

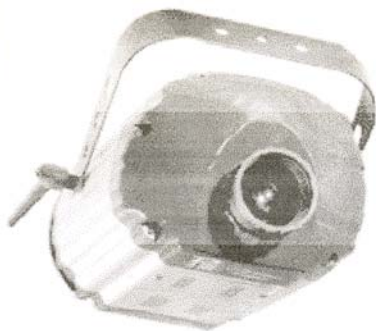
PURE
RELIABILITY

DJ Pro Series

Nova

PR-2013D

Technical Data



VOLTAGE: 220/230V AC 50Hz
100/120/200/240V AC 50 or 60Hz to
order.

POWER CONSUMPTION: 280W @ 220V

LAMP: MSD250W
Colour temperature: 6700°K
Socket: GY9.5
Manufacturers Rated Lamp Life: 2000 Hours

COLOURS:
9 Dichroic colours plus white and rainbow effect

GOBOS:
1 wheel with various apertures for "iris" effect plus
2 extra dichroic colour filters and 4 gobo patterns.
1 slot for manual gobo or frost filter placement.
1 colour temperature correction filter (6000°K) supplied.

FROST: manually insertable filter supplied.

FOCUS: manual focus adjustment,

BEAM ANGLE: 2 lenses supplied for 20° and 13°
beams.

SHUTTER/STROBE:
2 blade shutter for dimming, blackout and strobe 1 – 7
F.P.S.

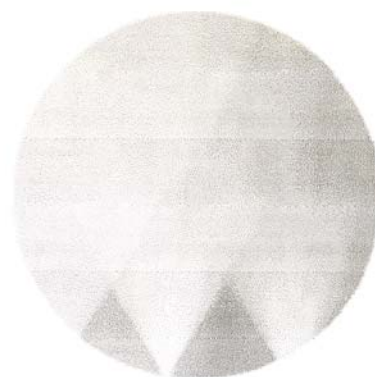
CONTROL:
DMX: 3 Channels.
Automatic mode with Master/Slave operation
and sound activation.

MOTORS: 4 Stepper motors

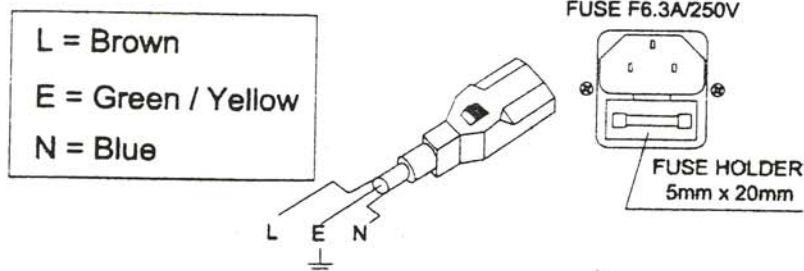
HOUSING: Composite plastic (IP20)

DIMENSIONS:
410 mm LONG x 320mm WIDE x 265mm HIGH (inc.
bracket)
WEIGHT: 9.8Kg.

PACKED DIMENSIONS: (4 units per carton)
665mm LONG x 485mm WIDE x 535mm HIGH
PACKED WEIGHT: 43.4Kg.



POWER SUPPLY - MAINS



Use the plug provided to connect the mains power to the projector paying attention to the voltage and frequency marked on the panel of the projector. It is recommended that each projector is supplied separately so that they may be individually switched on and off. It is recommended that **the green/yellow cord must be earthed correctly.**

OPERATION

The projector may be controlled by sound, auto programmes or a controller, and it may be operated in Stand-Alone automatic mode, in Master/Slave synchro mode or in Controller mode. With the touch-switches and the digital display screen, DMX start address can be easily set and the various setup options may be configured.

TO SET THE DMX START ADDRESS

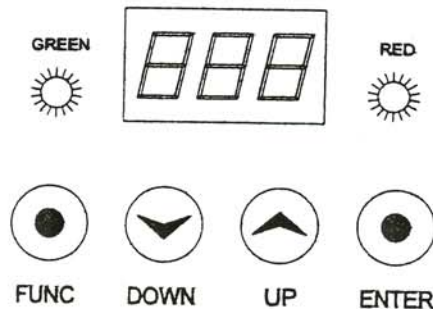
The display shows the DMX start address after the projector is switched on (if you have already set the DMX start address and saved it, the screen will display the last setting).

Press the **UP** or **DOWN** buttons to select the required DMX start address in the display.

Confirm your choice by pressing the **ENTER** button. The green LED will flash and the projector will save it.

In Stand-Alone mode, the DMX start address can be set at random.

In the Controller and Master/Slave mode, the DMX start address must be set correctly. (Refer to "Controller mode" and "Master/Slave mode" sections).



