

MINI 1.5 DOUBLE | RECESSED DOWNLIGHT

IC
RATED

5 YEARS
LIMITED WARRANTY

JAS
TITLE 24
COMPLIANT

ETL
Intertek



MATERIAL

Aluminum Die-Casting, Electrostatic Powder Coating

SOURCE INFORMATION

SOURCE LUMENS	Up to 2200lm
DELIVERED LUMENS	Up to 1700lm
CONSUMPTION	Up to 20W
CURRENT	500mA
INPUT VOLTAGE	120VAC-277VAC
DIMMING	TRIAC/ELV / 0-10V (1%) / 10V PWM
CRI	90+
COLOR TEMP-CCT	2700K/3000K/3500K/4000K/ DW (DIM TO WARM)
OPERATING TEMP	32°F to 77°F

OPERATING TEMPERATURE Luminaire should be installed and operated ONLY in dry environments where the ambient temperature ranges from 32°F to 77°F (0°C to 25°C). Luminaire operation in environments outside the listed temperature range voids the warranty AND may damage the product or adversely impact lamp life, lumen output and color consistency.

TYPE OF LED

COB by Bridgelux

WARRANTY

5 years



FIXED



ADJUSTABLE



WALLWASH

FLANGED TRIM



LENS BEAM ANGLE



15°
Spot



24°
Narrow Flood



36°
Flood



60°
Wide Flood

TRIM FINISH



Black



White



Custom

Fixture type:

Job information:

CONSTELLATION

MINI 1.5 DOUBLE – RECESSED DOWNLIGHT



PRODUCT DEFINITION SHEET

1	2	3	4	5	6	7	8
9	10	11	12	13	14	15	16

LIGHT ENGINE

1	2	3	4
SERIES	LIGHT ENGINE TYPE	COLOR TEMP-CCT (90 CRI)	LENS BEAM ANGLE
☐ CTL-M Constellation Mini	☐ 1.5 1.5 High Efficiency Standard	☐ 27K 2700K ☐ 30K 3000K ☐ 35K 3500K ☐ 40K 4000K ☐ DM Dim to Warm	☐ 15 15° Spot ☐ 24 24° Narrow ☐ 36 36° Flood ☐ 60 60° Wide Flood

TRIM

5	6	7	8	9
TRIM SHAPE	REFLECTOR TYPE	MOUNTING PAN	REFLECTOR - INSERT	TRIM FINISH
☐ RC Rectangle	☐ FX Fixed ☐ AD Adjustable ☐ WW Wall Wash	☐ TF Flanged Trim	☐ OP Open	☐ WH White ☐ BK Black ☐ CS Custom RAL No. _____

HOUSING / POWER

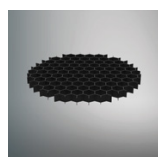
10	11	12	13	14
LUMEN OUTPUT	DIMMING	VOLTAGE	STANDBY MODULES	INSTALLATION TYPE
☐ 4L 400lm ☐ 5L 500lm ☐ 6L 600lm ☐ 7L 700lm ☐ 8L 800lm ☐ 13L 1300lm ☐ 17L 1700lm	☐ V10 0-10V ☐ TLV TRIAC/ELV ☐ PWM 10V PWM For other dimming options contact Mercury	☐ U Uni 120-277V	☐ EM10 Emergency Battery Pack 10W ☐ EM12 Emergency Battery Pack 12W ☐ NO OPTION Remote Emergency Battery Pack, for field install	☐ RM Remote ☐ NCNIC New Construction Non-IC Frame ☐ NCIC New construction IC

See pages 3 for light engine output available

ACCESSORIES

15	16
OPTICS ACCESSORY	LIGHT ENGINES
☐ NN None ☐ HL Honeycomb louver + PC sheet ☐ SG Striped Glass Lens	☐ DB Double

Accessories are not suitable for wallwash fixtures



Honeycomb louver + PC sheet



Striped Glass

CONSTELLATION

MINI 1.5 DOUBLE - RECESSED DOWNLIGHT



FIXED RC-FX-TF-OP

CRI	90+	
LENS BEAM ANGLE	15°/24°/36°/60°	
3000K	NON-IC	IC
FIXTURE CONSUMPTION	20W	
CURRENT (mA)	500	400
DELIVERED LUMEN	1728 lm	1395 lm
DIM TO WARM	NON-IC	IC
FIXTURE CONSUMPTION	22W	16W
CURRENT (mA)	500	400
DELIVERED LUMEN	876 lm	700 lm

