limelite®

mosaic™

modular LED light-bank system

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/limelitevideo

by **BOWENS**
the power behind the picture

Pb lead-free

RoHS 2002/95/EC

5600°K Daylight	**AC/DC** Power Source
Join Light Wall	**Multiple** Battery Options
f/stop Control	**576** Power LED
Chain Remote Link	**DMX** Built-in
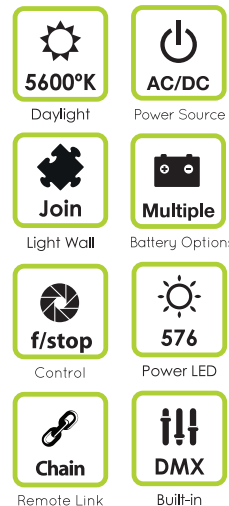
operating instructions

contents

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The information contained in this user guide should not be relied on solely before making a purchase, seek further information from your retailer.
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CE
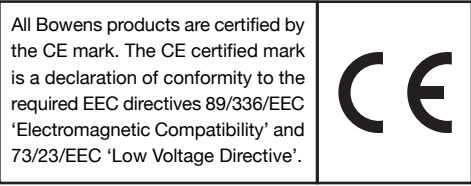
introduction

The Mosaic™ LED light bank is a compact continuous light source designed by working closely with photography and video creatives to develop a robust, reliable and versatile unit that meets the exacting high standards demanded in professional production today, at the same time remaining simple and intuitive to use.

In order to obtain the full benefit from your purchase, please take a few moments to familiarise yourself with these operating instructions.

For more information on our range of cross-media lighting solutions, see our website at:
**www.limelite.uk.com**

safety notes

always...

- Avoid placing cables where they can be tripped over. Protect from heavy, sharp or hot objects, which may cause damage & replace damaged cables immediately.
- All servicing must be carried out by a Bowens authorised service centre.
- Always remove the power cord by gripping the plug. NEVER pull the cord.
- Ensure that any extension cord used has a suitable current rating to prevent overheating and never use coiled extension cords.

never...

- Use in an environment where moisture or flammable vapour is likely to come in contact with the unit.
- Restrict air vents while in use.
- Use a unit with damaged housing, mouldings or LEDs. If the unit is dropped or damaged in any way, always have it checked before using.
- Operate the unit without a safe grounded AC supply.

controls

1 2 3 4 5 6

7 8 9 10 11 12 13 14
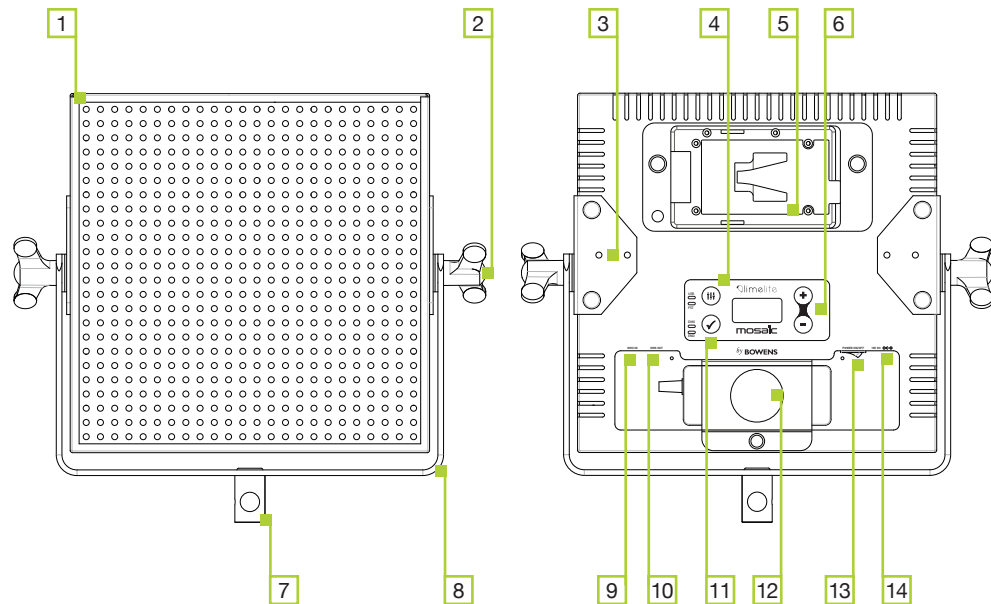
1. Diffuser / Filter Slot
2. Tilt Bracket Lock
3. Mosaic Joining Plate
4. DMX / User Mode Select Button
5. Battery Mount
6. Power Level / DMX Channel Up/Down
7. 5/8" Female Mount

