

## CLUSTER B2 FC

- 2 x 300W Full Color
- RGBA + Warm White LED's
- C-Lok Cluster System
- Magnetic Pre-Link system

All CLUSTER products can be easily connected both horizontal and vertically, by using the integrated C-Lok system. The series is made to enable toolless multiple array configurations, scalable from a single vertical line, to massive matrix like arrays. Due IP65 rating all products are outdoor ready and protected from ingress of dust and rain. There are several mounting options – Camlock mounts on top and back enable the use of Omega-Brackets, Yokes can be attached to mounting points on all sides, or the internal C-Lok system can be used for seamless inter-connection. Pre-Link Magnets on top and side help to align the fixtures, giving an incredible user-friendly operation and save interlocking. A specially designed rigging bracket is used for seamless connection of multiple Blinders, to avoid gaps due to bracing of the truss structure by variable, sliding mounting positions.

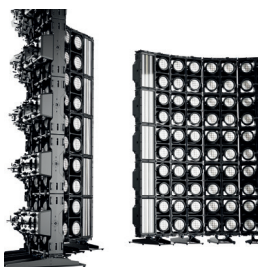
Floor extensions can be used to create vertical structures in single or double rows.

The Full Color version reproduces the same look by using it's warmwhite LED's in combination with RGB and Amber, plus the full range of user adjustable color mixing and tunable white.

### Accessories



Line Array  
(Flybar)



Line Array  
(Floor Bracket)



Yoke 4.1  
(Included)



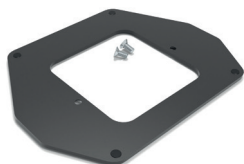
Yoke 2.2  
(Optional)



Yoke 4.3  
(Optional)



