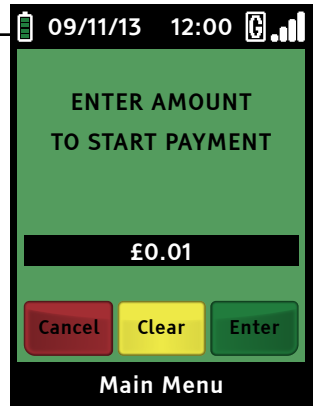Insert the Chip Card into the terminal's Chip Card reader or PIN Pad (if fitted). Type in the base amount in pence (or cents for ROI) and press the green '*ENTER*' key.

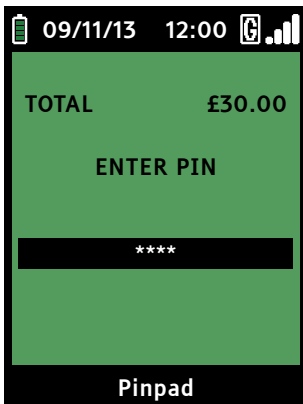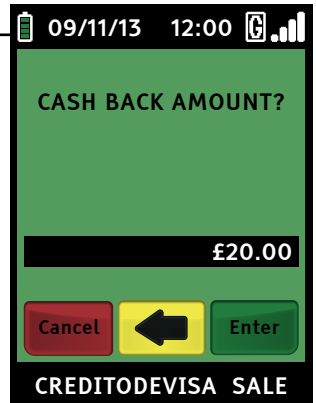*Example:* Typing in 1000 would equate to a value of £10.00 (€10.00 in ROI).

Please note: If a mistake is made entering data, the the last digit can be deleted by pressing the yellow '**CLEAR**' key.

Sale and tip – Inserting a chip card *(cont.)*

Step 2

Ask the cardholder if they wish to enter a tip. If the answer is yes, select '**YES**' by pressing the green '**ENTER**' key. If the answer is no, select '**NO**' by pressing the red '**CANCEL**' key.

If the cardholder chooses '**YES**' by pressing the green '**ENTER**' key. Type in the base amount in pence (or cents for ROI) and press the green '**ENTER**' key.

```
09/11/13   12:00  [G].ıl

BASE AMOUNT £100.00
DO YOU WISH TO
ENTER A TIP?


   No              Yes
           SALE
```

```
09/11/13   12:00  [G].ıl

     BASE AMOUNT
       £100.00
     TIP AMOUNT

                 £10.00
 Cancel    ⬅     Enter
           SALE
```

Example: Typing in 1000 would equate to a value of £10.00 (€10.00 in ROI).

Please note: If a mistake is made entering data, the the last digit can be deleted by pressing the yellow '**CLEAR**' key.

Step 3

The cardholder is requested to confirm the tip amount.

```
09/11/13   12:00  [G].ıl

TIP AMOUNT     £10.00
CORRECT?




           No      Yes
   VISA          SALE
```

Sale and tip – Inserting a chip card *(cont.)*

09/11/13   12:00   🅖 .ııl

TOTAL   £110.00
CORRECT?

No   Yes

VISA   SALE

Step 4

The cardholder should confirm the total value of the transaction, by selecting '**YES**' by pressing the green '**ENTER**' key'.

09/11/13   12:00   🅖 .ııl

SWIPE/INSERT CARD

SALE
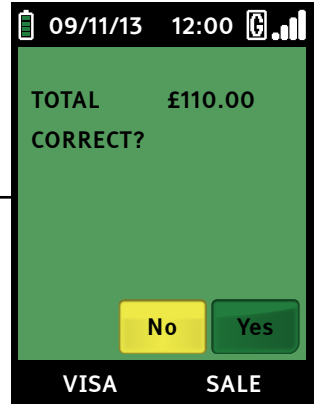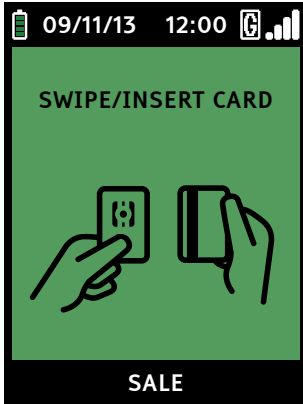
Step 5

If the transaction was started by inserting or swiping the card (Option 2), then go to Step 6. Otherwise you will be requested to insert or swipe the card.

Insert the Chip Card into the terminal's Chip Card reader or PIN Pad (if fitted).

Step 6

The cardholder will be prompted for his/her PIN on the terminal or the optional PIN Pad. After the PIN has been entered, the cardholder should press the green 'ENTER' key. The terminal will now attempt to connect to your acquirer and the rest of the transaction will continue in the same way as for a normal Chip and PIN sale.

Example of sale and tip receipts

```
        SPIRE PAYMENTS
            SALISBURY
            SP1 2UD

TERMINAL ID:          91234567
MERCHANT ID:          123000123
CREDITODEVISA
1234000012345678          ICC
PAN SEQ NO: 01
AID: A0000000012345
START 07/95 EXPIRY 12/20


SALE
BASE                     £100.00
TIP                       £10.00
TOTAL                    £110.00

        PIN VERIFIED
AUTH: 12345
DATE: 09/11/13 TIME: 12:00 TXN 1234
```

Merchant's copy

Merchant name, address

Transaction information
Terminal ID
Merchant ID
Card type
Card number (full) ICC signifies Chip Card used
Card sequence number
Card AID
Card start and end dates
Transaction type
Transaction Amount & Tip Amount
Total Amount

Verification method

Date and time
Transaction number

Auth Code

Customer's copy

Card number truncated for security

Payment methods
ICC – Chip Card
SWIPED – Card was swiped
KEYED – Keyed entry

Customer's copy of receipt

```
        SPIRE PAYMENTS
            SALISBURY
            SP1 2UD

TERMINAL ID:          ****4567
MERCHANT ID:          ****00123
CREDITODEVISA
************5678           ICC
PAN SEQ NO: 01
AID: A0000000012345


SALE
SALE AMT                 £100.00
CASH BACK                 £10.00
TOTAL                    £110.00

    ***CUSTOMER COPY***
  PLEASE RETAIN FOR YOUR RECORDS
        PIN VERIFIED
AUTH: 12345
DATE: 09/11/13 TIME: 12:00
```

Page 59
Forced authorisation

Force Authorisation is a transaction type that may be available on your terminal if permitted by your bank. This transaction type allows you to capture and submit transactions that have previously been authorised using paper vouchers. You can capture both Sale and Refund paper voucher transactions. Force Authorisation must only be used if the transaction has already been authorised on a paper voucher, and you must continue to keep the original paper voucher for the period specified by your bank.

