

# LX USB Programmer

ver | 1.0

## Application User Guide

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## System Requirements:

To install and use this software, your computer must meet the following requirements.

For PC:

- Windows 2000 or later
- 1Ghz or faster processor
- 512Mb+ of RAM
- 15Mb or more of free disk space

For MAC:

- OSX 10.5 or later (Leopard)
- 1Ghz or faster processor
- 512Mb+ of RAM
- 25Mb or more of free disk space

Adobe pdf reader (or equivalent) is required to view the help materials. You may install the pdf reader from the included disc or download it directly from Adobe's website:

<http://get.adobe.com/reader/>

## Installation:

Insert the bundled mini cd into your computer to begin the installation. On computers running the Windows operating system, a welcome window will appear with an option to begin the installation process. If your system is set to disallow CD auto-run you will not see the welcome window and you must launch the installer manually by browsing the CD contents in "My Computer". If your system is not physically compatible with the bundled mini cd you may download the program for the operating system of your choice from the following website:

<http://www.source1thermostats.com/downloadapp.html>

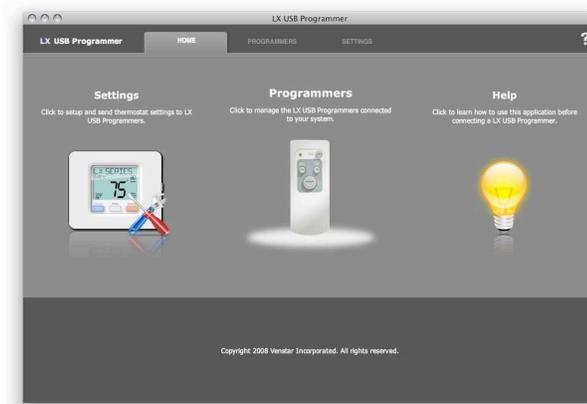
- For Mac computers, download and run `lxusb_win_setup.pkg`
- For Windows computers, download and run `lxusb_osx_setup.exe`

Follow all instructions given by the installer and complete the program installation.

## Quick Start Guide:

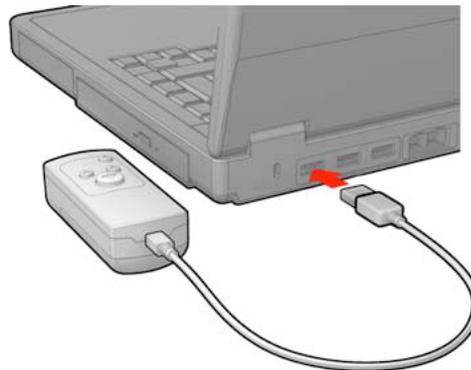
The quick start guide will help you start programming the S1-LXUSB programmer with your computer. Be sure to have the program installed on your computer before proceeding. Follow the installation instructions above if you have not already installed the program.

1. Launch the installed program



2. Connecting the USB Programmer Module:

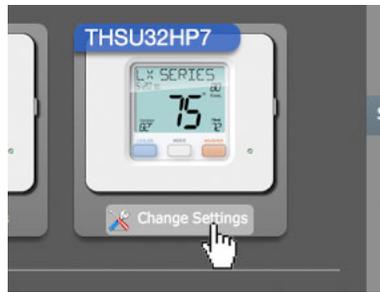
Connect the USB Programmer Module to one of your computer's USB ports using the included USB cable as shown below:



The program should automatically recognize your connected programmer and list it under the "Programmings" tab.

3. Selecting a thermostat to configure:

Click on the settings tab to list all the LX Series thermostats that can be programmed using this program. Find the thermostat model that you would like to program and click on its "Change Settings" button. For example, to program the THSU32HP7, click on the following button:



#### 4. Configuring a thermostat:

You will now see a screen filled with all the configurable options for that particular thermostat. The current step, the total number of steps available, and the title of the current step are shown on the top left corner of the screen. In the image below, the user is currently viewing the first of 8 steps and he/she is configuring the General Settings of the thermostat.



On the lower left and right corners of the screen are 2 buttons labeled Previous and Next. These buttons allow the user to navigate to the next step and to the previous step. There are also 2 buttons on the top right corner of the screen labeled "Set Defaults" and "Close". Clicking the "Set Defaults" button will revert all of the settings for the current step back to the factory default values. The close button will return you to the main "Settings" screen.

Configure the thermostat's settings one by one to your desired liking. To exit to the main "Settings" page click on the "Close" button.

