VIVID RGB LIGHTING

ORB100 RGB Sphere

Key Features

- 360º Viewing Angle
- Matte or Glossy Finish
- 4” Ball Diameter
- Easy Installation and Maintenance
- Full-color RGB pixels
- Dust- and Waterproof
- 24 Month Warranty
- ETL Listed RoHS Compliant

Many Applications

- Theater and Concert Stage Elements
- Trade Shows
- Interior and Exterior Architecture
- Themed Environments
- Nightclubs
- Museums and Art Installations
- TV Production
- Holiday Light Shows

Further Reading

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

www.VividRGBlighting.com

Presenting ORB100

ORB100 from Vivid RGB Lighting allows full 360° viewing of 16 million super saturated colors in a beautiful 4” diameter globe. Each **ORB100** is fitted with 6 powerful RGB LEDS and is sure to amaze! Used individually or in groups, the **ORB100** will enhance any project.

The **ORB100** is offered in a standard matte or custom glossy finish. Paired with a multiple-output T-cable the **ORB100** offers many cabling options and design flexibility. Directly controllable from any DMX controller, up to 48 **ORB100** can be powered from a single feed.

It truly is an ORB like no other!

Why limit your creativity? Use the eye catching **ORB100** on your next project!

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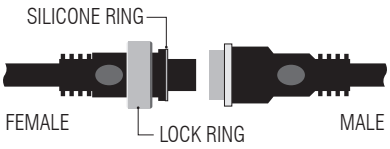
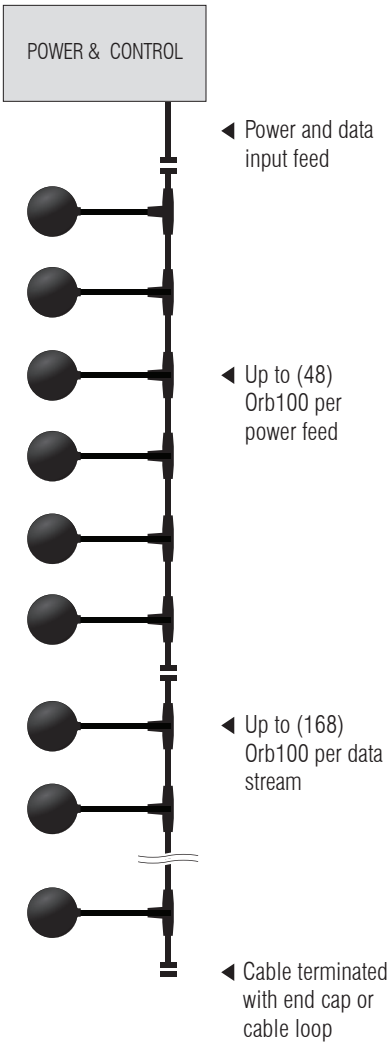
Connectors

6-PIN keyed aviation-style connector with weathertight lock ring



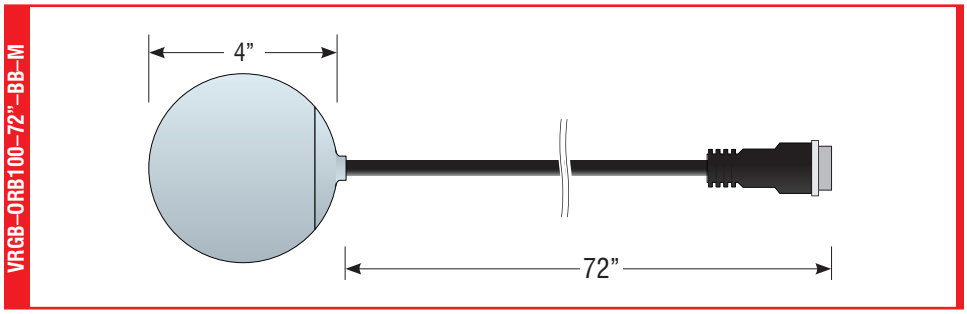
System Overview



Standard Configuration Part Order No. ORB100–72"–BB–M

Each module consists of a matte finished 4" globe with 6 RGB LEDs, a 72" flexible black cable with integrated power and control, terminated in a 6-PIN male connector.

