

# RAZR MODULAR SYSTEM WIRING GUIDE

**THANK YOU FOR CHOOSING FLUENCE!**

|                                            |           |
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## CAUTIONS AND WARNINGS

### **WARNING**

Turn off and disconnect the power before installation. Installation should be performed by a qualified electrician in accordance with all national and local electrical and construction codes and regulations.

- DO NOT attempt to install or use this product until you have fully read and understand the installation instructions contained in the RAZR Modular wiring guide, the RAZR Modular user and installation guide, and on the product safety labels. Failure to follow the Fluence product instructions and safety label advice may result in damage to the product, damage to property, or personal injury. Be sure to retain a copy of this wiring guide and the user guide after installation for future reference.
- Risk of Electrical Shock. Turn off and disconnect the power before installing, moving, or cleaning to reduce the possibility of serious injury. DO NOT disconnect cables from the power supply or LED light bar while energized.
- Only connect the system to an electrical outlet or circuit of appropriate type and rating for the cord and plug. Connect the system only to power sources of the correct voltages and frequencies listed in the product specifications.
- Protect power cables from being pinched, walked on, or otherwise damaged.
- Use a strain-relief or power cord grip if needed. Maintain a minimum of 1" (2.5 cm) bend radius for all cables.
- Use IP wet-rated junction boxes and fittings for the power cords equal to the IP rating of the rating of the lighting system for the application.
- DO NOT connect to live power until installation is complete and all connections are made.
- DO NOT modify or alter the product; doing so will void the warranty. Please refer to the Fluence Terms and Conditions and Limited Warranty for further details.
- LED and heatsink surfaces may be hot. DO NOT touch while in operation. Allow sufficient cooling time before handling.
- To reduce the risk of overheating or fire, never place operating fixtures face down on a flush surface. Always allow for adequate ventilation of fixtures and power supplies.

### **CHEMICAL EXPOSURE PRECAUTION**

Fluence lighting systems are designed to be resilient against crop protection products. Many chemicals used in the Commercial Horticultural Industry are corrosive to electronic equipment. If the luminaire is accidentally exposed to a corrosive liquid or vapor (e.g. VOC –Volatile Organic Compound and H<sub>2</sub>S – Hydrogen Sulfide) the luminaire must be rinsed with clean water as soon as possible. The product warranty will no longer apply if the product is exposed or remains in the corrosive environment. It is recommended the luminaires be removed and protected from the corrosive environment during all periods of disinfection or sanitization of the facility.

### **CALIFORNIA PROPOSITION 65 WARNING**

**WARNING:** This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm. For more information: [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov).

# 24-Bar RAZR Modular Systems

## (8) 3-Bar Fixtures

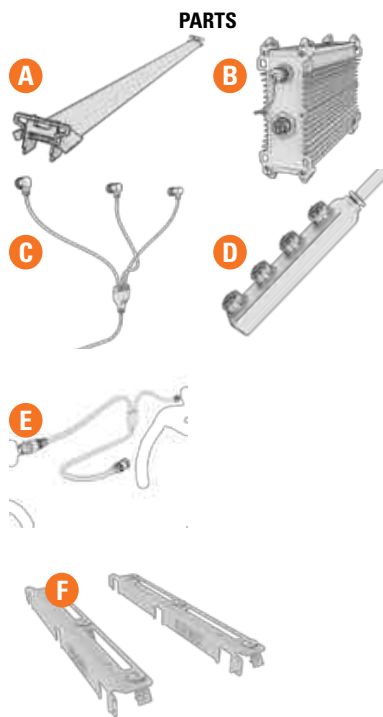
Fixture Array | Number of Fixtures per Power Supply

|              |                                                                                  |
|--------------|----------------------------------------------------------------------------------|
| 2'x4' 3-Bar  |                                                                                  |
| 8 Fixtures   |                                                                                  |
| Installation | Pre-Configured Systems                                                           |
|              | RM-48SLBW3-3A8LV-S/ RM-48SLBW3-3A8HV-S<br>RM-48SLBW4-3A8LV-S/ RM-48SLBW4-3A8HV-S |

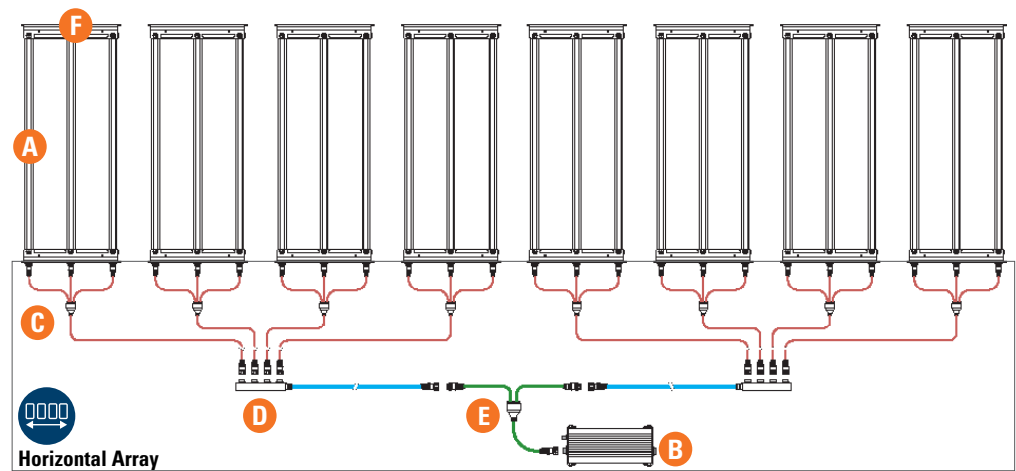


### RAZR MODULAR COMPONENTS

| Component | RCC               | Part Description                                            | QTY per system | Ordering PN 12NC Single Pack (-S) | Ordering PN 12NC Bulk Pack (-B) | Bulk Pack Quantity |
|-----------|-------------------|-------------------------------------------------------------|----------------|-----------------------------------|---------------------------------|--------------------|
| <b>A</b>  | RM-48-SL-BW3      | 48" Enclosed Light Bar, BROAD R3, uniform LED spacing       | 24             | 9124 017 02052                    | 9124 017 02062                  | 234                |
|           | RM-53-SL-BW3      | 53" Enclosed Light Bar, BROAD R3, uniform LED spacing       | 24             | 9124 017 02059                    | 9124 017 02069                  | 234                |
|           | RM-53-RL-BW3      | 53" Enclosed Light Bar, BROAD R3, redistributed LED spacing | 24             | 9124 017 02060                    | 9124 017 02070                  | 234                |
| <b>B</b>  | PLMG-V3A-600-111  | Power supply, LVG,600W/11.1A,M19                            | 1              | 9124 017 01914                    | 9124 017 01988                  | 24                 |
|           | PHWG-V2C-600-111  | Power supply, HVG,600W/11.1A,WLD                            | 1              | 9124 017 02203                    | 9124 017 02208                  | 33                 |
| <b>C</b>  | CDG-RMU23AFP6M1.2 | 3-Bar Right Angle DC Splitter, 4-FT Trunk                   | 8              | 9124 017 02113                    | 9124 017 02129                  | 10                 |
| <b>D</b>  | CDG-RMU24PFP9M1.4 | 4-port DC Manifold Cable, 4-FT Trunk                        | 2              | 9124 017 02125                    | 9124 017 02141                  | 10                 |
| <b>E</b>  | CDG-RMU2MSFP9M0.9 | Manifold Splitter Cable, 3-FT to power supply               | 1              | 9124 017 02124                    | 9124 017 02140                  | 10                 |
| <b>F</b>  | FF-RM-8S-2F       | Fixture Frame Kit, 8" bar spacing, 2ft                      | 8              | 9124 017 02102                    | N/A                             | N/A                |



### DC CABLE WIRING DIAGRAM

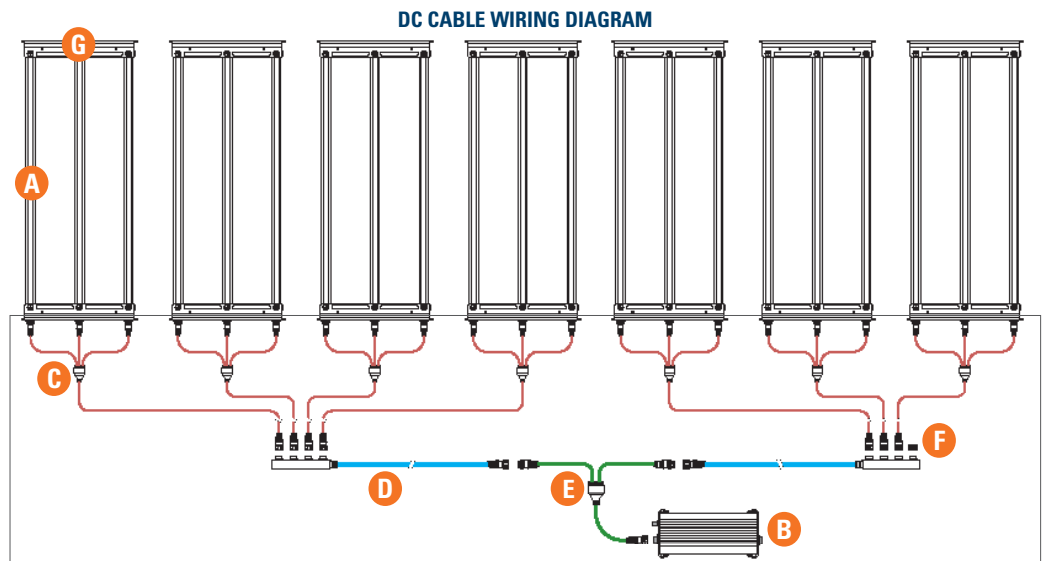
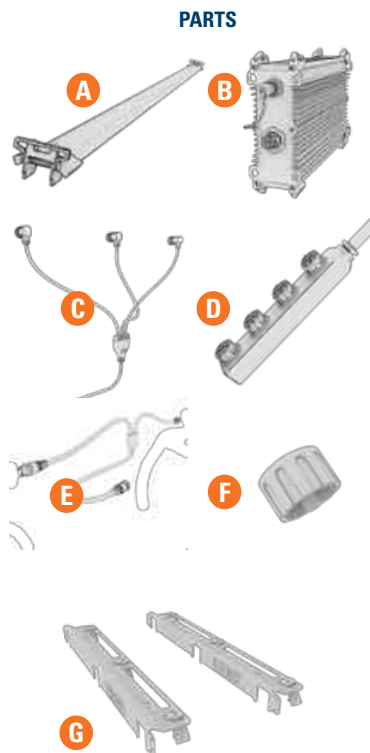