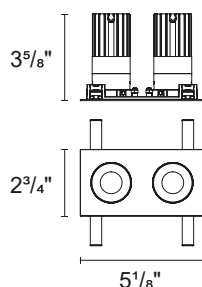
Multiplier for Optics Accessories	
Clear (None)	100%
Honeycomb louver	67%
Striped Glass Lens	78%



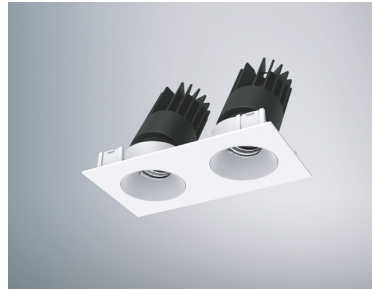
STANDARD LIGHT ENGINE



DIMENSIONS



Cut out: 2 13/32" x 4 24/32"



ADJUSTABLE (30°) RC-AD-TF-OP

CRI	90+	
LENS BEAM ANGLE	15°/24°/36°/60°	
3000K	NON-IC	IC
FIXTURE CONSUMPTION	20W	
CURRENT (mA)	500	400
DELIVERED LUMEN	1369 lm	1342 lm
DIM TO WARM	NON-IC	IC
FIXTURE CONSUMPTION	22W	16W
CURRENT (mA)	500	400
DELIVERED LUMEN	812 lm	678 lm

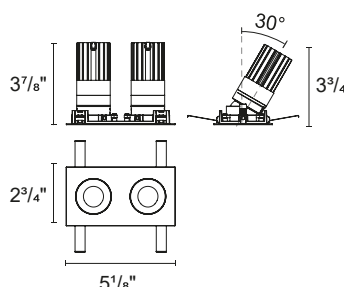
Multiplier for Optics Accessories	
Clear (None)	100%
Honeycomb louver	67%
Striped Glass Lens	78%



STANDARD LIGHT ENGINE



DIMENSIONS



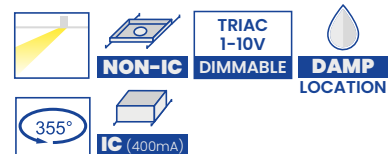
Cut out: 2 13/32" x 4 24/32"



WALLWASH RC-WW-TF-OP

CRI	90+	
LENS BEAM ANGLE	15° only	
3000K	NON-IC	IC
FIXTURE CONSUMPTION	20W	
CURRENT (mA)	500	400
DELIVERED LUMEN	824 lm	671 lm
DIM TO WARM	NON-IC	IC
FIXTURE CONSUMPTION	22W	16W
CURRENT (mA)	500	400
DELIVERED LUMEN	546 lm	436 lm

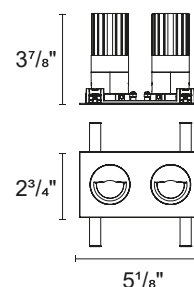
Multiplier for Optics Accessories	
Clear (None)	100%
Honeycomb louver	67%
Striped Glass Lens	78%



STANDARD LIGHT ENGINE



DIMENSIONS



Cut out: 2 13/32" x 4 24/32"

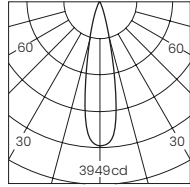
CONSTELLATION

MINI 1.5 DOUBLE - RECESSED DOWNLIGHT

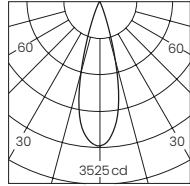


PHOTOMETRICS

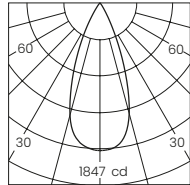
FIXED RC-FX-TF-OP



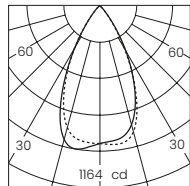
H(m)	D(m)	E(lx)
Lens beam angle 15°		
1.0	0.39	2794
2.0	0.79	698
3.0	1.18	310
4.0	1.58	174
5.0	1.97	111



