INSTALLATION GUIDE

RAZR Modular

2’x4’ and 4’x4’
Light Fixtures for Racks

GLOBAL

THANK YOU FOR CHOOSING FLUENCE!

Please confirm that all hardware and accessories received are correct for your RAZR Modular application by referring to the ***RAZR Modular System Wiring Guide*** before you begin the installation.

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1. CAUTIONS AND WARNINGS

1.1 FERTIGATION WARNING STATEMENT

CAUTION: Allowing repeated and/or CONTINUED contact with fertigation and/or mineralized water to the light fixture may result in reduced product life or failure, VOIDING warranty of the product.

PRECAUCIÓN: Permitir el contacto repetido y/o continuo con fertirrigación y/o agua mineralizada al dispositivo de iluminación puede resultar en una reducción de la vida útil del producto o en fallas, anulando la garantía del producto.

ATTENTION: Le fait de laisser de l'eau à plusieurs reprises et/ou continue et/ou minéralisée dans le luminaire peut réduire la durée de vie ou produire une défaillance du produit, en annulant ainsi sa garantie.

IMPORTANT: Contact with fertigation, hard mineralized water and other chemicals (including those found in typical tap water) can build up on the LED light fixture or cause corrosion impacting the products performance and life. To maintain the Fluence lighting system at optimal performance and protect your investment, the following cleaning guidelines per the Fluence Light Fixture Cleaning Recommendations are strongly recommended:

IMPORTANTE: El contacto con fertirrigación, agua mineralizada dura y otros productos químicos (incluidos los que se encuentran en el agua del grifo) puede acumularse en el dispositivo de iluminación LED o causar corrosión que afecte el rendimiento y la vida útil del producto. Para mantener el sistema de iluminación Fluence en un rendimiento óptimo y proteger su inversión, se recomiendan encarecidamente las siguientes instrucciones de limpieza según las Recomendaciones de Limpieza de Dispositivos de Iluminación Fluence:

IMPORTANT: Le contact par fertigation, par l'eau minéralisée dure et d'autres produits chimiques (y compris ceux qui se trouvent dans l'eau du robinet de tout les jours) peut s'accumuler sur le luminaire à DEL ou causer de la corrosion qui affecte les performances et la durée de vie des produits. Il est fortement recommandé d'utiliser les directives de nettoyage suivantes, conformément aux recommandations de nettoyage des luminaires Fluence pour maintenir ce même système d'éclairage à des performances optimales et protéger votre investissement :

CONDITION / CONDICIÓN / ÉTAT	RECOMMENDED ACTION / ACCIÓN SUGERIDA / ACTION RECOMMANDÉE
Minimal or no contact with fertigation, hard water, or other chemicals during a grow cycle. Contacto mínimo o nulo con fertirrigación, agua dura u otros productos químicos durante un ciclo de cultivo. Contact minimal ou inexistant avec la fermentation, l'eau dure ou d'autres produits chimiques pendant un cycle de croissance.	Clean the LED boards or light bars and heat sinks after each grow cycle. Limpia las placas LED o las barras de luz y los disipadores de calor después de cada ciclo de cultivo. Nettoyez les tableaux à DEL ou les barres lumineuses et les dissipateurs thermiques après chaque cycle de croissance.
The light fixture is in accidental direct contact with fertigation, hard water, or other chemicals. El dispositivo de iluminación está en contacto directo accidental con fertirrigación, agua dura u otros químicos. Le luminaire est en contact direct accidentel avec la fertigation, l'eau dure ou d'autres produits chimiques.	Clean the LED boards or light bars and heat sinks immediately per the Fluence Light Fixture Cleaning Recommendations available at: Limpie las placas LED o las barras de luz y los disipadores de calor de inmediato según las Recomendaciones de Limpieza de Dispositivos de Iluminación de Fluence disponibles en: Nettoyez les cartes à LED, les barres lumineuses et les dissipateurs de chaleur immédiatement conformément aux recommandations de nettoyage des luminaires Fluence, disponibles au: **https://fluence.science/support-center/**
The light fixture is in repeated contact with fertigation, hard water, or other chemicals. El dispositivo de iluminación está en repetido contacto con fertirrigación, agua dura u otros químicos. Le luminaire est en contact répété avec la fertigation, l'eau dure ou d'autres produits chimiques.	This is not an approved use case and will void the product warranty. Este no es un caso de uso aprobado y anulará la garantía del producto. Ce n'est pas un boitier approuvé pour l'utilisation et cette action annulera la garantie du produit.

DEFINITIONS OF LIQUID CONTACT WITH A LIGHT FIXTURE:

1. Direct misting, spraying, fogging or splashing droplets or liquid stream from below the fixture on the LED boards or light bars, and heat sinks.
2. Indirect misting, spraying, fogging or splashing droplets in close proximity to the fixture on the LED boards or light bars, and heat sinks.
3. Direct misting, spraying, fogging or splashing droplets from above the fixture on the LED boards or light bars, and heat sinks.

DEFINICIONES DE CONTACTO DE LÍQUIDO CON UN ARTEFACTO DE ILUMINACIÓN:

1. Gotas o chorros de líquido que puedan directamente salpicar, rociar, empañar, humedecer desde debajo del dispositivo en los dispositivos LED o barras de luz y disipadores de calor.
2. Gotas o chorros de líquido que puedan indirectamente salpicar, rociar, empañar, humedecer desde debajo del dispositivo en los dispositivos LED o barras de luz y disipadores de calor.
3. Gotas o chorros de líquido que puedan indirectamente salpicar, rociar, empañar, humedecer desde arriba del dispositivo en los dispositivos LED o barras de luz y disipadores de calor.

DÉFINITIONS DU CONTACT LIQUIDE AVEC UN LUMINAIRE:

1. Pulvérisation en brouillard direct, vaporisation, nébulisation ou éclaboussement de gouttelettes ou le jet de liquide directement sous le luminaire sur les panneaux à DEL ou les barres lumineuses et les dissipateurs thermiques.
2. Pulvérisation en brouillard indirect, pulvérisation, nébulisation ou éclaboussement de gouttelettes ou le jet de liquide sous le luminaire sur les panneaux à DEL ou les barres lumineuses et les dissipateurs thermiques.
3. Pulvérisation en brouillard direct, pulvérisation, nébulisation ou éclaboussement de gouttelettes ou le jet de liquide depuis le dessus du luminaire sur les panneaux à DEL ou les barres lumineuses, et les dissipateurs de chaleur.

1.2 GENERAL CAUTIONS AND WARNINGS

WARNING

Risk of electrical shock. To reduce the possibility of serious injury, always take the proper precautions and unplug the fixture before moving or cleaning.

CAUTION

LED and heatsink surfaces may be hot. Allow sufficient cooling time before handling.

CAUTION

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.

CAUTION

To prevent eye damage, avoid looking directly at the unshielded LEDs. **Practice safety precautions recommended by IEC standard 62471 for Photobiological Risk Group 1.**

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. **ADVERTENCIA:** Este producto contiene productos químicos reconocidos por el estado de California que provocan cáncer, defectos de nacimiento u otros daños reproductivos.

For more information: www.P65Warnings.ca.gov

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. Care should be taken to ensure that only approved crop protection products, cleaning agents and/or other chemicals (e.g., pesticides, fungicides and insecticides) may come in contact with the luminaire. If the luminaire is accidentally exposed to a corrosive liquid or vapor (e.g. VOC –Volatile Organic Compound and H2S – 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 repeatedly exposed or remains in the corrosive environment for a prolonged period. It is recommended the luminaires be removed and protected from the corrosive environment during all periods of aggressive disinfection or sanitization of the facility. The product warranty will be void if the product is repeatedly exposed to Sulfur.

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

ETL Rating: RAZR Modular Series fixtures are rated suitable for wet locations. A "wet location" is defined as an interior or exterior location in which water or other liquids may drip, splash or flow on or against the electrical components of a lighting fixture. RAZR Modular Series fixtures and power supply are certified to meet UL standards (ETL) from the Intertek safety consulting and certification company. Systems are cETL listed and are rated IP66 by IEC standard 60529.

Intertek 4009715

The light source of this luminaire is not replaceable; when the light source reached its end of life the whole luminaire shall be replaced.

Horticulture Lighting, not suitable for household room illumination.

1 PPF calculations compiled using integrating sphere measurements at a steady state and typical spectroradiometric data for each LED to determine typical fixture performance. Actual photometric results may vary within the LED manufacturer's bin tolerance.

2 Wattage values are typical expected values. Fluence maintains a tolerance of ±10% on flux and power specifications. Target light levels can vary from projected levels depending on ambient temperature, room reflections values and dirt accumulation.

ADVERTENCIA (ES)
Riesgo de descarga eléctrica. Para reducir la posibilidad de lesiones graves, tome siempre las precauciones adecuadas y desenchufe el aparato antes de moverlo o limpiarlo. PRECAUCIÓN - Las superficies LED y del disipador térmico pueden estar calientes. Permita un tiempo de enfriamiento suficiente antes de tocarlos. Para reducir el riesgo de sobrecalentamiento o incendio, nunca coloque los accesorios de operación boca abajo sobre una superficie de descarga. Permita siempre una ventilación adecuada de los accesorios y las fuentes de alimentación. Para evitar daños oculares, evite mirar directamente los LED sin cobertura. Practique las precauciones de seguridad recomendadas por la norma IEC 62471 para el Grupo de Riesgo Fotobiológico 1.

AVERTISSEMENT (FR)
Risque de décharge électrique. Afin de réduire les risques de blessures graves, il faut toujours prendre les précautions nécessaires et débrancher l'appareil avant de le déplacer ou de le nettoyer. MISE EN GARDE - Les surfaces des DEL et du dissipateur thermique peuvent être chaudes. Prévoyez un temps de refroidissement suffisant avant toute manipulation. Pour réduire le risque de surchauffe ou d'incendie, ne jamais placer les appareils de fonctionnement face vers le bas sur une surface affleurante. Toujours prévoir une ventilation adéquate des appareils et des blocs d'alimentation. Pour éviter les lésions oculaires, il faut éviter de regarder directement les DEL non blindées. Prendre les précautions de sécurité recommandées par la norme CEI 62471 pour le groupe de risque photobiologique 1. AVERTISSEMENT CONCERNANT LA PROPOSITION 65 DE LA CALIFORNIE Ce produit contient des produits chimiques dont l'État de Californie sait qu'ils provoquent le cancer et des malformations de la peau ou d'autres atteintes à la reproduction. Pour en savoir plus : www.P65Warnings.ca.gov

ПРЕДУПРЕЖДЕНИЕ (BG)
Риск от електрически удар. За да намалите вероятността от сериозни наранявания, винаги вземайте подходящи предпазни мерки и изключвайте тялото от захранването преди местене или почистване. Тялото и захранването са с рейтинг UL 1598 за влажни помещения, но не са разработени за потапяне във вода. В случай че модулът или корпусът на захранването бъдат потопени, първо изключете прекъсвача, след което изключете потопените компоненти, преди да извадите от водата. За да избегнете увреждане на очите, не гледайте директно в незащитени LED осветителни тела. Повърхностите на LED тялото и топлоотвода може да са горещи. Осигурете достатъчно време за охлаждане преди работни дейности. За да намалите риска от прегряване или пожар, никога не поставяйте работещи тела с лицевата част надолу върху гладка повърхност. Винаги осигурявайте адекватна вентилация на телата или захранването.

VAROVÁNÍ (CZ)
Riziko úrazu elektrickým proudem. Kvůli snížení možnosti váženého zranění vždy přijměte náležitá preventivní opatření a odpojte zařízení před přesunutím nebo čištěním. Zařízení a zdroj napájení odpovídají normě UL 1598 pro mokré umístění, ale nejsou určeny pro ponoření do vody. V případě, že dojde k ponoření modulu nebo skříně zdroje napájení, nejprve vypněte jistič a potom odpojte ponořené komponenty. Teprve potom je možné přikročit k vyjmutí z vody. Dbejte na to, abyste se si nepoškodili zrak, a nedívejte se přímo do nezastíněných LED diod. Povrch LED diod a chladiče může být horký. Než přistoupíte k manipulaci, počkejte dostatečně dlouho, než zařízení vychladnou. Nikdy nedávejte zařízení, které je v provozu, lícní stranou na rovný povrch, abyste snížili riziko přehřátí nebo požáru. Vždy dbejte na dostatečné větrání zařízení a zdrojů napájení.

ADVARSEL (DK)
Risiko for elektrisk stød. For at reducere risikoen for alvorlig personskade skal du altid tage de korrekte forholdsregler og frakoble armaturet inden flytning eller rengøring. Armatur og strømforsyning er UL 1598-klassificeret til placering i våde omgivelser, men er ikke beregnet til at blive nedsænket i vand. Hvis modulet eller strømforsyningskabinettet bliver nedsænket, skal du først frakoble afbryderen og derefter frakoble de nedsænkede komponenter, inden du tager dem ud af vandet. Undlad at se direkte på de ikke-afskærmede LED'er for at undgå øjenskader. LED'ers og varmeaflederes overflader kan være varme. Lad dem køle af, før du håndterer dem. For at reducere risikoen for overophedning eller brand må du aldrig placere tændte armaturer med forsiden nedad på en plan overflade. Sørg altid for tilstrækkelig ventilation omkring armaturer og strømforsyninger.

WARNUNG (DE)
Stromschlagrisiko. Um die Gefahr von schweren Stromschlägen zu vermeiden, treffen Sie geeignete Vorkehrungen und stecken Sie den Leuchtkörper aus, bevor Sie ihn bewegen oder säubern. Der Leuchtkörper und das Netzteil sind für Nassbereiche gemäß UL 1598 zertifiziert, dürfen jedoch nicht unter Wasser getaucht werden. Sollte das Modul oder das Netzteilgehäuse unter Wasser getaucht werden, lösen Sie zuerst den Stromkreisunterbrecher und stecken dann die untergetauchten Komponenten aus, bevor Sie sie aus dem Wasser holen. Um Augenschäden vorzubeugen, schauen Sie nicht ungeschützt direkt in die LEDs. LED und Kühlkörperoberflächen können heiß sein. Vor dem Berühren abkühlen lassen. Um das Risiko von Überhitzung oder Feuer zu verringern, legen Sie niemals einen Leuchtkörper in Betrieb mit der LED-Seite nach unten auf eine ebene Oberfläche. Achten Sie immer auf ausreichende Belüftung der Leuchtkörper und Netzteile.

ΠΡΟΕΙΔΟΠΟΙΗΣΗ (GR)
Κίνδυνος ηλεκτροπληξίας. Για μείωση της πιθανότητας σοβαρού τραυματισμού, λαμβάνετε πάντα τις απαραίτητες προφυλάξεις και αφαιρείτε το προϊόν από το ρεύμα πριν από τη μεταφορά ή τον καθαρισμό. Το προϊόν και το τροφοδοτικό διαθέτουν βαθμονόμηση UL 1598 Υγρής Τοποθεσίας αλλά δεν είναι σχεδιασμένα για να βυθίζονται στο νερό. Στην περίπτωση που η μονάδα ή το περίβλημα του τροφοδοτικού βυθιστούν, κλείστε τον κεντρικό διακόπτη ρεύματος και στη συνέχεια αφαιρέστε από την πρίζα τα βυθισμένα εξαρτήματα πριν προχωρήσετε στην αφαίρεσή τους από το νερό. Για την αποφυγή οφθαλμολογικών βλαβών, αποφεύγετε να κοιτάτε απευθείας σε μη προστατευμένα LED. Τα LED και οι επιφάνειες απαγωγού θερμότητας ενδέχεται να είναι καυτά. Περιμένετε να κρυώσουν πριν από τον χειρισμό. Για μείωση του κινδύνου υπερθέρμανσης ή πυρκαγιάς, μην τοποθετείτε ποτέ προϊόντα σε λειτουργία με την πρόσοψη προς τα κάτω σε επιφάνειες που δεν προεξέχουν. Παρέχετε πάντα επαρκή εξαερισμό στα προϊόντα και τα τροφοδοτικά.

HOIATUS! (EE)
Elektrilöögi oht. Tõsiste vigastuste tekkevõimaluse vähendamiseks võtke enne liikumist või puhastamist alati kasutusele vastavad ettevaatusabinõud ja ühendage seade lahti. Seade ja toiteallikas vastab standardile UL 1598 märgades tingimustes kasutamiseks, kuid ei ole ette nähtud vette kastmiseks. Juhul kui moodul või toiteallika korpus kastetakse vette, ühendage enne veest välja võtmist esmalt lahti kaitselüliti ja seejärel eemaldage vooluvõrgust vette kastetud komponendid. Silmakahjustuste vältimiseks vältige otse varjestamata LED-idesse vaatamist. LED-ide ja jahutusradiaatorite pinnad võivad olla kuumad. Enne käsitsemist laske neil piisavalt jahtuda. Ülekuumenemise või tuleohu vähendamiseks ärge kunagi asetage töötavaid seadmeid tasapinnale, eesmine külg allapoole. Tagage seadmetele ja toiteallikatele alati piisav ventilatsioon.

