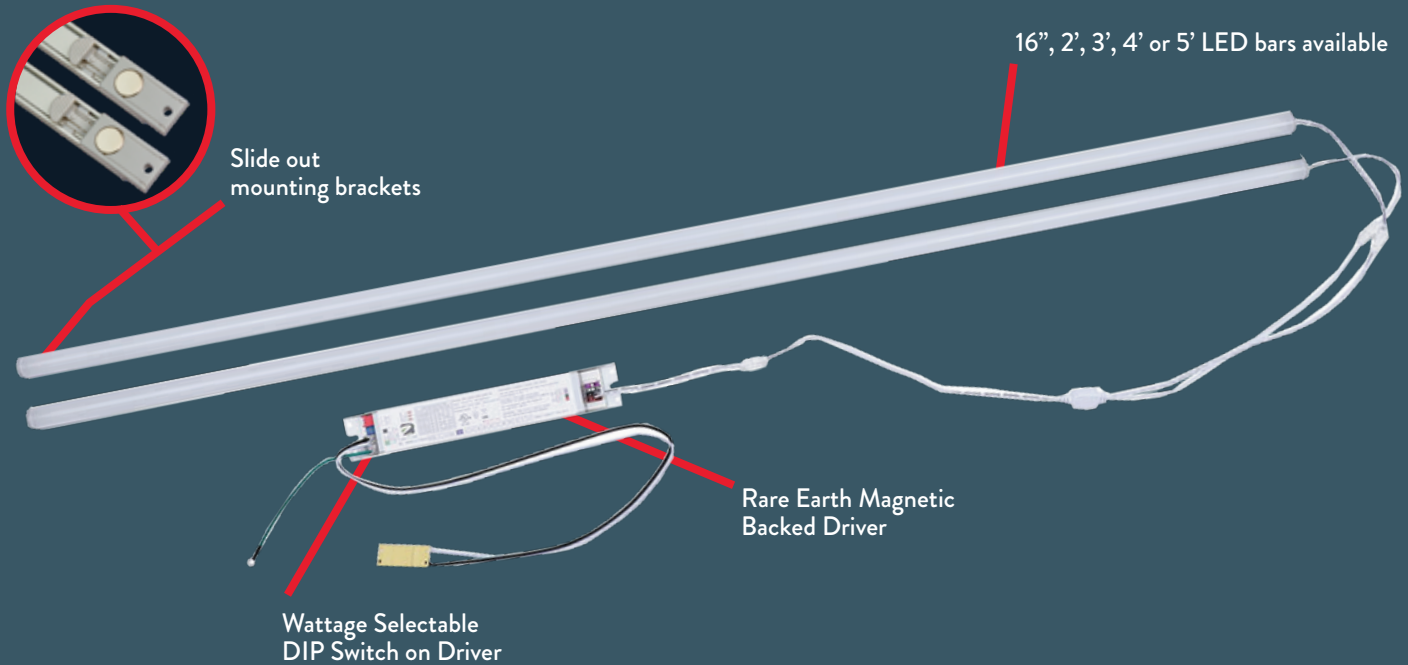




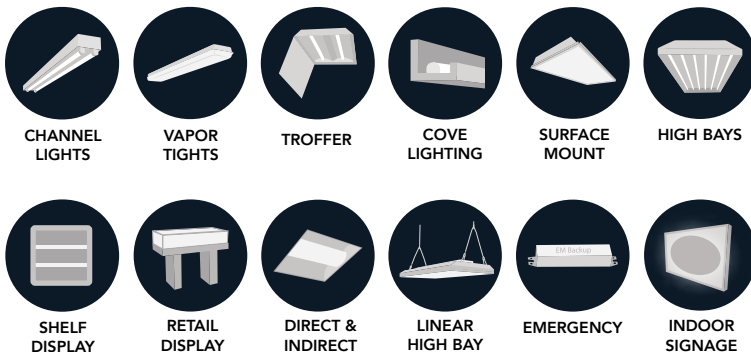
16", 2', 3', 4' and 5' LED Magnetic Retrofit Kits

Magnilumen Plus™ is designed to retrofit fluorescent fixtures with standard 0-10 volt dimming. Kits are easy to install and fit into almost any existing linear fluorescent fixture with onboard magnets.