H(m)	D(m)	E(lx)
Lens beam angle 24°		
1.0	0.51	2466
2.0	1.02	616
3.0	1.54	274
4.0	2.05	154
5.0	2.56	98

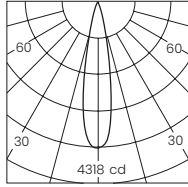


H(m)	D(m)	E(lx)
Lens beam angle 36°		
1.0	0.75	1275
2.0	1.49	318
3.0	2.24	141
4.0	2.99	79
5.0	3.74	50

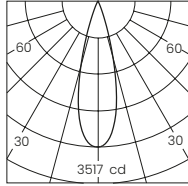


H(m)	D(m)	E(lx)
Lens beam angle 60°		
1.0	1.00	745
2.0	2.00	186
3.0	2.99	82
4.0	3.99	46
5.0	4.99	29

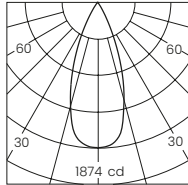
ADJUSTABLE RC-AD-TF-OP



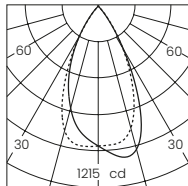
H(m)	D(m)	E(lx)
Lens beam angle 15°		
1.0	0.36	3011
2.0	0.72	752
3.0	1.08	334
4.0	1.43	188
5.0	1.79	120



H(m)	D(m)	E(lx)
Lens beam angle 24°		
1.0	0.49	2518
2.0	0.98	629
3.0	1.48	279
4.0	1.97	157
5.0	2.46	100

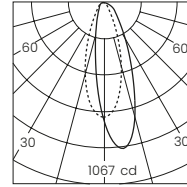


H(m)	D(m)	E(lx)
Lens beam angle 36°		
1.0	0.72	1299
2.0	1.44	324
3.0	2.16	144
4.0	2.88	81
5.0	3.60	51



H(m)	D(m)	E(lx)
Lens beam angle 60°		
1.0	0.92	784
2.0	1.83	196
3.0	2.75	87
4.0	3.66	49
5.0	4.58	31

WALLWASH RC-WW-TF-OP



H(m)	D(m)	E(lx)
Lens beam angle 15° (Wallwash)		
1.0	0.50	630
2.0	1.01	157
3.0	1.51	70
4.0	2.02	39
5.0	2.52	25

CONSTELLATION

MINI 1.5 DOUBLE – RECESSED DOWNLIGHT



HOUSING



REMODEL/REMOTE ENCLOSED DRIVER

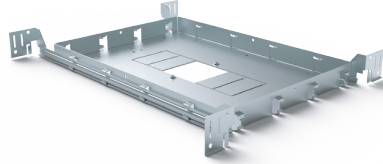
For Constellation Mini 1.5 Double flanged trim

Installs from below, service from below

Type: Remote driver box

2 light engine flanged trim

Cut out: $2\frac{13}{32}" \times 4\frac{24}{32}"$



NEW CONSTRUCTION NON-IC FRAME

For Constellation Mini 1.5 Double flanged trim

Installs from above, service from below

Type: New construction frame

2 light engine flanged trim

Cut out: $2\frac{13}{32}" \times 4\frac{24}{32}"$



NEW CONSTRUCTION IC BOX

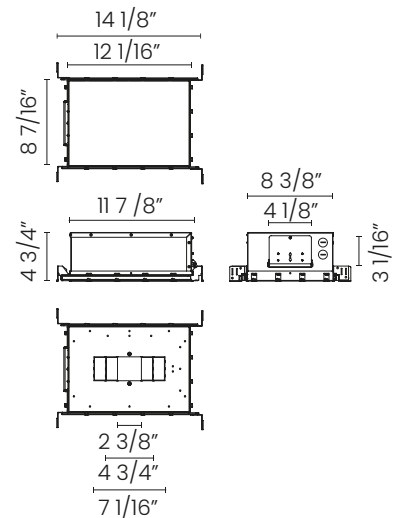
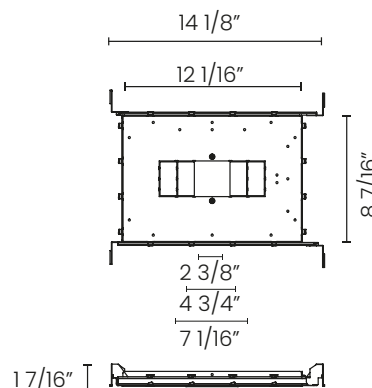
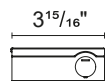
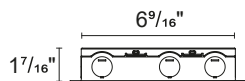
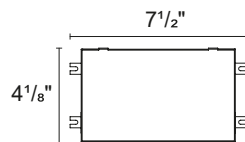
For Constellation Mini 1.5 Double flanged trim

