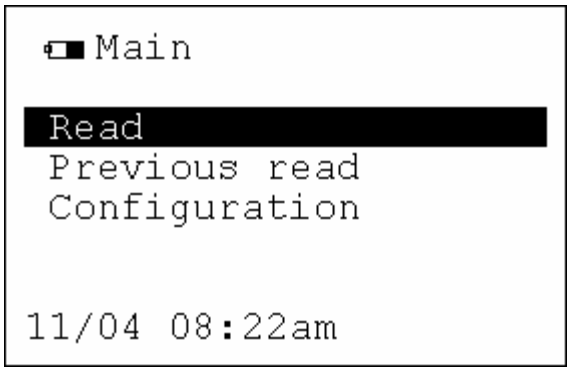
User Reference Guide

Stemco Handheld reader

Turning a unit on

When a unit is first picked up the display will normally be turned off. To turn the unit on press any key. If the display contrast is wrong press the **MAIN** function key and then the right and left arrow keys to change the contrast. The right arrow key darkens the display and the left arrow key lightens the display.

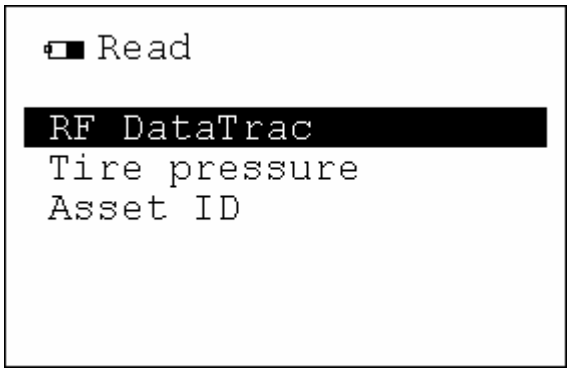
Main Menu



This screen is the Main Menu and is used to perform the intended functions of this RFID handheld reader. Select the function you wish to perform. You have three primary functions to choose from. First, and the primary function is; **Read tags** second, is reviewing **Previous reads** and third is **Configuration.**

Read tags

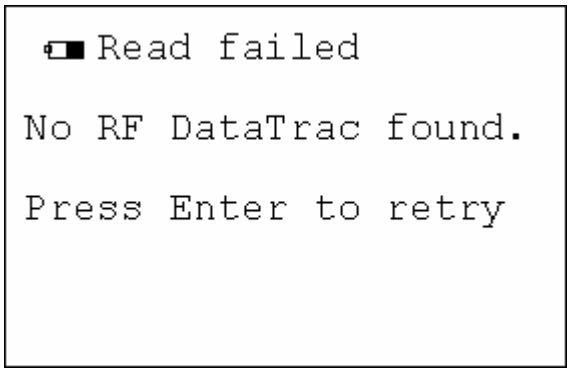
This is the primary screen option used to read your RFID tags installed on your vehicles. To activate this option depress the **ENTER key** found in the middle of the up/down arrow keys. After depressing the **ENTER key** you will be presented with the **Read tags** screen as shown below.

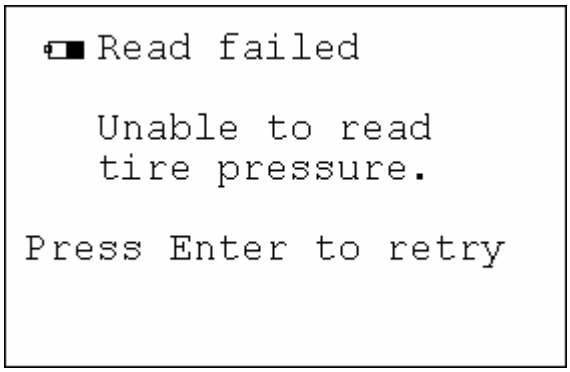


Select the type of RF sensor you wish to read at this time. You have three unique RFID sensors to choose from; Mileage sensors, TPMM sensors, and Asset ID sensors. Select your choice by using the up/down keys and highlighting your desired sensor type and

depressing the **ENTER key**. NOTE: **Make sure you are within 5' (feet) of the tag you are pointing at before attempting to read. The front of the reader must point at the sensor that is being read. If several sensors can be seen at once it may be necessary to get closer to the desired sensor so that you know which sensor you are reading.**

