

# Carbon Quick Start Guide

## Standalone terminals



<b>1</b>	<b><i>Terminal components</i></b>	<b>3</b>
1.1	Carbon 100 (C100)	3
<b>2</b>	<b><i>Important information</i></b>	<b>4</b>
<b>3</b>	<b><i>Getting started</i></b>	<b>5</b>
3.1	Terminal settings	5
3.2	Language settings	9
3.3	Network settings	10
<b>4</b>	<b><i>Use your card on terminal</i></b>	<b>13</b>
4.1	Perform a purchase	13
4.2	Perform a refund	16
4.3	Perform a reversal	18
4.4	Reports	20
4.4.1	Since last report	21
4.4.2	Current day	22
4.4.3	Select date	23
4.4.4	Configuration	24
<b>5</b>	<b><i>Other settings</i></b>	<b>26</b>
5.1	Wireless network – WiFi	26
5.2	Mobile network – GSM (3G/4G)	28
5.2.1	General requirements	28
5.2.2	Operator settings	28
<b>6</b>	<b><i>Preferred battery settings</i></b>	<b>31</b>
6.1	Set screen brightness	32
6.2	Set sleep timer	34
6.3	Set suspend timer	35

## Version history

Version	Date	Notes
1.0	2018-12-12	Document created
1.1	2019-08-28	Document updated

## 1 Terminal components

### 1.1 Carbon 100 (C100)



- 1 Printer
- 2 Status bar; current battery level, network connection, WiFi and 3G/4G
- 3 4" TFT Color Display, multi-touch screen, contactless card reader
- 4 Magnetic Card Reader
- 5 Keypad
- 6 Chip card reader
- 7 Power button
- 8 Abort button
- 9 Edit or back button
- 10 Approval or select button
- 11 USB-C, power supply
- 12 Camera
- 13 Battery cover

## 2 Important information

This terminal is approved in regulation with *PCI PA-DSS*. It is therefore important that you get to know its content and how to use the payment terminal in a PCI-safe way.

To get hold of the information, please download the implementation guide from the following homepage:

<http://www.westpay.se/pci>


If you have any questions related to above information, contact your reseller.

## 3 Getting started

### 3.1 Terminal settings

When the terminal is started for the first time it asks for some configuration settings. The addresses, which will be used for your specific card terminal, are supplied by your terminal supplier.


The steps below are only required once per terminal installation. If the terminal for some reason is replaced in the future these steps must be applied again.

Start the terminal by holding down the *red terminal button*  for approximately five seconds.

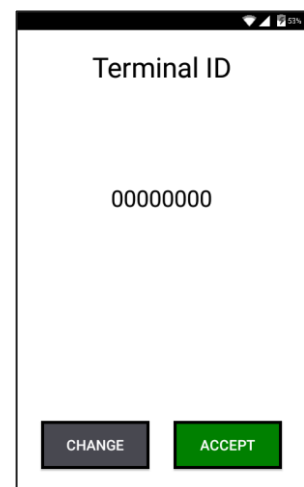
You have successfully started the terminal when a blue screen is shown.

The payment application starts and asks for the Terminal ID.

Press *CHANGE* on the screen and then enter the ID by using the terminal keypad.


Press the *yellow terminal button*  to delete an entered value.

Once done, save the settings by pressing *OK* and then *ACCEPT* to continue.



On the next screen you will be asked to enter IP address for the PPL Server. The PPL Server is a service that supplies the terminals with its configuration. The settings make the terminal unique for your business.

Press *CHANGE* on the screen and then enter the number by using the terminal keypad.

Press the *yellow terminal button*  to delete an entered value.

Once done, save the settings by pressing *OK* and then *ACCEPT* to continue.

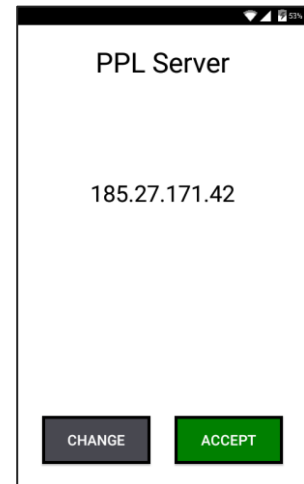


The address should be entered in one cohesive string where numbers with one or two digits should also be filled with zeroes (0). Dots will be added automatically.

**Example**


IP address: 192.168.0.1

Is entered like: 192.168.000.001

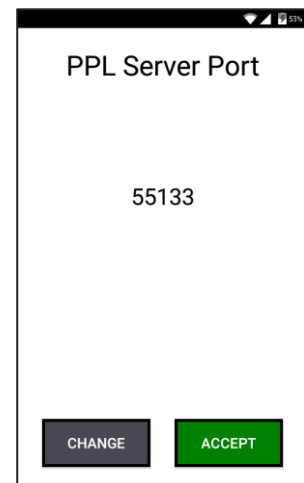


Next setting is for the PPL Server Port.

Press *CHANGE* on the screen and then enter the number by using the terminal keypad.


Press the *yellow terminal button*  to delete an entered value.

Once done, save the settings by pressing *OK* and then *ACCEPT* to continue.

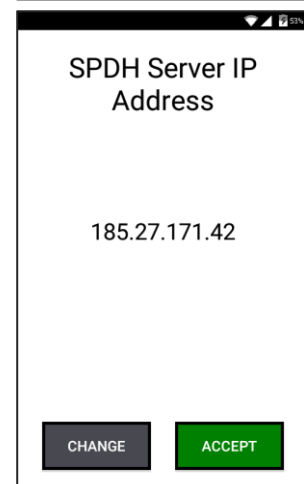


Next setting asks for SPDH Server IP Address. SPDH server is the service to where the transactions are sent and approved by the acquirer.

Press *CHANGE* on the screen and then enter the number by using the terminal keypad.


Press the *yellow terminal button*  to delete an entered value.

Once done, save the settings by pressing *OK* and then *ACCEPT* to continue.

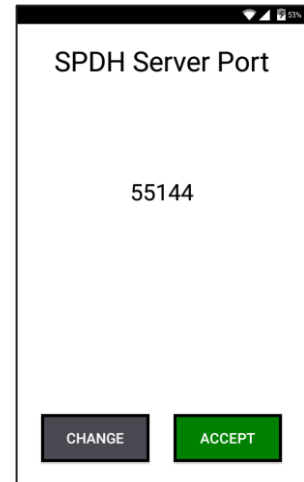


Next setting is for the SPDH server port.

Press *CHANGE* on the screen and then enter the number by using the terminal keypad.

Press the *yellow terminal button*  to delete an entered value.

Once done, save the settings by pressing *OK* and then *ACCEPT* to continue to the next setting.




