Updating the VEXnet Key 2.0 Firmware

The VEXnet Key 2.0 contains upgradeable firmware, enabling additional features or bug fixes to be added in as they are developed. Outlined below are the installation and operating instructions for the VEXnet Key 2.0 Firmware Update Utility, which will allow you to use the latest and greatest firmware in your radio.

Installing the VEXnet Key 2.0 Firmware Update Utility

1. Uninstall existing versions of the VEXnet Key 2.0 Update Utility, if any.
   a. This is typically done through Control Panel. Search “uninstall”.

   Note: [X.XX] in the following steps refers to the latest version number.

2. Save file “VEXnet Key 2.0 Update Utility Version [X.XX]-withInst.zip” and extract to a known location.

3. Open directory “VEXnet Key Update Utility Version [X.XX]-withInst”.

4. Double click on “setup.exe”.

   Note: Click "Allow", "Continue", "Run" or similar for any security warning windows in any of the following steps.

5. At the "Welcome to the VEXnet Key 2.0 Update Utility Setup Wizard" window, click "Next >".

6. At the "Select Installation Folder" window, click "Next >".

7. At the "Confirm Installation" window, click "Next >".

8. The "Installing VEXnet Key 2.0 Update Utility" window will open and start installing the tool.

9. At the "Installation Complete" window, click "Close".

Installing VEXnet Key 2.0 Drivers

NOTE: If using Windows 8, please see “Using the VEXnet Key 2.0 Firmware Update Utility on Windows 8”. Otherwise, continue below.

1. Insert one 276-3245 VEXnet Key 2.0 Radio into an unused USB port on the PC.

2. Allow the driver to install. This may take a few minutes, but will only occur the first time a Key is inserted into each USB port.

Updating VEXnet Key 2.0 Firmware

1. Open the Utility by double-clicking the "VEXnet Key 2.0 Update Utility" icon.

2. If the Key connected to the PC from Step 1 of the "Installing Drivers" section can be updated, click the "Start Update" button. Otherwise, follow the instructions displayed in the Utility.

3. When "Update completed!" is displayed, this indicates the end of a successful update.

4. Remove the VEXnet Key 2.0 Key from the PC.

5. To update additional VEXnet Keys, install each Key in the PC one at a time and repeat.
The VEXnet Key 2.0 Radio drivers do not have a Digitally Signed Device Driver. In this situation, Windows 8 requires a special sequence to allow unsigned driver installation. This sequence consists of installing the VEXnet Key 2.0 Firmware Upgrade Utility, allowing the computer to use an unsigned driver, attaching one VEXnet Key 2.0 radio, installing the driver, moving the Key to each USB port once, rebooting the PC.

**VEXnet Key 2.0 Firmware Update Utility**
1. Install the latest VEXnet Key 2.0 Firmware Update Utility per the instructions above.

**Allowing Unsigned Drivers**
1. Boot Windows into “Advanced Startup” mode by holding the "Shift" key down while selecting "Restart".
2. Click "Troubleshoot".
3. Click "Advanced options".
4. Click "Startup Settings".
5. Click "Restart".
6. Choose Option 7 (“Disable driver signature enforcement”).
7. (The PC will reboot).

**Installing the Unsigned Driver**
1. Log in to Windows.
2. Insert a VEXnet Key 2.0 into a USB port.
3. Windows 8: Open "All apps" (right click near the bottom on the right hand side of the screen). Select "All apps".
   a. Windows 8.1: Click the down arrow near the bottom on the left hand side of the screen.
4. Scroll to the right and click "Control Panel".
5. Enter "Device Manager" in the "Search Control Panel" block and select "Device Manager".
6. Locate "VEX Radio" in "Other Devices". It will have a triangle with an exclamation point indicating a driver issue.
7. Right click on "VEX Radio" and select "Update Driver Software...".
8. Click "Browse My Computer" and select "C:\Program Files (x86)\VEX Robotics" or similar.
9. Click "Next>" and click "Install this driver software anyway".
10. Click "Close" once installation is complete.
11. A successful driver installation is noted by "VEXnet 2.0 Radio (COM...) in the “Ports (COM & LPT)” section of Device Manager.
12. Move the VEXnet Key 2.0 radio to each USB port that may be used for Key reprogramming.
13. Remove the VEXnet Key 2.0 radio and reboot the PC.