



Run summary

One line per run: patch, port, pixels, channels, universes, length, full-white power at 24 V, injector columns. Source: patch of record (segments.json), 23.04 W/m.

Run	Pieces	Controller	Rack port	IP	px	ch (RGB)	sACN	Lit length	W full white	A @ 24 V	Power injection
DS1	DS1-1, DS1-2	CTRL A out 1	NL4-1	192.168.41.41	369	1107	41 to 43	18.4 m	425 W	17.7 A	NJCT 1, 2
DS2	DS2-1, DS2-2	CTRL A out 2	NL8-1 a	192.168.41.41	369	1107	44 to 46	18.4 m	425 W	17.7 A	NJCT 1, 2
DS3	DS3-1, DS3-2	CTRL A out 3	NL8-1 b	192.168.41.41	369	1107	47 to 49	18.4 m	425 W	17.7 A	NJCT 1 (2 pass)
AUD1	AUD1-1, AUD1-2, AUD1-3	CTRL A out 4	NL8-5 a	192.168.41.41	568	1704	50 to 53	28.3 m	653 W	27.2 A	NJCT 5, 6, 7
AUD2	AUD2-1, AUD2-2, AUD2-3	CTRL B out 1	NL8-5 b	192.168.41.42	575	1725	54 to 57	28.7 m	661 W	27.6 A	NJCT 5, 6 (7 pass)
US4	US4-1, US4-2	CTRL B out 2	NL4-2	192.168.41.42	307	921	58 to 59	15.3 m	352 W	14.7 A	NJCT 3, 4
US5	US5-1, US5-2	CTRL B out 3	NL8-2 a	192.168.41.42	307	921	60 to 61	15.3 m	352 W	14.7 A	NJCT 3, 4
US6	US6-1, US6-2	CTRL B out 4	NL8-2 b	192.168.41.42	307	921	62 to 63	15.3 m	352 W	14.7 A	NJCT 3 (4 pass)
USR1-1	USR1-1	CTRL C out 1	NL4-3	192.168.41.43	98	294	64	4.9 m	112 W	4.7 A	rack only
USR1-2	USR1-2	CTRL C out 2	NL8-3 a	192.168.41.43	98	294	65	4.9 m	112 W	4.7 A	rack only
USR1-3	USR1-3	CTRL C out 3	NL8-3 b	192.168.41.43	98	294	66	4.9 m	112 W	4.7 A	rack only
USR2-1	USR2-1	CTRL D out 1	NL4-4	192.168.41.44	100	300	67	5.0 m	115 W	4.8 A	rack only
USR2-2	USR2-2	CTRL D out 2	NL8-4 a	192.168.41.44	100	300	68	5.0 m	115 W	4.8 A	rack only
USR2-3	USR2-3	CTRL D out 3	NL8-4 b	192.168.41.44	100	300	69	5.0 m	115 W	4.8 A	rack only
Total					3765	11295	41 to 69		4327 W	180 A	

Network. CTRL A .41, B .42, C .43, D .44, spare CTRL E .45 (boxed, holds 70 to 85). Gateway 192.168.41.1, /24. sACN E1.31, 170 px per universe, RGB, 20 px/m. Laptop on a static in 192.168.41.x to reach Advatek Assistant.

Rack power. 2x Mean Well UHP-1500-24 (3,000 W bus). Rack feeds the first piece of every run plus the whole of each riser run; the injectors carry the rest, so rack load is well under the bus. One TRUE1 circuit, about 12.9 A at 120 V.



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DMX PATCH MAP

SPEC # KG3-BEA-PATCH-01 · JOB: BEABADOOBEE 2026 HEADLINE TOUR · DATE: SEPTEMBER 1, 2026

sACN · Universe 41-85

live 41-69 · held 70-85 for the spare
192.168.41.41-45/24 · 4 in the rack + 1 spare
Sheet 4.11 V2.2 · 20 px/m · RGB

14
OUTPUTS

4
PXL-CTRL

3,765
PIXELS

11,295
DMX CHANNELS

29
LIVE UNIVERSES (41-69)

70-85
HELD FOR THE SPARE (CTRL E)

UNIVERSE MAP · BAR LENGTH IS TRUE TO PIXEL COUNT



CTRL A CTRL B CTRL C CTRL D Data in (lowest channel) Segment join · power injection only, data passes through

Alternating shade = one universe (170 px / 510 ch)

Read it this way. One bar = one controller output = one continuous pixel string. Every output starts on a fresh universe at channel 1, and no pixel is split across a universe boundary, so the last universe of each run is partly filled. Segment joins are power injection points only: they are **not** patched separately and never restart a universe.

PATCH BY OUTPUT

OUT	RUN	FEED	M	PX	CH	UNIVERSES	START	END
CTRL A · 41-53 · 4 OF 4 OUTPUTS USED								
1	DS1	NL4	18.44	369	1,107	41-43	41.1	43.87
2	DS2	NL8 a	18.44	369	1,107	44-46	44.1	46.87
3	DS3	NL8 b	18.44	369	1,107	47-49	47.1	49.87
4	AUD1	NL8 a	28.32	568	1,704	50-53	50.1	53.174
CTRL B · 54-63 · 4 OF 4 OUTPUTS USED								
1	AUD2	NL8 b	28.70	575	1,725	54-57	54.1	57.195
2	US4	NL4	15.29	307	921	58-59	58.1	59.411
3	US5	NL8 a	15.29	307	921	60-61	60.1	61.411
4	US6	NL8 b	15.29	307	921	62-63	62.1	63.411
CTRL C · 64-66 · 3 OF 4 OUTPUTS USED								
1	USR1-1	NL4	4.88	98	294	64	64.1	64.294
2	USR1-2	NL8 a	4.88	98	294	65	65.1	65.294
3	USR1-3	NL8 b	4.88	98	294	66	66.1	66.294
CTRL D · 67-69 · 3 OF 4 OUTPUTS USED								
1	USR2-1	NL4	4.98	100	300	67	67.1	67.300
2	USR2-2	NL8 a	4.98	100	300	68	68.1	68.300
3	USR2-3	NL8 b	4.98	100	300	69	69.1	69.300
RIG TOTAL		14 outputs	187.8	3,765	11,295	41-69	29 universes	