### (7) 3-Bar Fixtures

## 7 Fixtures



| Component RCC |                   | Part Description                                            | QTY per system | Ordering PN 12NC Single Pack (-S) | Ordering PN 12NC Bulk Pack (-B) | Bulk Pack Quantity |
|---------------|-------------------|-------------------------------------------------------------|----------------|-----------------------------------|---------------------------------|--------------------|
| A             | RM-48-SL-BW3      | 48" Enclosed Light Bar, BROAD R3, uniform LED spacing       | 21             | 9124 017 02052                    | 9124 017 02062                  | 234                |
|               | RM-53-SL-BW3      | 53" Enclosed Light Bar, BROAD R3, uniform LED spacing       | 21             | 9124 017 02059                    | 9124 017 02069                  | 234                |
|               | RM-53-RL-BW3      | 53" Enclosed Light Bar, BROAD R3, redistributed LED spacing | 21             | 9124 017 02060                    | 9124 017 02070                  | 234                |
| B             | PLMG-V3A-600-097  | Power supply, LVG,600W/9.7A,M19                             | 1              | 9124 017 02013                    | 9124 017 02014                  | 24                 |
|               | PHWG-V2C-600-097  | Power supply, HVG,600W/9.7A,WLD                             | 1              | 9124 017 02204                    | 9124 017 02209                  | 33                 |
| C             | CDG-RMU23AFP6M1.2 | 3-Bar Right Angle DC Splitter, 4-FT Trunk                   | 7              | 9124 017 02113                    | 9124 017 02129                  | 10                 |
| D             | CDG-RMU24PPF9M1.4 | 4-port DC Manifold Cable, 4-FT Trunk                        | 2              | 9124 017 02125                    | 9124 017 02141                  | 10                 |
| E             | CDG-RMU2MSFP9M0.9 | Manifold Splitter Cable, 3-FT to power supply               | 1              | 9124 017 02124                    | 9124 017 02140                  | 10                 |
| F             | RM-MDC            | Manifold Port Dust Cap (covering unused ports)              | 1              | 9124 017 02328                    | 9124 017 02329                  | 100                |
| G             | FF-RM-8S-2F       | Fixture Frame Kit, 8" bar spacing, 2ft                      | 7              | 9124 017 02102                    | N/A                             | N/A                |



# 18-Bar RAZR Modular Systems

## (6) 3-Bar Fixtures

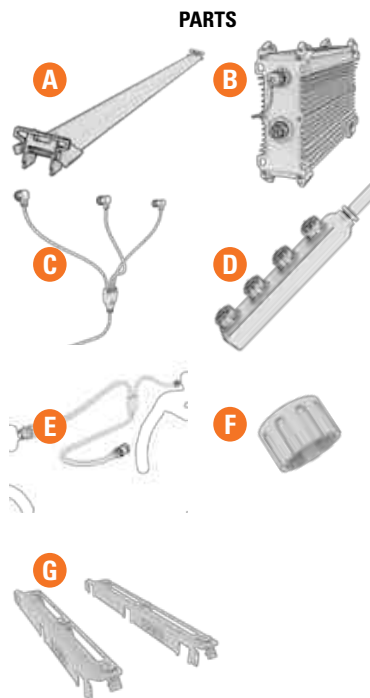
Fixture Array | Number of Fixtures per Power Supply

|                                        |
|----------------------------------------|
| 2'x4' 3-Bar                            |
| 6 Fixtures                             |
| Pre-Configured Systems                 |
| RM-48SLBW3-3A6LV-S/ RM-48SLBW3-3A6HV-S |
| RM-48SLBW4-3A6LV-S/ RM-48SLBW4-3A6HV-S |

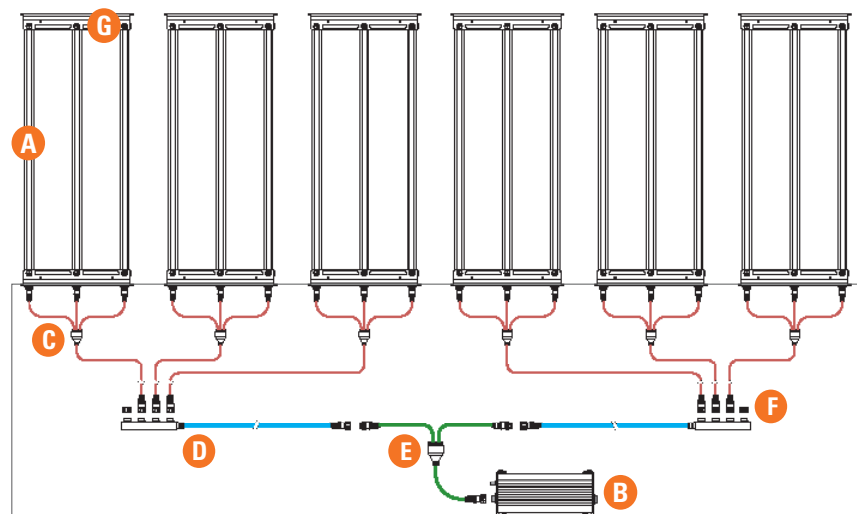


### RAZR MODULAR COMPONENTS

| Component | RCC               | Part Description                                            | QTY per system | Ordering PN 12NC Single Pack (-S) | Ordering PN 12NC Bulk Pack (-B) | Bulk Pack Quantity |
|-----------|-------------------|-------------------------------------------------------------|----------------|-----------------------------------|---------------------------------|--------------------|
| <b>A</b>  | RM-48-SL-BW3      | 48" Enclosed Light Bar, BROAD R3, uniform LED spacing       | 18             | 9124 017 02052                    | 9124 017 02062                  | 234                |
|           | RM-53-SL-BW3      | 53" Enclosed Light Bar, BROAD R3, uniform LED spacing       | 18             | 9124 017 02059                    | 9124 017 02069                  | 234                |
|           | RM-53-RL-BW3      | 53" Enclosed Light Bar, BROAD R3, redistributed LED spacing | 18             | 9124 017 02060                    | 9124 017 02070                  | 234                |
| <b>B</b>  | PLMG-V3A-600-083  | Power supply, LVG,600W/8.3A,M19                             | 1              | 9124 017 02015                    | 9124 017 02016                  | 24                 |
|           | PHVG-V2C-600-083  | Power supply, HVG,600W/8.3A,WLD                             | 1              | 9124 017 02206                    | 9124 017 02211                  | 33                 |
| <b>C</b>  | CDG-RMU23AFP6M1.2 | 3-Bar Right Angle DC Splitter, 4-FT Trunk                   | 6              | 9124 017 02113                    | 9124 017 02129                  | 10                 |
| <b>D</b>  | CDG-RMU24PFP9M1.4 | 4-port DC Manifold Cable, 4-FT Trunk                        | 2              | 9124 017 02125                    | 9124 017 02141                  | 10                 |
| <b>E</b>  | CDG-RMU2MSFP9M0.9 | Manifold Splitter Cable, 3-FT to power supply               | 1              | 9124 017 02124                    | 9124 017 02140                  | 10                 |
| <b>F</b>  | RM-MDC            | Manifold Port Dust Cap (covering unused ports)              | 2              | 9124 017 02328                    | 9124 017 02329                  | 100                |
| <b>G</b>  | FF-RM-8S-2F       | Fixture Frame Kit, 8" bar spacing, 2ft                      | 6              | 9124 017 02102                    | N/A                             | N/A                |



### DC CABLE WIRING DIAGRAM



# 15-Bar RAZR Modular Systems

## (5) 3-Bar Fixtures

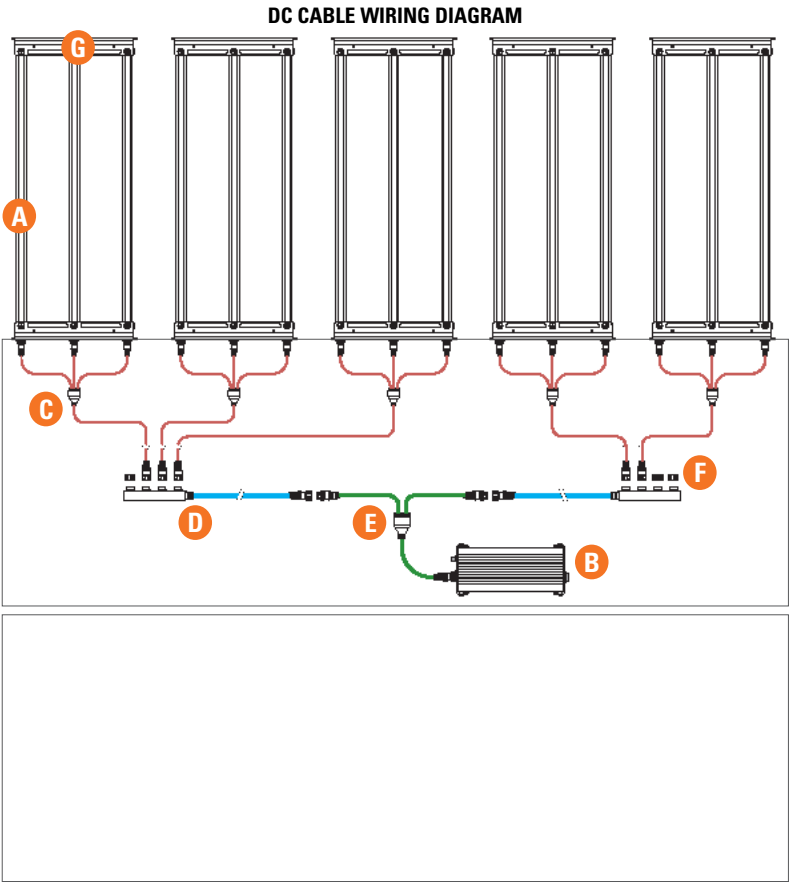
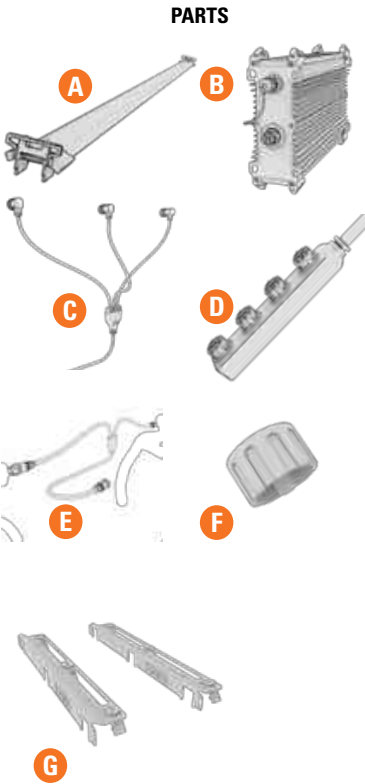
Fixture Array | Number of Fixtures per Power Supply

