

RF Tags SA

— *RFID* —

ASSETtraK – Hand held Reader



Turning the Reader On / Off

The ASSETtrak™ hand held reader has a red (on most versions) power button in the bottom left corner. Depress the button for a second or two to turn it on. Similarly, depress the button for a second or two when it is already on to turn it off.



Power switch position



Reader is ON

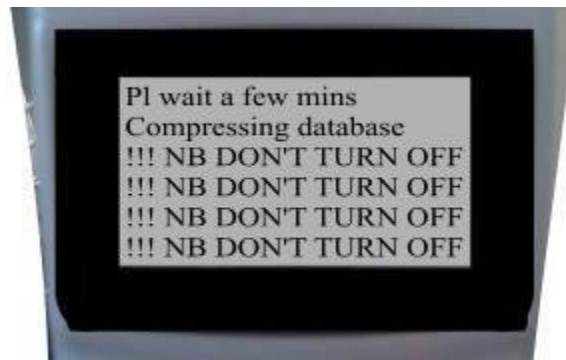


Reader is OFF

In some cases you may find that the reader does not immediately respond when you are trying to turn it off. In this case, keep the button depressed for a longer time, typically about 30 seconds.

If the battery life is less than 25%, the reader will warn you on the screen and then it will automatically shut down.

During start up, the hand held reader will first do any data management that is needed before presenting you with the start up screen. There will be a message on the screen indicating what it's busy with, as well as some form of status counter indicating the progress of the process.



Every 15 cycles (turning the reader on and off), the hand held reader will compact the database. This process takes about 1 minute, and, as the prompt on the screen says, do not turn the reader off during this process.

Entering Text Using the Keypad

Certain functionality requires you to enter text and / or numeric data using the keypad, for instance when you are logging in.

The screen will display alphabetic characters on the first line and numeric and special characters on the next line. There will be a short line under the character 'A', meaning that the next character to use is the 'A'. To move to a different character, use the left and right arrows, and to move between numeric and alphabetic characters, use the up and down arrows.

When you are on the character you would like to use, press the trigger button to select it. As you make your selections, the text will be displayed on the last line of the screen so that you can see what you are 'typing'.



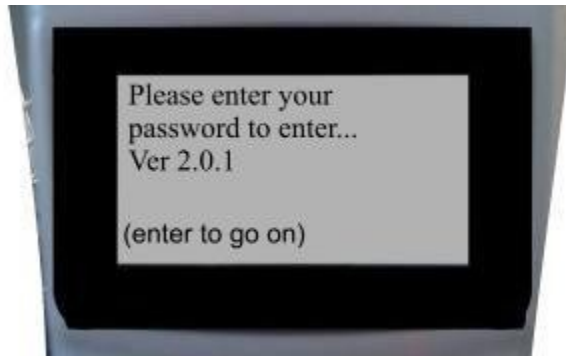
If you have made a mistake and need to delete a character, use the down arrow to go down to the text that you have typed in. The cursor will change to a arrow type cursor. Pressing the trigger button now will remove one character from the end of your text. You can remove multiple characters by pressing the trigger button multiple times.



When you are done, press enter to submit your input.

Logging In

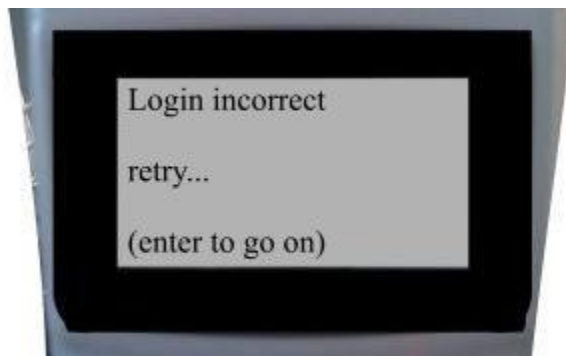
When the system has started, and all start up tasks are complete, you will need to log in to continue.



The log in screen presents you with the version number of the software inside the hand held reader.