CONTROLLERS

CTRL	CONTENTS	OUTS	SPARE	PX	BLOCK	RACK W	IP
CTRL A	MS WIRE ROPE whole + DS ROPE 1 AUD1	4	0	1,675	41-53	407	192.168.41.41
CTRL B	DS ROPE 1 AUD2 + US WIRE ROPE whole	4	0	1,496	54-63	395	192.168.41.42
CTRL C	US 1 whole	3	1	294	64-66	337	192.168.41.43
CTRL D	US 2 whole	3	1	300	67-69	344	192.168.41.44
CTRL E	spare, carried for the road, not in the rack	0	4	-	70-85	-	192.168.41.45
TOTAL		14	2 + 4	3,765	41-85	1,483	

For LX. Our block is **Universe 41 through 85**; 41-69 is the live patch across the four controllers in the rack, 70-85 is held for CTRL E, a spare 4-output controller carried for the road at 192.168.41.45. Media server clear from 86 up. Host addresses are our proposal; reassign if that range is spoken for.

Rack power. The pylon rack sources 1,483 W of the 4,326 W rig (34%) on a 3,000 W bus: 49% loaded. The 7 flown PWR-NJCT carry the rest on their own TRUE1 feeds. Rack W column above is the controller-to-first-injection share, not the run total.



SEGMENT REFERENCE

SPEC # KG3-BEA-PATCH-01 · BEABADOOBEE 2026 · TROUBLESHOOTING ONLY . PATCH IS PER OUTPUT, NOT PER SEGMENT

CHAINED RUNS · WHERE EACH SEGMENT LANDS

SEGMENT	LENGTH	PX	RUN PX	ADDRESS RANGE
DS1				
DS 1-1	30'0"	183	1-183	41.1 – 42.39
DS 1-2	30'6"	186	184-369	42.40 – 43.87
DS2				
DS 2-1	30'0"	183	1-183	44.1 – 45.39
DS 2-2	30'6"	186	184-369	45.40 – 46.87
DS3				
DS 3-1	30'0"	183	1-183	47.1 – 48.39
DS 3-2	30'6"	186	184-369	48.40 – 49.87
AUD1				
AUD 1-1	26'2"	160	1-160	50.1 – 50.480
AUD 1-2	33'4"	204	161-364	50.481 – 52.72
AUD 1-3	33'5"	204	365-568	52.73 – 53.174
AUD2				
AUD 2-1	27'2"	166	1-166	54.1 – 54.498
AUD 2-2	33'7"	205	167-371	54.499 – 56.93
AUD 2-3	33'5"	204	372-575	56.94 – 57.195
US4				
US 4-1	28'4"	173	1-173	58.1 – 59.9
US 4-2	21'10"	134	174-307	59.10 – 59.411
US5				
US 5-1	28'4"	173	1-173	60.1 – 61.9
US 5-2	21'10"	134	174-307	61.10 – 61.411
US6				
US 6-1	28'4"	173	1-173	62.1 – 63.9
US 6-2	21'10"	134	174-307	63.10 – 63.411

SINGLE-SEGMENT OUTPUTS

RUN	CTRL	LENGTH	PX	ADDRESS RANGE
USR1-1	CTRL C out 1	16'0"	98	64.1 – 64.294
USR1-2	CTRL C out 2	16'0"	98	65.1 – 65.294
USR1-3	CTRL C out 3	16'0"	98	66.1 – 66.294
USR2-1	CTRL D out 1	16'4"	100	67.1 – 67.300
USR2-2	CTRL D out 2	16'4"	100	68.1 – 68.300
USR2-3	CTRL D out 3	16'4"	100	69.1 – 69.300



Patch is per OUTPUT, not per segment. Segment joins are power-injection points only: data runs straight through, so a universe may change mid-segment. Universe.channel below is where each segment's first and last pixel land.

CTRL	OUT	RUN	SEGMENT	SEG	LENGTH	M	PX	RUN PX	UNIVERSE.CH START – END	FEED
CTRL A · 192.168.41.41 · UNIVERSES 41–53 · 1675 PX										
A	1	DS1	DS1-1	1 of 2	30'0"	9.14	183	1–183	41.1 – 42.39	NL4 single
A	1	DS1	DS1-2	2 of 2	30'6"	9.30	186	184–369	42.40 – 43.87	NL4 single
A	2	DS2	DS2-1	1 of 2	30'0"	9.14	183	1–183	44.1 – 45.39	NL8 a
A	2	DS2	DS2-2	2 of 2	30'6"	9.30	186	184–369	45.40 – 46.87	NL8 a
A	3	DS3	DS3-1	1 of 2	30'0"	9.14	183	1–183	47.1 – 48.39	NL8 b
A	3	DS3	DS3-2	2 of 2	30'6"	9.30	186	184–369	48.40 – 49.87	NL8 b
A	4	AUD1	AUD1-1	1 of 3	26'2"	7.98	160	1–160	50.1 – 50.480	NL8 a
A	4	AUD1	AUD1-2	2 of 3	33'4"	10.16	204	161–364	50.481 – 52.72	NL8 a
A	4	AUD1	AUD1-3	3 of 3	33'5"	10.19	204	365–568	52.73 – 53.174	NL8 a
CTRL B · 192.168.41.42 · UNIVERSES 54–63 · 1496 PX										
B	1	AUD2	AUD2-1	1 of 3	27'2"	8.28	166	1–166	54.1 – 54.498	NL8 b
B	1	AUD2	AUD2-2	2 of 3	33'7"	10.24	205	167–371	54.499 – 56.93	NL8 b
B	1	AUD2	AUD2-3	3 of 3	33'5"	10.19	204	372–575	56.94 – 57.195	NL8 b
B	2	US4	US4-1	1 of 2	28'4"	8.64	173	1–173	58.1 – 59.9	NL4 single
B	2	US4	US4-2	2 of 2	21'10"	6.65	134	174–307	59.10 – 59.411	NL4 single
B	3	US5	US5-1	1 of 2	28'4"	8.64	173	1–173	60.1 – 61.9	NL8 a
B	3	US5	US5-2	2 of 2	21'10"	6.65	134	174–307	61.10 – 61.411	NL8 a
B	4	US6	US6-1	1 of 2	28'4"	8.64	173	1–173	62.1 – 63.9	NL8 b
B	4	US6	US6-2	2 of 2	21'10"	6.65	134	174–307	63.10 – 63.411	NL8 b
CTRL C · 192.168.41.43 · UNIVERSES 64–66 · 294 PX										
C	1	USR1-1	USR1-1	1 of 1	16'0"	4.88	98	1–98	64.1 – 64.294	NL4 single
C	2	USR1-2	USR1-2	1 of 1	16'0"	4.88	98	1–98	65.1 – 65.294	NL8 a
C	3	USR1-3	USR1-3	1 of 1	16'0"	4.88	98	1–98	66.1 – 66.294	NL8 b
CTRL D · 192.168.41.44 · UNIVERSES 67–69 · 300 PX										
D	1	USR2-1	USR2-1	1 of 1	16'4"	4.98	100	1–100	67.1 – 67.300	NL4 single
D	2	USR2-2	USR2-2	1 of 1	16'4"	4.98	100	1–100	68.1 – 68.300	NL8 a
D	3	USR2-3	USR2-3	1 of 1	16'4"	4.98	100	1–100	69.1 – 69.300	NL8 b
TOTAL · 14 outputs · 24 segments							3,765	41.1 – 69.300		