VAROITUS (FI)
Sähköiskun vaara. Vakavien vammojen riskin vähentämiseksi tee aina asianmukaiset varotoimet ja irrota laitteen virtajohto pistorasiasta ennen sen siirtämistä tai puhdistusta. Laitteella ja virtalähteellä on märkätilojen UL 1598 -luokitus, mutta niitä ei ole suunniteltu upotettavaksi veteen. Jos moduulin tai virtalähteen kotelo uppoaa veteen, kytke ensin virrankatkaisin pois ja irrota sitten uponneiden osien virtajohto pistorasiasta, ennen kuin poistat ne vedestä. Silmävaurioiden estämiseksi vältä katsomasta suoraan

1. CAUTIONS AND WARNINGS

suojaamattomiin LED-valoi. LED-valojen ja jäähdytyslevyjen pinnat voivat olla kuumia. Anna niiden jäähtyä riittävän kauan ennen käsittelyä. Ylikuumenemisen tai tulipalon riskin vähentämiseksi älä koskaan aseta toiminnassa olevia laitteita tasaiselle pinnalle alaspäin suunnattuna. Varmista aina laitteiden ja virtalähteiden riittävä ilmanvaihto.

UPOZORENJE (HR)
Rizik od električnog šoka. Kako biste smanjili rizik od ozbiljnih ozljeda, uvijek poduzmite mjere opreza i isključite rasvjetno tijelo prije pomicanja ili čišćenja. Rasvjetno tijelo i napajanje imaju oznaku UL 1598 za vlažna mjesta, ali ne mogu izdržati potapanje u vodi. Ako se modul ili kućište napajanja potopi, prvo isključite osigurač, a zatim isključite potopljene dijelove prije nego što ih nastavite uklanjati iz vode. Nemojte gledati izravno u nezaštićene LED-ove kako biste spriječili oštećenje oka. LED i površine hladnjaka mogu biti vruće. Prije rukovanja pričekajte da se dobro ohlade. Kako biste smanjili rizik od pregrijavanja ili požara rasvjetna tijela nikada nemojte postavljati na ravnu površinu okrenuta licem prema dolje Uvijek osigurajte odgovarajuću ventilaciju rasvjetnih tijela i napajanja.

FIGYELMEZTETÉ (HU)
Elektromos áramütés veszélye. A súlyos sérülések megelőzése érdekében mindig tegye meg a megfelelő óvintézkedéseket, és tisztítás vagy áthelyezés előtt húzza ki a berendezést. A berendezés és a tápegység az UL 1598 szerint nedves helyen használható, de nem meríthető vízbe. Ha a modul vagy a tápegység háza vízbe merülne, először állítsa vissza a megszakítót, húzza ki az elmerült alkatrészeket a hálózati aljzatból, majd vegye ki őket a vízből. A szemkárosodás elkerülése érdekében ne nézzen közvetlenül a szabadon lévő LED-ekbe. A LED-ek és a hőelvezető felületek forrók lehetnek. Hagyjon megfelelő időt a lehűlésre, mielőtt hozzájuk érne. A túlhevülés vagy tűz kockázatának csökkentése érdekében soha ne helyezze a működő berendezést vízszintes felületre lefelé fordítva. Mindig biztosítsa a berendezések és tápegységek megfelelő szellőzését.

AVVERTENZA (IT)
Rischio di elettrocuzione. Per ridurre il rischio di lesioni gravi si raccomanda di prendere sempre le dovute precauzioni e scollegare l'apparecchio prima di spostarlo o pulirlo. L'apparecchio e l'alimentatore sono adatti ad ambienti umidi conformemente allo standard UL 1598, ma non sono progettati per essere immersi in acqua. Nel caso in cui il modulo o l'involucro dell'alimentatore vengano sommersi, disconnettere per prima cosa l'interruttore, poi scollegare i componenti immersi prima di procedere a rimuoverli dall'acqua. Per prevenire danni agli occhi evitare di guardare direttamente i LED non schermati. Le superfici dei LED e del dissipatore di calore possono diventare molto calde. Assicurarsi che si siano raffreddati a sufficienza prima di maneggiarli. Per ridurre il rischio di surriscaldamento o di incendio, non posizionare mai apparecchi accessi a faccia in giù su una superficie a filo. Assicurare sempre una ventilazione adeguata degli apparecchi e degli alimentatori.

ECKEPTY (KZ)
Ток соғу қаупі бар. Ауыр жарақат алу мүмкіндігін азайту үшін, әрдайым тиісті сақтық шараларын орындап, жылжытпас немесе тазаламас бұрын, құрылғыны ажыратыңыз. Құрылғы мен қуат көзі UL 1598 ылғал жер стандартына сәйкес келеді, бірақ суға батыруға арналмаған. Егер модуль немесе қуат көзі суға батырылса, алдымен автоматты ажыратқышты ажыратып, содан кейін судан шығармас бұрын, суға батырылған құрамдастарды ажыратыңыз. Көздің зақымдалуын болдырмас үшін, экрандалмаған жарық диодты шамдарға тікелей қарамаңыз. Жарық диоды мен радиатор беттері ыстық болуы мүмкін. Пайдаланбас бұрын, салқындау үшін жеткілікті уақыт беріңіз. Шамадан тыс қызып кету немесе өрт шығу қаупін азайту үшін, жұмыс істеп тұрған құрылғыларды теріс беттерге ешқашан бетін төмен қаратып қоймаңыз. Құрылғылар мен қуат көздерінің әрдайым тиісті түрде желдетілуіне мүмкіндік беріңіз.

ĮSPĖJIMAS (LT)
Elektros smūgio pavojus. Kad būtų sumažinta rimtų sužalojimų galimybė, visada imkitės tinkamų atsarginių priemonių ir atjunkite įrangą prieš ją perkeldami ar valydami. Įranga ir maitinimo šaltinis atitinka UL 1598 drėgnų vietų kategorijos reikalavimus, tačiau jie nėra skirti nardinti į vandenį. Jei modulis arba maitinimo šaltinis būtų panardintas į vandenį, pirmiausia išjunkite grandinės pertraukiklį, tada atjunkite panardintus komponentus, o tada ištraukite iš vandens. Kad apsaugotumėte akis, stenkitės nežiūrėti tiesiogiai į neapsaugotus LED. LED ir ir šilumokaičio paviršiai gali būti karšti. Prieš atlikdami su jais veiksmus palaukite, kol jie pakankamai atvės. Kad būtų sumažintas perkaitimo ar gaisro pavojus, veikiančios įrangos niekada nedėkite priekine dalimi žemyn ant lygaus paviršiaus. Visada pasirūpinkite tinkama įrangos ir maitinimo šaltinių ventiliacija.

BRĪDINĀJUMS (LV)
Strāvas trieciena risks. Lai samazinātu smagu traumu iespējamību, vienmēr veiciet atbilstošus drošības pasākumus un pirms pārvietošanas vai tīrīšanas atvienojiet gaismekli. Gaismeklis un barošanas avots ir norādīti ar UL 1598 Wet Location aizsardzību, taču tie nav domāti iegremdēšanai ūdenī. Ja modulis vai barošanas avots korpuss tomēr tiek iegremdēti ūdenī, vispirms izslēdziet jaudas slēdzi, pēc tam, pirms izņemšanas no ūdens, atvienojiet iegremdētās komponentes. Lai nepieļautu acu bojājumus, neskatieties tieši uz LED bez aizsarga. LED un radiatora virsmas var būt karstas. Pirms darbībām, atļaujiet tām atdzist. Lai samazinātu pārkaršanas vai uguns draudus, nekad nenovietojiet ieslēgtus gaismekļus ar priekšpusi uz leju uz līdzenas virsmas. Vienmēr nodrošiniet atbilstošu gaismekļa un barošanas avota ventilāciju.

ADVARSEL (NO)
Fare for elektrisk støt. For å redusere muligheten for alvorlig personskade må du alltid ta de riktige forholdsreglene og koble fra armaturen før du flytter eller rengjør den. Armaturen og strømforsyningen er UL 1598-klassifisert for våt plassering, men er ikke utformet for å senkes ned i vann. Hvis modulen eller strømforsyningskabinettet blir senket ned i vann, må du først koble fra kretsbryteren og deretter koble fra komponenter under vannet, før du fjerner enheten fra vannet. Ikke se direkte på LED-lysene som ikke er skjermet, da dette kan føre til øyeskader. LED- og kjøleplateflater kan være varme. Gi tilstrekkelig tid til nedkjøling før håndtering. For å redusere risikoen for overoppheting eller brann må du ikke montere armaturen opp ned på en plan overflate. Du må alltid sørge for tilstrekkelig ventilasjon av armaturer og strømforsyninger.

WAARSCHUWING (NL)
Risico op een elektrische schok. Neem altijd de juiste voorzorgsmaatregelen om de kans op ernstig letsel te verminderen en ontkoppel de armatuur alvorens deze te verplaatsen of te reinigen. Armatuur en stroomvoorziening zijn gecertificeerd volgens UL 1598 Wet Location (natte locatie), maar zijn niet ontworpen om te worden ondergedompeld in water. In het geval de module of de behuizing van de stroomvoorziening onder water raakt, koppelt u eerst de stroomonderbreker los en vervolgens de ondergedompelde componenten voordat u deze uit het water haalt. Kijk niet rechtstreeks in de onbeschermde led's om oogletsel te voorkomen. Het oppervlak van led's en koellichamen kan heet zijn. Laat deze voldoende lang afkoelen voordat u deze vastpakt. Plaats in werking zijnde armaturen nooit met de voorkant naar beneden op een vlak oppervlak om het risico op oververhitting of brand te voorkomen. Zorg altijd voor voldoende ventilatie van armaturen en stroomvoorzieningen.

OSTRZEŻENIE (PL)
Ryzyko porażenia prądem elektrycznym. Aby zmniejszyć prawdopodobieństwo odniesienia poważnych obrażeń, należy zawsze stosować odpowiednie środki ostrożności i odłączać oprawę od zasilania przed wymontowywaniem lub czyszczeniem. Oprawa i zasilacz są przeznaczone do stosowania w pomieszczeniach z instalacją wodną zgodnie z oznaczeniem UL 1598 Wet Location, ale nie mogą być zanurzane w wodzie. W razie zanurzenia modułu lub obudowy zasilacza w wodzie przed rozpoczęciem osuszania najpierw należy rozłączyć wyłącznik awaryjny, a następnie odłączyć zanurzone elementy od zasilania. Aby zapobiec uszkodzeniu oczu, nie należy patrzeć bezpośrednio na nieosłonięte diody LED. Dioda LED i radiator mogą być gorące. Przed kontynuowaniem pracy poczekać na ostygnięcie elementów. Aby zmniejszyć ryzyko wystąpienia przegrzania lub pożaru, nigdy nie kłaść świecących opraw stroną emitującą światło na zupełnie płaskiej powierzchni. Należy zawsze zapewnić odpowiednią wentylację opraw i zasilaczy.

ADVERTÊNCIA (PT)
Risco de choque elétrico. Para reduzir a possibilidade de ferimentos graves, tome sempre as devidas precauções e desligue a luminária antes de a mover ou limpar. A luminária e a fonte de alimentação são classificadas como UL 1598 (Adequado para Locais Húmidos), mas não são projetadas para serem submersas na água. No caso de o módulo ou o compartimento da fonte de alimentação ficar submerso, primeiro desconecte o disjuntor e então desligue os componentes antes de removê-los da água. Para evitar danos aos olhos, evite olhar diretamente para os LEDs não blindados. As superfícies do LED e do dissipador de calor podem estar quentes. Aguarde o tempo suficiente de arrefecimento antes de utilizar. Para reduzir o risco de sobreaquecimento ou incêndio, nunca coloque luminárias em funcionamento com a face voltada para baixo numa superfície nivelada. Sempre garanta a ventilação adequada de luminárias e fontes de alimentação.

AVERTISMENT (RO)
Risc de electrocutare. Pentru a reduce posibilitatea rănirii grave, luați întotdeauna precauțiile corespunzătoare și deconectați aparatul înainte de a-l deplasa sau curăța. Aparatul și sursa de alimentare dețin clasificarea UL 1598 - Locație umedă, dar nu sunt proiectate pentru a fi scufundate în apă. În cazul în care modulul sau carcasa de alimentare intră sub apă, întâi decuplați întrerupătorul, apoi deconectați componentele scufundate înainte de a continua scoaterea din apă. Pentru a preveni rănirea ochilor, evitați să priviți direct la LED-urile neprotejate. Suprafețele LED și ale radiatorului pot fi fierbinți. Lăsați suficient timp pentru a se răci înainte de manipulare. Pentru a reduce riscul de supraîncălzire sau incendiu, nu așezați niciodată aparatele în stare funcționare cu fața în jos pe o suprafață plană. Permiteți întotdeauna o ventilație adecvată a aparatelor și a surselor de alimentare.

ПРЕДУПРЕЖДЕНИЕ (RU)
Опасность поражения электрическим током. Чтобы уменьшить вероятность получения серьезных травм, всегда принимайте надлежащие меры по обеспечению безопасности и отключайте устройство перед перемещением или чисткой. Конструкция устройства и блок питания соответствуют требованиям эксплуатации в сырых помещениях UL 1598 Wet Location, но не предназначены для погружения в воду. В случае погружения модуля или корпуса блока питания в воду сначала разъедините автоматический выключатель, затем отсоедините погруженные компоненты, прежде чем вынимать их из воды. Во избежание повреждения глаз избегайте смотреть прямо на неэкранированные светодиоды. Поверхности светодиодов и теплоприемника могут быть горячими. Подождите несколько минут перед работой с ними. Чтобы снизить риск перегрева или возгорания, никогда не кладите рабочее устройство лицом вниз на ровную поверхность. Всегда предусматривайте достаточную вентиляцию светильников и источников питани.

VÝSTRAHA (SK)
Riziko zásahu elektrickým prúdom. Aby ste znížili riziko vážneho poranenia, pred presúvaním alebo čistením vždy prijmite náležité bezpečnostné opatrenia a výrobok odpojte. Výrobok a napájací zdroj majú klasifikáciu UL 1598 pre mokré miesta, nie sú však určené na ponorenie do vody. V prípade, že dôjde k ponoreniu modulu alebo krytu napájacieho zdroja, najskôr vypnite istič, potom odpojte ponorené komponenty a až potom ich vytiahnite z vody. Aby ste predišli poškodeniu očí, nepozerajte sa priamo do netienených diód LED. LED diódy a povrchy chladiča môžu byť horúce. Pred manipuláciou ich nechajte dostatočne ochladnúť. Aby ste znížili riziko prehriatia alebo požiaru, výrobky v prevádzke nikdy neklaďte prednou stranou nadol na rovný povrch. Vždy zabezpečte dostatočnú ventiláciu výrobkov a napájacích zdrojov.

OPOZORILO (SI)
Nevarnost električnega udara. Ogrodje pred premikanjem ali čiščenjem vedno pravilno zaščitite in izklopite napajanje, s čimer zmanjšate možnost resnih poškodb. Čeprav imata ogrodje in napajanje oceno UL 1598 Wet Location, nista namenjeni uporabi pod vodo. Če sta modul ali ohišje napajalnika pod vodno gladino, najprej odstranite prekinjevalnik električnega kroga, nato odklopite potopljene komponente, preden izdelek vzamete iz vode. Ne glejte neposredno v nezakrite LED-luči, s čimer preprečite poškodbe oči. Površina LED-luči in hladilnega telesa je lahko vroča. Pred uporabo pustite, da se ohladi. Delujoče opreme nikoli ne postavite z licem navzdol na ravno površino, da preprečite tveganje pregrevanja ali požara. Vedno poskrbite za primerno prezračevanje opreme in napajalnika.

UPOZORENJE (RS)
Rizik od električnog udara. Da biste smanjili mogućnost ozbiljnih povreda, uvek preduzmite odgovarajuće preventivne mere i isključite opremu pre premeštanja ili čišćenja. Oprema i električno napajanje predviđeni su za rad na vlažnim lokacijama prema standardu UL 1598, ali nisu projektovani za potapanje u vodu. U slučaju da se kućište modula ili električnog napajanja potopi, prvo odvojite osigurač, a zatim isključite potopljene komponente pre nego što ih izvadite iz vode. Da biste sprečili oštećenje vida, izbegavajte da gledate direktno u neizaštićene LED indikatore. Površine LED indikatora i hladnjaka mogu biti vruće. Ostavite dovoljno vremena za hlađenje pre rukovanja. Da biste smanjili rizik od pregrevanja ili požara, radne elemente nikada nemojte stavljati okrenute licem ka ravnoj površini. Uvek omogućite dovoljnu ventilaciju opreme i električnog napajanja.

VARNING (SE)
Risk för elektriska stötar. För att minska risken för allvarliga personskador ska du alltid vidta lämpliga försiktighetsåtgärder och koppla ur fixturen innan du flyttar eller rengör den. Fixtur och strömförsörjning är godkända enligt UL 1598 för användning i våtrum, men de är inte utformade för att nedsänkas i vatten. Om modulen eller strömförsörjningshöljet blir nedsänkta ska du först stänga av kretsbrytaren och sedan koppla ur de nedsänkta komponenterna innan du lyfter upp dem ur vattnet. Titta aldrig direkt på de oskyddade lysdioderna eftersom det kan leda till ögonskador. Ytor med lysdioder eller kylflänsar kan vara heta. Avsätt tillräcklig tid för nedkylning före hantering. Minska risken för överhettning eller brand genom att aldrig placera fixturer i drift med framsidan nedåt på en plan yta. Säkerställ alltid att fixturer och strömförsörjningsenheter har tillräcklig ventilation.