Installs from above, service from below

Type: IC Box

2 light engine flanged trim

Cut out: $2\frac{13}{32}" \times 4\frac{24}{32}"$



CUTOUT ACCESSORIES



For Constellation Mini 1.5 Double

Cut out:

Round : $\varnothing 1\frac{26}{32}"$

Square : $\square 1\frac{26}{32}"$

CONSTELLATION

MINI 1.5 DOUBLE - RECESSED DOWNLIGHT



DRIVER

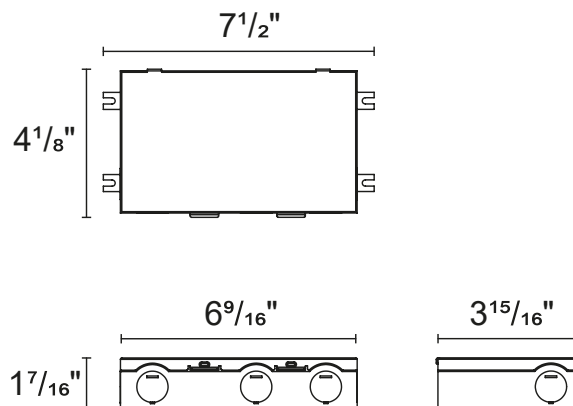
KIG-DWJ Series 40W



FEATURES

- Output: Constant Current
- Range: 100-277VAC
- PFC design: Built-in active PFC function
- Efficiency: Up to 82%
- Protections: Short circuit / Over temperature
- Heat dissipation: Cooling by free air convection
- Waterproof performance: Driver built-in Junction box, for dry and damp locations.
- Dimming function: Phase dimming: work with Forward phase, MLV and Reverse phase, ELV, TRIAC dimmers
- 0-10V dimming: 0-10V/1-10V/Potentiometer/10V PWM 4 in 1
- Dimming range: 1-100%
- Application: Suitable for the application of indoor LED lighting
- Warranty: 5 years warranty