On the next screen it is possible to configure a second SPDH server IP address.

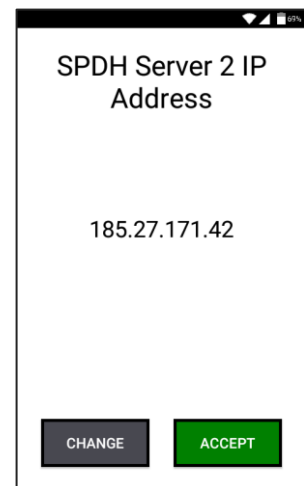


If not using a second SPDH server, leave this field empty.

Press *CHANGE* on the screen and then enter the number by using the terminal keypad.

Press the *yellow terminal button*  to delete an entered value.

Once done, save the settings by pressing *OK* and then *ACCEPT* to continue.




Next setting is for the second SPDH server port.

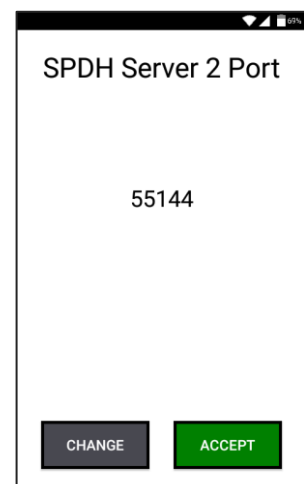


If not using a second SPDH server, leave this field empty.

Press *CHANGE* on the screen and then enter the number by using the terminal keypad.


Press the *yellow terminal button*  to delete an entered value.

Once done, save the settings by pressing *OK* and then *ACCEPT* to continue.



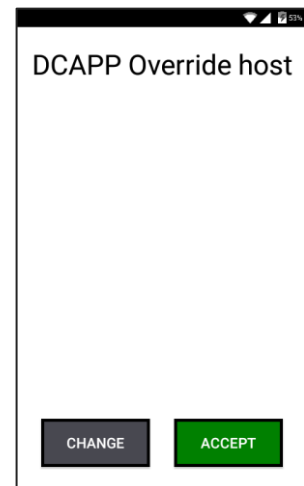
The last configuration option is DCAPP Override host. This option will only be required if you have received information that this should be used. To skip this step, leave field empty.

Press *CHANGE* on the screen and then enter the number by using the terminal keypad.

Press the *yellow terminal button*  to delete an entered value.

Once done, save the settings by pressing *OK* and then *ACCEPT* to finish the configuration.

The terminal now automatically returns to the main menu.





## 3.2 Language settings

All Westpay terminals have multi-lingual support. Follow the steps below to set default language.

In the terminal main menu, press *MORE*.

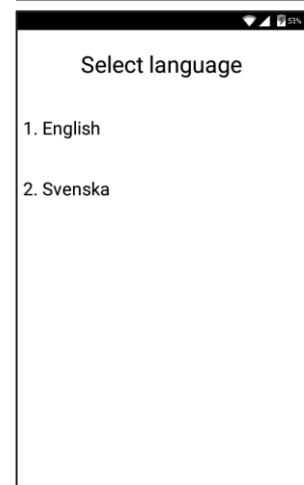
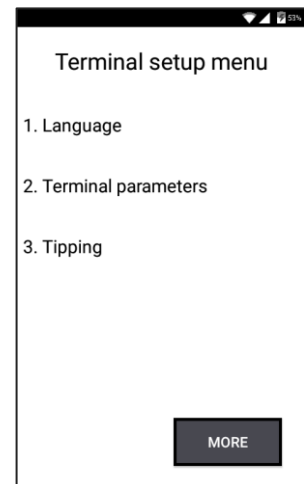
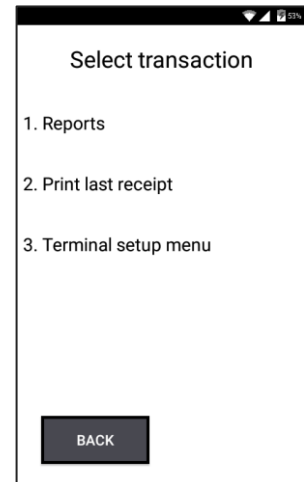
Select *Terminal setup menu* by pressing corresponding number on the terminal keypad.

In the Terminal setup menu, select *Language* by pressing corresponding number on the terminal keypad.

In the Select language menu, set default language by pressing corresponding number on the terminal keypad.



Available languages may vary depending on the terminal configuration.

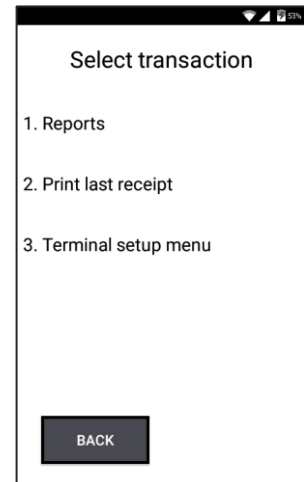


## 3.3 Network settings

The terminal is by default delivered with its network to get assigned dynamically (DHCP). Follow the steps below to change the settings to static IP addresses.

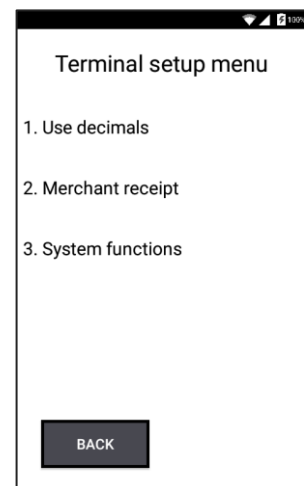
In the Terminal main menu, press *MORE*.

Select *Terminal setup menu* by pressing corresponding number on the terminal keypad.

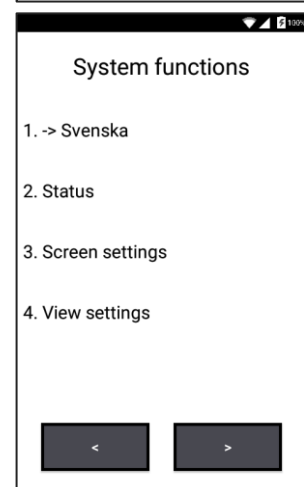


In the Terminal setup menu, press *MORE*.

Select *System functions* by pressing corresponding number on the terminal keypad.



In the System functions menu, select *Status* by pressing corresponding number on the terminal keypad.



Press *NEXT* to display Network Info.

Press *CHANGE* to configure settings.



If the terminal has two interfaces they are displayed like the following (select the one to configure):

1. DM90001 (Cable network connection)
2. NETRTWLANU1 (Wireless network connection)

If there is only one interface on the terminal it will automatically continue to the next screen.

