

## Lighting packages for Elementary, Middle, and High Schools

**For K-8 schools** I would recommend a lighting package that sets up (and breaks down) quickly and easily and covers the performance area with a general illumination.

The Lightronics “Lighting in a Box” LB02 package is designed to do just that.

<https://www.newlighting.com/22257/new-lightronics-lb02-lighting-in-a-box?ref=search.results>

This package includes

- (1) Show\*Pro SM192 Console (a light board)
- (2) Show\*Pro SD4102 Dimmers (each plugs into a wall outlet, on different circuit breakers)
- (8) PAR38 Fixtures (I recommend the upgrade to PAR56 fixtures - they are almost twice as large, a 7” lamp diameter, compared to 4.75” diameter of the PAR38s)
- (8) 150W Lamps (I’d also recommend going up to 300W lamps, effectively twice as bright)
- (8) Color Gels (nice to start with, but most likely just use white light for illumination)
- (2) 25' Microphone Cable (to connect light board to dimmers for control)
- (2) 9' Stand



With practice one person could set this up in 30 minutes. The light board has a individual sliders that controls each light.

A common setup of a system like this would be to place each tree about 10’ away from the corner of the performance area closest to the audience. On each tree point one light toward the closest third of the stage, one at the center third, one at the farthest third, and use the 4th unit in the smartest way possible, e.g. point it at the piano/ band, or on a soloist/narrator.

Each of these systems should be under \$1000.

### **For High Schools with no existing lighting packages**

Certainly creativity lives at all grade levels, but high schools have a variety of performance opportunities. I feel that more than general illumination is needed.

They need color. I will present three different package (small, medium, and large) for schools that have no built-in lighting system.

These are all based on the “Lighting in a Box” system above, just larger, more muscular systems.

**Small System - All 3 system sizes begin with the same two lighting trees in the audience**, about 15' away from the edge of the performance area. The trees are taller than the K-8 system (11' tall, compared to 9') and each tree holds 8 lights instead of 4.



Each of the audience trees will have 4 LED color changing wash units and 4 adjustable zoom spotlights on it



The Wash units do just that, they color the performance area with a wash of color. They have 7 different colors of LED lights in them, so they can be mixed (on the lighting console) to give the students just about any color they need. Each unit is controlled independently

The spotlights (25°-50° beam spread - If you hold your arms out in front of you and make the letter V, that's a little smaller than 50°, half of that is about 25°). So these Spotlights can cover the stage with general illumination or be tightened down to cover a single performer.



The trees each have 4 dimmers attached to them for the spotlights, the dimmer pack plugs into a wall. The Wash units daisy-chain (plug into each other) with the last unit plugging into the wall



All of the lights are controlled by a wired control signal that comes from the control console. Each light can be assigned a slider or lights can be control by a touchscreen. Individual lighting looks can be copied into the console's memory or simply assigned to a slider. To use the advanced features of the control board takes some learning, but the touch screen has a built in help section that functions as a manual.

With more theatre types of lighting units, this system is easily twice as bright as the K-8 system and able to produce more theatrical effects.

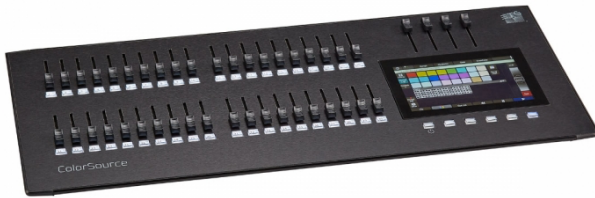
With practice, two people could easily put this system in place in one hour. The taller tripod units are weighted at their bottom with 75 lbs. of sandbags for safety. While this is a “portable” system, I imagine that it may be in place for a few days of practice or multiple performances.



Small Package - 2 trees	Brand	Model		Quantity	Price each	Total
<b>ultimatesupport.com</b>	Ultimate Support	LT-99B	11' lighting stand	2	250	500
<b>newlighting.com</b>	4Wall	Sandbag 25 lbs.		6	25	150
	Chauvet	SlimPar64	LED color changing wash unit	8	150	1200
	ETC	Source4Jr 25-50 Zoom	Ellipsoidal reflector spotlight	8	380	3040
	Lightronics	AS40	4 channel dimmer	2	300	600
	ETC	Colorsourc 20	20 channel lighting control console	1	1590	1590
<b>Any brand will do</b>		3 foot mic cable	Par controls	6	8	48
		25' DMX cable	Console to dimmer 1	1	25	25
		10' DMX Cable	Dimmer 1 to tree 1	1	10	10
		50' DMX	Tree 1 to dimmer 2	1	50	50
		10' DMX Cable	Dimmer 2 to tree 2	1	10	10
		3 pin XLR to DMX adapter	signal to and from pars	3	10	30
		50' Extension cord	Power to dimmers	2	30	60
		5% overage		1	365.65	365.65
					<b>Grand Total</b>	<b>7678.65</b>

