

FLEX NEON UDF7 BENDS UP/DOWN 0.7" FLAT LENS

24VDC INDOOR / OUTDOOR TRUCOLOR™ RGBTW

DESIGNED BY GREGORY KAY | ASSEMBLED IN AMERICA

REV 07.21.25



DESCRIPTION

UDF7 Flex Neon Bends UP and Down using a 0.7" wide Flat lens that can be surface or flush-mounted. Flex Neon offers superior color quality and performance while creating uniform illumination without pixelation. The **(W)** is an IP67 rated wet location fixture featuring watertight barrel connections. The **(S)** Seamless (for continuous, seamless runs), is rated for Indoor Damp Locations ONLY and uses class 2 bare wire connectors. Flex Neon is offered with both indoor and wet-rated junction boxes sold separately, which include a Pure Smart/WiZ Pro Bridgebox allowing for 5-Channel, full color, wireless control of the TruColor™ **RGBTW** Light Engine with the WiZ Pro Software Suite or Pure Smart Wi-Fi Room Controller (sold separately). Remote Power Supply is required and sold separately. Intended for use with the PSBR Power Supply for Remote Bridgebox (PSBR-96W-24VDC sold separately). Pure Smart TruColor™ technology uses five channels of tunable LEDs, composed of **RGBTW** red, blue, green, and Tunable White (**1500K-6500K**). With our precision-engineered, proprietary color mixing, we produce one of the widest, most accurate spectrums available, giving our customers access to the warm glow of the sunset (1500K-2400K golden hour) to the pure white light of the mid-day sun (5700K) and everything in between. TruColor™ LED's achieve an average CRI-Color Rendering Index of 94+ and a Duv of +0.0021 in relation to the blackbody curve at any point on the spectrum of tunable white CCT. Let TruColor™ transform your space and the people within it. Click here for all [Other Color Temperatures](#). Includes a 5-year pro-rated warranty. For custom quotes and layout assistance, send your drawings and ideas to our design team: design@PureEdgeLighting.com.

SPECIFICATIONS

DIMENSIONS	Height: 0.5" Width 0.6" (TOP) 0.7" (BOTTOM)
LUMEN PERFORMANCE	303lm/ft 7W @3000K
INPUT	5" wire leads, Remote 24VDC Power Supply (sold separately)
POWER CONSUMPTION	5W5: 5W RGB & 5W Tunable White 5 watts/ft maximum 5W7: 5W RGB & 7W Tunable White 7 watts/ft maximum
COMPLIANCE	Class 2 Wet Listed with water-tight Barrel Connectors, IP67. ETL/UL, RoHS
POWER SUPPLY	PSBR-96W-24VDC Power Supply for Remote Bridgebox (sold separately)
ORDERING INCREMENTS	3"
MAX LENGTH	5W5 – Pure Smart™ WiZ Pro: 20ft 5W7 – Pure Smart™ WiZ Pro: 12ft
BENDING	4" Minimum Radius
MOUNTING	Clips included every 12"
MATERIAL	UV Resistant PVC
OPERATING TEMPERATURE	-4° F (-20° C) to 122° F (+50° C)
AVERAGE LED LIFE	50,000 hrs
WARRANTY	5 years

REMOTE POWER SUPPLIES, BRIDGEBOXES, DIMMERS & CONTROLS (SOLD SEPARATELY)

24VDC, Class 2 wiring

- [Home Integration Solutions](#)

OUTDOOR/WET LOCATION

- Pure Smart™ WiZ Pro [Power Supplies](#) & [Smart Controls](#)

See page 8 for Outdoor Bridgebox (BR-JBC-96W-WZ-TCXXX-W-FN)

INDOOR

- Pure Smart™ WiZ Pro [Power Supplies](#) & [Smart Controls](#)

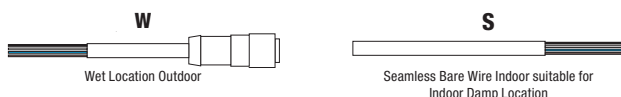
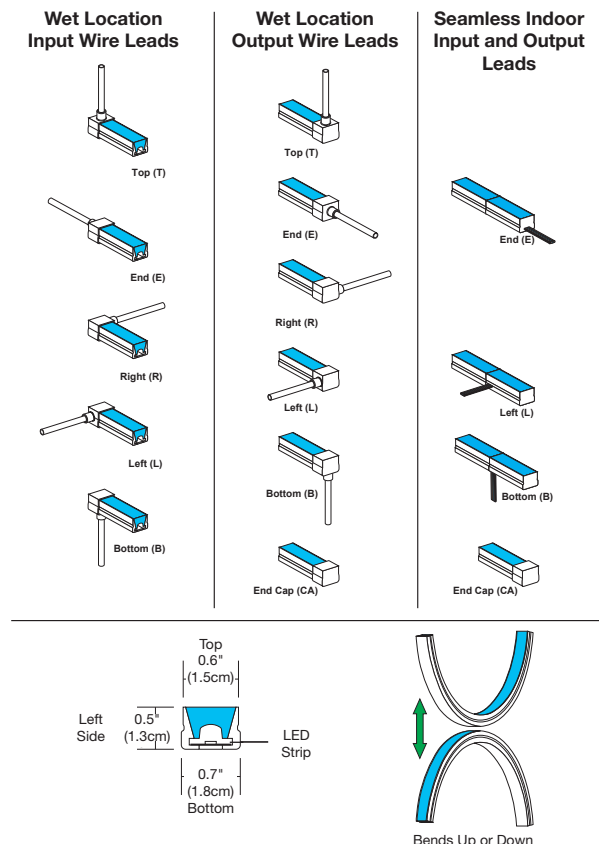
See page 7 for Outdoor Bridgebox (C-1RE4G-96W-WZ-TCXXX-FN)

Pure Smart™ PSBR Power Supply for Remote Bridgebox is developed to support Pure Smart TC TruColor RGBTW luminaires connected by WiZ Pro.

APPLICATIONS

Designed for indoor **(S)** and outdoor **(W)** wet locations. Ideal applications include coves, toe-kick lighting, pathways, steps, music venues, media rooms, and accent lighting.

