



PILOT 250

PR-2250

This product manual contains important information about the safe installation and use of this projector. Please read and follow these instructions carefully and keep this manual in a safe place for future reference.

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Please note that as part of our ongoing commitment to continuous product development, specifications are subject to change without notice. Whilst every care is taken in the preparation of this manual we reserve the right to change specifications in the course of product improvement. The publishers cannot be held responsible for the accuracy of the information herein, or any consequence arising from them.

Every apparatus is tested completely and packed properly by the manufacturer. Please make sure the packing and / or the apparatus is in good condition before your installation and use. Should there be any damage caused by transportation, consult your dealer and do not use the apparatus. But any damage caused by improper use will not be assumed by the manufacturer and / or dealer.

ACCESSORIES

THESE ITEMS ARE PACKED TOGETHER WITH THE PROJECTOR

Mounting Bracket (2 PCS)

M8x25 screw for mounting brackets (4 PCS)

Power-cord (1 PCS), XLR plug (1 PCS), XLR socket (1 PCS), Safety cord (1 PCS)

Spare gobos (4 PCS)

This manual (1 PCS)

INTRODUCTION

Thank you for purchasing our product PILOT 250, PR-2250.

This product manual contains important information about the safe installation and use of this projector. Please read and follow these instructions carefully and keep this manual in a safe place for future reference.


The PILOT 250 is an innovative projector with an elegant housing, which is made from high intensity and heat-resistant complex plastic. The product complies to CE norms and standards and uses international protocol DMX 512. It can be used as a stand-alone unit or linked to a controller, so it is suitable for many different applications.

The PILOT 250 features 9 colours plus white on the colour wheel, 2 gobo wheels, one with 7 indexable, interchangeable rotating gobos, one with 7 interchangeable fixed gobos. DMX controlled focus, a 3 facet rotating prism and 3 beam angles. The prism channel also has pre-programmed "macros" giving automated selection of prism and gobo combinations for easy programming and operation. The pan and tilt motor speeds are adjustable, the lamp may be switched on and off remotely and the unit may also be reset remotely. The pan and tilt have encoder wheels allowing auto position correction. A 2 blade shutter provides dimming and strobe effects.

SAFE USAGE OF THE PROJECTOR



When unpacking and before disposing of the carton check there is no transportation damage before using the projector. Should there be any transportation damage keep the carton, consult your dealer and do not use the apparatus.

The projector is for indoor use only, IP20. Use only in dry locations. Keep this device away from rain and moisture, excessive heat, humidity and dust. Do not allow contact with water or any other fluids, or metallic objects.

The projector is not designed or intended to be mounted directly on to inflammable surfaces. 

The projector is only intended for installation, operation and maintenance by qualified personnel.

The projector must be installed in a location with adequate ventilation, at least 50cm from adjacent surfaces. Be sure that no ventilation slots are blocked.

Do not project the beam onto inflammable surfaces, minimum distance is 3m.  3m 

Avoid direct exposure to the light from the lamp. The light is harmful to the eye.

Do not attempt to dismantle and/or modify the projector in any way.

Electrical connection must only be carried out by qualified personnel.

Before installation, ensure that the voltage and frequency of power supply match the power requirements of the projector.

It is essential that each projector is correctly earthed and that electrical installation conforms to all relevant standards.

Do not connect this device to any dimmer pack.

Make sure that the power-cord is never crimped or damaged by sharp edges. Never let the power-cord come into contact with other cables. Only handle the power-cord by the plug. Never pull out the plug by tugging the power-cord.

Keep the lamp clean. Do not touch the lamp glass with bare hands.

The projector should always be installed with a secondary safety fixing. A safety cord is supplied for this, it should be attached as shown in the "installing the projector" section.

The lamp used in this projector is an MSD 250W discharge lamp. After being switched off don't attempt to restart the projector until the lamp has cooled, this will require approx 10 to15 minutes. Switching the lamp on and off at short intervals will reduce the life of both the lamp and the projector.

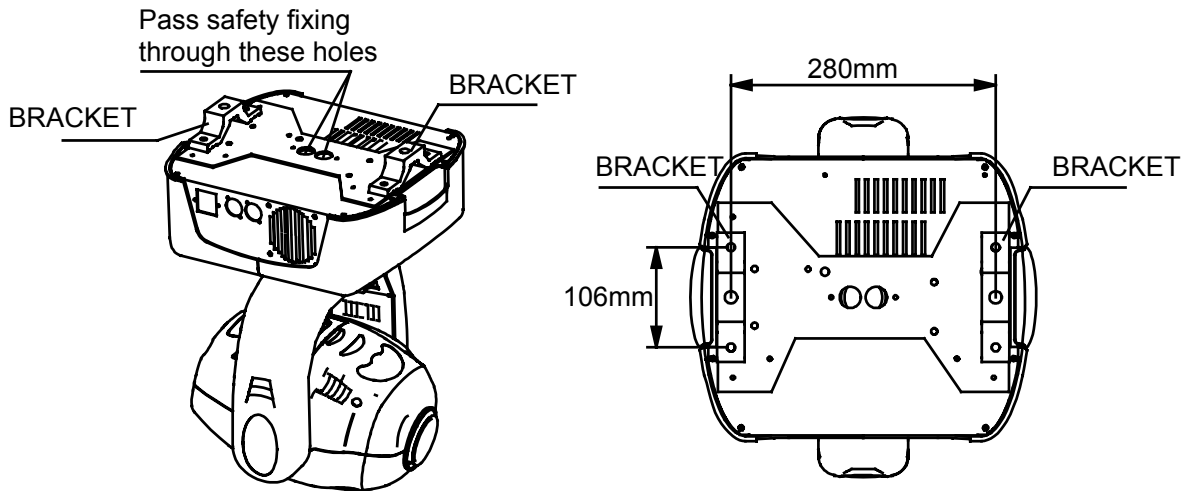
Never run the projector without a lamp.