Read tags

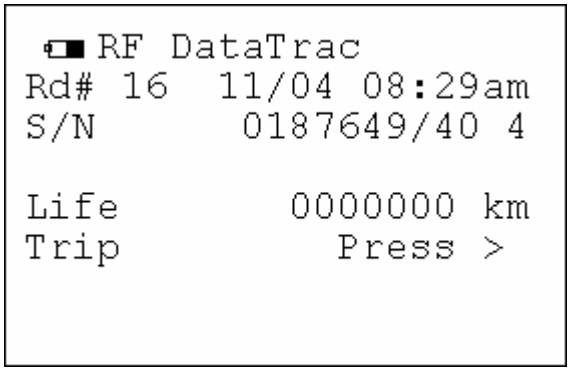




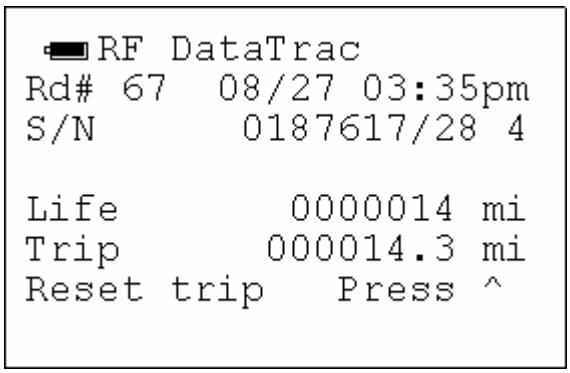
If your desired read tags option **can not** find the RF tag within the device range then one of the previous screens will return to you in less than 2.5 seconds.

This may be caused by not holding your Handheld reader within the specified 3' to 4' (feet) from the RF sensor you wish to read or it may be that no RF sensor is found of the type you chose or too many sensors are being read at once. Please refocus the handheld reader to within the specified reading range and try again. Contact Stemco service specialist if you cannot read a RF tag for any reason. (Chris Steph at 800-527-8492 Ext 369)

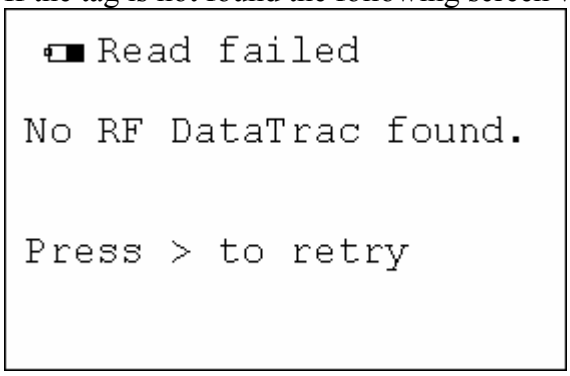
If you chose the **RF DataTrac** then the following screen will appear;



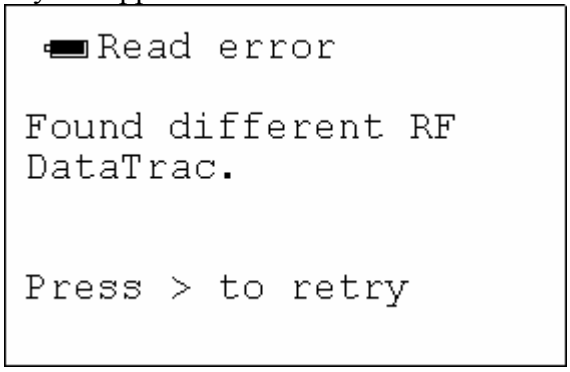
To get the trip press the right arrow key. Note that the trip mileage has a resolution of tenths of a mile. When you chose to get the trip mileage it will reread the mileage sensor and return a screen similar to that shown below;



