SYN-TECH SYSTEMS, INC.

Home of the FuelMaster®

FuelMaster® PDA Operations Manual

SYN-TECH SYSTEMS, INC.

FuelMaster PDA Operations Manual

Revision 2

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Software

ADC PDA combines easy to use software and interoperability with familiar FuelMaster products.

yn-Tech Systems, Inc. offers several different methods of authorizing fueling transactions. Transactions can be started with a credit card, such as the US Government Air Card or can be entered manually. Upon completion, the transaction can be downloaded into the DoD AE software for viewing. The download can be accomplished wirelessly or serially with ActiveSync® and a desktop PC.

Introduction

In this chapter we will cover the operations of the ADC PDA software to include configuring the PDA, performing transactions and downloading transactions. A step-by-step approach will be used to cover Air Card and manually entered transactions.

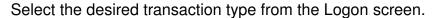
Software

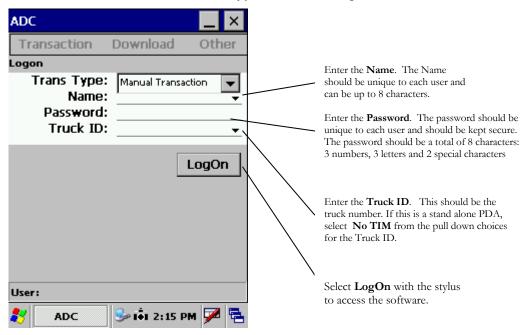


Microsoft Windows CE®

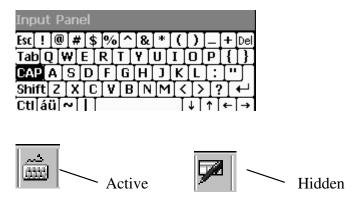
ADC PDA software is designed to operate on Microsoft Windows CE. Windows CE provides an interface that will look and feel like your desktop PC. Using the **Start** button and **Programs** can access the installed programs, including the ADC software. Desktop icons My Computer and Recycle Bin provide similar functionality as in Windows XP. Common MS Office applications are also available for Windows CE.

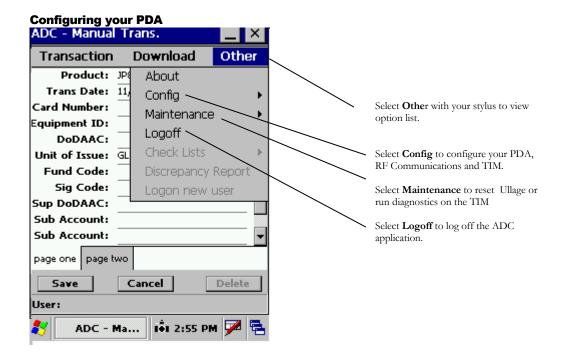
Logon



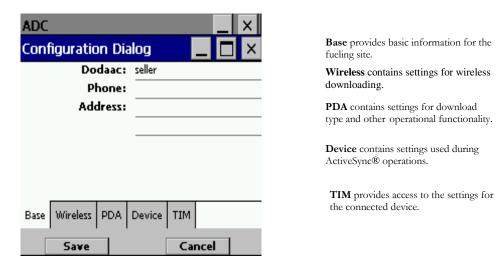


Entry of data is accomplished with the virtual keyboard (available in the **Taskbar**) and the accompanying stylus. The keyboard has two icons associated with it, which is shown depends on whether or not the keyboard is active or hidden.



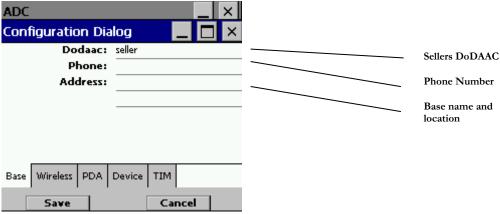


The **Configuration Dialog** window is a central entry point for all necessary configuration data needed to prepare the PDA for use.



ADC PDA SOFTWARE

Begin entry of data into the Configuration Dialog box by using the keyboard and stylus to enter the information.



