

# How to Make Proper Lighting Charts v2

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## 1 Introduction

This document explains how I make lighting charts at the time of this document being written. Currently I type them in L<sup>A</sup>T<sub>E</sub>X or Microsoft Excel/ LibreOffice Calc. They depend on the case, and in the future I might make a program that converts one of the formats to the other, and vice versa.

This document was made using L<sup>A</sup>T<sub>E</sub>X, a typesetting format. All section titles in the Table of Contents can lead you to the actual section when double-clicked. You can read here why I made this in L<sup>A</sup>T<sub>E</sub>X.

## 2 Why is this important?

You might be asking why this is important? During practices or dress rehearsals, we make and modify our own lighting charts. This is not entirely necessary, but it is easier to keep track of things if we write them down. This document describes my format on how to do so. Don't think that you must follow this if another format works better for you. Just make sure that other people can also understand it if they have to use your notes.

## 3 Getting the Template

To get this template, you can go to <https://huseinesmail.xyz/guides/all/> and download the template under "How to Make Proper Lighting Charts".

## 4 Using LaTeX

In the past I have made my lighting charts in Microsoft Word. I have now been trying to move my process over to LaTeX, and that means typing my lighting charts in that format too. In LaTeX, it can number functions automatically (useful for counting cues automatically), make a Table of Contents automatically (useful for going directly to a scene and its first cue in it), and many other things that isn't really necessary in this template like automatic citations, and more.

The main concept about LaTeX is that (almost) everything is a command. A command looks like this:

```
\commandname{}
```

In this case, the command only has 1 argument, since it only has 1 set of brackets. I have defined my own commands, which are:

```
\LX{Lx num}{Page num}{Time}{Line 1}{Line 2}{Description}{Notes}  
\note{Note}  
\newScene{Num}{Title}
```

Here I wrote what goes in which arguments. Almost all of the arguments in the commands I created are optional. That means if you have nothing to put in that

specific field, you can just have a set of empty brackets. The only ones that are currently not optional are: the scene number in “\newScene{HERE}{” and the note in “\note{HERE}” (because if you have no note but you are writing a note command, I see no point in that). If you leave the Lx num blank in “\LX{HERE}{” it will count automatically for you. This is useful if you are planning cues, but not if there are already cue numbers set in your lighting board with their own numbers.<sup>1</sup> The count starts at 1<sup>2</sup>, and goes up by 1.

## 5 Formatting

### 5.1 \Lx{ }{ }{ }{ }{ }{ }

#### 5.1.1 {Lx number}

This section is how to use the Usually when people have a list of items, they are numbered in the order they appear. Well theatre has something similar too. It is referred to as the ‘cue’ but written as “Lx” (for the specific convention of “lighting cue”. The x means cue). For example, if the Stage Manager says to go to “Cue 37”, you would look for Lx 37. This means that whenever we write our lighting cues, they must be numbered.

#### 5.1.2 {Page}

Normally you might also choose to note in your script when each cue happens as well. Either way, this “Page” section comes in handy. If the Stage Manager or Director chooses to continue from a specific line on a specific page, you can refer to your lighting charts what the lights need to be at that moment. It can also tell you when there is a break between cues so you are not ready to do the cue for a long time.

#### 5.1.3 {Time}

This section is how long the duration of the cue takes, if it is faded or if you have to do it manually. If it is just programmed into the lighting board and you don’t have to worry about it, you can leave this blank and this part of the cue won’t be printed.

#### 5.1.4 {Line} → {Line}

This section would be when to perform the cue based on what line a person says. If you are writing the lines in the LaTeX template, and you have to perform the cue between “I want some” and “pizza with mushrooms.”, you would write it like this:

---

<sup>1</sup>However, in some lighting boards you can set it to renumber the cues properly, in which case you would get the same auto-generated numbers here

<sup>2</sup>Unless the starting number is changed in \myLXcounter in the variables section

\LX{}{}{}{I want some}{pizza with mushrooms}{}{}

If this cue were printed, it will show up like this:

```
-Lx- | 1  
Line | I want some  
      | Cue here.  
Line | pizza with mushrooms
```

The reason why I formatted it this way is because it's easier to see where to run the cue. If it was all on one line like it used to be, it would look like this:  
**Cue:** [line before cue] → [line after cue]

### 5.1.5 {Desc}

This section is if you have a description of the cue, for what it does, Simple as that. This is useful for finding when something happens but you don't remember the cue or page it's on. If you had "Red wash" in the description, you could find the words "Red wash" in the PDF or .tex document and you'd find it. It's also nice for listing all instances of something all together. If you have no description, this section won't show in that cue.