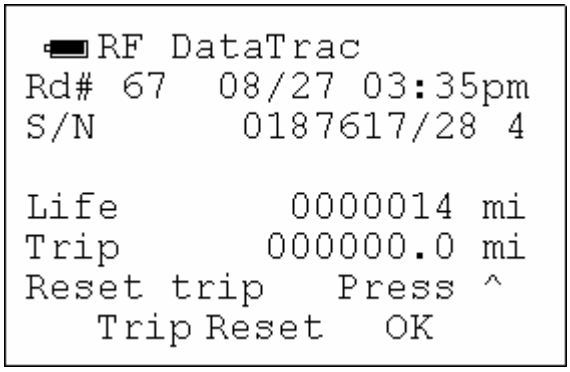
If the tag is not found the following screen will be shown



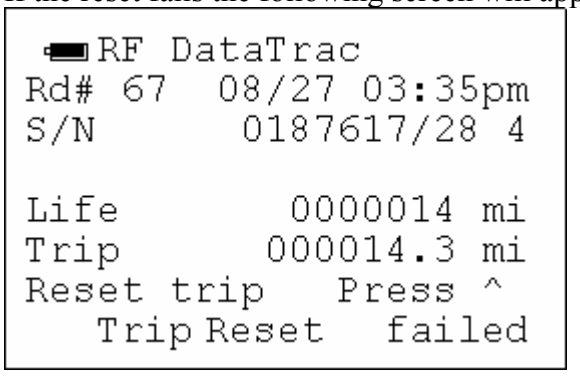
If you happen to read a different RF DataTrac trip the following message will appear.



To reset the trip then press the up arrow key

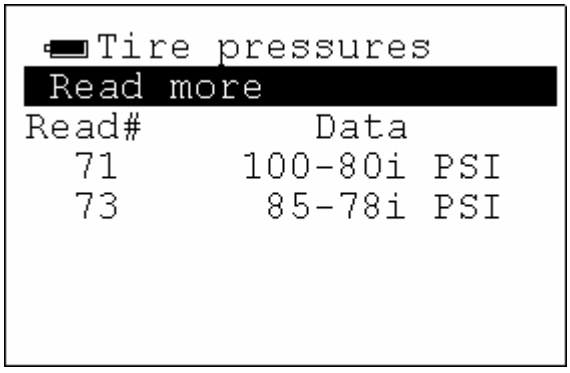


If the reset fails the following screen will appear

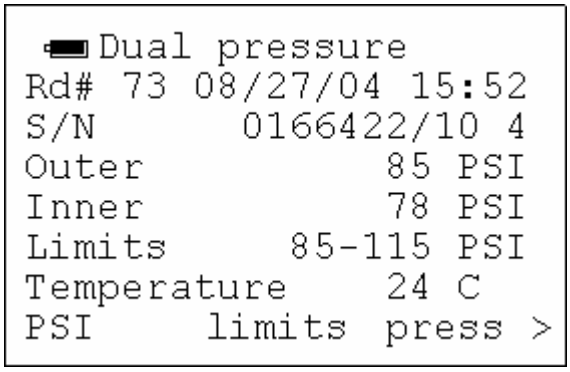


To return to the previous read menu press the BACK key.
To get Help (additional directions) press the HELP key.

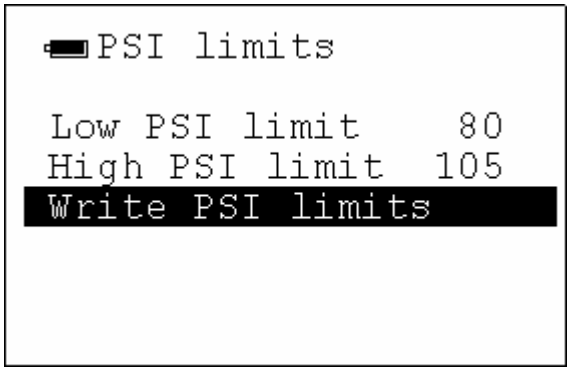
If you chose the **Read TPMM or tire pressure** then the following screen will appear;



