Indigo 4600

ORDERCODE 41385

SHOWELECTRONICS FOR PROFESSIONALS

Congratulations!

You have bought a great, innovative product from Showtec.
The Showtec Indigo 4600 LED brings excitement to any venue. Whether you want simple plug-&-play action or a sophisticated DMX show, this product provides the effect you need.

You can rely on Showtec, for more excellent lighting products.
We design and manufacture professional light equipment for the entertainment industry.
New products are being launched regularly. We work hard to keep you, our customer, satisfied.
For more information: iwant@showtec.info

You can get some of the best quality, best priced products on the market from Showtec.
So next time, turn to Showtec for more great lighting equipment.
Always get the best -- with Showtec !

Thank you!

Showtec

Showtec Indigo 4600 LED™ Product Guide

Warning

Unpacking Instructions

Immediately upon receiving this product, carefully unpack the carton and check the contents to ensure that all parts are present, and have been received in good condition. Notify the dealer immediately and retain packing material for inspection if any parts appear damaged from shipping or the carton itself shows signs of mishandling. Save the carton and all packing materials. In the event that a fixture must be returned to the factory, it is important that the fixture be returned in the original factory box and packing.

Your shipment includes:
• Showtec Indigo 4600 LED with Volex IEC powercable 1,5m
• 2 brackets for truss mounting
• Safety cable
• User manual

LED Expected Lifespan

LEDs gradually decline in brightness over time. HEAT is the dominant factor that leads to the acceleration of this decline. Packaged in clusters, LEDs exhibit higher operating temperatures than in ideal or singular optimum conditions. For this reason when all color LEDs are used at their fullest intensity, life of the LEDs is significantly reduced. It is estimated that a viable lifespan of 40,000 to 50,000 hours will be achieved under normal operational conditions. If improving on this lifespan expectancy is of a higher priority, place care in providing for lower operational temperatures. This may include climatic-environmental and the reduction of overall projection intensity.

> **CAUTION!**
> **Keep this device away from rain and moisture!**
> **Unplug mains lead before opening the housing!**

Safety Instructions

Every person involved with the installation, operation and maintenance of this device has to:
- be qualified
- follow the instructions of this manual

> **CAUTION! Be careful with your operations.**
> **With a dangerous voltage you can suffer**
> **a dangerous electric shock when touching the wires!**

Before your initial start-up, please make sure that there is no damage caused by transportation. Should there be any, consult your dealer and do not use the device.

To maintain perfect condition and to ensure a safe operation, it is absolutely necessary for the user to follow the safety instructions and warning notes written in this manual.

Please consider that damages caused by manual modifications to the device are not subject to warranty.

This device contains no user-serviceable parts. Refer servicing to qualified technicians only.

IMPORTANT:

The manufacturer will not accept liability for any resulting damages caused by the non-observance of this manual or any unauthorized modification to the device.

- Never let the power-cord come into contact with other cables! Handle the power-cord and all connections with the mains with particular caution!
- Never remove warning or informative labels from the unit.
- Never use anything to cover the ground contact.
- Never lift the fixture by holding it at the projector-head, as the mechanics may be damaged. Always hold the fixture at the transport handles.
- Never place any material over the lens.
- Never look directly into the light source.
- Never leave any cables lying around.
- Never unscrew the screws of the rotating gobo, as the ball bearing will otherwise be opened.
- Do not insert objects into air vents.
- Do not connect this device to a dimmerpack.
- Do not switch the device on and off in short intervals, as this would reduce the device's life.
- Do not touch the device's housing bare-handed during its operation (housing becomes very hot). Allow the fixture to cool for at least 5 minutes before handling.
- Do not shake the device. Avoid brute force when installing or operating the device.
- Only use device indoor, avoid contact with water or other liquids.
- Only operate the fixture after having checked that the housing is firmly closed and all screws are tightly fastened.
- Only operate the device after having familiarized with its functions.
- Avoid flames and do not put close to flammable liquids or gases.
- Always keep case closed while operating.
- Always allow free air space of at least 50 cm around the unit for ventilation.
- Always disconnect power from the mains, when device is not used or before cleaning! Only handle the power-cord by the plug. Never pull out the plug by tugging the power-cord.
- Make sure that the device is not exposed to extreme heat, moisture or dust.
- Make sure that the available voltage is not higher than stated on the rear panel.
- Make sure that the power-cord is never crimped or damaged. Check the device and the power-cord from time to time.
- If the lens is obviously damaged, it has to be replaced. So that its functions are not impaired, due to cracks or deep scratches.
- If device is dropped or struck, disconnect mains power supply immediately. Have a qualified engineer inspect for safety before operating.
- If the device has been exposed to drastic temperature fluctuation (e.g. after transportation), do not switch it on immediately. The arising condensation water might damage your device. Leave the device switched off until it has reached room temperature.
- If your Showtec device fails to work properly, discontinue use immediately. Pack the unit securely (preferably in the original packing material), and return it to your Showtec dealer for service.
- For adult use only. Movinghead must be installed out of the reach of children. Never leave the unit running unattended.
- Never attempt to bypass the thermostatic switch or fuses.
- For replacement use fuses of same type and rating only.
- The user is responsible for correct positioning and operating of the Indigo. The manufacturer will not accept liability for damages caused by the misuse or incorrect installation of this device.
- This device falls under protection class I. Therefore it is essential to connect the yellow/green conductor to earth.
- During the initial start-up some smoke or smell may arise. This is a normal process and does not necessarily mean that the device is defective.
- Repairs, servicing and electric connection must be carried out by a qualified technician.
- WARRANTY: Till one year after date of purchase.

CAUTION ! EYEDAMAGES !.
Avoid looking directly into the light source.
(meant especially for epileptics) !

Operating Determinations

- This device is not designed for permanent operation. Consistent operation breaks will ensure that the device will serve you for a long time without defects.
- The minimum distance between light-output and the illuminated surface must be more than 1 meter.
- The maximum ambient temperature $t_a = 45°C$ must never be exceeded.
- The relative humidity must not exceed 50 % with an ambient temperature of 45° C.
- If this device is operated in any other way, than the one described in this manual, the product may suffer damages and the warranty becomes void.
- Any other operation may lead to dangers like short-circuit, burns, electric shock, crash, etc.

You endanger your own safety and the safety of others!

Rigging

Please follow the European and national guidelines concerning rigging, trussing and all other safety issues.

Do not attempt the installation yourself !
Always let the installation be carried out by an authorized dealer !

Procedure:

- If the projector is lowered from the ceiling or high joists, professional trussing systems have to be used.
- Use a clamp to mount the projector, with the mounting-bracket, to the trussing system.
- The projector must never be fixed swinging freely in the room.
- The installation must always be secured with a safety attachment, e.g. an appropriate safety net or safety-cable.
- When rigging, derigging or servicing the projector, always make sure, that the area below the installation place is blocked and staying in the area is forbidden.
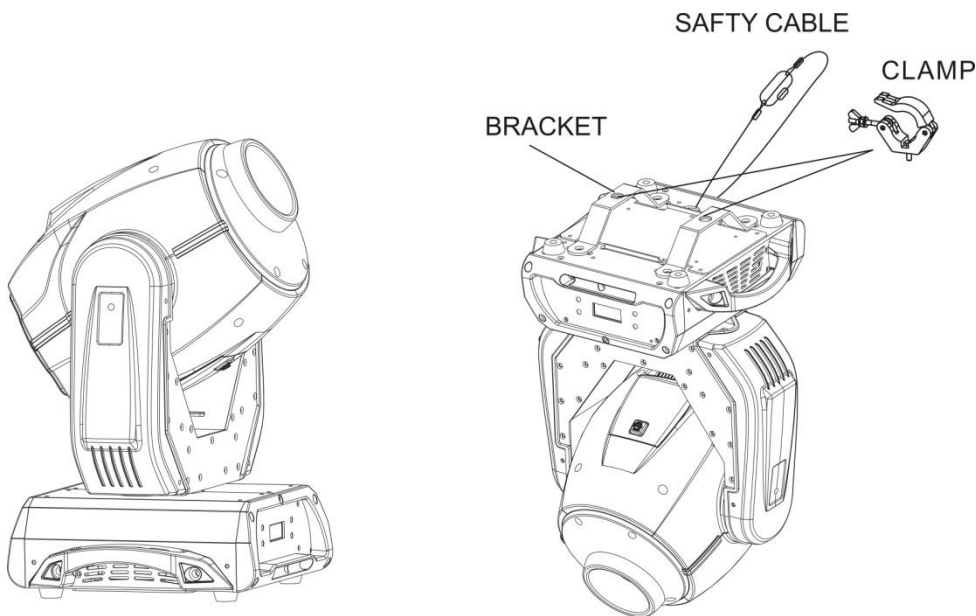
The Indigo can be placed on a flat stage floor or mounted to any kind of truss by a clamp.

Mounting a clamp to the underside of the Indigo moving head

Clamp

Eye for safety-cable   Unlocked   Locked
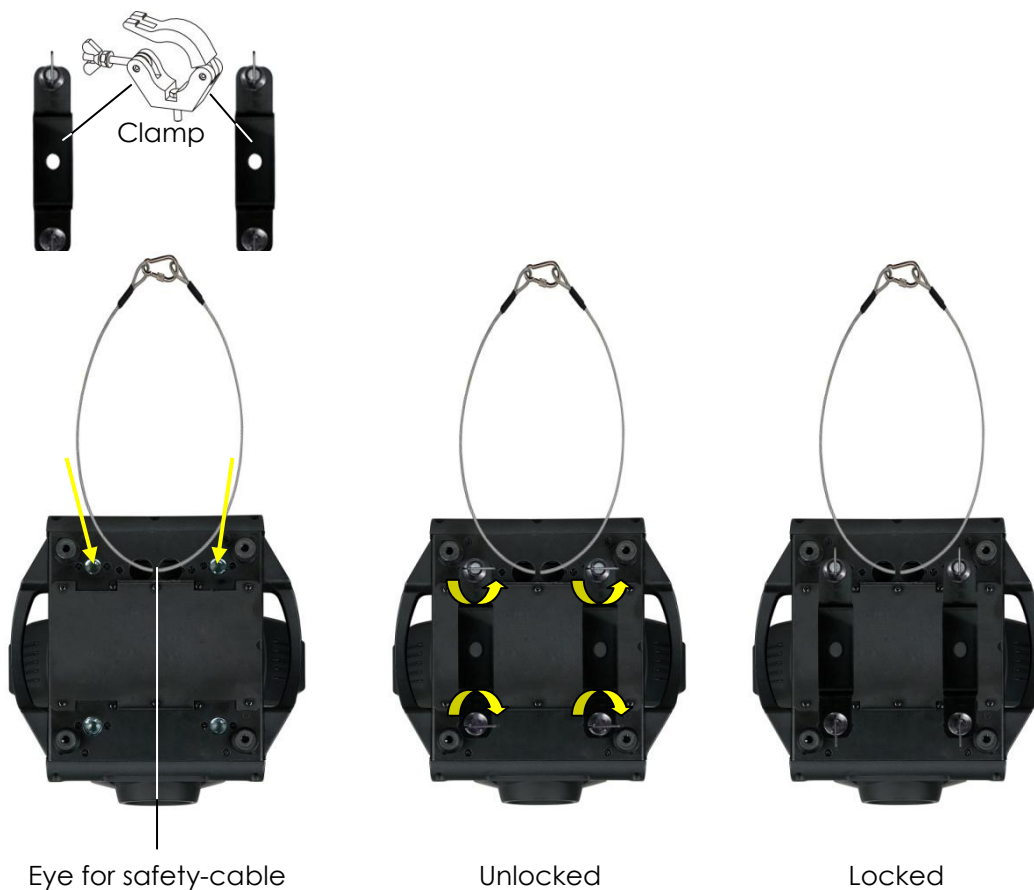
Improper installation can cause serious damage to people and property !