There are no user serviceable parts inside the projector, do not open the housing and never operate the projector with the covers removed.

Always disconnect from the mains, when the device is not in use, or before cleaning it, or before attempting any maintenance work.

If you have any questions, don't hesitate to consult your dealer or manufacturer.

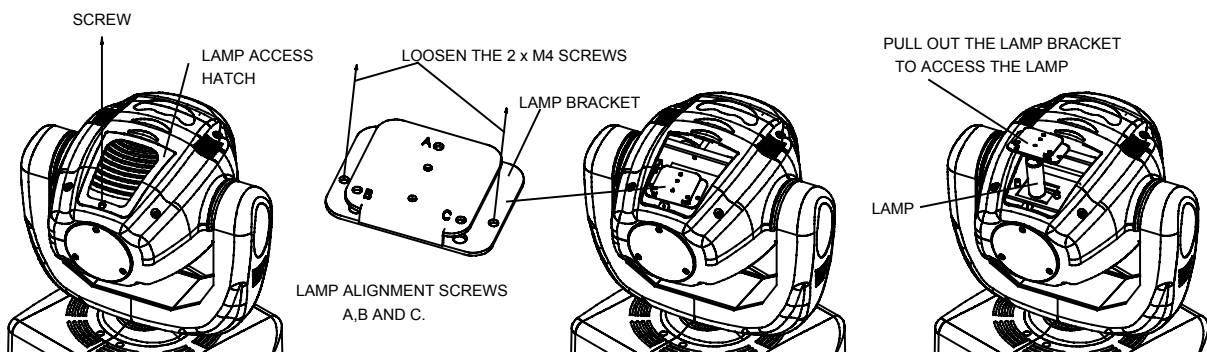
INSTALLING THE PROJECTOR



The projector should be mounted via its bracket using 2 x M12 bolts. The brackets attach to the underside of the projector with 4 x M8x25 bolts provided. Always ensure that the projector is firmly anchored to avoid vibration and slipping whilst functioning. Always ensure that the structure to which you are attaching the projector is secure and is able to support a weight of 19Kg for each PILOT 250. For safety the projector should have a secondary fixing with a safety chain through the holes on the underside of the unit.

WARNING: The projector should NEVER be lifted or carried by the yoke.

FITTING THE LAMP



Undo the screw on the lamp access hatch, and then remove the hatch as shown in the above figure.

Undo the 2 x M4 screws (one on each side of the lamp bracket) and then pull out the lamp bracket with the old lamp.

Pull out the old lamp and then plug in the new lamp. Do not touch the glass of the lamp with bare hands.

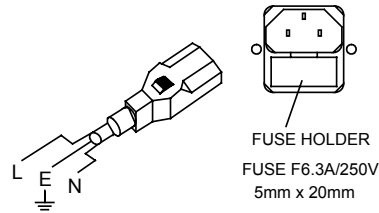
Replace the lamp bracket and fasten the screws, then replace the lamp access hatch and fasten the screw.

The MSD series are high pressure lamps with external igniters (⚠). Care should always be taken when handling these lamps. Always read the manufacturers "Instructions for use" enclosed with the lamp.

To optimize light output it will be necessary to adjust the lamp alignment to obtain an even distribution of light within the beam. The three screws (marked A, B, and C) may be gently turned to center the lamp within the reflector. The projector should be switched on with the shutter open and the beam focused to do this, it is also advisable to allow the lamp 5 minutes to come up to full brightness before starting to align it. Note: the three screws will only need a small adjustment to centre the lamp, do not try to unscrew them completely. Read the rest of this manual and then come back to this section to align the lamp.

POWER SUPPLY - MAINS

L = BROWN
E = GREEN/YELLOW
N = BLUE



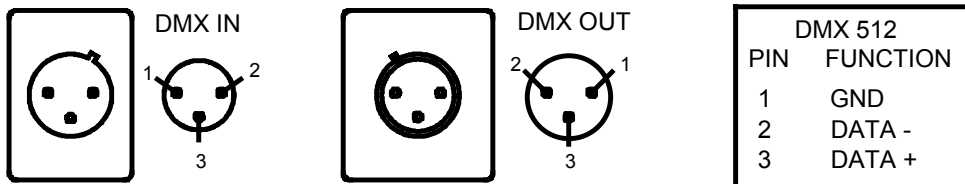
Use the plug provided to connect the mains power to the projector paying attention to the voltage and frequency marked on the panel of the projector. It is recommended that each projector is supplied separately so that they may be individually switched on and off.

IMPORTANT

It is essential that each projector is correctly earthed and that electrical installation conforms to all relevant standards. Power consumption of the PILOT 250 is 410W at 220V.

To change the voltage and/or frequency of the Pilot 250, see the details at the back of this manual.