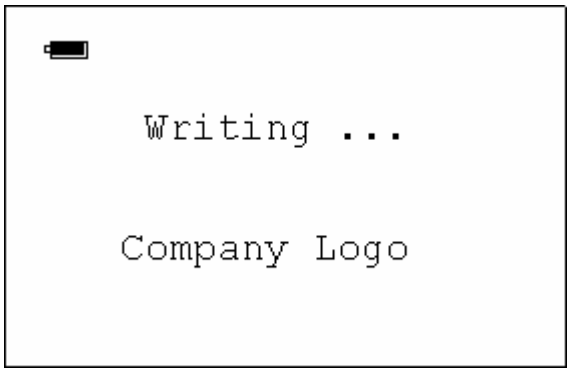
This screen allows you to either read more Tire Pressure sensors or to look at the details of any of the tire pressure sensors that were read. To see the details use the down arrow key and highlight the sensor of interest and press enter. The following screen will appear;



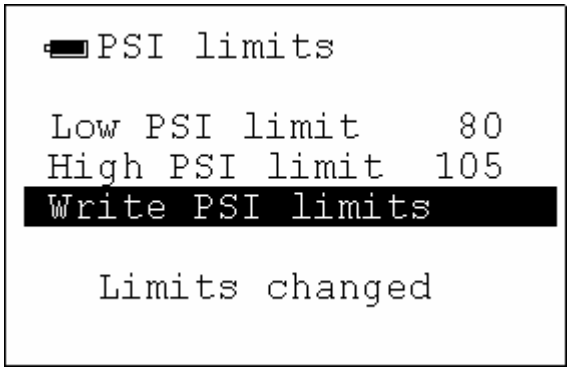
To change the pressure warning limits on the Sensor press the right arrow key.
A screen similar to the one shown below will be displayed.



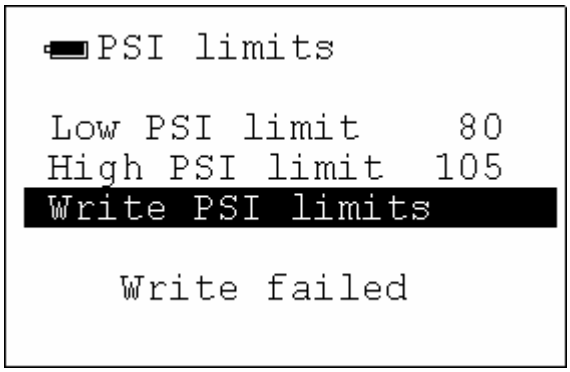
If you want to change the limits, use the arrow keys to navigate to the setting you want to change then press enter and you will be allowed to change the limits in 5 PSI increments by once again pressing the up and down arrow keys. When the limits have been set to the desired values press the enter key which changes the default write settings then arrow down to the write PSI limits line and press enter. The writing screen will be shown as portrayed below.



Then you will be returned to the previous screen with a message about whether or not the write was successful. If the write to the pressure sensor works a screen similar to the one shown below will be returned.



However if the write failed a different screen will appear with the failed message.

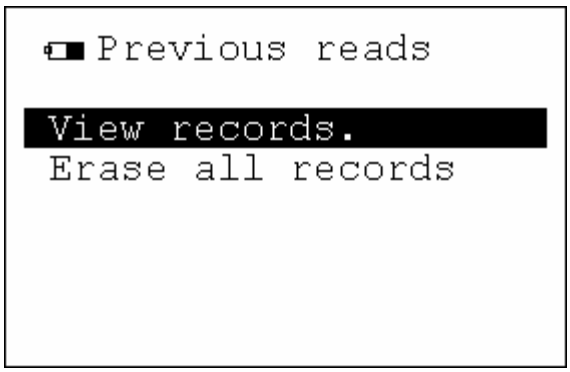


To return to the Main menu depress the MAIN key.
To return to the previous screen press the BACK key.
To get Help (additional directions) depress the HELP key.

