

Saturn S1F2 Troubleshooting guide

Castles Technology

UK Customer Support Centre

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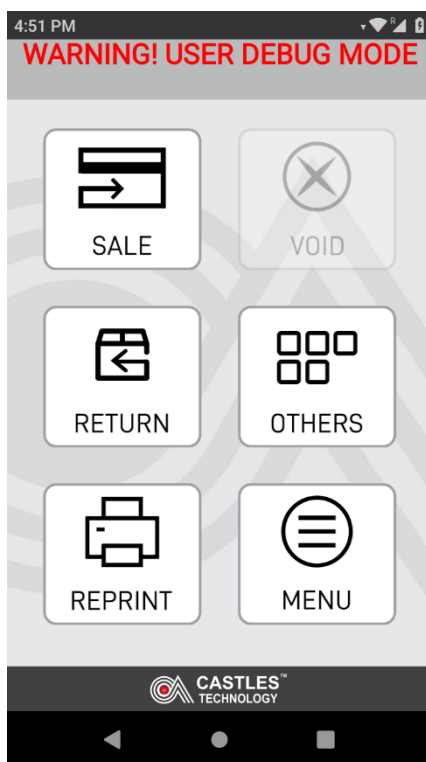
1. Scope

This document provides guidance for the Saturn S1F2 and is a troubleshooting and user guide.

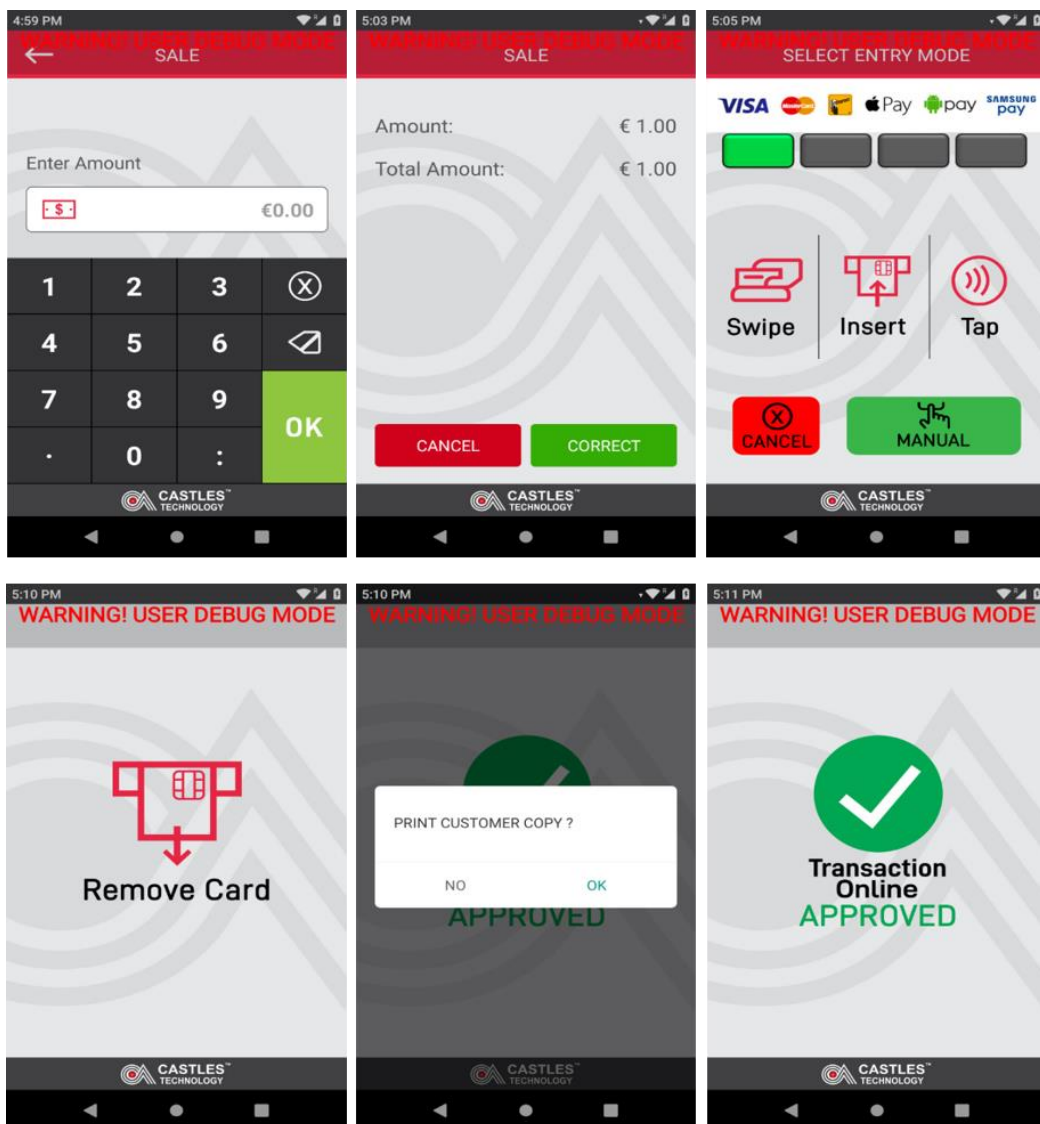
Please note. Merchants are responsible for ensuring that training mode is used for training purposes only and is disabled prior to accepting payments. No liability is accepted by Castles Technology, your merchant acquiring service provider, and/or terminal finance provider for any loss of payment acceptance if training mode is used in error.