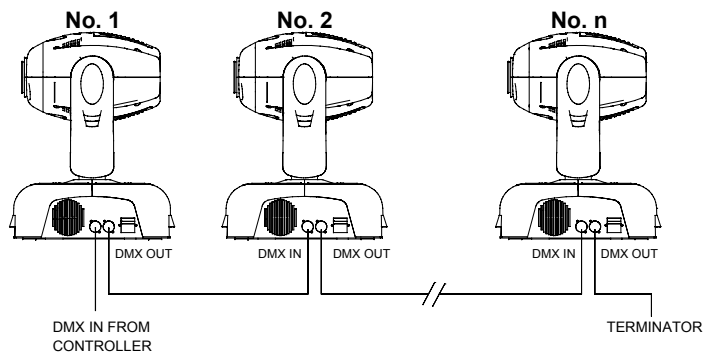
CONTROL CONNECTIONS



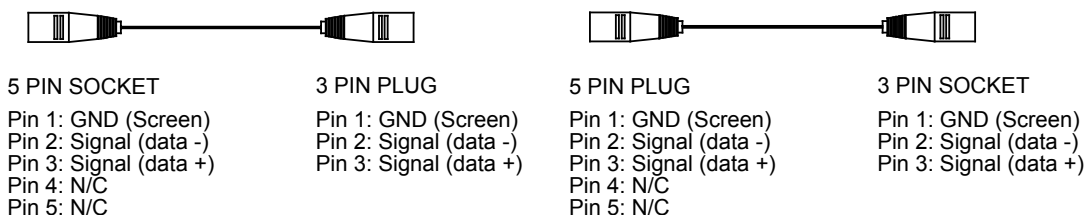
Connection between controller and projector and between one projector and another must be made with 2 core screened cable, with each core having at least a 0.5mm diameter. Connection to and from the projector is via cannon 3 pin XLR plugs and sockets which are included with the projector. The XLR's are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

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.

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 PILOT 250 accepts digital control signals in standard DMX512 (1990) format.



PILOT 250 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.

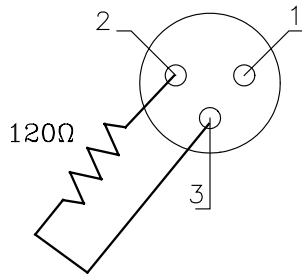


When a DMX 512 signal is received the LED located near the digital display will illuminate green. When not receiving a DMX signal the green and red LEDs will be off, and if the green LED flashes, it means that the DMX signal is not correct.

DMX TERMINATOR

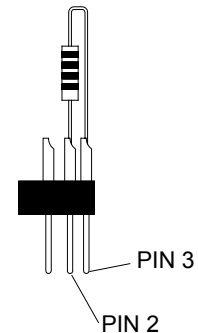
In Controller mode or Master/Slave mode, the DMX output has to be connected with a DMX terminator at the last fixture in the chain. This prevents electrical noise from disturbing and corrupting the DMX control signals.

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.



DMX TERMINATOR CONNECTION

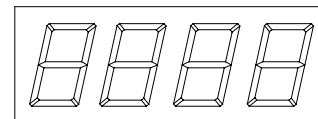
Connect a 120Ω(OHM) resistor across pins 2 and 3 in an XLR plug and insert into the DMX OUT socket on the last unit in the chain.



SETUP OPTIONS – PROJECTOR CONFIGURATION

With the touch-switches and the digital display screen, the DMX start address can be easily set and the various setup options may be configured.

After the projector is switched on, the projector will reset automatically and then the display will show the DMX start address (if you have already set the DMX start address and saved it, the screen will display the last setting).



To set or browse through the various Setup Options, press the **UP** or **DOWN** button.

Press the **ENTER** button to confirm your modification or enter a sub-option where available.

Press the **UP** or **DOWN** button to modify the settings or values.

Press the **ENTER** button to confirm your modification.

For example, if you want to set the display intensity (brightness) to 100%, press the **UP** or **DOWN** buttons to select **BBBB** (display intensity).

Press the **ENTER** button to enter the value setting sub-options, and press the **UP** or **DOWN** buttons to show **BBBB** (100%) in the display, and then press the **ENTER** button to save and exit.

The display is now set to an intensity of 100%, maximum brightness.

At any time pressing the **FUNC** button will return you to the previous level without saving any changes that may have been made.

See the following Setup Options Table for a full listing of all available option settings.

SETUP OPTIONS TABLE

	RESET		PAN MOVEMENT (0-255)
	HOT LAMP, FAIL TO START		FIXED GOBO WHEEL (0-255)
	LAMP DAMAGED, FAIL TO START		COLOUR WHEEL (0-255)
	ADDRESS SETTING		DIMMER (0-255)
	LAMP ON/OFF		CONTROLLER OPERATED SOFT RESET
	LAMP ON		ON
	LAMP OFF		OFF
	RESET		LAMP ON/OFF AND RESET FROM CONTROLLER
	FAN SPEED ADJUST		ON
	HIGH SPEED		OFF
	LOW SPEED		FIXED GOBO WHEEL LINEAR MOVEMENT
	SELF TEST		ON
	RUN SELF TEST		OFF
	DISPLAY BRIGHTNESS ADJUST		COLOUR WHEEL LINEAR MOVEMENT
	25%		ON
	50%		OFF
	75%		UNIT OPERATING TIME
	100%		1 HOUR
	UNIT TEMPERATURE DISPLAY		LAMP OPERATING TIME
	38°C		1 HOUR
	MANUAL OPERATION		INVERT TILT MOVEMENT
	STROBE (0-255)		ON
	PAN/TILT SPEED (0-255)		OFF
	EFFECTS WHEEL (0-255)		INVERT PAN MOVEMENT
	PRISM (0-255)		ON
	GOBO ROTATION (0-255)		OFF
	GOBO WHEEL (0-255)		16 BIT RESOLUTION
	FOCUS (0-255)		ON
	TILT MOVEMENT (0-255)		OFF

Note, to reset the Lamp Operating Time displayed, for example when you change a lamp, simply press and hold the **DOWN** button for more than one second while the Lamp Operating Time is being shown in the display.