The first configuration option displayed is if the terminal should use DHCP or not.

To enable DHCP press *YES* (this option is activated as standard).

If *NO* is selected a new screen is displayed with options to set static IP addresses for your network. Follow the steps below for configuration.

Set *IP Address*, *SubNet Mask* and *Gateway* by pressing corresponding number on the terminal keypad.

Network Info

wlan0: DHCP=disabled

IP address: 10.0.2.37

Mask: 255.255.255.0

Gateway: 10.0.2.1

CHANGE NEXT

Enable DHCP?

YES NO


1 = IP Address

2 = SubNet Mask

3 = Gateway

A configuration screen is shown when an option has been selected.

Enter the correct address with the terminal keypad.

Press the *yellow terminal button*  to delete an entered value.

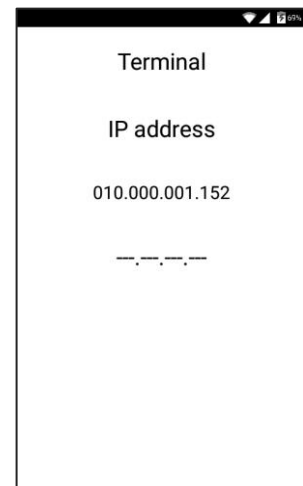



The address should be entered in one cohesive string where numbers with one or two digits should be filled with zeroes (0). Dots will be added automatically.


### Example

IP address: 192.168.0.1

Is entered like: 192.168.000.001



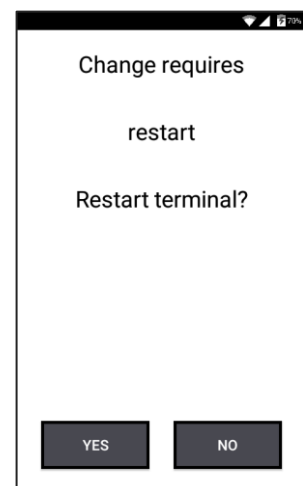
Complete the registration by pressing the *green terminal button* .

Once the configuration is done, press the *red terminal button*  to return to the System functions menu.

If changes have been made, then the terminal will require a restart. Press *YES* to restart.



Settings will not apply until the terminal has been restarted.



## 4 Use your card on terminal


### 4.1 Perform a purchase



In the terminal main menu, select *Purchase* by pressing corresponding number on the terminal keypad.



Depending on the card used there might be a supplementary question (for example to select debit or credit).

Enter the amount of the purchase.

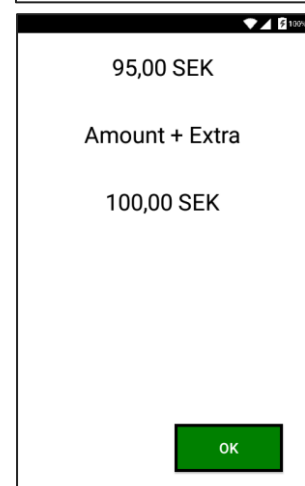
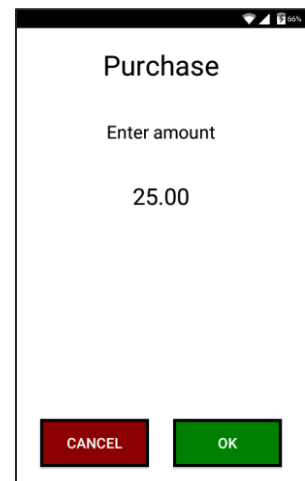
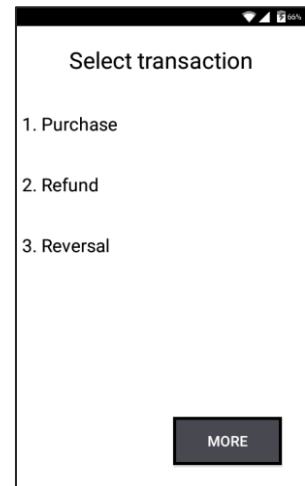
Press the *yellow terminal button*  to delete an entered value.

Accept the entry with *OK* or the *green terminal button* . *CANCEL* or the *red terminal button*  aborts the transaction.

If the tipping function has been activated, then the following screen will be displayed where it is possible to enter tip.

The amount is entered as a total sum (for example 100 SEK where purchase is 95 SEK and extra tip 5 SEK).

Press *OK* to confirm.





Insert or swipe the card or use contactless.

If chip card, chip should be facing up and towards the card terminal.



If using contactless, next screen asks for confirmation of the total amount.

If using PIN, next screen asks for the PIN code (four digits). Enter PIN using the terminal keypad and accept with the *green terminal button*. 

Press the *yellow terminal button*  to delete an entered value.

If not remember PIN code, press onscreen icon *No PIN* to select signature.



Purchase less than 200 SEK does usually not require PIN.

When the purchase is approved, two receipts will be printed (if this function is activated).

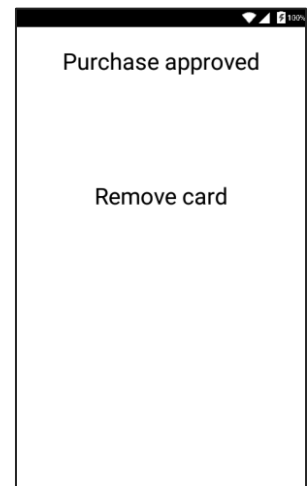
The first receipt is the merchant copy.

Press *OK* to print second receipt, the cardholder copy.

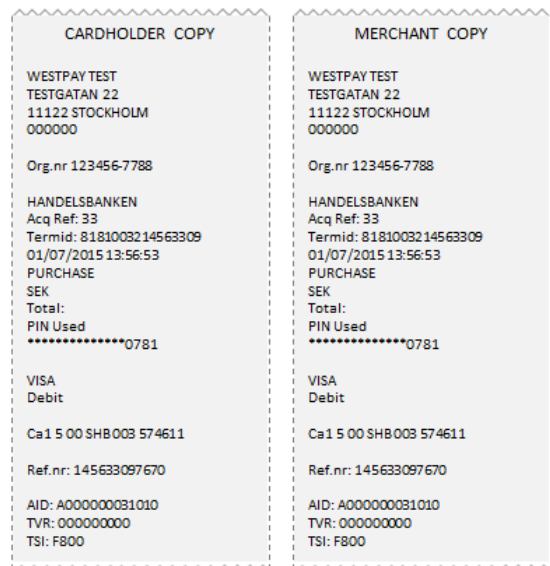


When the purchase is approved, remove the card.

The terminal automatically returns to the main menu.



The example shows printed receipts for merchant and cardholder.



## 4.2 Perform a refund


In the terminal main menu, select *Refund* by pressing corresponding number on the terminal keypad.