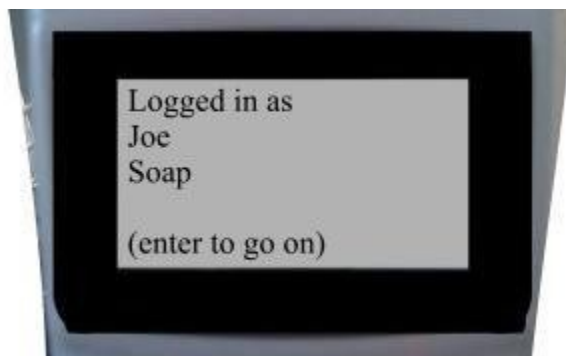
To enter your password, follow the on screen prompt, that is, press the enter button to continue. Once you press enter you will be taken to the text input screen as described above (see "Entering Text Using the Keypad").

Enter your password and press enter to validate. If you entered your password incorrectly you will be prompted to re-enter your password.



Press enter to continue. It will now take you back to the login screen.

If you entered your password correctly you will see a message telling you that you are logged in, and who you are logged in as. As before, press enter to continue to the main menu.



If this is the first time this reader is being used, it will not have any user created passwords. In this case, you need to use the default password which is "RFTAGS", without the quotes. This password will be deleted once your user created passwords have been downloaded during the next sync.

Main Menu

The main menu presents you with the following options:

- 1) Verification
- 2) Tag Assignment
- 3) Setup



To select between menu options, use the up and down arrows. As you move between items, the asterix (*) to the left will indicate which menu item will be selected when you press the enter key.

Press the enter key to make the selection.

Verification

In both the “Verification” and “Tag Assignment” modes, you will be presented with the option of either continuing in that mode (the first item in the sub menu), or syncing the reader with the PC. As the syncing is identical for both modes, it will be discussed separately under the heading “Syncing with the PC”



Asset verification is the mode used to verify or audit assets that are already tagged and captured in the hand held reader. If you have a new system and need to assign and capture tags, then read the section below labeled “Tag Assignment”.



Once verification mode starts up you will have several prompts on the screen.

a) “Trigger to start Read”. Pressing the trigger will start the RF reader and will look for tags that are within range.

b) "Press > for barcodes". By default, the verification mode starts reading RF Tags. To change to reading barcodes, press the right (>) key. When you now press the trigger you will see the barcode's laser scanner being activated. The message will also change to "Press > for RFID tags" so that you can change back to the RF reader.

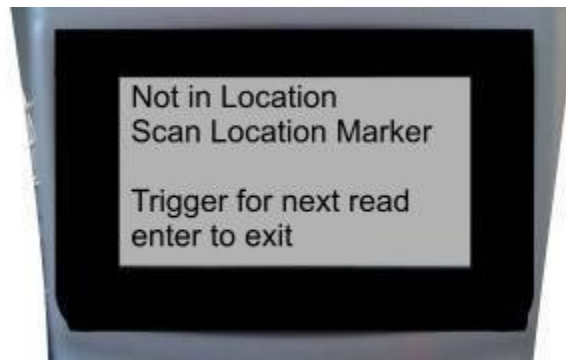
c) "Enter to exit". Pressing the enter key will exit the verification process and will give you the option of syncing with the PC.

Reading a Tag

In verification mode, you have to FIRST enter a location before you can start reading asset tags. This makes logical sense as the system cannot verify that an asset is in a correct, or incorrect location if you have not scanned a location marker first.

If you attempt to scan an asset tag without being in a location (ie, without having scanned a location marker), then system will beep twice and warn you on the screen that you need to first enter a location.

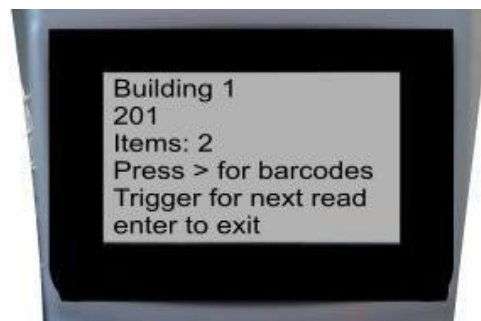
It is possible to scan multiple tags in verification mode simultaneously. However, if you scan multiple tags and one or more of them are unassigned, then the reader will stop and warn you to read one tag at a time to single out the unassigned tag.



