

# Advanced Aircraft Analysis 5.0

## Node Locked License Installation

### 1 Introduction

DARcorporation uses the Wibu-Systems WibuKey Copy Protection for the AAA licensing. The WibuKey consists of a WibuBox and the Wibu software.

A WibuBox must be attached to the local computer where AAA is started. The software protection is handled by a WibuBox.

We recommend reading through this complete document first and then following the installation steps of Section 2.

Please do not insert the WibuBox until you are directed to do so. The software must be installed first.

### 2 Install Procedure

You must have administrative rights to complete the following steps. Installing the software with consists of the following steps:

**STEP 1** Close any programs that are running on the computer where the software is being installed.

**STEP 2** If you were provided with a download link for AAA installer, click on it to download and save it. Right-click on the installer to select **Run as administrator** and follow the instructions on the screen from the installation program. It is strongly suggested that the program be installed in the recommended directory. Proceed to Step 5 to continue.

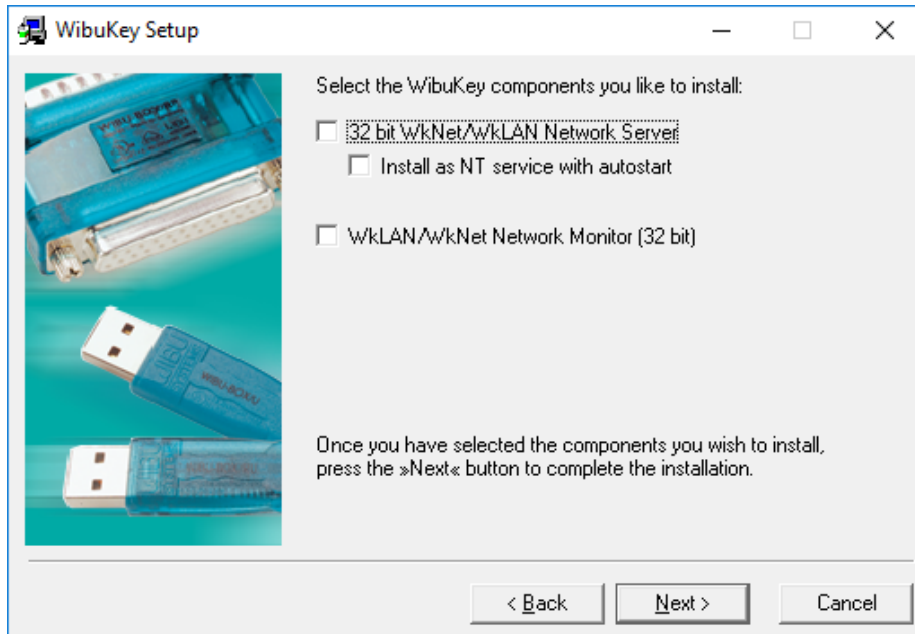
STEP 3 Insert CD into the CD-ROM drive. If the installation does not start automatically: select run from the Start Menu. In the Run dialog, type: X:\setup (where X is the letter of the CD-ROM drive) and click **OK**. Figure 2.1 shows the setup window.



*Figure 2.1 AAA Setup Window*

STEP 4 Click on “Install AAA” to install AAA first. Follow the instructions on the screen from the installation program. It is strongly suggested that the program be installed in the recommended directory.

STEP 5 If you were provided a download link for Wibu driver, click on it to download and save it. Right-click on the WkRuntime installer to select **Run as administrator** to proceed. Or click on “Install WIBU Drivers/Software” to install the WibuKey driver (See Figure 2.1). In the WibuKey Setup, uncheck the boxes as shown in Figure 2.2:



*Figure 2.2 WibuKey Setup Window*

**STEP 6** Attach the USB WibuBox to the computer. Windows 7/8/8.1/10/11 will automatically detect the USB device as a “Plug and Play” device. If the WibuKey software has been installed, the device driver will be automatically installed.

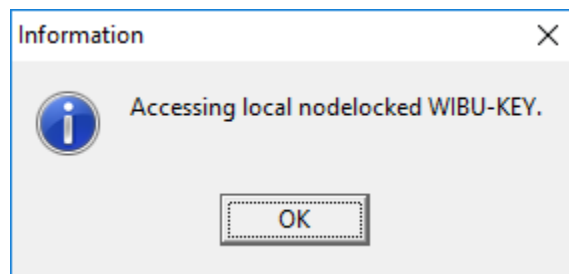
**STEP 7** Install the AAA and the Wibu Drivers/Software on each computer on the network. For Windows operating systems, Microsoft patches for the Help program are needed because the Help program is not included as a feature for Windows. The patches are included on the installation CD in a folder named Patches or they can be downloaded from:

- Windows 10/11: Locate winhlp32-windows.zip on the installation CD or download it (<https://www.darcorp.com/wp-content/uploads/2018/10/winhlp32-windows-1.zip>) and in there are three files (install.cmd, winhlp32.exe and winhlp32.exe.mui). Unzip the files to a local folder of your choice. Right-click on install.cmd and select Run as administrator. The install batch file should install the needed winhlp32.exe to your operating system. If you get an error message of problem running the macro (1037) when using AAA Help, go to Microsoft Support Page <http://support.microsoft.com/kb/917607> and follow the instructions given

under Manually enable macros on a single computer.

