

**Anthony Kelly**

**Basic Lighting Software & MMX Software**

# About me

---

I am currently the Drama Subject Leader at Mercedes College in Adelaide, where I teach Drama & Theatre to middle and high school students. He also works as an independent multidisciplinary practitioner as a director, facilitator, devisor, designer, operator and actor. I firmly believes in the importance of the Arts as a vehicle for change and helping young people feel empowered and find their own voices through the Arts.

I frequently collaborate with Claire Glenn through our company *Conundrum Theatre* and their reputation for creating immersive theatre and site-specific works for and with young people is growing. Their site-specific and immersive works include *Where to From Here?*, *Unpacking Unley's Lost Worlds*, *The Bunyip of Brownhill Creek*, *SuperCOO-EEfragilisticexpialiCRIKEY* and most recently the Ruby Award winning *Area 53*.

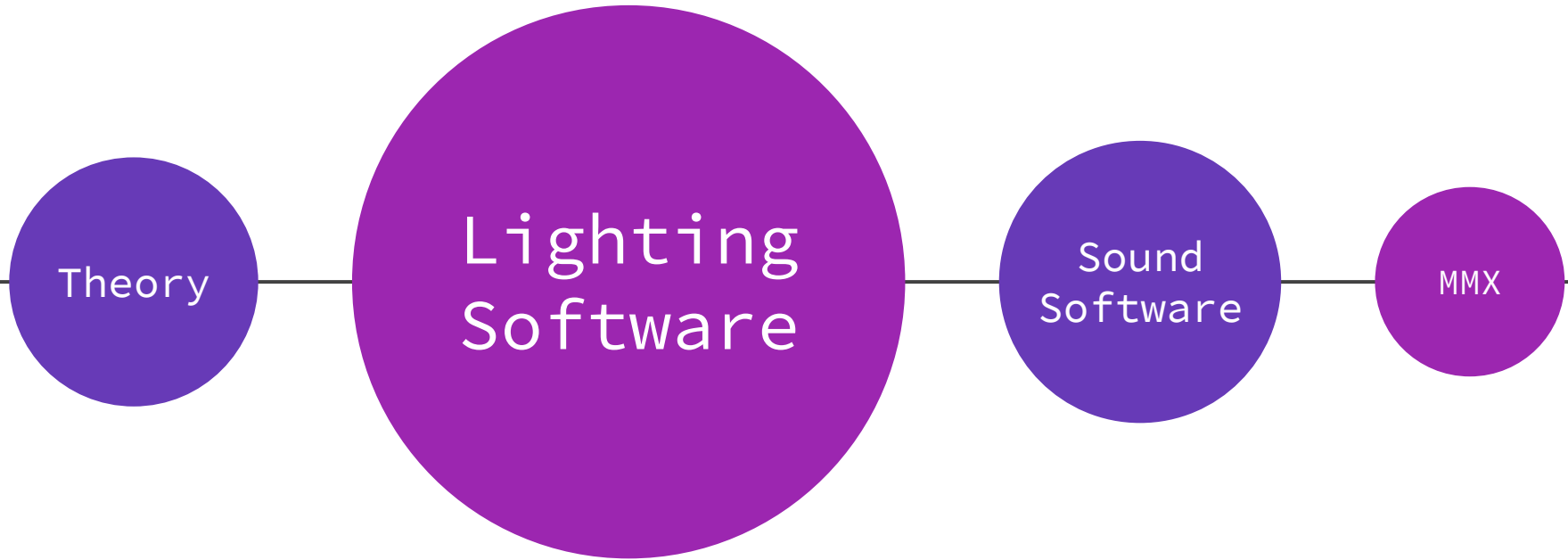
I have worked with a range of youth theatre companies including South Australian Youth Arts (SAYarts) and D'Faces of Youth Arts in a variety of roles, including technical designer and operator and has also written a number of contemporary and incisive musicals for schools.

