

LIGHTING DESIGN and more!

Peter Rubie

Second Year Masterclass



The 'and' more;

- Who is this Peter Rubie guy?
 - What I do
- Get Inspired!
 - Variety is the spice of life
- The Challenges
 - Expect the unexpected
- Tips and tricks
 - Paperwork and planning
- Next steps
 - Building experience here

My journey (*so far!*)

What to get excited about?

Blooper Reel

What I find useful

And out there!

Show and tell.

Find your passion

Be confident but prepared

Technology and tools

Shadowing

What I do

- A vast mixture of performance styles and events.
- Thrive on the variety
- Preference is anything with a music drive behind it.
- Specialising in fusions of contemporary and classical.
- Ironically not straight theatre, but the skills learnt in a theatrical course have proven to be applicable in all areas.

Classical music

Cabaret

Concert / Festival

Dance

Physical Theatre / Circus

Musical Theatre

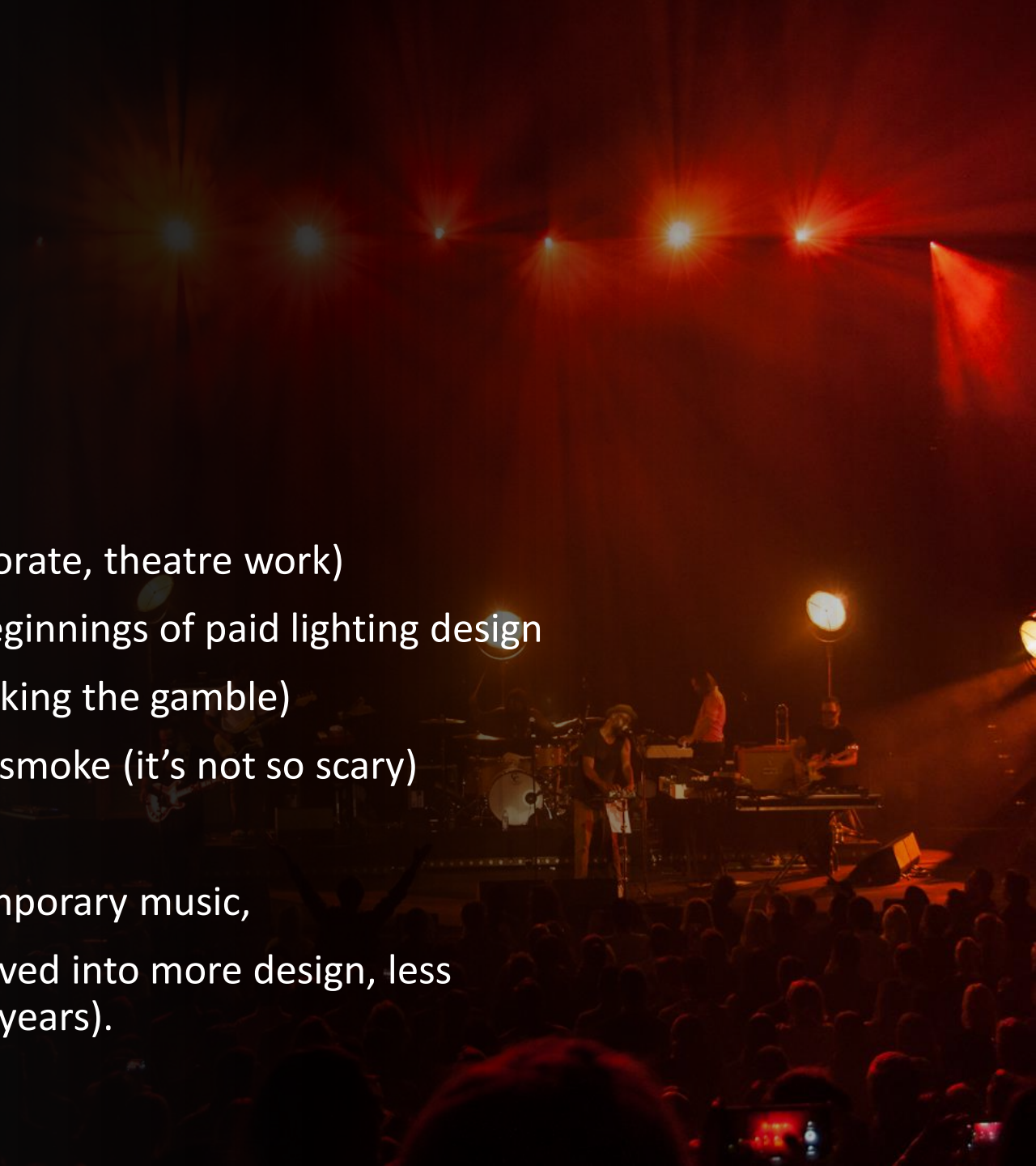
Bands Orchestrated

Corporate (*sometimes*)