PROJECTOR DMX START ADDRESS

Each PILOT 250 must be given a DMX start address so that the correct projector responds to the correct control signals. This DMX start address is the DMX channel number from which the projector starts to “listen” to the digital control information being sent out from the controller. The PILOT 250 has 15 channels, so set the No. 1 projector’s address to 001, No. 2 projector’s address to 016, No. 3 projector’s address to 031, No. 4 projector’s address to 046, and so on.

With the touch-switches and the digital display, the DMX start address can be easily set.

Press either the **UP** or **DOWN** button to select **0000** the current DMX start address, the display may show a different number after the **A** if a different DMX start address has already been set.

Then press the **ENTER** button.

The **A** will start flashing, then press the **UP** or **DOWN** button to set the desired DMX start address number.

Finally, press the **ENTER** button to save and exit.

At any time pressing the **FUNC** button will return you to the previous level without saving any changes that may have been made.

DMX CONTROL CHANNEL FUNCTIONS

The PILOT 250 uses 12, 14 or 15 DMX channels depending on the setup options that have been selected. They are listed in the following table.

CHANNEL	DMX VALUES	DESCRIPTION
1 STROBE	0-9	Black
	10-249	Strobe from slow to fast (max. 9.3 F.P.S.)
	250-255	Open
2 DIMMER	0-255	Linear Dimming from black to full open (0-100%)
3 COLOUR WHEEL	0-9	White (5-7 for 5 secs.)= Soft reset – See Note
	10-19	White + Colour 1
	20-29	Colour 1
	30-39	Colour 1 + Colour 2
	40-49	Colour 2
	50-59	Colour 2 + Colour 3
	60-69	Colour 3
	70-79	Colour 3 + Colour 4
	80-89	Colour 4
	90-99	Colour 4 + Colour 5
	100-109	Colour 5
	110-119	Colour 5 + Colour 6
	120-129	Colour 6
	130-139	Colour 6 + Colour 7
	140-149	Colour 7
	150-159	Colour 7 + Colour 8
	160-169	Colour 8
	170-179	Colour 8 + Colour 9
	180-189	Colour 9
	190-199	Colour 9 + White
200-225	Forward rotation from fast to slow (rainbow effect)	
226-229	Stop	
230-255	Reverse rotation from slow to fast (rainbow effect)	
4 FIXED-GOBO WHEEL	0-24	Open/clear
	25-49	GOBO 1
	50-74	GOBO 2
	75-99	GOBO 3
	100-124	GOBO 4
	125-149	GOBO 5
	150-174	GOBO 6
	175-199	GOBO 7
200-255	Rotate from slow to fast till scrolling effect	
5 PAN	0-255	Pan movement (0°-540°)
6 TILT	0-255	Tilt movement (0°-265°)
7 FOCUS	0-255	Focus
8 ROTATING-GOBO	0-31	Open/clear
	32-63	GOBO 1

WHEEL	64-95	GOBO 2
	96-127	GOBO 3
	128-159	GOBO 4
	160-191	GOBO 5
	192-223	GOBO 6
	224-255	GOBO 7
9 GOBO ROTATION	0-149	Step rotation in anti-clockwise direction (0-540°)
	150-153	Stop (Position in 540°)
	154-201	Rotate from slow to fast in clockwise direction
	202-207	Stop
	208-255	Rotate from slow to fast in anti-clockwise direction
10 PRISM	0-7	No prism (white)
	8-15	Prism static
	16-106	Rotate from fast to slow in anti-clockwise direction
	107-110	Stop
	111-199	Rotate from slow to fast in clockwise direction
	200-204	Rotate slowly in anti-clockwise direction
	205-209	Macro 1
	210-214	Macro 2
	215-219	Macro 3
	220-224	Macro 4
	225-229	Macro 5
	230-234	Macro 6
	235-239	Macro 7
	240-244	Macro 8
245-249	Macro 9	
250-255	Macro 10	
11 EFFECT WHEEL	0-50	White
	51-101	Effect 1 (15.6°)
	102-152	Effect 2 (19.5°)
	153-203	Colour temperature glass 1 (3200°K)
	204-255	Colour temperature glass 2 (7800°K)
12 X/Y SPEED	0-255	Pan and tilt movement from slow to fast
13 PAN 16Bit	0-255	Pan 16Bit resolution
14 TILT 16Bit	0-255	Tilt 16Bit resolution
15 LAMP CONTROL AND RESET	0-109	Not used
	110-119	Lamp off
	120-159	Not used
	160-179	Lamp on (It can't be on until after 10 minutes of lamp off)
	180-219	Not used
	220-239	Reset
240-255	Not used	

NOTE:

1. After turning the lamp off, the “L. Hot” characters may be appeared on the display screen meaning the lamp should be cooled for 10 minutes before it can restart. If the lamp is still not lit after being switched on, the luminaire will attempt to restart the lamp automatically at intervals of 10 minutes. After 8 times of restarting, if the lamp is still off, it means the lamp is damaged and the “L. Err” appears on the display screen.

2. The speed of fans may be adjusted automatically in relation to the temperature inside the luminaire.

3. Channels 13 and 14 – high resolution Pan and Tilt, are only available if the 16 Bit Resolution option has been set to ON in the setup options of the projector.

