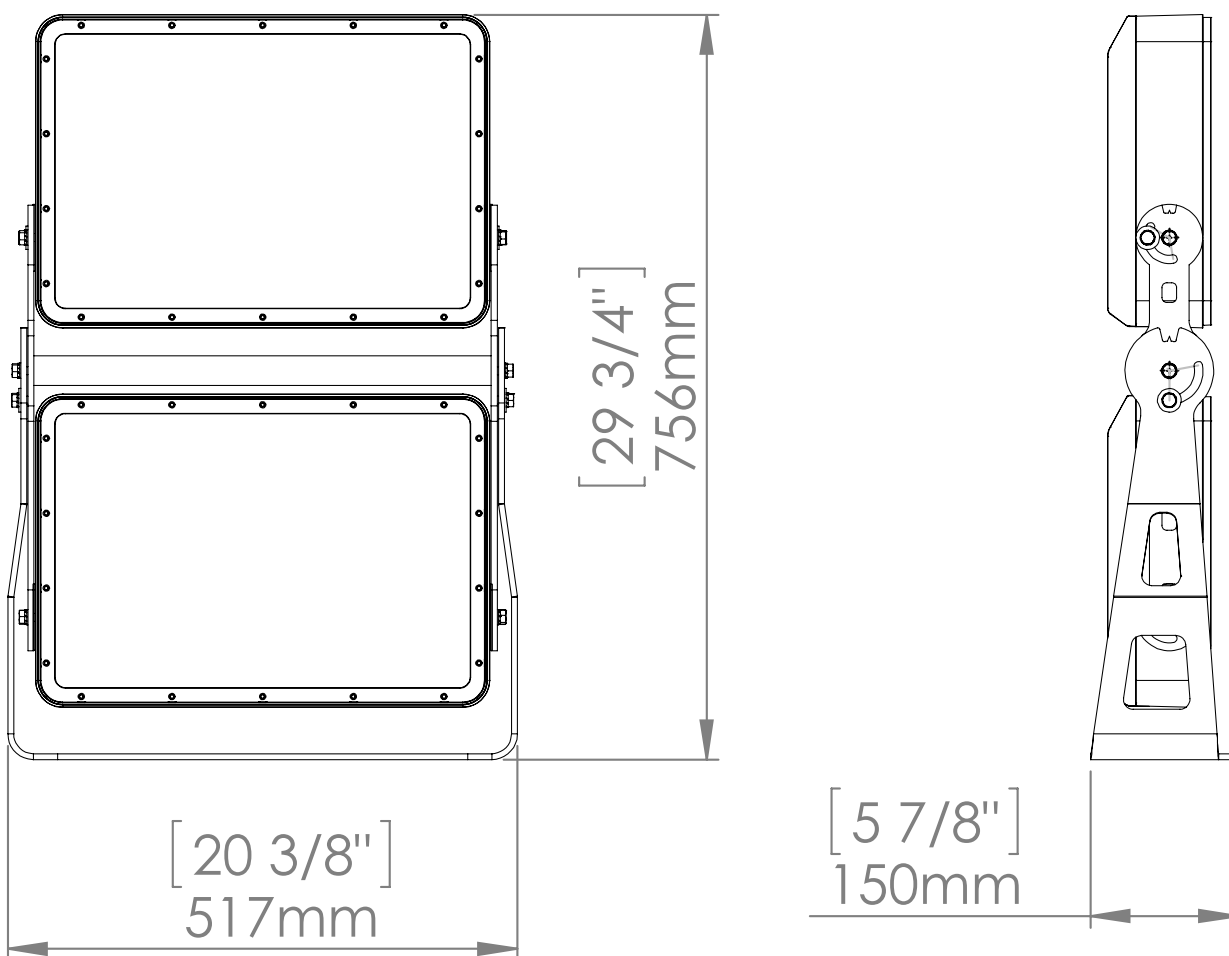




|                                                            | Capital 600                            | Capital 600 US               | Capital 600 MC       |
|------------------------------------------------------------|----------------------------------------|------------------------------|----------------------|
| Code / Codice                                              | AL5020 - AL5022 (PE)                   | AL5024 (US) - AL5025 (US PE) | AL5021 - AL5023 (PE) |
| Power consumption<br>Consumo di energia                    | 2x 256 W(RN), 2x 285 W (W) 2x 240 (MC) |                              |                      |
| Nominal current<br>Corrente nominale                       | 2x 1.6 A (RN), 2x 1.29 A(W), 2x1.1(MC) |                              |                      |
| Power supply<br>Alimentazione elettrica                    | 100-277VAC 50-60Hz                     |                              |                      |
| Inrush current / Corrente di spunto                        | 2x 70 A@240VAC, cold start             |                              |                      |
| Power factor / Fattore di potenza                          | cos.φ= 0.96 (RN&W), 0.94(US)           |                              |                      |
| Electrical class / Classe elettrica                        | I                                      |                              |                      |
| Weight / Peso                                              | 32.8 Kg                                |                              |                      |
| Operating temperature<br>Temperatura di funzionamento      | -40°C to +50°C ( -40°F to 122°F )      |                              |                      |
| IP rating / Grado IP                                       | IP67                                   |                              |                      |
| IK rating / Grado IK                                       | IK09                                   |                              |                      |
| Aerodynamic surface<br>Superficie massima esposta al vento | Front = 0.39 m2<br>Side = 0.11 m2      |                              |                      |

### Dimensions / Dimensioni



## Important notices - Avvisi importanti

- This product must be installed in accordance with applicable national and local electrical and construction codes by a person familiar with the construction and operation of the product and the hazards involved. Failure to comply with the following installation instructions may result in death or serious injury.
- Do not stare at the operating light source.
- The fixture might be damaged by excess voltage. The installation of an overvoltage protection device on the electrical system (SPD) is recommended for reduce the risk of damage.
- The use of an adequate magnetothermic switch along the power supply line is recommended.
- Connect the fixtures to each other only when disconnected from mains.
- Never leave cables and connectors unconnected or unprotected for long periods.
- Disconnect power before installing or servicing to avoid electrical shock.
- Disconnect power before any connection operation.
- Check voltage and frequency before powering the fixture. Do not exceed fixture specified voltage.
- Do not handle the unit with wet hands or in wet environments.
- Apply to qualified staff for any maintenance service not described in this instructions manual.
- Do not exceed the maximum quantity of fixtures per line in order to avoid power surges.
- Before powering the unit, ensure to use cables and connectors with proper section and length, according to its power consumption.
- Fix the projector by using screws, hooks or other adequate supports that can bear its weight.
- If the external flexible cable of this appliance is damaged, it must only be replaced by the manufacturer, its assistance service or equivalent qualified personnel in order to avoid hazards.
- Integrated temperature control, the projector reduces power when  $T_a > 35^\circ\text{C}$ .
- The luminaire should be positioned so that prolonged observation of the luminaire at a distance of less than 2 meters (6.56 ft) is not expected.