UYARI (TR)
Elektrik çarpma riski. Ciddi yaralanmaları önlemek için her zaman gerekli önlemleri alın ve hareket ettirmeden veya temizlemeden önce düzeneği çıkarın. Kablo ve güç kaynağı ıslak yerlerde kullanım için UL 1598 uyumludur. Ancak suya batırılmamalıdır. Modülün veya güç kaynağının su altında kalması halinde suyu temizlemeden önce ilk olarak devre kesiciyi çıkarın ve ardından su altında kalan bileşenlerin bağlantısını kesin. Göze zarar vermemesi için koruyucusuz LED'lere doğrudan bakmayın. LED ve ısı giderici yüzeyler sıcak olabilir. Dokunmadan önce yeteri kadar soğumasını bekleyin. Aşırı ısınma veya yangın riskini önlemek için düzeneği düz bir zemine üst taraf aşağıya gelecek şekilde koymayın. Düzeneğin ve güç kaynağının yeteri miktarda havalandırılmasını sağlayın.

УВАГА! (UA)
Небезпека враження електричним струмом. Щоб уникнути можливості серйозно травмуватися, завжди дотримуйтеся належних запобіжних заходів і вимикайте прилад із розетки перед переміщенням або чисткою. Прилад і блок живлення відповідають вимогам для використання у вологому середовищі, наведеним у стандарті UL 1598, але не розраховані на занурення у воду. Якщо модуль або блок живлення було занурено у воду, перш ніж дістати його, вимкніть автоматичний мікровимикач і від'єднайте виріб від розетки. Щоб уникнути пошкодження зору, не дивіться на відкриті світлодіоди. Світлодіоди й поверхні радіатора можуть бути гарячими. Перш ніж торкатися приладу, зачекайте, доки він охолоне. Щоб уникнути перегріву чи пожежі, ніколи не ставте ввімкнений прилад лицьовою стороною вниз на гладку поверхню. Завжди забезпечуйте належну вентиляцію приладів і джерел живлення.

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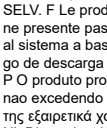
1. CAUTIONS AND WARNINGS

D Produkt zur Raumbeleuchtung im Haushalt nicht geeignet GB Product not suitable for domestic household lighting F Produit inadapte a l'eclairage interieur d'une habitation I Prodotto non idoneo a impianti di illuminazione domestici E Producto no adecuado para iluminacion residencial P Produto nao adequado para iluminacao domestica GR Το προϊόν δεν είναι κατάλληλο για φωτισμό οικιακής χρήσης NL Product niet geschikt voor huishoudelijke verlichtingsdoeleinden S Produkten ar ej lamplig for hushallsbelysning FIN Tuotetta ei voida kayttaa kotitalouksien valaisuun N Produktet er ikke egnet til a lyse opp rom med DK Produktet er ikke egnet husholdningsbelysning CZ Vyrobek neni vhodny pro osvětleni domacnosti RUS Продукт не подходит для бытового освещения помещений KZ Бұл өнім үйдегі тұрмыстық жарықтандыруға жарамайды H A termek nem alkalmas haztartasi vilagitasnak PL Produkt nie jest odpowiedni do oświetlenia domowego SK Produkt nie je vhodny na osvetlenie miestnosti v domacnosti SLO Izdelek ni primeren za osvetlitev bivalnih prostorov TR Urun, ev aydınlatması icin uygun değildir HR Proizvod nije prikladan za rasvjetu prostorija u kućanstvu RO Produsul nu este adecvat pentru iluminatul locuinţei BG Продуктът не е подходящ за жилищно-битово осветление EST Toode ei sobi majapidamisvalgustiks LT Prietaisas neskirtas namų apšvietimui LV Produkts nav piemērots apgaismojumam mājās. SRB Proizvod nije pogodan za rasvetu u domaćinstvu UA Продукт не підходить для побутового освітлення приміщень

D WEEE-Geratekennzeichen: Nicht in den Hausmull werfen! Sachgerechte Entsorgung der Produkte und Verpackung nach geltendem Landesrecht vornehmen. GB WEEE device identification: Do not dispose of in domestic waste! Proper disposal of the product and packaging must be done in accordance with the applicable national law. F Identification WEEE du dispositif : ne pas jeter avec les dechets menagers ! Le produit et son emballage doivent etre elimines conformement a la legislation nationale en vigueur. I Identificazione RAEE del dispositivo: Non smaltire con i rifiuti domestici! Lo smaltimento corretto del prodotto e dell'imballaggio deve essere effettuato secondo la legge nazionale applicabile. E Identificacion RAEE del dispositivo: No desechar con los residuos domesticos. El desecho adecuado del producto y el embalaje debera llevarse a cabo de conformidad con la ley nacional aplicable. P Identificacao do dispositivo REEE: Nao deite fora no lixo domestico! A eliminacao adequada do produto e da embalagem deve ser feita em conformidade com a legislacao nacional aplicavel. GR Αναγνώριση συσκευής WEEE: Μην απορρίπτετε με τα οικιακά απορρίμματα! Η απόρριψη του προϊόντος και της συσκευασίας πρέπει να γίνεται σύμφωνα με την ισχύουσα εθνική νομοθεσία. NL WEE-apparaatidentificatie: niet weggooien bij het huishoudelijke afval! Correcte verwijdering van het product en verpakking dient te gebeuren overeenkomstig de toepasselijke nationale wetgeving. S Enhetens identifikation for WEEE: Slang inte bland hushallssopor! Produkten och forpackningen maste slangas pa ett korrekt satt i enlighet med gallande nationell lag. FIN WEEE-laitetunnus: Ala havita kotitalousjatteen seassa! Tuotteen ja pakkauksen asianmukainen havittaminen on suoritettava soveltuvien paikallisten lakien mukaisesti. N WEEE Enhetsidentifikasjon: Skal ikke kastes i husholdningsavfallet! Riktig avhending av produktet og emballasjen ma gjores i henhold til gjeldende nasjonale lover. DK WEEE enhedsidentifikation: Ma ikke bortskaffes med husholdningsaffald! Korrekt bortskaffelse af produktet og emballagen skal ske i overensstemmelse med g.ldende national lovgivning. CZ Označení zařízení podle systemu WEEE: Nevyhazovat do domovniho odpadu! Spravna likvidace vyrobku a obalu musi byt provedena v souladu s platnymi narodnimi legislativnimi předpisy. RUS Идентификация устройства в соответствии с Директивой ЕС (WEEE) об отходах электрического и электронного оборудования: Не выбрасывайте продукт вместе с бытовыми отходами! Продукт и упаковку необходимо утилизировать надлежащим образом в соответствии с действующим национальным законодательством. KZ WEEE құрылғы идентификаторы: үй қоқысымен бірге тастаманыз! Бұл өнім мен оның қаптамасының тасталуы қолданыстағы ұлттық заңға сай дұрыс орындалуы тиіс. H WEEE keszulek azonosito: Kommunalis hulladekba helyezni tilos! A termek es a csomagolas megfelelő artalmatlanitasat a hatalyos nemzeti szabalyozas szerint kell elvegezni. PL Identyfikacja urządzenia WEEE: Urządzenia nie wolno wyrzucać wraz ze zwykłymi odpadami domowymi! Właściwe usuwanie produktu i opakowania musi odbywać się zgodnie z obowiązującym prawem krajowym. SK Označenie zariadenia WEEE: Nelikvidujte v ramci komunalneho odpadu! Riadna likvidacia tohto produktu a obalov sa musi vykonať v sulade s narodnymi pravnymi predpismi. SLO Identifikacija izdelka v smislu OEEO: Ne zavrzite med gospodinjske odpadke! Izdelek in embalažo je treba med odpadke zavreči ustrezno in v skladu z veljavno nacionalno zakonodajo. TR WEEE cihaz kimliği: Evsel atıklara dahil etmeyin! Urun ve ambalajın doğru bicimde imhası ilgili ulusal yasaya uygun olarak gerceklestirilmelidir. HR Oznaka WEEE na uređaju: ne odlažite u kućni otpad! Proizvod i pakiranje potrebno je ispravno odložiti u skladu s primjenjivim zakonom države. RO Identificarea dispozitivelor WEEE: Nu eliminaţi produsul in gunoiul menajer! Eliminarea corectă a produsului şi ambalarea se vor face in conformitate cu legea naţională aplicabilă. BG Идентификация на устройството по WEEE: Да не се изхвърля с битовите отпадъци! Правилното третиране на продукта и опаковката му като отпадъци трябва да става в съответствие с приложимото национално законодателство. EST WEEE-seadme identifitseerimine: Arge visake olmejaatmetesse! Toote ja pakendite nouetekohane korvaldamine peab toimuma kooskolas kehtivate siseriiklike oigusaktidega. LT WEEE įrenginio identifikacija: nešalinti kartu su buitinėmis atliekomis! Gaminio ir pakuotės šalinimas turi būti atliekamas pagal šalyje galiojančius įstatymus. LV WEEE ierīces identifikācija: neizmest sadzīves atkritumos! Produkts un iepakojums jāizmet atbilstoši piemērojamam valsts likumam. SRB Identifikacija WEEE uređaja: Nemojte da odlažete u otpad iz domaćinstva! Proizvod i pakovanje morate da odložite u otpad u skladu sa važećim nacionalnim zakonom. UA Ідентифікація пристрою відповідно до Директиви ЄС (WEEE) щодо відпрацьованого електричного й електронного обладнання: Не викидайте продукт разом з іншим домашнім сміттям! Продукт та упаковку слід утилізувати належним чином відповідно до діючого національного законодавства.



D Produkt, bei der der Schutz gegen elektrischen Schlag auf der Anwendung der Schutzkleinspannung (SELV) beruht und in der Spannungen hoher als SELV nicht erzeugt werden. GB The product protects against risk of electric shock with safety extra-low voltage (SELV), not exceeding voltages above SELV. F Le produit protege des risques d'electrocution grace a la tres basse tension de securite (TBTS) ; il ne presente pas de tension superieure a la TBTS. I Il prodotto protegge dal rischio di scossa elettrica grazie al sistema a bassissima tensione (SELV) che non supera le tensioni SELV. E El producto protege contra riesgo de descarga electrica con voltaje bajo extra seguro (SELV) que no exceda los voltajes superiores a SELV. P O produto protege contra o risco de choque eletrico com a tensao de seguranca muito baixa (SELV), nao excedendo as tensoes acima de SELV. GR Το προϊόν προσφέρει προστασία από ηλεκτροπληξία λόγω της εξαιρετικά χαμηλής τάσης (SELV). Το προϊόν δεν υπερβαίνει τις τάσεις πάνω από το επίπεδο SELV. NL Dit product beschermt tegen het risico op elektrische schokken met extra lage veiligheidsspanning (SELV); de SELV wordt niet overschreden. S Produkten skyddar mot risken for elektrisk chock med extra lag sakerhetsspanning (SELV) som inte overstiger spanning over SELV. FIN Tuote on suojattu sahkoiskua vastaan erityisen alhaisen suojajannitteen (SELV) ansiosta, jannitteet eivat ylita SELV-jannitetta. N Produktet beskytter mot risikoen for elektrisk stot med ekstrapolert lavspenning (SELV), som ikke overstiger spenninger over SELV. DK Produktet beskytter mod risiko for elektrisk stod med sikkerheds – ekstra-lavsp.nding (SELV, safety extra-low voltage), der ikke overstiger sp.ndinger over SELV. CZ Vyrobek chrani před urazem elektrickym proudem vzhledem k extra-nizkemu napěti (SELV), nevyskytuji se zde napěti nad SELV. RUS Продукт предотвращает риск поражения электрическим током благодаря работе при безопасном сверхнизком напряжении (БСНН). Напряжение не превышает БСНН. KZ Бұл өнім қауіпсіз өте төменгі кернеу (SELV) мөлшерінен жоғары кернеуден аспайтын қауіпсіз өте төменгі кернеудің арқасында электр тогына түсу қаупінен қорғалған. H A termek biztonsagi torpefeszultseg (SELV) alkalmazasaval ved az elektromos aramutes veszelyevel szemben, a SELV erteket nem haladja meg a feszultseg. PL Produkt chroni przed porażeniem prądem elektrycznym dzięki obwodowi bardzo niskiego napięcia (SELV), nie przekraczającemu napięcia powyżej SELV. SK Produkt chrani pred zasiahnutim elektrickym prudom použitim ochranneho nizkeho napatia (SELV), nedosahuje sa napatie prekračujuce SELV. SLO Izdelek varuje pred električnim udarom zaradi varnostne male napetosti (SELV) in ne presega napetosti, višjih od SELV. TR Urun, SELV uzerindeki voltajlara cıkmayan, guvenli cok duşuk gerilimle (SELV) elektrik şoku riskine karşı korur. HR Proizvod pruža zaštitu od električnog udara primjenom sigurnosnog malog napona (SELV). Ne generiraju se naponi koji premašuju SELV. RO Produsul protejează impotriva riscului de electrocutare cu tensiune de siguranţă foarte joasă (SELV), fără să depăşească tensiunile mai mari decat SELV. BG Продуктът осигурява защита от електрически удар с безопасно свръхниско напрежение (SELV), което не се повишава до стойности над SELV. EST Toode kaitseb elektriloogi ohu eest maandamata kaitsevaikepinge susteemiga (SELV), mis ei uleta SELV-i korgemaid pingeid. LT Prietaisas apsaugo nuo elektros smūgio pavojaus, jei žema saugi įtampa (SELV) neviršija SELV įtampos. LV Produkts pasargā no elektrošoka riska, jo tam ir izteikti zema strāva (SELV), kas nepārsniedz strāvas līmeni virs SELV. SRB Proizvod štiti od rizika od električnog udara putem izuzetno niskog bezbednog napona (SELV), koji ne prekoračuje napone iznad SELV. UA Продукт запобігає ризику ураження електричним струмом завдяки роботі при безпечній наднизькій напрузі (БННН). Напруга не перевищує БННН.

D CE-Kennzeichen: Hiermit erklart Signify, dass dieses Produkt den grundlegenden Anforderungen und den relevanten Vorschriften der europaischen Richtlinien entspricht. GB CE marking: Signify declares that this product conforms with the basic requirements and relevant provisions of the European guidelines. F Marquage CE: Signify declare que ce produit repond aux exigences de base et aux dispositions applicables des directives europeennes. I Marchio CE: Signify dichiara che questo prodotto e conforme ai requisiti di base e i provvedimenti pertinenti secondo le linee guida europee. E Marca CE: Signify declara que este producto cumple con los requisitos basicos y las disposiciones relevantes de las directrices europeas. P Marca CE: A Signify declara que este produto esta em conformidade com os requisitos basicos e as disposicoes relevantes das diretrizes europeias. GR Σήμανση CE: Η Signify δηλώνει ότι το προϊόν αυτό συμμορφώνεται με τις βασικές απαιτήσεις και τις σχετικές διατάξεις των ευρωπαϊκών οδηγιών. NL CE-markering: Signify verklaart dat dit product voldoet aan de basisvereisten en relevante bepalingen van de Europese richtlijnen. S CE-markning: Signify tillkannager att den har produkten uppfyller de grundlaggande kraven och relevanta bestammelserna i de europeiska riktlinjerna. FIN CE-merkinta: Signify takaa, etta tama tuote tayttaa Eurooppalaiset perusvaatimukset ja muut tarkeat vaatimukset. N CE-merking: Signify erkl.rer at dette produktet oppfyller krav og relevante bestemmelser i de europeiske retningslinjene. DK CE-m.rkning: Signify erkl.rer, at dette produkt overholder de grundl.ggende krav og relevante bestemmelser i de europ.iske vejledninger. CZ Značka CE: Společnost Signify prohlašuje, že tento vyrobek splňuje zakladni požadavky a ustanoveni evropskych směrnic. RUS Маркировка CE: компания Signify заявляет, что данный продукт отвечает основным требованиям и соответствующим положениям Европейских директив. KZ CE белгісі: Signify компаниясы бұл өнімнің Еуропалық нұсқаулықтардың негізгі талаптары мен қатысты ережелеріне сай екенін жариялайды. H CE jeloles: Az Signify kijelenti, hogy a termek teljesiti az Europai iranyelvek alapvető kovetelmenyeit es vonatkozo előirasait. PL Oznakowanie CE: firma Signify oświadcza, że niniejszy produkt jest zgodny z podstawowymi wymogami i odpowiednimi postanowieniami wytycznych europejskich. SK Označenie CE: Spoločnosť Signify tymto deklaruje, že tento produkt vyhovuje zakladnym požiadavkam a relevantnym predpisom europskych smernic. SLO Oznaka CE: Družba Signify izjavlja, da ta izdelek izpolnjuje osnovne zahteve in ustrezna določila evropskih smernic. TR CE işareti: Signify, bu urunun Avrupa kılavuz ilkelerinin ilgili hukumleri ve temel gerekliliklerine uygun olduğunu beyan eder. HR Oznaka CE: tvrtka Signify ovim izjavljuje da je ovaj proizvod u skladu s osnovnim zahtjevima i relevantnim odredbama europskih direktiva. RO Marcaj CE: Signify declară că acest produs respectă cerinţele de bază şi prevederile relevante ale standardelor europene. BG Маркировка „CE": Signify декларира, че този продукт съответства на основните изисквания и приложимите разпоредби на европейските насоки. EST CE-margis: Signify kinnitab, et antud toode vastab Euroopa suuniste pohinouetele ja asjakohastele satetele. LT CE ženklinimas: Signify pareiškia, kad šis prietaisas atitinka pagrindinius Europos gairių reikalavimus ir atitinkamas nuostatas. LV CE marķējums: Signify paziņo, ka šis produkts atbilst Eiropas vadlīniju pamata prasībām un saistītiem nosacījumiem. SRB CE označavanje: Signify izjavljuje da je ovaj proizvod u saglasnosti sa osnovnim zahtevima i važećim propisima evropskih smernica. UA Маркування CE: компанія Signify засвідчує,