Advatek PixLite A4-S Mk3, 4 outputs each, sACN (E1.31), WS2811 RGB, 170 px per universe, "Pixels can be split across universes" OFF, every output starts on a fresh universe at channel 1. Media server clear from universe 86.

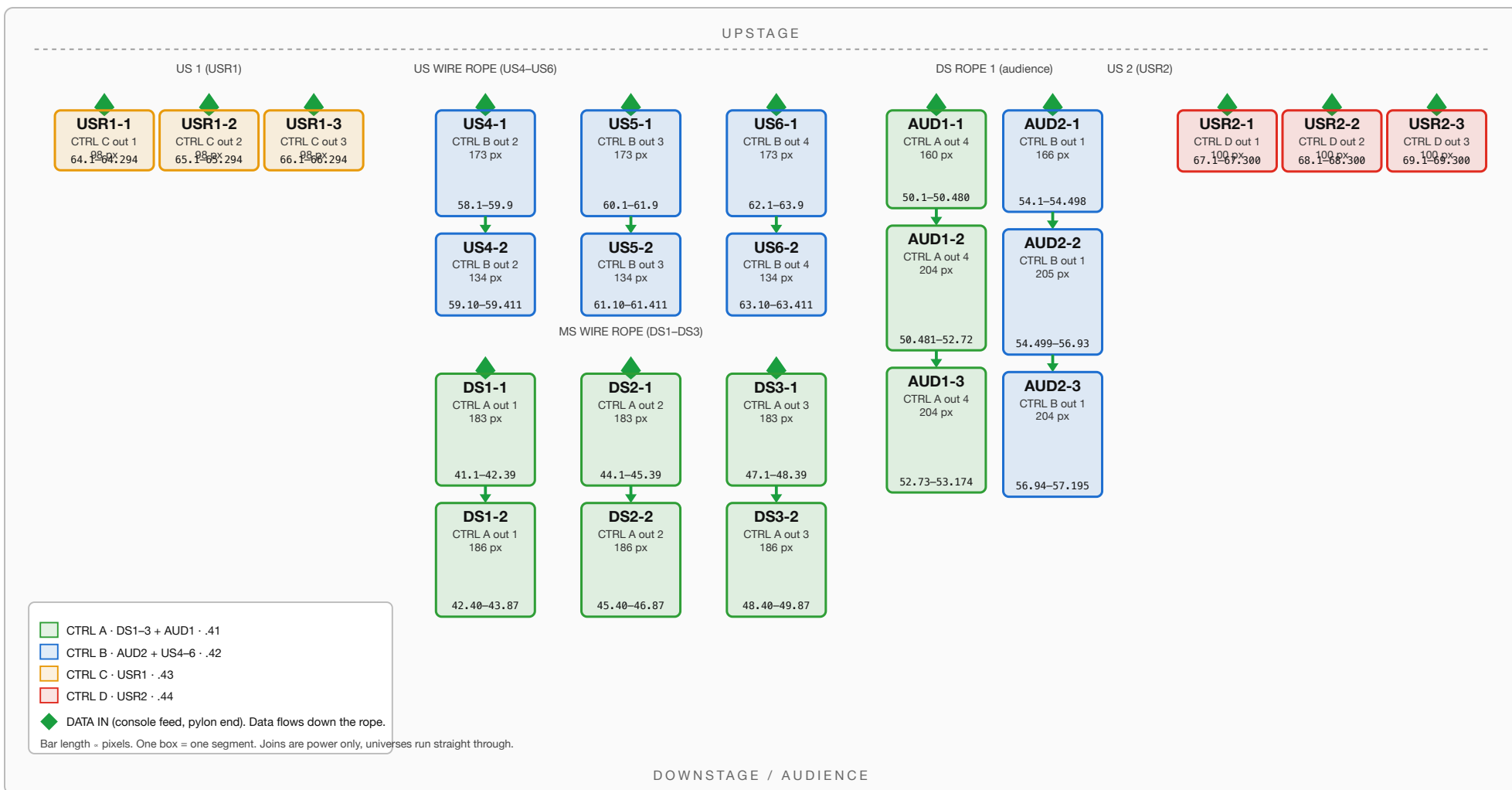
CTRL A192.168.41.41 · 4 of 4 outputs · 1675 px · universes 41–53								
OUT	RUN	SEGMENTS (DATA FLOW)	PX	CH	UNIVERSES	START	END	FEED
1	DS1	DS1-1 → DS1-2	369	1107	41–43 (3)	41.1	43.87	NL4 single
2	DS2	DS2-1 → DS2-2	369	1107	44–46 (3)	44.1	46.87	NL8 a
3	DS3	DS3-1 → DS3-2	369	1107	47–49 (3)	47.1	49.87	NL8 b
4	AUD1	AUD1-1 → AUD1-2 → AUD1-3	568	1704	50–53 (4)	50.1	53.174	NL8 a

