

# mp2 Barcoding Plus User's Guide

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## 1.0 Introduction

This document provides loading and usage information for mp2 Barcoding Plus.

mp2 Barcoding Plus is designed to provide a mobile interface for data collection related activities with mp2. In general, the mobile application provides the ability to capture storeroom data collection such as part checkouts and physical inventories, asset audits, warehouse receipts, meter readings, etc. This document will detail the usage of this application as well as provide hand held installation and setup.

### 1.1 Supported Hardware

The following hardware will be supported in the build described in this document.

System Requirements are:

- 1) Processor → StrongARM & Intel X-Scale
- 2) RAM → 32MB RAM (min.); 64MB RAM(Rec.) ...additional storage card is highly recommended
- 3) Operating System → Pocket PC 2002/2003 Windows Mobile 5.0/6.0
- 4) Screen Size → ¼ VGA

#### Symbol

8100, 8800, MC9000, MC50, MC90

#### Intermec

710, 720, 740, 750, CN2

#### Psion Teklogix

WorkAbout Pro

#### Infor

INF1100, DS1100

### 1.2 Usage Processes

This document focuses primarily on the user interface and flow from a software functional perspective. Details related to the actual implemented process, and usage instructions for this application, will be available in the 'Best Practices' documentation that will be the responsibility of system implementers.

## 2.0 Software Installation

mp2 Barcoding Plus is designed to run on the Microsoft Pocket PC 2002/2003 platform. This section describes how to load mp2 Barcoding Plus on any appropriate device defined above in section 1.1.

### 2.1 Background Information

There are several areas that may require background knowledge to perform the installation. This section describes these areas before the actual installation process is explained. If you are already familiar with cabinet (CAB) files, hardware reset procedures and installing and using Microsoft ActiveSync, then you can skip to section 3.2 (Installation Procedure).

#### 2.1.1 CAB Files

A CAB file is a self-extracting archive that the Pocket PC platform is able to automatically extract to perform necessary software installation steps. If the CAB file (mp2BarcodingPlus.cab in this case) is placed in the correct location, then the Pocket PC operating system will automatically extract and run the CAB file when a hardware cold-boot is performed. In most cases, the CAB file will contain everything that is necessary to complete the software installation. This process includes the extracting and copying of application executable and data files from the CAB to the hand-held, and the creation of any necessary program shortcuts, desktop icons or startup instructions.

The entire mp2 Barcoding Plus installation is included in a single CAB file that is named mp2BarcodingPlus.cab. This CAB file is placed in the **\Program Files\mp2 Mobile Products Server\ Client\Barcoding\_Plus** directory during system installation. For information regarding system installation and documentation, please contact your systems administrator or refer to **mp2 Barcoding Plus Install and Config guide.pdf**.

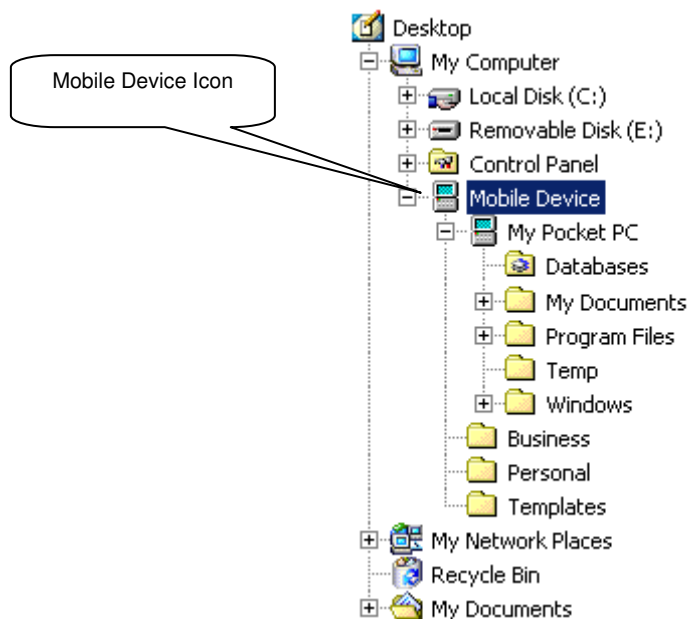
#### 2.1.2 ActiveSync

Microsoft's ActiveSync program allows for a cradled hand-held device to be accessed through the PC's Windows Explorer. In most cases, a hand-held cradle will be connected to a PC through a serial cable. If ActiveSync is installed and properly configured, cradling the hand-held device will then cause ActiveSync to automatically create a system connection to the device. In this state, Windows Explorer can be used to explore the hand-held drives in the same way any drive on the local PC can be explored. CAB file placement on the hand-held will then involve simply copying it from the PC to the correct hand-held drive location using the Windows Explorer. This is the identical process and is as easy as copying a file from one location on your PC to another.

The installation program for ActiveSync is included on the installation CD in the **Utilities** folder. You can download ActiveSync from <http://www.microsoft.com> and search for ActiveSync. Any ActiveSync version that is greater than or equal to 3.5 is supported by the mp2 Barcoding Plus system.

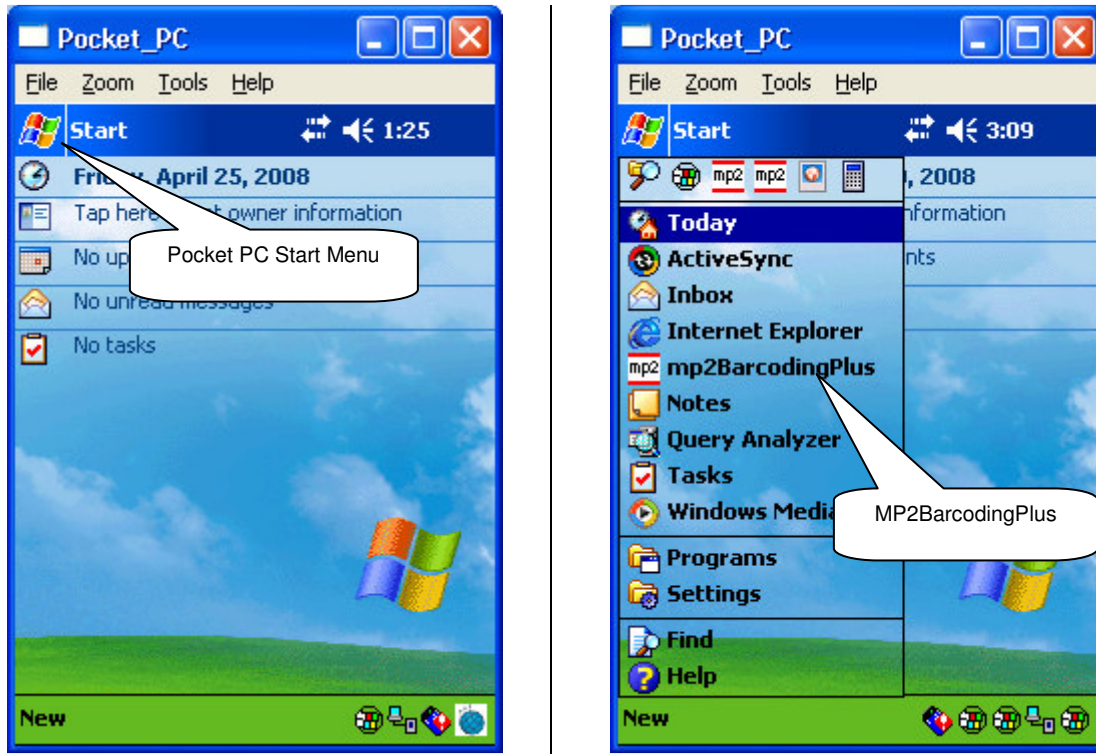
## 2.2 Installation Procedure

- 1) Install and configure Microsoft ActiveSync on any Windows NT or greater PC.
- 2) Connect the hand-held cradle to the PC.
- 3) Dock the hand-held in the cradle.
- 4) Open the Windows Explorer on the PC.
- 5) If a connection has been established, you should be able to browse the **Mobile Device** icon. The **Mobile Device** icon will appear as a sibling to the PC's other local drives.



- 6) Browse the **Mobile Device** and locate the auto-run directory. As mentioned earlier, this can be hardware specific so consult your hardware guide.
- 7) Copy mp2BarcodingPlus.cab file to the auto-run directory. (Consult mp2 Barcoding Plus Install and Config guide.pdf for detailed instructions how to obtain this file from the CD provided).
- 8) Perform a hand-held cold boot (see section 2.1.2) and follow the instructions on the screen. Click **Yes to All** if you are prompted with a file replacement dialog during this process.

- 9) After installation is complete, the mp2 Barcoding Plus can be accessed by clicking the **mp2BarcodingPlus** icon on the Pocket PC Start Menu.



- 10) mp2 Barcoding Plus installation is now complete. Please refer to section 3.0 (mp2 Barcoding Plus Setup) for information regarding any setup and configuration steps that may be necessary.



### 3.0 mp2 Barcoding Plus Setup

Once the hand-held is loaded, some administrator setup is required. Depending on what has been loaded for configuration in mp2BarcodingPlus.cab file, some of the following steps may or may not be necessary.

It is possible to pre-configure mp2 Barcoding Plus program within mp2BarcodingPlus.cab file to minimize the amount of system setup that is required after installation. If you are interested in pursuing this option, please contact [sales@bluedotsolutions.com](mailto:sales@bluedotsolutions.com).

