

# AI4100 Portable Reader Display Only Version User Manual

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# AI4100 Portable AEI Reader Display Only

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## 1. BRIEF OVERVIEW

The AI4100 Portable AEI Reader is a small, lightweight unit consisting of a Janam XM2 rugged mobile computer with an integrated AEI tag RF reader running Windows Mobile 6.5.

The AI4100 Portable AEI Reader is used to read the data encoded into an AEI tag.

Unlike previous portable AEI tag readers that have two separate components that must be Bluetooth paired with each other, the AI4100 is a single-piece unit (see Figure 1).



Figure 1- AI4100 AEI Portable Reader

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The RF reader and antenna are permanently attached to the Janam XM2 mobile computer (see Figure 2).



**Figure 2 - AI4100 Side View**

The AI4100 AEI Portable Reader is shipped with a charging cradle, which allows for a USB connection to a computer, and a battery (see Figure 3).



**Figure 3 - AI4100 Components**

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Even though the portable reader can read over 10,000 AEI tag on a single battery charge, we recommend the purchase of a second battery for each portable reader. The cradle has a separate battery charging position in the back of the unit for charging a second battery while the portable reader is in the cradle and having its battery charged (see Figure 4).



**Figure 4 - AI4100 Portable Reader in the Cradle**

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## 2. QUICK START

### 2.1. Initial Startup

The AI4100 Portable AEI Reader is shipped with the power off. To power up the unit, press the red power button in the lower left corner of the unit (see Figure 5). This will cause the computer to boot up and automatically start the Softrail AEI Portable Reader program. This program must be running and shown on the display for the system to read AEI RF tags and barcodes. The AI4100 information display will first appear (see Figure 6).



Figure 5 - AI4100 Buttons



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Figure 6 - AI4100 Information Display

## 2.2. Power Off

To power down the unit, press and hold the power button. A power off display will appear (see Figure 7).

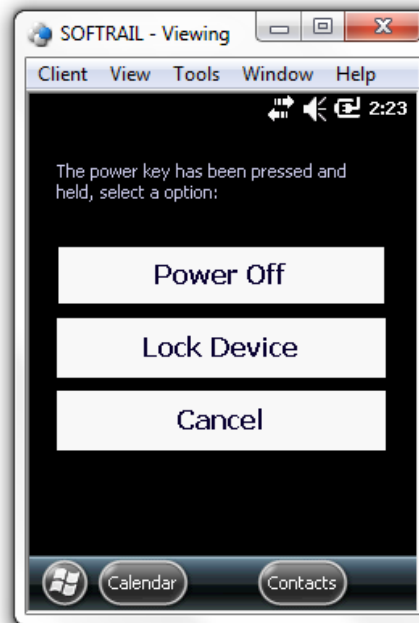
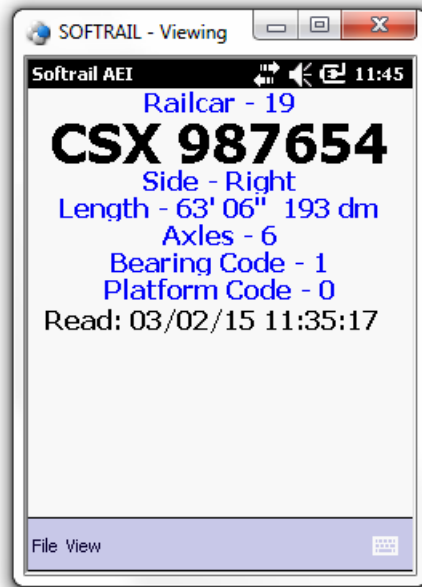


Figure 7 - Power Off Screen

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### 2.3. Reading AEI Tags

There are three buttons that can start the RF reading of an AEI tag. These are at the top on the left hand side of the computer, at the top on the right hand side, and the large red button just below the screen (see Figure 5). When any of these buttons is pressed and held, the computer will turn on the AEI tag RF reader and attempt to read a tag. A “Reading Tag” message will appear on the screen. It will continue attempting to read a tag until a tag is read or the button is released. If a tag is read, the information in the tag will be displayed (see Figure 8). If not, a “No Tag Read” message will appear.



