XBAR

by

bright

Instructions:

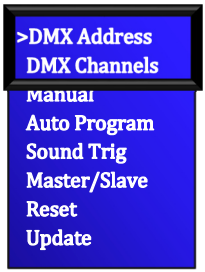
- Do not open this device - there are no user-serviceable parts inside.
- Do not look directly at the light source when the device is on.
- Caution, this unit's housing may be hot when lights are operating.
- Do not leave any flammable material within 50 cm of this unit while operating or connected to power.
- Always use a safety cable when mounting this device overhead.
- Do not operate this device outdoors or in location where dust, excessive heat, water, or humidity may affect it.
- Do not connect this device to a dimmer or other regulated power
- Only connect this device to a grounded and protected circuit.
- Switchmode powers has high inrush-currents, do not exceed 8A on the output Powercon when daisy-chaining fixtures (16 units @ 230V)

- High Output 12x12w 6in1 RGBWAUV pixel-controlled led-engine
- 30° Even field optics
- Industry standard 5pin XLR and powerCON TRUE 1
- Inputs and outputs for easy daisy-chaining.
- 16bit DMX control
- DMX controlled rise-time
- RDM remote addressing
- Easy and intuitive Local menu structure, rotatable display
- Firmware cloning from fixture to fixture
- Intelligent yoke-design enables direct floor-mount without removal of hook clamp.
- Stealth design: All black parts, (body, yoke, hook clamp & bolt), Automatic dimming of LCD backlight.
- Compact size, low weight and power consumption

Display Navigation

When XBAR is already in DMX-mode, the DMX start address is displayed on the left side (Axxx), while the DMX channel count is displayed on the right side (Cxx).
Use the Up/Down buttons to alter the DMX start address, and press Enter/Confirm to set the address permanently.

When receiving valid DMX, a blinking dot is displayed between the address and the channel count:



If the XBAR is not in DMX-mode, or to change other settings than the start address, press the Menu button to access the main menu:

Menu/Exit   Up

Enter/Confirm   Down

You may rotate the display 180 degrees by pressing the Up and Down buttons simultaneously for 2 seconds.

Navigate the main menu with the Up/Down buttons, and use the Enter/Confirm button to select a menu item. The XBAR will return to its previous state if no new setting or mode has been confirmed within 10 seconds.

DMX start Address

Use Up/Down to alter the DMX start Address (001→xxx), then press Enter/Confirm to set the chosen start address permanently.
"xxx" (highest address) is determined by the chosen channel-mode. (e.g. in 2ch mode max address is 511)

- **Setting the DMX start Address will activate "DMX Mode"**

DMX Channel count

Use Up/Down to alter the DMX channel count (2ch, 3ch, 12ch, 32ch, 60ch, 96ch), and press Enter/Confirm.
If the mode supports individual control of each cell, select Normal or Reversed cell order (-**REV**), then press Enter/Confirm to set the chosen Channel count and cell order permanently.

(Normal cell order: First cell is on the input side)

- **Setting the DMX Channel count will activate "DMX Mode"**

Manual Control

Use Up/Down and Enter/Confirm to sequentially choose a Preset basic color, finetune the hue of the chosen color, and finally set the overall intensity.
Use Menu/Exit to step backwards in menu-sequence to readjust the hue, or select another basic color.

- **Setting a manual color will activate "Manual Mode"**

Automatic Programs

Use Up/Down and Enter/Confirm to sequentially choose an Auto program and set the wait and fade times between the steps of the program.
Use Menu/Exit to step backwards in menu-sequence to readjust the wait time, or to select another Program.

- **Setting a program will activate "Auto Program" mode**

Sound trig

Use Up/Down to adjust the sensitivity (Sen000→Sen100) of the in-build microphone, then press Enter/Confirm to set Sound sensitivity permanently.

- **Setting the Sound sensitivity will activate "Sound" mode**

Master/Slave Operation

Use Up/Down to choose Master or Slave 1 → Slave 12, and press Enter/Confirm.

When using any of the standalone operating modes: auto, sound, or manual with Master enabled, the Master fixture will transmit and remote control any fixtures set to Slave Mode.

When a Master is transmitting AutoPrograms, the program steps can be shifted on the slaves (Slave 1 = in sync with master, slave 2 = one step ahead etc)

- **Setting Master/Slave to Slave will activate "Slave Mode"**

Factory Reset

Use Up/Down to select <Yes>, then press Enter/Confirm to reset the fixture to factory default settings.

- **Resetting the fixture will activate "DMX Mode"**

Firmware Update

Use Up/Down to select <Yes>, then press Enter/Confirm to set the fixture in update mode.