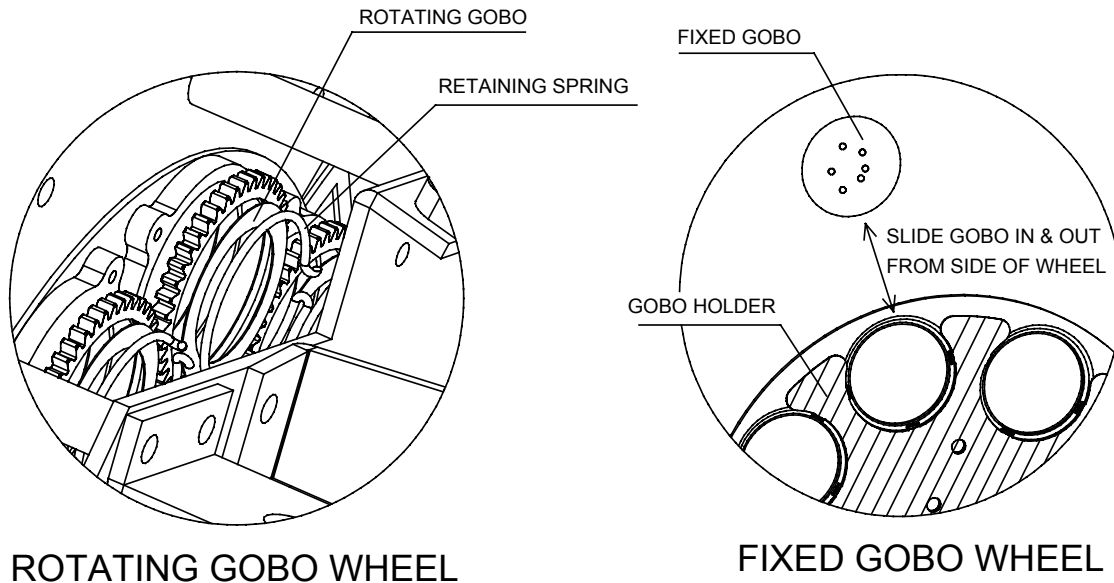
4. Channel 15 - Lamp Control and Reset is only available if the appropriate options have been set to ON in the setup options of the projector.

Soft Reset – If the option rErE is set to OFF this reset function will be available on channel 3, the colour channel. If the DMX value sent on this channel (3) stays in the range from 5 to 7 for more than 5 seconds, the projector will start a reset sequence (Remote Requested Soft Reset). The electronics are re-started and all motors moved to their home positions exactly as they do when the power is first switched on but the lamp is not switched off in this sequence, although the beam will be blacked out.

STAND-ALONE MODE

Press the **UP** or **DOWN** button to select **DEMO** (self test), and then press **ENTER** button to confirm it. The projector will run in stand-alone mode automatically with a programme that has been factory set.

CHANGING THE GOBOS



Unscrew the four (4) M4 bolts from the head cover, then carefully lift off the plastic cover

Using a small screwdriver remove the rotating gobo retaining spring or push out the fixed gobo directly by hand. **NOTE:** the fixed gobos slide out from the edge of the wheel.

Insert the new gobo (or a glass gobo) into position as shown in the figure above. For rotating gobos, remember to re-insert the retaining spring.

Mount the cover again and retighten the 4 M4 screws.

MAINTENANCE

If the projector's lens becomes damaged or broken it should be replaced. If the lamp becomes damaged or deformed in any way it must be replaced. If the light from the lamp appears dim this would normally indicate that it is reaching the end of its life and it should be changed at once, old lamps run to the extremity of their life can explode. If the projector does not function, check the fuses on the power socket of the projector, they should only be replaced by fuses of the same specified value 6.3A/250V (fast blow, 5mmx20mm). On the main PCB inside the projector there are also 3 fuses rated 6.3A/250V (2 PCS) and 4A/250V (1 PCS) (fast blow, 5mmx20mm). Should these be damaged call a qualified technician before replacement. The projector has a thermal protection device that will switch off the projector in case of overheating, should either of these operate, check that the fans are not blocked, and if they are dirty clean them before switching on the projector again. Check that the fans are operational, if not call a qualified technician.

Any maintenance work should only be carried out by qualified technicians.

LUBRICATION

To ensure the continued smooth rotation of the rotating gobos and linear motion of the lens for focusing, it is recommended that the bearings for the rotating gobos and the 2 shafts for the focusing lens holder are lubricated periodically, preferably every two months. Use only high working temperature low viscosity oil. When lubricating the bearings, a syringe with a fine needle is the easiest way to introduce the oil to the bearings around each gobo. Do not over lubricate as this will cause spillage when the wheel rotates.

KEEPING THE PROJECTOR CLEAN

To ensure the reliability of the projector it should be kept clean. It is recommended that the fans should be cleaned every 15 days. The lens and dichroic colour filters should also be regularly cleaned to maintain an optimum light output. **Do NOT use any type of solvent on dichroic colour filters.**