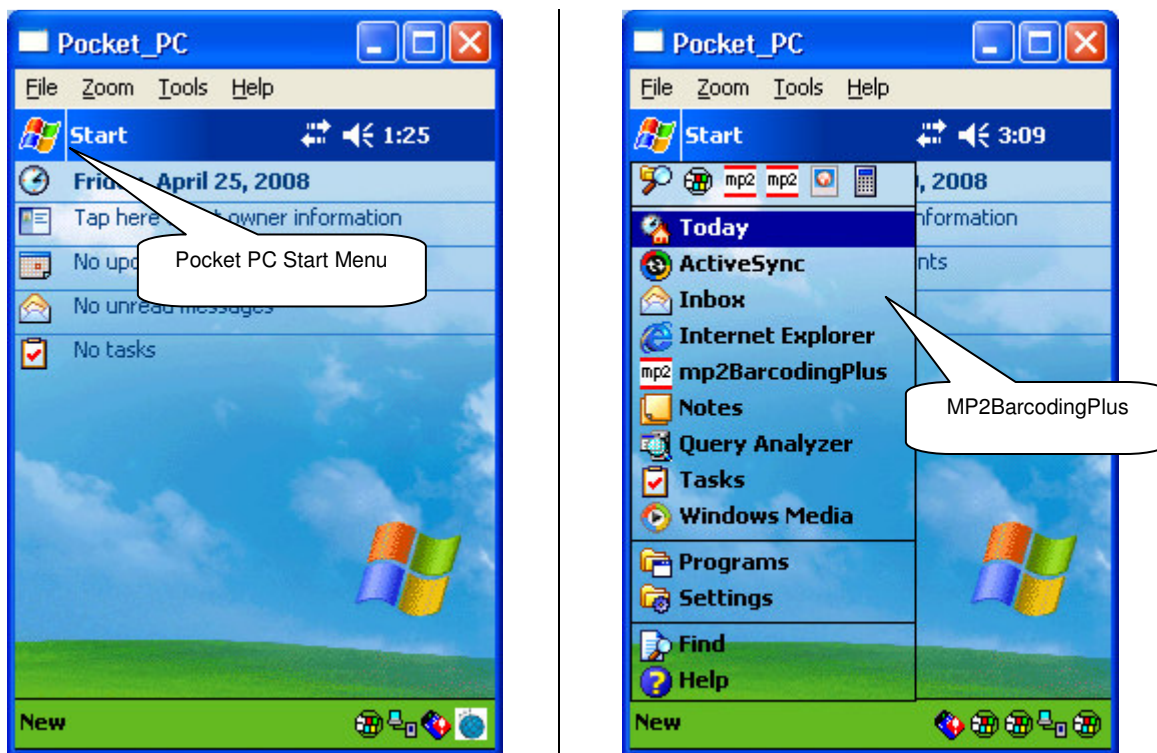
### 3.1 mp2 Barcoding Plus Configuration

There are several settings and options that are used and stored by mp2 Barcoding Plus. These options control configuration of the communications channel from mp2 Barcoding Plus to the synchronization server, as well as date display formats and meter reading input styles.

Before mp2 Barcoding Plus can be used, the following setup activities must take place. Steps that can be by-passed with a pre-configured mp2 Barcoding Plus are marked as *optional*.

#### 3.1.1 Step 1

Start mp2 Barcoding Plus application by clicking the Pocket PC Start Menu, then **mp2BarcodingPlus** Icon.



### 3.1.1.1 Splash Screen

When the mp2 Barcoding Plus is started, the program splash screen will be displayed. If the hand-held has not yet been authorized, a hardware authorization screen will be displayed. To obtain a hardware authorization code, if not already provided, please email [support@bluedotsolutions.com](mailto:support@bluedotsolutions.com) with the authorization information provided and application name on your mobile device.

The splash screen will remain visible until dismissed by the user.



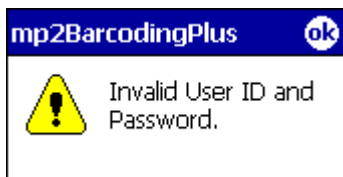
### 3.1.2 Step 2

Once the Splash screen is dismissed, the Login screen will be displayed. Enter the admin **User ID** and **Password**, then press **OK**. Until setup is complete, ADMIN (user id) and 12345 (password) will be the only valid login.



#### 3.1.2.1 OK Button

If a valid **User ID** and **Password** have been entered, clicking this button will display the program Main Menu (Section 4.4). If not valid, the following error message will be displayed, and the user will not be allowed to proceed.



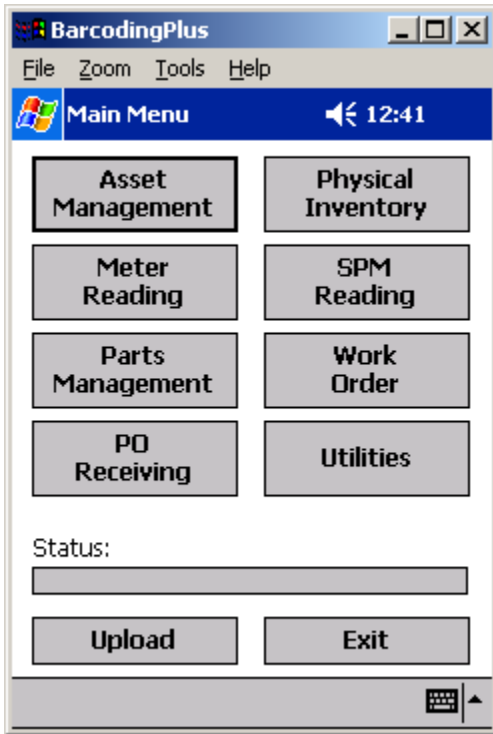
After dismissing this message, the user is allowed to re-enter the **User ID** and **Password**.

#### 3.1.2.2 Cancel Button

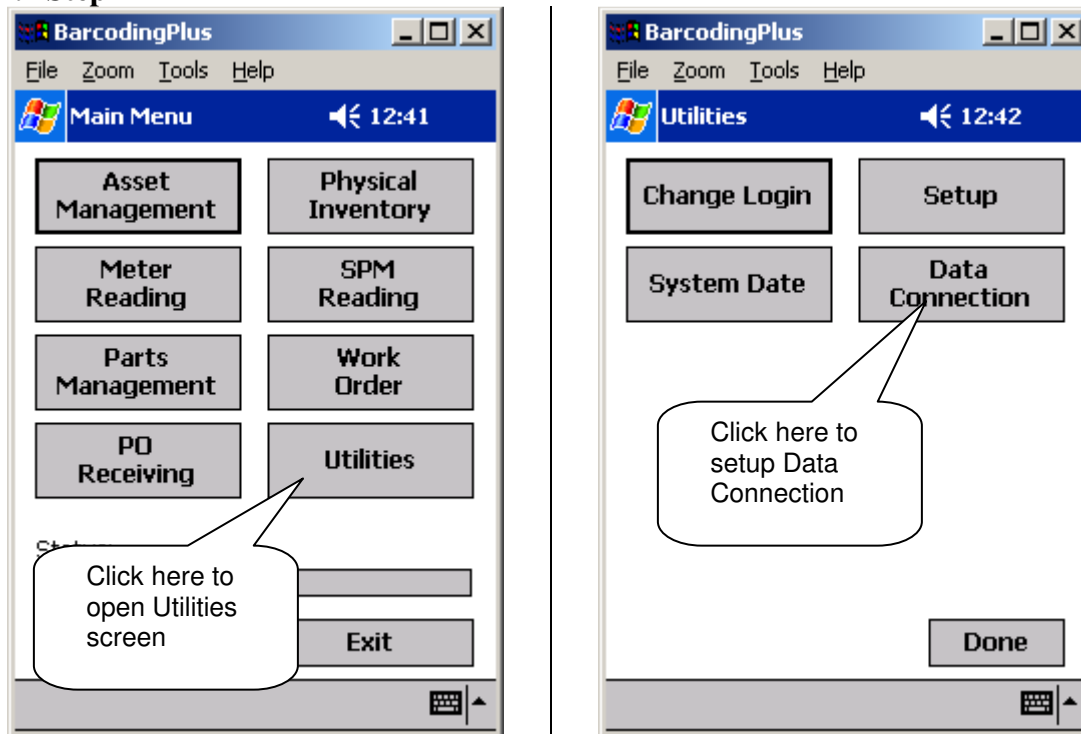
This will exit the user from the application.

### 3.1.3 Step 3

If a valid admin login has been entered, mp2 Barcoding Plus Main Menu will be displayed.

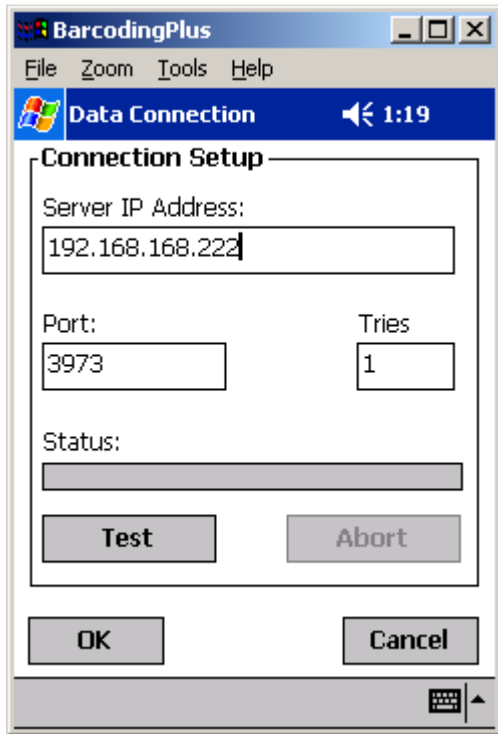


### 3.1.4 Step 4



Click the **Utilities** button to display the Utilities screen. Then click the **Data Connection** button to display the Data Connection screen.