- **Enhanced Product Flexibility:** Wattage Selectable and Color Selectable (CSK - Color Selectable Kelvin in Retail Packs Only) options allow the end user to adjust lumen output and color temperature to application needs.
- **Ease of Use:** Pre-installed onboard magnets on both bars and driver. Slide out mounting brackets on bars, pre drilled holes on driver for easy screw mount installation. (Self drilling screws included).
- **DLC Listed:** 150 lm/W with frosted lens installed. Maximized energy savings: 170 lm/W with clear lens or 180 lm/W with no lens.

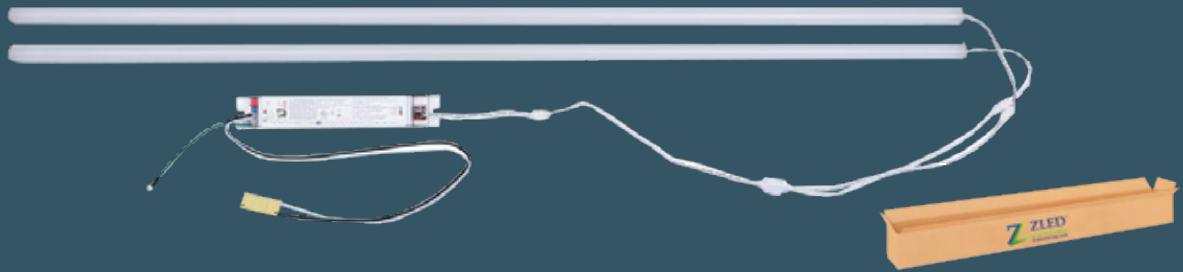
APPLICATIONS



WATTAGE	Wattage selectable drivers
COLOR TEMPS	27K, 30K, 35K, 40K, 50K, 65K, Green, Blue, Orange, Yellow, Red, Amber, Black Light (color selectable in retail pack only)
EFFICACY	150 lm/W with Frosted Lens 170 lm/W with Clear Lens 180 lm/W with No Lens
VOLTAGE INPUT	120/277V
DRIVER OUT VOLTAGE	27-42VDC
CRI	80+ (standard); 90+ (special order)
DIMMING	0-10VDC, (optional: TRIAC, DALI, LUTRON ECOSYSTEM)
AMBIENT TEMP	-20 to 50C; -40 to 122F
SURGE PROTECTION	2KV
RATED	IP20 for damp location
WARRANTY	7 year Magnilumen Standard, 5 year Color, 3 year Black Light
LED LIFESPAN (L70)	100,000 hours Standard Products 50,000 hours Colors
FLICKER	Meets Title 24 Flicker Requirements

KIT OPTIONS

JOB PACK



Magnetic LED bars, selectable magnetic driver, 24" harness, and screws
(27K, 30K, 35K, 40K, 50K, 65K, Green, Blue, Yellow, Orange, Red, Amber, Black Light)

RETAIL PACK



Magnetic LED bars, selectable magnetic driver, 24" harness
with CSK switch (35K, 40K, 50K), and screws

LUMEN OUTPUT



- 150 lm/W with Frosted Lens
- 170 lm/W with Clear Lens
- 180 lm/W with No Lens

WATTAGE SELECTABLE



- Toolless wattage selectable option on driver via DIP switch.

MAXIMUM WATTAGE

- 2 foot: 15W per bar
- 3 foot: 20W per bar
- 4 foot: 30W per bar
- 5 foot: 38W per bar

COLOR TEMPERATURE SELECTABLE STANDARD IN RETAIL PACKS, OPTIONAL IN JOB PACKS



- Toolless color temperature selectable option on harness via switch.
- 35K, 40K, 50K options available.

INSTALLATION MADE EASIER



- Onboard magnets on LED bars, driver and CCT switch designed for quick and easy installation.
- Mounting brackets for screw mounting (where applicable).