- Windows 8.1: Run WinHlp32 patch on the installation CD or download it from <http://www.microsoft.com/en-us/download/details.aspx?id=40899>. If you get an error message of problem running the macro (1037) when using AAA Help, go to Microsoft Support Page <http://support.microsoft.com/kb/917607> and follow the instructions given under Manually enable macros on a single computer.
- Windows 8: Run WinHlp32 patch on the installation CD or download it from <http://www.microsoft.com/en-us/download/details.aspx?id=35449>. If you get an error message of problem running the macro (1037) when using AAA Help, go to Microsoft Support Page <http://support.microsoft.com/kb/917607> and follow the instructions given under Manually enable macros on a single computer.

Start AAA. A window will show up when the connection to the WibuBox is successful (See Figure 2.3).



*Figure 2.3 AAA Startup Screen*

Note: AAA uses a working directory to create temporary working files. This directory is normally C:\Users\LoginName\AppData\Local\Temp\working. To use another directory than the default, change the shortcut to AAA on the Desktop from:

aaa50.exe to aaa50.exe "%1" "new working directory location\working"

Be sure to include the %1 and to include the directory name working.

STEP 8 When AAA is started for the first time, the dialog window in Figure 2.4, along with the online Registration Form on [www.darcorp.com](http://www.darcorp.com) in a web browser, will be displayed requesting information used to set up the software configuration.

Default Preferences

Default preferences are defined when AAA is used for the first time.  
These preferences are used when starting a new project.

Company/University Name

Your Name

Date Format: 01/09/22

Time Format: 1:49 pm

Auto Save Recover Project Every 5 Minutes

Default Print Output

- Screendump: prints a bitmap of the entire screen
- Print Parameters: prints a list of parameters from the active window
- Active Window: prints a table of the contents of the active window

Variable Changed Default Color

Calculated Variable Note Color

Default Note Color, Hint

Units Type

- British
- S.I.

Calculator Type

- Standard
- RPN

Print Date

- Date on print-out
- No date on print-out

Print Time

- Time on print-out
- No time on print-out

Input/Output Infos

- Enabled
- Disabled

Input/Output Notes

- Enabled
- Disabled

Paper Size

- Letter (8.5" x 11")
- A4 (210 mm x 297 mm)

OK Help

Figure 2.4 Program Options Window

The following information is requested:

- **Company name:** This name will be displayed in the status bar while running the software.
- **Your Name:** The name will be saved in the software configuration file.
- **Date Format:** Default format of date displayed on status bar.
- **Time Format:** Default format of time displayed on status bar.
- **Units Type:** The software supports both S.I. and British units.
- **Calculator Type:** The software calculator supports standard and RPN mode.
- **Print Date:** The date can be displayed on each printout.
- **Input/Output Infos:** A button can be displayed on each input/output element allowing the user to directly access help about that info. Default is 'enabled'.
- **Input/Output Notes:** A button can be displayed on each input/output element allowing the user to keep notes about the parameter. Default is 'enabled'.
- **Print Time:** The print time can be displayed on each printout.
- **Paper Size:** Specify the paper size for printouts.
- **Auto Save Recovery:** Specify the time interval for auto save.
- **Variable Change Color:** Specify the default color to display with calculated values change.
- **Default Note Color:** Specify the color of a note, and a description of what the note color represents.
- **Default Printer Output:** The default hardcopy output type can be defined (see AAA 4.0 User's Manual, Part I, Chapter 4).

### 3 WibuKey Software



When the WibuKey Setup software is installed on the computer, a program icon is added to the Control Panel. This icon executes the WibuKey Control Panel Applet “WibuKey Software Protection: Test and Settings”. The program shows the contents of the WibuBox (see Figure 3.1) and several options to control the WibuKey software.

