Derby9

9 colour derby beam effects

Due to continuous product development, please ensure that you have downloaded the latest instruction manual for this product from the AVSL website at www.avsl.com

For the latest instruction manual updates and information on the entire range visit:

www.avsl.com











Thank you for purchasing this product, we are sure that it will serve you for many years to come.

To optimise it's performance, please read these instructions carefully to familiarise yourself with the basic operations of the unit. Please retain them for future reference. This unit has been tested at the factory before being shipped to you. To prevent or reduce the risk of electrical shock or fire, do not expose the unit to rain or moisture. To prevent a fire hazard, do not expose the unit to any naked flame sources. Unplug this apparatus during lightning storms or if it is unlikely to be used for long periods of time.

When installing the unit, please ensure you leave enough space around the unit for ventilation. Slots and openings in the unit are provided for ventilation to ensure reliable operation of the product and to protect it from overheating. To prevent fire hazard, the openings should never be blocked or covered.

The unit is powered by the mains, always handle the power cable by the plug. Never pull out the plug by pulling on the cable. Never touch the power cable when your hands are wet as this could cause an electric shock. Do not tie a knot in the cable. The power cable should be placed such that it is not likely to be stepped on. A damaged power cable can cause a fire or give you an electrical shock. Check the power cord periodicaly, if you ever find that it is damaged, replace it before using the unit again. Contact your retailer for a replacement.

The voltage of the available power supply differs according to country or region. Be sure that the power supply voltage of the area where this unit is to be used meets the requirements of the unit.

The lightning flash symbol inside a triangle is to alert the user to the presence high voltage within the unit's enclosure that may be of sufficient power to constitute a risk of electrical shock to persons. Caution: to prevent the risk of electric shock, do not attempt to open the unit. No user-serviceable parts inside. Refer all servicing to qualified service personnel. The exclamation mark inside a triangle is intended to alert the user to the presence of important operating and maintenance instructions in the literature accompanying the appliance.

Select the installation location of your unit carefully. Avoid placing it in direct sunlight or locations subject to vibration and excessive dust. Do not use the unit where there are extremes in temperature (below 41°F / 5°C or exceeding 95°F / 35°C).

Unpacking and safety Please unpack your new product carefully. Your new product should reach you in perfect condition. Please check that no damage has occurred during transit. If any damage is found, do not operate your unit. Please contact the retailer you purchased it from immediately. If there is any damage to the mains cable do not use the device. Always disconnect the unit from the mains supply when carrying out any cleaning of the unit.

Manufacturer declarations



In compliance with the following requirements: RoHS Directive (2002/95/EU) and WEEE Directive (2002/96/EU). If this product is ever no longer functional please take it to a recycling plant for environmentally friendly disposal.

CE declaration of conformity

R&TTE Directive (1999/5/EU), EMC Directive (2004/108/EU), Low Voltage Directive (2006/95/EU). Before putting the devices into operation, please observe the respective country-specific regulations.

Overhead rigging

Important - the installation must be carried out by qualified service personal only. Improper installation can result in serious injuries and /or damage to property. Overhead rigging required extensive experience. Working load limits should be respected, certified installation materials should be used, the installed unit should be inspected regularly for safety.

- Make sure the area below the installation place is free from unwanted persons during rigging, de-rigging and servicing.
- Locate the unit in a well ventilated spot, far away from any flammable materials and/or liquids. The fixture must be fixed **at least 50cm** from surrounding walls
- The device should be installed out of reach of people and outside of areas where persons may walk by or be seated.
- Before rigging make sure that the installation area can hold minimum point load of 10 times the device's weight.
- The device should be well fixed; a free swinging mounting is dangerous.
- Do not cover any ventilation opening as this may result in overheating

Before first time use, the unit should be inspected for safety. Inspection the unit regularly every year.

