VIVID RGB LIGHTING

Key Features

- Wide-Angle Viewing
- Fully Overmolded Electronics
- Full-color RGB pixels
- IP66 Dust- and waterproof
- Easy Installation and Maintenance
- 24 Month Warranty
- RoHS Certified and Built to CE, UL, ETL Standards

Many Applications

- Light Shows
- Large-Scale Video Installations
- Signage
- Trade Shows
- Retail Interiors
- Concerts and Events
- Decorative Elements
- Architectural Accents

Further Reading

Visit us online for the most up-to-date product information:

www.VividRGBlighting.com

Introducing Pixy

The new Pixy LED pixel from Vivid RGB Lighting is a versatile, cost-effective RGB media solution, packing 8-bit color technology into a compact, all-weather, easy-to-install package. Designed for quick installation, Pixy pixels are a great way to add high-impact RGB animation to your event, retail space, or any lighting system.

We've designed Pixy from the ground up, combining the latest in LED technology with our hands-on end-user experience.
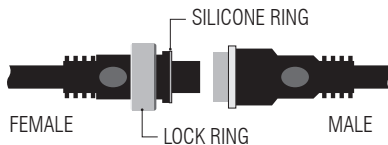
Pixy strings are available with standard 6-inch on-center pixel spacing, and have many options for project-specific customizations. Put Pixy to work in your next project!
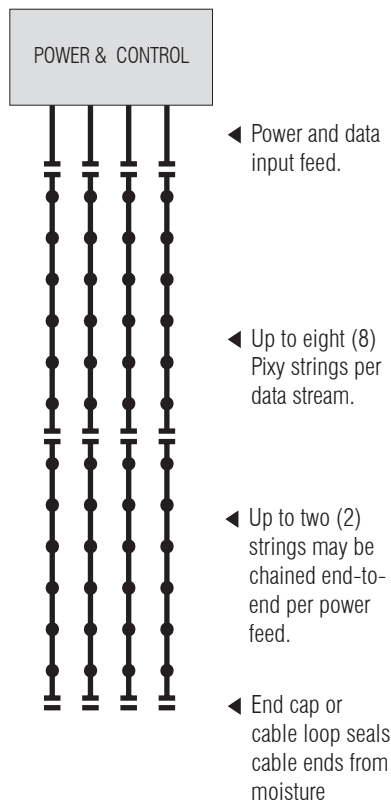
VIVID RGB LIGHTING

Pixy Inline Compact RGB Pixel

Connectors

3-pin keyed aviation-style connector with weathertight lock ring.

SILICONE RING

FEMALE — LOCK RING — MALE

System Overview

POWER & CONTROL

◄ Power and data input feed.

◄ Up to eight (8) Pixy strings per data stream.

◄ Up to two (2) strings may be chained end-to-end per power feed.

◄ End cap or cable loop seals cable ends from moisture

Standard Configurations Part No. PIXY–21–6"–BB–B

Each each string of LED pixels are inline on a flat cable with integrated power and control. A 10'–6" (3.2m) string of 21 pixels with 6" on-center spacing is available as a standard configuration.

Low-gloss black housing with raised 8mm LED, fully sealed for maximum fixture life and IP66 rated for outdoor applications.

5V-PIXY–21–6"–BB–B

7/8"   1 3/4"   6"
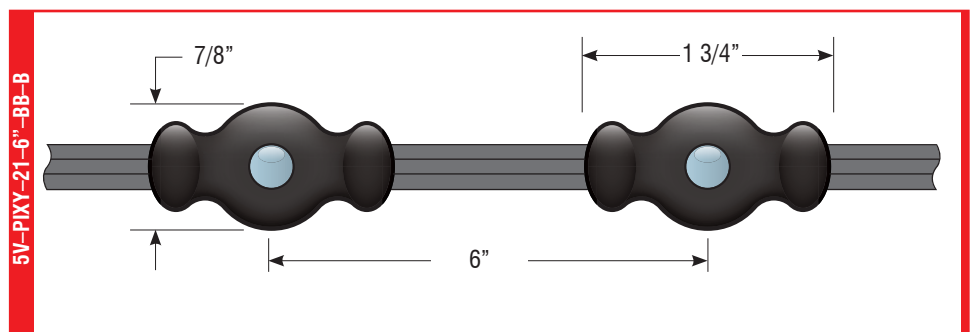
Technical Specifications*

