

MobileTrak Lite for BlackBerry



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Introduction

MobileTrak[®] Lite is a demonstration application designed to run on mobile devices, such as a BlackBerry[™], a device running the Windows Mobile operating system, or on a PC running Windows XP. MobileTrak Lite is designed to connect to an RF Code Mobile Reader through a *Bluetooth* connection. The *Bluetooth* connection allows MobileTrak Lite to receive tag information acquired from the Mobile Reader allowing the application user to locate specific assets or inventory assets which have been “tagged” with an RF Code active tag.

MobileTrak Lite has several configuration options for searching and inventory tracking. The user has the ability to search for asset(s), set specific ranges to search within, and email or export asset information to a host computer in XML format. The Application Loader program provided with the BlackBerry Desktop Software Application 4.2.2 or Microsoft[®] ActiveSync[™] can be used to upload MobileTrak Lite to the appropriate portable device.

The M220 Mobile Reader can be connected to your portable device or PC via a *Bluetooth* connection. The mobile reader and portable device allow you to search for assets in any location. The reader collects asset tag data and MobileTrak Lite running on your portable device interprets and displays asset tag information.

Requirements

MobileTrak Lite supports the following:

- BlackBerry OS 4.1 and higher
- BlackBerry support for 71xx, 72xx, 75xx, 77xx, 81xx, 87xx, 88xx.

Features

Some of the features included with the MobileTrak Lite are:

- Graphically displays signal strength to reveal the proximity of the asset tag
- Audible indicator when tag is found
- Import XML Configuration File consisting of Tag IDs and Group Codes
- Export information gathered from Tag search into XML File
- Motion, Tamper, Panic, and Low Battery icon indicators for each tag
- Capable of searching up to 25 tags
- Ability to set the mobile reader search range to one of 8 preset modes
- Ability to search for a specific asset tag by manually inputting TagID and Group Code

Installation

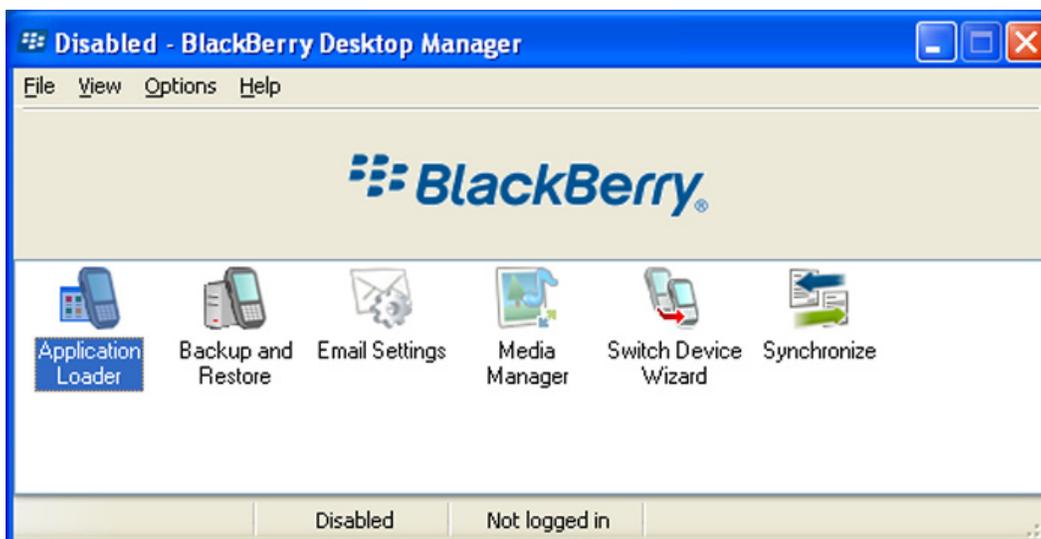
Installing MobileTrak Lite on a BlackBerry is accomplished through the BlackBerry Desktop Manager. The Desktop Manager can be found on the CD provided with your BlackBerry or it can be downloaded from the BlackBerry web site.

Once the Desktop Manager is installed, the Application Loader is used for installing new applications onto your BlackBerry.

