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18kw Moving Head Par

OPERATORS MANUAL

For Firmware Versions 2.05 & 1.10

Manual Version 1.1 September 2023

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VULCAN PAR 18 OVERVIEW

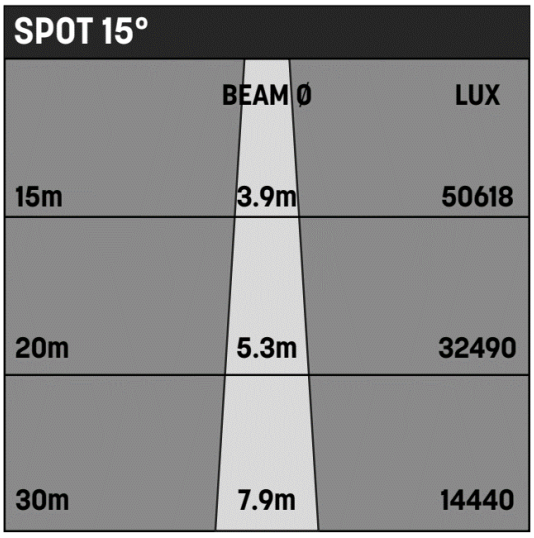
The Vulcan PAR 18 is a super versatile, automated, high output luminaire. Offering full operational control over output and direction, this ultra-bright daylight Fresnel combines exceptional levels of illumination, with super convenient control over focus, pan and tilt.

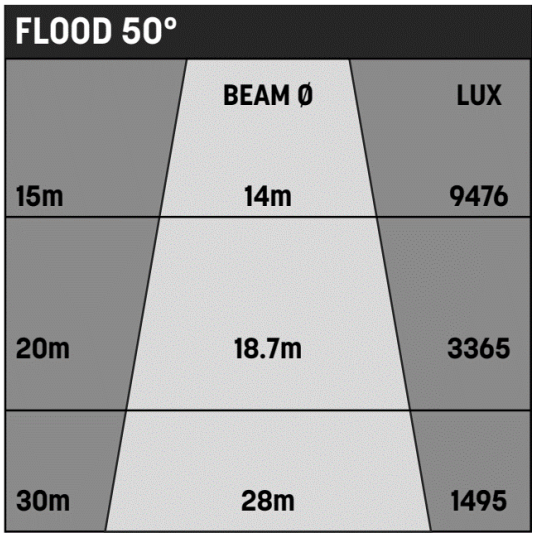
Designed for use with any suitably approved crane mount, truss build or scaffold installation, the Vulcan PAR 18 system delivers precise, directional illumination, controllable through 270°

Created around a faceted PAR 18kW head, the Vulcan's powerful daylight output and detailed, focusable beam, delivers smooth, evenly distributed light.

Exceptional performance combined with a robust, custom designed housing, which provides excellent resistance to the elements, makes the Vulcan an ideal shooting partner for all manner of applications, particularly when used to illuminate large scale location based productions.

Vulcan Par 18	
Compatible Lamps	18kw and 12kw MSR HMI
UV Protective Lens Diameter	ø645mm
Colour Temperature @ 18kw	5600k
Lamp Holder	GX51
Class / IP Rating	1 / IP23
Max Surface Temperature	260° C
Max Ambient Temperature	45° C
Min. safe distance from illuminated object	15m
Dimensions (depth / width / height)	1050mm / 780mm / 1335mm
Weight (with Barndoor)	120kg (126kg)





