LUXE®

SOFTWARE

LUXE USB INTERFACE FOR WINDOWS

SYSTEM REQUIREMENTS

THE LUXE® USB INTERFACE IS COMPATIBLE WITH WINDOWS XP AND NEWER versions of the Microsoft Windows Operating system (Windows 7, Windows Vista, Windows 2000) on computers with an available USB port. Operation may also be possible under Windows emulation in Mac OSX and LINUX operating systems, but is not supported.
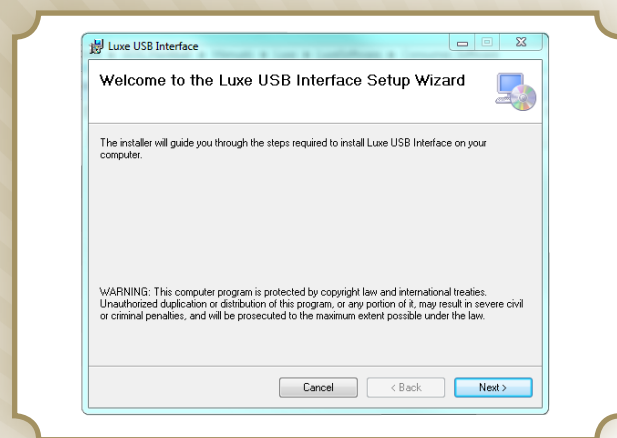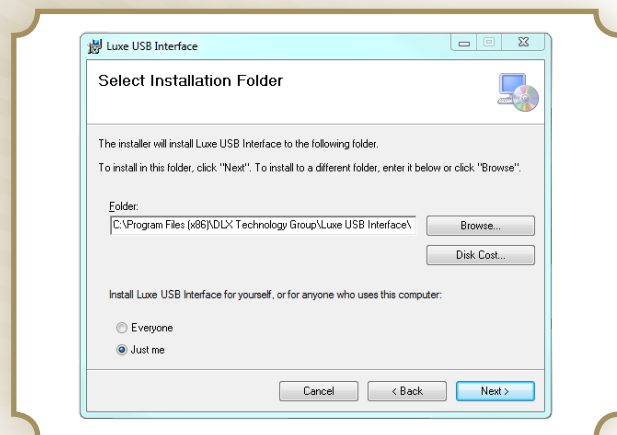

❦ FIG. 1 ❦

❦ FIG. 2 ❦

INSTALLATION

DOWNLOAD AND OPEN the Luxe® USB Interface .zip file. Drag the files or folders contained in the .zip file to a location on your computer such as the Documents folder or the desktop. Open the folder containing the Luxe® USB Interface Installer and double-click the program entitled setup.exe.

DEPENDING ON YOUR VERSION OF WINDOWS, you may be presented with a security warning. If so, you must click *"Run"* to install the software. During the installation process you may also be asked to grant permission to the software to make changes to your computer or hard drive. You must grant permission in order for the software to install.

THE LUXE® USB INTERFACE SETUP WIZARD WINDOW will explain the purpose of the installer software – to install the Luxe® USB Interface on your computer. Click *"Next"* to continue **[FIG. 1.]**

BY DEFAULT THE INSTALLER WILL then select an appropriate folder where the rest of your program files are stored. You may choose an alternate location by clicking the *"Browse"* button, but this is not necessary **[FIG 2.]**

IF YOUR COMPUTER IS SET UP FOR MULTIPLE PEOPLE to log-in, you may use the radio buttons to choose whether the Luxe® USB software is available only to your account or to all users of the computer. Click *"Next"* to continue.

THE INSTALLER SOFTWARE WILL THEN ASK for a final confirmation – click *"Next"* to start the installation.