Connect another fixture (unpowered) with 5pin, then apply power. When the second fixture displays "Waiting for file", Press Enter/Confirm on the original fixture to start transferring firmware to the second fixture.

- **Press Menu/Exit twice to return to Main menu when done**

DMX channels:

The XBAR may be set to use 2, 3, 12, 32, 60 or 96 DMX channels.
Please refer to the DMX Charts for detailed description of each channel

2 Channel mode

1	2
Dim	Color

The 2 channel mode gives easy access to intensity and color from manual consoles, with crossfading presets from warm to cold white, all saturated hues and finally UV.

3 Channel mode

1	2	3
R	G	B

The 3 channel mode allows control by the use of RGB control channels only, to be used with architectural or other generic control-systems. The levels of White, Amber and UV are automatically calculated by the fixture to maximize output of the chosen colors.

12 Channel mode

1	2	3	4	5	6	7	8	9	10	11	12
R	G	B	W	A	UV	Dim	Dim fine	Strobe	Rise-time	Cell color	Cell select

The 12 channel mode gives individual access to all 6 LED-colors, 16-bit master dimmer and shutter/strobe with additional random and audio-trig, rise-time for emulation of filament lamps, and finally basic cell effects.

32 Channel mode

1-24	25	26	27	28	29	30	31	32
Dim cell 1-12	R	G	B	W	A	UV	Strobe	Rise-time

The 32 channel mode gives individual 16-bit dimmer access to all 12 cells, along will common control of LED-colors, strobe and risetime.

60 Channel mode

1	2	3	4	5
R	G	B	Dim	Dim fine

x 12

The 60 channel mode gives individual access to all 12 cells using RGB and 16-bit dimmer.

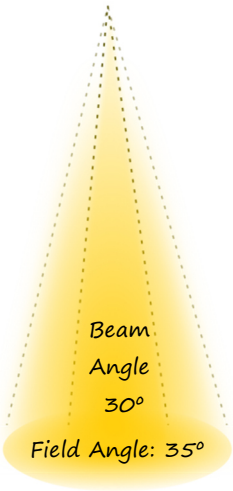
96 Channel mode

1	2	3	4	5	6	7	8
R	G	B	W	A	UV	Dim	Dim fine

x 12

The 96 channel mode gives individual access to all 6 LED-colors of each cell, along with 16-bit dimmer.

Photometrics



Lux

	R	G	B	W	A	UV	All
1m	913	1164	1157	1706	673	290	5180
2m	375	486	468	678	257	116	2050
3m	190	250	240	351	135	59	1067
4m	119	156	154	219	89	36	660
5m	87	113	109	158	67	26	471

DMX Chart

2 Channel mode

CHANNEL	VALUE	FUNCTION
1	000-255	Master dimmer 0% → 100%
2	000	Straw →
	020	Warm white →
	040	White →
	060	Cool white →
	080	Blue →
	100	Magenta →
	120	Red →
	140	Orange →
	160	Yellow →
	180	Green →
	200	Teal →
	220	Cyan →
	240	Blue →
	255	UV

3 Channel mode

CHANNEL	VALUE	FUNCTION
1	000-255	Red component: 0% → 100%
2	000-255	Green component: 0% → 100%
3	000-255	Blue component: 0% → 100%

12 Channel mode

CHANNEL	VALUE	FUNCTION
1	000-255	Red dimmer 0% → 100%
2	000-255	Green dimmer 0% → 100%
3	000-255	Blue dimmer 0% → 100%
4	000-255	White dimmer 0% → 100%
5	000-255	Amber dimmer 0% → 100%
6	000-255	UV dimmer 0% → 100%
7	000-255	Master dimmer 0% → 100% (coarse)
8	000-255	Master dimmer (fine 16bit)
9	000-007	Shutter Closed
	008-015	Shutter Open
	016-119	Strobe Slow → Fast (1-25Hz)
	120-127	Shutter Open
	128-183	Strobe Random Slow → Fast
	184-191	Shutter Open
	192-247	Strobe Audio Slow → Fast
	248-255	Shutter Open
10	000-031	Instant response
	032-063	Short rise-time
	064-095	Medium rise-time
	096-127	Long rise-time
	128-159	Extra-long rise-time
	160-191	[reserved]
	192-223	[reserved]
	224-255	[reserved]
11		Cell Color (use Cell Select to apply destination)
	000	Straw →
	020	Warm white →
	040	White →
	060	Cool white →
	080	Blue →
	100	Magenta →
	120	Red →
	140	Orange →
	160	Yellow →

