T-POS Terminal

User Manual

Based on Build 1-6-4, Software version 1.16.2

October 2021

TT FUEL

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1. Introduction

The purpose of this document is to familiarise T-POS operators with the system, its capabilities and also to provide practical operating instructions for daily use.

1.1 History of Changes

For a complete list of changes, please consult the referenced T-POS Terminal – Release Notes document.

1.2 Referenced Documents

The **T-POS Terminal - User Manual** should be read in conjunction with the following documents, thus offering a complete coverage of the T-POS installation, functionalities, and day to day operations:

- T-POS Terminal – Getting Started Guide.
- T-POS Terminal – Release Notes
- T-POS Wet & Dry Stock – Package Showcase.
- T-POS Wet Stock – Package Showcase.
- FC6000-T – Installation and Configuration Guide (D00217).
- FC6000-T – User Manual (D00213).

1.3 Standards and Safety

It is the responsibility of the installation staff to ensure that all relevant standards and legislation relating to the installation of this device are adhered to, for example OH&S, electrical wiring codes, and hazardous area works etc.

The following is a list of some of the Australian/New Zealand Standards (AS/NZS) and National Measurement Institute (NMI) procedures that are relevant to the installation of the FC6000-T in Australia. Note that this list may be incomplete, and the installation technician is responsible for determining what other standards may apply.

- AS/NZS 3000:2007"Wiring Rules".
- AS 1940 "The storage and handling of flammable and combustible liquids".
- AS/NZS 2430.3.2 "Classification of hazardous areas" "Part 3.2: Examples of area classification – Vehicle workshops, vehicle parking, fuel dispensing stations and aircraft hangars".
- NMI V 2-1 "Uniform Test Procedures for the Verification, Certification and In-service Inspection of Fuel Dispensers - Part 1 Other than LPG Dispensers". Part 6, 7 and 8 is applicable.
- NMI V 2-2 "Uniform Test Procedures for the Verification, Certification and In-service Inspection of Fuel Dispensers - Part 2 LPG Dispensers". Part 6, 7 and 8 is applicable.

1.4 System Components

The T-POS Terminal can be deployed in a variety of configurations, depending on each customer's needs and requirements. The basic functionality requires a standard set of main components and peripherals, however the system can accommodate more complex scenarios and can interact with an extensive set of peripherals, depending on the purchased T-POS solution.

Note: Although an Uninterruptable Power Supply (UPS) is not required, integrating one in your deployment is highly recommended.

Figure 1: T-POS Terminal Wiring Connections

Note: For installing your new T-POS system, please refer to the T-POS Terminal – Getting Started Guide.

T-POS Terminal: has a primary touch screen display which allows the T-POS operator to manage not only the sales and tendering process but also the pumps on the forecourt. There is also a customer facing display that provides feedback on the sales process to the customer. Advertising media content can also be displayed on the screen if so desired. Unlike the primary display, the secondary customer display is not touch input as customer interaction with the screen is not required.

Cash Drawer: compartment where the cash from transactions is kept. The cash drawer connects to the printer and not to the T-POS Terminal.

Receipt Printer: used for printing receipts and local reports.

Barcode Scanner: used to scan barcodes on dry stock goods, adding the items to the current sale.

Indoor EFTPOS Payment Terminal: used for payments with a debit or credit card.

Indoor Account Payment Terminal: used for payments with non-EFTPOS account cards issued and managed by the merchant.

FC6000-T Forecourt Controller: unlike any other components covered here, there is no human interaction with the Forecourt Controller, however this is one of the central components of the system, making the interaction between the T-POS Terminal and the dispensers possible.

Important: T-POS can also be deployed on sites with an existing FC6000-S Forecourt Controller, by upgrading it to FC6000-T full specifications via TT Fuel's exchange / refurbishment service, thus alleviating some of the installation costs.

Make sure the serial interface between the FC6000-T and T-POS is firmly connected. Losing the connection to the FC6000-T will result in faulty operation, while trying to start the T-POS application will generate the following Critical Error message.

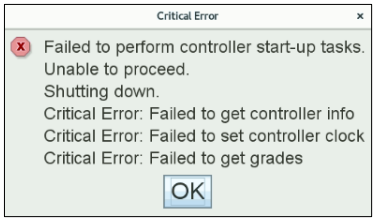


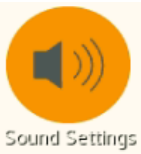
Figure 2: T-POS Serial Interface Error

2. Home Screen

The T-POS Terminal comes from the factory with a default configuration, suitable for most installations, however prior to starting the main T-POS application and commencing daily operations, operators can personalise their preferences through the Home Screen, covered in depth in the following chapters.

Figure 3: T-POS Home Screen

2.1 Sound Settings



Sound Settings allows Operators to adjust the sound output levels for the Terminal. To maintain the intended functionality of the T-POS Terminal, do not make changes to other settings.

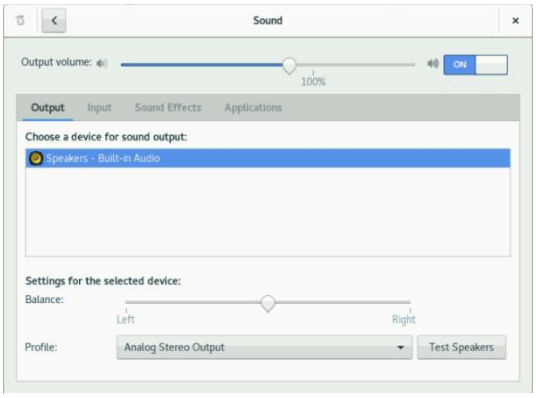


Figure 4: T-POS Sound Settings

2.2 Brightness Settings

Brightness Settings allows Operators to adjust the level of brightness and the colour temperature for both primary and secondary displays.

> Note: The Brightness Settings menu gets minimised when closed and can only be reopened from the left bottom corner, by first sliding out the hidden menu, then tapping on the minimised icon.

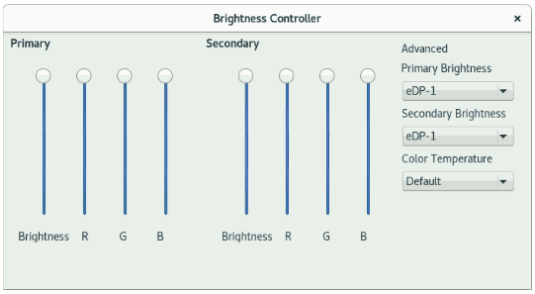


Figure 5: T-POS Brightness Settings

2.3 Network Settings

Network Settings allows Operators to configure the T-POS Terminal wired network or to connect it to a wireless network, either from a list of discovered wireless networks or by manually connecting to a hidden wireless network.

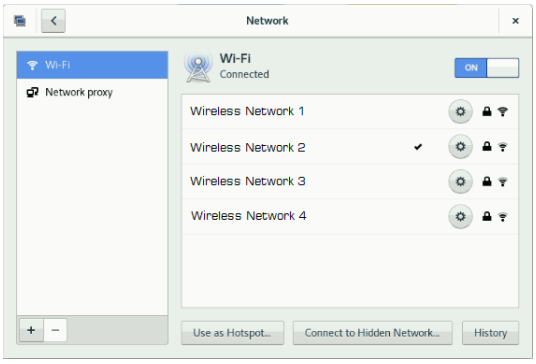


Figure 6: Network Settings

> Depending on the wireless signal strength, this icon will have more or less bars.
> A wireless network displaying this icon means it is protected by a passphrase.
> Tap on this icon to display the network connection details.

To connect the T-POS to a new or different wireless network, follow these steps:

1. Access the Networks Settings menu, as depicted in Figure 6.
2. A list of available Wi-Fi networks will be displayed.

   Note: In rural areas with no Wi-Fi access but sufficient 3G/4G coverage, mobile tethering can be used instead.

Figure 7: Wi-Fi Security Settings

3. Tap on the Wi-Fi network name. When prompted to type in the password, tap Cancel.
4. Once a wireless network has been accessed, this icon will be displayed next to it, allowing configuration.
5. Tap the icon next to the wireless network you want to connect to, type in the password in the Security tab, then tap Apply. The Networks Settings menu will be displayed again, listing all the available wireless networks.
6. Tap the wireless network you wish to connect to. The connection being previously configured, it will be established automatically.

To connect the T-POS to a hidden wireless network, follow these steps:

1. Access the Networks Settings menu, as depicted in Figure 6, then tap on Connect to Hidden Network.
2. Type in the name of the hidden network (SSID).
3. Select the Wi-Fi security type for the hidden network, from the drop-down menu. Once a choice has been selected, the Password field becomes available.
4. Type in the Wi-Fi password, then tap on Connect.

Figure 8: T-POS Hidden Network Settings

To connect the T-POS to a wired network (LAN), simply connect the Ethernet cable to the Ethernet port underneath T-POS primary screen. Provided that your network has a working DHCP server assigning IP addresses, T-POS is configured to recognise your network automatically and should receive an IP address that belongs to your network.

Note: Once a connection has been established, tap on Networks Settings → Wired for the connection details or to further configure it by tapping on the icon.

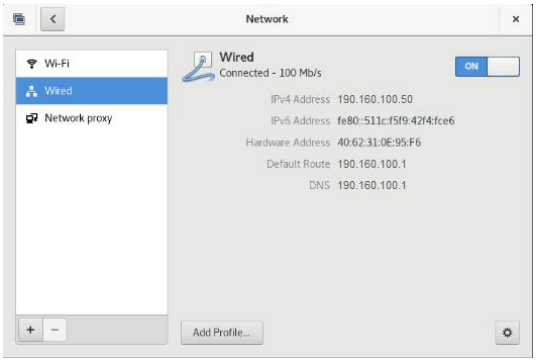
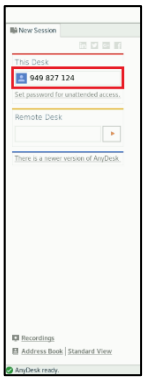


Figure 9: T-POS Hidden Network Settings

2.4 TT Remote Support

The TT Remote Support menu allows Operators to request support from TT Fuel and have their T-POS Terminal remotely accessed by support personnel.



To establish a remote support connection, follow these steps:

1. Make sure the T-POS is connected to the Internet.
2. Make sure the TT Remote Support window is displayed on the primary T-POS display.
3. Provide the unique ID number (highlighted in red) to TT Fuel support technician.
4. You will be prompted to accept the incoming connection. Tap on the green Accept button.

Note: Occasionally, the connection request is displayed as a central top banner. Tap on the banner then tap on Accept.

2.5 T-POS Application

This shortcut launches the main T-POS application, aiding the Operator in their daily operations, extensively covered in chapter 4. Using T-POS Application.

Note: The application is password protected by a unique PIN number used to identify each Operator. The factory Administrator passcode is **1964**, however TT Fuel strongly recommends this password be changed immediately.

2.6 T-POS Utilities

T-POS Utilities is a utility application that allows users to manage and maintain their T-POS application.

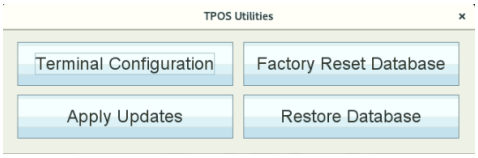


Figure 10: T-POS Utilities

Note: Detailed Logs checkbox determines the level of detail in the information captured by the routine logging. Only enable this feature if requested to do so by TT Fuel.

2.6.1 Terminal Configuration

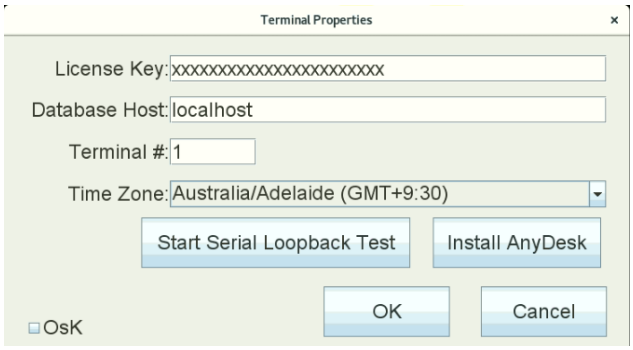


Figure 11: T-POS Utilities – Terminal Configuration

License Key: Enter your license key here. For more information, read chapter 3.2 Licensing.

Database Host: Each T-POS has a local database. However, T-POS can be configured to point to a MySQL database residing elsewhere. Enter an IP address of

the database server instead of 'localhost' if you want to connect to a different database.

Important: If you wish to have this setup, contact one of TT Fuel's sales representatives or your distributor.

Terminal #: If multiple T-POS machines are operating on the same site, each T-POS machine must have a unique Terminal ID.

Time Zone: The time zone you set here will be the time that gets displayed on the T-POS application and embedded in all records in the database.

Note: It is recommended to set the time zone ahead of time, before commencing normal operations, to ensure timestamps are accurate and reflect your location.

Start Serial Loopback Test: This special function is to test the serial port connectivity at the factory. End users need a special loopback serial cable to be able to perform this test.

Install AnyDesk: AnyDesk is the application that provides the remote connection functionality. This option is reserved to TT Fuel technicians and should not be attempted by end users.

2.6.2 Apply Updates

Occasionally, an update package is created for the T-POS systems, addressing issues and adding new features and functionality. Once an update becomes available, the T-POS operator can download the package and apply it on the T-POS machine by following these steps:

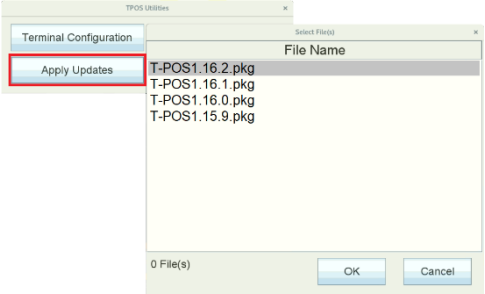


Figure 12: T-POS Apply Updates

1. Have a FAT32 formatted USB flash drive ready.
2. Go to www.ttfuel.com/resources.
3. From the Software Updates section, select T-POS Software Update.
4. Follow the instructions on the webpage for the rest of the update process.

Note: Prior to commencing the update, the current system is archived and a backup of the database is stored locally so in the unlikely event of a failure, the current system can be restored. For more details on how to restore a T-POS system to a previous state, go to chapter 2.6.1 Database Backup and Restore.

2.6.3 Factory Reset Database

Although T-POS comes equipped with robust software that covers all day to day operations, there are times when the system needs to be reverted to a known, default state by performing a Factory Reset Database.

Warning: Performing a Factory Reset Database results in losing any changes made to the system since factory delivery, including all historic sales data, the product list and the Product License. It is highly recommended this action be performed under direct TT Support supervision who will also need to reissue a new license to allow normal POS functions to resume once the factory reset operation has been completed.

To perform a Factory Reset Database, follow these steps:

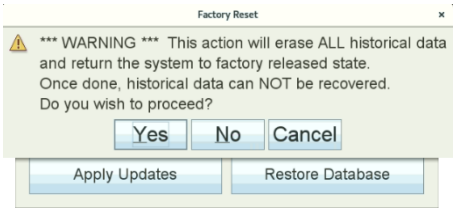


Figure 13: T-POS Terminal Factory Reset

1. First, close the T-POS main application.
2. From T-POS Utilities, tap on Factory Reset Database.
3. Confirm your intention to reset to factory defaults, twice.
4. Wait for the reset to complete. The Home Screen will be displayed once the process finishes.
5. Tap on T-POS and enter the password.
6. A warning message will be displayed, advising no valid license is present.
7. Provide the automatically generated installation key to TT Support who in turn, will issue a new license key.
8. Enter the new license key in the T-POS license dialogue box.
9. Close and reopen the T-POS main application, resuming normal operations.

Remember: T-POS is now in its default factory state so it will be necessary to reconfigure the system for your specific requirements and start the POS day.

2.6.4 Restore Database

All the product and sales data acquired by the T-POS through routine operations is stored in a database. Like most computer systems, it is important to perform periodic backups of the information in the unlikely event of a failure .

Note: The frequency of backup operations is up to each merchant to decide, however in the event of a failure and a previous backup needs to be restored, the information acquired by the system after the backup used in the restoration, can never be recovered.

The database backup functionality is not accessed from the T-POS Utilities but from the T-POS interface instead, accessing Menu → Help → Database Backup. (see chapter 3.11.3 Database Backup)

Restoring a previous backup is similar to creating one, this time using the Restore Database button from the T-POS Utilities.

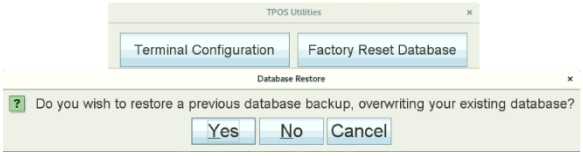


Figure 15: T-POS Terminal Database Restore

The T-POS operator is warned twice that any information acquired after the backup used, will be lost once the restoration is complete. The T-POS operator can then choose to back up from an external FAT32 formatted USB flash drive, otherwise the last local backup is used in the restoration process.

Note: When complete, normal POS operations can be resumed, by simply restarting the T-POS application.

2.7 Formatting a USB flash drive

A USB flash drive can be used with T-POS in a variety of scenarios, from importing products or marketing material to exporting logs and updating the T-POS firmware. The one requirement for a USB flash drive to be T-POS ready is to be formatted using the FAT32 file system.

In a Windows® environment, follow this procedure to make your USB flash drive T-POS ready:

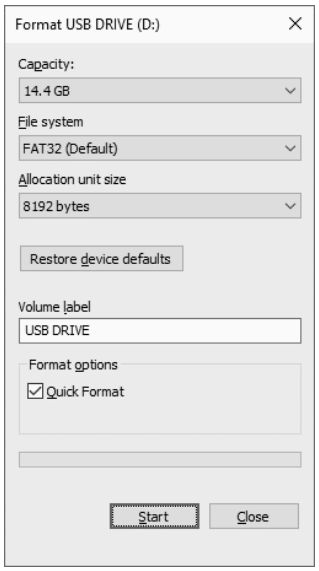


Figure 16: Formatting a USB flash drive under Windows®

1. Connect the USB flash drive to the computer.
2. After the drive is recognized by the OS, launch File Explorer.
3. Locate the USB flash drive icon and right click on it.
4. Select Format. In the Format dialogue window, select:
   a. File System: **FAT32**
   b. Allocation Unit Size: Default Allocation Size.
5. Type in a Volume Label of your choosing.
6. Select Quick Format, then click Start.
7. A warning message is display. Click OK to continue.
8. If the procedure finishes successfully, the message Format Complete is displayed.
9. Click Close. At this point, the USB flash drive is FAT32 formatted and ready for use.

Note: After copying the necessary files on your newly FAT32 formatted USB flash drive, find the USB icon in File Explorer again, right click on it and select Eject. Do not remove the USB flash drive before completing this procedure.

2.8 Shutdown

Tap on this icon to turn OFF the T-POS Terminal. To turn it back ON, press the POWER button on the back panel and wait for unit to boot and load the operating system.

Important: Make sure all apps are closed before initiating the Shutdown.

3. Configuring T-POS

After unpacking the T-POS System, connecting all the peripherals (covered in chapter 1.3 System Components, powering it ON for the very first time and personalizing the preferences through the Home Screen (covered in chapter 2. Home Screen), it's time to get familiarised with the system and take the first steps to configure it to your requirements, all within the T-POS main application (chapter 2.5 T-POS Application).

Note: There is no need to Start a New Day when configuring options from Menu → Settings.

Although some of the configuration may have already been done for you in the factory prior to shipment, the following steps will help you setup your new T-POS Terminal for your specific deployment:

1. Licensing
2. Forecourt Settings
3. General Settings
4. Receipt Settings
5. Personalise
6. Product Management

Important: Keep in mind most privileged operations require typing the password before continuing, thus identifying the Operator making the changes. (the factory Administrator passcode is **1964**, however a new passcode should have been set already).

3.1 Navigating the User Interface

The T-POS Terminal uses a touch screen while also providing on-screen keyboard functionality so there is no need for a keyboard or a mouse to interact with the system.

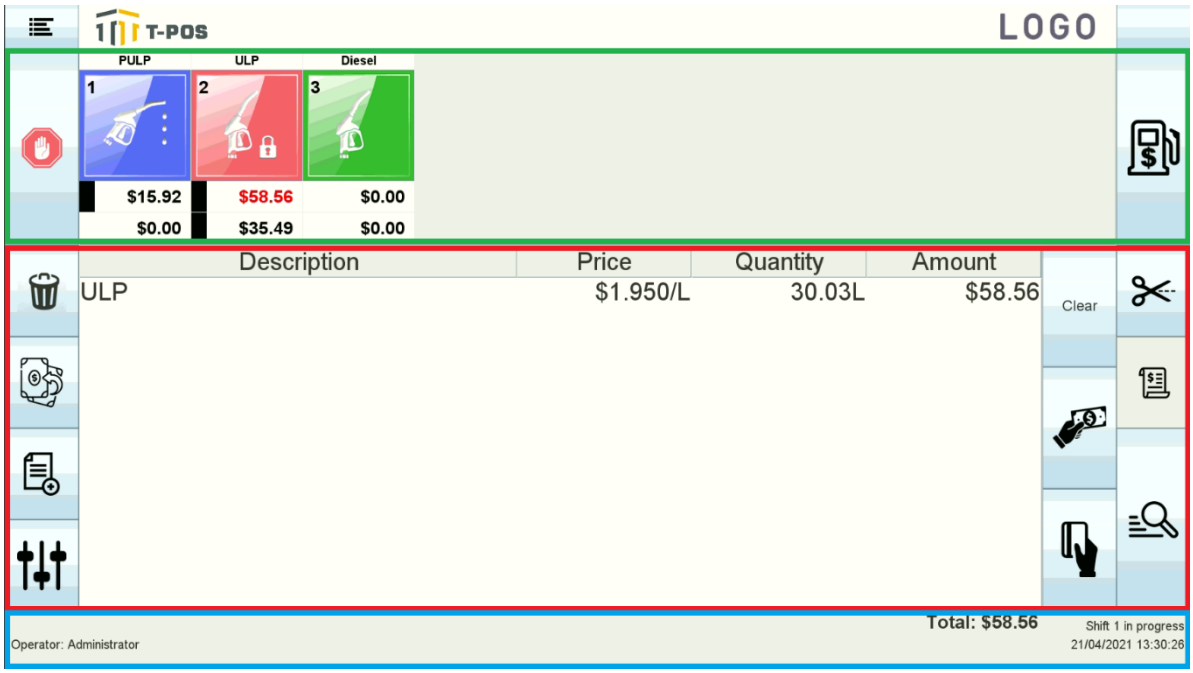


Figure 17: T-POS Application Main Screen

The T-POS functionality is grouped into "zones", colour coded in Figure 17 and further explained on the following page.

Highlighted in Green in Figure 17, the top position is used for managing the dispensers on the forecourt, displaying information in text and showcasing each dispenser state by changing its icon colour. For more information on basic dispenser control and what state each colour signals, read chapter 4.3 Basic Dispenser Control.

To the left of the dispenser's management panel there is a STOP ALL DISPENSERS button which will cease all dispensing activity on the forecourt when tapped on. This button should be used in emergency situations only.

To the right of the dispenser's management panel there is a button used to PRE-PAY a dispenser, commonly used to prevent drive-offs by accepting the customer's payment upfront before dispensing the fuel. Pre-payment can only be made using either cash or EFTPOS bank cards.

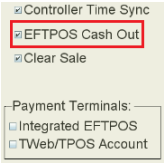
Highlighted in Red in Figure 17, the central position is used for the sales ledger (containing the sale items, either wet stock or dry stock) and action buttons related to the sale process.

The following information is provided for each item displayed in the ledger: the name of the item (Description), the price per item, the quantity added in the ledger and the total amount.

> Note: There are 3 methods which may be used to add items to the ledger:
> 1. By manually scanning dry stock items.
> 2. By finishing dispensing fuel from one or more fuel pumps (added as a wet stock item).
> 3. By using the search functionality and manually adding dry stock item(s) into the ledger.

On the right side of the ledger, there are 5 buttons used in finalising the goods purchase:

CLEAR: Using this option results in finalising the sale, a useful feature when independent third-party POS operations for wet-stock sales are used. This option is reserved to Administrators and can be disabled from Menu → Settings → General.



CASH: Selecting this payment type will open the cash drawer, allowing the Operator to deposit the cash payment for the items displayed in the ledger and dispense change if necessary.

CARD: This allows the Operator to choose from a selection of payment types, some preloaded from the factory while others added post deployment. After selecting the payment type, the Account Payment Terminal will wait for payment for the items displayed on the ledger.