JOB PACK PART BUILDER

MRK	# of Bars	Length of Bar	Kit Wattage	Color Temp	PLUS	Options
	1 2 3 4	16 = 16 inches 2 = 2 feet (21.06 inches) 3 = 3 feet (30.91 inches) 4 = 4 feet (42.91 inches) 5 = 5 feet (58 inches)	20 = 20W Driver 30 = 30W Driver 40 = 40W Driver 50 = 50W Driver 60 = 60W Driver 100 = 100W Driver Max wattage per bar by length 16" - 10W Max 2 ft. - 15W Max 3 ft. - 22W Max 4 ft. - 30W Max 5 ft. - 38W Max	27K = 2700K 30K = 3000K 35K = 3500K 40K = 4000K 50K = 5000K 65K = 6500K AMBER-585NM = TURTLE SAFE AMBER NO UV BLACK = BLACK LIGHT ① BLUE = BLUE LED GREEN = GREEN LED ORANGE = ORANGE LED RED = RED LED YELLOW = YELLOW LED AMBER = AMBER LED		90CRI = HIGH CRI AO = AUX 12V OUTPUT AO Drivers - available in 40, 60W BL = MAGNIBLEND CL = CLEAR LENS EM = EMERGENCY BATTERY BACKUP MS = FACTORY SUPPLIED INFRARED (PIR) MOTION SENSOR MV = FACTORY SUPPLIED MICROWAVE MOTION SENSOR NL = NO LENS TR = DRIVER WITH TRIAC DIMMING DALI = Includes DALI 2 Driver LUTRON = Includes Lutron® Hi-Lume® 1% ECOSYSTEM® 3 Wire Driver Consult factory for additional drivers.

Job Pack Box

All Color Bars 2ft and 4ft only.
Black Light 4ft only.

① = Black Light Max Wattages
20W - 4 ft.
Lutron, Hi-Lume and EcoSystem
are all registered trademarks of Lutron
Electronics Co. inc.

2 FOOT RETAIL KIT

150 lm/W with Frosted Lens (Standard for Retail Pack), 180 lm/W with Lens Removed



PRODUCT NUMBER	COLOR TEMP CSK	QTY/ LENGTH	DRIVER	WATTAGE	LUMENS WITH LENS	LUMENS WITH LENS REMOVED	RATED	DLC CODE	UPC BARCODE
MRK2220-CSK-PLUS-RP	35K, 40K, 50K	2 pcs 2 ft = 21.06"	20W	Max. 20W	3000	3600	ETL, DLC	PH6IV9OX	080101407472
MRK2230-CSK-PLUS-RP	35K, 40K, 50K	2 pcs 2 ft = 21.06"	30W	Max. 30W	4500	5400	ETL, DLC	P6Q72IGJ	080101408448

4 FOOT RETAIL KIT

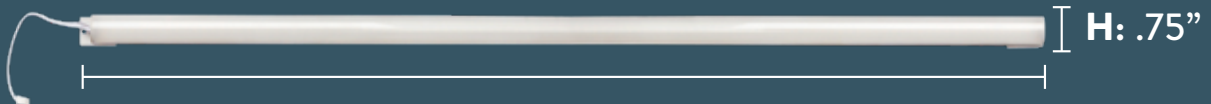
150 lm/W with Frosted Lens (Standard for Retail Pack), 180 lm/W with Lens Removed



PRODUCT NUMBER	COLOR TEMP CSK	QTY/ LENGTH	DRIVER	WATTAGE	LUMENS WITH LENS	LUMENS WITH LENS REMOVED	RATED	DLC CODE	UPC BARCODE
MRK2420-CSK-PLUS-RP	35K, 40K, 50K	2 pcs 4 ft = 42.91"	20W	Max. 20W	3000	3600	ETL, DLC	PTML224Q	080101408271
MRK2430-CSK-PLUS-RP	35K, 40K, 50K	2 pcs 4 ft = 42.91"	30W	Max. 30W	4500	5400	ETL, DLC	PDL8J2HO	080101407922
MRK2440-CSK-PLUS-RP	35K, 40K, 50K	2 pcs 4 ft = 42.91"	40W	Max. 40W	6000	7200	ETL, DLC	P4S826L6	080101407977
MRK2450-CSK-PLUS-RP	35K, 40K, 50K	2 pcs 4 ft = 42.91"	50W	Max. 50W	7500	9000	ETL, DLC	S-KYTS7G	080101408028

DIMENSIONS

W: .72"



L: 16 inch: 16" | 2 feet: 21.06" | 3 feet: 30.91" | 4 feet: 42.91" | 5 feet: 58"