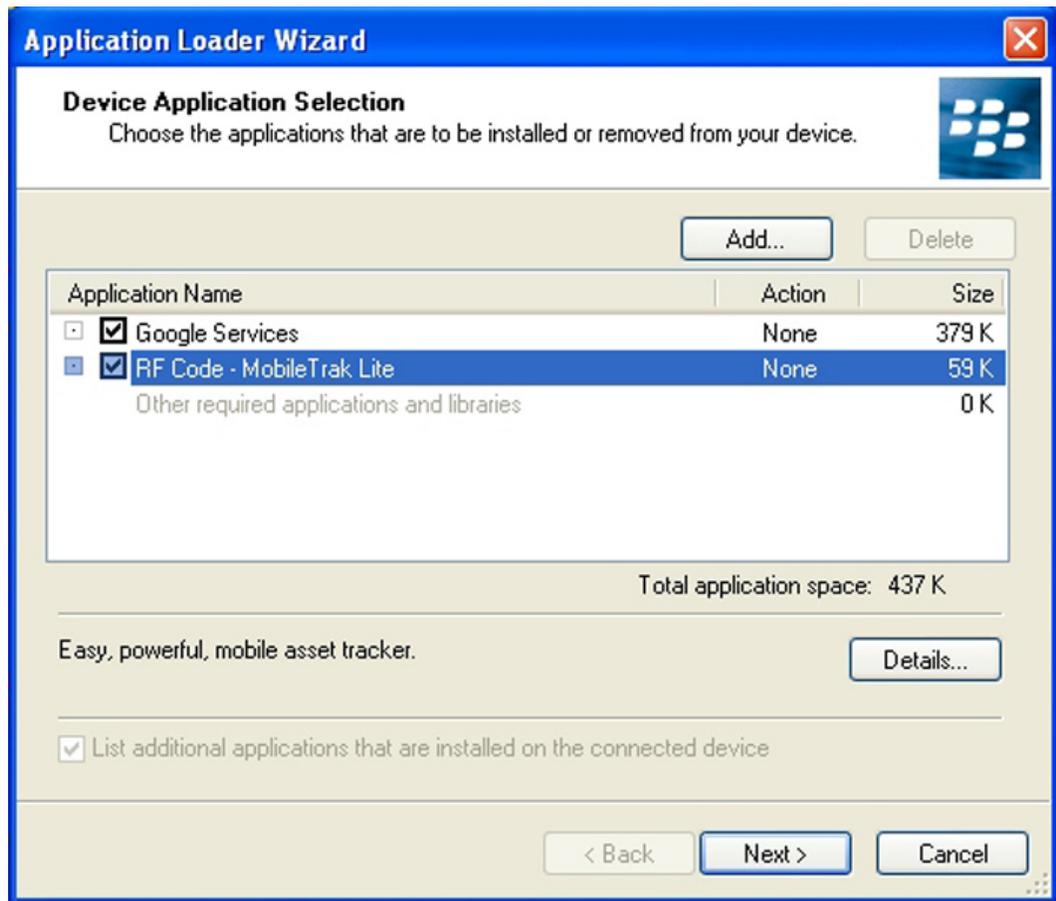
For a BlackBerry, the Application Loader is a wizard that allows you to update or add/remove applications on your BlackBerry. To learn how to use this wizard, see “How to...Run the Application Loader” on your BlackBerry.

To run the Application Loader, follow these steps:

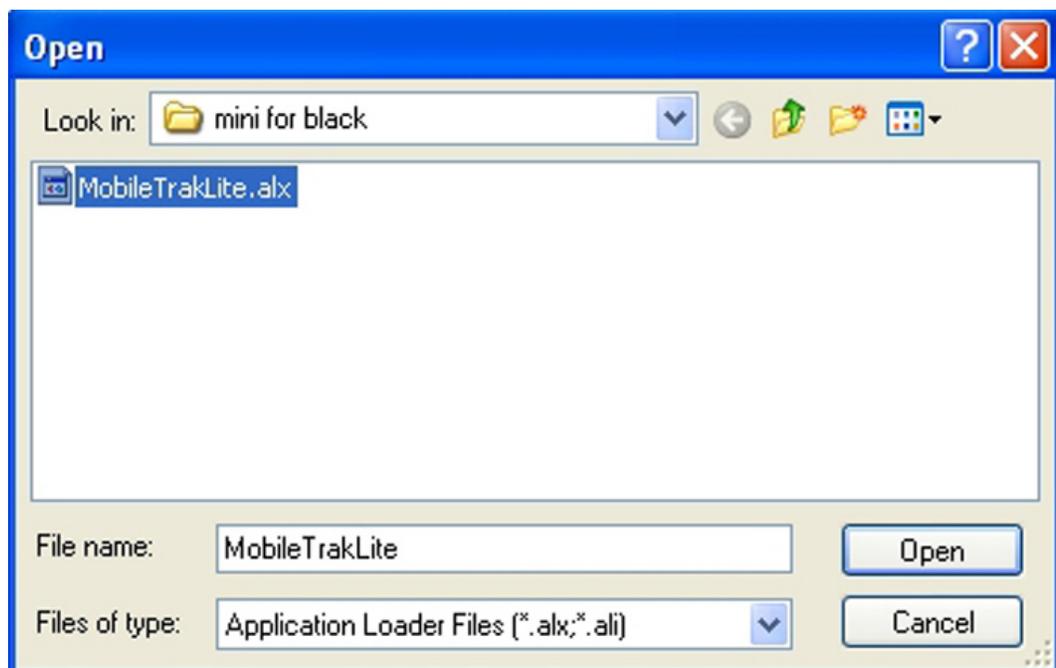
1. On your PC, open the Desktop Manager and double-click the Application Loader icon.