Entering a Location

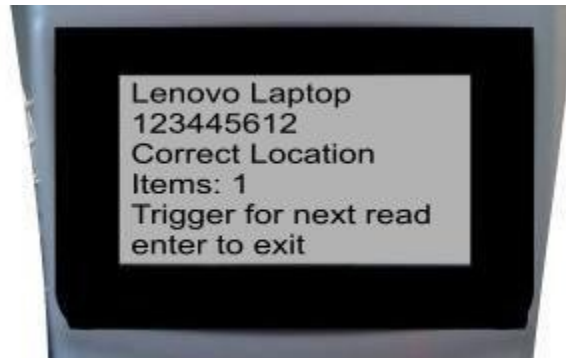
When you scan a location tag, the hand held reader will display on its screen which location you are in, and how many assets are in that location.

In the image below, we have entered a building identified as Building 1. On the next line we see the room name (number), ie, 201. The third line tells us that there are 2 items in this location.



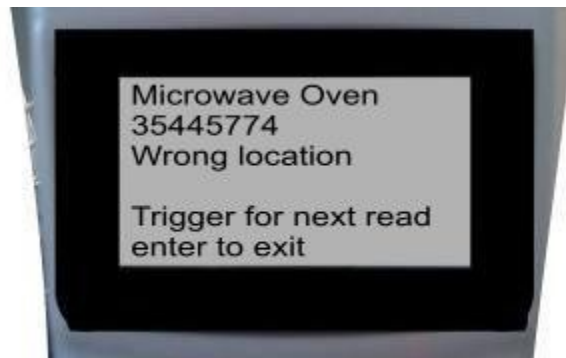
Scanning an asset tag which is in the correct location

Once you have entered a location (scanned a location marker) and you start scanning asset tags, they will count down the items line if the asset is in the correct location. In other words, by scanning the first tag in this location, the display will show the name of the asset scanned (“Lenovo Laptop”), the assets code from the client database (“123445612”) and the number of assets left to scan in this location.



Scanning an asset tag which is in the incorrect location

If you scan an asset tag in your current location which does not belong in that location, the hand held reader will notify you of the problem by beeping twice and the display will inform you that the asset is in the wrong location. The actual reports will be discussed in the section below labeled “Verification Reports”.



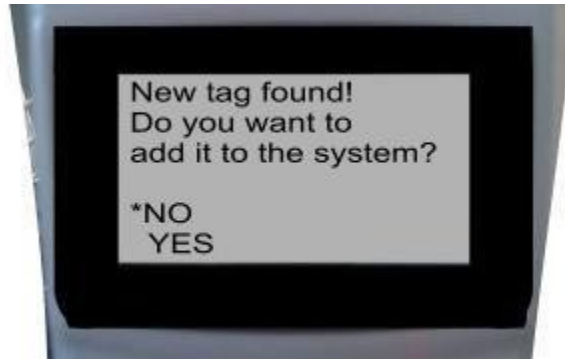
Enter to exit

Pressing enter (to exit) will leave verification mode and the reader will ask you if you would like to sync with the PC. If you select “NO”, it will go back into the verification screen. If you select yes, it will start syncing with the PC as explained under the section “Syncing with the PC” below.

Finding New Tags

It may be that during your verification process you need to assign tags. For instance, you may have skipped over an asset (locked location, etc) during the tag assignment process.

If you scan a tag which is not in the system, the hand held reader will notify you that it has found a new tag and will ask you if you would like to assign the tag now.

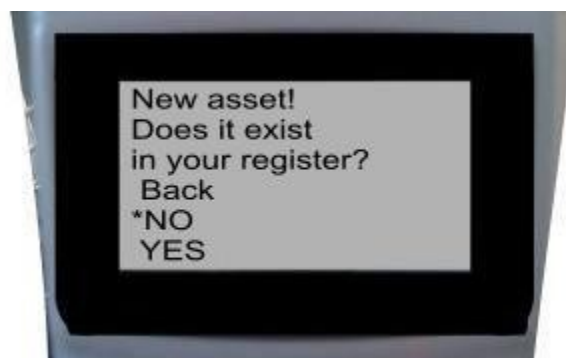


If you select "NO", it will ignore this tag. If you select "YES", it will proceed to add the new tag. The process for adding or assigning a tag is quite different in verification mode than it is in assignment mode.