8. Swivel / Tilt Yoke & Mount (U Bracket)
9. DMX / Remote Link In
10. DMX / Remote Link Out
11. Save / End Select Button
12. Power Adaptor Mount
13. Power Switch
14. DC Power In Socket

start up

1. Ensure the mains power source is off.
2. Connect the Mosaic power supply unit to a mains power socket and to the Mosaic DC in socket.
3. Switch the mains power source on, then switch on the Mosaic.
4. The unit will power up to the last saved level and the display will indicate the power setting.
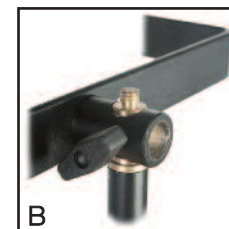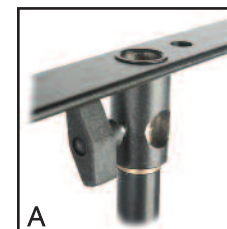
mounting

Always mount your Mosaic on a dependable stand or support system.

Standard Mounting.
The 5/8" female mount on the swivel/tilt yoke allows two ways of mounting to the stand or support.
Method A, is standard upright.
Method B, allows the light to be mounted at a 90° angle to the stand so the light can point down without obstruction.

2 and 4 Bank Cine Stand Mounting.
To mount onto a Cine Stand with a universal 28mm socket, first remove the locking knob from the 5/8" bracket mount and slot the mount inside the stand socket until the bracket rests on top of the stand mount.

A

B

C
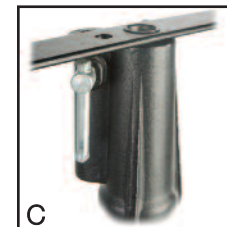
user mode

Power up.

When the Mosaic unit is switched on it will step up in power from 000 to 255, or the last saved power level, as indicated by the display screen.

USR
FST The default mode is user mode. This is confirmed by the LED indicator and the graphic on the display screen once the unit has reached the desired power level. *USr*

User Mode.

- The - button will lower the Mosaic light output by one, if the button is pressed and held the output will keep decreasing.

+ The + button will increase the Mosaic light output by one, if the button is pressed and held the output will keep increasing.

✓ To save the current light output level in user mode, **press and hold** the save button until the display screen indicates that the value has been saved. *SEt*

When the unit is next powered up, the unit will light from 000 up to the saved light output level and will remain in user mode.

Remote Link Mode (Page 9).

To control multiple Mosaic units from one unit, all units must be in 'user mode'.

dmx mode

Change Mode.

DMX
END To switch between User, DMX and FST mode, press the mode button. The unit will switch between the three modes on each button press as indicated by the LED indicators and the display. *dnX*

DMX Mode.

- The - button will lower the DMX address by one, if the button is pressed and held the output will keep decreasing to the minimum address of 001.

+ The + button will increase the DMX address by one, if the button is pressed and held the output will keep increasing to the maximum address of 256.

✓ If the Mosaic unit is at the end of a DMX chain it must be set to END. Press the End button **once**, END status will be confirmed by the LED indicator and the graphic on the display screen. *End*

✓ To save the current DMX address, DMX mode and DMX END status, **press and hold** the Save button. When the unit is next powered up, it will power up with the LEDs out and with the DMX address and END status set. The unit will wait for a valid DMX value for this DMX address, the LED output will then go to that value.

- Any changes to mode, address or END status should be saved to ensure the same settings are used after the unit has been switched off.
- DMX cables should only be connected or disconnected while the Mosaic is switched off.
- Only use DMX cables to link a DMX controller with Mosaic units. Microphone cables or ethernet cables should not be used.
- Spare lines in DMX cables should not be used to pass control voltages other than DMX/RDM standard signals. i.e. mains power.

f/stop mode

Change Mode.