2. Sale application

2.1. Main Menu



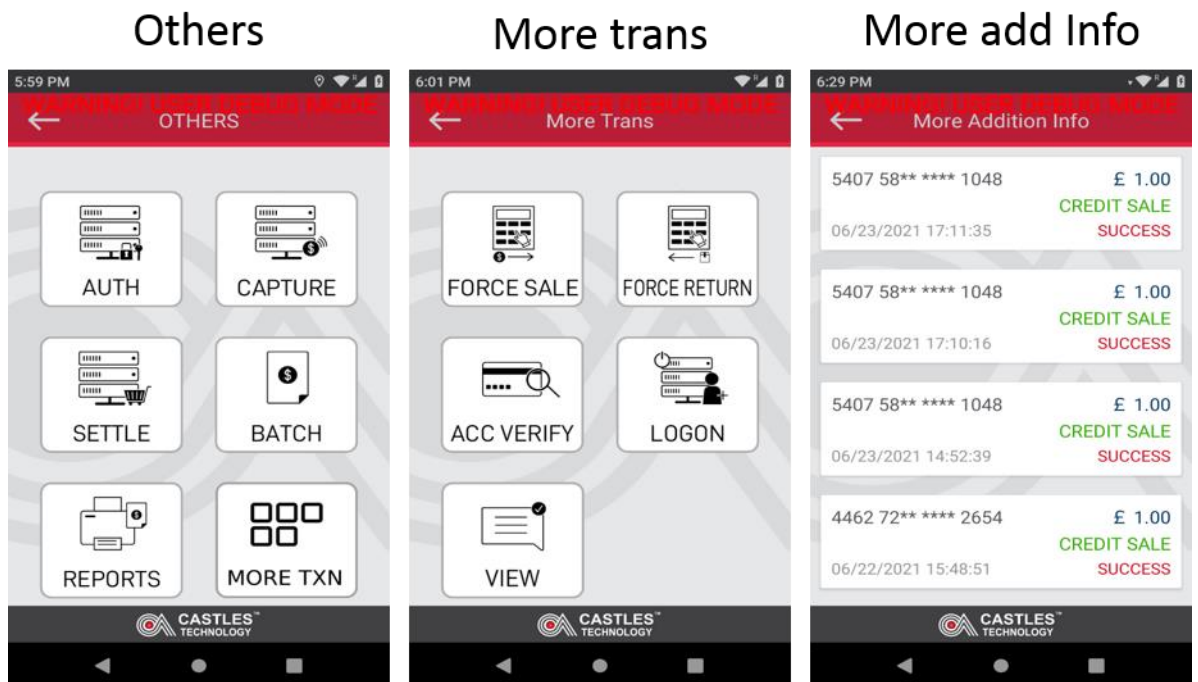
2.2. Sale Transaction Flow



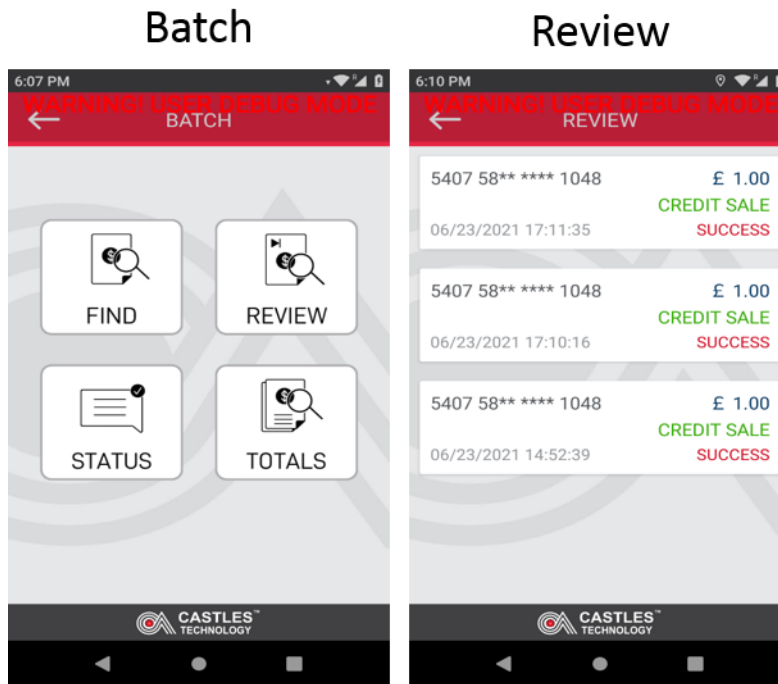
2.3. Sale Receipt



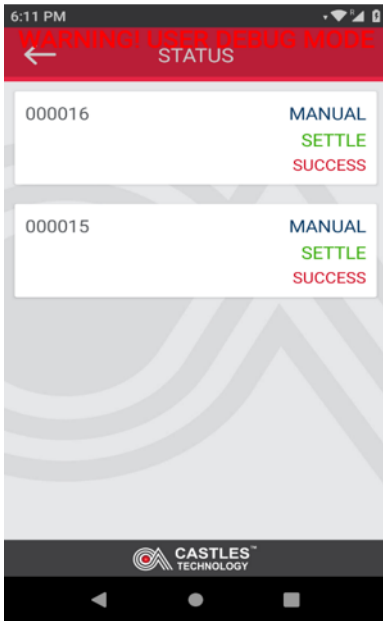
2.4. Menus



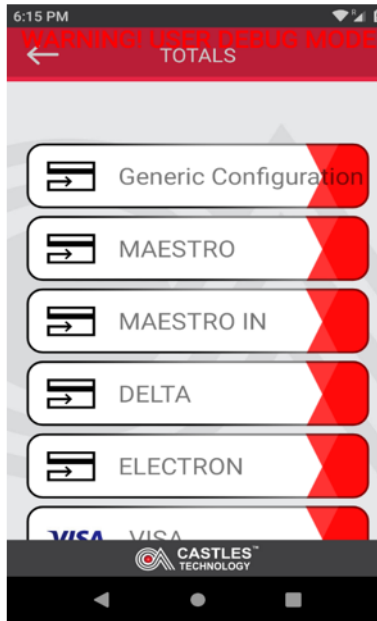
2.5. Batch, review, status and totals



Status

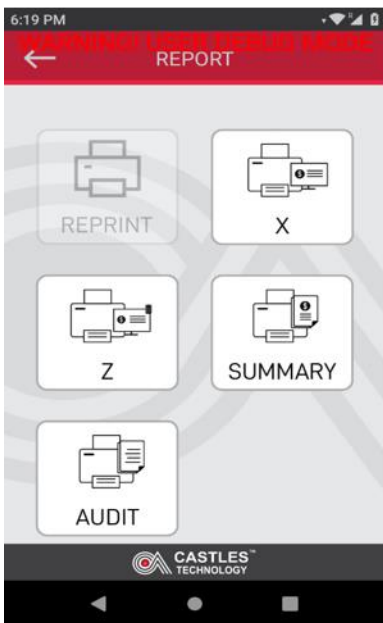


Totals



2.6. Reports, X and Z report

Reports



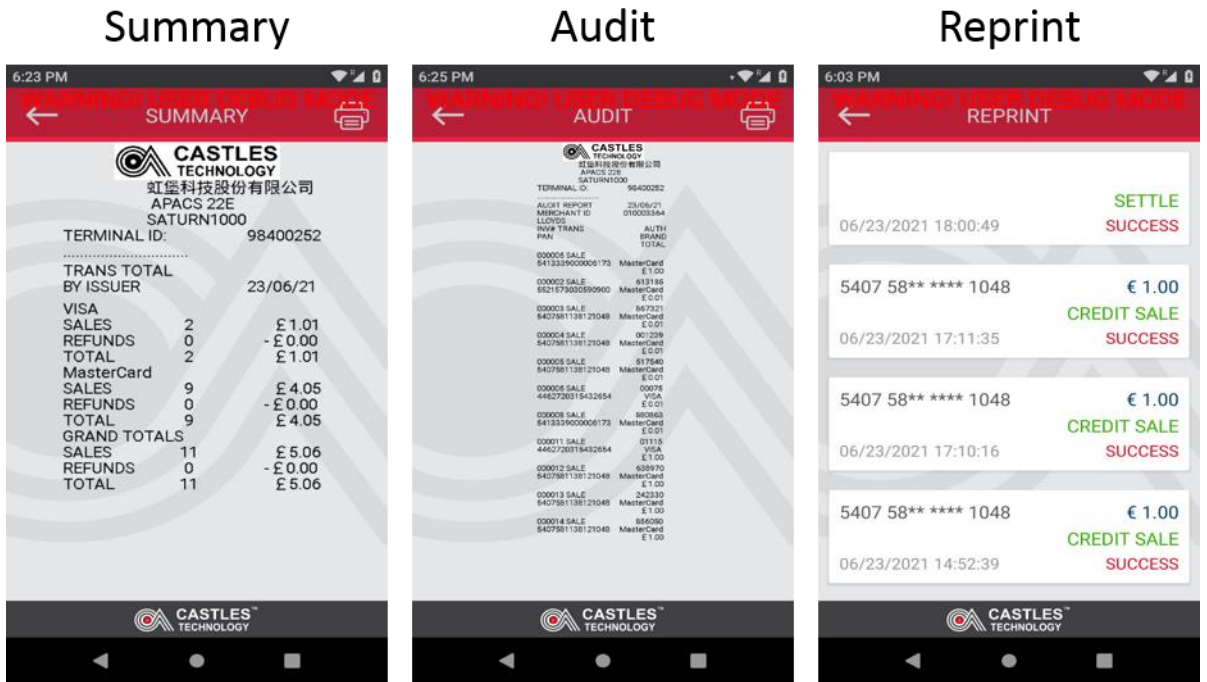
X



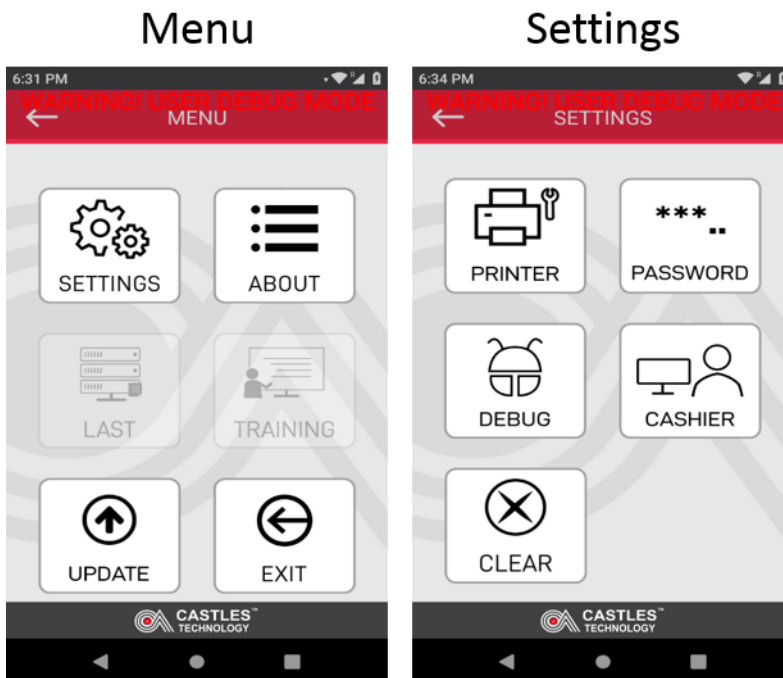
Z