> Note: To read more about managing payment types, read chapter 3.6 Payment Types.

Cut Receipt: On rare occasions, the printer can jam due to sub-par paper roll quality. Tap this button to resume normal printing operations.

Reprint: Used to reprint a previous sale, selectable from a dropdown list, a useful feature in case customers change their mind and request a receipt after initially declining one. For more information, read chapter 4.14 Reprinting a Sales Receipt.

Product Lookup: It allows the operator to search for an item from the product catalogue, if perhaps the barcode is damaged, missing or cannot be scanned.

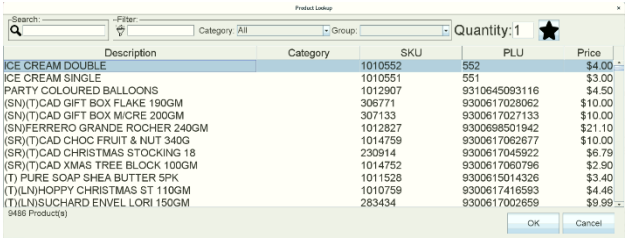


Figure 18: T-POS Product Lookup

- The default selection of products is the Favourites, selectable from the Group criteria field. Once a product is selected and the star button is tapped, the action is confirmed audibly and visually while the product is automatically added in the Favourites category, a feature useful when certain products are always in high demand.

- To display all products, just de-select Favourites from Groups by tapping the empty cell in the selection.
- The Category is a subdivision of Groups, aggregating similar products in the same collection, for easier finding.
- The Search functionality allows the Operator to use a single word to look for products containing it. To refine the results even further, the Filter functionality uses an additional word to look inside the results page.
- Finally, after finding the desired product, tap on it to select it, tap on Quantity to change the default value of 1, then tap OK to add it to the Sales Ledger.

> Note: Only one product can be added at a time. To add additional (and different) items, tap Product Lookup from the Home Screen.

On the left side of the ledger, there are 3 buttons also related to the tendering process:

Remove / Recover: Used to remove sale items (one by one) from the ledger by first selecting the item then tapping on the button. Alternatively, if no items are in the ledger, this function is used to recover a transaction. For more details, read chapter 4.16 Recovering a Dispenser Transaction.

Refund: used to refund an item that has already been paid, if it so deemed appropriate by first selecting the item then tapping on Refund. Depending on the refund method selected, the refund can be either in cash or by EFTPOS.

Custom Sale Item Properties: This functionality enables the user to quickly include items in the sale that are NOT already included in the Product Catalog. However, adding a custom sale item in the ledger and selling it will not automatically add it in the Product Catalogue as well.

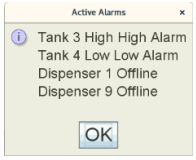
Stock Adjustment: used to alter the stock quantity value of an item from the ledger by first selecting the item then tapping on Stock Adjustment.

Highlighted in Blue in Figure 17, the bottom panel is used for displaying information about the logged in Operator (depending on the used passcode, the Operator will be uniquely identified and displayed here), the sale total amount, the current time and the Shift status (for more information, read chapter 4.1 Day and Shift Control).

Additionally, located in the top corners of the screen:

This menu located in the top left corner is used for accessing the less frequently used operations, while most of the routine operations are done using the T-POS application Home Screen.

There is also an area in the top right corner of the display, sometimes flashing an ALERT that can be tapped on, alerting the Operator on conditions that need immediate addressing, such as a low-level tank alert.



3.2 Licensing

Each T-POS is deployed with a unique serial number, located behind the primary screen and hardware locked to your terminal. You can license your T-POS by entering this serial number in the License dialogue menu: T-POS Utilities → Terminal Properties → License Key.

For more information about licensing, read chapter 2.6.5 Terminal Configuration.

3.3 Forecourt Settings

Because the FC6000-T Forecourt Controller is delivered with a default forecourt configuration, it will need to be configured for the specific deployment (pump types, interfaces etc) remotely with the assistance of TT Support (please contact the helpdesk at ✉ support@ttfuel.com or ☎ +61 8 8215 5000 to initiate this process). Once completed, the forecourt settings are read directly from the controller every time T-POS starts up and can be maintained (should the need arise) in the Forecourt Settings going forward.

Like other configuration aspects, the customization is accessible from Menu → Settings → Forecourt and requires an Administrator passcode to proceed.

> Important: Make sure once the pump settings have been configured, the forecourt configuration is saved (archived) for a potential future restoration: Menu → Settings → Forecourt → Archive / Restore.

Forecourt Settings are organised in 4 tabs: Grades, Tanks, Dispensers and Other. The recommended order in which to start configuring these settings is from left to right, as each new tab is dependent on the previous one.

> Note: the functionality present in the Other tab has not been yet implemented and is intended to be released at a later date.

Within the forecourt settings, use the + button to add, the - button to delete, and Open to view or edit a file.

> Important: If the T-POS is connected to an existing controller, all the tanks and dispenser information will be automatically transferred and displayed in Forecourt Settings.

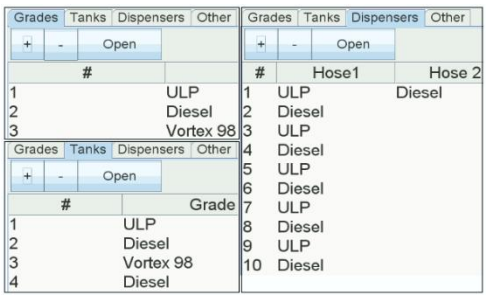


Figure 19: Existing Controller Configuration

Grades: Apart from the fact that every grade must have a unique ID number (up to 48 grades can be defined in the system), the rest of the fields can be customised as desired. After a grade has been added or deleted, the system needs to be restarted.

To add a new grade to the system, follow this procedure:

1. Go to Menu → Settings → Forecourt.
2. Enter the Administrator Passcode to continue.
3. Tap on + then enter the grade's ID and Name.
4. Tap on OK.

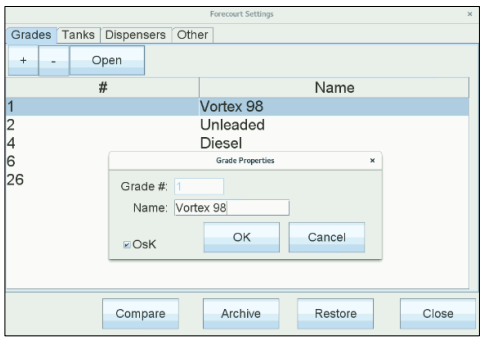


Figure 20: Adding a New Grade

> Remember: When adding a new grade, also assign it to a tank in Tanks tab, otherwise the newly added grade will not be saved when Close is tapped on.

Tanks: After you have established all the grades intended for sale, advance to the Tanks tab. Here you need to define each of the tanks you have on site and in doing so, specify the grades and capacity (previously defined) of each tank.

> Important: Only tanks carrying the same fuel grade can be marked as manifolded (joined together), a practice required in case multiple physical tanks are joined together by pipe work while being regarded as a single logical unit by the T-POS.

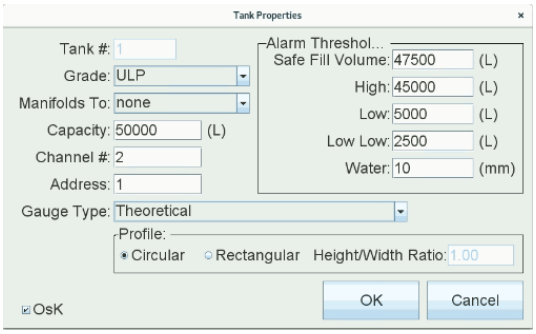


Figure 21: T-POS Tank Properties

Next, configure the rest of the finer details for each tank:

- Channel #: represents the communication channel number that the tank is using.
- Address: represents the tank ID.
- Gauge Type: represents the protocol used by the tank gauge used to measure the product level, given a tank's profile.
- Profile: Knowing a tank's profile (circular or rectangular), a basic tank gauge can convert the height /width ratio measurement into volume and give accurate levels measured in litres.

The various alarm threshold values are used to capture the Operator's attention in case the maximum values are exceeded. The rest of the values have already been configured for the particular installation and should not be changed without consulting TT Fuel first.

Dispensers: The graphical representation makes it easier to identify which hoses are connected to which tanks. Of course, for single product dispensers there is only one hose, so the remaining hoses are simply not defined.

There are also several additional configuration fields that can be used to tailor the properties of

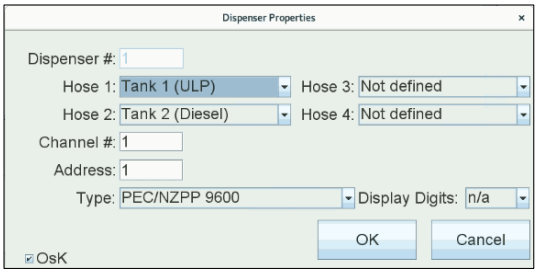


Figure 22: T-POS Dispenser Properties

each dispenser, however again these settings most likely have been already configured for each merchant prior to shipping:

- Channel #: represents the communication channel that the dispenser is connected to.
- Address: represents the dispenser ID.
- Type: represents the protocol on which the pump runs on.
- Display Digits: allows selecting between 5-digit and 6-digit mode.

The majority of pumps are set to run in 5-digit mode and cap out at $999.99 or 999.99L depending on which value is reached first. Switching these pumps to 6-digit mode results in moving the decimal point one step so the value can max out at $9999.99 instead, a measure needed for large capacity tanks. However, in instances where the pump and the controller do not agree on the decimal point settings, the system will end up charging either 10x as much or 1/10th as much.

> Note: If changes are made to any of the forecourt properties, the T-POS terminal will shut down and will need to be manually restarted for changes to take effect.

Additionally, T-POS allows Operators to manage their configurations, a functionality especially helpful when an existing Forecourt Controller is being used.

Figure 23: Compare Configurations Example

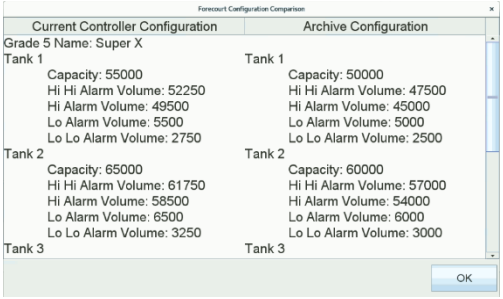


Figure 24: T-POS Configuration Management

- Compare: Allows Operators to compare the current Forecourt Controller configuration to one of the previously saved snapshots, selectable from a list. If any differences are found for any category (Grades, Tanks or Dispensers), they will be displayed (Figure 23).
- Archive: Allows Operators to save a snapshot of the current Forecourt Controller configuration on the T-POS internal storage. There is no limit on how many snapshots can be stored.
- Restore: Allows Operators to restore the Forecourt Controller configuration to a previously saved snapshot, selectable from a list.

> Note: Any change in the Forecourt configuration will result in a notification being displayed, asking the operator to confirm the modifications. After applying the changes, a confirmation window is displayed, notifying the operator the changes have been applied successfully.

3.4 General Settings

The General Settings menu provides configuration for a variety of behaviours or settings and usually once they have been set, there is no need to change them again. And like other configuration functions, it is accessed from Menu → Settings → General → General [tab] and requires an Administrator passcode to proceed.

> Note: Some of the settings found here are mentioned in other chapters as well, where they play an important role.

Timestamp Format: every T-POS Report or export which utilises a date and time will use this format.

Currency Symbol: Represents the currency in which sales are expressed and can accommodate any currency available.

Volume Symbol: Represents the symbol for wet stock volume, almost always expressed in litres (L) but can be configured for gallons, if required.

Inactivity Timeout: Represents the amount of time the T-POS can be idle for before requiring a passcode validation to resume operations. Setting the value to 0, ignores the timeout.

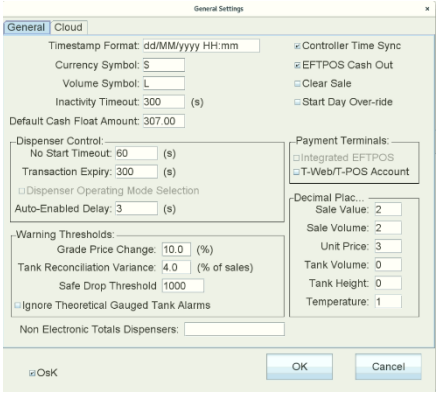


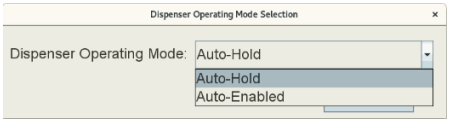
Figure 25: T-POS General Settings

Default Cash Float Amount: Represents the value amount present in the cash drawer when starting a new T-POS Day or shift. This amount can be overwritten by the T-POS operator, if it is not correct at the time.

No Start Timeout: This value (expressed in seconds) determines how long after a dispenser is readied (green status) by a T-POS operator it automatically reverts to the Held State (red status), provided it sits idle, the hose is not lifted and fuel does not flow.

Transaction Expiry: This value (expressed in seconds) represents the amount of time the system should wait after the dispenser operation completes for processing and finalising the sale. If exceeded, an audible alert is raised thus indicating a possible drive off. Sale buffer background colour also changes at this time and even in this state, it can still be processed as a regular sale if required.

Dispenser Operating Mode Selection: If checked, when starting a new Shift or POS Day, the Operator is prompted to select a Dispenser Operating Mode:



- » If **Auto-Enabled** is selected, the dispensers are in the Ready state (green status) by default and will maintain their state (either red or green) if changed by the Operator, effectively bypassing the **No Start Timeout** value. Only 2 transaction can be stacked in Auto-Enabled mode and the pump will revert to Held state after the second transaction. In order to resume the Ready state, the Operator needs to first cash-off both stacked sales.

  Important: Auto-Enabled mode is a more printer intensive operation mode because for the dispenser to be auto-enabled (at the end of each dispensing operation) the prior (just completed) dispenser sale needs to be printed. This is an NMI certification requirement and cannot be turned off.

- » If **Auto-Hold** is selected, the dispensers are in the Held state (red status) by default. If readied (green status) by an Operator, they will revert to the Held state (red status) after each transaction or after the amount of time configured for the **No Start Timeout** value.

Note: Changes will take effect after restarting the T-POS application. Changes in the Dispenser Operating Mode only take affect after starting a new Shift or POS Day.

(Warning) Grade Price Change: Used for warning the operators in case a wet stock price change exceeds the current price by the percentage value declared in this field, hence helping to protect against accidental price change.

(Warning) Tank Reconciliation Variance: Tank Reconciliation Variance values exceeding the total sales percentage declared in this field, will appear on the T-POS day summary reports.

(Warning) Safe Drop Threshold: Represents the threshold (expressed in the current Currency) at which the T-POS operators are prompted to deposit cash from the cash drawer into the safe.

(Warning) Ignore Theoretical Gauged Tank Alarms: Selecting this option will result in ignoring all alarms generated by theoretical gauged tanks, a useful feature for customers doing the tank reconciliation separately from T-POS. Selecting this option implies manual dips and delivery drops are not going to be used.

Non Electronic Totals Dispensers: All legacy dispensers, lacking the built-in totals meter functionality, have to be added here. If more than one legacy dispenser is present, use a comma to separate each one (see Figure 24).

Controller Time Sync: This option is always enabled, except when an Outdoor Payment Terminal (OPT) is present on the premises.

EFTPOS Cash Out: This checkbox determines whether EFTPOS tendering allows cash out, as many merchants do not want to extend this service to their customers.

Clear Sale: This checkbox determines whether the CLEAR payment method is enabled or disabled.

Start Day Over-ride: This option allows the operator to start or end the POS Day when there are outstanding dispenser sales (i.e. non-zero dispenser sale buffers). T-POS actively prevents you from starting or ending a POS Day while there are outstanding dispenser sales (without this property enabled) therefore it should NOT be necessary to enable this configuration setting in normal operations except where pumps and/or the forecourt controller are/is replaced (while the POS Operating day is closed/ended), inadvertently leading to inheriting non-zero dispenser sale buffers when it next starts up.

Note: Even if enabled, the CLEAR payment method is only reserved for Administrators.

Payment Terminals: allows integration of the selected methods of payment with the T-POS, transferring the amounts automatically and eliminating the need to manually enter them into the system. For more information on payment terminals, go to chapter 1.3 System Components.

Decimal Places: These values almost never need to be changed, however allowances for different values have been accommodated here, in case requirements dictate a different configuration.

Additionally, T-WEB connectivity can be configured from Menu → Settings → General → Cloud [tab] in installations where back office connected services have been contracted for the T-POS.

Figure 26: T-POS Cloud Settings

3.5 Receipt Settings

The T-POS system allows the merchant to customise or personalise the receipt, accessible from Menu → Settings → Receipt and like many other configuration functions it requires an Administrator Passcode to proceed. Once authorised, the system allows Operators to customise the receipt in 3 tabs, General, Header and Footer.

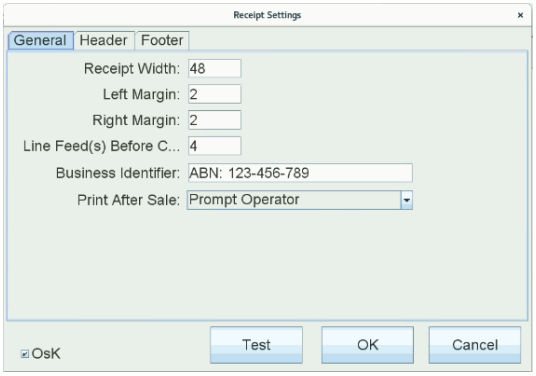


Figure 27: T-POS Receipt Settings

There should be no need to change most of the fields in the General tab, as they should be the right values for the default T-POS Terminal printer. However, the Business Identifier required for tax purposes should be filled in.

The Header and Footer tabs allow a generous degree of customisation for the receipt, however the following guidelines should be followed:

1. Filling less lines than configured in the Count field will result in displaying blanks in the receipt.

   Example: If only the first 3 header lines are supplied but the Count value is set to 9, every receipt will contain the first 3 supplied header lines, followed by 6 blank lines.

2. Conversely, filling in more lines than configured in the Count field will result in only displaying the first [Count] supplied header lines.

   Example: If all 9 header lines are supplied but the Count value is set to 2, every receipt will contain only the first 2 supplied header lines, completely ignoring the remaining 7 header lines.

Note: Additionally, there are 3 more values that can be included in either the Header or the Footer line: The business ID (configured in the General tab), the timestamp and the reference number (unique to each sale).

Test functionality has been added to help Operators calibrate their receipt texts by visually inspecting them on printed paper. In case the printed receipt does not look as the Operator intended, make the necessary adjustments, and reprint it.

Figure 28: Printed Receipt

Note: The behaviour of the receipt printer after each sale can be configured from the Print After Sale drop down menu.

Final step is to experiment the changes, using the Test button, so you have the receipt looking exactly the way intended.

Important: On rare occasions, the printer can jam due to sub-par paper roll quality. Tap ✂ from the Main Screen to resume normal printing operations.

3.6 Payment Types

The T-POS Terminal comes preconfigured with several payment types, selectable from the right side of the sales ledger (see Figure 27). These payment types can still be configurable but they cannot be removed, as the first 80 entries are reserved.

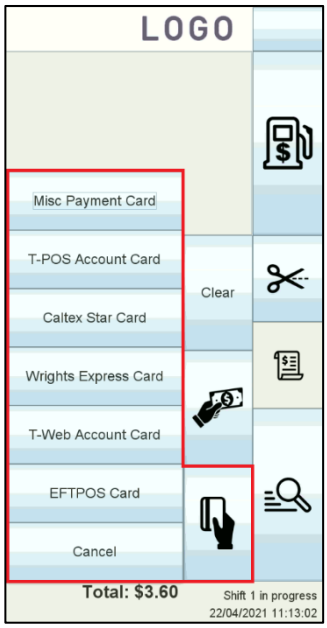


Figure 29: Selecting a Payment Type

To add, remove or edit an existing payment type, follow these steps:

1. Access the functionality from Menu → Settings → Payment Types. (see Figure 29)
2. Press + to add a new payment type, - to remove a custom payment type or Open to edit an existing payment type. (see Figure 30)
3. When configuring the ID, start from 81.
4. Select Show if you want the Payment Type to be visible when selecting a Card from the T-POS Home Screen (see Figure 27).
5. Select Always Open Cash Drawer if you want the Cash Drawer to be opened automatically every time this Payment Type is selected.

   Note: Activating this option for any Payment Type other than Cash is not recommended.
6. When choosing a name, remember T-POS automatically adds the "Card" suffix to the name.

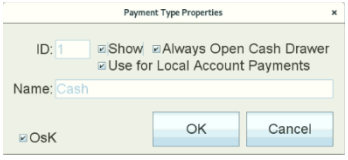


Figure 31: Configure a Payment Type

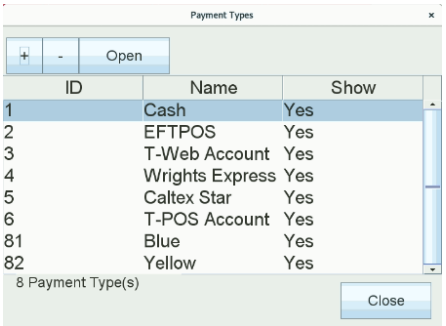


Figure 30: List of All Payment Types

3.7 Security

The T-POS Terminal and its software has been developed from the ground up with simplicity in mind, maintaining security and reducing misuse by limiting the T-POS passcode authentication to only certain key events or functions. As a result, the T-POS uses a very simple two-tier security profile: The Administrator (limited to one Administrator) and standard T-POS operators (or Forecourt attendants).

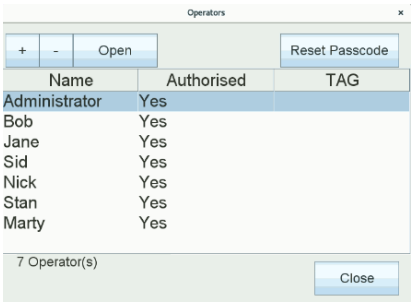


Figure 33: List of Operators Receipt

To simplify the process even further, all T-POS operators are identified only by their unique 4-digit passcodes, eliminating the need to remember both a username and a password for the authentication process, as used in most POS systems.

This way, merchants only need a single Administrator passcode throughout the entire T-POS interface for all operations while in a deployment where several T-POS operators are employed can use individual T-POS operator validation, granting limited functionality.

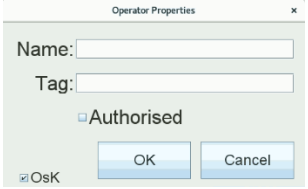


Figure 32: Creating a New T-POS operator

To create a new T-POS operator, follow these steps:

1. Select Menu → Settings → Security → Operators.
2. Use the Administrator passcode validation, then Tap on +.
3. Configure the details for the new T-POS operator.
4. Check the Authorised box then tap on OK.

> Note: Choosing not to authorise an Operator will result in creating the new credentials but refusing their login until this box is ticked.

5. At this point, the new T-POS operator is created, having the default passcode **0000**. Remember to never create more than one new operator at a time. Once the new Operator has changed their 4-digit passcode, an additional operator can then be added.
6. Before logging in with the new Operator account, the default **0000** passcode has to be changed. Read chapter 3.6.2 Change Passcode for more information.

> Note: Setting the Administrator password to **0000** forces the system to bypass the security check, allowing all functionality to be accessed without an Administrator password validation.

3.7.1 Change Privileges

Another important Security aspect is defining which T-POS functions require Administrator passcode validation, a facility accessible from Menu → Settings → Security → Privileges.

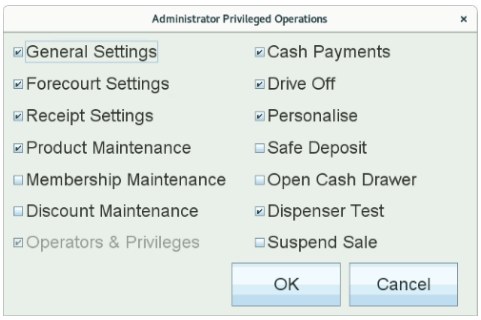


Figure 34: Configuring Administrator Privileged Operations

For example, to grant standard T-POS operators the ability to write off dispenser sales as drive offs, simply uncheck the Drive Off option in the Administrator Privileged Operations menu. In Figure 25, performing cash payments still requires an Administrator passcode validation (a standard T-POS operator passcode is not accepted in this case), however a standard T-POS operator passcode can now be used to write off dispenser sales.

> Important: Granting maximum privileges to everyone can lead to misuse, however restricting certain operations from standard T-POS operators means these functions cannot be performed without assistance from an Administrator T-POS operator, who may or may not always be present on site.