	180	Green →
	200	Teal →
	220	Cyan →
	240	Blue →
	250	UV →
	255	Black
12	Cell Select (where to use Cell color instead of RGBWAUV)	
	000-007	No function (Cell color ignored)
	008-015	4step 1→4
	016-039	Single 1→12
	040-063	Twin 1→12
	064-087	Quad 1→12
	088-253	Random few→many
	254-255	All cells

32 Channel mode

CHANNEL	VALUE	FUNCTION
1-2		Dimmer Cell 1:
1	000-255	Cell 1 Dimmer 0% → 100% (coarse)
2	000-255	Cell 1 Dimmer (fine 16bit)
3-24		Dimmer Cell 2 – Cell 12
25-32		Color All Cells:
25	000-255	Red dimmer 0% → 100%
26	000-255	Green dimmer 0% → 100%
27	000-255	Blue dimmer 0% → 100%
28	000-255	White dimmer 0% → 100%
29	000-255	Amber dimmer 0% → 100%
30	000-255	UV dimmer 0% → 100%
31	000-007	Shutter Closed
	008-015	Shutter Open
	016-119	Strobe Slow → Fast (1-25Hz)
	120-127	Shutter Open
	128-183	Strobe Random Slow → Fast
	184-191	Shutter Open
	192-247	Strobe Audio Slow → Fast
	248-255	Shutter Open
32	000-031	Instant response
	032-063	Short rise-time
	064-095	Medium rise-time
	096-127	Long rise-time
	128-159	Extra-long rise-time
	160-191	[reserved]
	192-223	[reserved]
	224-255	[reserved]

60 Channel mode

CHANNEL	VALUE	FUNCTION
1-5		Cell 1
1	000-255	Red component: 0% → 100%
2	000-255	Green component: 0% → 100%
3	000-255	Blue component: 0% → 100%
4	000-255	Master dimmer 0% → 100% (coarse)
5	000-255	Master dimmer (fine 16bit)
6-10		Cell 2
11-15		Cell 3
16-20		Cell 4
21-25		Cell 5
26-30		Cell 6
31-35		Cell 7
36-40		Cell 8
41-45		Cell 9
46-50		Cell 10
51-55		Cell 11
56-60		Cell 12

96 Channel mode

CHANNEL	VALUE	FUNCTION
1-8		Cell 1
1	000-255	Red dimmer 0% → 100%
2	000-255	Green dimmer 0% → 100%
3	000-255	Blue dimmer 0% → 100%
4	000-255	White dimmer 0% → 100%
5	000-255	Amber dimmer 0% → 100%
6	000-255	UV dimmer 0% → 100%
7	000-255	Master dimmer 0% → 100% (coarse)
8	000-255	Master dimmer (fine 16bit)
9-16		Cell 2
17-24		Cell 3
25-32		Cell 4
33-40		Cell 5
41-48		Cell 6
49-56		Cell 7
57-64		Cell 8
65-72		Cell 9
73-80		Cell 10
81-88		Cell 11
98-96		Cell 12

Technical Specification:

Construction	
Housing	Black Die-cast Aluminum Body, Iron Yoke
Cooling System	Passive fanless, Temperature protection
Power Input/Output	Neutrik Powercon TRUE1
DMX Input/Output	5-pin XLR
Display	Blue/white Backlit LCD, auto-dimmed when idle.
Dimension (LxWxH)	985 x 65 x 168 mm
Weight	4.3kg (clamp included)
Electric	
Power supply	100-240V AC, 50/60 Hz
Power consumption	150W, 0.9A@120V 0.65A@230V
LED Driver	Constant Current Driver, 1280Hz (Flicker Free)
Fuse	T2A , 250V
Optics	
Light Source	12 pcs of 6in1 RGBWAUV 12W LED
Luminous Flux	1000lux @ 3m
Beam/Field Angle	30°/35°
Functions	
Control Modes	DMX512, RDM, Manual, Auto, Sound, Master/Slave
DMX Channels	2/3/12/32/60/96CH
Operation	
Temperature	Max ambient temperature Ta: 40°C Max housing temperature Tc (steady state): 80°C
Distance	Min. distance from flammable surfaces: 0.5 m Min. distance to lighted object: 0.1 m
Compliance	
LVD	EN60598-2-17:1989+A2:1991 EN60598-1:2008+A11:2009
EMC	EN55015:2006+A1:2007+A2:2009 EN61547:2009 EN61000-3-2:2006+A12009+A2:2009 EN61000-3-3:2008

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