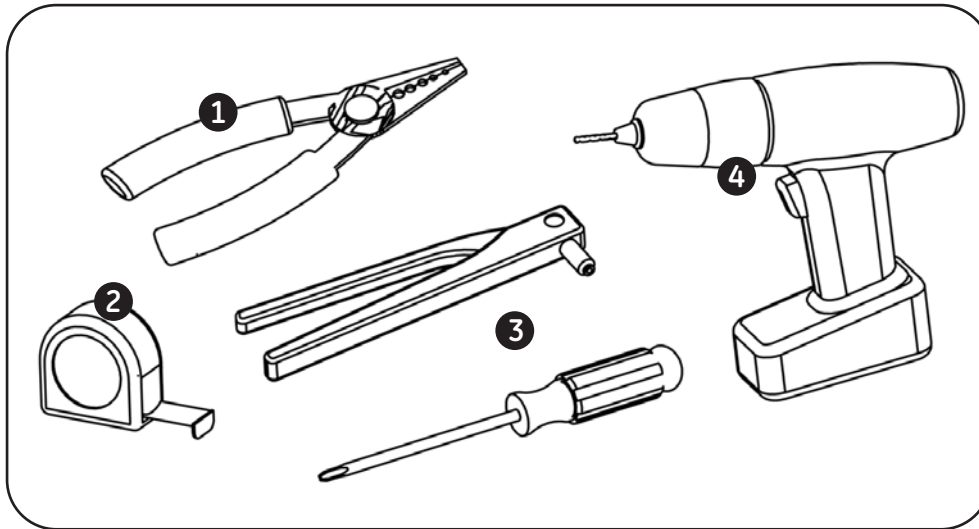


Tetra® PowerGrid LED Systems

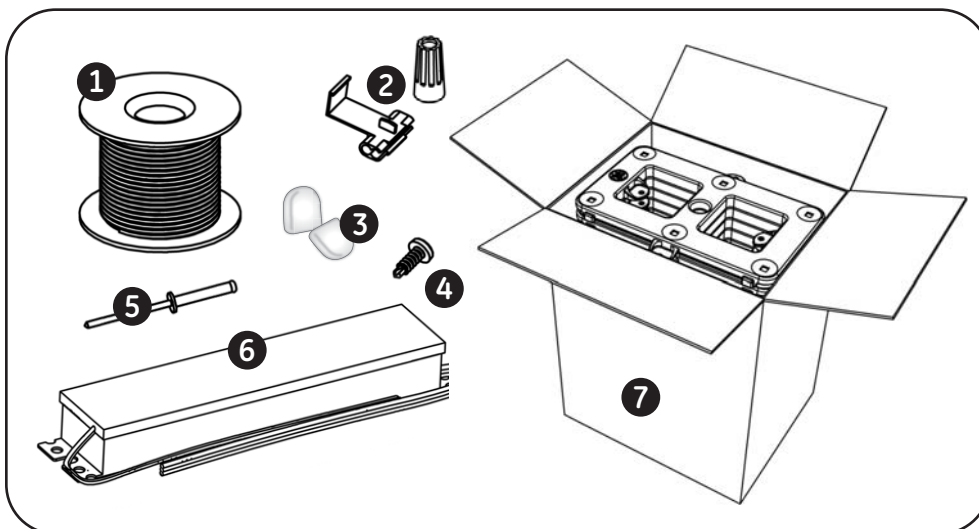
(GEWHPGP6-65K)

Step1: Tools and Components Required



Tools required:

- 1 Wire stripper/cutter
- 2 Tape measure
- 3 Rivet gun or screwdriver
- 4 Cordless drill



Components required:

- 1 18 AWG supply wire
- 2 UL approved: 22-14 AWG twist-on wire connectors or 18-14 AWG in-line connectors (IDC)
- 3 End caps (GEPGEC1)
- 4 #6 or #8 self drilling pan headed screws
- 5 1/8-inch rivets
- 6 Power Supply (GEPS24-80)
- 7 Tetra® PowerGrid LED Modules (GEWHPGP6-65K)



imagination at work



WARNING! RISK OF ELECTRIC SHOCK:

Turn power OFF before inspection, installation or removal.