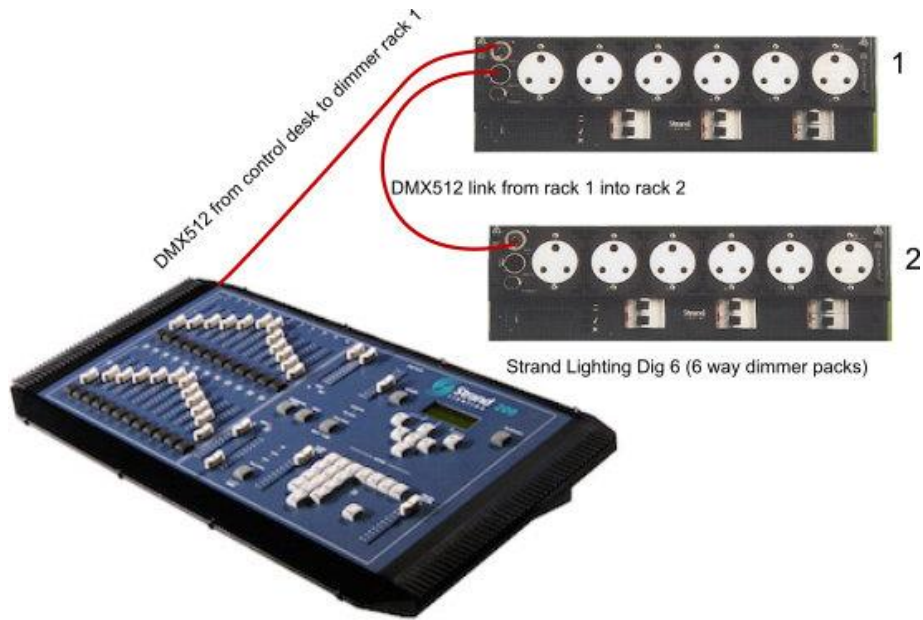
I love technology, particularly lighting and sound and am constantly trying new programmes to get the most out of lighting, media and sound in production.

## Workshop Aim:

To give you the knowledge and skills to use software for your lighting, sound & projection requirements in your context.

# Today's Focus





---

## DMX (Digital Multiplex)

Image Sourced:

<http://www.theatrecrafts.com/pages/home/topics/lighting/lighting-systems-patching/>

---

## DMX Addresses

Everything needs to have an address to function with DMX 512.

Profiles, Fresnels, ParCans generally have 1 channel.

1 channel = dimmer/intensity + varying power through the dimmer rack

Then LEDs, Moving Heads etc, can have something like 22 channels - argh!

### Require Constant Power

Most simple LED Pars have 4 channels;

Channel 1: Red

Channel 2: Green

Channel 3: Blue

Channel 4: Dimmer

Can be more depending on functions - can find this information in the Manufacturers Guide + Operation Modes

## DMX Addresses (cont.)

---

Here's where it gets complicated.

