

MEASURED — BENCH TEST AUG 14 2026 (1 M SAMPLE, ADVATEK A4-S MK3 + SERIES METER): 0.96 A/M · 23.04 W/M @ 100% RGB WHITE · 20 PX/M · ROPE MEASURED 0.45 KG/M, PLANNED AT 0.5 KG/M · SIZE PSUS/CABLES WITH HEADROOM ABOVE MEASURED MAX

SEGMENTS BY RUN — WEIGHT @ 0.5 KG/M · FULL WHITE @ 23.04 W/M MEASURED (0.96 A PER METER @ 24V)

RUN	SEGMENT	LENGTH	M	KG	PX	W	A @24V	FED BY
CABLES DS — 3 RUNS								
CTRL A · out 1	DS1-1	30'0"	9.14	4.6	183	211	8.8	CTRL A-1 + NJCT DSP
	DS1-2	30'6"	9.30	4.6	186	214	8.9	NJCT DSP + NJCT DS end
	DS1 total	60'6"	18.44	9.2	369	425	17.7	20 lb
CTRL A · out 2	DS2-1	30'0"	9.14	4.6	183	211	8.8	CTRL A-2 + NJCT DSP
	DS2-2	30'6"	9.30	4.6	186	214	8.9	NJCT DSP + NJCT DS end
	DS2 total	60'6"	18.44	9.2	369	425	17.7	20 lb
CTRL A · out 3	DS3-1	30'0"	9.14	4.6	183	211	8.8	CTRL A-3 + NJCT DSP
	DS3-2	30'6"	9.30	4.6	186	214	8.9	NJCT DSP + NJCT DS end
	DS3 total	60'6"	18.44	9.2	369	425	17.7	20 lb
CABLES US — 3 RUNS								
CTRL B · out 1	US4-1	28'4"	8.64	4.3	173	199	8.3	CTRL B-1 + NJCT USP
	US4-2	21'10"	6.65	3.3	134	153	6.4	NJCT USP + NJCT US end
	US4 total	50'2"	15.29	7.6	307	352	14.7	17 lb
CTRL B · out 2	US5-1	28'4"	8.64	4.3	173	199	8.3	CTRL B-2 + NJCT USP
	US5-2	21'10"	6.65	3.3	134	153	6.4	NJCT USP + NJCT US end
	US5 total	50'2"	15.29	7.6	307	352	14.7	17 lb
CTRL B · out 3	US6-1	28'4"	8.64	4.3	173	199	8.3	CTRL B-3 + NJCT USP
	US6-2	21'10"	6.65	3.3	134	153	6.4	NJCT USP + NJCT US end
	US6 total	50'2"	15.29	7.6	307	352	14.7	17 lb
CABLES USR1 / USR2 — 2 RUNS (SINGLE-END, NO INJECTORS)								
CTRL C	USR1-1 · 1-2 · 1-3	3 × 16'0"	3 × 4.88	3 × 2.4	3 × 98	3 × 112	3 × 4.7	CTRL C single-end
	USR1 total	48'0"	14.63	7.3	294	337	14.0	16 lb
CTRL D	USR2-1 · 2-2 · 2-3	3 × 16'4"	3 × 4.98	3 × 2.5	3 × 100	3 × 115	3 × 4.8	CTRL D single-end
	USR2 total	49'0"	14.94	7.5	300	344	14.3	16 lb
AUDIENCE CABLES — 2 RUNS								
CTRL E · out 1	Audience 1-1	26'2"	7.98	4.0	160	184	7.7	CTRL E-1 + NJCT AP1
	Audience 1-2	33'4"	10.16	5.1	204	234	9.8	NJCT AP1 + NJCT AP2
	Audience 1-3	33'5"	10.19	5.1	204	235	9.8	NJCT AP2 + NJCT AP3
	AUD1 total	92'11"	28.32	14.2	568	652	27.2	31 lb
CTRL E · out 2	Audience 2-1	27'2"	8.28	4.1	166	191	7.9	CTRL E-2 + NJCT AP1
	Audience 2-2	33'7"	10.24	5.1	205	236	9.8	NJCT AP1 + NJCT AP2
	Audience 2-3	33'5"	10.19	5.1	204	235	9.8	NJCT AP2 + NJCT AP3
	AUD2 total	94'2"	28.70	14.4	575	661	27.6	32 lb
RIG TOTAL — 24 segments · 14 runs		616'1"	187.8	93.9	3,765	4,327	180.3	207 lb rope · mains ~36 A @120V on deck; 24V DC down each winch