- Questo prodotto deve essere installato secondo le normative locali, da personale specializzato. La mancata osservanza delle istruzioni di installazione può portare a situazioni di pericolo all'incolumità della persone.
- Non fissare la sorgente luminosa durante il suo funzionamento.
- Apparecchiatura sensibile alle sovratensioni. Si consiglia l'installazione di un dispositivo di protezione delle sovratensioni (SPD) sull'impianto elettrico per attenuare l'intensità di questi fenomeni proteggendo gli apparecchi dal rischio che vengano danneggiati.
- E' consigliato l'uso di un adeguato interruttore magnetotermico/differenziale sulla linea di alimentazione.
- Collegare tra loro i proiettori solo quando nessuno di essi è collegato alla rete elettrica.
- Non lasciare mai per lungo tempo agli agenti atmosferici cavi e connettori non collegati o non protetti.
- Togliere l'alimentazione prima di effettuare qualsiasi operazione all'interno dell'apparecchiatura.
- Togliere l'alimentazione prima di effettuare qualsiasi operazione di connessione tra gli apparecchi.
- Prima di connettere l'apparecchio alla rete elettrica, verificate la compatibilità di tensione e frequenza.
- Non maneggiate il prodotto con mani bagnate o in presenza di acqua.
- Rivolgersi ad un tecnico qualificato per qualsiasi operazione di manutenzione ordinaria non descritta nel presente manuale.
- Non superare il numero massimo specificato di apparecchi per linea per evitare pericolosi sovraccarichi di corrente.
- Prima di effettuare le connessioni verificare la portata dei cavi / connettori e la lunghezza dei cavi tenendo conto dell'assorbimento del prodotto.
- Fissare il proiettore con viti, ganci o altri supporti in grado di sostenerne il peso.
- Se il cavo flessibile esterno di questo apparecchio viene danneggiato, deve essere sostituito esclusivamente dal produttore, dal suo servizio di assistenza o da personale qualificato equivalente, al fine di evitare pericoli.
- Controllo della temperatura integrato, il proiettore reduce la potenza ad una  $T_a > 35^\circ\text{C}$
- l'apparecchio di illuminazione dovrebbe essere posizionato in modo che non sia prevista un'osservazione prolungata dell'apparecchio ad una distanza inferiore a 2 metri.

  **CAUTION:** Prolonged staring at the LED source should be avoided by placing the fixture in a proper position.

  **WARNING !** Fixing and connecting operations must mandatorily be carried out by qualified personnel only !

  **WARNING !** Make sure that power supply is off before connecting or disconnecting fixtures !



The possibility of reusing some electrical parts of the device is subject to the total responsibility of the user. The label shows the symbol indicated in Legislative Decree n.49 of 14 March 2014 which transposes Directive 2012/19 / EU, which indicates the need to dispose of the product in separate waste, specifically in electrical waste. and electronic. Refer to the waste collection center located in your area.



La possibilità di riutilizzare alcune parti elettriche del dispositivo è subordinata alla totale responsabilità dell'utilizzatore. Nell'etichetta è stato riportato il simbolo indicato nel D.lgs n.49 del 14 Marzo 2014 che recepisce la direttiva 2012/19/UE, il quale indica la necessità di smaltire il prodotto nei rifiuti differenziati, nello specifico nei rifiuti di tipo elettrico ed elettronico. Fare riferimento al centro di raccolta rifiuti situato nella Vostra zona.



