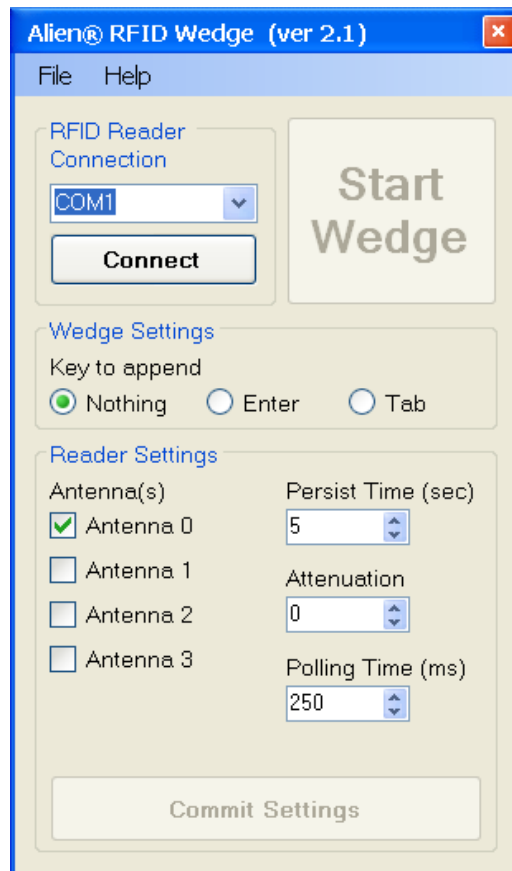


Alien® RFID Wedge Software

User Manual

Version 2.1



Developed by:
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2008

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This software has been developed independent of Alien Technologies and uses the name Alien to indicate that it works with their readers. No other association, endorsement or partnership is implied.

Introduction

One of the problems that many smaller companies and universities have with the successful integration of RFID is that they do not have the expertise in either the hardware or in writing software that will allow for the integration of the hardware with standard software. The Alien[®] RFID Wedge software was originally developed at Ohio University to allow students in the College of Business to integrate RFID into their web applications. However, once it was realized that others in both the university and business settings could benefit from the software, it was made publicly available.

Software wedges are a carry-over from the hardware wedges that were used with the early bar code scanners. Since many of the bar code scanners were serial based, users found the need to be able to push the resulting data from the scanner into the keyboard buffer of the computer. The hardware wedge did that by providing an adapter that allowed the user to plug both the bar code scanner's output and the keyboard into the keyboard port of the computer. Although today most of the scanners use USB interfaces, there is still a lot of general data collection equipment that needs to be able to accept serial data. At present, most of the RFID equipment requires custom programming to input the data into an application. However, there are times when proof-of-concept activities or legacy support demand the ability to push the RFID data into an application. This is where the software wedge has its use. The Alien[®] RFID Wedge software has been designed to work with the Alien[®] 9650, 9780, 9800, 9900 and the 8800. While testing on all units has not been conducted there should be no problems.

At this point, the software has been developed to specifically work with Alien Technology[®] readers via serial communications. While future versions of the software will incorporate networks, there are no immediate plans for adding other brands of readers.

Help

If you have questions, find mistakes in this document, would like to suggest improvement or find bugs in the software, please contact us via email at autoid@ohio.edu.

Versions

- 2.1 3/17/2009 – Updated this document to show the correct address for the software download.
- 2.1 9/17/2008 – Initial release for download and purchase. Demo/registered modes were integrated.
- 2.0 5/1/2008 – Control for appending no characters to the end of the tag id was added.
- 1.0 10/10/2007 – Initial version originally developed for COB.

Getting Started

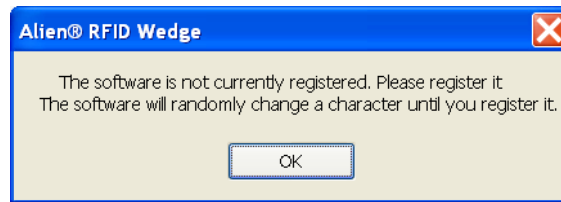
To run the Alien[®] RFID Wedge software, you will need to download the latest version from www.ohio.edu/industrialtech/aidc/software.cfm. Be sure to click on the Alien[®] RFID Wedge link

to get the most current version. You will be prompted to download the installation file in a .ZIP format. Once the file is downloaded, go to the registration page to register the software.

Unzip the file and run Setup.msi. Follow the directions.

Using the software the 1st time

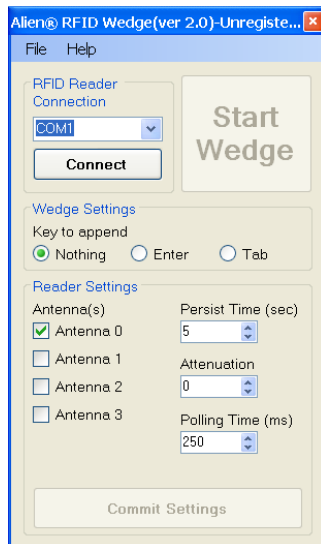
Once you have downloaded and installed the setup file, you will need to get a registration code. Double click on the shortcut that was placed on your computer's desktop. The Alien[®] RFID Wedge software will start and will display the following message warning you that you are in demonstration mode.