MAGNILUMEN PLUS™ DRIVER SPECIFICATIONS



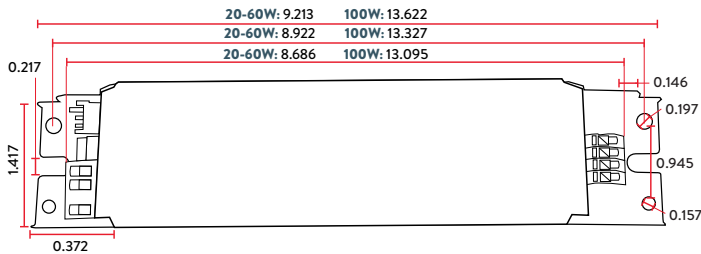
PART NUMBER

MRK-DRIVER-20W-2WH-PLUS
MRK-DRIVER-30W-2WH-PLUS
MRK-DRIVER-40W-2WH-PLUS
MRK-DRIVER-50W-2WH-PLUS
MRK-DRIVER-60W-2WH-PLUS
MRK-DRIVER-100W-4WH-PLUS

- **Wattages:** 20W, 30W, 40W, 50W, 60W, 100W
- **Input Voltage:** 120/277V
- **Power Factor:** ≥ 0.9
- **Efficiency:** $\geq 88\%$
- **THD:** $\leq 10\%$
- **Output Voltage:** 27-42VDC

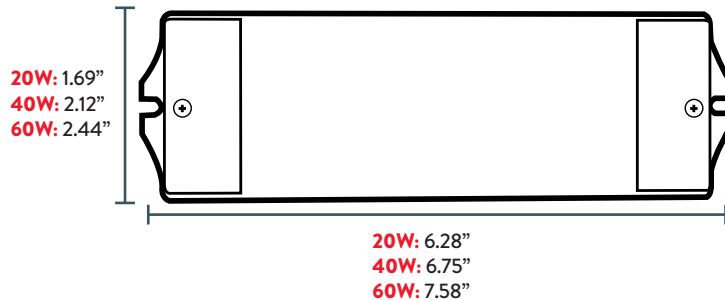
MAGNILUMEN PLUS™ DRIVER DIMENSIONS

(Unit: inches)



DIMMABLE LED TRIAC DRIVER WITH 5 IN 1 DIMMING (WATTAGE SELECTABLE)

20W, 40W, 60W with DIP Switch (Triac, Forward Phase, MLV, ELV, 0-10V)



PART NUMBER

ZL-DRIVER-20W-TRIAC
ZL-DRIVER-40W-TRIAC
ZL-DRIVER-60W-TRIAC

- **Wattages:** 20W, 40W, 60W
- **Input Voltage:** 120/277V
- **Power Factor:** ≥ 0.95

OPTIONAL MOUNTING HARDWARE

MAGNETS FOR DIRECTIONAL USE

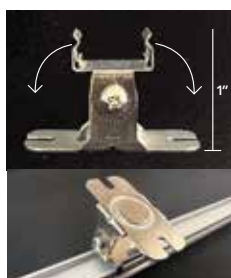
45 Degree Angle Magnet

PART NUMBER:
MAG-NO-HOOK-45DEG



Magnet with Hook (adjustable 0-180 degrees)

PART NUMBER:
MAG-HOOK-ADJUSTABLE



MOUNTING MAGNETS AND HARDWARE

Magnet with Hook

PART NUMBER:
MAG-HOOK



Clip with No Magnet, No Hook

PART NUMBER:
NO-MAG-NO-HOOK



No Hook Magnet

PART NUMBER:
MAG-NO-HOOK



All Magnilumen Plus™ LED Bars come with onboard magnets and self-drilling screws standard. Additional mounting magnets and hardware available.

WATTAGE DRIVER LUMENS

DRIVER WATTAGE POWER SELECTABLE OPTIONS

Wattage selectable options allow the end user to adjust lumen output to their specific needs.

DEFAULT WATTAGE	WATTAGE POWER SELECTABLE OPTIONS
20W	8W, 10W, 14W, 16W, 18W, 20W, 22W
30W	10W, 16W, 20W, 24W, 28W, 30W, 32W
40W	24W, 28W, 30W, 32W, 38W, 40W, 42W
50W	25W, 30W, 38W, 40W, 45W, 50W, 52W
60W	40W, 45W, 50W, 55W, 57W, 60W, 62W
100W	65W, 70W, 75W, 85W, 90W, 95W, 100W



Toolless
Wattage
Selectable
Switch (red
switch)

- Setting info on driver and website.