After having selected "YES", the next menu asks you whether this tag is for an asset or a location (marker). Select the correct option and press enter.

If, for example, we select "Asset", ie, this is an asset tag, it then asks if this asset exists in your register, in other words was this asset recorded in your master database which was imported to the ASSETtraK system via the excel import?



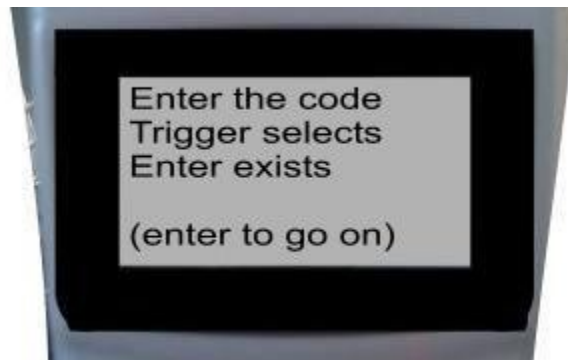
You have 3 options here:

Back: selecting “Back” will take you back to the “New tag found!” menu, which will ask you again if you want to add it to the system. The purpose of the back function is, for instance if you do not have the detail of this new asset with you and you need to exit the assignment menus, or, if you accidentally selected that it is a location marker when it is in fact an asset tag, or vice versa.

NO: Selecting “NO” will ignore this tag and you can continue scanning other tags.

YES: Selecting “YES” will start the process of manually assigning this tag to the system as follows:

In Verification mode, you need to manually enter the code (asset's unique code from your master database) using the keypad.



As per the image above, the hand held reader will prompt you to enter the code. The instructions on the screen are:

“Trigger selects”. This means that when you move the cursor onto the desired letter, number or character and press the trigger button, the character you selected will be added to the text at the bottom of the screen (See the section above “Entering Text Using the Keypad”).

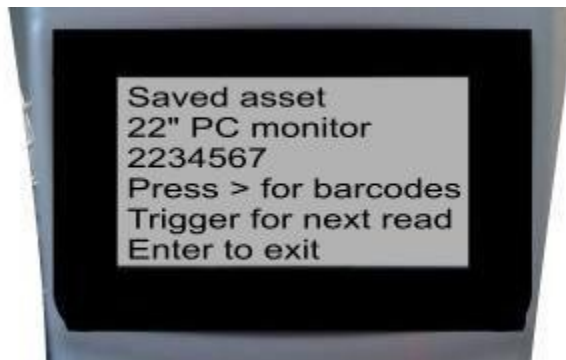
“Enter exists”. When you press the enter key, the text input mode exists and the text you typed in will be used.

“(enter to go on)”. There are various prompts that use this message. It simply means that the program is waiting for you to press enter to continue execution. This guarantees that messages will be seen by the operator.

Once you have pressed enter, you will be taken to the text input screen. Enter the asset code of the asset, as found in your master asset database.

Once you have entered your code, there may be one of three results:

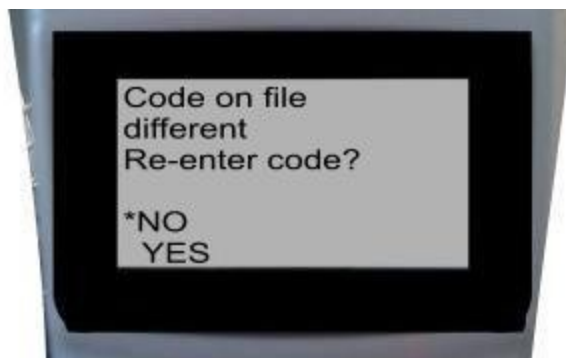
a) “Saved asset”. The code was successfully saved. That is, the scanned tag was successfully assigned to this asset.



On the saved asset screen, you will see the description of the asset, as well as the asset's code from your master database.