This function may be password protected. If so, enter the password with the terminal keypad. The password was handed along with the terminal ID.

Depending on the card used there might be a supplementary question (for example to select debit or credit).

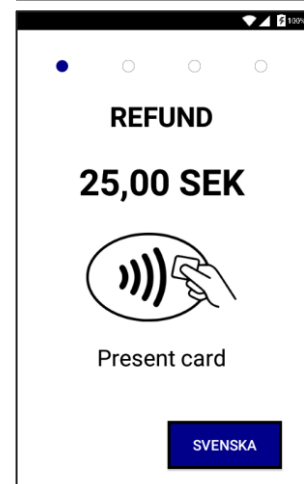
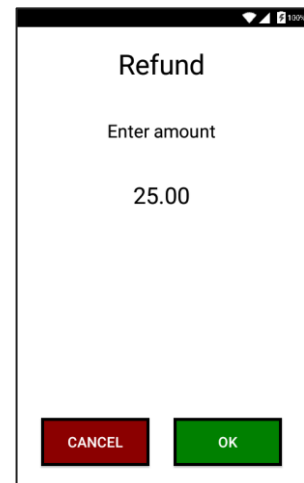
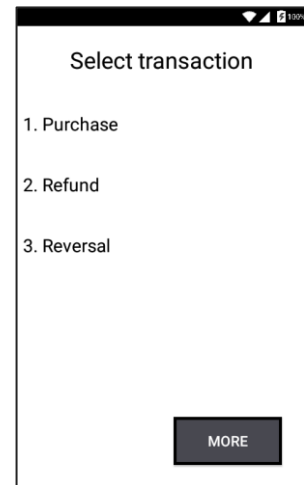
Enter the amount of the refund.

Press the *yellow terminal button*  to delete an entered value.

Accept the entry with *OK* or the *green terminal button*.  *CANCEL* or the *red terminal button*  aborts the transaction.

Insert or swipe the card or use contactless.

If chip card, chip should be facing up and towards the card terminal.

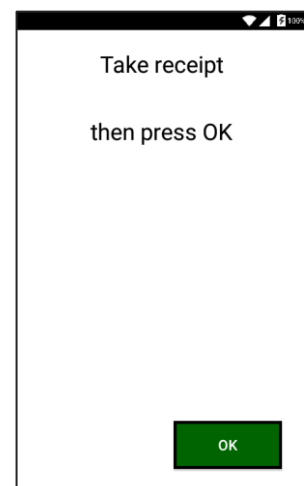




When the refund is approved, two receipts will be printed (if this function is activated).

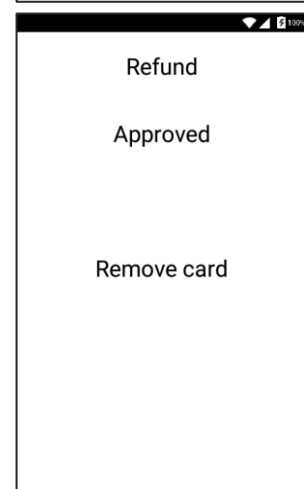
The first receipt is the merchant copy.

Press *OK* to print second receipt, the cardholder copy.



When the refund is approved, remove the card.

The terminal will return to the main menu automatically.



The example shows printed receipts for merchant and cardholder.



## 4.3 Perform a reversal

In the terminal main menu, select *Reversal* by pressing corresponding number on the terminal keypad.

For security reasons the reversal function is password protected. Enter the password with the terminal keypad and confirm with *OK*.

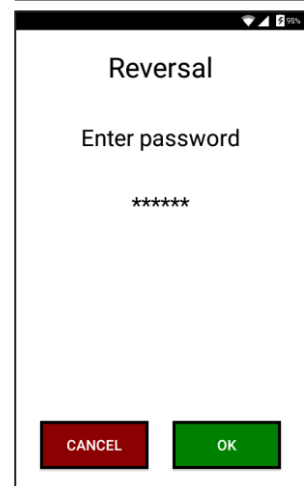
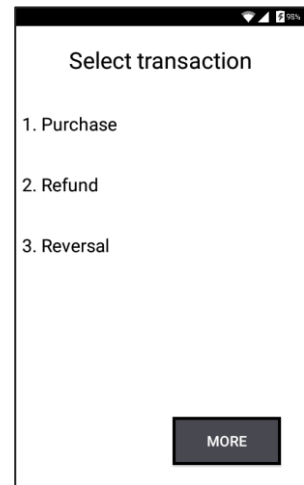


The password was handed along with the terminal ID.

Terminal asks if to reverse last transaction. Confirm by pressing *YES* or press *NO* to cancel.



It is only possible to reverse the previous made transaction.

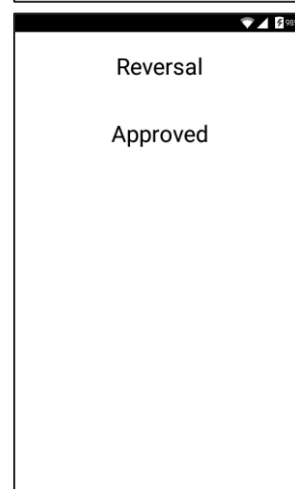
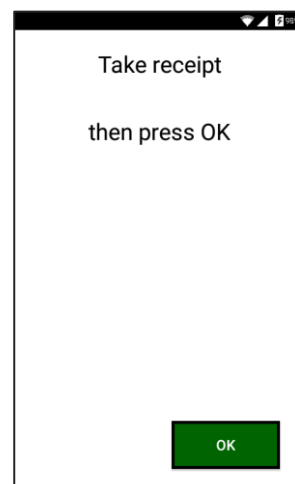


When the reversal is approved, two receipts will be printed (if this function is activated).

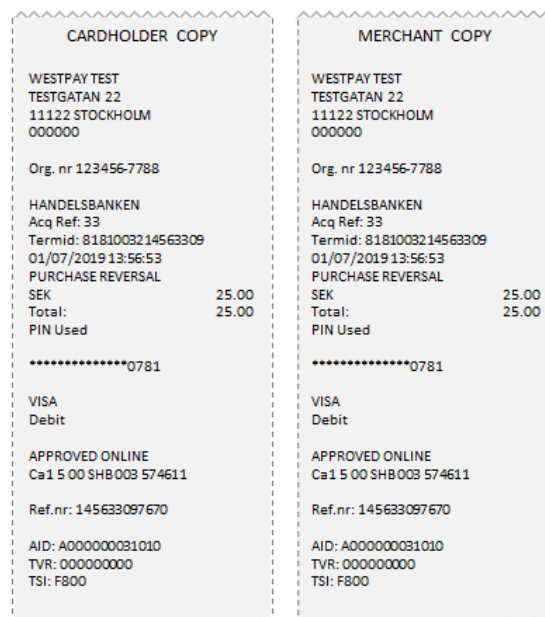
The first receipt is the merchant copy.