To switch between User, DMX and FST mode, press the mode button. The unit will switch between the three modes on each button press as indicated by the LED indicators and the display.

USR
FST

FSt

FST Mode.

- The - button will lower the f/stop value by 1/10th of a stop from 6.5 (max) to 1.5 (min). If the button is pressed and held the output will keep decreasing.

+ The + button will increase the f/stop value by 1/10th of a stop from 1.5 (min) to 6.5 (max). If the button is pressed and held the output will keep increasing.

✓ To save the current f/stop value and mode, **press and hold** the Save button. When the unit is next switched on, it will power up from 000 to the f/stop value previously saved.

Any changes to mode, or f/stop value will need to be saved to be used after the unit has been switched off.

remote link mode

In addition to DMX control, banked (2x1 or 2x2) Mosaic units can be linked together via a standard ethernet cable, allowing all units to be controlled from one control panel. All units must be set to '**user mode**'.

Creating a chain.
The first unit in the chain of units must be set to END. Press the End button **once**, END status will be confirmed by the LED indicator and the graphic on the display screen. Plug one end of an ethernet cable into the OUT socket and plug the other end into the IN socket of the next unit. Plug the OUT socket of this unit into the IN socket of the next and so on until you reach the last unit in the chain. The last unit in the chain must also be set to END by pressing the End button once.
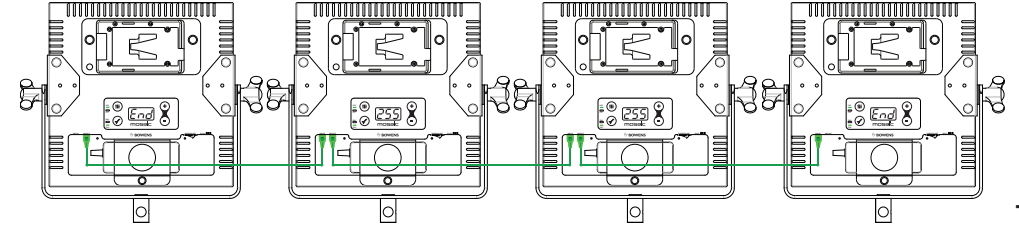
Example:
Controlling the chain:
Once the chain has been set up, the light level on all units will be set to the same value. Changing the value on any unit will change all other units in the chain.

power sources

The Mosaic LED Light Bank is designed to be versatile and can be powered by either mains or battery power.

The Mosaic can be powered using mains power using the 100-240V AC power supply unit. The unit can also be powered from an Anton Bauer or V-mount battery with a 14.4V output (up to a maximum weight of 1.5kg). The runtime of the Mosaic will be dependant on rating of battery.

If using a battery you should ensure that the Anton Bauer or V-mount battery plate is connected to the DC input plug on the Mosaic unit using the attached connecting cable. Always ensure that the power switch on the unit is in the 'Off' position before connecting the cable or the batteries. Only use a single Anton Bauer or V-mount battery on the mounting plates. DO NOT USE stackable batteries on the Mosaic unit as this will put undue stress on the Mosaic, and cause the unit to be unbalanced, this could damage the Mosaic unit.

The maximum working voltage of the Mosaic LED Light Bank is 18V DC. Exceeding this operating voltage will cause damage to the unit.

Mounting Batteries.

• Locate the battery mount on the rear of the Mosiac unit.

• Slot the battery into the mount until it clicks into place. Then plug the connecting cable into the DC input socket.

• The battery is now mounted and the Mosaic unit is ready to be used.

• To remove the battery, unplug the power cord then press the battery release button.

joining mosaic units

Joining kits are available to allow Mosaic units to be banked together in 2x1 or 2x2 configurations.

Creating a 2x1 Bank.
First remove the 'U' Bracket and joining plates from two Mosaic units. The 2x1 Joining Kit is supplied complete with a 2x1 'U' Bracket and a support spine with left, right and central joining plates. Simply attach each Mosaic unit to the joining kit as shown in Figure 2 & 3 and secure the units with the captive fasteners. You can now attach the mains or battery supply together with DMX/Ethernet cables and the 2x1 bank is ready to use.