A BAR GRAPH WILL SHOW THE PROGRESS of the installation. During the installation process you may also be asked to grant permission to the software to make changes to your computer or hard drive. You must click the *"Yes"* button and grant permission in order for the software to install.
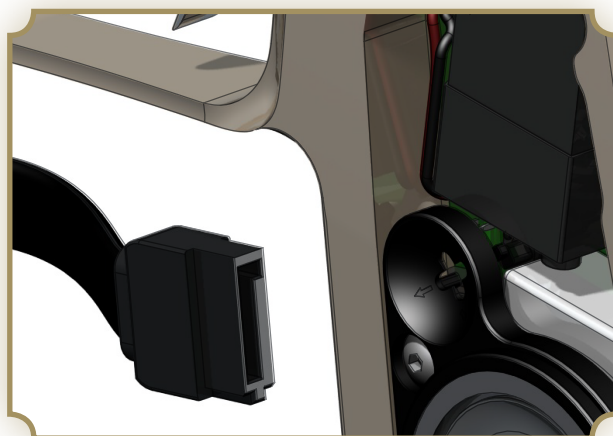
ONCE INSTALLATION IS COMPLETE, click the *"Close"* button.

THE LUXE® USB INTERFACE SOFTWARE WILL BE AVAILABLE by double-clicking the Luxe® USB Interface icon on your Windows desktop. In most versions of Windows you may choose alternate locations for launching the program by right clicking on the icon and selecting *"Pin To Start Menu"* or *"Pin To Taskbar."* With the program in the Start Menu or Taskbar you may delete the desktop icon without affecting the Luxe® USB Software. You may also launch the program by double clicking it in the folder where the program is stored – typically *C:\Program Files (x86)\DLX Technology Group\Luxe® USB Interface.*

IF YOU EVER NEED TO REMOVE THE LUXE® USB INTERFACE SOFTWARE, use the *"Remove Software,"* *"Add/Remove Software,"* or *"Add/Remove Programs"* utility found in the Windows Control Panel.

✥ FIG. 3 ✥

✥ FIG. 4 ✥

CONNECTING THE LUXE®

FOLLOWING THE INSTRUCTIONS in the Luxe® owner's manual, make sure the Luxe® is unloaded and de-gassed, and that its circuit board is turned off before making a USB connection. Connect the USB end of the Luxe® USB/SATA cable to one of the computer's USB ports **[FIG. 3.]** If the USB port is positioned in an area where the length of the USB/SATA cable makes connection impractical, a USB extension cord (available in most consumer electronics stores) may be used.

CONNECT THE SATA END of the Luxe® USB/SATA to the Luxe®. The SATA connector only fits in one direction. The hook of its internal L-shaped slot goes up, towards the top of the circuit board and the trigger on the Luxe® **[FIG. 4.]** Carefully slide the connector into place, as forcing a misaligned connector can cause permanent damage. When a proper connection is achieved the right LED on the Luxe®'s LED array will glow blue.

THE FIRST TIME THE LUXE® IS CONNECTED to a computer, the Windows operating system will take several seconds to identify and configure the USB connection.

THE USB CABLE WILL SUPPLY THE NECESSARY POWER to flash data into the circuit board, so a circuit board by itself, without battery speaker or Luxe® may be re-programmed directly. The USB connection will not provide charging power to the Luxe® battery, and is not a substitute for the Luxe® LiPO battery charger.
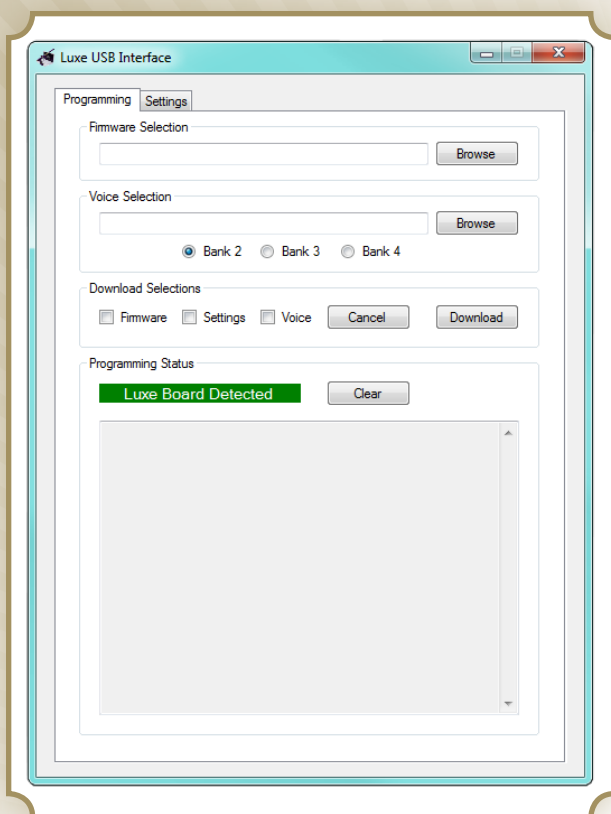
ONCE THE CONNECTION IS ESTABLISHED, you may launch the Luxe® USB Interface software. Do not disconnect the cable until all download actions within the Luxe® USB Interface software are complete. Disconnecting during a download may result in a malfunctioning or non-functioning Luxe®, but will not cause permanent damage. The Luxe® may be reconnected and firmware, voice or settings reloaded to restore it to normal operation.