Omega Bracket



Floor Extension



Rigging Bracket G2



Floor Bracket



Cases

## Technical Data

| Photometrics                                                   |                                                                                                                                                                                                                                                                                                          |
|----------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| LED expected lifetime                                          | 50.000 hours                                                                                                                                                                                                                                                                                             |
| Lightsource                                                    | 2x 300W Red, Green, Royal Blue, Amber, Warm-White                                                                                                                                                                                                                                                        |
| Type of optical system                                         | Reflector with Compound Eye Lens                                                                                                                                                                                                                                                                         |
| LED PWM Frequency                                              | selectable 800Hz, 1.200Hz, 2.000Hz, 3.600Hz, 12kHz, 25kHz                                                                                                                                                                                                                                                |
| Beam angles (50%)                                              | 50°                                                                                                                                                                                                                                                                                                      |
| Maximum Field angles (10%)                                     | 87°                                                                                                                                                                                                                                                                                                      |
| Color temperature range                                        | 2000-10.000K                                                                                                                                                                                                                                                                                             |
| CRI/Ra                                                         | 90 @ 5600K / 86 @ 2900K                                                                                                                                                                                                                                                                                  |
| Efficacy (max)                                                 | 26,15 lm/W                                                                                                                                                                                                                                                                                               |
| Luminous flux                                                  | 16.215 lm                                                                                                                                                                                                                                                                                                |
| illuminance Lux @ 1m / 3,3ft (@ 2900K)                         | 17.801lx / 1654fcd                                                                                                                                                                                                                                                                                       |
| illuminance Lux @ 3m / 9,8ft (@ 2900K)                         | 1920lx / 178fcd                                                                                                                                                                                                                                                                                          |
| illuminance Lux @ 5m / 16,4ft (@ 2900K)                        | 721lx / 67fcd                                                                                                                                                                                                                                                                                            |
| illuminance Lux @ 7m / 23,0ft (@ 2900K)                        | 398lx / 37fcd                                                                                                                                                                                                                                                                                            |
| illuminance Lux @ 10m / 32,8ft (@ 2900K)                       | 199lx / 18fcd                                                                                                                                                                                                                                                                                            |
| Thermal Characteristics                                        |                                                                                                                                                                                                                                                                                                          |
| Cooling                                                        | Active, Forced Air, Temperature-regulated                                                                                                                                                                                                                                                                |
| Humidity (max.)                                                | 95%                                                                                                                                                                                                                                                                                                      |
| Temperature range, Operating                                   | -40°C to 45°C                                                                                                                                                                                                                                                                                            |
| Temperature range, Start-up                                    | -20° to 45°C                                                                                                                                                                                                                                                                                             |
| Temperature range, Storage                                     | -40°C to 80°C                                                                                                                                                                                                                                                                                            |
| Thermal Protection                                             | Automatic overtemperature protection                                                                                                                                                                                                                                                                     |
| Electrical Data                                                |                                                                                                                                                                                                                                                                                                          |
| AC Power, max                                                  | 90 – 285V 50/60Hz                                                                                                                                                                                                                                                                                        |
| AC Power, nominal                                              | 100 – 240V 50/60Hz                                                                                                                                                                                                                                                                                       |
| Electrical protection                                          | Overload protection with automatic recover                                                                                                                                                                                                                                                               |
| Max power consumption (Boost Mode)                             | 620W                                                                                                                                                                                                                                                                                                     |
| Constant power consumption (Illumination Mode)                 | 220W                                                                                                                                                                                                                                                                                                     |
| Power Max. Out                                                 | 13A @ 230V / 9A @ 120V                                                                                                                                                                                                                                                                                   |
| Power Linking @ Max Power Consumption (Boost Mode)             | 4 units @ 230V / 1 unit @ 120V                                                                                                                                                                                                                                                                           |
| Power Linking @ Constant Power Consumption (Illumination Mode) | 15 units @ 230V / 6 units @ 120V                                                                                                                                                                                                                                                                         |
| Power Factor                                                   | 0.974 PF (230V) / 0.996 PF (120V)                                                                                                                                                                                                                                                                        |
| Power Supply Unit                                              | Inbuilt auto-ranging electronic switch-mode                                                                                                                                                                                                                                                              |
| Operator & Controller                                          |                                                                                                                                                                                                                                                                                                          |
| DMX Functions                                                  | Master Dimmer, Master Dimmer Fine, Shutter, Duration, Dimmer 1-2, Dimmer 1-2 Fine, Red 1-2, Red 1-2 Fine, Green 1-2, Blue 1-2, Blue Fine 1-2, Amber 1-2, Warm-White 1-2, CTC 1-2, Tint 1-2, Color Macro 1-2, Color Macro Crossfade 1-2, Dimmer Curve, Dimmer Response, Redshift, Effect, Device Settings |
| DMX channels                                                   | 1CH DWE, 2CH DWE, 4CH DWE, 9CH DWE+, 6CH STROBE, 6CH RGB, 10CH BASIC RGB, 14CH BASIC RGB, 11CH SECTION RGB, 11CH COMP RGB, 13CH STANDARD RGB (default), 22CH STANDARD RGB, 24CH EXTENDED RGB, 33CH EXTENDED RGB, 10CH DIRECT, 12CH DIRECT, 17CH DIRECT, 24CH DIRECT, 41CH DIRECT                         |
| DMX modes                                                      | 19                                                                                                                                                                                                                                                                                                       |
| Protocol                                                       | USITT DMX512A<br>RDM ANSI E1.20                                                                                                                                                                                                                                                                          |
| Setting and addressing                                         | OLED graphical display / 4 controls<br>RDM ANSI E1.20                                                                                                                                                                                                                                                    |

**Operator & Controller**

|                     |                                                                   |
|---------------------|-------------------------------------------------------------------|
| Standalone mode     | Auto Program, Color Macro, Quick Color, Tunable White, User Color |
| Wireless DMX        | n.a.                                                              |
| Indicator           | OLED graphical display                                            |
| Controls            | 4 touch sensitive, backlighted controls                           |
| Strobe              | 0-20Hz                                                            |
| DMX I/O             | IP65 XLR 5-pin male/female                                        |
| Power In            | TRUE1 compatible input & link-thru sockets                        |
| USB Firmware Update | IP65 USB socket                                                   |

**Dimensions & Weight**

|                            |                                                  |
|----------------------------|--------------------------------------------------|
| IP class                   | IP65                                             |
| IK class                   | IK08                                             |
| Body material              | Aluminum, Nylon                                  |
| Lens material              | Tempered glass front                             |
| Net dimensions (w x h x d) | 400 x 200 x 191mm                                |
| Net dimensions inches      | 15,75 x 7,87 x 7,52 inches                       |
| Net weight (incl. Yoke)    | 10,5 kg (23,15lbs)                               |
| Tilt                       | 360°                                             |
| Tilt Locking System        | Locking system with toothing and angle indicator |