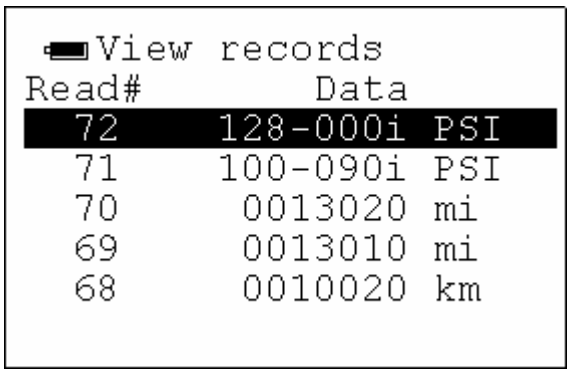
Previous reads

Each time you read any RF sensor the reader assigns a read sequence number to each read initiated. This allows the user to easily and quickly retrieve previous reads from the handheld reader. The memory can hold up to 400 read records. When this memory is full the reader will replace the oldest record in the stored read list upon each new read event. (Replaces the oldest tag read record in the memory.)

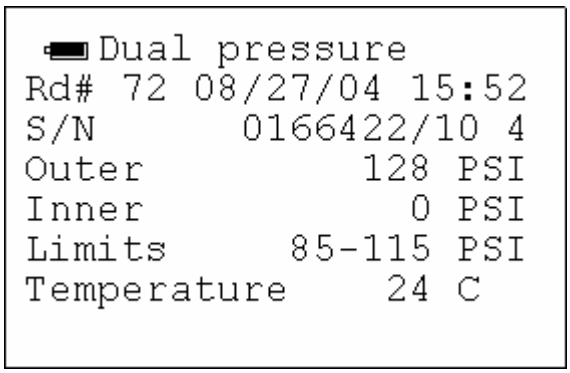
Highlight the **Previous reads** option in the main menu and depress the **Enter key**. (Select this option by using the up/down arrow keys) . The following screen will be seen;



If the View Records Item is selected another screen will be shown.

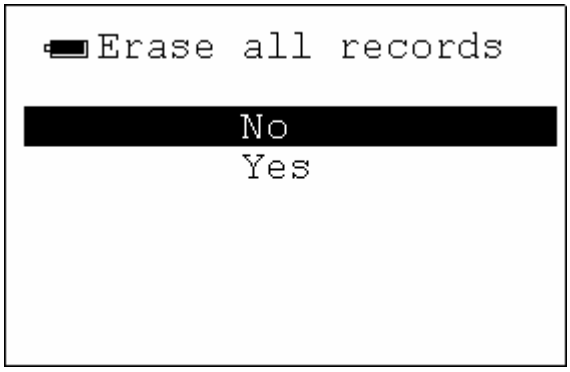


If you want to see the actual "read record detail" then highlight the **read record #** by using the up/down arrow key and then when you have the desired record highlighted then depress the **Enter key**. You can also scroll by 5 at a time by using the right and left arrow keys. The sample record detail screen is shown below;



This screen gives you the exact date and time of the read event and the RF sensor serial #.

The other option under the previous reads screen was the erase all records item. When this item is selected the following screen will be shown;

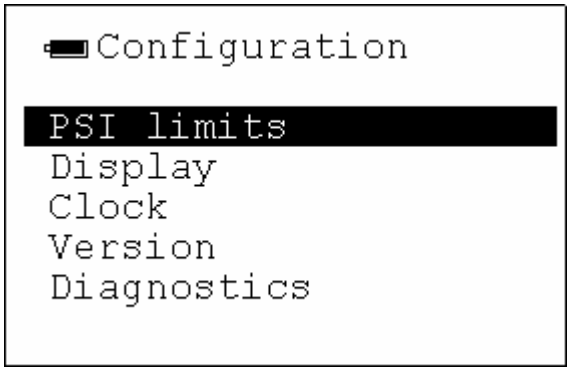


To confirm that you actually want to erase all the records you must select yes then press enter. An “all records erased” message will then be shown.