2. Make sure your BlackBerry is connected to the PC and click **Next** to continue. The wizard initializes the BlackBerry and reads current information.
3. In the next window, you see the applications that are currently loaded or available for loading. Click the check box next to each item to install, and remove the check beside any item you want removed from the BlackBerry.



4. If the MobileTrak Lite application is not listed, select the **Add...** button.



5. Browse to and select the MobileTrak Lite application loader file (.alx) and click **Open**.



Note Ensure that the MobileTrak Lite application file (.cod) is located in the same folder as the application loader file (.alx).

6. Once your list is complete, click **Next** in the Application Loader Wizard.



Any application not selected will be deleted from the BlackBerry if they are currently present on the handheld.

7. The next window presents you with two check box options.

- a. The first option enables you to erase any application data from the handheld. This feature is helpful if you want to delete old data before performing an upgrade. By default, this option is not selected.
- b. The second option erases all applications from the BlackBerry before loading the new applications. This option can help you in the recovery of a failed installation, but is not typically something you should enable. Make selections and click Next.

8. A summary window appears. Review your settings and click **Finish**. The transfer occurs, and once it is complete, the BlackBerry system reinitializes.



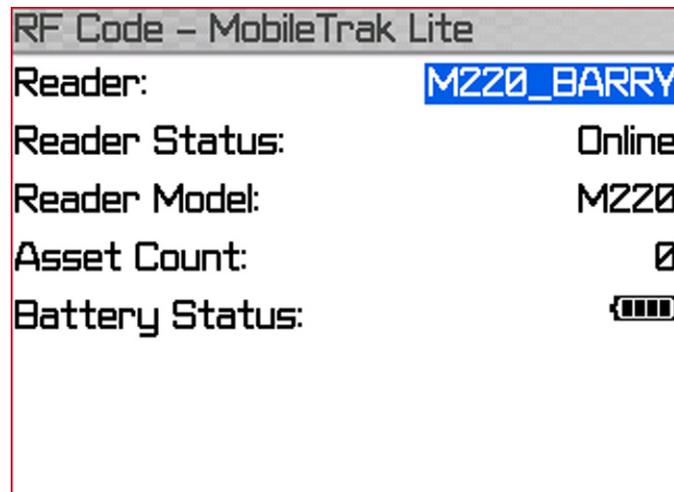
If you want to remove an application from your BlackBerry, launch the Application Loader again, remove the check beside the application that you want to remove, and complete the wizard instructions.

Introduction

After installing MobileTrak Lite, an RF Code icon will appear on your portable device. Below is the application installed on a BlackBerry.



Select and open the MobileTrak Lite application. The initial screen is shown in below.



Menu Commands

The MobileTrak Lite consists of the following menu commands:

- Import Configuration
- Track Assets
- Inventory Assets
- Export Tags
- Input Setup
- Noise Level

Import Configuration

To import a configuration a support form is available to assist you. This page can be accessed at the following URL:

<http://www.rfcode.com/mtlcfg>



The above image shows the location of the Group Code, Tag ID and Treatment Code that is needed for the creation of the XML configuration.

Once you have completed this form, you can email it to your device that is running the MobileTrak Lite application. This can also be performed by manually creating the XML files mentioned below.

If you are using a BlackBerry, the emailed configuration file will be imported automatically. To perform the import manually, select the Import Configuration command to import an XML file containing a list of asset tags to search. The XML file consists of information such as TagIDs, related group codes, and Zones that is interpreted by the MobileTrak Lite software to determine which asset tags to search.

The Import Configuration command searches your handheld device's email for subject lines that contain the text **RFCode-assets:** and that only contains XML formatted data in the body of the message. Contents of an XML configuration file must be copied and pasted into the body of the message and emailed to your BlackBerry.