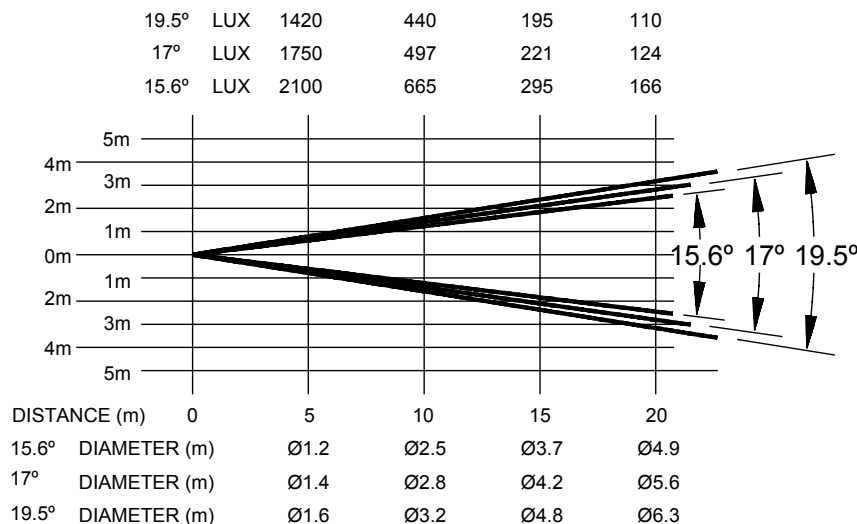
Cleaning frequency depends on the environment in which the fixture operates: damp, smoke or particularly dirty surroundings can cause greater accumulation of dirt on the unit's optics. A soft cloth and typical glass cleaning products should be used in cleaning. It is recommended to clean the external optics at least once every 20 days and clean the internal optics at least once every 30 / 60 days.

Do not use any organic solvent, e.g. alcohol, to clean the reflector mirror, dichroic colour filters or housing of the apparatus.

TROUBLESHOOTING

PROBLEM	POSSIBLE CAUSE	ACTION
The projector doesn't switch on	-The power supply is not present -The lamp is not working	Check the fuse on the power socket. Replace the lamp.
The lamp comes on but the projector doesn't respond to the controller	-Wrong DMX configuration and/or start address - Defective DMX cable	Make sure that the projector is correctly configured. Replace or repair the DMX cable.
The projector only functions intermittently	-The fan has failed	Make sure the fan is working and not dirty.
Defective projection	-The lens is broken -Dust or grease on lenses	Check the lenses are not broken. Remove dust or grease from the lenses.
The projected image appears to have a halo	-Installation of the lamp is not correct -Dust or grease contamination on the optics.	Make sure the lamp is installed correctly. Carefully clean the optical group lenses and the projector components.
The beam appears dim	-Dust or grease contamination on the optics. -The lamp is at the end of its life	Check the optics are clean. Replace with a new lamp of the specified type and rating.

LIGHT OUTPUT



TECHNICAL DATA

VOLTAGES: 100/120/200/220/230/240V AC, 50Hz or 60Hz To Order.

POWER CONSUMPTION:
410W @ 220V

LAMP: Type : MSD 250W discharge lamp.
Colour Temperature: 6700°K
Socket: GY9.5 (Single end)
Manufacturers Rated Lamp Life: 2000 Hours

COLOURS: 9 Dichroic colours plus white and variable speed Rainbow effect

COLOUR TEMPERATURE CORRECTION:
2 Colour temperature correction filters

GOBOS: Gobo Wheel 1
7 interchangeable, indexable rotating gobos plus clear
Gobo Wheel 2
7 interchangeable, fixed gobos plus clear
Gobo diameter: 27.8mm
Gobo image diameter: 23mm

SHUTTER/STROBE: 2 Blade shutter for dimmer
Shutter for blackout and strobe 1 – 9.3 F.P.S.

PRISMS: 1X3 Facet variable speed, bi-directionally rotating prism

FOCUS: DMX controlled focus

HEAD MOVEMENT: Pan 540° Tilt 265° with auto position correction (encoders)

BEAM ANGLES: 15.6°, 17°, 19.5°

CONTROL: DMX512:
12 Channels plus 2 for Hi Res. Pan and Tilt and 1 for DMX Lamp control

MOTORS: 12 Stepper motors

OTHER POINTS OF NOTE:
X,Y, Motor speed adjustable
Lamp On/Off control via DMX
Display shows lamp and projector hours
Adjustable fan speed

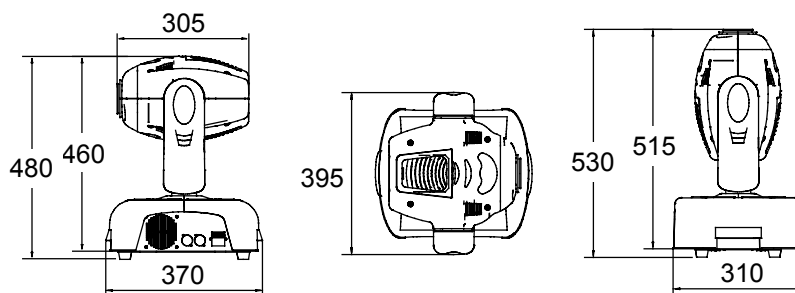
HOUSING: Metal and composite plastic (IP20)

DIMENSIONS: See drawings below.

