

The LATTICE

THE ORIGINAL LED CARPET MATRIX LIGHTING SYSTEM

The LATTICE

LED Carpet Matrix Lighting System for Sign Cabinets and Large Light Boxes

Bitro's patent pending LATTICE LED matrix lighting system is simply the most **ADVANCED**, **VERSATILE**, **EASY** and **AFFORDABLE** illumination solution for indoor and outdoor sign cabinets and large area illumination.

Innovative design of LATTICE system comes in lightweight easy-to-install rolls, which allows for instant and perfect lighting matrix. The rolls also come in multiple widths and each LED bulbs on the modules can be cut individually to fit custom size boxes. This revolutionary product creates uniform backlit lighting across the entire illuminated area with depth as low as 2-1/2" with **NO HOTSPOTS**.

Introducing

THE MOST POWERFUL and PRACTICAL FLUORESCENT REPLACEMENT

ILLUMINATION SOLUTION
for sign cabinets and large display areas.



LATTICE eliminates

Hotspots
Costly Maintenance
Environmental Hazards
& Bulky Light Boxes

LATTICE offers

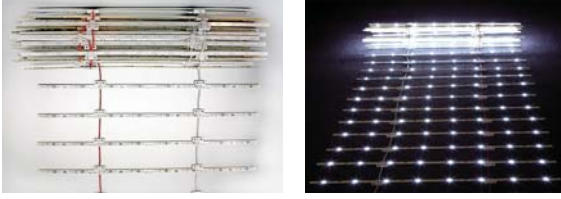
Uniform Lighting
Low Maintenance
Easy Installation
Green Lighting
& Thin Light Boxes
AT AFFORDABLE COSTS

The LATTICE ensures uniform lighting with constant current technology and strict RANK control on LEDs. Reliable circuit technology maximizes the life-span of the system, which results in minimal maintenance after the installation.

The LATTICE is available in single-sided and double-sided models, offering various brightness and color temperatures.

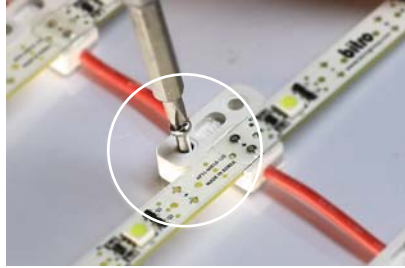
How the LATTICE works

Rolls of Matrix Lighting



LATTICE comes standard in 2ft or smaller width rolls of LED matrix which can be rolled out in columns to instantly cover the illuminating area.

Simple Mounting

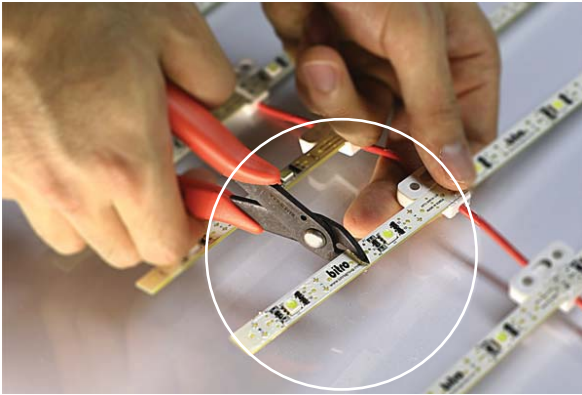


Simple screw mounting



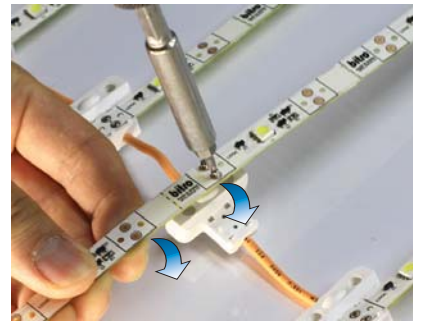
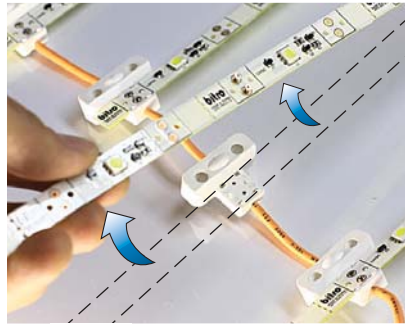
Double-sided tape can be used as an option. (Sold separately)

