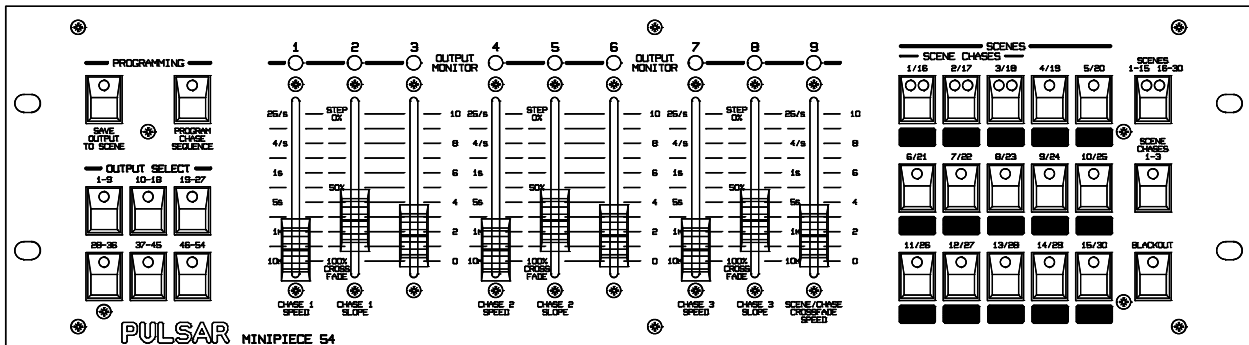


MINIPIECE™ 54



SPECIFICATION

MINIPIECE 54 Black - Product Code 20054
White - 20054W, Silver - 20054S, Grey - 20054G

- 54 Channels of DMX (Digital MultipleX) digital output.
- 30 Programmable scene memories, with crossfade time.
- 3 Chases with individual Speed and Slope controls, fade in and out time.
- Compact 19" 3U panel mounting or free-standing enclosure.

The Pulsar MiniPiece 54 controller has been designed to cater for many applications where up to 54 DMX control channels are required. It is ideal for controlling all types of generic, neon and intelligent lighting in bars, shop windows, exhibitions, theatres, churches and in other architectural applications. The MiniPiece 54 is easy to program and operate.

CONTROLS - PROGRAMMING - USE

Setting Channel Levels / Preparing Scenes

Take control of the 54 channels using the 9 **Sliders** and the 6 **Output Select (OS)** keys. Press the same OS key twice, making its LED bright, to pass control of the channel levels to the Sliders. Move a slider to the existing channel level, shown by its **Output Monitor LED**, the slider then engages, allowing you to set a new level. Repeat for all the channels you wish to set or change.

Save Output To Scene (SOTS)

While pressing the SOTS key, use the **Scenes 1-15 / 16-30** key to select the keyboard page required and then press the **Scene** key (1/16 - 15/30) where you wish to save your scene.

Recalling Scenes

Use the **Scenes 1-15 / 16-30** key to select the keyboard page required and then press the required **Scene** key (1/16 to 15/30). The scene will fade in (or out) with a time set by the **Scene / Chase Crossfade Speed** slider. The scene's green LED will shimmer during the fade. Pressing another Scene key will crossfade from the current one to the new one.

Program Chase Sequence (PCS)

While pressing the PCS key, first select the chase to program by pressing **Scene Chase key 1, 2 or 3**, then enter the chase steps by pressing any of the 15 Scene keys, using the Scene Page key to switch between scenes 1-15 and 16-30. The Blackout key may be used to enter a blank step. A key may be entered more than once to extend the time of that scene in the chase. When all the steps are entered, release the PCS key to end the chase. Each of the 3 chases may contain up to 100 steps.

Controls - Programming - Use cont.

Running Scene Chases

Press the **Scene Chases 1-3** key to select the chase keyboard. Press a **Scene Chase** key 1-3 to switch on (or off) a chase. The chase will fade in (or out) with a time set by the **Scene / Chase Crossfade Speed** slider. The chase's yellow LED will shimmer during the fade. Each chase has its own **Chase Speed** and **Chase Slope** control - adjust these for the desired effect.

Key Action - Latch / Swap

- The **Output Select** keys swap.
- The **Scene and Scene Chase keys** swap but pressing the same key again will switch it off.
- Up to 3 Chases plus 1 Scene may be latched on together by pressing their keys while the Scenes 1-15 / 16-30 key or the Scene Chases 1-3 key is pressed.

All these actions will be instant or will fade - depending on the setting of the **Scene / Chase Crossfade Speed** slider.

Blackout Switch - for an instant blackout / restore.