SUGGESTED FIXTURE LUMENS CHART FOR Magnilumen Plus™ RETROFITS

150 lm/W with Frosted Lens			170 lm/W with Clear Lens			180 lm/W with No Lens		
WATTAGES	MAGNILUMEN PLUS	SUGGESTED FIXTURE	WATTAGES	MAGNILUMEN PLUS	SUGGESTED FIXTURE	WATTAGES	MAGNILUMEN PLUS	SUGGESTED FIXTURE
8W	1,200		8W	1,360		8W	1,440	
10W	1,500		10W	1,700		10W	1,800	
14W	2,100		14W	2,380		14W	2,520	
16W	2,400		16W	2,720		16W	2,880	
18W	2,700		18W	3,060		18W	3,240	
20W	3,000	2'x2'	20W	3,400	2'x2'	20W	3,600	2'x2'
22W	3,300		22W	3,740		22W	3,960	
24W	3,600		24W	4,080		24W	4,320	
25W	3,750		25W	4,250		25W	4,500	
28W	4,200		28W	4,760		28W	5,040	
30W	4,500		30W	5,100		30W	5,400	
32W	4,800	2'x4' (8-10')	32W	5,440	2'x4' (8-10')	32W	5,760	2'x4' (8-10')
34W	5,100		34W	5,780		34W	6,120	
35W	5,250		35W	5,950		35W	6,300	
38W	5,700		38W	6,460		38W	6,840	
40W	6,000	2'x4' (10' and above)	40W	6,800	2'x4' (10' and above)	40W	7,200	2'x4' (10' and above)
42W	6,300		42W	7,140		42W	7,560	
45W	6,750		45W	7,650		45W	8,100	
47W	7,050		47W	7,990		47W	8,460	
50W	7,500	Low Bay	50W	8,500	Low Bay	50W	9,000	Low Bay
52W	7,800		52W	8,840		52W	9,360	
55W	8,250		55W	9,350		55W	9,900	
57W	8,550		57W	9,690		57W	10,260	
60W	9,000		60W	10,200		60W	10,800	
62W	9,300		62W	10,540		62W	11,160	
65W	9,750		65W	11,050		65W	11,700	
70W	10,500		70W	11,900		70W	12,600	
75W	11,250		75W	12,750		75W	13,500	
85W	12,750		85W	14,450		85W	15,300	
90W	13,500		90W	15,300		90W	16,200	
95W	14,250		95W	16,150		95W	17,100	
100W	15,000	High Bay	100W	17,000	High Bay	100W	18,000	High Bay

These are suggested lumen fixture packages based upon photometrics and manufacturers experience. Vital decisions may vary based on actual criteria. For High Bays above 20ft Use High Output Magnilumen Plus™ Kits.

ENCLOSURES FOR MAGNILUMEN PLUS™ DRIVERS



100W DRIVER ENCLOSURE (with two knockouts)

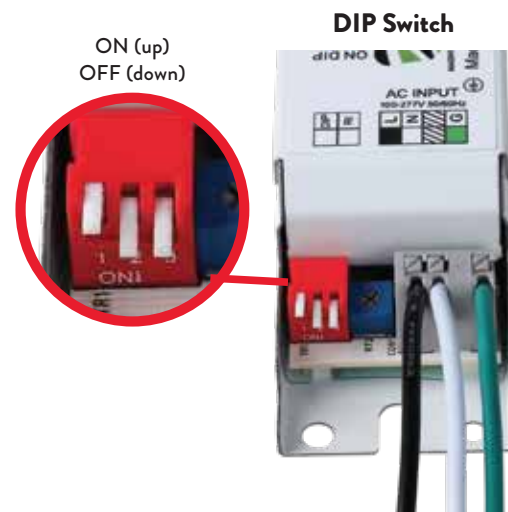
PN: MRK-100W-DRIVER-ENCLOSURE

DIMENSIONS: 16" (L) x 1.75" (W) x 1.3125" (D)

20-60W DRIVER ENCLOSURE (with two knockouts)