### 3.1.4.1 Data Connection Screen



#### Screen Details:

##### Server IP Address:

This is the IP Address of the computer that is running the mp2 Mobile Products Server. When the mp2 Mobile Products Server is running, this value is displayed at the bottom of the mNow Server's main screen

##### Port:

This must be the same as the mNow Server's Communications Port.

##### Tries:

This is the number of attempts that will be made by mp2 Barcoding Plus to establish a connection with the mp2 Mobile Products Server before failing synchronization.

Enter or select the correct configuration settings, click **Test** to test the connection, then **OK** to save your changes.

### 3.1.4.1.1 Test Button

Before attempting a connection test:

- 1) Make sure the mp2 Mobile Products Server is started and running. For more information on the mp2 Mobile Products Server please refer to **mNowServer\_UsersGuide.pdf**.
- 2) Make sure the hand-held has access to the computer running the mp2 Mobile Products Server, either through a valid ActiveSync connection or a Wireless or Ethernet network connection.
- 3) Make sure the hand-held is docked in its cradle if appropriate.

Clicking this button will create a test connection to the mp2 Mobile Products Server based on the entered **IP Address**, **Port** and **Tries** values that have been entered. During the attempt, status text will be displayed to the right of the **Status** label, and a graphical progress bar will show the progress of the test.

If the test is successful, then the **Status** field will display **Test Succeeded** and a positive, success tone will be played. If the test is not successful, then the **Status** will display **Test Failed** and a negative, failure, tone will be played.



### 3.1.4.1.2 Abort Button

This will abort the connection test.

### 3.1.4.1.3 OK Button

This will save the entered configuration settings, close the Setup screen and return the user to mp2 Barcoding Plus Main Menu.

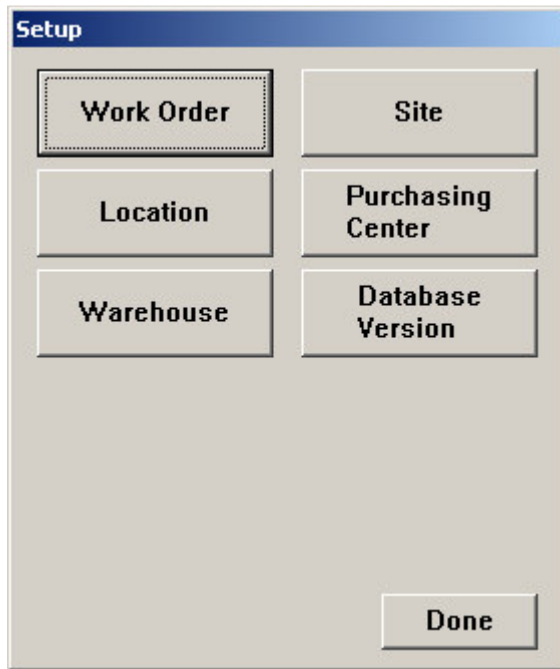
### 3.1.4.1.4 Cancel Button

Clicking this button will close this screen without saving any changes that have been made, then return the user to mp2 Barcoding Plus Main Menu

### 3.1.5 Setup Configuration

#### 3.1.5.1 Setup Menu

This screen allows the user to setup Work Order, Location, Warehouse, Site, and Purchasing Center information as well as define the mp2 Database Version.



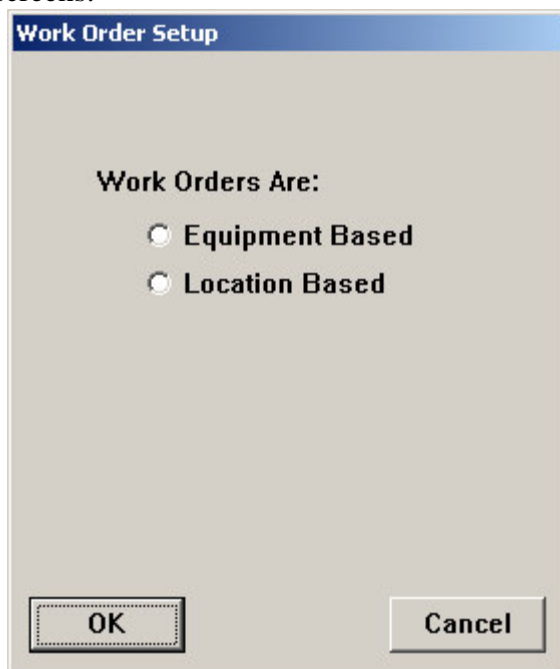
Screen Details:

<i>Button</i>	<i>Function</i>
Work Order	This will display the Work Order Setup Screen (Section 3.1.5.2)
Location	This will display the Location Setup Screen (Section 3.1.5.3)
Warehouse	This will display the Warehouse Setup Screen (Section 3.1.5.4)
Site	This will display the Site Setup Screen (Section 3.1.5.5)
Purchasing Center	This will display the Purchasing Center Setup Screen (Section 3.1.5.6)
Database Version	This will display the Database Version Setup Screen (Section 3.1.5.7)
Done	This will return the user to the Utilities Screen (Section 3.1.4)



### 3.1.5.2 Work Order Setup

This screen allows the user to set whether work orders are equipment based, or location based. The selection made here will determine the fields that are collected on certain screens.



The screenshot shows a dialog box titled "Work Order Setup". It contains a section labeled "Work Orders Are:" with two radio button options: "Equipment Based" and "Location Based". The "Equipment Based" option is selected. At the bottom of the dialog box, there are two buttons: "OK" and "Cancel".

#### Screen Details:

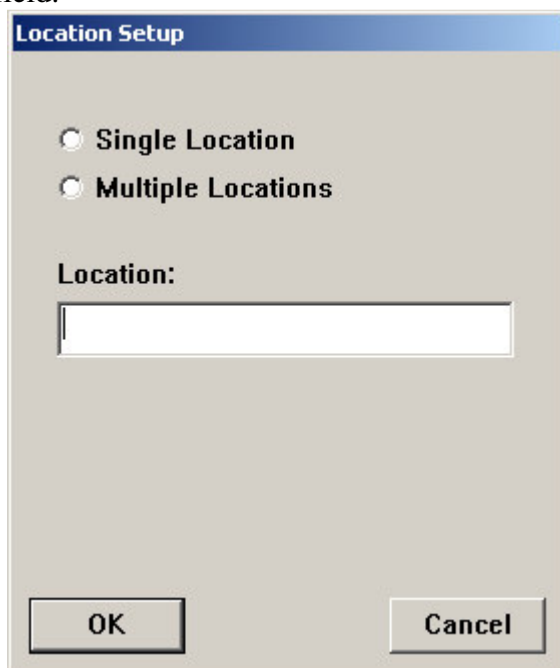
Work Orders are:

Type: Radio button selection. Either equipment based or location based.

Default: Equipment Based

### 3.1.5.3 Location Setup

This screen allows the user to set whether data collection is for a single location or multiple locations. If single, then the user can enter the default location into the Location field.



The screenshot shows a dialog box titled "Location Setup". It contains two radio button options: "Single Location" and "Multiple Locations". The "Multiple Locations" option is selected. Below the radio buttons is a label "Location:" followed by a text input field. At the bottom of the dialog box, there are two buttons: "OK" and "Cancel".

#### Screen Details:

Location:

Length - 30

Radio Buttons:

Default: Multiple Locations

### 3.1.5.4 Warehouse Setup

This screen allows the user to set whether data collection is for a single warehouse or multiple warehouses. If single, then the user can enter a default warehouse into the Warehouse field.



The 'Warehouse Setup' dialog box features a blue title bar. It contains two radio buttons: 'Single Warehouse' and 'Multiple Warehouses'. Below them is a text input field labeled 'Warehouse:'. At the bottom are 'OK' and 'Cancel' buttons.

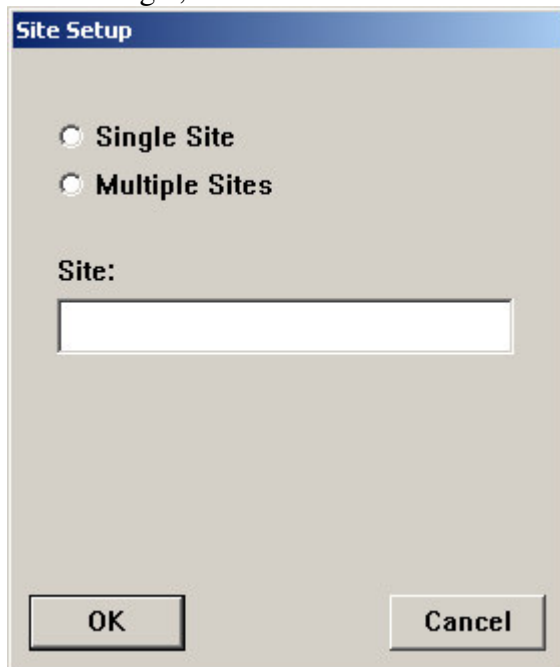
Screen Details:

Warehouse:  
Length - 15

Radio Buttons:  
Default: Multiple Warehouses

### 3.1.5.5 Site Setup

This screen allows the user to set whether data collection is for a single site or multiple sites. If single, then the user can enter a default site into the Site field.



The 'Site Setup' dialog box features a blue title bar. It contains two radio buttons: 'Single Site' and 'Multiple Sites'. Below them is a text input field labeled 'Site:'. At the bottom are 'OK' and 'Cancel' buttons.