UKCA Mark: Signify declares that this product complies with the basic relevant UK statutory instruments and relevant provisions of the United Kingdom guidelines. Маркировка на UKCA: Signify декларира, че този продукт отговаря на основните съответни законови инструменти на Обединеното кралство и съответните разпоредби на насоките на Обединеното кралство.Oznaka UKCA: Signify izjavljuje da je ovaj proizvod u skladu s osnovnim relevantnim zakonskim instrumentima Ujedinjenog Kraljevstva i relevantnim odredbama smjernica Ujedinjenog Kraljevstva. Značka UKCA: Signify prohlašuje, že tento produkt je v souladu se základními příslušnými zákonnými nástroji Spojeného království a příslušnými ustanoveními směrnic Spojeného království. UKCA-mærke: Signify erklærer, at dette produkt overholder de grundlæggende relevante britiske lovbestemte instrumenter og relevante bestemmelser i de britiske retningslinjer.UKCA-merkteken: Signify verklaart dat dit product voldoet aan de fundamentele relevante wettelijke instrumenten van het VK en relevante bepalingen van de richtlijnen van het Verenigd Koninkrijk. UKCA tähis: Signify kinnitab, et see toode vastab Ühendkuningriigi põhiseaduslikele õigusaktidele ja Ühendkuningriigi juhiste asjakohastele sätetele. UKCA-merkki: Signify vakuuttaa, että tämä tuote on Yhdistyneen kuningaskunnan lakisääteisten perussäädösten ja asiaa koskevien Yhdistyneen kuningaskunnan ohjeiden mukainen. Marque UKCA : Signify déclare que ce produit est conforme aux instruments réglementaires britanniques de base et aux dispositions pertinentes des directives du Royaume-Uni.UKCA-Zeichen: Signify erklärt, dass dieses Produkt den grundlegenden einschlägigen britischen Rechtsinstrumenten und den einschlägigen Bestimmungen der britischen Richtlinien entspricht. Σήμα UKCA: Η Signify δηλώνει ότι αυτό το προϊόν συμμορφώνεται με τις βασικές σχετικές νομοθετικές πράξεις του Ηνωμένου Βασιλείου και τις σχετικές διατάξεις των κατευθυντήριων γραμμών του Ηνωμένου Βασιλείου. UKCA védjegy: Az Signify kijelenti, hogy ez a termék megfelel az Egyesült Királyság alapvető vonatkozó törvényi eszközeinek és az Egyesült Királyság irányelveinek vonatkozó rendelkezéseinek. Marc UKCA: Dearbhaíonn Signify go gcomhlíonann an táirge seo bunionstraimí reachtúla ábhartha na RA agus forálacha ábhartha threoirlínte na Ríochta Aontaithe. Marchio UKCA: Signify dichiara che questo prodotto è conforme agli strumenti legali di base del Regno Unito e alle disposizioni pertinenti delle linee guida del Regno Unito.UKCA marķējums: Signify paziņo, ka šis izstrādājums atbilst galvenajiem attiecīgajiem Apvienotās Karalistes tiesību aktiem un attiecīgajiem Apvienotās Karalistes vadlīniju noteikumiem.UKCA ženklas: Signify pareiškia, kad šis gaminys atitinka pagrindinius atitinkamus JK teisės aktus ir atitinkamas Jungtinės Karalystės gairių nuostatas.Marka UKCA: Signify tiddikjara li dan il-prodott jikkonforma mal-istrumenti statutorji rilevanti bażiċi tar-Renju Unit u d-dispożizzjonijiet rilevanti tal-linji gwida tar-Renju Unit. Znak UKCA: Signify oświadcza, że ten produkt jest zgodny z podstawowymi odpowiednimi instrumentami ustawowymi Wielkiej Brytanii oraz odpowiednimi postanowieniami wytycznych brytyjskich. Marca UKCA: A Signify declara que este produto está em conformidade com os instrumentos legais básicos relevantes do Reino Unido e com as disposições relevantes das diretrizes do Reino Unido. Marca UKCA: Signify declară că acest produs este în conformitate cu instrumentele legale de bază relevante din Regatul Unit şi cu prevederile relevante ale ghidurilor Regatului Unit. Značka UKCA: Signify vyhlasuje, že tento produkt je v súlade so základnými príslušnými zákonnými nástrojmi Spojeného kráľovstva a príslušnými ustanoveniami smerníc Spojeného kráľovstva. Oznaka UKCA: Signify izjavlja, da je ta izdelek v skladu z osnovnimi ustreznimi zakonskimi instrumenti Združenega kraljestva in ustreznimi določbami smernic Združenega kraljestva. Marca UKCA: Signify declara que este producto cumple con los instrumentos legales básicos pertinentes del Reino Unido y las disposiciones pertinentes de las directrices del Reino Unido. UKCA-märke: Signify förklarar att denna produkt överensstämmer med de grundläggande relevanta brittiska lagstadgade instrumenten och relevanta bestämmelser i Storbritanniens riktlinjer. D WEEE-Geratekennzeichen: Nicht in den Hausmull werfen! Sachgerechte

Horticulture Use

1.3. IMPORTANT SAFETY PRECAUTIONS & EXPLANATION OF SYMBOLS

- Please read this manual thoroughly before attempting to install or operate any Fluence RAZR Modular Series system.
- After successful installation and configuration of the system, be sure to retain this manual in a safe place for future reference. Safety is a key component to a long lasting and trouble free installation.
- It is important you read, fully understand, and observe the subsequent safety precautions. If you are not comfortable with the installation of high performance lighting systems, you should seek the services of a qualified installation professional or call us for help.
- NOTICE: RAZR Modular is a high-performance lighting system. **DO NOT TOUCH** while in operation.
- Connect the system only to the power sources of the appropriate voltage using the correct AC plug type. Protect power cables from being pinched, walked on, or otherwise damaged. Be especially careful where the power cable enters the power outlet and the unit. Only connect the system to an electrical outlet or extension cord of appropriate type and rating. Connect the system only to the power sources of the correct voltage using the plug received.
- DO NOT defeat the safety purpose of a grounding or polarized plug by removing ground pins or using unsafe adapters. A polarized plug has two blades – one wider than the other. A grounding plug has a third ground prong in addition to the two main conductors. The wide blade or third grounding prong is provided for your safety. If the provided plug does not fit your outlet, consult an electrician to replace your obsolete outlet. If you replace the power cord, only use one of similar type and equal or greater current rating.
- The system should only be cleaned as directed in the manual. You should seek service for your system by qualified service personnel if any of the following occur:
  1. The power-supply cord or the plug has been damaged.
  2. The unit has been exposed to rain.
  3. The unit exhibits a marked change in performance.
  4. The unit has been dropped, or its enclosure or chassis is damaged.

1.4. CULTIVATION BEST PRACTICES

Fluence encourages everyone to experiment and pursue their own techniques. Every crop is different and everyone has different goals.

For cultivation recommendations visit
https://fluence.science/science-articles/

1.5. GENERAL CARE

RAZR Modular lighting systems are passively cooled with zero moving components. They are designed for harsh environments and years of reliable performance. Some basic care will keep your system operating at peak performance cycle-after-cycle.

For detailed instructions for maintenance and cleaning, refer to the ***Fluence Light Fixture Cleaning Recommendations,*** available at **www.fluence.science/support-center/**

Maximum Ambient Operating Temperature: 104° F / 40° C*
***Note: 95° F / 35° C when operated at 120 V AC supply voltage.**

Maximum Ambient Humidity: 90%, Non-Condensing

SYSTEM SPECIFICATION SHEETS

For complete product information and system specifications please visit
www.fluence.science/support-center/
or email **support@fluence-led.com**

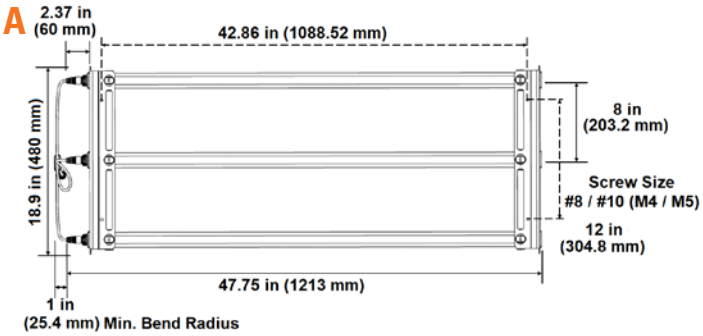
RAZR Modular is a high-performance lighting system. Do not touch while in operation.

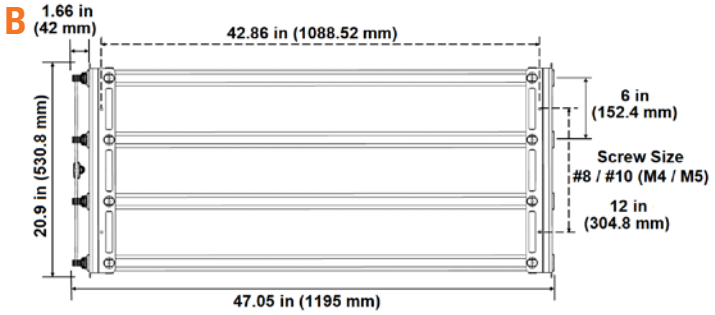
PLEASE RECYCLE ALL PACKAGING MATERIAL.

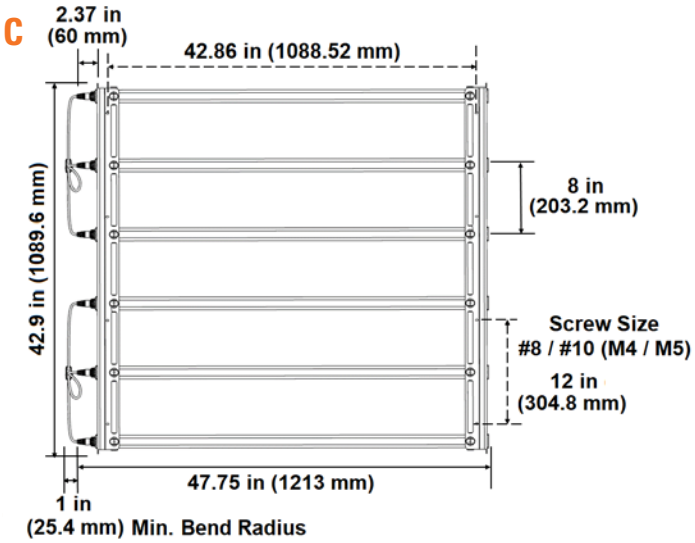
2. DIMENSIONS AND WEIGHT

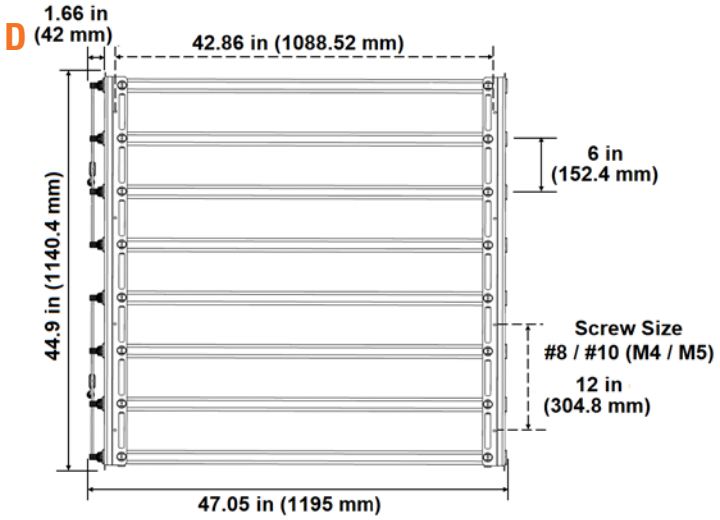
2.1 ASSEMBLED 2′ X 4′ AND 4′ X 4′ FIXTURES

Assembled Light Fixture		Bar Spacing	Length	Width	Height	Weight	Region
A	**2′ x 4′ 3-Bar**	8.0″ 203.2 mm	Right Angle DC Splitter 47.05″ 1195 mm	18.9″ 480 mm	1.57″ 39.9 mm	2.9 lb 1.3 kg	Global
B	**2′ x 4′ 4-Bar**	6.0″ 152.4 mm		20.9″ 530.8 mm		3.6 lb 1.6 kg	
C	**4′ x 4′ 6-bar**	8.0″ 203.2 mm	Straight DC Splitter 47.75″ 1213 mm	42.9″ 1089.6 mm		6.1 lb 2.8 kg	
D	**4′ x 4′ 8-bar**	6.0″ 152.4 mm		44.9″ 1140.4 mm		7.3 lb 3.3 kg	



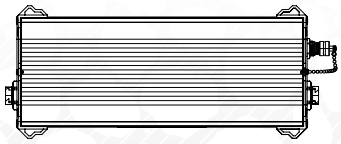






Power Supply Type		DC Wattage	AC Input	Length	Width	Height	Weight	Region
A	**PSU2 LVG**	365-584 W	120-277 V 50/60 Hz	13.43″ 341 mm	5.26″ 134 mm	2.56" 65 mm	7.1 lb 3.2 kg	Global
B	**PSU2 HVG**	365-584 W	347-480 V 50/60 Hz	11.5″ 292 mm	6.41″ 163 mm	2.47" 63 mm	7.5 lb 3.4 kg	
C	**PSU2 LVG**	146-292 W	120-277 V 50/60 Hz	12.60″ 320 mm	4.29″ 109 mm	2.56″ 65 mm	7.5 lb 3.4 kg	
D	**PSU2 HVE**	146-292 W	347-400 V 50/60 Hz	12.60″ 320 mm	4.29″ 109 mm	2.56″ 65 mm	4.9 lb 2.3 kg	

A



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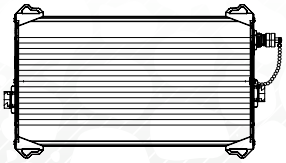

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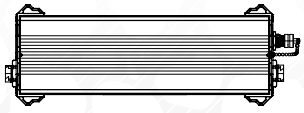

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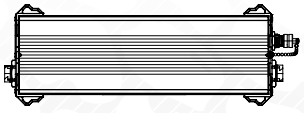


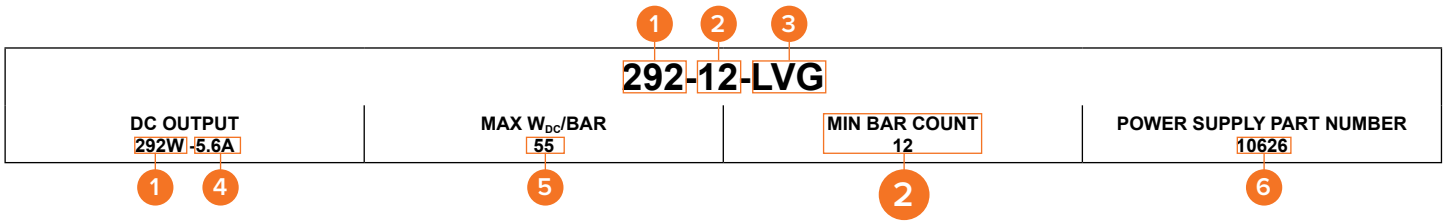
3. PREPARATION FOR SYSTEM INSTALLATION

3.1 BEFORE YOU BEGIN...

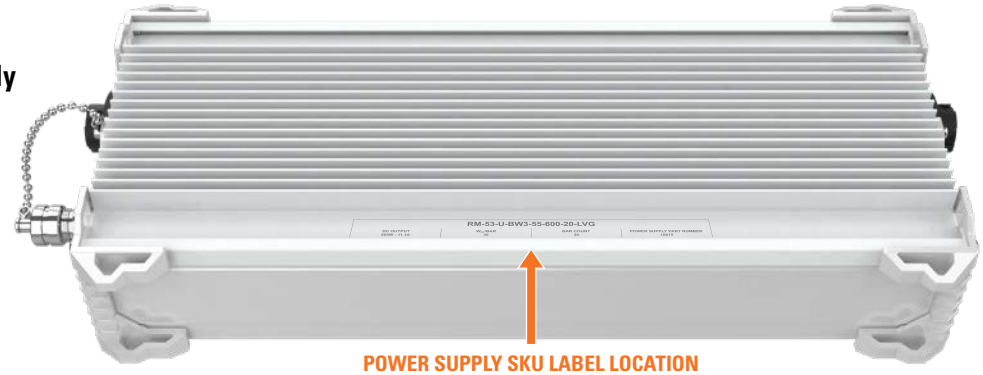
IMPORTANT: Please be sure to match the EXACT light bar quantity per power supply to the BAR COUNT on Power Supply SKU label for proper system performance. A differed bar count from SKU label would result in INCORRECT LIGHT OUTPUT from light bars. For best system performance, only use supplied DC cables or contact FLUENCE for alternative recommendations.