Creating a 2x2 Bank.
To create a 2x2 bank, the process is similar. Remove the 'U' Brackets and Joining plates from four Mosaic units then attach them one-by-one to the pre-assembled 2x2 Joining Kit, fastening them securely in place as you go with the captive fasteners supplied. Finally add power and DMX/ethernet cables as required.

SAFETY NOTE:
When mounting Mosaic units from a ceiling track system or similar mount, always secure the units to the mount using a safety cable.

Figure 1

Figure 2

Figure 3

Figure 4

attaching barn-doors

Light output from the Mosaic can be controlled using one of the optional barn-door sets which are available for individual units or banked units of two or four.

Single Mosaic Unit.
The four-leaf barn-door set for the single Mosaic unit is easily fitted by simply placing the barn-door frame over the front of the unit and securing with the thumbscrews at each corner.

Banked 2x1 Mosaic Units.
The two-leaf barn-door set for use with a 2x1 banked set of Mosaic units can be quickly assembled and fitted as follows.
First assemble the frame by slotting the sections together. The frame can then be placed over the front of the unit and, secured in place at each corner. Finally, add the barn-doors to the frame.

Banked 2x2 Mosaic Units.
The two-leaf barn-door set for use with a 2x2 banked set of Mosaic units is fitted as above.
As the frame is square, the barn-doors can be oriented to be top and bottom or side control.

Locking or loosening Barn-Doors.
The barn-door tension can altered by adjusting the M3 self-locking nuts as required.
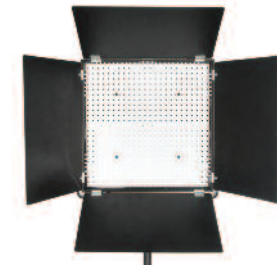
diffusers & filters

Filter Sets.
Two filter effects kits are available for the Mosaic.
These kits contain sets of gels or filters which simply slot into the front of the Mosaic panel to create various colour or diffusion effects on the light output.

Each kit contains one each of the following colours or filters.

VB1506: Colour FX Filter Kit

Colour	LT	Effect
Cosmetic Peach	57%	Adds subtle warm highlights.
Moroccan Frost	57.2%	Smooths flood washes in large areas.
Medium Amber	57.6%	Emulates afternoon sunlight or candlelight.
Light Lavender	37.8%	Excellent for general area washes.
Pale Blue	54.8%	Creates an overcast or cold weather look.
Bright Pink	14%	Deep saturated pink. Great for down/back lighting.
Light Red	11%	Good for TV and theatre as well as cycloramas.
Bedford Blue	18%	Warm smokey blue, good for skin tones.
Liberty Green	67%	Creates mystery and suspense.
Sunlight Yellow	80%	Produces a strong sunlight effect.

VB1505: Colour Control Filter Kit

Colour	LT	Effect
Full CT Orange	55.4%	Converts 5600K daylight to 3200K tungsten.
½ CT Orange	71%	Converts 5600K daylight to 3800K tungsten.
¼ CT Orange	79%	Converts 5600K daylight to 4600K tungsten.
White Diffusion	36%	Moderate diffuser that creates a soft, even effect.
½ Hanover Frost	n/a	Light frost effect to soften shadow & reduce hot spots.
White Frost	39%	Medium diffuser to soften beam characteristics.

LT = Light Transmission.
The percent of total visible light from the Mosaic that is transmitted through the filter sheet.
The lower the number, the less visible light transmitted.

accessories

accessories

Colour Control Set
A set of 6 filters for adjusting the intensity or colour temperature of the light output.
VB1505 Colour Control

Colour FX Set
A set of 10 filters for adding colour or cosmetic effects to the light output.
VB1506 Colour FX

2x1 Joining Kit
For joining two Mosaic units together. Includes joining plate and an extended swivel/tilt yoke.
VB1515

2x2 Joining Kit
For joining four Mosaic units together. Includes joining plates and a larger swivel/tilt yoke.
VB1516

1x1 Barn-Door Set
A set of four-leaf (top, bottom and sides) barn-doors for use with a single Mosaic unit.
VB1500

2x1 Barn-Door Set
A set of two-leaf (top, bottom or sides) barn-doors for use with two joined Mosaic units.
VB1501

