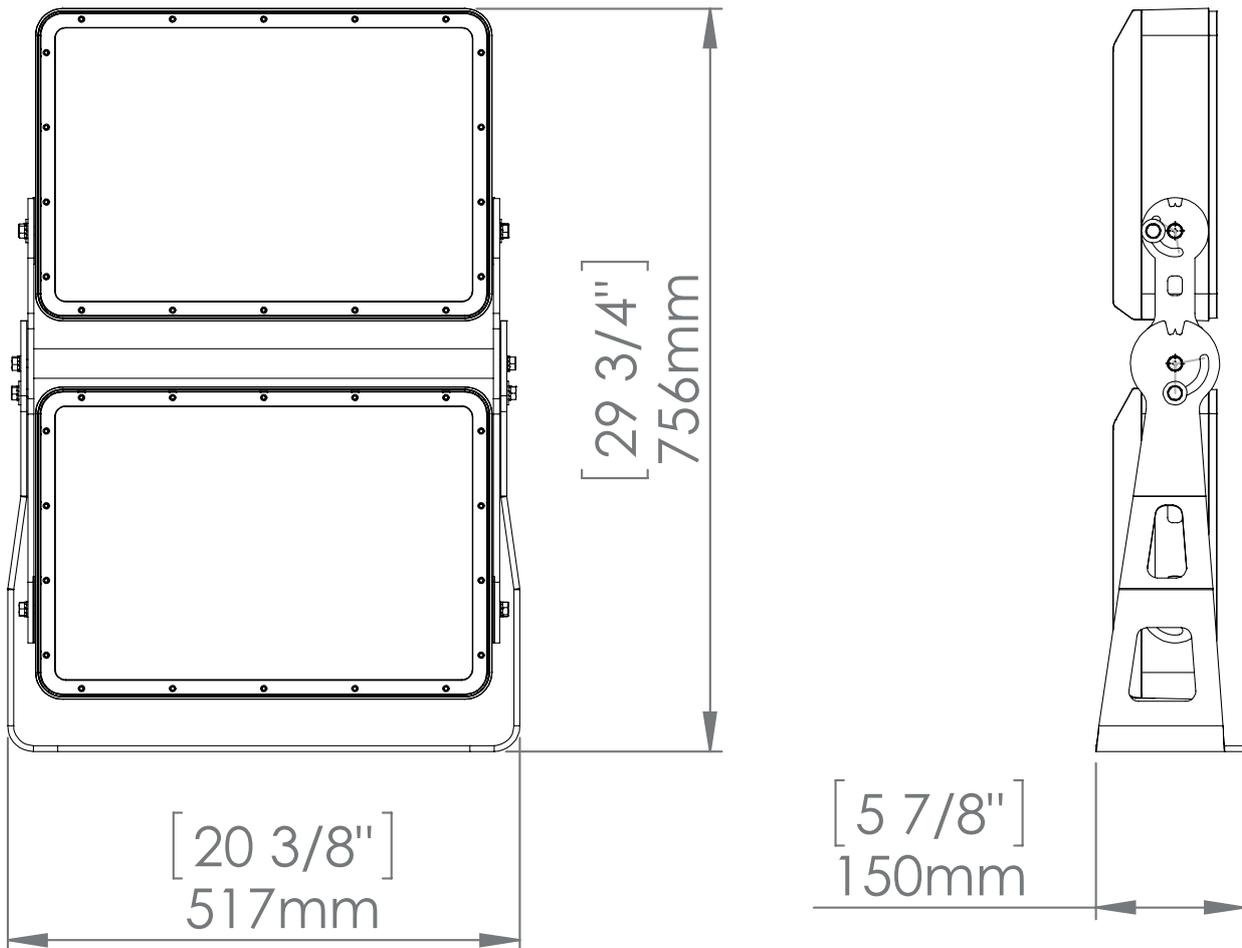




	Capital 600	Capital 600 US	Capital 600 MC
Code	AL5020 - AL5022 (PE)	AL5024 (US) - AL5025 ( US PE)	AL5021 - AL5023 (PE)
Power consumption	2x 256 W(RN), 2x 285 W (W) 2x 266 (MC)		
Nominal current	2x 1.6 A (RN), 2x 1.29 A(W), 2x1.2(MC)		
Power supply	100-277VAC 50-60Hz		
Inrush current	2x 70 A@240VAC, cold start		
Power factor	cos.φ= 0.96 (RN&W), 0.94(US)		
Electrical class	I		
Weight	32.8 Kg		
Operating temperature	-40°C to +50°C ( -40°F to 122°F )		
IP rating	IP67		
IK rating	IK09		

### Dimensions



## Important notices

- This product must be installed in accordance with the local applicable 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 can reduce the risk of damage.