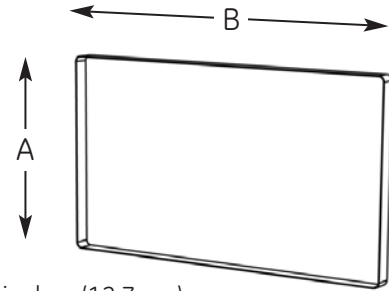
Installation Guide

Step 2: Determine Layout

- 1 Determine total number of modules needed to populate the sign based on sign width and height. Refer to charts below.

NOTE:

For best, more uniform light output, box depth should be a minimum of 5 inches (12.7 cm).



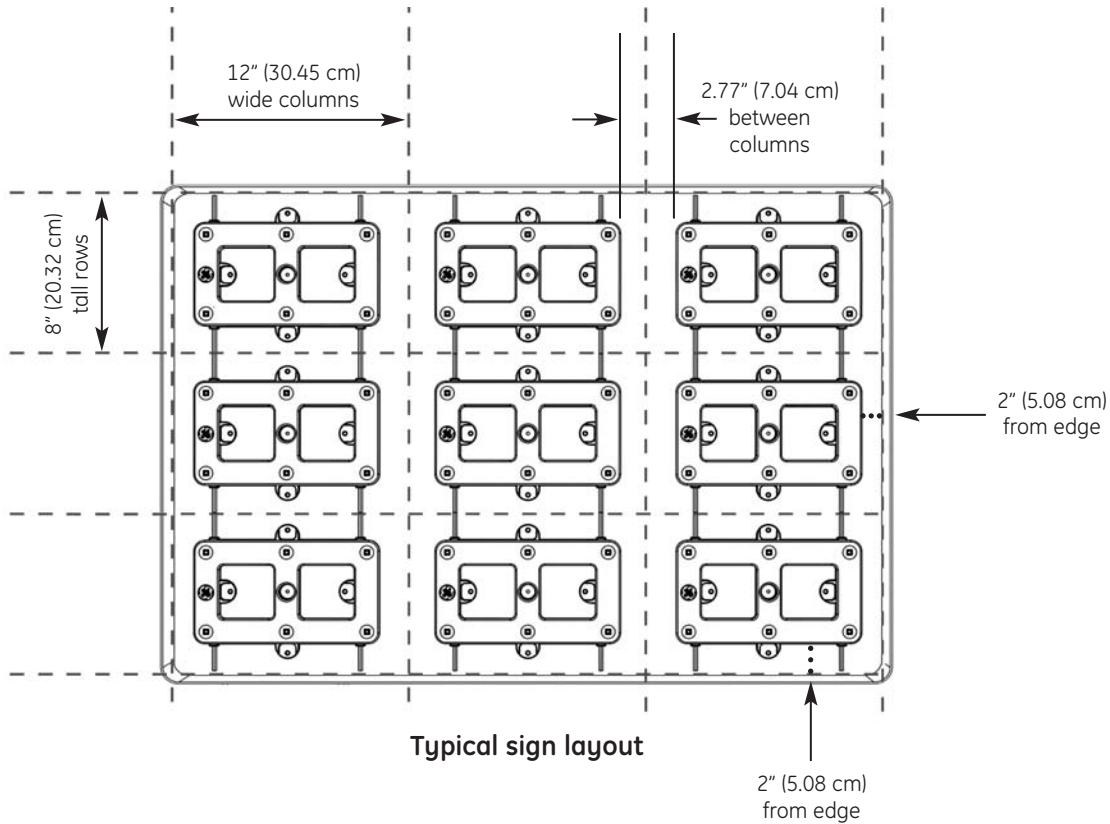
Total number of modules required based on height and width:

		Horizontal width in FEET (B)																					
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
Vertical height in FEET (A)	1	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
	2	3	6	9	12	15	18	21	24	27	30	33	36	39	42	45	48	51	54	57	60	63	66
	3	4	8	12	16	20	24	28	32	36	40	44	48	52	56	60	64	68	72	76	80	84	88
	4	6	12	18	24	30	36	42	48	54	60	66	72	78	84	90	96	102	108	114	120	126	132
	5	7	14	21	28	35	42	49	56	63	70	77	84	91	98	105	112	119	126	133	140	147	154
	6	9	18	27	36	45	54	63	72	81	90	99	108	117	126	135	144	153	162	171	180	189	198
	7	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180	190	200	210	220
	8	12	24	36	48	60	72	84	96	108	120	132	144	156	168	180	192	204	216	228	240	252	264
	9	13	26	39	52	65	78	91	104	117	130	143	156	169	182	195	208	221	234	247	260	273	286
	10	15	30	45	60	75	90	105	120	135	150	165	180	195	210	225	240	255	270	285	300	315	330
	11	16	32	48	64	80	96	112	128	144	160	176	192	208	224	240	256	272	288	304	320	336	352
	12	18	35	54	72	90	108	126	144	162	180	198	216	234	252	270	288	306	324	342	360	375	396

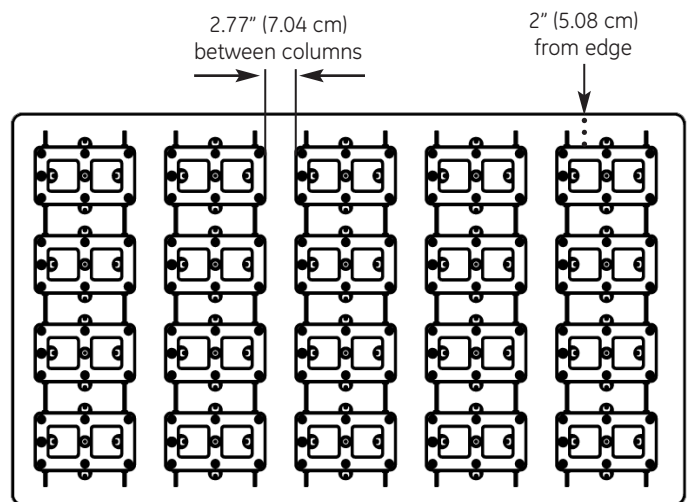
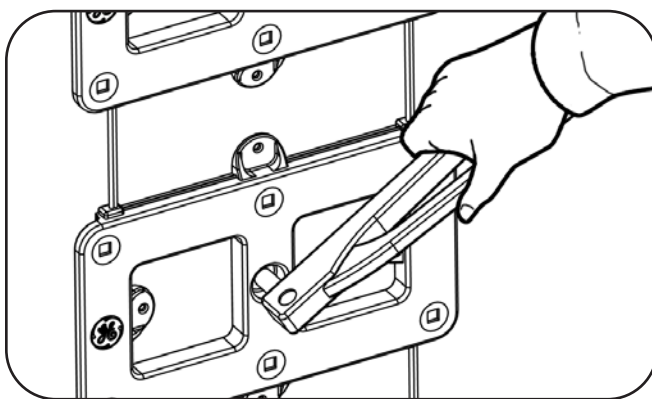
		Horizontal width in METERS (B)																					
		0.5	1.0	1.5	2.0	2.5	3.0	3.5	4.0	4.5	5.0	5.5	6.0	6.5	7.0	7.5	8.0	8.5	9.0	9.5	10.0	10.5	11.0
Vertical height in METERS (A)	0.5	2	5	7	10	12	15	17	20	22	24	27	29	32	34	37	39	42	44	47	49	52	54
	1.0	6	15	21	30	36	45	51	60	66	72	81	87	96	102	111	117	126	132	141	147	156	162
	1.5	10	25	35	50	60	75	85	100	110	120	135	145	160	170	185	195	210	220	235	245	260	270
	2.0	12	30	42	60	72	90	102	120	132	144	162	174	192	204	222	234	252	264	282	294	312	324
	2.5	16	40	56	80	96	120	136	160	176	192	216	232	256	272	296	312	336	352	376	392	416	432
	3.0	20	50	70	100	120	150	170	200	220	240	270	290	320	340	370	390	420	440	470	490	520	540
	3.5	22	55	77	110	132	165	187	220	242	264	297	319	352	374	407	429	462	484	517	539	572	594
	4.0	26	65	91	130	156	195	221	260	286	312	351	377	416	442	481	507	546	572	611	637	676	702
	4.5	30	75	105	150	180	225	255	300	330	360	405	435	480	510	555	585	630	660	705	735	780	810
	5.0	32	80	112	160	192	240	272	320	352	384	432	464	512	544	592	624	672	704	752	784	832	864
	5.5	36	90	126	180	216	270	306	360	396	432	466	522	576	612	666	702	756	792	846	882	936	972
	6.0	38	95	133	190	228	285	323	380	418	456	513	551	608	646	703	741	798	836	893	931	988	1026

- Using the diagram below as an estimation guide, begin cutting strings of modules to create 8-inch (20.32 cm) tall rows and 12-inch (30.45 cm) wide columns.