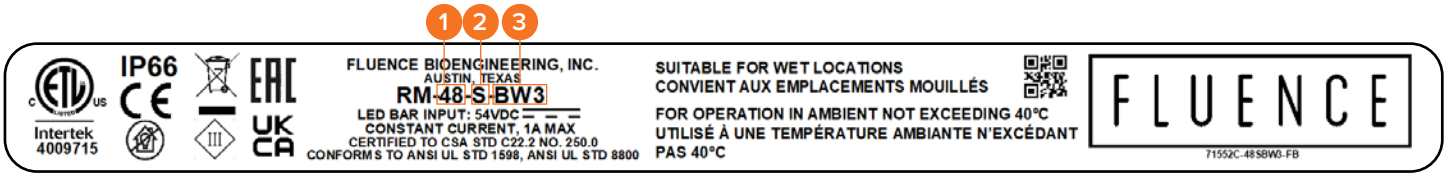
IMPORTANTE: Asegúrese de aparear la cantidad EXACTA de barras de luz por la fuente de alimentación con el CONTADOR DE BARRAS en la etiqueta SKU de la fuente de alimentación para un rendimiento adecuado del sistema. Un recuento de barras diferente al de la etiqueta SKU daría como resultado una SALIDA DE LUZ INCORRECTA de las barras de luz. Para obtener el mejor rendimiento del sistema, utilice únicamente los cables de CC suministrados o comuníquese con FLUENCE para obtener recomendaciones alternativas.

IMPORTANT: Assurez-vous de faire correspondre la quantité EXACTE de barres lumineuses par alimentation électrique au NOMBRE DE BARRES indiqué sur l'étiquette de référence de l'alimentation électrique pour une performance correcte du système. Un nombre de barres différent de celui sur l'étiquette de référence entraînerait un FLUX LUMINEUX INCORRECT des barres lumineuses. Pour de meilleures performances du système, utilisez uniquement les câbles CC fournis ou contactez FLUENCE pour d'autres recommandations.



1. Power Supply DC Output Wattage
2. **Light Bar Quantity for Power Supply**
3. Power Supply Type
4. Power Supply DC Output Current
5. Max. DC Watts per Light Bar
6. Power Supply Part Number





1. Light Bar Model
2. Light Bar LED Distribution
3. Light Bar Spectrum

CAUTION: To protect the LED Array,

- **DO NOT** plug in AC power **BEFORE** connecting the power supply to RAZR Modular light fixtures first.
- The use of gloves is recommended when handling and installing the power supply.

PRECAUCIÓN: Para proteger el conjunto de LED,

- **NO** conecte la alimentación de CA **ANTES** de conectar la fuente de alimentación a los dispositivos de iluminación RAZR Modular.
- Se recomienda el uso de guantes al tocar e instalar la fuente de alimentación.

ATTENTION: Pour protéger la matrice de DEL,

- **NE BRANCHEZ PAS** le câble d'alimentation à une prise CA **AVANT** de brancher le cordon d'alimentation aux luminaires modulaires RAZR.
- L'utilisation de gants est recommandée lors de la manipulation et de l'installation de l'alimentation.

3.2 INSTALLATION PLANNING

A little planning before beginning the installation can pay big dividends in reduced installation time and labor cost.

1. Review and measure the rack tier spacing to plan the routing of all cables.
2. It is recommended to mount the power supply after the DC splitter and manifold cables. This will enable you to determine the optimal location to mount the power supply so all of the cables and power supply will reach each other when you're ready to plug them in.
3. When installing high vertical racks, connecting DC splitter cables to the fixtures during fixture assembly on the ground can reduce work time required on the ladder or scissor lift.

SYSTEM COMPONENTS

Please refer to the ***RAZR Modular System Wiring Guide*** for details of your ordered SKUs, including wiring diagrams, part list and accessories to plan out the installation.

1. 48" LED Light Bar

2. Light Fixture Frames

3. Power Supply

4. DC Splitter Cable

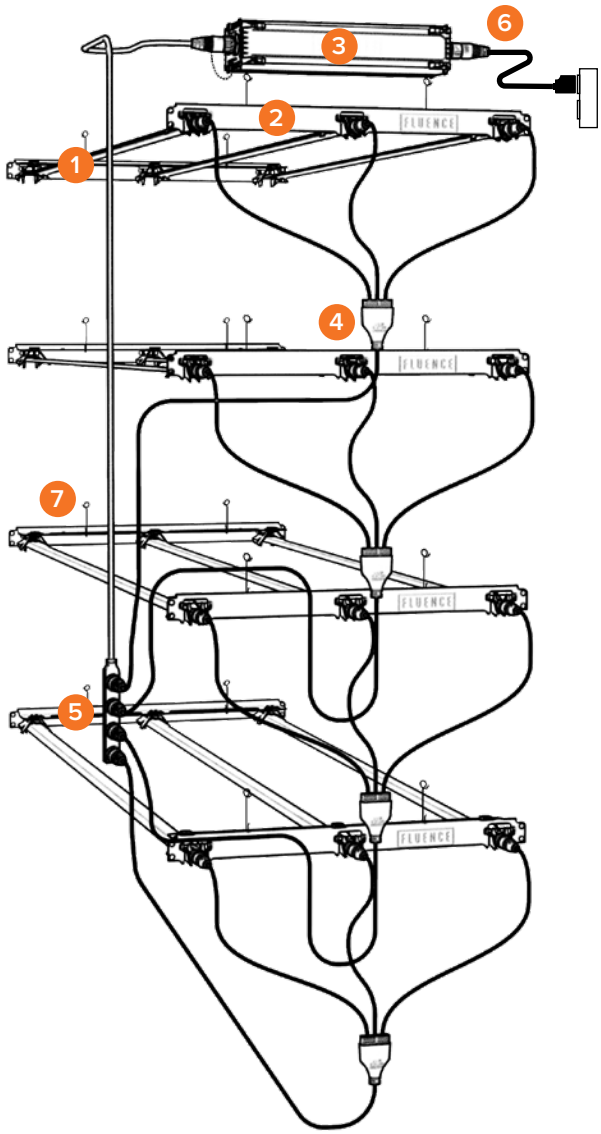
5. DC Manifold Cable

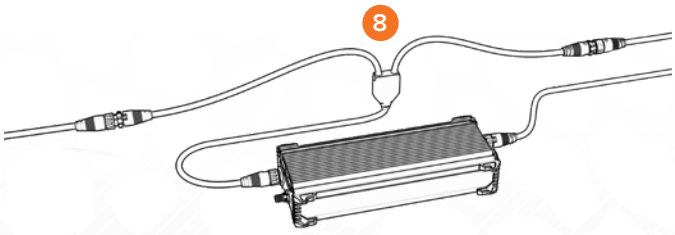
Dust Cap

6. AC Power Cable

7. Fixture Wire Hangers

8. DC Manifold Splitter Cable
(when using two DC manifold cables per power supply)





3. PREPARATION FOR SYSTEM INSTALLATION

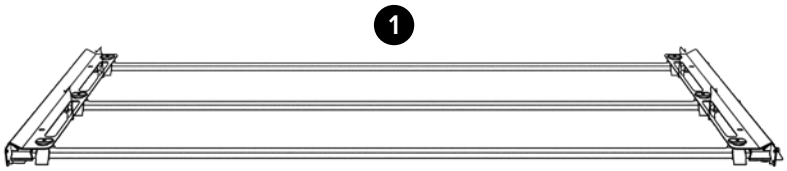
3.3 INSTALLATION STEPS OVERVIEW

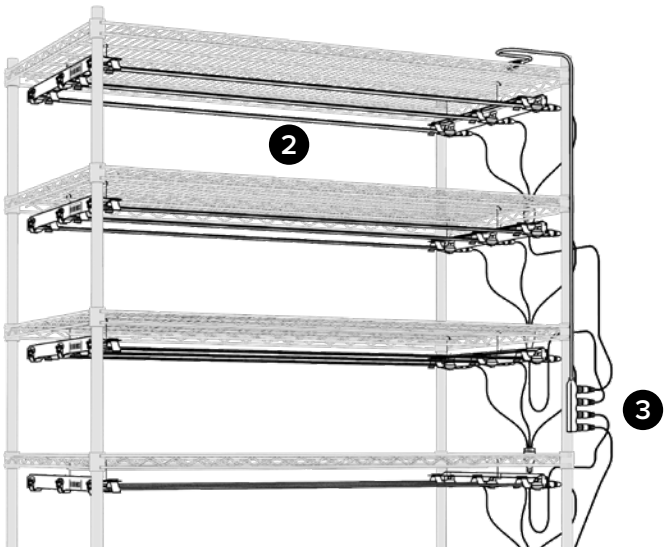
IMPORTANT: Read each installation step completely for important notes regarding proper installation before you begin. It is recommended to install RAZR Modular in the following sequence of steps:

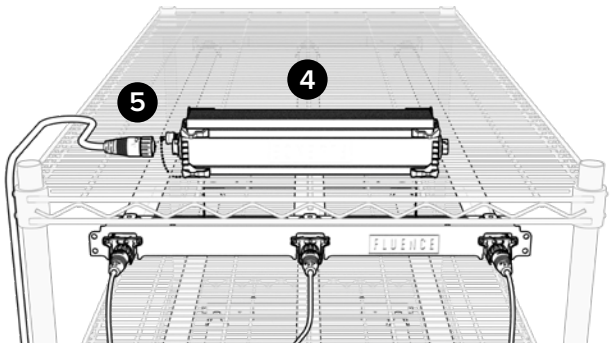
IMPORTANTE: Antes de comenzar, lea cada paso de instalación completamente para obtener notas importantes sobre la instalación adecuada. Se recomienda instalar RAZR Modular en la siguiente secuencia de pasos:

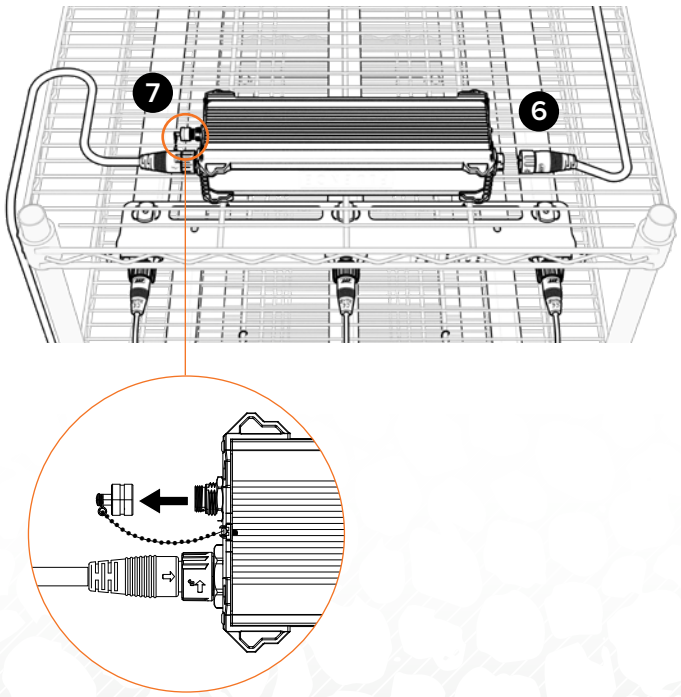
IMPORTANT: Lisez complètement chaque étape d'installation pour obtenir des notes importantes concernant l'installation correcte avant de commencer. Il est recommandé d'installer les luminaires modulaires RAZR dans l'ordre suivant:

1. Assemble the light fixtures.
2. Mount the light fixtures to the rack according to the lighting design.
3. Install the DC splitter and manifold cables.
4. Mount the power supply to the rack.
5. Connect the DC manifold cable(s) to the power supply.
6. Connect the AC power cable to the power supply.
7. Optional: Connect the DC dimming cable to the power supply and then to a dimming controller.
8. Power and test the system.









4. INSTALLATION STEPS

4.1 - STEP 1: ASSEMBLE THE LIGHT FIXTURES

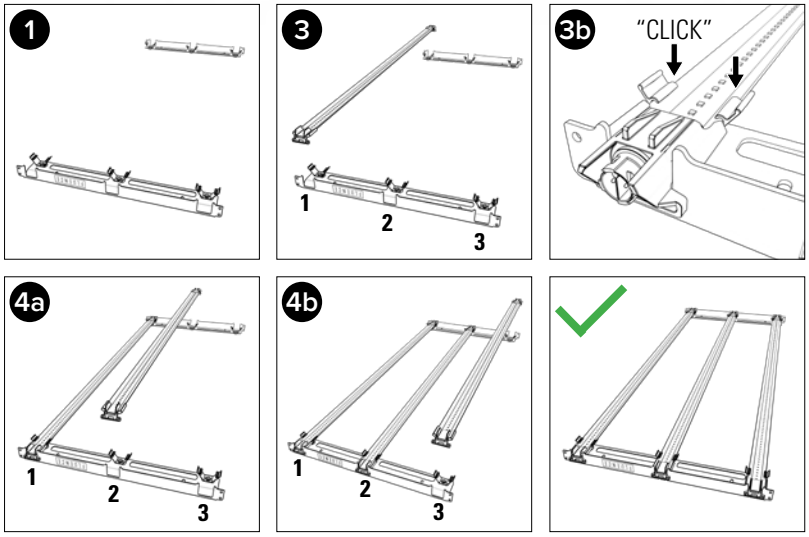
- Dedicate a cleared and clean work space for assembling the light fixtures.
- An additional step of connecting the DC splitter cables to the light fixtures as part of the fixture assembly process may reduce work time required on the ladder or scissor lift.

1. Place the fixture frames **upside down (clips up)** on a stable, flat work surface. Orient the fixture frames so that the "FLUENCE" name is facing away from each other as shown.

2. Identify the first LED light bar in the recommended installation sequence for your specific light fixture configuration as show below.

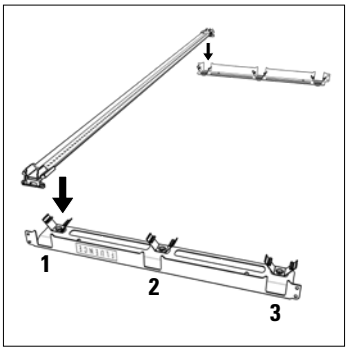
3. Lay the first LED bar **(LED's facing up)** in the frame clips Firmly grip and support the middle of the light bar with one hand, while pressing the light bar down into the clip at one end. **Avoid touching the LED's and only press on the heat sink.** Press each edge of the bar heat sink in until you hear a loud "click". **Ensure the light bar is secure in the clip as shown in the detail.**

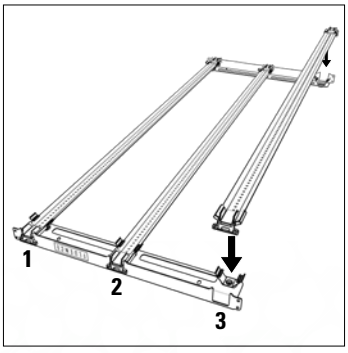
4. **Repeat Step 3** for each LED light bar in the recommended sequence, with all power connectors on the same end.



