Lighting Controlled Simply
by team TheatricallyInclined

This is only a user manual design for our non-technical users. It only provides instructions on how to run and use our software rather than how it is built. If you are interested in the logic and technical details about our software, please consult the technical documentation

Download or get more information about our software from our website:

http://www.acsu.buffalo.edu/~ryang5/

Description:

LCS or Lighting Controlled Simply is a C# desktop based **Windows** application designed to be an easy to use replacement for two scene preset boards. We are utilizing the open source USB to DMX converter from Enttec to help minimize cost and simplify user hardware complexity. We are looking to deliver all the simplicity and function of a physical board while also having extra tools commonly found in high end boards in order to help the user.

Hardware Needed:

- A DMX (Digital Multiplex 512) based light (A light that can be controlled through DMX512)
- Enttec USB to DMX converter (which can be found here)
- DMX Cable
- 5-pin (male) to 3-pin (female) DMX adapter (if necessary for your light)

Software Needed:

- LCS software (download from our GitHub)
- ENTTEC OPENDMX USB Driver (here)

Current Features:

- Live computer control of DMX light
- Have instance and timed transitions between 2 scenes
- Ability to control any type of DMX functionality including but not limited to Color (RGBCMY), Color Temperature, Intensity, Pan, Tilt, Gobo Selection, Gobo Rotation, FX, FX Speed, etc.

Add on Features in the Future:

- Control multiple types of DMX Lights at once
- Ability to Create timed Show files and a cue list
- Ability to create light groups of similar but different addressed fixtures
- Sound activated mode (Control light through external sound from the environment)
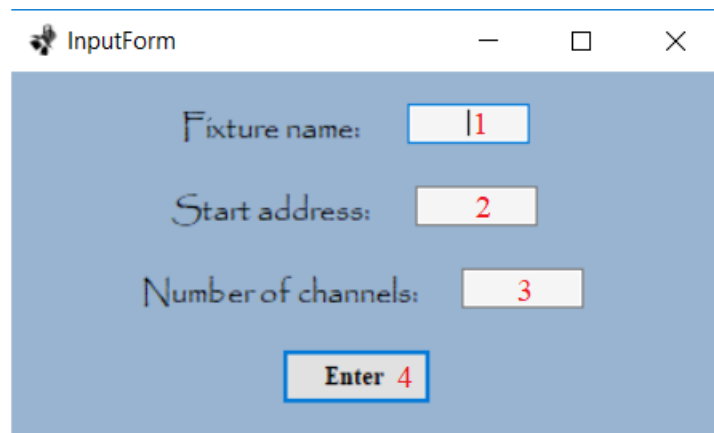
Running Software:

- Set your light to DMX mode with the necessary starting address
- Properly connect the DMX light and the Enttec Converter to your devices.
- Download our software (zip file) from GitHub, unzip the file. Open the project folder and run the executable file (LCS\LCS.exe) found in the LCS folder.
- Up to this stage, the software should be running, more details and explanations about the software can be found below in Software User Guide

Software User Guide:

Please make sure you have completed the Running Software instruction above when you get to this stage

The window below without those red numeric labels should be what you have so far. The explanation of those labeled field are below the image.


1. Fixture name of this light, this is basically the name of the light you are controlling. You can name it whatever you want
2. The start address of this light. This is the address of the first channel of your light, and the rest of channels will map to the addresses consecutively after this address. The maximum address is 512.
3. Total number of channels in the for the light. This is the channels you wish to have for your light. For example, you could have three channels where channel 1

controls Red, channel 2 controls Green, channel 3 controls Blue colors of your light. (This is fixture specific and can be found in the User Manual for your light)
4. You could either click Enter button or hit enter key in your keyboard to get to the main controlling page.