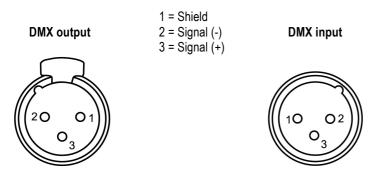
AC power

The unit is supplied with a power plug appropriate to its voltage. Should any other connections be required they must be carried out with the following configuration:

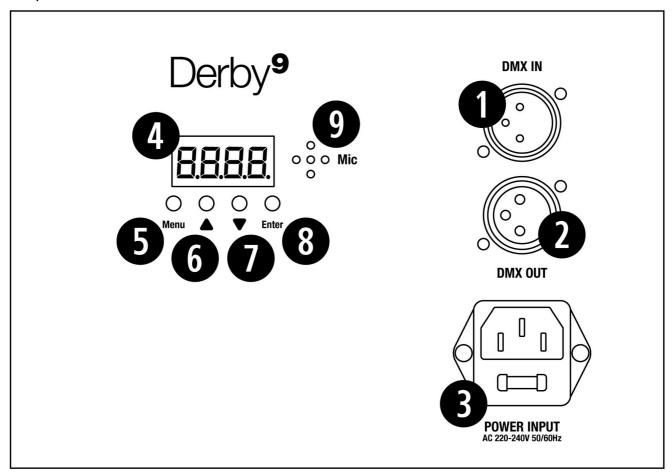
Cable (EU)	Cable (US)	Pin	International
Brown	Black	Live	L
Light blue	White	Neutral	N
Yellow/green Green		Earth	

DMX-512 connection

If you are using a standard DMX controller, you can connect the DMX output of the controller directly to the DMX input of the first unit in a DMX chain. If you wish to connect a DMX controller with other XLR outputs you will need to use adapter cables.



Connect the DMX output of the first unit in a DMX chain with the DMX input of the next unit in the chain. Always connect the the output of one unit with the input of the next unit until all units are connected.



Key to rear panel diagram

- 1. DMX Input 3 pin male XLR interface for DMX connections
- 2. DMX Output 3 pin female XLR interface for DMX connections
- 3. Mains power input IEC socket / AC 220-240V 50/60Hz
- 4. LED function setting display shows the various menus and the selected functions
- 5. MENU button used to select the different menu items
- 6. UP button used to move 'up' through the function menus
- 7. DOWN button used to move 'down' through the function menus
- 8. ENTER button used to confirm your menu selection
- 9. Microphone for sound-to-light for operation

Remote control functions:

ON/OFF - switches the unit On or Off DMX ON/OFF - switches the DMX On or Off STOP START - switches the motor On or Off

MUSIC 1 - sound show mode 1

MUSIC 2 - sound show mode 2

MUSIC 3 - sound show mode 3

FLASH - switches the strobe On or Off

A1 - red + blue + warm white colour group

A2 - orange + white + yellow colour group

A3 - green + purple + UV colour group

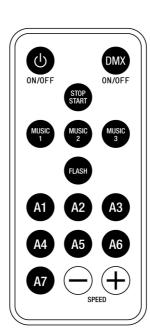
A4 - 9 colour jump change

A5 - 3 colour jump change

A6 - gradual change 1

A7 - gradual change 2

SPEED +/- - increases or decreases speed



Main Menu

To select any of the menu options, press the MENU button on the rear of the unit to select the mode required.

Once you have made a selection then press ENTER to confirm. Use the UP and DOWN buttons to choose the desired menu option.