187.8 m LIT PIXEL NEON	93.9 kg ROPE · 207 LB	3,765 px @ 20 PX/M
4.33 kW FULL WHITE · MEASURED	5 PXL-CTRL	7 PWR-NJCT FLOWN

Product: LEDODM NL-Ws2811-120φ22 — 22 mm round, black silicone, 360° · DC 24V WS2811 · 23.04 W/m full white
MEASURED Aug 14 2026 (0.96 A/m, 1 m sample) · 120 LEDs/m · 20 px/m addressable, 50 mm pitch · 0.5 kg/m · 3-core 20 AWG leads both ends

BOX LOADS — 5 CONTROLLERS + 7 FLOWN INJECTORS

BOX	POSITION	FEEDS	W	A @24V
CTRL A	Pylon, DS starts (3 outputs)	near ½ DS seg 1 + data (each)	105	4.4
CTRL B	Pylon, US starts (3 outputs)	near ½ US seg 1 + data (each)	100	4.1
CTRL C	Pylon, USR1	entire run, single-end	337	14.0
CTRL D	Pylon, USR2	entire run, single-end	344	14.3
CTRL E · out 1	AUD1 anchor DSE	near ½ Audience 1-1 + data	92	3.8
CTRL E · out 2	AUD2 anchor DSE	near ½ Audience 2-1 + data	95	4.0
NJCT 1	DSP column, truss · retractor	mid feed, all 3 DS cables	637	26.6
NJCT 2	DS end column (backdrop winches) · retractor	far ½ of all 3 DS seg 2	321	13.4
NJCT 3	USP column, truss · retractor	mid feed, all 3 US cables	528	22.0
NJCT 4	US end column (scenic winches) · retractor	far ½ of all 3 US seg 2	230	9.6
NJCT 5	AP1 chain motor (static) · 26'0" fixed drop	AUD1 + AUD2 at AP1	422	17.6
NJCT 6	AP2 chain motor (static) · 30'0" fixed drop	AUD1 + AUD2 at AP2	470	19.6
NJCT 7	AP3 chain motor (static) · 28'10" fixed drop	AUD1 + AUD2 at AP3	235	9.8
Rig total			4,327	180.3

Topology. Seven PWR-NJCT fly in the truss, one per pickup column, feeding every rope in their group via two 24V DC power wires on NL4 down a drop: a cable retractor beside each DS/US Wahlberg Winch 50 (rigging only, no pass-through), a fixed drop on the black pickup cable at the AP 1/2/3 chain motors (static, no winch). Five PXL-CTRL sit at the run start points (pylon / audience anchors) as data origin + first feed. Every ~9–10 m segment is fed from both ends, so no rope point is more than ~5 m from a supply.

Rigging weight. Segment and run weights are rope only: measured 0.45 kg/m, planned at 0.5 kg/m for margin. Add neon rigging rings at 0.5 kg per group of 4, 0.25 kg per group of 2 (KG3 measured), plus a 1.8 kg / 4 lb feed cable + NL4 allowance at each of the 7 power injection columns. Winch lines are rigging only; the drop rides a retractor in the truss (DS/US) or the black pickup cable (AP).

Watch items. USR runs fed single-end at 14.2–14.6 m — supplier max-run answer pending; if short, cap USR master at 80% on console. Retractor model + drop cable gauges per the Retractor Plan (bea.kg3.io/retractor-plan).