Versatile & Flexible



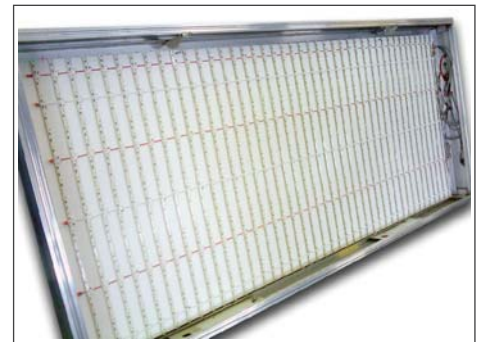
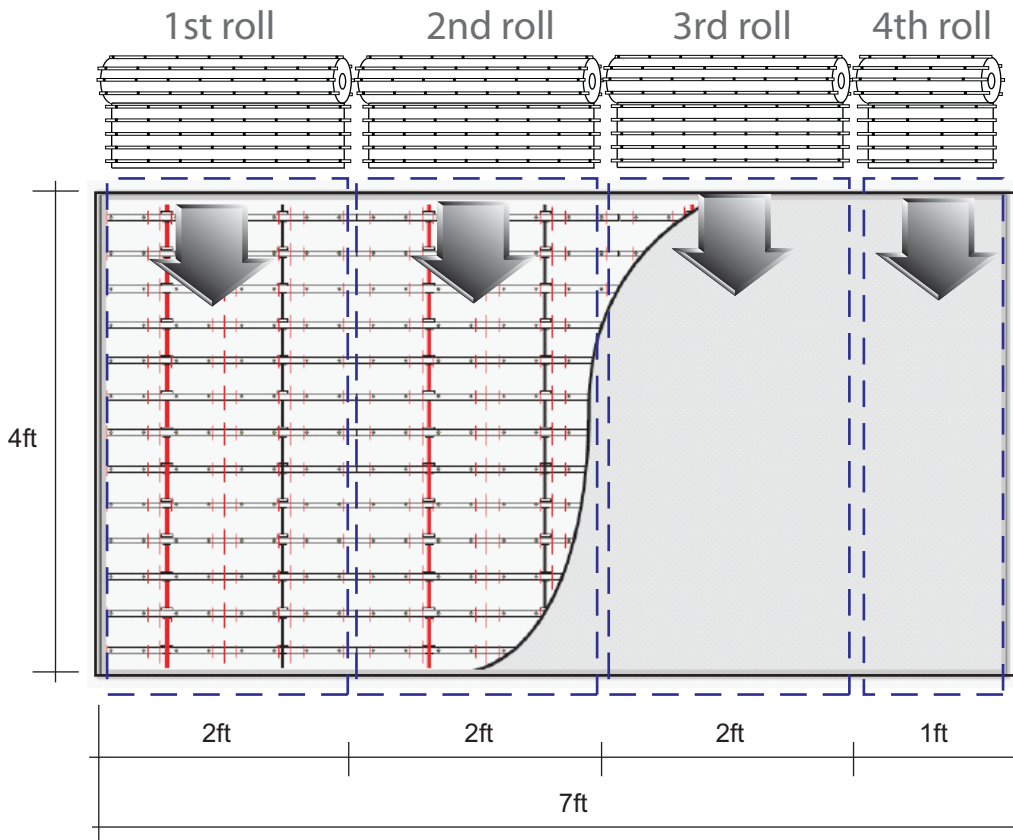
LED modules (bars) can be easily cut in every LED bulb to fit custom sized boxes at job-site.