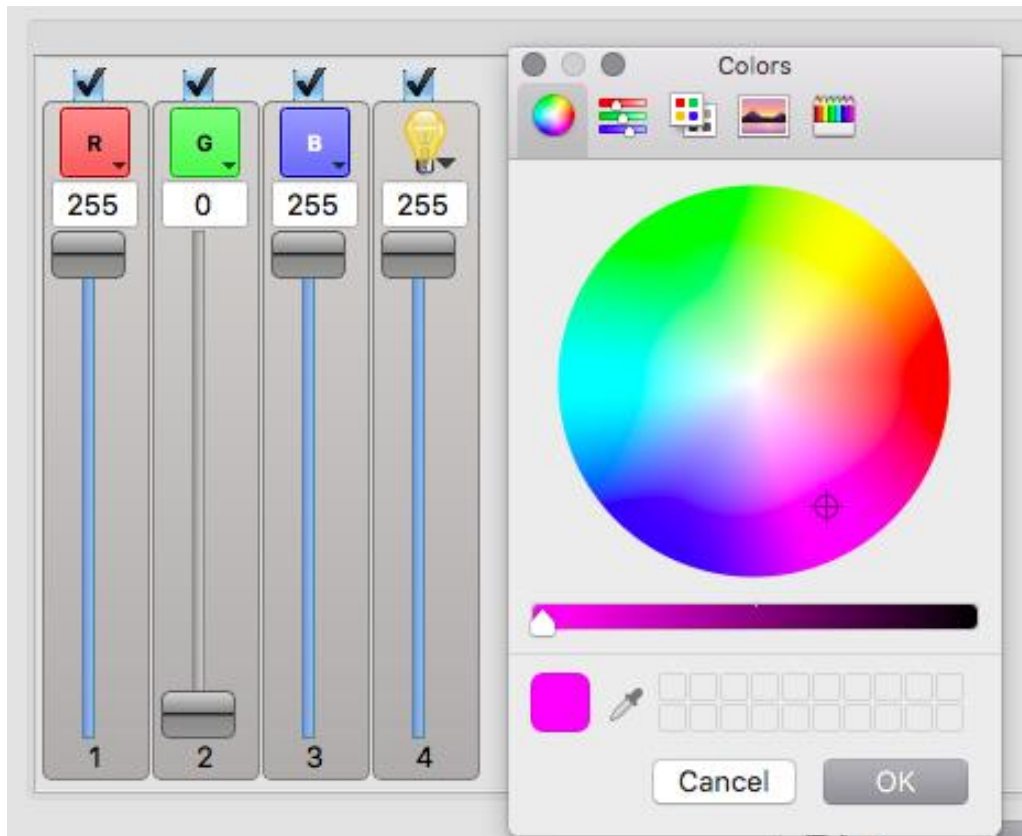
Within each channel (up to 512 addresses), there are 255 'levels'.

These can be simple and can help you mix your colour on a four channel system.

For example:



## DMX Addresses (cont.)



## DMX Addresses (cont.)

— — —

Or it can be complex when something has many, many channels that all have different functions.

With this in mind, you need to ensure every light/fixture is set on its own channel(s).

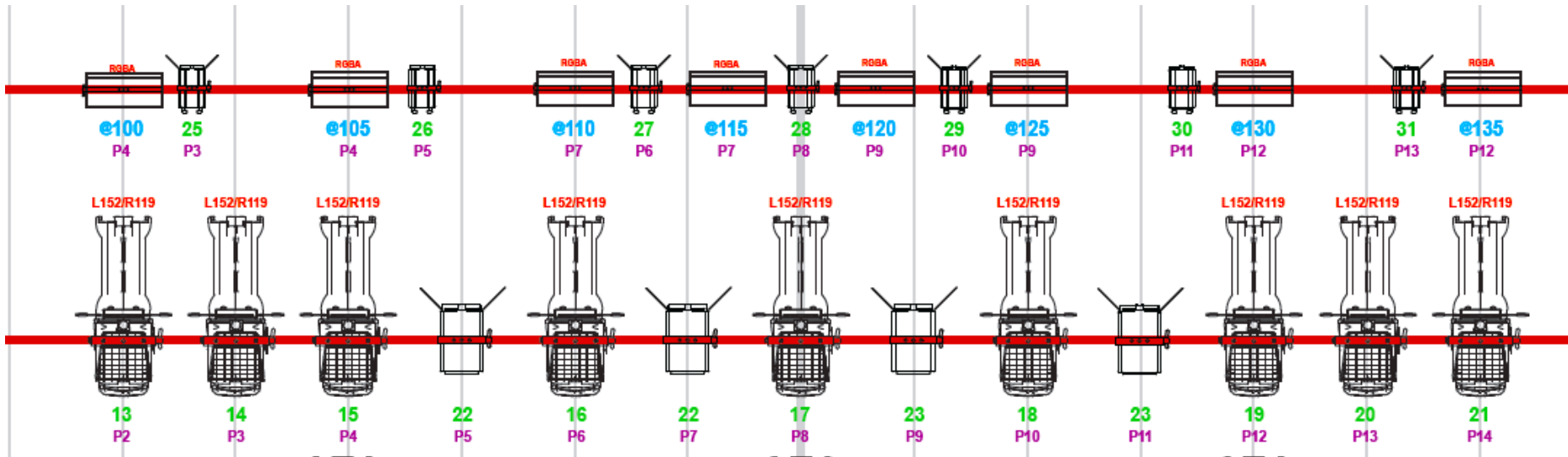
Often there are different modes with different numbers of channel too.