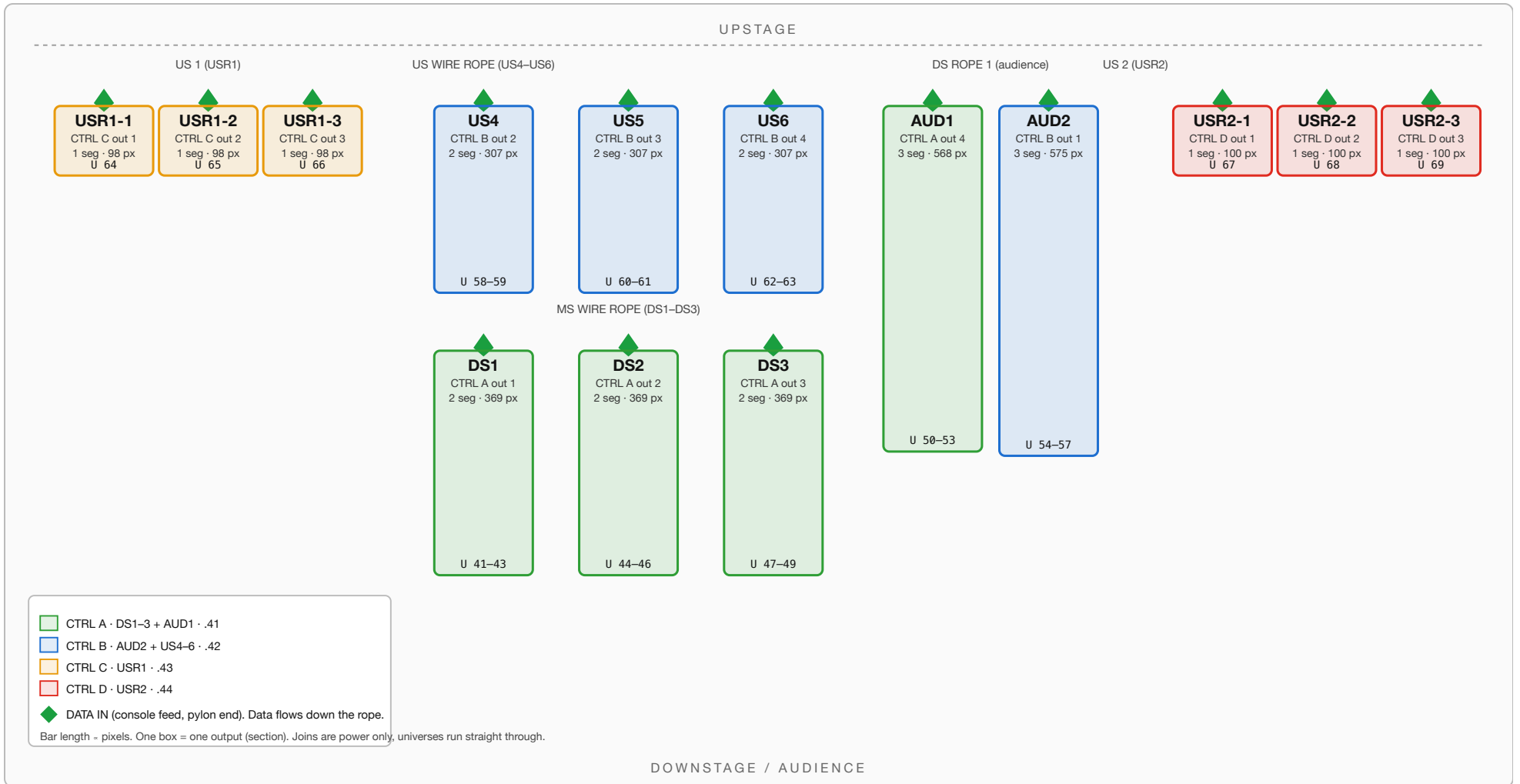
CTRL B192.168.41.42 · 4 of 4 outputs · 1496 px · universes 54–63								
OUT	RUN	SEGMENTS (DATA FLOW)	PX	CH	UNIVERSES	START	END	FEED
1	AUD2	AUD2-1 → AUD2-2 → AUD2-3	575	1725	54–57 (4)	54.1	57.195	NL8 b
2	US4	US4-1 → US4-2	307	921	58–59 (2)	58.1	59.411	NL4 single
3	US5	US5-1 → US5-2	307	921	60–61 (2)	60.1	61.411	NL8 a
4	US6	US6-1 → US6-2	307	921	62–63 (2)	62.1	63.411	NL8 b

CTRL C192.168.41.43 · 3 of 4 outputs · 294 px · universes 64–66								
OUT	RUN	SEGMENTS (DATA FLOW)	PX	CH	UNIVERSES	START	END	FEED
1	USR1-1	USR1-1	98	294	64 (1)	64.1	64.294	NL4 single
2	USR1-2	USR1-2	98	294	65 (1)	65.1	65.294	NL8 a
3	USR1-3	USR1-3	98	294	66 (1)	66.1	66.294	NL8 b
4	unused							

CTRL D192.168.41.44 · 3 of 4 outputs · 300 px · universes 67–69								
OUT	RUN	SEGMENTS (DATA FLOW)	PX	CH	UNIVERSES	START	END	FEED
1	USR2-1	USR2-1	100	300	67 (1)	67.1	67.300	NL4 single
2	USR2-2	USR2-2	100	300	68 (1)	68.1	68.300	NL8 a
3	USR2-3	USR2-3	100	300	69 (1)	69.1	69.300	NL8 b
4	unused							

CTRL E · ROAD SPARE, not in the rack192.168.41.45 · 0 of 4 outputs · 0 px · universes 70–85 held								
OUT	RUN	SEGMENTS (DATA FLOW)	PX	CH	UNIVERSES	START	END	FEED
1	unused							
2	unused							
3	unused							
4	unused							







SECTION PIXEL TOTALS

Spec # KG3-BEA-DM-02 · Beabadoobee 2026 · one section = one controller output = one continuous pixel string