Connection with the mains

Connect the device to the mains with the power-plug.
Always pay attention, that the right color cable is connected to the right place.

International	EU Cable	UK Cable	US Cable	Pin
L	BROWN	RED	YELLOW/COPPER	FASE
N	BLUE	BLACK	SILVER	NUL
⏚	YELLOW/GREEN	GREEN	GREEN	EARTH

Make sure that the device is always connected properly to the earth!

⚠️Return Procedure ⚠️

Returned merchandise must be sent prepaid and in the original packing, call tags will not be issued. Package must be clearly labeled with a Return Authorization Number (RMA number). Products returned without an RMA number will be refused. Highlite will not accept the returned goods or any responsibility. Call Highlite 0031-455667723 or mail aftersales@highlite.nl and request an RMA prior to shipping the fixture. Be prepared to provide the model number, serial number and a brief description of the cause for the return. Be sure to properly pack fixture, any shipping damage resulting from inadequate packaging is the customer's responsibility. Highlite reserves the right to use its own discretion to repair or replace product(s). As a suggestion, proper UPS packing or double-boxing is always a safe method to use.

Note: If you are given an RMA number, please include the following information on a piece of paper inside the box:
1) Your name
2) Your address
3) Your phone number
4) A brief description of the symptoms

Claims

The client has the obligation to check the delivered goods immediately upon delivery for any short-comings and/or visible defects, or perform this check after our announcement that the goods are at their disposal. Damage incurred in shipping is the responsibility of the shipper; therefore the damage must be reported to the carrier upon receipt of merchandise.
 It is the customer's responsibility to notify and submit claims with the shipper in the event that a fixture is damaged due to shipping. Transportation damage has to be reported to us within one day after receipt of the delivery.
Any return shipment has to be made post-paid at all times. Return shipments must be accompanied with a letter defining the reason for return shipment. Non-prepaid return shipments will be refused, unless otherwise agreed in writing.
Complaints against us must be made known in writing or by fax within 10 working days after receipt of the invoice. After this period complaints will not be handled anymore.
Complaints will only then be considered if the client has so far complied with all parts of the agreement, regardless of the agreement of which the obligation is resulting.

Description of the device

Features
The Showtec Indigo 4600 LED is a moving-head with high output and great effects.
The Indigo 4600 is the successor of the very popular Indigo 4500. It has a revolutionary new optical system which gives the Indigo 4600 20% more light output with half the LED power (30W).
- High efficiency optics
- Lightweight
- Ideal solution for clubs, mobile DJ and smaller rental applications.
- Compact size
- Standard DIM4 dimming technology on board to simulate special dimming effects
- Two gobo wheels, one color wheel, a rotating prism, DMX focus and a strobe.
- DMX-control via standard DMX-controller
- Music Control
- Automatic Pan/Tilt correction
- Rotating Gobowheel with 7 rotating interchangeable gobos (2 glass, 5 metal) and open with Gobo Shake
- Static Gobowheel with 8 static gobos and open with Gobo Shake Function
- Colourwheel with 7 vivid colours and white
- Built in Automatic Programs
- Built in Sound activated programs
- Built in Macros via DMX
- 3 facet, rotating prism
- User selectable pan/tilt ranges
- Pan/Tilt movement blackout
- Pan/Tilt resolution 8/16 Bit
- Cooling system: Low Noise Fan
- Beam Angle: 16° degrees
- Shutter: 0-20Hz
- Dimmer: 0-100% electronic dimmer
- Focus: Electronic focus
- Housing: Flame-retardant plastic
- Cooling: Forced Cooling (Fan)
- Drive Current 3A
- Input Voltage: 100~240VAC.47/63Hz
- Power consumption: 120W max @FO
- Slot-n-Lock Gobo
- Fixture Connection Data in/Out (XLR 3/5 Pin)
- On Board: Display for easy Set Up
- IP Rating: IP-20
- Power in (Volex)
- Fuse 3,15 A / 250V
- Pan 0° -- 540°
- Tilt 0° -- 270°
- Control: DMX-512, Auto, Master/Slave, Sound
- User selectable 11CH or 14CH operating modes
- Light Source: 3x 10W CW
- Output: Lumen: 1800+
- Lux@2m: 7300+
- Efficiency: 60 lm/W
- Dimensions (LxWxH): 330 x 270 x 500 mm
- Weight: 9,5 kg

Overview

Fig. 1

1) Lens
2) Menu Buttons + LCD Display

Backside

Fig. 2

3) On/Off
4) Volex IEC power connector + Fuse 3,15A / 250V
5) DMX signal connector (IN) 5-pin
6) DMX signal connector (OUT) 5-pin
7) DMX signal connector (OUT) 3-pin
8) DMX signal connector (IN) 3-pin

Installation

Remove all packing materials from the Indigo 4600 LED. Check that all foam and plastic padding is removed. Connect all cables.

Do not supply power before the whole system is set up and connected properly.
Always disconnect from electric mains power supply before cleaning or servicing.
Damages caused by non-observance are not subject to warranty.

Set Up and Operation

Follow the directions below, as they pertain to your preferred operation mode.
Before plugging the unit in, always make sure that the power supply matches the product specification voltage. Do not attempt to operate a 120V specification product on 230V power, or vice versa.

Control Modes

There are 4 modes:
- Stand-alone (built-in programs)
- Sound-controlled
- Master/Slave
- DMX512 (14 Channels **Person 1** or 11 Channels **Person 2**)

One Indigo (Built-in Programs)

1. Fasten the effect light onto firm trussing. Leave at least 0,5 meter on all sides for air circulation.
2. Plug the end of the electric mains power cord into a proper electric power supply socket.
3. When the Indigo is not connected by a DMX-cable, it functions as a stand-alone device. Please see page 18 for more information about the built-in programs.

One Indigo (Sound-control)

1. Fasten the effect light onto firm trussing. Leave at least 0,5 meter on all sides for air circulation.
2. Plug the end of the electric mains power cord into a proper electric power supply socket.
3. Turn on the music. If the device is set to sound-control, then the Indigo will react to the beat of the music. Please see page 18 for more information about the sound-control options.

Multiple Indigo's (Master/Slave control)

1. Fasten the effect light onto firm trussing. Leave at least 0,5 meter on all sides for air circulation.
2. Use a 3-p XLR cable to connect the Indigo.
   The pins:

   1. Earth
   2. Signal -
   3. Signal +
3. Link the units as shown in (Fig. 3), Connect a DMX signal cable from the first unit's DMX "out" socket to the second unit's "in" socket. Repeat this process to link the second, third, and fourth units.
   You can use the same functions on the master device as described on page 18 (Built-in Programs or Music control). This means on the master device you can set your desired operation Mode and all slave devices will react the same as the master device.

Multiple Indigo's (Master/Slave control)

Fig. 3

Multiple Indigo's (DMX Control)

1. Fasten the effect light onto firm trussing. Leave at least 0,5 meter on all sides for air circulation.
2. Always use a safety cable.
3. Use a 3-p XLR cable to connect the Indigo's and other devices.

Occupation of the XLR-connection:

DMX-OUTPUT
XLR mounting-socket:

1 - Ground
2 - Signal (-)
3 - Signal (+)

DMX-input
XLR mounting-plug

1 - Ground
2 - Signal (-)
3 - Signal (+)

The transformation of the controller line of 3 pins and 5 pins (plug and socket)

5-Pins canon (socket)
Pin 1 : GND(screen)
Pin 2 : Signal (-)
Pin 3 : Signal (+)
Pin 4 : N/C
Pin 5 : N/C

3-Pins canon (plug)
Pin 1 : GND(screen)
Pin 2 : Signal (-)
Pin 3 : Signal (+)

3-Pins canon (socket)
Pin 1 : GND(screen)
Pin 2 : Signal (-)
Pin 3 : Signal (+)

5-Pins canon (plug)
Pin 1 : GND(screen)
Pin 2 : Signal (-)
Pin 3 : Signal (+)
Pin 4 : N/C
Pin 5 : N/C
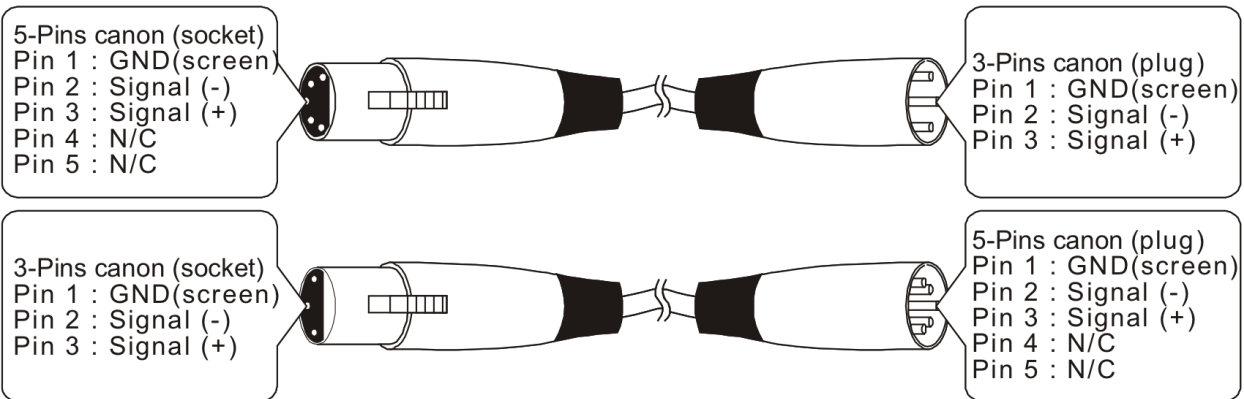
4. Link the units as shown in (figure 4), Connect a DMX signal cable from the first unit's DMX "out" socket to the second unit's "in" socket. Repeat this process to link the second, third, and fourth units.
5. Supply electric power: Plug electric mains power cords into each unit's IEC socket, then plug the other end of the mains power cord into proper electric power supply sockets, starting with the first unit. Do not supply power before the whole system is set up and connected properly.