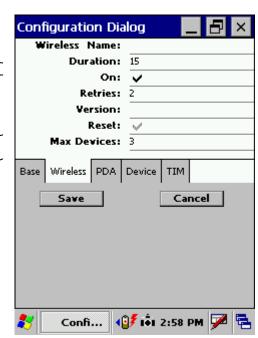
Base Configuration Settings

The sellers DoDAAC, phone number and base address is entered on the Base tab. The seller DoDAAC is entered into the **DoDAAC** field. **Phone** provides the phone number for fueling operations. The base name and location is entered in the Address field.

Configuring your PDA - Wireless settings

Duration is a variable communication timeout setting that determines how long the PDA will attempt to communicate with external equipment. On indicates the wireless functions have been enabled Retries determines the number of retry attempts be made to communicate with the Bluetooth® radio. Version indicates what version of Bluetooth® radio. Reset allows the user to reset the Bluetooth® radio Max Devices controls the maximum number of remote devices that can be communicated with during a single session. The **Wireless** tab contains settings for wireless communications with the T.I.M. and other devices.

Control settings for wireless downloads are set in this window.



Wireless Configuration Settings

Configuring your PDA - PDA settings



PDA settings control how you download your transaction information to your Central Controller.

There are two forms of download, Wireless and Cradle. Wireless configuration enables the TIM to download via radio frequency. Cradle setting will enable download with DoD AE software using Microsoft ActiveSync®.



Battery and Battery Critical are PDA operational settings to provide important battery level information to safeguard the transaction data. Battery low warning messages can be set to 30%, 20% or 10% of battery power. A setting of 30% is recommended. Battery critical messages can be set to 5%, 3% and 1%. A setting of 5% is recommended. If this message is received it is critical that you place the PDA on a charger or attach an external battery pack soon to ensure transaction data security. Both battery warning message settings are available options from drop down pick lists.



Battery Critical Warning Settings

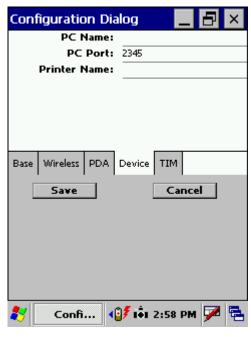


Battery Low Warning Settings

Reject Exp. Cards allows for the acceptance of expired air cards while updated cards are being distributed. A message is displayed to inform the user of the expiration.

Configuring your PDA - Device Settings

Device settings provides the **PC Name** and **PC Port** information that will be used by the ADC software and ActiveSync® to enable download ability through the cradle. The PC
Name will provide an identity for the PDA to the Central Controller PC.
The PC Port setting will need to be matched when configuring the ADC software. This setting provides the port communications are available.



Device Configuration Settings

Configuring your PDA – TIM Settings



TIM Configuration Settings

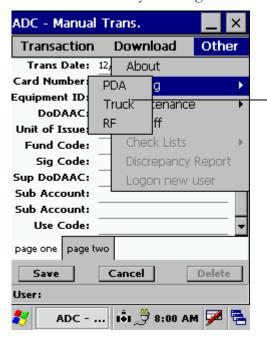
TIM settings are selected in this window. Currently there are two options: **Print** and **Receipt Copies**.

The **Print** setting allows for enabling printing and autoprint functions on the TIM reciept printer.

The **Receipt Copies** selection allows up to 3 copies of a receipt to be printed.

TIM Configuration

When the basic PDA configuration has been completed the TIM configuration can be downloaded, modified and uploaded to the TIM from the PDA via BlueTooth® radio by selecting the **Truck** configuration option.

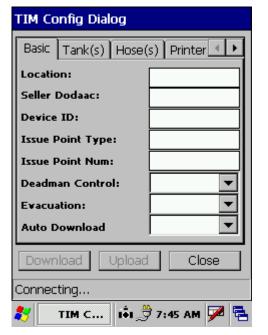


There are two configurations stored in the TIM. The **Truck** configuration contains basic site, hose, tank, printer and central controller information while the **RF** configuration contains the information required for wireless RF downloading of transactions.

Select Config from the Other drop down list and then select

TIM Config/Truck Config Selection

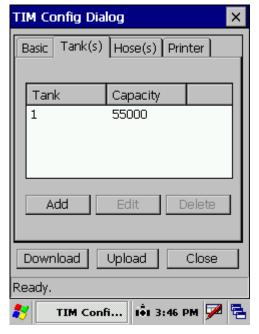
Configuring your TIM - Basic settings



TIM Config-Basic settings

The Basic tab contains Location, Seller,
Device ID and Issue Point information. Also there are settings for Deadman Control,
Evacuation and Auto Download. Enabling the Auto Download setting causes transactions to be downloaded via RF radio to the Central Controller and cleared from thre TIM upon completion of the transaction.