Each module is sealed for maximum fixture life and IP66 rated for outdoor applications.



Technical Specifications*

OUTPUT	LUMEN MAINTENANCE	50,000+ hours
	LED CHANNELS	Red, Green, & Blue
	GRAYSCALE	256, 8-bit
ELECTRICAL	INPUT VOLTAGE	24V DC
	POWER	1.50W / ORB
CONTROL	INTERFACE	1-Wire DMX512
	CONTROL SYSTEM	DSD,VPD, Color Mimic, or compatible third-party DMX controller
PHYSICAL	TEMPERATURE RANGES	-20ºC – 50ºC / -4ºF – 122ºF
	HUMIDITY	Any
SAFETY	ENVIRONMENT	Dry, damp, wet locations; IP66 ETL Listed

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

Build-to-Order Configurations

Minimum Order Quantity: 20 orbs per configuration
Production Lead Time: 8 weeks after receipt of order

Custom options:

- Matte or Glossy finish
- Cable length & color—black, white, and clear
- Thiner cable diameter
- Rigid stem mounting
- Alternate cable configurations
- Other designs upon request, call for more information

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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 run.

ORB100 Power

- Use total watts to determine necessary power supply capacity.
- Maximum power draw is 1.50 W per pixel at 24 V DC.

ORB:100	AMPS @ 24V	TOTAL WATTS	
1	.065 A	1.50 W	SINGLE ORB:100
6	.375 A	9.0 W	SINGLE 6T-CABLE
12	.750 A	18 W	
18	1.13 A	27 W	
24	1.50 A	36 W	
48	3.00 A	72 W	
96	6.00 A	144 W	
170	10.63 A	255 W	ONE UNIVERSE
340	21.25 A	510 W	TWO UNIVERSES
510	32.00 A	765 W	THREE UNIVERSES
680	42.50 A	1020 W	FOUR UNIVERSES