#### 5. Configuring other thermostats:

Repeat Step 4 for each thermostat model that you would like to program; the application will remember each model's configuration

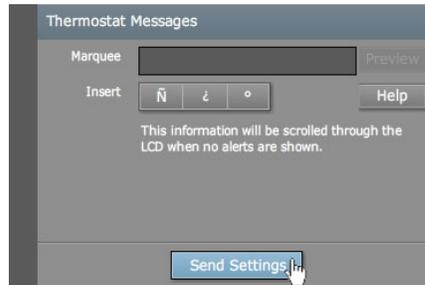
#### 6. Setting service information and scrolling marquee:

The service information is the text displayed when service is required and marquee text is the text displayed at other times. For the service information, you can either use the default settings, your own custom text, or choose to not display any service information on the thermostat. For the scrolling marquee text, you may use your own custom text, or not display any text.

Refer to the Text Formatting and Special Characters section for more information on formatting and displaying special characters.

7. Sending the settings to the USB Programmer Module:

Once satisfied with the thermostat configuration, click on the "Send Settings" button on the "Settings" screen.



Select the programmer that you would like to program and click "Send". Once the settings are successfully sent, click on the "OK" button to return to the "Settings" screen.

Click on the "Programmers" tab and click "Eject" on the programmer in use. Once it has successfully ejected, you may unplug the USB Programmer Module from the computer.

8. Saving your configuration:

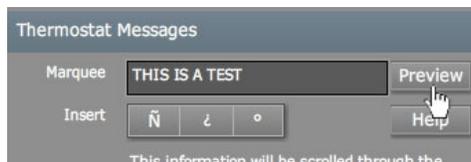
If you would like to save your configuration to a file, specify a descriptive name in the "Name" input box located in the "Settings" screen. Once finished, click on the "Save to File" button. Select a location for the file and click OK. A file containing all of your settings, including the Service Information and scrolling marquee text, will be created. You may load this file in the future using the "Load from File" button to load all of the configuration settings that you've saved.

*Note: The "Save to File As" button will save the current setting as a new file. This is useful if you would like to save as a different file rather than saving it to the same file that you've loaded.*

## Text Formatting and Special Characters:

The scrolling marquee display of the LX Series thermostat can display textual information to the user, including customized messages that you can program into the thermostat. A number of formatting options are available so that textual information is presented the way they are intended.

Because the LX Series thermostat is limited to displaying 10 characters at a time (including spaces), you may use special characters to correctly format your message. You may preview them in the different scrolling modes by clicking on the "Preview" button before programming the thermostat.



**&** - Use the ampersand (&) to denote a non-breaking space. Words joined by "&" will be considered a single word by whole word scrolling modes. This provides format control for small words.

### Example:

"THIS IS A TEST" will be displayed as

- "THIS IS A"
- "TEST"

"THIS&IS A&TEST" will be displayed as

- "THIS IS"
- "A TEST"

**#** - Use the pound sign (#) to add a smart word break. The word will be broken at the # character and replaced with a "-" when a whole word scroll mode is active. The word will not be broken if the active scroll mode is letter by letter. This provides a way to split words that are larger than 10 characters.

### Example:

"PERIODIC#ALLY" will be displayed as

- "PERIODIC-"
- "ALLY"

*Note: The actual special characters themselves will not be displayed on the thermostat.*



## Configuring Programmable Thermostats:

All of the LX Series thermostats, with the exception of the TBSU22HN, can be configured to be programmable. This allows the user to configure time period setpoints (morning, day, evening, and night). You can easily configure this for the programmable LX Series thermostats using the computer to save time:

### Residential:

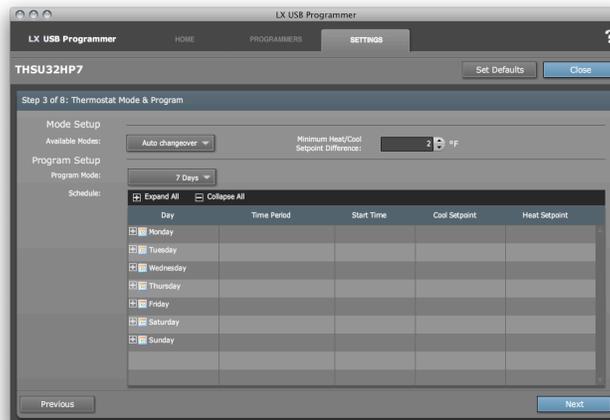
The residential models of the LX Series are all programmable. Both the THSU32P7 and THSU32HP7 support 1, 5/2, and 7 day programmable modes whereas the THSU21P1 only supports 1 day programmable mode.