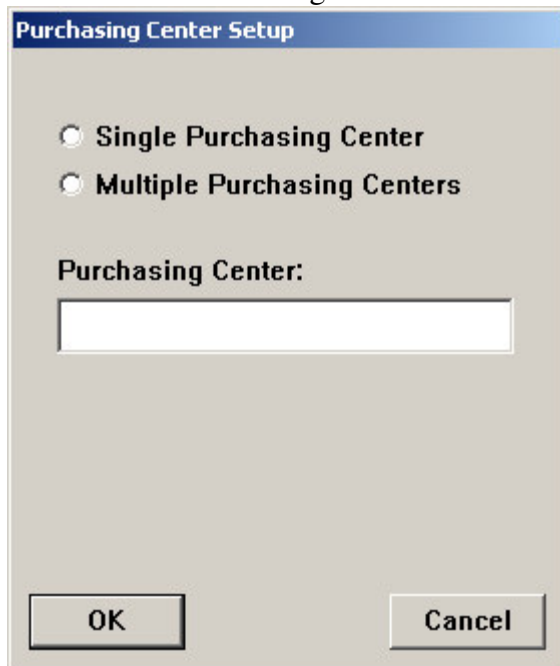
Screen Details:

Site:  
Length - 15

Radio Buttons:  
Default: Multiple Sites

### 3.1.5.6 Purchasing Center Setup

This screen allows the user to set whether data collection is for a single purchasing center or multiple purchasing centers. If single, then the user can enter a default purchasing center into the Purchasing Center field.



The screenshot shows a dialog box titled "Purchasing Center Setup". It contains two radio buttons: "Single Purchasing Center" and "Multiple Purchasing Centers". Below the radio buttons is a text input field labeled "Purchasing Center:". At the bottom of the dialog box are two buttons: "OK" and "Cancel".

#### Screen Details:

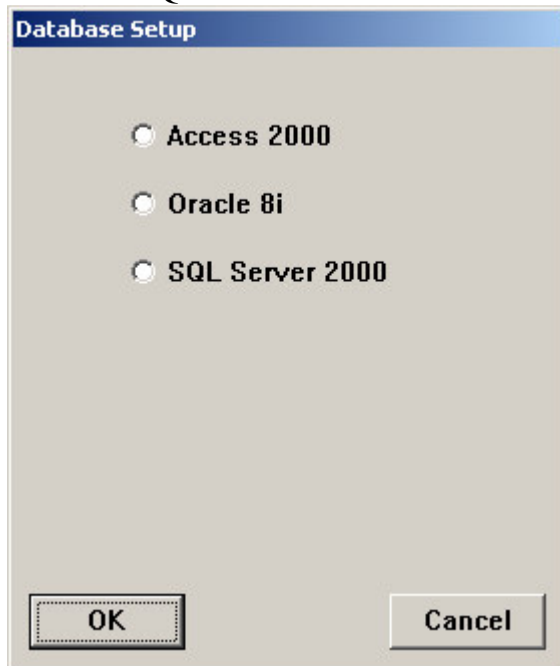
Purchasing Center:  
Length - 15

Radio Buttons:  
Default: Multiple Purchasing Centers

### 3.1.5.7 Database Setup

This screen allows the user to select the database version of mp2 that is being used. This selection must match mp2 installation or data collection and transfer results will be unstable and inaccurate.

The selection made here effects the data fields that are visible during data collection, as well as the SQL that is sent to the server for processing and insertion into mp2 database.



Screen Details:

Radio Buttons:

Default: Access 2000

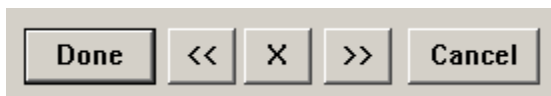
## 4.0 Using mp2 Barcoding Plus

This section describes the basic use of mp2 Barcoding Plus. It assumes that mp2 Barcoding Plus has been loaded on the scanner and that the initial administrator setup and synchronization have been performed. It should not be necessary for the user to start the program once the administrator setup is complete. If the program is not running, please contact your systems administrator or refer to section 3.1.1 for information on how to launch the mp2 Barcoding Plus application.

### 4.1 Standard Navigation

#### 4.1.1 Data Collection button bar

All data collection screens contain the same button navigation bar across the bottom. To simplify the use of the program, these buttons always perform the same general activity, regardless of where they appear in the work order flow. This section describes the behavior of each of these buttons.




<i>Button</i>	<i>Function</i>
Done	Closes the dialog and saves collected data.
<<	Goes to the previously collected data record.
X	Deletes the current collected data.
>>	Goes to the next collected data screen. This will add a new record or go to the next collected data record if << was previously pressed.
Cancel	Cancel all collected data (not just the current screen) and returns the user to the previous menu.

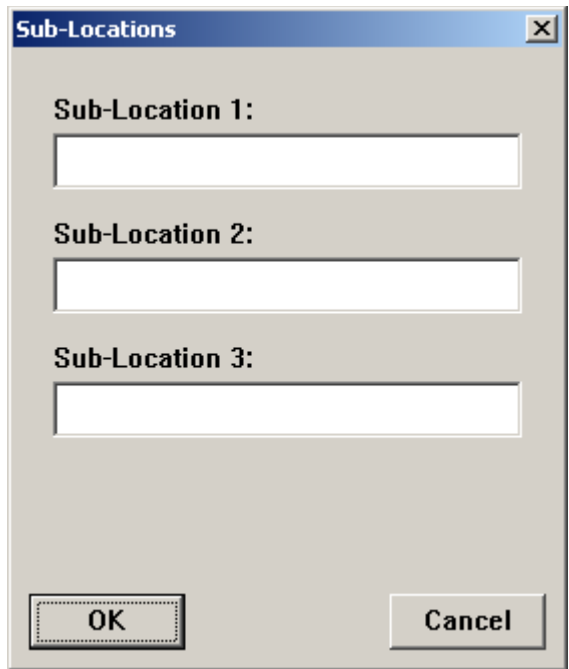
#### 4.1.2 OK Cancel button bar



<i>Button</i>	<i>Function</i>
OK	Saves all changes and returns the user to the previous menu.
Cancel	Cancel all changes and returns the user to the previous menu.

### 4.1.3 Sub-Locations

If the configuration is set to collect Location Based work orders (see Section 3.1.5.2 Work Order Setup), then WO Location and Sub-Location information will be collected instead of Equipment #. The collection of sub-locations for location based work orders will be performed on a separate dialog from the main transaction page on which the WO Location is collected. The following describes this dialog. This dialog will be displayed when the user clicks on a  (ellipsis) push button.



**Sub-Locations** [X]

**Sub-Location 1:**

**Sub-Location 2:**

**Sub-Location 3:**

**OK** **Cancel**

Screen Details:

Sub-Location 1:  
Length - 30

Sub-Location 2:  
Length -30

Sub-Location 3:  
Length - 30

## 4.2 Splash Screen

When the mp2 Barcoding Plus is started, the program splash screen will be displayed. If the hand-held has not yet been authorized, a hardware authorization screen will be displayed. To obtain a hardware authorization code, if not already provided, please email [support@bluedotsolutions.com](mailto:support@bluedotsolutions.com) with the authorization information provided on your mobile device.

The splash screen will remain visible until clicked by the user.



### Screen Details:

#### Version:

This is the currently running mp2 Barcoding Plus version.

## 4.3 Login

This screen is also displayed on application startup, before the main menu is displayed.

The user ID will be validated against a local copy of the mp2 user tables.



### Screen Details:

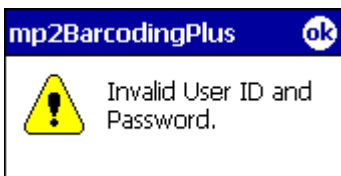
User ID:  
Length - 12

Password:  
Length - 10

The first time the program is run there will obviously be no mp2 user data on the scanner to perform login validation against. As such, an ADMIN password is supported to allow for initial setup and synchronization. The ADMIN user will have complete access to all program features. Also, only the ADMIN user will be allowed to enter the Setup portion of the program.

### 4.3.1 OK Button

If a valid **User ID** and **Password** have been entered, clicking this button will display the program Main Menu (Section 4.4). If not valid, the following error message will be displayed, and the user will not be allowed to proceed.



After dismissing this message, the user is allowed to re-enter the **User ID** and **Password**.

### 4.3.2 Cancel Button

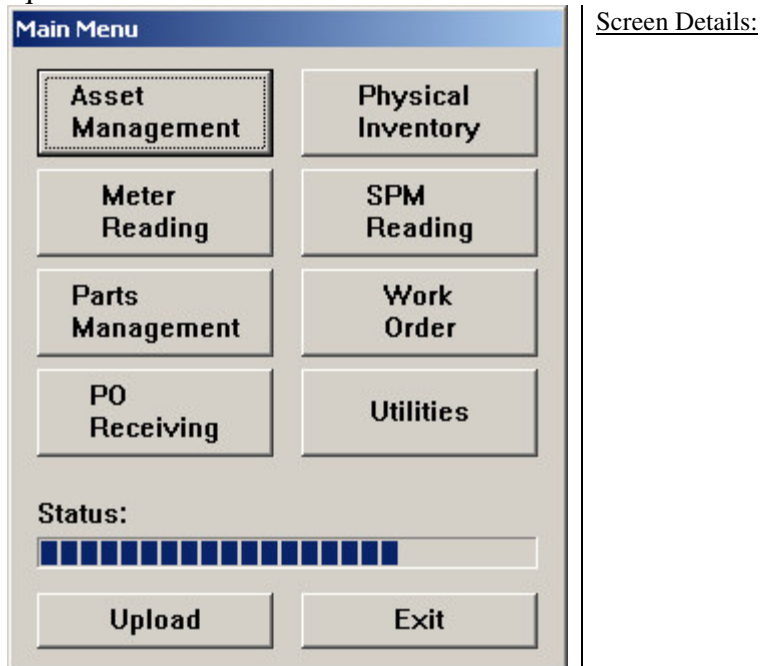
This will exit the user from the application.