SECTION	ZONE (PRODUCTION NAME)	OUTPUT	#SEG	SEGMENTS	SECTION PX	CH	UNIVERSES	START – END
DS1	MS WIRE ROPE	CTRL A out 1	2	DS1-1 → DS1-2	369	1107	41–43	41.1 – 43.87
DS2	MS WIRE ROPE	CTRL A out 2	2	DS2-1 → DS2-2	369	1107	44–46	44.1 – 46.87
DS3	MS WIRE ROPE	CTRL A out 3	2	DS3-1 → DS3-2	369	1107	47–49	47.1 – 49.87
AUD1	DS ROPE 1	CTRL A out 4	3	AUD1-1 → AUD1-2 → AUD1-3	568	1704	50–53	50.1 – 53.174
AUD2	DS ROPE 1	CTRL B out 1	3	AUD2-1 → AUD2-2 → AUD2-3	575	1725	54–57	54.1 – 57.195
US4	US WIRE ROPE	CTRL B out 2	2	US4-1 → US4-2	307	921	58–59	58.1 – 59.411
US5	US WIRE ROPE	CTRL B out 3	2	US5-1 → US5-2	307	921	60–61	60.1 – 61.411
US6	US WIRE ROPE	CTRL B out 4	2	US6-1 → US6-2	307	921	62–63	62.1 – 63.411
USR1-1	US 1	CTRL C out 1	1	USR1-1	98	294	64	64.1 – 64.294
USR1-2	US 1	CTRL C out 2	1	USR1-2	98	294	65	65.1 – 65.294
USR1-3	US 1	CTRL C out 3	1	USR1-3	98	294	66	66.1 – 66.294
USR2-1	US 2	CTRL D out 1	1	USR2-1	100	300	67	67.1 – 67.300
USR2-2	US 2	CTRL D out 2	1	USR2-2	100	300	68	68.1 – 68.300
USR2-3	US 2	CTRL D out 3	1	USR2-3	100	300	69	69.1 – 69.300
TOTAL · 14 sections			24		3,765	11,295	41–69 (29)	



CONTROLLERS

4 x A4-S Mk3

CTRL A to D, 4 outputs each. CTRL E = road spare, not in rack.

OUTPUTS

14 live

5 x NL8 (two runs) + 4 x NL4 (one run).
C4 and D4 spare.

PIXELS

3,765 px

24 segments, WS2811 RGB, 20 px/m.

SACN

41-69

170 px/universe. 70-85 held for E. Clear from 86.

NETWORK

192.168.41.x

Gateway .1 A .41, B .42, C .43, D .44, E .45.

POWER

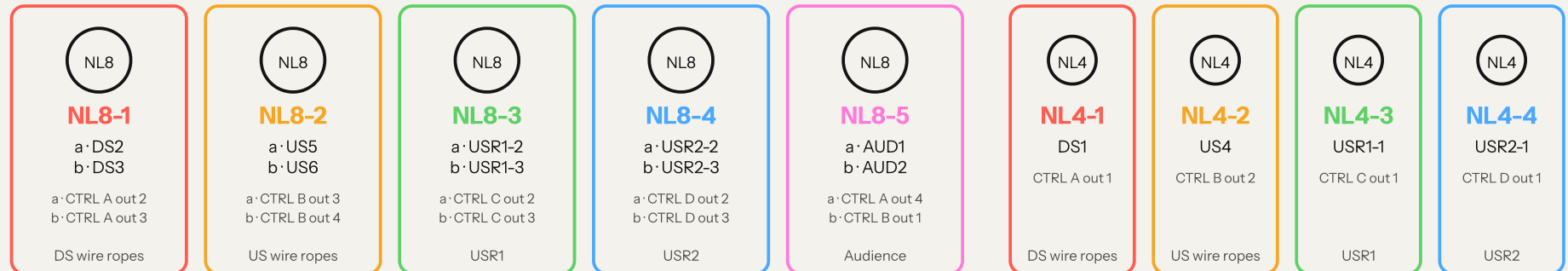
2 x UHP-1500-24

3,000 W, load 1,483 W. About 12.9 A @ 120 V, one TRUE1 feed.

Front panel: which port is which

PYLON PXL CTRL RACK · FRONT · OUTPUTS

5 x NL8 (2 runs each) + 4 x NL4 (1 run each) = 14 outputs



NL8 leg a / leg b = the two NL4 tails of the NL8 to 2x NL4 splitter at the top of the trunk. Colors match the lanes on bea.kg3.io/power.

Setting the rack up

1 Roll the rack to the pylon base

Front (outputs) faces the pylon feeders. Rear plate (TRUE1 + etherCON) faces the cable path from LX. Leave the rear open for air.

2 AC in

One TRUE1 feed into TRUE1 IN on the rear plate. TRUE1 THRU is a pass-through for the next thing on the same circuit. Rack draws about 12.9 A at 120 V, so give it its own 20 A circuit.

3 Network in

etherCON from the LX sACN switch into the rear plate. The second etherCON loops the network on. Controllers are static: CTRL A .41, B .42, C .43, D .44 on 192.168.41.x.

4 Plug the feeders by port label

Each NL8 trunk goes to its numbered NL8 port and splits to two NL4 tails at the top (leg a and leg b). Each NL4 single goes to its numbered NL4 port. The table below says which run is on which port. Match the port label on the rack to the label on the trunk.

5 Power up and test

Power the rack, then run the Advatek test pattern on each box (Advatek Assistant 3, red / green / blue). Every run should light in order from its rack end. If red and green are swapped on a run, change Color Order on all outputs of that box, never the patch.

6 Hand off to the console

Console sends sACN universes 41-69. Patch of record is the DMX Patch Map in the tech kit. 70-85 stay clear for CTRL E.

7 If a box dies

Swap in CTRL E. Import the dead box's .conf from the Controller Update Package, set the IP to the dead box's address, move the output cables across in the same order. The patch does not change.



