

STUDENT WORKSHEET 15

LIGHTING DESIGN

Tim Lutkin's sophisticated lighting design for **BACK TO THE FUTURE: The Musical** utilises a range of lanterns, colours and special effects. We asked him what the considerations were for translating such an iconic film onto the stage. He spoke to us about creating 'black art illusions':

"The overall design vision for the lighting on the show developed from me and Tim Hatley talking about 'how do you deliver iconic film moments in a box space?' And one of the big things we do with illusions is called 'black art illusions'. This is, basically, where everything is covered in black velvet. And then you can get away with pretty much anything because you only light the object you want to see or the person you want to see.

"When you define a space around it, which we call 'framing', and the black box space has been framed with the edges of the LED portals."

"You've essentially got black floor, black wings, and a black video wall. And then we control the whole levels of light and video within that box to give you what we'd call negative space, which is all the black space. So then, we frame it with those LED lights. And then you add some content on the video wall, and you add the skeletal bits of scenery. And then suddenly, you've got a toolbox to be able to deliver all these visuals inside it."

"So, we decided that was the concept. We're going to deliver all these iconic moments within this black box."

Brainstorm: Which moments in the show do you think were created using 'black art illusions'?



KEY VOCAB IN FOCUS - LEDS

Stage lights known as 'LEDs' use light-emitting diodes as a light source whereas traditional stage lighting often use halogen lamps. LEDs have high light output but a lower power consumption. There are three main types of LEDs: PAR Cans, strip lights and moving heads. All three of these LEDs are used in **BACK TO THE FUTURE: The Musical**.

CREATING THE EFFECT OF A ROCK CONCERT USING LIGHTING

Tim says that one of the first decisions he made as a lighting designer was choosing the 'rig'. The lighting 'rig' is the structure, often suspended above the stage, that holds the lights. The lights on the rig can then be focused on the actors and scenery on stage to create specific effects. Tim chose a rig which enabled him to create the effect of a rock concert:

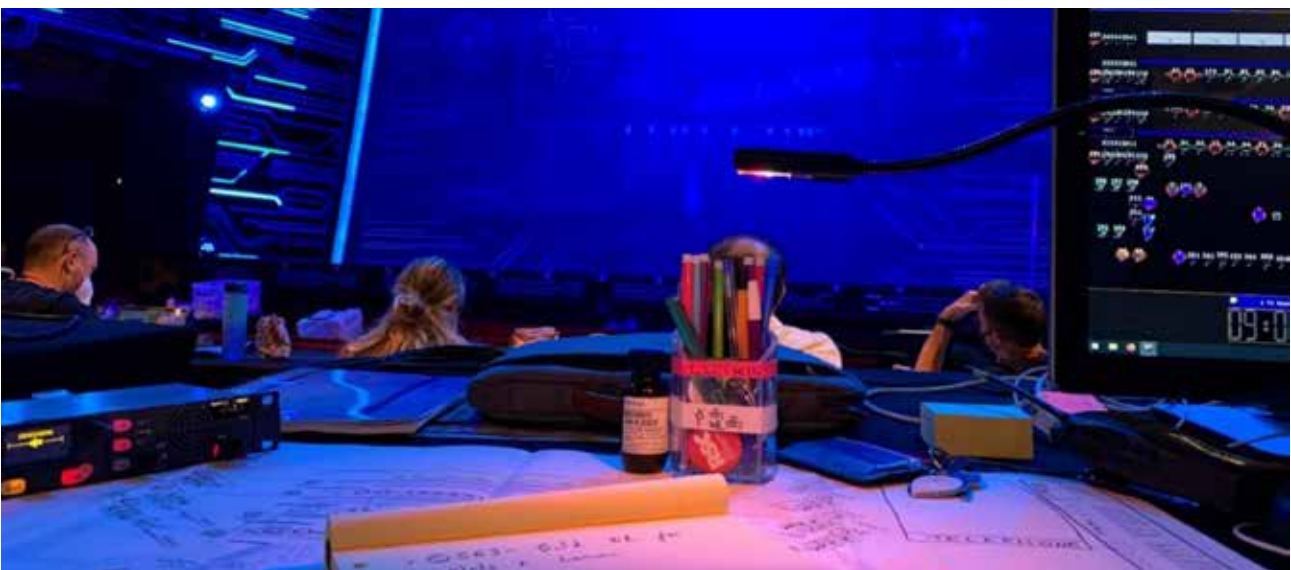
“The show has this rock concert drive all the way through.”

“So in the lighting rig, we decided to create a complete concert lighting rig. So it's just rows of moving lights that we can fly in and create a big old concert, moving lights around, blast a load of smoke on. But it also provides us all the tools we need to recreate everything inside the black box. And that is what's quite unique about the show, that the lighting rig is very much geared towards the concert. But obviously the other thing to say that might be useful for students, is that as technology's moved on in the last 10 years, especially LED technology... most of our rig is LED. Not all of it, but most of it.”

“A theatre rig is now looking more like a concert rig anyway. They're all moving lights. So that's a big design choice that we went on. And that means that we've essentially got an extremely flexible lighting rig.”

KEY VOCAB IN FOCUS - INTELLIGENT LIGHTS

When Tim refers to 'moving lights', these are also known as 'moving heads' or 'intelligent lights'. A new generation of fixtures called 'intelligent lights' can move to different focus points, as well as changing their beam size and edge hardness.



Tim Lutkin watching the Technical Rehearsal

CREATING AN INTIMATE SPACE USING LIGHTING

Much of the show has a 'concert' feel to it, with bold colours and moving lights. However, there are more intimate moments in the show, for example, the scene in Act 1, when Marty wakes up in Lorraine's bedroom. We asked Tim Lutkin how he chose to light this scene:



"In the bedroom scene, you've got a small scene with two cast members that need to deliver this intimate moment where Marty's realizing that he's actually got these feelings for his mother, and she's got feelings for him, but you're in a 1000 plus-seat auditorium. And Tim (Hatley's) got this beautiful little house truck. And then to define the space from upstairs, we only light the area downstage of the truck, to keep it intimate. And then another layer that works with theatre lighting, to hone in even further, is actually adding a layer of blue, deep blue. There's a deep blue island around the house truck, and the (LED) portals glow a little bit, and there's a tree piece that flies in that's got deep blue lighting on it.

"And it's the same whenever we want to define a small space on stage, is we define the area that they're going to play it in, and then add a surround in a deeper, saturated colour.

"It does two things. It gives you a different energy in the space and creates a tone for the scene. But it also helps your eye be less distracted by the light that's bouncing from the space because it fills it in with a saturated colour. So that's a product of doing things in a black box space, because you're able to do that.

"It acts as a blank canvas and a general thought for students is, the blank canvas for a lighting designer, as opposed to a white canvas for an artist, is the blackout. And you've got to think about building a lighting state from black."

KEY VOCAB IN FOCUS - SATURATED

A measure of how intense, rich or vivid a colour is. A lighting state which is described as 'saturated' is made of deep and powerful colours, rather than light tones or white light.

In contrast, a lighting state described as 'de-saturated' is one which combines different colours and is therefore 'muted'.