## 4.4 Main Menu

This is the application's main menu. The user must login successfully before this screen is displayed.

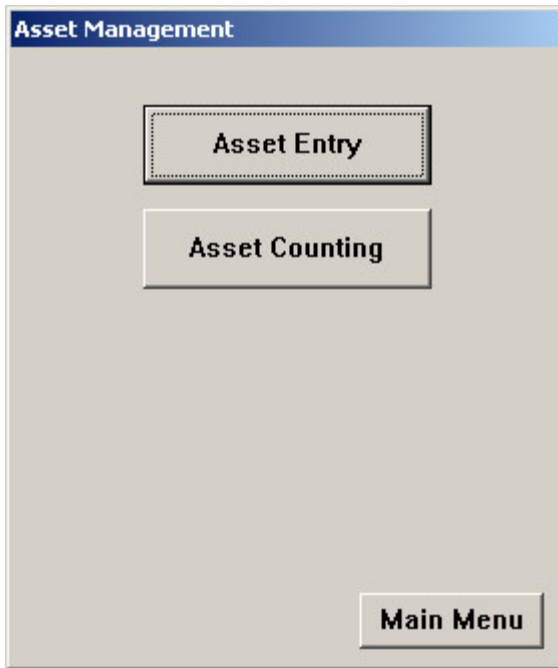
This is the first screen that is displayed on application startup, after the User ID is requested and validated.



<i>Button</i>	<i>Function</i>
Asset Management	This will display the Asset Management Screen (Section 4.4.1)
Meter Reading	This will display the Meter Reading Screen (Section 4.4.2)
Parts Management	This will display the Parts Management Screen (Section 4.4.3)
PO Receiving	This will display the PO Receiving Screen (Section 4.4.4)
Physical Inventory	This will display the Physical Inventory Screen (Section 4.4.5)
SPM Reading	This will display the SPM Reading Screen (Section 4.4.6)
Work Order	This will display the Work Order Screen (Section 4.4.7)
Utilities	This will display the Utilities Screen (Section 3.1.4)
Upload	After data collection is completed, the user will dock the mobile device and press this button. The synchronization process will cause collected transactions to be transferred via the remote server software and inserted into mp2 Database. Also at this time, the client date and time will be synchronized with that of mp2 Barcoding Plus server.
Exit	This will exit the user from mp2 Barcoding Plus

#### 4.4.1 Asset Management

This is the Asset Management menu. Asset Management in mp2 allows you to record information about specific assets that need to be recorded, but not maintained or repaired. The Asset Entry in mp2 Barcodign Plus permits the user to add new assets to mp2. The Asset Counting mobile function permits the user to gather quantity detail against an asset for comparison/update in mp2.. For more detail on how Assets are used and differentiated from equipment in mp2, please consult the mp2 user documentation set.



#### Screen Details:

This form is a menu selection form. To proceed, the user must make a selection.

<i>Button</i>	<i>Function</i>
Asset Entry	This will display the Asset Entry Screen (Section 4.4.1.1)
Asset Counting	This will display the Asset Counting Screen (Section 4.4.1.2)
Main Menu	This will return the user to the Main Menu (Section 4.4)

#### 4.4.1.1 Asset Entry

This screen captures data for a new asset. The user enters the Asset #, Location, Asset Type and Site (if applicable).

Asset Entry 1 of 5

Asset #:

Location:

Asset Type:

Site:

Done << X >> Cancel

##### Screen Details:

Asset #:

Length - 15

Location:

Length - 30

Asset Type:

Length - 8

Site:

Length - 15

##### Access 2000

**Site:** Not collected.

##### Oracle/SQL Server

**Site:** Only collected if the program is configured for 'Multiple Sites' (see Section 3.1.5.5).

#### 4.4.1.2 Asset Counting

This screen captures data for a given asset. The user enters the Location, Asset #, Quantity and Site (if applicable).

The entered location is 'remembered' from one count record to the next so the user does not have to repeatedly key it in. When the user presses the >> button to create a new record, the location will be pre-set with the value that was previously entered.



The screenshot shows a dialog box titled "Asset Count" with a "1 of 5" indicator in the top right corner. The dialog contains four input fields, each with a label to its left: "Location:", "Asset #:", "Quantity:", and "Site:". Below the input fields is a row of five buttons: "Done", "<<", "X", ">>", and "Cancel".

#### Screen Details:

Location:  
Length - 30  
Asset #:  
Length - 15  
Quantity:  
Floating Point Decimal  
Site:  
Length - 15

#### Access 2000

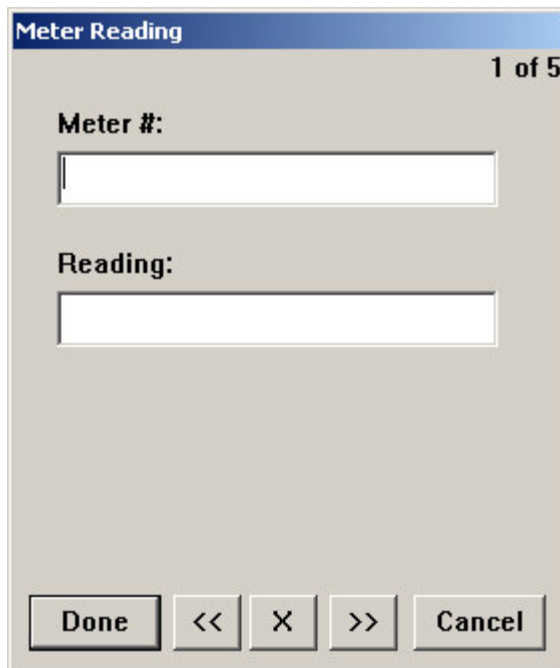
**Site:** Not collected.

#### Oracle/SQL Server

**Site:** Only collected if the program is configured for 'Multiple Sites' (see Section 3.1.5.5).

#### 4.4.2 Meter Reading

This screen captures data for a meter reading. Data Collected from meters are typically used to help mp2 determine when work is required for a given piece of equipment based on the values collected from a meter. The user enters the Meter # (which is a combination of Equipment-Meter) and the Reading. For more detail on how Meters are utilized in mp2, please consult the mp2 user documentation set.



The screenshot shows a window titled "Meter Reading" with a "1 of 5" indicator in the top right corner. The window contains two text input fields. The first is labeled "Meter #:" and the second is labeled "Reading:". At the bottom of the window, there are five buttons: "Done", "<<", "X", ">>", and "Cancel".

##### Screen Details:

Meter #:

Length – 30

**Note:** This is a combination of Equipment-Meter Number.

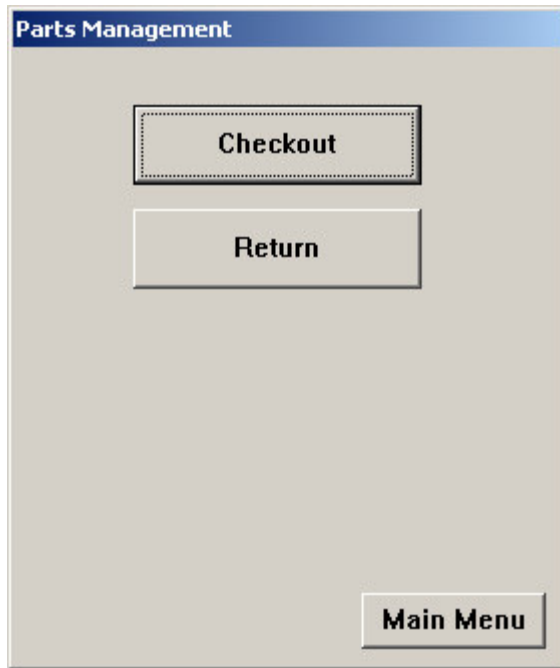
For example: EQ123-MTR456

Reading:

Floating Point Decimal

### 4.4.3 Parts Management

The Parts Management menu permits the user to either Checkout or Return parts. One of the more heavily used features of mp2 Barcoding Plus, this functionality helps automate the business process performed by many for issuing and returning parts to and from an inventory crib. For more detail on how Inventory is managed within in mp2, please consult the mp2 user documentation set.



#### Screen Details:

This form is a menu selection form. To proceed, the user must make a selection.

#### Note:

The screens for checkout and return are nearly identical. To avoid confusion, minor changes will be made to these screens that will make the 'checkout' or 'return' state more obvious.

<i>Button</i>	<i>Function</i>
Checkout	This will display the Parts Checkout Menu (Section 4.4.3.1)
Return	This will display the Parts Return Menu (Section 4.4.3.2)
Main Menu	This will return the user to the Main Menu (Section 4.4)

#### 4.4.3.1 Parts Checkout

This is the Parts Checkout menu. This menu permits the user to checkout parts to either a Work Order, Employee, Cost Center or Equipment.

##### Screen Details:

This form is a menu selection form. To proceed, the user must make a selection. Clicking the Back button will return the user to the Parts Management menu.