For example, the subject could contain the text **RFCode-assets: Shiner Tags.** Contents of an example XML file provided in an email message body looks similar to the following:

```
<mobiletrak version="1.0">
  <assets>
    <asset name="Gas Tank" desc="Generic Gas Tank">
      <tag id="00000059" taggroupid="MTGPLV"/>
    </asset>
    <asset name="Laptop 1" desc="Generic Laptop">
      <tag id="00000001" taggroupid="RFCLOC"/>
    </asset>
    <asset name="Laptop 2" desc="Generic Laptop">
      <tag id="00000002" taggroupid="RFCLOC"/>
    </asset>
    <asset name="Laptop 3" desc="Generic Laptop">
      <tag id="00000003" taggroupid="RFCLOC"/>
    </asset>
    <asset name="Laptop 4" desc="Generic Laptop">
      <tag id="00000004" taggroupid="RFCLOC"/>
    </asset>
    <asset name="Laptop 5" desc="Generic Laptop">
      <tag id="00000005" taggroupid="RFCLOC"/>
    <asset name="Freezer 2" desc="Generic Freezer">
      <tag id="00000098" taggroupid="HUMRCK"/>
    </asset>
    <asset name="Freezer" desc="Generic Freezer">
      <tag id="00000018" taggroupid="TMPRCK"/>
    </asset>
    <asset name="Smoke Alarm" desc="Generic Smoke Alarm">
      <tag id="00000034" taggroupid="RFCDRY"/>
    </asset>
    <asset name="Door" desc="East Entrance">
      <tag id="00000104" taggroupid="RFCDOR"/>
    </asset>
  </assets>
</mobiletrak>
```

```

<zones>
  <zone id="064" name="Engineering" roomlocatorid="064"/>
  <zone id="002" name="Finance" roomlocatorid="101"/>
</zones>
<taggroups readerfamily="M">
  <taggroup id="MTGPLV" treatcode="04E" family="RFCode"/>
  <taggroup id="HUMRCK" treatcode="04F" family="RFCode"/>
  <taggroup id="RCKDRY" treatcode="04I" family="RFCode"/>
  <taggroup id="TMPRCK" treatcode="04D" family="RFCode"/>
  <taggroup id="RCKDOR" treatcode="04C" family="RFCode"/>
  <taggroup id="RCKLOC" treatcode="04A" family="RFCode"/>
</taggroups>
</mobiletrak>

```



Only XML tags should be provided in the email message. Do not include a signature or other text in the message.



It is very important to insert the correct Tag Group IDs and Treatment Codes in this configuration file.

All RF Code tags are defined as being members of a specific group, and have a unique tag ID number within that group. When an RF Code reader is configured, it can be supplied with up to 8 group code IDs and a corresponding treatment code for each group code. The treatment code instructs the reader how to interpret the payload data for each tag event within that group code. RF Code tags are smart and have the ability to transmit various types of data within its radio frequency beacon such as indicators for motion, panic, tamper, infrared location, and low battery.

The following is a list of RF Code Group Codes and their corresponding tag Treatment Codes. Most RF Code tags utilize Treatment Code 02 or 04.

Treatment Code 02:

- TRTTWO
- INTJDS
- RCFMII

Treatment Code 04:

- RCKLOC
- AHSAAA
- RCKSEC
- LOCATE
- RCKBDG
- TMPRCK
- RCKDAA
- IMHERE
- RCKRCK
- HUMRCK
- RCKDRY
- MTGPLV
- RCKDOR

The list above is a compilation of the most current codes at the time of publication, however, a support page with the most updated list of group/treatment codes is available to help you determine your specific Group Code and Treatment Code:

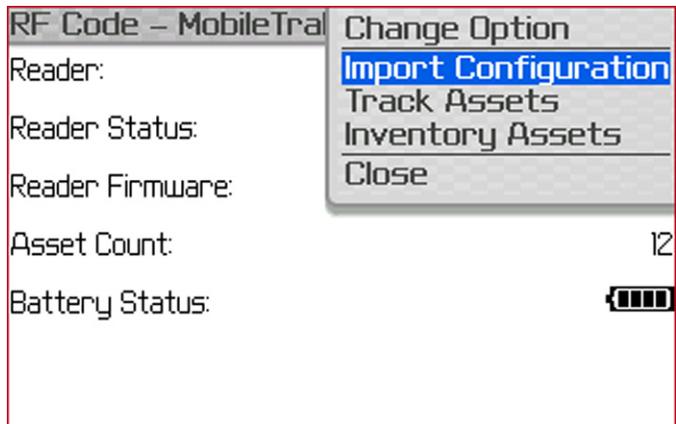
<http://www.rfcode.com/codes>

Contact RF Code support if you have questions about the usage of group codes and treatment codes.