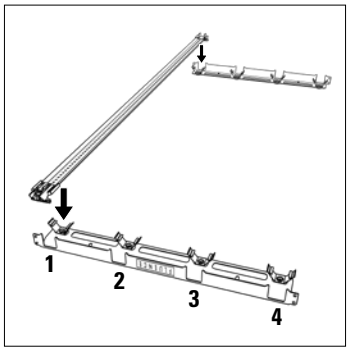
Recommended LED Light Bar Installation Sequences

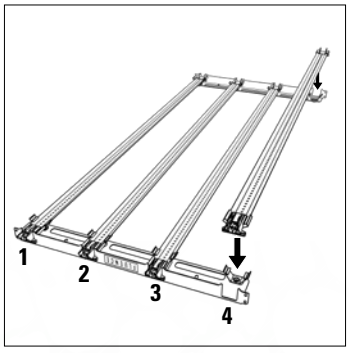
2' x 4' 3-Bar Fixture



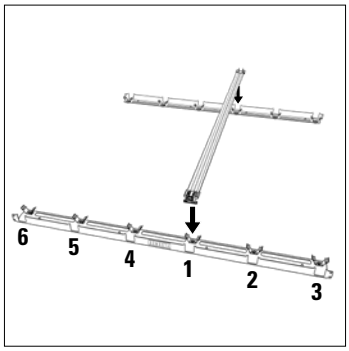


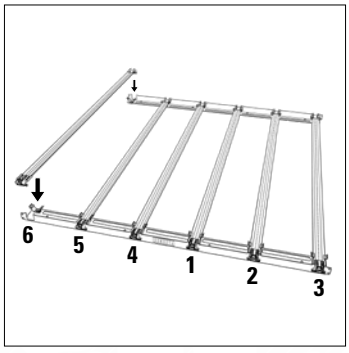
2' x 4' 4-Bar Fixture



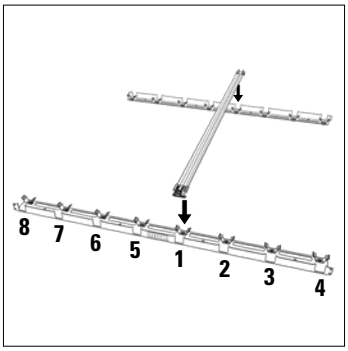


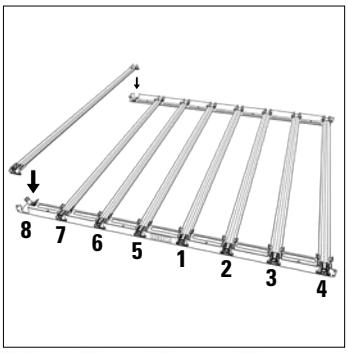
4' x 4' 6-Bar Fixture





4' x 4' 8-Bar Fixture

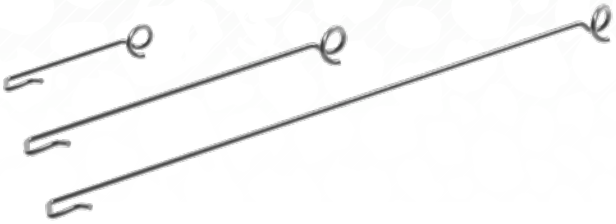




4.2 - STEP 2: MOUNT THE LIGHT FIXTURES TO THE RACK ACCORDING TO THE LIGHTING DESIGN

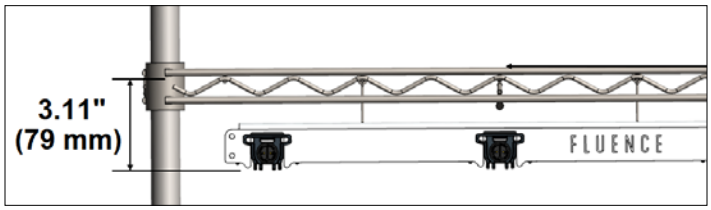
Light Fixture Wire Hanger Options

Three lengths of wire hangers are available that are ideal for specific rack types. Any of the lengths though can be used that best fit your specific application.



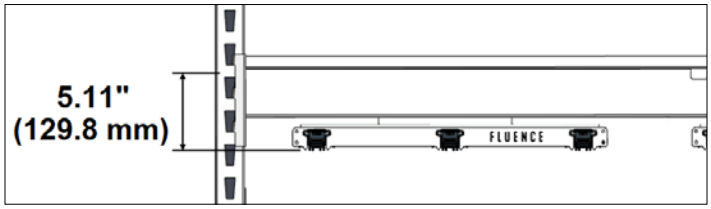
Fixture Wire Hanger, Short - Baker's Rack (RM-SHANGER-01)

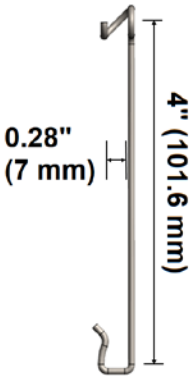
2" (50.8 mm) length is ideal for 24" (609.6 mm) deep by 48" (1219.2 mm) long wire shelving (Baker's) racks.



Fixture Wire Hanger, Medium - PIPP Rack (RM-MHANGER-01)

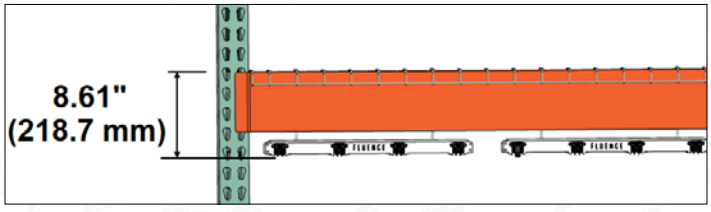
4" (101.6 mm) length is ideal for 48" (1219.2 mm) deep by 96" (2438.4 mm) long PIPP vertical farming racks. Enables the fixture to hang below the Z-rail. Shorter hangers can be used with wire grid above the fixtures if the fixtures are mounted parallel to the Z-rail.

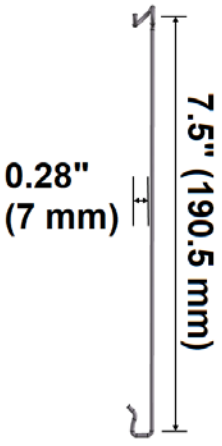


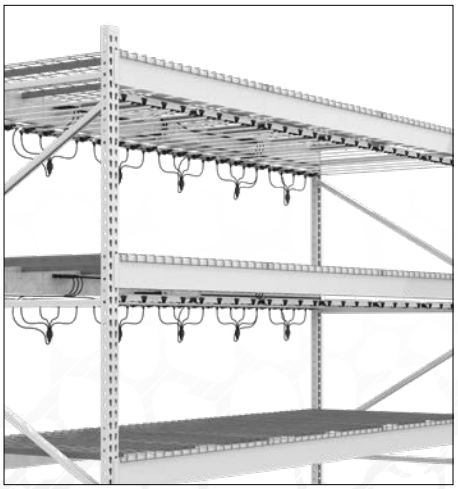


Fixture Wire Hanger, Long - Pallet Rack (RM-LHANGER-01)

7.5" (190.5 mm) length is ideal for 48" (1219.2 mm) deep by 96" (2438.4 mm) or longer pallet racks. Enables the fixture to hang below the horizontal beam. Shorter hangers can be used with wire grid above the fixtures if the fixtures are mounted parallel to the horizontal beam.



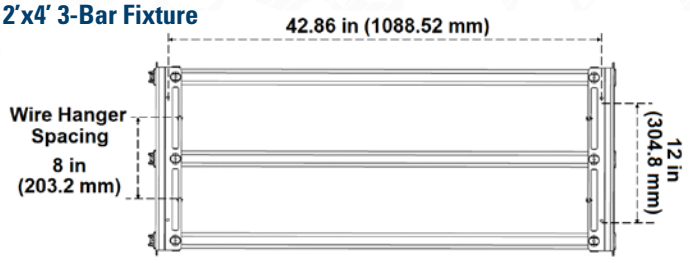




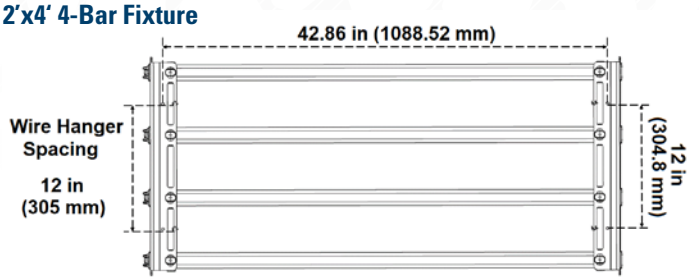
4. INSTALLATION STEPS

Assembled Light Fixture Mounting Point Measurements

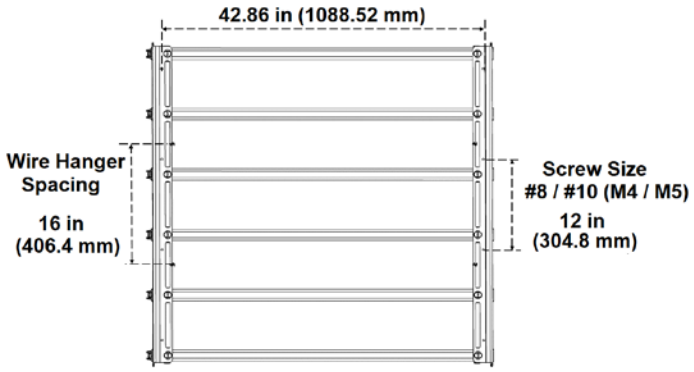
2'x4' 3-Bar Fixture



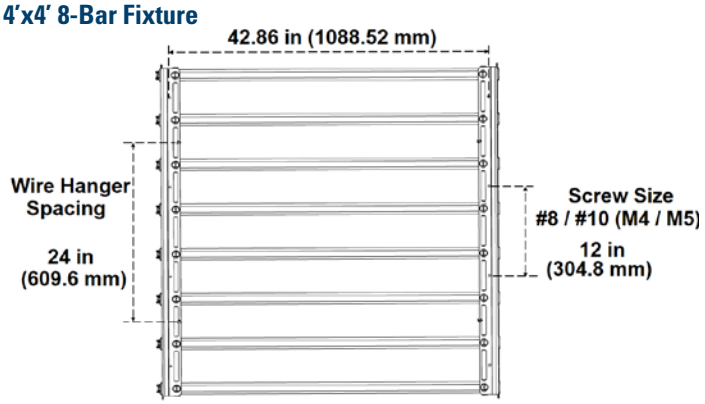
2'x4' 4-Bar Fixture



4'x4' 6-Bar Fixture



4'x4' 8-Bar Fixture



IMPORTANT:
- Two persons are recommended for the mounting of light fixtures to ensure safety.
- Avoid touching the LED's while mounting the light fixtures.

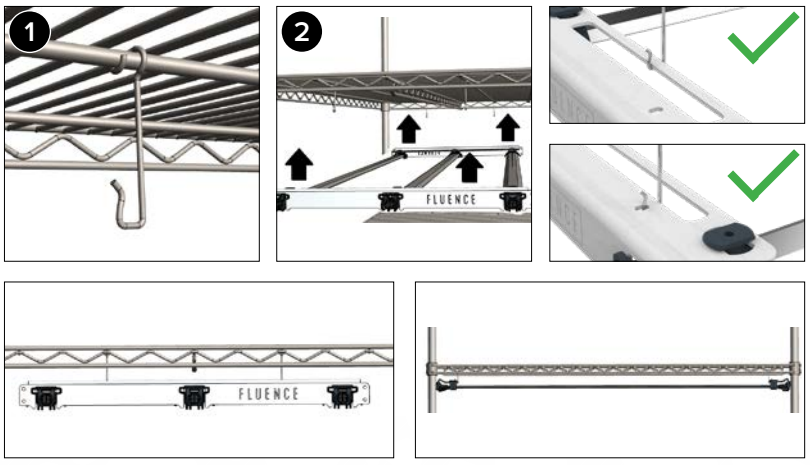
IMPORTANTE:
- Se recomiendan dos personas para hacer el montaje de los dispositivos de iluminación para garantizar la seguridad.
- Evite tocar los LEDs mientras esta encajando y colocando los dispositivos de iluminación.

IMPORTANTE:
- Deux personnes sont recommandées pour le montage des luminaires afin d'assurer la sécurité.
- Évitez de toucher les DEL lors du montage des appareils d'éclairage.

Wire Hanger Mounting Instructions

1. Hang the top hook of 4 wire hangers to the rack shelf frame or wire grid as shown. Space the width between hangers at the minimum recommended spacing for the fixture frame. Space the length between hangers at approximately 42" (1066.8 mm).

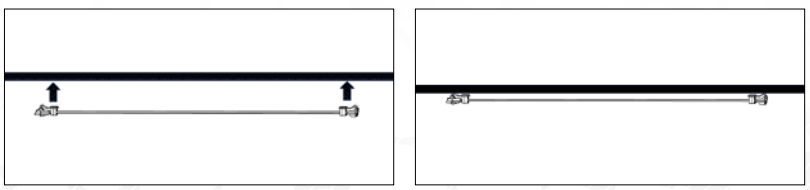
2. With assistance from a second person, hook the bottom of each hook through the slot on the fixture frame. The hanger can be securely hooked through the screw hole to prevent lateral movement, or it can be hook along the slot if flexibility in spacing is needed.



Screw Hole Mounting Instructions

1. Drill pilot or through-holes in the mounting surface as required according to the measurements provided.

2. With assistance from a second person, install #8 or #10 (M4 or M5) screws or other suitable hardware for the mounting surface of the same size in each of the holes. Tighten until the light fixture is secure and level.

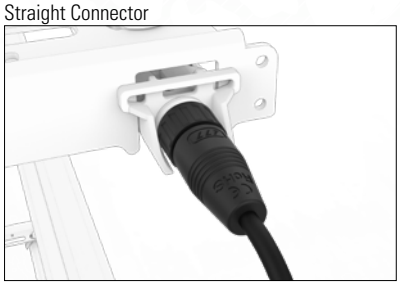


4.3 - STEP 3: INSTALL THE DC SPLITTER AND MANIFOLD CABLES

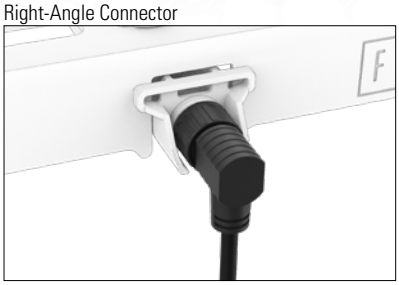
DC Splitter Cables

All DC splitter cables use a push-lock type M16 2-pin connector to connect the cable to the light fixture LED bars to a port on the DC manifold cables. The standard SKU DC splitter cables are ordered in two styles, straight or right-angle connectors. All operate the same way.

Straight Connector



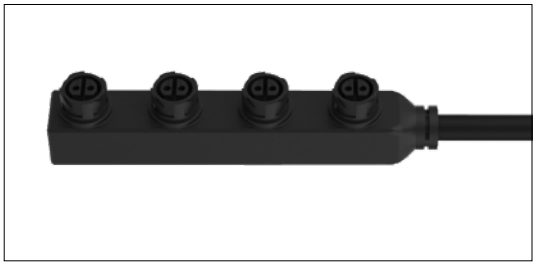
Right-Angle Connector



DC Manifold Cables

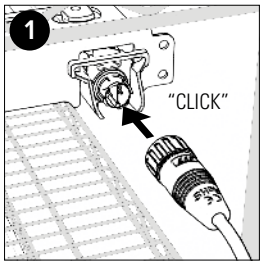
All DC manifold cables use an M16 2-pin connector to connect the manifold cable port to the DC splitter cable.

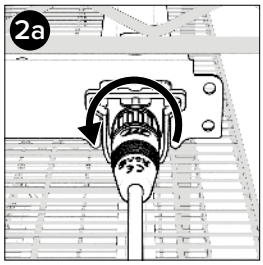
Use a dust cap (p/n CDCG-71285-05) to cover all unused manifold ports.

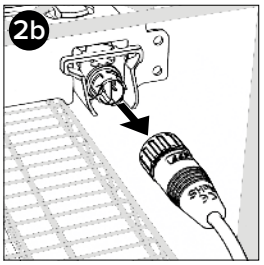


To Attach or Remove the Connectors:

1. To attach the connector, match up the keyed pins on the cable (male to female) to the receptacle and push it on until you hear a "click". Check that the connector is securely attached.
2. To remove the connector, twist the ring on the base of the connector counter-clockwise approximately a quarter turn until it stops to release, and then pull straight out.







IMPORTANT:
- DO NOT plug in AC power **BEFORE** connecting the power supply to RAZR Modular light fixtures first.
- Install a dust cap on all unused DC manifold ports.

IMPORTANTE:
- NO conecte la alimentación de CA **ANTES** de conectar la fuente de alimentación a los dispositivos de iluminación RAZR Modular.
- Instale una tapa contra el polvo en todos los puertos del colector de CC que no se utilicen.

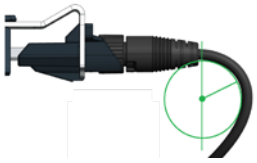
IMPORTANT:
- NE BRANCHEZ PAS le câble d'alimentation à une prise CA **AVANT** de brancher le cordon d'alimentation aux luminaires modulaires RAZR.
- Installez un capuchon anti-poussière sur tous les collecteurs CC inutilisés.

Installation Steps

1. Connect the plugs of the splitter end of the DC splitter cable to each light bar on the first fixture and the last fixture in the array for 2-foot wide fixtures, or the furthest set of light bars in 4-foot wide fixtures (see the examples below). Let the cable trunk ends hang loose.

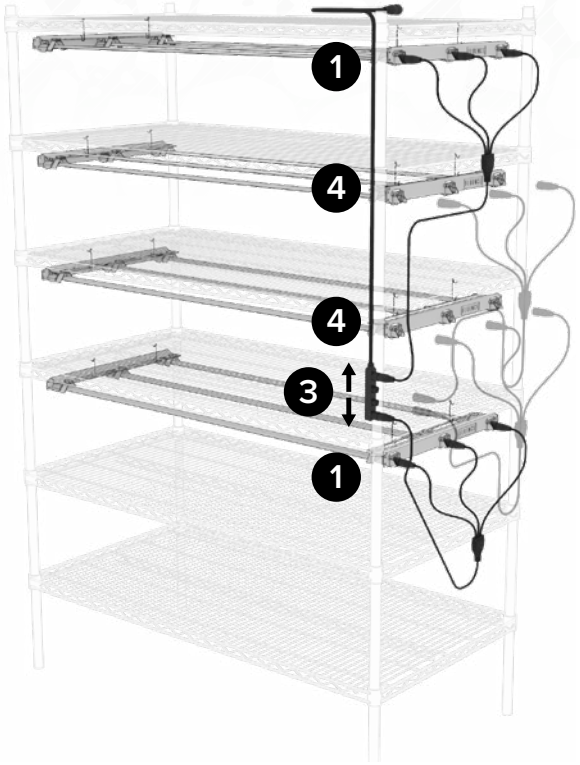
2. Connect the trunk ends of the DC splitter cables to the first and last ports on the 4-port DC manifold cable. For 24-bar systems, also connect the manifold splitter cable to both 4-port DC manifold cables (see the examples below).