PinScan Mode - back panel switch

A slide switch on the back panel selects **Normal Mode** or **PinScan Mode**. PinScan Mode is designed for Clay Paky PinScan projectors. These have three channels: Lamp, Pan and Tilt. Their DMX start addresses should be set for 1,4,7,10, etc

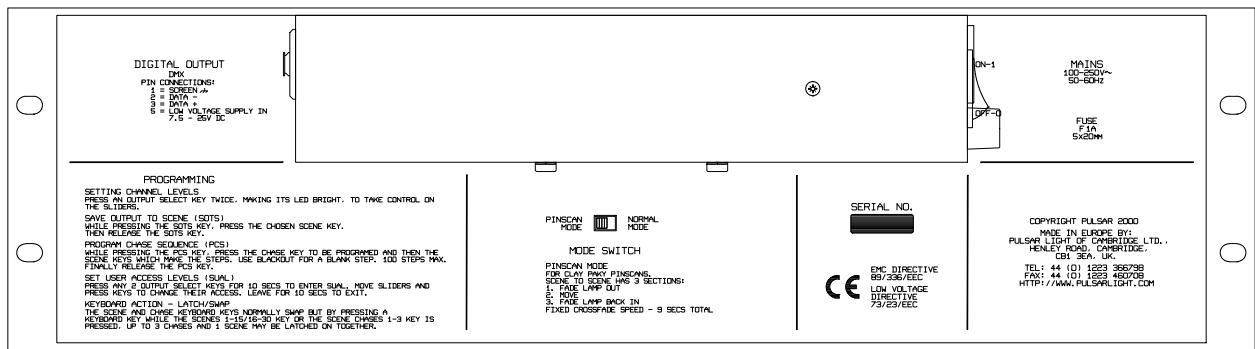
The special feature of PinScan Mode is that when swapping from scene to scene there is a three stage crossfade:

1. Fade out the lamps over 3 secs
2. Move to the new positions over 3 secs
3. Fade in the lamps again over 3 secs

Notes: In PinScan mode the crossfade speed is fixed - the Scene/Chase Crossfade Speed slider is not active. The three stage crossfade does not operate on the scenes within a chase. The lamp channels are scaled to 50% to give full brightness without fading through the 55-95% strobing range. Blackout just operates on the lamp channels.

Modular programming

The MiniPiece 54's ability to run a number of chases at the same time together with a choice of static Scene, allows "modular programming". For example, with generic lights these chases and scenes could represent different areas of the venue. With intelligent lighting projectors, a Tilt chase could be running at one speed, a Pan chase at a different speed, a Shutter chase at a third speed and different scenes could give various gobo and colour combinations. Modular programming allows you to program very powerful and complex effects quickly and simply.



Controls - Programming - Use cont.

Set User Access Levels (SUAL) - from software version 2.0 Having programmed and set the Minipiece in the required operating mode, any slider or key may be made inaccessible to prevent accidental corruption. Hold any two Output Select keys pressed. After 10 seconds the unit switches into SUAL mode. The LEDs then show if a slider or key is currently accessible. Move the sliders above or below 50% and press the keys to change their accessibility. Leave the unit for 10 seconds to return to normal operation. Moving a disabled slider or key has no effect but flashes the blackout LED.

Viewing levels

Sometimes it is useful to have a read out of the level of an Output Channel or to know the position of a Speed slider.

Without a 7 segment display, this has required a little ingenuity - the levels are displayed in binary. Binary bits 7 to 0 are displayed on LEDs 2 to 9. Some common percentages are: 25% - LED 3 only, 50% - LED 2 only, 75% - LEDs 2 & 3 only. This can be useful with intelligent lighting, for example for:

- Setting dimmer channels to 50%-full but not in strobing range
- Matching gobo and prism rotation speeds between projectors
- Matching colour disc positions between projectors.
- Learning to count in binary!

How? While pressing an Output Select key for more than one second, move the slider corresponding to the channel you wish to view. Or, while pressing any keyboard key moving a slider will show the slider's actual value.

Start-Up State

The Minipiece 54 starts up in the same state as when it was switched off, except that all chases start from step one.

Software Version At switch on the software version is shown on the LEDs for 0.5secs. LED 2 = Software version 2.0.

Program Record Sheet

This is provided for you to record your Channel Assignments and the contents of your Scenes and Chases. We suggest you use this sheet as a master to photocopy from.

BACK PANEL CONNECTIONS

MAINS SUPPLY - 100-240 VAC, 50-60 Hz, 5W.

Note: a mains supply is only required if a Low Voltage Supply is not available - see below.

An IEC chassis mains plug is mounted on the back panel and a three core mains cable with floating IEC socket is provided. The mains cable should be fitted with a suitably approved and rated plug. Note: in some countries it is a requirement that such a plug be fitted by a qualified electrician.

CABLE COLOURS

Green/Yellow = \perp Earth / Ground
Brown = Live / Phase / Hot
Blue = Neutral

WARNING - THIS APPLIANCE MUST BE EARTHED

Also on the back panel is a mains **On / Off Switch** and a **Fuse**. The fuse is F 1Amp 5x20mm.

LOW VOLTAGE SUPPLY - The unit may be fed by a Low Voltage Supply (LVS) on Pin 5 of the DMX socket. A voltage in the range +7.5 to +25V DC at 120mA is required. This is automatically provided by all Pulsar Dimmer and Switching packs and can be made available from Clay Paky projectors. If an LVS is not available a mains supply is required - see above.