3.7.2 Change Passcode

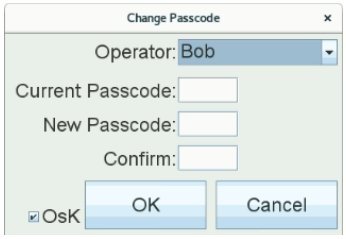


Figure 35: Changing an Operator's Passcode

T-POS allows changing passcode for any user (including the Administrator) provided the current password is known. Please follow this procedure when changing a passcode:

1. First go to Menu → Settings → Security → Change Passcode
2. Select an operator from the drop-down menu.
3. Type in the current passcode (**0000** in case of a newly created operator) then the new 4-digit passcode twice.
4. Tap OK. At this point, the passcode has been changed for the selected operator and it can be used next time the T-POS application is restarted.

3.8 Personalise

T-POS offers a generous degree of customisation, allowing operators to tailor the Dispensing Control interface and upload images and media from a FAT32 formatted USB flash drive that will further personalise their terminals and help them better integrate into the business.

» Uploaded images must be in either **.png** or **.jpg** format with an ideal dimension of 519x693 pixels for advertisement and 339x75 pixels for logos (W x H). Using different dimensions will result in stretched images being displayed.

» Uploaded videos can be in any format supported by VLC video player, however we strongly recommend using **.mp4** due to their reduced file size.

Note: Although a 1GB USB flash drive is usually enough for most scenarios, please consider bigger drive capacities to accommodate larger personalisation file imports on the T-POS. Also keep in mind that regardless of what size the USB flash drive is, individual files on a FAT32 drive cannot exceed 4GB in size.

3.8.1 Load Customer Logo

This option (Menu → Settings → Personalize → Load Customer Logo) will search the connected USB flash drive for images. Once a file is selected from the ones found on the USB flash drive and OK is pressed, the system checks the image dimensions.

» If the image dimensions are correct (339x75 pixels) , the file is imported and displayed in the upper right corner of both screens once the T-POS application is restarted.

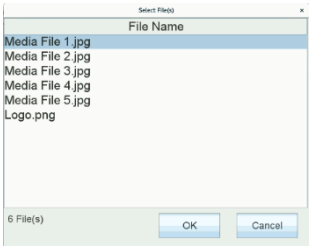


Figure 36: Uploading a Logo File

» If the image dimensions don't match the requirements, an error message will be displayed and the import process will be abandoned.

3.8.2 Load Media Content

This option (Menu → Settings → Personalize → Load Media Content) allows T-POS operators to upload media content (both images and video files) that will be played in a loop on the secondary (customer facing) display.

Before searching for suitable media files, the operator is asked to confirm deletion of all the media files found on the Terminal.

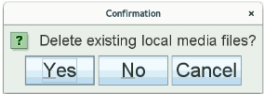


Figure 37: Confirmation for Deleting Local Files

- » If Yes is selected, all the media files are deleted before proceeding to search the connected USB flash drive for media content.
- » If No is selected, the system starts searching the connected USB flash drive for media content.
- » If Cancel is selected, the import process is abandoned.

Once one or more media file is found, the operator is asked to confirm the file(s) import.

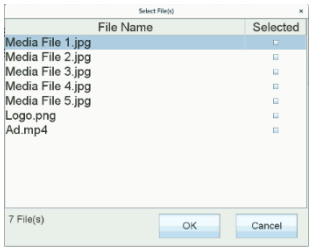


Figure 38: Uploading a Media File

- » Select the files you want to import, using the Selected checkboxes.

  Note: Images should not exceed recommended dimensions, thus avoiding being stretched when displayed.

- » If OK is selected, the media file(s) are imported and displayed (or played in a loop) on the secondary (customer facing) display once the T-POS application is restarted.
- » If Cancel is selected, the import process is abandoned.

Note: Either pictures or video files can be used as media content, however uploading both images and video files in the T-POS Terminal will result in a split mode advertisement, displaying the pictures on the right side and the video on the bottom of the secondary screen. See Figure 38.

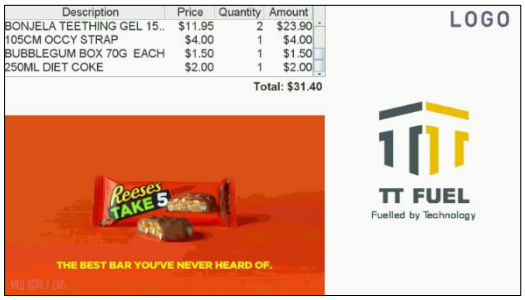


Figure 39: Secondary Display Example

3.8.3 Load Account Payment Terminal Logo

This option (Menu → Settings → Personalize → Load Account Payment Terminal Logo) will search the connected USB flash drive for images. Once a file is selected from the ones found on the USB flash drive (see Figure 31) and OK is pressed, the system checks the image dimensions.

- » If the image dimensions are correct (339x75 pixels), the file is imported and displayed on the Account Payment Terminal screen once the T-POS application is restarted.

  Note: Images exceeding recommended dimensions will not be imported and an error message will be displayed.

- » If the image dimensions do not match the requirements, an error message will be displayed and the import process will be abandoned.
- » If Cancel is selected, the import process is abandoned.

3.8.4 Dispenser Appearance

T-POS supports full customisation for its dispenser icons, a functionality that can be accessed from Menu → Settings → Personalize → Dispenser Appearance.

Depicted in Figure 39, the Dispenser Appearance customisation window is grouped in 7 zones.

> Note: It is highly recommended before any changes are made, the right dispenser state is selected from Preview Options → State.

Any changes made are live previewed in the right bottom corner of the window.

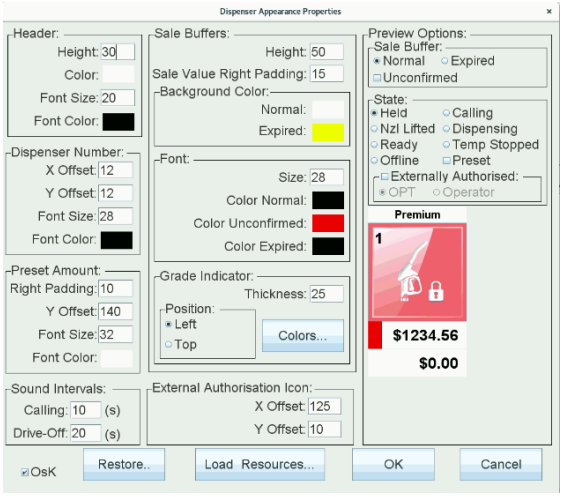


Figure 40: T-POS Dispenser Appearance Customisation

Header: This section controls the header part of the dispenser.

Dispenser Number: This section controls the dispenser number properties.

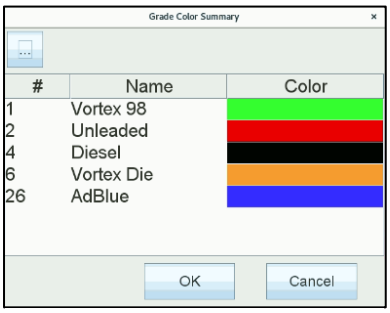


Figure 41: T-POS Grade Colours

Preset Amount: This section controls the Pre-Pay amount properties.

> Note: Although changes are being recorded, the preview image will reflect the changes only when Preset (Preview Options → State) is selected.

Sale Buffers: This section controls the properties for the sale buffers and grade indicators.

> Note: Use the Preview Options → Sale Buffer selection section to preview normal/expired or unconfirmed values in the live image.

External Authorisation Icons: This section controls the location where External authorisation icons (/) are displayed on the dispenser.

> Note: Although changes are being recorded, the preview image will reflect the changes only when either OPT or Operator (Preview Options → State → Externally Authorised) is selected.

Preview Options: This section is to be used in conjunction with **Preset Amount**, **Sale Buffers** and **External Authorisation Icons** sections for live previewing the changes.

Live Image: Any changes made in the Dispenser Appearance menu are being live previewed in this image, allowing operators on-the-fly changes.

Additionally, grade colours can also be customised here, by accessing Grade Indicator.

Once a colour is assigned to a fuel grade (default is white), a flag bearing the same colour will be displayed next to the sale amount for that particular grade, the moment the nozzle is lifted.

> Note: Displaying the grade colour is a feature only available from firmware version BAB10018 or later.

Bottom Displayed Buttons:

- Restore: Tapping this button will result in resetting the dispenser appearance to the factory settings.
- Load Icons: This option allows operators to import a new icon for the selected dispenser.

  > Important: Make sure to match the selected dispenser state (Preview Options → State) with the new icon about to be imported.

  > Note: TT Fuel provides operators with two additional sets of dispenser icons besides the one (Large) T-POS comes preloaded with: A Medium dispenser icon set and a Small dispenser icon set. Visit www.ttfuel.com/resources for more information.
- OK: Tapping this button will result in saving the changes made in the Dispenser Appearance menu.
- Cancel: Tapping this button will result in losing all changes made in the Dispenser Appearance menu.

3.9 Product Management

When the T-POS Terminal starts and first communicates with the forecourt controller (FC6000-T) it automatically creates all the wet stock fuel grade products it finds configured in the controller. This will be reflected in the Product Catalog which will be devoid of any dry stock products and these will need to be created or established before they could be sold using the T-POS Terminal.

As a result, only wet stock and dry stock products already in the T-POS Product Catalog can be sold using the T-POS interface and there is no facility to create these products on the fly in the routine sales operations.

All aspects of the Product Catalog can be managed from Settings → Product using four sub-menus:

- The Product Catalog.
- Adding a New Product.
- Managing Groups.
- Managing Categories.

3.9.1 The Product Catalog

The Product Catalog can be accessed from Menu → Settings → Product → Catalog and requires the Administrator passcode validation to proceed.

1. The usual + (Add), - (Remove) and Open buttons are used to add new products, delete existing products, or edit existing products.

2. The Import button allows a Dry Stock Product Catalog to be quickly and efficiently established using an external import source copied to a FAT32 formatted USB flash drive and inserted into the T-POS Terminal. Please refer to chapter 3.9.1 Dry Stock Catalog Import.
3. The Search functionality allows the Operator to use a single word to look for products containing it. To refine the results even further, the Filter functionality uses an additional word to look inside the results page.
4. The Category is a subdivision of Groups, aggregating similar products in the same collection, for easier finding.

   Note: Groups can contain products from multiple Categories.

   Categories can be added, deleted, or updated as necessary, although the default categories cannot be changed nor deleted. Once a category exists in this list, it can be referenced when adding or editing a product.

   Note: Groups and Categories can be combined for displaying only the products that are in both selections, similar to how Search and Filter work.

5. Show functionality allows Operators to display active products or products that have been deleted. When products are deleted, they are not completely removed from the Product Catalog as they are still required for downstream reporting purposes, so the deleted items can still be viewed if Deleted is selected from the Show control.

3.9.2 Adding a New Product

To create a product, follow these steps:

1. Select Menu → Settings → Product → Catalog.
2. Enter the Administrator passcode.
3. Tap on + (Add) to add a new product.
4. Supply the product's details. If a Category is not yet suitable for the product, go back (chapter 3.8.4 Managing Categories) and create a category for it first.

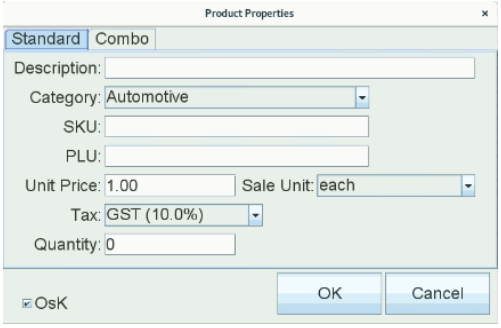


Figure 42: Adding/Editing Products

5. Supply the Price Look-Up Code (PLU) code by using the barcode scanner on the product's barcode and optionally the Stock Keeping Unit (SKU) which is an arbitrary merchant specific code used to keep track of the product (can be empty if SKU codes are not used).
6. Set the new product's Unit Price, the type of Sale Unit (litres, kilograms, metres, each) and the percentage of Tax it carries.
7. The last step necessary before an item can be sold, is to establish an inventory or effectively change its Quantity from the initial value (0). Set the desired value in the Quantity field then tap on OK.
8. Switching to the Combo tab and adding 2 or more products to the list will essentially turn the newly created item into a combo of its contained products. Adding combo products to a new product brings up the Product Lookup window, documented in chapter 3.1 Navigating the User Interface → Product Lookup. Make sure to deselect the Favourites from Groups and proceed finding the product(s) you wish to add in the

combo package. Multiple products can be added to a combo package, by tapping their respective Selected checkbox. (Figure 41).

> Note: Only adding 1 product in the Combo tab makes no sense, resulting in selling the combo item under a new name, the name of the newly created Product.

When creating combo items, it is a good practice to add them into a Combo category as well, for easy finding.

9. The product is now ready for sale like any other product from the Product Catalogue.

To edit a product, follow these steps:

1. Select Menu → Settings → Products.
2. To quickly identify the product, first use the Filter functionality.
3. Once located, tap on Open. The Product Properties window is displayed.
4. Make the necessary changes then tap on OK to save the changes.

> Note: Once the inventory quantity value for a product has been set, it cannot be changed any longer from Menu → Settings → Products → Open; instead, the Stock Adjustment functionality has to be accessed from the Home Screen. Once a dry stock item is in the sales ledger, you can edit its stock information by tapping in the left bottom corner. In case the product is new, tap on Set Quantity in the Type field. Otherwise, tap on Change Quantity.

If you no longer plan to sell a certain product, delete the product from the Product Catalogue, following these steps:

1. Select Menu → Settings → Products.
2. To quickly identify the product, first use the Filter functionality.
3. Once located, tap on – (Remove). The product is now removed from the Product Catalog and can no longer be sold. However, it will remain in the Deleted inventory for downstream reporting purposes and can still be viewed if Deleted is selected from the Status control.

> Note: Deleting a product from the list of deleted products will result in removing the item from the list of deleted products and in effect returning the item to the Product Catalog making the product available for sale again.

3.9.3 Managing Groups

Managing Groups of Products is an operation that requires administrative privileges.

Menu → Settings → Product → Groups.

The Groups functionality has been added to support special collection of products such as Favourites , which will only contain the most popular products sold. However, additional Groups can be added.

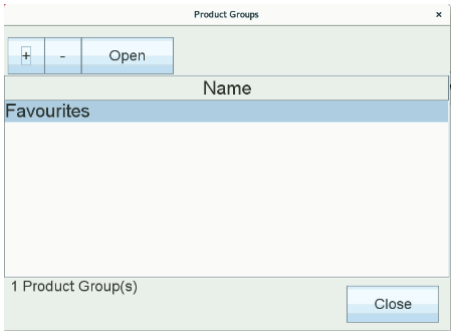


Figure 43: Product Groups

> Note: Groups can be added or deleted as necessary, using the [+] and [–] buttons, however Favourites is a reserved entry and cannot be deleted.

When creating a new Group, give it a meaningful name and add at least one product from the Catalog, using the [+] and [–] buttons.

Adding products to a Group brings out the Product Lookup window, documented in chapter 3.1 Navigating the User Interface → Product Lookup. Again, deselect the Favourites from Groups and proceed finding the product(s) you wish to add to the newly created Group.

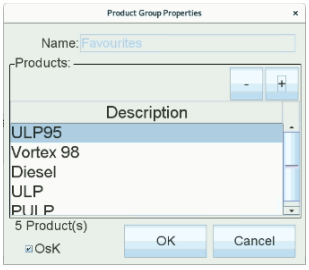


Figure 44: Product Group Properties

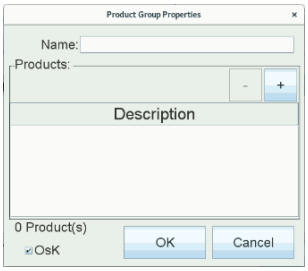


Figure 45: New Product Group Properties

> Note: Additional to the regular Product Lookup, multiple products can be added to a Group by tapping their respective Selected checkbox (Figure 45).

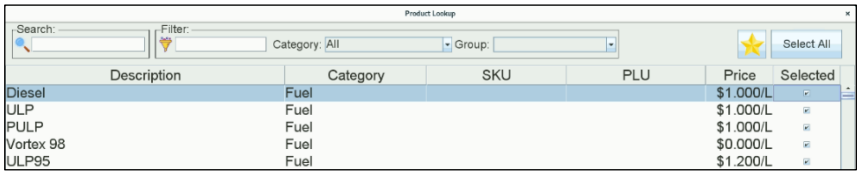


Figure 46: Adding Products to Groups – Product Lookup

Similarly, once a Group name has been added and selected (Figure 42), clicking Open will allow Operators to change its name, add and remove products to/from the group, using the [+] and [–] buttons in the Product Group Properties window (Figure 43).

3.9.4 Managing Categories

Managing Categories of Products is an operation that requires administrative privileges.

Menu → Settings → Product → Categories.

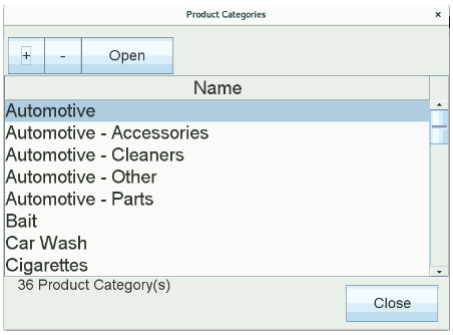


Figure 47: Product Categories

The Category is a subdivision of Groups, aggregating similar products in the same collection, for easier finding. Categories can be added, deleted, or updated as necessary, using the [+], [–] and Open buttons, although the default categories cannot be changed nor deleted. Once a category exists in this list, it can be referenced when adding or editing a product (chapter 3.8.2 Adding a New Product).

> Note: Categories can be added or deleted as necessary, using the [+] and [–] buttons, however a comprehensive list of Categories come as standard and therefore cannot be deleted.

> Example: The most intuitive and logical way of grouping products into categories is to add, for example, all the cold beverages under Cold Beverages, all the fuel grades under Fuels, all the automotive parts under Auto-Parts and so on.

3.10 Bulk Imports

Adding dry stock items, discounts or modifying an item's stock value or its price can all be done the usual way, within the T-POS user interface. The system however supports performing these

actions in bulk, modifying values across the board by importing update files, documented in the following chapters.

3.10.1 Dry Stock Catalog Import

Establishing a Product Catalog from scratch can be a tedious process using the method covered in chapter 4.16 Acquiring Individual Dry Stock Sale Items, however a much quicker method of creating a Product Catalog is by leveraging its dry stock import functionality.

Provided a previous Product Catalog has been created, it can then be imported into T-POS using an external import source file copied to a FAT32 formatted USB flash drive, merging the information found in the import file with existing product(s) already present in the database. The merge process has the following rules:

- New products found in the import file are always added to the local database.
- Products found in the import file that already exist in the local database are ignored.

Consequently, the Product Catalog import functionality can be used repeatedly, as the Dry Stock Catalog is dynamic and its contents will change over time. To import a Dry Stock Catalog:

Menu → Settings → Products → Catalog → [Administrator Passcode] → Import → [Select dry stock source file from USB flash drive] → Open.

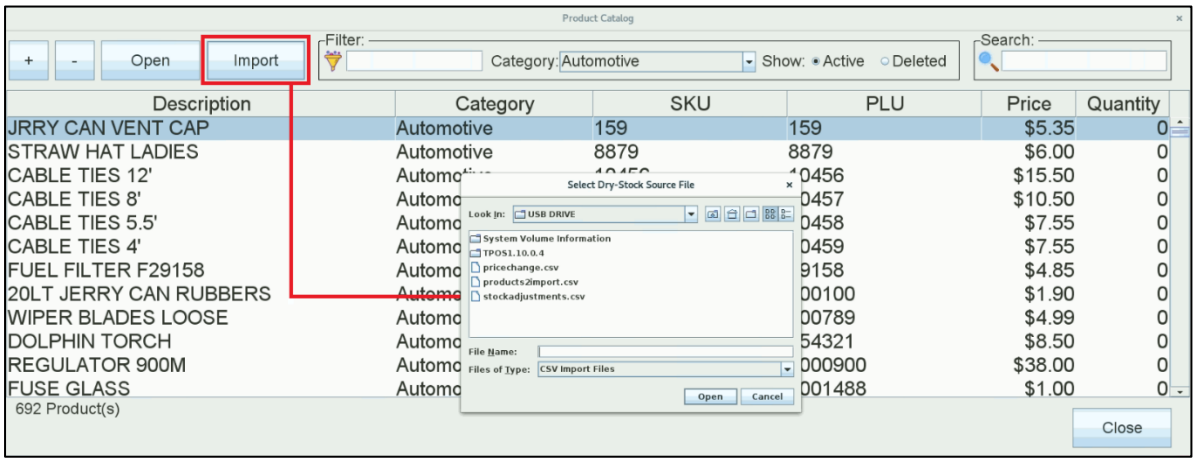


Figure 48: Importing a Dry Stock Catalogue

The Product Catalog update file uses a **.csv** format. When creating a new Dry Stock Catalog file in a spreadsheet application of your choosing, use the following file structure:

Field	Field Name	Field Type	Mandatory	Notes
A	Description	Alphanumeric	Yes	* Read Note below.
B	Price	Numeric (decimal)	Yes	Without the currency symbol
C	Unit	Alphanumeric	No	Kg (kilograms) L (litres) m (metres) blank/empty (each)
D	PLU	Numeric	No	
E	SKU	Alphanumeric	No	
F	Tax	Alphanumeric	No	Get (GST) Blank/empty (GST exempt) Case-insensitive
G	Category Name	Alphanumeric	Yes	Case-insensitive lookup
H	Quantity	Numeric (decimal)	Yes	Without a unit of measure.

* Note: If existing product description found in T-POS product catalog (case-insensitive lookup) has the same PLU, then the record is not going to be imported (it already exists in T-POS product catalog).

If existing product description found in T-POS product catalog (case-insensitive lookup) has a different PLU, then a new product record is created/added. Thus, multiple products with the same product description (different PLU) are possible.

Additionally, if a new category name is encountered in the import file, a new Product Category bearing the same name will be created.

An example of how a **.csv** formatted Dry Stock Catalog file should look like is displayed below.

Remember: Always fill in the titles in the first row as depicted in this example, otherwise the import process will fail.

	A	B	C	D	E	F	G	H
1	Description	Price	Unit	PLU	SKU	Tax	CategoryName	Quantity
2	HOT CHOCOLATE	4		101	101	GST	Miscellaneous	0
3	HOT COFFEE	4		102	102	GST	Miscellaneous	0
4	HOT CHOCOLATE	3		103	103	GST	Miscellaneous	0
5	WOOD	11		150	150		Miscellaneous	0
6	KINDLING	9		151	151		Miscellaneous	0
7	JRRY CAN VENT CAP	5.35		159	159	GST	Automotive	0
8	MEDALIONS	1.2		161	161	GST	Hot Food	0
9	PLUTO PUPS	2.75		162	162	GST	Hot Food	0
10	DONUT	1.2		163	163	GST	Hot Food	0
11	4' FLOAT	4.5		1004	1004	GST	Tackle	0
12	6' FLOAT	7.35		1006	1006	GST	Tackle	0
13	CANDY SOURS	0.35		1122	1122	GST	Confectionery	0
14	BRAIN BLASTERS	0.1		1123	1123	GST	Confectionery	0
15	HUNTING EGGS	0.35		1234	1234	GST	Confectionery	0
16	LOTSA FIZZ	0.2		2211	2211	GST	Confectionery	0
17	3X 5KG BAG ICE	10		3410	3410	GST	Ice	0
18	3X BAGS ICE	11		3411	3411	GST	Ice	0
19	DAIRY MILK HUNTING EGGS	0.35		4321	4321	GST	Confectionery	0
20	UGLY STICK ROD	105		5624	5624	GST	Tackle	0
21	SCHRODER 20LB LINE	5.25		5829	5829	GST	Tackle	0
22	CAP LIGHTS	5.5		6547	6547	GST	Tackle	0
23	HOOK EXTRACTOR	1		6985	6985	GST	Tackle	0
24	SCREAMER 50G LURE	21		7894	7894	GST	Tackle	0
25	SCREAMER 80G LURE	41.65		7895	7895	GST	Tackle	0
26	SCREAMER 160G TUNA LURE	46.65		7896	7896	GST	Tackle	0
27	FISH EAGLE 100G TUNA RIG	16.5		7897	7897	GST	Tackle	0
28	STRAW HAT LADIES	6		8879	8879	GST	Automotive	0
29	FOUR SEASONS GLASSES	16.5		8976	8976	GST	Tackle	0
30	SCHRODER 30LB LINE	6.4		9285	9285	GST	Tackle	0
31	FARMERS UNION TWIN PACK	6.2		10016	10016	GST	Miscellaneous	0
32	SMALL STARLITES	2		10046	10046	GST	Tackle	0
33	STARLITES (LARGE)	3		10047	10047	GST	Tackle	0
34	FISHING ROD PURPLE	120		10066	10066	GST	Tackle	0
35	SM SLUSHIE	2.5		10250	10250	GST	Miscellaneous	0
36	MED SLUSHIE	3.5		10350	10350	GST	Miscellaneous	0
37	BERLEY POT BLACK SCREW LID	8.25		10359	10359	GST	Tackle	0
38	6' HANDLINE COMPLETE	5.5		10366	10366	GST	Tackle	0

Figure 49: Example of a .csv Dry Stock Catalog File

Depending on the number of items in the **.csv** Dry Stock Catalog file, the import process can take a short while. Do not intervene in any way until a dialog confirming the products were successfully added is displayed.