Having a patch diagram is useful.

For example:





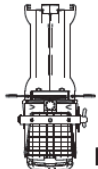


DMX	Name
5	Shutter, Strobe, Reset, Lamp On/Off
6	Dimmer
7	Cyan
8	Magenta
9	Yellow
10	CTC
11	Gobo Wheel, Gobo & Function
12	Gobo Wheel, Rotation Coarse
13	Gobo Wheel, Fine Position
14	Gobo Animation wheel position
15	Gobo Animation Wheel, Position/Velocity
16	Effect Wheel Selection
17	Iris
18	Framing MACRO functions
19	Focus
20	Zoom
21	Framing shutter 1
22	Framing shutter 1 Angle
23	Framing shutter 2
24	Framing shutter 2 Angle
25	Framing shutter 3
26	Framing shutter 3 Angle
27	Framing shutter 4
28	Framing shutter 4 Angle
29	Rotate framing shutters
30	Pan
31	Pan Fine
32	Tilt
33	Tilt Fine
34	Pan/Tilt Speed
35	Dimmer Speed and Gobo Speed





### KEY

DIMMER NUMBER  
@DMX ADDRESS  
PATCH NUMBER

 DTS Fresnel	 PAR64	 Acclaim 24/44	 Pacific 12/28	 Pacific 23/50
 Color Force 12	 Acclaim Fresnel			

# An Interface

---

In order to control lighting from your computer, you'll need the following:

- An Interface
- The DMX addresses of your lights
- Suitable Software



# Interfaces



## Enttec OPENDMX USB

Simplest and cheapest product.

About \$75

Purchase here:

<https://bit.ly/2Jg8h0B>

---

# LFX Software

## Option 1: QLC+

*A Free Lighting Control Programme for PC and Mac!*

# Making QLC+ Work

---

## Step One

Inputting your lights/fixtures into the programme so it can control them.

- Dimmers (Fresnels, Profiles etc)
- LED + Moving Heads etc
- Plugging in your USB Box and checking for operation
- Setting the DMX Addresses

## Step Two

Programming the lights;

- Making lighting states
- Using 'Simple Desk'
- Using 'Shows / Virtual Console'
- Setting Up Virtual Console

# Your turn!

---

I need a volunteer to attempt the following;

- Start QLC+
- Check the DMX USB Connection
- Add a fixture (or 2 if you are feeling game!)
- Create two lighting states with a 5 second fade
- Name them 'Scene 1' & 'Scene 2'
- Use Virtual Console to make a button for each scene.