<i>Button</i>	<i>Function</i>
Work Order	This will display the Checkout To Work Order Screen (Section 4.4.3.1.1)
Employee	This will display the Checkout To Employee Screen (Section 4.4.3.1.2)
Cost Center	This will display the Checkout To Cost Center Screen (Section 4.4.3.1.3)
Equipment	This will display the Checkout To Equipment Screen (Section 4.4.3.1.4)
Back	This will return the user to the Parts Management Menu (Section 4.4.3)
Main Menu	This will return the user to the Main Menu (Section 4.4)

#### 4.4.3.1.1 Checkout To Work Order

This screen captures data when a user wants to checkout a part to a Work Order. The user enters the Work Order #, Item # (Part #), Equipment #, Employee/Vendor ID (the VendorID is the VendorID%BranchID), Location, Quantity checked out, Site and Warehouse.

Each checkout record can contain multiple item/site/location/quantity sub records. The user will have the option to add multiple of these sub records before creating a new checkout record.

When the user clicks the '>>' button, they will be asked if they would like to create a new checkout to work order, or if they want to add an item to the current work order.

For Equipment Based Work Orders

Screen Details:

Checkout Work Order #:

Length - 15

Item #:

Length - 25

Equipment #:

Length - 30

For location based work orders, a '-' will be saved for the Equipment #.

WO Location:

Length - 30

Employee/Vendor:

Length - 12

**Vendor Note:** this is VendorID%BranchID.  
For example: VEN123%BRCH456

Location:

Length - 30

Quantity:

Floating Point Decimal

Site:

Length - 15

Warehouse:

Length - 15

Ellipsis:

Access to sub-location input.

Access 2000

**Site:** Only collected if the program is configured for 'Multiple Sites'.

**Location:** Only collected if the program is configured for 'Multiple Locations'.

**Warehouse:** Not collected.

(see next page for Location Based WO)



For Location Based Work Orders

Checkout to Work Order				
Checkout Work Order #:	1 of 5			
<input type="text"/>				
Item #:	<input type="text"/>			
WO Location:	<input type="text"/> ...			
Employee/Vendor:	Location:			
<input type="text"/>	<input type="text"/>			
Quantity:	Site:	Warehouse:		
<input type="text"/>	<input type="text"/>	<input type="text"/>		
Done	<<	X	>>	Cancel

Oracle/SQL Server

**Site:** Only collected if the program is configured for 'Multiple Sites'.

**Location:** Only collected if the program is configured for 'Multiple Locations'.

**Warehouse:** Only collected if the program is configured for 'Multiple Warehouses'.

#### 4.4.3.1.2 Checkout To Employee

This screen captures data when a user wants to checkout a part to an Employee. The user enters the Employee/Vendor ID (the VendorID is the VendorID%BranchID), Item # (Part #), Location, Quantity checked out, Site and Warehouse.

##### Screen Details:

Checkout Employee/Vendor

Length - 12

**Vendor Note:** this is VendorID%BranchID.

For example: VEN123%BRCH456

Item #:

Length - 25

Location:

Length - 30

Quantity:

Floating Point Decimal

Site:

Length - 15

Warehouse:

Length - 15

##### Access 2000

**Site:** Only collected if the program is configured for 'Multiple Sites'.

**Location:** Only collected if the program is configured for 'Multiple Locations'.

**Warehouse:** Not collected.

##### Oracle/SQL Server

**Site:** Not collected.

**Location:** Only collected if the program is configured for 'Multiple Locations'.

**Warehouse:** Only collected if the program is configured for 'Multiple Warehouses'.

#### 4.4.3.1.3 Checkout To Cost Center

This screen captures data when a user wants to checkout a part to a Cost Center. The user enters the Cost Center, Item # (Part #), Employee/Vendor ID (the VendorID is the VendorID%BranchID), Location, Quantity checked out, Site and Warehouse.

The screenshot shows a dialog box titled "Checkout to Cost Center" with a "1 of 5" indicator in the top right corner. The dialog contains the following fields and controls:

- Checkout Cost Center:** A text input field.
- Item #:** A text input field.
- Employee/Vendor:** A text input field.
- Location:** A text input field.
- Quantity:** A text input field.
- Site:** A text input field.
- Warehouse:** A text input field.
- At the bottom, there are five buttons: "Done", "<<", "X", ">>", and "Cancel".

##### Screen Details:

Checkout Cost Center:

Length - 15

Item #

Length - 25

Employee/Vendor:

Length - 12

**Vendor Note:** this is VendorID%BranchID.

For example: VEN123%BRCH456

Location:

Length - 30

Quantity

Floating Point Decimal

Site:

Length - 15

Warehouse:

Length: 15

##### Access 2000

**Site:** Only collected if the program is configured for 'Multiple Sites'.

**Location:** Only collected if the program is configured for 'Multiple Locations'.

**Warehouse:** Not collected.

##### Oracle/SQL Server

**Site:** Not collected.

**Location:** Only collected if the program is configured for 'Multiple Locations'.

**Warehouse:** Only collected if the program is configured for 'Multiple Warehouses'.

#### 4.4.3.1.4 Checkout To Equipment

This screen captures data when a user wants to checkout a part to an Equipment Number. The user enters the Equipment #, Item # (Part #), Employee/Vendor ID (the VendorID is the VendorID%BranchID), Location, Quantity checked out, Site and Warehouse.

##### Screen Details:

Checkout Equipment #:

Length - 30

Item #

Length - 25

Employee/Vendor

Length - 12

**Vendor Note:** this is VendorID%BranchID.

For example: VEN123%BRCH456

Location:

Length - 30

Quantity:

Floating Point Decimal

Site:

Length - 15

Warehouse:

Length - 15

##### Access 2000

**Site:** Only collected if the program is configured for 'Multiple Sites'.

**Location:** Only collected if the program is configured for 'Multiple Locations'.

**Warehouse:** Not collected.

##### Oracle/SQL Server

**Site:** Not collected.

**Location:** Only collected if the program is configured for 'Multiple Locations'.

**Warehouse:** Only collected if the program is configured for 'Multiple Warehouses'.

#### 4.4.3.2 Parts Return

This is the Parts Return menu. This menu permits the user to return parts to either a Work Order, Employee, Cost Center or Equipment.

##### Screen Details:

This form is a menu selection form. To proceed, the user must make a selection. Clicking the Back button will return the user to the Parts Management menu.

<i>Button</i>	<i>Function</i>
Work Order	This will display the Return To Work Order Screen (Section 4.4.3.2.1)
Employee	This will display the Return To Employee Screen (Section 4.4.3.2.2)
Cost Center	This will display the Return To Cost Center Screen (Section 4.4.3.2.3)
Equipment	This will display the Return To Equipment Screen (Section 4.4.3.2.4)
Back	This will return the user to the Parts Management Menu (Section 4.4.3)
Main Menu	This will return the user to the Main Menu (Section 4.4)

#### 4.4.3.2.1 Return To Work Order

This screen captures data when a user wants to return a part from a Work Order. The user enters the Work Order #, Item # (Part #), Equipment #, Employee/Vendor ID (the VendorID is the VendorID%BranchID), Location, Quantity checked out, Site and Warehouse.

Each return record can contain multiple item/site/location/quantity sub records. The user will have the option to add multiple of these sub records before creating a new return record.

When the user clicks the '>>' button, they will be asked if they would like to create a new work order return, or if they want to add an item to the current work order.

For Equipment Based Work Orders

For Location Based Work Orders

Screen Details:

Return Work Order #:

Length - 15

Item #:

Length - 25

Equipment #:

Length - 30

For location based work orders, a '-' will be saved for the Equipment #.

WO Location:

Length - 30

Employee/Vendor:

Length - 12

**Vendor Note:** this is VendorID%BranchID.  
For example: VEN123%BRCH456

Location:

Length - 30

Quantity:

Floating Point Decimal

Site:

Length - 15

Warehouse:

Length - 15

Ellipsis:

Access to sub-location input.

Access 2000

**Site:** Only collected if the program is configured for 'Multiple Sites'.

**Location:** Only collected if the program is configured for 'Multiple Locations'.

**Warehouse:** Not collected.

Oracle/SQL Server

**Site:** Only collected if the program is configured for 'Multiple Sites'.

**Location:** Only collected if the program is configured for 'Multiple Locations'.

**Warehouse:** Only collected if the program is

**Return To Work Order**

Return Work Order #: 1 of 5

Item #:

WO Location:

Employee/Vendor: Location:

Quantity: Site: Warehouse:

Done << X >> Cancel

configured for 'Multiple Warehouses'.

#### 4.4.3.2.2 Return To Employee

This screen captures data when a user wants to return a part from an Employee. The user enters the Employee/Vendor ID (the VendorID is the VendorID%BranchID), Item # (Part #), Location, Quantity checked out, Site and Warehouse.

##### Screen Details:

Return Employee/Vendor

Length - 12

**Vendor Note:** this is VendorID%BranchID.

For example: VEN123%BRCH456

Item #:

Length - 25

Location:

Length - 30

Quantity:

Floating Point Decimal

Site:

Length - 15

Warehouse:

Length - 15

##### Access 2000

**Site:** Only collected if the program is configured for 'Multiple Sites'.

**Location:** Only collected if the program is configured for 'Multiple Locations'.

**Warehouse:** Not collected.

##### Oracle/SQL Server

**Site:** Not collected.

**Location:** Only collected if the program is configured for 'Multiple Locations'.

**Warehouse:** Only collected if the program is configured for 'Multiple Warehouses'.



#### 4.4.3.2.3 Return To Cost Center

This screen captures data when a user wants to return a part from a Cost Center. The user enters the Cost Center, Item # (Part #), Employee/Vendor ID (the VendorID is the VendorID%BranchID), Location, Quantity checked out, Site and Warehouse.