If one or more items in the import file contain(s) syntax errors, T-POS will not upload that particular product(s) and will notify the error in a log file so that the necessary corrections can be made before retrying the import. The log file will be copied to the USB flash drive automatically.

Note: T-POS also supports price bulk adjustments, updating only the prices of the dry stock catalogue. The functionality is available from Menu → Special Functions → Load Bulk Stock Adjustments and requires the **.csv** external import source file to be copied to a FAT32 formatted USB flash drive connected to the T-POS. Once the file is selected, the information found in the import file is merged with existing prices already present in the database.

3.10.2 Stock Adjustments Import

Very similar to Dry Stock Catalog Import functionality (read chapter 3.9.1 Dry Stock Catalog Import), the Stock Adjustments Import allows Operators to instantly update the stock figures for some or all products in the Dry Stock Catalog.

Provided a Stock Adjustments file has been created, it can then be imported into T-POS using a FAT32 formatted USB flash drive.

Just like in case of Dry Stock Catalog Import, the Stock Adjustments Import functionality can be used repeatedly, as the Dry Stock Catalog is dynamic and its stock figures change constantly.

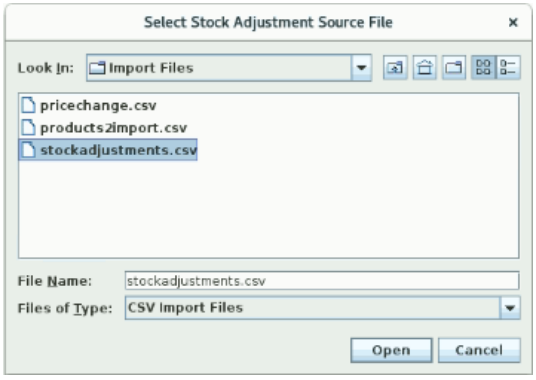


Figure 50: Importing a Stock Adjustment File

To import a Stock Adjustments file, follow this procedure:

1. Menu → Special Functions → Load Bulk Stock Adjustments → [Select Bulk Stock Adjustments source file from USB flash drive] → Open.
2. After the import process finishes, a summary is displayed (Figure 51).
3. Tap OK.
4. At this point, the Dry Stock Catalog reflect the update changes.

Figure 51: Stock Adjustment Summary

The Stock Adjustments update file uses a **.csv** format. When creating a new Bulk Stock Adjustments file in a spreadsheet application of your choosing, use the following file structure:

Field	Field Name	Field Type	Mandatory	Notes
A	PLU	Numeric	Yes	
B	Type	Alphanumeric	Yes	Change (increase or decrease) or set. Case-insensitive.
C	Quantity	Numeric (decimal)	Yes	Without unit of measure.

Refer to Figure 51 for an example of how a **.csv** formatted Bulk Stock Adjustments file should look like.

Remember: Always fill in the titles in the first row as depicted in this example, otherwise the import process will fail.

	A	B	C
1	PLU	Type	Quantity
2	9415767624207	change	100
3	9418315124082	set	20
4	9771323107004	change	3
5	9300605085213	change	-2

Figure 52: Example of a .csv Bulk Stock Adjustments File

3.10.3 Product Price Import

Very similar to Dry Stock Catalog Import functionality (read chapter 4.16 Dry Stock Catalog Import) and Stock Adjustments Import functionality (read chapter 4.17 Stock Adjustments Import), Product Price Import allows operators to instantly update the prices for some or all products in the Dry Stock Catalog.

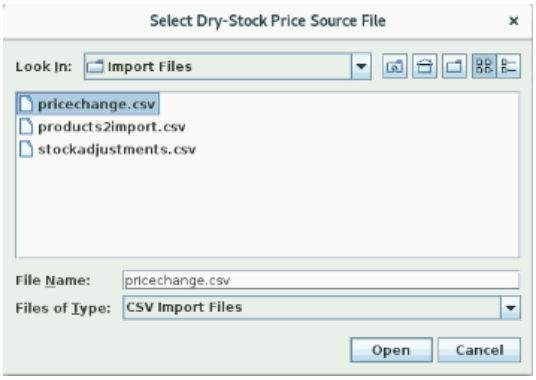


Figure 53: Importing a Dry Stock Price Update

Provided a Product Price file has been created, it can then be imported into T-POS using a FAT32 formatted USB flash drive.

Similar to the Dry Stock Catalog Import, and Stock Adjustments Import, the Product Price Import functionality can be used repeatedly, as the Dry Stock Catalog is dynamic and its product prices change over time. To import a new Product Price file, follow this procedure:

1. Menu → Price Change → Product Price Import → [Select Product Price Update source file from USB flash drive] → Open.
2. After the import process finishes, a summary is displayed (Figure 53).
3. Tap OK. At this point, the Dry Stock Catalog reflects the price update changes.

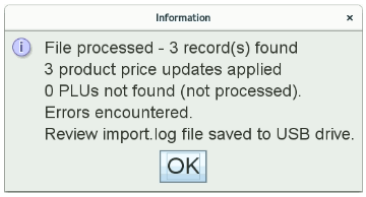


Figure 54: Price Adjustment Summary

The Product Price update file uses a **.csv** format. When creating a new Product Price Update file in a spreadsheet application of your choosing, use the following file structure:

Field	Field Name	Field Type	Mandatory	Notes
A	PLU	Numeric	Yes	
B	Price	Numeric (decimal)	Yes	Without the currency symbol.

4.

Refer to Figure 54 for an example of how a **.csv** formatted Product Price update file should look like.

	A	B
1	PLU	Price
2	9415767624207	3.5
3	9418315124082	2.95
4	9771323107004	8.95
5	9300605085213	4.85

Figure 55: Example of a .csv Product Price Update File

> Remember: Always fill in the titles in the first row as depicted in this example, otherwise the import process will fail.

3.10.4 Discounts Catalog Import

Provided a collection of discounts has been created in a .csv format, the T-POS allows Operators to import such a collection from a FAT32 formatted USB flash drive.

Menu → Settings → Discounts → [Administrator Passcode]. When creating a new Discounts Catalog file in a spreadsheet application of your choosing, use the following file structure:

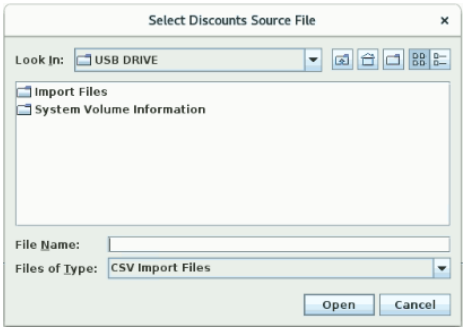


Figure 56: Import a Discounts Catalog

Field	Field Name	Field Type	Mandatory	Notes
A	PLU	Numeric	Yes	
B	Type	Alphanumeric	Yes	% (percentage) or f (fixed amount) or q (quantity) case-insensitive
C	Minimum	Numeric	Yes	without unit of measure
D	Maximum	Numeric	Yes	without unit of measure
E	Membership Scheme PAN	Alphanumeric	No	* See Note below.
F	Value	Numeric (decimal)	Yes	without the currency symbol

* Note: It applies only when the discount is associated with a membership. New Membership Schemes encountered in import files will result in new Membership Schemes being created.

Refer to Figure 56 for an example of how a **.csv** formatted Discounts Catalog update file should look like.

	A	B	C	D	E	F
1	PLU	Type	Minimum	Maximum	MemberShipSchemePANMask	Value
2	9418315124082	%	0	0		10
3	9418315124082	%	0	0	1234##	15
4	9771323107004	f	0	0		0.5
5	9415767624207	q	3	0		0.5
6	9300605085213	f	0	0		0.25

Figure 57: Example of a .csv Discounts Catalog Update File

Remember: Always fill in the titles in the first row as depicted in this example, otherwise the import process will fail.

3.11 HELP Menu

3.11.1 Tutorials

Menu → Help → Tutorials.

The Tutorials menu provides a comprehensive collection of commented videos helping Administrators with configuring T-POS and aiding operators with daily operations.

Once a video is being played, double tapping on the image will enter/exit full screen mode, while tapping on the base of the image will briefly display the video controls.

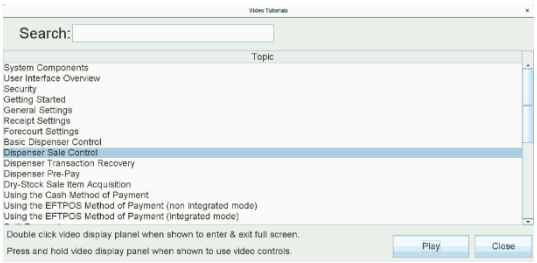


Figure 58: T-POS Help Videos

3.11.2 Get Log Files

Menu → Help → Get Log Files

For TT Fuel Support to assist T-POS operators in dealing with issues, additional detailed information is required and can be provided from logs which the T-POS system creates for all operations.

Note: The level of log detail the T-POS system generates can be adjusted from Menu → Help → Log Verbosity (selecting the checkbox for the desired sensitivity). It is highly recommended this to be established ahead of time, and changed accordingly to TT Fuel Support advice, as more detailed logs require more disk space.

T-POS automatically maintains the log files generated for the last 2 days, discarding older logs so they do not consume unnecessary disk space. For this reason, it is critically important to request TT Support's attention as soon as a problem is identified, to allow these logs to be collected. To provide logs to TT Fuel Support, follow these steps:

1. Connect a FAT32 formatted USB flash drive to the T-POS system then select Menu → Help → Get Log Files. See Figure 127.
2. All available logs are archived (.zip) into a single file and copied to the connected USB flash drive, which can then be safely disconnected and the file forwarded to TT Support for analysis.

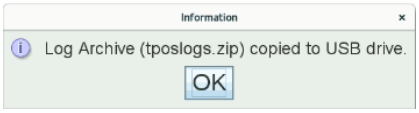


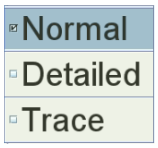
Figure 127: Confirmation on Successfully Copying the Log Files

Note: Log file collection is a one-way operation and there is no need to copy log files back to the T-POS system.

The only files ever copied to the T-POS system, will be the customer display media & logo, as well as T-POS Updates which may be issued by TT Fuel, as a result of diagnostics from the log files obtained in this manner.

3.11.3 Log Verbosity

Menu → Help → Log Verbosity



The level of log detail the T-POS system generates can be adjusted from this menu by selecting the checkbox for the desired sensitivity. It is highly recommended this to be established ahead of time, and changed accordingly to TT Fuel Support advice, as more detailed logs require more disk space and can contribute to slowing down normal operations.

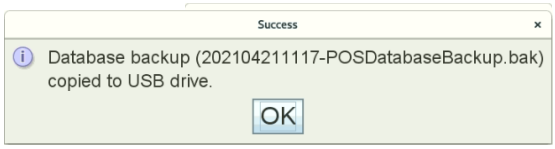
3.11.4 Database Backup

Menu → Help → Database Backup

All the product and sales data acquired by the T-POS through routine operations is stored in a database. Like most computer systems, it is important to perform periodic backups of the information in the unlikely event of a failure .

Note: The frequency of backup operations is up to each merchant to decide, however in the event of a failure and a previous backup needs to be restored, the information acquired by the system after the backup used in the restoration, can never be recovered.

Once the backup is complete, it is recommended to be saved on an external FAT32 formatted USB flash drive, to reduce the risk of both the live system and the backup being lost in the event of an accident.



Selecting Yes in the confirmation window will result in attempting to copy the database backup to a connected FAT32 formatted USB flash drive. A successful copy operation will be prompted with a confirmation message, as shown in Figure xx.

3.11.5 Apply SQL Script

Menu → Help → Apply SQL Script

> Important: Although SQL scripts can be run locally from a connected FAT32 formatted USB flash drive, TT Fuel recommends these scripts to be applied remotely by TT Fuel support technicians.

The T-POS system allows support technicians to address some problems remotely by using SQL scripts. These scripts can also be used to make large scale pre-arranged changes, such as modifying a portion of the Product Catalog or changing the list of operators.

To establish a remote support connection in order for a TT Fuel Technician to apply an SQL script for your system, follow these steps:

1. Make sure the T-POS is connected to Internet.
2. Make sure the TT Remote Support window is displayed on the primary T-POS display.
3. Provide the unique ID number (highlighted in red) to the TT Fuel support technician.
4. You will be prompted to accept the incoming connection. Tap on Accept.

> Note: Occasionally, the connection request is displayed as a central top banner. Tap on the banner then tap on Accept.

5. Once the SQL script has been applied, the TT Fuel technician will return the T-POS system control back to the Operator so normal operations can resume.

3.11.6 Reset Dispenser Prepay

Menu → Help → Reset Dispenser Prepay

In rare occasions when dispensers might get stuck in Pre-Pay operations, this option will reset the dispenser to its default state (either Held or Ready, depending on what Dispenser Operating Mode has been selected at the beginning of the POS Day or Shift).

3.11.7 User Manual

Menu → Help → User Manual

For convenience, the T-POS User Manual version matching the firmware and software running on the T-POS can be accessed from this menu.

> Note: Use the viewing functionality on the top of the screen to resize the document as required and the scroll slider on the right side of the screen to browse through the document.

3.11.8 About

Menu → Help → About

The About menu provides important information related to the T-POS, its software components and hardware firmware, all required when requesting help from TT Fuel support team.

4. Using T-POS Application

Covered in the following chapters are introductory concepts related to the T-POS Terminal and its peripherals as well as brief guides for day to day operations aimed to aid operators in better interacting with the system and utilising its extensive capabilities.

4.1 Day and Shift Control

In order to ease reconciliation and better manage stock, the T-POS system supports day and shift operations.

Here is an example of how day/shift changes and what exactly happens behind the scenes:

1. The day is started by selecting Menu → Start Day after which the T-POS operator is asked to confirm the day Start Cash Float amount.

   Note: Depending on the selection made in Menu → Settings → General → Dispenser Operating Mode Selection, the Operator might be asked to select the dispenser behaviour: **Auto-Hold** or **Auto-Enabled**.

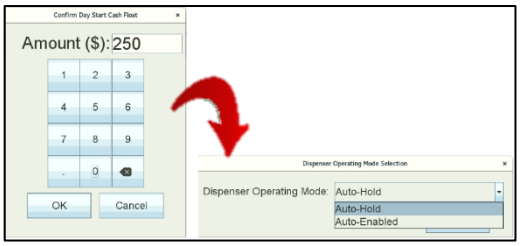
   

   Figure 59: Dispenser Operating Modes

   At this point, all the tanks are dipped, the dispenser meter totals are retrieved and after preparations for downstream reporting and reconciliation purposes are completed, the T-POS operator is free to conduct routine POS sales activities. This represents the first shift of the day.

   Note: The Default Cash Float amount is configured in Menu → Settings → General → [Default Cash Float Amount].

2. Operator changes the shift, by selecting Menu → Shift Change. At this point, dispenser meter totals and tank dips are again acquired both for the shift that has just ended and the new shift that is about to start.

   Note: Any number of shifts can operate throughout the day, each potentially with a different T-POS operator; the shift can be changed at any time, by selecting Menu → Shift Change and furthermore there is no need to operate the same number of shifts each day of the week. However, no sales must be in progress in the sales ledger when initiating the shift change. This ensures downstream reporting and reconciliation consistency.

3. When it is decided the T-POS operating day should end, the T-POS operator simply selects Menu → End Day action from the menu, ending both the current shift (shift 2) and day, while dispenser meter totals and tank dips are acquired again.

Note: Once the POS operating day has ended, no further sales can be made nor dispensers controlled until the day is again started, usually the next calendar day. In this way, the T-POS operating day must be explicitly started and ended traditionally once a day. Furthermore, the T-POS Terminal does not automatically end the POS day when it is shut down.

It is possible therefore, to operate one continuous POS operating day for weeks, months or even years, routinely shutting down the T-POS each night and starting it again the following day but

never explicitly ending the POS operating day and starting a new day. Operating in this manner though will not be conducive to reconciliation.

Similarly, it is possible to both explicitly start and end more than one POS operating day per calendar day. However, by far the most typical operating scenario will be similar to this:

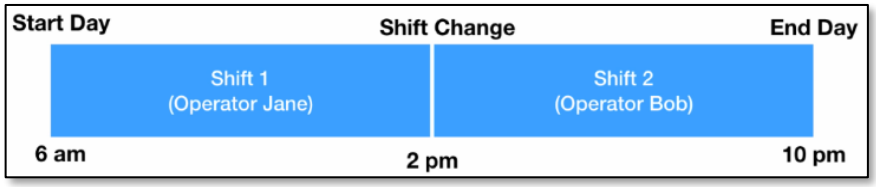


Figure 60: T-POS Typical Day Scenario

> Tip: There are no rules as to how to run the T-POS and it is up to each merchant to decide on this, but the more granular the operation schedule is chosen, the more the reports will help identify sources of financial variance and by whom.

4.1.1 Ending a POS Day

Deciding to end the POS day from Menu → End Day will result in displaying a warning message (Figure 60).

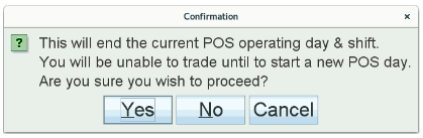


Figure 61: Ending the POS Day – Warning Message

> Note: Ending a POS Day will also result in ending the current Shift. Starting a new POS Day will result in automatically restarting the Shift number to 1.

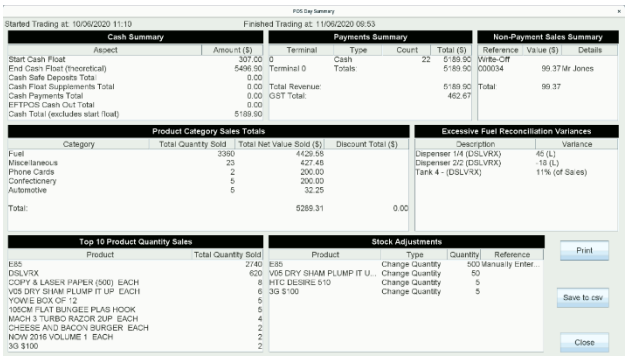


Figure 62: POS Day Summary Example

Selecting Yes will result in ending the POS Day and first displaying the Shift Summary for the last Shift in the POS Day.

The POS Day Summary (Figure 61) is then displayed and can be inspected and closed, printed, or saved as a **.csv** file for future reference.

Selecting Cancel or No will result in disregarding the End POS Day action and returning to normal operations.

When ending a POS Day containing multiple shifts, first the POS Shift Summary for the last shift is displayed then the POS Day Summary containing the entire POS Day balance is displayed. Additionally, after starting a new POS Day (and consequently starting Shift 1), the T-POS operator is asked to confirm the Start Cash Float amount.

> Important: Read chapter 4.19.3 POS Day Summary for in-depth details on this report.

Tap Save to .csv to save the report on an external FAT32 formatted USB flash drive, print it by tapping Print or close it by tapping Close.

4.1.2 Changing the POS Shift

Deciding to change the current Shift from Menu → Shift Change will result in displaying a warning message (Figure 62).

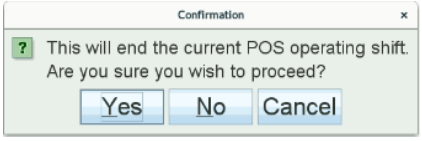


Figure 63: Changing Current POS Shift – Warning Message

> Note: Ending a POS Shift (Shift no. X) will increment the next Shift number by 1 (Shift no. X+1).

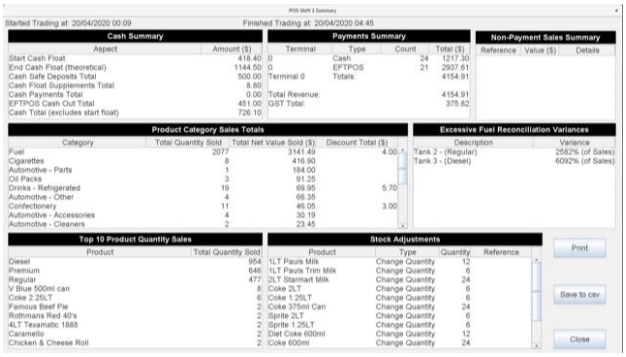


Figure 64: POS Shift Summary Example

Selecting Yes will end the current Shift and first display the Start Cash Float confirmation window for the next shift, waiting for the Operator's input (Figure 63).

Once an amount has been entered, the POS Shift Summary (Figure 64) for the shift that has just ended can be inspected and closed, printed, or saved as a **.csv** file for future reference.

Selecting Cancel or No will result in disregarding the Shift Change action and return to normal operations.

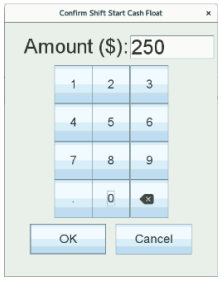


Figure 65: Shift Start Cash Confirmation Window

> Note: It is customary at the end of a shift to move most of the cash profits to a safe or to the bank (Shift Change withdraws). The remaining amount is the one declared as the Start Cash Float, before starting the next Shift.

4.1.3 Exiting the POS Application

Exiting the POS application from Menu → Exit can be done with or without ending the current POS Day (and consequently ending the current POS Shift as well). See (Figure 65)

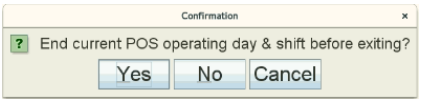


Figure 66: Exiting the POS application – Warning Message

Selecting Yes after deciding to exit the POS application will result in:

1. Ending both the POS Day and the POS Shift.
2. Displaying the POS Shift Summary (similar to Figure 64), which can be viewed, printed, or saved. Tap Close to advance to the next step.
3. Displaying the POS Day Summary (Figure 61), which can be viewed, printed, or saved. Tap Close to advance to the next step.
4. Closing the POS application.

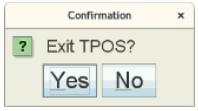
Note: Restarting the POS application (Selecting Yes) will not automatically start a new POS Day nor a new POS Shift. These actions must be performed manually from Menu → Start Day and Menu → Shift Change, respectively.

Selecting No after deciding to exit the POS application will result in exiting the POS application immediately, leaving both the POS Day and the POS Shift suspended.

Note: Restarting the POS application (Selecting No) will resume both POS Day and POS Shift.

Selecting Cancel will result in disregarding the Exit action and returning to normal operations.

Note: if the POS Day has already been ended prior to tapping Menu → Exit, the POS will display a different dialogue box:



4.2 Wet Stock Inventory Management

Wet Stock Inventory Management in T-POS is for the most part, automated. As products are sold, the inventory levels are decremented. Similarly, the inventory levels are incremented when the products have received additional stock. The stock adjustment can be performed either manually, by providing stock adjustments (accessed from the Products Catalogue) or by using delivery measurement capable Automatic Tank Gauging (ATG).

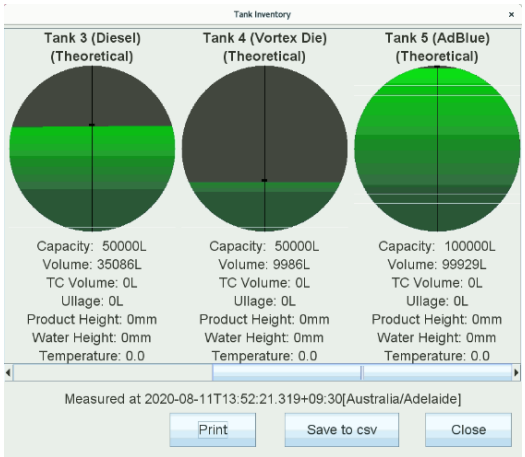


Figure 67: Wet Stock Inventory Management

Using automatic gauging, the inwards goods receipt and measurement of wet stock product is automated, as the ATG automatically records the tank delivery (drop) in real time and increments the inventory levels accordingly.