|             |
|-------------|
| 2'x4' 3-Bar |
| 5 Fixtures  |



### RAZR MODULAR COMPONENTS

| Component | RCC               | Part Description                                            | QTY per system | Ordering PN 12NC Single Pack (-S) | Ordering PN 12NC Bulk Pack (-B) | Bulk Pack Quantity |
|-----------|-------------------|-------------------------------------------------------------|----------------|-----------------------------------|---------------------------------|--------------------|
| A         | RM-48-SL-BW3      | 48" Enclosed Light Bar, BROAD R3, uniform LED spacing       | 15             | 9124 017 02052                    | 9124 017 02062                  | 234                |
|           | RM-53-SL-BW3      | 53" Enclosed Light Bar, BROAD R3, uniform LED spacing       | 15             | 9124 017 02059                    | 9124 017 02069                  | 234                |
|           | RM-53-RL-BW3      | 53" Enclosed Light Bar, BROAD R3, redistributed LED spacing | 15             | 9124 017 02060                    | 9124 017 02070                  | 234                |
| B         | PLMG-V3A-600-069  | Power supply, LVG,600W/6.9A,M19                             | 1              | 9124 017 01916                    | 9124 017 01990                  | 24                 |
|           | PHWG-V2C-600-069  | Power supply, HVG,600W/6.9A,WLD                             | 1              | 9124 017 02207                    | 9124 017 02212                  | 33                 |
| C         | CDG-RMU23AFP6M1.2 | 3-Bar Right Angle DC Splitter, 4-FT Trunk                   | 5              | 9124 017 02113                    | 9124 017 02129                  | 10                 |
| D         | CDG-RMU24PFP9M1.4 | 4-port DC Manifold Cable, 4-FT Trunk                        | 2              | 9124 017 02125                    | 9124 017 02141                  | 10                 |
| E         | CDG-RMU2MSFP9M0.9 | Manifold Splitter Cable, 3-FT to power supply               | 1              | 9124 017 02124                    | 9124 017 02140                  | 10                 |
| F         | RM-MDC            | Manifold Port Dust Cap (covering unused ports)              | 3              | 9124 017 02328                    | 9124 017 02329                  | 100                |
| G         | FF-RM-8S-2F       | Fixture Frame Kit, 8" bar spacing, 2ft                      | 5              | 9124 017 02102                    | N/A                             | N/A                |



# 12-Bar RAZR Modular Systems

## (4) 3-Bar Fixtures

Fixture Array | Number of Fixtures per Power Supply

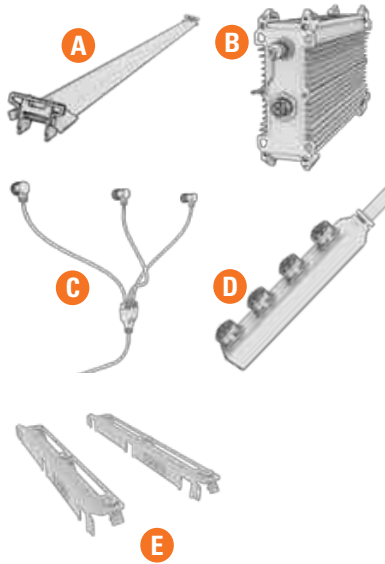
|                                        |
|----------------------------------------|
| 2'x4' 3-Bar                            |
| 4 Fixtures                             |
| Pre-Configured Systems                 |
| RM-48SLBW3-3A4LV-S/ RM-48SLBW3-3A4HV-S |
| RM-48SLBW4-3A4LV-S/ RM-48SLBW4-3A4HV-S |



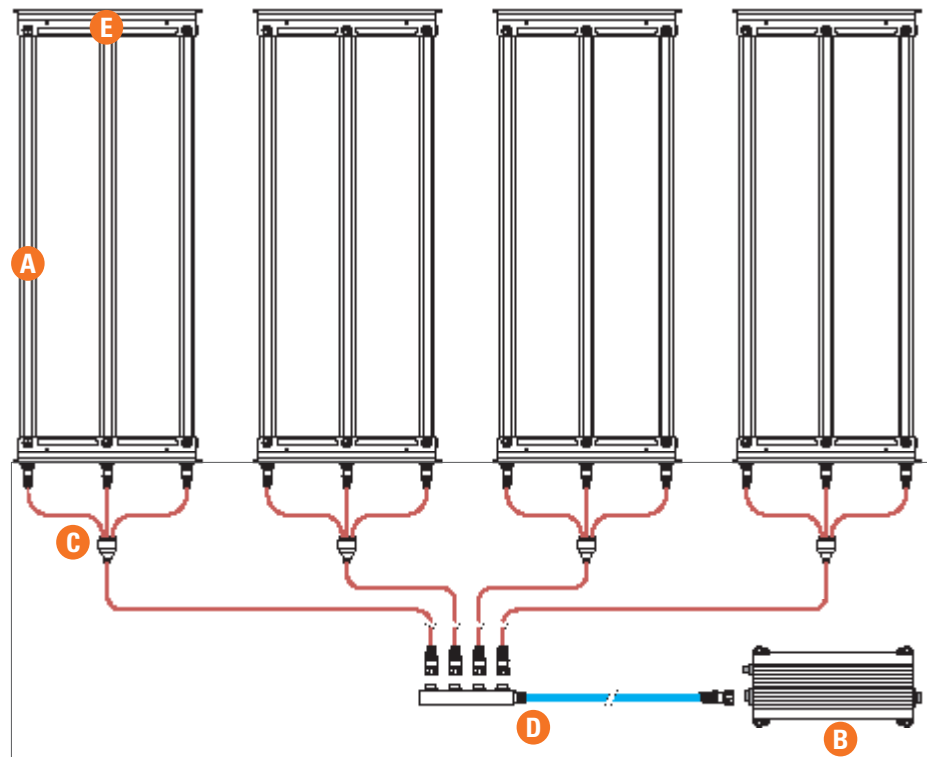
### RAZR MODULAR COMPONENTS

| Component | RCC               | Part Description                                            | QTY per system | Ordering PN 12NC Single Pack (-S) | Ordering PN 12NC Bulk Pack (-B) | Bulk Pack Quantity |
|-----------|-------------------|-------------------------------------------------------------|----------------|-----------------------------------|---------------------------------|--------------------|
| <b>A</b>  | RM-48-SL-BW3      | 48" Enclosed Light Bar, BROAD R3, uniform LED spacing       | 12             | 9124 017 02052                    | 9124 017 02062                  | 234                |
|           | RM-53-SL-BW3      | 53" Enclosed Light Bar, BROAD R3, uniform LED spacing       | 12             | 9124 017 02059                    | 9124 017 02069                  | 234                |
|           | RM-53-RL-BW3      | 53" Enclosed Light Bar, BROAD R3, redistributed LED spacing | 12             | 9124 017 02060                    | 9124 017 02070                  | 234                |
| <b>B</b>  | PLMG-V3B-320-056  | Power supply, LVG,320W/5.6A,M19                             | 1              | 9124 017 02021                    | 9124 017 02022                  | 30                 |
|           | PHMG-V3B-320-056  | Power supply, HVG,320W/5.6A,M19                             | 1              | 9124 017 01909                    | 9124 017 01983                  | 30                 |
| <b>C</b>  | CDG-RMU23AFP6M1.2 | 3-Bar Right Angle DC Splitter, 4-FT Trunk                   | 4              | 9124 017 02113                    | 9124 017 02129                  | 10                 |
| <b>D</b>  | CDG-RMU24PFP9M1.4 | 4-port DC Manifold Cable, 4-FT Trunk                        | 1              | 9124 017 02125                    | 9124 017 02141                  | 10                 |
| <b>E</b>  | FF-RM-8S-2F       | Fixture Frame Kit, 8" bar spacing, 2ft                      | 4              | 9124 017 02102                    | N/A                             | N/A                |

#### PARTS



#### DC CABLE WIRING DIAGRAM



## 9-Bar RAZR Modular Systems

### (3) 3-Bar Fixtures

Fixture Array | Number of Fixtures per Power Supply

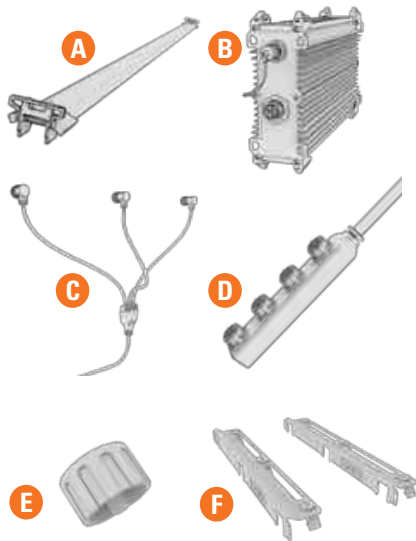
|                                        |
|----------------------------------------|
| 2'x4' 3-Bar                            |
| 3 Fixtures                             |
| Pre-Configured Systems                 |
| RM-48SLBW3-3A3LV-S/ RM-48SLBW3-3A3HV-S |
| RM-48SLBW4-3A4LV-S/ RM-48SLBW4-3A3HV-S |