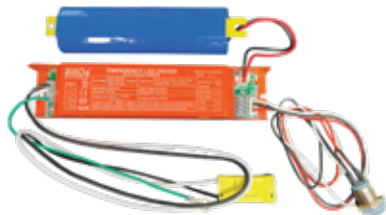
PN: MRK-20/60W-DRIVER-ENCLOSURE

DIMENSIONS: 12" (L) x 1.75" (W) x 1.3125" (D)



OPTIONS

EMERGENCY BACK-UP LED DRIVER



Plug and Play To Magnilumen Plus™ Retrofit Kit
90 Minutes Minimum Run time in Emergency Mode
2200L in Emergency Mode

PART NUMBER:
BL-EMRG-LED-15-1H
BL-EMRG-LED-20-1H

SENSORS/REMOTES

Microwave Sensor

3Pin Style With 90° Angle



PART NUMBER:
ZL-MV-SENSOR-HB-ARM-HD07R
OPTIONAL PART
BUILDER NUMBER: MV

Power Supply: 10-15VDC, <30mA
Dim Control Output: DIM 0-10V
Mounting Height: 12m/39ft Max.
Detection Distance: ≥3m/9ft
Operating Temp: -40°C-60°C
IP Rating: IP65

Optional Remote:

(Sold Separately)



PART NUMBER:
ZL-REMOTE-HD05R

PIR Sensor



PART NUMBER:
ZL-MS-SENSOR-ANT-4A
OPTIONAL PART
BUILDER NUMBER: MS

Power Supply: 12-24VDC, >50mA
Dim Control Output: -10V, max. 25mA sinking current
Mounting Height: 15ft (4.5m) max.
Detection Angle: 120°
Operating Temp: -20°C-70°C
IP Rating: IP20

Optional Remote:

(Sold Separately)



PART NUMBER:
ZL-REMOTE-RC-105

Power Supply

(Only required when using Non-AO Drivers)



PART NUMBER:
MUSP-12V-03-SW

AO DRIVERS WITH 12V AUXILIARY OUTPUT FOR CONTROLS

FEATURES

PART NUMBER

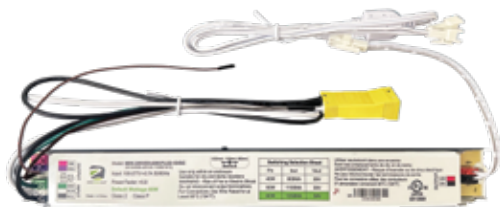
MRK-DRIVER-40W-2WH-AO-PLUS

MRK-DRIVER-60W-2WH-AO-PLUS

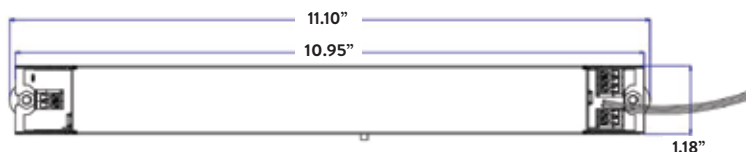
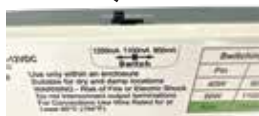
- Built-in 0-10V adjustable power LED Driver
- 12V 0.1A Auxiliary source
- For luminaires of protection Class P



- Wattages: 20/30/40W selectable
40/50/60W selectable
- Input Voltage: 120/277V
- Power Factor: ≥0.9
- Efficiency: >85%
- THD: ≤<20%
- Output Voltage: 27-42VDC
- Output Current: 20W- 470mA
30W- 660mA
40W- 900mA
50W- 1100mA
60W- 1250mA



Wattage Selector Switch



OPTIONS – HARNESSES

A 2-Way harness is standard with kits but unique situations might require a special harness. 1, 3, and 4-Way harness options are available.

PLUG & PLAY HARNESSES & EXTENSIONS

1-WAY HARNESS – Connects 1 LED bar to 1 driver

PART NUMBER: HARNESS-1-WAY-12IN

Connects 1 LED bar to 1 driver.

PART NUMBER: HARNESS-1-WAY-16IN

Connects 1 LED bar to 1 driver.

