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LED SHOP PREP

bea.kg3.io/chance/led-prep · Beabadoobee 2026 Headline Tour · PX1 tech · September 2, 2026

Rules of record

Cut
LumiRope 360 22 mm black, 20 px/m, cut points every 50 mm. Cut = drawing length rounded UP to the next 50 mm, never down. DS/US/AUD from 10 m and 11 m stock, USR from 5 m. Spares stay at stock length.

Leads · 12 in finished
Leave 12 in of lead measured from the rope end at every column junction (factory lead about 1 m, about 27 in comes off). Measure from the rope, mark, then cut. Rack-fed IN ends and USR far ends: per Kenny.

NL4 gender
Every rope points the same way: IN end = FEMALE, OUT end = MALE. Arriving at a column = male (18), leaving = female (10, barrel to the wye). No male to male anywhere.

Pin map (NL4 SPI)
1+ RED V+ 24 V
1- YELLOW SPI data
2- BLACK GND
2+ empty

Patch
sACN, universes 41-69 live, 70-85 held for the spare box. 170 px per universe, every output on a fresh universe. CTRL A .41 = DS + AUD1, B .42 = AUD2 + US, C .43 = USR1, D .44 = USR2, E .45 spare.

Labels + QR
Band label on each end (product IN/OUT + show IN/OUT). The QR on the NeonOS piece label opens spec.kg3.io for that piece.

Controller outputs

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

Maps and patch

Patch Elevation https://bea.kg3.io/chance/kit/KG3-26-BEA-PatchElevation.pdf	The runs as they hang, universe bands on each rope. Your troubleshooting sheet.
DMX Patch Map https://bea.kg3.io/chance/kit/KG3-26-BEA-PatchMap.pdf	Patch of record, sACN 41-69, by controller.
Patch Builder https://bea.kg3.io/patch/	Interactive patch page.
Power and Data Plan https://bea.kg3.io/power/	Rack, NL8 feeders, drop chains, per-group loads.
Injection Cable Map R2 https://bea.kg3.io/chance/kit/BEA-Injection-Cable-Map.pdf	Every drop, wye and jumper to scale per column.
Wye Chain Plan R4 https://bea.kg3.io/chance/kit/BEA-Wye-Chain-Plan.pdf	Drop cable and wye chain with NL4 joints and rings.
Feeder Cable Map https://bea.kg3.io/chance/kit/BEA-Feeder-Cable-Map.pdf	Rack to run feeders, what is used where.
Rigging Weights https://bea.kg3.io/rigging/	Per-pickup weights.
Rigging Ring Detail https://bea.kg3.io/chance/kit/BEA-Rigging-Ring-Detail.pdf	5/8 in eye, 22 mm bore.
Truck Pack Rev D https://bea.kg3.io/truck-pack/	3D pack, case contents.

Retractor Plan https://bea.kg3.io/retractor-plan/	Winch drop plan.

Cable pinouts (build sheets)

NL8 Pixel Data + Power Cable https://bea.kg3.io/diagrams/nl8-trunk/	16/6, both ends.
NL8 to NL4 SPI Splitter https://bea.kg3.io/diagrams/nl8-splitter/	Your prototype first.
NL8 Rack Jack, 4-wire https://bea.kg3.io/diagrams/nl8-rack-4w/	Inside the rack: 16/4 per run, 2+ / 4+ = clock.
Injection 2fer (Wye) https://bea.kg3.io/diagrams/tee-2fer/	12/3 molded Y, terminate.
Injection 3fer https://bea.kg3.io/diagrams/tee-3fer/	Shop built.
Power Through Jumper https://bea.kg3.io/diagrams/power-jumper/	20 in NL4 M to F.
Audience AP Drops https://bea.kg3.io/diagrams/ap-drop/	12/3 to NL4, 50 ft.

Production and shop

NeonOS neon job (BBDB) https://os.kg3.io/neon/54cf8685-c57b-4fd4-be7e-13662667abe2	Pieces, cutting plan, prep workflow.
NeonOS piece labels https://os.kg3.io/neon/54cf8685-c57b-4fd4-be7e-13662667abe2/labels	Print piece and reel labels.
P-touch label proof https://bea.kg3.io/chance/kit/BBDB-LED-labels-proof.pdf	Band labels, IN and OUT per piece.
Pull Sheet PS1 https://bea.kg3.io/chance/kit/KG3-26-BEA-PullSheet.pdf	Everything that ships.
Potential Cuts to LED https://bea.kg3.io/chance/kit/KG3-26-BEA-Potential-Cuts-to-LED.pdf	V2.2 vs potential V2.4 lengths. Not decided until rehearsals; do not cut to it yet.
tasks.kg3.io https://tasks.kg3.io	Your task board.
Tech kit (all PDFs + controller configs) https://bea.kg3.io/chance/kit/	The full package for the road.