For quick & easy reference, plus the most up-to-date pricing, use our [Flex Neon UDF7 Configurator](#)



PROJECT		FIXTURE TYPE		DATE	
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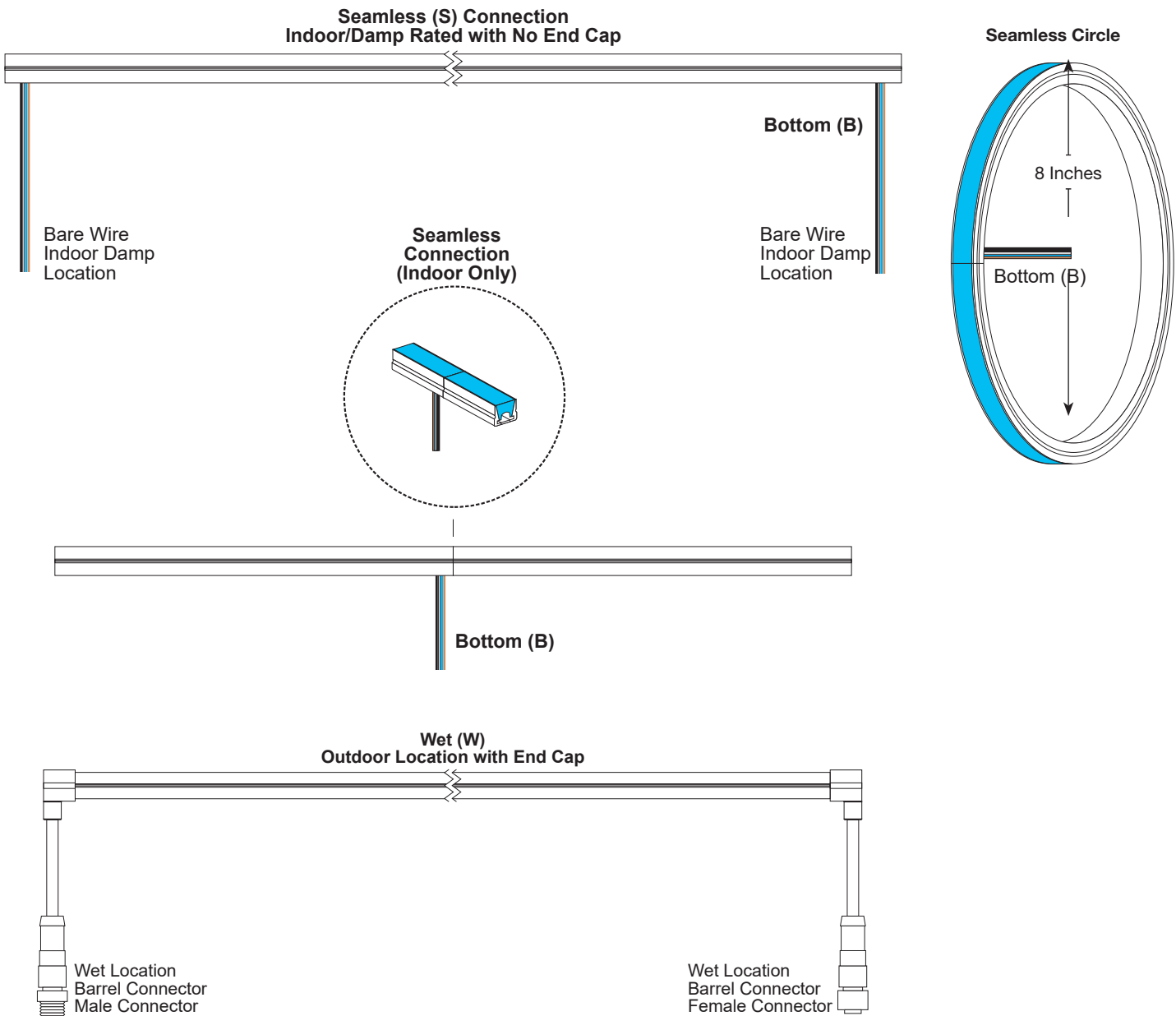
FLEX NEON UDF7 BENDS UP/DOWN 0.7" FLAT LENS

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System	Viewing Angle Model Shape	Wattage	Length in Inches	Color Temperature	5" Input Wire Feed	5" Output Wire	Environment
FN	UDF7	5W5	120	TC	E	L	W
FN Flex Neon 24V	UDF7 Up or Down Bend Flat 0.7"x 0.75"	5W5 5 watts RGB & 5 watts Tunable White 5W7 5 watts RGB & 7 watts Tunable White	6-240"(20' max for 5W5) 6-144"(12' max for 5W7)	TC TruColor™ RGBTW Red, Green, Blue & Tunable White 1500K-6500K	T Top Power Input Wire E* End Power Input Wire L* Left Power Input Wire R Right Power Input Wire B* Bottom Power Input Wire	T Top Wire Lead Out E* End Wire Lead Out L* Left Wire Lead Out R Right Wire Lead Out B* Bottom Wire Lead Out CA Cap at end for wet located, no feed through wire for seamless	S Seamless Indoor/Damp location bare wire leads Bottom and Left Feed Only W Outdoor wet location Barrel Connector cable leads
*Seamless indoor: E, L, B & CA Only **Indoor Seamless: No output feed wire							

