

ICS LinkTag Programmer Software Installation / Operation Instructions

Overview:

The ICS LinkTag Programmer is a device which connects to a PC through a standard USB port. It works in conjunction with the ICS LinkTag Programming software to allow the reading and programming of the LinkTags for operation with either a Phoenix 8000 or Phoenix AFC fuel management system.

Software Installation



BEFORE connecting the LinkTag Programmer to the PC, you **MUST** install the USB driver software on your PC. The programmer will not work if the installation is not performed properly.

Important Note: At the current time, the USB drivers and LinkTag Programmer software are only certified to work with Windows XP and Windows Vista.

Additional Note: For demonstration purposes, you may install and run the LinkTag Programmer software without installing the USB drivers or connecting the LinkTag Programmer. However, before you connect the LinkTag Programmer for the first time, you must install the USB driver. You do not need to reinstall the programmer software after you install the USB driver.

Step 1 -- USB Driver Installation:

Note: If you are installing the LinkTag Programmer software and connecting the LinkTag Programmer for the first time, you **MUST** install the USB drivers. If you are upgrading the LinkTag Programmer software, you do not need to reinstall the USB drivers.

Insert the LinkTag software CD into the CD-ROM drive of the computer you wish to install it on. If the contents of the CD are not displayed automatically, double-click on the My Computer icon, locate the CD icon, and double-click on it to view the contents of the CD.

When you view the contents of the CD, you will see two folders and an instruction file. Double-click on the folder labeled LinkTag USB Driver. Several other files and folders will be displayed. Locate the file labeled LinkTag USB Driver and double-click on it to begin the USB driver installation.

Depending on your operating system, your computer may ask you for confirmation to run this program. Click "Yes" or "Run" on any such windows. Be sure to read and follow the on-screen instructions.

During the installation process, the "Silicon Laboratories" window will be displayed. Click the "Install" button to continue the USB driver installation. Once the installation process is complete, you may connect the LinkTag Programmer to an available USB port on the computer.

Note: These drivers may take additional time to install because the program must determine if certain required Windows components are present. During this process, it may appear the installer has stopped working. Let it continue and the installation will complete.

Step 2a – Initial LinkTag Programmer Software Installation:

Return to the main directory of the LinkTag Programmer CD. Double-click on the folder labeled LinkTag Programmer.

Several files and folders will be displayed. Locate the file labeled Setup and double-click on it to begin the LinkTag Programmer software installation. Be sure to read and follow the on-screen instructions.

Note: If the computer is running Windows XP and does not have Microsoft .NET Framework 3.5 installed, setup will prompt you to install the .NET Framework and Windows Installer 3.1. Follow the directions to install these from the LinkTag Programmer Software CD. The LinkTag Programmer setup will continue afterward.

The next window will allow you to select the installation folder for the application. It is strongly suggested you use the default folder location, in the event you require technical support.

At the bottom of this window, select which users will be able to run the LinkTag Programmer application. If all users should have access to it, click the button beside “Everyone”. If the current user should have exclusive access, click the button beside “Just Me”. Click “Next” to continue the installation.

The next window will ask you to confirm the installation details. Verify these settings and click “Next” to continue. The software will be installed into the specified folder for access by the selected users. Depending on your operating system, a window may appear asking you to confirm installation of the application. Click “Allow” to continue.

Once the application has been installed, the “Installation Complete” window will be displayed, indicating the installation was successful. Click “Close” to continue.

The installation program also creates shortcuts to the LinkTag programmer application in the Start menu, as well as on the desktop. You can use either of these icons to start the LinkTag Programmer application.

Congratulations! Your LinkTag Programmer and software are now installed and ready to use.

Step 2b – Upgrading LinkTag Programmer Software v1.0 to v1.1 Or Later:

If you have received an updated version of the LinkTag Programmer software, you must follow the steps below to successfully install the upgrade.

This update adds some convenience features to the LinkTag Programmer interface. Updating this software does not require reprogramming any LinkTags or making any changes to your Phoenix 8000 or Phoenix AFC system.

The USB driver for the LinkTag Programmer installed on your computer has not been updated -- if your programmer is operating properly, the USB driver will not have to be reinstalled.

Prior to installation of the v1.1 LinkTag Programmer software, the original version of the software must be uninstalled in Windows using the Add or Remove Programs feature in the Control Panel. If you attempt to install the v1.1 software before uninstalling the previous version, a warning message will be displayed and the installation will be aborted.

To uninstall the old version, follow the steps in the Uninstalling LinkTag Programmer Software section presented below.

To install the new version, insert the CD and follow the steps outlined above in section 2a.

Once these procedures are completed, LinkTag Programmer software v1.1 or later is installed.