Configuring your TIM-Tank settings

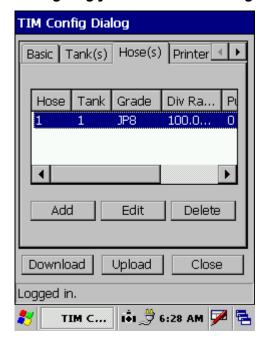


The **Tank** tab provides the tank number and capacity. You can **Add** a tank **Edit** the values of an existing tank or **Delete** a tank.

TIM Config/Tank Config Information

The **Hose** tab provides hose number, grade information, divide ratio, no pulse timeout value, and pump finish timeout value. You can **Add** a hose, **Edit** the settings for an existing hose or **Delete** an existing hose.

Configuring your TIM – Hose settings



TIM Config/Hose Config Information

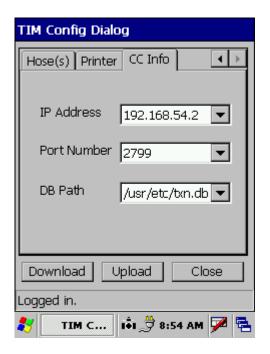
Configuring your TIM - Printer settings



The **Printer** tab contains printer header information.

TIM Config/Printer Information

Configuring your TIM - CC Info settings



The **CC Info** tab contains the IP address and port number of the Central Controller and the TIM transaction database path information. This information is preconfigured in the TIM and is only viewable.

TIM config /CC information

Configuring your TIM - RF Configuration settings

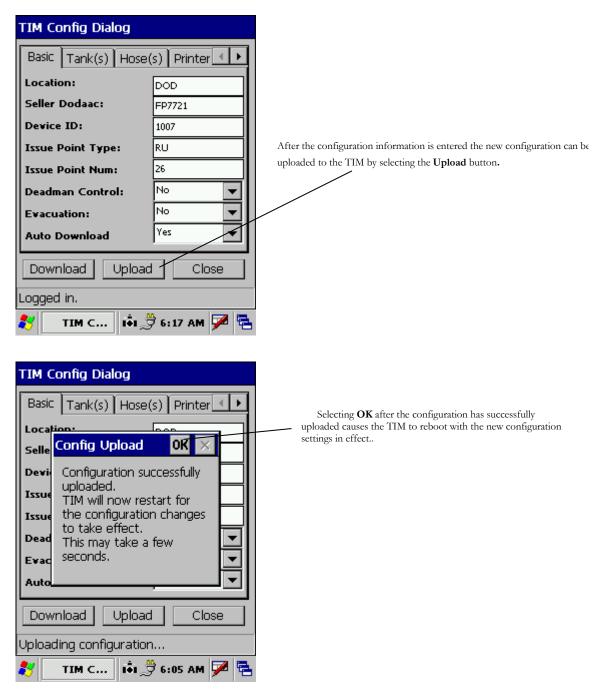
The RF ConfigForm allows enabling and configuring of the TIM's wireless RF communications. The Enable, Radio Lockout code, RF Range, Freq Band and High Power Level settings are configured here.



RF ConfigForm

Configuration Upload

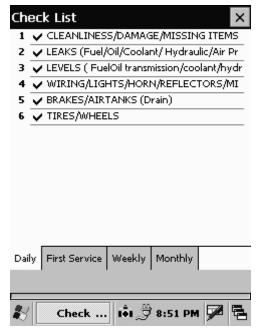
Each TIM configuration dialog can be uploaded from the PDA to the TIM via BlueTooth® radio by selecting the **Upload** function.



Tim Config Dialog

Check Lists

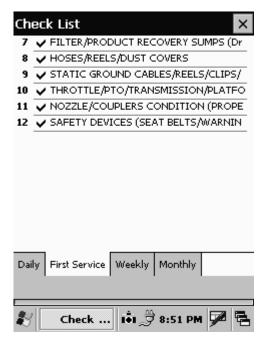
ADC PDA features Check Lists of operational and safety tasks to be performed on a periodic basis. Available check lists are **Daily**, **First Service**, **Weekly** and **Monthly**.



