| Date		Project	
Notes			

PIXEL FLEXIBLE BACKLYTE

Pixel Flexible BackLyte lets you program and control individual color changing pixels for precision lighting effects. The Pixel Flexible BackLyte is engineered to backlight translucent objects such as onyx, stone and resin panels – even in curved applications. Now with improved efficacy and lumen output, 24V Pixel Flexible BackLyte offers amazing light consistency and clarity. Each nominal 1 x 2 ft (305 x 610 mm) rectangular panel features 32 cuttable 3 in. (76.2 mm) square sections that contain four programmable color changing LEDs. Bend, cut and connect our Pixel Flexible BackLyte sheets to match the size and shape of your custom project.

- Flexible 12.01 x 24.02 in. (305 x 610 mm) sheet
- 32 cuttable 3 in. (76.2 mm) squares
- 45 W/sheet (22.5 W/sq ft, 242.2 W/sq m)
- 837.5 lm/sq ft (9014.77 lm/sq m), 38.5 lm/W (all on)
- 128 RGB pixels per sheet spaced at 1.5 in. (38.1 mm)
- Program each individual LED pixel
- Uses SPI controls
- 3.94 in. (100 mm) min. bending radius
- 24 VDC
- Daisy chain up to 8 full sheets
- IP20 for indoor use
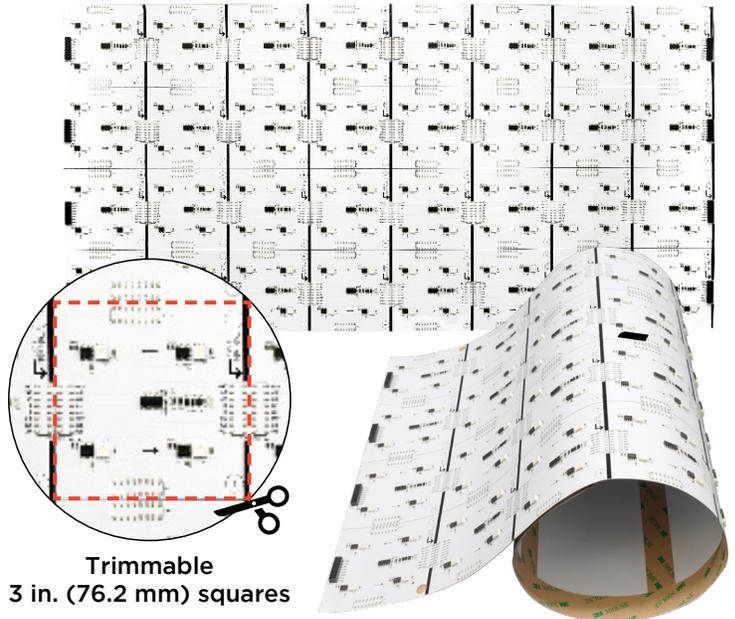
Trimmable 3 in. (76.2 mm) squares

UL · ETL · CE · **RoHS** · **IP20**

ORDERING GUIDE

Category	Voltage	IP Rating	Wattage	Color or Color Temperature
FBLADD	24	20	45	RGB
FBLADD - Pixel Flexible Backlyte	**24** - 24 VDC	**20** - IP20	**45** - 45 W/sheet	**RGB** - Red, Green, Blue

AVAILABLE COLORS

RGB

ACCESSORIES:

1. Jumper
ADDBLJUMP

2. Lead PCB
ADDBLHEADER

3. Lead Cable
ADDBLCBLFB1000 (3 ft 3.3 in. | 1 m)
ADDBLCBLFB2000 (6 ft 6.7 in. | 2 m)
ADDBLCBLFB3000 (9 ft 10 in. | 3 m)

4. Easy Connect
DIGIEC

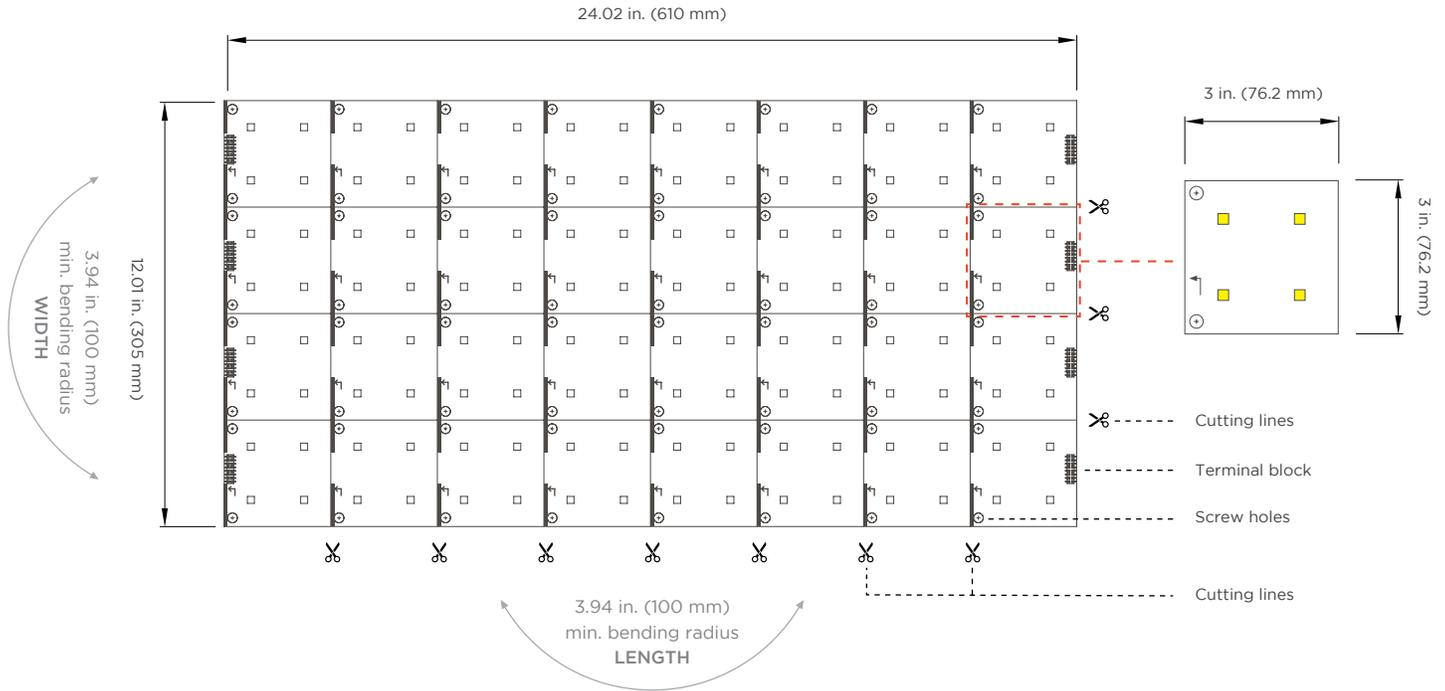**NOTE:** Customization still available upon request.
NOTE: Acolyte recommends Belden 9729 shielded cable and Cat5e RJ45 cable for all connections.

SPECIFICATIONS

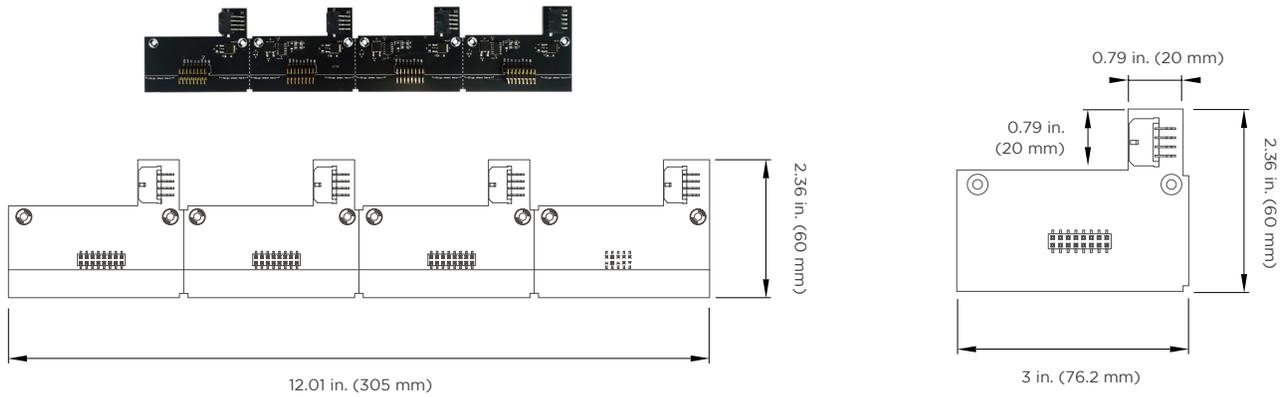|	
Operating Voltage	24 VDC
Power Consumption	45 W/sheet (22.5 W/sq ft / 242.2 W/sq m)
Luminous Efficacy	38.5 lm/W
IC Code	GS8208
Beam Angle	120°
LEDs per sheet	128
LED spacing	1.5 in. (38.1 mm)
Pixels per fixture	128
Color Temperature	RGB
Luminous Flux	1675 lm per sheet
Minimum Bend Radius	3.94 in. (100 mm)
Protection Rating	IP20
Storage Temperature	-4 — 158 °F (-20 — 70 °C)
Operating Temperature	-4 — 140 °F (-20 — 60°C)
Dimensions (L x W)	12.01 x 24.02 in. (305 x 610 mm)
Warranty	2 years