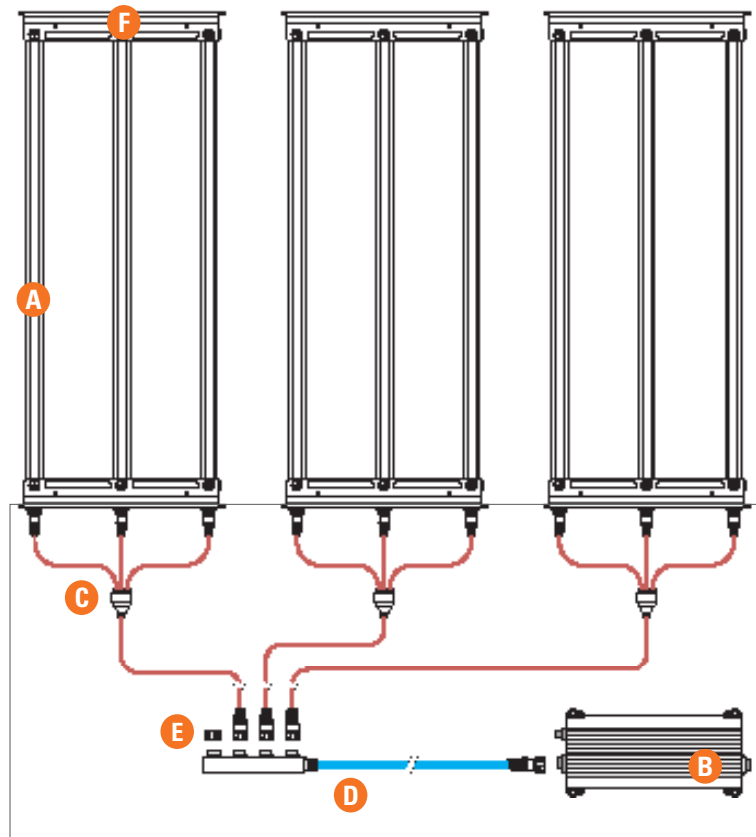
### RAZR MODULAR COMPONENTS

| Component | RCC               | Part Description                                            | QTY per system | Ordering PN 12NC Single Pack (-S) | Ordering PN 12NC Bulk Pack (-B) | Bulk Pack Quantity |
|-----------|-------------------|-------------------------------------------------------------|----------------|-----------------------------------|---------------------------------|--------------------|
| <b>A</b>  | RM-48-SL-BW3      | 48" Enclosed Light Bar, BROAD R3, uniform LED spacing       | 9              | 9124 017 02052                    | 9124 017 02062                  | 234                |
|           | RM-53-SL-BW3      | 53" Enclosed Light Bar, BROAD R3, uniform LED spacing       | 9              | 9124 017 02059                    | 9124 017 02069                  | 234                |
|           | RM-53-RL-BW3      | 53" Enclosed Light Bar, BROAD R3, redistributed LED spacing | 9              | 9124 017 02060                    | 9124 017 02070                  | 234                |
| <b>B</b>  | PLMG-V3B-320-042  | Power supply, LVG,320W/4.2A,M19                             | 1              | 9124 017 02023                    | 9124 017 02024                  | 30                 |
|           | PHMG-V3B-320-042  | Power supply, HVG,320W/4.2A,M19                             | 1              | 9124 017 02026                    | 9124 017 02025                  | 30                 |
| <b>C</b>  | CDG-RMU23AFP6M1.2 | 3-Bar Right Angle DC Splitter, 4-FT Trunk                   | 3              | 9124 017 02113                    | 9124 017 02129                  | 10                 |
| <b>D</b>  | CDG-RMU24PPF9M1.4 | 4-port DC Manifold Cable, 4-FT Trunk                        | 1              | 9124 017 02125                    | 9124 017 02141                  | 10                 |
| <b>E</b>  | RM-MDC            | Manifold Port Dust Cap (covering unused ports)              | 1              | 9124 017 02328                    | 9124 017 02329                  | 100                |
| <b>F</b>  | FF-RM-8S-2F       | Fixture Frame Kit, 8" bar spacing, 2ft                      | 3              | 9124 017 02102                    | N/A                             | N/A                |

#### PARTS



#### DC CABLE WIRING DIAGRAM



# 6-Bar RAZR Modular Systems

## (2) 3-Bar Fixtures

Fixture Array | Number of Fixtures per Power Supply

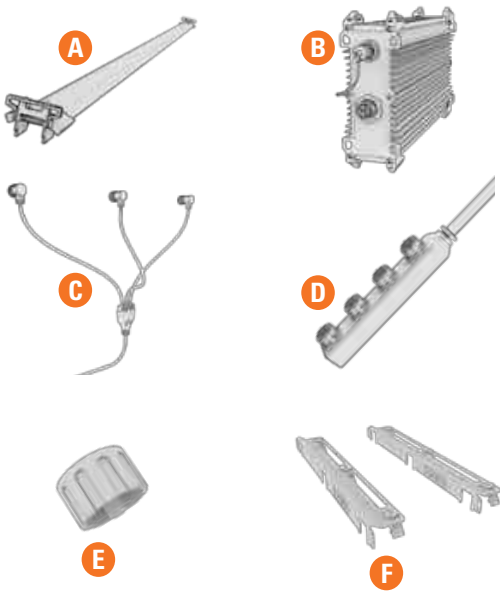
|             |
|-------------|
| 2'x4' 3-Bar |
| 2 Fixtures  |



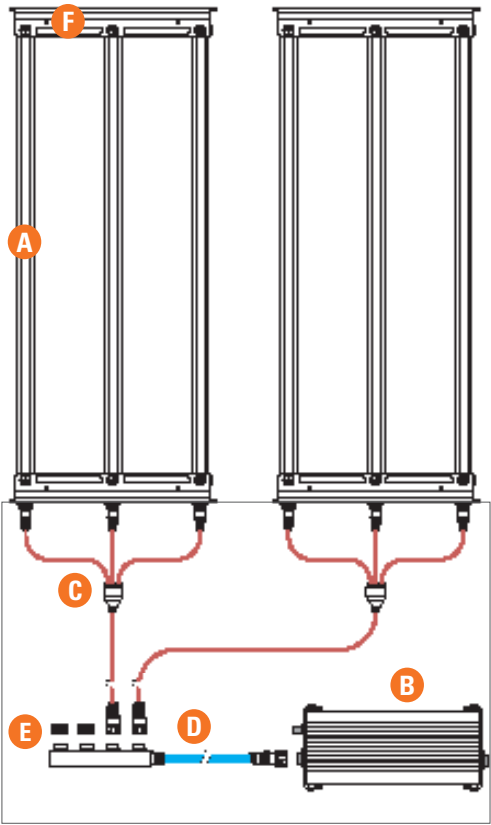
### RAZR MODULAR COMPONENTS

| Component | RCC               | Part Description                                            | QTY per system | Ordering PN 12NC Single Pack (-S) | Ordering PN 12NC Bulk Pack (-B) | Bulk Pack Quantity |
|-----------|-------------------|-------------------------------------------------------------|----------------|-----------------------------------|---------------------------------|--------------------|
| A         | RM-48-SL-BW3      | 48" Enclosed Light Bar, BROAD R3, uniform LED spacing       | 6              | 9124 017 02052                    | 9124 017 02062                  | 234                |
|           | RM-53-SL-BW3      | 53" Enclosed Light Bar, BROAD R3, uniform LED spacing       | 6              | 9124 017 02059                    | 9124 017 02069                  | 234                |
|           | RM-53-RL-BW3      | 53" Enclosed Light Bar, BROAD R3, redistributed LED spacing | 6              | 9124 017 02060                    | 9124 017 02070                  | 234                |
| B         | PLMG-V3B-320-028  | Power supply, LVG,320W/2.8A,M19                             | 1              | 9124 017 01918                    | 9124 017 01992                  | 30                 |
|           | PHMG-V3B-320-028  | Power supply, HVG,320W/2.8A,M19                             | 1              | 9124 017 02030                    | 9124 017 02029                  | 30                 |
| C         | CDG-RMU23AFP6M1.2 | 3-Bar Right Angle DC Splitter, 4-FT Trunk                   | 2              | 9124 017 02113                    | 9124 017 02129                  | 10                 |
| D         | CDG-RMU24PFP9M1.4 | 4-port DC Manifold Cable, 4-FT Trunk                        | 1              | 9124 017 02125                    | 9124 017 02141                  | 10                 |
| E         | RM-MDC            | Manifold Port Dust Cap (covering unused ports)              | 2              | 9124 017 02328                    | 9124 017 02329                  | 100                |
| F         | FF-RM-8S-2F       | Fixture Frame Kit, 8" bar spacing, 2ft                      | 2              | 9124 017 02102                    | N/A                             | N/A                |

### PARTS



### DC CABLE WIRING DIAGRAM



## 24-Bar RAZR Modular Systems

### (6) 4-Bar Fixtures

Fixture Array | Number of Fixtures per Power Supply

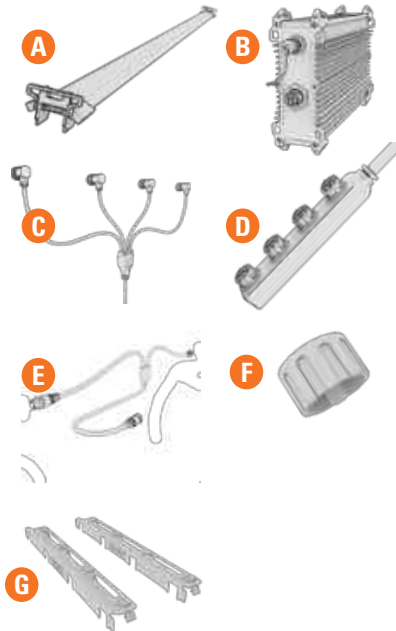
|                                                                                  |
|----------------------------------------------------------------------------------|
| 2'x4' 4-Bar                                                                      |
| 6 Fixtures                                                                       |
| Pre-Configured Systems                                                           |
| RM-48SLBW3-4A6LV-S/ RM-48SLBW3-4A6HV-S<br>RM-48SLBW4-4A6LV-S/ RM-48SLBW4-4A6HV-S |



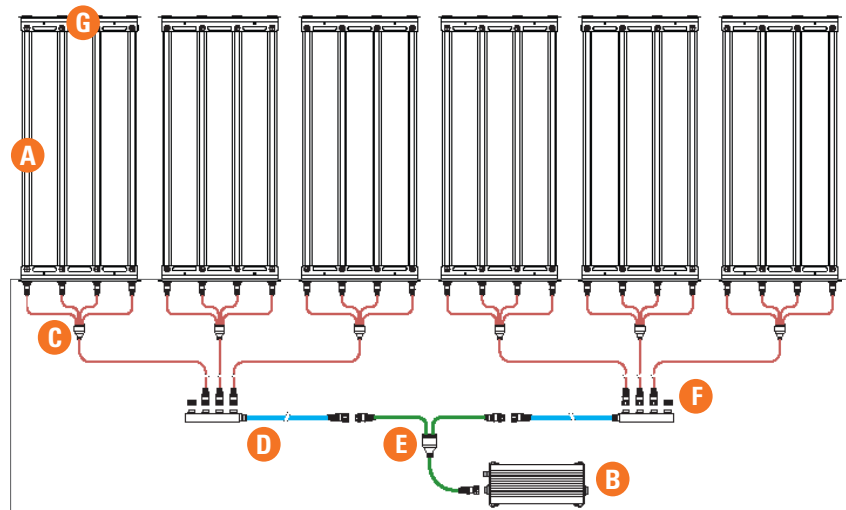
### RAZR MODULAR COMPONENTS

| Component RCC |                   | Part Description                                            | QTY per system | Ordering PN 12NC Single Pack (-S) | Ordering PN 12NC Bulk Pack (-B) | Bulk Pack Quantity |
|---------------|-------------------|-------------------------------------------------------------|----------------|-----------------------------------|---------------------------------|--------------------|
| A             | RM-48-SL-BW3      | 48" Enclosed Light Bar, BROAD R3, uniform LED spacing       | 24             | 9124 017 02052                    | 9124 017 02062                  | 234                |
|               | RM-53-SL-BW3      | 53" Enclosed Light Bar, BROAD R3, uniform LED spacing       | 24             | 9124 017 02059                    | 9124 017 02069                  | 234                |
|               | RM-53-RL-BW3      | 53" Enclosed Light Bar, BROAD R3, redistributed LED spacing | 24             | 9124 017 02060                    | 9124 017 02070                  | 234                |
| B             | PLMG-V3A-600-111  | Power supply, LVG,600W/11.1A,M19                            | 1              | 9124 017 01914                    | 9124 017 01988                  | 24                 |
|               | PHWG-V2C-600-111  | Power supply, HVG,600W/11.1A,WLD                            | 1              | 9124 017 02203                    | 9124 017 02208                  | 33                 |
| C             | CDG-RMU24AFP6M1.2 | 4-Bar Right Angle DC Splitter, 4-FT Trunk                   | 6              | 9124 017 02114                    | 9124 017 02130                  | 10                 |
| D             | CDG-RMU24PPF9M1.4 | 4-port DC Manifold Cable, 4-FT Trunk                        | 2              | 9124 017 02125                    | 9124 017 02141                  | 10                 |
| E             | CDG-RMU2MSFP9M0.9 | Manifold Splitter Cable, 3-FT to power supply               | 1              | 9124 017 02124                    | 9124 017 02140                  | 10                 |
| F             | RM-MDC            | Manifold Port Dust Cap (covering unused ports)              | 2              | 9124 017 02328                    | 9124 017 02329                  | 100                |
| G             | FF-RM-6S-2F       | Fixture Frame Kit, 6" bar spacing, 2ft                      | 6              | 9124 017 02103                    | N/A                             | N/A                |