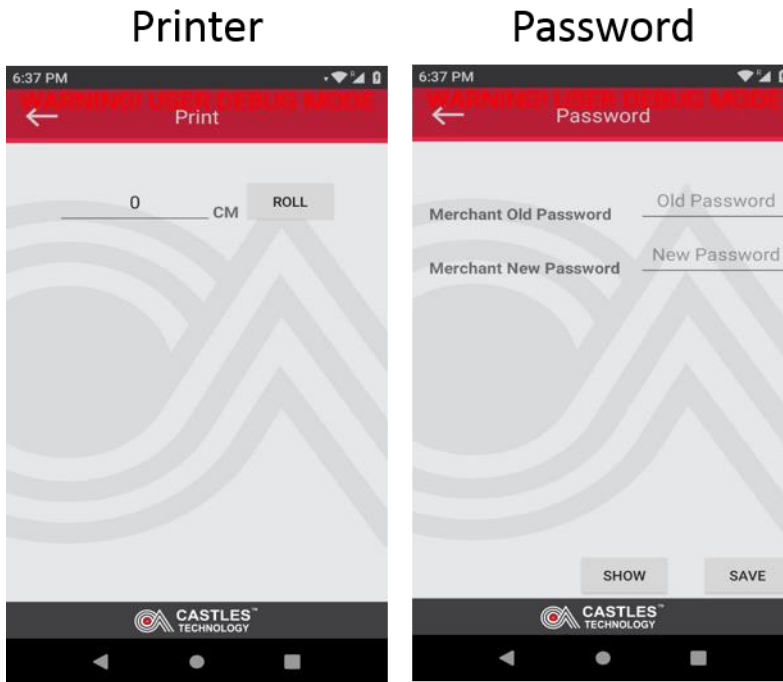
2.7. Summary, audit and reprint



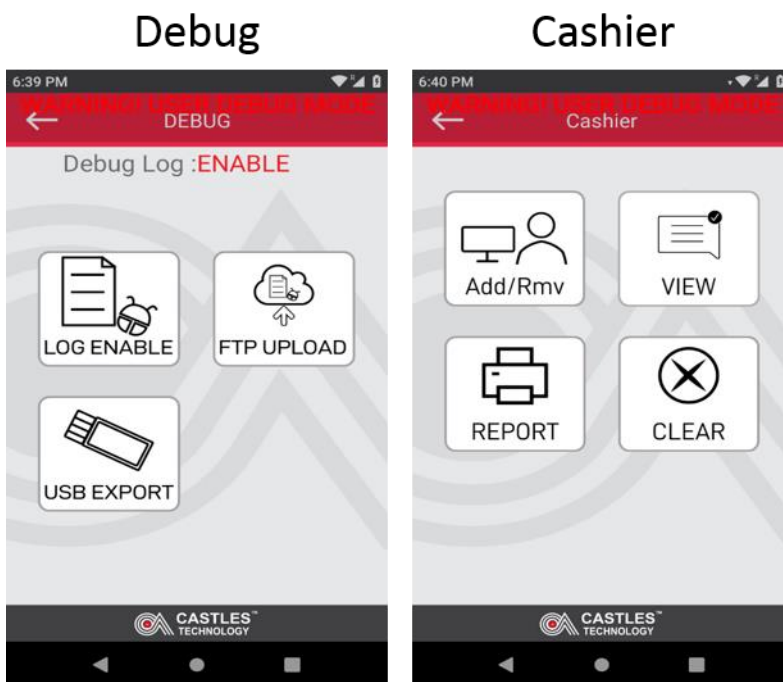
2.8. Menu, settings



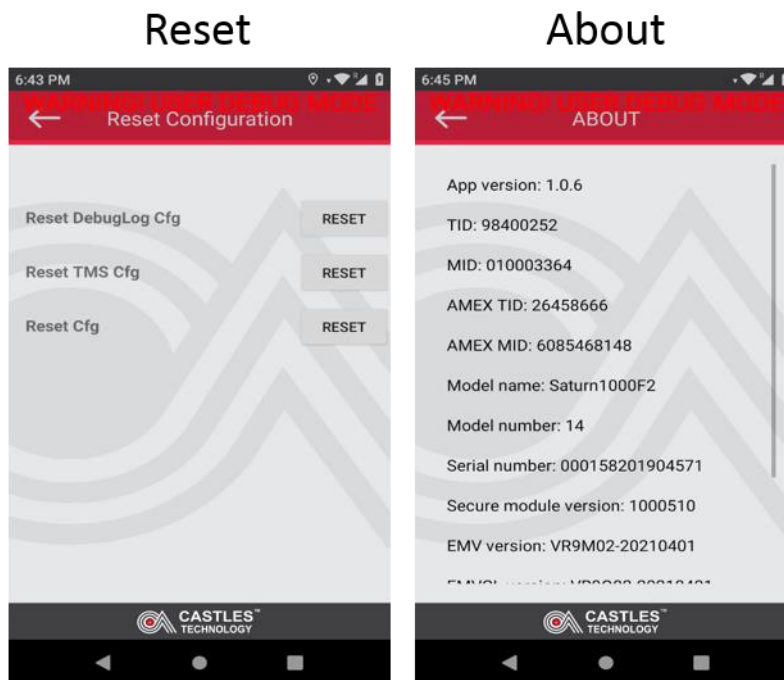
2.9. Printer, password



2.10. Debug, cashier



2.11. Reset, about



3. SIM installation

To install the SIM card remove terminal back cover, remove the battery and insert the SIM to the SIM 1 slot. Reinststate the battery and put the cover back in.

Step by step guide – go to SATURN1000F2 User manual Section 2.5 - please refer to support website www.castlestechemea.com/support