##### Screen Details:

Return Cost Center:

Length - 15

Item #

Length - 25

Employee/Vendor:

Length - 12

**Vendor Note:** this is VendorID%BranchID.

For example: VEN123%BRCH456

Location:

Length - 30

Quantity

Floating Point Decimal

Site:

Length - 15

Warehouse:

Length: 15

##### Access 2000

**Site:** Only collected if the program is configured for 'Multiple Sites'.

**Location:** Only collected if the program is configured for 'Multiple Locations'.

**Warehouse:** Not collected.

##### Oracle/SQL Server

**Site:** Not collected.

**Location:** Only collected if the program is configured for 'Multiple Locations'.

**Warehouse:** Only collected if the program is configured for 'Multiple Warehouses'.

#### 4.4.3.2.4 Return To Equipment

This screen captures data when a user wants to return a part from an Equipment Number. The user enters the Equipment #, Item # (Part #), Employee/Vendor ID (the VendorID is the VendorID%BranchID), Location, Quantity checked out, Site and Warehouse.

##### Screen Details:

Return Equipment #:  
Length - 30  
Item #  
Length - 25  
Employee/Vendor  
Length - 12  
**Vendor Note:** this is VendorID%BranchID.  
For example: VEN123%BRCH456  
Location:  
Length - 30  
Quantity:  
Floating Point Decimal  
Site:  
Length - 15  
Warehouse:  
Length - 15

##### Access 2000

**Site:** Only collected if the program is configured for 'Multiple Sites'.  
**Location:** Only collected if the program is configured for 'Multiple Locations'.  
**Warehouse:** Not collected.

##### Oracle/SQL Server

**Site:** Not collected.  
**Location:** Only collected if the program is configured for 'Multiple Locations'.  
**Warehouse:** Only collected if the program is configured for 'Multiple Warehouses'.

#### 4.4.4 PO Receiving

This screen captures data when a user wants to receive Items from a Purchase Order (PO). This commonly used feature aids in automating the process of receiving items from vendors into the maintenance organization. The user enters the PO #, Release #, Item #, Quantity and Purchasing Center.

When the user clicks the '>>' button, they will be asked if they would like to add to this PO. If yes, then the PO # and Release # already entered will remain, and they will only need to enter the next Item # and Quantity.

The screenshot shows a dialog box titled "PO Receiving" with a blue header bar. In the top right corner of the dialog, it says "1 of 5". The dialog contains five text input fields, each with a label to its left: "PO #:", "Release #:", "Item #:", "Quantity:", and "Purchasing Center:". At the bottom of the dialog, there are five buttons: "Done", "<<", "X", ">>", and "Cancel".

##### Screen Details:

PO #:  
Length - 20  
Release #:  
Long Integer  
Item #:  
Length - 25  
Quantity:  
Floating Point Decimal  
Purchasing Center:  
Length - 15

##### Access 2000

**Purchasing Center:** Not collected.

##### Oracle/SQL Server

**Purchasing Center:** Only collected if the program is configured for 'Multiple Purchasing Centers'.

#### 4.4.5 Physical Inventory

This screen captures data when the user wants to perform a Physical Inventory. Rather than capturing update detail, such as this, on paper, mp2 Barcoding Plus automates this process so that detail captured is more accurate, timely, and efficient. For more detail on Inventory Management in mp2, please consult the mp2 user documentation set.

The user enters the Item #, Location, Quantity, Site and Warehouse.

The screenshot shows a window titled "Physical Inventory" with a status bar indicating "1 of 5". The form contains the following fields and controls:

- Item #:** A single-line text input field.
- Location:** A single-line text input field.
- Quantity:** A single-line text input field.
- Site:** A single-line text input field.
- Warehouse:** A single-line text input field.
- Buttons:** A row of five buttons: "Done", "<<", "X", ">>", and "Cancel".

##### Screen Details:

**Item #:**  
Length - 25

**Location:**  
Length - 30

**Quantity:**  
Floating Point Decimal

**Site:**  
Length - 15

**Warehouse:**  
Length - 15

##### Access 2000

**Site:** Only collected if the program is configured for 'Multiple Sites'.

**Location:** Only collected if the program is configured for 'Multiple Locations'.

**Warehouse:** Not collected.

##### Oracle/SQL Server

**Site:** Not collected.

**Location:** Only collected if the program is configured for 'Multiple Locations'.

**Warehouse:** Only collected if the program is configured for 'Multiple Warehouses'.

#### 4.4.6 Statistical Predictive Maintenance (SPM) Reading

This screen captures data when the user wants to perform a Statistical Predictive Maintenance (SPM) Reading. Capturing data for this module in mp2 aids the process of becoming more statistically controlled in determining when work is required for a given piece of equipment under the surveillance of the SPM module in mp2. The user enters the Equipment #, Measurement, Work Order #, Number Read, Text Read and the Site. For more detail on the SPM module in mp2, please consult the mp2 user documentation set.

The screenshot shows a window titled "SPM Reading" with a status bar indicating "1 of 5". The form contains the following fields and controls:

- Equipment #:** A single-line text input field.
- Measurement:** A single-line text input field.
- Work Order #:** A single-line text input field.
- Number Read:** A single-line text input field.
- Text Read:** A single-line text input field.
- Site:** A single-line text input field.
- Buttons:** A row of buttons at the bottom: "Done", "<<", "X", ">>", and "Cancel".

##### Screen Details:

Equipment #:  
Length - 30  
Measurement:  
Length - 15  
Work Order #:  
Length - 15  
Number Read:  
Floating Point Decimal  
Text Read:  
Length - 30  
Site:  
Length - 15

##### Access 2000

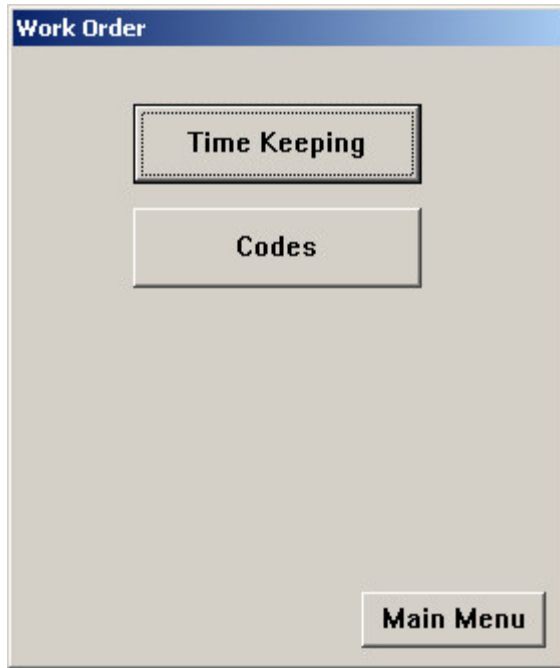
**Site:** Not collected.

##### Oracle/SQL Server

**Site:** Only collected if the program is configured for 'Multiple Sites'.

#### 4.4.7 Work Order

This is the Work Order menu which is used by many to enter Time Keeping (Employee and Vendor) and Work Order Codes (Comments and RFO Codes).



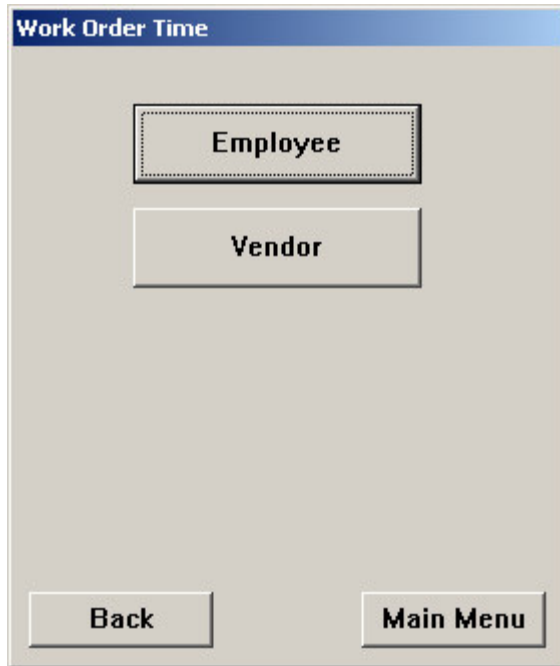
Screen Details:

This form is a menu selection form. To proceed, the user must make a selection.

<i>Button</i>	<i>Function</i>
Time Keeping	This will display the Work Order Time Menu (Section 4.4.7.1)
Codes	This will display the Work Order Codes Menu (Section 4.4.7.2)
Main Menu	This will return the user to the Main Menu (Section 4.4)

#### 4.4.7.1 Work Order Time

This is the Work Order Time menu. This menu permits the user to enter either Employee or Vendor Time for a Work Order.



##### Screen Details:

This form is a menu selection form. To proceed, the user must make a selection. Clicking the Back button will return the user to the Work Order menu.

<i>Button</i>	<i>Function</i>
Employee	This will display the Work Order Time - Employee Screen (Section 4.4.7.1.1)
Vendor	This will display the Work Order Time - Vendor Screen (Section 4.4.7.1.2)
Back	This will return the user back to the Work Order Menu (Section 4.4.7)
Main Menu	This will return the user to the Main Menu (Section 4.4)

#### 4.4.7.1.1 Work Order Time - Employee

This screen captures data when the user wants to enter Employee Time for a Work Order. The user enters the Work Order #, Equip #, Employee #, Date, Duration, OT and Site.

To indicate straight time and overtime, first enter the straight time hours then page forward, >>, to a new screen. All data on the prior screen will remain and enter overtime hours including checking the overtime box.