#### PARTS



#### DC CABLE WIRING DIAGRAM

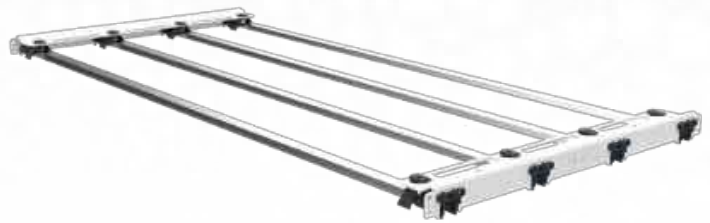


## 20-Bar RAZR Modular Systems

### (5) 4-Bar Fixtures

Fixture Array | Number of Fixtures per Power Supply

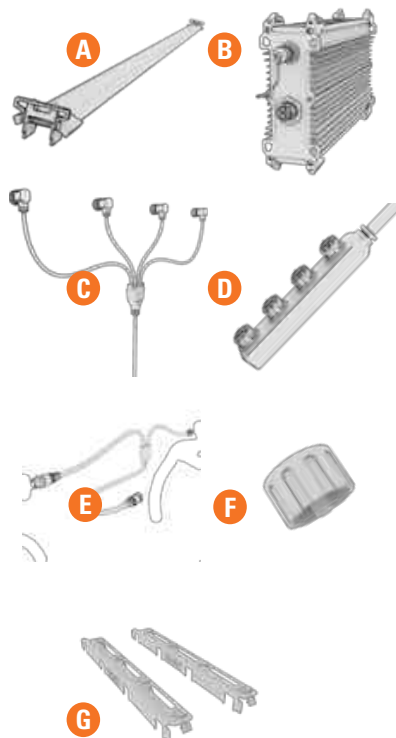
|             |
|-------------|
| 2'x4' 4-Bar |
| 5 Fixtures  |



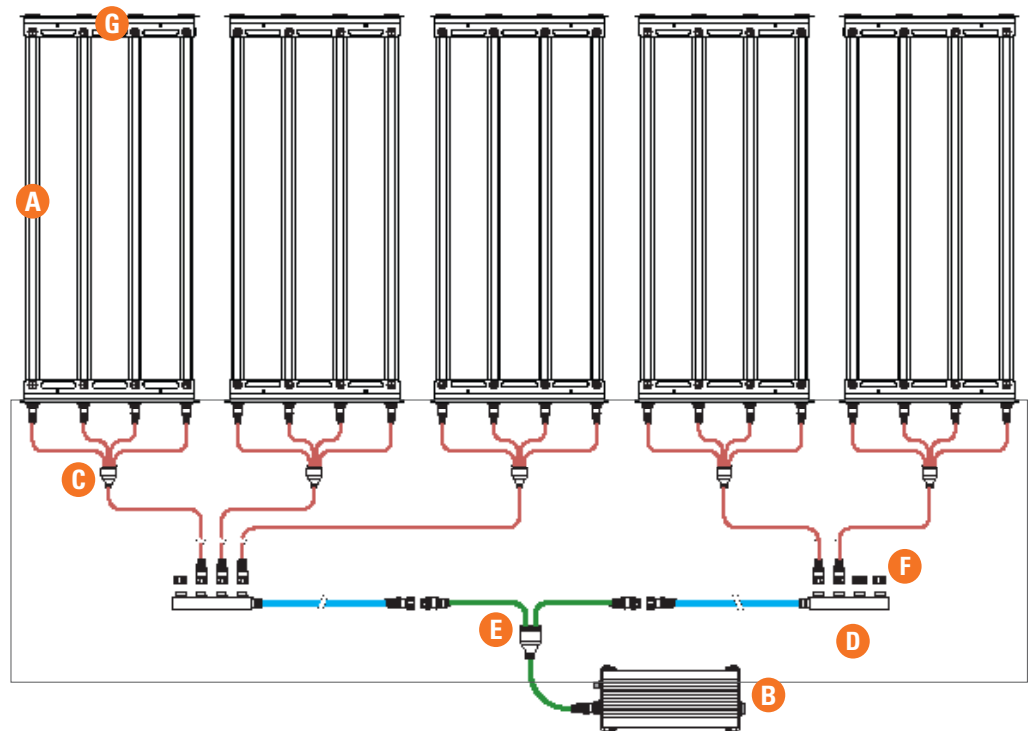
#### RAZR MODULAR COMPONENTS

| Component | RCC               | Part Description                                            | QTY per system | Ordering PN 12NC Single Pack (-S) | Ordering PN 12NC Bulk Pack (-B) | Bulk Pack Quantity |
|-----------|-------------------|-------------------------------------------------------------|----------------|-----------------------------------|---------------------------------|--------------------|
| <b>A</b>  | RM-48-SL-BW3      | 48" Enclosed Light Bar, BROAD R3, uniform LED spacing       | 20             | 9124 017 02052                    | 9124 017 02062                  | 234                |
|           | RM-53-SL-BW3      | 53" Enclosed Light Bar, BROAD R3, uniform LED spacing       | 20             | 9124 017 02059                    | 9124 017 02069                  | 234                |
|           | RM-53-RL-BW3      | 53" Enclosed Light Bar, BROAD R3, redistributed LED spacing | 20             | 9124 017 02060                    | 9124 017 02070                  | 234                |
| <b>B</b>  | PLMG-V3A-600-093  | Power supply, LVG,600W/9.3A,M19                             | 1              | 9124 017 02013                    | 9124 017 02014                  | 24                 |
|           | PHWG-V2C-600-093  | Power supply, HVG,600W/9.3A,WLD                             | 1              | 9124 017 02204                    | 9124 017 02209                  | 33                 |
| <b>C</b>  | CDG-RMU24AFP6M1.2 | 4-Bar Right Angle DC Splitter, 4-FT Trunk                   | 5              | 9124 017 02114                    | 9124 017 02130                  | 10                 |
| <b>D</b>  | CDG-RMU24PFP9M1.4 | 4-port DC Manifold Cable, 4-FT Trunk                        | 2              | 9124 017 02125                    | 9124 017 02141                  | 10                 |
| <b>E</b>  | CDG-RMU2MSFP9M0.9 | Manifold Splitter Cable, 3-FT to power supply               | 1              | 9124 017 02124                    | 9124 017 02140                  | 10                 |
| <b>F</b>  | RM-MDC            | Manifold Port Dust Cap (covering unused ports)              | 3              | 9124 017 02328                    | 9124 017 02329                  | 100                |
| <b>G</b>  | FF-RM-6S-2F       | Fixture Frame Kit, 6" bar spacing, 2ft                      | 5              | 9124 017 02103                    | N/A                             | N/A                |

#### PARTS



#### DC CABLE WIRING DIAGRAM



# 16-Bar RAZR Modular Systems

## (4) 4-Bar Fixtures

Fixture Array | Number of Fixtures per Power Supply

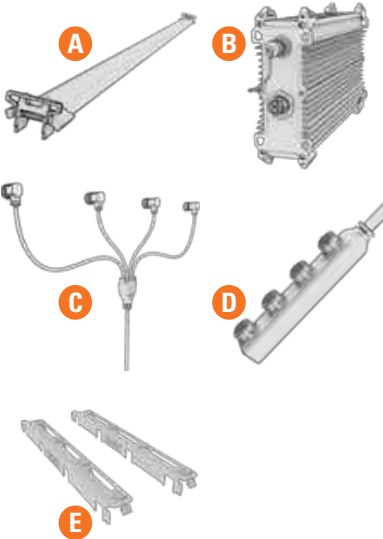
|                  |                                                                                  |
|------------------|----------------------------------------------------------------------------------|
| 2'x4' 4-Bar      |                                                                                  |
| 4 Fixtures       |                                                                                  |
| Installation     | Pre-Configured Systems                                                           |
| Horizontal Array | RM-48SLBW3-4A4LV-S/ RM-48SLBW3-4A4HV-S<br>RM-48SLBW4-4A4LV-S/ RM-48SLBW4-4A4HV-S |



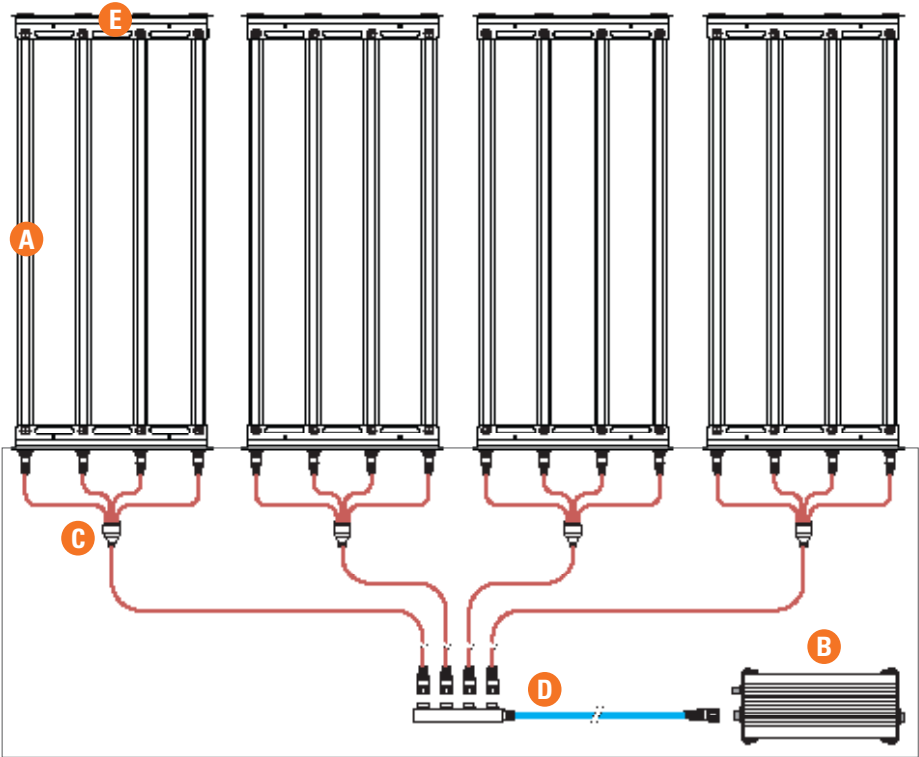
### RAZR MODULAR COMPONENTS

| Component RCC |                   | Part Description                                            | QTY per system | Ordering PN 12NC Single Pack (-S) | Ordering PN 12NC Bulk Pack (-B) | Bulk Pack Quantity |
|---------------|-------------------|-------------------------------------------------------------|----------------|-----------------------------------|---------------------------------|--------------------|
| A             | RM-48-SL-BW3      | 48" Enclosed Light Bar, BROAD R3, uniform LED spacing       | 16             | 9124 017 02052                    | 9124 017 02062                  | 234                |
|               | RM-53-SL-BW3      | 53" Enclosed Light Bar, BROAD R3, uniform LED spacing       | 16             | 9124 017 02059                    | 9124 017 02069                  | 234                |
|               | RM-53-RL-BW3      | 53" Enclosed Light Bar, BROAD R3, redistributed LED spacing | 16             | 9124 017 02060                    | 9124 017 02070                  | 234                |
| B             | PLMG-V3A-600-074  | Power supply, LVG,600W/7.4A,M19                             | 1              | 9124 017 01915                    | 9124 017 01989                  | 24                 |
|               | PHWG-V2C-600-074  | Power supply, HVG,600W/7.4A,WLD                             | 1              | 9124 017 01908                    | 9124 017 01982                  | 33                 |
| C             | CDG-RMU24AFP6M1.2 | 4-Bar Right Angle DC Splitter, 4-FT Trunk                   | 4              | 9124 017 02114                    | 9124 017 02130                  | 10                 |
| D             | CDG-RMU24PPF9M1.4 | 4-port DC Manifold Cable, 4-FT Trunk                        | 1              | 9124 017 02125                    | 9124 017 02141                  | 10                 |
| E             | FF-RM-6S-2F       | Fixture Frame Kit, 6" bar spacing, 2ft                      | 4              | 9124 017 02103                    | N/A                             | N/A                |