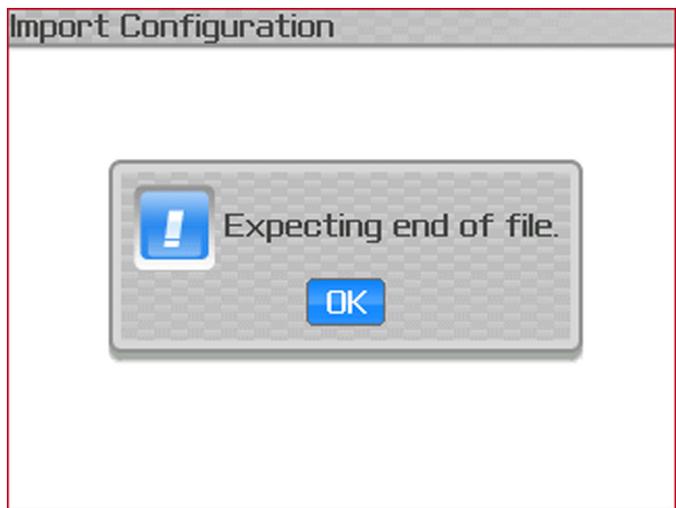
512.439.2200 (main), 877.969.2828 (toll-free), support@rfcode.com, or <http://www.rfcode.com/support>

To import a configuration:

1. Click the BlackBerry's scroll wheel to display the menu and choose Import Configuration.



2. If MobileTrak Lite detects a corrupt XML file (possibly containing additional text or improperly closed tags) in your email, the following dialog will appear.



3. Email messages containing properly formatted XML content will appear in a list of configurations with the name you provide after **RFCode-assets:**



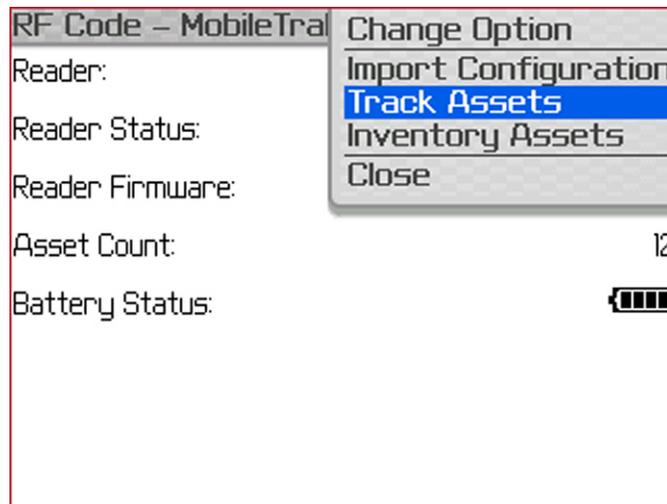
4. Select a configuration of tags to search for from the list.
5. Display the menu options.
6. Choose Change Option to enable the selected configuration.



7. Choose Save to accept changes.
8. Choose Close to go back to previous screen.

Track Assets

To track asset tags that are defined in the XML configuration, select Track Assets from the menu options.



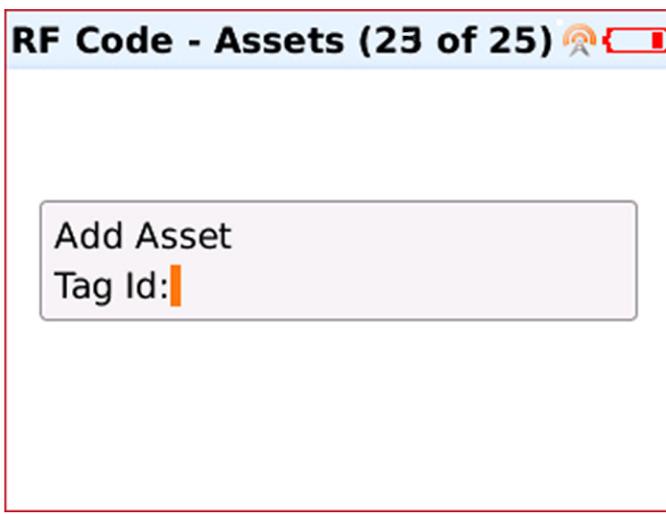
Each found tag is identified by its TagID and a signal strength indicator that visually denotes the proximity of the tag. Stronger signals indicate the tag is closer to you and a weak signal means the tag is farther away.