- The use of an adequate magnetothermic switch along the power supply line is recommended.
- Connect the fixtures one to each other only when disconnected from mains power.
- Never leave cables and connectors disconnected or unprotected for long periods.
- Disconnect mains power before installing or servicing to avoid electrical shock.
- Disconnect mains power before any connection operation.
- Check voltage and frequency before powering the fixture. Do not exceed the 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.



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



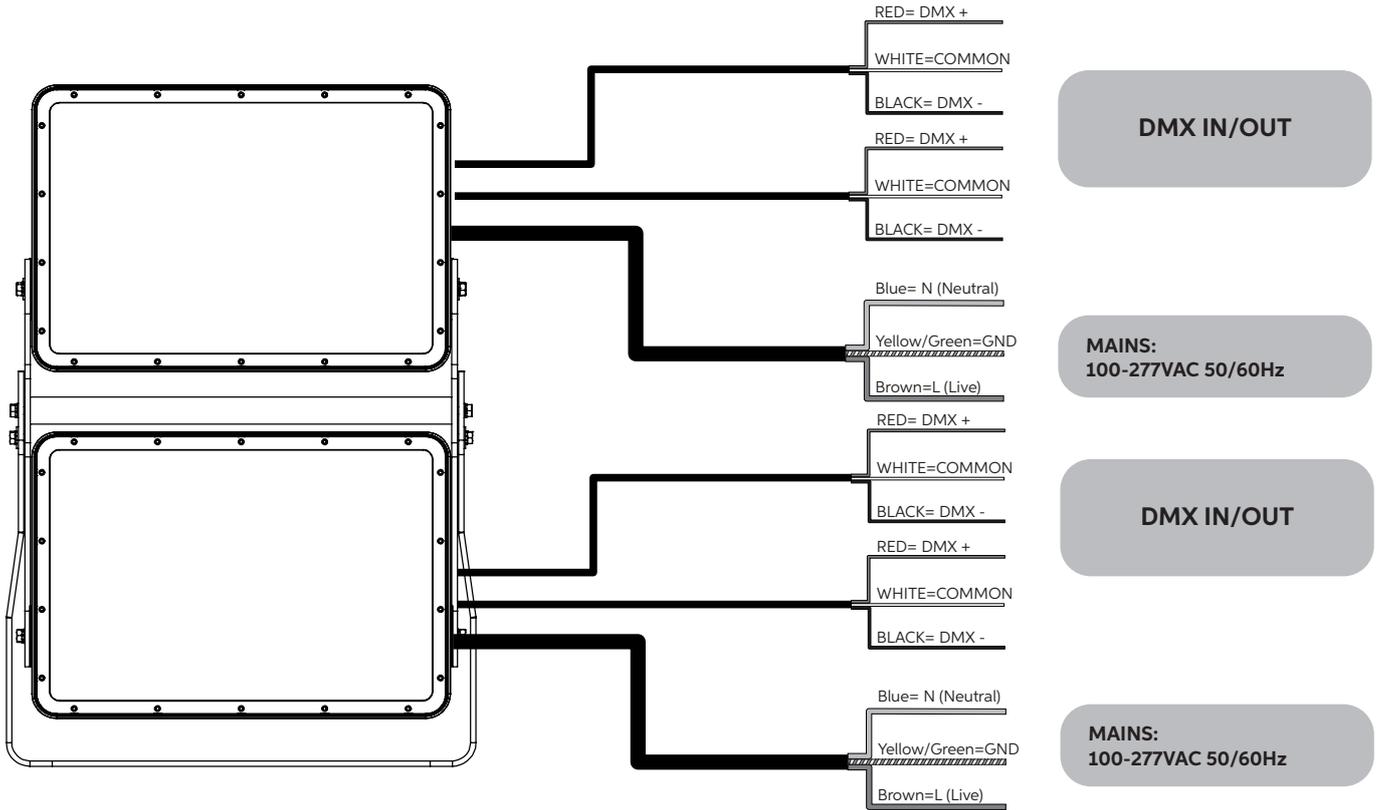
**WARNING ! Fixing and connecting operations must mandatorily be carried out by qualified personnel only !**