**Replaceable control gear by a professional**



**Alimentatore sostituibile da un professionista**



**Replaceable (LED only) light source by a professional**

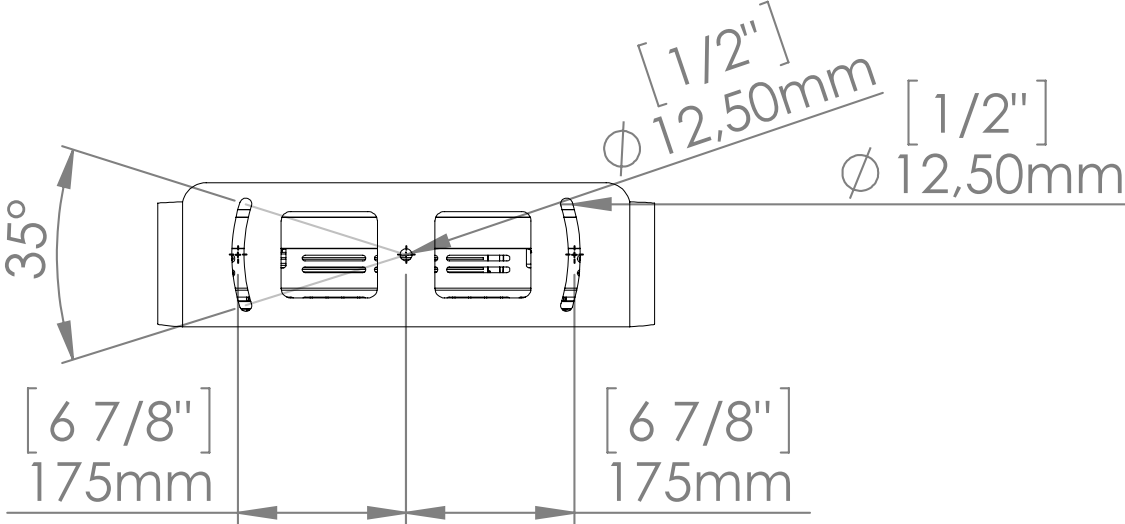


**Sorgente luminosa (solo LED) sostituibile da un professionista**

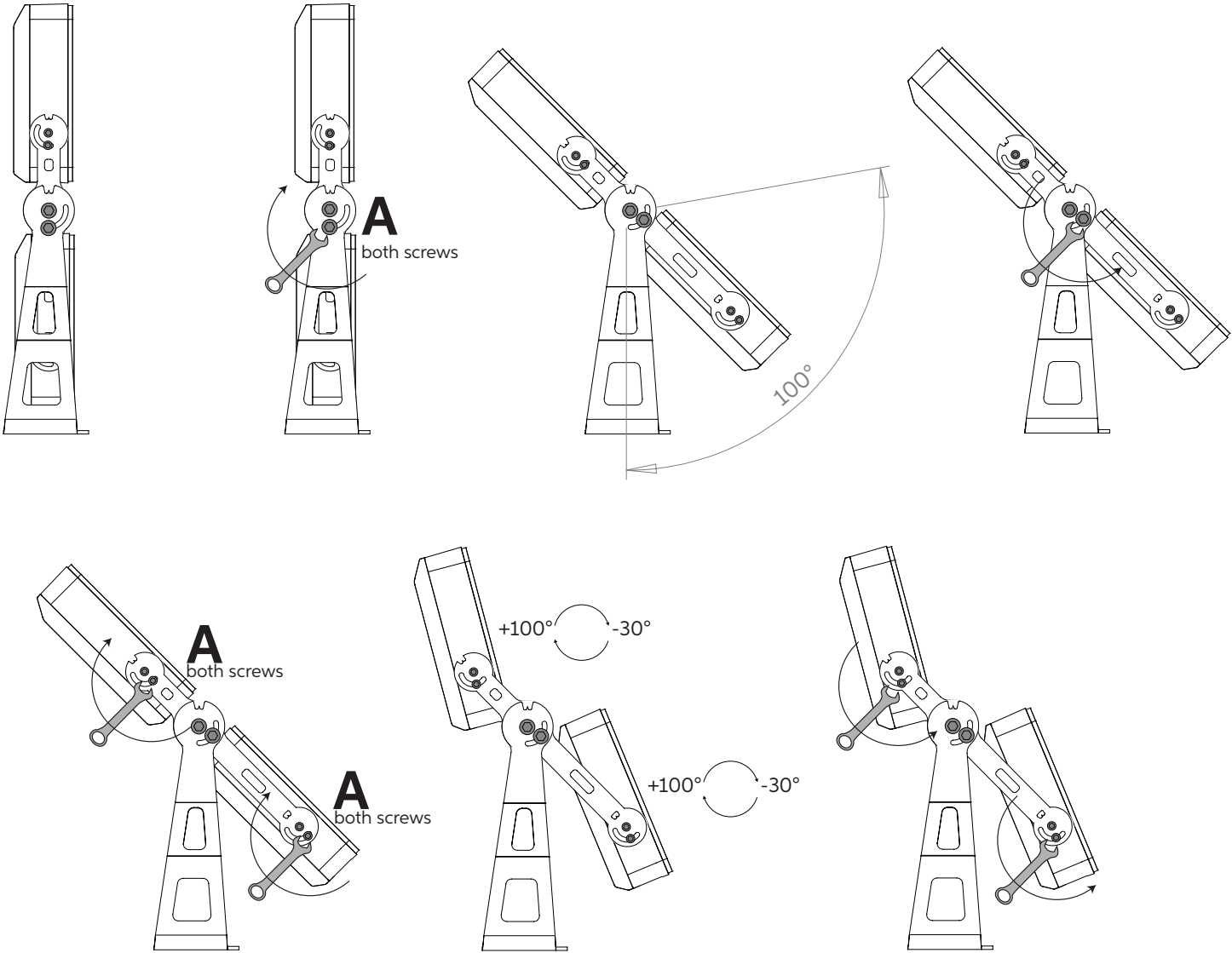
This product contains a light source of energy efficiency class:

Questo prodotto contiene una sorgente luminosa di classe di efficienza energetica:

|       |       |               |            |
|-------|-------|---------------|------------|
| 3000K | 4000K | Dynamic White | RGBW 4000K |
| F     | F     | F             | E          |