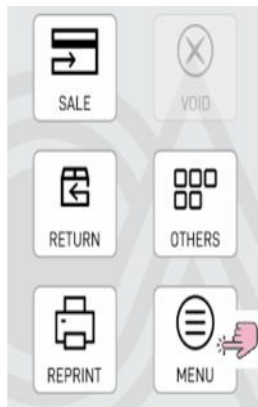
4. Accessing Applications Menu

To access various application and system settings you have to exit sale application (CastlesPay)

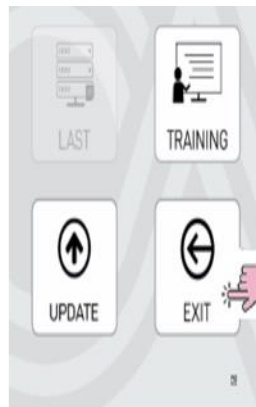
From the Sale screen:



Click on white arrow

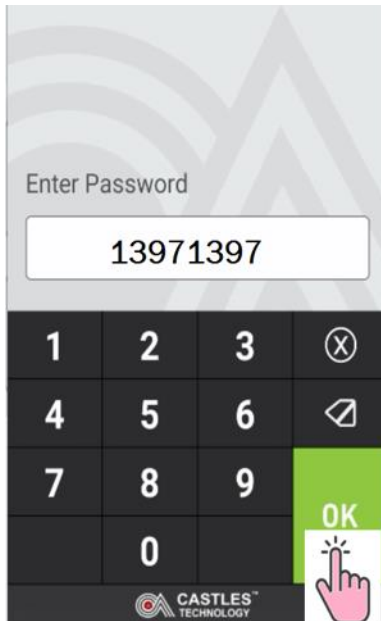


Select 'Menu'

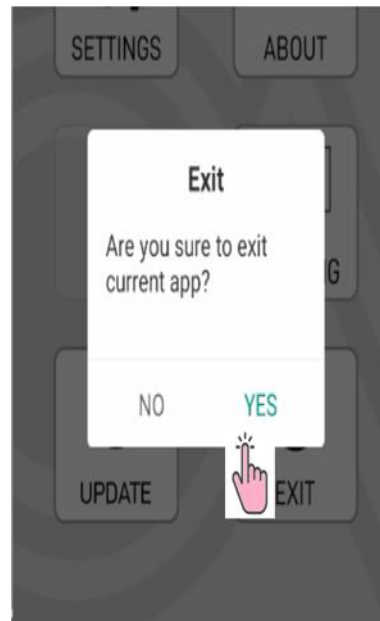


Select 'Exit'

Key in operator and logon password 13971397 and click green 'OK'