My Journey (so far)

- 2007 WAAPA graduate
- Work in Perth (production companies, concert, corporate, theatre work)
- Crewing > to Head LX> to head of lighting > to the beginnings of paid lighting design
- Moved to Sydney 2013 (new city, beginning again, taking the gamble)
- Finding work and getting recognised in the scary big smoke (it's not so scary)
- Interstate work opens doors for touring.
- SOH, cementing my love of Concert Halls and contemporary music,
- Initially only wanting to be a programmer, slowly moved into more design, less programmer, eventually full time sole trader (over 5 years).



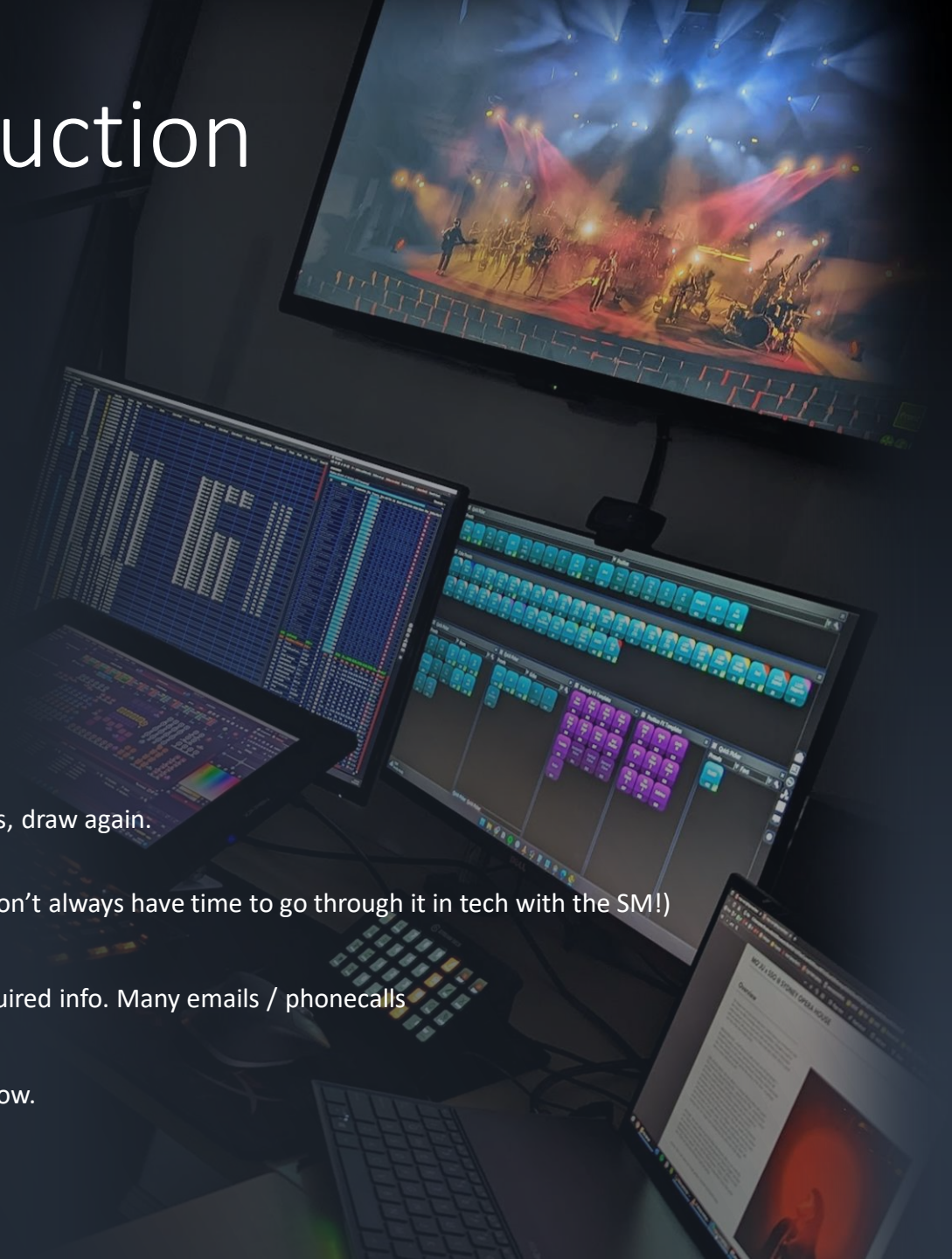


Show and tell

- Examples of work.
- Why it's important to photograph (and occasionally video) for documentation, self improvement and reflection, and self promotion!
- Showreels. A great way to showcase a selection of work.

My Design process – Pre Production

1. The boring bits
 - The fee, the hire budget, the schedule, the contract
2. Learning the show content. Study the script and/or music
 - Could be as simple as making a playlist and listening to the music on my commute
 - Film and watch rehearsal videos, step through slowly
3. Create design concepts
 - Renders or mood boards
 - A Cue synopsis or plotting empty cues straight into the desk
4. Present
 - Present some early design concepts (might be mood board / renders / cue synopsis),
 - Discuss any feedback, ask the rest of the creative teams vision / desires.
5. Creating Paperwork
 - Obtain Venue and Set LX plans, Venue equipment lists, draw own plans. Print plans, find errors, draw again.
 - Consider if it could be readable by others
 - Mark up a score / script in addition to the cue synop if required for someone to call off (you don't always have time to go through it in tech with the SM!!)
6. Book Hire Equipment / Organise consumables
 - Liaise with venue / head electricians (if I have one) and hire company to send / receive all required info. Many emails / phonecalls
7. Previz / pre plot
 - Finish cue synopsis if desired, often program the shot to previz, sometimes timecoding the show.
 - Present to the client if it's worthwhile
 - Finish softpatch



My Design process -In the Venue

1. Bump in
 - Be present for bump in to check positions of fixtures during bump in.
 - Make adjustments if required.
 - Occasionally help with or lead bump in