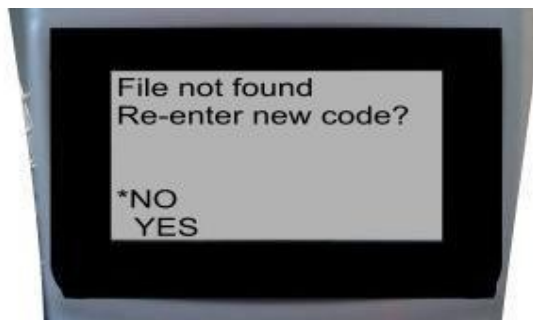
The other three messages have already been discussed, that is, Pressing the > key enables the barcode reader. Simply pressing the trigger button reads the next tags, and pressing enter will exist the verification mode and ask you if you would like to sync with the PC.

b) "Code on file different". The code (asset's code) is already saved on the system and assigned to a different tag.



You can select "YES" if you want to re-enter a different asset code, or "NO" if you would like to go back to the "New item found" menu where you can select whether you want to add this tag to the system.

c) "File not found". This code was not found on the hand held reader at all.



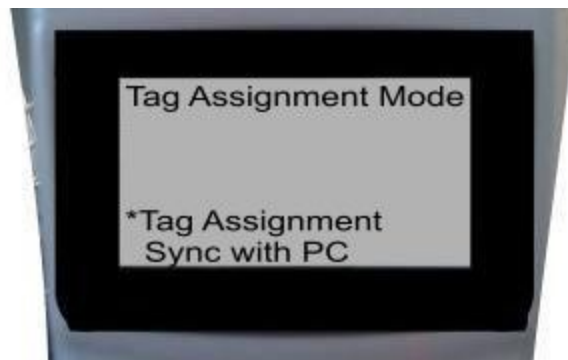
If you are sure it is on the system, then sync the hand held reader with the PC. Select "YES" if you believe you made a mistake and would like to re-enter the code, and select "NO" if you would like to go back to the original "New item found" menu.

Tag Assignment

Tag assignment mode is used to assign tags to assets and locations. In tag assignment mode, you need to print barcode labels using the RF Tags ASSETtraK PC software (see “**File Menu**” on page 3 of “Software_Manual.pdf”).

When you scan a tag which needs to be assigned in this mode, the hand held reader will then prompt you to scan the barcode of the location or asset.

Selecting “Tag Assignment” from the main menu enters you into the Tag Assignment sub menu.



To enter tag assignment mode, select “Tag Assignment” from the sub menu, or select “Sync with PC” to sync the hand held reader with the PC.



In tag assignment mode, you have two options.

Tag already assigned

a) “**Trigger to start Read**”. Pressing the trigger will start the RF reader to read any tags within range.

If the tag is already assigned to an asset or location, the information of that asset or location will be displayed on screen, see image below.

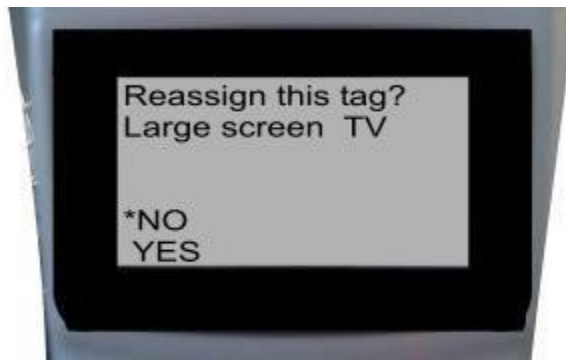


Line 1 is the name of the item.

Line 2 is the asset code as per the client's database

Line 3 is the actual tag number (or a portion of it. The tag number is longer than the available space on the screen).

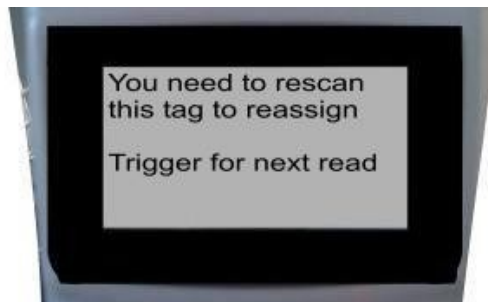
Line 4: "Press > to reassign". If the tag was previously assigned incorrectly, ie, you have just read a tag on an asset (or location), but the tag description on the screen is different to the item you have just read you are able to reassign this tag to correct its assignment. This reassignment is only possible in tag assignment mode, not in verification mode. Press the > button to start the reassignment.