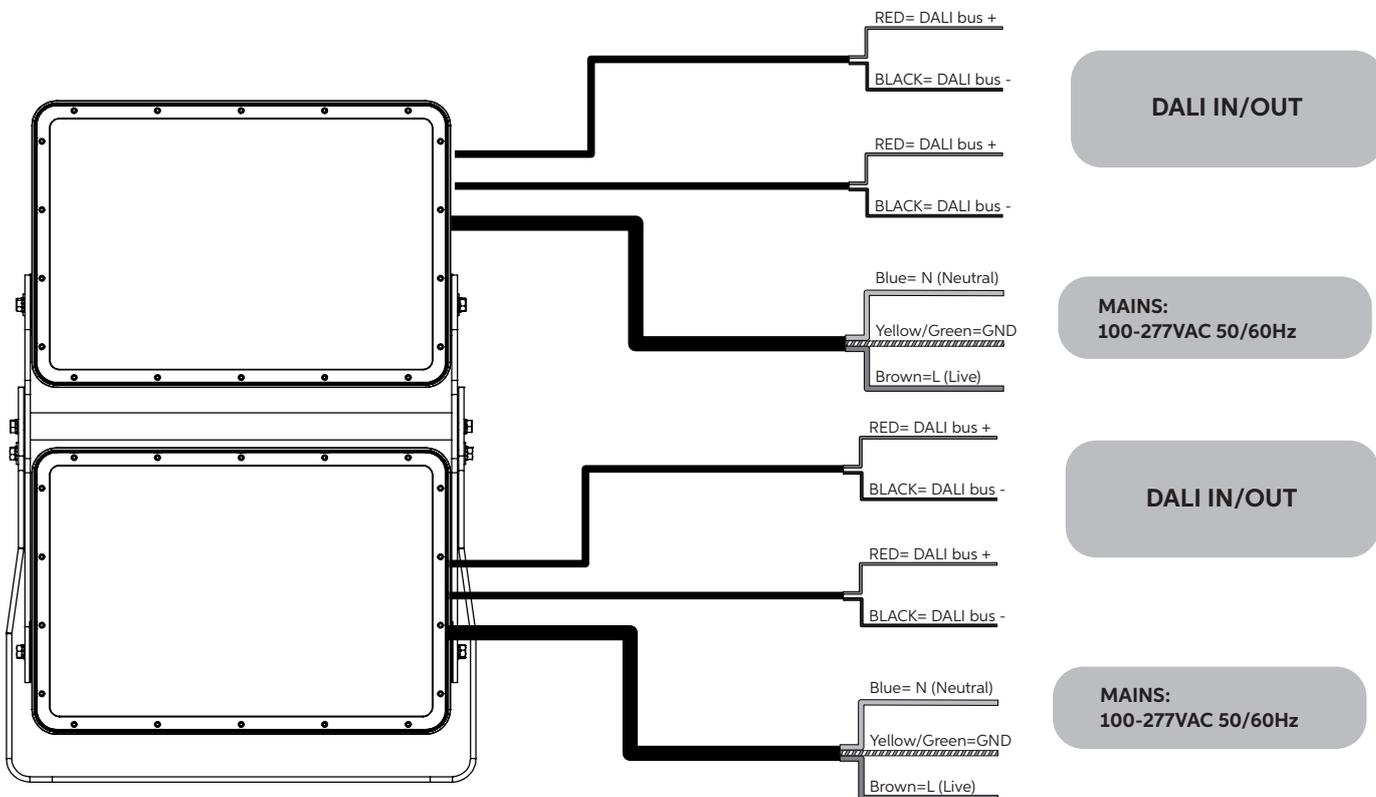
**WARNING ! Make sure that power supply is off before connecting or disconnecting fixtures !**