OUTPUT	LUMEN MAINTENANCE	25,000+ hours
	LED CHANNELS	Red, Green, Blue
	GRAYSCALE	256, 8-bit
ELECTRICAL	INPUT VOLTAGE	5V DC
	POWER	0.3 W / pixel
CONTROL	INTERFACE	1-wire 1804 Fast Bus
	CONTROL SYSTEM	Vivid Bridge or compatible third-party controller
PHYSICAL	TEMPERATURE RANGES	-20ºC – 50ºC / -4ºF – 122ºF
	HUMIDITY	Any
SAFETY	ENVIRONMENT	Dry, damp, wet locations; IP66

*Due to continuous improvements and design innovations, specifications subject to change without notice.

Build-to-Order Configurations

Minimum Order Quantity: 200 pixels per configuration
Production Lead Time: 8 weeks after receipt of order

Custom options available for:
- Pixel count per string, specific to your design
- Pixel spacing along cable
- Plastic body color
- Cable color and length

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Pixy Inline Compact RGB Pixel

Installation Guide

Cable Ties

Pixy is designed for quick and easy installation by securing each pixel to standard tube or rod with cable ties, which fit securely between the pixel body and integrated wings.
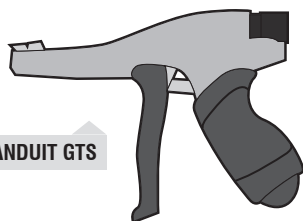
Ties less than 0.18 inches wide are recommended, typically those rated for loads between 18 and 50lbs.

1:1 Scale Illustrations

BEST FIT
0.10" width, 18lb load rating.

MAX RECOMMENDED
0.18" width, 50lb load rating.

3/8" tube shown

2 1/2" Minimum
6" Maximum

Pixel Spacing

Distance between pixels can be field-customized by folding the inline cable onto itself, away from the LED.

Installation Example

Folded power & data cable

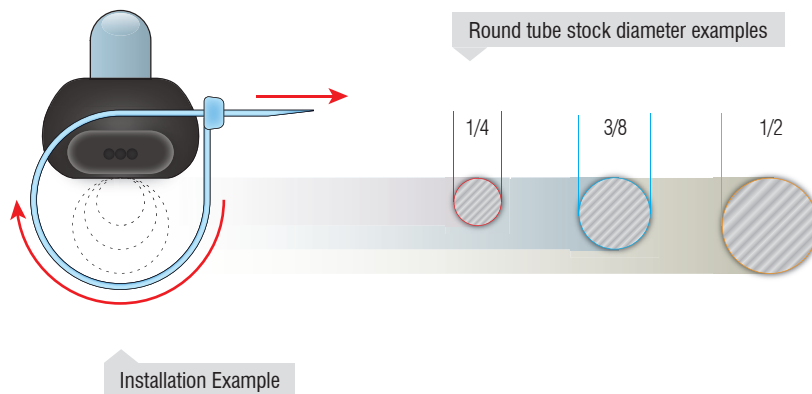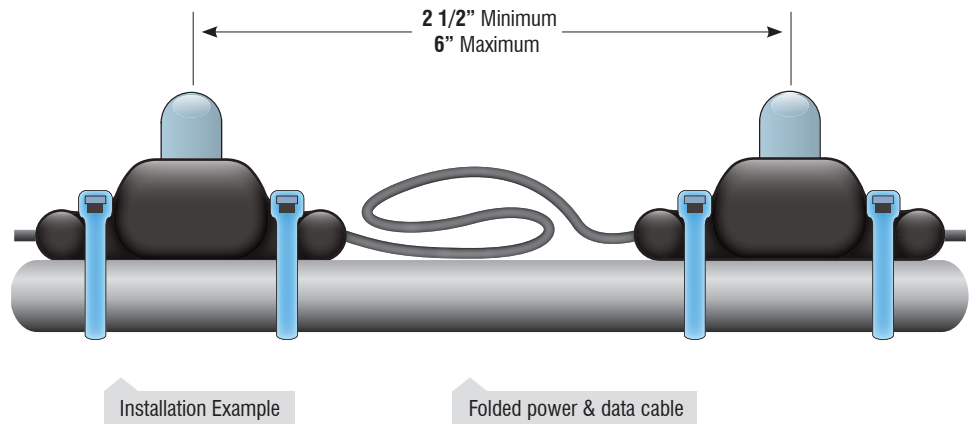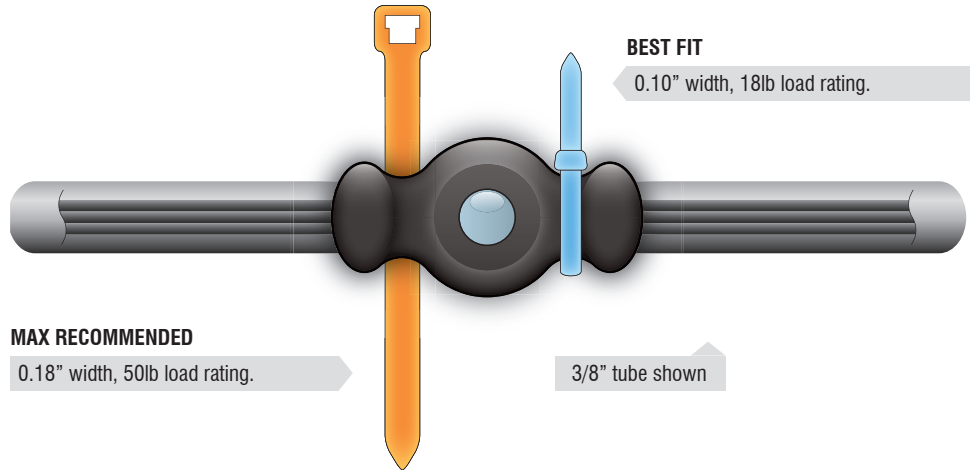### Tools