Acolyte does not warrant or represent that the information is free from errors or omission. The information may change without notice and Acolyte is not in any way liable for the accuracy of any information printed and stored or in any way interpreted or used.
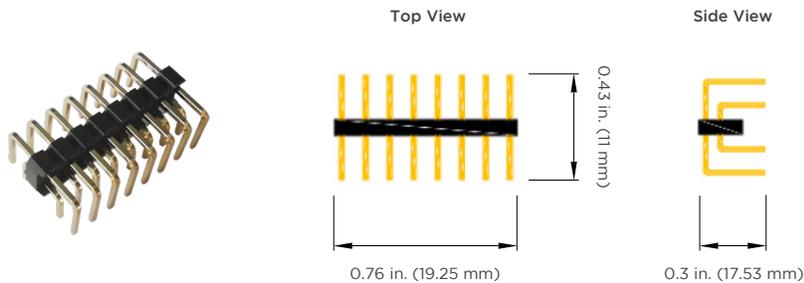
DIMENSIONS

24.02 in. (610 mm)

3 in. (76.2 mm)

3 in. (76.2 mm)

12.01 in. (305 mm)

3.94 in. (100 mm) min. bending radius WIDTH

Cutting lines

Terminal block

Screw holes

Cutting lines

3.94 in. (100 mm) min. bending radius LENGTH

LEADER PCB

Part #:
ADDBLHEADER

2.36 in. (60 mm)

12.01 in. (305 mm)

0.79 in. (20 mm)

0.79 in. (20 mm)

2.36 in. (60 mm)

3 in. (76.2 mm)

JUMPER

Part #:
ADDBLJUMP

Top View

Side View

0.43 in. (11 mm)

0.76 in. (19.25 mm)

0.3 in. (17.53 mm)

NOTE: Acolyte recommends Belden 9729 shielded cable and Cat5e RJ45 cable for all connections.

LEADER CABLE (2 PIN TERMINAL WIRE)

Part #:
ADDBLCBLFB1000 (3 ft 3.3 in. | 1 m)
ADDBLCBLFB2000 (6 ft 6.7 in. | 2 m)
ADDBLCBLFB3000 (9 ft 10 in. | 3 m)

Wire length can be customized

3 ft 3.3 in. (1 m)
6 ft 6.7 in. (2 m)
9 ft 10 in. (3 m)
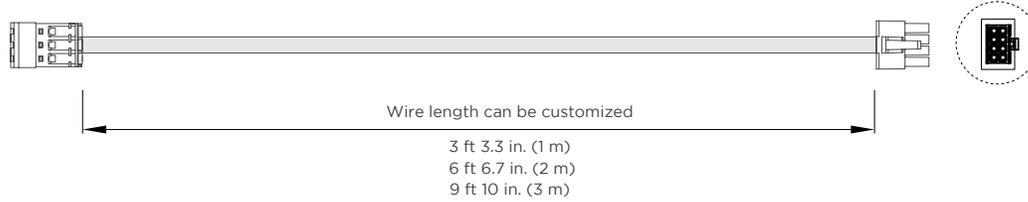
EASY CONNECT

Easy Connect is a plug and play connector that joins your C4 controller and power supply with your LEDs. No complex wiring required. Connect your power supply on one side and the input cable on the other.