2. Focus
 - Manual focuses first
 - Moving light focuses / palette updates
3. Check through the show
 - Check for any fixture translation issues (if the rig is different)
 - Check cues and balance levels.
 - Action any notes from last time, if time before rehearsals.
4. Rehearse
 - Rehearse the show. Sometimes this may be under partial worklight first, if with an orchestra for example. Other times there will only be time for a step through not a full run
 - Rehearsal may be the same day as bump in, often as early as immediately after lunch
 - Work through the performers breaks to action notes on a typically concert day. Try take breaks if it's a proper tech week
5. Notes / Fixups
 - Get a short space of time post rehearsals and prior to doors to action as many notes as I can fit in \Start to prioritise as door get upon us. Plead for a few extra minutes on the really tight In/rehearsal / show / out days.
6. Show
 - Take notes during the show and afterwards action improvements for the next show. Even if it's show number 20 and city number 12 on the tour.
7. Post show
 - Debrief (even if just internally). What went well, what not so well? Improvements for next time.
 - Archive and fill all important documents and showfiles for next time.



The Challenges

- The hours
 - Production week at WAAPA is great training for it, but it will get worse.
 - Build stamina early
 - Live for the exciting parts and if there are too few, move on to something different or offset it.
- Learning how to work with unsavoury characters. It will happen!
- Being confident without coming across like a know it all.
- Being respectful
 - Of superiors
 - Of gender/ race / ability. Everyone has capability of excelling in their own way if they've worked hard.
- Stress /time management
- Working with smaller rigs / faulty equipment
- Expect the unexpected
 - Delays on a gig (late gear / wrong gear / slow or missing crew / force majeure events)



- Meeting Notes
- Rehearsal / Show Notes
- In Venue Task List
- Show Info
- Equipment
- Design Ideas
- Flights + Travel

By Status All Tasks Due Dates Table

Todo List

Not Started 11 In Progress 0 Completed 0

- Fee Negotiated
- Hire Budget
- Contract
- Plans Obtained (Venue and Set)
- Lighting Plans Drawn
- Hires Booked
- Showfile / Patch Created
- Previz
- Cue Synopsis
- Invoice Sent
- Showfile Archived