The **Daily** checklist consists of trip preparation and operational maintenance items for upkeep of the vehicle.

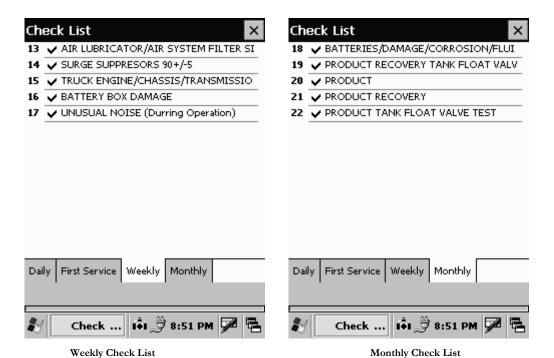
Daily Check List

The **First Service** check list provides maintenance items to be performed at the first PM cycle of the vehicle.



First Service Check List

The Weekly and Monthly check lists are extended maintence items for the vehicle and fueling systems on the vehicle.



Discrepancy Report

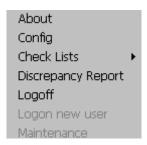


Discrepancy Report Note Entry Screen

Each task on each checklist has an available notepad to record information on any issue found during the performance of that check.

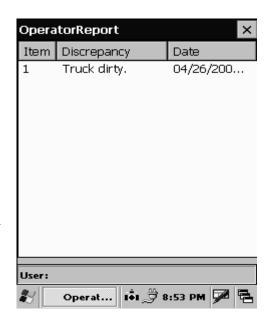
Entry of the information is performed with the keyboard and stylus. When notes are completed select Save with the stylus to store the notes associated with the checklist item.

Selecting **Discrepancy Report** from the Other menu will generate a list of all stored notes of discrepancies recorded during the periodic checks.



Other Menu

Each item on the **Operator Report** can be individually selected and reviewed. Additional information on the discrepancy can be entered and stored from this view.



Operator Report



message will be displayed that reports no discrepancies.

If no discrepancies have been noted, a

No Discrepancy Message

The version of ADC PDA software that is being used is simple to determine. Selecting **About** from the **Other** menu will display the current version of software installed on your PDA.





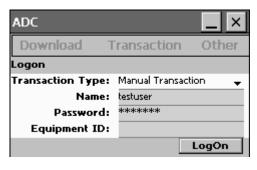
Fueling Operations

Fueling with the ADC PDA is simple and flexible. Fueling can be accomplished by interfacing with fueling equipment or completely manually entered.

everal transaction types are available with the ADC PDA system. Air Card and Manual transaction types allow for transaction information to be entered in conjunction with information received from the fueling point or can be manually entered completely. Fueling quantity and hose information can be received from the T.I.M. and can be manually entered into the transaction.

Manual Transaction

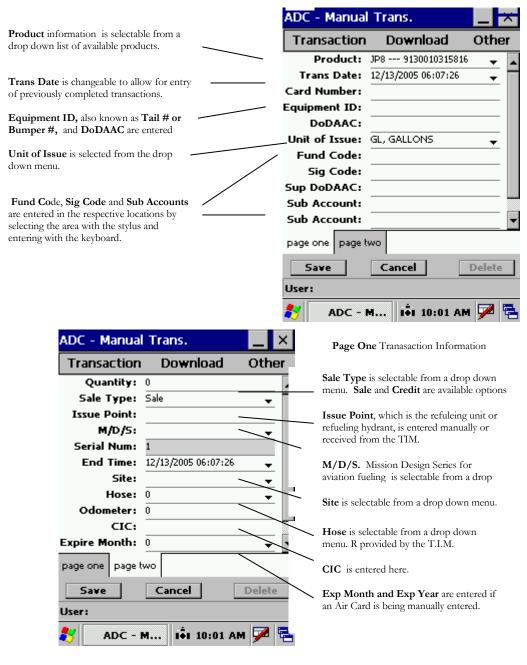
A **Manual Transaction** allows for the entry of transaction information to be manually entered and then uploaded to the Central Controller software. No automated fueling equipment is necessary to complete a manual transaction.



