DIM FLEX WIRING SYSTEM
Americas (M12 1-Channel)

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MODULAR 0-10V DC DIMMING WIRING SYSTEM FOR FLUENCE SINGLE-CHANNEL LED LIGHT FIXTURES



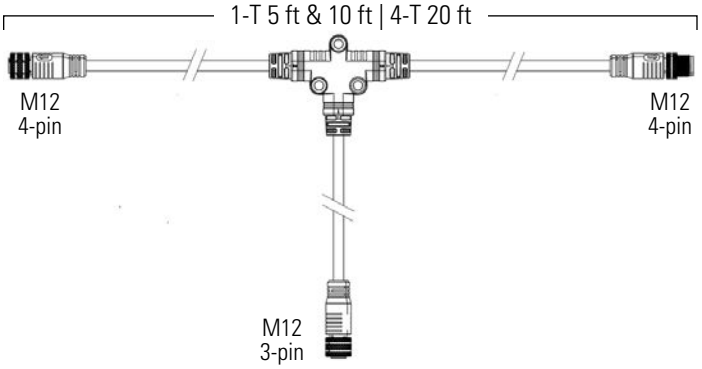
FEATURES

- Dramatic pre-wire, installation, and clean-up time and labor cost savings over traditional light fixture 0-10 V DC control wiring
- Plug-and-play connectors for error-free installation and easy maintenance
- Secure and reliable connections
- Suitable for wet locations
- 1 year limited warranty

DIM FLEX WIRING SYSTEM COMPONENTS

T-CONNECTOR CABLE

Connects Main Trunk to Power Supply of Light Fixtures



TRUNK EXTENSIONS

Extends length of T-Connector Trunk



TRUNK TERMINATION

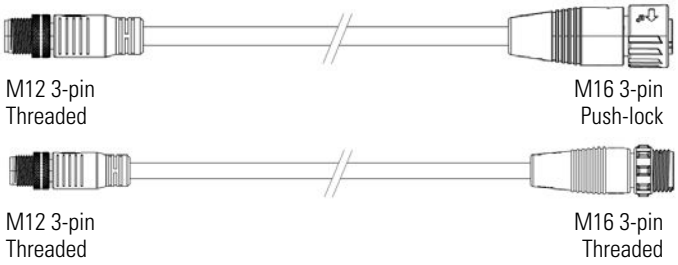
Ends the Trunk Cable Run at the Last Fixture
with or without a Shield Ground to the Power Supply



ACCESSORIES

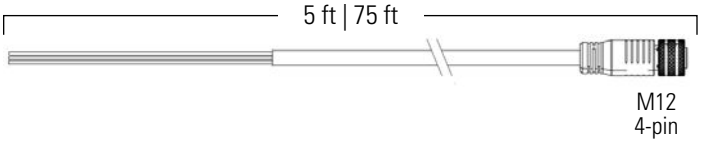
ADAPTERS

Adapts a Power Supply with Push-Lock or Threaded M16 Dimming Port to DC Flex M12



PIGTAIL TRUNK EXTENSION

Begins the Modular Wire Run at the Dimmer or Controller



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REGIONAL COMMERCIAL CODE LEGEND

	Product	Cable Info	Cable Function	-	# Connector Pins	Connector1 (Input)	C1 Type	# Connector Pins	Connector2 (Output)	C2 Type	Length in Meters	Packing
DESCRIPTION	**DF -** Dim Flex Wiring	**U -** UL Compliant	**1T -** 1T-Branch Cable **4T -** 4T-Branch Cable **ET -** Trunk Extension **PT -** Pigtail Trunk Extension **TT -** Trunk Termination **TG -** Trunk Drop Termination (Drain Grounded)	-	**X -** N/A (Leads) **1 -** 1 Pin **2 -** 2 Pins **3 -** 3 Pins **4 -** 4 Pins	**P6 -** Push Lock M16 **P9 -** Push Lock M19 **T2** - Screw Lock (Threaded) M12 **T6** - Screw Lock (Threaded) M16 **L3 -** 3-wire Leads (Pigtails)	**X -** N/A (Leads) **M -** Male **F -** Female	**1 -** 1 Pin **2 -** 2 Pins **3 -** 3 Pins **4 -** 4 Pins	**P6 -** Push Lock M16 **P9 -** Push Lock M19 **T2** - Screw Lock (Threaded) M12 **T6** - Screw Lock (Threaded) M16	**X -** N/A (Leads) **M -** Male **F -** Female	**XXX -** No Cable Length **#.# -** Length	**S -** Single Pack **B -** Bulk Pack
EXAMPLE	**DF**	**U**	**ET**	**-**	**4**	**T2**	**M**	**4**	**T2**	**F**	**3.6**	**S**