Step 1

Select the '**FORCE**' transaction type from the menu system. Next select either '**SALE**' or '**REFUND**' from the same screen depending on the Force Authorisation you require.

You may be asked to enter your Merchant Password.

09/11/13   12:00

INSERT OR SWIPE CARD

ENTER AMOUNT

AMOUNT   £100.00

PRE AUTH

09/11/13   12:00

ENTER AMOUNT

£10.00

Cancel   ←   Enter

VISA   SALE
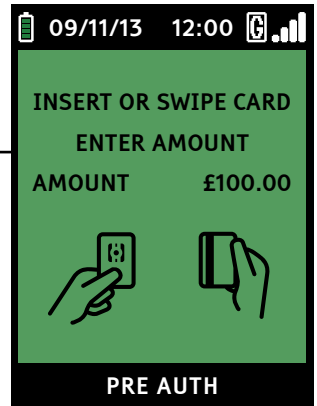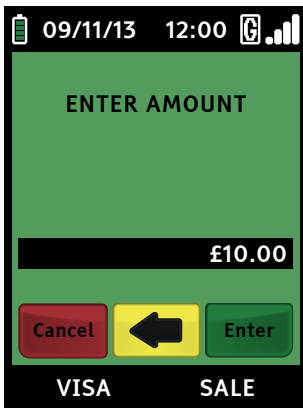
Step 2

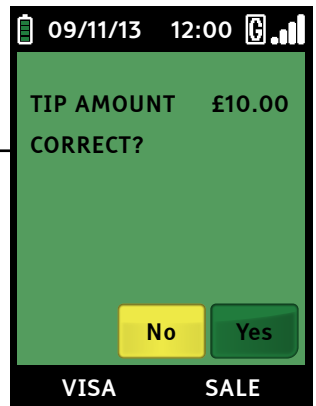Please enter the original transaction amount.

Example: Typing in 100 would equate to a value of £1.00 (€1.00 in ROI).

Please note: If a mistake is made entering data, the the last digit can be deleted by pressing the yellow '**CLEAR**' key.

Step 3

The terminal will then prompt for the entry of data from the paper authorisation receipt, including card number, expiry date (this is not checked by the terminal as the transaction may have occurred in the past), card issue number, authorisation code, and whether the cardholder was present or not at the time of the original transaction. You will not be asked for Cardholder Security (CSC) data or Address Verification (AVS) data, since the cardholder will no longer be available to supply this information when capturing data from a paper voucher (please note you must under no circumstances write down the CSC or AVS data as this is a breach of Data Security Standard requirements.

Forced authorisation *(cont.)*

Step 4

The terminal will print out a merchant copy receipt acknowledging the capture of the data. Keep with the original paper voucher for your records. The transaction data will be submitted by the terminal when it next goes online to the acquirer.

Example of forced sale receipts

Merchant's copy

```
        SPIRE  PAYMENTS
            SALISBURY
            SP1 2UD

TERMINAL ID:            91234567
MERCHANT ID:           123000123
VISA
1234000012345678          KEYED
FORCED AUTH
AMOUNT                    £10.00

    CUSTOMER NOT PRESENT
                            :52
AUTH: 12345
DATE: 09/11/13 TIME: 12:00 TXN 1234
```

Merchant name, address

Transaction information
Terminal ID
Merchant ID
Card type
Card number (full)
Transaction type
Transaction Amount

Verification method

Date and time
Transaction number

Auth Code

Merchant's copy of receipt

Hotel and rental operations

The SP family of terminals allow transaction types for use in the hotel industry. These transaction types are also relevant for other merchant categories such as car rentals.

The transaction is performed in two parts: a 'Pre-Authorisation' and a confirming 'Completion'.

Hotel and Rental configuration, Express Check-Out feature (that allows Customer Not Present check-out) and Tipping features are not available unless requested and agreed with your bank.

Pre-authorisation – Check-in

The Pre-Authorisation is performed during check-in. The final bill is estimated and the cardholder's account checked for sufficient funds. The estimated amount is reserved in, but not taken from, his/her bank. The funds are eventually taken using a Completion transaction when the cardholder settles his/her bill on check-out. There are, of course, other situations where these transactions would be useful.

A Pre-Authorisation transaction must be completed within a set amount of time. If not completed within this period it will become invalid and reallocated funds will return to the cardholder's account. Your bank can advise you on this time limit.

The value of the Completion must also be within a specified range of the original Pre-Authorisation (not dramatically different). Your bank can advise on the upper and lower variances allowable.

Step 1

Select the '**PRE-AUTH**' transaction type from either the Transaction Menu or the '**TRANS**' option of the Terminal and Reports Menu. The exact location will be dependent on your terminal's configuration.

Type in the Pre-Authorisation amount in pence (or cents for ROI) and press the green '**ENTER**' key.

Example: Typing in 10000 would equate to a value of £100.00 (€100.00 in ROI).

Please note: If a mistake is made entering data, the the last digit can be deleted by pressing the yellow '**CLEAR**' key.
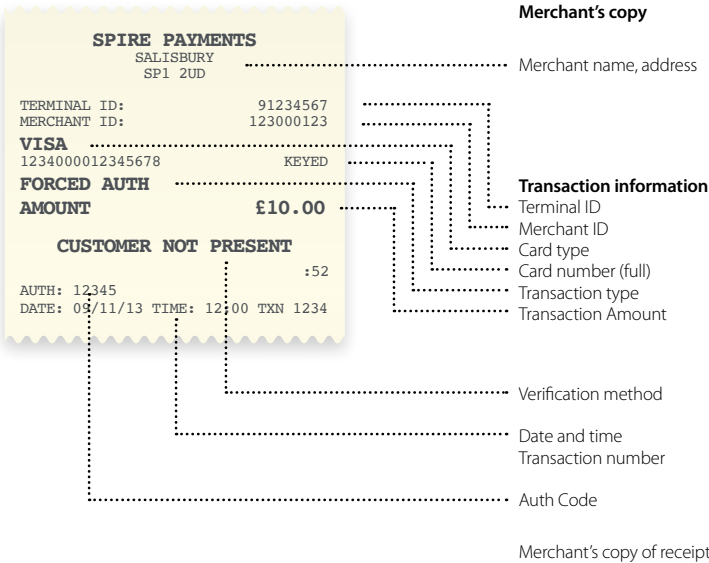
09/11/13 12:00

ENTER AMOUNT

£100.00

Cancel | ← | Enter

VISA   PRE AUTH
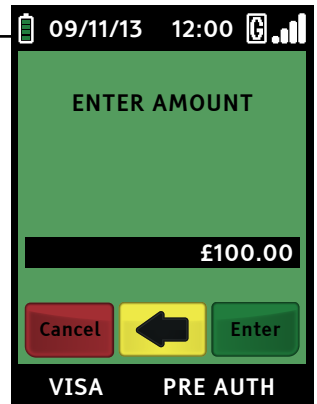
Step 2

The terminal will prompt for the cardholder's card to be inserted or swiped. The transaction will continue in the same way as a normal Chip and PIN Sale.