Uninstalling LinkTag Programmer Software:

In the event you must uninstall the LinkTag Programmer software, it must be done through the Windows utility – do not manually delete the program files. Failure to properly uninstall the software may create future issues.

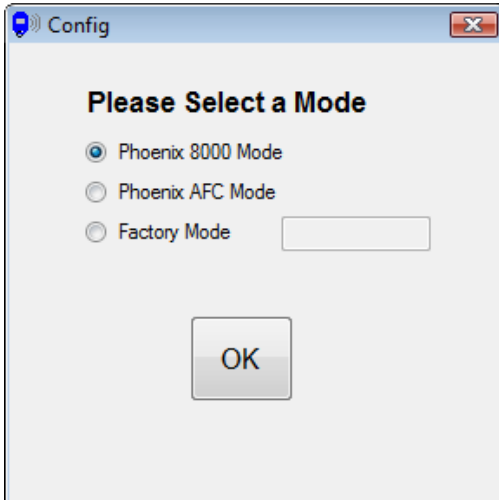
To uninstall the software, click Start > Control Panel > Add or Remove Programs. Depending on the version of Windows installed and how it is configured, you may alternately have to click Start > Settings > Control Panel > Programs and Features.

Once the list of installed programs is populated, locate and click on the entry labeled “LinkTag Programmer. The entry should be highlighted and additional information will be displayed. Confirm the entry says “LinkTag Programmer”. Click the Remove button and follow the instructions to uninstall.

Software Operation

Once the USB drivers and the LinkTag Programmer software have been installed and the LinkTag Programmer has been connected to the PC, you may use the LinkTag Programmer software to read and program LinkTags. To run the LinkTag Programmer software, select the LinkTag Programmer item from the Start menu or double-click on the LinkTag Programmer desktop icon.

When the LinkTag Programmer software is started, the mode selection window is displayed. If you want to program or read LinkTags for a Phoenix 8000, click the button labeled “Phoenix 8000 Mode”. If you want to program or read LinkTags for a Phoenix AFC, click the button labeled “Phoenix AFC Mode”. Click the “OK” button to continue to the next screen.



Note: The “Factory Mode” option is disabled in this version of the software

Note: In order to switch from Phoenix 8000 Mode to Phoenix AFC Mode, you must exit and re-run the LinkTag Programmer software.

Once you have selected which card system you want to program or read LinkTags for, the main LinkTag Programmer window will be displayed. In the lower left corner of this window, the connection status of the LinkTag Reader is shown. If the LinkTag reader is properly connected and functional, this box will be green. If the box is red, the LinkTag programmer is not connected properly or the USB drivers are not installed or not functioning correctly.

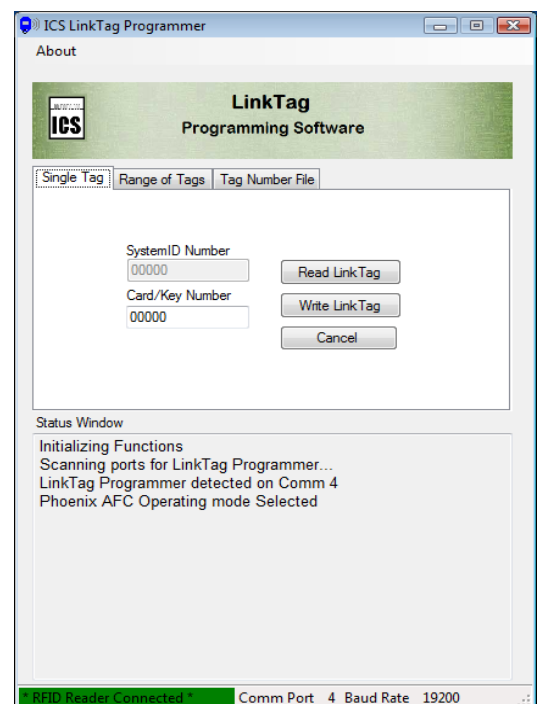
To remedy any of the above issues, exit the LinkTag Programmer software and confirm the USB drivers are installed properly and the LinkTag programmer cable is properly plugged in to both the computer and the programmer. Re-run the LinkTag Programmer software when you are finished.

