CG TOUR - SCENIC LED ON BAND RISERS — Quick Reference

venue power → KG3 24V DMX dimmer racks → 6-pin NL8 home runs → panel plates → Glowback RGBW tape (7 W/ft) · 27 zones · 72 segments · SGPS #10883 Task 405

FRONT — WIRING · BACK — ZONES & INSTALL

NL8 PINOUT - RGBW (KG3 STANDARD)

6-PIN CABLE REQUIRED

PIN	FUNCTION	RIBBON COLOR
1+	**V+ 24V**	○ **BLACK**
1-	**Red**	○ **RED (A+B)**
2+	**Green**	○ **GREEN**
2-	**Blue**	○ **BLUE (A)** / WHITE (B)
3+	White	○ WHITE (A) / **BLUE (B)**
3- / 4+ / 4-	Spare / unused	-

⚠ VERIFY before first termination: black = V+ assumed; NL8 map marked Needs Review in Wire Diagrams DB.

TAPE RIBBON VARIANTS

⚠ WIRE BY COLOR

	POS 1	POS 2	POS 3	POS 4	POS 5
FUNCTION	**V+ 24V**	**GREEN**	**RED**	**BLUE**	**WHITE**
NL8 PIN	1+	2+	1-	2-	3+
RIBBON A	black	green	red	blue	white
RIBBON B	black	green	red	**WHITE**	**BLUE**

⚠ Function follows RIBBON POSITION. On Ribbon B the WHITE wire carries BLUE (pin 2-) and the BLUE wire carries WHITE (pin 3+). Identify A vs B before terminating - selector at stl.kg3.io/wire-diagrams.

DMX PROFILE - EACH ZONE (4CH RGBW)

CH OFFSET	FUNCTION	VALUE
+0	RED	0-255 = intensity
+1	GREEN	0-255 = intensity
+2	BLUE	0-255 = intensity
+3	WHITE	0-255 = intensity
+4	-	not used (spacing)

ℹ Zone start channels TBD pending final rack locations. Start + offset = actual channel.

SIGNAL CHAIN

- ☐ Venue power → KG3 24V DMX dimmer rack (one per position: CS / SL / SR)
- ☐ Rack output → NL8 home run (10' / 20', 6-pin) → riser panel plate
- ☐ Panel plate → ~3' NL8 daisy chain → next segment plate (within zone)
- ☐ Plate → tape ribbon (wire by POSITION - see ribbon A/B table)
- ☐ Console → 5-pin DMX → racks (opto if positions share a universe)

ℹ Pink circle on riser maps = run start (feed). Blue arrow = daisy chain direction.

⚠ ALL 10'/20' home run cables MUST be 6-pin NL8 - do not substitute 5-pin. Max zone load 6.4 A @ 24V (CS-12).

CENTER - 12 ZONES (BOTH HALVES) — DMX TBD

ZONE	SEGMENTS	LEN	W	A
CS-01	A1, A3	9'-4"	65	2.7
CS-02	A2, A4	9'-4"	65	2.7
CS-03	B1 B2, B5 B6	11'-2"	78	3.3
CS-04	B3 B4, B7 B8	14'-3"	100	4.2
CS-05	C1 C2, C5 C6	16'-1"	112	4.7
CS-06	C3 C4, C7 C8	14'-7"	102	4.3
CS-07	D1 D2, D7 D8	10'-3"	72	3.0
CS-08	D3 D4, D9 D10	12'-4"	86	3.6
CS-09	D5 D6, D11 D12	16'-6"	116	4.8
CS-10	E1 E2, E8 E9	11'-9"	83	3.4
CS-11	E3 E4, E10 E11	12'-4"	86	3.6
CS-12	E5-E7, E12-E14	22'-1"	154	6.4
TOT		**160'**	**1120**	**46.7**

STAGE LEFT - 8 ZONES — DMX TBD

ZONE	SEGMENTS	LEN	W	A
SL-01	F1 F2	11'-0"	77	3.2
SL-02	F3 F4	12'-1"	85	3.5
SL-03	F5 F6	13'-3"	92	3.9
SL-04	G1 G2	14'-11"	104	4.3
SL-05	G3 G4	10'-10"	76	3.2
SL-06	G5	8'-3"	58	2.4
SL-07	G6 G7	16'-0"	112	4.7
SL-08	G8	7'-8"	54	2.2
TOT		**94'**	**658**	**27.4**

STAGE RIGHT - 7 ZONES — DMX TBD

ZONE	SEGMENTS	LEN	W	A
SR-01	H1 H2	10'-8"	75	3.1
SR-02	H3 H4	12'-0"	84	3.5
SR-03	H5	6'-8"	46	1.9
SR-04	I1 I2	14'-9"	103	4.3
SR-05	I3 I4	14'-5"	101	4.2
SR-06	I5 I6	14'-2"	100	4.2
SR-07	I7	8'-2"	57	2.4
TOT		**80ft-11in**	**566**	**23.6**

INSTALL SEQUENCE

- ☐ Mount NL8 panel plates at segment boxes (#8 x 3/4" screws)
- ☐ Pull home runs rack → each zone feed (pink circle on map); label BOTH ends with zone ID
- ☐ Run ~3' daisy chains between segment plates within each zone (blue arrows)
- ☐ Identify ribbon A vs B, then terminate BY POSITION per the ribbon table
- ☐ Meter every plate: no V+ shorts to channels before power-on
- ☐ Power one rack at a time; test each zone R → G → B → W per DMX profile
- ☐ Dress + p-clip cable, gaff at crossings, photo each riser when done

TROUBLESHOOTING

SYMPTOM	LIKELY CAUSE	FIX
Blue/white swapped on a segment	Ribbon B terminated by jacket color	Re-terminate by position: white wire → 2-, blue wire → 3+
Whole zone dead	Home run V+ (pin 1) or rack output	Meter pin 1 at plate; check rack fuse/output
One color out, whole zone	That channel pin at feed plate	Meter pins 2-5 at feed; reseat NL8
Zone dies mid-run	Daisy chain at last working segment	Reseat/swap that ~3' jumper
Flicker under vibration	Loose NL8 twist lock	Full quarter-turn lock; swap connector if worn
Dim far end of long zone	Voltage drop	Expected within spec; report if severe