DMX SIGNAL AND LOW VOLTAGE SUPPLY - pinout

Pin 1 = 0V - Screen
Pin 2 = Signal -
Pin 3 = Signal +
Pin 4 = No Connection
Pin 5 = Low Voltage Supply In

Note: The end of the DMX line **MUST ALWAYS** be terminated with a 100 ohm resistor connected between Signal+ and Signal-. This resistor can conveniently be mounted in a 5 pin XLR plug which should be inserted in the last device on the DMX line.

OTHER INFORMATION

DESK STANDING - Side cheeks (Pulsar Stock No.25664) are provided, enabling the unit to be free standing if required.

PORTABLE APPLIANCE TESTING - The Minipiece 54 may be safely Earth Bond and Insulation (500V) Tested.

STANDARDS - The Minipiece 54 complies with the following International and National Standards:

Electrical Safety - IEC65, EN60065, BS415

EMC - EN50081-1, EN55022, EN50082-1

Rack Mounting - IEC297

Index of Protection - IP20



Marking Directive 93/68/EEC - The Minipiece 54 meets both the EMC Directive 89/336/EEC and the Low Voltage Directive 73/23/EEC.

GUARANTEE - 12 months from the date of original purchase. The guarantee is limited to parts and labour. The guarantee is void if the unit is misused, repairs are performed by unauthorised persons, or the incorrect type of fuse has been used. In the unlikely event of a fault occurring, do not use without repair. Return the unit, with a description of the fault, to your supplier or direct to Pulsar for immediate attention.

COMPLEMENTARY PRODUCTS

Power Packs - a wide range of Pulsar Dimming & Switching Packs are available in Truss, Wall or Rack Mounting Format.

Intelligent Lighting - any capable of receiving DMX.

DIMENSIONS AND WEIGHTS

Code	Product	Width	Height	Depth	Weight
		mm.	mm.	mm.	kgs.
20054	Minipiece 54	483.0	133.0	75.0	2.3
	Console Cut Out - 3U	450.0	127.0	75.0	
	Fixing Holes	465.6	57.1		

Minipiece™ 54 Program Record Sheet

Microsoft Excel 5.0a - File MPROG5.XLS available on request

Output Select 1 Channels 1 - 9		Ch. No.	Output Select 2 Channels 19 - 27		Ch. No.	Output Select 5 Channels 37 - 45		Ch. No.
OS1 - 1		1	OS3 - 1		19	OS5 - 1		37
OS1 - 2		2	OS3 - 2		20	OS5 - 2		38
OS1 - 3		3	OS3 - 3		21	OS5 - 3		39
OS1 - 4		4	OS3 - 4		22	OS5 - 4		40
OS1 - 5		5	OS3 - 5		23	OS5 - 5		41
OS1 - 6		6	OS3 - 6		24	OS5 - 6		42
OS1 - 7		7	OS3 - 7		25	OS5 - 7		43
OS1 - 8		8	OS3 - 8		26	OS5 - 8		44
OS1 - 9		9	OS3 - 9		27	OS5 - 9		45
Output Select 2 Channels 10 - 18		Ch. No.	Output Select 4 Channels 28 - 36		Ch. No.	Output Select 6 Channels 46 - 54		Ch. No.
OS2 - 1		10	OS4 - 1		28	OS6 - 1		46
OS2 - 2		11	OS4 - 2		29	OS6 - 2		47
OS2 - 3		12	OS4 - 3		30	OS6 - 3		48
OS2 - 4		13	OS4 - 4		31	OS6 - 4		49
OS2 - 5		14	OS4 - 5		32	OS6 - 5		50
OS2 - 6		15	OS4 - 6		33	OS6 - 6		51
OS2 - 7		16	OS4 - 7		34	OS6 - 7		52
OS2 - 8		17	OS4 - 8		35	OS6 - 8		53
OS2 - 9		18	OS4 - 9		36	OS6 - 9		54
Scene Keyboard 1 Scenes 1 - 15		Scene No.	Scene Keyboard 2 Scenes 16 - 30		Scene No.	Chase Keyboard Chases 1 - 3		chase No.
SK1 - 1		1	SK2 - 1		16			
SK1 - 2		2	SK2 - 2		17			
SK1 - 3		3	SK2 - 3		18	CK - 1		1
SK1 - 4		4	SK2 - 4		19			
SK1 - 5		5	SK2 - 5		20			
SK1 - 6		6	SK2 - 6		21			
SK1 - 7		7	SK2 - 7		22			
SK1 - 8		8	SK2 - 8		23	CK - 2		2
SK1 - 9		9	SK2 - 9		24			
SK1-10		10	SK2-10		25			
SK1-11		11	SK2-11		26			
SK1-12		12	SK2-12		27			
SK1-13		13	SK2-13		28	CK - 3		3
SK1-14		14	SK2-14		29			
SK1-15		15	SK2-15		30			