**Medium System** Begins exactly the same as the small system with the two trees in the audience, but two 11' tall trees are added *behind* the performers, each with 4 more LED color-changing Wash units. This will give depth to the performers in the space (using only light from the front tends to “flatten” people. This will add space to the performance area.

Because more than 20 units are being controlled a slightly larger version of the lighting control console has been substituted.



It will take longer to set this system in place, but not twice as long.

Medium Package - 4 trees	Brand	Model		Quantity	Price each	Total
<a href="http://ultimatesupport.com">ultimatesupport.com</a>	Ultimate Support	LT-99B	11' lighting stand	2	250	500
		TS-110BL	11' tripod stand	2	170	340
		LTB-48B	4' lighting crossbar for tripod stand	2	55	110
<a href="http://newlighting.com">newlighting.com</a>	4Wall	Sandbag 25 lbs.		12	25	300
	Chauvet	SlimPar64	LED color changing wash unit	16	150	2400
	ETC	Source4Jr 25-50 Zoom	Ellipsoidal reflector spotlight	8	380	3040
	Lightronics	AS40	4 channel dimmer	2	300	600
	ETC	Colorsourc 40	40 channel lighting control console	1	2450	2450
Any brand will do		3 foot mic cable	Par controls	6	8	48
		25' DMX cable	Console to dimmer 1	1	25	25
		10' DMX Cable	Dimmer 1 to tree 1	1	10	10
		50' DMX	Tree 1 to dimmer 2	1	50	50
		10' DMX Cable	Dimmer 2 to tree 2	1	10	10
		50' DMX	Tree 2 to tree 3	1	50	50
		50' DMX	Tree 3 to tree 4	1	50	50
		3 pin XLR to DMX adapter	signal to and from pars	7	10	70
		50' Extension cord	Power to dimmers	2	30	60
		50' Extension cord	Power to trees 3+4	2	30	60
		5% overage		1	505.65	505.65
					<b>Grand Total</b>	<b>10678.65</b>

**Large System** - This offers the most creativity and variety. This system uses the two trees of the small system, and doubles them. Placing the two new trees *behind* the performers. This now lets the performance area be washed from all sides in the same color, or contrasting colors, or a rainbow. It also gives 8 more opportunities to highlight parts of the playing area or create effects. This system uses the same control console as the Medium system.

2 people could set this system up in two hours; 4 people, one hour.

Large Package - 4 trees	Brand	Model		Quantity	Price each	Total
<a href="http://ultimatesupport.com">ultimatesupport.com</a>	Ultimate Support	LT-99B	11' lighting stand	4	250	1000
<a href="http://newlighting.com">newlighting.com</a>	4Wall	Sandbag 25 lbs.		12	25	300
	Chauvet	SlimPar64	LED color changing wash unit	16	150	2400
	ETC	Source4Jr 25-50 Zoom	Ellipsoidal reflector spotlight	16	380	6080
	Lightronics	AS40	4 channel dimmer	4	300	1200
	ETC	Colorsources 40	40 channel lighting control console	1	2450	2450
<b>Any brand will do</b>		3 foot mic cable	Par controls	12	8	96
		25' DMX cable	Console to dimmer 1	1	25	25
		10' DMX Cable	Dimmer 1 to tree 1	1	10	10
		50' DMX	Tree 1 to dimmer 2	1	50	50
		10' DMX Cable	Dimmer 2 to tree 2	1	10	10
		50' DMX	Tree 2 to Dimmer 3	1	50	50
		10' DMX Cable	Dimmer 3 to Tree 3	1	10	10
		50' DMX	Tree 3 to Dimmer 4	1	50	50
		10' DMX Cable	Dimmer 4 to Tree 4	1	10	10
		3 pin XLR to DMX adapter	signal to and from pars	7	10	70
		50' Extension cord	Power to dimmers	4	30	120
		5% overage		1	696.55	696.55
					<b>Grand Total</b>	<b>14627.55</b>

I hope this helps. I can Theatre-splain all of this better in person or on Zoom. Storage of all of this at the school also needs to be considered.

Stay safe and take care,  
Michael