Part #:
DIGIEC

4.33 in. (110 mm)

2.36 in. (60 mm)

PSU 1
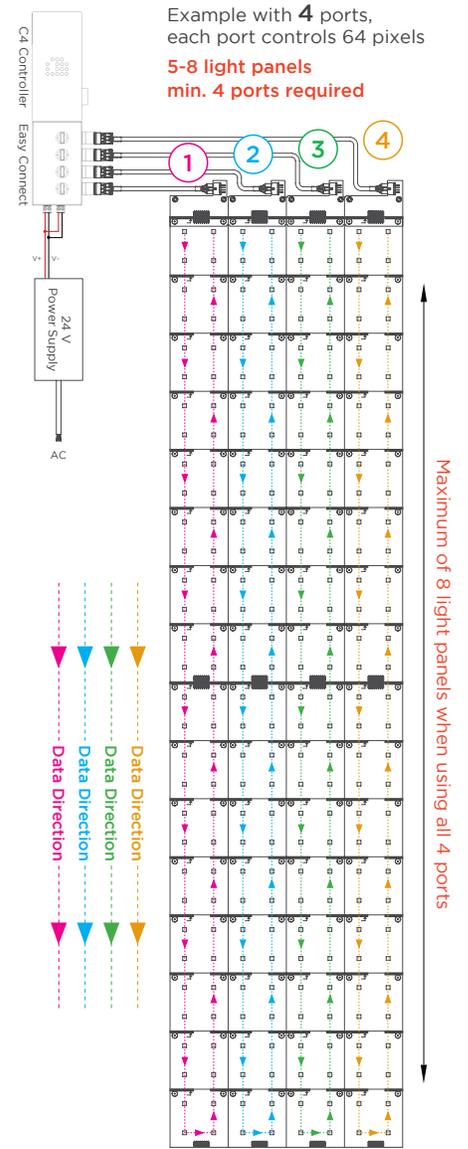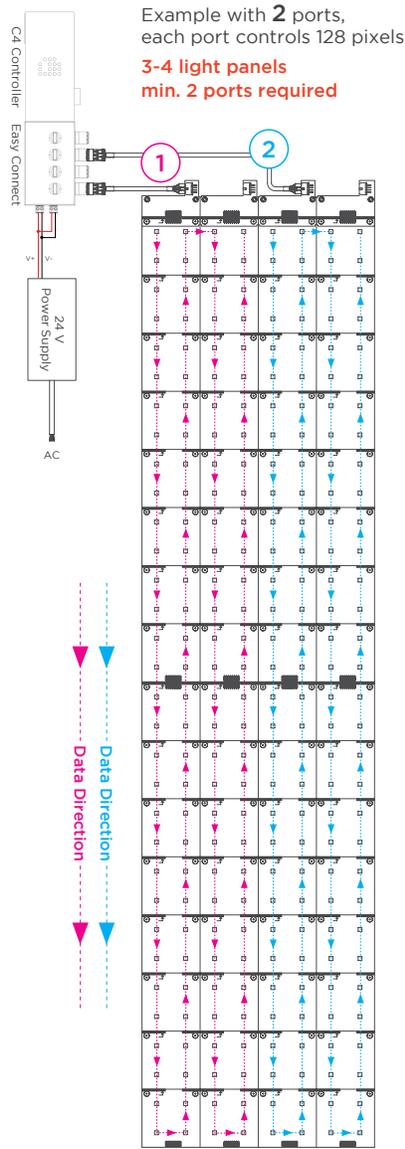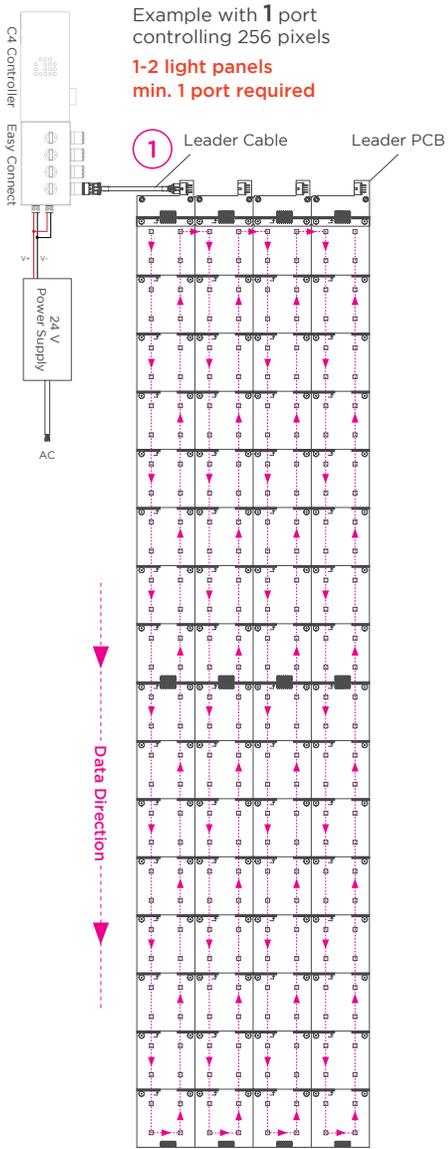
PSU 2