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

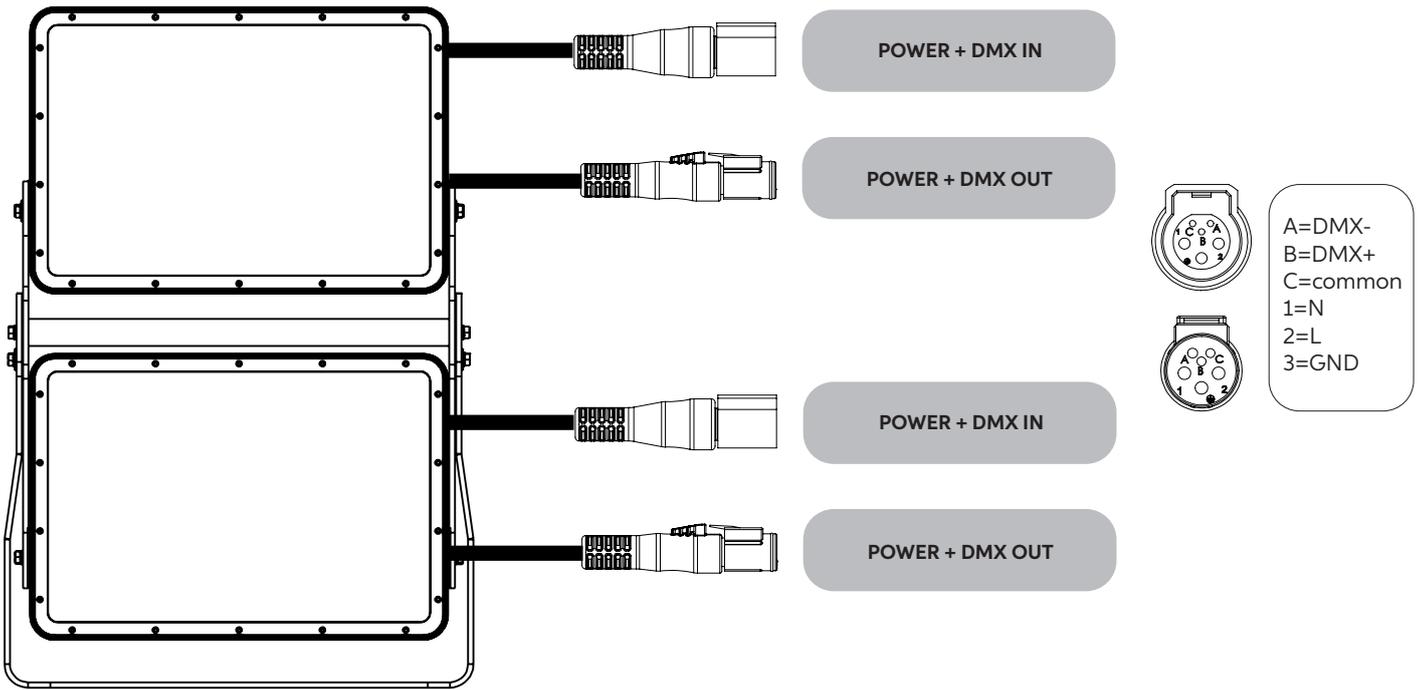


“D” type cable ( Power in, DALI In, DALI Out )