ORDERING INFORMATION

Description	Function (Refer to Wiring Diagram)	Regional Commercial Code (RCC)	Ordering PN 12NC Single Pack (S)	Ordering PN 12NC Bulk Pack (B)	Bulk Pack Carton QTY
4-T Branch Dimming Cable, 20 FT Trunk, 1 FT Drop	Connects 4 fixtures to the dimming control line	DFU4T-4T2M3T2F6.0	9124 017 01727	9124 016 56184	5
1-T Branch Dimming Cable, 5 FT Trunk, 1 FT Drop	Connects 1 fixture to the dimming control line	DFU1T-4T2M3T2F1.5	9124 017 01726	9124 016 56183	10
1-T Branch Dimming Cable, 10 FT Trunk, 1 FT Drop	Connects 1 fixture to the dimming control line	DFU1T-4T2M3T2F3.0	9124 017 01725	9124 016 56182	5
Pigtail Trunk Extension Cable, 5 FT	Begins the dimming control line at the dimmer or controller	DFUPT-XL3X4T2F1.5	9124 017 01731	9124 016 56188	10
Pigtail Trunk Extension Cable, 75 FT	Begins the dimming control line at the dimmer or controller	DFUPT-XL3X4T2F22.	9124 017 01730	9124 016 56187	3
Trunk Extension Cable, 5 FT	Extends length of trunk to first or next T-cable	DFUET-4T2M4T2F1.5	9124 017 01733	9124 016 56190	10
Trunk Extension Cable, 12 FT	Extends length of trunk to first or next T-cable	DFUET-4T2M4T2F3.6	9124 017 01732	9124 016 56189	5
Trunk Termination Cable with Ground, 3.5 FT	Ends the dimming control line at the last fixture. Shield grounded to power supply	DFUTG-4T2M3T2F1.0	9124 017 01736	9124 016 56193	10
Trunk Termination Cable without Ground, 3.5 FT	Ends the dimming control line at the last fixture. Shield must be grounded to PE	DFUTT-4T2M3T2F1.0	9124 017 01734	9124 016 56191	10
Dimming Adapter Cable, M12 Screw Lock to M16 Push Lock	Adapts T-cable Drop or Trunk Termination to Push Lock M16 Dimming Port	ACA-XXU3P6FT2M0.1	9124 017 01728	9124 016 56185	20
Dimming Adapter Cable, M12 Screw Lock to M16 Screw Lock	Adapts T-cable Drop or Trunk Termination to Screw Lock M16 Dimming Port	ACA-XXU3T6FT2M0.1	9124 017 01729	9124 016 56186	20

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REGIONAL COMMERCIAL CODE LEGEND