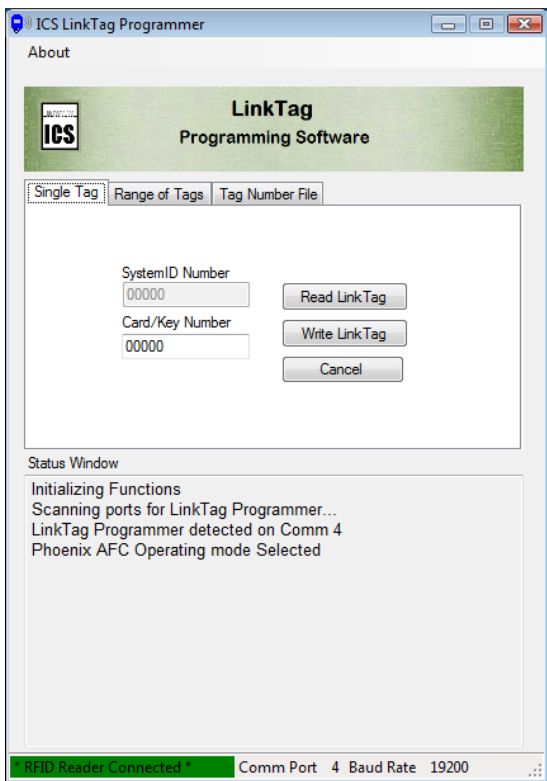
The first thing you will notice about the main LinkTag Programmer window is the three tabs. These tabs provide different ways to program LinkTags. You may program a single tag, a sequential range of tags, or a series of randomly sequenced tags.

For security reasons, you must present a system LinkTag with the proper system serial number or system ID to the LinkTag Programmer before programming any LinkTags. This assures LinkTags can't be created for systems the user does not have the authority to access.

Single Tag:

The single tag operation simply allows the operator to read or program one LinkTag at a time.





Read Link Tag:

To read LinkTags, click the “Read Link Tag” button. The status window will prompt for a tag to be presented. Hold a LinkTag flat against the top of the programmer. The program will automatically detect the presence of the tag and display the tag data in the windows to the left of the buttons. Note that unprogrammed LinkTags will display zeros for both the system ID and card / key number.

To read another tag, remove the current tag from the LinkTag Programmer and place the next one on it. To end the Read LinkTag function, click the “Cancel” button.

Write Link Tag:

To write a single tag, enter the vehicle number (for Phoenix 8000 users) or Card/Key number (for Phoenix AFC users) into the appropriate box. Click the “Write Link Tag” button.

If this is the first write operation being done since the application was started, it will prompt for a system tag to be presented. Present any of the system tags that came with your LinkTag kit. The application will use the system tag to

read your unique serial number or system ID number. This unique number will then be written to all LinkTags for your system so that others will not be able to program tags for use with your system.

Once the system tag has been read, the status window will prompt for the tag to be written. Hold the LinkTag to be written flat against the top of the programmer. The program will detect the presence of the tag and write the data to the LinkTag. Note that previously programmed LinkTags may be overwritten, but system tags may not. ICS recommends that you mark each LinkTag with its Vehicle Number or Card/Key number as they are written to prevent confusion.

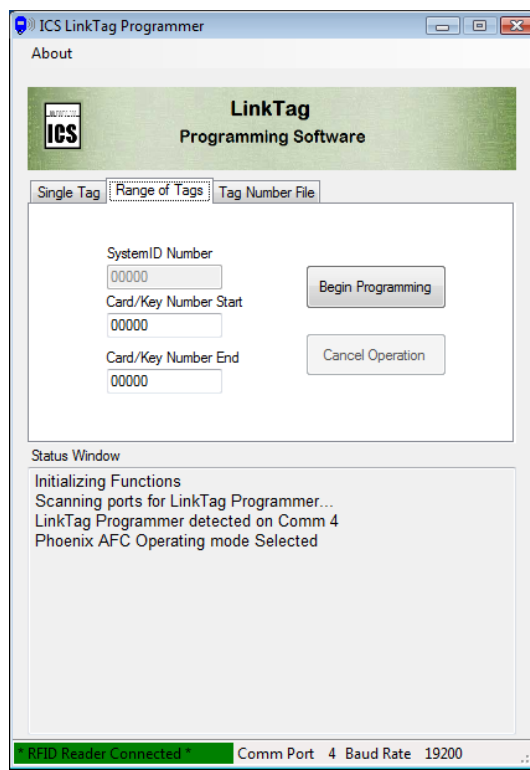
Cancel:

During a read or write operation, the cancel button may be pressed to cancel the operation without presenting a LinkTag. Note that if a read or write operation is in progress, another tab cannot be selected until the cancel button is pressed.

Range of Tags:

If a large number of sequentially numbered LinkTags need to be programmed, click the “Range of Tags” tab. Enter the starting and ending number of the LinkTags to be programmed. (Vehicle number for Phoenix 8000 or Card/Key number for Phoenix AFC) Press the “Begin Programming” button.

If this is the first write operation being done since the application was started, it will prompt for a system tag to be presented. Present any of the system tags that came with your LinkTag kit. The application will use the



system tag to read your unique serial number or system ID number. This unique number will then be written to all LinkTags for your system so that others will not be able to program tags for use with your system.