Multiple Indigo's DMX Set Up

DMX 512

Fig. 4

Note : Link all cables before connecting electric power

Fixture Linking

You will need a serial data link to run light shows of one or more fixtures using a DMX-512 controller or to run synchronized shows on two or more fixtures set to a master/slave operating mode. The combined number of channels required by all the fixtures on a serial data link determines the number of fixtures the data link can support.

Important: Fixtures on a serial data link must be daisy chained in one single line. To comply with the EIA-485 standard no more than 30 devices should be connected on one data link. Connecting more than 30 fixtures on one serial data link without the use of a DMX optically isolated splitter may result in deterioration of the digital DMX signal.

Maximum recommended DMX data link distance: 100 meters
Maximum recommended number of Indigo's on a DMX data link: 30 fixtures

Data Cabling

To link fixtures together you must obtain data cables. You can purchase DAP Audio certified DMX cables directly from a dealer/distributor or construct your own cable. If you choose to create your own cable please use data-grade cables that can carry a high quality signal and are less prone to electromagnetic interference.

DAP Audio Certified DMX Data Cables
- DAP Audio Basic microphone cable for allround use. bal. XLR/M 3 p. > XLR/F 3 p.
  Ordercode FL01150 (1,5m.), FL013 (3m.), FL016 (6m.), FL0110 (10m.), FL0115 (15m.), FL0120 (20m.).
- DAP Audio cable for the demanding user with exceptional audio-qualities and connector made by Neutrik®. **Ordercode** FL71150 (1,5m.), FL713 (3m.), FL716 (6m.), FL7110 (10m.).

The Indigo 4600 LED can be operated with a controller in **control mode** or without the controller in **stand-alone mode.**

Control Panel
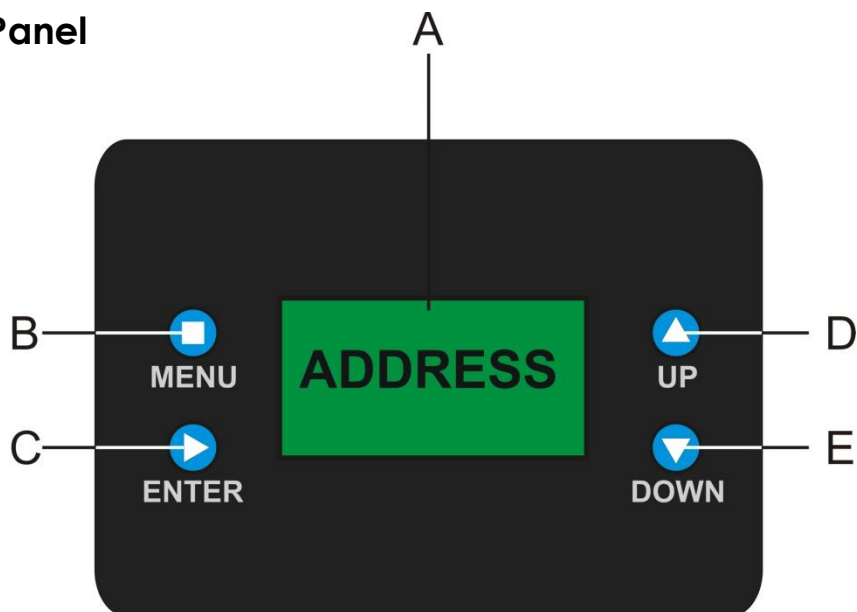
Fig. 5

A. LCD Display   **D.** Up Button
B. MENU button   **E.** Down Button
C. ENTER Button

Control Mode

The fixtures are individually addressed on a data-link and connected to the controller.
The fixtures respond to the DMX signal from the controller. (When you select the DMX address and save it, the controller will display the saved DMX address the next time.)

DMX Addressing

The control panel on the front side of the base allows you to assign the DMX fixture address, which is the first channel from which the Indigo will respond to the controller.
Please note when you use the controller, the unit has **14** channels.
When using multiple Indigo's, make sure you set the DMX addresses right.
Therefore, the DMX address of the first Indigo's should be **1(001)**; the DMX address of the second Indigo should be **1+14=15 (015**); the DMX address of the third Indigo should be **15+14=29 (029)**, etc.
Please, be sure that you don't have any overlapping channels in order to control each Indigo correctly.
If two or more Indigo's are addressed similarly, they will work similarly.
For address settings, please refer to the instructions under ''Addressing'.

Controlling:

After having addressed all Indigo fixtures, you may now start operating these via your lighting controller.
Note: After switching on, the Indigo will automatically detect whether DMX 512 data is received or not. If there is no data received at the DMX-input, the "**LED** " on the control panel will not flash.
If not, the problem may be:
• The XLR cable from the controller is not connected with the input of the Indigo 4600.
• The controller is switched off or defective, the cable or connector is detective, or the signal wires are swapped in the input connector.

Note: It's necessary to insert a XLR termination plug (with 120 Ohm) in the last fixture in order to ensure proper transmission on the DMX data link.

Menu Overview

MENU

| ADDRESS | ENTER → | ADDRESS [001-512] |

| PERSON | ENTER → | PERSON PERSON1/2 |

| SETTINGS | ENTER → | PERFORM | ENTER → | PT SPEED | ENTER → | PT SPEED [SLOW-FAST] |

PAN INV → ENTER → PAN INV [NORM-INVERT]

TILT INV → ENTER → TILT INV [NORM-INVERT]

OP SPEED → ENTER → OP SPEED [SLOW-FAST]

BLACK D → ENTER → BLACK D [INSTANT-DELAY]

DIMMER → ENTER → DIMMER [DIM1-2-3-4-OFF]

DIM INV → ENTER → DIM INV [NORM-INVERT]

DMXERROR → ENTER → DMXERROR [SAVE-BLACK]

DMXRESET → ENTER → DMXRESET [DMX-DISPLAY]

DISPLAY → ENTER → DISPLAY [SHORT-LONG-ALWAYS]

KEY LOCK → ENTER → KEY LOCK [NO-YES]

HOMEPAGE → ENTER → HOMEPAGE [DMX-NAME+DMX]

UP/DOWN

RANGE → ENTER → SETTINGS P.START → ENTER → P.START [000-255]

SETTINGS P.END → ENTER → P.END [000-255]

SETTINGS T.START → ENTER → T.START [000-255]

SETTINGS T.END → ENTER → T.END [000-255]

UP/DOWN

DEFAULT → ENTER → DEFAULT [NO/YES]

SEND → ENTER → SEND [NO/YES]

UP/DOWN

| RUNMODE | ENTER → | RUN | ENTER → | RUN DMX512 |

RUN AUTO1

RUN AUTO2

RUN SOUND1

RUN SOUND2

RUN CUSTOM

RUN TEST

RUN SLAVE

UP/DOWN

EDIT → ENTER → STEP → ENTER → STEP1 [001-049]

PAN → ENTER → PAN [000-255]

TILT → ENTER → TILT [000-255]

COLOR → ENTER → COLOR [000-255]

GOBO1 → ENTER → GOBO1 [000-255]

GOBO2 → ENTER → GOBO2 [000-255]

GOBO2ROT → ENTER → GOBO2ROT [000-255]

PRI&ROT → ENTER → PRI&ROT [000-255]

FOCUS → ENTER → FOCUS [000-255]

DIMMER → ENTER → DIMMER [000-255]

STROBE → ENTER → STROBE [000-255]

TIME → ENTER → TIME [000-255]

USE → ENTER → USE [NO-YES]

UP/DOWN

You first have to create a step and press enter. then the rest of the menu will appear

| MANUAL | ENTER → | SEND | ENTER → | SEND [NO/YES] |

RESET → ENTER → RESET [NO/YES]

UP/DOWN

DMXvalue → ENTER → PAN → ENTER → PAN [000-255]

TILT → ENTER → TILT [000-255]

COLOR → ENTER → COLOR [000-255]

GOBO1 → ENTER → GOBO1 [000-255]

GOBO2 → ENTER → GOBO2 [000-255]

GOBO2ROT → ENTER → GOBO2ROT [000-255]

PRI&ROT → ENTER → PRI&ROT [000-255]

FOCUS → ENTER → FOCUS [000-255]

DIMMER → ENTER → DIMMER [000-255]

STROBE → ENTER → STROBE [000-255]

UP/DOWN

| SERVICE | ENTER → | ACCESS | ENTER → | SETTLOCK → ENTER → SETTLOCK [NO/YES] |

SERVLOCK → ENTER → SERVLOCK [NO/YES]

UP/DOWN

INFO → ENTER → VERSION → ENTER → VERSION S630 V1.0

CONTENT → ENTER → DISPLAY → ENTER → DISPLAY ********

SEND → ENTER → SEND [NO/YES]

UP/DOWN

MENU

13

Main Menu Options

ADDRESS	1.
DOWN	
PERSON	2.
DOWN	
SETTINGS	3.
DOWN	
RUNMODE	4.
DOWN	
MANUAL	5.
DOWN	
SERVICE	6.

1. Address

DMX Addressing
With this menu you can set the DMX address.

ADDRESS → **ENTER** → **ADDRESS [001-512]**

1) Press Menu, until the display shows: **Address**
2) Press enter to open this menu. You can choose 512 different DMX addresses.
 Use the Up / Down buttons to select the required address from 000 - 512.
3) Once you have set the desired DMX address, press the enter button to store your DMX address.

2. Channel Modes/Personalities

Personality
With this menu you can set the Personality of the Indigo.

PERSON → **ENTER** → **PERSON PERSON1/2**

1) Press Menu, until the display shows: **Person**
2) Press enter to open this menu. You can choose 2 different Personality modes.
 Person 1 has 14 channels and **Person 2** has 11 channels.
3) Once you have set the desired mode, press the enter button to store your setting.

3. Settings

With this menu you can set the Settings of the Indigo.

1) Press Menu, until the display shows: **Settings**
2) Press enter to open this menu. You can choose 4 different submenus.