	Product	Cable Info	Cable Function	-	# Connector Pins	Connector1 (Input)	C1 Type	# Connector Pins	Connector2 (Output)	C2 Type	Length in Meters	Packing
DESCRIPTION	**DF -** Dim Flex Wiring	**U -** UL Compliant	**1T -** 1T-Branch Cable **4T -** 4T-Branch Cable **ET -** Trunk Extension **PT -** Pigtail Trunk Extension **TT -** Trunk Termination **TG -** Trunk Drop Termination (Drain Grounded)	-	**X -** N/A (Leads) **1 -** 1 Pin **2 -** 2 Pins **3 -** 3 Pins **4 -** 4 Pins	**P6 -** Push Lock M16 **P9 -** Push Lock M19 **T2** - Screw Lock (Threaded) M12 **T6** - Screw Lock (Threaded) M16 **L3 -** 3-wire Leads (Pigtails)	**X -** N/A (Leads) **M -** Male **F -** Female	**1 -** 1 Pin **2 -** 2 Pins **3 -** 3 Pins **4 -** 4 Pins	**P6 -** Push Lock M16 **P9 -** Push Lock M19 **T2** - Screw Lock (Threaded) M12 **T6** - Screw Lock (Threaded) M16	**X -** N/A (Leads) **M -** Male **F -** Female	**XXX -** No Cable Length **#.# -** Length	**S -** Single Pack **B -** Bulk Pack
EXAMPLE	**DF**	**U**	**ET**	**-**	**4**	**T2**	**M**	**4**	**T2**	**F**	**3.6**	**S**

SPECIFICATIONS

Description	Regional Commercial Code (RCC)	Cable Lengh	Max DC Input Voltage	Max DC Input Current	Input Connector	Output Connector	T-Drop Connector	Cable Type
4-T Branch Dimming Cable, 20 FT Trunk, 1 FT Drop	DFU4T-4T2M3T2F6.0	20.0 ft 6096 mm	12 V	7 A	Push Lock Male M25 3-pin	Push Lock Female M25 3-pin	Screw Lock Female M12 3-pin	AWM UL 21996/UL 22190 300 V 2 x 20 AWG/ 0.5 mm², Plus Drain
1-T Branch Dimming Cable, 5 FT Trunk, 1 FT Drop	DFU1T-4T2M3T2F1.5	5 ft 1524 mm						
1-T Branch Dimming Cable, 10 FT Trunk, 1 FT Drop	DFU1T-4T2M3T2F3.0	10 ft 3048 mm						
Pigtail Trunk Extension Cable, 5 FT	DFUPT-XL3X4T2F1.5	5.0 ft 1524 mm	12 V	7 A	Pigtails	Screw Lock Female M12 4-pin	N/A	
Pigtail Trunk Extension Cable, 75 FT	DFUPT-XL3X4T2F22.	75.0 ft 22860 mm						
Trunk Extension Cable, 5 FT	DFUET-4T2M4T2F1.5	5.0 ft 1524 mm			Screw Lock Male M12 4-pin	Screw Lock Female M12 4-pin		
Trunk Extension Cable, 12 FT	DFUET-4T2M4T2F3.6	12.0 ft 3658 mm						
Trunk Termination Cable with Ground, 3.5 FT	DFUTG-4T2M3T2F1.0	42.0 in 1064 mm				Screw Lock Female M12 3-pin		
Trunk Termination Cable without Ground, 3.5 FT	DFUTT-4T2M3T2F1.0	42.0 in 1064 mm						
Dimming Adapter Cable, M12 Screw Lock to M16 Push Lock	ACA-XXU3P6FT2M0.1	6.0 in 152 mm			Screw Lock Male M12 3-pin	Push Lock Female M16 3-pin		
Dimming Adapter Cable, M12 Screw Lock to M16 Screw Lock	ACA-XXU3T6FT2M0.1	6.0 in 152 mm				Screw Lock Female M16 3-pin		

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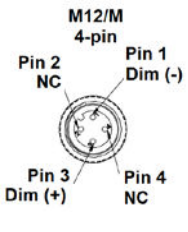
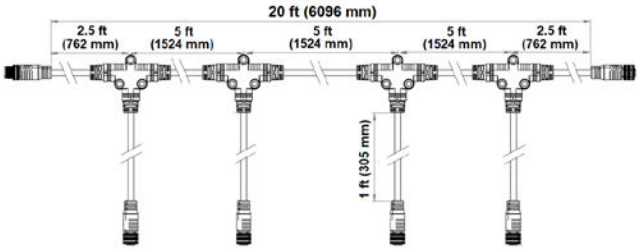
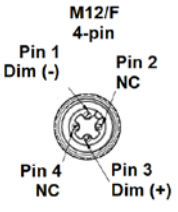
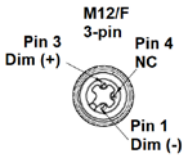
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PACKAGE INFORMATION