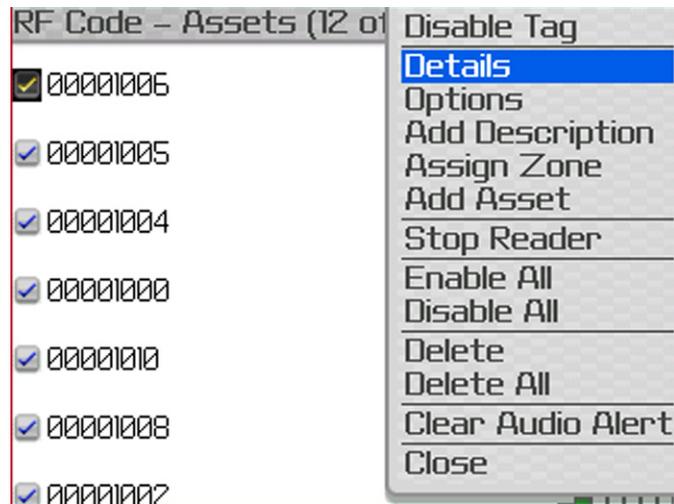
Various state indicator icons may appear with an asset tag. Icons are defined as:

-  Motion icon indicates that asset is moving or being relocated.
-  Tamper icon indicates that tag has been removed from asset.
-  Panic icon indicates that panic button has been activated on tag.
-  Low battery icon indicates that the tag's battery is low and should be replaced.
-  Dry contact icons indicate the current dry contact tag sensor is either open or closed.
-  Sensor low battery icon indicates that tag's sensor battery is low and should be replaced.

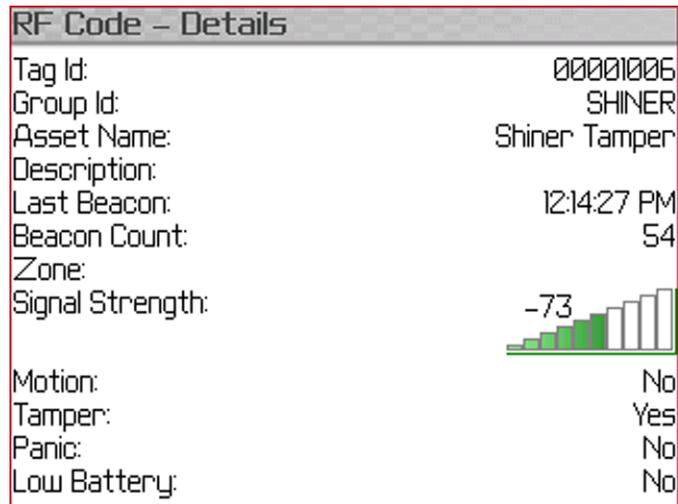
Tags can be added if the reader is tracking less than 25 tags by selecting Add Asset from the Track Assets menu and adding the Tag ID for the asset.



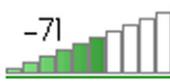
You can select an asset tag in the list and click the selection button to display a menu of options; as shown below.



Choose Details to display more information for a selected tag.



Additional options are available for each tag. Display the menu to add a description or assign a zone to a tag.

RF Code - Details	
Tag Id:	
Group Id:	
Asset Name:	
Description:	
Last Beacon:	12:15:03 PM
Beacon Count:	71
Zone:	
Signal Strength:	-71 
Motion:	No
Tamper:	Yes
Panic:	No
Low Battery:	No

Add Description

Assign Zone

Close

In the Tag menu, select Options to display additional global options that apply to all tags. Select an option and display the menu associated with each option to change the setting. For example, display the Range Setting menu to select a tag detection range between 1 (minimum) to 8 (maximum).

RF Code - Options	
Range Setting:	8
Sound:	On Beacon
Vibrate:	Off
Label	Asset Name
Sort By:	None
Show Zone:	On
Bar Color:	Green
Temperature:	Celcius
Pressure:	psi