For Equipment Based Work Orders

**Work Order Time - Employee** 1 of 5

**Work Order #:**

**Equipment #:**

**Employee #:**

**Date:** 8/17/2003 **Duration:** 8:16  OT

**Site:**

Done << X >> Cancel

Screen Details:

Work Order #: Length - 15  
 Equipment #: Length - 30  
 For location based work orders, a '-' will be saved for the Equipment #.  
 WO Location: Length - 30  
 Employee #: Length - 12  
 Date: Standard Date Picker  
 Duration: Hours: Minutes  
 Over Time: Standard Check Box  
 Site: Length - 15  
 Ellipsis: Access to sub-location input.

For Location Based Work Orders

**Work Order Time - Employee** 1 of 5

**Work Order #:**

**WO Location:** ...

**Employee #:**

**Date:** 8/17/2003 **Duration:** 8:17  OT

**Site:**

Done << X >> Cancel

Access 2000

**Site:** Not collected.

Oracle/SQL Server

**Site:** Only collected if the program is configured for 'Multiple Sites'.



#### 4.4.7.1.2 Work Order Time - Vendor

Some work isn't always performed by employees. From time to time, Work may be performed by vendors. To facilitate the documentation of this work, the user enters the Work Order #, Equip #, Vendor ID, Performed By, Rate, Date, Duration, OT and Site. For more detail Work Management in mp2, please consult the mp2 user documentation set.

To indicate straight time and overtime, first enter the straight time hours then page forward, >>, to a new screen. All data on the prior screen will remain and enter overtime hours including checking the overtime box.

For Equipment Based Work Orders

The screenshot shows a software interface titled "Work Order Time - Vendor" with a subtitle "1 of 5". The form contains the following fields and controls:

- Work Order #:** A text input field.
- Equipment #:** A text input field.
- Vendor ID:** A text input field.
- Performed By:** A text input field.
- Rate:** A text input field.
- Date:** A date picker showing "8/17/2003".
- Duration:** A time picker showing "8:42".
- OT:** A checkbox that is currently unchecked.
- Site:** A text input field.
- Navigation:** Buttons for "Done", "<<", "X", ">>", and "Cancel".

For Location Based Work Orders

Screen Details:

Work Order #:  
Length - 15

Equipment #:  
Length - 30  
For location based work orders, a '-' will be saved for the Equipment #.

WO Location:  
Length - 30

Vendor ID:  
Length - 12  
**Note:** this is VendorID%BranchID.  
For example: VEN123%BRCH456

Performed By:  
Length - 11

Rate:  
Floating Point Decimal

Date:  
Standard Date Picker

Duration:  
Hours: Minutes

Over Time:  
Standard Check Box

Site:  
Length - 15

Access 2000

**Site:** Not collected.

Oracle/SQL Server

**Site:** Only collected if the program is configured for 'Multiple Sites'.

**Work Order Time - Vendor** 1 of 5

Work Order #:

WO Location:  
 ...

Vendor ID:      Performed By:      Rate:  
           

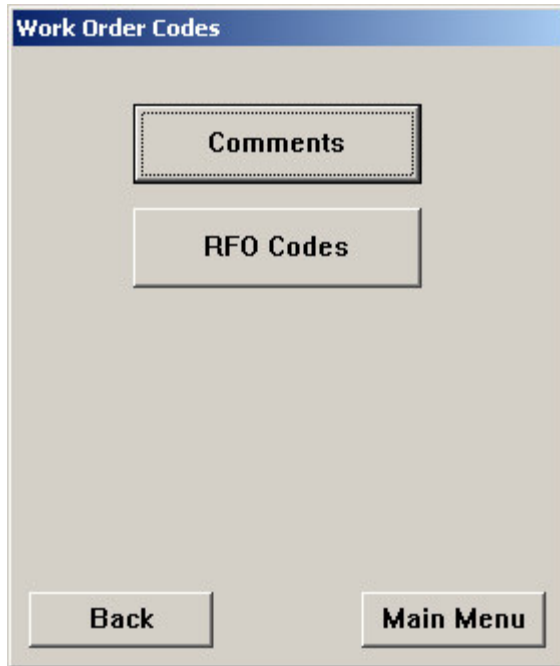
Date:      Duration:  
             OT

Site:

Done    <<    X    >>    Cancel

#### 4.4.7.2 Work Order Codes

This is the Work Order Codes menu. This menu permits the user to enter either Comments or RFO Codes for a given Work Order.



##### Screen Details:

This form is a menu selection form. To proceed, the user must make a selection. Clicking the Back button will return the user to the Work Order menu.

<i>Button</i>	<i>Function</i>
Comments	This will display the Work Order Codes - Comments Screen (Section 4.4.7.2.1)
RFO Codes	This will display the Work Order Codes - RFO Screen (Section 4.4.7.2.2)
Back	This will return the user back to the Work Order Menu (Section 4.4.7)
Main Menu	This will return the user to the Main Menu (Section 4.4)

#### 4.4.7.2.1 Work Order Codes - Comments

This screen captures data when the user wants to enter Comments for a Work Order. The user enters the Work Order #, Equip # (or WO Location), Comment Code and Site.

For Equipment Based Work Orders

Screen Details:

Work Order #:  
Length - 15  
Equipment #:  
Length - 30  
For location based work orders, a '-' will be saved for the Equipment #.  
WO Location:  
Length - 30  
Comment Code:  
Length - 4  
Site:  
Length - 15

Access 2000

**Site:** Not collected.

Oracle/SQL Server

**Site:** Only collected if the program is configured for 'Multiple Sites'.

For Location Based Work Orders

#### 4.4.7.2.2 Work Order Codes – Reason For Outage (RFO)

This screen captures data when the user wants to enter Reason For Outage (RFO) Codes for a given Work Order. The user enters the Work Order #, Equip #, RFO Code and Site.

Work Order Codes - RFO 1 of 5

Work Order #:

Equipment #:

RFO Code:

Site:

Done << X >> Cancel

##### Screen Details:

Work Order #:

Length - 15

Equipment #:

Length - 30

RFO Code:

Length - 8

Site:

Length - 15

##### Access 2000

**Site:** Not collected.

##### Oracle/SQL Server

**Site:** Only collected if the program is configured for 'Multiple Sites'.

#### 4.4.8 Utilities

This is the Utilities menu. This menu permits the user to Change Login, change the System Date, go to the Setup menu or change the Data Connection information.



##### Screen Details:

This form is a menu selection form. To proceed, the user must make a selection. Clicking Done returns the user to the Main Menu.

<i>Button</i>	<i>Function</i>
Change Login	This will display the Change Login Screen (Section 4.4.8.1)
Setup	This will display the Setup Menu (Section 3.1.5.1)
System Date	This will display the System Date Screen (Section 4.4.8.1)
Data Connection	This will display the Data Connection Screen (Section 3.1.4.1)
Done	This will return the user to the Main Menu (Section 4.4)

#### 4.4.8.1 Change Login

This screen captures the User ID and Password for the user to be able to change their login. The user enters their User ID and new Password and then presses OK to perform the update.



#### Screen Details:

User ID:  
Length - 12

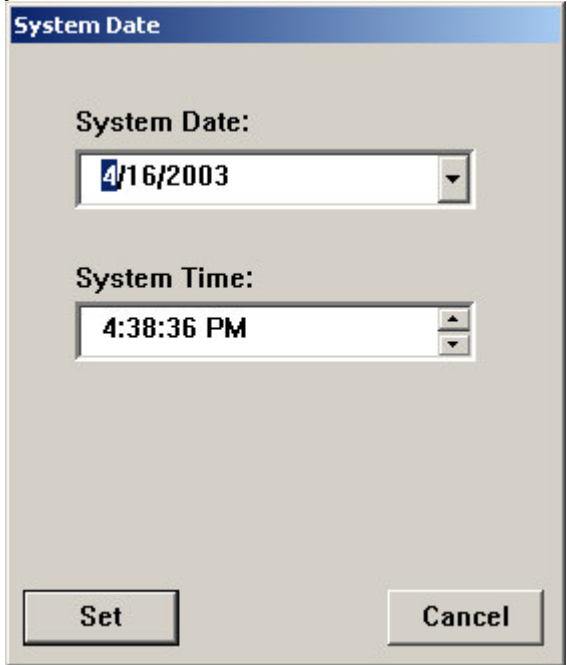
Password:  
Length - 10

To change the User you're logged in as, enter the appropriate **User ID** and **Password** and press the OK button.

<i>Button</i>	<i>Function</i>
OK	Change the user that your logged in as and return the user to the Utilities Menu (Section 4.4.8)
Cancel	This will cancel any changes and return the user to the Utilities Menu (Section 4.4.8)

#### 4.4.8.1 System Date/Time

The date and time on the handheld will be synchronized with that on mp2 Barcoding Plus server machine each and every time a 'Synchronize' occurs. However, users with proper authorization have the ability to manually change these settings for current data collection. As stated above, even if manually adjusted by the user, this time will be changed to that of the mp2 Mobile Products Server clock the very next data synchronization.

	<p><u>Screen Details:</u></p> <p>System Date: Standard Date Picker</p> <p>System Time: Standard Time Picker</p>
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<i>Button</i>	<i>Function</i>
Set	This will set the System Data and Time and return the user to the Utilities Menu (Section 4.3.8)
Cancel	This will cancel any changes and return the user to the Utilities Menu (Section 4.3.8)



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## 5.0 Revision History

Date	Version	Description
12/31/2003	1.0	Initial Version
01/02/04	1.1	Suggested Changes/Review
01/05/04	1.2	Added descriptions for each of the screens.
01/12/2004	1.3	KEP → Added additional comments per the request of Blue Dot Solutions
02/11/04	1.4	Finalization by Blue Dot Solutions, Inc.
5/1/08`	3.0	Documentation update.