Merchant's copy

Auth Code

```
           SPIRE PAYMENTS
              SALISBURY
               SP1 2UD

TERMINAL ID:              91234567
MERCHANT ID:             123000123
CREDITODEVISA
1234000012345678               ICC
PAN SEQ NO: 01
AID: A0000000012345
START 07/95 EXPIRY 12/20


AUTHORISATION ONLY
AMOUNT                    £100.00

        PIN VERIFIED
AUTH: 12345
DATE: 09/11/13 TIME: 12:00 TXN 1234
```

IMPORTANT:
The merchant receipt must be kept in a safe place as you will need to refer to the 'AUTH' number when performing the Completion transaction.

If the estimated amount used for the Pre-Authorisation is no longer adequate to cover the estimated final bill, incremental authorisation should be performed, e.g. for an extended stay. This may be required if the Pre-Authorisation expires (your bank must advise on how long Pre-Authorisations remain valid). An incremental Pre-Authorisation is performed in exactly the same way as a Pre-Authorisation above.

Completion – Check-out

A Completion transaction is performed at the end of a stay to debit funds from the card holder. For a rental environment, this will be when the vehicle is returned. In order to perform a Completion transaction, a Pre-Authorisation must have been previously performed using the same card. You will need the authorisation code from the most recent Pre-Authorisation receipt relating to this transaction. You do not need to use the same payment terminal as was used for the Pre-Authorisation.

Step 1

Select the '**Completion**' transaction type from either the Transaction Menu or the '**TRANS**' option of the Terminal and Reports Menu. The exact location will be dependent on your terminal's configuration.

Insert the Chip Card into the terminal's Chip Card reader or PIN Pad (if fitted)

OR

Type in the card number. If the card number is keyed the terminal will prompt '**Customer Present**'. For an Express Check-Out select '**NO**' by pressing the red '**CANCEL**' key, otherwise select '**YES**' by pressing the green '**ENTER**' key.

Step 2

Type in the Pre-Authorisation amount in pence (or cents for ROI) and press the green '**ENTER**' key.

 If you performed incremental Pre-Authorisations, then you must enter the total value of all Pre-Authorisations on this card.

Example: Typing in 1000 would equate to a value of £10.00 (€10.00 in ROI).

Please note: If a mistake is made entering data, the the last digit can be deleted by pressing the yellow '**CLEAR**' key.

09/11/13   12:00
PRE-AUTH AMOUNT
£100.00
Cancel ← Enter

Completion – Check-out *(cont.)*

Step 3

Type in the Completion amount in pence (or cents for ROI) and press the green '**ENTER**' key.

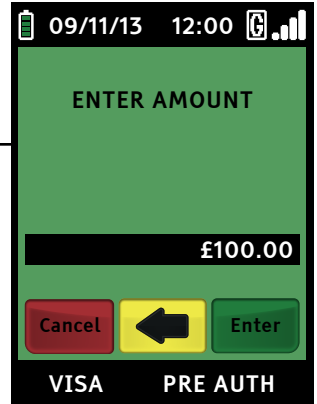*Example:*   Typing in 1000 would equate to a value of £10.00 (€10.00 in ROI).

Please note: If a mistake is made entering data, the the last digit can be deleted by pressing the yellow '**CLEAR**' key.

Step 4

Completion amount confirmation is requested by pressing the green '**ENTER**' key.
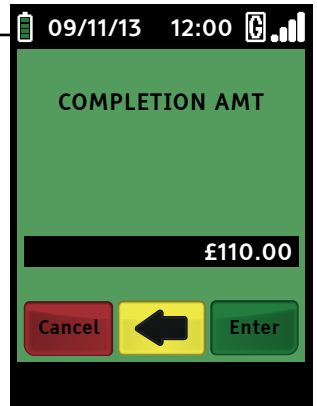
Step 5

Refer to the receipt for the latest Pre-Authorisation on this card and note the '**AUTH**' code printed near the bottom. Key this '**AUTH**' code and press the green '**ENTER**' key. The terminal will now connect to your acquirer and display progress.

If the transaction is approved, the Approval Code will then be displayed and the terminal will print the merchant's copy of the receipt.

(See Appendix A for possible transaction responses.)
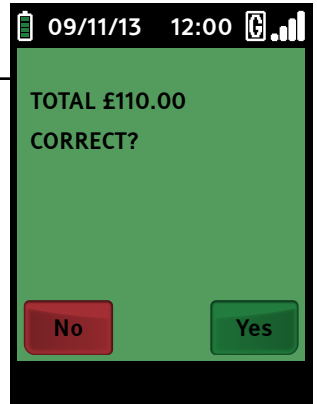
Completion – Check-out *(cont.)*

Step 6

Remove the card and the merchant's copy of the receipt and press the green 'ENTER' key. The terminal will then print the customer's copy of the receipt.

Step 7

Tear off the customer's copy and hand it to the cardholder. For an Express Check Out or No-Show, you must mail this to the cardholder.

Express Check-out

Express Check-Out is performed in the same way as a normal Completion transaction documented above, selecting No at the Customer Present prompt.

Note: You will require agreement from your leasing company to perform Express Check-Out transactions.

Additional Charge after Check-Out and No-Show

Any additional charges identified after Check-Out or charges arising from a No-Show situation should be processed as separate card not present Sale transactions.

Tipping

It is possible to activate tipping at Check-Out. In this case the terminal will prompt for a Base Amount then a Tip Amount before confirming the transaction. Please contact your leasing company if you require the tipping feature. An example transaction is as follows:

A hotel charges £100 per night for a room. A customer arrives at the hotel and indicates that they will be staying for five nights. A Pre-Authorisation is performed for £500.

Before checkout the customer indicates that they will be staying for an additional two nights. Because this is a significant portion of the original bill the hotel chooses to perform a top-up authorisation. This is for £200 for the extra two nights.

Whilst at the hotel the customer spends £10 in the bar each night bringing the total bill to £770.

The Completion transaction is performed with the Pre-Authorisation amount of £700 (the sum total of the previous authorisations) and the authorisation code from the second Pre-Authorisation. The final amount entered for the transaction is £770.

Page 66
Sale transaction – Customer not present (keyed)

This method is used for taking transactions when the cardholder is not next to the terminal – a telephone order, for example.

Please note: Some of the screens which ask for information are dependent on your terminal's configuration. If a screen is absent, simply skip to the next step.