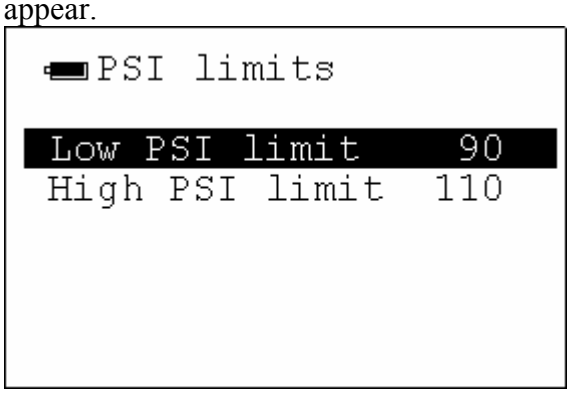
Configuration
To configure the settings of the unit select **Configuration** from the main menu.

This option of the main menu will allow you to configure various user reader parameters.

Select the Configuration option by using the up/down arrow keys and when the Configuration line is highlighted then depress the **Enter** key. The following screen will return as shown below.



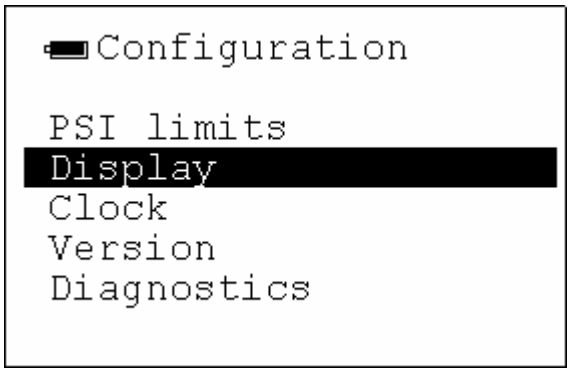
The PSI limits screen is very similar to the one used after looking at a tire pressure tag that was just read the only difference is that you can get to this screen without reading a tag. To select the PSI limits screen depress the **Enter** key. The following screen will appear.



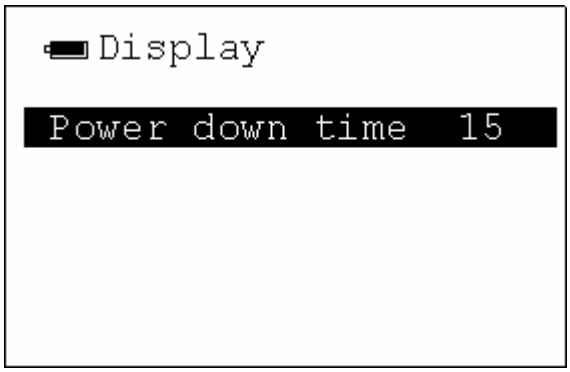
With the PSI low point "highlighted" then depress the right arrow key to reach the PSI value field. Then change the PSI value field by depressing the up/down arrow keys for increments or decrements to the PSI value desired.

To change the PSI high point use the down arrow key to highlight the PSI high point line. Then depress the right arrow key to reach the PSI value field. Then change the PSI value field by depressing the up/down arrow keys for increments or decrements to the PSI value desired.

Configuration – Display option



With the Display line highlighted depress the **ENTER** key and the following screen will appear.

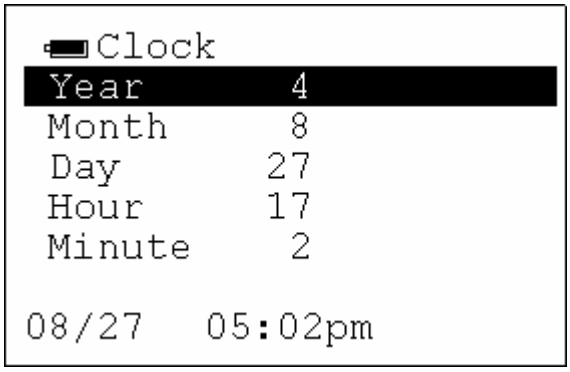


With Power down time highlighted depress the right arrow key to reach the down time value field. To change the Power Down time field use the up/down arrow keys to increment or decrement to the Power Down time setting.

The user can set the power down timer via the Display option as shown on the following screen. The user can set the time in minute increments i.e., 03= 3 minutes, 05= 5 minutes, etc.) To conserve battery life it is recommended that the user set the reader at some low value.

Note: It is very easy and quick to wake up the Handheld reader and use it again with just the touch of any key on the handheld.