PROGRAMMING

THE PROGRAMMING TAB OF THE LUXE® USB INTERFACE software consists of four sections. *Firmware Selection, Voice Selection, Download Selections* and *Programming Status*. Each of these sections relates to downloading, or sending data from the computer to the Luxe®.

[Luxe USB Interface application window showing Programming tab with Firmware Selection, Voice Selection (Browse buttons, Bank 2 / Bank 3 / Bank 4 radio options), Download Selections (Firmware, Settings, Voice checkboxes, Cancel and Download buttons), and Programming Status showing "Luxe Board Detected" with a Clear button.]

FIRMWARE

FIRMWARE REFERS TO THE ACTUAL PROGRAMS that drive the Luxe®, providing logical control for everything from detecting pulls on the trigger and activating the solenoid valve to navigation of the voice menu system. Occasionally DLX Technology group may release firmware updates, such as when a league changes its rules regarding firing modes. Luxe® firmware updates are available from LuxePaintball.com, and consist of AES encrypted software. AES encryption has been approved by the US National Security Agency as safe for protecting national secrets at the "Top Secret" clearance level. It is used by DLX Technology group to protect against unverified software being loaded through the Luxe® USB Interface.

LUXE® FIRMWARE .AES FILES ARE DISTRIBUTED in .zip format. To ensure settings compatibility the Luxe® USB Interface software is distributed with the .aes files and it is advisable to install the Luxe® USB Software that came bundled with the firmware version to be loaded. Simply open the downloaded .zip file and drag the .aes file to the Windows desktop or documents folder, and it is ready to be used by the Luxe® USB Interface software.
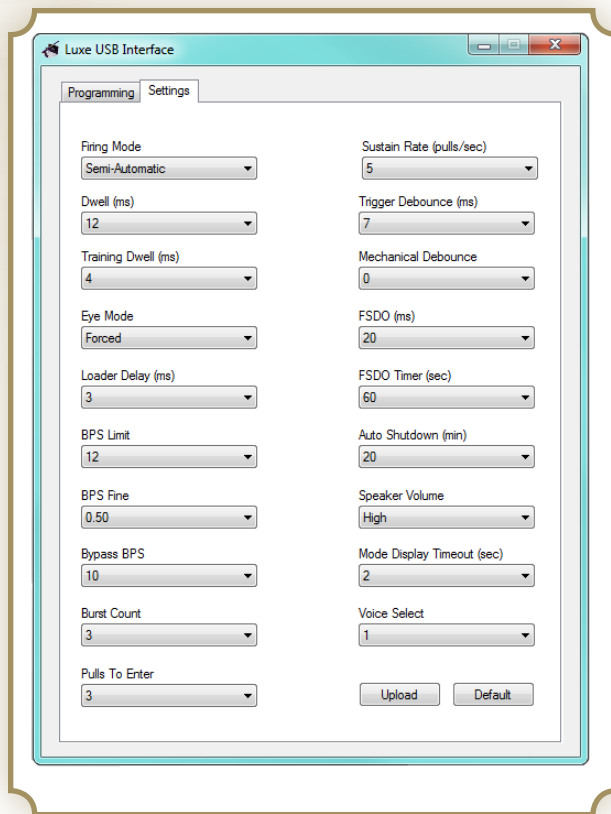
USE THE BROWSE BUTTON in the *Firmware Selection* area of the Luxe® USB Interface to locate the .aes file, then check the *"Firmware"* box in the *Download Selections* area and click the *"Download"* button. This will download the firmware from the computer to the Luxe®. If the *Voice* and or *Settings* check boxes are also selected, these will also be downloaded to the Luxe®. The progress of the firmware download will be shown in the *Programming Status* window, and takes approximately 10 seconds.