DIMENSIONS



DRIVER

KIG-DWJ Series 40W

TECHNICAL PARAMETERS

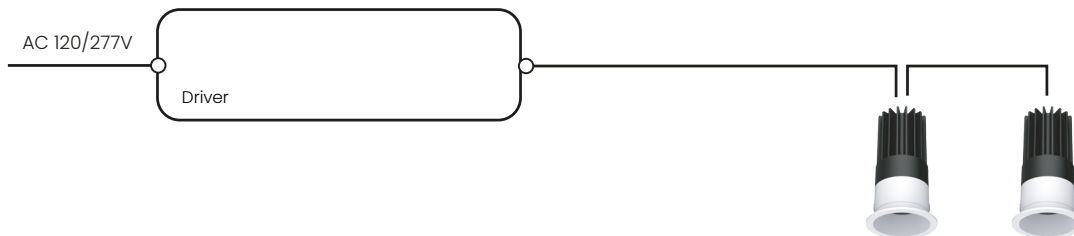
Certificate		UL / cUL / FCC / ICES-005 / Class P / SELV / ROHS / REACH																
Output	Rated current (A) T ON ↓ OFF	0.3	0.35	0.4	0.45	0.5	0.55	0.6	0.65	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	
	DIP Code																	
	DIP Code																	
	Current Tolerance	±5%																
	No-Load Voltage	75V max.																
	DC Voltage (V)	3-65								3-62	3-57	3-50	3-45	3-40	3-37	3-34	3-31	3-29
	Rated power (W)	19.5	22.8	26	29.3	32.5	35.8	39	40									
Input	Rated Voltage	100-277VAC																
	Rated Frequency	50 / 60HZ																
	Power Factor	>0.9																
	THD@full load	≤20%																
	Efficiency (Typ.)	≥82% @120VAC 60Hz ≥82% @277VAC 60Hz																
	AC Current (Max.)	0.52A																
	Inrush Current (Typ.)	3.12A, 36us@50% Ipeak 120VAC 9.2A, 34us@50% Ipeak 277VAC																
	Leakage current	<0.50mA																
Protection	Short Circuit	Constant current mode, recovers automatically after fault condition is removed																
	Over temperature	Ambient temp. over 50°C±5°C, output current will be reduced to 50% ; Ambient temp. over 60°C±5°C, recovers automatically after the temp.drops.																
Environ- ment	Working TEMP.	-40~+60°C																
	Working Humidity	20-95% RH, non-condensing																
	Storage TEMP. Humidity	-40~+80°C,10-95% RH																
	TEMP. coefficient	±0.03% /°C (0-50°C)																
	Vibration	10-500Hz, 5G 12min./1 cycle,period for 72min.each along X,Y,Z axes																
Safety & EMC	Safety standards	UL 8750 CAN/CSA-C22.2 No. 250.13																
	Withstand voltage	I/P-O/P:1.88KVAC I/P-F/G:1.88KVAC O/P-F/G:0.5KVAC																
	Isolation resistance	I/P-O/P:100MΩ / 500VDC / 25°C / 70% RH																
	EMC Immunity	FCC/ICES do not request this test.																
	EMC Emission	FCC Part 15 Subpart B; ICES-005 Issue 5; ANSI C63.4a-2017																
Others	Net Weight	0.57KG																
	Dimension	190.2*103.9*36mm(L *W*H)																
	Packing	540*235*235mm 20pcs/CTN																
Notes	1. All parameters NOT specially mentioned are measured at 120VAC input, rated load and 25°Cof ambient temperature. 2. Tolerance: includes set up tolerance, line regulation and load regulation.																	