Drawings: Flex Neon UDF7

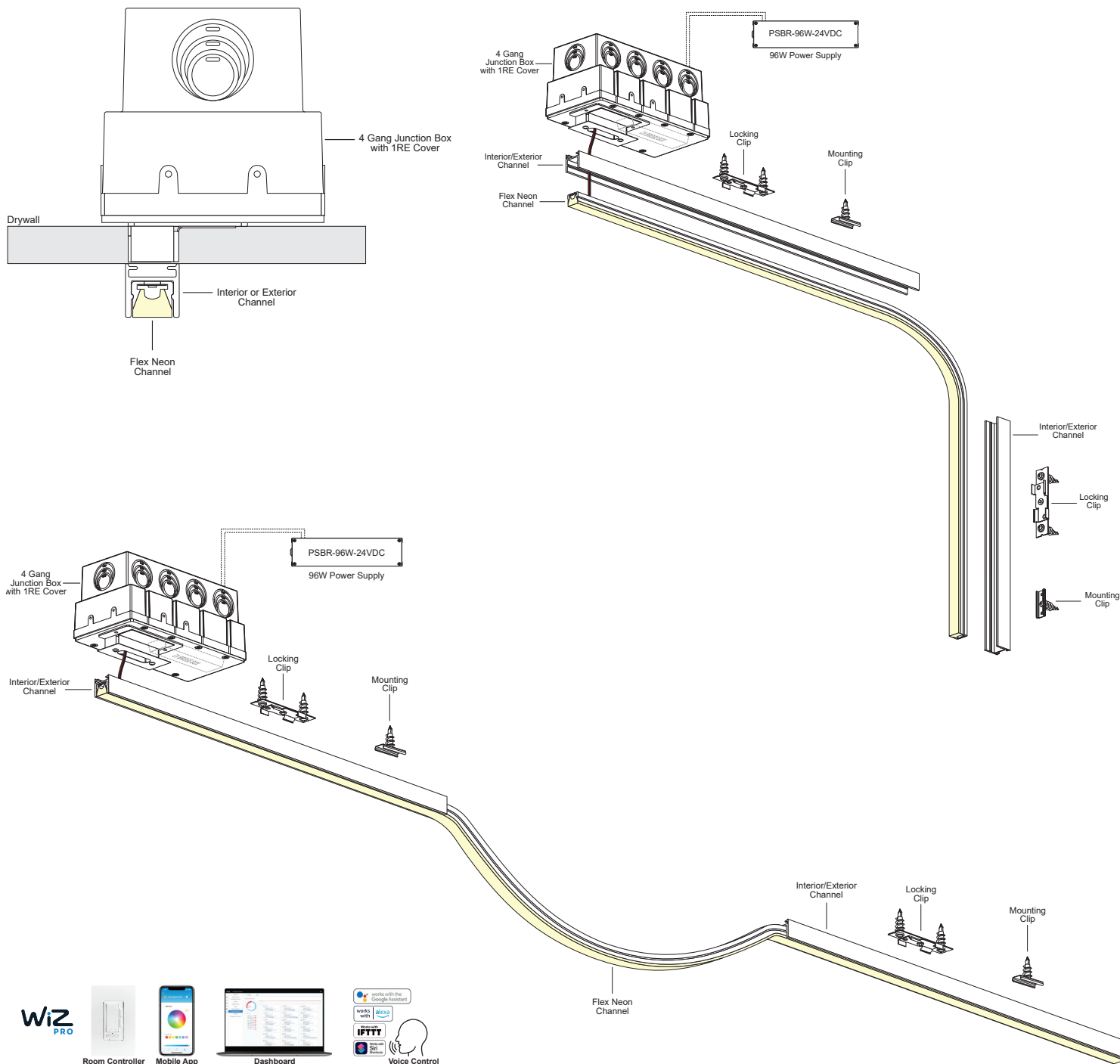
Seamless Connectors are ideal for indoor projects that have multiple segments of Flex Neon but need to look like a continuous run/fixture. Two (E) Endfeeds can not be seamless. Are assembled in the factory – fixtures ready to use.



FLEX NEON UDF7 BENDS UP/DOWN 0.7" FLAT LENS

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Drawings: Exploded View for Flexible Aluminum Channel with 1RE J-box



PROJECT		FIXTURE TYPE		DATE	
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FLEX NEON UDF7 BENDS UP/DOWN 0.7" FLAT LENS