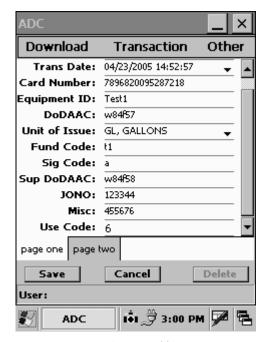
Manual Transaction LogOn

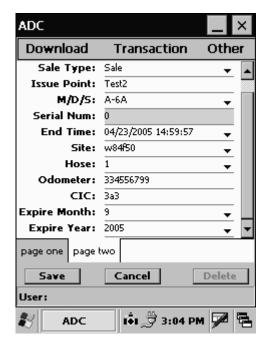
Select **Manual Transaction** from the drop down menu. Complete the LogOn process by entering a valid Name, Password and Equipment ID. Select **LogOn** to complete logon process.

The Manual Transaction screen has two entry pages for capture of transaction information. These screens provide the ability to enter a wide range of transaction information.



Page Two Transaction Information

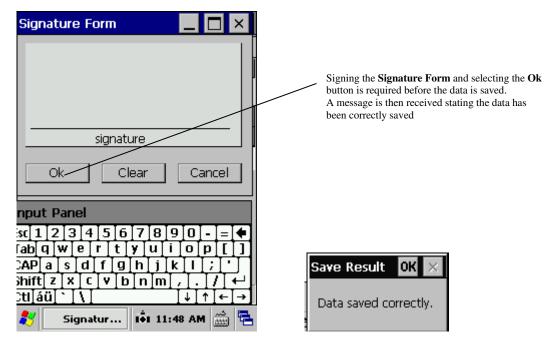




Page One Completed Transaction

Page Two Completed Transaction

After all transaction information has been entered Select **Save**. The Signature form now opens.



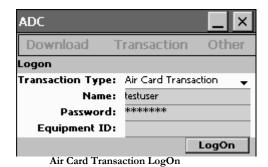
Signature Form Box

Data Saved Correctly Message Box

Air Card

An **Air Card Transaction** allows for the use of the ADC PDA Card Reader to transfer Air Card data into the ADC PDA transaction information entry screens. Air Card account number and expiration information is transferred to the PDA with a card swipe. An Air Card Transaction can also be done manually requiring no automated fueling equipment by selecting **Manual** for Transaction Type.

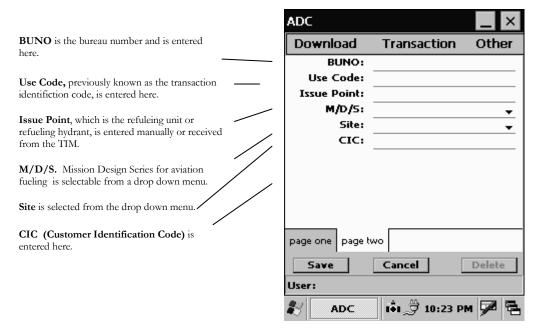
Select **Air Card Transaction** from the drop down menu. Complete the LogOn process by entering a valid Name, Password and Equipment ID. Select LogOn to complete logon process.



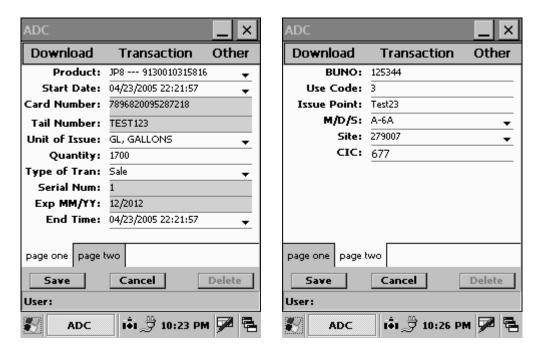
Download Transaction Other Product information is selectable Product: JP8 --- 9130010315816 from a drop down list of available • products. Start Date: 04/23/1980 22:19:52 • Card Number: Start Date is chanable to allow for entry of previously completed transactions Tail Number: Unit of Issue: GL, GALLONS • Card Number and Tail Number Quantity: 0 are provided from the Air Card with the card swipe. Type of Tran: Sale • Serial Num: Unit of Issue is selected from the Exp MM/YY: 0/0 drop down menu. End Time: 04/23/1980 22:19:52 Type of Tran is selected from the drop down menu. page two page one Serial Num and Exp MM/YY is received from the Air Card with the Save Cancel Delete card swipe. User: End Time is set from the time set drop 🔖 🍠 10:19 PM 🖊 🔁 ADC down menu.