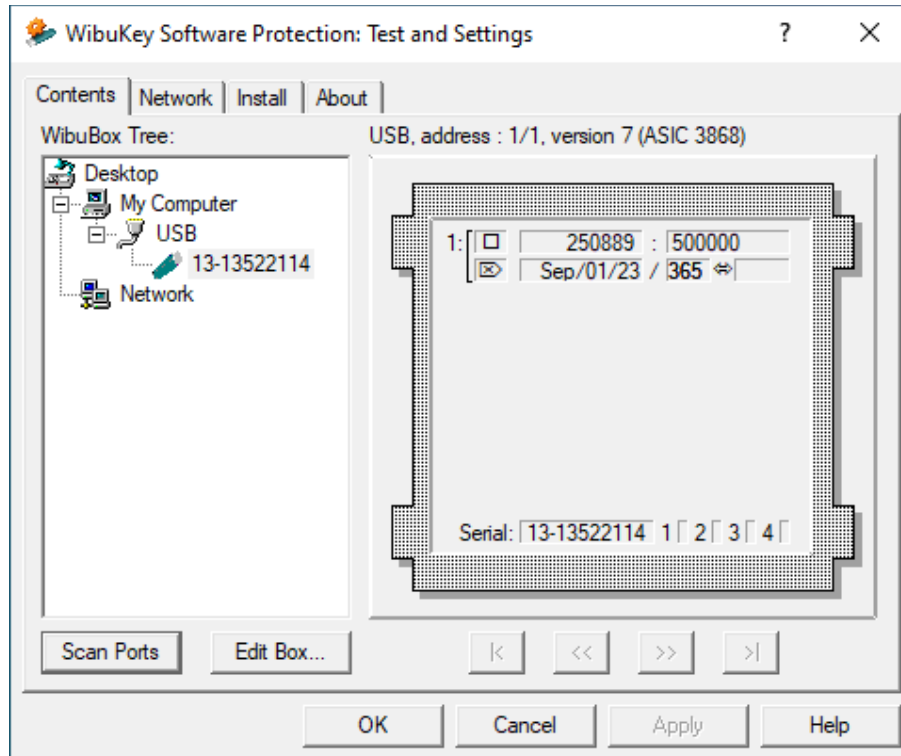


Figure 3.1 WibuKey Control Panel Applet

Normally, no special configuration changes are needed.

## 4 Troubleshooting

The WibuKey software has an extensive help system built-in. Select the help from:

Windows Start > WibuKey > WibuKey Help

The help has an FAQ with common questions and problems. Other common problems are:

**Problem:** Unable to Locate DLL, the dynamic library WKWIN32.DLL could not be found.

**Solution:** Install the WibuKey runtime software.

**Problem:** Program is Already Running.

**Solution:** Only one instance of the software can be run at one time. Switch to the currently running program.

**Problem:** Cannot Open Database Files.

**Solution:** When attempting to execute the software, this message indicates two possible problems:

1. Another program is already running which is using the software databases. The other program could be any other DARcorporation airplane design and analysis software. Close any DARcorporation airplane design and analysis applications that are currently running, and try to start the software again. If the message appears again and there is no other program running using the software databases, then go to number two.
2. If the software or another DARcorporation airplane design and analysis program exits abnormally due to a program or system crash, or by using Windows to kill the program, the database engine may not reset itself. This problem can occur in all versions of Windows. To reset the database engine, exit completely and restart Windows.
3. No read rights in the darcorporation\aaa50\database directory.
4. No read\write rights in the Users\LoginName\AppData\Local\Temp\working directory.



5. A file PDOXUSRS.NET is created by the BDE with no rights to access it. AAA does not need this file. To fix this, go to Program Files\Common Files\Borland Shared\BDE, there should be a program called bdeadmin.exe. Please run this program. Double click on drivers and select Native then select Paradox. On the right hand side it should show the properties for Paradox. Please delete the directory (pathname) listed next to NET DIR. Then save your settings and exit bdeadmin.exe. If you use the BDE for any other applications, please be sure that they still work. If you have another application that uses the BDE, instead of deleting the pathname, set the directory name to a directory the user has access rights to.

**Problem:** Working database or system database is read only.

**Solution:** If the file attributes of any files in the **Database** folder in the folder where the software is installed are set to “read only”, the program cannot execute. Refer to the Windows documentation for instructions for setting file attributes.

**Problem:** AAA locks up, cannot open database.

**Solution:** Check if the Users\LoginName\AppData\Local\Temp\working directory is empty. Delete any files in the working directory when AAA is not running.

## 5 Reporting Software Errors

We at DARcorporation want to know about potential errors in the software so that we may correct them as soon as possible. If you feel that you have encountered an error in the software user interface, license manager, module calculations or module calculation methods, software errors can be reported to the software support department at:

Phone: (785) 832-0434  
E-mail: support@darcorp.com  
Internet: www.darcorp.com  
Mailing address: DARcorporation  
910 E 29th St,  
Lawrence, KS 66046-4926  
USA