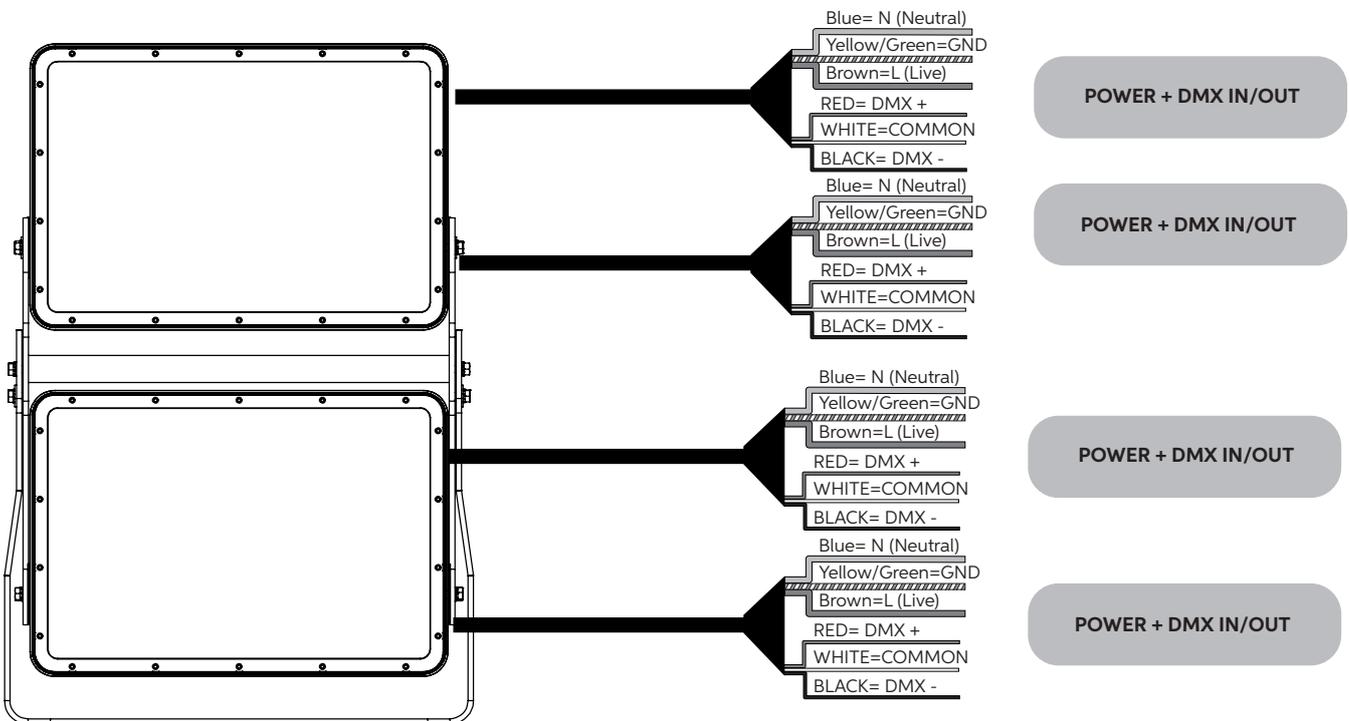


Note: the power and signal connections of S and M cable types can be carried out by using the connection kit included in the packing box. Follow the instructions provided along with the connection kit.