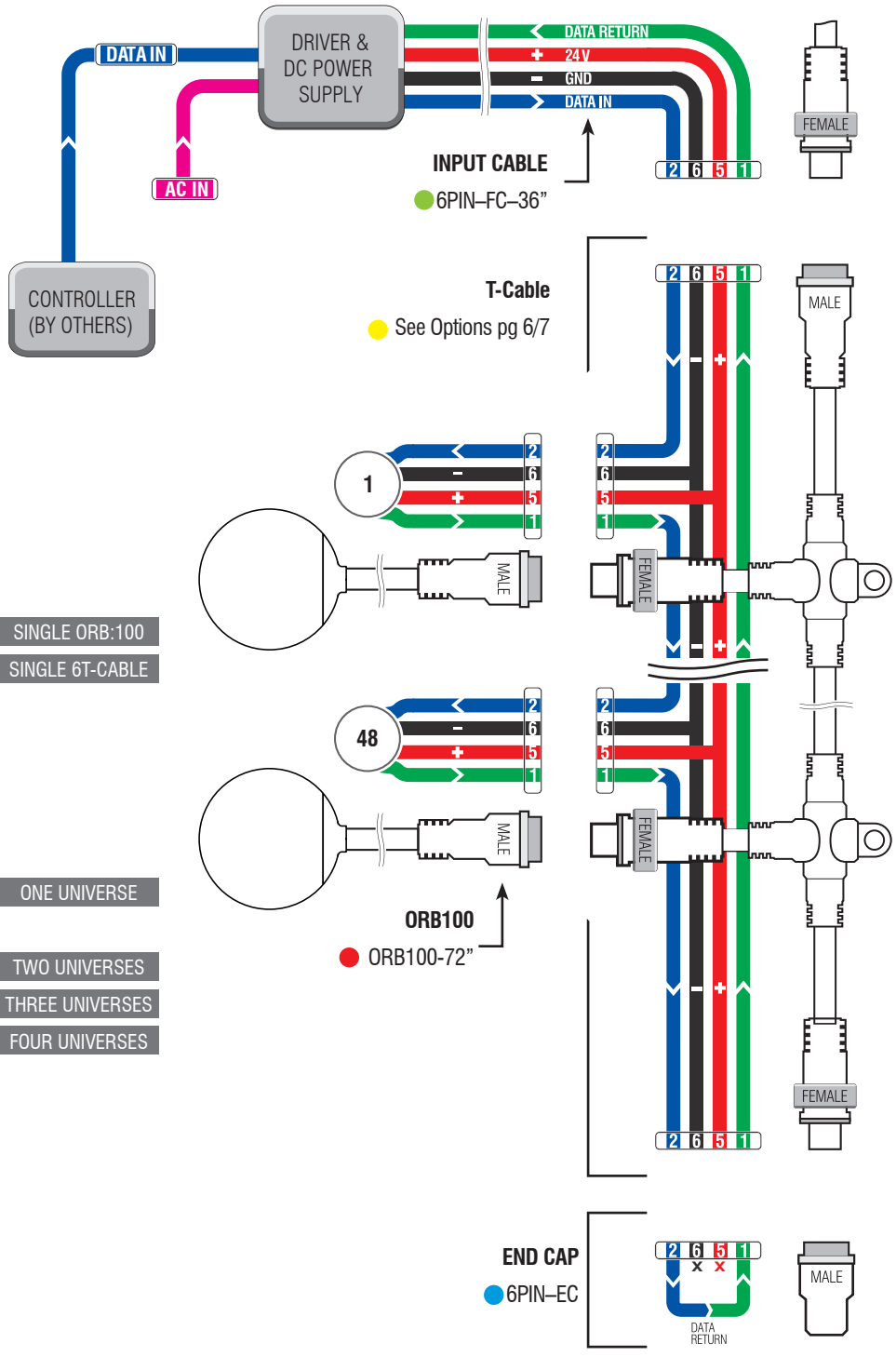
NOTES

Figures in this chart allow for **5%** headroom.
Typical per-pixel wattage is **1.42 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.



System Accessories
& Part Numbers

Vivid RGB Lighting's **24-Volt** system is compatible with our **6-PIN** accessory cables and products. Please contact customer support with product compatibility concerns.

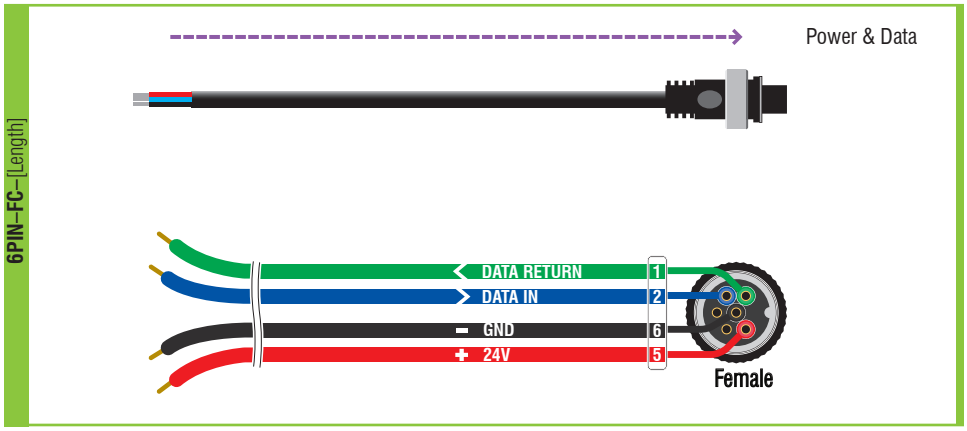
System Input Cable
Bare ends connect to controller and power, female end connects to strings.

Stock:

6PIN–FC–36"

*Custom lengths available.

NOTES
1. Numbers refer to labeled pins in connectors.
2. Not all pins are connected