+ New

Paperwork – General Documentation

- Todo lists / Notes + Organisation
 - Find a good system now.
 - Dropbox / Drive / Notion / Evernote / Google Keep(Cloud)
 - Break show notes into sessions / department / questions / todo
 - Break todo notes into focus / plot / question / blocking
- Versioning
 - Datestamp or version drawings / quotes / showfiles etc
 - Keep multiple versions, particularly showfiles
- Obtaining
 - Getting info out of people takes time. Ask for things like venue / set CAD's early on.
- Archiving
 - Never delete anything
 - Good labelling is key for finding later
 - Keep music / video archivals in case remount
- Admin
 - Making time, Especially when you're busy!

Folder Structure

- Name
- Desk Showfiles
- Drawings
- Gear + Quotations
- Music + Video
- Personal
- Schedules
- Show Info
- Venue Info

Mood Boards



above feature zoomed wider (with moving lights)



We spoke of how to create the glitzy showbiz moments at the end. Suggest LED pixel strip product or similar. More modern take on festoon arched.



backlight look (hopefully 1 light per dancer, maybe small moving wash)
Earlier in show they will be simple warm and cool tones,
As we go in and out of the fantasy worlds they could shift into saturates.

Comment

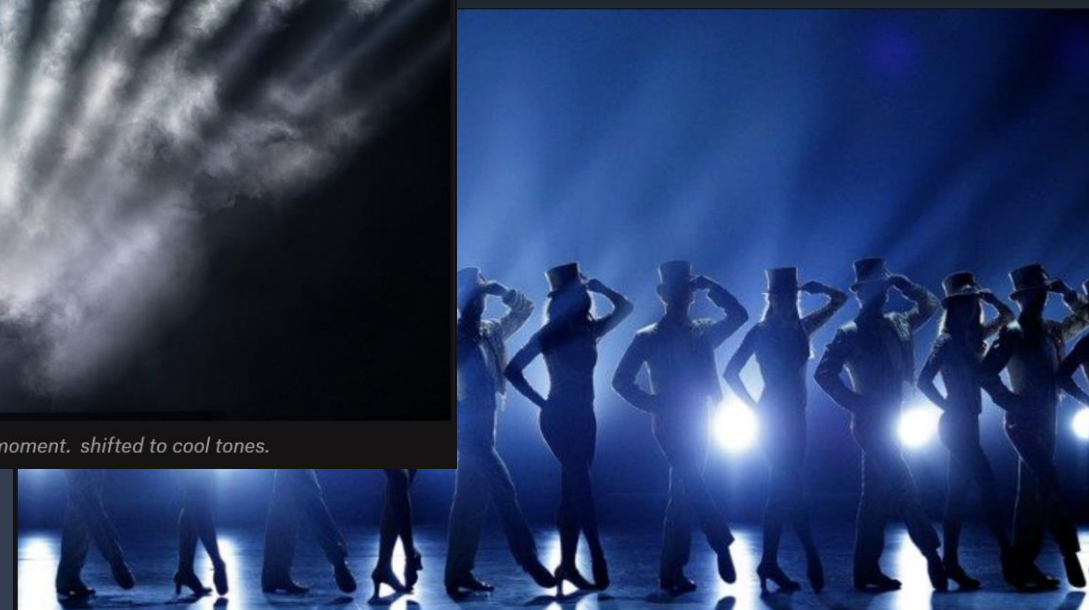


above feature zoomed in and highlighting a moment. shifted to cool tones.

but solo thought moments, all blue, one white.
to move will allow Amy flexibility with choreography
- morphing from a straight line to a curved or diagonal one for example.
fun and movement and chases to them in the glitzy numbers.



Referencing to the world of dance, this and the following two images are a visual of what audiences as well as dancers onstage identify with dance lighting. booms of sidelight and sculpted bodies.
Sidelight is important for dance but tricky to achieve on the Eternity stage as we need all the width we can get.
Work out the minimum width Amy needs and then see if we can allow for some booms.
Can serve as an important set element as well as being practical for LX. Aim to have some of these fixtures as colour mixing profiles so we can colour tone the scenes and add dramatics where we need to.



silhouetted backlight, would need to be on floor or low on back wall

Paperwork – Cue Synopsis (orchestral concert)