SETUP OPTIONS - PROJECTOR CONFIGURATION

To browse through the various Setup Options, press the **FUNC** button consecutively. There are 11 option codes (1~9 and A, b), each code has a specific function. The functions provided are listed in the following table.

Once you have selected the desired operation code, press the key **UP** or **DOWN** to select "y" (means ON) or "n" (means OFF). y = YES, n = NO.

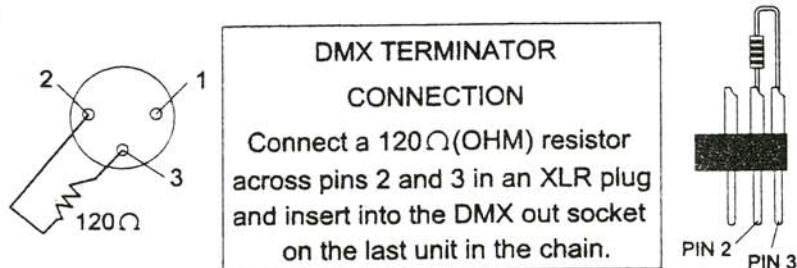
Press the key **ENTER** to save the selected function and configuration. If the display is showing "y", then the setting has been enabled. In the same way, if it was showing "n" when you pressed **ENTER** the option has been disabled.

The green LED will flash during this operation.

DMX TERMINATOR

In the Controller mode or Master/Slave mode, the DMX output has to be connected with a DMX terminator at the last fixture in the chain. This prevents electrical noise from disturbing and corrupting the DMX control signals.

The DMX terminator is simply an XLR connector with a 120Ω (ohm) resistor connected across pins 2 and 3, which is then plugged into the output socket on the last projector in the chain. The connections are illustrated below.

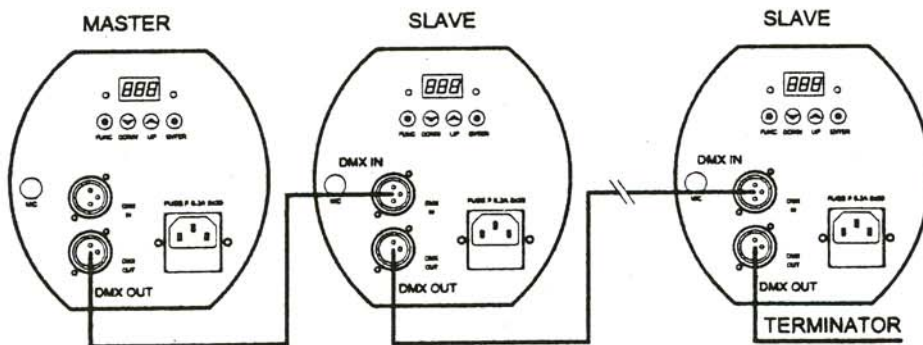


MASTER/SLAVE MODE

Without using the controller, many projectors can run synchronously in the Master/Slave mode by linking them with each other.

Select one projector as the master setting the DMX start address at random. Regard the other projectors as the slaves setting all DMX start address "001".

Connect the master's output to the first slave's input, and connect the first slave's output to the second slave's input. The rest may be deduced by analogy. Eventually connect the last slave's output to a DMX terminator as shown in the figure below.



In the Master/Slave mode, you may run the master via the auto programmes having been set in the master or via sound activation through MIC inside the master, and the slaves will run synchronously with the master.

In the Master/Slave mode, when enable Master a combining of setup options 3 (sound activation) and 4 (auto programmes), the master will run auto programmes.

During operation, you can easily differentiate between the master and the slaves since the master's DMX input without connecting any cable. When auto programmes running, the master's red LED is constantly on, but the slaves' red LEDs are flashing.

SETUP OPTIONS		
CODE	CHOICE	FUNCTION
1		Not used
2		Not used
3	Y	Sound activation enable
	N	Sound activation disable
4	Y	Automatic programmes enable
	N	Automatic programmes disable
5		Not used
6		Not used
7	Y	Reset enable
	N	Reset disable
8		Not used
9		Not used
A		Not used
B		Not used

STAND-ALONE MODE

Without connecting the controller and the control cable, with the setup option 3 (sound activation) or 4 (auto programmes) enable, the projector will run in Stand-Alone mode.

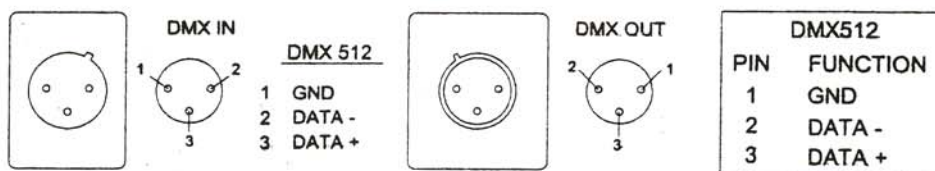
If you enable a combination of setup options 3 (sound activation) and 4 (auto programmes), the projector will run in auto programmes.