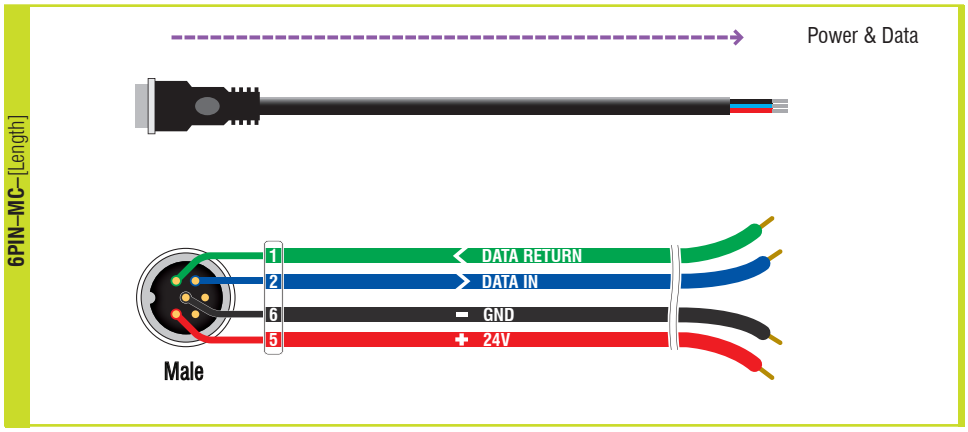


System Output Cable
Male end connects to end of strings, bare ends provide data and power output from system.

Stock:

6PIN–MC–36"

*Custom lengths available.

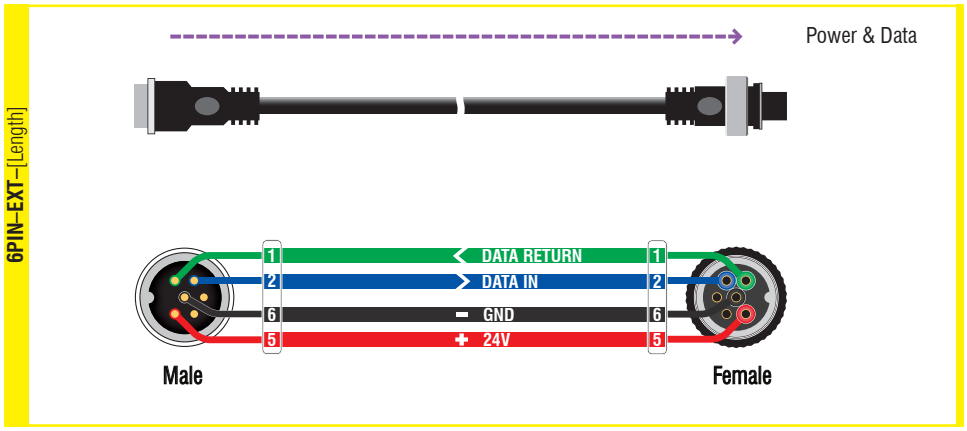


Extension Cables
Through extension of all pins.

Stock:

6PIN–EXT–60" **(5 feet)**
6PIN–EXT–120" **(10 feet)**
6PIN–EXT–300" **(25 feet)**

*Custom lengths available.



***Custom / Build-to-Order**
All cables and accessories may be custom designed for your project.

End Caps

Seals cable end with a water tight termination and returns data stream to beginning of string.

Available in simple cap or cable loop for easy hanging.

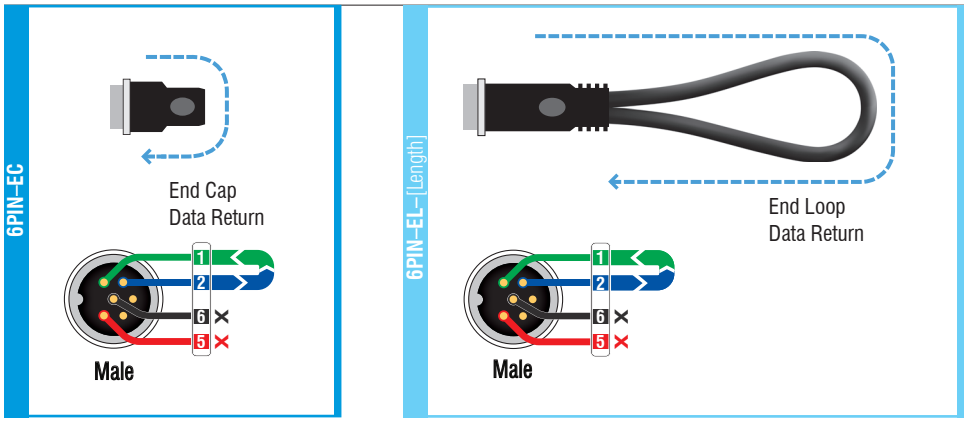
Stock:

6PIN–EC

*End Loops available on special order.