For larger installations, we recommend use of a cable tie installation tool with adjustable tension and cut-off.

PANDUIT GTS

Round tube stock diameter examples

1/4   3/8   1/2

Installation Example

VIVID RGB LIGHTING

Typical Wiring Instructions

Input cables connect to controller & power supply and provide a common ground between them.
Extension cables extend distances between components.
End caps provide a waterproof termination at the end of each string.

Pixy String Power
Use total watts to determine necessary power supply capacity.

Maximum power draw is 0.3 W per pixel at 5 V DC.

STRINGS	AMPS @ 5V	TOTAL WATTS	
1	1.40 A	7.00 W	ONE STRING
2	2.80 A	14.00 W	TWO STRINGS
3	4.20 A	21.00 W	
4	5.60 A	28.00 W	
5	7.00 A	35.00 W	
6	8.40 A	42.00 W	
7	9.80 A	49.00 W	
8	11.20 A	56.00 W	ONE UNIVERSE
16	22.40 A	112.00 W	TWO UNIVERSES
24	33.60 A	168.00 W	THREE UNIVERSES
32	44.80 A	224.00 W	FOUR UNIVERSES

NOTES
Figures in this chart allow for **5%** headroom.
Typical per-pixel wattage is **0.3 W**.

IMPORTANT
Keep the power supply as close as possible to the strings to minimize voltage drop. Excessive voltage drop will cause color shift and/or intermittent operation.