Configuration – Clock Option

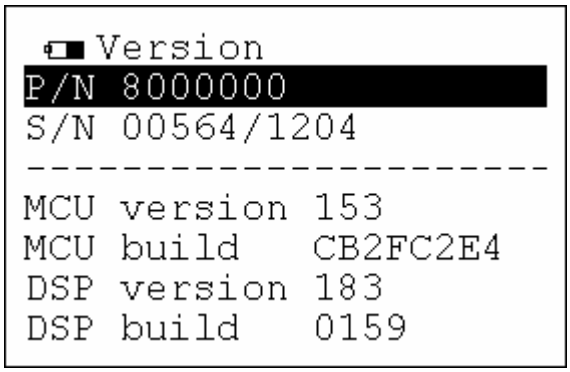


Using the up/down and right arrow keys make the desired clock changes and depress the **ENTER** key for each field so the updates are made. The final date and time entered will appear on the bottom of the screen (as shown above).

Enter military time for PM in the hour field. Example: 14 = 2pm 18 = 6pm Midnight = 00.

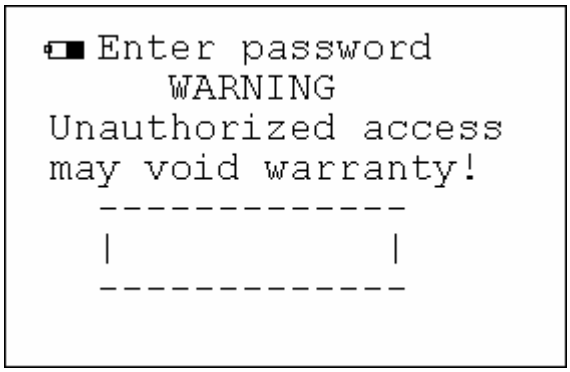
Configure – Version

The version screen allows the user to tell which version and build numbers are currently programmed into the processors inside the unit. This screen will normally only be referenced for warranty or upgrade purposes.



Configure – Diagnostics

This menu is password protected and holds the factory settings for your unit and **cannot be accessed by end user's.**



Upon further trouble shooting you may be asked to access one or more of these screen options for diagnostics. You will be directed by the Stemco service specialist as to what steps to take.

Battery indicator

The battery indicator always is shown in the upper left hand corner (as shown above). It will show the current status of the battery. When the battery gets sufficiently depleted the unit will block the user from reading tags so that the unit is not damaged. If a unit becomes severely discharged the unit will display a low battery message and then turn itself off automatically.

Battery charging
It the handheld is plugged into a charger the battery indicator will be replaced by a plug icon with either a C (charging) or F (full) until the unit is fully charged.
See demonstration of the charging function from Stemco specialist.

Troubleshooting
The system can be reset holding down the F3 and down arrow combination simultaneously until the screen flashes and redraws. Takes about 4 seconds. No records or data will be lost.

RF exposure information

Safety specifications or Specific Absorbtion Rate info

According to 15.247, of the FCC guidelines, this device is categorically excluded from routine environmental evaluation for demonstrating RF exposure compliance with respect to MPE and/or SAR limits.

1.) This unit is classified as a portable devices.
2.) Exposure falls under general population/Uncontrolled exposure.
3.) Device transmits less than 20 mW of power in the 2.4 to 2.48 GHz band.
4.) The device should be considered a spread spectrum transmitter.
5.) Typical exposure times are less than 3 seconds during any tag reading.
6.) This device is tested and evaluated under part 15 section 247.
7.) The device is tested as a production unit.

The unit uses a vertically polarized half wave patch radiator with less than 3 dBi of gain and less than 20 mW of output power.

FCC conformance statements

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

FCC ID# SRA-8000000
Part # 800-0000

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

-- Reorient or relocate the receiving antenna.
-- Increase the separation between the equipment and receiver.
-- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
-- Consult the dealer or an experienced radio/TV technician for help.

End of User Reference Guide
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Stemco LLC

Should you need any additional assistance with any problems or issues please contact your STEMCO at (800) 527-8492, and ask for FIS technical support.