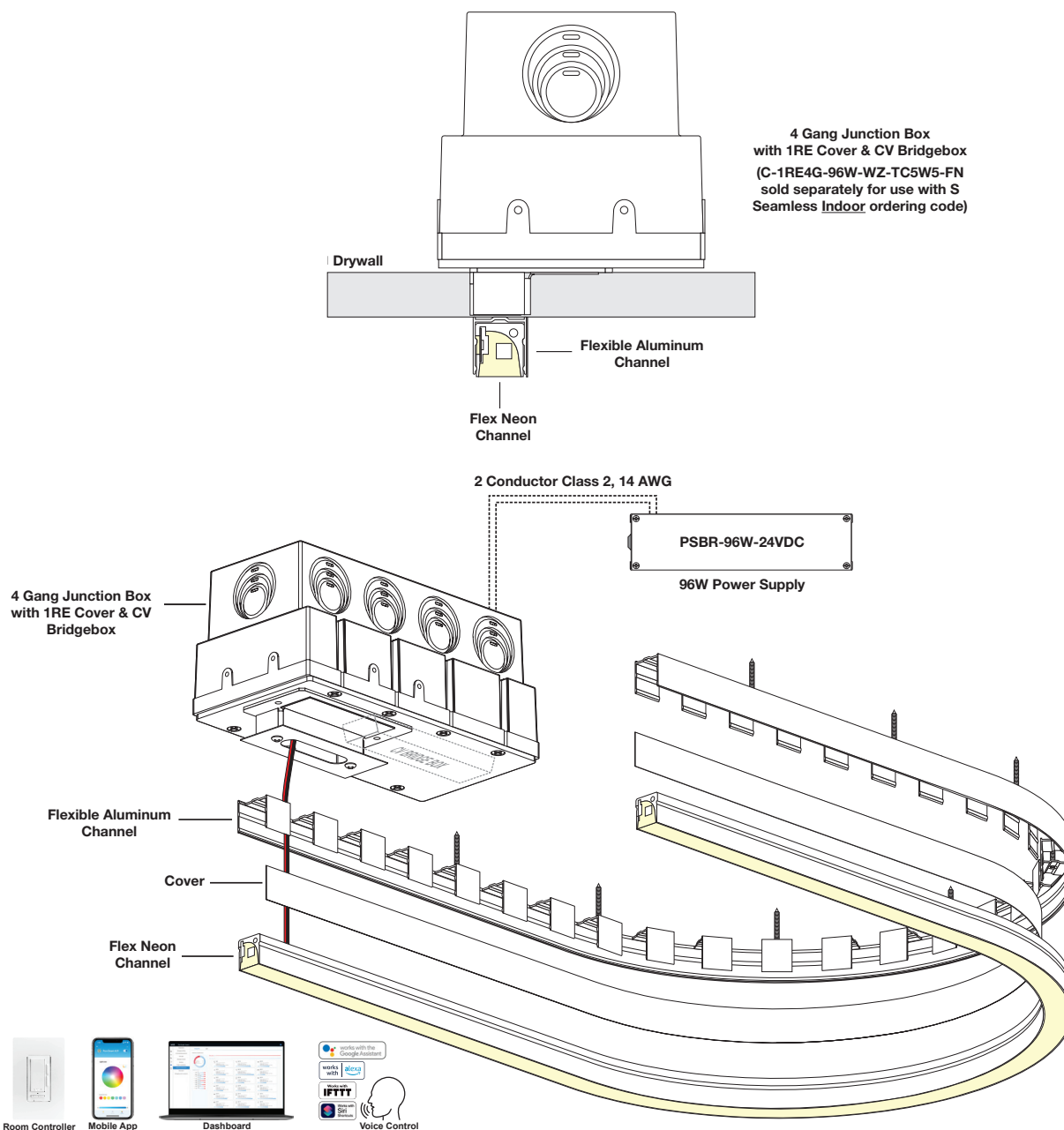
24VDC INDOOR / OUTDOOR TRUCOLOR™ RGBTW

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NOMINAL DELIVERED LUMENS

DESCRIPTION	5W 5W RGB & 5W TUNABLE WHITE									5W 5W RGB & 7W TUNABLE WHITE								
WATTS PER FOOT	5W Tunable White									7W Tunable White								
COLOR TEMPERATURE	20K	22K	24K	27K	30K	35K	40K	57K	65K	20K	22K	24K	27K	30K	35K	40K	57K	65K
LUMENS PER FOOT (lm/ft)	96	143	174	195	202	213	230	161	149	118	197	253	287	295	310	304	178	162
LUMENS PER WATT (lm/w)	35	32	40	46	47	49	55	55	62	35	51	41	48	48	50	52	52	54
CRI	91.8	93.8	94.5	94.9	95.5	96.9	97.2	92.1	89.8	93	95	96	97	97	98	97	95	93
Duv	-0.0040	-0.0012	-0.0034	-0.0058	-0.0055	-0.0033	-0.0014	-0.0049	-0.0063	-0.003	0.0002	0.003	0.003	0.003	0.0009	0	0.003	0.003
Rf	90	90	90	94	97	97	91	81	70	91	90	90	94	95	93	93	79	67
Rg	91	93	94	94	95	94	94	92	90	92	93	95	95	95	95	94	92	91
R9	105	101	103	105	104	102	100	102	103	104	100	102	103	103	101	100	102	103
R13	92	94	95	95	94	96	99	90	87	92	95	96	96	97	99	99	91	88
R15	99	99	99	98	97	97	97	89	85	99	99	99	99	99	98	97	90	85
WATTS/FOOT	2.7	4.55	4.35	4.25	4.25	4.35	4.2	2.95	2.4	3.35	3.85	6.15	5.95	6.15	6.15	5.84	3.45	3

Drawings: Exploded View for Flexible Aluminum Channel with 4 Gang Jbox



PROJECT		FIXTURE TYPE		DATE	
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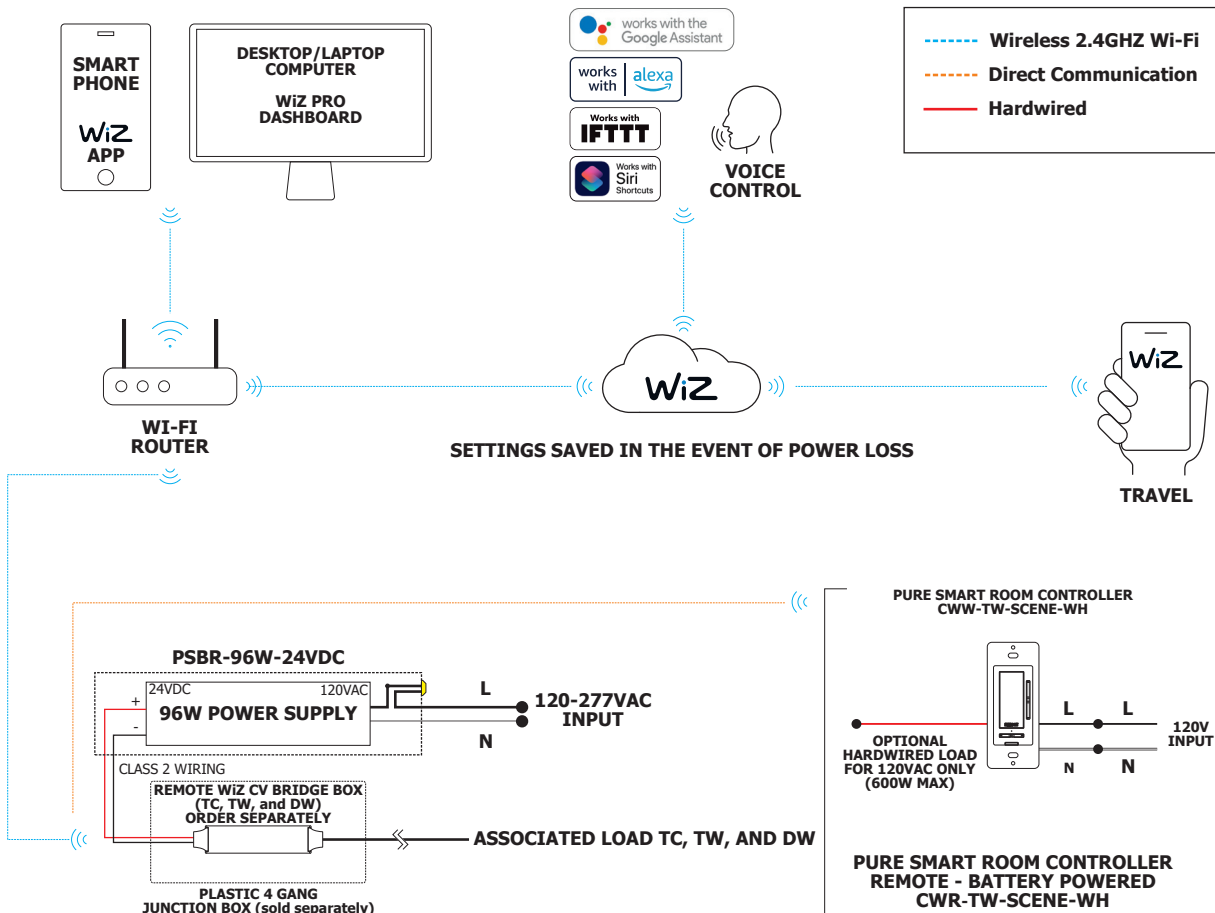
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LENGTH CHART Actual lengths for Flex Neon UDF7