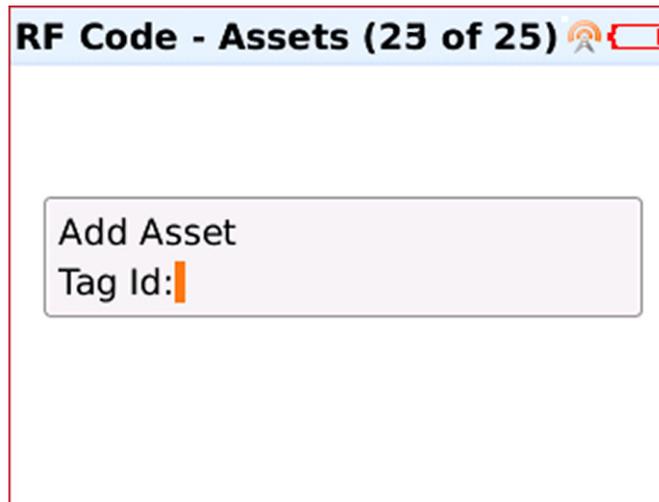
Inventory Assets

Using the inventory mode, MobileTrak Lite is put into a discovery mode where information is displayed for the first 25 tags the RF Code Mobile reader discovers. This is useful when you do not know in advance what tags are located in a specific area.

Select the Inventory Assets command to begin searching for the first 25 tags. A list of existing inventory is then displayed on your portable device, as shown in below. When inventorying assets you can choose to delete a tag. This will reduce the number of tags discovered by one allowing the application to discover new tags in inventory mode. Deleted tags are not rediscovered unless the application is restarted.

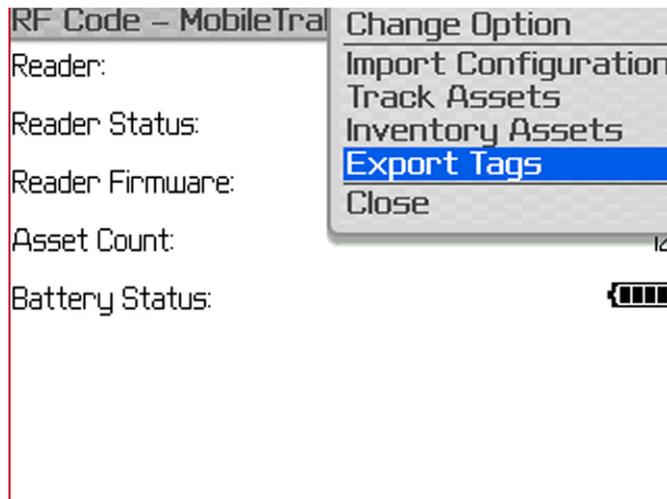


Tags can be added if the reader discovers less than 25 tags by selecting Add Asset from the Inventory Assets menu and adding the Tag ID for the asset.



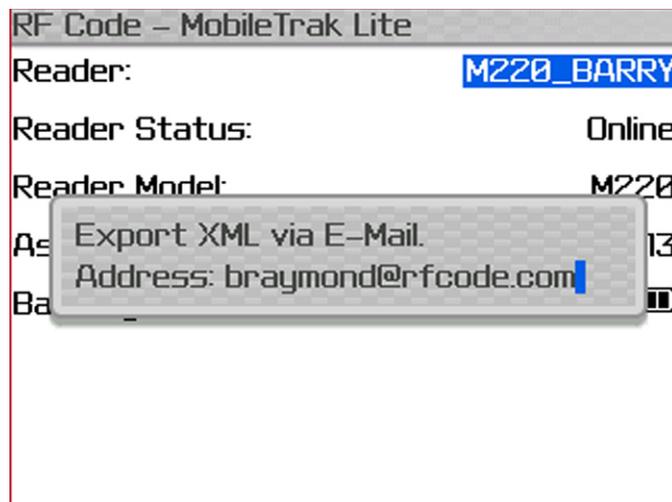
Export Tags

After tags are located and data is gathered, the Export Tags command will appear in the main menu; as shown in below.



Select the Export Tags command to export the found tag data to an XML file. An email prompt will appear. Enter email address that will receive XML formatted data.

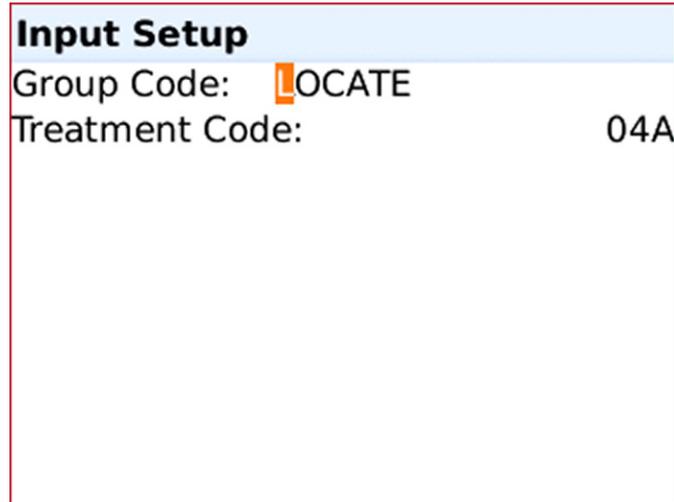
The export data includes found and not found tag data. Exporting gathers search results from the mobile device. When "Track Assets" is used to search for tags, the export command will include results for all assets defined in the configuration regardless if the reader received a beacon from a specified tag. In inventory mode, the results will only be from tags detected by the reader.