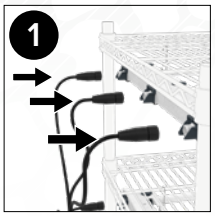
3. At this time the manifold location can be adjusted to the optimal location within the reach limitation of the splitter cables. **DO NOT stretch the DC splitter cables to the light bars too tightly, as this can cause stress on the light bar connection. Maintain a minimum of 1 inch (25.4 mm) of bend radius in all cables at the connector.**

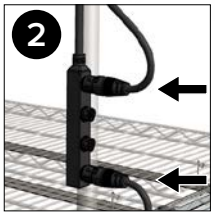


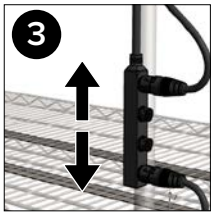
1 in (25.4 mm)

Baker's Rack, 2'x4' 3-Bar Fixture, 4-Fixture Array (12 Bars)

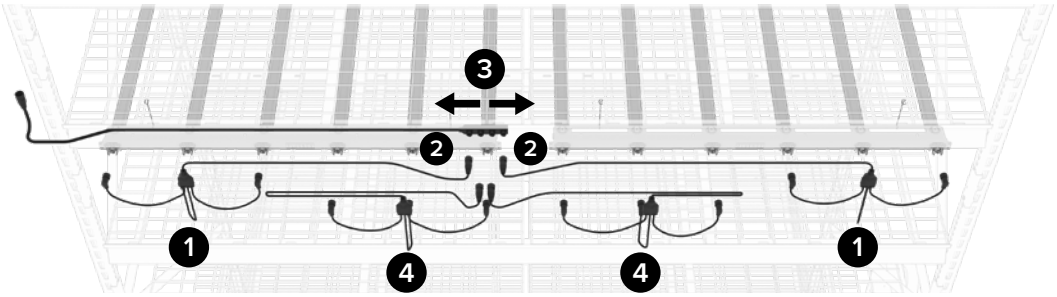


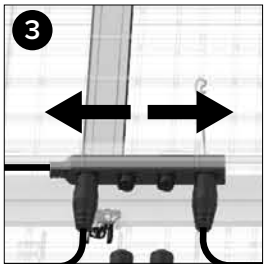




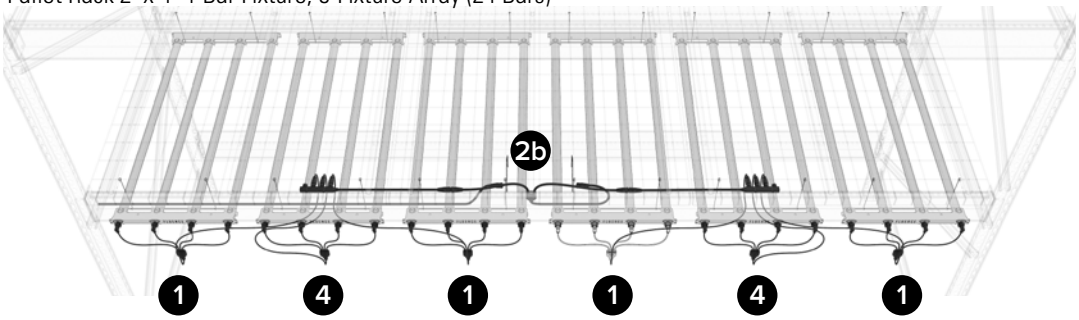


PIPP Rack, 4' x 4' 6-Bar Fixture, 2-Fixture Array (12 Bars)

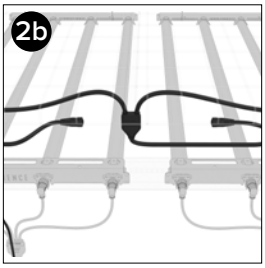




Pallet Rack 2' x 4' 4-Bar Fixture, 6-Fixture Array (24 Bars)

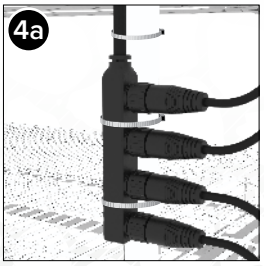


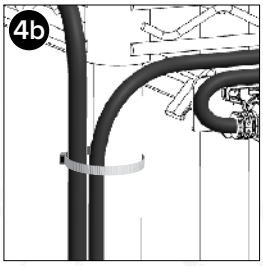
DC Manifold Splitter



4. Connect the remaining DC splitter cable trunk ends to the ports on the DC manifold cable(s). Complete the cable management by securing loose cables and manifolds with wire ties to the rack (4a and 4b).

5. **Install a dust cap on any unused manifold ports.**





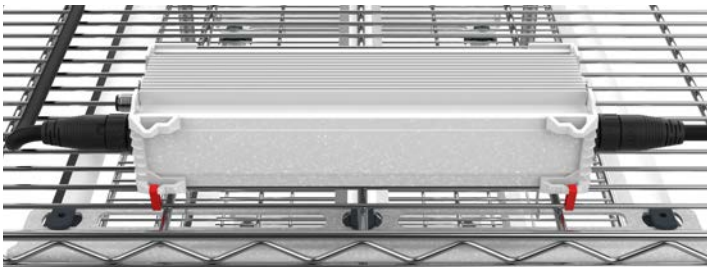
4.4 - STEP 4: MOUNT THE POWER SUPPLY TO THE RACK

IMPORTANT: Ensure a minimum of 2 inches (5.08 cm) of clearance above the power supply between the ceiling or hard surface, and/or heat sources, to ensure sufficient air flow for proper cooling.

IMPORTANTE: Asegúrese de que haya un mínimo de 5,08 cm (2 pulgadas) de espacio libre por encima de la fuente de alimentación entre el techo o la superficie firme y / o las fuentes de calor, para garantizar suficiente flujo de aire para un enfriamiento adecuado.

IMPORTANT: Assurez-vous de maintenir un dégagement d'au moins 5,08 cm (2 pouces) au-dessus de l'alimentation électrique entre le plafond ou la surface dure et/ou les sources de chaleur pour assurer un débit d'air suffisant pour un refroidissement correct.

The simplest and most cost-effective method to mount the power supply is to lay it on top of a rack shelf and secure it to the shelf using cable ties through all four bottom corner loops as shown. Several mounting hardware options are available to mount the power supply in the optimal location where all cables can reach it, and there is enough slack in cables to avoid stress on the connectors.



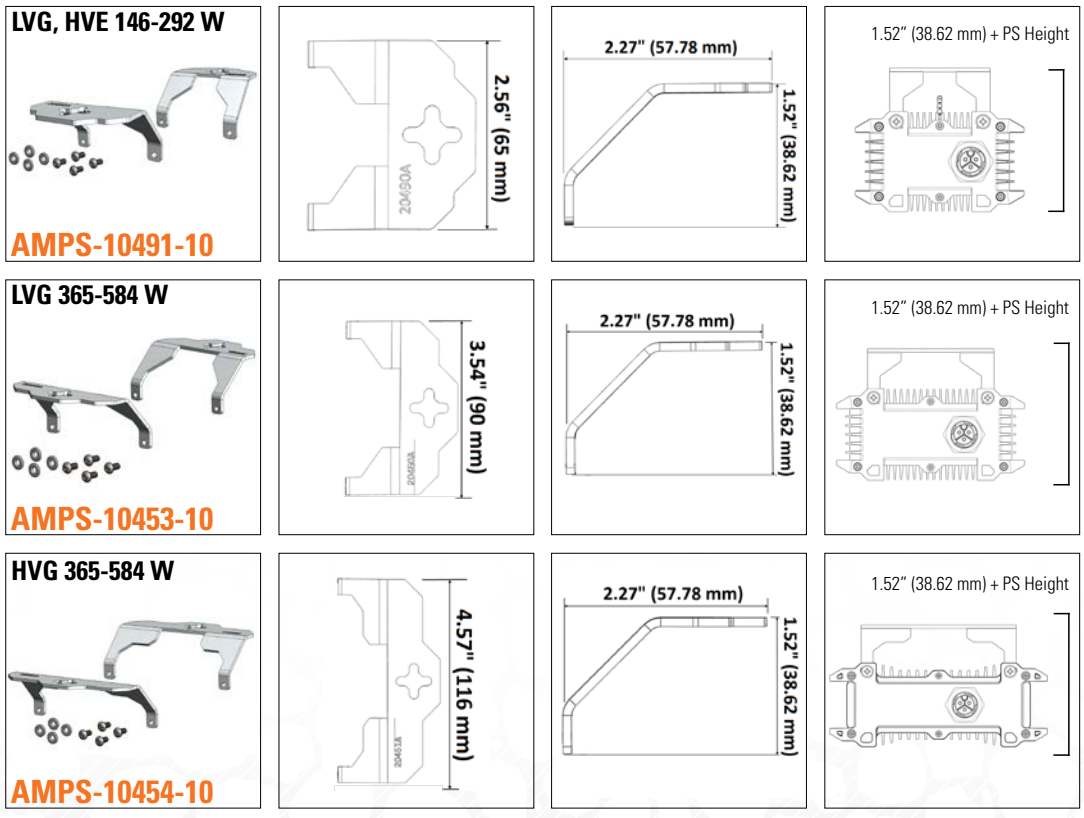
CAUTION:
- **DO NOT** plug in AC power **BEFORE** connecting the power supply to RAZR Modular light fixtures first.
- The use of gloves is recommended when handling and installing the power supply.

PRECAUCIÓN:
- **NO** conecte la alimentación de CA **ANTES** de conectar la fuente de alimentación a los dispositivos de iluminación RAZR Modular.
- Se recomienda el uso de guantes al tocar e instalar la fuente de alimentación.

ATTENTION:
- **NE BRANCHEZ PAS** le câble d'alimentation à une prise CA **AVANT** de brancher le cordon d'alimentation aux luminaires modulaires RAZR.
- L'utilisation de gants est recommandée lors de la manipulation et de l'installation de l'alimentation.

Surface Mount Kit

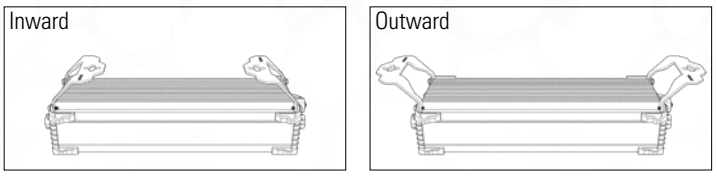
The surface mount bracket kit enables the power supply to be securely mounted vertically or horizontally to the rack structure.



Power Supply Surface Mount Kit Installation Instructions

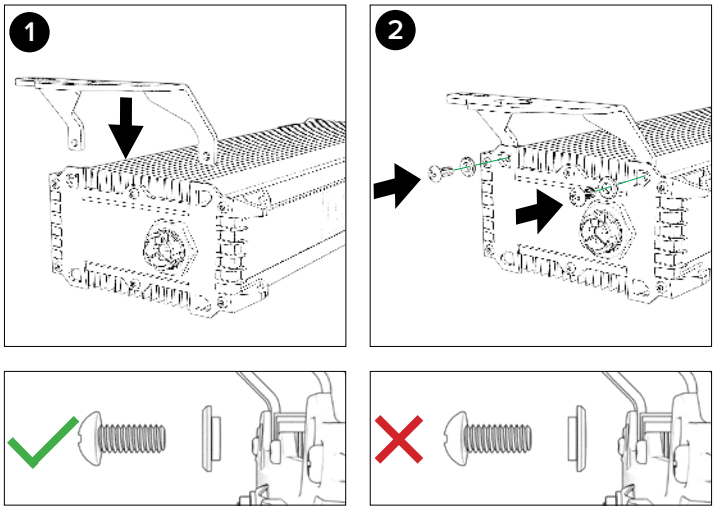
Bracket Positions

The mounting brackets can be installed outward or inward. If installed inward, it may be necessary to first mount the brackets to the surface.



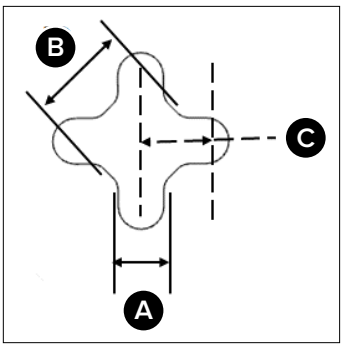
Bracket Installation

1. Place one bracket behind the power supply end plate and align the screw holes.
2. Install a screw and washer in each hole and tighten. Ensure the washer is installed in the correct direction as shown for proper fit and function. Do not overtighten.
3. Repeat steps 1 and 2 at the other end. Mount the power supply to the desired surface using suitable hardware for the surface material, and weight of the power supply.

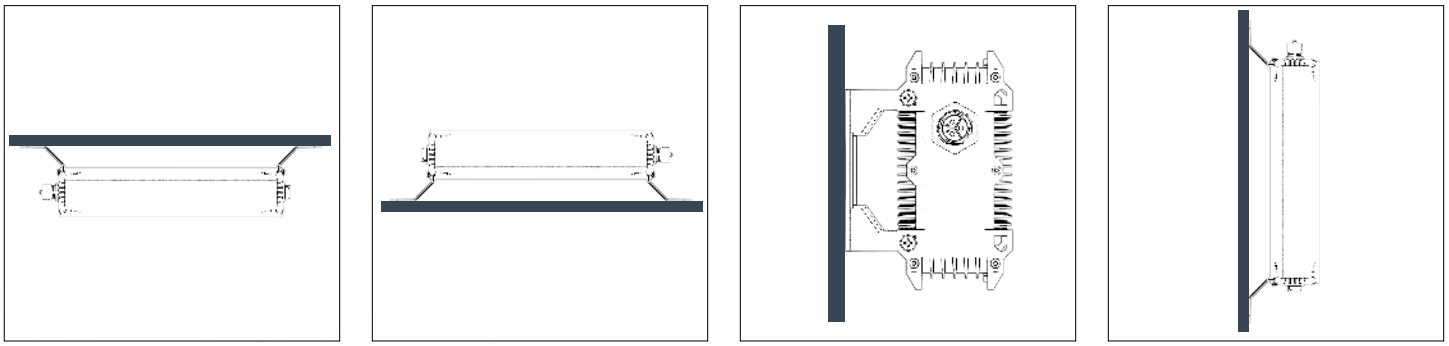


Surface Bracket Mounting Hole Detail

- A 2" (5.25 mm)
- B 0.42" (10.5 mm)
- C 0.30" (7.5 mm)



Recommended Mounting Positions

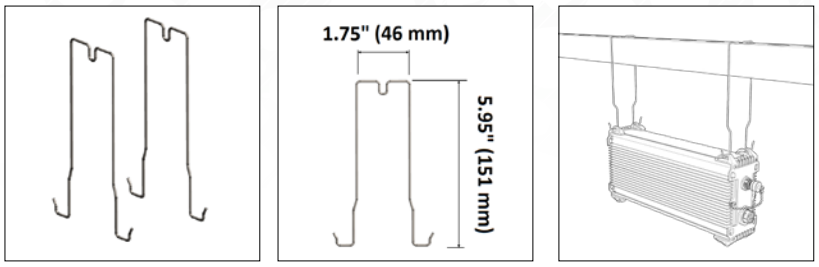


4. INSTALLATION STEPS

Power Supply Wire Hanger Mounting Kits

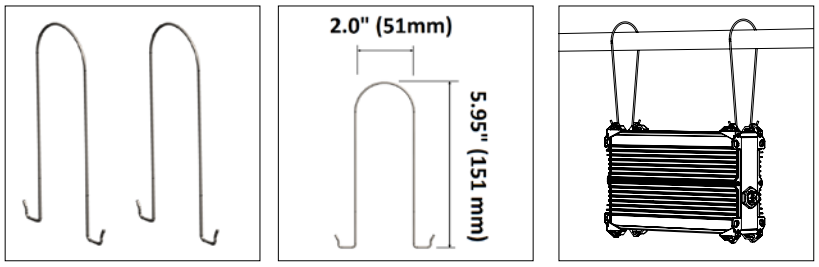
Unistrut Hanger Kit (AMV2-10120-20)

Suitable for Unistrut up to 1 5/8" (45 mm) wide.