LENGTH CHART - RGBTW											
Ordering Code (Nominal Size)	Actual Length	Ordering Code (Nominal Size)	Actual Length	Ordering Code (Nominal Size)	Actual Length	Ordering Code (Nominal Size)	Actual Length	Ordering Code (Nominal Size)	Actual Length	Ordering Code (Nominal Size)	Actual Length
6	6.75	75	75.75	138	138.75	207	207.75	276	276.75	345	345.75
9	9.75	78	78.75	141	141.75	210	210.75	279	279.75	348	348.75
12	12.75	81	81.75	144	144.75	213	213.75	282	282.75	351	351.75
15	15.75	68	67.95	147	147.75	216	216.75	285	285.75	354	354.75
18	18.75	70	70.35	150	150.75	219	219.75	288	288.75	357	357.75
21	21.75	84	84.75	153	153.75	222	222.75	291	291.75	360	360.75
24	24.75	87	87.75	156	156.75	225	225.75	294	294.75	363	363.75
27	27.75	90	90.75	159	159.75	228	228.75	297	297.75	366	366.75
30	30.75	93	93.75	162	162.75	231	231.75	300	300.75	369	369.75
33	33.75	96	96.75	165	165.75	234	234.75	303	303.75	372	372.75
36	36.75	99	99.75	168	168.75	237	237.75	306	306.75	375	375.75
39	39.75	102	102.75	171	171.75	240	240.75	309	309.75	378	378.75
42	42.75	105	105.75	174	174.75	243	243.75	312	312.75	381	381.75
45	45.75	108	108.75	177	177.75	246	246.75	315	315.75	384	384.75
48	48.75	111	111.75	180	180.75	249	249.75	318	318.75	387	387.75
51	51.75	114	114.75	183	183.75	252	252.75	321	321.75	390	390.75
54	54.75	117	117.75	186	186.75	255	255.75	324	324.75	393	393.75
57	57.75	120	120.75	189	189.75	258	258.75	327	327.75	396	396.75
60	60.75	123	123.75	192	192.75	261	261.75	330	330.75	399	399.75
63	63.75	126	126.75	195	195.75	264	264.75	333	333.75	402	402.75
66	66.75	129	129.75	198	198.75	267	267.75	336	336.75	405	405.75
69	69.75	132	132.75	201	201.75	270	270.75	339	339.75	408	408.75
72	72.75	135	135.75	204	204.75	273	273.75	342	342.75	411	411.75

INDOOR WIRING DIAGRAMS



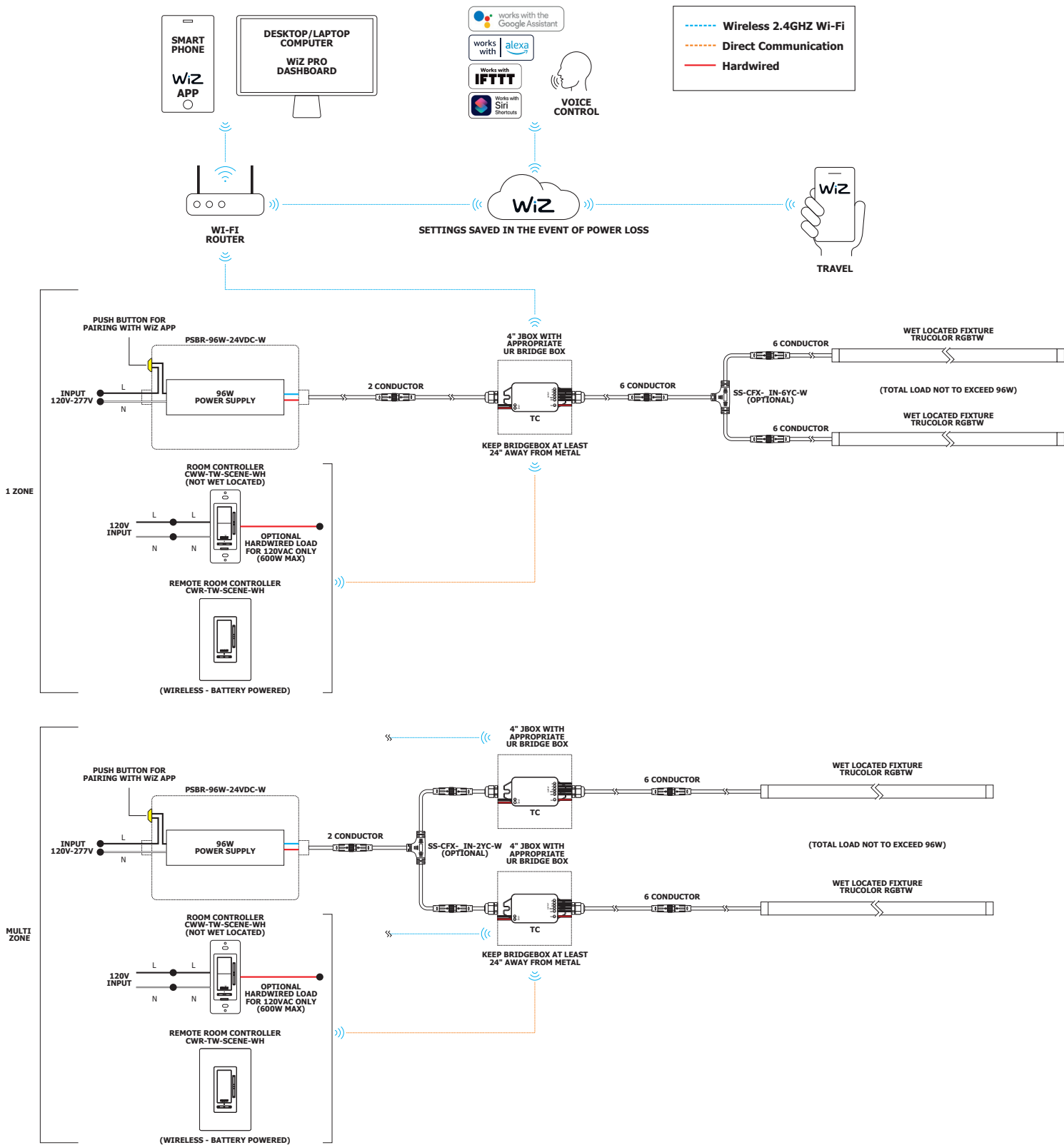
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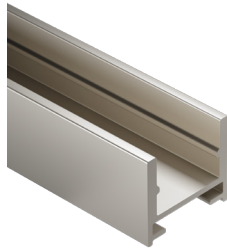
OUTDOOR WIRING DIAGRAMS



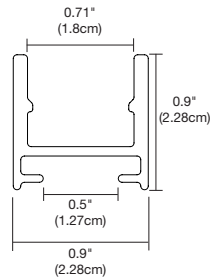
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FLEX NEON UDF7 ACCESSORIES AND J-BOXES

24VDC INDOOR / OUTDOOR TRUCOLOR™ RGBTW



EXT.7 Light Channel



INTERIOR OR EXTERIOR CHANNEL

Interior or exterior channel features an aluminum extrusion with mounting clips included every 2ft. Available in length up to 10ft long and may be cut at the job site.