If you have no longer wish to reassign this tag you can simply select the "NO" option and press enter.

This will cause the tag to keep its current assignment and will prompt you to trigger for next read, ie, normal operation.

Selecting the "YES" option will delete the RFID tag from the database completely. The screen will tell you to scan this tag again to perform an assignment. Scanning this tag again will assign the tag as normal (see below).



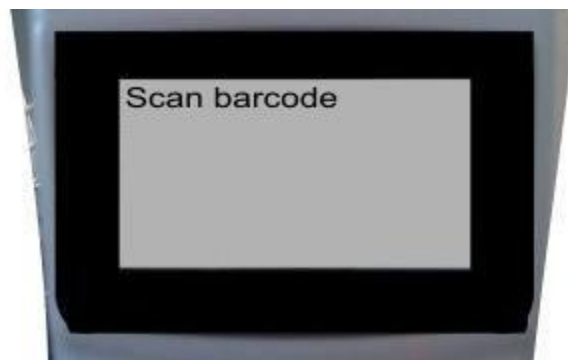
Line 5: “Enter to exit”. Pressing enter prompts you to sync with the PC.

b) “Enter to exit”.

Pressing enter (to exit) will leave tag assignment mode and the reader will ask you if you would like to sync with the PC. If you select “NO”, it will go back into the assignment screen. If you select yes, it will start syncing with the PC as explained under the section “Syncing with the PC” below.

Tag not previously assigned

Scanning a new tag (one not previously assigned) in tag assignment mode will start the tag assignment process. The hand held reader will prompt you to scan the barcode of the asset or location you are assigning. Printing barcodes is done using the RF Tags ASSETtraK PC software (see “**File Menu**” on page 3 of “Software_Manual.pdf”).



Large screen television
ASN123094923



22" laptop + docking station
ASN235039932



Colour laser printer
ASN948372853



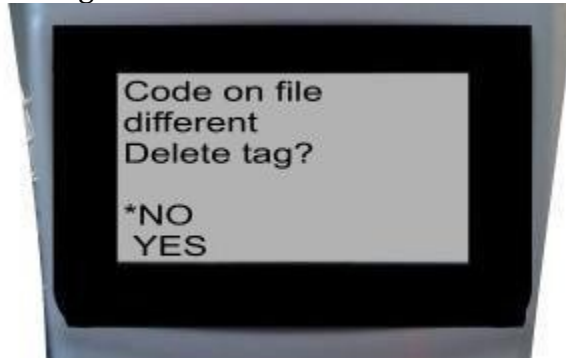
Paper shredder
ASN675767534

Scan the barcode of the item you would like to assign to the tag.

There can be one of two results when scanning a barcode:

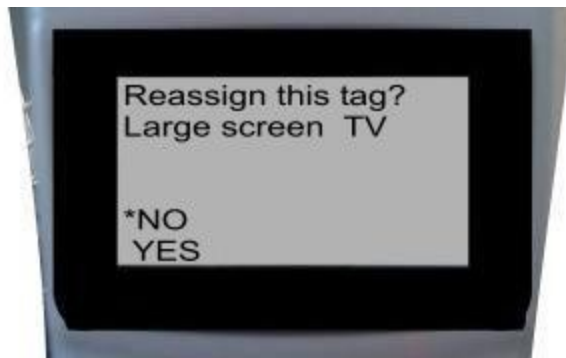
1) "Delete tag".

The code (asset's code) is already saved on the system and assigned to a different tag. You now have the option of deleting this tag from the hand held's database.