### 5.1.6 {Note}

This section is for your personal notes. If you have no note, this section won't show in that cue.

Examples:

- "Redo"
- "Go over at tech run"
- "Fix this"
- "Changed on board. Retype this."

... you get the idea.

## 5.2 \note{}

This command is if you have a note, but isn't assigned to a specific cue. It could be something to prepare for if something is done by a cast member, where a sound cue would be, a personal note, etc.

## 6 Ways to write changes

This section only applies if you plan to write the channel numbers and intensity percentages on your documents. It can be used to reference if something goes wrong with the lighting board, but it also takes up space on the page when you are running through the show.

I know of two ways to write channel numbers and intensity percentages (will be referred to as "cue") in lighting charts. The first is to only write what changes

in each cue, and the other is to write all the lights that are on in a given cue. There are pros and cons to both, and here's what they are.

### 6.1 Only writing changes in each cue

The benefit to this is that it's faster to read during performances, but the downside is that if the director wants to start at a certain scene, there may be lights that need to be turned on that aren't listed in the current cue.

### 6.2 Writing all instructions on all cues

The benefit for this is that it's easier to switch to specific scenes, but they are slower to read during performances because there will also be cues that are already on.

Note that if you are using specific channel numbers, they only work if you are at the same theatre. A solution to this would be to write stage locations, but we will go into that later on. If you are using submasters on the lighting board, you can simply write **SUB 1**. If you are using multiple submasters at the same time, it would look a little like this:

**SUB1@100%, SUB2@50%**

I recommend refraining from using multiple submasters during individual cues, because that would defeat the use of them; which is to have all the lights you need in one fader. The goal is to make it something like this:

**SUB1@100%**

### 6.3 When there are no changes

If there are no changes in something but you still need a new lighting cue, you would write “[NONE]” in the spaces where no change occurs. For the BASIC lights, it would look something like this:

**[NONE]**

## 7 Stage Locations/Other Theatres

If you are making lighting charts that you know will only be performed at your own theatre, then this section isn't as necessary. Some examples of this scenario can be the school talent show, and the winter and spring showcases.

However, if there is even a possibility there will be performances at a different theatre, I recommend that you write this section. This section is used to make submasters at new theatres. I won't go into why, but please, if there is one thing you need to know out of this entire document, **MAKE SURE YOU WRITE DOWN STAGE LOCATIONS FOR LIGHTS FOR EACH CUE!**

Since words like “Downstage” or “Stage Right” take up a lot of space, we use abbreviated terms.

Term	Name
USR	Upstage Right
USC	Upstage Centre
USL	Upstage Left
SR	Stage Right
CS	Centre Stage
SL	Stage Left
DSR	Downstage Right
DSC	Downstage Centre
DSL	Downstage Left
AL	Apron Left
AC	Apron Centre
AR	Apron Right

## 8 Example Lighting Chart

<b>-Lx-</b>	1
<b>Page</b>	2
<b>Line</b>	[None]
	<u>Cue here.</u>
<b>Line</b>	[None]
<b>Desc</b>	House lights
<b>Note</b>	When people enter, before show
<hr/>	
<b>Note</b>	When the admission period ends. Show starts here.
<hr/>	
<b>-Lx-</b>	2
<b>Page</b>	2
<b>Time</b>	4s
<b>Line</b>	[None]
	<u>Cue here.</u>
<b>Line</b>	The first line in the script
<b>Desc</b>	Blackout
<b>Note</b>	Before the show starts
<hr/>	
<b>-Lx-</b>	3
<b>Page</b>	2
<b>Time</b>	4s
<b>Line</b>	This is the line before.
	<u>Cue here.</u>
<b>Line</b>	This is the line after
<b>Desc</b>	Some description
<b>Note</b>	This is a note.
<hr/>	
<b>-Lx-</b>	4



<b>Line</b>	[None]
	<u>Cue here.</u>
<b>Line</b>	[None]
<b>-Lx-</b>	5
<b>Page</b>	2
<b>Time</b>	4s
<b>Line</b>	This is the line before.
	<u>Cue here.</u>
<b>Line</b>	This is the line after
<b>Desc</b>	Some description
<b>Note</b>	This is a note.

## 9 Contact

If you have any issues with L<sup>A</sup>T<sub>E</sub>X or my templates, please don't hesitate to send me an email at HusseinEsmailContact@gmail.com.

You can also see my website here at <https://husseinesmail.xyz>.