Note: Delivery drops and manual dippings for theoretical gauged tanks are prevented against exceeding the tank capacity.

4.2.1 Entering Delivery Drop

Only when an ATG not capable of delivery measurement is used, or alternatively when no ATG is used and when logical inventory is maintained (known as theoretical gauging) does tank delivery information need to be manually entered:

Menu → Tank(s) → Enter Delivery / Drop

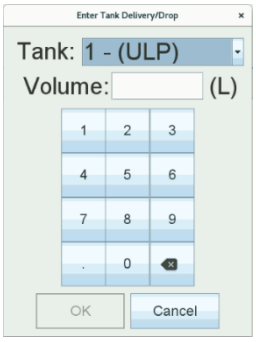


Figure 68: Adding Wet Stock Delivery Quantity

Unlike stock adjustments that must be made for dry stock goods, there is a special function available from the tanks menu to enter wet stock product additions or fuel deliveries. A tank delivery entry dialogue is provided for this purpose and the Operator only needs to select the

tank and enter the delivery amount, usually determined by the delivery receipt obtained from the tanker driver.

In order to avoid confusion, it is not possible to manually enter the delivery for gauged tanks for which this information is automatically captured. Of course, an ATG provides a real measured inventory snapshot at the time the inventory is queried by the T-POS operator; the inventory levels maintained in the T-POS are synchronised to the real measured values returned at this time. Therefore, both inwards and outwards wet stock movements in inventory are maintained for any type of tank.

> Important: Both Delivery Drops and Tank Dippings are only meant to be performed on theoretical tanks.
>
> Note: It is recommended the Delivery Volume should be entered immediately after a tank has been refilled, making sure no wet stock transactions have been initiated in between.

4.2.2 Entering Tank Dips

The only other thing to consider is some sort of synchronisation for the theoretical or logically gauged tanks, as over time the inventory levels will drift or deviate from the actual level which of course can be determined manually by dipping the tank using the tank's dipstick.

> Tip: Fuels modify their volume depending on temperature, a phenomenon that should be taken into consideration when dipping.

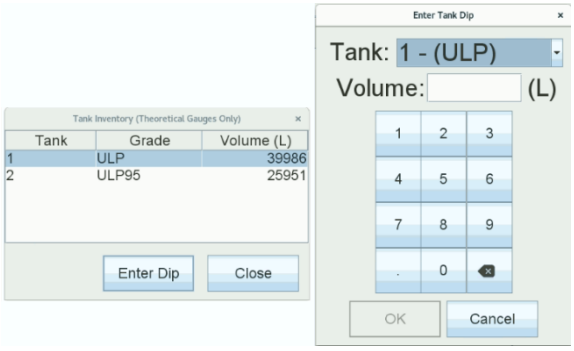


Figure 69: Manually Adding Tanks Current Volume

Whenever this is done, the actual depth measurements should be entered in the T-POS to synchronise the theoretical tank volume with the actual measured tank volume, according to the dipstick readings.

This can be accessed only for logically gauged tanks or tanks without an ATG. The current inventory level is shown for each qualifying tank and the user only needs to access the functionality from:

Menu → Tank(s) → Enter Dip.

> Note: While is not necessary to dip all non-gauged tanks in this manner at the same time, it is a common practice. However, it is important that there is no delay after the physical dip is done before the information is entered in the T-POS. If wet stock products are sold before dip readings are entered, the dip reading will not be representative of the current inventory levels, so an offset will exist in the base going forward for the concerned tank, until the next physical tank dip is entered in the T-POS.

There is also no fixed frequency for which dips must be entered and synchronised, although it is customary to do this as part of the routine of opening and closing day tasks.

4.3 Basic Dispenser Control

By default, all dispensers are stopped or held, indicated by the red colour status icon in the T-POS interface dispenser's management panel. Without operator's intervention, no fuel can be dispensed even if the nozzle were to be lifted and trigger squeezed.

To ready or enable one or more dispensers to be used in dispensing operations, the T-POS operator only needs to tap on the dispenser's status icon, as shown in Figure 17. When the dispenser has been enabled, its status icon turns green and dispensing operations can proceed.

It is common for POS Operators to only ready the dispenser after the customer has arrived on the forecourt and only after having ascertained there are no hazards in the vicinity that would prevent safe dispensing.

> Note: Read chapter 4.4.1 Dispenser Sale Example to understand more about the dispenser's status icons and colour coding.

Dispensers are defined in the system (Menu → Settings → Forecourt → [Administrator Passcode] → Dispensers). The maximum number of dispensers that a T-POS can accommodate and control is 64, however only 9 can be displayed at a time in the dispenser panel. If more than 9 dispensers are configured, use the horizontal slide bar underneath the dispenser panel to move the dispenser panel contents around (tap and hold tap on the horizontal slide bar while sliding finger left and right) and display the dispensers you are after.

If the T-POS operator has been distracted and the customer lifts the nozzle before the T-POS operator has had a chance to ready the dispenser, the interface alerts the T-POS operator by changing the dispenser's status icon to orange and emitting the audible alert sound.

At this point, the T-POS operator can ready the dispenser by tapping on its status icon, after checking it is safe to do so. When a calling dispenser is readied by the operator or the nozzle of a dispenser previously readied by the Operator is lifted, the dispenser status icon turns light blue to indicate fuel is ready to be dispensed.

When the customer pulls the trigger on a nozzle and fuel starts to flow, the dispenser status icon turns dark blue and the sale progress information is displayed in one of the two dispensing sale buffers below.

If while refuelling, the T-POS operator identifies a minor hazard, he can temporarily put a hold or pause on the dispenser by simply tapping on the dispenser icon. Fuel will stop flowing and the dispenser icon will change to a brown colour. Once the hazard has been removed, the POS operator can allow refuelling to resume by tapping on the dispenser's status icon again.

When the customer finishes dispensing and hangs up the nozzle, the dispenser status icon reverts back to the held (stop) state and the final dispense value is displayed, awaiting payment.

A dispenser has been added to the system but is either offline or has not been yet connected.

The dispenser is online but will not dispense fuel until it is readied by the Operator. Tapping on a red dispenser icon will change its status to green (ready).

The dispenser has been readied by the Operator and upon lifting the nozzle and squeezing the trigger, fuel will be dispensed. Tapping on a green dispenser icon will change its status to red (not ready).

Note: The dispenser remains in green mode for a limited time (default value is 1min), before it automatically reverts to the red state. This value can be changed from Menu → Settings General → [Administrator Passcode] → No Start Timeout.

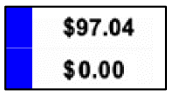
Figure 70: Readying a Dispenser

After the T-POS operating day has ended (Menu → End Day), all dispensing operations are disabled, until the T-POS operating day is started again (Menu → Start Day).

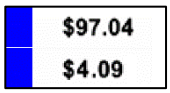
If while refuelling, the T-POS operator identifies a serious hazard on the forecourt, the STOP ALL DISPENSERS button to the left of the dispenser's management panel can be used to immediately cease and suspend all refuelling activities on all dispensers. Contrary to the pause action, in this situation refuelling cannot be resumed without first hanging up the nozzle.

4.4 Basic Dispenser Sale Control

As described chapter 4.3 Basic Dispenser Control, tapping a completed dispenser sale in the buffer will cause it to turn red and appear in the sales ledger. At this point it can be processed as a regular transaction, either by itself or in combination with dry stock items.



At this stage, the sales ledger is cleared of the sale items and ready for the next sale, while the sale buffer for the sale just completed reverts to the value 0.00 and the default black colour.



The second buffer however allows the sale to be held or stacked and the dispenser used again before the first sale has been paid for. This might happen for example to someone who dispensed some fuel then moved their vehicle making way for someone else to refuel, then progressed inside the station selecting various dry stock goods to purchase. The dispenser sale having been stacked is able to be used a second time.

Having been successfully stacked, the dispenser can again be readied by the T-POS operator while the receipt printer prints the details of the stacked sale amount in the event of a power failure.

Note: If the receipt printer is disconnected or turned off, neither the sale can be stacked nor the dispenser can be readied again until the current sale buffer is finalised.

If the sale is successfully stacked and fuel starts flowing, it is displayed in the second sale buffer.

Depending on the amount dispensed in the second stacked dispensing operation or the amount of time the first customer takes selecting various dry stock goods after dispensing fuel, there could be two completed sales awaiting payment or finalisation.

When one of the customers of these two sales approaches the T-POS operator and advise on the dispenser they wish to pay for, the T-POS operator may inadvertently tap on the wrong sale buffer and transfer the wrong sale amount to the sales ledger.

At this point, the colour of the sale buffer amount turns red. When the customer sees this on the customer display and alerts the T-POS operator to this, the T-POS operator can then tap on VOID SALE to return the selected sale item to the dispenser (note the colour of the sale buffer amount reverts to black) and instead select the other sale buffer for inclusion in the sale.

Additionally, once a colour is assigned to a fuel grade in Menu → Settings → Personalise → Dispenser Appearance (default is white), a flag baring the same colour will be displayed next to the sale amount for that particular grade, the moment the nozzle is lifted.

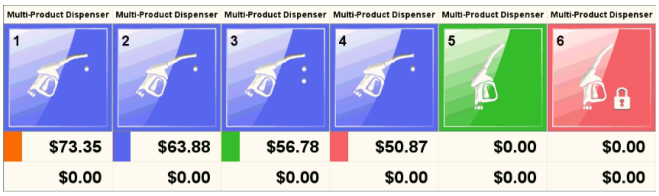


Figure 71: Example of Fuel Grade Colours

Note: Displaying the grade colour is a feature only available from firmware version BAB10018 or later.

Once the dispenser has two sales, neither of which have been finalised, it cannot be used again until at least one of the sale buffers is used in a sale that is finalised then cleared.

Note: The order in which the sale buffers are paid has no relevance as long as they are eventually paid and finalised.

The T-POS system provides a mechanism to manage long expired sales, covered more in depth in chapter 4.15 Recovering a Dispenser Transaction.

Important: There are situations when communication between the pumps and the T-POS Terminal have been interrupted (for example during power outages) in which case fuel can be still dispensed but needs to be manually added in the Sales Ledger, after selecting the appropriate grade and quantity from the Product Catalog.

4.4.1 Dispenser Sale Example

To better demonstrate the meaning of dispenser icon colours and exactly how stacked sales work, the following image is a perfect example of a busy dispenser situation.

Dispenser 1: A dispensing operation is in progress ($50.05 so far). When this dispensing operation finishes, the Operator can ready the Dispenser so a second dispensing operation can take place.

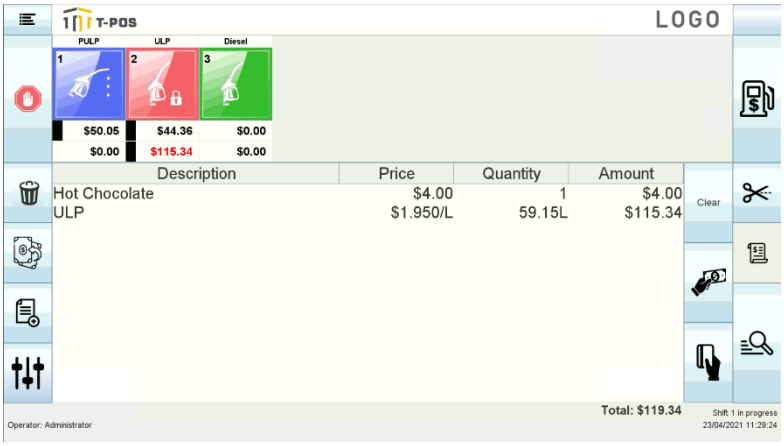


Figure 72: Dispenser Sale Example

Dispenser 2: A first sale, placed in the first sale buffer ($115.34) has been added in the Sales Ledger by the Operator, along with a Dry Stock item ($4.00) awaiting payment, while a second sale awaits finalisation in the second sale buffer ($44.36). No other operations can be made on Dispenser 2 until at least one of the sale buffers is used in a sale that is finalised then cleared.

Dispenser 3: The dispenser has been readied by the Operator and awaits a dispense operation to commence. When this dispensing operation finishes, the Operator can ready the Dispenser so a second dispensing operation can take place.

4.5 Dispenser Operations

4.5.1 Testing Dispensers

Periodic calibration and testing of measurement equipment are a routine necessity of most markets and with regards to dispensers, this means performing dispenser tests.

During the dispenser test, fuel is dispensed into a precisely calibrated measurement vessel and volume dispensed indicated by the display is verified against the measured volume in the vessel. Because the fuel is only used for equipment checking, it is returned to the tank.

The T-POS system supports this calibration with the built-in dispenser test functionality. Once the fuel has been dispensed in this manner, the payment typical routine can be bypassed by simply invoking the Dispenser Test (Menu → Dispensers(s) → Dispenser Test) option from the menu.

Once the Administrator password validation has been accepted, the selected dispenser sale can simply be cleared without requiring the usual payment.

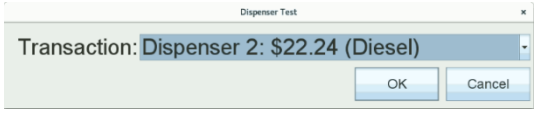


Figure 73: T-POS Dispenser Test

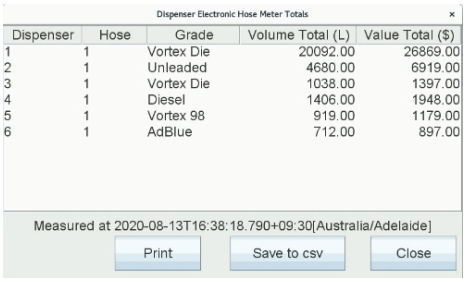
There is no need to take the dispenser offline from the controller for this purpose. While dispenser tests done in this manner will be correctly accounted for in downstream tank and dispenser reconciliation.

4.5.2 Hose Meter Totals

All modern pumps have accurate built-in meters, counting the total amount of fuel dispensed since new.

T-POS can read these totals, helping with downstream reconciliation, a functionality accessible from Menu → Dispensers(s) → Hose Meter Totals.

The results can be either saved on an attached FAT32 formatted USB flash drive or printed.



Dispenser	Hose	Grade	Volume Total (L)	Value Total ($)
1	1	Vortex Die	20092.00	26869.00
2	1	Unleaded	4680.00	6919.00
3	1	Vortex Die	1038.00	1397.00
4	1	Diesel	1406.00	1948.00
5	1	Vortex 98	919.00	1179.00
6	1	AdBlue	712.00	897.00

Figure 74: Electronic Hose Meter Totals

4.5.3 Mechanical Hose Meter Totals

Legacy dispensers, lacking the built-in meters, are still used in some sites. T-POS offers a simple way of managing meter totals for legacy (mechanical) dispensers, allowing Operators to manually input these figures for shifts and POS Days.

The process of manually entering the Mechanical Hose Meter Totals usually follows these steps:

1. First of all, T-POS needs to know which dispensers (from the ones configured in Menu → Settings → Forecourt → [Administrator Passcode] → Dispensers) have no built-in meters. Add all legacy dispensers, separated by a comma, in Menu → Settings → General.
   In the example from Figure 71, dispensers 3 and 4 have been added as legacy, lacking the built-in meter functionality. This means, only dispensers 3 and 4 will be considered, when manually updating Mechanical Hose Meter Totals.
2. Go to Menu → Dispensers(s) → Mechanical Hose Meter Totals, select a shift or POS day for which to update the meter totals, then press OK. (see Figure 75)

   Note: For Shifts and POS Days that are still in progress, only Start Meter Totals can be edited.
3. Select the dispenser which you want to update the meter totals for then press Open.
4. Update the value(s) then press OK to save the changes or Cancel to discard them.

Important: Updating legacy hose meter totals is not an automatic process and requires the Operator to keep track of these figures as Shifts and POS Days advance.

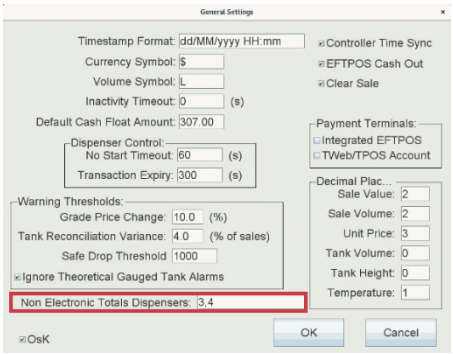


Figure 75: Configuring Legacy Dispensers

Figure 76: Select Ended Shift or POS Day

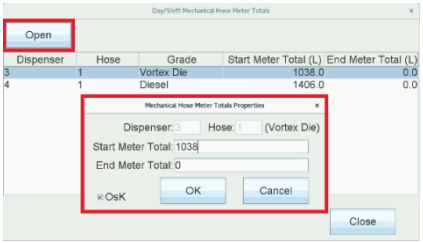


Figure 77: Select Dispenser to Update

4.6 Using Prepay as the Method of Payment

Prepay has become more popular as the price of fuel has increased in recent times and so too the number of drive-offs, so any tool to help minimise theft by accepting payment for the fuel upfront and before the refuelling process begins can be very helpful.

Note: Prepay is only available for online dispensers. Should offline dispensers be present in the forecourt configuration, they will be prevented from being displayed in the Prepay Dispenser selection.

The centre of the Prepay method of payment is the button to the right of the dispenser management panel and the process usually follows these steps:

1. The customer having arrived at the refuelling station approaches the T-POS operator and usually indicates the amount, the dispenser and in the case of a multi-product dispenser, the grade as well.
2. The T-POS operator enters the details into the dialog provided (see Figure 77). Once the Preset button has been tapped, the Pre-Pay preset is moved into the Sales Ledger, awaiting payment (see Figure 78).
3. The T-POS Operator accepts the payment with the preferred method and if required, a provisional receipt (provisional because the fuel has not been yet dispensed) is optionally printed. At this point, the indicated dispenser status icon will change into green, awaiting the customer (see Figure 79) to lift the nozzle and commence refuelling.

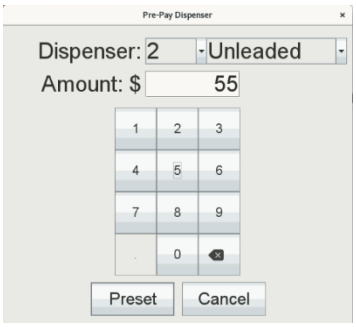


Figure 78: Entering Pre-Pay Preset

Figure 78: Awaiting Payment for Pre-Pay Amount

Figure 79: Pre-Pay Preset Paid - Awaiting Dispensing

Figure 80 Pre-Pay - Dispensing

> Note: The dispenser is pre-set for the amount indicated and the customer is expected to return to the vehicle, dispense the fuel and drive away when finished.

4. The customer lifts the nozzle and commences refuelling (see Figure 80). After the fuel has been dispensed (the full preset amount), a purchase receipt can be printed if the customer returns to request one.

> Note: Because the dispenser is pre-set, the customers cannot take any more fuel than they paid for.

Refunds: When the sale completes, if the customer has taken the full amount prepaid, the sale is automatically cleared on the dispenser along with the value originally prepaid and pre-set.

If for some reason the customer does not take all the fuel that was prepaid, then neither final amount dispensed nor the original prepaid value get automatically cleared from the dispenser in question, requiring the customer to return for a refund (see Figure 81). This procedure is called a pre-pay refund.

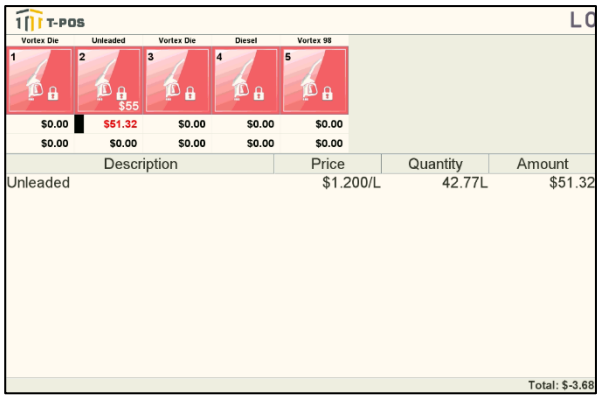


Figure 81: Pre-Pay - Refund Example

Unlike traditional post pay sales when the appropriate sales buffer is selected, the prepay refund (not the final sale dispensed, or amount displayed) is transferred to the sales ledger, which can be returned to the customer using either the cash or the EFTPOS methods of payment. For more information, please see chapter 4.9 Refunds.

> Note: Refunds are similar to regular sales, except they result in a transfer of money from the merchant to the customer displayed as a negative amount in the sales ledger.

4.7 Using Cash as the Method of Payment

Although the most common method of payment for any transaction made through the T-POS Terminal is by either customer account cards or bank cards such as Visa or Mastercard, the system fully supports cash transactions as well.

The sale process using cash as the preferred method of payment usually follows these steps:

1. Having multiple sale items on the sales ledger, the T-POS operator simply taps on CASH when the customer is ready to complete the sale.
2. A dialogue is presented in which the Operator enters the amount tendered by the customer, either by selecting the exact denominations (the Quick Tender tab) or by entering the exact amount (the Keypad tab). By default, this is the total outstanding amount of the sale and initially the full sale amount;
   However, the system will round the sale total to the nearest coin denomination.

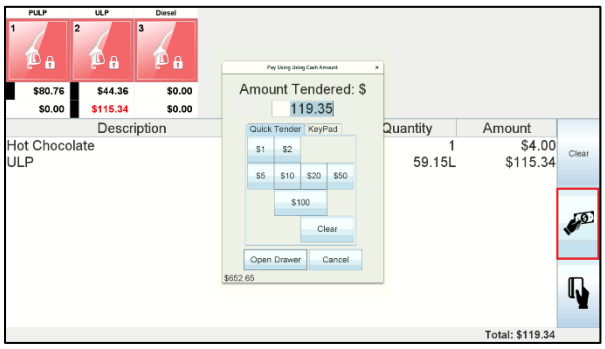


Figure 84: T-POS Returning Change

3. If the exact amount for the sale is provided by the customer, the sale is completed, the cash drawer is triggered by the T-POS so the funds can be added to the contents of the drawer and a receipt can be printed.
4. If the customer presents more money than is required, which is usually quite typical, then as well as the cash drawer opening, a dialogue is presented to the T-POS operator, advising on the amount of change that has to be returned to the customer.

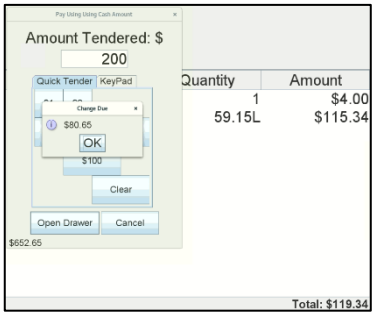
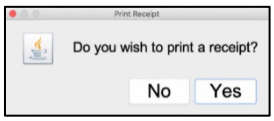


Figure 85: Paying Using Cash

5. If the customer provides less funds than the total outstanding amount of the sale, then the total shown on the bottom of the screen is reduced by the amount paid, while another form of payment or alternatively another cash payment is required to finalise the sale. This procedure is known as a split payment and its covered in detail in chapter 4.8 Making Split Payments.
6. Like all payment methods, once the cash payment funds have been accepted by the T-POS operator, and any change returned to the customer and the sale has been paid for in full, a dialogue appears asking if a receipt is required.



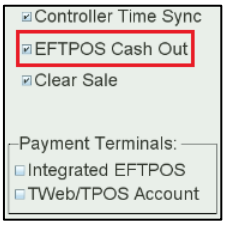
> Note: The T-POS operator should ask this of the customer before answering the dialogue on the screen, however receipts can be printed afterwards (using the Re-Print button) in case customers change their minds after initially declining having a receipt printed. This action is covered in more detail in chapter 4.12 Reprinting a Sale Receipt.

7. After the full sale amount, considering any rounding, has finally been paid in full, the sales ledger clears of all the items of the sale, ready for the next sale.

4.8 Using EFTPOS as the Method of Payment [Non-Integrated Mode]

This chapter covers tendering sales using the EFTPOS method of payment, specifically using independent and non-integrated EFTPOS terminals, meaning those not driven by the T-POS Terminal.

Having a sale item in the sales ledger, the T-POS operator taps on EFTPOS payment button on the right when the customer is ready to complete the sale and has indicated they wish to pay with EFTPOS. A dialogue is presented in which the amount due is displayed and any cash out the customer may also request.



There is also a global setting which configures whether the cash out option is enabled or not (as many merchants understandably choose not to extend this service to their customers) at
Menu → Settings → General.