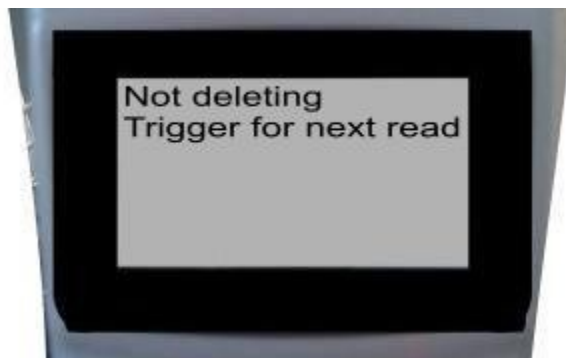


Selecting "NO" will ignore this tag read. The current tag assignment will be kept.

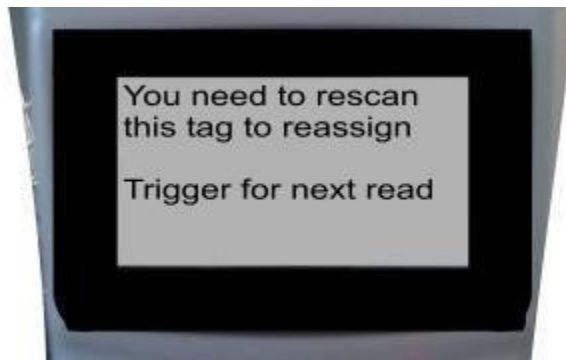
Selecting "YES" will delete this tag from the hand held's database, ie, the next time the tag gets read it will show as an unassigned tag and will prompt you to scan the barcode for assignment. The hand held reader will first prompt you to make sure you want to delete this tag.



If you select "NO" the tag will not be deleted and the current assignment will be kept.



If you select "YES" the tag will be deleted and you will need to rescan this tag to assign it.



2) "Saved asset"

If the tag was not previously assigned and the barcode you scanned is not assigned, the tag assignment will be made. The screen will indicate this with the words "Saved asset".



The name of the asset and the asset code will be displayed on screen.

Press the trigger for more tag reads or press enter to exit and sync with the PC.

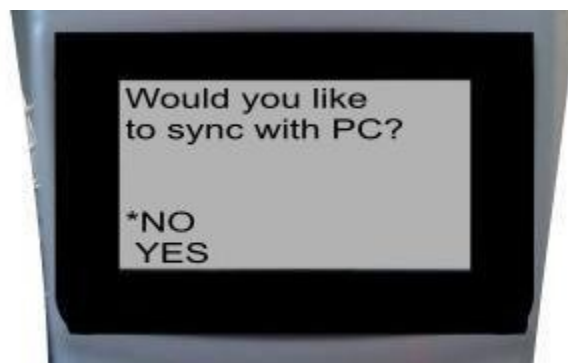
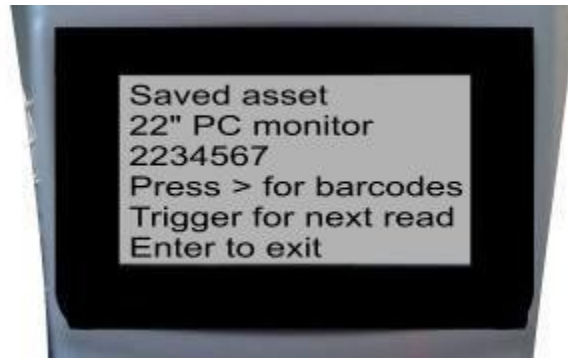
Syncing with the PC

There are two ways of getting to the sync with PC menu.

- 1) From the main menu, select either "Verification" or "Tag Assignment" mode, then from the sub menu select option 2, "Sync with PC". This will automatically start the sync.



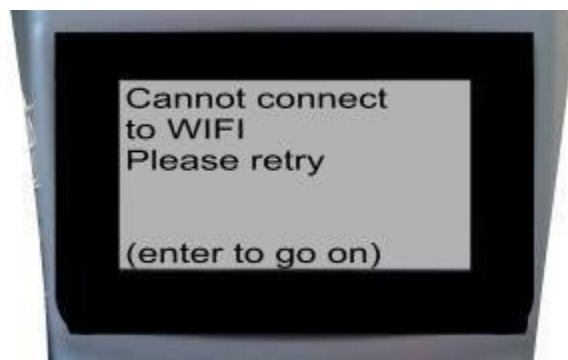
2) From almost any other screen, press the enter button when you see the “Enter to exit” prompt.