PART NUMBER: HARNESS-1-WAY-24IN

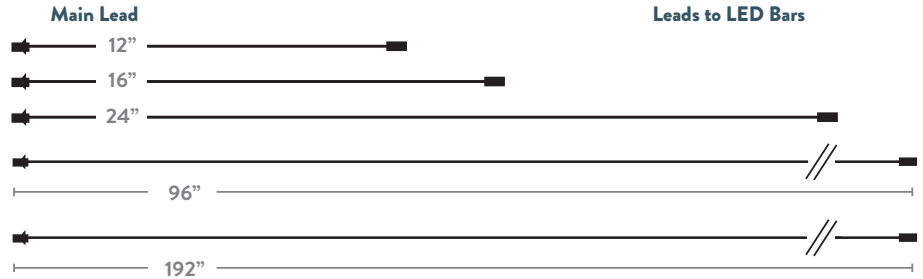
Connects 1 LED bar to 1 driver.

PART NUMBER: HARNESS-1-WAY-8FT

Connects 1 LED bar to 1 driver, with an 8 ft extension on driver end

PART NUMBER: HARNESS-1-WAY-16FT

Connects 1 LED bar to 1 driver, with a 16 ft extension on driver end



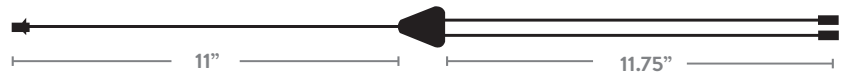
2-WAY HARNESS (STANDARD) – Connects 2 LED bars to 1 driver

PART NUMBER: HARNESS-2-WAY

Lead from driver connection to splitter: 11.00"; 2 leads to bars: each 11.75"

PART NUMBER: HARNESS-2-WAY-OPT

Lead from driver connection to splitter: 11.00"; 2 leads to bars: each 11.75"



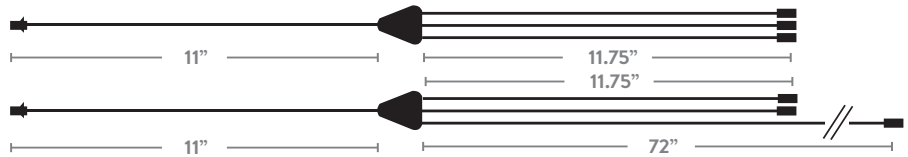
3-WAY HARNESS – Connects 3 LED bars to 1 driver

PART NUMBER: HARNESS-3-WAY

Lead from driver connection to splitter: 11.00"; 3 leads to bars: each 11.75"

PART NUMBER: HARNESS-3-WAY-EXT (2 short, 1 long)

Has 6 ft extension on driver end. Lead from driver connection to splitter: 11.00"; 2 leads to bars: each 11.75"; 1 lead to bars: 72.00"



4-WAY HARNESS – Connects 4 LED bars to 1 driver

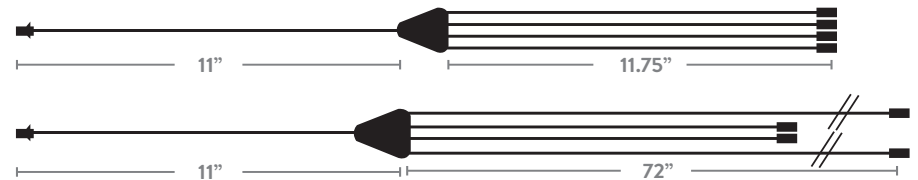
PART NUMBER: HARNESS-4-WAY

Lead from driver connection to splitter: 11.00"; 4 leads to bars: each 11.75"

PART NUMBER: HARNESS-4-WAY-2-WAY-EXT

(2 long, 2 short)

2 leads have 6 ft extension. Lead from driver connection to splitter: 11.00"; 2 leads to bars: each 11.75"; 2 leads to bars: 72.00"



CSK SWITCH – PLUG & PLAY HARNESSES

Color Selectable Switch with Magnetic Back



PART NUMBER: HARNESS-2-WAY-CSK-SWITCH

Lead from driver connection to CSK switch: 11.00";
2 leads to bars: each 11.75"

PART NUMBER: HARNESS-2-WAY-4-WAY-CSK-SWITCH

Lead from driver connection to CSK switch: 11.00";
2 leads each to 4 bars: each 11.75"

PART NUMBER: HARNESS-4-WAY-CSK-SWITCH

Lead from driver connection to CSK switch: 11.00";
4 leads to bars: each 11.75"