#### PARTS



#### DC CABLE WIRING DIAGRAM



# 12-Bar RAZR Modular Systems

## (3) 4-Bar Fixtures

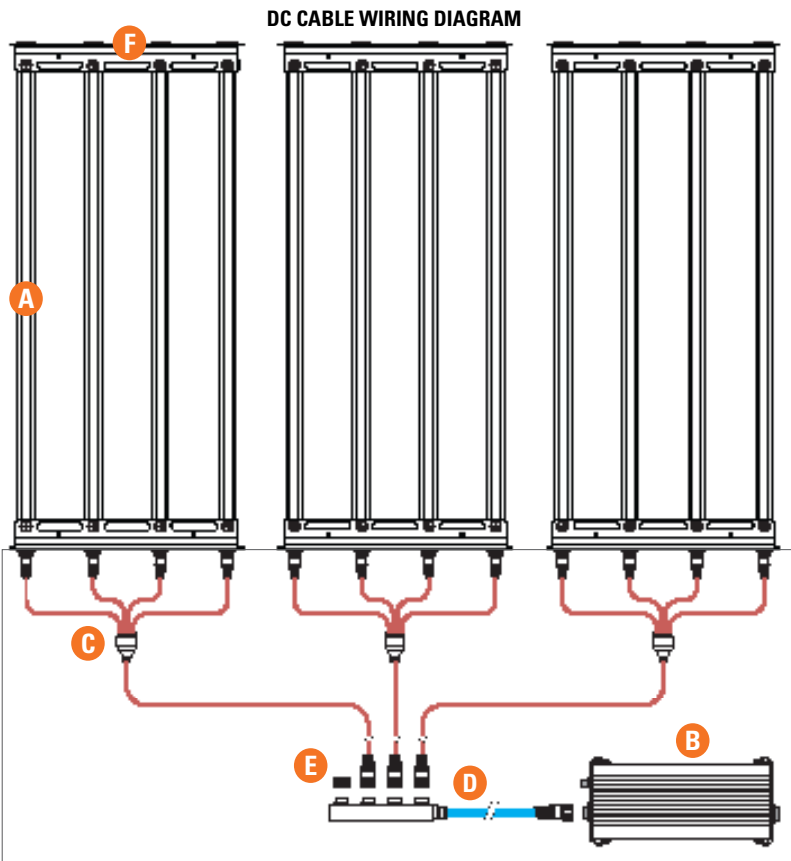
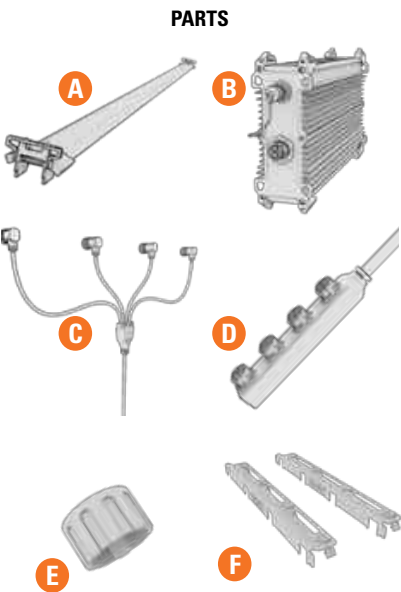
Fixture Array | Number of Fixtures per Power Supply

|                  |                                                                                  |
|------------------|----------------------------------------------------------------------------------|
| 2'x4' 4-Bar      |                                                                                  |
| 3 Fixtures       |                                                                                  |
| Installation     | Pre-Configured Systems                                                           |
| Horizontal Array | RM-48SLBW3-4A3LV-S/ RM-48SLBW3-4A3HV-S<br>RM-48SLBW4-4A3LV-S/ RM-48SLBW4-4A3HV-S |



### RAZR MODULAR COMPONENTS

| Component RCC |                   | Part Description                                            | QTY per system | Ordering PN 12NC Single Pack (-S) | Ordering PN 12NC Bulk Pack (-B) | Bulk Pack Quantity |
|---------------|-------------------|-------------------------------------------------------------|----------------|-----------------------------------|---------------------------------|--------------------|
| A             | RM-48-SL-BW3      | 48" Enclosed Light Bar, BROAD R3, uniform LED spacing       | 12             | 9124 017 02052                    | 9124 017 02062                  | 234                |
|               | RM-53-SL-BW3      | 53" Enclosed Light Bar, BROAD R3, uniform LED spacing       | 12             | 9124 017 02059                    | 9124 017 02069                  | 234                |
|               | RM-53-RL-BW3      | 53" Enclosed Light Bar, BROAD R3, redistributed LED spacing | 12             | 9124 017 02060                    | 9124 017 02070                  | 234                |
| B             | PLMG-V3B-320-056  | Power supply, LVG,320W/5.6A,M19                             | 1              | 9124 017 02021                    | 9124 017 02022                  | 30                 |
|               | PHMG-V3B-320-056  | Power supply, HVG,320W/5.6A,M19                             | 1              | 9124 017 01909                    | 9124 017 01983                  | 30                 |
| C             | CDG-RMU24AFP6M1.2 | 4-Bar Right Angle DC Splitter, 4-FT Trunk                   | 3              | 9124 017 02114                    | 9124 017 02130                  | 10                 |
| D             | CDG-RMU24PFP9M1.4 | 4-port DC Manifold Cable, 4-FT Trunk                        | 1              | 9124 017 02125                    | 9124 017 02141                  | 10                 |
| E             | RM-MDC            | Manifold Port Dust Cap (covering unused ports)              | 1              | 9124 017 02328                    | 9124 017 02329                  | 100                |
| F             | FF-RM-6S-2F       | Fixture Frame Kit, 6" bar spacing, 2ft                      | 3              | 9124 017 02103                    | N/A                             | N/A                |



## 8-Bar RAZR Modular Systems

### (2) 4-Bar Fixtures

Fixture Array | Number of Fixtures per Power Supply

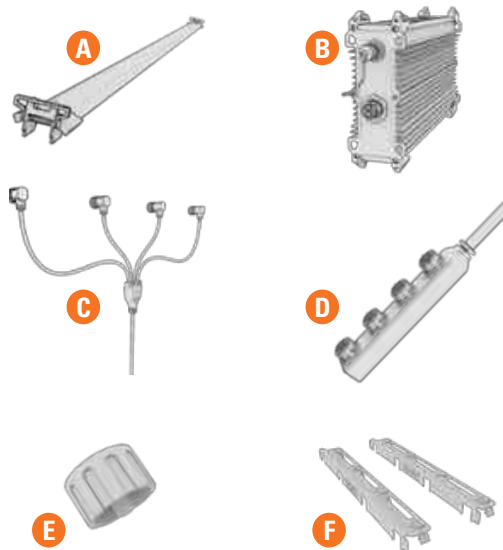
|             |
|-------------|
| 2'x4' 4-Bar |
| 2 Fixtures  |



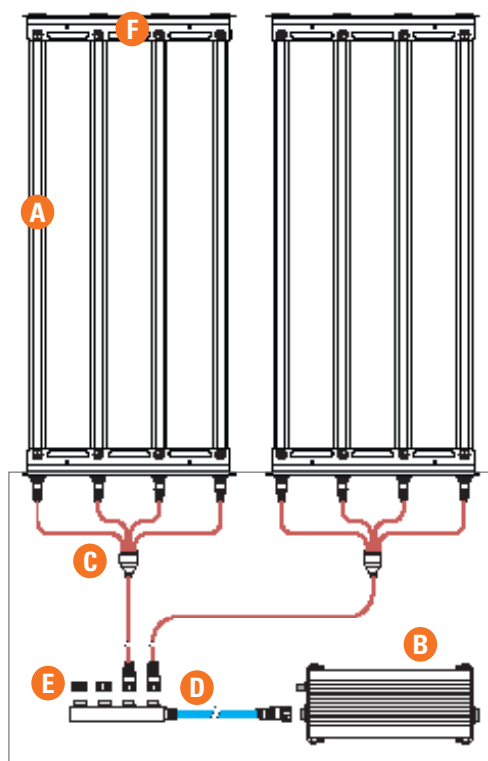
#### RAZR MODULAR COMPONENTS

| Component | RCC               | Part Description                                            | QTY per system | Ordering PN 12NC Single Pack (-S) | Ordering PN 12NC Bulk Pack (-B) | Bulk Pack Quantity |
|-----------|-------------------|-------------------------------------------------------------|----------------|-----------------------------------|---------------------------------|--------------------|
| <b>A</b>  | RM-48-SL-BW3      | 48" Enclosed Light Bar, BROAD R3, uniform LED spacing       | 8              | 9124 017 02052                    | 9124 017 02062                  | 234                |
|           | RM-53-SL-BW3      | 53" Enclosed Light Bar, BROAD R3, uniform LED spacing       | 8              | 9124 017 02059                    | 9124 017 02069                  | 234                |
|           | RM-53-RL-BW3      | 53" Enclosed Light Bar, BROAD R3, redistributed LED spacing | 8              | 9124 017 02060                    | 9124 017 02070                  | 234                |
| <b>B</b>  | PLMG-V3B-320-037  | Power supply, LVG,320W/3.7A,M19                             | 1              | 9124 017 01917                    | 9124 017 01991                  | 30                 |
|           | PHMG-V3B-320-037  | Power supply, HVG,320W/3.7A,M19                             | 1              | 9124 017 02028                    | 9124 017 02027                  | 30                 |
| <b>C</b>  | CDG-RMU24AFP6M1.2 | 4-Bar Right Angle DC Splitter, 4-FT Trunk                   | 2              | 9124 017 02114                    | 9124 017 02130                  | 10                 |
| <b>D</b>  | CDG-RMU24PPF9M1.4 | 4-port DC Manifold Cable, 4-FT Trunk                        | 1              | 9124 017 02125                    | 9124 017 02141                  | 10                 |
| <b>E</b>  | RM-MDC            | Manifold Port Dust Cap (covering unused ports)              | 2              | 9124 017 02328                    | 9124 017 02329                  | 100                |
| <b>F</b>  | FF-RM-6S-2F       | Fixture Frame Kit, 6" bar spacing, 2ft                      | 2              | 9124 017 02103                    | N/A                             | N/A                |