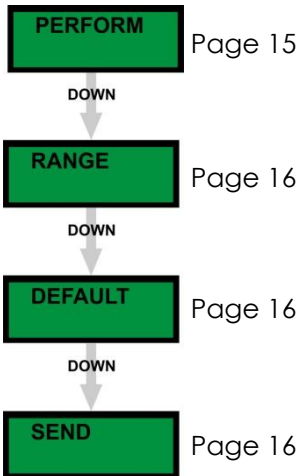|	
PERFORM	Page 15
↓ DOWN	
RANGE	Page 16
↓ DOWN	
DEFAULT	Page 16
↓ DOWN	
SEND	Page 16

3.1 Performance / Settings Menu

SETTINGS → **ENTER** → PERFORM → **ENTER** →

UP/DOWN:

	ENTER	
PT SPEED	→	PT SPEED [SLOW-FAST]
PAN INV	→	PAN INV [NORM-INVERT]
TILT INV	→	TILT INV [NORM-INVERT]
OP SPEED	→	OP SPEED [SLOW-FAST]
BLACK D	→	BLACK D [INSTANT-DELAY]
DIMMER	→	DIMMER [DIM1-2-3-4-OFF]
DIM INV	→	DIM INV [NORM-INVERT]
DMXERROR	→	DMXERROR [SAVE-BLACK]
DMXRESET	→	DMXRESET [DMX-DISPLAY]
DISPLAY	→	DISPLAY [SHORT-LONG-ALWAYS]
KEY LOCK	→	KEY LOCK [NO-YES]
HOMEPAGE	→	HOMEPAGE [DMX-NAME+DMX]
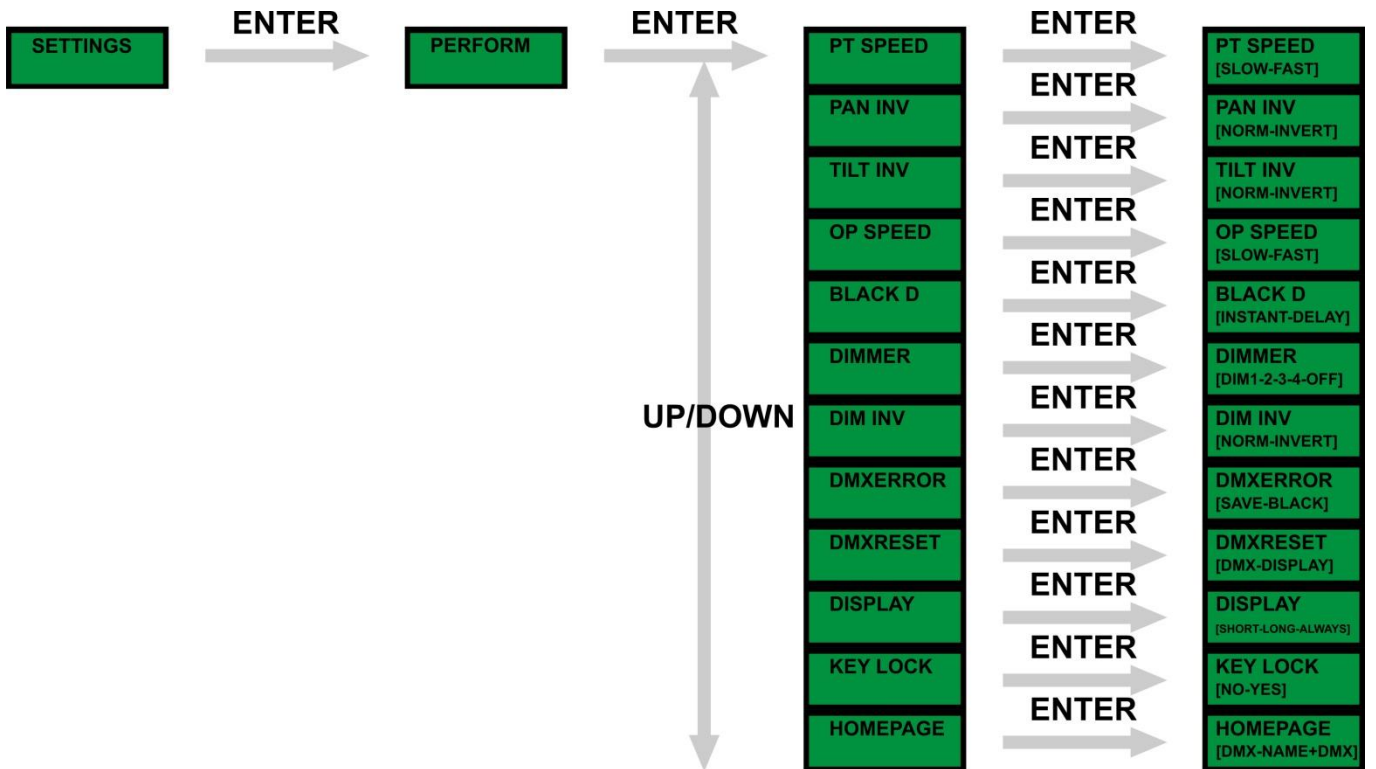
1) Press Menu, until the display shows: **Settings**
2) Press Enter, until the display shows: **Perform**
3) Now use the Up/Down buttons to scroll through the options: **PT Speed, Pan Inv, Tilt Inv, OP Speed, Black D, Dimmer, Dim Inv, DMX Error, DMX reset, Display, Key lock, Homepage**.
4) Press enter to open one of these menus. Use the Up / Down buttons to set the desired setting.
5) Once you have set the desired mode, press the enter button to store your setting.

PT Speed: Pan/Tilt movement Speed
Pan Inv: For Normal/Inverted Pan control
Tilt Inv: Normal/Inverted Tilt control
OP Speed: Slow/Fast Optics Speed
Black D: **Instant**: Immediate blackout when using Pan/Tilt.
                  Delay: 3 seconds delay before blackout when using Pan/Tilt
Dimmer: DIM1, DIM2, DIM3, DIM4, OFF
                  When DIMMER is set to OFF, then RGBW and MASTER DIMMER are linear.
                  Dim 1, 2, 3, 4 are speed modes of the non linear dimmer, Dim1 is fastest, Dim4 is slowest.
                  The factory default setting is Dim4.
Dim Inv: Normal/Inverted control of the Dimming function
DMX Error: **Save**: Maintain the last command in case of a DMX error.
                  Black: Indigo blackout in case of a DMX error
DMX reset: **DMX**: You are able to remotely reset the Indigo with a DMX controller.
                  Display: You are only able to reset the Indigo via the display on the device.
Display: **Long/Short/Always** The time the display backlight lights up when using the menu buttons.
Key lock: No/Yes; Lock the display when it is not in use or at start-up.
Homepage: **DMX**: to show the DMX Address
                  Name: to show a user created content in the LCD display, when it is not in use

3.2 Range
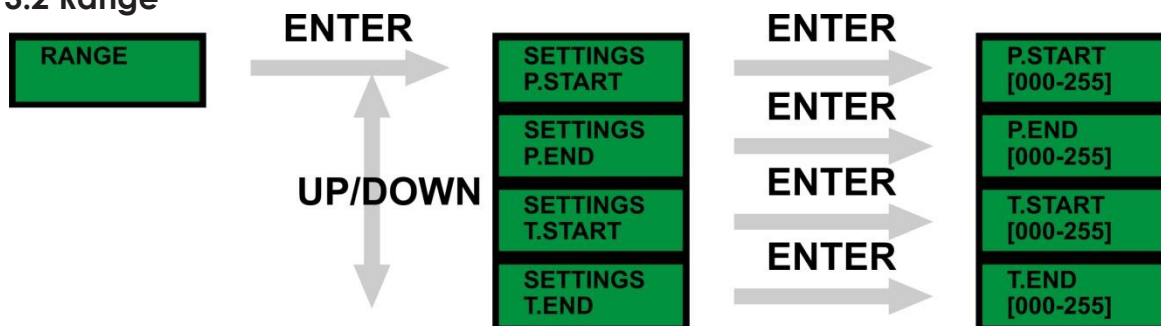
1) Press Menu, until the display shows: **Range**
2) Press Enter and use the Up/Down buttons to scroll through: **P.Start**, **P.End**, **T.Start**, **T.End**.
3) Press enter to open this menu. Use the Up / Down buttons to set the desired value.
4) Once you have set the desired mode, press the enter button to store your setting.

3.3 Default

1) Press Menu, until the display shows: **Default**
2) Press Enter and use the Up/Down buttons to choose: **Yes** or **No**.
3) If you use Yes, the device will return to the factory default setting.

3.4 Send

1) Press Menu, until the display shows: **Send**
2) Press Enter and use the Up/Down buttons to choose: **Yes** or **No**.
3) If you use Yes, the device will send all settings to in-line fixtures.

4. Runmode

With this menu you can set the different run modes for the Indigo.

RUNMODE

1) Press Menu, until the display shows: **Runmode**
2) Press enter to open this menu. You can choose 3 different submenus.

RUN
DOWN
EDIT
DOWN
SEND

4.1 Run

DMX Active

With this menu you able to control the device by DMX.

RUNMODE → **ENTER** → **RUN** → **ENTER** → **RUN DMX512**

1) Press Menu, until the display shows: **Runmode**
2) Press Enter and use the Up/Down buttons to go to the **Run** menu.
3) Press enter to open this menu. Scroll through the menu until the display shows **DMX512**.
4) Once you have set DMX control, press the enter button to store your setting. The device will be DMX Controlled.

Built-in Programs Mode

With this menu you can select 5 different Programs when using the Indigo.

ENTER → **ENTER** →

RUNMODE	RUN	RUN AUTO1
		RUN AUTO2
		RUN SOUND1
		RUN SOUND2
		RUN CUSTOM

1) Press Menu, until the display shows: **Runmode**
2) Press Enter and use the Up/Down buttons to go to the **Run** menu.
3) Press enter to open this menu. Scroll through the menu until the display shows **Auto1**, **Auto2**, **Sound1**, **Sound2** or **Custom**. You have 5 options to control the device as a stand-alone device.
4) Once you have chosen your desired mode, press the enter button to store your setting. The device will start the built-in program.

Built-in Programs (Auto1 + Auto2)

The device will play its built-in stand-alone programs.

Sound-controlled (Sound1 + Sound2)

The device will play its built-in stand-alone sound-controlled programs. The device is now sound-controlled and will react to the music.

Custom Mode

⚠ For a custom program to run, you have to enter some values first.
For more information, please see **4.2 Edit menu**.

Run Test

With this menu you are able to test the device.

ENTER → **ENTER** →

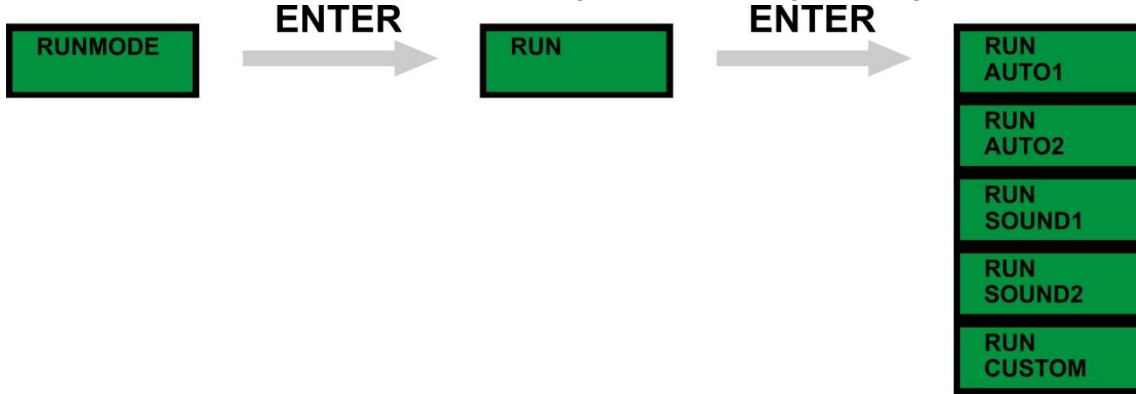| RUNMODE | RUN | RUN TEST |

1) Press Menu, until the display shows: **Runmode**
2) Press Enter and use the Up/Down buttons to go to the **Run** menu.
3) Press enter to open this menu. Scroll through the menu until the display shows **TEST**.
4) When you press ENTER, the display will blink once and the device will start an internal test.