Every output

CONTROLLER	OUT	RACK PORT	TYPE	RUN	SEGMENTS (DATA ORDER)	PX	UNIVERSES
CTRL A 192.168.41.41	1	NL4-1	NL4	DS1	DS1-1 > DS1-2	369	41-43
	2	NL8-1 a	NL8	DS2	DS2-1 > DS2-2	369	44-46
	3	NL8-1 b	NL8	DS3	DS3-1 > DS3-2	369	47-49
	4	NL8-5 a	NL8	AUD1	AUD1-1 > AUD1-2 > AUD1-3	568	50-53
CTRL B 192.168.41.42	1	NL8-5 b	NL8	AUD2	AUD2-1 > AUD2-2 > AUD2-3	575	54-57
	2	NL4-2	NL4	US4	US4-1 > US4-2	307	58-59
	3	NL8-2 a	NL8	US5	US5-1 > US5-2	307	60-61
	4	NL8-2 b	NL8	US6	US6-1 > US6-2	307	62-63
CTRL C 192.168.41.43	1	NL4-3	NL4	USR1-1	USR1-1	98	64
	2	NL8-3 a	NL8	USR1-2	USR1-2	98	65
	3	NL8-3 b	NL8	USR1-3	USR1-3	98	66
CTRL D 192.168.41.44	1	NL4-4	NL4	USR2-1	USR2-1	100	67
	2	NL8-4 a	NL8	USR2-2	USR2-2	100	68
	3	NL8-4 b	NL8	USR2-3	USR2-3	100	69

By rack port

RACK PORT	TYPE	CARRIES	GOES TO	PX	UNIVERSES
NL8-1	NL8	leg a DS2 = CTRL A out 2 leg b DS3 = CTRL A out 3	DS wire ropes	738	44-46, 47-49
NL8-2	NL8	leg a US5 = CTRL B out 3 leg b US6 = CTRL B out 4	US wire ropes	614	60-61, 62-63
NL8-3	NL8	leg a USR1-2 = CTRL C out 2 leg b USR1-3 = CTRL C out 3	USR1	196	65, 66
NL8-4	NL8	leg a USR2-2 = CTRL D out 2 leg b USR2-3 = CTRL D out 3	USR2	200	68, 69
NL8-5	NL8	leg a AUD1 = CTRL A out 4 leg b AUD2 = CTRL B out 1	Audience	1143	50-53, 54-57
NL4-1	NL4	DS1 = CTRL A out 1	DS wire ropes	369	41-43
NL4-2	NL4	US4 = CTRL B out 2	US wire ropes	307	58-59
NL4-3	NL4	USR1-1 = CTRL C out 1	USR1	98	64
NL4-4	NL4	USR2-1 = CTRL D out 1	USR2	100	67



Inside the rack

INSIDE THE RACK · TOP VIEW · FRONT IS DOWN

CTRL A192.168.41.41

out 1
DS1
NL4-1

out 2
DS2
NL8-1a

out 3
DS3
NL8-1b

out 4
AUD1
NL8-5 a

CTRL B192.168.41.42

out 1
AUD2
NL8-5 b

out 2
US4
NL4-2

out 3
US5
NL8-2 a

out 4
US6
NL8-2 b

CTRL C192.168.41.43

out 1
USR1-1
NL4-3

out 2
USR1-2
NL8-3 a

out 3
USR1-3
NL8-3 b

out 4 spare

CTRL D192.168.41.44

out 1
USR2-1
NL4-4

out 2
USR2-2
NL8-4 a

out 3
USR2-3
NL8-4 b

out 4 spare

UNDER THE TRAY

PSU 1
UHP-1500-24

PSU 2
UHP-1500-24

REAR PLATE

TRUE1 IN · TRUE1 THRU
etherCON x2 (sACN in, loop out)

2 x 1500 W = 3,000 W, load 1,483 W (49%)
AC draw about 12.9 A at 120 V

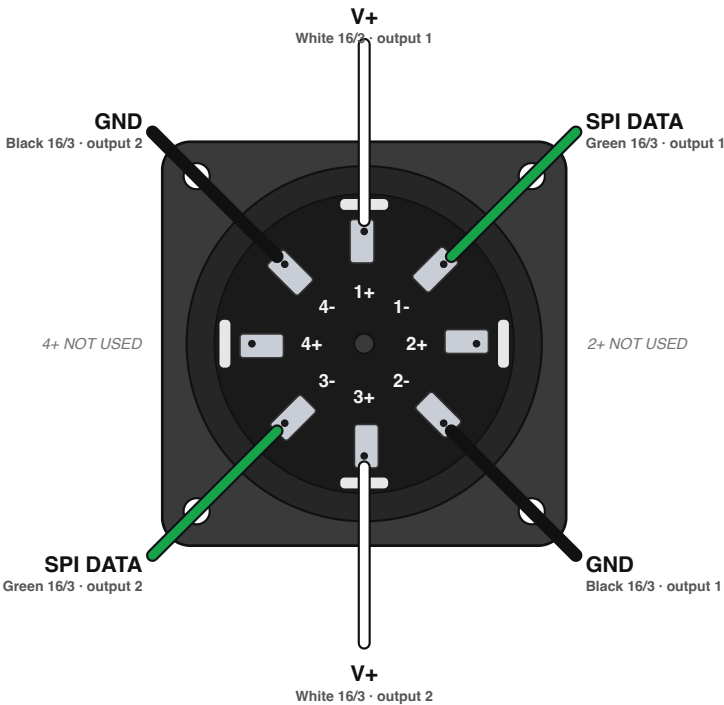
4 x Advatek PixLite A4-S Mk3 in a 2x2 grid on the tray, 2 x Mean Well UHP-1500-24 flat under it. SKB 4U 20 in rolling shockmount rack.

Network and universes

DEVICE	IP	UNIVERSES	NOTE
CTRL A	192.168.41.41	41-53	4 live outputs, 1675 px
CTRL B	192.168.41.42	54-63	4 live outputs, 1496 px
CTRL C	192.168.41.43	64-66	3 live outputs, 294 px
CTRL D	192.168.41.44	67-69	3 live outputs, 300 px
CTRL E	192.168.41.45	70-85 held	Road spare. Not in the rack, no live outputs. Import the failed box's .conf and set its IP to take over.
Gateway	192.168.41.1		Subnet 192.168.41.0/24. Laptop on a static address in the same subnet (for example .200).
Media server / console		sACN 41-69 out, clear from 86	sACN (E1.31), 170 px per universe, every output starts on a fresh universe at ch 1.