Modules should be 2 inches (5.08 cm) from the edge of the sign with 2.77 inches (7.04 cm) between each column.



Step 3: Install Modules



- Lay modules into the sign at least 2 inches (5.08 cm) from the edges.
Fasten down each module with at least one screw or rivet in the center hole or two opposing sides.

- Start another row with 2.77-inch (7.04 cm) spacing between the module strings.
Continue this process until the entire sign is populated with modules.

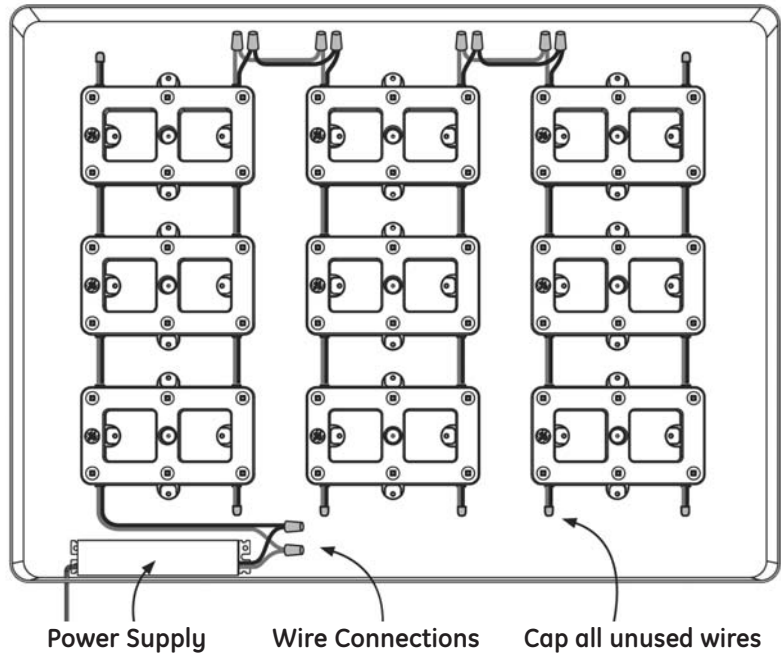
Installation Guide

Step 4: Electrical Connections

- 1 Strip the ends of the wire 1/2-inch (1.27 cm) on the modules (white and red) of adjacent columns that you want to connect.
- 2 Use UL approved wire connectors (twist-on or in-line connectors) and 18 AWG wire to connect the corresponding wires.
- 3 Strip the end of the wire 1/2-inch (1.27 cm) on the first column of modules and connect to the output of the power supply.

Output connections must be red-to-red and white-to-black.

NOTE: Each power supply will power up to 21 modules (14 ft./4.27 m).
- 4 Refer to the GEPS24-80 Power Supply Installation Instructions for more information on connecting the power supply.



Step 5: Troubleshooting

System	Solution
Row of modules does not light.	Check wire connections to power supply to ensure red-to-red and white-to-black connections. Check row-to-row polarity connections.
Sign does not light.	Check 120VAC line input voltage and check power supply input/output connections.
Individual modules do not light.	Check wire connection attachment and polarity of wires.
Modules are dim.	Verify there are 21 or less PowerGrid modules per GEPS24-80 power supply. Verify there is less than 20 ft. (6.1 m) of supply wire between LED modules and output of power supply.

⚠ WARNING!

RISK OF ELECTRIC SHOCK:

- Turn power OFF before inspection, installation or removal.
- Properly ground Tetra Power Supply enclosure.



RISK OF FIRE:

- Follow all NEC and local codes.
- Use only UL approved wire for input/output connections. Minimum size 18 AWG (1.02 mm)

Conforms to the following standards:



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