### Commercial:

The programmable commercial models of the LX Series include the TBSU32HP7 and the TBSU32P7. They both support 1, 5/1/1 and 7 day programmable modes.

### Programming via computer:

Click on the “Change Settings” button for the particular thermostat you’d like to configure and navigate to the “Thermostat Mode and Program” page.



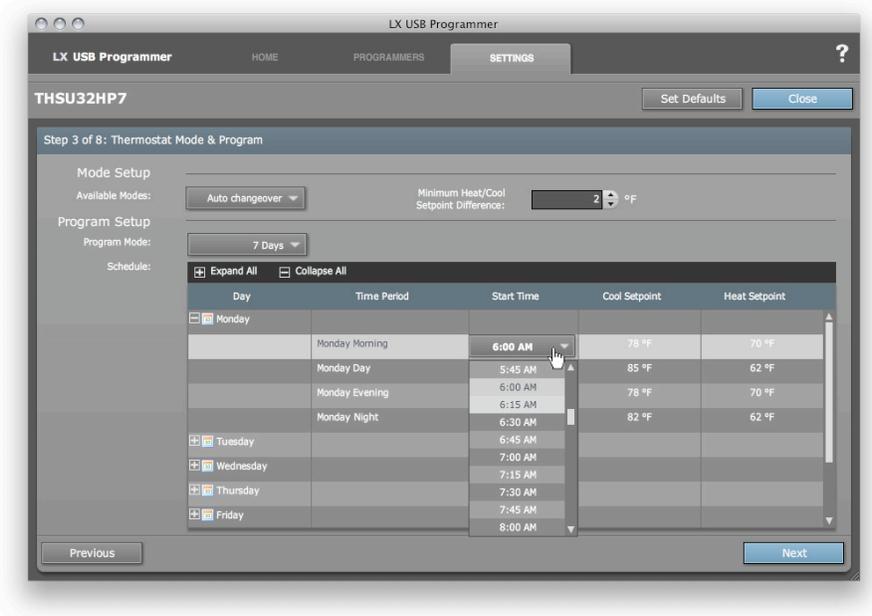
*Note: If you are configuring a commercial model, you will notice that additional fields are available to configure the Unoccupied cool and heat setpoints. Furthermore, the residential 5/2 program mode (weekday/weekend) is now 5/1/1 (weekday/Saturday/Sunday) to accommodate most commercial applications.*

You may configure the available modes of the thermostat (auto changeover, manual changeover, heat only, or cool only) via the first dropdown menu. Additionally, you can also configure the maximum heat/cool setpoint difference via the numeric stepper.

To begin programming, first select the program mode you’d like the thermostat to be in. Selecting 7 day will display a list of Monday-Sunday whereas 5/2 day will display Weekday-Weekend and 1 day is simply a single day. Select the day that you would like to program to expand its time periods along with the start times, cool setpoint, heat setpoint, and stop time (if commercial). Clicking on the same

day will then collapse those rows. You may collapse or expand all days by clicking on the Collapse All and Expand All buttons.

Once expanded, you may begin modifying the program parameters by clicking on the item. In the image below, clicking on the “Start Time” for Monday Morning opens a list of available times from which you may pick. Similarly, you may click on the setpoints to open a numeric stepper where you can increment/decrement the setpoint value or input directly by typing the number on your keyboard.



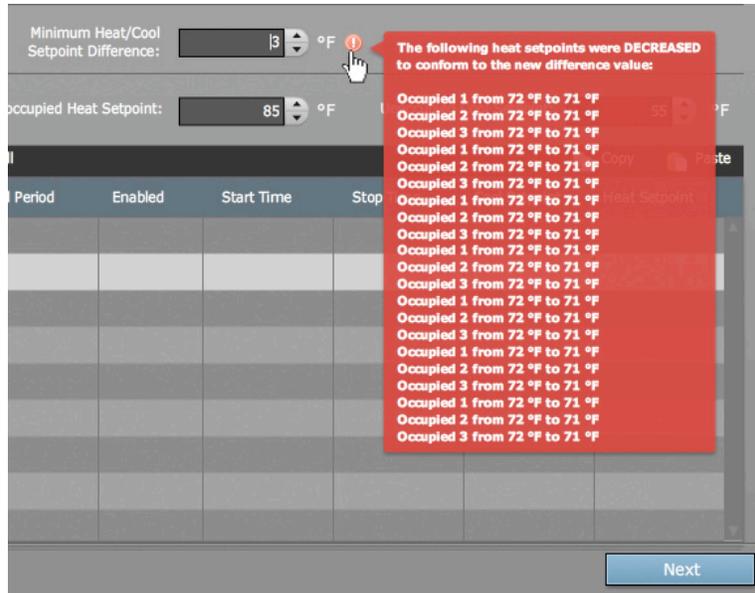
Do this for each of the day and time period that you want to program.