Step 1

When the terminal is ready to perform a keyed Sale transaction it will show the Welcome screen. Enter the Sale amount in pence (or cents in ROI) and press the green '**ENTER**' key.

Example: Typing in 1000 would equate to a value of £10.00 (€10.00 in ROI).

Please note: If a mistake is made entering data, the the last digit can be deleted by pressing the yellow '**CLEAR**' key.

```
09/11/13   12:00

ENTER AMOUNT
TO START PAYMENT


£0.01

Cancel    Clear    Enter
Main Menu
```

```
09/11/13   12:00

ENTER CARD NUMBER



12345678901234

Cancel         Enter
SALE
```

Step 2

Carefully type in the long number on the front of the card. As you type you will notice the message changes from '**SWIPE/ INSERT CARD**' to '**ENTER CARD NUMBER**', as the number begins to appear in the box on the screen. Once the number has been typed in correctly, press the green '**ENTER**' key. You may also be asked to enter the expiry date of the card.

Please note: If a mistake is made entering data, the the last digit can be deleted by pressing the yellow '**CLEAR**' key.

Sale transaction *(cont.)*

09/11/13   12:00

CARD PRESENT?

No   **Yes**

VISA   **SALE**

Step 3

Since the cardholder (and card) is not present, select '**NO**' by pressing the yellow '**CLEAR**' key.

09/11/13   12:00

CVV2 FROM CARD

170

Cancel   **Enter**

VISA   **SALE**

Step 4

If prompted, ask the cardholder for the 3 digit CVV2 code (security code) on the back of the card and press the green '**ENTER**' key.

For an American Express card enter the 4 digit code printed on the front of the card.

Please note: If a mistake is made entering data, the the last digit can be deleted by pressing the yellow '**CLEAR**' key.

09/11/13   12:00

ENTER POST CODE

(NUMERICS ONLY)

126

Cancel   **Enter**

VISA   **SALE**

Step 5

If prompted, enter the number contained within the cardholder's postcode and press the green '**ENTER**' key.

Example: If the customer's postcode is SP12 6UD, enter '126'.

Please note: If a mistake is made entering data, the the last digit can be deleted by pressing the yellow '**CLEAR**' key.

Sale transaction *(cont.)*

Step 6

If prompted enter the numbers from the cardholder's first line of his/her address and press the green '**ENTER**' key.

Example: If the first line of the customer's address is 159 Baker Street, enter '**159**'.

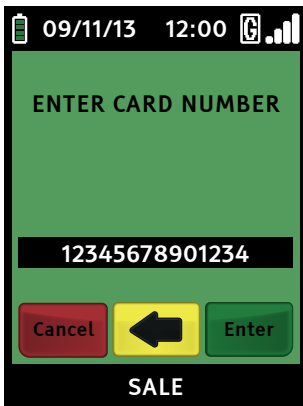**Please note:**   If a mistake is made entering data, the the last digit can be deleted by pressing the yellow '**CLEAR**' key.

The terminal will now connect to your acquirer. After the terminal connects, it will display the response from your acquirer.

Step 7

The transaction will now continue as with a normal Sale transaction, but the PIN entry phase will be skipped. You will receive a response from the acquirer informing you whether the address and post-code entered are correct. You must decide if you are happy to continue with the transaction.

If you select '**NO**' by pressing the yellow '**CLEAR**' key the terminal will print out the Reversal copy of the receipt and connect to your acquirer to reverse the transaction. If you select '**YES**' by pressing the green '**ENTER**' key, the transaction will complete.

Example of sale receipt (Customer not present – keyed)

The receipts will have the same information as a swiped card, except the dotted line and declaration will be replaced by the text '**CUSTOMER NOT PRESENT**'.

Refund – Inserting a chip card

A Refund transaction should only be performed if an End of Day Banking/Settlement has been completed subsequent to the original transaction that needs to be refunded.

Step 1

Select the '**REFUND**' transaction type from either the Transaction Menu or the '**TRANS**' option of the Terminal and Reports Menu. The exact location will be dependent on your terminal's configuration.

```
 09/11/13   12:00

 1    SALE

 2    REFUND

 3    FORCE

              TRANS
```

Step 2

```
 09/11/13   12:00

   ENTER AMOUNT

                £10.00

 Cancel   ◀   Enter

          REFUND
```
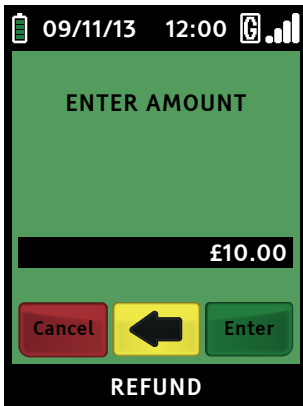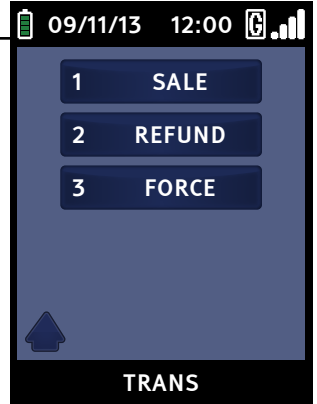
Enter the Refund amount in pence (or cents in ROI) and press the green '**ENTER**' key.

Example: Typing in 1000 would equate to a value of £10.00 (€10.00 in ROI).

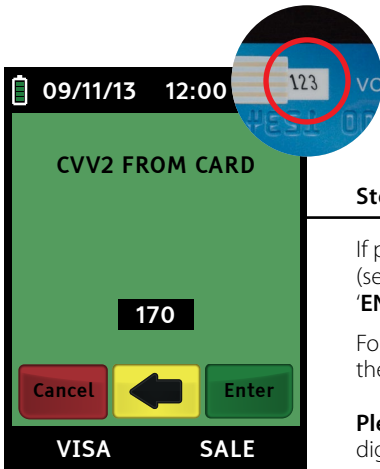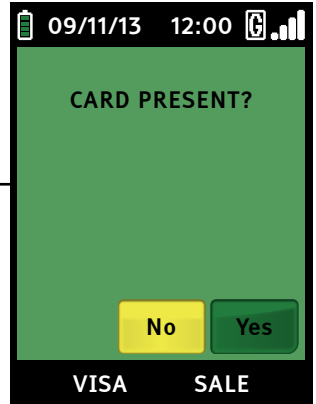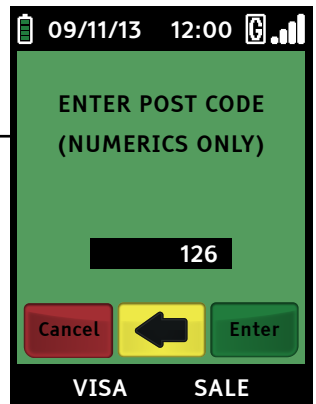**Please note:** If a mistake is made entering data, the the last digit can be deleted by pressing the yellow '**CLEAR**' key.