> Note: The Administrator passcode is required to access the General Settings section.

The sale amount (or a lower amount if processing a split payment) and any cash out must be manually entered in the T-POS terminal. It is recommended to not hand the customer their cash out before doing this.

When completed and the EFTPOS terminal is returned to the T-POS operator, the result of this payment should be noted. If the payment is successful, tap on OK If not, tap on Cancel while an alternative payment method should be requested of the customer. If the customer requested cash out and the payment was successful, tap on OK to open the cash drawer. This will also trigger a dialogue box showing the amount of cash the customer should be given.

> Note: As with a cash transaction, once the payment is complete the T-POS Operator is given the option of printing a receipt.

It is important to understand the non-integrated mode of operation, meaning that it is up to the T-POS operator to correctly transcribe the sale information from the T-POS Terminal into the EFTPOS Terminal, the process being entirely the T-POS operator's sole responsibility.

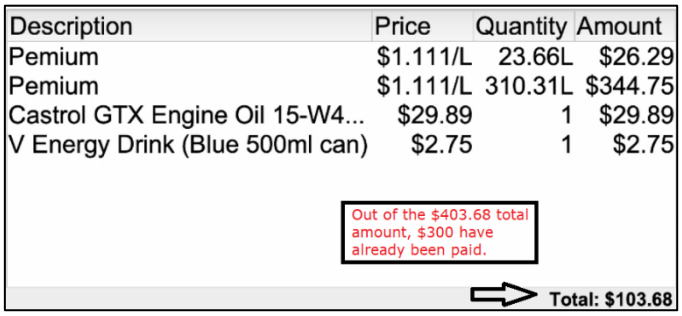


Figure 86: T-POS Split Payments

For this reason, it is quite common for the merchant to require the T-POS operator to keep a copy of the EFTPOS receipts for downstream reconciliation purposes which can be placed either in the cash drawer or on a countertop spike.

Like the cash method of payment, the customer can choose to pay less than the total sale amount using EFTPOS with the T-POS operator entering the advised amount in both the T-POS Terminal tendering dialogue and the EFTPOS Terminal.

At the end of a successful EFTPOS payment, the amount paid is deducted from the total sale amount and the remaining balance can be paid for as required. This procedure is known as a split payment and its covered in detail in chapter 4.8 Making Split Payments.

Important: Only when the full sale amount has been fully paid is the sales ledger cleared of the sale items and ready for the next sale.

4.9 Using Local Accounts as the Method of Payment

This chapter covers tendering sales using T-POS Accounts as a method of payment, either by swiping a card or by just selecting the desired T-POS account.

Having a sale item in the sales ledger, tap on the Card payment button on the right, then select the T-POS Account Card method of payment.

Figure 87: Payments with T-POS Account Cards

A dialogue is presented in which the T-POS Operator can select a T-POS account without any cards attached to it, which will complete the transaction directly, using the account's positive balance or credit limit. A receipt can be printed if required.

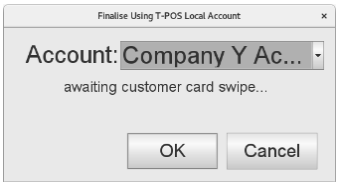


Figure 88: T-POS Account Selection

Note: A successful transaction using a T-POS Account or T-POS Account Card is acknowledged by displaying the following notification: Payment Successful! (Fig 85).

Alternatively, after selecting Card → T-POS Account Card, a valid card swipe will complete the transaction using the account information tied to that card, provided enough funds are available.

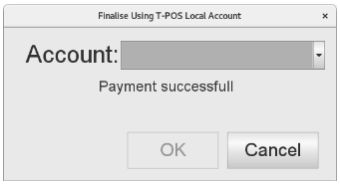


Figure 89: T-POS Account Card Successful Payment

Using T-POS Accounts as a valid method of payment, involves 5 steps:

1. Enable the T-POS Account Terminal.

Select Settings → General → Payment Terminals, then make sure T-WEB / T-POS Account option is checked. Leaving this option unchecked will result in disabling the T-POS Account Terminal and the inability to process any payment using a T-POS Account Card.

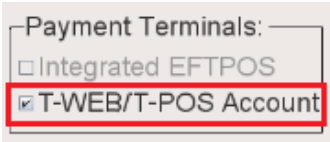


Figure 90: Enabling T-POS Account Terminal

Note: T-POS Card Schemes and Cards can still be added, configured or deleted, regardless of the state of this switch. Additionally, payments using a T-POS Account (without having a Card attached) can still be made even if the T-WEB / T-POS Account option is left unchecked.

2. Enable the T-POS Account as an option in the ledger payment selection.

Select Settings → Payment Types → T-POS Account → Open, then make sure Show option is checked. Leaving this option unchecked will result in not displaying the T-POS Account as a valid method of payment.

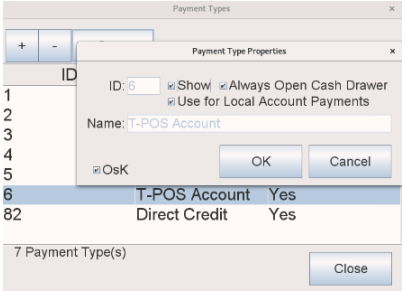


Figure 91: Enabling T-POS Account Payments

> Note: Name and ID fields are factory defaults so they cannot be edited. Always Open Cash Drawer should be left unchecked, as this type of payment does not involve cash. Use for Local Account Payments, allows topping up Local Accounts using T-POS Accounts.

3. Create a T-POS Account and configure it.
Select Settings → Local Accounts → Accounts, then tap +. At this point, a new Account can be created, acting as the central point for payments made either directly or by swiping linked cards.

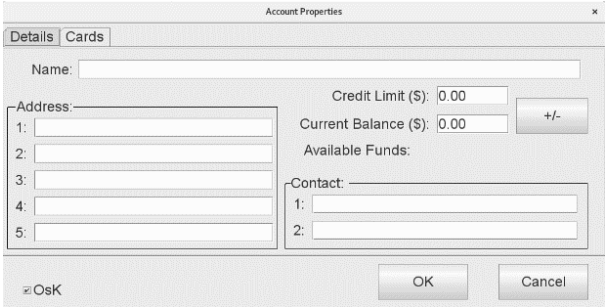


Figure 92: Adding / Editing a T-POS Account

- Name the account. Usually, this will be the name of a company but could also be used for individuals or organisations.
- Record addresses and contact information as required.
- Enter a credit limit (if required) the account owner is allowed to spend before a top up (step **6**) is required, effectively paying back the amount owed (either partially or in full). If left at 0, the account becomes a pre-paid system and cannot go into debt.

> Note: Current Balance can be either negative, meaning that credit has been spent without being paid back using a top up, or positive, meaning the top up amounts exceed the credit used. Account figures are calculated using the following formula: Available Funds = Credit Limit + Current Balance. Additionally, Current Balance can be set to a specific value (either positive or negative) when the account is first created, becoming a read-only value when editing an existing account.

- At this point, no T-POS Cards have been assigned to this T-POS Account, so none are present in the Cards tab.

4. Create a T-POS Card Scheme and configure it.
Select Settings → Local Accounts → Card Schemes, then tap +. At this point, a new T-POS Card Scheme can be created, allowing individual or series of Cards to be created and assigned to a T-POS Account (step **5**).

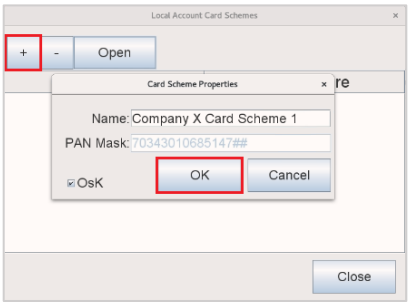


Figure 93: Adding / Editing a T-POS

- Configure the name for this Card Scheme. The name can be related to a T-POS account or be reflective of the Cards later linked to this T-POS Card Scheme.
- Enter the Personal Account Number syntax (PAN Mask) used to create T-POS Cards following this pattern.

> Note: A PAN number is usually made out of 4 x 4 digits. To accept a range of cards, only enter the fixed numbers, while the flexible numbers are written as #. For example, 1356

> 2134 #### #### will only accept cards with a PAN starting with 1356 2134, while #### #### 4554 #### will only accept account cards having the 3rd set of digits as 4554.

Tap OK to save your newly created T-POS Account Card Scheme.

5. Create a T-POS Card, following a T-POS Card Scheme rule and assign it to a T-POS Account.

Select Settings → Local Accounts → Cards, then tap +. Selecting Yes on the Create Card Sequence conformation window allows the T-POS Operator to create a sequence of T-POS Account Cards by specifying a card number interval, within the assigned T-POS Card Scheme. Selecting No will allow the T-POS Operator to create a single T-POS Account Card, following the rules of the assigned T-POS Card Scheme.

> Important: Creating a Card Sequence requires each card to be individually opened, authorised, and assigned to an account before it can be used. Selecting No at this stage allows the T-POS Operator to create an individual T-POS Card and configure it from the beginning.

» To create a Card Sequence, select the T-POS Card Scheme rule your Cards will follow, then select a card interval.

» To create or edit an individual T-POS Card, first select a Card Scheme rule for the T-POS Card to follow. Then, assign a T-POS Account to it, add the card number and contact information for up to 4 users.

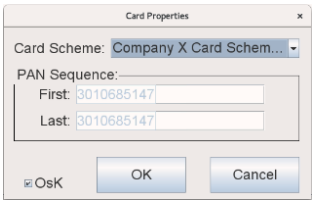


Figure 94: Creating a T-POS Card Sequence

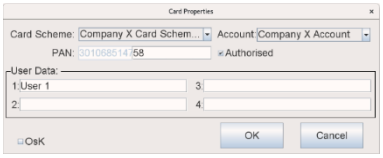


Figure 95: Creating a T-POS Card

Remember to check the Authorised option. Leaving it unchecked will result in creating the T-POS Card but declining it when trying to finalise a sale with it.

» Tap OK. At this point, the T-POS Card(s) are ready to be used in transactions, providing the linked T-POS Accounts have enough funds.

6. Top up a T-POS Account.

Add funds to a T-POS Account using Cash or EFTPOS, reducing any negative balance or even exceeding the credit limit and having pre-paid funds available.

Figure 96: Top up a T-POS Account

```
Fast Fuel Motors
1234 Old Digger Highway
Kangaroo Creek NSW
Tax Invoice
Ph: 0800 382 5631
ABN: 123-456-789
Date: 30/09/2020 15:13
Reference: 000013
-----------------------------------------
* Hot Chocolate
  4 @ $4.00                    $16.00
Sale Total:                    $16.00

T-POS Account (Card#:7034...58)  $16.00
Payment Total:                 $16.00

GST included in Total:         $1.45
        Items with * include GST

Thank you for shopping at Fast Fuel Motors

        Like us on Facebook
   Complaints can addressed to our
complaints service PH:0800 NO PROBLEMO
      (01:15 - 01:16, Friday)
```

Figure 97: T-POS Account Sale Receipt

» Select Special Functions → Account Payment, then select the T-POS Account to which funds will be allocated and the amount.

» Tap OK to place the top up payment in the sales ledge, then finalise the transaction using either Cash or EFTPOS.

» After the transaction ends successfully, a receipt can be printed. The new balance for the topped off T-POS Account can be checked from Settings → Local Accounts → Accounts.

4.10 Making Split Payments

Split payments refer to the process of tendering a sale using more than one payment type or alternatively two or more payments of the same type.

Cash payments:

1. Starting with one or more sale items in the sales ledger awaiting payment, the T-POS operator taps Cash payment method button as usual but instead of accepting the full sale amount, they only accept a partial payment from the customer.
2. At this point, the amount paid is deducted from the total sale amount and additional or alternate methods of payment are required to complete the sale. See example in Figure 83.
3. The T-POS operator will again tap on Cash payment method button, accepting the remaining outstanding amount, displayed on the bottom of the screen.

Mixed payments:

1. Starting with one or more sale items in the sales ledger awaiting payment, the T-POS operator taps on Cash payment method button as usual but instead of accepting the full sale amount, they only accept a partial payment from the customer.
2. At this point, the amount paid is deducted from the total sale amount and additional or alternate methods of payment are required to complete the sale. See example in Figure 82.
3. The T-POS operator taps on EFTPOS method of payment button this time and enters either the full outstanding amount or again a partial sale amount. A Cash Out amount can be entered as well, if required.
4. After the customer has paid using the EFTPOS terminal, depending on the amount paid, the sales ledger either clears the sale items, or alternate methods of payment are still required to complete the sale.

Important: Only when the full sale amount has been fully paid (in two or more payments) is the sales ledger cleared of the sale items and ready for the next sale.

4.11 Refunds

The T-POS Terminal fully supports refunds either due to customers not dispensing all the fuel that was prepaid or changing their mind about purchasing one or more dry stock items.

The refund policy is at the discretion of the store owner or merchant. Refunds for unused prepaid amounts are covered in chapter 4.5 Using Prepay.

A refund can also be carried out in a different manner:

1. A dry stock item has been sold and paid for, however the customer changes their mind and requests a refund.
2. Either scan or select the same item (from the dry stock product catalogue) and add it to the sales ledger.
3. Once in the sales ledger, if the item is selected and REFUND is tapped on, both the quantity and amount values are made negative to indicate the stock being returned and the money refunded to the customer.
4. The rest of the sale and payment process is like any other purchase, except that if the complete sale amount results in money needing to be paid from the merchant back to the customer, both the EFTPOS and cash tendering dialogues used in the refund payment process mark the amount as a refund.
5. A receipt is printed, detailing the refund amount.

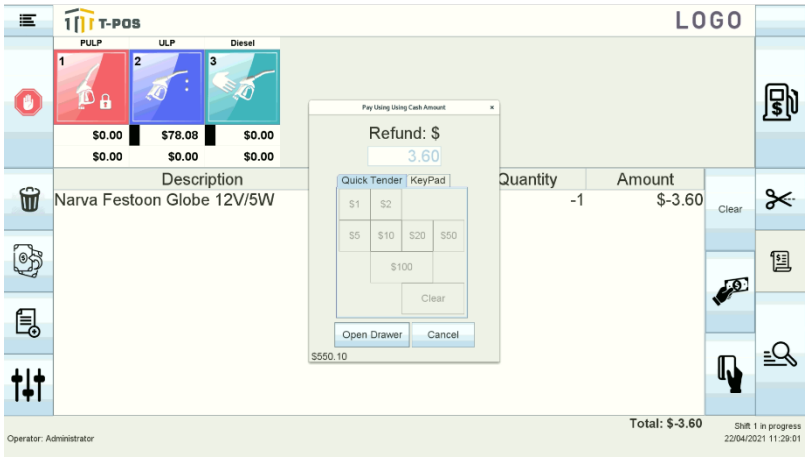


Figure 98: T-POS Terminal Refunds Screen

Note: Refunds do not have to be conducted singularly as described above but can be combined with other sale items such as refunding one oil pack previously purchased because it is the wrong sort of oil and choosing instead to purchase the correct one.

4.12 Suspend, Restore and Write-Off a Sale

Sometimes, due to unforeseen events, some sales cannot be paid for immediately but payment still needs to be finalised. In such cases (for example, when a client tries to pay for their already dispensed fuel and realises, they have lost their wallet) the Suspend Sale functionality comes in handy and essentially puts the transaction on hold until it is paid in full at a later date. A printed Suspended Sale receipt is also generated, acting as proof for the unfinalized transaction.

Note: The Suspend Sale functionality is intended for use in case of Wet Stock items only, that once dispensed cannot be returned.

The steps involved in using the Suspend, Restore and Write-Off functionality is as follows:

1. Fuel has been dispensed and the wet stock product is in the Sales Ledger, awaiting payment and transaction finalisation.
2. Client cannot pay for the fuel immediately and needs to return at a later date (usually within a couple hours).
3. Operator selects Menu → Special Functions → Suspend Sale, operation that requires administrator privileges. When asked for details (Figure 99), the client's name should be added for future reference.

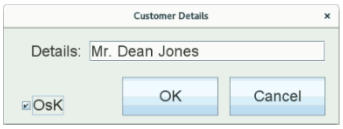


Figure 99: Suspended Sale

4. At this point, the transaction is removed from the Sales Ledger and "parked" while a printed Suspended Sale receipt is also generated (Figure 100), acting as proof of the unfinalised transaction.
5. The Operator resumes normal activities.

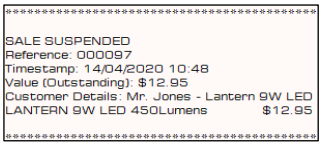


Figure 100: Suspended Sale Receipt

6. Once the customer returns to finalise payment, operator selects Menu → Special Functions → Restore Suspended Sale and selects the correct suspended sale from a list (Figure 101), consulting the printed Suspended Sale receipt.

Figure 101: Selecting a Suspended Sale

7. At this point, the suspended transaction is returned in the Sales Ledger and the Operator has two choices:
   - Finalise the sale by accepting payment from the returning customer. Once the payment is finalised, the item is removed from both Sales Ledger and list of Suspended Sales.
   - Write-Off Suspended Sale (Menu → Special Functions → Write-Off Suspended Sale) and effectively remove the unfinalised sale from the list of Suspended Sales in case the customer never returns to pay for the sale.

4.13 Safe Deposit

Menu → Special Functions → Safe Deposit

T-POS allows Administrators to withdraw cash from the cash drawer and safe deposit it in a secure location.

Note: The cash drawer's current total is conveniently displayed in the bottom left side of the withdraw window.

Once a withdrawal is made, a receipt is printed attesting the cash withdrawal, while the amount is subtracted from the cash float totals.

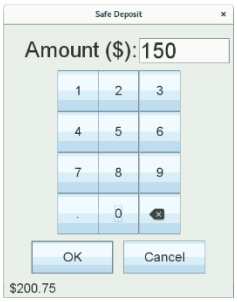


Figure 102: Safe Deposit Withdraw

4.14 Changing Wet Stock [Grade] Pricing

While prices for the dry stock items are maintained in the product catalog, wet stock grade pricing is handled in a different manner due to the long running sale process, from the moment the nozzle is first lifted until the sale is finalised and paid for.

During this time, it is important that the grades prices do not fluctuate. Therefore, regardless of any price changes the operator might have made, the Forecourt Controller (FC6000) makes sure the customer gets no surprises after the nozzle has been first lifted.

There is no need to wait for downtime while every dispenser of a given grade is not currently being used as price changes do not affect sales in progress, either in the dispenser or in the sales ledger.

Let's assume we have a dispenser sale in progress while another completed sale awaits payment. To initiate a grade price change as the T-POS operator, follow these steps:

1. Select Menu → Grade Price Change.
2. To prevent unauthorised access, enter the Administrator passcode.
3. From the next dialogue, select the grade for which the price is being changed and the new price. For convenience, the current price for the selected grade is displayed.

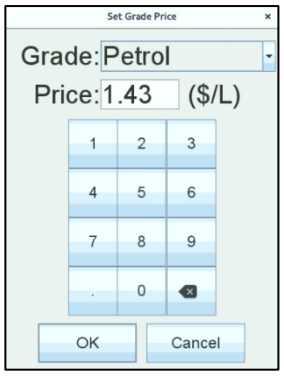


Figure 103: Fuel Grade Price Change

> Note: To help protect against accidental pricing, if the T-POS operator specifies a price beyond the threshold specified in the settings (Menu → General Settings → Grade Price Change %) a warning is displayed.

4. After tapping on OK, the new price is instantly applied to the affected dispensers on the forecourt, provided they are not currently dispensing.

> Important: In case there are some dispensers affected by the price change currently dispensing fuel, the price change will be applied after the current sale is finalised and paid for.

5. None of the two sales in progress used in this example are affected by the price change.

4.15 Reprinting a Sales Receipt

Each time a sale is finalised and paid for, the option to print a receipt is provided.

Usually the T-POS operator will ask the customer whether they want the receipt. It is not a problem when customers answer no in the first instance then later change their mind.

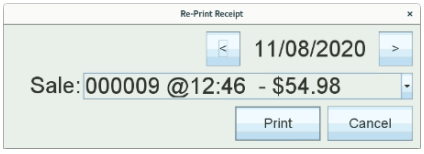


Figure 104: T-POS Reprinting a Receipt

The Reprint Receipt button to the right side of the sales ledger can be used to recall the sales of any POS day and reprint the associated receipt. The most recent sale is displayed on the top of the list.

And although the T-POS operator is shown only the two most identifiable features of the receipt – the time stamp and the amount – the individual sale items are displayed on the customer display to help the customer confirm that the selected sale is indeed the one for which the receipt is requested.

Once the sale in question has been located, the receipt can be printed by simply tapping on Print.

```
              Fast Fuel Motors
          1234 Old Digger Highway
            Kangaroo Creek NSW
               Tax Invoice
Ph: 0800 382 5631
ABN: 123-456-789
Date: 11/08/2020 12:46
Reference: 000009
-------------------------------------------
* AdBlue - Dispenser #:6
  18.20L @ $0.999/L                 $18.18
* Windscreen Washer Additive
  4 @ $9.20                         $36.80
Sale Total:                         $54.98

Cash                                $55.00
Rounding:                            $0.02
Payment Total:                      $55.00

GST included in Total:               $5.00
        Items with * include GST

 Thank you for shopping at Fast Fuel Motors

          Like us on Facebook
      Complaints can addressed to our
  complaints service PH:0800 NO PROBLEMO
        (01:15 - 01:16 Friday)
```

Figure 105: Example of Reprinted Receipt

4.16 Recovering a Dispenser Transaction

While a current transaction is actively in the sales ledger, it is owned by the T-POS Terminal, meaning that if the terminal is closed for any reason, before the payment has been completed, the sale item is simply discarded. This can be a problem for dispenser sale items which effectively have never been paid for.

Upon restarting the T-POS Terminal, the sale value will be placed in the sale buffer and marked in red but will not appear in the sales ledger or in the Total value on the bottom of the screen. To move forward and finalise the outstanding sale in a payment process, follow these steps:

1. While having no sale items in the sales ledger, tap on the left side of the sales ledger. This acts as a recovery for any held, not yet finalised transaction.
2. The Transaction Recovery dialogue is displayed, showing all the sales currently owned, that are not finalised with a payment.
3. Choose the one needed to recover then tap on OK.
4. The sale item is now returned in the sales ledger.
5. Proceed with the sale normally by selecting the payment method buttons and receiving the payment.

Note: Transactions are left unfinished and need to be manually recovered (added to the sales ledger and paid for in full) only when the sale process has not yet been started. If for a transaction in the sales ledger, a payment method has been initiated (by tapping on one of the payment method buttons) but immediately after the T-POS has been shut down, upon restarting, the transaction is usually recovered automatically and placed in the sales ledger, awaiting payment.

4.17 Acquiring Individual Dry Stock Sale Items

The default method of acquiring dry stock items is by using the scanner, though this option is only available when T-POS is displaying the sales ledger. However, in deployments where a scanner has not been provided, there is another simple way of adding dry stock items in the sales ledger as part of an active transaction:

1. After a customer presents the dry stock item(s), tap on in the bottom right corner of the display to bring up the Dry Stock Catalog.

> Remember: The default selection of products is the Favourites, selectable from the Group criteria field. To display all products, just de-select Favourites from Groups by tapping the empty cell in the selection.

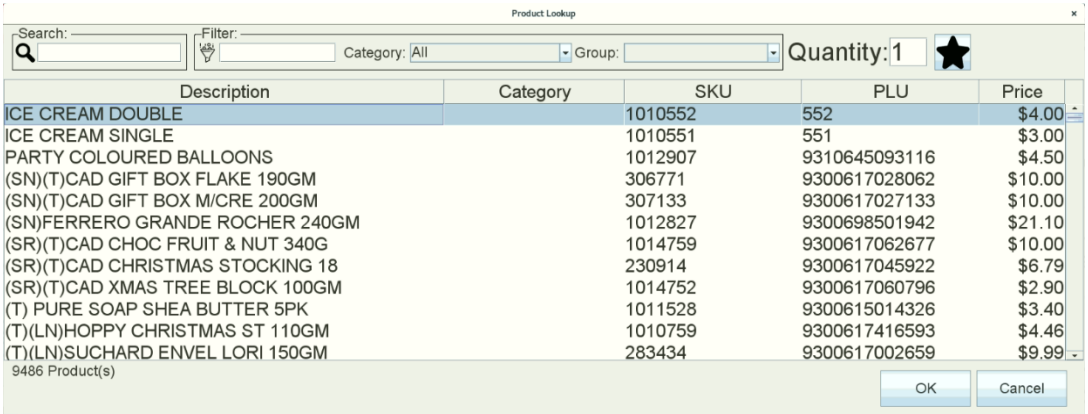


Figure 106: T-POS Product Searching

2. The Search functionality allows the Operator to use a single word to look for products containing it. To fine tune the results even further, the Filter functionality uses an additional word to look inside the results page. Tap on CLOSE to close the virtual keyboard and display those dry stock items best matching your input.
3. Finally, after finding the desired product, tap on it to select it, tap on Quantity and adjust it as required, then tap OK to add it to the sales ledger.
4. At this point, the selected product is added to the sales ledger, for inclusion in the current sale.