Press *OK* to print second receipt, the cardholder copy.

The terminal automatically returns to the main menu when the reversal is approved.



The example shows printed receipts for merchant and cardholder.

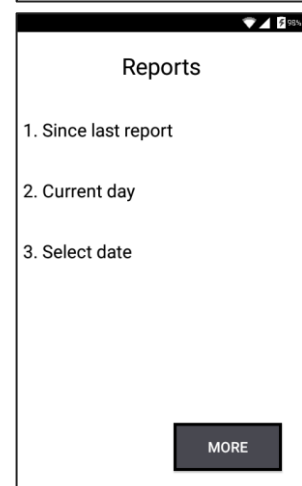
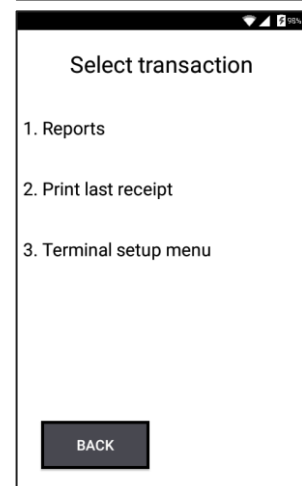
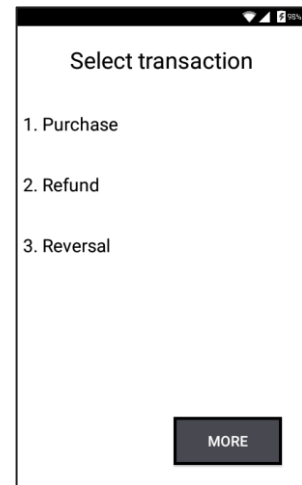


## 4.4 Reports

In the terminal main menu, press *MORE* until option Reports is displayed.

Select *Reports* by pressing corresponding number on the terminal keypad.

The Reports menu is displayed.



## 4.4.1 Since last report

*Since the last report* summarizes all the sales from previous printed report.

From the Reports menu, select option *Since last report* by pressing corresponding number on the terminal keypad.

The report has two options, Print summary and Print report.

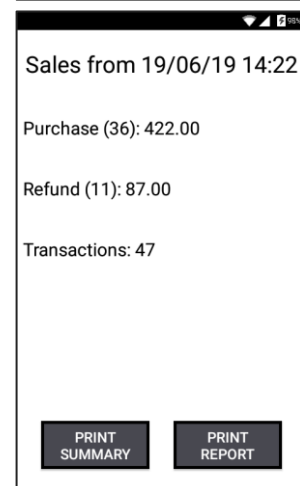
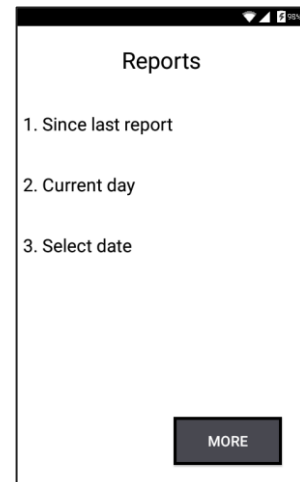
Press *PRINT SUMMERY* to print the information displayed on the summary screen.

Press *PRINT REPORT* to print a full report. It includes all transactions made since the last complete report was printed.



The report information is cleared after printing a full report. The function will set printing time as new start time.

The example shows the two types of reports that can be printed.



Sales from 19-01-16 00:00	
Purchase (21):	977.00
Refund (0):	0.00
Transactions:	21

Transaction report	
WESTPAY TEST	
TESTGATAN 22	
11122 STOCKHOLM	
Termid: 8181003214563309	
From: 19-01-16 00.00	
To: 19-01-17 00.00	
Debet MasterCard	
Purchase (4)	100.00
Refund (0)	0.00
Reversal Purchase (0)	0.00
Reversal Refund (0)	0.00
Total (4)	100.00
Visa	
Purchase (18)	902.00
Refund (0)	0.00
Reversal Purchase (1)	25.00
Reversal Refund (0)	0.00
Total (17)	877.00
Total	
No. of transactions	21
Purchase (21)	977.00
Refund (0)	0.00
END	

## 4.4.2 Current day

*Current day report* displays a summary on the screen of all sales for the current day. The default sales start time is set to 00.00. (see section 4.4.4 Configuration to change sales start time).

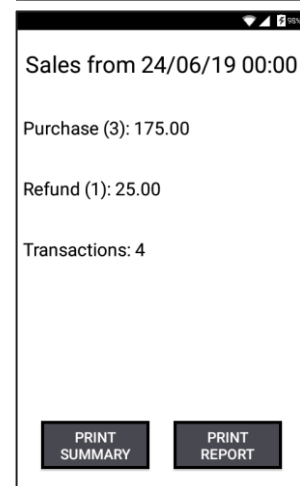
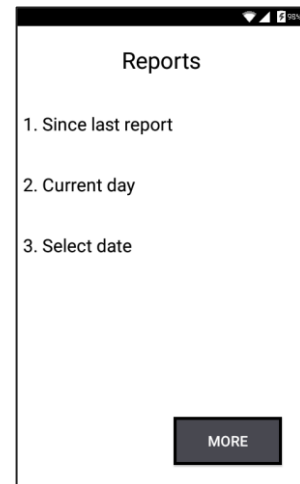
From the Reports menu, select option *Current day* by pressing corresponding number at the terminal keypad.

The report has two options, Print summary and Print report.

Press *PRINT SUMMERY* to print the information displayed on the summary screen.

Press *PRINT REPORT* to print a full report.

The example shows the two types of reports that can be printed.



Sales from 19-01-16 00:00  
Purchase (21): 977.00  
Refund (0): 0.00  
Transactions: 21

Transaction report

WESTPAY TEST  
TESTGATAN 22  
11122 STOCKHOLM

Termid: 8181003214563309

From: 19-01-16 00.00  
To: 19-01-17 00.00


Debet MasterCard	
Purchase (4)	100.00
Refund (0)	0.00
Reversal Purchase (0)	0.00
Reversal Refund (0)	0.00
Total (4)	100.00
Visa	
Purchase (18)	902.00
Refund (0)	0.00
Reversal Purchase (1)	25.00
Reversal Refund (0)	0.00
Total (17)	877.00
Total	
No. of transactions	21
Purchase (21)	977.00
Refund (0)	0.00
END	

## 4.4.3 Select date

*Select date report* displays a summary of the chosen sales date. The report is executed in the same way as the Current day report, with the difference that the date of the report can be changed.