Insert the Chip Card into the terminal's Chip Card reader or PIN Pad (if fitted).

Step 3

The transaction will now complete as per a normal transaction, but the PIN entry phase will be skipped.

```
 09/11/13   12:00

  TOUCH, INSERT
  OR SWIPE CARD


     Main Menu
```
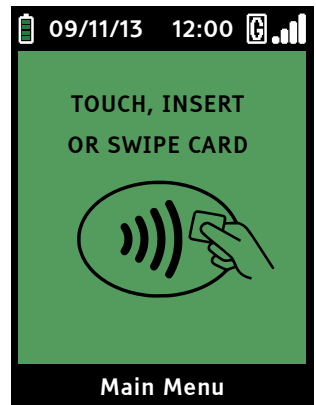
Example of refund receipt

Merchant's copy

```
      SPIRE PAYMENTS
          SALISBURY
           SP1 2UD

TERMINAL ID:          91234567
MERCHANT ID:         123000123
VISA
1234000012345678           ICC
PAN SEQ NO: 01
EXPIRY 12/20


REFUND
AMOUNT             −£10.00

      PLEASE SIGN BELOW


X_____
PLEASE CREDIT MY ACCOUNT WITH TOTAL SHOWN
                             :73

REFUND ACCEPTED
DATE: 09/11/13 TIME: 12:00 TXN 1234
```

Merchant name, address

Transaction information

Terminal ID
Merchant ID
Card type
Card number (full), ICC signifies inserted card
Sequence number
Expiry date
Transaction type
Transaction Amount

PLEASE SIGN BELOW
REFUND ACCEPTED

Date and time
Transaction number

Customer's copy

Card number truncated for security

Payment methods
ICC – Chip Card
SWIPED – Card was swiped
KEYED – Keyed entry

Customer's copy of receipt

```
      SPIRE PAYMENTS
          SALISBURY
           SP1 2UD

TERMINAL ID:          ****4567
MERCHANT ID:         ****00123
CREDITODEVISA
************5678            ICC
PAN SEQ NO: 01
REFUND
AMOUNT             −£10.00

      ***CUSTOMER COPY***
    PLEASE RETAIN FOR YOUR RECORDS
      SIGNITURE VERIFIED
REFUND ACCEPTED
DATE: 09/11/13 TIME: 12:00
```

Settlement

At the end of a business day, the Settlement procedure must be performed on the terminal unless set to automatically settle at a particular time of day (if you are unsure whether your terminal settles automatically, please contact your helpdesk). Automatic Settlement is not usually permitted.

For the totals to display correctly, this must be done during the 'Banking Window' time set by your Acquirer. During a Settlement, the terminal will connect to your acquirer(s) and ensure that all transactions processed have been received.

The terminal may contain stored transactions for a number of reasons such as low-risk and contactless transactions. If any transactions are stored in the terminal, a successful Settlement will automatically send them to your acquirer(s).

Procedure

Step 1

Ensure the terminal is at the Welcome screen and press the 'MAIN MENU' key to display the Reports and Terminal Menu. Select 'BATCH' and then select 'SETTLE'.

Step 2

You may be requested to enter the Merchant Password.

Step 3

If your terminal is configured with multiple Acquirers, select the Acquirer you want to settle. However, the selection of 'ALL HOSTS' is recommended. The terminal will connect to the selected Acquirer(s) and print out the Settlement report. The Settlement totals will be reset to zero once this process is complete.

If you do not complete this procedure, it may result in your terminal failing to automatically update and may expose you to the risk of charge-backs.

Responses

Totals Agree

Everything was received by your Acquirer(s) and the totals in the terminal match their totals.

Totals disagree

There has been a discrepancy in the total value of the transactions that the Acquirer has and those in the terminal (i.e. the totals are out of balance).

The terminal will print the error code '73' on the receipt of each transaction after the discrepancy occurred. This will require you to review the receipt for that day's transactions to find the one that caused the error. Once discovered you can contact the Acquirer to rectify the situation.

Please note: Manual program updates will reset the totals and may cause this response.

Totals unconfirmed

The terminal was unable to connect to your Acquirer(s) (See page 81 for help with troubleshooting communication problems or call the helpdesk).

Cannot confirm

The terminal was unable to connect to your Acquirer(s). This is only displayed when the terminal has previously attempted a Settlement that had a Totals Unconfirmed response.

Please note: If you are unsure of any aspect relating to the Settlement procedure, please contact your Acquirer or the helpdesk.

Example of settlement receipt

```
09 NOV 13                    12:00
            Z TOTALS
        SPIRE PAYMENTS
            SALISBURY
             SP1 2UD

TERMINAL ID:            91234567
...........................
STREAMLINE
MERCHANT ID:           123000123

TOTALS AGREED
TXN 1234                      :76

VISA
CURRENT
         2              VOID
         2              DECLINED
        80         £1905.32 DR
         2            £75.00 CR
TOTAL          £1830.32 DR


CURRENT TOTAL S1
FOR TXNS 0001-0109
        80         £1905.32 DR
         2            £75.00 CR
TOTAL          £1830.32 DR
```
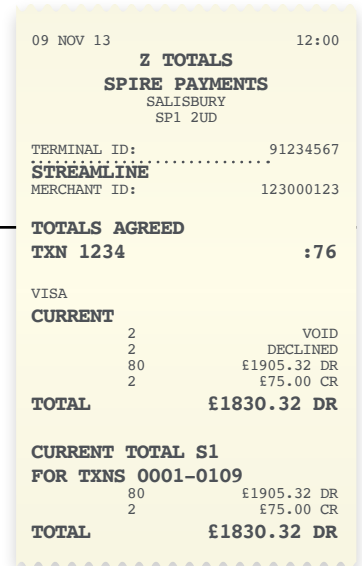
Reports

There are a number of different reports that can be produced by the terminal, each with a different purpose. To access the reports menu press the '**MAIN MENU**' button and select '**REPORTS**'.

Please note: The reports in this section are for optional usage and only designed to help you keep track of your orders and accounts. These reports are not a substitute for the Settlement procedure.

The Merchant password (default '0000') may be requested prior to running these reports.

For compliance with the PCI Data Security Standard, you must contact the helpdesk to access Full View reports. Full View reports may not be available on your terminal.