> Note: Only one product can be added at a time. To add additional (and different) items, tap again.

5. The process can be repeated to add additional dry stock items into the sales ledger.
6. Proceed with the normal payment process for the current sale.

4.18 Membership Schemes

Membership Schemes functionality has been added to include discounts operated through account card transactions. Once a membership scheme has been created, it can be associated with either a new or existing discount.

To create a new membership scheme, follow this procedure:

1. Go to Menu → Settings → Membership Schemes.
2. Enter the Administrator passcode.
3. Tap +.
4. Give the new membership scheme a meaningful name.
5. Enter the Personal Account Number (PAN) of the account card(s) that will be recognised as part of this membership discount scheme.

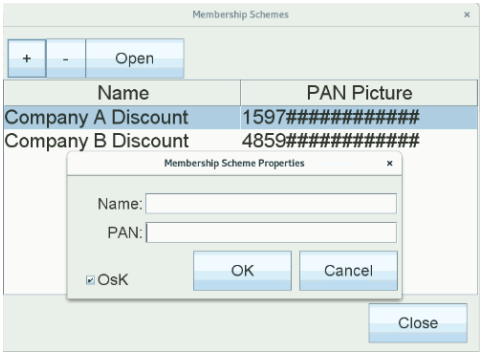


Figure 107: Adding a Membership Scheme

> Note: PAN numbers are usually made out of 4 x4 digits. To accept a range of cards, only enter the fixed numbers, while the flexible numbers are written as #. For example, 1356 2134 #### #### will only accept cards with a PAN starting with 1356 2134, while #### #### 4554 #### will only accept account cards having the 3rd set of digits as 4554.

6. Tap OK. At this point, the new Membership scheme can be associated with a discount in Menu → Settings → Discounts → [Tap on a Discount] → Open.

4.19 Discounts

The Discounts menu allows Operators to sell both dry stock and wet stock items at discounted prices, functionality easy configurable from Menu → Settings → Discounts → [Administrator Passcode].

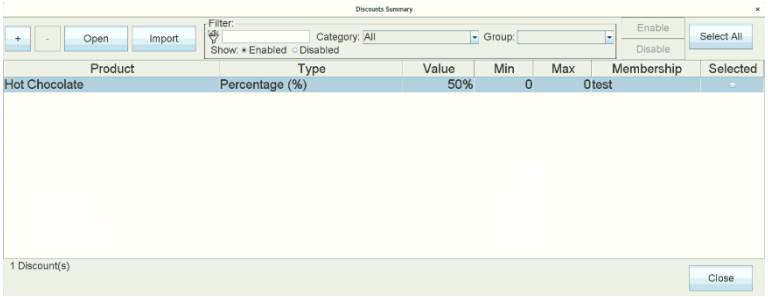


Figure 108: Discounts Summary

Opening the discounts menu will display a list of discounted products if any have been configured.

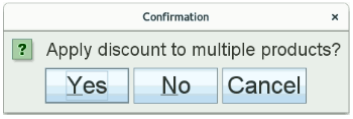
- Use the +, - and Open buttons to facilitate the Add, Delete and Open operations.
- The filter functionality allows the operator to quickly find products by searching for all items that contain a particular word.
- By default, the discount window is set to show your Favourites. To display all products, just de-select Favourites from Groups by tapping the empty cell in the selection. The Category is a subdivision of Groups, aggregating similar products in the same collection, for easier finding.

- A collection of discounts saved in a .csv format can be also imported. Read chapter 3.9.4 Discounts Catalog Import.

> Note: Account cards can be used at any moment during a sale to trigger discounts either by swiping or scanning the card. Customers are reminded of this feature with a message on the secondary display that reads: *Please swipe or scan discount card to unlock additional in-store savings*.

4.19.1 Discounts for Individual Products

Discounts can be configured for individual products or applied to multiple products. To add a new discount to a single product in the system, follow this procedure:



1. Go to Menu → Settings → Discounts.
2. Enter the Administrator passcode to continue.
3. Tap on +.
4. Select No in the Apply discount to multiple product confirmation window.
5. The Discount Properties Dialog window is displayed (Figure 108).
6. Select a Product to which the discount will be applied to.
7. If applicable, select a Membership for the product. For more information on memberships, read chapter 4.17 Membership Schemes.

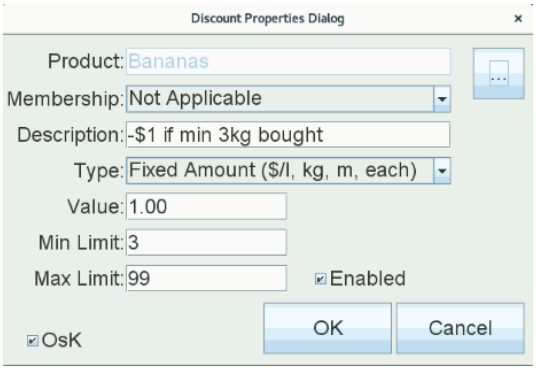


Figure 109: Adding Discounts for a Product

8. Provide a description for the discount you want to apply. This description will be displayed in both Discounts Summary (Figure 108) and in the sales ledger (if discounts apply to any of the products being purchased).
9. Select a type of discount:
   - Percentage: if selected, the percentage amount set in the Value field will be deducted from the total amount of the purchased discounted item (Price*Quantity – Calculated Percentage), provided the Min & Max Limit criteria are met.

     Note: If decimals are used to set a percentage, the figure gets rounded.
   - Fixed Amount: if selected, the fixed amount set in the Value field will be deducted from the price of each purchased discounted item (Price*Quantity – Discount*Quantity), provided the Min & Max Limit criteria are met.
   - Quantity: if selected, the fixed amount set in the Value field will be deducted from the total price of the purchased discounted items (Price*Quantity – Discount), provided the Min Limit criteria is met.
10. Type in a figure in the Value field. Depending on the selection made in the Type menu, this value is either nominal (Fixed & Quantity) or a percentage that will be calculated after adding discounted products in the sales ledger.
11. Min & Max Limit: Sales in quantities outside of this interval will not qualify for the configured discount. For Max Limit, 0 value registers as no limit.
12. Check the Enable field to have this discount effective immediately. Leave it unchecked if you only want to have the discount configured but applied at later date (when Enable will be checked).
13. The discount for the selected product is now active.

4.19.2 Discounts for Multiple Products

To apply a new discount to multiple products in the system, follow this procedure:

1. Go to Menu → Settings → Discounts.
2. Enter the Administrator passcode to continue.
3. Tap on +.
4. Select Yes in the Apply discount to multiple product confirmation window. The alternative Discount Properties window is displayed (Figure 110).
5. Select the Products tab, tap on + then proceed to select the products which the new discount will be applied for.
6. From the Discounts tab, configure the Type, Value, Min & Max Limit values as you would in case of a single product discount.
7. Check the Enable field to have this discount effective immediately. Leave it unchecked if you only want to have the discount configured but applied at later date (when Enable will be checked).
8. The discount for the selected products is now active.

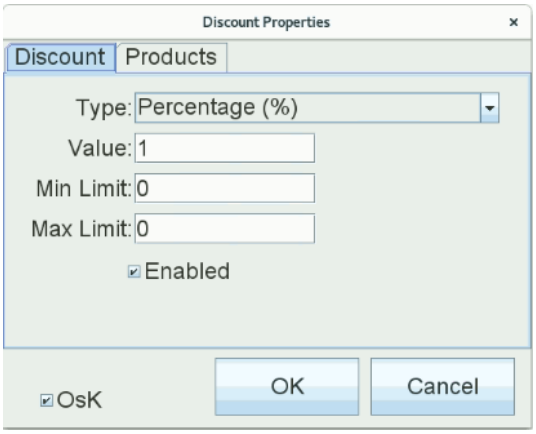


Figure 110: Adding Discounts for Multiple Products

4.20 Reports

The T-POS system provides an array of reports that can filter output by time-interval criteria, all accessible from Menu → Reports.

As standard in each report, results can be refined by:

» POS Operating day.
» POS Shift, selectable from a drop-down menu.
» Calendar day.
» Custom time frame.

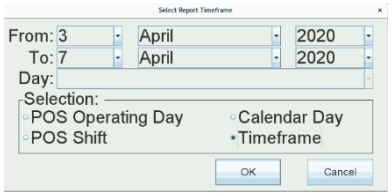


Figure 111: Report Timeframe Selection

All reports, with the exception of the Inventory report, require the specification of a time frame, a selection that can be provided in a dialogue.

For the Dispenser Reconciliation, Tank Reconciliation and POS Summary reports, the time frame requirements need to be very accurate, while a POS operating day has to be specified for the chosen calendar day.

The Dispenser Transaction Journal, Sale Journal and Tank Delivery reports allow the T-POS operator to choose either a specific T-POS operating day or alternatively, a calendar day.

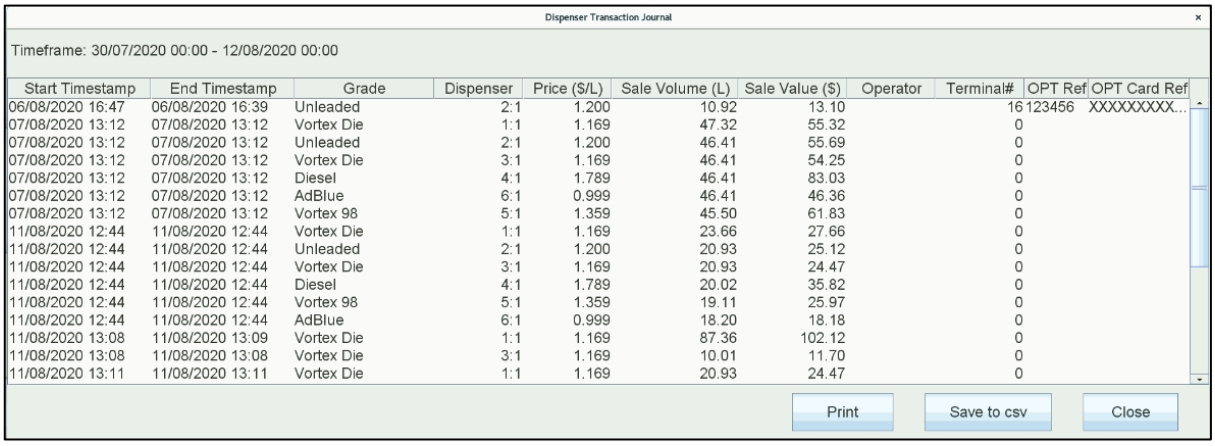
Note: Usually, there is only a single POS operating day per each calendar day to choose from.

All reports allow the information displayed to be printed or saved to an external FAT32 formatted USB flash drive in **.csv** format for subsequent reference or analysis, using tools such as Microsoft© Excel®.

Note: Exported files have an automatically generated timestamp suffix added to their names.

4.20.1 Dispenser Transaction Journal

Menu → Reports → Dispenser Transactions Journal



Dispenser Transaction Journal

Timeframe: 30/07/2020 00:00 - 12/08/2020 00:00

Start Timestamp	End Timestamp	Grade	Dispenser	Price ($/L)	Sale Volume (L)	Sale Value ($)	Operator	Terminal#	OPT Ref	OPT Card Ref
06/08/2020 16:47	06/08/2020 16:39	Unleaded	2:1	1.200	10.92	13.10		16	123456	XXXXXXXXX...
07/08/2020 13:12	07/08/2020 13:12	Vortex Die	1:1	1.169	47.32	55.32		0		
07/08/2020 13:12	07/08/2020 13:12	Unleaded	2:1	1.200	46.41	55.69		0		
07/08/2020 13:12	07/08/2020 13:12	Vortex Die	3:1	1.169	46.41	54.25		0		
07/08/2020 13:12	07/08/2020 13:12	Diesel	4:1	1.789	46.41	83.03		0		
07/08/2020 13:12	07/08/2020 13:12	AdBlue	6:1	0.999	46.41	46.36		0		
07/08/2020 13:12	07/08/2020 13:12	Vortex 98	5:1	1.359	45.50	61.83		0		
11/08/2020 12:44	11/08/2020 12:44	Vortex Die	1:1	1.169	23.66	27.66		0		
11/08/2020 12:44	11/08/2020 12:44	Unleaded	2:1	1.200	20.93	25.12		0		
11/08/2020 12:44	11/08/2020 12:44	Vortex Die	3:1	1.169	20.93	24.47		0		
11/08/2020 12:44	11/08/2020 12:44	Diesel	4:1	1.789	20.02	35.82		0		
11/08/2020 12:44	11/08/2020 12:44	Vortex 98	5:1	1.359	19.11	25.97		0		
11/08/2020 12:44	11/08/2020 12:44	AdBlue	6:1	0.999	18.20	18.18		0		
11/08/2020 13:08	11/08/2020 13:09	Vortex Die	1:1	1.169	87.36	102.12		0		
11/08/2020 13:08	11/08/2020 13:08	Vortex Die	3:1	1.169	10.01	11.70		0		
11/08/2020 13:11	11/08/2020 13:11	Vortex Die	1:1	1.169	20.93	24.47		0		

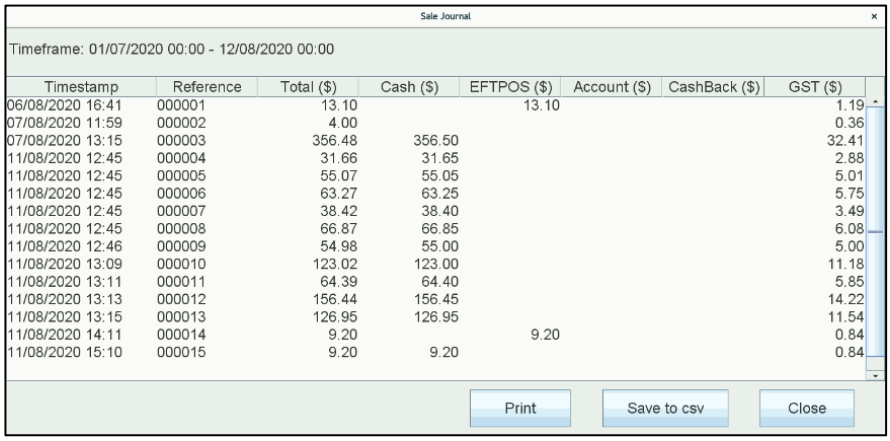
Print Save to csv Close

Figure 112: Dispenser Transaction Journal Report Example

- The Dispenser Transactions Journal report simply lists details of dispenser (wet stock only) transactions.
- After choosing the time interval or specific POS day/shift (Figure 111), the report is generated as in Figure 112.
- Tap Save to .csv to save the report on an external FAT32 formatted USB flash drive or close it by tapping Close.

4.20.2 Sale Journal

Menu → Reports → Sale Journal



Sale Journal

Timeframe: 01/07/2020 00:00 - 12/08/2020 00:00

Timestamp	Reference	Total ($)	Cash ($)	EFTPOS ($)	Account ($)	CashBack ($)	GST ($)
06/08/2020 16:41	000001	13.10		13.10			1.19
07/08/2020 11:59	000002	4.00					0.36
07/08/2020 13:15	000003	356.48	356.50				32.41
11/08/2020 12:45	000004	31.66	31.65				2.88
11/08/2020 12:45	000005	55.07	55.05				5.01
11/08/2020 12:45	000006	63.27	63.25				5.75
11/08/2020 12:45	000007	38.42	38.40				3.49
11/08/2020 12:45	000008	66.87	66.85				6.08
11/08/2020 12:46	000009	54.98	55.00				5.00
11/08/2020 13:09	000010	123.02	123.00				11.18
11/08/2020 13:11	000011	64.39	64.40				5.85
11/08/2020 13:13	000012	156.44	156.45				14.22
11/08/2020 13:15	000013	126.95	126.95				11.54
11/08/2020 14:11	000014	9.20		9.20			0.84
11/08/2020 15:10	000015	9.20	9.20				0.84

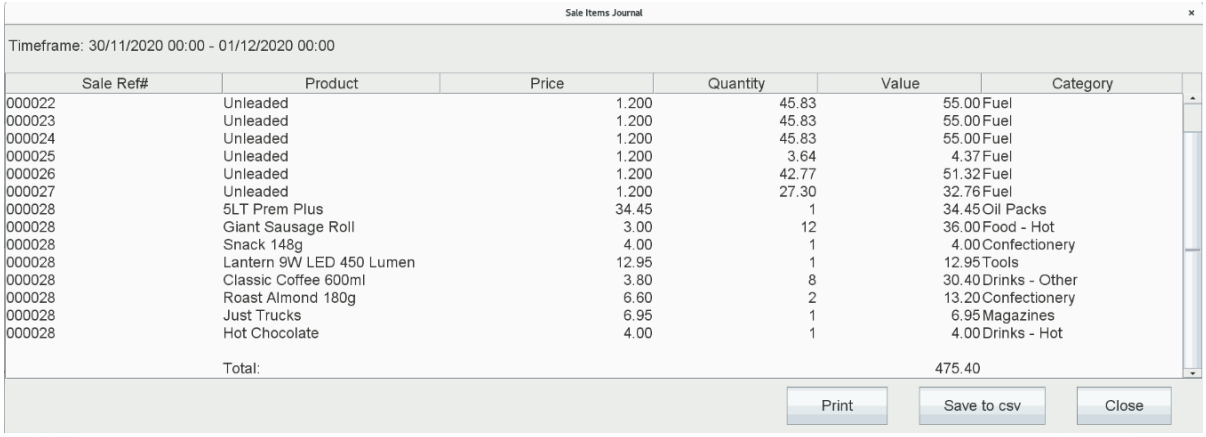
Print Save to csv Close

Figure 113: Sale Journal Report Example

- The Sale Journal report lists sales totals and payment details (dry stock only), however the individual sales items constituting the sale are not included in this report.
- After choosing the time interval or specific POS day/shift (Figure 111), the report is generated as in Figure 113.
- Tap Save to .csv to save the report on an external FAT32 formatted USB flash drive or close it by tapping Close.

4.20.3 Sale Items

Menu → Reports → Sale Items



Sale Items Journal

Timeframe: 30/11/2020 00:00 - 01/12/2020 00:00

Sale Ref#	Product	Price	Quantity	Value	Category
000022	Unleaded	1.200	45.83	55.00	Fuel
000023	Unleaded	1.200	45.83	55.00	Fuel
000024	Unleaded	1.200	45.83	55.00	Fuel
000025	Unleaded	1.200	3.64	4.37	Fuel
000026	Unleaded	1.200	42.77	51.32	Fuel
000027	Unleaded	1.200	27.30	32.76	Fuel
000028	5LT Prem Plus	34.45	1	34.45	Oil Packs
000028	Giant Sausage Roll	3.00	12	36.00	Food - Hot
000028	Snack 148g	4.00	1	4.00	Confectionery
000028	Lantern 9W LED 450 Lumen	12.95	1	12.95	Tools
000028	Classic Coffee 600ml	3.80	8	30.40	Drinks - Other
000028	Roast Almond 180g	6.60	2	13.20	Confectionery
000028	Just Trucks	6.95	1	6.95	Magazines
000028	Hot Chocolate	4.00	1	4.00	Drinks - Hot
	Total:			475.40	

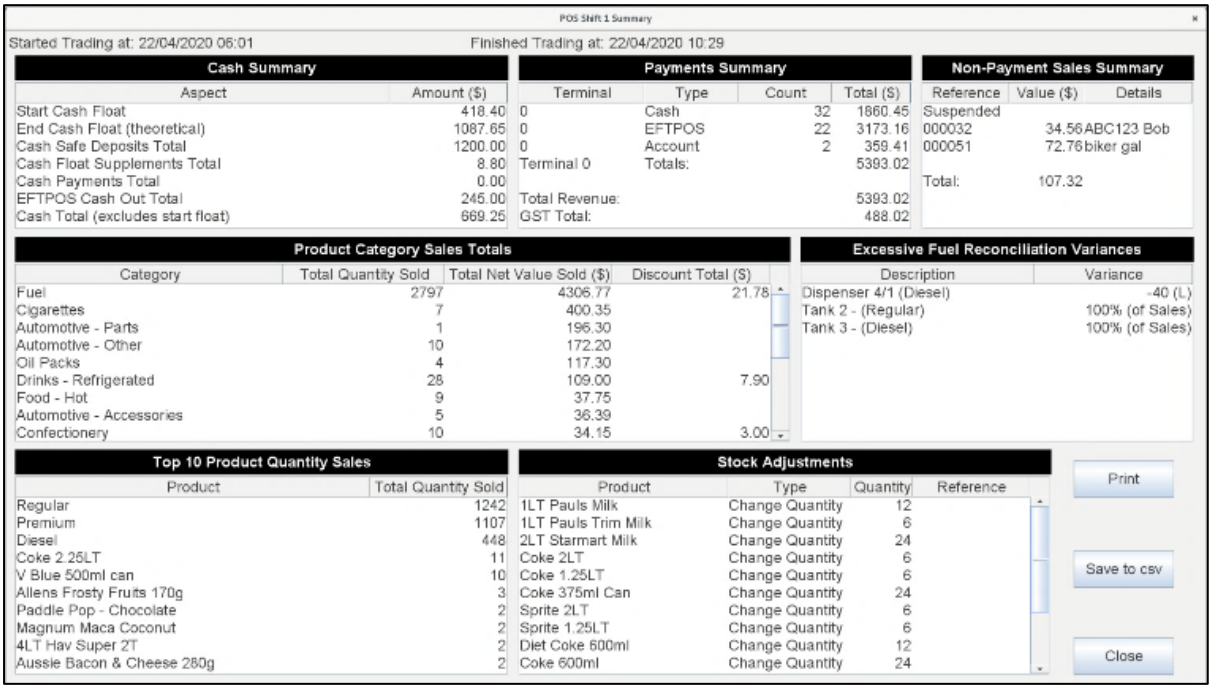
Print | Save to csv | Close

Figure 114: Sale Items Report Example

- The Sale Items report comes to complement the Sale Journal report, listing individual sales totals.
- After choosing the time interval or specific POS day/shift (Figure 111), the report is generated as in Figure 114.
- Tap Save to .csv to save the report on an external FAT32 formatted USB flash drive or close it by tapping Close.

4.20.4 POS Summary

Menu → Reports → POS Summary



POS Shift 1 Summary

Started Trading at: 22/04/2020 06:01 Finished Trading at: 22/04/2020 10:29

Cash Summary

Aspect	Amount ($)
Start Cash Float	418.40
End Cash Float (theoretical)	1087.65
Cash Safe Deposits Total	1200.00
Cash Float Supplements Total	8.80
Cash Payments Total	0.00
EFTPOS Cash Out Total	245.00
Cash Total (excludes start float)	669.25

Payments Summary

Terminal	Type	Count	Total ($)
0	Cash	32	1860.45
0	EFTPOS	22	3173.16
0	Account	2	359.41
Terminal 0	Totals:		5393.02
	Total Revenue:		5393.02
	GST Total:		488.02

Non-Payment Sales Summary

Reference	Value ($)	Details
Suspended		
000032	34.56	ABC123 Bob
000051	72.76	biker gal
Total:	107.32	

Product Category Sales Totals

Category	Total Quantity Sold	Total Net Value Sold ($)	Discount Total ($)
Fuel	2797	4306.77	21.78
Cigarettes	7	400.35	
Automotive - Parts	1	196.30	
Automotive - Other	10	172.20	
Oil Packs	4	117.30	
Drinks - Refrigerated	28	109.00	7.90
Food - Hot	9	37.75	
Automotive - Accessories	5	36.39	
Confectionery	10	34.15	3.00

Excessive Fuel Reconciliation Variances

Description	Variance
Dispenser 4/1 (Diesel)	-40 (L)
Tank 2 - (Regular)	100% (of Sales)
Tank 3 - (Diesel)	100% (of Sales)

Top 10 Product Quantity Sales

Product	Total Quantity Sold
Regular	1242
Premium	1107
Diesel	448
Coke 2.25LT	11
V Blue 500ml can	10
Allens Frosty Fruits 170g	3
Paddle Pop - Chocolate	2
Magnum Maca Coconut	2
4LT Hav Super 2T	2
Aussie Bacon & Cheese 280g	2

Stock Adjustments

Product	Type	Quantity	Reference
1LT Pauls Milk	Change Quantity	12	
1LT Pauls Trim Milk	Change Quantity	6	
2LT Starmart Milk	Change Quantity	24	
Coke 2LT	Change Quantity	6	
Coke 1.25LT	Change Quantity	6	
Coke 375ml Can	Change Quantity	24	
Sprite 2LT	Change Quantity	6	
Sprite 1.25LT	Change Quantity	6	
Diet Coke 600ml	Change Quantity	12	
Coke 600ml	Change Quantity	24	

Print | Save to csv | Close

Figure 115: POS Summary Report Example

- The POS Summary report displays key aspects of the POS operating **day** and/or **shift**, including payment totals, stock adjustments, variance in cash and top 10 sales by quantity.
- The report is automatically displayed at the end of any shift (change) or day and can optionally be printed to the receipt printer so that it can be added to the cash drawer for downstream reconciliation purposes.
- After carefully choosing the time frame requirements and the POS operating day (Figure 111), the report is generated as in Figure 115, displaying comprehensive information for the selected POS day on the following topics:

Cash Summary

Cash Summary	
Aspect	Amount ($)
Start Cash Float	307.00
End Cash Float (theoretical)	5496.90
Cash Safe Deposits Total	0.00
Cash Float Supplements Total	0.00
Cash Payments Total	0.00
EFTPOS Cash Out Total	0.00
Cash Total (excludes start float)	5189.90

Figure 116: POS Day Summary – Cash Summary

This category gives a comprehensive cash flow summary, totalling all the Shifts in the POS Day that has just ended.