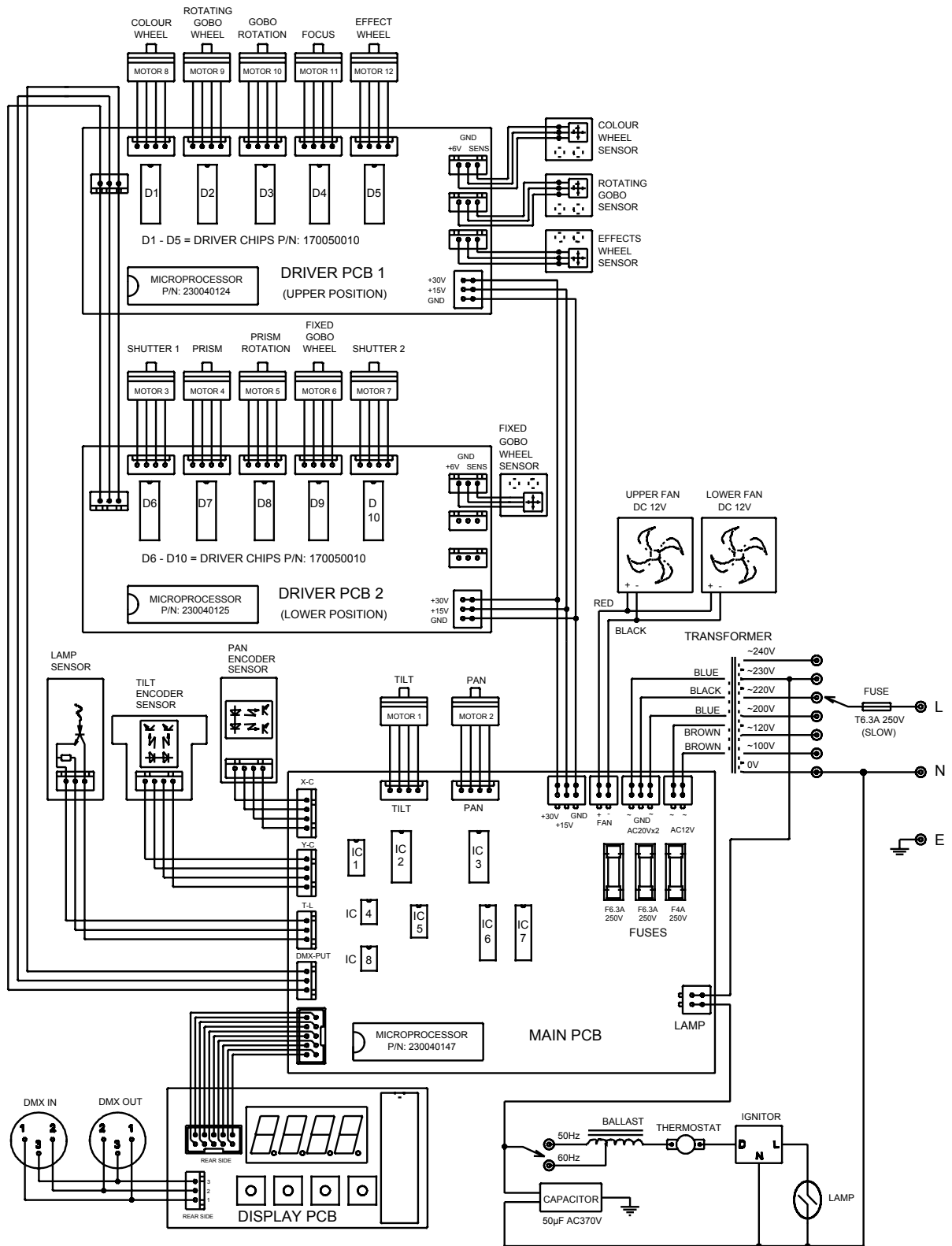
WEIGHT: 19Kg.

PACKED DIMENSIONS: 450mm LONG x 450mm WIDE x 610mm HIGH

PACKED WEIGHT: 21Kg.



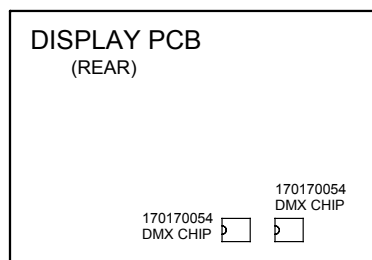
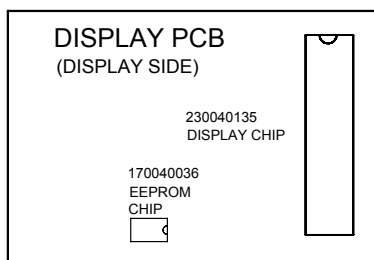
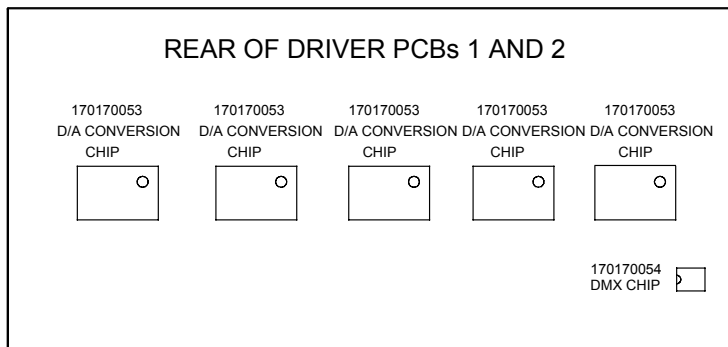
ELECTRICAL DIAGRAM