NOTE

CHIP6 Strings are not wired for Data Return.



Mid-Feed Power Input

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

Stock:

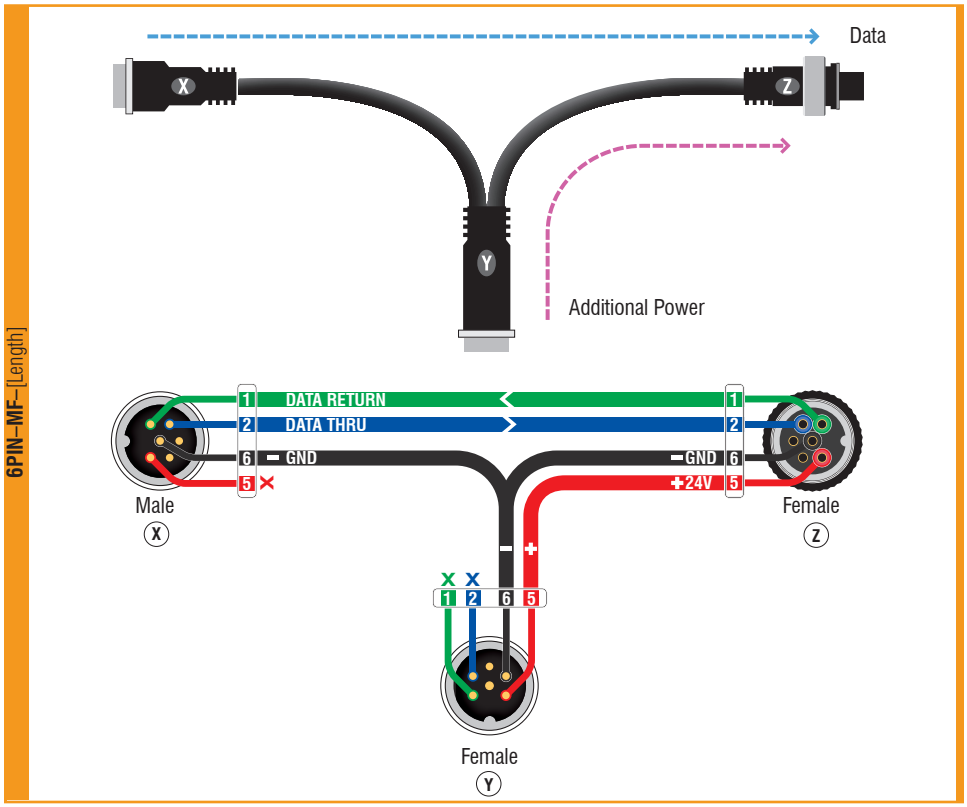
6PIN–MF–12”

*Custom lengths available.

X: Data input from previous string

Y: Additional power input

Z: Power and data output to next string(s)



NOTES

1. Numbers refer to labeled pins in connectors.
2. Some pins are not connected

Important

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

***Custom / Build-to-Order**

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

V-Cables

Allows strings to be used in parallel on the same power and data stream.

Stock:

6PIN–VC–18”

*Custom lengths available.