X Totals

This is a running report that can be printed off at any point in time during the day. It displays the total number and total value of transactions performed for each Acquirer since the last Z Report was performed. This report DOES NOT reset the totals.

```
09 NOV 13              12:00
          X TOTALS
      SPIRE PAYMENTS
         SALISBURY
          SP1 2UD
TERMINAL ID:         91234567
...............................
STREAMLINE
MERCHANT ID:        123000123

VISA
        2        £111.00 DR
        2         £20.00 CR
TOTAL            £91.00 DR
SUBTOTAL
FOR TXNS 0002-0011
        2        £111.00 DR
        2         £20.00 CR
TOTAL            £91.00 DR
.....................................
GRAND TOTALS
        2        £111.00 DR
        2         £20.00 CR
TOTAL            £91.00 DR
.............................
TOTALS NOT RESET
```

```
09 NOV 13              12:00
          Z TOTALS
      SPIRE PAYMENTS
         SALISBURY
          SP1 2UD
TERMINAL ID:         91234567
...............................
STREAMLINE
MERCHANT ID:        123000123

VISA
        2        £111.00 DR
        2         £20.00 CR
TOTAL            £91.00 DR
SUBTOTAL
FOR TXNS 0002-0011
        2        £111.00 DR
        2         £20.00 CR
TOTAL            £91.00 DR
.....................................
GRAND TOTALS
        2        £111.00 DR
        2         £20.00 CR
TOTAL            £91.00 DR
.............................
TOTALS RESET
```

Z Totals

This report can be done at the end of each business day or working week. It performs the same function as an X Totals Reports but then resets the reports totals in the terminal back to zero

Page 74
Reports *(cont.)*

Audit

Performing an Audit on the terminal will print out a report of each transaction that has been put through the terminal since the last Settlement. This can be used in the unlikely event of a Settlement error, allowing you to check transactions in the terminal's batch against the Merchant copies of the receipts. There are two versions of this report: Limited View and Full View. Both views show transaction type, card type, and amount. Limited View reports show only the last four digits of each card number. Full View reports show the full card number.

Please note: For compliance with the PCI Data Security Standard, you must contact the helpdesk to access Full View.

```
        SPIRE PAYMENTS
           SALISBURY
            SP1 2UD

TERMINAL ID:              91234567
AUDIT REPORT             09 NOV 13
000001                  010003382
STREAMLINE

INV# TRANS                    AUTH
CARD NUMBER              CARD TYPE
                            TOTAL

360464 SALE                  01024
*************0010               VIS
                             £1.00

360467 COMPLETION            00042
*************0010               VIS
                           £110.00

360472 REFUND                10106
*************0010              *VIS
                           -£10.00

360473 REFUND                10114
*************0010              *VIS
                           -£10.00

        SPIRE PAYMENTS
           SALISBURY
            SP1 2UD

TERMINAL ID:          123000123456

TRANS TOTAL
BY ISSUER               09 NOV 13

VISA
SALES       2             £111.00
REFUNDS     2             -£20.00
TOTAL       4              £91.00
```

Summary

Performing a Summary on the terminal will print out a report of the amount and totals of each type of transaction performed for each Acquirer.

Reprint

This allows you to quickly reprint a copy of the last transaction receipt. There are two versions of a reprinted receipt: Limited View and Full View. Limited View shows only the last four digits of each card number. Full View shows the full card number.

Reviewing transactions/reprinting a receipt

The SP family of terminals maintain a Batch record of all transaction information since the last successful Settlement was performed. It is possible to review the Batch, find the appropriate transaction and, if required, reprint the receipt.

There are two versions of this feature: Limited View and Full View

- Limited View shows only the last four digits of each card number.
- Full View shows the full card number.

Please note: For compliance with the PCI Data Security Standard, you must contact the helpdesk to access Full View reports. Full View reports may not be available on your terminal.

Step 1

Press the '**MAIN MENU'** key, select '**BATCH**' from the Report and Terminal menu and then select 'REVIEW'. Select '**LIMITED VIEW**'.
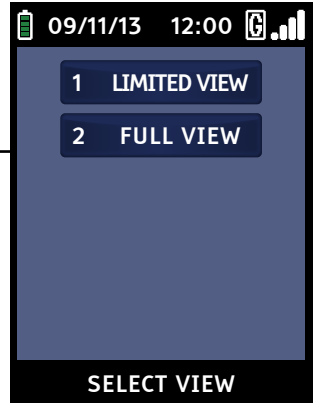
Step 2

The last transaction performed will be displayed. You have the option to scroll through the available transactions using the '**ARROW**' keys. A typical transaction summary is shown to the left:

Please note: The duplicate copy will only show the last four digits of the card number in Limited View mode. To access Full View, please contact the helpdesk.

Troubleshooting
Error messages

(When inserting, swiping a card or keying in the card number)

When a Chip Card is inserted, swiped or the long card number is typed in, the terminal will check against a number of parameters downloaded from the Spire Payments system. If the terminal rejects the card it will display one of the following messages:

ACQUIRER DISABLED	The terminal has become logged off from your acquirers. Please contact the helpdesk to have your terminal logged on again.
CARD ERROR	The magnetic stripe could not be read when the card was swiped. Check that it was swiped the correct way round and try again, or try a different card. *If problems persist, please contact the helpdesk.*
PLEASE REMOVE CARD	The chip could not be read when the card was inserted. Check that it was inserted the correct way round or try an alternative. *If problems persist, please contact the helpdesk.*
EXPIRED CARD	The card inserted is past its expiration date or the date on the terminal is incorrect.
INVALID CARD	The check digit (last digit) of the card number entered is incorrect. Double check you have the correct number and try re-typing carefully.
MAN ENT NOT ALLOWED	Typing in the number of this type of card is not allowed by the Card Issuer. You must only insert or swipe it.
SETTLEMENT REQUIRED	*If the Settlement procedure is not completed on a regular basis, the terminal's batch record of totals will become full. The Settlement procedure must be performed before you can resume taking transactions.* *(See page 71 for more information)*
STORE FULL	The terminal stores offline authorised transactions until it next successfully connects to your acquirer. To prevent delays in funds reaching your bank account, the terminal will only store a limited number of transactions before displaying this message. *Please complete a settlement. (See page 71 for more information.) Please contact the helpdesk immediately if a settlement does not resolve the issue.*
UNSUPPORTED CARD	It is not permissible for the card number to be used on the terminal. *PLEASE NOTE: This message is usually the result of typing in the card number incorrectly. Check you have the correct number and try re-typing carefully. If problems persist, please contact the helpdesk.*

Terminal problems

Terminal screen is blank	**Countertop models (SPc5)**
	Check that the power supply or mains cable is plugged into a working electrical wall socket and that any switch is on. If an extension cable is being used, check the fuse.
	Check that the power supply is connected to the socket on the base of the terminal.
	Mobile models (SPg7 Wi-Fi and SPg7 GPRS)
	Ensure a battery module is fitted.
	Hold down the power button located at the right hand of the menu buttons until display illuminates.
	If the terminal does not beep and turn on:
	Connect the power supply into the power socket on the rear of the terminal or place on a powered charging stand.
	Hold down the power button located at the right hand of the menu buttons until display illuminates.
	If the terminal still does not beep and turn on:
	Check the power supply or mains cable is plugged into a working electrical wall socket and that any switch is on. If an extension cable is being used check the fuse.
	Hold down the power button located at the right hand of the menu buttons until display illuminates.
	PLEASE NOTE: If problems persist, please call the helpdesk.
Battery module not charging (SPg7 Wi-Fi and SPg7 GPRS)	**If the battery module is not charging:**
	Check the power supply or mains cable is plugged into a working electrical wall socket and that any switch is on. If an extension cable is being used, check the fuse.
	Check that the power supply is plugged into the socket on the rear of the charging stand or the rear of the terminal.