NL8 Panel Mount (NL8MPR) - 2x SPI Pixel LED outputs - 16/3 wire

Solder side of the rack jack, as seen inside the rack. Two 16/3 SOOW cables (White / Green / Black), one per Advatek output. 2+ and 4+ NOT USED.



Pole map (16/3 per output)

- 1+ V+ · White · output 1
- 1- SPI DATA · Green · output 1
- 2+ NOT USED
- 2- GND · Black · output 1
- 3+ V+ · White · output 2
- 3- SPI DATA · Green · output 2
- 4+ NOT USED
- 4- GND · Black · output 2

Output 1 = 1+ V+ / 1- DATA / 2- GND (splitter OUT 1)
Output 2 = 3+ V+ / 3- DATA / 4- GND (splitter OUT 2)
Same map on the NL8 to NL4 SPI Splitter and on the NL8 trunk: function follows the pin, not the colour.

Pole map (solder side)

NL8 POLE	OUTPUT	FUNCTION	16/3 WIRE
1+	Output 1	V+	White
1-	Output 1	DATA	Green
2+	NOT USED, no wire		
2-	Output 1	GND	Black
3+	Output 2	V+	White
3-	Output 2	DATA	Green
4+	NOT USED, no wire		
4-	Output 2	GND	Black

Two Advatek A4-S Mk3 outputs per NL8, one 16/3 SOOW cable each: **output 1 = 1+ V+ / 1- DATA / 2- GND, output 2 = 3+ V+ / 3- DATA / 4- GND**. WHITE = V+, GREEN = SPI DATA, BLACK = GND. **2+ and 4+ take no wire**. Function follows the pin, not the colour: same map on the NL8 trunk and on the NL8 to NL4 SPI Splitter (OUTPUT 1 = poles 1/2, OUTPUT 2 = poles 3/4). Verify colours on the jacket before terminating.

Wire map of record: NeonOS cable type NL8 to NL4 SPI Splitter / wirediagramcreator nl8-spi-2x. Geometry: NL8MPR solder side, 1+ at 12 o'clock under the key.



PYLON PXL CTRL RACK

Beabadoobee 2026 · sACN 41-69 · 3,765 px · 192.168.41.0/24 gw .1
CTRL E .45 = road spare, u70-85 held · Sep 4, 2026

CTRL A

192.168.41.41

OUT	RUN	RACK PORT	PX	SACN
1	DS1	NL4-1	369	u41-43
2	DS2	NL8-1 a	369	u44-46
3	DS3	NL8-1 b	369	u47-49
4	AUD1	NL8-5 a	568	u50-53

sACN 41-53 · 1,675 px · 4 outputs live

CTRL B

192.168.41.42

OUT	RUN	RACK PORT	PX	SACN
1	AUD2	NL8-5 b	575	u54-57
2	US4	NL4-2	307	u58-59
3	US5	NL8-2 a	307	u60-61
4	US6	NL8-2 b	307	u62-63

sACN 54-63 · 1,496 px · 4 outputs live

CTRL C

192.168.41.43

OUT	RUN	RACK PORT	PX	SACN
1	USR1-1	NL4-3	98	u64
2	USR1-2	NL8-3 a	98	u65
3	USR1-3	NL8-3 b	98	u66
4	<i>spare</i>			

sACN 64-66 · 294 px · 3 outputs live

CTRL D

192.168.41.44

OUT	RUN	RACK PORT	PX	SACN
1	USR2-1	NL4-4	100	u67
2	USR2-2	NL8-4 a	100	u68
3	USR2-3	NL8-4 b	100	u69
4	<i>spare</i>			

sACN 67-69 · 300 px · 3 outputs live

NL8 PORTS · TWO RUNS EACH, LEG A / B AT THE SPLITTER

NL8-1

a **DS2** A2
b **DS3** A3

NL8-2

a **US5** B3
b **US6** B4

NL8-3

a **USR1-2** C2
b **USR1-3** C3

NL8-4

a **USR2-2** D2
b **USR2-3** D3

NL8-5

a **AUD1** A4
b **AUD2** B1

NL4 SINGLES = ONE RUN EACH

NL4-1

DS1 A1

NL4-2

US4 B2

NL4-3

USR1-1 C1

NL4-4

USR2-1 D1



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Pixel Count & Channel Map

Ref #: KG3-26-BEA-PX01 **Project:** Conor Houston · Beabadoobee · 2026 Headline Tour · LED Pixel Rope Package (V2.2 Design · Black 22mm)

CLIENT Eighteen Twenty Six (1826 Touring) Beabadoobee 2026 Headline Tour Attn: Conor Houston (PM) connorhoustonlive@gmail.com	PRODUCTION DESIGN Daniel Richardson Production + Lighting Designer Eighteen Twenty Six danrichardson@eighteentwentsix.com	PRODUCT KG3 LumiRope 360 · 22mm black WS2811 RGB · DC 24V 120 LEDs/m · 20 px/m (50 mm pitch) 3 DMX channels per pixel
SOURCE Lengths: Scenic 1826 Sheet 4.11 Drawings V2.2, 12.08.2026 Pixel counts rounded up (ceil)	REP Kenny Gay KG3 LLC kenny@kg3.io	CONTROL 5x KG3 PXL-CTRL (Advatek PixLite A4-S Mk3) 14 data outputs · one run per output 170 px / 510 ch per universe

ISSUED 08/26/2026	US REHEARSALS 09/22/2026	TOUR END 12/07/2026	STATUS For Patch
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SEGMENTS 24 physical rope pieces	RUNS / OUTPUTS 14 across 5 PXL-CTRL	TOTAL PIXELS 3,765 187.8 m lit @ 20 px/m	TOTAL CHANNELS 11,295 RGB · 3 ch per pixel	UNIVERSES 27 fresh universe per output
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PER RUN (ONE RUN = ONE CONTROLLER DATA OUTPUT)