CONSTELLATION

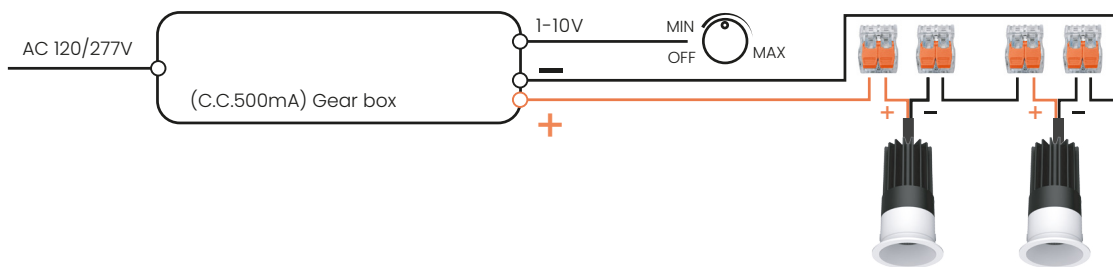
MINI 1.5 DOUBLE – RECESSED DOWNLIGHT

MULTIPLE DOWNLIGHTS WIRING DIAGRAM

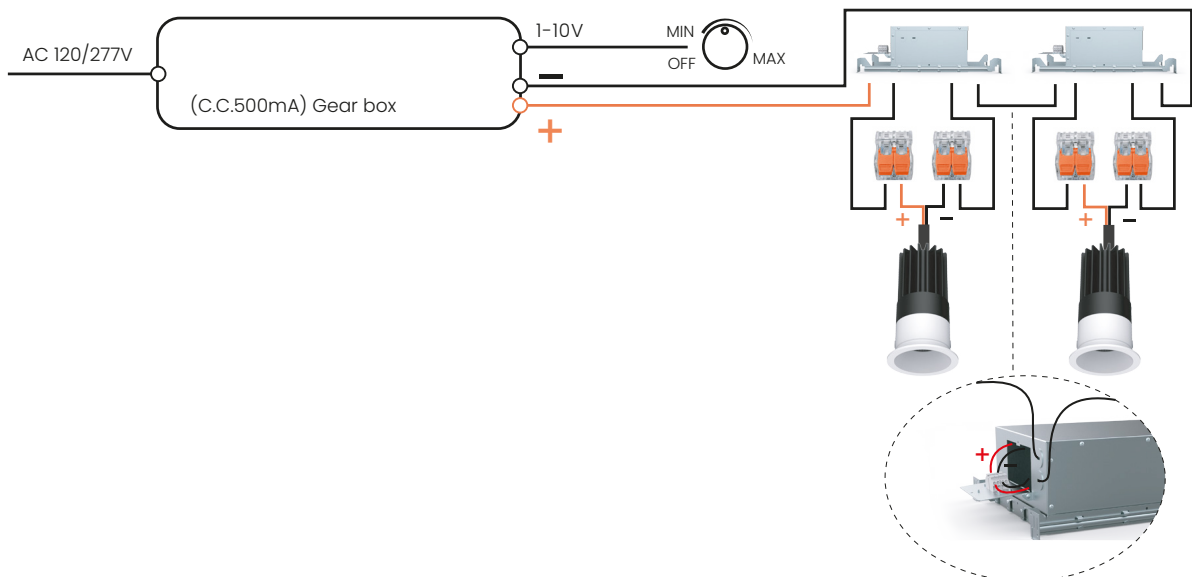
REMOTE DRIVER



NEW CONSTRUCTION NON-IC FRAME



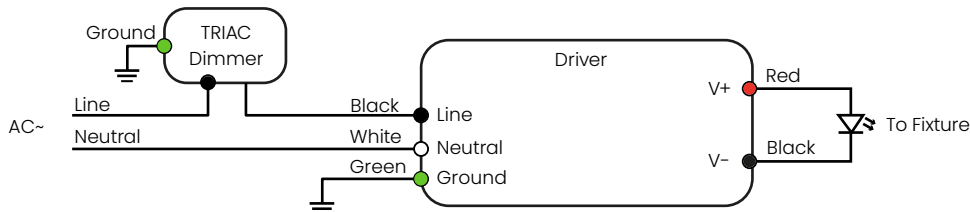
NEW CONSTRUCTION IC



DIMMING WIRING DIAGRAM

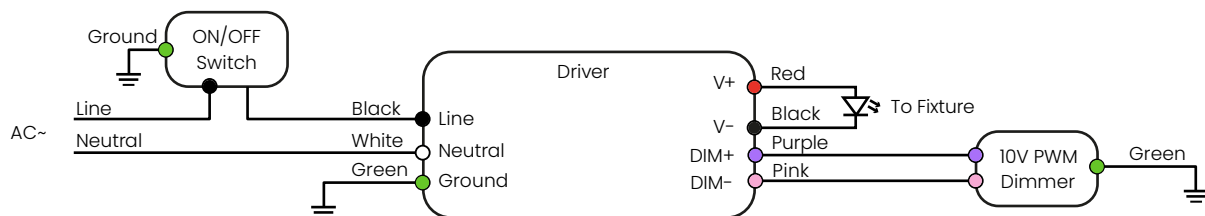
TRIAC / FORWARD PHASE / LEADING EDGE DIMMING (TRI)

1. The Pulse-Width Modulation (PWM) of output voltage can be adjusted through input terminal of the AC phase line(L) by connection a phase /Triac dimmer or lighting system.
2. Working with forward phase, MLV and Reverse phase, ELV, TRIAC dimmers or light system.
3. Min. loading is about 10%
4. Please try to use dimmers with power at least 2 times as the output power of the driver.