Terminal problems

Wi-Fi access point doesn't turn on (SPg7 Wi-Fi)	**If the Wi-Fi access point power indicator light doesn't turn on when it is plugged into the mains:** Check the power supply or mains cable is plugged into a working electrical wall socket and that any switch is on. If an extension cable is being used, check the fuse. Check that the power supply is plugged into the correct socket on the Wi-Fi access point.
PIN Pad screen is blank	**If you have connected up the optional PIN Pad and the screen appears blank:** Check it is securely connected into the yellow socket on the back of the main terminal labelled PIN PAD. Turn the main terminal off and back on again using the power button located at the right hand of the menu buttons.
Receipts print out blank	**If the paper is feeding through but appears blank:** Your terminal uses thermal paper rolls to print receipts. This paper will only print on one side. When the rolls supplied with the terminal are used up, you must obtain replacements from the supplier recommended by your leasing company. *Check your paper rolls* Check that the roll is loaded the correct way round. See the Quick Reference Guide or the paper loading section within this User Manual for more information. Only use paper from an authorised supplier for Spire terminals.
Screen appears frozen, or terminal does not react to inserting a card	**If the screen appears frozen and doesn't react to key presses or inserting a card:** Turn the main terminal off, wait 10 seconds then turn back on again using the power button located at the right hand of the menu buttons.

Please note: If the above suggestions do not resolve the problem, please contact the helpdesk.

Troubleshooting
Communication problems

SPc5 (dial only)

The normal sequence of messages displayed during a transaction using a dial connection is:

CONNECTING VIA DIAL,
CONNECTION MADE, PROCESSING NOW,
APPROVAL XXXXXX

CONNECTION MADE, PROCESSING NOW

This message indicates the terminal has connected successfully. In this case, the following display will be a response from the acquirer.

(See *Appendix A* for common transaction responses.)

If the terminal fails to connect on the first try, it will make two further attempts to connect before voiding the transaction. The screen will display:

CONNECTING VIA DIAL, ATTEMPT 2
CONNECTING VIA DIAL, ATTEMPT 3

One of the following error messages may also be displayed:

LINE IDLE

The terminal has detected the presence of a line and attempted to dial but is experiencing a problem connecting.

- The line may require a prefix number to dial out on, for example a **9.**

- The number the terminal dials may not be working on your phone line.

- The terminal may be connected to a broadband line without a DSL filter.

- A third party call service may be in use on the line.

LINE BUSY, WAIT

The terminal is not detecting a normal dial tone on the telephone line.

- The line may be in use, dead or faulty.

- A telephone cable or adaptor may be faulty.

- The terminal may not be connected or the connection to the line is loose.

Please note: Please ensure you are using the telephone cable supplied with the terminal. Other telephone cables may not be compatible.

Communication problems

SPc5 (IP with dial backup)

The normal sequence of messages displayed during a transaction using an IP/Ethernet connection is:

CONNECTING VIA IP,
CONNECTION MADE, PROCESSING NOW,
APPROVAL XXXXXX

CONNECTION MADE, PROCESSING NOW

This message indicates the terminal has connected successfully. In this case, the following display will be a response from your acquirer.

(See *Appendix A* for common transaction responses.)

If the terminal fails to connect on the first try, it will make a two further attempts to connect before reverting to dial backup. The screen will display:

CONNECTING VIA IP, ATTEMPT 2
CONNECTING VIA IP, ATTEMPT 3

One of the following error messages may also be displayed:

LINE IDLE

The terminal cannot make a connection.

The Ethernet cable may not be connected.

* Your router or LAN (Local Area Network) may not be working properly.

* Your ISP (Internet Service Provider) may be experiencing problems.

CONNECTING VIA DIAL

The terminal has failed to connect 3 times using IP and has reverted to dial backup. The terminal will try a maximum of 3 times to connect via dial and then void the transaction if it cannot connect.

If this happens, please call the helpdesk as soon as possible to ensure your terminal operates at its optimum speed.

Troubleshooting
Communication problems

SPg7 GPRS

The normal sequence of messages displayed during a transaction using a GPRS connection is:

CONNECTING VIA IP,
CONNECTION MADE, PROCESSING NOW,
APPROVAL XXXXXX

CONNECTION MADE, PROCESSING NOW

This message indicates the terminal has connected successfully. In this case, the display will show the response from your acquirer.

(See *Appendix A* for common transaction responses.)

If the terminal fails to connect on the first try, it will make a two further attempts to connect before voiding the transaction (or reverting to dial backup if T4230). The screen will display:

CONNECTING VIA IP, ATTEMPT 2
CONNECTING VIA IP, ATTEMPT 3

One of the following error messages may also be displayed:

LINE IDLE

The terminal cannot make a connection.

• There may be low/no GPRS signal.

• There may be no SIM card installed

Please note: GPRS terminals come with a SIM card pre-installed by Spire Payments. If there is no SIM card installed, a warning will display at power up. If this happens, please call the helpdesk.

DO NOT remove the SIM unless instructed by the helpdesk.

DO NOT install your own SIM.

Troubleshooting
Communication problems

SPg7 Wi-Fi

The normal sequence of messages displayed during a transaction using a Wi-Fi connection is:

CONNECTING VIA IP,
CONNECTION MADE, PROCESSING NOW,
APPROVAL XXXXXX

CONNECTION MADE, PROCESSING NOW

This message indicates that the terminal has connected successfully. In this case, the following response displayed will be from your acquirer.

(See *Appendix A* for common transaction responses.)

If the terminal fails to connect on the first try, it will make a further two attempts to connect before voiding the transaction. The screen will display:

CONNECTING VIA IP, ATTEMPT 2
CONNECTING VIA IP, ATTEMPT 3

If the terminal fails to connect, check the following (in this order):

- The terminal may be out of the Wi-Fi range of the Wi-Fi access point. If possible, move the terminal closer to the Wi-Fi access point.