From the Reports menu, select option *Select date* by pressing corresponding number at the terminal keypad.

Select date that should be included in the report. This can be done in two ways:

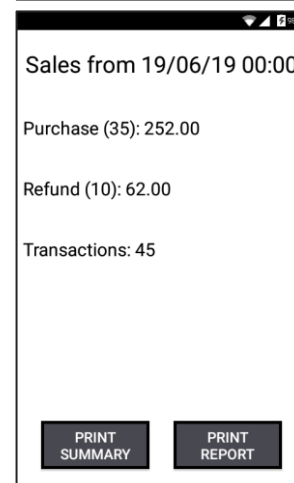
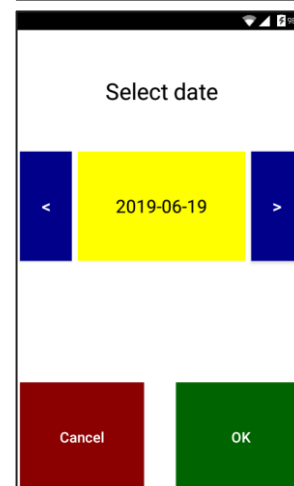
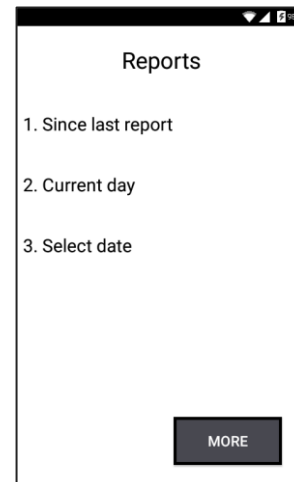
1. Use the right and left arrows on the screen to step one day per press.
2. Enter the date manually with the terminal keypad (press *yellow terminal button*  first to delete current date).

Press *OK* to continue to the next screen.

The report has two options, Print summary and Print report.

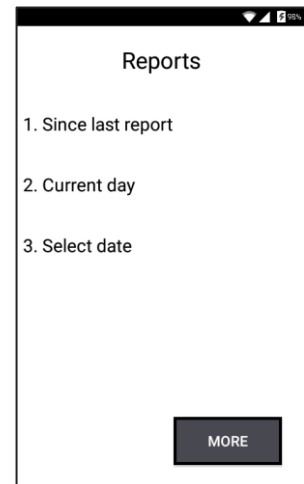
Press *PRINT SUMMERY* to print the information displayed on the summary screen.

Press *PRINT REPORT* to print a full report

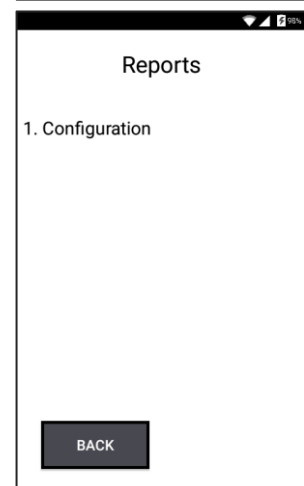


## 4.4.4 Configuration

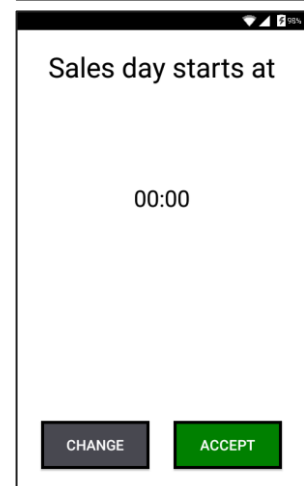
In the Reports menu, press *MORE*.




From the Reports menu, select option *Configuration* by pressing corresponding number at the terminal keypad.



Press *CHANGE* to set time when the sales day starts.



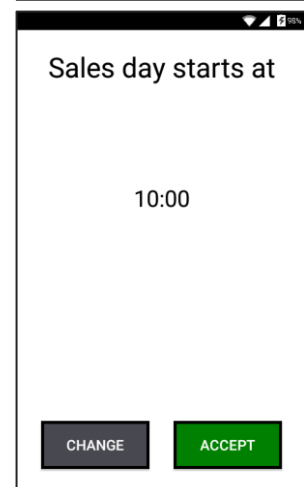
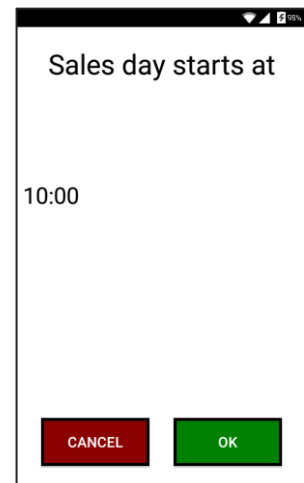


Press the *yellow terminal button*  to delete the current value.

Use the terminal keypad to enter the new value.

Press *OK* when finished.

Press *ACCEPT* to confirm settings.

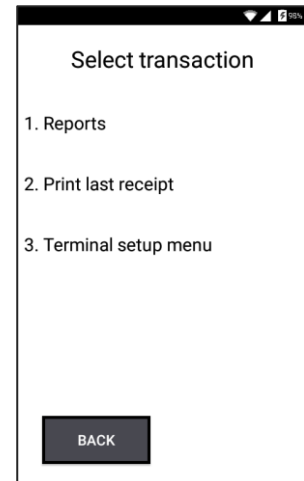


## 5 Other settings

### 5.1 Wireless network – WiFi

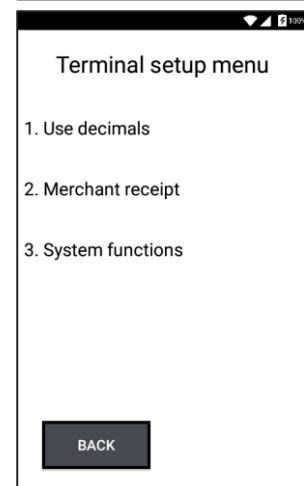
In the terminal main menu, press *MORE*.

Select *Terminal setup menu* by pressing corresponding number on the terminal keypad.



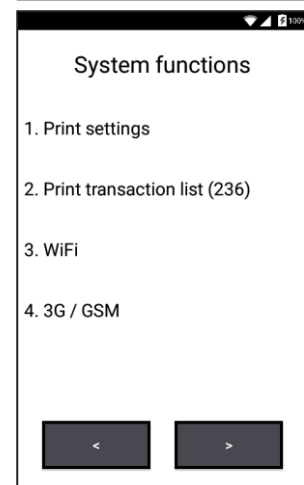
In the Terminal setup menu, press *MORE*.