Cue	Up	Dn	Point	Track	Score	Lighting Description	Soloists	Notes / TODO	Staging. Soprano, Mezzo, Tenor, Bass
1. Dixit Dominus									
1			Start - All Soloist	00:00	P2, Bar 1	All singer lit up. Backlights pretty bright, possible texture peel reveal. Bright fronts		do a bow out cue	
2			Tempo change - slower	00:21	P4, Bar 17	richer, deeper colours warms, more silhouetted		prelude	
3			A bit more uplifting	00:36	P4, Bar 23	brighter			
4			slower movement	01:11	P9, Bar 44	softer more intimate. narrow down to certain soloists	Soprano I Soprano II	check this cuepoint	
5			next passage	02:08	P16, Bar 78	change soloist focus	Tenor 1		
6	1		1 bigger, fuller	02:45	P18, Bar 100	bigger, fuller, restore full stage, still richer colours			
7	3		3 end . drops	03:30	P23, Bar 128	slow into more intimate deeper, focus soloists and organ?			
8	1		1 lighter, full orch	03:54	P25, Bar 137	colour lighten			
9	3		3 drop	04:00	P25, Bar 141	colour deeper		tighen cond sp	
10			lighter, full orch	04:19	P27, Bar 149	Colour lighten			
11			drop	04:26	P28, Bar 154	Colour deepen			
12			lighter, full orch	04:43	P29, Bar 162	Colour lighten			
13			drop	04:57	P32, Bar 172	drop to certain soloists and feature theorbo?			
14			build	05:15	P34, Bar 181	slow build, all soloists	All		
15	12	12	cresc	05:42	P37, Bar 195	building			
16	4	4	end note before drop	05:58	P39, Bar 202	slow drop back to sopranos feature and strings			
17	2	2	fuller ensemble	07:00	P42, Bar 227	brighter as per start			
18	7	7	long held notes	07:28	P45, Bar 255	pull into to ending look			
19	3	3	Mennnn (last note)	07:37	P45, Bar 259	soft button, favour backlights (texture and backs)			

Paperwork – Cue Synopsis (music camera shoot)

ITE	Cuelist Label	Cue ID	Cue Label	Total Time	Follow Mode	Follow Time	Notes	Camera Shot	Location	CCU
	3WASN'T IT GOOD									
							silhouetted look of band and tina. big warm beams coming from upstage	a low angle shot up into them or front one panning down from them could be nice		
	3WASN'T IT GOOD	1	Start	5s	Timecode	02:00:05:00				
	3WASN'T IT GOOD	2	Softening	4s	Timecode	02:00:20:22	Standby to pickup tina			
	3WASN'T IT GOOD	3	Vox in	2s	Timecode	02:00:24:05	Tina intimate. Piano featured here too. rest of band not so much yet	Tina MCU	probably on circle	
	3WASN'T IT GOOD	4	chorus*	6s	Timecode	02:01:21:16	glow of floor lighting behind them, might get some nice warm lens flare	Wide shot / band pull out / lens flare		Big brightness change
	3WASN'T IT GOOD	5	pull back	6s	Timecode	02:01:55:15	pull back to Tina	Tina MWS		
	3WASN'T IT GOOD	6	verse	3s	Timecode	02:02:03:07				
	3WASN'T IT GOOD	7	chorus*	6s	Timecode	02:02:30:00	band reveal again	Wide shot		
	3WASN'T IT GOOD	8	chorus rpt	8s	Timecode	02:03:00:00	lift of low floor lighting slowly into air, could get wider shots from here	Super wide	Move across DS edge	
	3WASN'T IT GOOD	9	pull back	5s	Timecode	02:03:30:01				
	3WASN'T IT GOOD	10	beat in	4s	Timecode	02:03:34:18	richer blue colour tones come in here, mostly instrumental to end, BV and MD do backing vocals			
	3WASN'T IT GOOD	12	end	5s	Timecode	02:04:58:19	band to silhouette			Silhouetted ending / Tina key light out
	COULD IT BE 4MAGIC									
	COULD IT BE 4MAGIC	1	Start	5.3s	Timecode	05:00:02:22	white toplight on piano. He is feature, might be nice to see the blue lighting framed around him for a moment or two. tina may hold pose in her blue silhouette		piano is feature	
	COULD IT BE 4MAGIC	2	build instruments	6s	Timecode	05:00:56:00	MD plays flugelhorn. might get some low interesting shots up into the blue textures with him in foreground			
	COULD IT BE 4MAGIC	3	vox in	2s	Timecode	05:01:04:09	tina intimate. centre shot with her in the mirrors should be nice.		Tina / Mirrors	