Description	Regional Commercial Code (RCC)	Ordering PN 12NC	Carton QTY	Weight	Length	Width	Height	HTS Tariff Code
4-T Branch Dimming Cable, 20 FT Trunk, 1 FT Drop	DFU4T-4T2M3T2F6.0S	9124 017 01727	1	3.92 lb 1.78 kg	16.0″ 40.7 cm	10.5″ 26.7 cm	1.5″ 3.9 cm	8536.69.8000
	DFU4T-4T2M3T2F6.0B	9124 016 56184	5	19.18 lb 8.70 kg	13.5″ 34.3 cm	13.0″ 33 cm	9.0″ 22.9 cm	
1-T Branch Dimming Cable, 5 FT Trunk, 1 FT Drop	DFU1T-4T2M3T2F1.5S	9124 017 01726	1	0.71 lb 0.32 kg	16.0″ 40.7 cm	10.5″ 26.7 cm	1.5″ 3.9 cm	
	DFU1T-4T2M3T2F1.5B	9124 016 56183	10	6.61 lb 3.00 kg	13.5″ 34.3 cm	13.0″ 33 cm	9.0″ 22.9 cm	
1-T Branch Dimming Cable, 10 FT Trunk, 1 FT Drop	DFU1T-4T2M3T2F3.0S	9124 017 01725	1	1.52 lb 0.69 kg	16.0″ 40.7 cm	10.5″ 26.7 cm	1.5″ 3.9 cm	
	DFU1T-4T2M3T2F3.0B	9124 016 56182	5	7.28 lb 3.30 kg	13.5″ 34.3 cm	13.0″ 33 cm	9.0″ 22.9 cm	
Pigtail Trunk Extension Cable, 5 FT	DFUPT-XL3X4T2F1.5S	9124 017 01731	1	0.37 lb 0.17 kg	16.0″ 40.7 cm	10.5″ 26.7 cm	1.5″ 3.9 cm	
	DFUPT-XL3X4T2F1.5B	9124 016 56188	10	3.53 lb 1.60 kg	13.5″ 34.3 cm	13.0″ 33 cm	9.0″ 22.9 cm	
Pigtail Trunk Extension Cable, 75 FT	DFUPT-XL3X4T2F22.S	9124 017 01730	1	4.56 lb 2.07 kg	15.5″ 39.4 cm	5.0″ 12.7 cm	15.5″ 39.4 cm	
	DFUPT-XL3X4T2F22.B	9124 016 56187	3	11.49 lb 5.21 kg	13.5″ 34.3 cm	13.0″ 33 cm	9.0″ 22.9 cm	
Trunk Extension Cable, 5 FT	DFUET-4T2M4T2F1.5S	9124 017 01733	1	0.40 lb 0.18 kg	16.0″ 40.7 cm	10.5″ 26.7 cm	1.5″ 3.9 cm	
	DFUET-4T2M4T2F1.5B	9124 016 56190	10	3.75 lb 1.7 kg	13.5″ 34.3 cm	13.0″ 33 cm	9.0″ 22.9 cm	
Trunk Extension Cable, 12 FT	DFUET-4T2M4T2F3.6S	9124 017 01732	1	0.88 lb 0.40 kg	16.0″ 40.7 cm	10.5″ 26.7 cm	1.5″ 3.9 cm	
	DFUET-4T2M4T2F3.6B	9124 016 56189	5	3.86 lb 1.75 kg	15.5″ 39.4 cm	5.0″ 12.7 cm	15.5″ 39.4 cm	
Trunk Termination Cable with Ground, 3.5 FT	DFUTG-4T2M3T2F1.0S	9124 017 01736	1	0.33 lb 0.15 kg	16.0″ 40.7 cm	10.5″ 26.7 cm	1.5″ 3.9 cm	
	DFUTG-4T2M3T2F1.0B	9124 016 56193	10	3.09 lb 1.40 kg	15.5″ 39.4 cm	5.0″ 12.7 cm	15.5″ 39.4 cm	
Trunk Termination Cable without Ground, 3.5 FT	DFUTT-4T2M3T2F1.0S	9124 017 01734	1	0.33 lb 0.15 kg	16.0″ 40.7 cm	10.5″ 26.7 cm	1.5″ 3.9 cm	
	DFUTT-4T2M3T2F1.0B	9124 016 56191	10	3.09 lb 1.40 kg	15.5″ 39.4 cm	5.0″ 12.7 cm	15.5″ 39.4 cm	
Dimming Adapter Cable, M12 Screw Lock to M16 Push Lock	ACA-XXU3P6FT2M0.1S	9124 017 01728	1	0.30 lb 0.14 kg	16.0″ 40.7 cm	10.5″ 26.7 cm	1.5″ 3.9 cm	
	ACA-XXU3P6FT2M0.1B	9124 016 56186	20	3.75 lb 1.70 kg	15.5″ 39.4 cm	5.0″ 12.7 cm	15.5″ 39.4 cm	
Dimming Adapter Cable, M12 Screw Lock to M16 Screw Lock	ACA-XXU3T6FT2M0.1S	9124 017 01729	1	0.21 lb 0.095 kg	16.0″ 40.7 cm	10.5″ 26.7 cm	1.5″ 3.9 cm	
	ACA-XXU3T6FT2M0.1B	9124 016 56185	20	5.51 lb 2.50 kg	15.5″ 39.4 cm	5.0″ 12.7 cm	15.5″ 39.4 cm	