**Included / Optional**

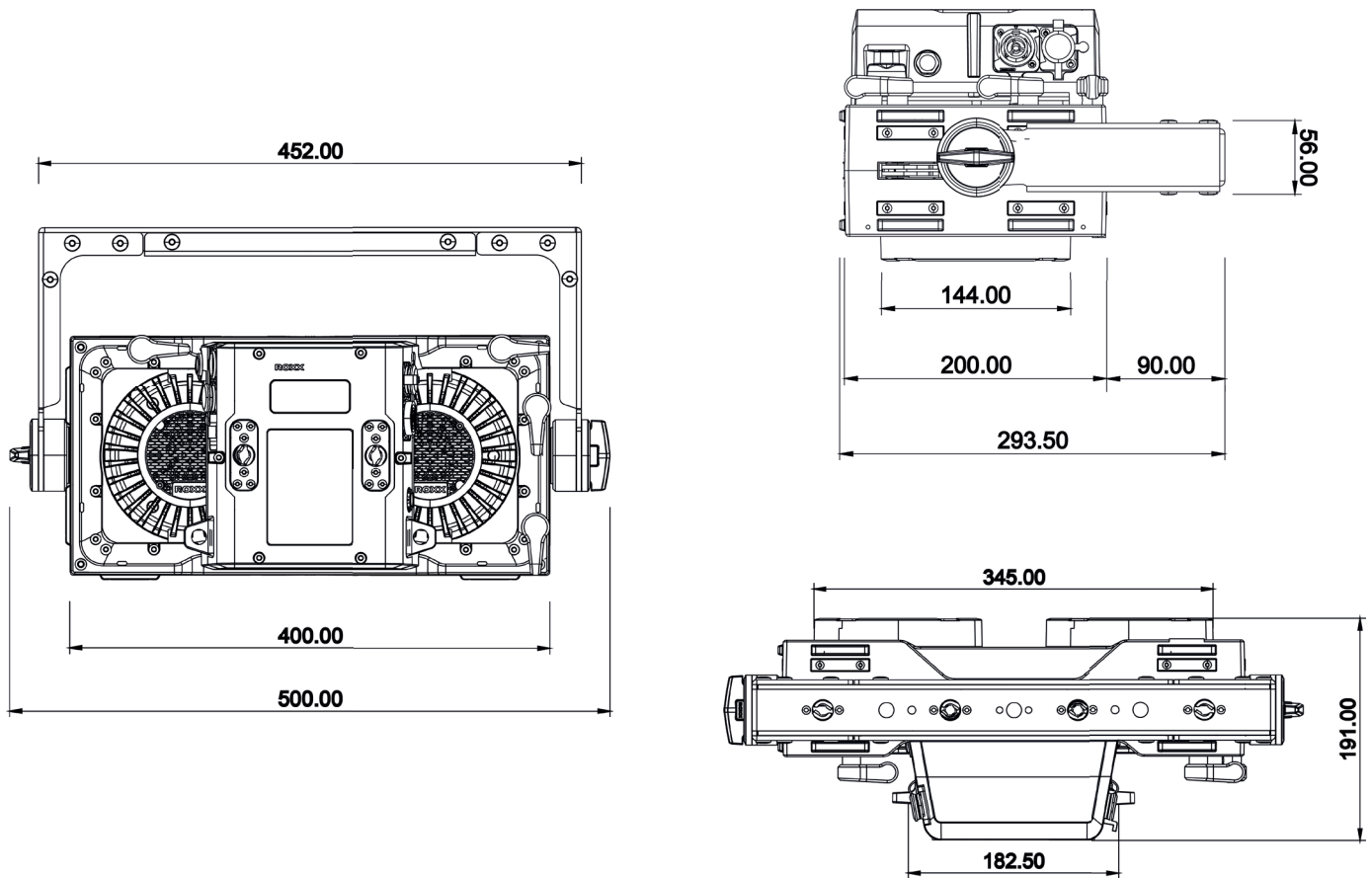
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|----------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Included items       | Yoke 4.1, 2m Power Cable, Puk                                                                                                                                                                                                                                     |
| Optional Accessories | Yoke 2.2, Yoke 4.3, Yoke Floor Extension, Rigging Bracket G2, Omega Bracket ST, Floor Bracket, CLUSTER Line Array Fly Bar, CLUSTER Line Array Side Bracket Set, CLUSTER Line Array Back-Bone 4, CLUSTER Line Array Backbone 2+2, CLUSTER Line Array Floor Bracket |

|               |                                                                    |
|---------------|--------------------------------------------------------------------|
| Color options | Black – RAL 9004 (Standard)<br>Custom color – any RAL (on request) |
|---------------|--------------------------------------------------------------------|