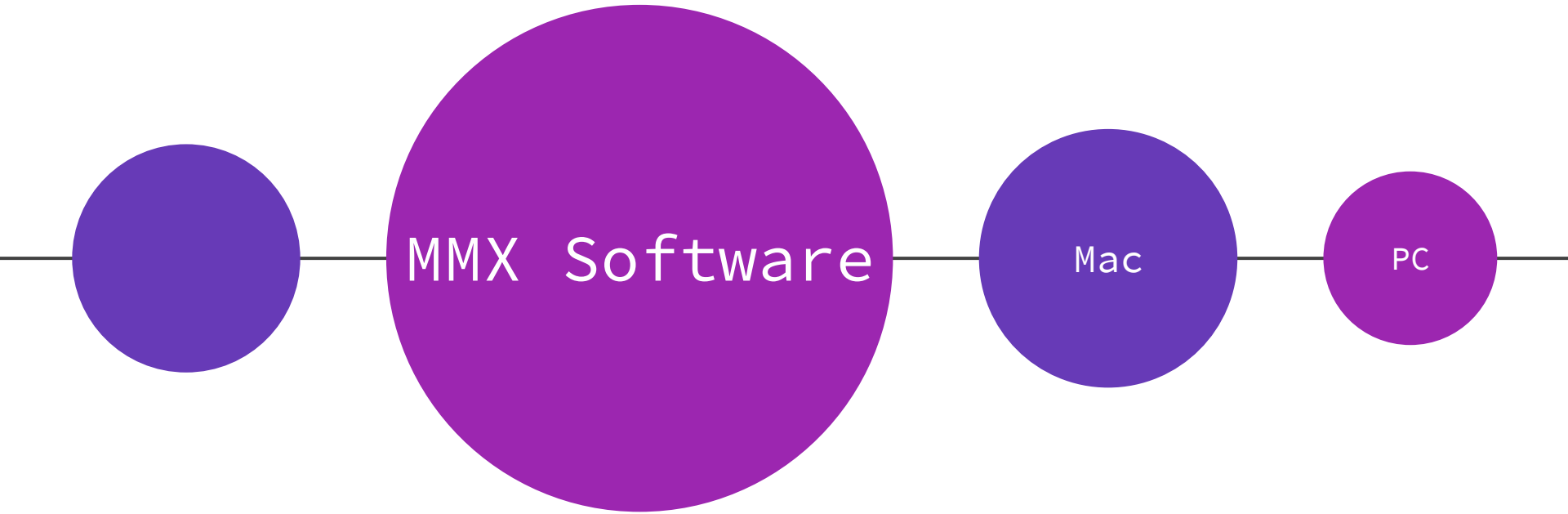
- Hit Play.
- Test the buttons.

# AFX Software

## Option 2: LightKey

*Mac Only - \$150 per year (512 channels)*

# Sound & Projection





# What do I need?

---

## SFX

- An Amplifier
- Some Speakers
- A 3.5mm to whatever fits your amplifier!

## VFX

- A Projector
- A Dongle of some description to connect your computer to your laptop

# MMX Software

## Option 1: QLab

*Free for Sound - License required for Projection  
Mac Only*

# Making QLab Work

— — —

## Step One - Sound Cues

### Adding Cues

- Naming
- Sound Cues
- Trimming
- Fades
- Editing Levels
- Auto Advance
- Pre Wait & Post Wait
- Making Groups
- Looping Sound
- Stop Cues

## Step Two - Video Cues

### Adding Projection Cues

- Setting up Second 'Screen'
- Trimming
- Opacity
- Fade in + out

## Step 3 - Run your show!

# MMX Software

## Option 2: Show Cue System

*Demo - 30 days of Free goodness!*

*Standard License \$100*

*PC Only*

# Making SCS Work

— — —

## Step One - Sound Cues

### Adding Cues

- Naming
- Sound Cues
- Trimming
- Fades
- Editing Levels
- Auto Advance
- Pre Wait & Post Wait
- Looping Sounds
- Stopping Cues

## Step Two - Video Cues

### Adding Projection Cues

- Setting up Second 'Screen'
- Trimming
- Opacity
- Fade in + out

## Step 3 - Run your show!

# Your turn!

---

If you have a device here, try using the sounds & video footage provided on the USB to build a little show.

Try using:

- Fades
- Auto-play
- Editing the start/end time of the tracks
- Inserting video and choosing the output
- Changing the levels of the cue(s)

# MMX Software

## Option 3: Multiplay

*Free but old and unsupported.  
PC Only.*

# Making Multiplay Work

— — —

## Step One - Sound Cues

### Adding Cues

- Naming
- Sound Cues
- Trimming
- Fades
- Editing Levels
- Auto Advance
- Video Cues (selecting output)

## Step Two

Cross your fingers and try to run your show.



Questions?