TIP You can use the new found inventory as a new configuration to import to your portable device.

Input Setup

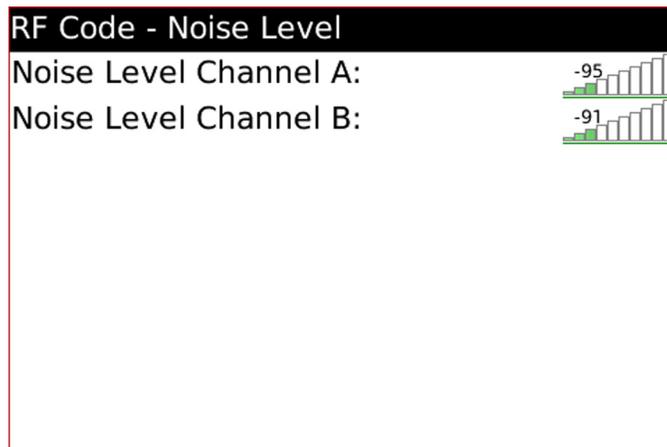
This feature provides the user with the ability to enter a Group Code and Treatment Code to discover tags with. It can be accessed by selecting the Input Setup option on the main menu screen.



The screenshot shows a screen titled "Input Setup" with a light blue header. Below the header, there are two input fields. The first field is labeled "Group Code:" and contains the text "LOCATE". The second field is labeled "Treatment Code:" and contains the text "04A".

Noise Floor Level

This feature indicates the noise level present within the immediate vicinity of the M220 Mobile Reader that the user has connected to. This feature can be accessed by selecting the Noise Floor Level option on the main menu screen.



Limited Standard Warranty Terms

RF Code warrants its products to be free from defects in materials and workmanship for a period of 1 year (12 months) for hardware and software from the date of purchase from RF Code. Its obligation under this warranty is limited to repairing or replacing, at its own sole option, any such defective products. This warranty does not apply to equipment that has been damaged by accident, negligence, or misapplication or has been altered or modified in any way. This warranty applies only to the original purchaser (end-user) and is not transferable.

Standard Warranty Limitations

Except as provided herein, the entire liability of RF Code and its suppliers under this limited warranty will be that RF Code will use reasonable efforts to repair or replace, without charge, all defective Products returned to RF Code by Customer, all as more particularly described in the End User Warranty. Except for the express warranties STATED HEREIN, RF Code makes no other representations or warranties and RF Code hereby disclaims, all other warranties, express, implied, statutory, or otherwise, including without limitation, any warranty of merchantability, non-infringement of third party intellectual property rights, fitness for a particular purpose, performance, satisfactory quality, or arising from a course of dealing, usage or trade practice.

Obtaining Service & Support

For in-warranty service, customers have several options. Customers having difficulty with RF Code products should attempt to solve those problems through RF Code's Technical Support Problem Escalation Process:

First, contact the RF Code representative or other distributor from whom the RF Code product was purchased for information on how to obtain local support.

Second, contact the RF Code Customer Support via e-mail.

Third, contact the RF Code Customer Support via the Support Line.

For product returns, the support engineer will give you a return material authorization (RMA) number. No returns will be accepted without an RMA number. If the warranty expired, there is a charge for repair or replacement per RF Code's out-of-warranty policy. For full details of the RF Code RMA policy, please review the "RF Code Warranty, RMA, and Extended Warranty Policy" document.

RF Code Customer Support

RF Code Customer Support gives entitled customers and partners the ability to contact RF Code about installation and usage-related questions as well as make defect inquiries about eligible products that are covered under RF Code warranty agreements. A team of technical specialists can be contacted electronically or via phone.

The Support Line is available to provide General Support during normal business hours: Monday through Friday, 8:00am to 5:00pm Central time, excluding national holidays.

E-mail: support@rfcode.com

Support form: <http://www.rfcode.com>

Voice: 512.439.2244 or toll-free at 866.830.4578