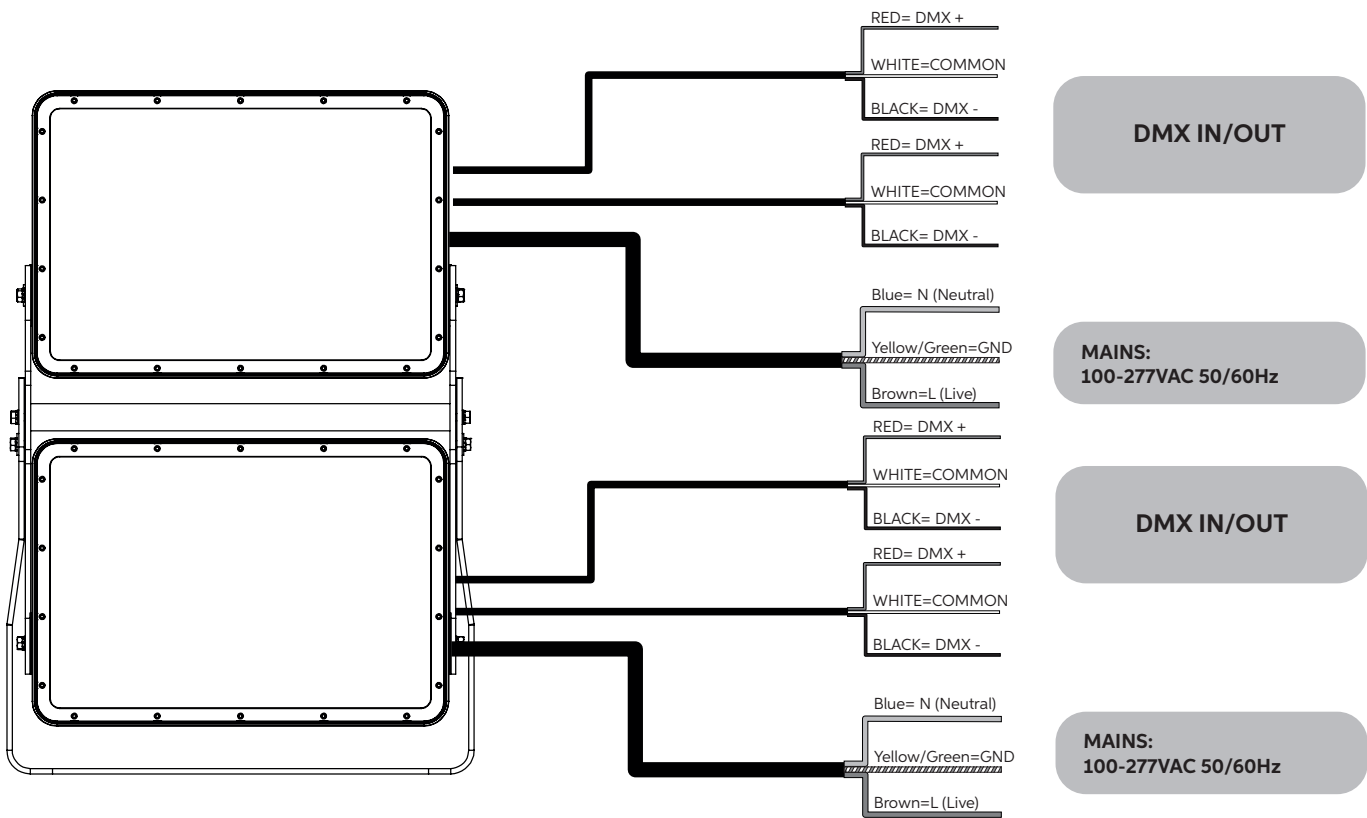


Vertical beam-aiming - Orientamento

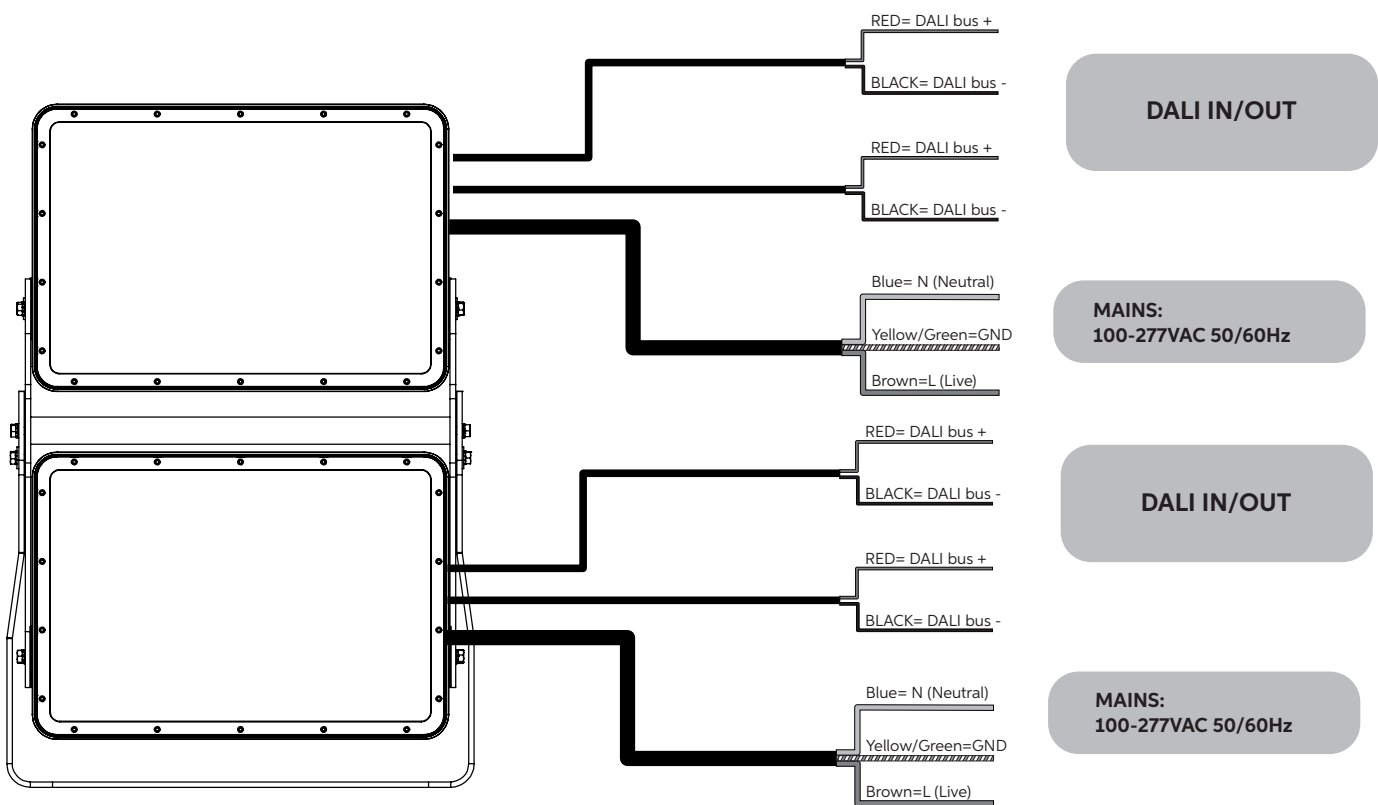


A=size 13 (ISO) Wrench

“S” type cable ( Power in, DMX In, DMX Out )

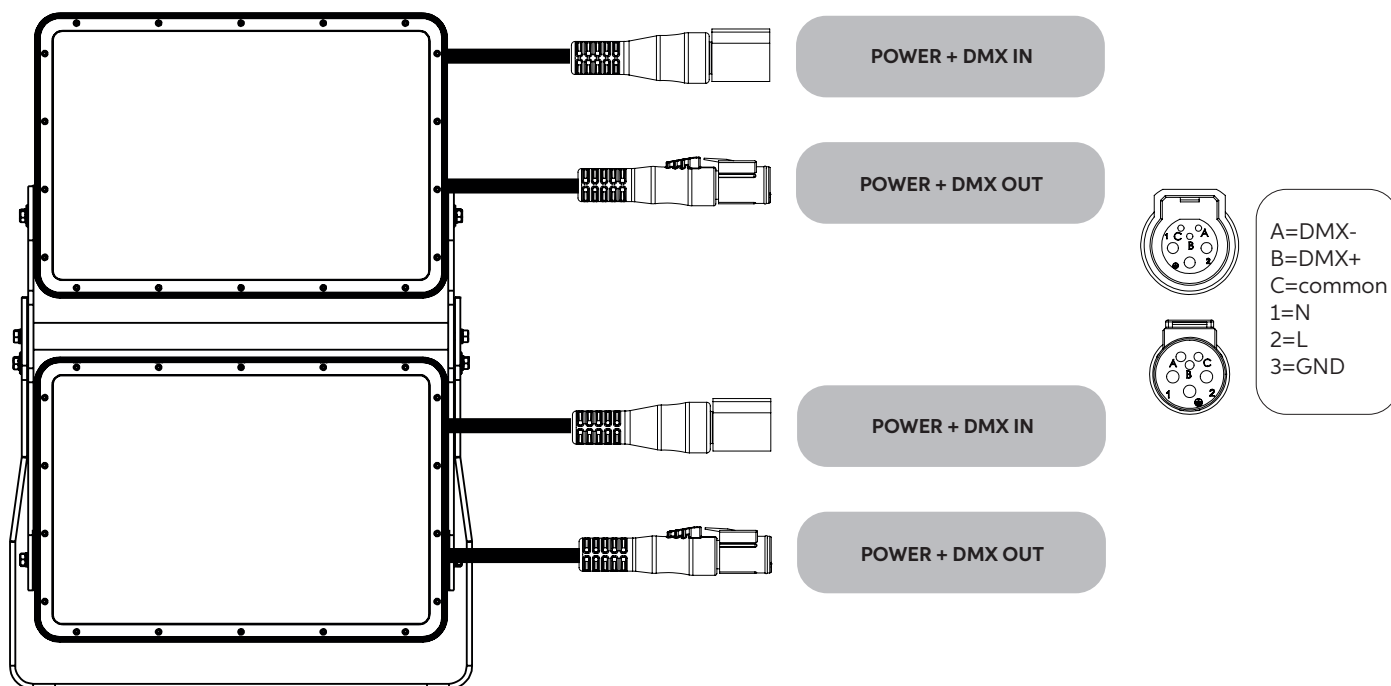


“D” type cable ( Power in, DALI In, DALI Out )