**“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.

# IR Remote Control operations

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

LOGIN		<b>1 2 3</b>	<b>5' inactivity = Automatic LOGOUT</b>	= OK	
DMX MODE	DMX MODE SETTING		Enter the corresponding "IR" value ( see the DMX chart, Mode Column to select the desired DMX mode ( e.g.: for IR=4 press button 4 )	= OK	
	DMX ADDRESS SETTING		001~512	= OK	
MASTER/SLAVE AUTOMATIC MODE <sup>1</sup> TO BE USED ONLY WITH DMX MODE #1	AUTOMATIC/MASTER		Green-Cyan-Blue-Magenta-Red-Yellow-White.		5"→10"→20"→ 40" 
					40"→ 20"→ 10"→ 5" 
	SLAVE FIXTURE SETTING		001	= OK	
FIXED COLOR MODE (RGB-RGBW-DW) TO BE USED ONLY WITH DMX MODE #1			<b>RGB</b> 1 = RED 2= GREEN 3 = BLUE <b>DW</b> 4 = COLD WHITE 5 = WARM WHITE		0%→100% 
DIMMER MODE (Monochromatic) TO BE USED ONLY WITH DMX MODE #1					
LOGOUT			<b>1</b>		
RESET			<b>7 8 9</b>	Reset to default settings	
WIRELESS <sup>2</sup>			1 = Unlink 2= Wireless LED status ON 3= Wireless LED status OFF		

<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 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 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 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 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 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 IR=9 (Default)	1	0-100% Red	0-255
	2	0-100% Green	0-255
	3	0-100% Blue	0-255
	4	0-100% Calibrated White (affects RGB channels)	0-255

Note: in absence of DMX signal the LEDs will remain **OFF**.

## DW (Dynamic White)

Mode	Channel	Function	Value
#1 IR=2 (Default)	1	0%→100% Warm white	0-255
	2	0%→100% Cold White	0-255
#2 IR=3	1	0%→100% Warm white	0-255
	2	0%→100% Cold white	0-255
	3	0%→100% dimmer	0-255
#3 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 **ON**.

## Monochromatic version

Channel	Function	Value
1	0%→100% dimmer	0-255

Note: in absence of DMX signal the LEDs will remain **ON**.

### RDM functions

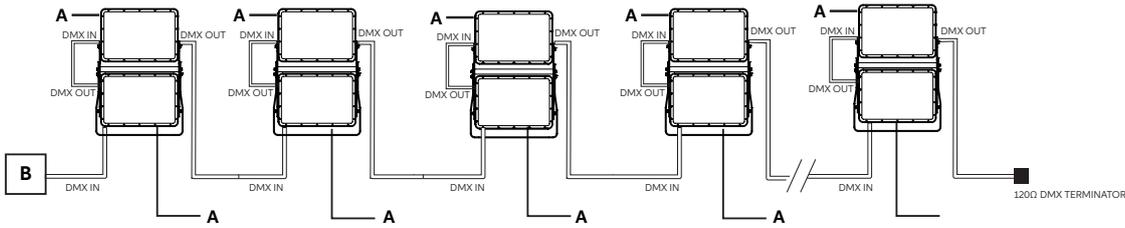
When operating in DMX mode the fixture can accept the following RDM commands:

- 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

# Configuration examples

## DMX Chain configuration - S type cable

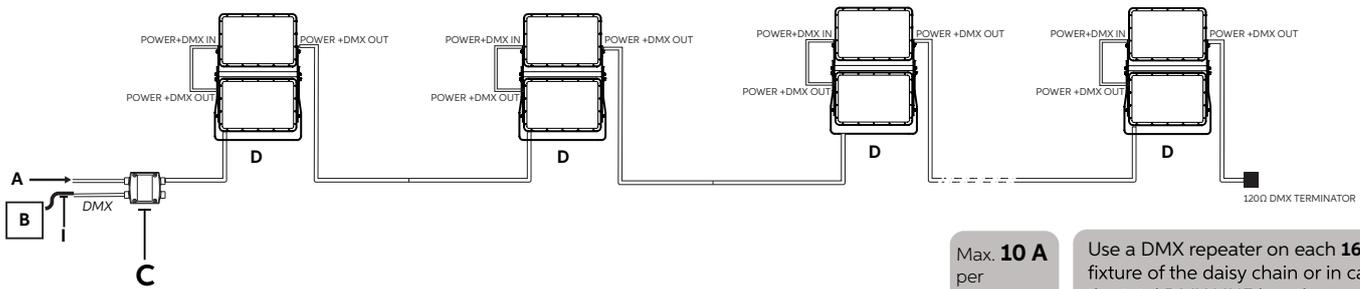


DMX cable type: 2x0.34 mm<sup>2</sup>, impedance 110Ω, capacity 43pF/m, resistance 50Ω/Km.

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)**

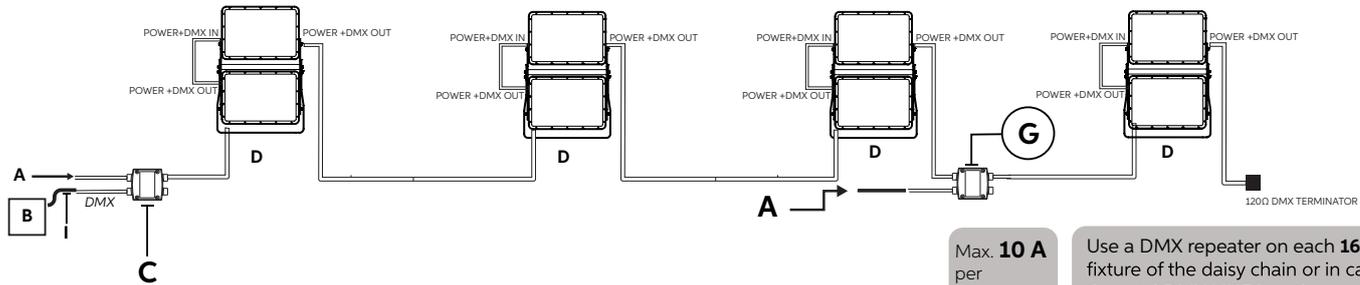
## Single Chain configuration - M or C type cable



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)**

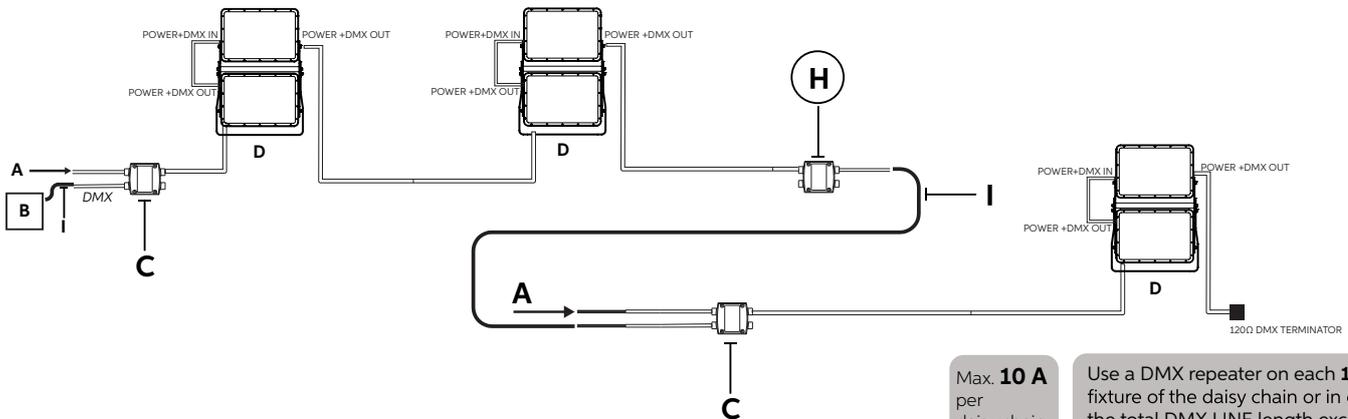
## Multi Chain configuration using Repower Box - M or C type cable