- Check the Wi-Fi access point is turned on & plugged in.

- Ensure the Wi-Fi access point is correctly connected to your Internet access point.

- The terminal may not be properly configured to the Wi-Fi access point.

Appendix A
Transaction and terminal responses

APPROVAL	The word 'APPROVAL' plus a 2 to 6 digit Approval Code indicates the transaction was approved by the Card Issuer.
CARD BLOCKED	The Card Issuer has blocked the card from use.
CALL AUTH CENTRE	A call to the Authorisation Centre is required to complete the transaction. PLEASE NOTE: If this happens on successive transactions please call the helpdesk.
COMMS FAIL	The terminal is unable to contact the acquirer.
DECLINED	The transaction has been declined by your acquirer or the Card Issuer.
DECLINED BY CARD	The chip on the card decided to decline the transaction. PLEASE NOTE: The card makes the final decision on whether to approve a transaction. If this happens on successive transactions, please call the helpdesk.
HOST DECLINED	The terminal has received a decline response from the acquirer.
INVALID TRANSACTION	The attempted type of transaction is not allowed on the terminal.

Appendix B
CVV2 and AVS responses

DATA MATCHED	The address, postcode and CVV2 code data supplied have all matched the data held by the Card Issuer.
DATA NOT MATCHED	The CVV2 code and one (or both) of the address details has not matched the data held by the Card Issuer.
DATA NOT CHECKED	Your acquirer has not checked the address data that has been typed in.
SEC. CODE MATCH ONLY	The CVV2 code typed in has matched the data held by the Card Issuer but one (or both) of the address details did not.
AVS MATCH ONLY	The address details typed in have matched the data held by the Card Issuer but the CVV2 code did not.

Appendix C
Terminal functions from the menu system

The following terminal functions can be initiated from the Menu System.

Reprint	Allows the user to reprint a receipt of the last transaction in the current batch.
	Ensure the terminal is displaying the Welcome screen.
	Press the '**MAIN MENU'** key once to display the Reports and Terminal Menu.
	Select '**REPORTS**'.
	Select '**REPRINT**'.
	If prompted, press the '1' key to print the last receipt or press '2' followed by the invoice number for the receipt you would like reprinted.
Printer Test	Allows the user to test the printer. Ensure the terminal is displaying the Welcome screen.
	Press the '**MAIN MENU**' key once to display the Reports and Terminal Menu.
	Press the right '**ARROW**'.
	Select '**TESTS**'.
	Select '**PRINTER**'.
	Select '**RECEIPT**'.
	A test receipt will be printed.
Paper Feed	Ensure the terminal is displaying the Welcome screen.
	Press the '**MAIN MENU**' key once to display the Reports and Terminal Menu.
	Press the right '**ARROW**'.
	Select '**SETUP**'.
	Select '**PRINTER**'.
	Select '**PAPER FEED**'.
	Select '**PAPER FEED**' which feeds the paper 5mm on every key press.

Appendix D
Terminal functions using 'Functions' shortcut

The following functions can be initiated by pressing the 'Functions' key on the Transactions Menu and entering a two digit number (see table below). You may be asked to enter a password before the function can be activated. This facility is often quicker than using the 'MENU' system. Please only use those functions listed below.

Function	Number
Change date and time	10
Paper feed	15
Power saving	44
Reprint last transaction	72
Printer test	82
Change local password	90
Local options (passwords)	97

Appendix E
Set a PABX digit(s)

Terminals with a dial connection come pre-configured with the option to dial a 9 prefix digit before dialling out. By default.

If you require a PABX Digit, please call the helpdesk.

Terminal operation

AVS – Address Verification System
A security method used for Customer Not Present keyed transactions to help reduce fraud. This method confirms the house number and numbers from the postcode of the cardholder's registered address. (Not applicable on international cards.)

Batch
The store of transaction totals in the terminal.

CVV2
Card Security Code (also known as CVV, CV2, CVC, CVVC and CSC). This is usually used for keyed transactions to reduce fraud. The CVV2 code is a 3 digit number found on the signature stripe, or for American Express, a four digit code on the front of the card.

Cashback or PWCB
A value-add service which allows you to debit a cardholder's debit card and hand over the equivalent value in cash.

MID – Merchant Identification
A 7-16 digit number assigned by your bank to identify a merchant. Often abbreviated to MID. Additional card schemes may have separate MIDs.

PIN – Personal Identification Number
This is usually a 4-digit number entered at the point of sale to validate the cardholder.

End-of-day banking/settlement
The procedure whereby the terminal checks the totals it has stored in its Batch with the totals stored at your acquirer.

Terminal ID (TID)
A unique 8-digit number assigned to each terminal.

UKCA – UK Cards Association
The organisation defining the rules and standard for the operation of most Point of Sales equipment in the United Kingdom and Ireland. Formerly known as Association for Payment Clearing Services (APACS).

Communications

Wi-Fi access point
A device that allows a Wi-Fi terminal to connect to a host or acquirer. The access point can communicate with an external network either via dial or network communications.

Wi-Fi
A wireless method of short range communication usually found in handheld devices.

Glossary
Communications

Broadband
Internet. Broadband systems are typified by being always connected and having faster connection speeds than dial-up. The most popular kinds of broadband include ADSL (Asymmetric Digital Subscriber Line) and Cable.

Dial backup
The ability of a terminal to revert to the dial mode of communication in the event of an IP/Ethernet connection being unavailable.

DHCP – Dynamic Host Control Protocol
A system where IP Addresses are assigned to networked equipment automatically.

DSL filter
A device that improves the quality of an ADSL (broadband) enabled telephone line by separating data and voice signal frequencies.

Ethernet
A standard used to physically connect devices together. Networking protocols such as IP can be used over Ethernet connected equipment.

GPRS – General Packet Radio Service
This is a method of communicating data via the mobile phone network.

IP – Internet Protocol
A method whereby data is transmitted over networks such as the Internet (may also be expressed as TCP/IP).

IP address
A number represented in the form XXX.XXX.XXX.XXX which identifies a device on the Internet (for example: 193.129.71.130). These numbers are the networking equivalent of telephone numbers.

MAC address – Media Access Control address
An individual address given to every piece, of Ethernet networking equipment. This address is always marked on Spire Payments equipment containing such an address. Do not confuse with Message Authentication Certificate: a certificate used in the UKCA Standard 70 message protocol.

PABX – Private Automatic Branch eXchange.
Usually found as part of a larger telephone system, requiring the user to press a number on their telephone to make an external call.

TCP port
A number representing a service at a particular IP address.

Glossary
Software license