When you hit enter, if the input is invalid, you will be prompted with error message to corresponding input otherwise you should have main window popped out as shown below (This is an example with Fixture name "LED", Start address "1", and Number of channels "10"):
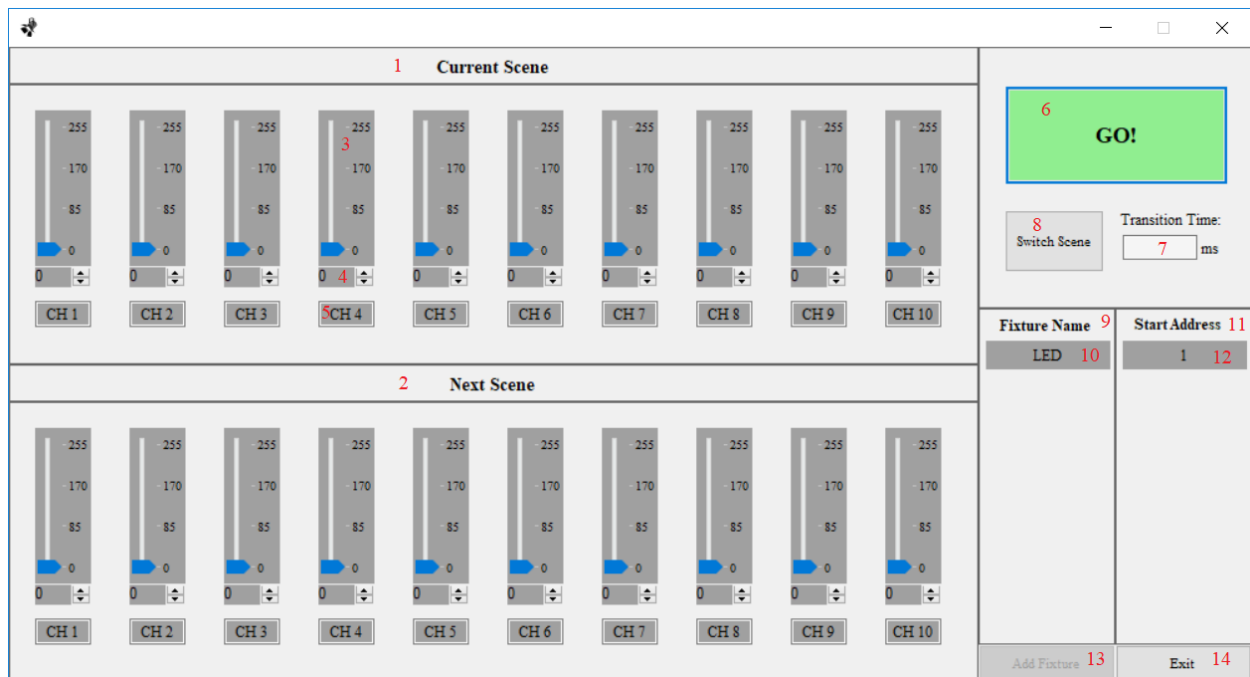
1. The Current Scene Panel. This is the panel that currently your light is displaying. You can try to change values of different channels, and the light should have corresponding change according to this panel.
2. The Next Scene Panel. This is the panel that your light will gradually transit to from current scene when you hit GO button. You also switch hit Switch Scene button to switch next scene to current scene.
3. The Slider Components. Slider that controls specific channel of your light. The exact value of this slider will be displayed below in numeric form.
4. The Numeric Up and Down components. This does exactly the same thing as slider. You can enter any number you want to control the light. The slider will be synchronized with this component.
5. The Channel Name Input Box. The name of specific channel of the light. The default channel names are CH plus specific channel this slider is at. You can change name of any channels to anything you want.
6. The GO Button. Once this button is hit and the Transition Time is valid, it will automatically turn into STOP button, and the timed transition will begin. The light will gradually transit between current scene and next scene within the transition time you entered. You will not allow to change any channel values during the

transition. You can click on STOP button to stop transition and make change with your channel values.

7. The Transition Time Input Box. This input box takes a positive integer number as your transition time. You will not allow to start timed transition for your light if this input box is invalid. The time unit is million second (1000ms = 1s).
8. The Switch Scene Button. This button allows you to do instance switch between current and next scenes.
9. The Fixture Name Panel. This panel will show all your fixtures with their names.
10. The Fixture Name. This is the name of all your light which you entered in the input page in Fixture Name.
11. The Start Address Panel. This panel shows the corresponding start address of certain light.
12. The Start Address. The actual start address of certain light.
13. Add Fixture Button. This button will allow you to add more lights to your control board (currently not available).
14. The Exit Button. This button will allow you to kill and exit the program.

Support:

If you have any question or concern about our software, you can always find us on our Gitter Chat Room, or email any of us:

Rong Yang: ryang5@buffalo.edu

Alex Killion: apkillio@buffalo.edu

Zack Bowen: zackbowe@buffalo.edu

If you find any bugs in our software, please you can report it as an issue in our GitHub or tell us in Gitter Chat Room.

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