You may set the DMX start address at random in Stand-Alone mode.

When sound activating, the red LED will flash according to the rhythm of the music. When auto programmes running, the red LED is constantly on.

XLR CONNECTORS AND TERMINATOR

XLR CONNECTORS

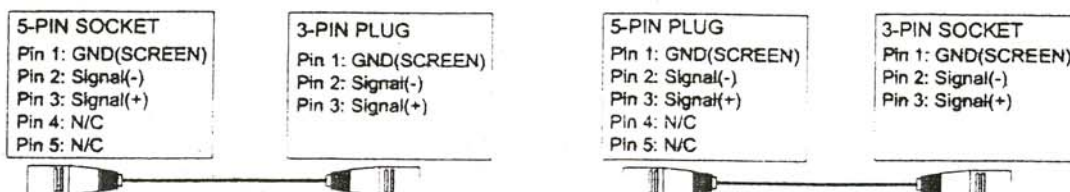


Connection between controller and projector and between one projector and another must be made with 2 core screened cable, with each core having at least a 0.5mm diameter. Connection to and from the projector is via cannon 3 pin XLR plugs and sockets which are included with the projector. The XLR's are connected as shown in the table above.

Note, care should be taken to ensure that none of the connections touch the body of the plug or each other. The body of the plug is not connected in any way. The NOVA accepts digital control signals in standard DMX512 (1990) format.

5-PIN AND 3-PIN CONVERSION

NOVA uses 3-pin XLR plug / socket. If your controller uses 5-pin XLR plug / socket, you should convert 5-pin plug / socket into 3-pin socket / plug as shown below.



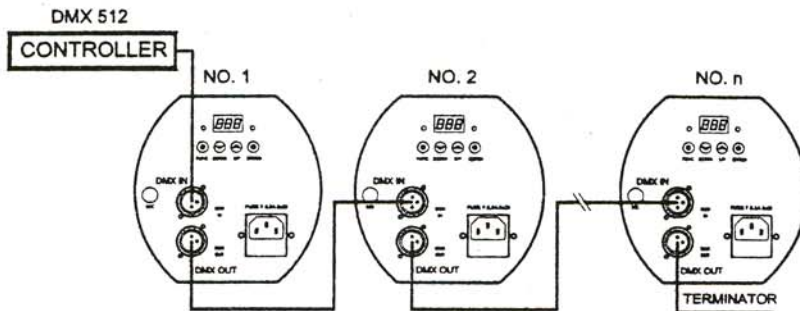
CONTROLLER MODE - DMX 512 OPERATION

Each NOVA must be given a DMX start address so that the correct projector responds to the correct control signals. This DMX start address is the channel number from which the projector starts to "listen" to the digital control information being sent out from the controller. The NOVA has 3 channels, so set the No. 1 projector's address 001, No. 2 projector's address 004, No. 3 projector's address 007, No. 4 projector's address 010, and so on.

Certainly, you may use formulation: $\text{address} = \text{channels} \times (\text{projector No} - 1) + 1$

For example, for the No. 4 projector's start address, you should calculate according to formulation: $3 \times (4 - 1) + 1 = 19$, So you set the No. 4 projector start address 019.

Connect the controller's output to the first fixture's input, and connect the first fixture's output to the second fixture's input. The rest may be deduced by analogy. Eventually connect the last fixture's output to a DMX terminator as shown in the figure below.



In Controller mode, the red LED indicator blinking means the projector is receiving the DMX 512 signal normally.

DMX CONTROL CHANNEL FUNCTIONS

CHANNEL	DMX VALUE	DESCRIPTION
1 Colour	0 - 17	White
	18 - 35	Light red
	36 - 53	Yellow
	54 - 71	Orange
	72 - 89	Blue
	90 - 107	Green
	108 - 125	Cyan
	126 - 143	Light purple
	144 - 161	Pink
	162 - 177	Light green
	178 - 255	Colour wheel movement in clockwise or anti-clockwise direction from slow to fast
2 Gobo	0 - 25	Open / Clear
	26 - 51	GOBO 1
	52 - 77	GOBO 2
	78 - 103	GOBO 3
	104 - 129	GOBO 4
	130 - 155	GOBO 5
	156 - 181	GOBO 6
	182 - 207	GOBO 7
	208 - 233	Clear / Green
	234 - 255	Clear / Cyan
3 Shutter/Strobe	0 - 12	Black-out
	13 - 99	Dimmer in linear movement
	100 - 127	Open
	128 - 251	Strobe adjust from slow to fast (1 to 7 flashes per sec.)
	252 - 255	Open