**Figure 8 - AEI Tag Display**

Please note the following when attempting to read an AEI tag:

- The Softrail AEI Tag Reader Software program must be on the screen. If not, press the Windows Flag button on the left side just below the screen (see Figure 5). If the program list screen (see Figure 9) does not appear, press this button again. Tap the AEI Reader icon to start the program.

A second way to start the Softrail AEI Tag Reader Software is to power down the unit by holding down the Power button until the Power Off screen appears (see Figure 7) and then tap the Power Off button. Press the Power button again to power up the unit, and the Softrail AEI Tag Reader Software will automatically start running.

- The AEI tag is designed to be mounted against metal. If it is not mounted against metal it will have a very short read range. The AI4100 AEI Portable Reader should be able to read all tags mounted against metal that are within three feet of the antenna.
- To read tags, point the portable reader at the AEI tag so that the portable reader's antenna surface is parallel to the surface of the tag.

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- If attempting to read tags at longer distances, wave the portable reader up and down.
- Depress one of the three buttons referenced above until a tag is read or you no longer want to attempt to read the tag.



**Figure 9- Program List Screen**

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### 3. ABOUT

To find information about the software version and the unit's serial number, tap the About menu item under the File menu, and the About display shown in Figure 10 will appear.



**Figure 10 - About Display**

### 4. MAINTENANCE AND COMMUNICATION LOGS

To help find problems with the portable reader, the portable reader maintains two logs. These are the maintenance log and the communications log.

#### 4.1. Maintenance Log

The maintenance log is located in a text file called "maint log.txt" in the Program Files\AI4100 folder. It contains information about when various events occurred and if internal problems were detected.

To view the maintenance log tap the Maintenance Log menu item under the View menu.

The following is an example of information contained in this log:

```
12/29/2005 12:48 Start of program  
12/29/2005 16:31 Program closed  
01/13/2006 10:14 Start of program
```

To help find problems, Softrail may need to obtain a copy of the maintenance log.

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## 4.2. Communications Log

The communications log is located in a text file called "comm log.txt" in the Program Files\AI4100 folder. It contains information about communications between the portable reader's mobile computer and other devices including the internal AEI RF reader. The internal RF reader is connected to the mobile computer's serial communications port.

To view the communications log, tap the Communications Log menu item under the View menu.

The following is an example of information contained in this log:

```
12/29/2005 12:49 R (COM1) Received "*P=H@!?8MQD S"  
12/29/2005 12:49 R (COM1) Received "FXO3!XD H1D S"  
12/29/2005 12:49 R (COM1) Received "FC2:?$@:P2D S"  
12/29/2005 12:49 R (COM1) Received "GCUH!MM@N1D S"
```

To help find problems, Softrail may need to obtain a copy of the communications log.

## 5. TECHNICAL SUPPORT AND UPDATES

Periodically Softrail issues maintenance releases and new versions of the software in the AI4100 Portable Reader. Maintenance releases are free and correct problems found with the program and/or provide minor enhancements to the program. Before contacting us with problems we suggest you contact your sales representative and review the issues with him and/or check our web page at [www.aeitag.com](http://www.aeitag.com) to insure that you have the latest maintenance release of the program.

Technical support is free for the first one year after purchase, but is limited to two hours of support for each portable reader that is purchased. Time is charged in blocks of 15 minutes.

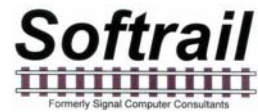
A maintenance agreement can be purchased to extend the period of technical support or add additional hours.

For technical support or more information on the maintenance agreement, contact Softrail at:

**Softrail, Inc.**  
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