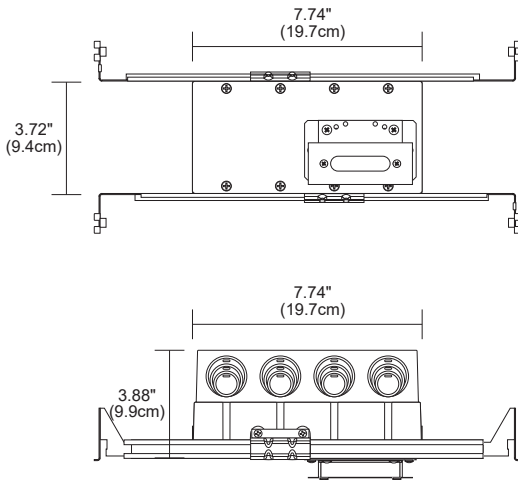
Product	Length	Finish
EXT.7	10FT	SA
EXT.7 Extrusion 0.7" Wide	4FT 4 Feet 5FT 5 Feet 8FT 8 Feet 10FT 10 Feet	SA Satin Aluminum WH White



FLEXIBLE 3D CHANNEL

Flexible 3D Channel is designed to flex up/down and left right. Surface or recessed mounting into wood, brick, cement. The channel can make 4 inch radius 90° turns that follow the form of architectural details and soffits.

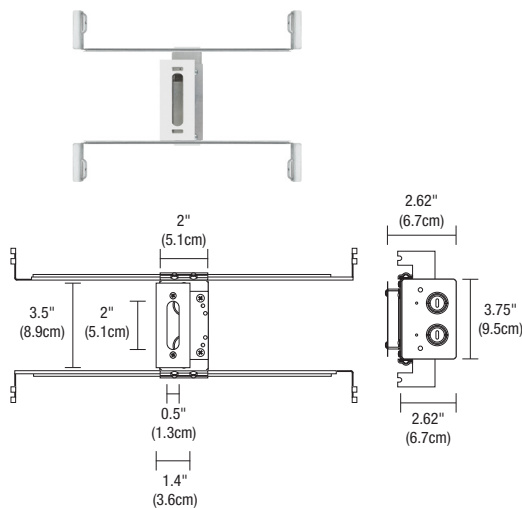
Product	Length	Finish
FX3D-EXT.7	4FT	CH
FX-EXT.7 Flexible Extrusion 0.7" Wide	4FT 4 Feet	CH Chrome



1" RECTANGLE CANOPY WITH 4 GANG JUNCTION BOX AND PURE SMART WIZ PRO CV BRIDGEBOX

The slim profile 1RE Canopy with 4 Gang Junction Box come with adjustable hanger bars and a Pure Smart WiZ Pro CV Bridgebox allowing for 5-channel, wireless control of the TruColor RGBTW Flex Neon Luminaire. Two Class 2, 14 AWG stranded conductors from the Remote Power Supply up to 40 ft away are required.

System	Type	Wattage	Control	Color Temperature	System Code
C	1RE4G	96W	WZ	TC5W5	FN
C Channel	1RE4G 1" Rectangle Canopy with 4 Gang Junction Box	96W 96 Watts	WZ WiZ Pro Connected CV Smart Bridgebox Included	TC5W5 TruColor™ 5 watts RGB & 5 watts Tunable White TC5W7 TruColor™ 5 watts RGB & 7 watts Tunable White	FN Flex Neon



1" RECTANGLE CANOPY & J-BOX

(INCLUDED WITH 1R SELECTED IN FIXTURE ORDERING CODE)

The Slim-Profile Junction Box with Hanger Bars mounts to studs spaced between 14.5" and 25" apart behind drywall. Allows low voltage DC wires from Remote Power Supply to connect to channel wires. The Junction Box opening is covered by the fixture for a clean, safe connection. Includes a Goof Plate, for poor plastering around J-box.

System	Canopy	Product
C	1RE	JBOX
C Channel	1RE 1" Rectangle	JBOX Junction Box

PROJECT		FIXTURE TYPE		DATE	
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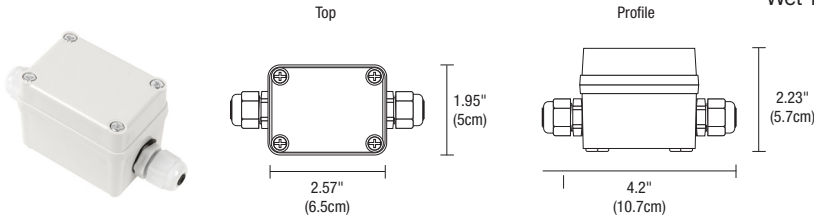
FLEX NEON UDF7 ACCESSORIES AND J-BOXES

24VDC INDOOR / OUTDOOR TRUCOLOR™ RGBTW

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WET LOCATION JUNCTION BOX FOR SPLICING

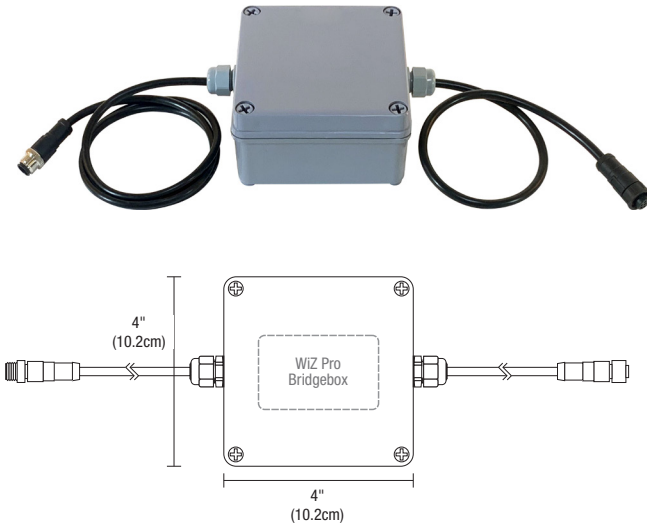
Wet-rated low voltage Splice Box with connectors.