Air Card Page One Transaction Infomation

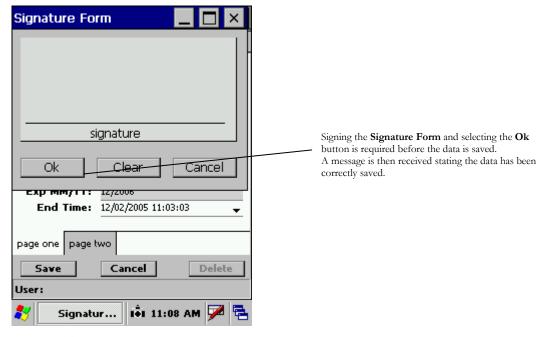
ADC PDA SOFTWARE



Air Card Page Two Transaction Infomation



Selecting **Save** after all transaction information has been entered opens the **Signature Form** window.

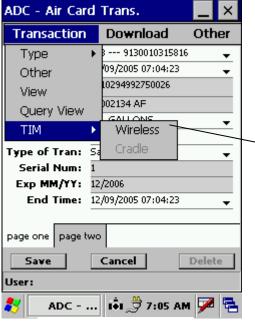


Signature Form



TIM Wireless

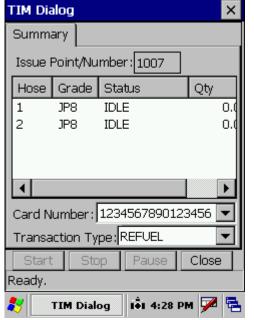
Once an Air Card transaction has been started, a BlueTooth connection can be made to the TIM from the PDA to allow for wireless communications with the Issue Point to initiate fueling and receive hose and grade information.



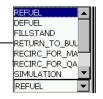
. Select TIM from the **Transaction** pull down box.

Select the Wirless otion from the TIM selection.

TIM Wireless Transaction

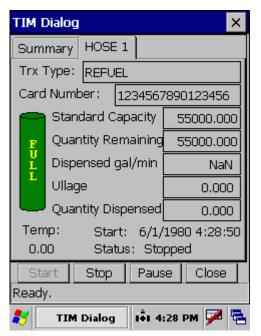


Once the hose information has been retrieved from the TIM, select a Transaction Type from the drop down list and select the appropriate hose to begin the transaction.



Transaction Type List

TIM Dialog Hose/Transaction Type Selection Screen

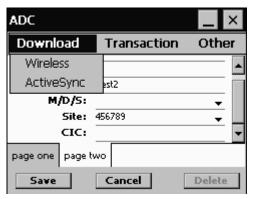


TIM Dialog Transaction Information Screen

The transaction information will be provided showing the **Transaction Type**, **Card Number**, **Tank Capacity**, **Ullage** and **Quantity Dispensed**. The transaction can be stopped or paused from this screen.

Download

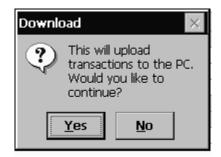
After completion of fueling operations the transactions held within the ADC PDA software can now be uploaded into the central controller software. There are two types of downloads, **Wireless** and **ActiveSync®**.



A Wireless download is used at the fueling point using the Truck Cradle. A download using ActiveSync® utilizes the PDA Cradle to connect to the Central Controller PC using an USB cable.

Download Type Selection Menu

After the selection of a Download type a message stating an Upload has been started with a **Yes/No** selection to continue.



Transaction Download Confirmation Question



Download Complete Message

When transaction download has been completed. A **Download Complete** message will be displayed provided the number of transactions that were uploaded successfully and the number of transactions that failed to download.



Central Controller Software

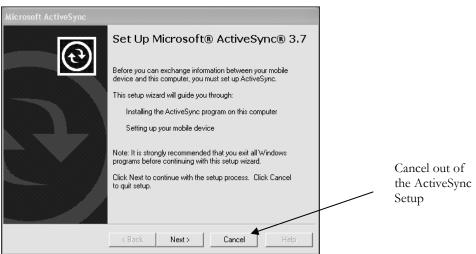
Use the Central Controller Software to View, Edit and Export Transactions.

he Central Controller Software allows users to download transactions from the PDA to the Central Controller where the transactions can be viewed, edited, deleted or exported.