Slave Mode

With this menu you are able to set the device as a slave device.
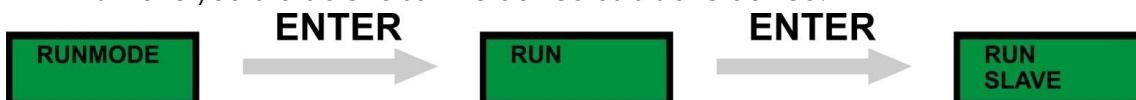
ENTER → **ENTER** →

| RUNMODE | RUN | RUN SLAVE |

1) Press Menu, until the display shows: **Runmode**
2) Press Enter and use the Up/Down buttons to go to the **Run** menu.
3) Press enter to open this menu. Scroll through the menu until the display shows **Slave**.
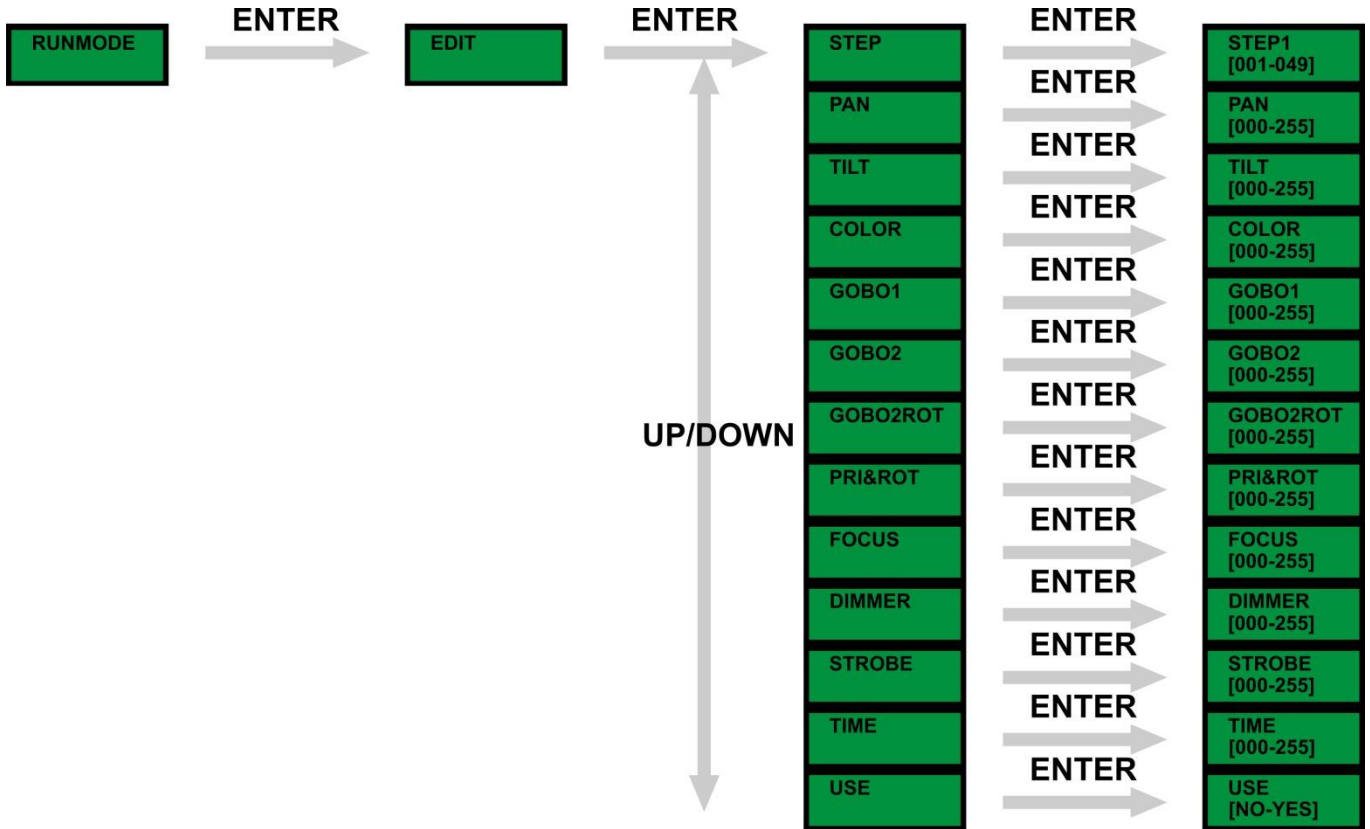4) When you press ENTER, the display will blink once and the device will be in slave mode.

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4.2. Edit

With this menu you are able to set a wide variety of special settings.

RUNMODE	**ENTER** →	EDIT	**ENTER** →		**ENTER** →	
				STEP	ENTER →	STEP1 [001-049]
				PAN	ENTER →	PAN [000-255]
				TILT	ENTER →	TILT [000-255]
				COLOR	ENTER →	COLOR [000-255]
				GOBO1	ENTER →	GOBO1 [000-255]
				GOBO2	ENTER →	GOBO2 [000-255]
			UP/DOWN	GOBO2ROT	ENTER →	GOBO2ROT [000-255]
				PRI&ROT	ENTER →	PRI&ROT [000-255]
				FOCUS	ENTER →	FOCUS [000-255]
				DIMMER	ENTER →	DIMMER [000-255]
				STROBE	ENTER →	STROBE [000-255]
				TIME	ENTER →	TIME [000-255]
				USE	ENTER →	USE [NO-YES]

⚠ You first have to create a **Step** and press enter. Then the entire Menu will appear ⚠.

1) Press Menu, until the display shows: **Runmode**
2) Press Enter, until the display shows: **Edit**
3) Press Enter and then create a **Step** and press enter.
4) Now use the Up/Down buttons to scroll through the options: **Pan**, **Tilt**, **Color**, **Gobo1**, **Gobo2**, **Gobo2Rot**, **Prism Rotation**, **Focus**, **Dimmer**, **Strobe**, **Time**, **Use**.
5) Press enter to open this menu. Use the Up / Down buttons to set the desired setting.
6) Once you have set the desired mode, press the enter button to store your setting.

Note: If you want to circulate the created steps, please set the last step as 0.

For example, when you have 3 steps, the setting should be:
Step 1 **Time** = 4   **Use** = Yes
Step 2 **Time** = 5   **Use** = Yes
Step 3 **Time** = 0   **Use** = Yes

4.3 Send

SEND	**ENTER** →	SEND [NO/YES]

1) Press Menu, until the display shows: **Send**
2) Press Enter and use the Up/Down buttons to choose: **Yes** or **No**.
3) If you use Yes, the device will send all settings to in-line fixtures.
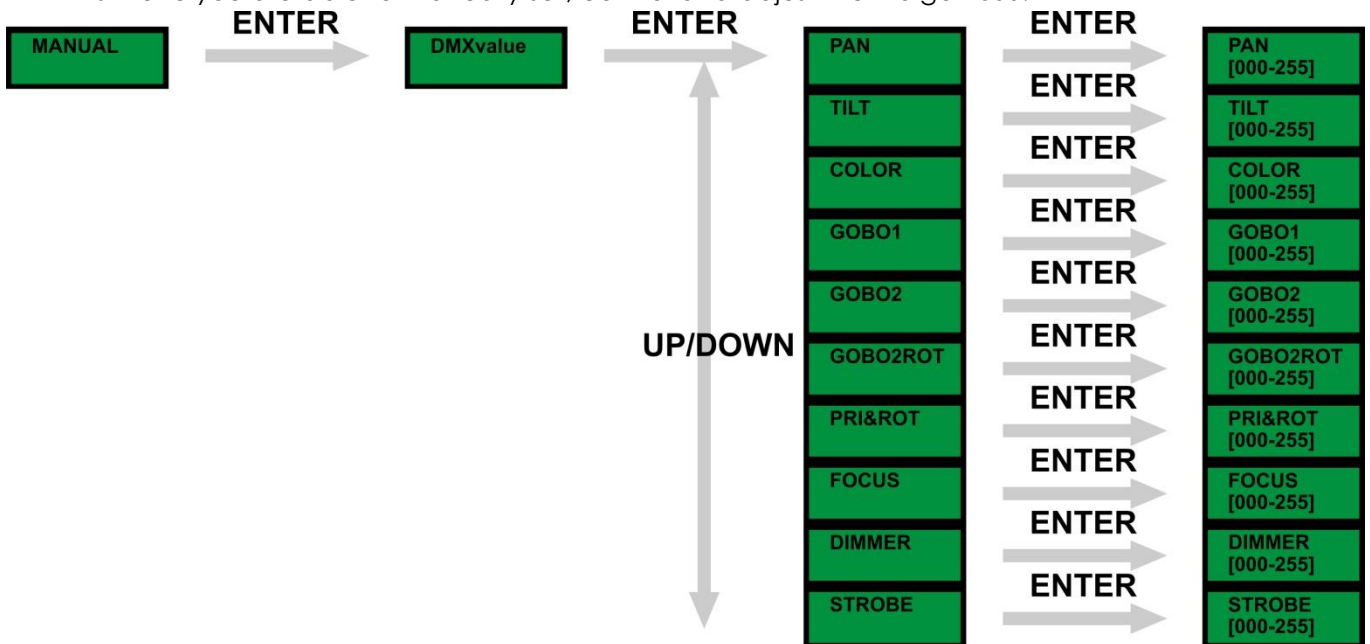
5. Manual

5.1 Reset
With this menu you can reset the device.

```
┌──────────┐              ┌──────────┐              ┌──────────┐
│ MANUAL   │  ENTER  ───▶ │ RESET    │  ENTER  ───▶ │ RESET    │
│          │              │          │              │ [NO/YES] │
└──────────┘              └──────────┘              └──────────┘
```

1) Press Menu, until the display shows: **Manual**
2) Press Enter and use the Up/Down buttons to go to the **Reset** menu.
3) Press enter to open this menu. You can choose **Yes** or **No** mode.
     Use the Up / Down buttons to select one.
4) Once you have set Yes, the device will perform a full reset and it will take 15 seconds to reset.
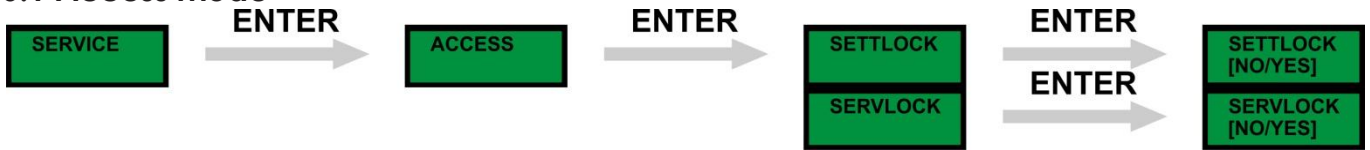