The application will now prompt for a LinkTag to be programmed. Hold the LinkTag to be programmed flat against the top of the programmer until the status window prompts for the tag to be removed. Remember to mark each LinkTag as they are programmed to avoid confusion.

The application will continue prompting for LinkTags until the range of values entered have all been programmed. Remember that LinkTags may be reprogrammed but system tags may not. Cancel may be pressed at any time to cancel the operation.

Tag Number File:

If the LinkTag numbers that need to be programmed are not in sequential order, then the Tag Number File tab should be selected. To use this function, first create a text file containing all of the values to be programmed onto the LinkTags – one 4- or 5-digit number per line. (These will be vehicle numbers on a Phoenix 8000 system or Card/Key numbers on a Phoenix AFC system.)

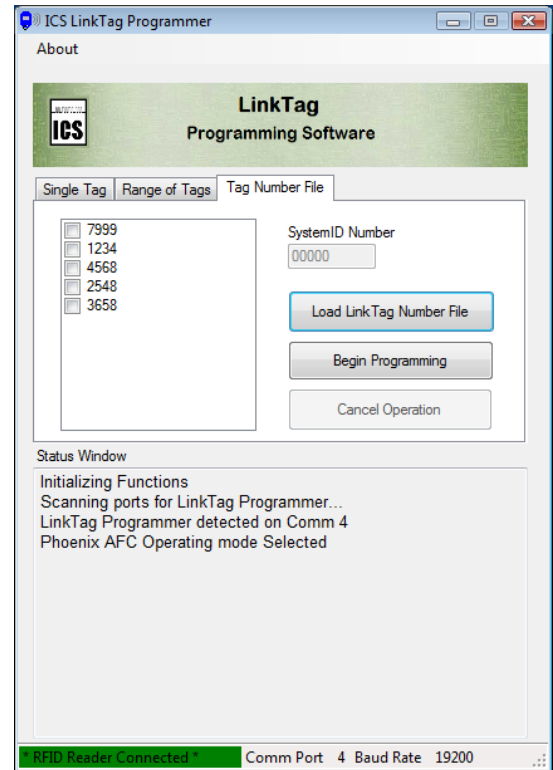
Creating a Phoenix 8000 Vehicle number file:

The Phoenix 8000 system has no capabilities to transfer the vehicle data to a computer, so the data must be entered manually. If the Phoenix 8000 system has firmware version 4.0 or higher, the “Print valid Vehicles” card can be used in the system to print a list of valid vehicles to the printer. This list should then be entered manually using the Windows Notepad application and saved as a “.txt” file. Before saving, make sure that the list contains only 4 digit numbers from 0001 to 7999, one per line. This file can now be used for LinkTag programming.

Creating a Phoenix AFC Card/Key number file:

The Phoenix AFC system comes with the “AFC Administrator” application. To extract a list of Card/Key numbers, execute this application and select a site. Click the “Reports” function and select the “Card/Durakey” tab. Select the topmost report “Card\Durakeys listed sequentially” and press the Export button. A dialog box will appear allowing the report to be saved. Select the folder location to save and enter a filename for the file. Make sure that the file type is “.txt” and press OK. AFC Administrator will save the report file to the location specified. Now open the file just saved using the Windows Notepad application and edit out all information except the leftmost column of Card/Durakey numbers. Make sure there is only one number per line, and there are no other characters other than a list of 5 digit numbers ranging from 00001 to 65499. Save the changes to the file and close Notepad. This file can now be used to program LinkTags for the AFC system.

Now that the file has been created, load the file into the LinkTag Programmer application by pressing “Load LinkTag Number File”. A dialog box will appear allowing the file to be selected. Browse to the file location and select the file created in the steps above. Press “Open”. If there were no errors in the file data, the numbers will be loaded and listed in the box to the left of the



buttons. If errors were encountered during the file load operation, use Notepad to edit the file again and check for errors.

Now that the LinkTag number file has been loaded, press “Begin Programming”.

If this is the first write operation being done since the application was run, it will prompt for a system tag to be presented. Present any of the system tags that came with your LinkTag kit. The application will use the system tag to read your unique serial number or system ID number. This unique number will then be written to all LinkTags for your system so that others will not be able to program tags for use with your system.

The status window will now prompt for the LinkTag to be programmed. Present the LinkTag to be programmed by holding it flat against the top of the programmer until the status window prompts to remove it. Remember to label the tags as they are programmed to avoid confusion. As each number in the LinkTag number window is programmed a checkmark will appear next to it. The status window will now prompt for the next LinkTag until the entire list has been programmed. Press “Cancel” if necessary to cancel the operation.

Technical Support:

For problems with the LinkTag system, or for questions about compatibility, please call ICS Technical Support at 972-642-6800.