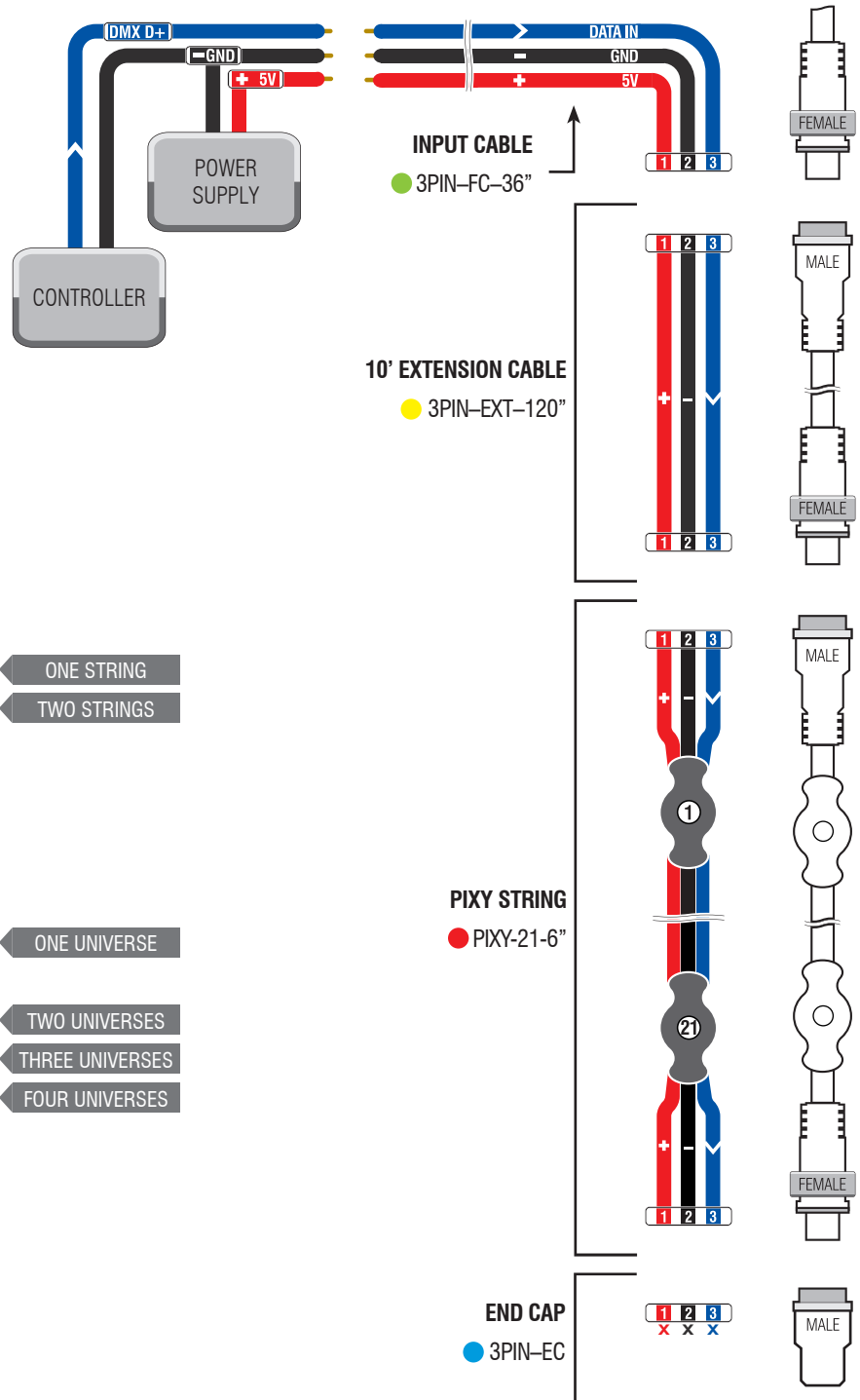
Due to continuous improvements and design innovations, specifications subject to change without notice.

DMX D+
GND
+ 5V

POWER SUPPLY

CONTROLLER

DATA IN
GND
5V

INPUT CABLE
● 3PIN–FC–36”

FEMALE

10' EXTENSION CABLE
● 3PIN–EXT–120”

MALE
FEMALE

PIXY STRING
● PIXY-21-6”

MALE
FEMALE

END CAP
● 3PIN–EC

MALE

VIVID RGB LIGHTING

Pixy Inline Compact RGB Pixel

System Accessories
& Part Numbers

Pixy is a **5-Volt** system, compatible with **3-pin** accessory cables and products. Please contact customer support with product compatibility concerns.

System Input Cable
Bare ends connect to controller and power, female end connects to strings.

Stock:

3PIN–FC–36"

Custom lengths available.

Power & Data

3PIN–FC–[Length]"

+ 5V   1
− GND   2
> DATA IN   3

FEMALE

System Output Cable
Male end connects to end of strings, bare ends provide data and power output from system.

Stock:

3PIN–MC–36"

Custom lengths available.

Power & Data

3PIN–MC–[Length]"

1   + 5V
2   − GND
3   > DATA OUT

MALE

Extension Cables
Through extension of all pins.