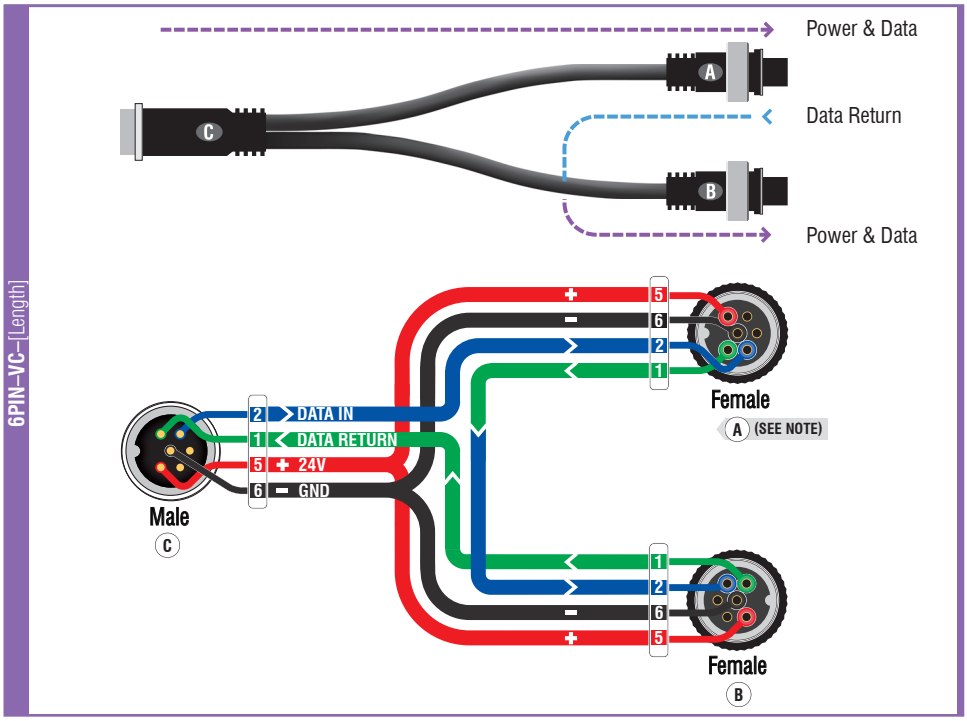
A: Output to first string sequence **(SEE NOTE)**
B: Output to second string sequence
C: Power and data input

NOTE

The last string of the **A** output of the V-Cable *must* have an end cap (**6PIN–EC** or **6PIN–EL**) installed for data to return to the **B** output. If the strings attached to **A** are disconnected, data will not return and be sent to **B**.

NOTES

1. Numbers refer to labeled pins in connectors.
2. Some pins are not connected



T-Cable

Allows for power and data to be sent to each module.

Stock:

6PIN–TC1–6” x 6”/6” - BB

*Custom lengths available.

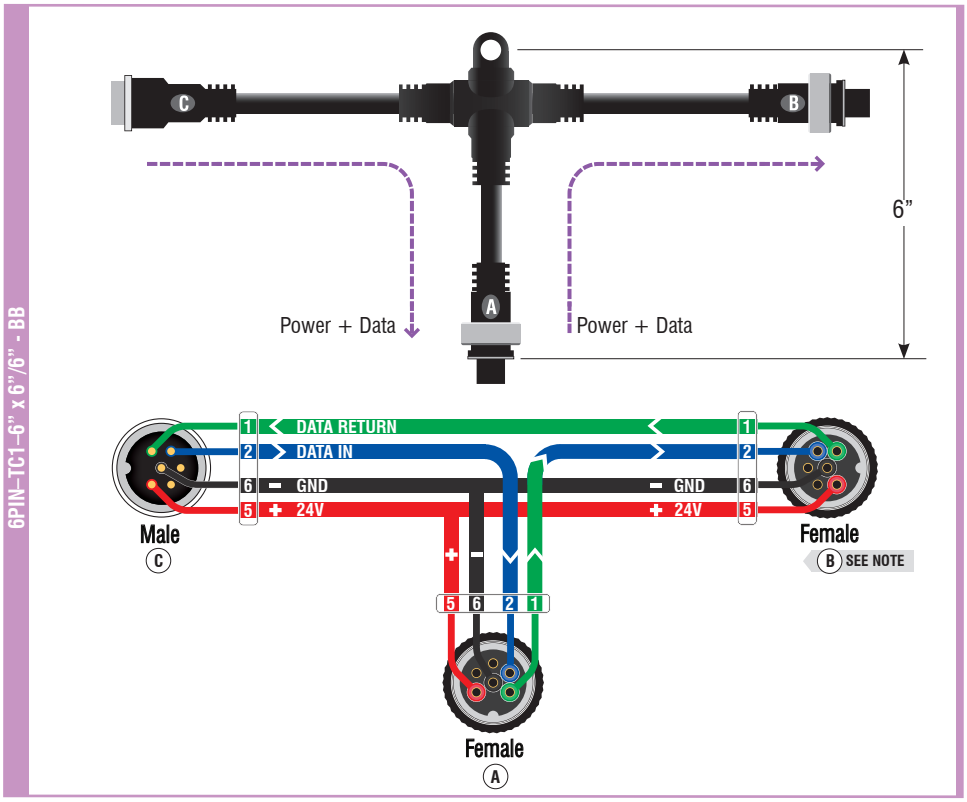
A: Output to first string sequence **(SEE NOTE)**
B: Output to second string sequence
C: Power and data input

NOTE

The last string of the **A** output of the T-Cable must have an end cap **(6PIN–EC or 6PIN–EL)** installed for data to return to the **B** output. If the strings attached to **A** are disconnected, data will not return and be sent to **B.**

NOTES

1. Numbers refer to labeled pins in connectors.
2. Some pins are not connected



***Custom / Build-to-Order**

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

T-Connector Cable

Allows for power and data to be sent to each module and can be customized to your project.