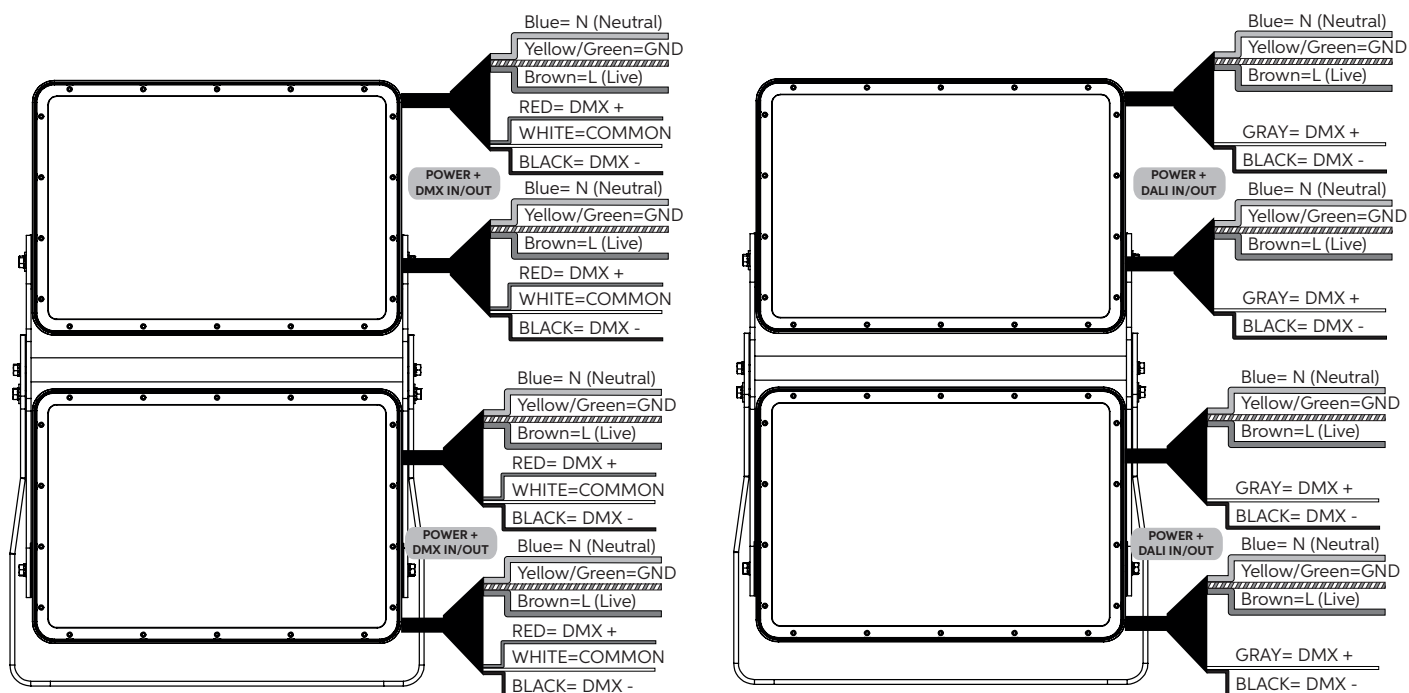


Note: the power and signal connections of S and M cable types can be carried out by using the connection kit included in the packing box. Follow the instructions provided along with the connection kit.  
Capital - Rev. 4.0

## “C” type cable ( Monocable + connectors )

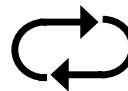
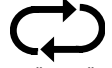


## “M” type cable ( Monocable without connectors )



Note: the power and signal connections of S and M cable types can be carried out by using the connection kit included in the box. Follow the instructions provided along with the connection kit.

The fixture must be configured only by using AL1321 IR remote control ( sold separately ) or via any DMX-RDM compatible controller.

|                                                                                       |                                                                                                       |                                                                                                                                              |                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                           |
|---------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| LOGIN                                                                                 |                      | <div>123</div> <div>456</div> <div>789</div>                                                                                                 |                                                                                                                                                                                                                                                                                                                  |  <div>5' inactivity = Automatic LOGOUT</div> <div>5' inattività = Automatico LOGOUT</div>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |  <div>= OK</div>                                                                                                       |
| DMX MODE                                                                              |  DMX MODE SETTING    |                                                             | Enter the corresponding "IR" value<br>( see DMX chart Mode Column)<br>to select the desired DMX Mode<br>(e.g.: for IR=4 press button 4).<br><br>Immettere il valore "IR" corrispondente<br>(vedi colonna DMX chart Mode)<br>per selezionare la modalità DMX desiderata<br>(es.: per IR=4 premere il pulsante 4). |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |  <div>= OK</div>                                                                                                       |
|                                                                                       |  DMX ADDRESS SETTING |                                                             | 001~512                                                                                                                                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |  <div>= OK</div>                                                                                                       |
| MASTER/SLAVE<br>AUTOMATIC<br>MODE <sup>1</sup><br>TO BE USED ONLY<br>WITH DMX MODE #1 |  AUTOMATIC/MASTER    |  <div>Green-Cyan-Blue-Magen-<br/>ta-Red-Yellow-White.</div> | <br><br>                                                                                                                                    |  <div>5"→10"→20"→ 40"</div> <div>   </div><br> <div>40"→ 20"→ 10"→ 5"</div> <div>   </div> |                                                                                                                                                                                                           |
|                                                                                       | SLAVE FIXTURE SETTING                                                                                 |                                                           | 001                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |  <div>= OK</div>                                                                                                     |
| FIXED<br>COLOR<br>MODE<br>(RGB-RGBW-DW)<br><br>TO BE USED ONLY<br>WITH DMX MODE #1    |                    |                                                           | <div>RGB</div> <div>1 = RED</div> <div>2= GREEN</div> <div>3 = BLUE</div> <div>DW</div> <div>5 = WARM WHITE</div> <div>6 = COLD WHITE</div>                                                                                                                                                                      | <div>RGBW</div> <div>1 = RED</div> <div>2= GREEN</div> <div>3 = BLUE</div> <div>4 = WHITE</div>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |  <div>0%→100%</div> <div></div> |
| DIMMER<br>MODE<br>(Monochromatic)<br><br>TO BE USED ONLY<br>WITH DMX MODE #1          |                                                                                                       |                                                           |  <div>100%→0%</div> <div></div>                                                                                                        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                           |
| LOGOUT                                                                                |                    |                                                           |                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                           |
| RESET                                                                                 |                    |                                                           |                                                         | Reset to default settings                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                           |
| WIRELESS <sup>2</sup>                                                                 |                    |                                                           | <div>1 = Unlink</div> <div>2= wireless LED status ON</div> <div>3= wireless LED status OFF</div>                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                           |

<sup>1</sup> WARNING ! in this mode, no DMX control device must be present along the line.