MECHANICAL DRAWINGS

Regional Commercial Code (RCC)	Pin Config. Input Connector	Mechanical Drawing	Pin Config. Output Connector	Pin Config. T-Drop Connector
DFU4T-4T2M3T2F6.0				

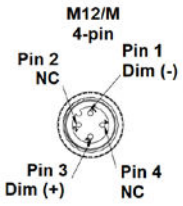
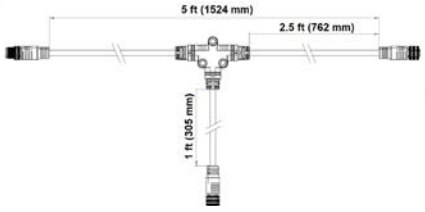
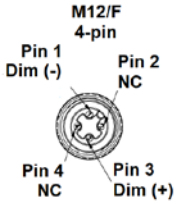
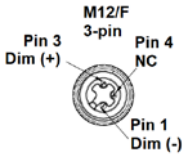
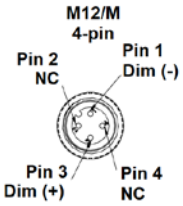
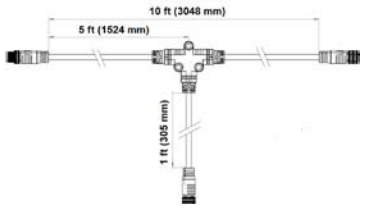
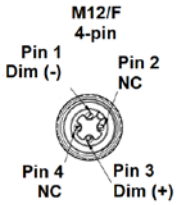
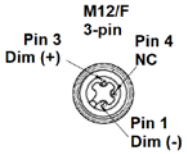
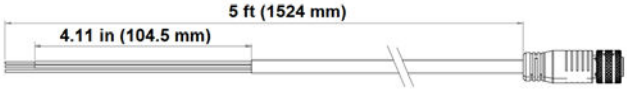
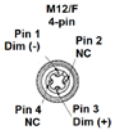
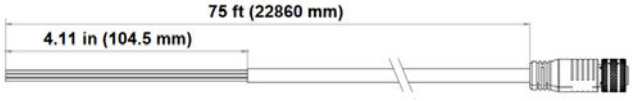
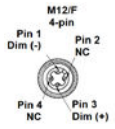
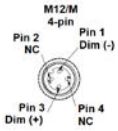
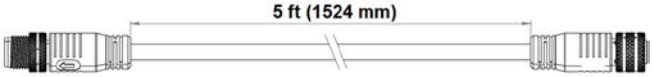
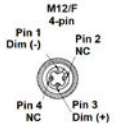
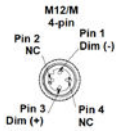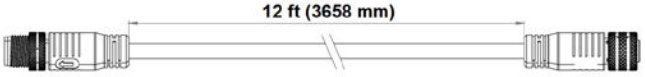
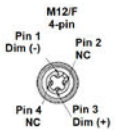
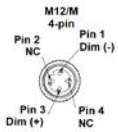
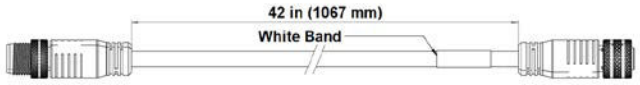
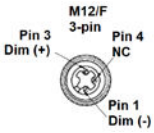
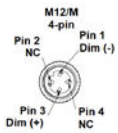
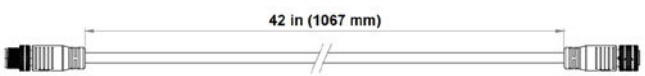
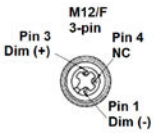
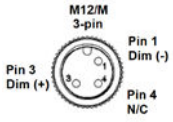
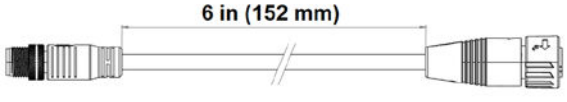
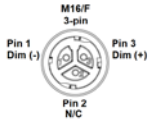
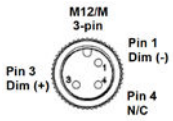
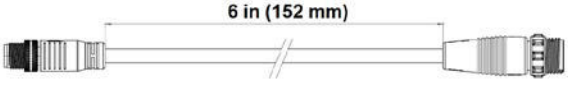
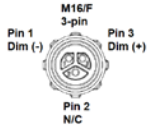
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DIM FLEX WIRING SYSTEM
Americas (M12 1-Channel)