- Start Cash Float: represents the contents of the cash drawer when starting Shift 1 of the POS Day.
- End Cash Float: represents the contents of the cash drawer after ending the POS Day.

> Important: End Cash Float for the POS Day is a theoretical value, representing the sum of End Cash Float values for all the Shifts within the summarized POS Day. The actual amount might be smaller, due to Safe Deposits, Cash Out or Shift Change withdraws:
> EndCashFloat = StartCashFloat + CashFloatSupplements + CashReceived – ChangeIssued – SafeDeposits – EFTPOSCashOut – CashPayments

- Cash Total: represents the profit for the POS Day, calculated as the difference between End Cash Float and Start Cash Float.
- Cash Float Supplements Total: represents small amounts of cash (usually coins) that are added to the float during the course of a shift, when for example, the volume of a certain denomination of coin (or note) gets low.

Payments Summary

This category gives a total on all sales (both cash and by EFTPOS), for all the Shifts in the POS Day that has just ended.

Payments Summary			
Terminal	Type	Count	Total ($)
0	Cash	22	5189.90
Terminal 0	Totals:		5189.90
Total Revenue:			5189.90
GST Total:			462.67

Figure 117: POS Day Summary – Payments Summary

The formulas used are:

- Cash = CashReceived – ChangeIssued – CashPayments – EFTPOSCashOut.
- EFTPOS = all EFTPOS transactions, including EFTPOSCashOut.

Non-Payment Sales Summary

Non-Payment Sales Summary		
Reference	Value ($)	Details
Write-Off 000034	99.37	Mr Jones
Total:	99.37	

Figure 118: POS Day Summary – Non-Payment Sales Summary

This category highlights sales that were suspended (awaiting payment) or written off during the reporting period. A sale may be suspended when a customer is unable to make payment.

Using the Suspend Sale Option (from the special functions menu), It is simply cleared from the sales ledger but still recorded for subsequent reference.

If it involves a dispenser sale it allows the pump to continue to operate and does not occupy a sale buffer. It can later be recalled for payment as usual, when for example, the customer returns to pay and results in a normal sale (no longer flagged as suspended) OR alternatively it may simply be written off - a sale created but no payments recorded.

Writing off a previously suspended sale prevents the list of suspended sales getting forever larger & larger if/when no payments are recovered.

Product Category Sales Totals

Product Category Sales Totals			
Category	Total Quantity Sold	Total Net Value Sold ($)	Discount Total ($)
Fuel	3360	4429.58	
Miscellaneous	23	427.48	
Phone Cards	2	200.00	
Confectionery	5	200.00	
Automotive	5	32.25	
Total:		5289.31	0.00

Figure 119: POS Day Summary – Product Category Sales Totals

This category highlights categories of products sold. The Quantity Sold field reflects the quantity sold during the report period. The Total Net Value field reflects the value of the category after discounts where applied while the Discount Total field reflects the total amount discounts applied.

The Total field (at the bottom of the section) reflects the Total Revenue field in the Payments section except the suspended or written off sales.

Excessive Fuel Reconciliation Variances

Excessive Fuel Reconciliation Variances	
Description	Variance
Dispenser 1/4 (DSLVRX)	45 (L)
Dispenser 2/2 (DSLVRX)	-18 (L)
Tank 4 - (DSLVRX)	11% (of Sales)

Figure 120: POS Day Summary – Fuel Reconciliation Variances

This category highlights variances of each hose and can be used to identify dispensers being used in stand-alone mode, which should not normally be the case, but it is a common cause of fraud.

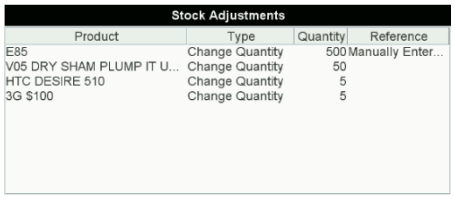
Top 10 Product Quantity Sales

Top 10 Product Quantity Sales	
Product	Total Quantity Sold
E85	2740
DSLVRX	620
COPY & LASER PAPER (500) EACH	8
V05 DRY SHAM PLUMP IT UP EACH	6
YOWIE BOX OF 12	5
105CM FLAT BUNGEE PLAS HOOK	5
MACH 3 TURBO RAZOR 2UP EACH	4
CHEESE AND BACON BURGER EACH	2
NOW 2016 VOLUME 1 EACH	2
3G $100	2

Figure 121: POS Day Summary – Top 10 Sales

This section highlights the fastest moving stock items. Wet stock items are expressed in litres while dry stock items are expressed in their particular sale unit (unit, Kg or metre).

Stock Adjustments



Stock Adjustments

Product	Type	Quantity	Reference
E85	Change Quantity	500	Manually Enter...
V05 DRY SHAM PLUMP IT U...	Change Quantity	50	
HTC DESIRE 510	Change Quantity	5	
3G $100	Change Quantity	5	

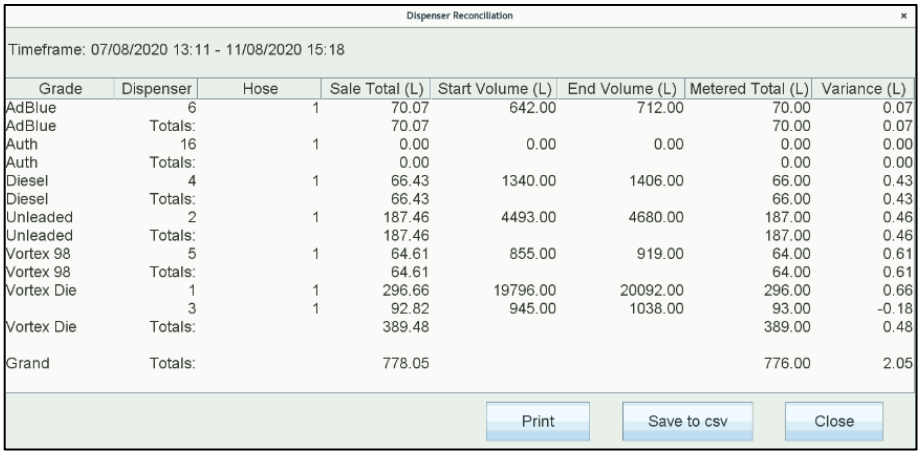
Figure 122: POS Day Summary – Stock Adjustments

This section highlights any adjustments made to the stock during the POS Day that has just ended.

Tap Save to .csv to save the report on an external FAT32 formatted USB flash drive, print it by tapping Print or close it by tapping Close.

4.20.5 Dispenser Reconciliation

Menu → Reports → Dispenser Reconciliation



Dispenser Reconciliation

Timeframe: 07/08/2020 13:11 - 11/08/2020 15:18

Grade	Dispenser	Hose	Sale Total (L)	Start Volume (L)	End Volume (L)	Metered Total (L)	Variance (L)
AdBlue	6	1	70.07	642.00	712.00	70.00	0.07
AdBlue	Totals:		70.07			70.00	0.07
Auth	16	1	0.00	0.00	0.00	0.00	0.00
Auth	Totals:		0.00			0.00	0.00
Diesel	4	1	66.43	1340.00	1406.00	66.00	0.43
Diesel	Totals:		66.43			66.00	0.43
Unleaded	2	1	187.46	4493.00	4680.00	187.00	0.46
Unleaded	Totals:		187.46			187.00	0.46
Vortex 98	5	1	64.61	855.00	919.00	64.00	0.61
Vortex 98	Totals:		64.61			64.00	0.61
Vortex Die	1	1	296.66	19796.00	20092.00	296.00	0.66
	3	1	92.82	945.00	1038.00	93.00	-0.18
Vortex Die	Totals:		389.48			389.00	0.48
Grand	Totals:		778.05			776.00	2.05

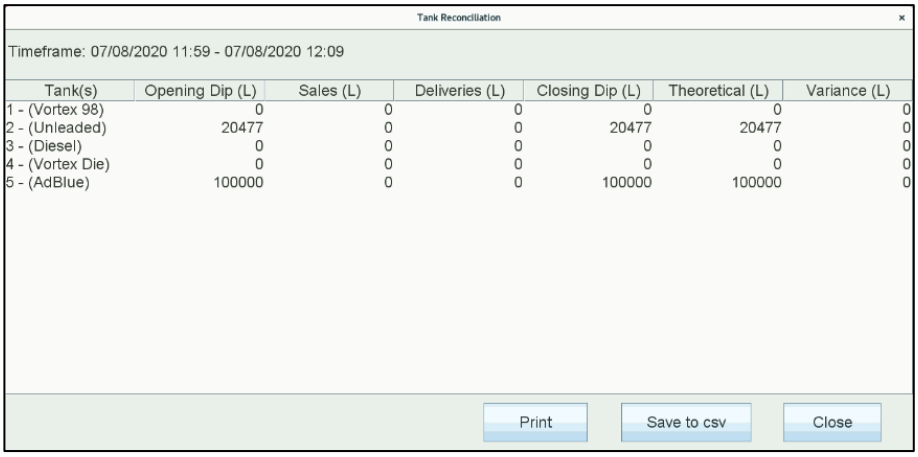
Print Save to csv Close

Figure 123: Dispenser Reconciliation Report Example

- The Dispenser Reconciliation report highlights variances of each hose and can be used to identify dispensers being used in stand-alone mode, which should not normally be the case, but it is a common cause of fraud.
- After choosing either a specific T-POS operating day or a calendar day (Figure 111), the report is generated as in Figure 123.
- Tap Save to .csv to save the report on an external FAT32 formatted USB flash drive or close it by tapping Close.

4.20.6 Tank Reconciliation

Menu → Reports → Tank Reconciliation



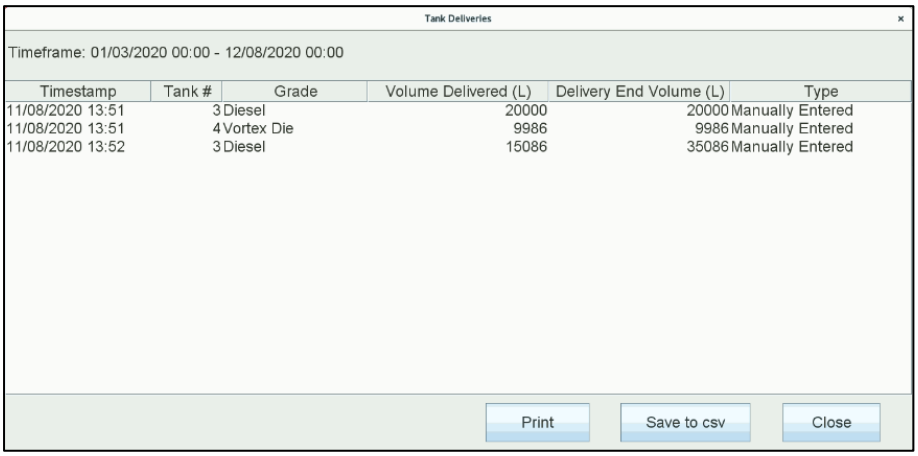
Tank(s)	Opening Dip (L)	Sales (L)	Deliveries (L)	Closing Dip (L)	Theoretical (L)	Variance (L)
1 - (Vortex 98)	0	0	0	0	0	0
2 - (Unleaded)	20477	0	0	20477	20477	0
3 - (Diesel)	0	0	0	0	0	0
4 - (Vortex Die)	0	0	0	0	0	0
5 - (AdBlue)	100000	0	0	100000	100000	0

Figure 124: Tank Reconciliation Report Example

- The Tank Reconciliation report is used to highlight variances between expected and actual tank inventory, exposing usual losses due to leaks or theft due to siphoning. Variances also show loss and gains due to changes in temperature.
- After choosing a specific POS shift (Figure 111), the report is generated as in Figure 124.
- Tap Save to .csv to save the report on an external FAT32 formatted USB flash drive or close it by tapping Close.

4.20.7 Tank Delivery

Menu → Reports → Tank Delivery



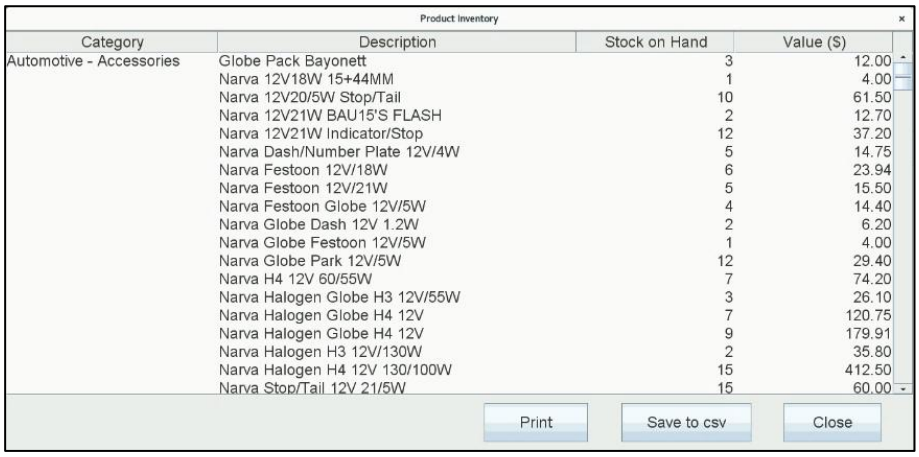
Timestamp	Tank #	Grade	Volume Delivered (L)	Delivery End Volume (L)	Type
11/08/2020 13:51	3	Diesel	20000	20000	Manually Entered
11/08/2020 13:51	4	Vortex Die	9986	9986	Manually Entered
11/08/2020 13:52	3	Diesel	15086	35086	Manually Entered

Figure 125: Tank Delivery Report Example

- The Tank Delivery report lists the deliveries or drops into the tanks, either ATG measured or using the theoretical gauging.
- After choosing a POS Day, a POS Shift or a specific timeframe (Figure 111), the report is generated as in Figure 125.
- Tap Save to .csv to save the report on an external FAT32 formatted USB flash drive or close it by tapping Close.

4.20.8 Inventory

Menu → Reports → Inventory


Product Inventory

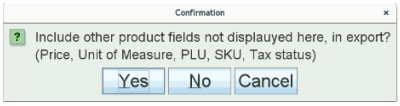
Category	Description	Stock on Hand	Value ($)
Automotive - Accessories	Globe Pack Bayonett	3	12.00
	Narva 12V18W 15+44MM	1	4.00
	Narva 12V20/5W Stop/Tail	10	61.50
	Narva 12V21W BAU15'S FLASH	2	12.70
	Narva 12V21W Indicator/Stop	12	37.20
	Narva Dash/Number Plate 12V/4W	5	14.75
	Narva Festoon 12V/18W	6	23.94
	Narva Festoon 12V/21W	5	15.50
	Narva Festoon Globe 12V/5W	4	14.40
	Narva Globe Dash 12V 1.2W	2	6.20
	Narva Globe Festoon 12V/5W	1	4.00
	Narva Globe Park 12V/5W	12	29.40
	Narva H4 12V 60/55W	7	74.20
	Narva Halogen Globe H3 12V/55W	3	26.10
	Narva Halogen Globe H4 12V	7	120.75
	Narva Halogen Globe H4 12V	9	179.91
	Narva Halogen H3 12V/130W	2	35.80
	Narva Halogen H4 12V 130/100W	15	412.50
	Narva Stop/Tail 12V 21/5W	15	60.00

Print Save to csv Close

Figure 126: Product Inventory Report Example

- The Inventory report shows the stock on hand of every product and its value at the current price, excluding deleted products.
- This report is generated without inputting a time filter, all the data being current.
- Tap Save to .csv to save the report on an external FAT32 formatted USB flash drive or close it by tapping Close.

Note: When exporting to a .csv file, the generated report can include all product data (not just the displayed data) if Yes is selected when prompted.



4.21 Attendant Tagging

Attendant tagging is a procedure used in markets where dispenser transactions are not self-service and are instead wholly managed by employees. This process is described below:

1. Firstly, forecourt attendants are issued with tags that are used in the dispenser authorisation process to link or associate them with the sale.
2. Unlike traditional dispenser sales where the dispensers are authorised by the T-POS operator from inside the refuelling station using the T-POS interface, the forecourt attendant authorises the dispenser by simply tagging it and then dispenses the fuel as normal.
3. When the T-POS receives notification of the presentation of an attendant tag at a dispenser, it first validates the tag.

   Note: This validation includes an automated check to ensure the associated attended does not have significant amounts of money from previous sales in their possession.

4. If the forecourt attendant in question is allowed to initiate refuelling activities, then the dispensers are automatically authorised. If not, the attendant must approach the POS Operator directly. They are required to surrender the proceeds or payment of previous sales so they can be entered into the T-POS interface and cleared by the POS Operator as usual, thus allowing refuelling operations to resume for the respective forecourt attendant.

> Note: Whenever a dispenser has been authorised using an attendant tag, the dispenser icon in question is overlaid with an attendant icon to indicate this, thus allowing the operator to keep track of the sale. This is only cleared when the attendant in question surrenders the payment to the operator who then finalises the payment as usual.

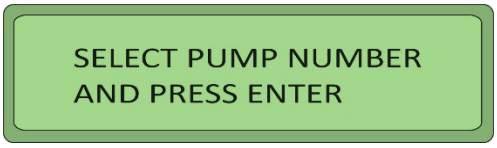
5. At the end of the refuelling process, the forecourt attendant helps the customer facilitate the payment process by whatever means necessary - usually providing change for cash payments.

The list of attendants and POS operators is maintained by the T-POS system and can be accessed from the menu. Whenever an attendant tag NOT previously known to the system is identified for the first time by tagging a dispenser, it is automatically registered in T-POS (and added to the list) but the dispenser is NOT authorised.

The T-POS operator having identified the tag in question can then choose to authorise it for subsequent tagging operations and may also at this time, record the attendant name for downstream reporting purposes.

Attendant Tag iButton – Registration at CAS

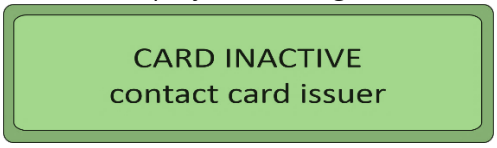
1. Ready the Attendant Tag iButton which is to be registered to a Cas on the site forecourt.
2. Confirm PRESENT ID is displayed on the CAS.
3. Place the Attendant Tag iButton onto the iButton Reader of the CAS.
4. SELECT PUMP NUMBER AND PRESS ENTER will be displayed on the CAS when the iButton is read.



5. At the CAS Keypad, press a valid Pump Number key, then press the ENT key. For example, press the 1 key to select Pump#1 and the press the ENT key.

> Note: The entered pump number must be a valid pump number in the T-POS FMS. The entered Pump Number must be online and idle, as indicated on the T-POS Terminal by a red in colour Pump Number icon.

6. The CAS display is showing the following message: CARD INACTIVE.



A docket will also be printed on the CAS Printer:

```
Card rejected:
ID INACTIVE
```

> Note: This is **not** an error condition. The message is displayed because although the iButton has been registered within T-POS, it has not yet been Authorised in T-POS.

7. This completes the Registration phase of an Attendant Tag iButton at a CAS. The next phase is to proceed to the Attendant Tag iButton – Authorisation at the T-POS Terminal.

Attendant Tag iButton – Registration at TT805 Pump/Dispenser iButton Reader

1. Ready the Attendant Tag iButton which is to be registered to a T805 Pump/Dispenser (equipped with an iButton Reader).
2. Place the Attendant Tag iButton onto the iButton Reader of the Pump/Dispenser.
3. When the iButton is read, the following message is displayed on the Pump/Dispenser:

   - - - - - -

   - - - 2 - -

   Note: This is **not** an error condition. . The message is displayed because although the iButton has been registered within T-POS, it has not yet been Authorised in T-POS.
4. This completes the Registration phase of an Attendant Tag iButton at the TT805 Pump/Dispenser. The next phase is to proceed to the Attendant Tag iButton – Authorisation at the T-POS Terminal.

Attendant Tag iButton – Authorisation at T-POS Terminal

Once an Attendant Tag iButton has been Registered in the T-POS, the next and final phase is to Authorise the Attendant Tag iButton at the T-POS Terminal.

1. Go to Menu → Settings → Security → Operators.
2. Enter the passcode, when requested.
3. The Operators window is displayed (see Figure 128), listing the Operators and Attendant Tags which have been Registered in the T-POS. Each registered Attendant Tag will be displayed, with an Authorised status of Yes or No.
4. Tap on the Attendant Tag entry you wish to Authorise from the displayed list.

   Note: Its status will be No, indicating it's currently Not Authorised. The entry will be highlighted.
5. Tap on Open. The Operator Properties panel for the selected Attendant Tag is displayed (see Figure 129).
6. Tap on Authorised check box. A tick mark should appear in the checkbox.
7. Tap on OK to save and exit. The Operators window is displayed. Confirm that the Attendant Tag entry has changed to an Authorised status of Yes.
8. Tap on Close. The selected Attendant Tag iButton is now Authorised for Fuel Transactions on the FMS Forecourt.

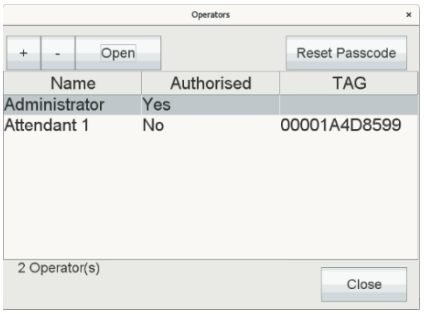


Figure 128: Operators Menu

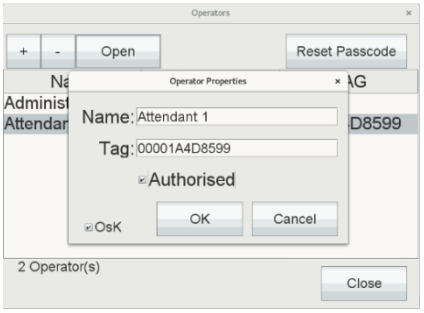


Figure 129: Operators Properties

4.22 Operating T-POS with a TT8900 OPT

T-POS has been designed to take advantage of having a connected Outdoor Payment Terminal (OPT), doing all the fuel payment processing.

In such configurations, transactions will be passed on to T-POS, while refuelling operations will be displayed on T-POS having colour coded icons, letting Operators know the transaction has been authorised from the OPT.

All card PAN & transaction sequence IDs used in OPT sales will be included in the Dispenser Transaction Journal report.

Note: While being operated by an OPT, the dispenser is not accessible by the T-POS.

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We have global experience supporting companies with fuel management systems, outdoor payment terminals, forecourt controllers, point of sale terminals, bulk fuel loading systems, management software services and specialised fuel storage & dispensing solutions.

We are a data rich business that delivers meaningful reporting and information to our customers to help them overcome challenges and manage risk.

Our excellence in technical listening and our focus on outcomes have allowed us to become proven innovative problem solvers.

We strive for durability, simplicity and exceptional performance when designing our products and solutions.

Our flexible solution architecture allows us to help customers manage change in their business and industry.

We are customer and outcome focused, understanding that we will be judged by our actions and performance.

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