5.2 DMX Value
With this menu you are able to manually set, control and adjust the Indigo 4600.

```
┌──────────┐           ┌──────────┐          ┌──────────┐   ENTER   ┌──────────────┐
│ MANUAL   │  ENTER ──▶│ DMXvalue │  ENTER ─▶│ PAN      │   ──────▶ │ PAN          │
└──────────┘           └──────────┘          │          │           │ [000-255]    │
                                             ├──────────┤   ENTER   ├──────────────┤
                                             │ TILT     │   ──────▶ │ TILT         │
                                             │          │           │ [000-255]    │
                                             ├──────────┤   ENTER   ├──────────────┤
                                             │ COLOR    │   ──────▶ │ COLOR        │
                                             │          │           │ [000-255]    │
                                             ├──────────┤   ENTER   ├──────────────┤
                                             │ GOBO1    │   ──────▶ │ GOBO1        │
                                             │          │           │ [000-255]    │
                                             ├──────────┤   ENTER   ├──────────────┤
                                             │ GOBO2    │   ──────▶ │ GOBO2        │
                                  UP/DOWN    │          │           │ [000-255]    │
                                  ↕          ├──────────┤   ENTER   ├──────────────┤
                                             │ GOBO2ROT │   ──────▶ │ GOBO2ROT     │
                                             │          │           │ [000-255]    │
                                             ├──────────┤   ENTER   ├──────────────┤
                                             │ PRI&ROT  │   ──────▶ │ PRI&ROT      │
                                             │          │           │ [000-255]    │
                                             ├──────────┤   ENTER   ├──────────────┤
                                             │ FOCUS    │   ──────▶ │ FOCUS        │
                                             │          │           │ [000-255]    │
                                             ├──────────┤   ENTER   ├──────────────┤
                                             │ DIMMER   │   ──────▶ │ DIMMER       │
                                             │          │           │ [000-255]    │
                                             ├──────────┤   ENTER   ├──────────────┤
                                             │ STROBE   │   ──────▶ │ STROBE       │
                                             │          │           │ [000-255]    │
                                             └──────────┘           └──────────────┘
```

1) Press Menu, until the display shows: **Manual**
2) Press Enter and use the Up/Down buttons until the display shows: **DMXvalue**
3) Now use the Up/Down buttons to scroll through the options: **Pan**, **Tilt**, **Color**, **Gobo1**, **Gobo2**, **Gobo2Rot**, **Prism Rotation**, **Focus**, **Dimmer**, **Strobe**.
4) Press enter to open this menu. Use the Up / Down buttons to set the desired setting.
5) Once you have set the desired mode, press the enter button to store your setting.

6. Service

6.1 Access Mode

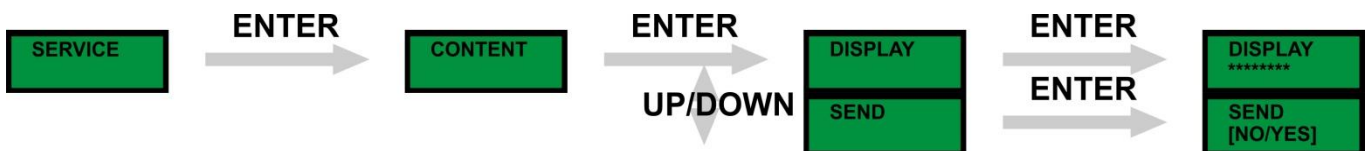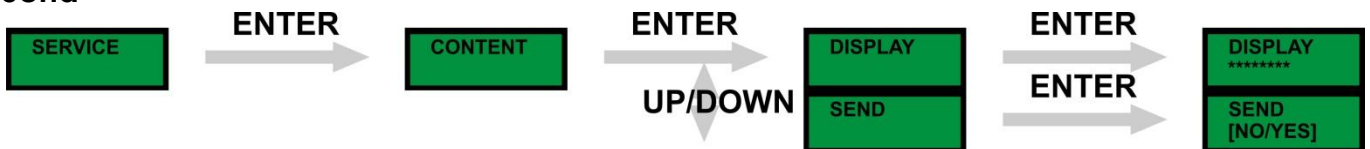| SERVICE | **ENTER** → | ACCESS | **ENTER** → | SETTLOCK
SERVLOCK | **ENTER** →
ENTER | SETTLOCK
[NO/YES]
SERVLOCK
[NO/YES] |

1) Press Menu, until the display shows: **Service**
2) Press Enter and use the Up/Down buttons until the display shows: **Access** menu.
3) Press Enter to open this menu. Use the Up / Down buttons to select **Settlock** or **Servlock**.
   Settlock: access the settings Menu (Yes or No)
   Servlock access the service menu (Yes or No)
4) Press Enter to open one of these menus. Use the Up / Down buttons to select **Yes** or **No**.

6.2 Info version

| SERVICE | **ENTER** → | INFO | **ENTER** → | VERSION | **ENTER** → | VERSION
S630 V1.0 |

1) Press Menu, until the display shows: **Service**
2) Press Enter and use the Up/Down buttons until the display shows: **Info** menu.
3) Press Enter to open this menu and select **Version**.
4) Press enter to see your Indigo version number.

6.3 Display/Send

Display

| SERVICE | **ENTER** → | CONTENT | **ENTER** →
UP/DOWN | DISPLAY
SEND | **ENTER** →
ENTER | DISPLAY
****
SEND
[NO/YES] |

1) Press Menu, until the display shows: **Service**
2) Press Enter and use the Up/Down buttons until the display shows: **Content** menu.
3) Press Enter to open the Display menu and press **Enter**.
4) You can now edit the first line of display content.

Send

| SERVICE | **ENTER** → | CONTENT | **ENTER** →
UP/DOWN | DISPLAY
SEND | **ENTER** →
ENTER | DISPLAY
****
SEND
[NO/YES] |

1) Press Menu, until the display shows: **Service**
2) Press Enter and use the Up/Down buttons until the display shows: **Content** menu.
3) Press Enter to open the Send menu and press **Enter**.
4) You can now transfer the display content to all fixtures currently connected via the DMX data cable.

DMX Channels

14 Channels (Person 1)

Channel 1 – Horizontal movement (Pan)
Push the slider up, in order to move head horizontally (PAN).
Gradual head adjustment from one end of the slider to the other (0-255, 128-center).
The head can be turned by 540° and stopped at any position you wish.

Channel 2 – Pan fine 16 bit

Channel 3 – Vertical movement (Tilt)
Push the slider, up in order to move head vertically (TILT).
Gradual head adjustment from one end of the slider to the other (0-255, 128-center).
The head can be turned by 270° and stopped at any position you wish.

Channel 4 – Tilt fine 16 bit

Channel 5 – PAN/TILT Speed

0-255	From Max Speed (0) to Min. Speed (255)

Channel 6 – Colourwheel
Linear color change following the movement of the slider. Between 220 - 255, the color-wheel rotates continuously the so-called "Rainbow" effect.

0-9	Open / White
10-19	Red
20-29	Green
30-39	Yellow
40-49	Blue
50-59	Orange
60-69	Magenta
70-79	Light Blue
80-99	Light Blue → Magenta
100-119	Magenta → Orange
120-139	Orange → Blue
140-159	Blue → Yellow
160-179	Yellow → Green
180-199	Green → Red
200-219	Red → Open White
220-255	Forwards (CW) Rainbow effect from slow to fast

Channel 7 – Static Gobo-wheel + Gobo Shake

0-10	Open / White
11-20	Metal Gobo 1
21-30	Metal Gobo 2
31-40	Metal Gobo 3
41-50	Metal Gobo 4
51-60	Metal Gobo 5
61-70	Metal Gobo 6
71-80	Metal Gobo 7
81-90	Metal Gobo 8
91-105	Gobo Shake 8 from slow to fast
106-120	Gobo Shake 7 from slow to fast
121-135	Gobo Shake 6 from slow to fast
136-150	Gobo Shake 5 from slow to fast
151-165	Gobo Shake 4 from slow to fast
166-180	Gobo Shake 3 from slow to fast
181-195	Gobo Shake 2 from slow to fast
196-210	Gobo Shake 1 from slow to fast
211-255	Forwards (CW) gobo-wheel rotation from slow to fast

Channel 8 – Rotating Gobo-wheel + Gobo Shake

0-10	Open / White
11-20	Glass Gobo 1
21-30	Glass Gobo 2
31-40	Metal Gobo 3
41-50	Metal Gobo 4
51-60	Metal Gobo 5
61-70	Metal Gobo 6
71-80	Metal Gobo 7
81-95	Gobo Shake 7 from slow to fast
96-110	Gobo Shake 6 from slow to fast
111-125	Gobo Shake 5 from slow to fast
126-140	Gobo Shake 4 from slow to fast
141-155	Gobo Shake 3 from slow to fast
156-170	Gobo Shake 2 from slow to fast
171-185	Gobo Shake 1 from slow to fast
186-255	Gobo-wheel rotation from slow to fast

Channel 9 – Rotation Gobo

0-60	Counter Clockwise Gobo-indexing
61-150	Forwards (CW) gobo rotation from slow to fast
151-165	No Function
166-255	Backwards (CCW) gobo rotation from slow to fast

Channel 10 – Prism rotating control

0-4	No Prism Rotation
5-9	Prism but no Rotation
10-127	Backwards (CCW) rotation from slow to fast
128-132	Prism but no Rotation
133-255	Forwards (CW) rotation from slow to fast

Channel 11 – Focus

0-255	Continuous adjustment from near to far

Channel 12 – Dimmer intensity (Shutter must be open ⚠)

0-255	From black to brightest

Channel 13 – Shutter / Strobe (Dimmer must be open ⚠)

0-31	Close
32-63	Shutter open
64-95	Strobe effect, from slow to fast (0-10 flashes/sec.)
96-127	Shutter open
128-159	Pulse-effect, in sequences from slow to fast
160-191	Shutter open
192-223	Random strobe effect, from slow to fast
224-255	Shutter open

Channel 14 – Channel Functions

0-19	No Function
20-39	Blackout during Pan/Tilt movement
40-59	Blackout during Pan/Tilt movement deactivated
60-79	Fan automatic
80-99	Fan slow
100-119	Fan standard
120-139	Fan high speed
140-149	Auto 1 (activated after 5 seconds)
150-159	Auto 2 (activated after 5 seconds)
160-169	Test (activated after 5 seconds)
170-179	Custom (P/Start, F/Start)
180-189	Sound 1 (activated after 5 seconds)

190-199	Sound 2 (activated after 5 seconds)
200-219	Reset (activated after 5 seconds)
220-235	No Function
236-239	DIM 0 (activated after 5 seconds)
240-243	DIM 1 (activated after 5 seconds)
244-247	DIM 2 (activated after 5 seconds)
248-251	DIM 3 (activated after 5 seconds)
252-255	DIM 4 (activated after 5 seconds)

⚠ When CH14 is set between 236-255, CH 12 (Dimmer) must also be used, for the DIM functions to work ⚠

11 Channels (Person 2)

Channel 1 – Horizontal movement (Pan)
Push the slider up, in order to move head horizontally (PAN).
Gradual head adjustment from one end of the slider to the other (0-255, 128-center).
The head can be turned by 540° and stopped at any position you wish.