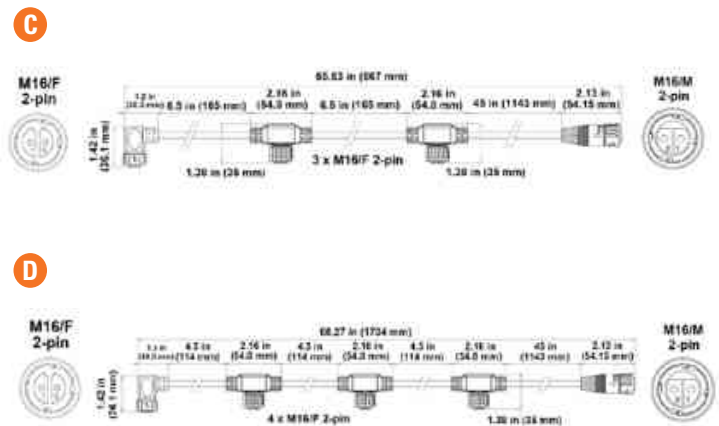
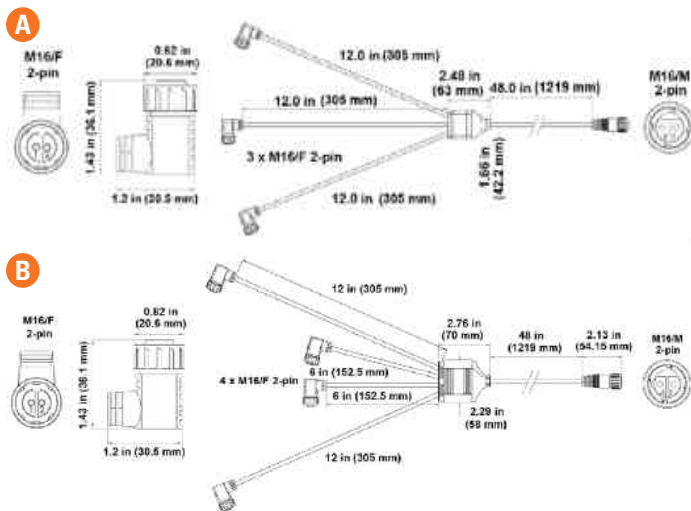
#### PARTS



#### DC CABLE WIRING DIAGRAM

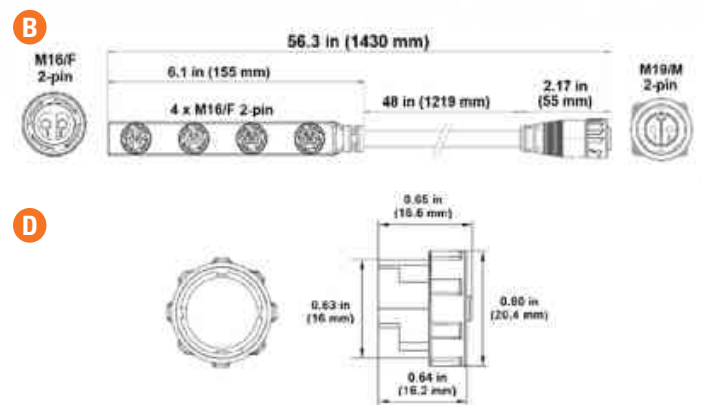
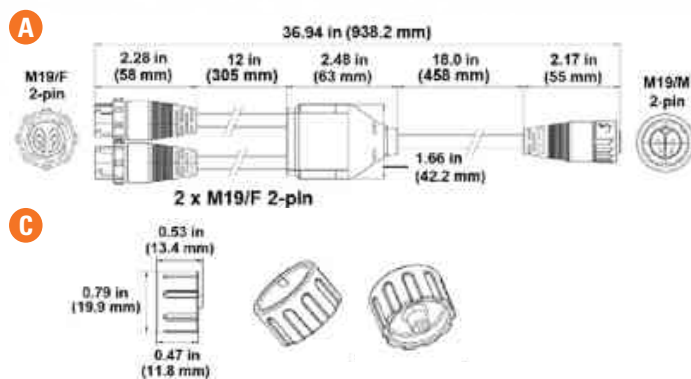


|          | Description                                       | Regional Commercial Code | Ordering PN 12NC Single Pack (S) | Ordering PN 12NC Bulk Pack (B) | Bulk Pack Carton Quantity |
|----------|---------------------------------------------------|--------------------------|----------------------------------|--------------------------------|---------------------------|
| <b>A</b> | 3-Bar Right Angle DC Splitter, 4 ft [1,2 m] Trunk | <b>CDG-RMU23AFP6M1.2</b> | 9124 017 02113                   | 9124 017 02129                 | 10                        |
| <b>B</b> | 4-Bar Right Angle DC Splitter, 4 ft [1,2 m] Trunk | <b>CDG-RMU24AFP6M1.2</b> | 9124 017 02114                   | 9124 017 02130                 | 10                        |
| <b>C</b> | 3-Bar RT In Line DC Splitter, 4 ft [1,2 m] Trunk  | <b>CDG-RMU23RFP6M1.2</b> | 9124 017 02119                   | 9124 017 02135                 | 10                        |
| <b>D</b> | 4-Bar RT In Line DC Splitter, 4 ft [1,2 m] Trunk  | <b>CDG-RMU24RFP6M1.2</b> | 9124 017 02120                   | 9124 017 02136                 | 10                        |



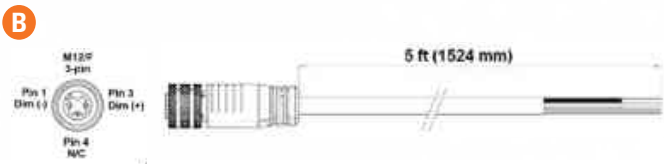
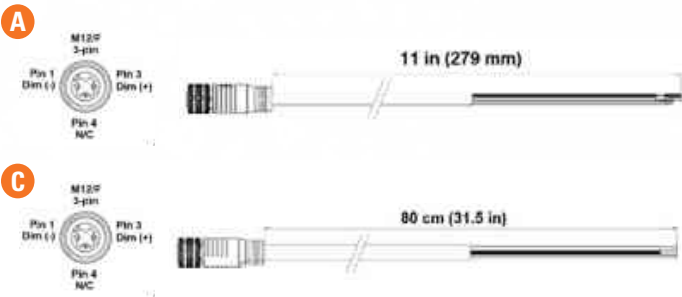
### DC MANIFOLD CABLES

| Description |                                              | Regional Commercial Code | Ordering PN 12NC Single Pack (S) | Ordering PN 12NC Bulk Pack (B) | Bulk Pack Carton Quantity |
|-------------|----------------------------------------------|--------------------------|----------------------------------|--------------------------------|---------------------------|
| <b>A</b>    | Manifold Splitter Cable, 3 ft [0,9 m]        | <b>CDG-RMU2MSFP9M0.9</b> | 9124 017 02124                   | 9124 017 02140                 | 10                        |
| <b>B</b>    | Manifold 4-Port Cable, 4 ft [1,2 m]          | <b>CDG-RMU24PFP9M1.4</b> | 9124 017 02125                   | 9124 017 02141                 | 10                        |
| <b>C</b>    | RAZRm, Dust Cap, M16, Inner, Manifold        | <b>RM-MDC</b>            | 9124 017 02328                   | 9124 017 02329                 | 100                       |
| <b>D</b>    | RAZRm, Dust Cap, M16, Outer, Splitter Cables | <b>RM-SDC</b>            | 9124 017 02326                   | 9124 017 02327                 | 100                       |



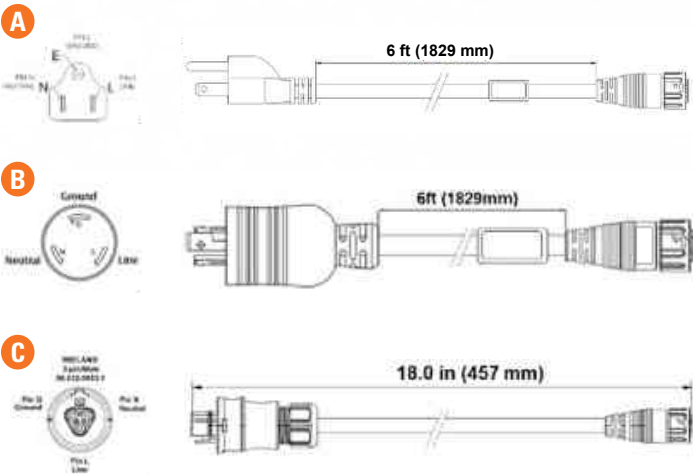
DC DIMMING SIGNAL CABLES (Power Supply to Dimming Control)

| Description |                                                                                | Regional Commercial Code | Ordering PN 12NC Single Pack (S) | Ordering PN 12NC Bulk Pack (B) | Bulk Pack Carton Quantity |
|-------------|--------------------------------------------------------------------------------|--------------------------|----------------------------------|--------------------------------|---------------------------|
| A           | 11 IN (0.28 m) dimming signal cable, pigtail, M12 connector                    | CCA-XXU3T2FL3X0.3        | 9124 017 01621                   | 9124 016 55902                 | 10                        |
| B           | 5-FT (1.52 m) dimming signal cable, pigtail, M12 connector                     | CCA-XXU3T2FL3X1.5        | 9124 017 01622                   | 9124 016 55881                 | 10                        |
| C           | 80 cm (31.5 IN) dimming signal cable, Cca, pigtail, M12 connector (for Europe) | CCE-XXC3T2FL3X0.8        | 9124 017 01623                   | 9124 016 55883                 | 10                        |