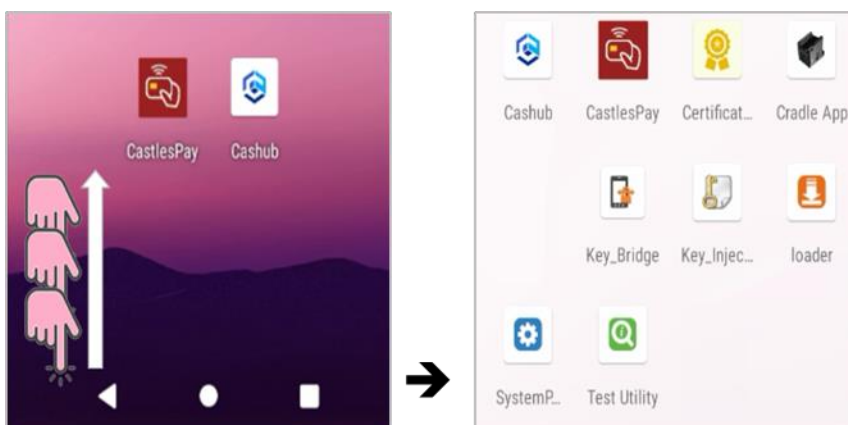
Select OK



YES to exit app

You may be also asked to key in user login password – key in 0000 0000 and click on login.

From the background screen, press and hold the screen (next to the left arrow) and slide it up until search apps is visible:



You can now access all applications.

5. Application list

This list may vary and depends on number of applications installed on the terminal.

Please see glossary section (11) for images.

5.1. Castles Pay - this is the payment application with all sub-menus. From this app you can:

- Performs transactions (sale, refund, void)
- Runs various reports
- Update the terminal
- Connects to Wi-Fi

Please see sale application (section 2 of this document) for 'how to...' guide.

5.2. CasHub - allows you to **review of application details** (listed below) and run updates. You can review from this level below details:

- Application version
- Install date
- Update date,

5.3. System Panel – allows you to **control most aspects of your device**—everything from establishing a new Wi-Fi or Bluetooth connection, to installing a third-party onscreen keyboard, to adjusting system sounds and screen brightness. Some key features with functionalities listed below:

- **'Network and Internet'** - allows you to configure and manage Wi-Fi, SIM connections, airplane mode, VPN, mobile hotspot, and more
- **Connected devices** (via **USB** and Bluetooth) – allows you to view all devices connected to via USB or Bluetooth
- **Apps and notifications** – allows you to view recently used apps, it also display all apps installed on the device
- **Battery** – displays battery info and allows to access battery manager settings
- **Display** – allows you to set and configure screen settings including brightness level, wallpaper, font size, display size, screen saver

- **Sound** – allows you to set and configure sound settings including volume, default notification sounds, touch sounds
- **Storage** – provides info about device storage capacity and storage usage by application
- **Security and location** – allows you to access to info about device security and privacy settings
- **Accounts** – provides info about SIM and synch data
- **Accessibility** - a large on-screen menu to control your Android device. You can control gestures, hardware buttons, navigation and more.
- **System** - allows you to control most aspects of your device—everything from establishing a new Wi-Fi or Bluetooth connection, to installing a third-party onscreen keyboard, to adjusting system sounds and screen brightness.
- **About phone** – provides basic information about the device to include Device name, SIM status, Model and hardware, IMEI for installed SIM, Android version, IP Address and MAC Address
- **'Network and Internet'** - allows you to configure and manage Wi-Fi, SIM connection, airplane mode, VPN, mobile hotspot, and more.
- **Connecting to WIFI** - you can connect the terminal to Wi-Fi network from the Sale app level or by accessing 'Network and Internet' config within System settings

5.4. Test utility apps - allows you to access test hardware performance tool

From Enter amount screen select **back arrow**

Go to MENU → EXIT

Key in Operator password 13971397 and press **green OK**

Select YES on Exit current app screen

From the new screen, swipe the screen **up** and click on **test utility** icon



5.4.1. App info

Revision - display current software operating and application version

Size – inform about available memory size

5.4.2. UI Test

LCD – use to test LCR display - touch the screen and the display will change the colour. Once 'LCD test finish' displayed the test is over.

LED - turns on and off the LED light on the front of the terminal

Backlight - allows to adjust background brightness

RTC - displays internal clock

Speaker - allows to adjust device volume

Touch - test touch screen

Camera - test camera

5.4.3. Card test

MSR – testing swipe reader. Swipe the card and terminal will display recorded track

SC – Chip reader test – once card inserted the terminal should display message: icc detect card & active.

CL (Contactless reader) – present the card to the top of the screen and terminal will display 'cl poll success' message when card read correctly

SD - swipe card reader.


5.4.4. System test

Printer – allows to print test. Ensure the paper is inside the terminal and click on print icon

Battery – displays current battery status. Informs if the battery is currently charging (and how is connected), charge level (in %), battery temperature

5.4.5. Comms test

Wi-Fi network test. Select start scan **Start Scan** icon for the terminal to display available Wi-Fi networks, signal strength (in dB), signal band (in Ghz) and channel through which the signal is broadcasted. Click on the network to prompt the terminal to connect to this network (terminal will prompt for password insertion if required).

Bluetooth - search for Bluetooth devices. Select 'search Bluetooth device' icon  to start scan.

USB – detects any device connected via USB

GPRS test – allows to run various GPRS mobile network tests: checking the network, testing network type, Network operator and run a ping test.

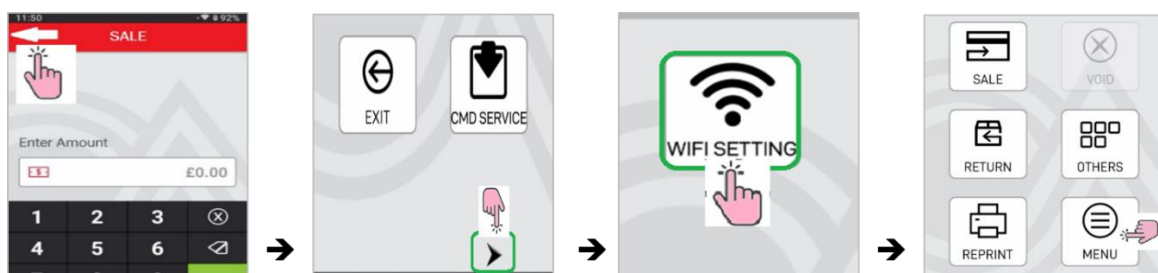
Cradle – test RS232 connection with the cradle (if connected)