Select *System functions* by pressing corresponding number on the terminal keypad.



In the System functions menu, press the right button >.

Select *WiFi* by pressing corresponding number on the terminal keypad.



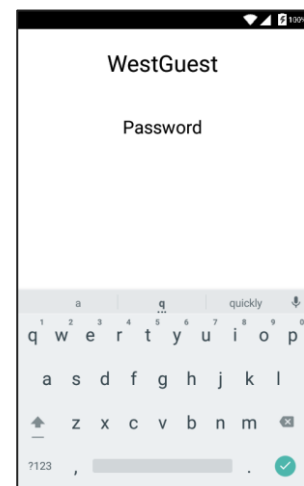
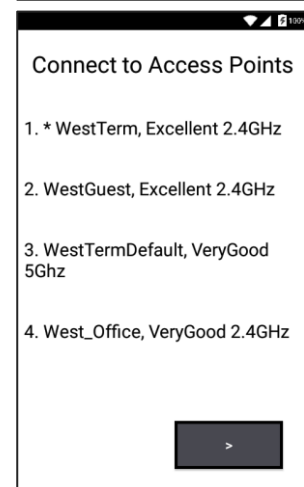
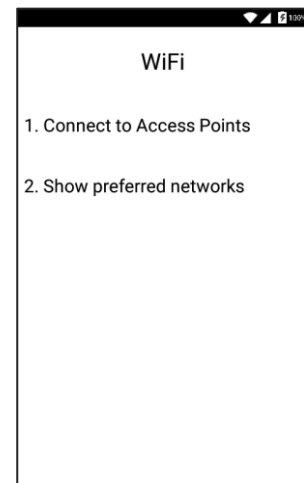
In the WiFi menu, select *Connect to Access Point* by pressing corresponding number on the terminal keypad.

A list of available WiFi networks (network standards are 2.4 GHz or 5GHz) should now be displayed. Select the preferred one by pressing corresponding number on the terminal keypad.

Enter password for the chosen network by using the terminal keypad or the onscreen keyboard.

Press the *green check button* on the screen keyboard and then *OK* to confirm.

When the wireless network has been connected the WiFi icon, on the screen header, should be visible, showing the actual signal strength.



## 5.2 Mobile network – GSM (3G/4G)

### 5.2.1 General requirements

To use GSM in a Westpay card terminal the following is required:

1. The SIM card must be activated by the operator.
2. If the SIM card is prepaid, make sure that it has a balance available.
3. The SIM card should not have PIN code activated.
4. The SIM card must be of Mini-SIM type (see illustration below).



Mini-SIM



Micro SIM



Nano Sim

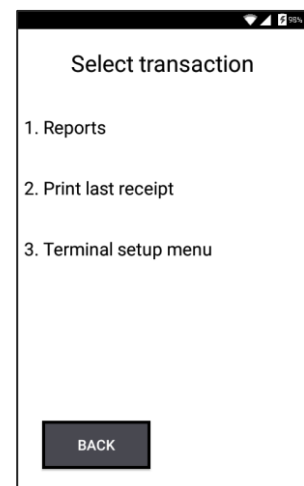


Westpay cannot guarantee that all the operators will work. For support related to GSM settings, please contact your operator.

### 5.2.2 Operator settings

In the terminal main menu, press *MORE*.

Select *Terminal setup menu* by pressing corresponding number on the terminal keypad.



In the Terminal setup menu, press *MORE*.

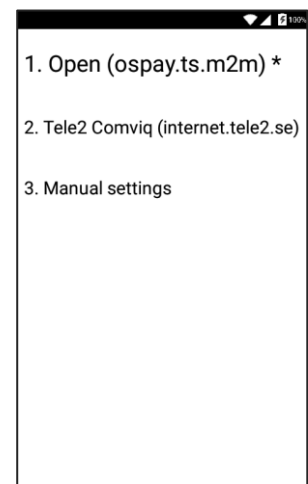
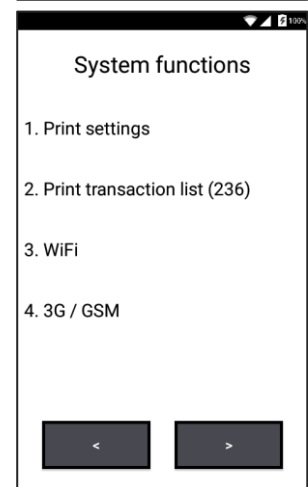
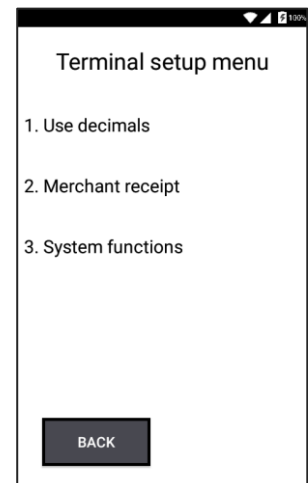
Select *System functions* by pressing corresponding number on the terminal keypad.

In the System functions menu, press the right button >.

Select *3G/GSM* by pressing corresponding number on the terminal keypad.

Select the preferred Access Point Name (APN) by pressing corresponding number on the terminal keypad.


Press *Manual settings* to configure APN manually.



First step is to enter APN name.

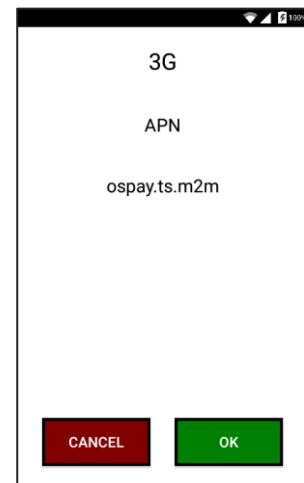


The Access Point Name (APN) is the name for the settings your terminal reads to set up a connection to the gateway between your carrier's cellular network and the public Internet.

Press the *yellow terminal button*  to delete the current value.

Use the terminal keypad to enter the new name.

Press *OK* when finished.



3G

APN


ospay.ts.m2m

CANCEL OK

Second step is to enter MCC and MNC values.

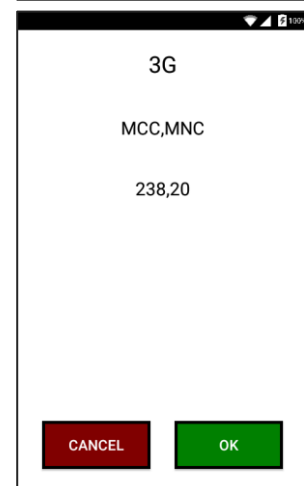


The Mobile Country Code (MCC) and Mobile Network Code (MNC) fields together specify which carrier you are using. Each carrier in the world has their own unique MCC and MNC value pair.