MECHANICAL DRAWINGS

Regional Commercial Code (RCC)	Pin Config. Input Connector	Mechanical Drawing	Pin Config. Output Connector	Pin Config. T-Drop Connector
DFU1T-4T2M3T2F1.5				
DFU1T-4T2M3T2F3.0				
DFUPT-XL3X4T2F1.5	Red = Dim (+) Black = Dim (-) Bare Wire = Drain			N/A
DFUPT-XL3X4T2F22.	Red = Dim (+) Black = Dim (-) Bare Wire = Drain			N/A
DFUET-4T2M4T2F1.5				N/A
DFUET-4T2M4T2F3.6				N/A
DFUTG-4T2M3T2F1.0				N/A
DFUTT-4T2M3T2F1.0				N/A
ACA-XXU3P6FT2M0.1				N/A
ACA-XXU3T6FT2M0.1				N/A

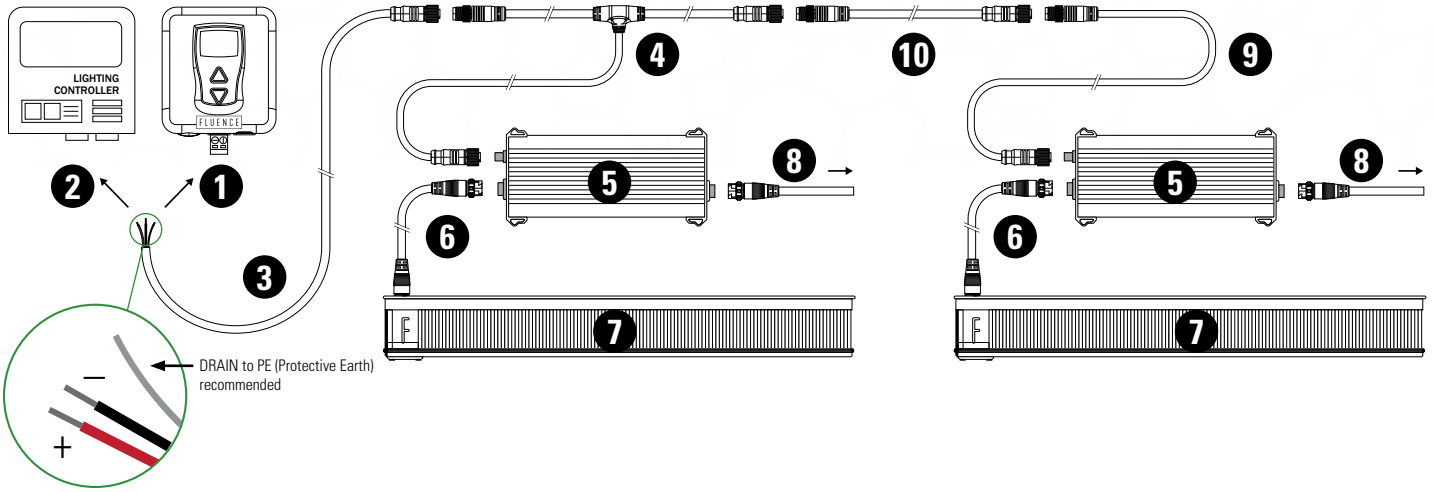
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DIM FLEX WIRING SYSTEM
Americas (M12 1-Channel)

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WIRING DIAGRAM: 0-10V Dimmer Channel to Multiple Fluence LED Light Fixtures



COMPONENTS

1. Fluence Dimmer (DM2AA-1CC2TBMTAP)
2. Third Party Light Controller/Dimmer
3. DIM Flex Pigtail Trunk Extension
   5 FT (DFUPT-XL3X4T2F1.5) or
   75 FT (DFUPT-XL3X4T2F22.)
4. DIM Flex T-Connector Cable to Light Fixture
   1-T 5 FT (DFU1T-4T2M3T2F1.5) or
   1-T 10 FT (DFU1T-4T2M3T2F3.0) or
   4-T 20 FT (DFU4T-4T2M3T2F6.0)
5. Power Supply for Light Fixture
6. DIM Power Extension Cable to Light Fixture
7. Light Fixture
8. AC Power Cable to Power Supply
9. DIM Flex Trunk Termination to last Light Fixture
   WITH Shield Ground (DFUTG-4T2M3T2F1.0) or
   WITHOUT Shield Ground (DFUTT-4T2M3T2F1.0)
10. DIM Flex Trunk Extension
    5 FT (DFUET-4T2M4T2F1.5) or
    12 FT (DFUET-4T2M4T2F3.6)