COMPONENT ORDER CODES

NAME	PART NO.	REMARK
TRANSFORMER	040030037	100V/120V/230V/60Hz
THERMOSTAT	190010054	95°C/10A/250V
CAPACITOR	140010045	50µF/370V
BALLAST	040070053	230V/50-60Hz, 250W/3.6A
IGNITOR	040090016	230V/50-60Hz, 4-5KV 300W
LOWER FAN	030060001	DC12V/2.6W
UPPER FAN	030060008	12V 0.43A
LAMP	100050018	MSD 250
MOTOR 1 (TILT)	030040052	23HS0015L
MOTOR 2 (PAN)		
MOTOR 3 (SHUTTER BLADE 1)	030040056	17HS0002-45L
MOTOR 4 (PRISM)	030040045	42BYGH023A-01B(JB)
MOTOR 5 (PRISM ROTATION)	030040080	17HS0002-48L
MOTOR 6 (FIXED GOBO WHEEL)	030040024	17HS0002-03L
MOTOR 7 (SHUTTER BLADE 2)	030040056	17HS0002-45L
MOTOR 8 (COLOUR WHEEL)	030040023	23HS0002-38L
MOTOR 9 (ROTATING GOBO WHEEL)	030040056	17HS0002-45L
MOTOR 10 (GOBO ROTATION)	030040080	17HS0002-48L
MOTOR 11 (FOCUS)	030040056	17HS0002-45L
MOTOR 12 (EFFECTS WHEEL)	030040080	17HS0002-48L
PAN DRIVE BELT	290151223	HTD426-3M-8
TILT DRIVE BELT	290151222	HTD339-3M-8
IC 1 – MAIN PCB	170030015	LOGIC CHIP
IC 2 – MAIN PCB	170110004	DRIVER CHIP
IC 3 – MAIN PCB	170110004	DRIVER CHIP
IC 4 – MAIN PCB	170050002	AMPLIFIER CHIP
IC 5 – MAIN PCB	170050001	AMPLIFIER CHIP
IC 6 – MAIN PCB	170170037	D/A CONVERSION CHIP
IC 7 – MAIN PCB	170170037	D/A CONVERSION CHIP
IC 8 – MAIN PCB	170170012	DMX CHIP
D1 TO D10 ON DRIVER PCB's 1 AND 2	170050010	DRIVER CHIPS
MICROPROCESSOR ON DRIVER PCB1	230040124	MICROPROCESSOR
MICROPROCESSOR ON DRIVER PCB2	230040125	MICROPROCESSOR
MICROPROCESSOR ON MAIN PCB	230040147	MICROPROCESSOR
FOR OTHER CHIPS SEE DRAWINGS		

CHIP ORDER CODES



Changing the operating voltage and/or frequency

To be carried out by qualified engineers only

The power input settings of the Pilot 250 may be changed to suit the supply in the area that the unit is to be operated. The voltage and frequency is pre-set at the factory and will be marked on the exterior of the unit.

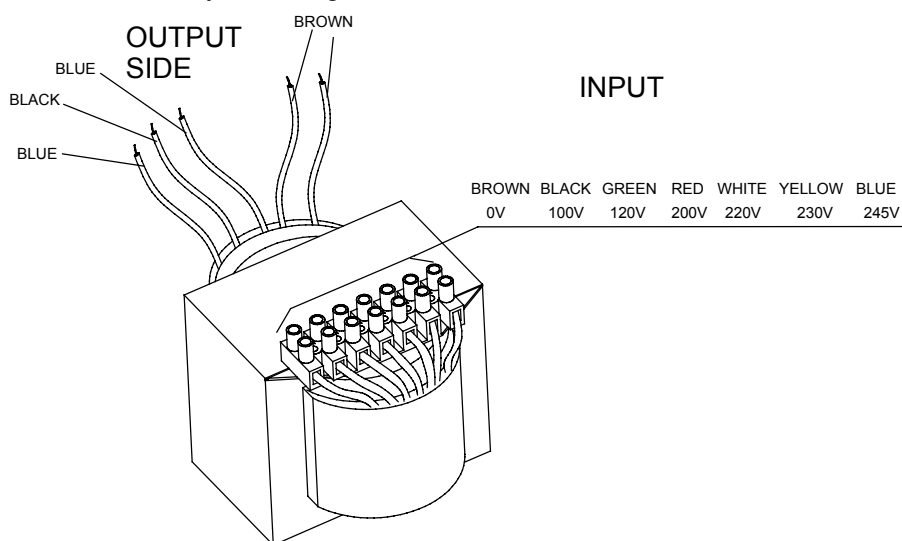
Any error or mistake in setting the frequency or voltage of the projector may seriously damage the unit.

Open the base of the projector by undoing the four screws on the top of the base and the 8 screws on the underside.

To Change the Voltage

Locate the transformer, select the appropriate voltage from 100V, 120V, 200V, 220V, 230V and 245V according to the local supply voltage. The voltages are marked on the transformer. Move only the incoming power cable that was connected to the factory set voltage as marked on the projector. ***Under NO circumstances should you move the cable attached to the 0V connection.***

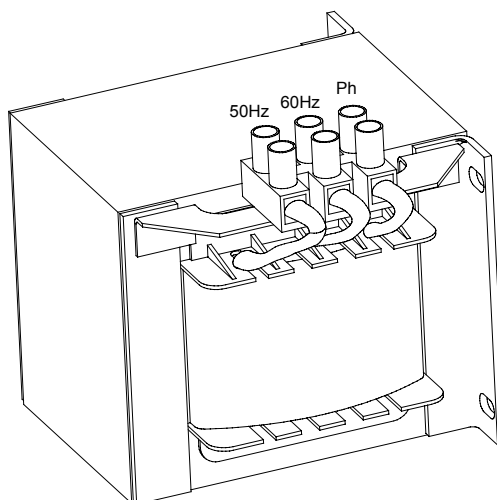
It is strongly recommended that you immediately mark the new voltage on the projector so that it may not be mistaken for the factory set voltage.



To Change the Frequency

Locate the ballast in the base of the projector, and select the required frequency from 50Hz or 60Hz by moving the cable to the appropriate position. The ballast will be labeled to show the connections.

Never move or disconnect the cable attached to the connector marked "Ph".



It is strongly recommended that you immediately mark the new frequency on the projector so that it may not be mistaken for the factory set frequency.

Once finished with the settings, re-assemble the base of the projector and covers.

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