You may also copy and paste a day’s program into another day to speed up the process. To do this, simply click on the day that you would like to copy to display the Copy and Paste buttons. If you click on a time period of a day, you will not see the Copy and Paste buttons.



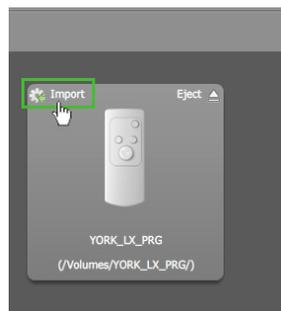
Clicking the Copy button will copy the selected day’s program to memory. You may then select a different day and click on the Paste button to duplicate the copied program to that particular day.

*Note: The max heat/cool setpoint difference and the security limit heat/cool setpoint (if enabled) are enforced while configuring your thermostat program. Changing the heat/cool setpoint difference after configuring your thermostat program may result in some setpoints being changed to meet the new setpoint difference requirement. If you notice the following icon, hover the mouse cursor over it to view the changes automatically applied.*



## Importing Data to the Computer:

You may import data from the S1-LXUSB USB Programmer Module to the computer for modification and/or archiving purposes. When a USB Programmer Module is connected to the computer, click on the "Programmers" tab in the program to view a list of connected Programmer Modules. Click the import button on the Programmer Module you would like to import data from:



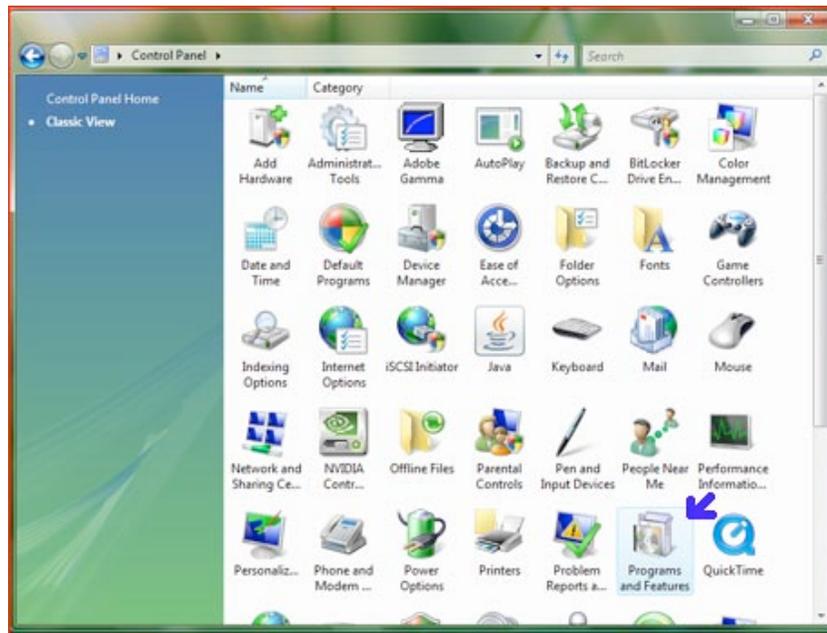
Confirm the import and wait until the importing process finishes. Once complete, the settings for all of the LX Series thermostats are now loaded on the application. You may then modify these settings and/or save them to a file.

## Uninstall:

To remove the LX Series USB Programmer Application from your computer, follow the steps outlined below:

### Windows Vista:

Access the “Control Panel” of your computer and click on “Programs and Features”. Find and select the LX Series USB Programmer application in the list. Once selected, click on the Add/Remove Programs button to begin the uninstall process.



### Windows XP & Earlier Versions:

Access the “Control Panel” of your computer and click on “Add or Remove Programs”. Find and select the LX Series USB Programmer application in the list. Once selected, click on the “Remove” button to begin the uninstall process.

### Mac OSX:

To remove the LX Series USB Programmer application, drag it’s icon to the trashcan.