P1   P2   P3   P4
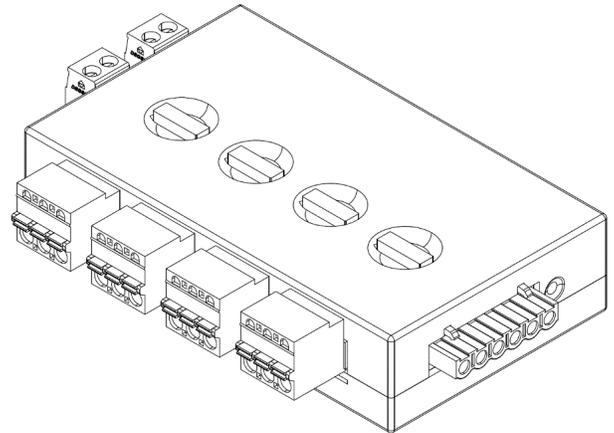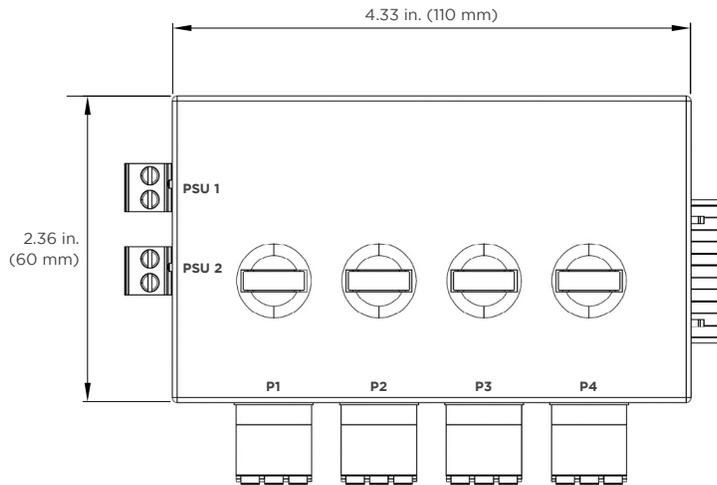
NOTE:
Easy Connect can supply a maximum of 30 amperes to the 4 outputs.
PSU 1 will supply power to output ports **P3** and **P4**;
PSU 2 will supply power to output ports **P1** and **P2**.
All output ports will have the same voltage output.
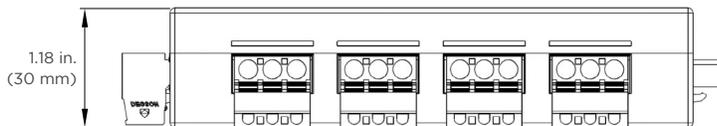
1.18 in. (30 mm)

NOTE: Acolyte recommends Belden 9729 shielded cable and Cat5e RJ45 cable for all connections.

CONNECTIONS

Example with 1 port controlling 256 pixels
1-2 light panels
min. 1 port required

Example with 2 ports, each port controls 128 pixels
3-4 light panels
min. 2 ports required

Example with 4 ports, each port controls 64 pixels
5-8 light panels
min. 4 ports required

Maximum of 8 light panels when using all 4 ports

# of Light Panels	Min. Ports Required	Min. Pixels per Port	Min. Channels per Port	Notes
1	1	128	384	--
2	1	256	768	
3	2	192	576	Each port and input cable should not control more than 256 pixels.
4	2	256	768	
5	4	160	480	
6	4	192	576	
7	4	224	672	
8	4	256	768	

NOTE: Acolyte recommends Belden 9729 shielded cable and Cat5e RJ45 cable for all connections.

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