Custom:

6PIN-TC6-6"x 4"- 6"/6"-BB

NOTE

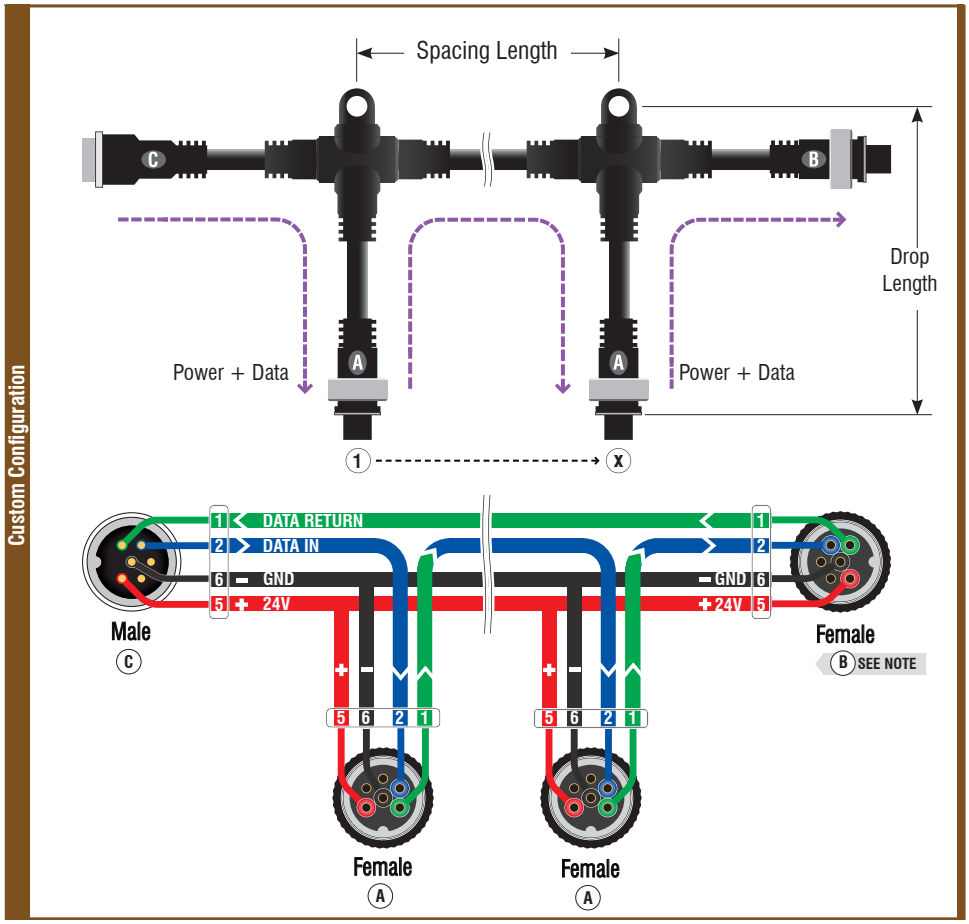
T-Connector cable stock changes frequently. Call to confirm availability.

NOTE

All strings on the **A** outputs of the T-Cable must have an end caps **(6PIN–EC or 6PIN–EL)** installed for data to return to the next **A** output, then to **B** output. If the strings attached to **A** are disconnected, data will not return and be sent to **B.**

***Custom / Build-to-Order**

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



T-Cable Example Code:

6PIN - TC6 - 12" x 6"- 6"/ 6"- B B

- Pin Quantity
- Number of Drops
- Spacing Length
- Drop Length
- Connector Color
- Wire Color
- Output Length
- Input Length

Important

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