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MENU STRUCTURE			
Tier 1	**Tier 2**	**Tier 3**	**Information**
MODE:	DMX Mode 1 8 Bit		3 channels of DMX data: · Channel 1 – Pan 0-255 · Channel 2 – Tilt 0-255 · Channel 3 – Focus 0-255
	DMX Mode 2 16 Bit		5 channels of DMX data: · Channel 1 – Pan 0-255 · Channel 2 – Pan Fine 0-255 · Channel 3 – Tilt 0-255 · Channel 4 – Tilt Fine 0-255 · Channel 5 – Focus 0-255
	DMX Mode 3 8 Bit		4 channels of DMX data: · Channel 1 – Pan 0-255 · Channel 2 – Tilt 0-255 · Channel 3 – Focus 0-255 · Channel 4 – Head Specific* *If value set to 170 head will move to the park position.
	DMX Mode 4 16 Bit		6 channels of DMX data: · Channel 1 – Pan 0-255 · Channel 2 – Pan Fine 0-255 · Channel 3 – Tilt 0-255 · Channel 4 – Tilt Fine 0-255 · Channel 5 – Focus 0-255 · Channel 6 – Head Specific* *If value set to 170 head will move to the park position.
	DMX Mode 5		Will jog the head based on the DMX value. Requires 6 channels of DMX data: · Channel 1 – value >128 Pan moves +ve direction · Channel 2 – value >128 Pan moves -ve direction · Channel 3 – value >128 Tilt moves +ve direction · Channel 4 – value >128 Tilt moves -ve direction · Channel 5 – value >128 Focus moves +ve direction · Channel 6 – value >128 Focus moves -ve direction

	Remote 1		Mode for using the Vulcan with the Vulcan Remote Controller set to 'VUL 1'. Works for both wired and wireless control from the Vulcan Remote Controller.
	Remote 2		Mode for using the Vulcan with the Vulcan Remote Controller set to 'VUL 2'. Works for both wired and wireless control from the Vulcan Remote Controller.
	Remote 3		Mode for using the Vulcan with the Vulcan Remote Controller set to 'VUL 3'. Works for both wired and wireless control from the Vulcan Remote Controller.
	Remote 4		Mode for using the Vulcan with the Vulcan Remote Controller set to 'VUL 4'. Works for both wired and wireless control from the Vulcan Remote Controller.
	Local Control		Will jog the head using the buttons on the keypad. · Buttons to the right of the screen move the head up/down (Tilt) and left/right (Pan). · Buttons to the left of the screen will move the focus in and out.
	Home		Will move head to ‘park’ position. · Pan at mid position · Tilt so that the head is level.
	Reset		Will run through the homing cycle. (Reset) · Head will pan to max range left. · Head will tilt to max range up. · Head will zoom to max range flood.
DMX Input:	TYPE:	WIRED:	Input is set to Wired DMX via 5 Pin XLR
		RADIO:	Input is set to CRMX wireless DMX via On-Board Radio Receiver
	ADD:	101	Set DMX Address

	RADIO:	NO LINK:	Press Sync on CRMX transmitter to Pair.
		LINKED:	Unlink Radio? Enter Confirms Unlinking from current Transmitter
UNLOAD Lamp:	LAMP REMOVAL Press Enter to Confirm.		· The head will tilt so that it is level. · The focus mechanism will run the lamp to the back of the head to allow the rear door to be opened. · Once the lamp has been mounted/removed close the door. · Press 'Enter' to confirm the lamp is able to be return to 'home'. · The focus will move to the home position and normal operation can resume.

NOTE ON MODES – NO HOME ON STARTUP

For heads running firmware version 2.5 or later, all remote modes and DMX mode 5 will not automatically require the head to re-home itself on startup. This is useful if you wish to power down the head between uses but do not want it auto-rehoming on startup.

If you switch the head to any other mode from one of these modes, the head will automatically re-home.

LAMP LOADING/UNLOADING

To load or unload a lamp in the Vulcan, first the Vulcan needs to be powered on. Ideally you would do this whilst the Vulcan is hung, with enough room to allow the Vulcan to complete its homing cycle first.

If you wish to replace the lamp without the Vulcan first homing, please see the section on 'Setup Mode' later in this manual.

The lamp can only be unloaded using the controls on the side of the Vulcan. First press enter to bring up the Main Menu, scroll down to 'Lamp Unload' and select it. The Vulcan will ask you to confirm the unload and confirm you have isolated the mains supply to the lamp.