PDA to PC Connection and Configuration

Step 1. Install ADC PDA Configuration Software

a. Install the ADC PDA Configuration software to the PC. Follow the onscreen instructions, which guide you through installing ADC PDA Configuration software. ActiveSync® is installed along with ADC PDA Configuration. *Do not configure ActiveSync® during installation; cancel out of the ActiveSync® setup.*



b. After installation, click on the ADC icon on the desktop to open ADC PDA Configuration. Click on the Export Configuration tab.

c. Select either FAS Export or AE Export. If AE Export is to be used, select the FMLedger.mdb database in the ADC PDA install program as the Export database.



To export to FAS, select FAS Export and the PDATransDB.mdb database file in the ADC PDA Configuration program directory.



d. Click on the PC Configuration tab. Edit the Local directory to point to the location of the ACD PDA Configuration installation directory.

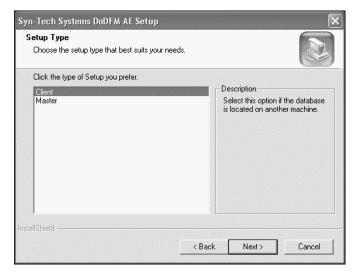
- e. If the NT Service is not already running, click Install NT Service. Then click Start NT Service.
- f. Select the Enable ActiveSync download.



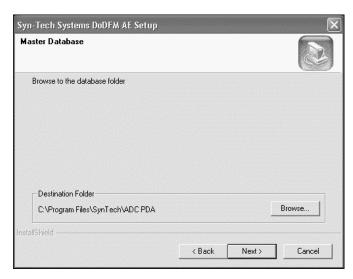
g. Click on Close to exit from ADC PDA Configuration.

Step 2. Install and Configure AE Ledger

a. Install AE Ledger. Follow the onscreen instructions, which guide you through installing the AE Ledger software. When prompted, select to install the Client version of AE.



b. When directed to select the database folder select the ADC PDA Configuration program directory.



- c. Follow the onscreen instructions to continue and complete the install.
- d. Open and configure AE Ledger with at least the DoDAACs, fuel codes, sites and other entries necessary for fueling.

Step 3. Connect the PDA cradle to the computer

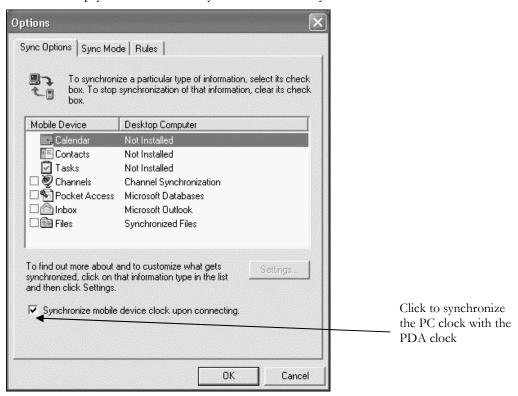
- a. Open ActiveSync® from the start menu.
- b. Connect the adapter cable to the side of the cradle. *Do not place the PDA into the cradle at this time.*
- c. Plug the adapter into a working electrical outlet.
- d. Plug the USB connector into an available USB port on your computer with one side and to the PDA Cradle with the other.

Step 4. Configure ActiveSync®

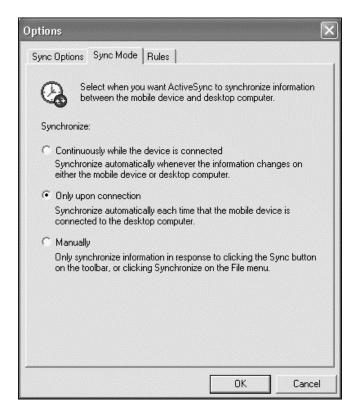
- a. Place the PDA unit into the cradle.
- b. ActiveSync® will connect to the PDA and prompt to create a new partnership for the PDA. Follow the onscreen instructions, which guide you through creating the new partnership.



- c. Once the partnership is created, select Options from ActiveSync® menu.
- d. Under Sync Options, select to "Synchronize mobile device clock upon connecting". This will keep your PDA clock synchronized with your PC clock.



e. Under Sync Mode, select to synchronize "Only upon connection".



Setup is complete

The PDA unit is now configured to download transactions to the Central Controller.

Working with Transactions

Downloading Transactions

Once the system is properly configured, you download transactions to the Central Controller simply by placing the PDA into the PC Cradle.