Channel 2 – Vertical movement (Tilt)
Push the slider, up in order to move head vertically (TILT).
Gradual head adjustment from one end of the slider to the other (0-255, 128-center).
The head can be turned by 270° and stopped at any position you wish.

Channel 3 – Colourwheel
Linear color change following the movement of the slider. Between 220 - 255, the color-wheel rotates continuously the so-called "Rainbow" effect.

0-9	Open / White
10-19	Red
20-29	Green
30-39	Yellow
40-49	Blue
50-59	Orange
60-69	Magenta
70-79	Light Blue
80-99	Light Blue → Magenta
100-119	Magenta → Orange
120-139	Orange → Blue
140-159	Blue → Yellow
160-179	Yellow → Green
180-199	Green → Red
200-219	Red → Open White
220-255	Rainbow effect from slow to fast

Channel 4 – Static Gobo-wheel + Gobo Shake

0-10	Open / White
11-20	Metal Gobo 1
21-30	Metal Gobo 2
31-40	Metal Gobo 3
41-50	Metal Gobo 4
51-60	Metal Gobo 5
61-70	Metal Gobo 6
71-80	Metal Gobo 7
81-90	Metal Gobo 8
91-105	Gobo Shake 8 from slow to fast
106-120	Gobo Shake 7 from slow to fast
121-135	Gobo Shake 6 from slow to fast
136-150	Gobo Shake 5 from slow to fast
151-165	Gobo Shake 4 from slow to fast
166-180	Gobo Shake 3 from slow to fast
181-195	Gobo Shake 2 from slow to fast
196-210	Gobo Shake 1 from slow to fast
211-255	Forwards (CW) gobo-wheel rotation from slow to fast

Channel 5 – Rotating Gobo-wheel + Gobo Shake

0-10	Open / White
11-20	Glass Gobo 1
21-30	Glass Gobo 2
31-40	Metal Gobo 3
41-50	Metal Gobo 4
51-60	Metal Gobo 5
61-70	Metal Gobo 6
71-80	Metal Gobo 7
81-95	Gobo Shake 7 from slow to fast
96-110	Gobo Shake 6 from slow to fast
111-125	Gobo Shake 5 from slow to fast
126-140	Gobo Shake 4 from slow to fast
141-155	Gobo Shake 3 from slow to fast
156-170	Gobo Shake 2 from slow to fast
171-185	Gobo Shake 1 from slow to fast
186-255	Gobo-wheel rotation from slow to fast

Channel 6 – Rotation Gobo

0-60	Counter Clockwise Gobo-indexing
61-150	Forwards (CW) gobo rotation from slow to fast
151-165	No Function
166-255	Backwards (CCW) gobo rotation from slow to fast

Channel 7 – Prism rotating control

0-4	No Prism Rotation
5-9	Prism but no Rotation
10-127	Backwards (CCW) rotation from slow to fast
128-132	Prism but no Rotation
133-255	Forwards (CW) rotation from slow to fast

Channel 8 – Focus

0-255	Continuous adjustment from near to far

Channel 9 – Dimmer intensity (Shutter must be open ⚠)

0-255	From black to brightest

Channel 10 – Shutter / Strobe (Dimmer must be open ⚠)

0-31	Close
32-63	Shutter open
64-95	Strobe effect, from slow to fast (0-10 flashes/sec.)
96-127	Shutter open
128-159	Pulse-effect, in sequences from slow to fast
160-191	Shutter open
192-223	Random strobe effect, from slow to fast
224-255	Shutter open

Channel 11 – Channel Functions

0-19	No Function
20-39	Blackout during Pan/Tilt movement
40-59	Blackout during Pan/Tilt movement deactivated
60-79	Fan automatic
80-99	Fan slow
100-119	Fan standard
120-139	Fan high speed
140-149	Auto 1 (activated after 5 seconds)
150-159	Auto 2 (activated after 5 seconds)
160-169	Test (activated after 5 seconds)
170-179	Custom (P/Start, F/Start)
180-189	Sound 1 (activated after 5 seconds)

190-199	Sound 2 (activated after 5 seconds)
200-219	Reset (activated after 5 seconds)
220-235	No Function
236-239	DIM 0 (activated after 5 seconds)
240-243	DIM 1 (activated after 5 seconds)
244-247	DIM 2 (activated after 5 seconds)
248-251	DIM 3 (activated after 5 seconds)
252-255	DIM 4 (activated after 5 seconds)

⚠ When CH11 is set between 236-255, CH 9 (Dimmer) must also be used, for the DIM functions to work ⚠

Channel settings

41385 Indigo 4600   Fixture-settings - Advanced Mode

Channel	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Function	Pan	Pan-Fine	Tilt	Tilt-Fine	Pan/Tilt Speed	Colorwheel	Static Gobowheel	Rotating Gobowheel	Gobo Rotation	Prism Rotation	Focus	Dimmer	Shutter Strobe	Control

Channel 1 Pan: 255 / 540° / 128 / 0° / 0

Channel 2 Pan-Fine: 255 / 270° / 128 / 0

Channel 3 Tilt: 255 / 270° / 128 / 0° / 0

Channel 4 Tilt-Fine: 255 / 128 / 0

Channel 5 Pan/Tilt Speed: 255 Slow / 0 Fast

Channel 6 Colorwheel:
220-255
200-219
180-199
160-179
140-159
120-139
100-119
80-99
70-79
60-69
50-59
40-49
30-39
20-29
10-19
0-9

Channel 7 Static Gobowheel:
211-255
196-210
181-195
166-180
151-165
136-150
121-135
106-120
91-105
81-90
71-80
61-70
51-60
41-50
31-40
21-30
11-20
0-10

Channel 8 Rotating Gobowheel:
186-255
171-185
156-170
141-155
126-140
111-125
96-110
81-95
71-80
61-70
51-60
41-50
31-40
21-30
11-20
0-10

Channel 9 Gobo Rotation:
255 Fast
166 Slow
165
No Function
151
150 Fast
61 Slow
60
Gobo rotate Index
0

Channel 10 Prism Rotation:
255 Fast
133 Slow
132
Prism No Rotation
128
127 Fast
10 Slow
9
Prism No Rotation
5
4
No Function
0

Channel 11 Focus:
255 Far
127
Near
0

Channel 12 Dimmer:
255
0

Channel 13 Shutter Strobe:
255 Shutter open
224
223 Fast Random Strobe
192 Slow
191 Shutter open
160
159 Fast Pulse Effect
128 Slow
127 Shutter open
96
95 Fast Strobe Effect max. 10 Flash
64 Slow
63 Shutter open
32
31 Shutter closed
0

Channel 14 Control:
255 DIM 4
252
251 DIM 3
248
247 DIM 2
244
243 DIM 1
240
239 DIM 0
236
235 No Function
220
219 Reset
200
199 Sound 2
190
189 Sound 1
180
179 Custom
170
169 Test
160
159 Auto 2
150
149 Auto 1
140
139 Fast Fans
120
119 Normal Fans
100
99 Slow Fans
80
79 Auto Fans
60
59 Blackout deactivated during Pan/Tilt movement
40
39 Blackout during Pan/Tilt movement
20
19 No Function
0

Fig. 6

Maintenance

The operator has to make sure that safety-relating and machine-technical installations are to be inspected by an expert after every year in the course of an acceptance test.
The operator has to make sure that safety-relating and machine-technical installations are to be inspected by a skilled person once a year.

The following points have to be considered during the inspection:
1. All screws used for installing the device or parts of the device have to be tightly connected and must not be corroded.
2. There may not be any deformations on housings, fixations and installation spots.
3. Mechanically moving parts like axles, eyes and others may not show any traces of wearing.
4. The electric power supply cables must not show any damages or material fatigue.

The Showtec Indigo 4600 LED requires almost no maintenance. However, you should keep the unit clean. Otherwise, the fixture's light-output will be significantly reduced. Disconnect the mains power supply, and then wipe the cover with a damp cloth. Do not immerse in liquid. Wipe lens clean with glass cleaner and a soft cloth. Do not use alcohol or solvents.
The front lens will require weekly cleaning, as smoke-fluid tends to build up residues, reducing the light-output very quickly.
The cooling-fans, colour-wheel, the gobowheel, the gobos and the internal lenses should be cleaned monthly with a soft brush.
Please clean internal components once a year with a light brush and vacuum cleaner.
Keep connections clean. Disconnect electric power, and then wipe the DMX and audio connections with a damp cloth. Make sure connections are thoroughly dry before linking equipment or supplying electric power.

Replacing a Fuse

Power surges, short-circuit or inappropriate electrical power supply may cause a fuse to burn out. If the fuse burns out, the product will not function whatsoever. If this happens, follow the directions below to do so.

1. Unplug the unit from electric power source.
2. Insert a flat-head screwdriver into a slot in the fuse cover. Gently pry up the fuse cover. The fuse will come out.
3. Remove the used fuse. If brown or unclear, it is burned out.
4. Insert the replacement fuse into the holder where the old fuse was. Reinsert the fuse cover. Be sure to use a fuse of the same type and specification. See the product specification label for details.

Replacing a Gobo from the rotating Gobowheel

1. Disconnect mains power supply and set the switch to OFF.
2. Make sure that the gobo you want to insert has the same size. For the right size, see below.

Gobo Size

Fig. 7

Fig. 8
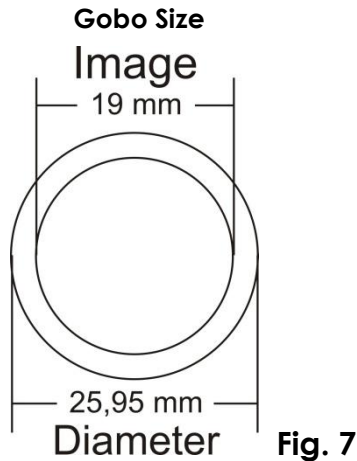
3. Before removing the top part of the housing, make sure the lens is in the position as shown on the left. The lens position should be on the bottom, symmetrically speaking.
4. Loosen the 4 screws on the back of the housing.
5. Gently tilt the head so the small metal housing will slide out more easy.
6. Turn the gobo wheel, with the gobo you want to remove, to the upside.