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

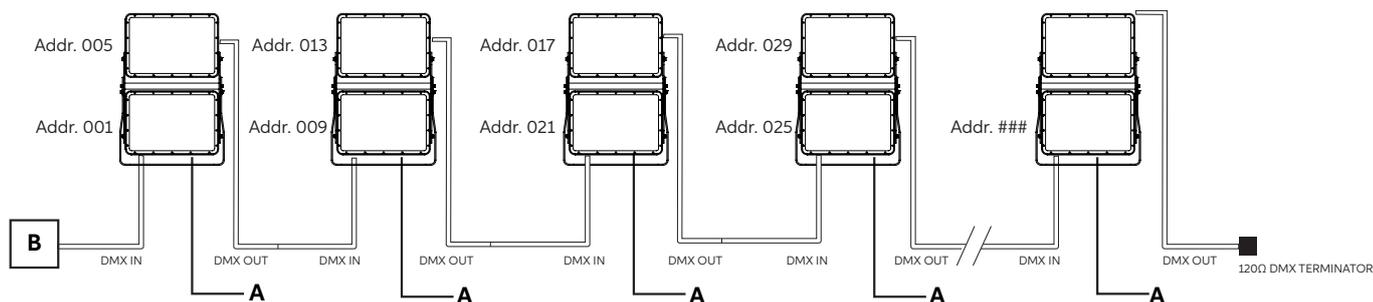


Max. **10 A**  
per  
daisy chain

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

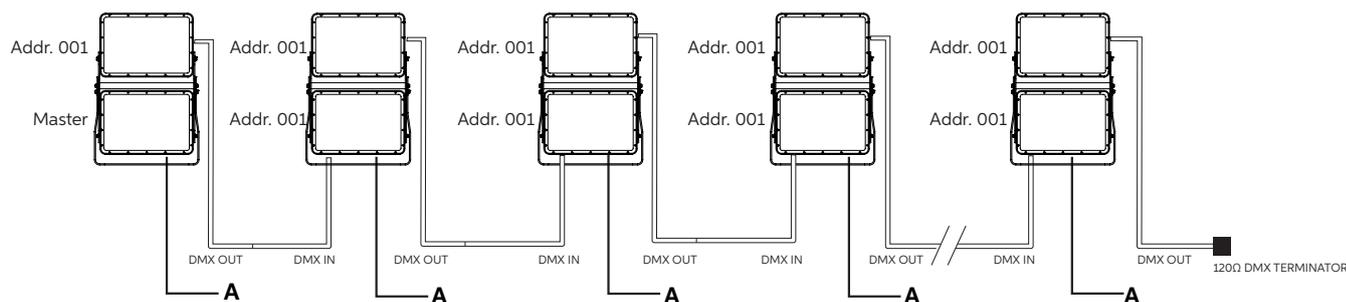
- A - Power Input
- B - DMX/RDM Controller
- C - Start Line Box - AL5058C with connectors / AL5058M without connectors
- D - Capital 600
- E - Connection Cable - AL8264 L=1m (3 ft) AL8265 L=2m (6 ft) AL8266 L=3m (10 ft) AL8267 L=5m (16 ft) AL8268 L=10m (32 ft)
- F - DMX Terminator - AL5169 (with connector)
- 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 other DMX control device must be present along the line.

Polar features (only on Polar Edition fixtures )

	Std.	US	MC
Capital 600 Polar	AL5022	AL5025	AL5023

The POLAR Edition is fitted with a thermal frontal 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 is automatically warmed up.

**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.

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