Need assistance or have questions? Fluence will design your DIM Flex Dimming Wiring System layout for you!

Contact us at: **support@fluence-led.com**

Maximum Quantity Connected Light Fixtures (per branch)	Maximum Distance First to Last Light Fixtures (per branch)
Up to 50 Light Fixtures	200-300 ft 61-91.5 m

NOTES

A. Connector Adapter (ACA-XXU3P6FT2M0.1) is required for PSU1 or PSE2 Power Supply with an M16 Push Lock dimming port.

B. Connector Adapter (ACA-XXU3T6FT2M0.1) is required for RAZR 234, RAY, SPYDRx, and SPYDRx PLUS.

C. Refer to 3rd Party controller/dimmer manufacturer specifications and installation instructions for wiring details when using a controller/dimmer other than by Fluence.

D. The maximum quantity is up to 50 connected light fixtures per branch. The rated mA capacity of the light controller/dimmer used may support less fixtures per branch. Please refer to the light controller/dimmer specifications for the application.

E. A single point of shield grounding to earth is recommended. This is accomplished by installing a grounded termination cable (DFUTG-4T2M3T2F1.0) to the last fixture in the channel (see # 9). Only the DIM (+) and DIM (-) wires are connected at the leader cable, and the drain wire of the leader cable must be cut. If the ungrounded termination cable (DFUTT-4T2M3T2F1.0) is used, then connect the drain wire of the leader cable to PE (Protective Earth).

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