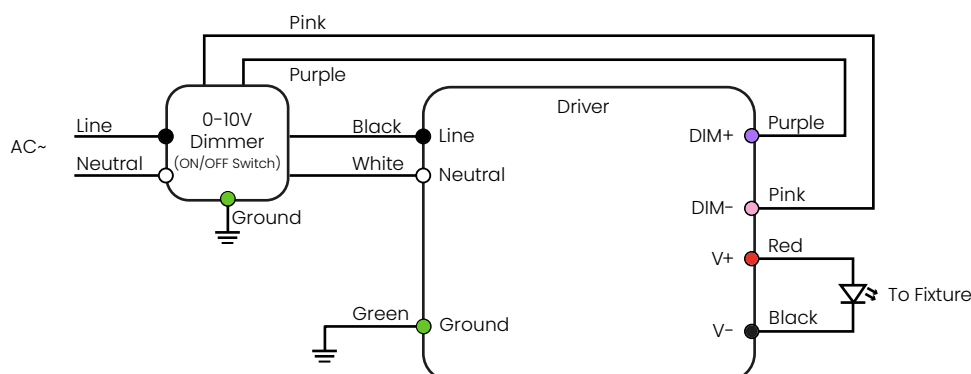
10V PWM

1. This driver should be installed by qualified and professional person.
2. Please make sure the driver is installed with adequate ventilation around it to allow for heat dissipation.
3. Ensure that wiring is correct before test in order to avoid light and power supply damage.
4. If driver Cannot work normally, don't maintain privately.



0-10V DIMMING (010)

1. This driver should be installed by qualified and professional person.
2. Please make sure the driver is installed with adequate ventilation around it to allow for heat dissipation.
3. Ensure that wiring is correct before test in order to avoid light and power supply damage.
4. If driver Cannot work normally, don't maintain privately.



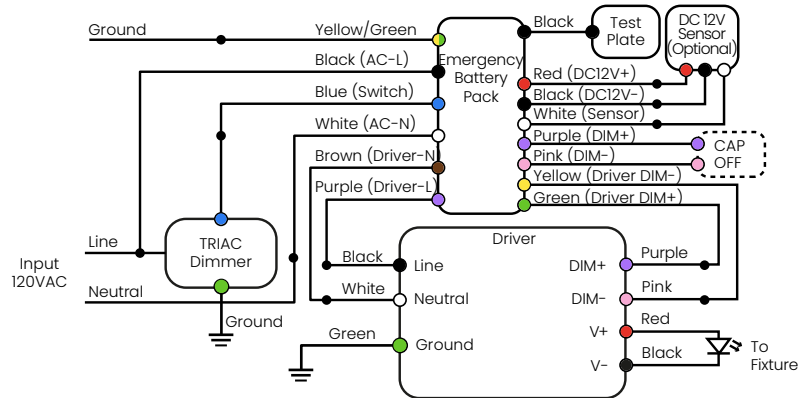
EMERGENCY BATTERY PACK WIRING DIAGRAM

TRIAC / FORWARD PHASE / LEADING EDGE DIMMING (TRI)

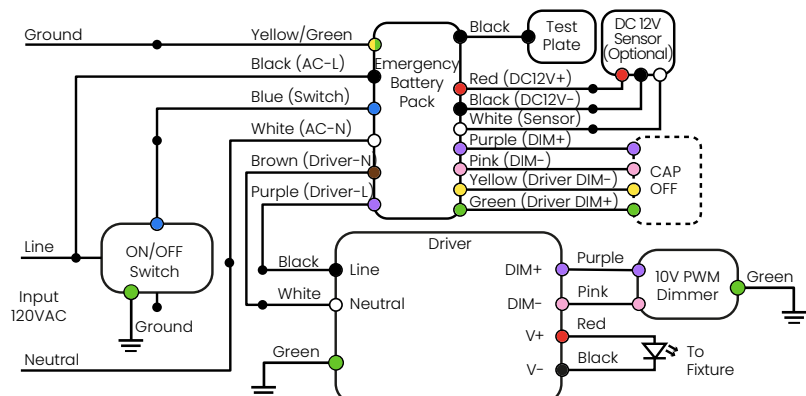
Input 120VAC 50/60Hz Range 3%-100%

NOTE: Cap off unused wires individually. DO NOT cap together.

EMERGENCY BATTERY ACCESS Above ceiling access is required for service. An access panel in the ceiling (or other form of access) adjacent to the installation location of the Emergency Battery is required.



10V PWM



0-10V DIMMING (010)

Input 120VAC-277VAC 50/60Hz Range 0.1%-100% dim to off

NOTE: Cap off unused wires individually. DO NOT cap together. Wall Switch and 0-10V dimmer may be one unit or two separate units.

EMERGENCY BATTERY ACCESS Above ceiling access is required for service. An access panel in the ceiling (or other form of access) adjacent to the installation location of the Emergency Battery is required.