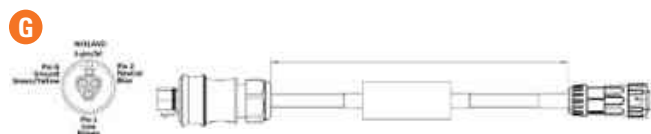
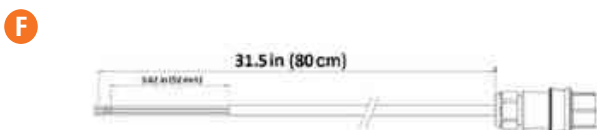
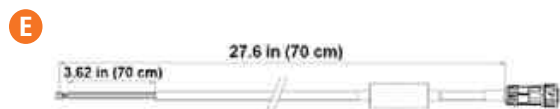
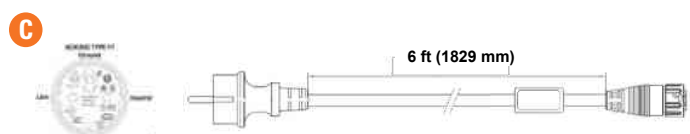
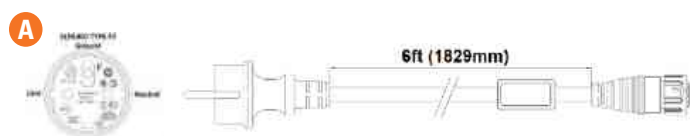
AC POWER CABLES - AMERICAS (Power Supply to AC Line)

|   | Description                                                                     | Regional Commercial Code | Ordering PN 12NC Single Pack (S) | Ordering PN 12NC Bulk Pack (B) | Bulk Pack Carton Quantity |
|---|---------------------------------------------------------------------------------|--------------------------|----------------------------------|--------------------------------|---------------------------|
| A | 6-FT (1.83 m) AC Extension Cable, NEMA 5-15P Plug, M19 Push Lock, Max 125 V AC  | CAA-XXU3P9FN5P1.8        | 9124 017 01611                   | 9124 016 88454                 | 10                        |
| B | 6-FT (1.83 m) AC Extension Cable, NEMA L7-15P Plug, M19 Push Lock, Max 277 V AC | CAA-XXU3P9FL7P1.8        | 9124 017 01625                   | 9124 016 55898                 | 10                        |
| C | 6-FT (1.83 m) AC Extension Cable, Pigtail, M19 Push Lock, Max 480 V AC          | CAA-XXU3P9FL3X1.8        | 9124 017 01624                   | 9124 016 55875                 | 10                        |



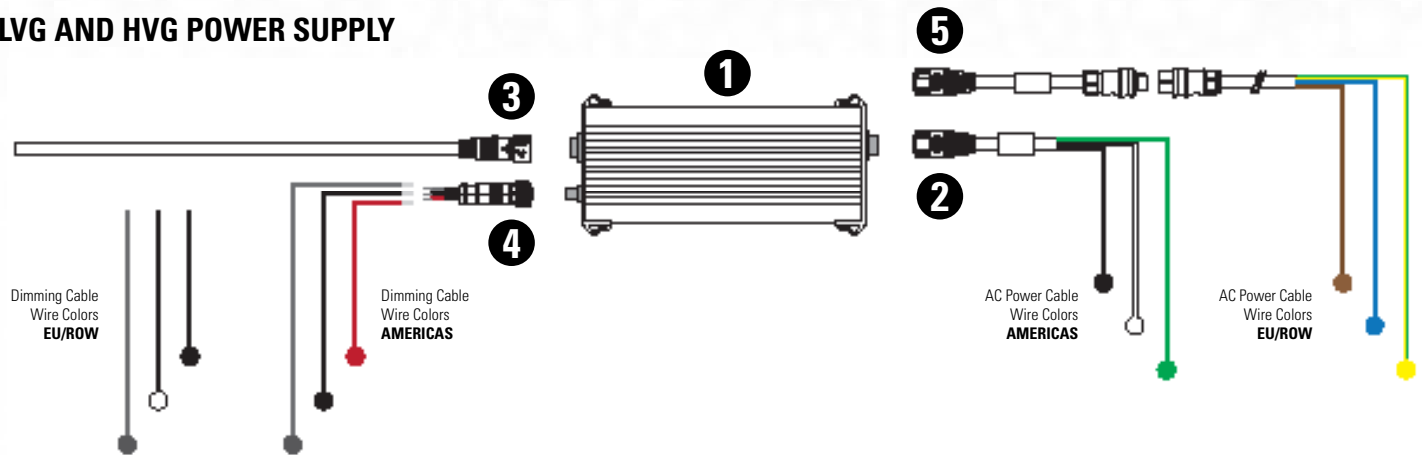
## AC POWER CABLES - EU/ROW (Power Supply to AC Line)

|          | Description                                                                                                                                | Regional Commercial Code | Ordering PN 12NC Single Pack (S) | Ordering PN 12NC Bulk Pack (B) | Bulk Pack Carton Quantity |
|----------|--------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|----------------------------------|--------------------------------|---------------------------|
| <b>A</b> | 1,83 m (6 FT) AC Cable, VDE H07RN-F, Schuko Type F7 plug, M19 Push Lock, 230V AC                                                           | <b>CAE-XXV3P9FF7P1.8</b> | 9124 017 01628                   | 9124 016 55901                 | 10                        |
| <b>B</b> | 1,83 m (6 FT) AC Cable, VDE H07RN-F, pigtail, M19 Push Lock (not for CE countries)                                                         | <b>CAR-XXV3P9FL3X1.8</b> | 9124 017 01616                   | 9124 016 88464                 | 10                        |
| <b>C</b> | 4,57 m (15 FT) AC Cable, VDE H07RN-F, Schuko Type F7 plug, M19 Push Lock, 230V AC                                                          | <b>CAE-XXV3P9FF7P4.6</b> | 9124 017 01615                   | 9124 016 88463                 | 5                         |
| <b>D</b> | 4,57 m (15 FT) AC Cable, VDE H07RN-F, pigtail, M19 Push Lock (not for CE countries)                                                        | <b>CAR-XXV3P9FL3X4.6</b> | 9124 017 01617                   | 9124 016 88465                 | 5                         |
| <b>E</b> | 70 cm (27,6 IN) AC Cable, DCA, pigtail, M19 Push Lock (230/400V CE application)                                                            | <b>CAE-XXD3P9FL3X0.7</b> | 9124 017 01627                   | 9124 016 55887                 | 10                        |
| <b>F</b> | 80 cm (31,5 IN) AC Cable, DCA, pigtail (use with adapter cable) Wieland connector Part #: 20i30F B2 ZR1S H GN02 (Female-Green)             | <b>CAE-XXD3WGFL3X0.8</b> | 9124 016 56106                   | 9124 016 56107                 | 10                        |
| <b>G</b> | Wieland AC Connector Adapter for Power Supply, DCA cable, M19 Push Lock, 20 cm (8 IN), Wieland Part #: RST20i3F S2 ZR1SVH GN0 (Male-Green) | <b>AAE-XXD3P9FWGM0.2</b> | 9124 017 01609                   | 9124 016 88466                 | 10                        |



# POWER SUPPLY WIRING

## LVG AND HVG POWER SUPPLY



## COMPONENTS

- ① Power Supply
- ② AC Power Cable to Power Supply
- ③ DC Power Cable to Light Fixtures (Refer to the **pages 3-18** for the DC Power Cabling for your configuration)
- ④ DC Dimming Signal Cable to Power Supply
- ⑤ Optional WIELAND© AC power cable adapters to Power Supply (i.e. p/n AAE-XXD3P9FWGM0.2) and Dca pigtail cable (i.e. p/n CAE-XXD3WGFL3X0.8), Green plug for Europe shown

## ② ⑤ AC POWER CABLE CONNECTIONS

| Americas<br>AC Cable Wire Colors | International<br>AC Cable Wire Colors | Power Supply<br>Pin Connection | LVG     |       |         |       |         | HVG     |       |       |
|----------------------------------|---------------------------------------|--------------------------------|---------|-------|---------|-------|---------|---------|-------|-------|
|                                  |                                       |                                | 120 V   | 208 V | 230 V   | 240 V | 277 V   | 347 V   | 400 V | 480 V |
| Black                            | Brown                                 | L                              | Phase   | Phase | Phase   | Phase | Phase   | Phase   | Phase | Phase |
| White                            | Blue                                  | N                              | Neutral | Phase | Neutral | Phase | Neutral | Neutral | Phase | Phase |
| Green                            | Green-yellow                          | G                              | PE      | PE    | PE      | PE    | PE      | PE      | PE    | PE    |

**NOTE:** In 3-phase power applications, the light fixtures/loads should be properly distributed across all three phases, and not all on the same phase.

## ④ DC DIMMING SIGNAL CABLE CONNECTIONS

| Dimming Cable<br>Wire Color<br>Americas | Dimming Cable<br>Wire Color<br>Europe | Power Supply<br>PinConnection         |
|-----------------------------------------|---------------------------------------|---------------------------------------|
| Red                                     | Black                                 | DIM (+)                               |
| Black                                   | White                                 | DIM (-)                               |
| Bare Wire                               | Bare Wire                             | Shield Drain<br>(not connected to PS) |

**NOTE:** Connect the dim cable shield drain to only one PE ground connection point, i.e. at the dimming control panel.

## DIMMING SPECIFICATIONS

|                                    |                                               |
|------------------------------------|-----------------------------------------------|
| Dimming Input                      | Off/on 0/1-10V<br>Sink Dimming, Source Driver |
| Dimming Range                      | 10-100 %, Linear                              |
| Typ / Max Source Current @ Vdim=0V | 400 µA/ 500 µA                                |
| Voltage @ Full load                | 10 V                                          |
| Voltage Dim to OFF                 | 0.8 V                                         |
| Voltage Dim to ON                  | 1.0 V                                         |
| Hysteresis ( V / % )               | 0.2 V / 2 %                                   |

| Power Supply Connector    | Connector Type                                       | Pin Assignments                                    |
|---------------------------|------------------------------------------------------|----------------------------------------------------|
| <b>AC Power Connector</b> | Push-lock<br>Male M19, 3-pin                         | Pin N: Neutral<br>Pin L: Line<br>Pin G: Ground     |
| <b>DC Power Connector</b> | Push-lock<br>Female M19, 2-Pin                       | Pin 1: LED (-)<br>Pin 2: LED (+)                   |
| <b>Dimming Connector</b>  | IEC61076-2-101<br>Threaded A-Code<br>Male M12, 3-pin | Pin 1: Dim (-)<br>Pin 3: Dim (+)<br>*Pin 4: 12VDC+ |

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\*Not Connected to Dimming Cable

**NOTE:** Fluence recommends the use of AC circuit contactors to completely disconnect the facility AC voltage from the luminaire to mitigate potential glowing or dimming interruptions of the crop dark period. For more information, please download the Dim-to-Off Application Note available at the Fluence Support Center <https://fluence-led.com/support-center/>.

## OUR PRODUCT GUARANTEE & WARRANTY

Every Fluence Lighting system is engineered and built by Fluence Bioengineering using state-of-the-art robotics and hand craftsmanship. All Fluence Lighting systems are guaranteed against manufacturing defects for five years from date of purchase. Fluence lighting systems comply with applicable standards and are intended to be used with Fluence power supplies, cables and mounting hardware. The use of Fluence lighting systems with power supplies, cables and mounting hardware by others will limit specifications and void the warranty. Contact us at [support@fluence-led.com](mailto:support@fluence-led.com) for more warranty information.

We stand behind our research, we stand behind our technology and we stand behind our clients. <https://fluence-led.com/warranty/>



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