**Installation**

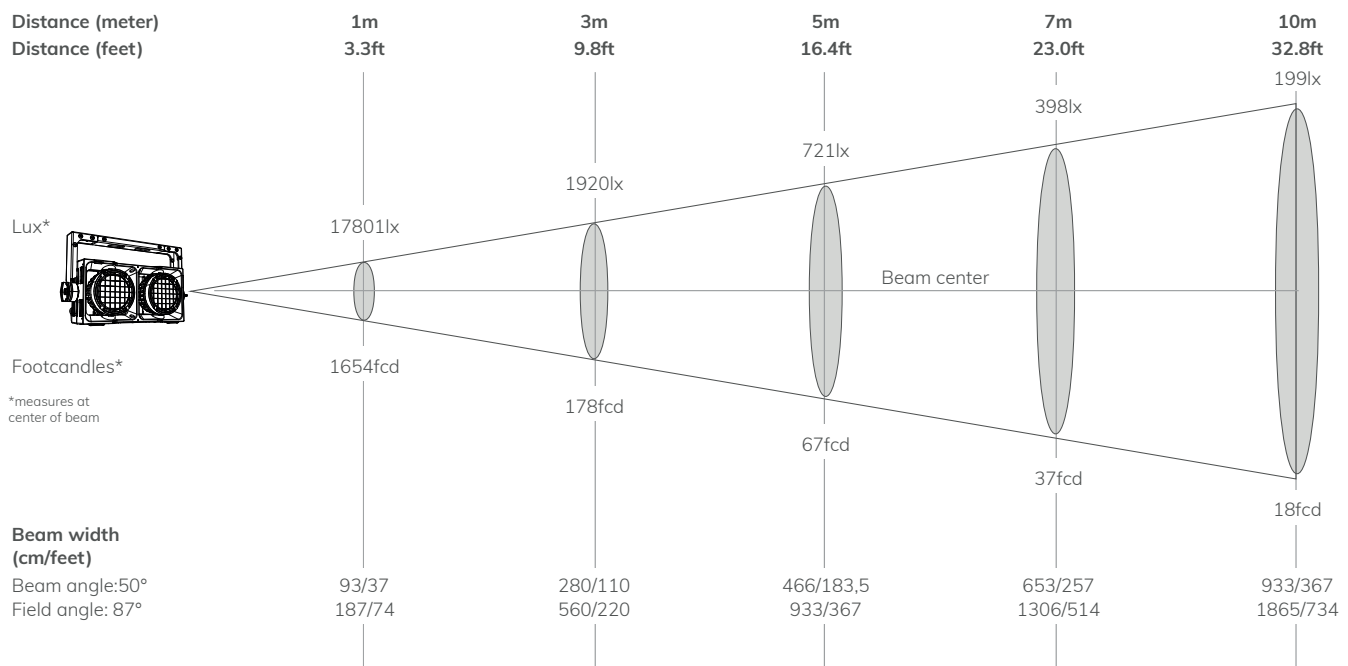
|                                              |                                                                                                  |
|----------------------------------------------|--------------------------------------------------------------------------------------------------|
| Mounting point by Yoke (included)            | 3x 13mm / 1/2" holes, 1x centric TV Spigot attachment, 3x integrated Camlocks for Omega Brackets |
| Mounting point on fixture                    | 1/4 turn Omega Bracket on top and rear side                                                      |
| Mounting point with optional Rigging Bracket | 2x 13mm / 1/2" holes for Clamp fixation                                                          |
| Orientation                                  | Any                                                                                              |
| Rigging possibilities                        | Hanging or ceiling / pendant mount                                                               |
| Safety features                              | 2x rear mount for safety wire                                                                    |
| Minimum distance from flammable materials    | 0,3 meters (11,8 inch)                                                                           |

## Technical Drawing



## Luminaire Photometrics

### B2 FC (@ 2.900K)



## Order Number

| CLUSTER            | Order Number |
|--------------------|--------------|
| B2 FC              | 13202101     |
| B4 FC              | 13204101     |
| B2 W               | 13202001     |
| B4 W               | 13204001     |
| Accessories        | Order Number |
| Yoke 2.2           | 13907001     |
| Yoke 4.1           | 13907601     |
| Yoke 4.3           | 13907101     |
| Floor Extension    | 13907201     |
| Rigging Bracket G2 | 13907411     |

| Accessories                      | Order Number |
|----------------------------------|--------------|
| Floor Bracket                    | 13908501     |
| Case 4 pcs. / 8 pcs.             | 13907411     |
| Case 2 pcs / 4 pcs.              | 13907511     |
| Omega Bracket                    | 90900002     |
| CLUSTER Line Array Flybar        | 13909501     |
| CLUSTER Line Array Side Brackets | 13909601     |
| CLUSTER Line Array Back Bone 4   | 13909701     |
| CLUSTER Line Array Back Bone 2+2 | 13909801     |
| CLUSTER Line Array Floor Bracket | 13909901     |

## Further Versions



CLUSTER B4 W



CLUSTER B2 W



CLUSTER B4 FC