Product	Type	Option
2RE	JBOX	W
2RE 2" Rectangle	JBOX Junction Box	W Wet Location

PURE SMART WET LOCATION JUNCTION BOX WITH 8FT POWER CABLE AND WIZ PRO UR BRIDGEBOX

This watertight Junction Box is especially designed for lighting in wet and damp locations. The Junction Box comes standard with a 8ft of outdoor cable and both male and female barrel connectors providing easy, safe, and reliable connections for 24V low voltage luminaires. Included with the Junction Box is one WiZ Pro type Bridgebox allowing for 5 Channel wireless control of the TruColor RGBTW luminaire. This box is approved for indoor and outdoor usage and complies with all the requirements of UL1241 and the National Electric Code.



Product	Type	Wattage	Controls	Type	Option	System
BR	JBC	96W	WZ	TC5W5	W	FN
BR Bridgebox for LED Soft Strip and Flex Neon	JBC Outdoor Junction Box with two Barrel Connectors, 4 conductor input and 6 conductor output.	96W 96 Watts	WZ Wiz Connected Bridgebox Included	TC5W5 5 Watts RGB & 5 Watts Tunable White TC5W7 5 Watts RGB & 7 Watts Tunable White	W Wet Location	FN Flex Neon

DIRECT BURIAL LOCATION CABLE ORDER PER FOOT

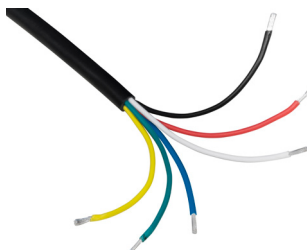
Our Direct Burial, 2 Conductor, 14 Gauge Cable is a durable and adaptable cable suitable for transmitting power, control, and switching in outdoor wet and in ground environments. Keep within 40 ft between fixture and power supply. Cable sold by the foot, simply specify the length needed by the foot.



Product	Gauge	Cable
DB	14G	2C
DB Direct Burial	14G 14 Gauge	2C 2 Conductor

WET AND DAMP LOCATION CABLE ORDER PER FOOT

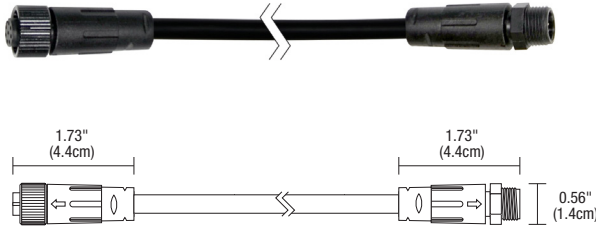
Our Wet Location, 6 Conductor, 14 Gauge Cable is a durable and adaptable cable suitable for transmitting power, control, and switching in indoor and outdoor wet and damp environments. Cable sold by the foot, simply specify the length needed by the foot. Keep within 50 ft between fixture and power supply. Cable sold by the foot, simply specify the length needed by the foot.



Product	Gauge	Cable
OC	14G	6C
OC Outdoor Cable	14G 14 Gauge	6C 6 Conductor

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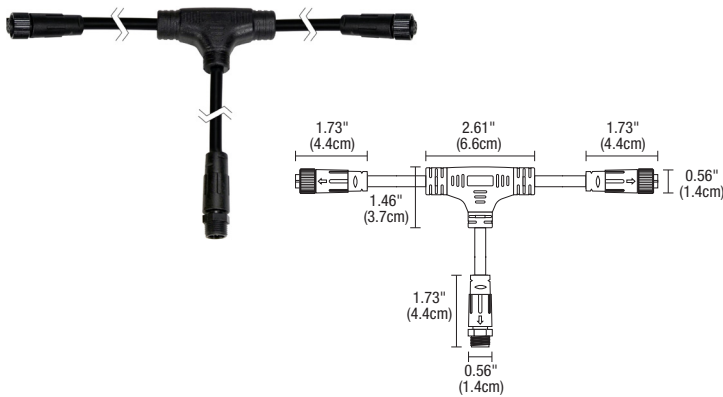


POWER CABLE CONNECTOR WET LOCATION

The flexible power cable connector is designed to work in outdoor environments for safe and reliable connections. This Flexible Connector is easy to install and configure, helping you create innovative lighting designs in an outdoor commercial or residential space.

All Other Color Temperatures

Product	Type	Size	Conductor	Option
SS	CFX	16IN	6C	W
SS Soft Strip and Flex Neon	CFX Flexible Connector	16IN 16" 96IN 96"	6C 6 Conductor	W Wet Location



WET LOCATION T-CONNECTOR

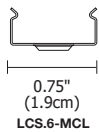
Our Wet Location T-Connector is a robust rugged design especially suited to withstand the challenges of damp and wet environments. This unique T-Connector has one Male and two Female Connectors and is suitable for multiple indoor and outdoor uses. Versatile design is easy to use, making installation quick and efficient.

All Other Color Temperatures

Product	Type	Size	Size	Option
SS	CFX	4IN	6YC	W
SS Soft Strip and Flex Neon	CFX Flexible Connector	4IN 4"	6YC Y-Shape 6 Conductor	W Wet Location



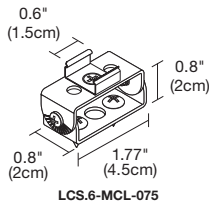
LCS.6-MCL



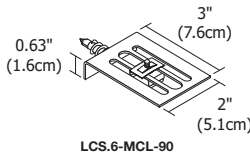
LCS.6-MCL



LCS.6-MCL-075



LCS.6-MCL-075



LCS.6-MCL-90

MOUNTING CLIP WITH NO CHANNEL

LCS.6 mounting clips are provided with every 12" of Flex Neon and may be ordered separately as replacement parts. The LCS.6-MCL-075 rotates Channel up to 75°. LCS.6-MCL-90 mounts Channel at a 90° angle.

System	Product
LCS.6	MCL
LCS.6 Flex Neon Left Right 0.6"	MCL Mounting Clip

FLEX NEON TIE STRAP

Use for mounting to poles for extra support, every 6"-12" (30 per package).