Basic

Tool Sets

- Lighting Device
- Lighting Accessory
- Hanging Position
- Focus Point
- Align and Distribute
- Focus Lighting Device...
- Ganging
- Instrument Summary

Attributes

Fill: Solid

Pen: Solid

0.05

Once - Comedy Theatre... x

None ONCE - Lighting

Selection Tool: R

Navigation - Design Layers

Layer Options: Show/Snap Others

Filter: <All Layers>

Visibility	Design Layer	#	^
<input type="checkbox"/>	Gobo	1	
<input checked="" type="checkbox"/>	ONCE - Lighting	2	
<input type="checkbox"/>	Masking	3	
<input type="checkbox"/>	ONCE - Set (construction dra...	4	
<input checked="" type="checkbox"/>	ONCE - Floor Lighting	5	
<input checked="" type="checkbox"/>	Dims	6	
<input checked="" type="checkbox"/>	ONCE - Darlo Set	7	
<input checked="" type="checkbox"/>	ONCE - Perth Set	8	
<input checked="" type="checkbox"/>	ONCE - Comedy Theatre Set	9	
<input checked="" type="checkbox"/>	Seating	10	

Object Info - Shape

Shape | Data | Render

Lighting Device

Class: Lights

Layer: ONCE - Lighting

X: -4895

Y: 4752

Z: 5500

X Rotation: 0.00°

Y Rotation: 0.00°

Z Rotation: 180.00°

Device Type: Moving Light

Instrument Type: Martin MAC Enc...

Fixture Mode: Martin MAC Enc...

Wattage: 596W

Purpose:

Position: LX4

Color:

Channel: 702

Universe/Address: 0/0

DMX Address: 0

DMX Footprint: 38

User Field 1:

Frame Size: N/A

Field Angle: 48.00°

Field Angle 2: 48.00°

Beam Angle: 12.00°

Beam Angle 2: 12.00°

Weight: 31.00 kg

Gobo 1:

Draw beam

Draw beam as 3D solid

Use vertical beam

Replace Lighting Dev...

Refresh Labels

Symbol Name: Light Instr Martin

Use Legend: Main

3D Legend View: None

Rotate 3D legend with Z rotation

Flip front and back 2D legend

Flip left and right 2D legend

Focus:

Pan: 75.00°

Tilt: 45.00°

Custom plan rotation

Vertical Focus Angle: 0.00°

Top Shutter Depth: 0

Top Shutter Angle: 0.00°

Paperwork – CAD Drawing

- Organisation
 - Layer up!
 - Label
 - Use clear symbols and formatting
 - Use label legends
 - Print sheet views at a sensible size. It should be easily readable
- Time management
 - CAD eats time.
- Versioning / Saving
 - Datestamp or version numbers.
 - Save often.
- Training
 - Practice drawing a plot in 2D and then convert it to 3D
- Use it to your advantage
 - Use CAD or Previz to check your angles / colours / ideas

Paperwork – Patch

801 14:1	A.leda B-EYE K10 CC
802 14:21	A.leda B-EYE K10 CC
803 14:41	A.leda B-EYE K10 CC
804 14:61	A.leda B-EYE K10 CC
701 14:281	Mac Viper Profile 16 bit Extended
702 14:315	Mac Viper Profile 16 bit Extended
703 14:349	Mac Viper Profile 16 bit Extended
704 14:383	Mac Viper Profile 16 bit Extended
705 14:417	Mac Viper Profile 16 bit Extended
706 14:451	Mac Viper Profile 16 bit Extended
301 15:1	Stark Bar 1000 PIXFX
302 15:92	Stark Bar 1000 PIXFX
303 15:183	Stark Bar 1000 PIXFX
304 15:274	Stark Bar 1000 PIXFX
721 15:365	Mistral S Extended
722 15:404	Mistral S Extended
723 15:443	Mistral S Extended
305 16:1	Stark Bar 1000 PIXFX
306 16:92	Stark Bar 1000 PIXFX
307 16:183	Stark Bar 1000 PIXFX
308 16:274	Stark Bar 1000 PIXFX
724 16:365	Mistral S Extended
725 16:404	Mistral S Extended
726 16:443	Mistral S Extended
309 17:1	Stark Bar 1000 PIXFX
310 17:92	Stark Bar 1000 PIXFX