RUN	OUTPUT	SEGMENTS IN DATA ORDER	LENGTH	METERS	PIXELS	CHANNELS	UNIV.
DS CABLES · PYLON TO BACKDROP WINCHES · CTRL A							
DS1	CTRL A · Out 1	DS1-1 + DS1-2	60'6"	18.44 m	369	1,107	3
DS2	CTRL A · Out 2	DS2-1 + DS2-2	60'6"	18.44 m	369	1,107	3
DS3	CTRL A · Out 3	DS3-1 + DS3-2	60'6"	18.44 m	369	1,107	3
US CABLES · PYLON TO SCENIC WINCHES · CTRL B							
US4	CTRL B · Out 1	US4-1 + US4-2	50'2"	15.29 m	307	921	2
US5	CTRL B · Out 2	US5-1 + US5-2	50'2"	15.29 m	307	921	2
US6	CTRL B · Out 3	US6-1 + US6-2	50'2"	15.29 m	307	921	2
USR CABLES · SINGLE-END FED · CTRL C / CTRL D							
USR1	CTRL C · Out 1	USR1-1 + USR1-2 + USR1-3	48'0"	14.64 m	294	882	2
USR2	CTRL D · Out 1	USR2-1 + USR2-2 + USR2-3	49'0"	14.94 m	300	900	2
AUDIENCE CABLES · AP1 / AP2 / AP3 · CTRL E							
AUD1	CTRL E · Out 1	Audience 1-1 + Audience 1-2 + Audience 1-3	92'11"	28.33 m	568	1,704	4

RUN	OUTPUT	SEGMENTS IN DATA ORDER	LENGTH	METERS	PIXELS	CHANNELS	UNIV.
AUD2	CTRL E · Out 2	Audience 2-1 + Audience 2-2 + Audience 2-3	94'2"	28.71 m	575	1,725	4
RIG TOTAL · 14 outputs · 24 segments · 616'1" · 187.8 m					3,765	11,295	27

PATCH NOTES

Each output is one contiguous block of channels. Patch the lowest channel at the data-in end of the run and count up 3 channels per pixel in data-flow order (segment .1 first, then .2, then .3). Universe counts assume each output starts on a fresh universe at 170 pixels per universe with no pixel split across a universe boundary; packed end to end the rig fits in 23 universes, but plan on 27 so every output patches clean. Largest single output is AUD2 at 575 px, well inside the 1,020 px per output ceiling of the PixLite A4-S Mk3. If a null pixel is spliced at the top of the up-tower feed, add 1 pixel (3 channels) to the front of that output and patch it as a dead pixel.

PER SEGMENT (24 PHYSICAL PIECES)

RUN	SEGMENT	FED FROM OUTPUT	LENGTH	METERS	PIXELS	CHANNELS
DS CABLES · PYLON TO BACKDROP WINCHES · CTRL A						
DS1	DS1-1	CTRL A · Out 1	30'0"	9.14 m	183	549
	DS1-2		30'6"	9.30 m	186	558
DS1 run total · 2 segments · 60'6" · 18.44 m					369	1,107
DS2	DS2-1	CTRL A · Out 2	30'0"	9.14 m	183	549
	DS2-2		30'6"	9.30 m	186	558
DS2 run total · 2 segments · 60'6" · 18.44 m					369	1,107
DS3	DS3-1	CTRL A · Out 3	30'0"	9.14 m	183	549
	DS3-2		30'6"	9.30 m	186	558
DS3 run total · 2 segments · 60'6" · 18.44 m					369	1,107
US CABLES · PYLON TO SCENIC WINCHES · CTRL B						
US4	US4-1	CTRL B · Out 1	28'4"	8.64 m	173	519
	US4-2		21'10"	6.65 m	134	402
US4 run total · 2 segments · 50'2" · 15.29 m					307	921
US5	US5-1	CTRL B · Out 2	28'4"	8.64 m	173	519
	US5-2		21'10"	6.65 m	134	402
US5 run total · 2 segments · 50'2" · 15.29 m					307	921
US6	US6-1	CTRL B · Out 3	28'4"	8.64 m	173	519
	US6-2		21'10"	6.65 m	134	402
US6 run total · 2 segments · 50'2" · 15.29 m					307	921
USR CABLES · SINGLE-END FED · CTRL C / CTRL D						
USR1	USR1-1	CTRL C · Out 1	16'0"	4.88 m	98	294
	USR1-2		16'0"	4.88 m	98	294
	USR1-3		16'0"	4.88 m	98	294
USR1 run total · 3 segments · 48'0" · 14.64 m					294	882

RUN	SEGMENT	FED FROM OUTPUT	LENGTH	METERS	PIXELS	CHANNELS
USR2	USR2-1	CTRL D · Out 1	16'4"	4.98 m	100	300
	USR2-2		16'4"	4.98 m	100	300
	USR2-3		16'4"	4.98 m	100	300
USR2 run total · 3 segments · 49'0" · 14.94 m					300	900
AUDIENCE CABLES · AP1 / AP2 / AP3 · CTRL E						
AUD1	Audience 1-1	CTRL E · Out 1	26'2"	7.98 m	160	480
	Audience 1-2		33'4"	10.16 m	204	612
	Audience 1-3		33'5"	10.19 m	204	612
AUD1 run total · 3 segments · 92'11" · 28.33 m					568	1,704
AUD2	Audience 2-1	CTRL E · Out 2	27'2"	8.28 m	166	498
	Audience 2-2		33'7"	10.24 m	205	615
	Audience 2-3		33'5"	10.19 m	204	612
AUD2 run total · 3 segments · 94'2" · 28.71 m					575	1,725

NOTES

- Pixel count = ceil(length in meters x 20). The partial pixel at the cut end is physically present and must be patched.
- Lengths are the scenic designer's Sheet 4.11 estimates (V2.2 12.08.2026). Final cut lengths confirmed at KG3 shop before ship; counts update if lengths change.
- Segments joined on the same output pass data straight through; no address gaps between segments.
- Segment weights, power loads, and injection points are in the companion document BEA Run & Segment Loads (bea.kg3.io/segments).

Segments	24
Runs (outputs)	14
Lit length	187.8 m
Pixels	3,765
Universes	27
TOTAL CHANNELS	11,295