6. Communication Wi-Fi

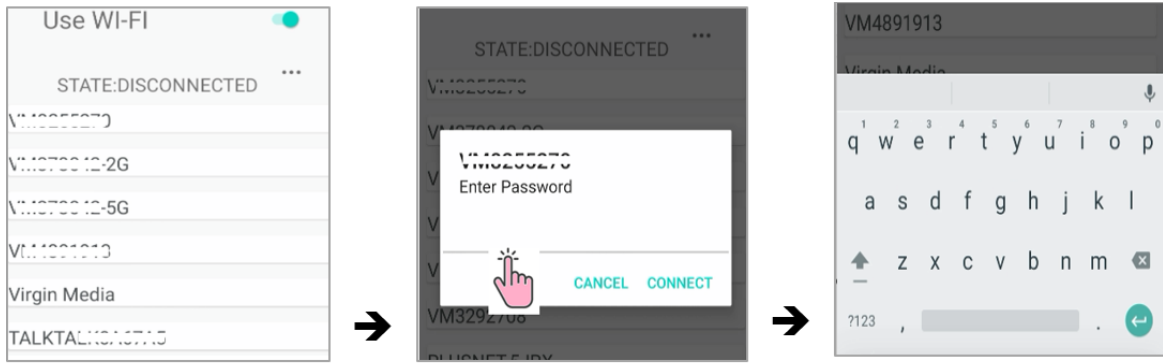
Castles Technology S1F2 terminals are compatible with 2.4 GHz and 5 GHz Wi-Fi Networks

6.1. Configuring Wi-Fi network from the Sale application:

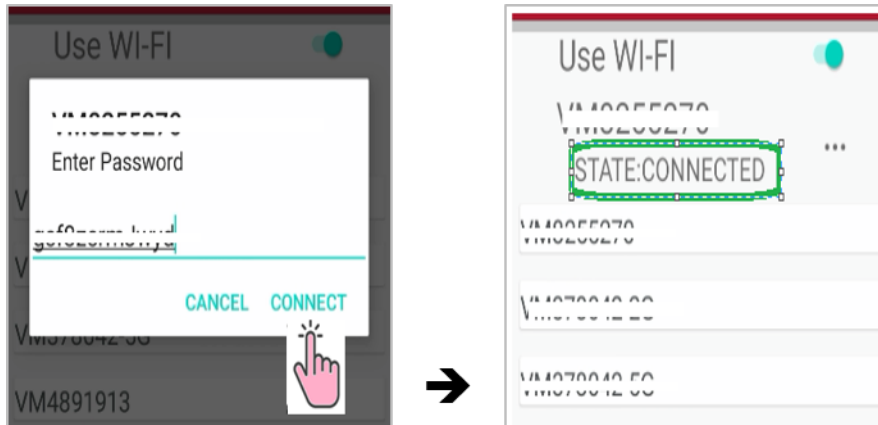
Press white arrow next to SALE then press on MENU icon, then press the **black arrow** from the bottom of the screen, then click on **Wi-Fi setting** icon:



The terminal will display a list of the available networks, select the one you wish to connect to by clicking on it, the terminal will prompt to type in the password. Click on the horizontal line to open the keyboard. Key in the password as required.



Once password entered press **CONNECT**; once successfully connected, the terminal will display message State: **CONNECTED**



Click on the back-arrow from the top left side of the screen to return to Enter amount screen.

6.2. Configuring Wi-Fi network from the 'Settings' menu:

From 'Enter amount screen select **black arrow**

Go to MENU → and select EXIT

Key in Operator password 13971397 and press **green OK**

Select YES on Exit current app screen.


From the new screen, swipe the screen up and click on **system menu icon**



Enter 00 00 00 00 in both first and the second password - press the **red tick**

circle 

Swipe the **system panel** screen up and select **settings**

From the top of the screen select **network and internet**  section, click on **Wi-Fi**
Select the network you would like to connect and key in the password – press on **connect**

Once the terminal is successfully connected you can return to the Enter amount screen by pressing **dot** at the bottom of the screen and then selecting **CastlesPay** app



6.3. Disconnecting and reconnecting to Wi-Fi

Select **System menu** screen 

Enter 00 00 00 00 in both first and the second password - press the **red tick** circle 

Swipe the **system panel** screen up and select **settings**

From the top of the screen select **network and internet**  section,

Swipe the toggle to stop using the Wi-Fi (the switch will become grey) and underneath the Wi-Fi you will see off

To reconnect to Wi-Fi move the toggle from left to right (the toggle will become green and underneath Wi-Fi it will say **connected** or **not connected**)

6.4. Forgetting Wi-Fi network

Select **System menu** screen 


Enter 00 00 00 00 in both first and the second password - press the **red tick** circle 

Swipe the system panel screen up and select **settings**

From the top of the screen select **network and internet**  section,

Click on **Wi-Fi**

Locate the network which has **connected** status (usually top displayed network)

Click on a **cog icon**  and select **forget**, the terminal is now disconnected from the network

6.5. Setting Static (Non-DHCP) IP on the terminal

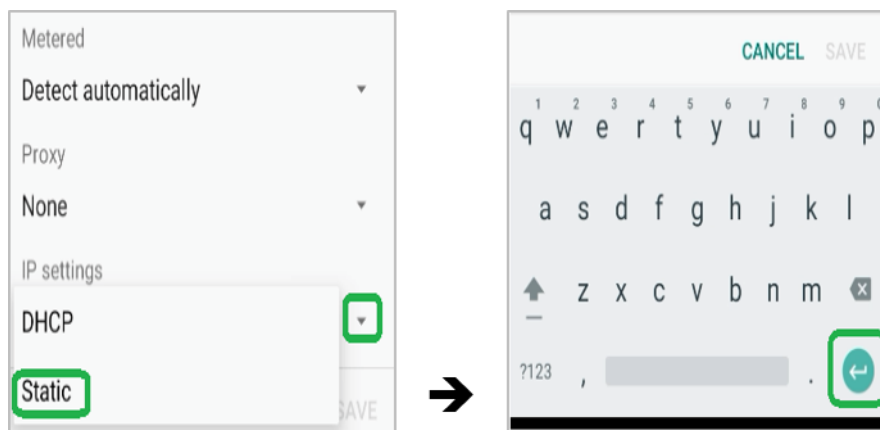
From the top of the screen select **network and internet**  section

Click on **Wi-Fi**

Click on **+ Add network** → **advanced options**

Scroll down and click on **dropdown on DHCP** and select **Static**

Scroll down the screen and enter Static IP address, Gateway IP and DNS1 then press **green arrow** from the keypad to confirm:



7. Communication Mobile networks (4G / 3G / GPRS)

Castles Technology S1F2 terminals are compatible with 3G and 4G network signal.