Easy Servicing

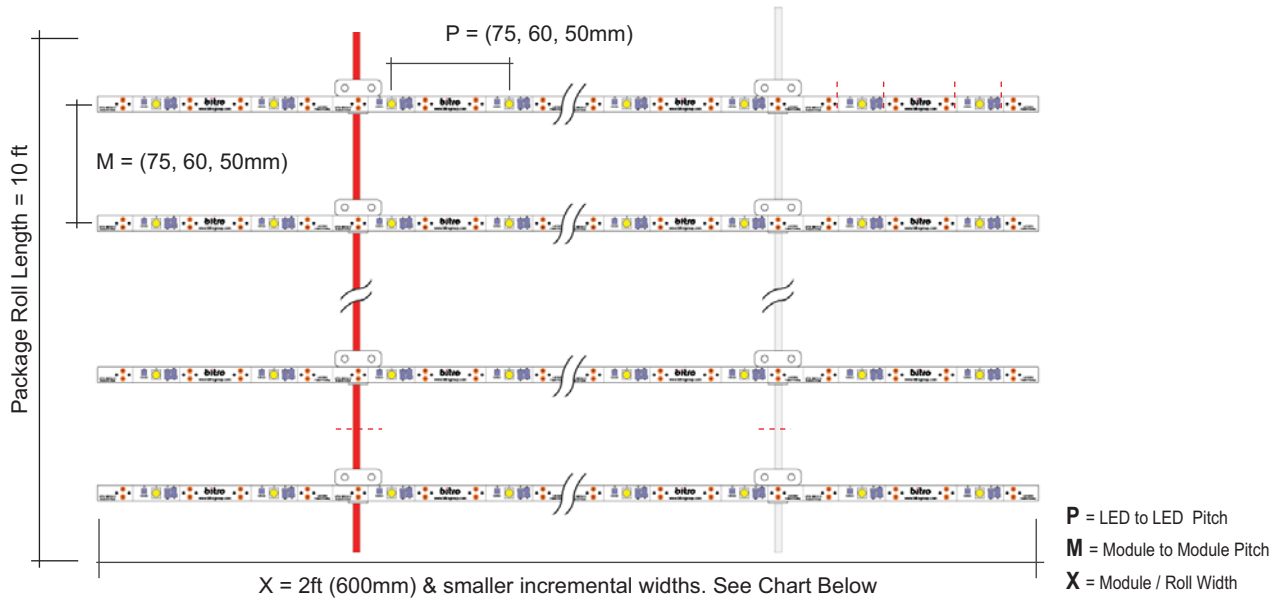


Each bar can be easily serviced from the front with minimum effort at job-site.

7'x4' Light Box Configuration Example



The LATTICE SYSTEM DIMENSIONS



The LATTICE SYSTEM SPECS (Single-Sided)