If you select “NO” you will return to normal operation.

If you select “YES”, the syncing process will begin.

If there is a problem connecting to the main PC you will see a message on the screen which informs you that the reader cannot connect:



Make sure that all the settings are correct in the setup menu, ie, own IP address, Server IP address and Host name. Check that the wifi on the PC is turned on. If all of the above are correct, the simply press the enter button to retry connecting.

The syncing process has many steps to it. Depending on what needs syncing, there may be more

or less steps involved.

The syncing process, once started, is automatic. When the sync has completed, the hand held reader will return to the main menu.

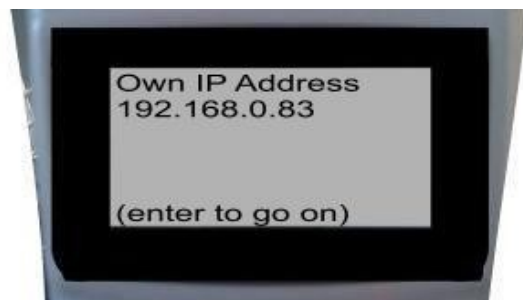
Setup

Selecting the Setup menu from the main menu presents you with a sub menu for certain



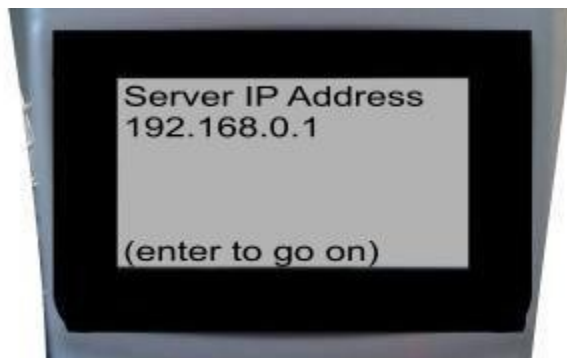
networking related settings

1) Own IP Address



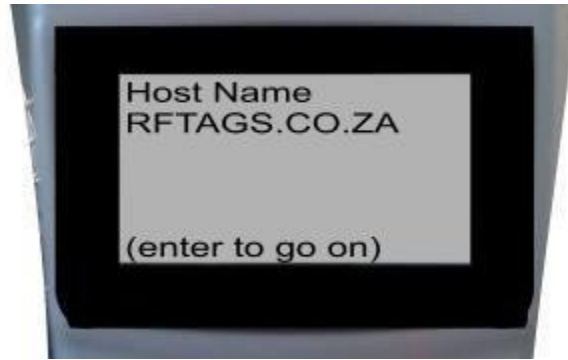
The IP Address that is currently stored in the hand held reader is displayed here. Pressing the enter key takes you to the text input screen (see "Entering text using the keypad" above). If you would like to change the IP address, delete the existing one and re-enter a new one. To keep the current IP address, simply press enter to return to the main menu. Each IP address must be unique and on the same network as the router or PC that you are syncing with.

2) Server IP Address



The server IP address works exactly the same as the device's own IP address.

3) Host Name



The host name works the same as the device's own IP address.

All of the networking settings will be provided to you by your own IT dept.

Trouble Shooting

1) What is the initial login password?

When you turn on a new reader, ie, one that has not been synced before, there will be no passwords in the hand held reader. The initial password will be "RFTAGS". After syncing with the PC, the initial "RFTAGS" password will be deleted and your own user entered passwords will be transferred from the PC.

2) The device won't turn off

The operating system used on the hand held reader is a Windows based operating system. As with normal PC's and laptops, the operating system may become unresponsive from time to time. Pressing the power off button for an extended period of time (usually about 30 - 45 seconds), will turn the device off.

3) The device won't turn on

If the device is completely unresponsive make sure that the device is charged. If the device's battery is running low, it may automatically turn off right after turning on.

4) More than 1 tag read

This message appears when you have read more than one tag, and one or more of them are unassigned. This applies in both verification and assignment modes. This prevents accidentally assigning a tag incorrectly.