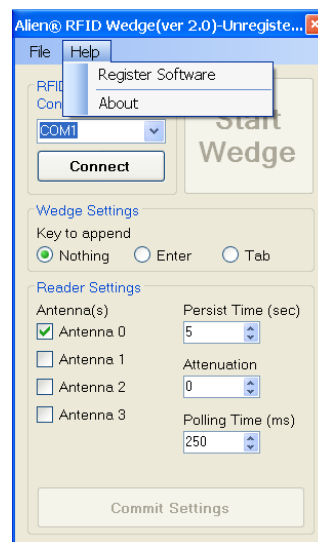
You are welcome to use this software for as long as you wish in an unregistered state. However one of the characters in the tag id will be randomly changed each time it is read. When the software loads the first time, a unique machine identification value is created. You will need this unique machine identifier to register your software. If you ever have to reload your software due to a crashed computer, you will need to contact us with the new unique machine identifier.

Registering the software

Once you have opened the Alien[®] RFID Wedge software, you need to click on Help and Register Software to get to the registration screen (see below)

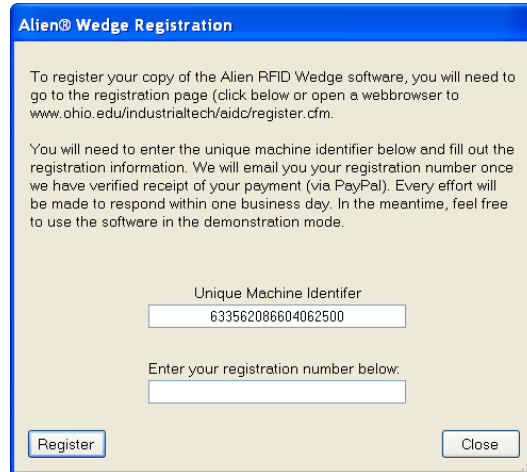


Unregistered software



Accessing the registration screen

The screen below will be displayed showing the unique machine identifier and a place for you to enter your registration number. We suggest that you copy the unique machine identifier from this box (by highlighting it and pressing *CTRL+C* or right clicking and selecting *Copy*) to ensure you get the string correct.

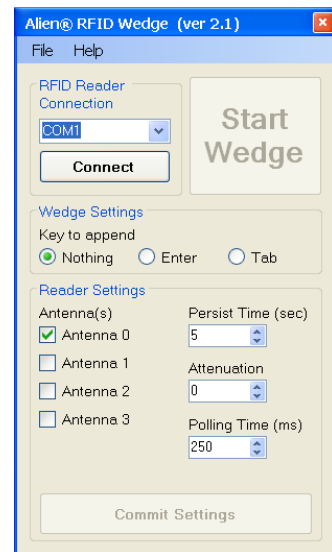


Go to www.ohio.edu/industrialtech/aids/register.cfm to submit your registration information. Once we have received your registration information and confirmation of receipt of payment, we will email you the registration number. You will need to copy this into the field provided. Click on Register and if you have the correct code, you will receive a message box stating that you software is now registered and that you need to restart the Alien® RFID Wedge software.

Using the Alien® RFID Wedge

Once you have installed and registered your software you can run it without the random character substitution.

- Start the software by double clicking on the icon on your desktop.
- You will need to connect to the reader before you can do anything else.
 - Plug in the required number of antennas
 - Provide power to the reader.
- Select the serial port that the reader is connected to from the drop-down list.
- Click on *Connect*.
- Select any *Reader Settings* or *Wedge Settings*.
- Start the application that you wish to have the data sent to. You will want to do this prior to starting the wedge since any tags the software sees will be immediately sent to the software, possibly causing problems.
- Switch back to the Alien® RFID Wedge software.



- Click on *Start Wedge*. A message will be displayed indicating that you have 1.5 seconds to switch to the application you want to have the data sent to.
- At this point, if you place a tag within the reader's field, it will be sent to the current application.

To stop the Alien® RFID Wedge:

- Remove all tags from the reader's field.
- Switch to the Alien® RFID Wedge software.
- Click on *Stop Wedge*.
- Select *File* then *Quit*.

Tips and Suggestions

- Set the *Attenuation* to the highest level you can while still being able to read the tags. This will help to ensure that the only tags that are read are the ones you intend to read.
- In environments where the reader has intermittent problems in reading the same tag while it is in range, try increasing the *Persist Time* to help prevent duplicate reads of that tag.
- For instances where the tag is not always immediately seen, try increasing the polling time to give the reader more time to read the tag.

Troubleshooting

| Problem | Try this |
|--|---|
| Characters are being substituted when entered into the computer | <ul style="list-style-type: none"> • Register the software. If the problem persists, contact us. |
| Tag ids are running together when being sent to Excel, Access, or other similar applications | <ul style="list-style-type: none"> • Check to see if you have either <i>Enter</i> or <i>Tab</i> selected in the <i>Wedge Settings</i> segment of the software. |
| Tags are not being read | <ul style="list-style-type: none"> • Check the <i>Attenuation</i> level • Ensure you have the correct <i>Antenna</i> selected • Make sure your tag is good |
| You get an error when connecting to the reader | <ul style="list-style-type: none"> • Make sure you have the correct serial port selected. • Try rebooting the reader |