Press the *yellow terminal button*  to delete the current value.

Use the terminal keypad to enter new values. Note that you must add a comma between the MCC and MNC values.

Press *OK* twice when finished.



3G

MCC,MNC

238,20

CANCEL OK

If changes have been made, then the terminal will require a restart. Press *YES* to restart.

## 6 Preferred battery settings

Do not use the terminal when the battery level is below 10%. Charge the terminal before this level is reached.

To save terminal battery it is strongly recommended to adjust the screen settings to this configuration:

1. Screen brightness: **40 %**
2. Sleep timer: **30 seconds**
3. Suspend timer: **30 seconds**

Follow the steps below to make these adjustments before using the terminal.

## 6.1 Set screen brightness

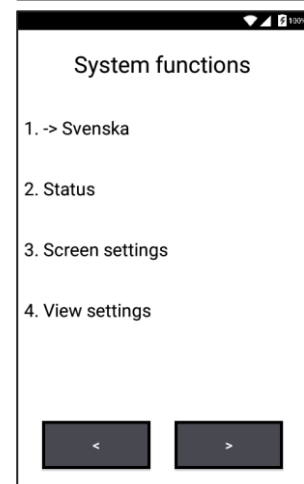
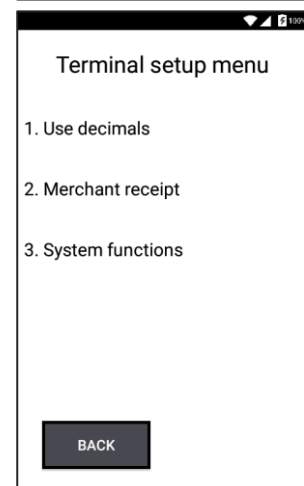
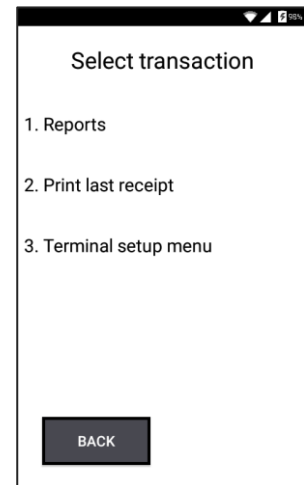
In the terminal main menu, press *MORE*.

Select *Terminal setup menu* by pressing corresponding number on the terminal keypad.

In the Terminal setup menu, press *MORE*.

Select *System functions* by pressing corresponding number on the terminal keypad.

In the System functions menu, select *Screen settings* by pressing corresponding number on the terminal keypad.






The Screen settings menu is now displayed.

Select menu option *Set screen brightness* by pressing corresponding number on the terminal keypad.

Press *CHANGE* to set percent of the full screen brightness.

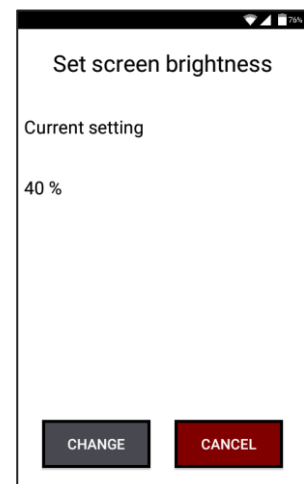
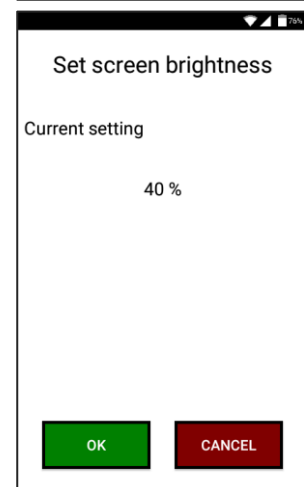
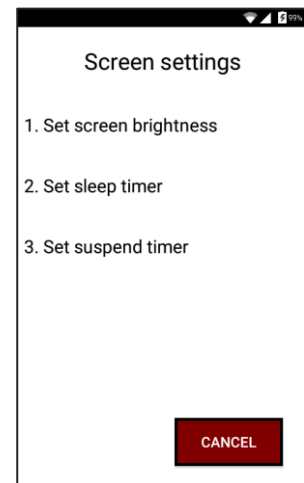
Press the *yellow terminal button*  to delete the current value.

Use the terminal keypad to enter value **40** %.

Press *OK* when finished.

Screen brightness is now set to 40 %.

Press *CANCEL* to return to the Screen settings menu.



## 6.2 Set sleep timer

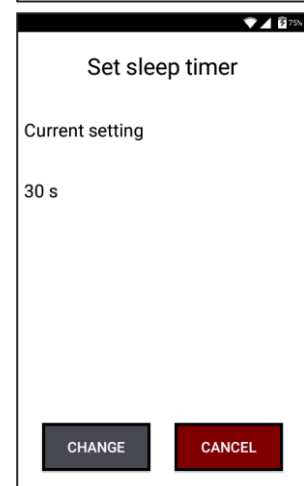
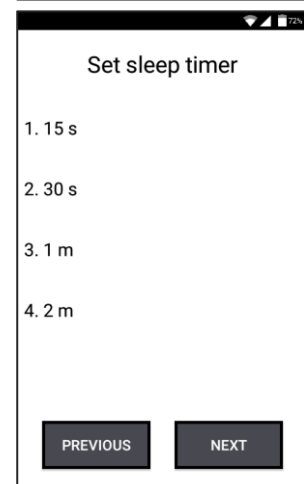
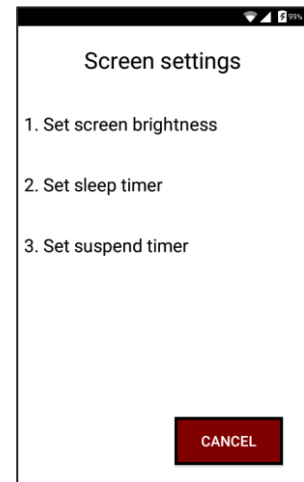
Select menu option *Set sleep timer* by pressing corresponding number on the terminal keypad.

Press *CHANGE* to configure.

Select option **30 s** by pressing corresponding number on the terminal keypad.

Sleep timer is now set to 30 seconds.

Press *CANCEL* to return to the Screen settings menu.



## 6.3 Set suspend timer

Select menu option *Set suspend timer* by pressing corresponding number on the terminal keypad.

Press *CHANGE* to configure.

Select option **30 s** by pressing corresponding number on the terminal keypad.

Suspend timer is now set to 30 seconds.

Press *CANCEL* to return to the Screen settings menu.

Press the *red terminal button*  two times to return to the terminal main menu.

The terminal is now ready to use.