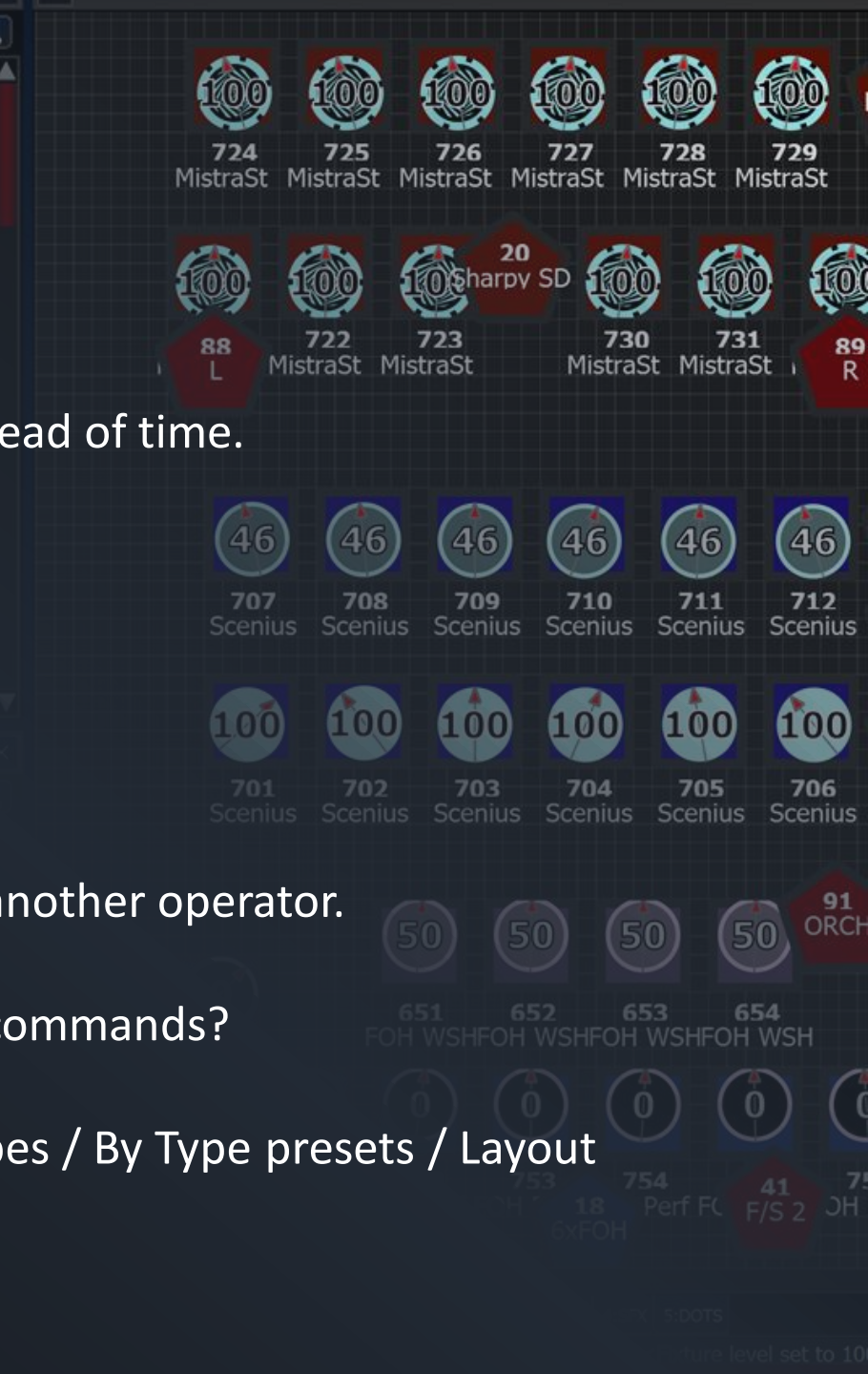
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121	Artnet	1:06	121	DS Dropper SL	Pixel Bar 40	Dreampix
122	Artnet	1:06	241	DS Dropper SL	Pixel Bar 40	Dreampix
123	Artnet	1:06	361	DS Dropper SL	Pixel Bar 40	Dreampix
124	Artnet	1:07	1	DS Dropper SL	Pixel Bar 40	Dreampix
125	Artnet	1:07	121	DS Dropper SL	Pixel Bar 40	Dreampix
126	Artnet	1:07	241	DS Dropper SL	Pixel Bar 40	Dreampix
131	Artnet	1:08	1	US Dropper SR	Pixel Bar 40	Dreampix
132	Artnet	1:08	121	US Dropper SR	Pixel Bar 40	Dreampix
133	Artnet	1:08	241	US Dropper SR	Pixel Bar 40	Dreampix
134	Artnet	1:08	361	US Dropper SR	Pixel Bar 40	Dreampix
135	Artnet	1:09	1	US Dropper SR	Pixel Bar 40	Dreampix
136	Artnet	1:09	121	LX 3	Pixel Bar 40	Dreampix
137	Artnet	1:09	241	LX 3	Pixel Bar 40	Dreampix
138	Artnet	1:09	361	LX 3	Pixel Bar 40	Dreampix
139	Artnet	1:10	1	LX 3	Pixel Bar 40	Dreampix
140	Artnet	1:10	121	LX 3	Pixel Bar 40	Dreampix
145	Artnet	1:11	241	US Dropper SL	Pixel Bar 40	Dreampix
146	Artnet	1:11	361	US Dropper SL	Pixel Bar 40	Dreampix
147	Artnet	1:12	1	US Dropper SL	Pixel Bar 40	Dreampix
148	Artnet	1:12	121	US Dropper SL	Pixel Bar 40	Dreampix
149	Artnet	1:12	241	US Dropper SL	Pixel Bar 40	Dreampix
501	sACN	21	1	Floor	Axcor Profile 400	Axcor
502	sACN	21	37	Floor	Axcor Profile 400	Axcor
503	sACN	21	73	Floor	Axcor Profile 400	Axcor
504	sACN	21	109	Floor	Axcor Profile 400	Axcor
505	sACN	21	145	Floor	Axcor Profile 400	Axcor
506	sACN	21	181	Floor	Axcor Profile 400	Axcor
601	sACN	24	1	LX 1 Dropper	Mac Encore Wash WRM	Enc WASH
602	sACN	24	25	LX 1 Dropper	Mac Encore Wash WRM	Enc WASH
603	sACN	24	49	LX 1 Dropper	Mac Encore Wash WRM	Enc WASH
604	sACN	24	73	LX 1 Dropper	Mac Encore Wash WRM	Enc WASH