<sup>2</sup> Only on wireless fixtures

## DMX Chart ( per each cluster )

### RGBW

| Mode       | Channel | Function                 | Value   |
|------------|---------|--------------------------|---------|
| #1<br>IR=4 | 1       | 0-100% Red               | 0-255   |
|            | 2       | 0-100% Green             | 0-255   |
|            | 3       | 0-100% Blue              | 0-255   |
|            | 4       | 0-100% White             | 0-255   |
| #2<br>IR=5 | 1       | 0-100% Red               | 0-255   |
|            | 2       | 0-100% Green             | 0-255   |
|            | 3       | 0-100% Blue              | 0-255   |
|            | 4       | 0-100% White             | 0-255   |
|            | 5       | 0→100% Dimmer            | 0-255   |
| #3<br>IR=6 | 1       | 0-100% Red               | 0-255   |
|            | 2       | 0-100% Green             | 0-255   |
|            | 3       | 0-100% Blue              | 0-255   |
|            | 4       | 0-100% White             | 0-255   |
|            | 5       | 0% Dimmer                | 0-5     |
|            |         | 0%-100% Dimmer           | 6-250   |
|            |         | 100% Dimmer              | 251-255 |
|            | 6       | No Strobo                | 0-5     |
|            |         | 0-100% Strobo            | 6-250   |
|            |         | 100% Strobo              | 251-255 |
| #4<br>IR=7 | 1       | 0-100% Red               | 0-255   |
|            | 2       | 0-100% Green             | 0-255   |
|            | 3       | 0-100% Blue              | 0-255   |
|            | 4       | 0-100% White             | 0-255   |
|            | 5       | NO FUNCTION              | 0-5     |
|            |         | 2700K                    | 6-7     |
|            |         | 2700K-3000K              | 8-40    |
|            |         | 3000K                    | 41-42   |
|            |         | 3000K-3500K              | 43-75   |
|            |         | 3500K                    | 76-77   |
|            |         | 3500K-4000K              | 78-110  |
|            |         | 4000K                    | 111-112 |
|            |         | 4000K-4500K              | 113-145 |
|            |         | 4500K                    | 146-147 |
|            |         | 4500K-5000K              | 148-179 |
|            |         | 5000K                    | 180-181 |
|            |         | 5000K-5500K              | 182-214 |
|            |         | 5500K                    | 215-216 |
|            |         | 5500K-6000K              | 217-249 |
|            |         | 6000K                    | 250-255 |
|            | 6       | 0-100% Dimmer            | 0-255   |
| #5<br>IR=8 | 1       | 0-100% Red               | 0-255   |
|            | 2       | 0-100% Red fine tuning   | 0-255   |
|            | 3       | 0-100% Green             | 0-255   |
|            | 4       | 0-100% Green fine tuning | 0-255   |
|            | 5       | 0-100% Blue              | 0-255   |
|            | 6       | 0-100% Blue fine tuning  | 0-255   |
|            | 7       | 0-100% White             | 0-255   |
|            | 8       | 0-100% White fine tuning | 0-255   |

| Mode                                                             | Channel | Function                                          | Value |
|------------------------------------------------------------------|---------|---------------------------------------------------|-------|
| #6<br>IR=9<br>(Default)                                          | 1       | 0-100% Red                                        | 0-255 |
|                                                                  | 2       | 0-100% Green                                      | 0-255 |
|                                                                  | 3       | 0-100% Blue                                       | 0-255 |
|                                                                  | 4       | 0-100% Calibrated White<br>(affects RGB channels) | 0-255 |
| Note: in absence of DMX signal the LEDs will remain <b>OFF</b> . |         |                                                   |       |

### DW (Dynamic White)

| Mode                                                            | Channel | Function                | Value |
|-----------------------------------------------------------------|---------|-------------------------|-------|
| #1<br>IR=2<br>(Default)                                         | 1       | 0%→100% Warm white      | 0-255 |
|                                                                 | 2       | 0%→100% Cold White      | 0-255 |
| #2<br>IR=3                                                      | 1       | 0%→100% Warm white      | 0-255 |
|                                                                 | 2       | 0%→100% Cold white      | 0-255 |
|                                                                 | 3       | 0%→100% dimmer          | 0-255 |
| #3<br>IR=3                                                      | 1       | 0%→100% Warm white      | 0-255 |
|                                                                 | 2       | 0%→100% Warm white fine | 0-255 |
|                                                                 | 3       | 0%→100% Cold white      | 0-255 |
|                                                                 | 4       | 0%→100% Cold White fine | 0-255 |
| Note: in absence of DMX signal the LEDs will remain <b>ON</b> . |         |                         |       |

### Monochromatic version

| Channel                                                         | Function       | Value |
|-----------------------------------------------------------------|----------------|-------|
| 1                                                               | 0%→100% dimmer | 0-255 |
| Note: in absence of DMX signal the LEDs will remain <b>ON</b> . |                |       |

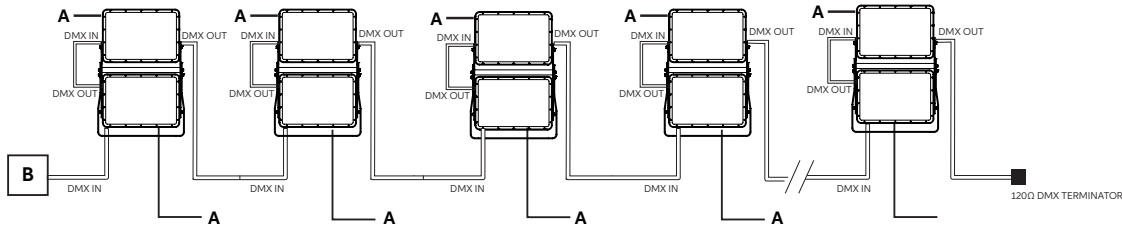
### RDM functions

When operating in DMX mode the fixture can accept the following RDM commands:

- Discovery: upon request of the RDM controller, the fixture will signal its own presence (the RDM controller will display the fixture on a list).
- DMX address reading and setting.
- Channels number reading and setting.
- On / Off identification: this command is used to identify the fixture you want to get access to (the identification happens by switching on all the LEDs at full intensity).
- Manufacturer: it displays the name of the manufacturer (Griven).
- Model description: it displays the fixture's model.
- Software version description: it displays the current version of the firmware.
- Temperature: it displays the LEDs operating temperature value.

| Command # | Description                                                               |
|-----------|---------------------------------------------------------------------------|
| 1         | Off                                                                       |
| 2         | Up (Fade rate)                                                            |
| 3         | Down (Fade rate)                                                          |
| 4         | Step Up ( Increment arc power level )                                     |
| 5         | Step Down ( Decrement arc power level )                                   |
| 6         | Recall MAX level                                                          |
| 7         | Recall MIN level                                                          |
| 8         | Step down and off ( Decrement arc power level if at min level turn down ) |
| 16...31   | Go to scene 0...15                                                        |
| 32        | Reset ( DALI factory default parameters )                                 |
| 33        | Store actual level in the DTR                                             |
| 42        | Store DTR as MAX level                                                    |
| 43        | Store DTR as MIN level                                                    |
| 45        | Store DTR as Power On level                                               |
| 46        | Store DTR as Fade Time                                                    |
| 47        | Store DTR as Fade Rate                                                    |
| 64-79     | Store DTR as Scene 0...15                                                 |
| 80-95     | Remove from Scene 0...15                                                  |
| 96...111  | Add to Group 0...15                                                       |
| 112...127 | Remove from Group 0...15                                                  |
| 128       | Store DTR as Short Address                                                |
| 144       | Query Status                                                              |
| 145       | Query Ballast                                                             |
| 151       | Query Version Number                                                      |
| 152       | Query Content DTR                                                         |
| 153       | Query Device Type                                                         |
| 154       | Query Physical Minimum Level                                              |
| 155       | Query Power Failure                                                       |
| 160       | Query Actual Level                                                        |
| 161       | Query Max level                                                           |
| 162       | Query Min level                                                           |
| 163       | Query Power On level                                                      |
| 164       | Query System Failure level                                                |
| 165       | Query Fade Time/Fade Rate                                                 |
| 176...191 | Query Scene level                                                         |
| 192       | Query Groups 0...7                                                        |
| 193       | Query Groups 8...15                                                       |
| 194       | Query Random Address High                                                 |
| 195       | Query Random Address Middle                                               |
| 196       | Query Random Address Low                                                  |

## DMX Chain configuration - S type cable

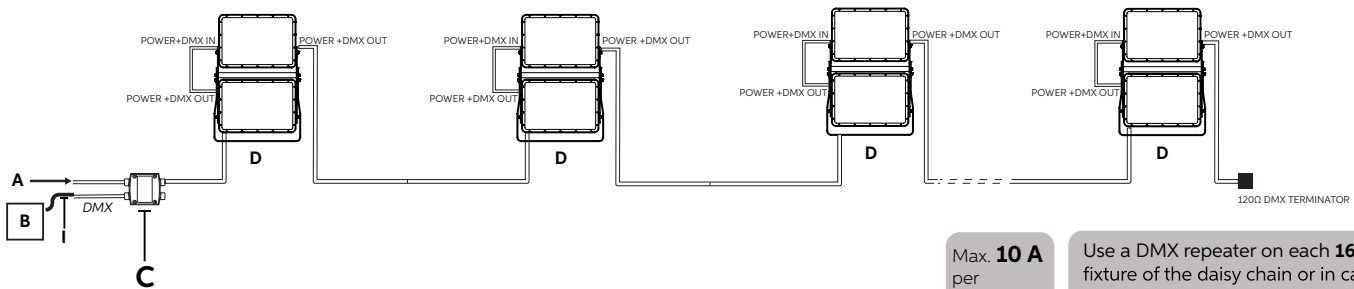


DMX cable type: 2x0.34 mm<sup>2</sup>, impedance 110Ω, capacity 43pF/m, resistance 50Ω/Km.

Max. **10 A**  
per  
daisy chain

Use a DMX repeater on each **16th** fixture of the daisy chain or in case the total DMX LINE length exceeds **300m (1000 ft)**

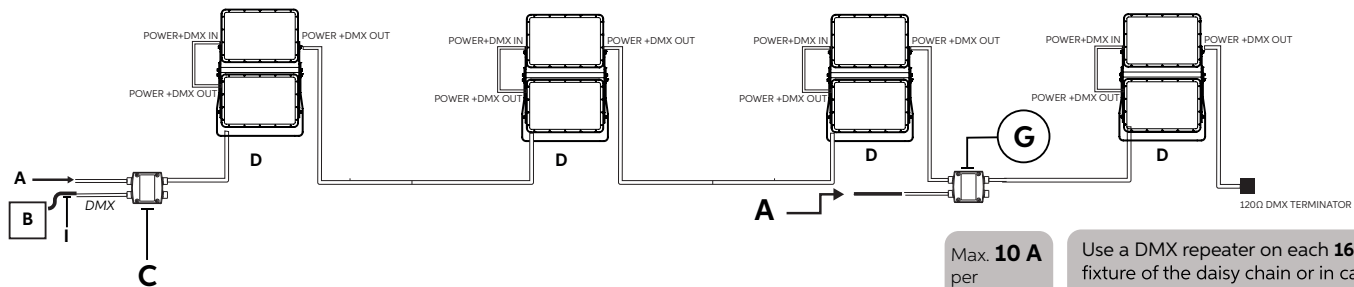
## Single Chain configuration - M or C type cable



Max. **10 A**  
per  
daisy chain

Use a DMX repeater on each **16th** fixture of the daisy chain or in case the total DMX LINE length exceeds **300m (1000 ft)**