VOICES

LUXE® VOICE PACKS ARE A COLLECTION of PCM audio files along with one or more .xml files which serve as directories, telling the Luxe® which audio files to load for a specific voice set. For more information on the voice set format, see the Customizing Voices section of this manual.

LIKE FIRMWARE, LUXE® VOICE PACKS ARE DISTRIBUTED in .zip files. To access a voice pack, simply download the .zip file, open it and drag its voice pack folder(s) to the Windows desktop or documents folder.

TO LOAD A VOICE SET, use the *Browse* button in the *Voice Selection* section and locate the desired voice pack folder. Each voice pack may contain one or more voice sets, such as a celebrity voice pack with different sets allowing a choice of different start-up sounds with that person's voice. Select the .xml file for the voice set you wish to load.

CHOOSE THE VOICE BANK from the *Voice Selection* section into which the voice should be downloaded. Voice bank One is not available, as it is reserved for the Luxe® default voice, which the marker will use after a factory reset. Once the voice bank is selected, select the *"Voice"* checkbox in the *Download Selections* section, and click the *Download* button. Download progress will be shown in the *Programming Status* area. Downloading a voice set from the computer into the Luxe® typically takes 10 to 12 minutes depending on the file sizes in the voice set.

IF DOWNLOADING SETTINGS OR FIRMWARE to the Luxe® after downloading a voice set, be sure to un-check the *"Voice"* checkbox in the Download Selections section, or the last selected voice set will also be downloaded, requiring a 10 to 12 minute wait. Cancelling a voice set download after it has started will result in an empty voice bank.

SETTINGS

THE SETTINGS TAB IS USED TO READ or change the settings in the Luxe®. For each setting, a pull-down menu is shown with all available options. Two buttons in the lower left also change the settings. Clicking the *"Default"* button will select the factory defaults for each of the 19 settings. Clicking the *"Upload"* button will upload the Luxe®'s current settings from the circuit board into the Luxe® USB Interface software, allowing a fast look at how the marker is configured. The upload process takes approximately 3 seconds, and Windows will display a "busy" mouse pointer while it is happening.

AFTER CHANGING VALUES in the *Settings* tab, click back to the *Programming* tab, check the *"Settings"* box in the *Download Selections* area and click the *"Download"* button to download the chosen settings from the computer to the Luxe®. The status of the settings transfer will be shown in the *Programming Status* window. Downloading settings takes approximately 2 seconds.

CUSTOMIZING VOICES

LUXE® VOICE FILES ARE SAVED as Unsigned 8-bit PCM audio files with a sampling frequency of 8KHz. As a matter of convention (it is not required) the files are named with the name of the voice set, a reference number for each sample and the file extension .raw.

EACH VOICE SET IS DEFINED by an xml file which may be edited with Windows Notepad or other text editors. Each phrase entry in the xml file includes its index number, the name of the particular phrase and the filename of the sound file to be loaded for that voice index position. The xml file from an official Luxe® voice set can be used as a list of samples that will need to be recorded to build a completely custom voice set.

MODIFYING AN EXISTING VOICE SET to change its powering-on sound for example is achieved by recording a new sample and saving it in 8-bit, 8KHz unsigned raw PCM format in the same directory as the rest of the sound samples in the set to be modified, then making a copy of that voice set's .xml file and editing the file entry for Index entry 44, the Powering-On sound, to list the new filename.

COMPLETE VOICE SETS MUST BE 1MB or smaller in total size.