The lamp carriage will now move all the way to the back of the Vulcan, this is indicated by a small red flag moving on the side of the lamp head. Once the lamp carriage has moved back to the correct position you will be able to open the back door. You will need to un-hook a catch on the door as you open it.

From here you can release both lamp holder clamps and replace the lamp inside. Make sure both holding clamps are firmly in place and re-close the back door, remembering to re-hook the door catch.

With the door closed, press enter on the controls again to confirm lamp reload. The lamp carriage will return to its normal operating position.

WIRELESS CONTROL

To use any wireless DMX controller with the Vulcan moving heads;

- Set the ‘DMX Input’ menu ‘Type’ to ‘Radio’.
- Select the ‘DMX Input’ menu, scroll down to the ‘Linked’ option and select it.
- The menu will ask ‘Unlink Radio?’
- Press enter again to clear any current link memory.
- Set your wireless controller equipment to ‘Sync’ mode. This is usually done by holding down a button often labelled ‘Sync’ for a few seconds.
- After 10 or so seconds the head and controller should link, often indicated by a blue blinking LED on your controller returning to a solid output.

VULCAN REMOTE CONTROLLER

The Vulcan Remote Controller is a quick and easy to use way of controlling up to 4 Vulcans individually.

Featuring both wireless CRMX and wired DMX control via an RJ45 port and adapter.

Each Vulcan can be set to one of 4 modes, ‘Remote 1’, ‘2’, ‘3’ or ‘4’. This will allow you to control a particular Vulcan by selecting the corresponding Vulcan number on the controller.

You can pair the controller wirelessly to a Vulcan just as you would any other wireless DMX controller. Whether you connect the controller to the Vulcan via a hardwired DMX connection or wireless, you simply need to select the correct control mode in the ‘DMX Input’ Menu.

SPECIAL MODES

CRATE MODE

Crate Mode allows you to position the Vulcan in such a way that it can be shipped lying down on a pallet. As such, Crate mode should be used when the Vulcan is not hung and is sitting on the ground.

Whilst holding the up and down arrow keys to the left of the screen, power on the yoke of the Vulcan. The Vulcan will now power on in ‘Crate Mode’.

The pan ‘bucket’ will first reset and then position itself 90 degrees from home position. You will then be able to ‘jog’ the tilt arm back and forth using the arrow keys to the right of the screen.

The head will now always power on in Crate mode until it is no longer needed. To return to normal operation press the enter key twice.

SETUP MODE

Setup Mode allows you to change settings on the Vulcan and replace the lamp in the head without the Pan and Tilt functions having to reset first on startup.

Whilst pressing the right of the screen ‘up’ arrow power on the yoke of the Vulcan. You can now perform a lamp unload and change any of the head’s settings without the initial Pan/Tilt reset.

To return to normal operation, power cycle the yoke.

RDM

The Vulcan is RDM capable which allows you to select the Modes and DMX address of the Vulcan head remotely when using wired DMX. This will only work when used with an RDM capable control device.

TROUBLESHOOTING

ON LAMP UNLOAD THE MENU SCREEN HANGS ON ‘UNLOADING…’

Make sure the door is closed and power cycle the head. If issue persists, please contact your local MBS Equipment branch.

THE LAMP WONT STRIKE

- Check the red switch on the side of the head is in the on position. When in the on position this switch should light up to show the safety loop is engaged correctly.
- If the switch does not light up, check all header cable connections have all pins present and not pushed in. Check the connection between the head and the yoke and the yoke and the ballast.
- Ensure the lamp is securely in place and the focus has moved into position between the ‘spot’ and ‘flood’ markers on the side of the head.

WHEN USING THE VULCAN REMOTE CONTROLLER, THE HEAD KEEPS RESETING TO 0 POSITIONS

- Make sure the Vulcan head is set to the correct corresponding ‘Remote’ mode in the menu settings and not set to one of the 5 ‘DMX’ modes.