Consoles – The Choices

- Experiment with different consoles (most have a free offline editor)
- Be wary of anyone who says console X is the best / the only choice.
- The best console is the one that works for you first and foremost.
- If you use / like using multiple, pick the best for the type of show

Consoles – The Showfile

- Build your showfile to work efficiently for you. Build it offline, ahead of time.
- Learn the fundamentals and learn them well
 - Palettes / Presets
 - Tracking
 - Filtering
 - Reference Marking
- Magic Sheets to help you visually
- Always assume the showfile will have another life or potentially another operator. Make it tourable to someone else.
- Are you using the file exclusively yourself or is a designer calling commands? You may set the file up differently
- Build up your base showfile: FX templates / Macros / Fixtures Types / By Type presets / Layout templates / Softkey arrangements.



Consoles - Busking

- Play with different options in your busk file.
- Start complicated, but always refine it to be as simple as possible.
- Use online tools / plugins where possible to get ideas / save time.
- Avoid too many pages or flipping of screen views.
See everything at a glance, reach anything with only muscle memory



Final thoughts and tips

- Try and put aside some of your own time to play with the resources at your disposal while you can.
 - Moving Lights / Basic servicing
 - Consoles. A personal choice. Learn many, specialise in 1 or 2, work out which suits which task.
 - Lights out studio – Colours / angles / subjects and skin tones
 - Experiment with unconventional ideas, you can always return to the safe bet
- Never stop asking questions, especially to upskill on your weaknesses.
- We are in a technical field, there is always something you can learn that will be highly valuable.
- As a team member / team leader.
 - Be organised and plan smart.
 - Practise being stern and in control without being nasty. Good working relationships are important.
- Volunteer / Work Experience (or work) outside of WAAPA. Short stints / Different Environments.
- Start looking at secondment / further work experience options now. Shadow an LD / programmer / Head Electrician & absorb