Mode Selection

Press the MENU button, the following functions can be selected and then confirmed using the ENTER button:

Mode	Function	Motor speed	Control effects	
A1			Red + blue + warm white – ON / motor speed from slow to fast	
A2			Amber + cool white + yellow - ON / motor speed from slow to fast	
A3			Green + purple + UV – ON / motor speed from slow to fast	
A4	Auto	1~9	9 colour jump change / motor speed from slow to fast	
A5			3 colour jump change / motor speed from slow to fast	
A6			Gradual change 1 / motor speed from slow to fast / with no strobe effects	
A7			Gradual change 2 / motor speed from slow to fast / including strobe effects	
S1	Sound	0~20	Sound mode / colour change / including strobe effects / light on / black out	
S2			Sound mode / colour change / motor speed from fast to slow	
SA	01-10		Sound mode	
S3	01-20		Sound mode	
FL	1-9		Strobe mode	
SLAU	-		Slave mode	
A001	001~512		DMX Control	

7 Channel DMX control

Channel	Function	DMX	Function
1	Master dimmer	0-7	Blackout
		8-255	0-100% linear dimmer
2	Red + blue +	0-7	Blackout
	warm white	8-255	0-100% linear dimmer
3	Amber + yellow	0-7	Blackout
J	+ cool white	8-255	0-100% linear dimmer
4	Green + purple + UV	0-7	Blackout
4		8-255	0-100% linear dimmer
5	Strobe	0-10	No strobe
5	Strobe	11-255	Strobe (6 different speeds)
6	Motor	0-5	Motor stop
		6-127	Static position
		128-255	Ocillation (9 different speeds)
	Choose program	0-9	Manual – channels 1-6 available
		10-39	A1 - red + blue + warm white – ON / motor speed from slow to fast
		40-69	A2 - amber + cool white + yellow – ON / motor speed from slow to fast
		70-99	A3 - green + purple + UV – ON / motor speed from slow to fast
7		100-129	A4 - 9 colour jump change / motor speed from slow to fast
/		130-159	A5 - 3 colour jump change / motor speed from slow to fast
		160-189	Gradual change 1 / motor speed from slow to fast / with no strobe effects
		190-219	Gradual change 2 / motor speed from slow to fast / including strobe effects
		220-249	S1 - sound mode 1
		250-255	S2 - sound mode 2

DMX address setting

When controlling the unit (or units) with a DMX controller, each one must be set with a specific DMX address. You can choose to set all units with the same DMX address or you can set every unit with its own DMX address. If all units are set with the same DMX address all units will be synchronised and operate in the same way, you cannot control each unit separately. If you set each unit with a different DMX address, they will receive the DMX signal from their own DMX address. You will now be able to control each unit individually. The DMX address that you set for each unit must be determined by the number of channels. This unit has 7 channels, therefore you should set the starting address of the first unit to 1, the second unit must then be set to 8 (7+1), the third unit must be set to 15 (8+7) and so on.

Troubleshooting

Problem	Check list	Troubleshooting	
No output - the unit does not appear to work	Check if the power cord is connected to the input mains socket of the unit.	Make sure there is mains present to the cable, check the fuse or replace the cable.	
Lights are dimmed	Check if the power cord is connected to the input mains socket of the unit.	Make sure the mains input voltage is the correct voltage.	
No DMX input	 Check that the cable is not damaged. Check the polarity of the pin connections is correct. Check If the unit is in DMX mode. Check if 2 units are set as Master units in a chain. 	1. Change the DMX cable. 2. Correct the DMX polarity or change the cable. 3. Set up the function mode as DMX. 4. Set all other units as Slave units in the chain.	
Remote control does not appear to work 1. Check that you have a 'clear line of sight' between the remote control and the unit. 2. Check that the batteries are usable.		Aim the remote control directly at the unit ensuring that there are no obstructions. Install a new battery in the remote control.	

Technical Specifications

DMX512 control channels: **7 Channels**DMX512 Input & Output connection: **3 pin XLR**

Mode: DMX512 / Auto / Sound-to-Light / Master/Slave / Remote control LEDs: 9 x 3w (red/green/blue/amber/yellow/purple/warm white/cool white/UV

Power supply: IEC mains / AC 220-240V 50/60Hz

Power consumption: 30W

Dimensions (WxDxH): 200 x 162 x 140mm (not including bracket)

Weight: 1.1Kgs

Due to continuous product development, specifications and appearance are subject to change.