2x2 Barn-Door Set
A set of two-leaf (top, bottom or sides) barn-doors for use with four joined Mosaic units.
VB1502

Safety Cable
Recommended for use when suspending lights from ceiling rail systems and high stands.
BW2619

3 pin XLR-RJ45 Adaptor
For Converting an older DMX 3 pin Male or Female XLR plug to an RJ45 male plug.
VB1565 Male to male
VB1566 Female to male

DMX / Ethernet Cable
DMX / Ethernet cable for linking mosaic units together to form light banks or chains.
VB1580 1m cable

AC Power Cord
6m power cord for use with the AC/DC Adaptor Power Supply Unit.
VB1541 UK
VB1540 Euro
VB1542 US

AC/DC Power Adaptor
Spare or replacement 18V AC Adaptor Power supply unit. Power cord not included.
VB1535

5 pin XLR-RJ45 Adaptor
For Converting an older DMX 5 pin Male or Female XLR plug to an RJ45 male plug.
VB1570 Male to male
VB1571 Female to male

Anton/Bauer Battery Plate
For powering Mosaic units from an Anton/Bauer® G-mount, or similar, battery.
VB1555

V Mount Battery Plate
For powering Mosaic units from a V-mount fitting battery.
VB1556

footer- Mosaic | Accessories.

- Mosaic | Accessories.

warranty

All Bowens products are covered by a two-year warranty against any faulty design, materials and workmanship.

If a product does not work on arrival, or up to a maximum period of four weeks from the date of dispatch of the product, it should be returned to the dealer/retail outlet from where it was purchased for exchange (subject to stock availability). If the faulty unit was part of a kit, the dealer/retailer may choose to only replace the unit and not the entire kit.
Alternatively the dealer may offer to repair the unit as soon as possible at no charge.

If neither an exchange nor repair is possible for the faulty unit, then a full refund may be made.

If a warranty fault occurs after the initial four-week period (and within the maximum two year warranty period), then the unit should be returned to the dealer, who will arrange to repair the unit as soon as possible, at no charge.

This warranty does not apply to consumable items such as flash tubes, modelling lamps, fuses or consumable type batteries.

Should a unit be returned at any time within the two year warranty period, and it is judged to have experienced any of the following;
Failure to follow working instructions correctly, accidental or willful damage, misuse, alteration or repair by a non-authorised Bowens service/repair centre, then the warranty will be deemed invalid and any repairs required will be payable by the owner.

The dealer, in advance of undertaking any work that may be required, should notify the cost of any repairs to the owner.

No warranty repairs can be undertaken to any units without proof of purchase.

All warranty repairs or returns must be conducted with the dealer from where the product was purchased.

Other terms and conditions may be applicable in specific countries, if stated at the time of purchase.

specifications

Model:	Mosaic LED daylight bank
Bulb:	576 x Power LED
Light Angle:	40º
Luminous Flux:	4200 Lux @1m
Power Variation:	Stepless 0-100%
Power Control:	Digital control panel / DMX
Power Indication:	Digital Display
Colour Rendering Index:	>85
Colour Temperature:	5600K ±300K
Operating Voltage:	12-18V DC
Power Draw:	45W at 18V
Power Supply:	18V AC Adapter 100-240V
Guide No. (m/100 ISO)	f/4.5 @ 1m
DMX I/O:	Built-in RJ45
Width:	350mm
Depth:	85mm
Height:	375mm
Weight:	1.4kg
Part No.:	VB1000 |NOTE: Add UK, EUR or US to code to ensure correct mains plug.

Accessories:

Colour Control Filter Set	VB1505	Ceiling Mount Kit	VB1517
Colour Effects Filter Set	VB1506	1m DMX/Ethernet Cable	VB1580
1x1 Barn-Door Set	VB1500	AC/DC Power Adaptor	VB1535
2x1 Barn-Door Set	VB1501	Anton/Bauer Battery Mount	VB1555
2x2 Barn-Door Set	VB1502	V-Mount Battery Adaptor	VB1556
2x1 Joining Kit	VB1515	Safety Cable	BW2619
2x2 Joining Kit	VB1516		