7. Gently lift up the gobo holder 10° and then gently pull out the gobo from its position.
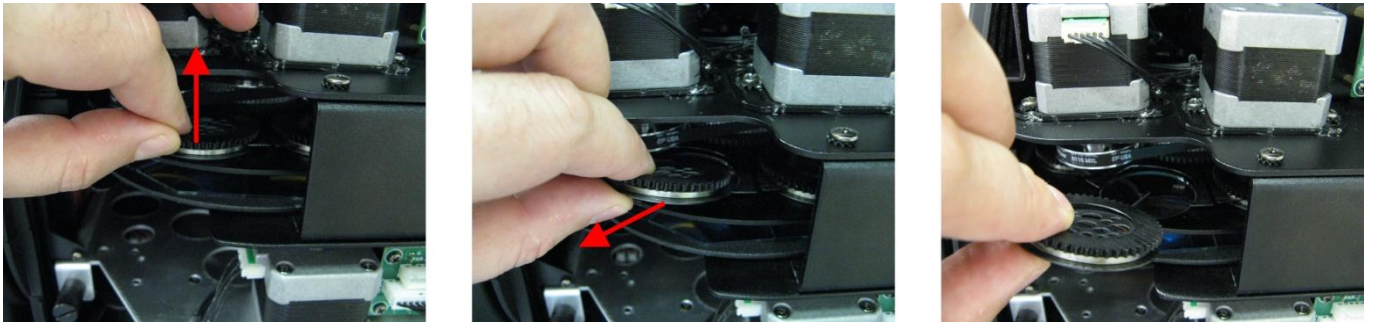
Fig. 9

8. Very carefully take the gobo out of the gobo holder with a pair of pliers.
9. Place the new gobo in the gobo holder. Carefully put the pinchcock back, gently press the pinchcock a little bit together. Possibly use a pair of pliers to press the pinchcock a little bit together.
10. Put the gobo holder back under the pressing snap and push it back.
11. Replace the maintenance caps and fasten all screws.

Glass Gobo Orientation

Coated glass gobos are inserted with the coating against the rim of the holder (away from the spring). Textured gobos are inserted with the smooth side against the spring. This provides the best results when combining rotating gobos.

Coated side   **Uncoated side**
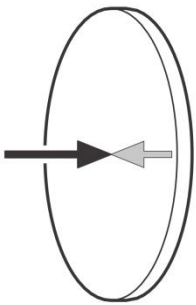
When an object is held up to the coated side there is no space between the object and its reflection. The back edge of the gobo cannot be seen when looking through the coated side.
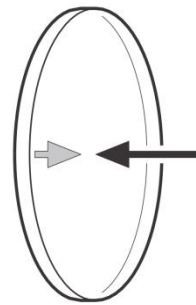
When an object is held up to the uncoated side there is a space between the object and its reflection. The back edge of the gobo can be seen when looking through the uncoated side.

Static Gobowheel, Rotating Gobowheel and Colorwheel
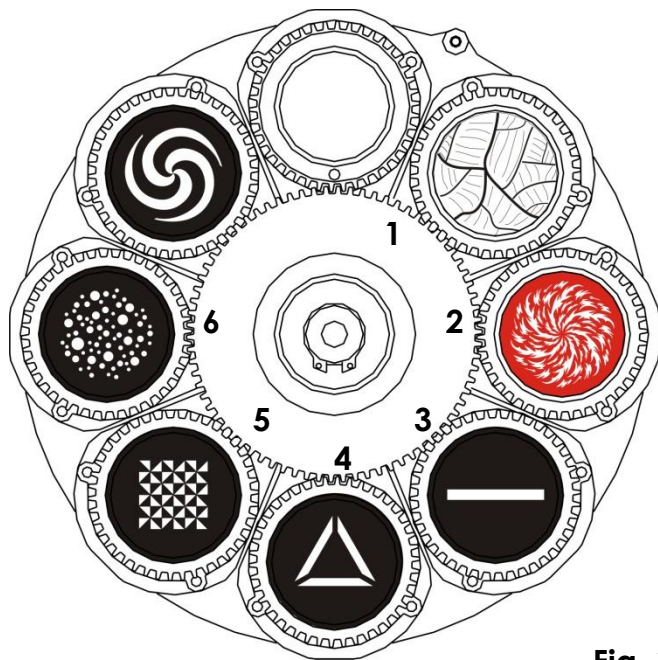
Rotating Gobo-wheel

Fig. 10

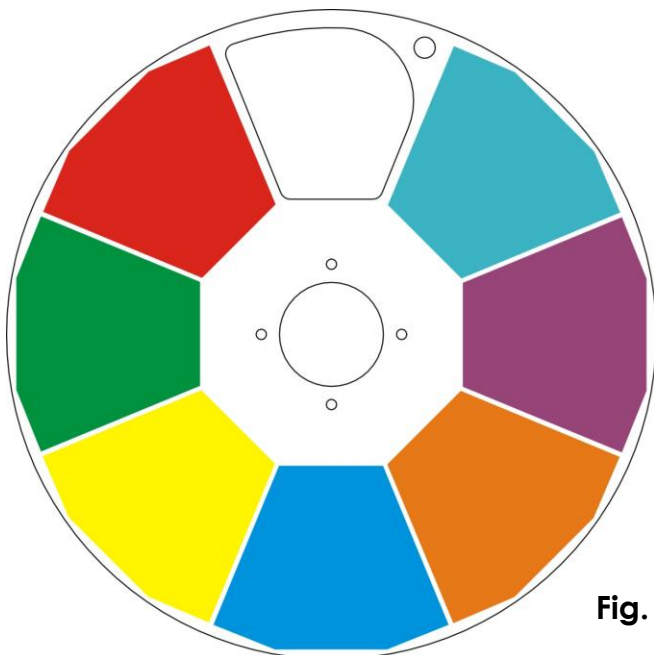## Static Gobo-wheel

Fig. 11

Color-wheel

Fig. 12

Troubleshooting

No Light

This troubleshooting guide is meant to help solve simple problems. If a problem occurs, carry out the steps below in sequence until a solution is found. Once the unit operates properly, do not carry out following steps.

If the light effect does not operate properly, refer servicing to a technician.

Response: Suspect three potential problem areas: the power supply, the lamp, the fuse.

1. Power supply. Check that the unit is plugged into an appropriate power supply.
2. The LEDs. Return the Indigo 4600 LED to your Showtec dealer.
3. The fuse. Replace the fuse. See page 27 for replacing the fuse.

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No Response to DMX

Response: Suspect the DMX cable or connectors, a controller malfunction, a light effect DMX card malfunction.

1. Check the DMX cable: Unplug the unit; change the DMX cable; then reconnect to electrical power. Try your DMX control again.
2. Determine whether the controller or light effect is at fault. Does the controller operate properly with other DMX products ? If not, take the controller in for repair. If so, take the DMX cable and the light effect to a qualified technician.

Problem	Probable cause(s)	Remedy
One or more fixtures are completely dead.	No power to the fixture	• Check that power is switched on and cables are plugged in.
	Primary fuse blown.	• Replace fuse.
Fixtures reset correctly, but all respond erratically or not at all to the controller.	The controller is not connected.	• Connect controller.
	3-pin XLR Out of the controller does not match XLR Out of the first fixture on the link (i.e. signal is reversed).	• Install a phase reversing cable between the controller and the first fixture on the link.
Fixtures reset correctly, but some respond erratically or not at all to the controller.	Poor data quality	• Check data quality. If much lower than 100 percent, the problem may be a bad data link connection, poor quality or broken cables, missing termination plug, or a defective fixture disturbing the link.
	Bad data link connection	• Inspect connections and cables. Correct poor connections. Repair or replace damaged cables.
	Data link not terminated with 120 Ohm termination plug.	• Insert termination plug in output jack of the last fixture on the link.
	Incorrect addressing of the fixtures.	• Check address setting.
	One of the fixtures is defective and disturbs data transmission on the link.	• Bypass one fixture at a time until normal operation is regained: unplug both connectors and connect them directly together. • Have the defective fixture serviced by a qualified technician.
	3-pin XLR Out on the fixtures does not match (pins 2 and 3 reversed).	• Install a phase-reversing cable between the fixtures or swap pin 2 and 3 in the fixture, that behaves erratically.
Shutter closes suddenly	The color wheel, gobowheel or a gobo has lost its index position and the fixture is resetting the effect.	• Contact a technician for servicing the problem persists.
No light or lamp cuts out intermittently	Fixture is too hot.	• Allow fixture to cool. • Clean fan. • Make sure air vents at control panel and front lens are not blocked. • Turn up the air conditioning .
	LEDs damaged	• Disconnect fixture and return to your dealer.
	The power supply settings do not match local AC voltage and frequency.	• Disconnect fixture. Check settings and correct if necessary.

Product Specification

Model: Showtec Indigo 4600 LED
- Input Voltage: 100~240VAC...47/63Hz
- Power consumption: 120W max @FO
- Fuse 3,15 A / 250V
- Dimensions (LxWxH): 330 x 270 x 500 mm (LxWxH)
- Weight: 9,5 kg

Operation and Programming
Signal pin OUT: pin 1 earth, pin 2 (-), pin 3 (+)
Set Up and Addressing: LED control panel
Pan/Tilt resolution: 8-16 bit
DMX Channels: 11 or 14
Signal input 3 and 5-pin XLR male
Signal output 3 and 5-pin XLR female

Electro-mechanical effects
- High efficiency optics
- Lightweight
- Ideal solution for clubs, mobile DJ and smaller rental applications.
- Compact size
- Standard DIM4 dimming technology on board to simulate special dimming effects
- Two gobo wheels, one color wheel, a rotating prism, DMX focus and a strobe.
- DMX-control via standard DMX-controller
- Music Control
- Automatic Pan/Tilt correction
- Rotating Gobowheel with 7 rotating interchangeable gobos (2 glass, 5 metal) and open with Gobo Shake
- Static Gobowheel with 8 static gobos and open with Gobo Shake Function
- Colourwheel with 7 vivid colours and white
- Built in Automatic Programs
- Built in Sound activated programs
- Built in Macros via DMX
- 3 facet, rotating prism
- User selectable pan/tilt ranges
- Pan/Tilt movement blackout
- Pan/Tilt resolution 8/16 Bit
- Cooling system: Low Noise Fan
- Beam Angle: 16° degrees
- Shutter: 0-20Hz
- Dimmer: 0-100% electronic dimmer
- Focus: Electronic focus
- Housing: Flame-retardant plastic
- Cooling: Forced Cooling (Fan)
- Slot-n-Lock Gobo
- Fixture Connection Data in/Out (XLR 3/5 Pin)
- On Board: Display for easy Set Up
- IP Rating: IP-20
- Power in (Volex)
- Pan 0° -- 540°
- Tilt 0° -- 270°
- Control: DMX-512, Auto, Master/Slave, Sound
- Light Source: 3x 10W CW
- Output: Lumen: 1800+
- Lux@2m: 7300+
- Efficiency: 60 lm/W

Gobos
Colourwheel: heat-resistant and intensify glass; dichroic glas coating
Max. ambient temperature t_a: 40°C; Max. housing temperature t_B: 80°C
Cooling: axial fans
Motor: high quality stepping-motor controlled by microprocessors

Minimum distance:
Minimum distance from flammable surfaces: 0.5m
Minimum distance to lighted object: 1.3m

Design and product specifications are subject to change without prior notice.

$C\epsilon$

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