Model	LATTICE 75 Standard	LATTICE 75-100	LATTICE 60 Standard	LATTICE 50 Standard	LATTICE 40 Standard	LATTICE 75 DS (Double-sided) Standard	LATTICE 75-100 DS	LATTICE 60 DS Standard
SKU	LAT75S24-SW600	LAT75S24-SW600-100	LAT60S24-SW600	LAT50S24-SW600	LAT40S24-SW600	LAT75D24-SW600	LAT75D24-SW600-100	LAT60D24-SW600
LED Pitch (P)	75mm (3")	75mm (3")	60mm (2.36")	50mm (2")	40mm (1.57")	75mm (3")	75mm (3")	60mm (2.36")
Bar to Bar (M)*	75mm (3")	100mm (4")	60mm (2.36")	50mm (2")	40mm (1.57")	75mm (3")	100mm (4")	60mm (2.36")
Minimum Box Depth for hot-spot-free illumination (Distance from face)**	> 4" Deep	> 5" Deep	> 3.5" Deep	> 3" Deep	> 2.25" Deep	> 8" Deep	> 10" Deep	> 7" Deep
Brightness Grade	Standard Brightness	Economy Brightness	High Brightness	Highest Brightness	Highest Brightness	High Brightness	Standard Brightness	Highest Brightness
Luminous Flux/sqft (lm)***	227 lm / sqft	171 lm / sqft	354 lm / sqft	510 lm / sqft	535 lm / sqft	454 lm / sqft	342 lm / sqft	684 lm / sqft
# of LED Lamps/bar	8 Lamps	8 Lamps	10 Lamps	12 Lamps	15 Lamps	16 Lamps	16 Lamps	20 Lamps
# bars/linear foot	4 Bars / ft	3 Bars / ft	5 Bars / ft	6 Bars / ft	7.5 Bars / ft	4 Bars / ft	3 Bars / ft	5 Bars / ft
Operation Voltage	24 VDC							
Power Consumption per 600 (2ft) Bar	1.8W / Bar	1.8W / Bar	2.25W / Bar	2.7W / Bar	2.25W / Bar	3.6W / Bar	3.6W / Bar	4.5W / Bar
Power Consumption per sqft	3.6W /sqft	2.7W /sqft	5.625W / sqft	8.1W / sqft	8.44 W / sqft	7.2 W /sqft	5.4 W /sqft	11.25 W /sqft
Linear ft / 72W-24V power supply	10ft (40-2ft bars), 20 sqft	13ft (40-2ft bars), 26 sqft	6.3ft (32-2ft bars), 12.6 sqft	5.25ft (26-2ft bars), 10.5 sqft	4.25ft (32-2ft bars), 8.5 sqft	5ft (20-2ft bars), 10 sqft	6.7ft (20-2ft bars), 13.4 sqft	3.2ft (16-2ft bars), 6.4sqft
Standard Bar Length	600mm (2ft)	600mm (2ft)	600mm (2ft)	600mm (2ft)	600mm (2ft)	600mm (2ft)	600mm (2ft)	600mm (2ft)
Incremental Lengths	300mm(1ft), 150mm(6")	300mm(1ft), 150mm(6")	360mm(14.2"), 240mm(9.4"), 120mm(4.74")	300mm(1ft), 100mm(4")	360mm(14.2"), 240mm(9.4"), 120mm(4.74")	300mm(1ft), 150mm(6")	300mm(1ft), 150mm(6")	360mm(14.2"), 240mm(9.4"), 120mm(4.74")
Package Roll Specification	10ft rolls, 20sqft, 40bars	10ft rolls, 20sqft, 30bars	10ft rolls, 20sqft, 50bars	10ft rolls, 20sqft, 60bars	10ft rolls, 20sqft, 75bars	10ft rolls, 20sqft, 40bars	10ft rolls, 20sqft, 30bars	10ft rolls, 20sqft, 50bars
Bar Cutting Increments	Cut every two lamps (150mm, 6")	Cut every two lamps (150mm, 6")	Cut every two lamps (120mm, 4-3/4")	Cut every two lamps (100mm, 4")	Cut every THREE lamps (120mm, 4-3/4")	Cut every one lamps (75mm, 3")	Cut every one lamp (75mm, 3")	Cut every one lamp (60mm, 2.36")
Viewing Angle	120°							
Color	Standard: Soft (Day) White @6500K****							
Wire	AWG #16, UL758							
Operation Temp.	-40°F ~ 140°F							
Application	Indoor / Outdoor Sign Cabinet Lighting, Dry & Damp Locations							



* LED Pitch and Module pitch can be mix-matched to customize into desired brightness and configurations.

** Tested with 2447 Acrylic Panels. Other types of faces produce different results. Please test for hot before installing the en

*** Lumens data based on 6500K, Soft White. Official LM-79 report available upon request.

**** Other colors can be custom ordered

The LATTICE APPLICATIONS



Sign Cabinets & Large Light Boxes / Internally Lighted Billboards / Architectural Walls / Columns

Bitro Group, Inc.

Specialized Lighting & Display Solutions

www.bitrogroup.com

© Copyright 2010 Bitro Group Inc. All Rights Reserved.