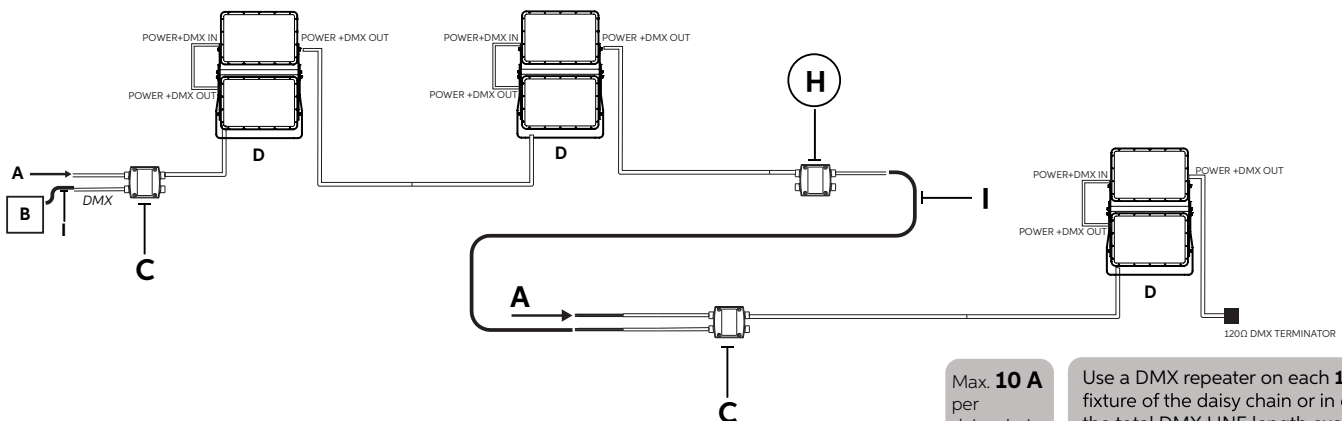
## Multi Chain configuration using Repower Box - M or C type cable



Max. **10 A**  
per  
daisy chain

Use a DMX repeater on each **16th** fixture of the daisy chain or in case the total DMX LINE length exceeds **300m (1000 ft)**

## Multi Chain configuration using DMX junction Box - M or C type cable

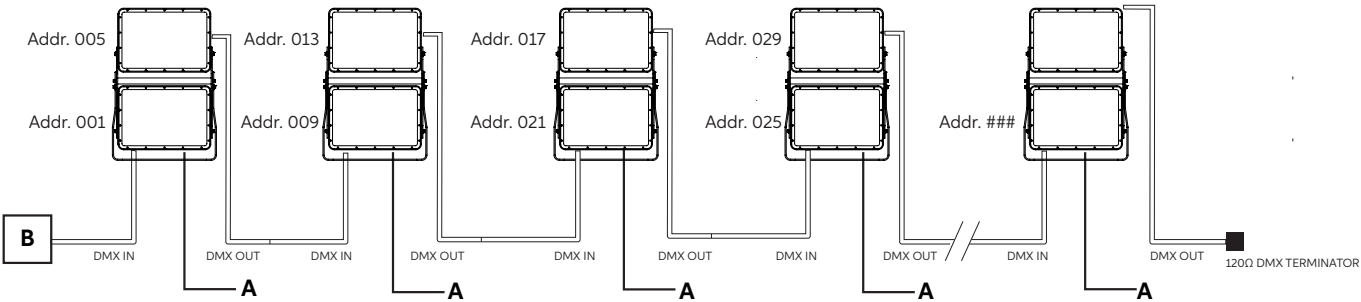


Max. **10 A**  
per  
daisy chain

Use a DMX repeater on each **16th** fixture of the daisy chain or in case the total DMX LINE length exceeds **300m (1000 ft)**

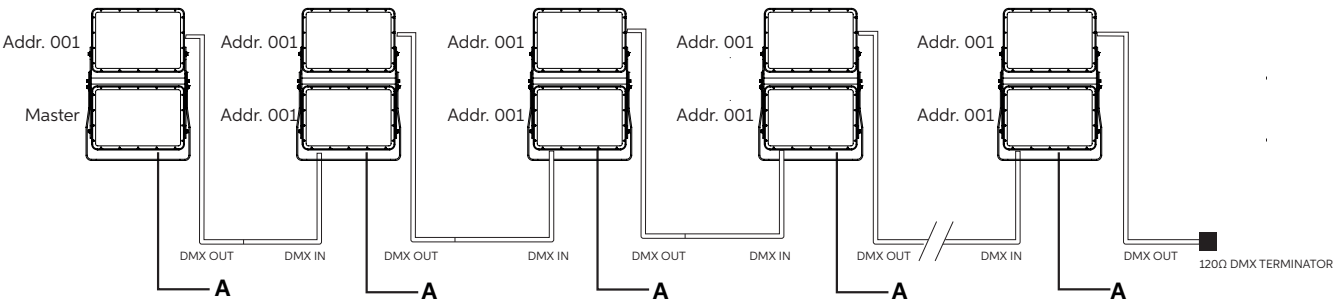
- A - Power Input
- B - DMX/RDM Controller
- C - Start Line Box - AL5058C with connectors / AL5058M without connectors
- D - Capital 600
- E - Connection Cable - AL8264 L=1m (3 ft) AL8265 L=2m (6 ft) AL8266 L=3m (10 ft) AL8267 L=5m (16 ft) AL8268 L=10m (32 ft)
- F - DMX Terminator - AL5169 (with connector)
- G - Repower Box - AL5167C with connectors / AL5167M without connectors
- H - DMX Junction Box - AL5059C with connectors / AL5059M without connectors
- I - DMX Cable - AL0512

DMX Mode



Example with fixtures set to 4 DMX channels

Master-Slave / Automatic / Fixed color Mode ( Only DMX Mode #1 )



**WARNING !** in this mode, no DMX control device must be present along the line.  
**ATTENZIONE !** in questa modalità non deve essere presente lungo la linea nessun altro dispositivo di controllo DMX.

Polar features (only on Polar Edition fixtures )  
Caratteristiche Polar (solo su dispositivi Polar Edition)

|                   | Std.   | US     | MC     |
|-------------------|--------|--------|--------|
| Capital 600 Polar | AL5022 | AL5025 | AL5023 |

The POLAR Edition is fitted with a frontal thermal glass which is particularly useful for outdoor applications. In fact, by warming up, the glass melts ice and snow which might interfere with the projection. When the projector is on, if required by the weather conditions, the glass automatically warms up.

La POLAR Edition è dotata di un vetro termico frontale particolarmente utile per applicazioni outdoor. Infatti, riscaldandosi, il vetro scioglie il ghiaccio e la neve che potrebbero interferire con la proiezione. Quando il proiettore è acceso, se richiesto dalle condizioni meteorologiche, il vetro si riscalda automaticamente.

**WARNING: If the projection is to be started at a definite time, deice the glass in advance, so that when the LEDs are switched on at the definite time the glass will be clean.**

**ATTENZIONE: Se la proiezione deve essere avviata ad una determinata ora, sghiacciare in anticipo il vetro, in modo che quando i LED vengono accesi all’ora stabilita, il vetro sia pulito.**

**WARNING: At very low temperatures (below -20° C), it is mandatory to leave the fixture always powered and to switch on the LEDs when needed.**

**ATTENZIONE: A temperature molto basse (inferiori a -20 ° C), è obbligatorio lasciare sempre l’apparecchio alimentato e accendere i led quando necessario.**