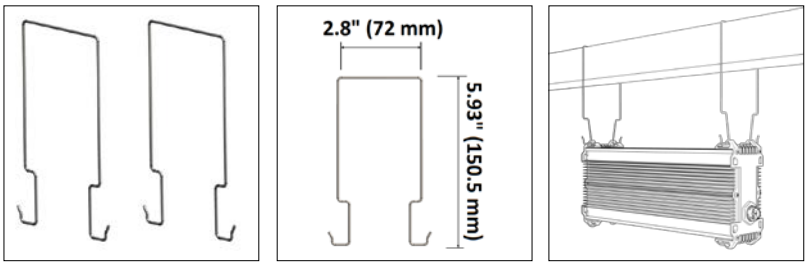
Pipe Hanger Kit (AMV2-10121-20)

Ideal for mounting under pipes up to 1 3/4" (45 mm) in diameter.



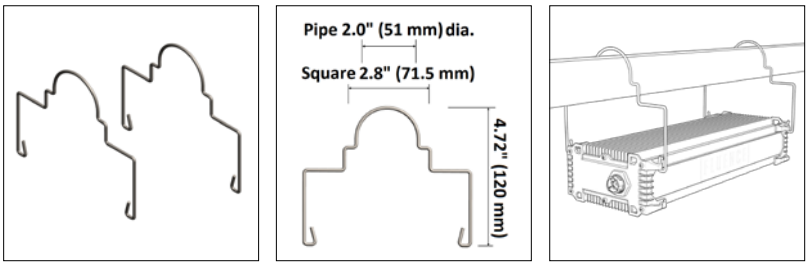
Square Hanger Kit (AMV2-10119-20)

Suitable for trusses or channel up to 2 3/4" (70 mm) wide.



Combo Mount Hanger Kit (AMV3-10569-20)

Suitable for pipes up to 1 3/4" (45 mm) in diameter, and for trusses or channel up to 2 3/4" (70 mm) wide.

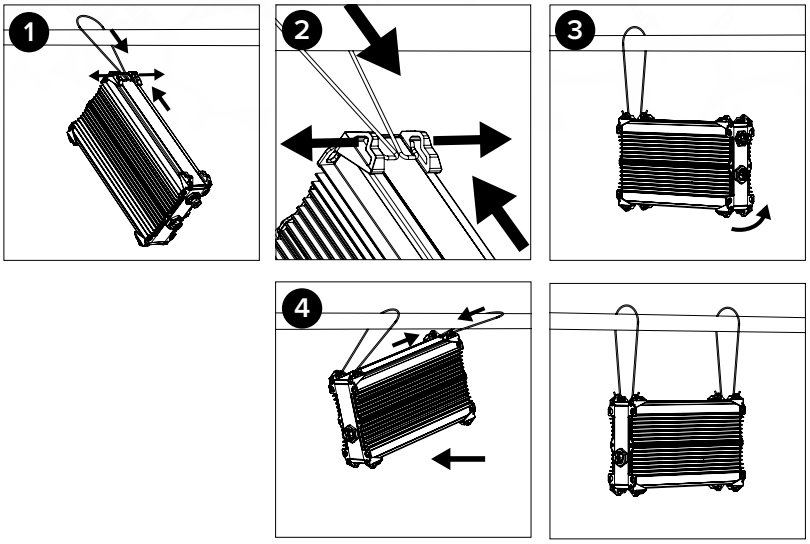


4. INSTALLATION STEPS

Power Supply Wire Hanger Installation Instructions

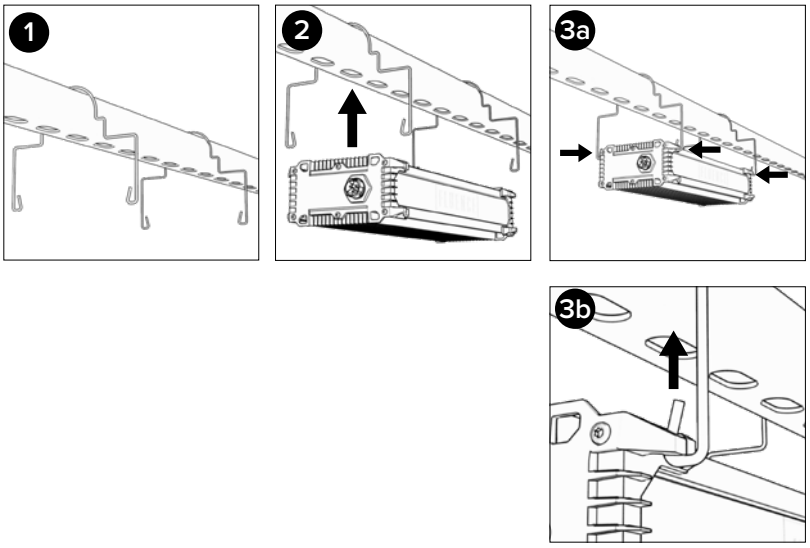
Unistrut, Pipe, or Square Hanger Kit

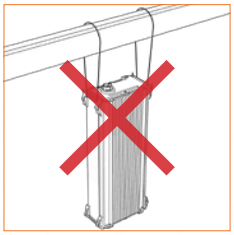
1. Take (2) mounting brackets and hang a bracket over the support structure. Locate the holes for brackets on the narrow side of PSU power supply, hold up the power supply under the support structure under it.
2. While maintaining a firm grip on both, pinch the bottom of the bracket inward and horizontally insert it into the receiving holes on the PSU power supply, release the tension of the bracket.
3. Lift the ends of the brackets up to a 90° angle. Repeat above steps to install another bracket on the PSU power supply.



Combo Mount Hanger Kit

1. Take (2) mounting hangers. Hang both brackets over the support structure as shown.
2. Hold the power supply up to the hangers as shown.
3. Hook each hanger end onto the upper loops at each corner of the power supply.





IMPORTANT: DO NOT mount the power supply vertically using wire-form type hangers. To mount the power supply vertically, use a Surface Mount Kit secured to a flat surface.

IMPORTANTE: NO coloque la fuente de alimentación verticalmente utilizando perchas de forma de alambre. Para montar la fuente de alimentación verticalmente, utilice un kit de montaje en superficie fijado a una superficie plana.

IMPORTANT: NE PAS monter l'alimentation électrique à la verticale en utilisant des supports de type fil de fer. Pour monter l'alimentation électrique à la verticale, utilisez un kit de montage en surface fixé sur une surface plane.

4.5 - STEP 5: CONNECT THE DC MANIFOLD CABLE(S) TO THE POWER SUPPLY

IMPORTANT: Please be sure to match the EXACT light bar quantity per power supply to the BAR COUNT on Power Supply SKU label for proper system performance. A differed bar count from SKU label would result in INCORRECT LIGHT OUTPUT from light bars.

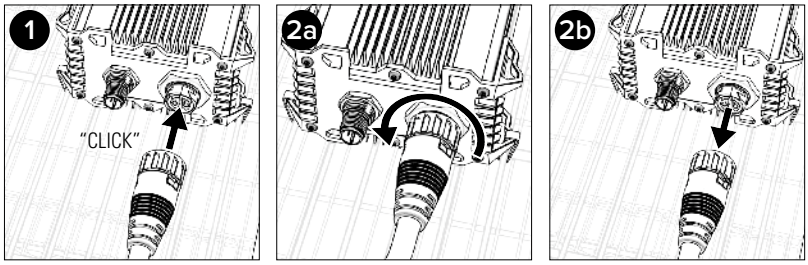
IMPORTANTE: Asegúrese de aparear la cantidad EXACTA de barras de luz por la fuente de alimentación con el CONTADOR DE BARRAS en la etiqueta SKU de la fuente de alimentación para un rendimiento adecuado del sistema. Un recuento de barras diferente al de la etiqueta SKU daría como resultado una SALIDA DE LUZ INCORRECTA de las barras de luz.

IMPORTANT: Assurez-vous de faire correspondre la quantité EXACTE de barres lumineuses par alimentation électrique au NOMBRE DE BARRES indiqué sur l'étiquette de référence de l'alimentation électrique pour une performance correcte du système. Un nombre de barres différent de celui sur l'étiquette de référence entraînerait un FLUX LUMINEUX INCORRECT des barres lumineuses.

All DC manifold cables use a push-lock type M19 2-pin connector to connect the cable to the power supply or manifold splitter cable.

To Attach or Remove the Connectors:

1. To attach the connector, match up the keyed pins on the cable (male to female) to the receptacle and push it on until you hear a "click". Check that the connector is securely attached.
2. To remove the connector, twist the ring on the base of the connector counter-clockwise approximately a quarter turn until it stops to release, and then pull straight out.

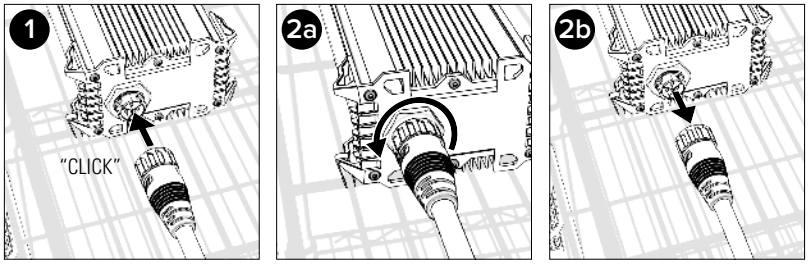


4.6 - STEP 6: CONNECT THE AC POWER CABLE TO THE POWER SUPPLY

All AC power cables use a push-lock type M19 3-pin connector to connect the cable to the power supply.
The connection to power is available in several plug types for receptacles, or in pigtails for direct wiring.

To Attach or Remove the Connectors:

1. To install the connector, match up the keyed pins on the cable (male to female) to the receptacle and push it on until you hear a "click". Check that the connector is securely attached.
2. To remove the connector, twist the ring on the base of the connector counter-clockwise approximately a quarter turn until it stops to release, and then pull straight out.



4. INSTALLATION STEPS

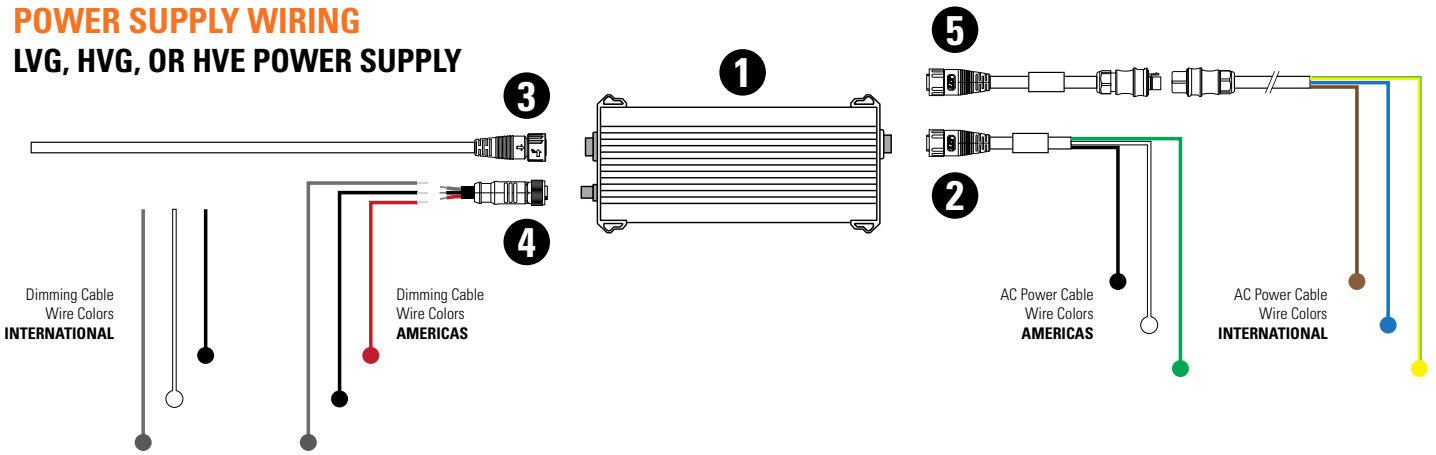
IMPORTANT: Please be sure to match the EXACT light bar quantity per power supply to the BAR COUNT on Power Supply SKU label for proper system performance. A differed bar count from SKU label would result in INCORRECT LIGHT OUTPUT from light bars.

IMPORTANTE: Asegúrese de aparear la cantidad EXACTA de barras de luz por la fuente de alimentación con el CONTADOR DE BARRAS en la etiqueta SKU de la fuente de alimentación para un rendimiento adecuado del sistema. Un recuento de barras diferente al de la etiqueta SKU daría como resultado una SALIDA DE LUZ INCORRECTA de las barras de luz.

IMPORTANT: Assurez-vous de faire correspondre la quantité EXACTE de barres lumineuses par alimentation électrique au NOMBRE DE BARRES indiqué sur l'étiquette de référence de l'alimentation électrique pour une performance correcte du système. Un nombre de barres différent de celui sur l'étiquette de référence entraînerait un FLUX LUMINEUX INCORRECT des barres lumineuses.

POWER SUPPLY WIRING

LVG, HVG, OR HVE POWER SUPPLY



COMPONENTS

1. Power Supply
2. AC Power Cable to Power Supply
3. DC Power Cable to Light Fixtures (Refer to the ***RAZR Modular System Wiring Guide*** 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 CACE-71576-10) and Dca pigtail cable (i.e. p/n CACE-71650-10)

❷❺ AC POWER CABLE CONNECTIONS

Americas AC Cable Wire Colors	International AC Cable Wire Colors	Power Supply Pin Connection	LVG					HVE (347-400 V), 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.

❹ 0-10 V DIMMING SIGNAL CABLE CONNECTIONS

Dimming Cable Wire Color Americas	Dimming Cable Wire Color International	Power Supply Pin Connection
Red	Black	DIM (+)
Black	White	DIM (-)
Bare Wire	Bare Wire	Shield Drain (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.

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

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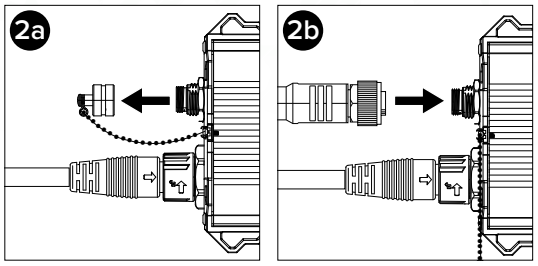
*Not Connected to Dimming Cable

4.7 - STEP 7: (OPTIONAL) CONNECT THE DC DIMMING CABLE TO THE POWER SUPPLY AND THEN TO A DIMMING CONTROLLER

The DC dimming cable uses a coaxial type A-code M12 3-pin connector to connect the cable to the power supply. To install the DC dimming cable:

1. Remove the dust cap from the power supply dimming port and let it hang by the chain.

2. Match up the connector end on the cable (female) to the power supply dimming port (male) and twist the ring on the connector clockwise to tighten until hand-tight. Check that the connector is securely attached.



4.8 - STEP 8: POWER AND TEST THE SYSTEM

1. Turn on AC power to the system. All light fixtures should be on and at equal levels of maximum brightness.

2. If a dimming controller has been connected, test the light fixtures by dimming to off and ramping back up to maximum.

THIS COMPLETES THE INSTALLATION!

If the system testing was not successful, please refer to Section 5 for Troubleshooting.

For additional assistance, please contact:

www.fluence.science/support-center/

or email **support@fluence-led.com**

5. TROUBLESHOOTING

CONDITION	POTENTIAL CAUSE	RESOLUTION
Some installed LED light bars are at different brightness levels even though a dimmer is not installed.	The quantity of light bars per power supply are not correctly matched.	Check the power supply label first to identify how many light bars should be connected to it. Add or remove light bars to the correct quantity for the power supply or order the correct power supply for the quantity of installed light bars.
One LED light bar does not come on.	The connection of the DC splitter cable to the LED light bar is not secure, or the light bar or DC splitter cable are possibly the cause.	1. Check for proper connection of the DC splitter cable to the light bar.
		2. Swap the light bar to a different location in the array. Replace if the cause.
		3. Remove the DC splitter cable from the light bars and power supply and perform a continuity test of the cable. Replace if the cause.
		4. If the above do not resolve the issue, contact Fluence Support.
All LED light bars in the system do not come on.	AC power is not connected correctly, or the power supply, AC power cable, or DC Power manifold cable are possibly defective.	1A. Check that AC power is properly connected, present, and correct any deficiencies. 1B. Check the dimmer level. Removing the dimmer cable from the driver - all lights should be on at 100% (could be a shortcut in the dimming circuit)
		2. Check that the power supply is outputting the correct DC power at the port pins by using a multimeter set for DC volts. Replace if the cause.
		3. Remove the DC power cables from the light bars and AC cable from the power supply and perform a continuity test of the cables. Replace if the cause.
		4. If the above do not resolve the issue, contact Fluence Support.
The system does not dim or perform as expected when connected to a dimmer.	The dimmer is not installed correctly, or the dimmer is not compatible. The dimming cable is possibly the cause.	1. Ensure the dimmer is 0-10V Sink control compatible and has enough sinking capacity for the connected power supplies.. Replace the dimmer If incorrect or the cause.
		2. Check the dimming cables for correct connection and polarity. Correct any deficiencies.
		3. Remove the DC dimming cable from the dimmer and power supply and perform a continuity test of the cable. Replace if the cause.
		4. Replace the power supply.
		5. If the above do not resolve the issue, contact Fluence Support.

6. 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** for more warranty information.

We stand behind our research, we stand behind our technology and we stand behind our clients. **www.fluence.science/warranty/**

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