Stock:

3PIN–EXT–60"

3PIN–EXT–120"

3PIN–EXT–300"

That's 5, 10 & 25 Feet.
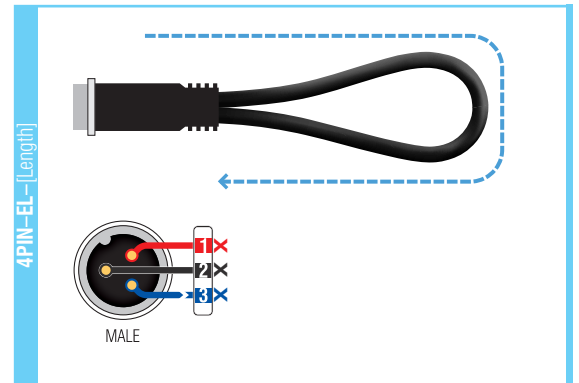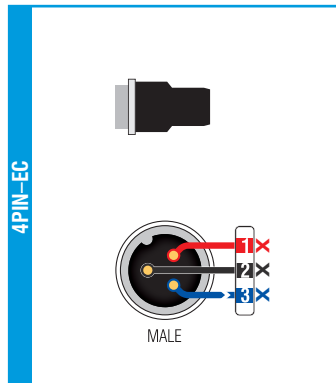
Custom lengths available.

Power & Data

3PIN–EXT–[Length]"

1   + 5V   1
2   − GND   2
3   > DATA THRU   3

MALE   FEMALE

NOTE
Numbers refer to labeled pins in connectors.

End Caps

Seals cable end with a waterproof cap or hanging loop.

Stock:

3PIN–EC
3PIN–EL–5"

Custom loop lengths available.

4PIN–EC

MALE

4PIN–EL–[Length]

MALE

Mid-Feed Power Input

Allows for power to be input between strings on same data stream.

Stock:

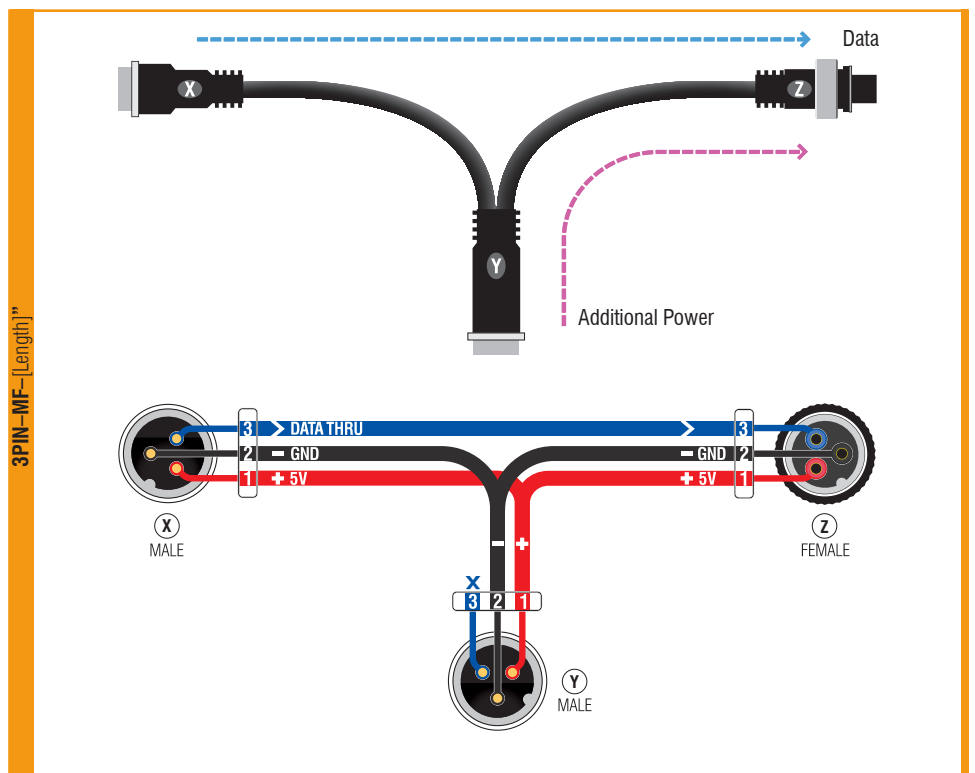| |
|---|
| 3PIN–MF–9" |
| 3PIN–MF–12" |

Custom lengths available.

X: Data input from previous string
Y: Additional power input
Z: Power and data output to next string(s)

Data

Additional Power

3PIN–MF–[Length]"

DATA THRU

GND — — GND

+ 5V + 5V

X
MALE

Z
FEMALE

X

Y
MALE

Custom / Build-to-Order

All cables and accessories may be custom designed for your project.

Important Note

Our systems use 3-, 4-, and 6-PIN connectors for different control data and power voltages. **Please do not interconnect.**