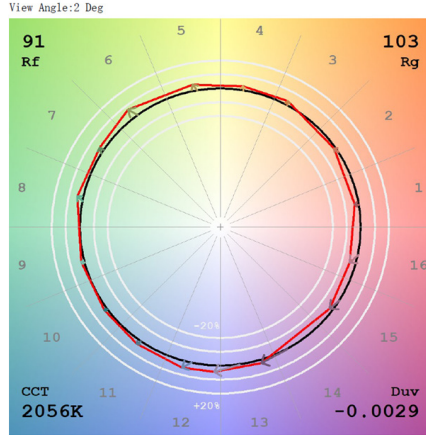
Product	Type
SS	ST
SS LED Flex Neon	ST Tie Strap

OUTDOOR TM30 DATA

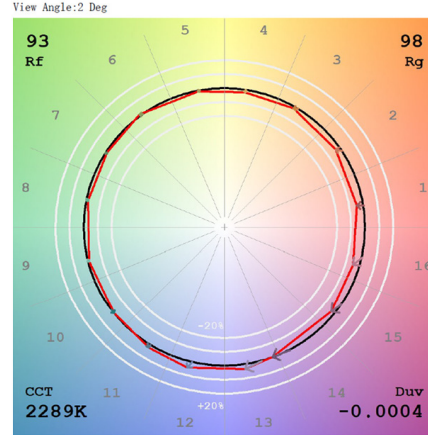
24VDC INDOOR / OUTDOOR TRUCOLOR™ RGBTW

TM-30-15 DATA: The data below is for TruColor™ RGBTW (S5W7) bare LED Strips. Consistent color temperatures throughout a single strip and among multiple strips is possible through a 3 phase binning process in which each order is inspected with a color meter to ensure uniformity.

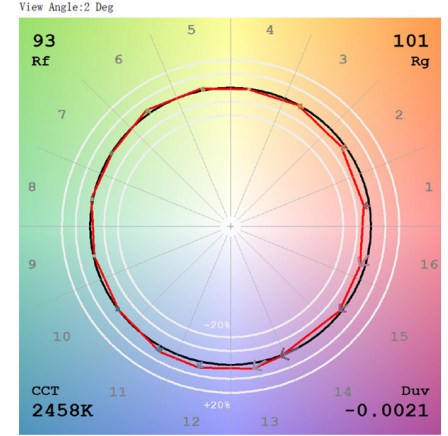
2000K (TruColor™ RGBTW)



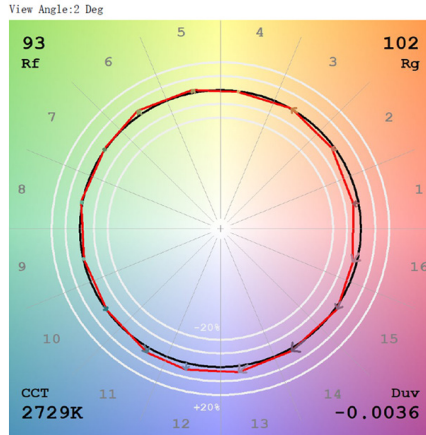
2200K (TruColor™ RGBTW)



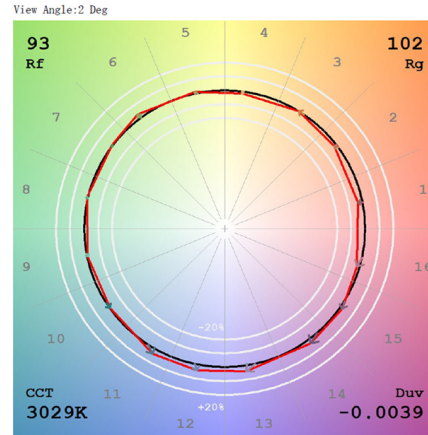
2400K (TruColor™ RGBTW)



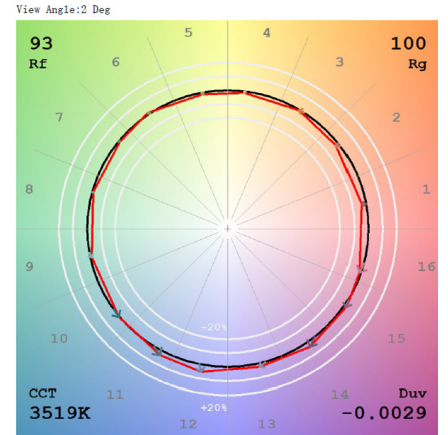
2700K (TruColor™ RGBTW)



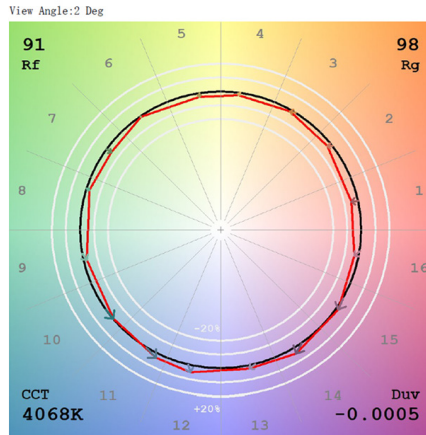
3000K (TruColor™ RGBTW)



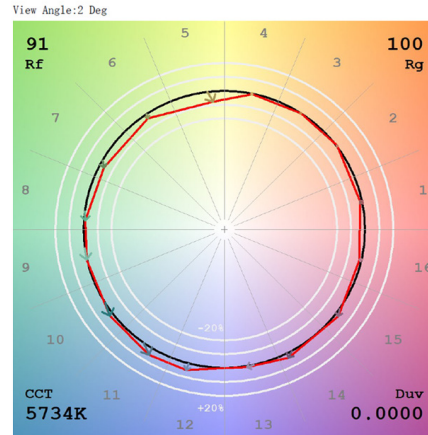
3500K (TruColor™ RGBTW)



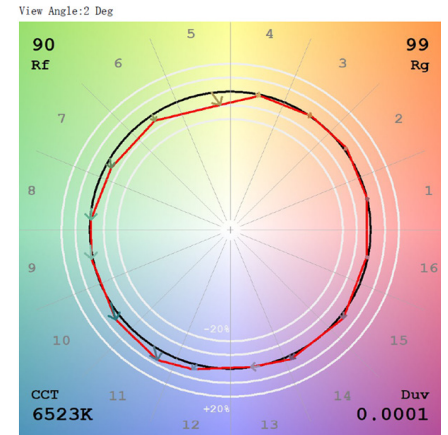
4000K (TruColor™ RGBTW)



5700K (TruColor™ RGBTW)



6500K (TruColor™ RGBTW)



PROJECT		FIXTURE TYPE		DATE	
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