7.1. Setting mobile network – automatic registration

Key in Operator password 13971397 and press **green OK**

Select **YES** on Exit current app screen.

From the new screen, swipe the screen up and click on **system menu** icon 

Enter 00 00 00 00 in both first and the second password - press the **red tick** circle 

Swipe the system panel screen up and select **settings**

From the top of the screen select **network and internet** , click on **mobile network**

Terminal will display below messages:

- name of the SIM Provider; Mobile data; Roaming; Data usage; Advanced;



7.2. Setting mobile network – manual registration

From Enter amount screen select **back arrow**

Go to MENU → and select EXIT


Key in Operator password 13971397 and press **green OK**

Select **YES** on Exit current app screen

From the new screen, swipe the screen **up** and click on **system menu** icon 

Enter 00 00 00 00 in both **first** and the **second** password - press the **red tick** circle 

Swipe the **system panel** screen **up** and select **settings**

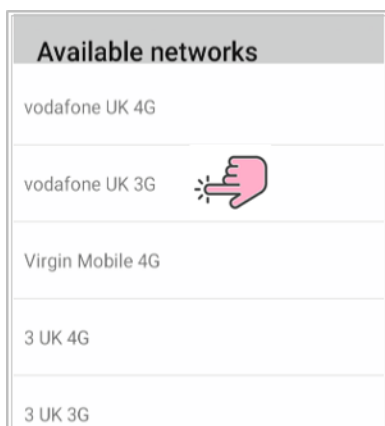
From the top of the screen select **network and internet** , click on mobile **network**
Terminal will display below messages:

- name of the SIM Provider; Mobile data; Roaming; Data usage; Advanced

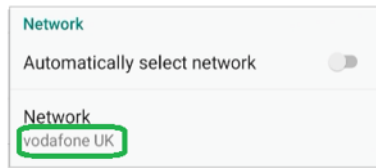


Select **advanced**, scroll down to 'Automatically select network' and move the toggle from right to the left

Click on preferred network from the list:



Terminal will display name of the network it's connected to:



7.3. Setting APN on the terminal

From Enter amount screen select **back arrow**

Go to MENU → EXIT

Key in Operator password 13971397 and press **green OK**

Select YES on Exit current app screen.

From the new screen, swipe the screen **up** and click on **system menu** icon



Enter 00 00 00 00 in both **first** and the **second** password - press the **red tick** circle



Swipe the **system panel** screen **up** and select **settings**

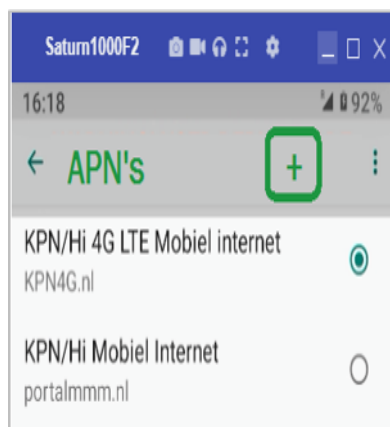
From the top of the screen select **network and internet**



Select **advanced** → scroll the screen down → **access point names**

An APN list should appear (if the SIM card is already installed)

Select **+** symbol from the top of the screen:



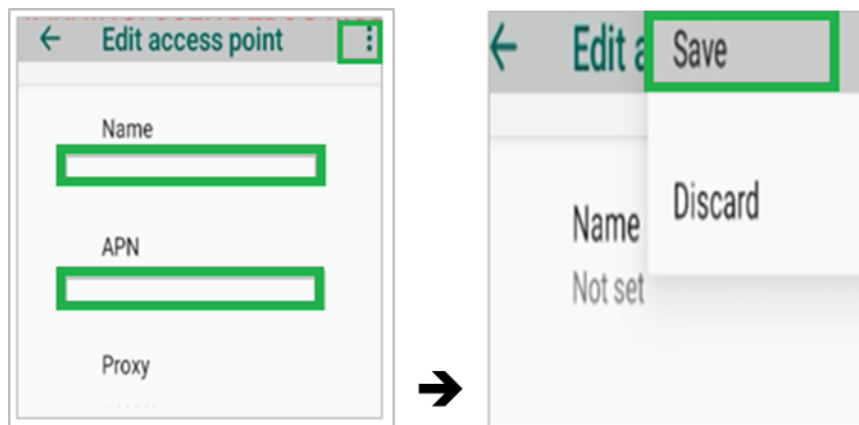
Enter APN details as per SIM requirement:

- Name – Castles
- APN – as per SIM requirement
- Proxy – leave blank
- Port – leave blank

- Username – as per SIM requirement
- Password – as per SIM requirement

All other settings don't require amendments.

Once amended to the required, please click on the vertical dots and save changes:



7.4. Disabling Mobile data

To disable mobile data (stops terminal from communicating via mobile network) follow below steps:

From 'Enter amount screen select **back arrow**

Go to MENU ➔ EXIT

Key in Operator password 13971397 and press **green OK**

Select YES on Exit current app screen

From the new screen, swipe the screen **up** and click on **system menu icon**



Enter 00 00 00 00 in both **first** and the **second** password - press the **red tick circle**

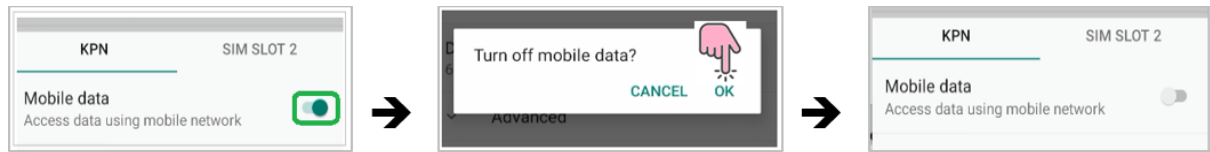


Swipe the **system panel** screen **up** and select **settings**

From the top of the screen select **network and internet**



, click on **mobile network**
On the mobile data section move the toggle from right to left and press **ok** to turn off data transfer via mobile network:



7.5. Enable Mobile data

To enable data transfer via mobile network follow below steps:

From Enter amount screen select **back arrow**

Go to MENU → EXIT

Key in Operator password 13971397 and press **green OK**

Select YES on Exit current app screen

From the new screen, swipe the screen **up** and click on **system menu icon**



Enter 00 00 00 00 in both **first** and the **second** password - press the **red tick circle**



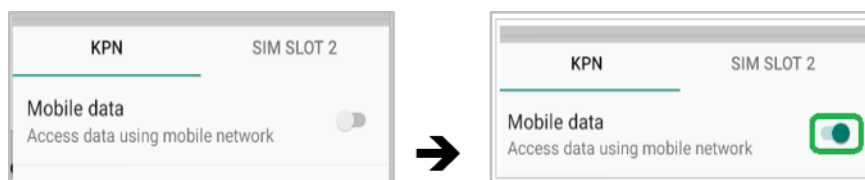
Swipe the **system panel** screen **up** and select **settings**

From the top of the screen select **network and internet**



, click on **mobile network**

On the mobile data section move the toggle from the left to right



8. Wi-Fi troubleshooting

- Restart the terminal
- Ensure the terminal is within required Wi-Fi range
- Disconnect from the Wi-Fi network from the Sale App level
- Re-connect to Wi-Fi from the Sale app level
- Exit Sale application – disconnect and reconnect to the Wi-Fi network from ‘Settings’ level
- Forget the network from ‘Settings’ level
- Reconnect to the network from ‘Settings’ level

- Test Wi-Fi network from 'Test utility' application
- Power cycle router
- Connect the terminal to the alternative network

9. Mobile networks (3G/4G/5G) troubleshooting

- Power cycle terminal
- Check the terminal can detect the sim card - if no SIM detected remove and insert the SIM card back to SIM slot 1
- Check the terminal has a signal
- Check the strength of the GPRS signal
- Check APN settings are correct
- Location of the terminal – take it to a window or outside the building if possible
- Disable and Re-enable auto registration
- Disable Auto registration – Manually select network provider
- Disable and enable mobile data

10. Hardware troubleshooting

10.1. Power troubleshooting

- Restart the terminal
- Check if terminal displays any error/screen messages when it turns back on
- Look for any physical damaged to the terminal
- Look for any damage to the power supply and/or USB cable and USB power connector
- Look for any damaged to the battery – disconnect and reconnect the battery
- Check if the power socket is working – connect to alternative power socket

10.2. Touch screen troubleshooting

- Restart the terminal
- Exit sale application and select 'Test utility'

- Select UI [LCD] touch the screen for the background to change the colour – keep pressing until ‘LCD TEST FINISH’ message appear on the screen
- Select ‘Bulb’ symbol and swipe the bar left and right to amend screen brightness
- Select ‘Hand on screen’ symbol (you have to scroll up the symbols on the left-hand side) – draw with your hand on the screen
- Select ‘Settings’ menu [key in password (00000000 as default for both first and second password) [scroll screen ‘up’ and select ‘Settings’ [select ‘Display’ [Brightness level] amend level by moving the ‘dot’ to the right or left
- Update the terminal – exit application – select CTMS - From top right corner of the screen select three vertical dots and select ‘UPDATE NOW’

10.3. Card reader troubleshooting

For all types of card test please ensure that test are completed on more than one card to eliminate card issue.

For all card reader test you have to exit the sale application, select ‘Test utility’ and select ‘Card’ symbol from the red vertical bar on the left hand side of the display.

Chip reader

- Restart the terminal
- Select ‘SC’ and insert the card - terminal to display ICC detect and active’
- Run an update
- Insert card to the card slot (in and out) several times (do not use payment card as this may cause the damage to the chip on the card) to clear the Chip reader




Contactless reader

- Restart the terminal
- Select ‘CL’ and terminal will display ‘CL Pooling’. Present the card to the contactless reader allocated on the printer lid. Terminal to display ‘CL Pool success’
- Run an update

Swipe card

- Restart the terminal
- Select 'SD' and swipe the card on the swipe reader allocated on the right side of the terminal
- Clean the reader by swiping the card up and down several times (do not use payment card as this may cause the damage to the magnetic stripe on the card)
- Run the update

10.4. Printer troubleshooting

- Ensure that correct paper is used and paper is feed from underneath the roll.
- Ensure the printer lid is locked properly
- Restart the terminal
- From 'Enter amount' select left arrow (on the top left side of the display)  MENU  Settings  Printer – touch '0' on the screen and from numeric keypad select '2', then select 'ROLL'
- Exit sale app and enter 'Test utility'
- Select 'COG' symbol from the red bar on the left side of the terminal - select 'Printer' then click on 'Print'
- Ensure that printer roller (allocated on the printer lid) is installed with the cog on the right side and that it spins freely
- Ensure that the battery is charged minimum of 20%
- Look for any physical damage to the printer, paper lid, and printer roller

11. Glossary

Provides the guide on terminal icons through the document.



Castles Pay - this is the payment application with all sub-menus



CasHub - allows you to review of application details



System Panel – allows you to control most aspects of your device



Test utility apps - allows you to access test hardware performance tool.

Once opened, you can see several options with sub menus



App info



UI Test



LCD



LED



Backlight



RTC



Speaker



Touch



Camera



Card test



MSR



SC



Contactless



SD (swipe)



System test



Printer



Battery



Comms test



Wi-Fi



Bluetooth



USB

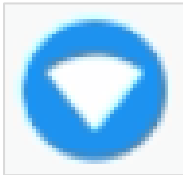


GPRS

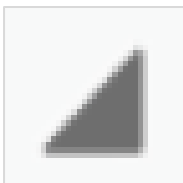


Cradle

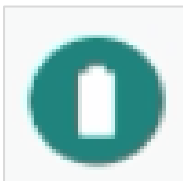
Other symbols:



Wi-Fi and Network menu



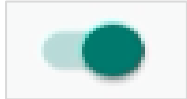
GPRS signal indicator



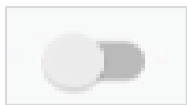
Battery symbol indicator



Tick circle to confirm selection



Toggle ON



Toggle OFF

12. Revision History

Issue	Description of Change	Date
1	Initial release	15/02/2022

For additional info, videos with installation guide please visit
www.castlestechema.com/support