When the PDA is placed into the PC Cradle, the system will automatically attempt to connect and synchronize using ActiveSync®. Once connected, any transactions in the PDA unit will be downloaded.



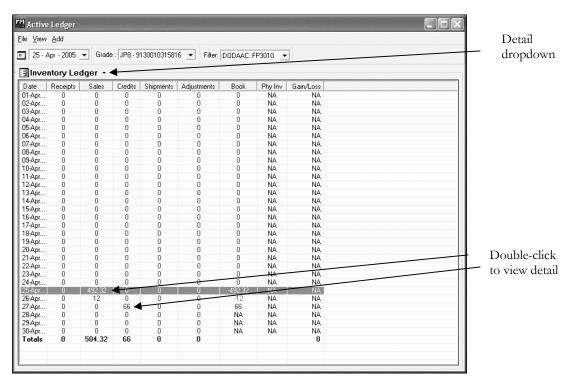
A message will be displayed on the PDA screen when the download is complete.



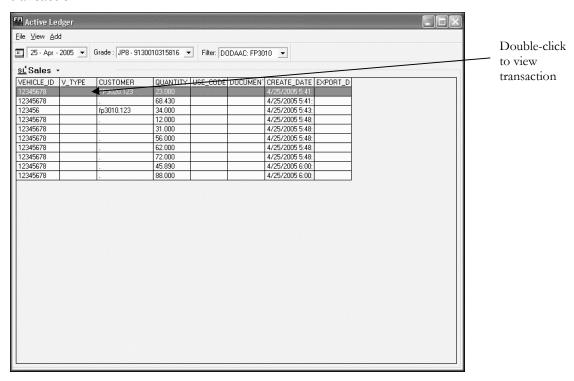
Viewing and Editing Transactions

After transactions have been downloaded, they can bed viewed and edited through AE Ledger. Log in to AE Ledger and click on the Ledger icon to open the Active Ledger view.

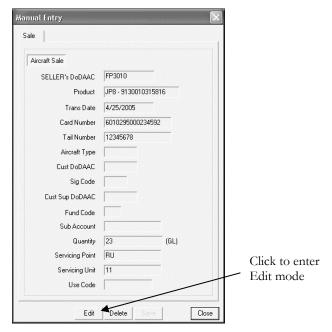
Select Sales or Credits from the detail drop-down, or double-click on the Sales or Credit columns for the date desired to view Sales or Credit details.



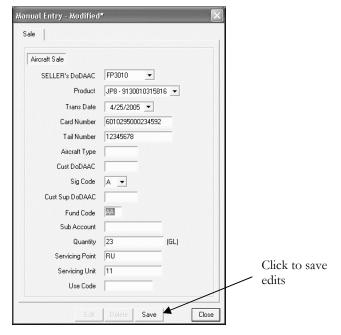
Transactions are listed by date and type. Double-click on a row to view an individual transaction.



The information for the transaction will be displayed, with the option to Edit the transaction, Delete the transaction or Close the dialog.



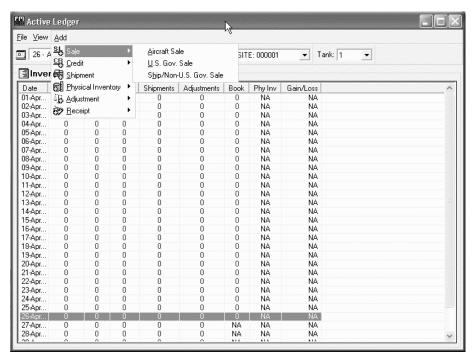
To edit a transaction, select the transaction as described above and click on the Edit button.



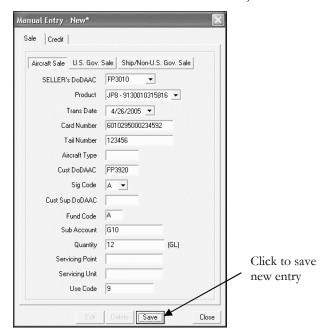
To save the edits, click the Save button.

Manual Transaction Entry

Transactions can also be manually entered via the AE Ledger software. To create a manual transaction, select Add from the Active Ledger menu.



You can select to add Sales or Credits, as well as other types of transactions.



After filling in the information for the new transaction, click Save to save the entry to the database.

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