# So infinity 

## MANUAL



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## 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 dealerimmediately and reta in packing material for inspection if any parts a ppear 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 retumed to the factory, it is important that the fixture be retumed in the original factory boxand packing.

## Your shipment includes:

- Infinity iS-100 LED Spot with Powerc on powerc able $0,9 m$
- 2 brackets for truss mounting
- Safety eye
- Usermanual



## LED Expected Lifespan

LEDs gradually decline in brightness overtime. 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 a re used at their fullest intensity, life of the LEDs is signific a ntly reduced. If improving your lifespan expectancy is of a higher prionty, 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 hasto:

- 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 wa ming notes written in this ma nual.
Please consider that damagescaused by manual modific ations to the device are not subject to warranty.
This device contains no user-serviceable parts. Referservicing to qualified technicians only.

## IMPORTANT:

The ma nufac cturer will not accept liability for a ny resulting da magescaused by the nonobservance of this manual or a ny unauthorized modific ation to the device.

- Never let the power-cord come into contact with othercables! Handle the power-cord and all connections with the mains with partic ular caution!
- Never remove wa ming or informative labels from the unit.
- Never use a nything to coverthe ground contact.
- Never lift the fixture by holding it at the projector-head, as the mechanicsmay be damaged. Always hold the fixture at the transport handles.
- Never place any material over the lens.
- Never look directly into the light source.
- Neverleave any cableslying around.
- Never unscrew the screws of the rotating gobo, as the ball bearing will otherwise be opened.
- Do not insert objects into a ir 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, a void contact with water or other liquids.
- Only operate the fixture after having checked that the housing is fimly closed and all screws a re tightly fastened.
- Only operate the device after having familiarized with its functions.
- Avoid flames and do not put close to flammable liquids orgases.
- Always keep case closed while operating.
- Always allow free air space of at least 50 cm a round the unit for ventilation.
- Always disc onnect power from the mains, when device is not used or before cleaning! Only handle the power-cord by the plug. Neverpull out the plug by tugging the power-cord.
- Make sure that the device is not exposed to extreme heat, moisture ordust.
- Make sure that the available voltage is not higherthan stated on the rearpanel.
- Make sure that the power-cord is never crimped ordamaged. Check the device and the powercord from time to time.
- If the lens is obviously damaged, it has to be replaced. So that its functions are not impaired, due to cracksordeep 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 Infinity device fails to work properly, disc ontinue use immediately. Pack the unit securely (preferably in the original packing material), and retum it to your Infinity dealer for service.
- For a dult use only. Movinghead must be installed out of the reach of children. Never leave the unit running unattended.
- Never attempt to bypass the themostatic switch or fuses.
- For replacement use fuses of same type and rating only.
- The user is responsible for correct positioning and operating of the Infinity. The manufacturer will not accept liability for damagescaused by the misuse or incorrect insta llation of this device.
- This device fallsunder protection classl. Therefore it is essential to connect the yellow/green conductor to earth.
- During the initial start-up some smoke or smell may a rise. This is a normal process a nd does not necessarily mean that the device is defective.
- Repairs, servicing and electric connection must be camed out by a qualified technician.
- WARRANTY: Till one year after date of purchase.


## Operating Determinations

- This device is not designed for pemanent 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 ta $=45^{\circ} \mathrm{C}$ must never be exceeded.
- The relative humidity must not exceed $50 \%$ with an ambient temperature of $40^{\circ} \mathrm{C}$.
- If this device is operated in any otherway, than the one described in this manual, the product may suffer damages and the wa ranty becomes void.
- Any other operation may lead to dangers like short-circ uit, bums, electric shock, crash etc.


## You enda nger your own safety and the safety of others!

## Rigging

Please follow the European and national guidelines conceming rigging, trussing and all other sa fety issues.

Do not attempt the installation yourself !
Always let the installation be carmed 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 isforbidden.


The Infinity 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 Infinity moving head



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.

| Intemational | EUCable | UKCable | US Cable | Pin |
| :---: | :---: | :---: | :---: | :---: |
| $L$ | BROWN | RED | YELIOW/COPPER | FASE |
| $N$ | BLUE | BLACK | SILVER | NUL |
| $(\theta)$ | YELOW/GREEN | GREEN | GREEN | EARTH |

Make sure that the device is always connected properly to the earth!
Improper installation can cause serious damage to people and property!


## $\triangle$ Retum Procedure $\Delta$

Retumed merchandise must be sent prepaid and in the original packing, call tags will not be issued. Package must be clearly labeled with a Retum Authorization Number (RMA number). Products retumed without an RMA number will be refused. Highlite will not accept the retumed goodsorany 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 retum. Be sure to properly pack fixture, a ny shipping da mage 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) Yourname
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 a ny shortcomings and/or visible defects, or perform this check after our announcement that the goods are at their disposal. Damage incured in shipping is the responsibility of the shipper, therefore the damage must be reported to the camier 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 hasto be reported to uswithin one day after receipt of the delivery.
Any retum shipment has to be made post-paid at all times. Retum shipments must be accompanied with a letter defining the reason for retum shipment. Non-prepaid retum shipments will be refused, unless otherwise agreed in writing.
Complaints a gainst 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 farcomplied with all parts of the agreement, regardless of the agreement of which the obligation is resulting.

## Description of the device

## Features

The Infinity iS-100 LED Spot is a moving-head with high output a nd great effects.

- Covers with quick lock screws
- Fast color \& gobo changes due to high torque motors
- On-Board: Battery powered full color display including gravity sensor
- Quick lock screws on the covers allow you to change gobos within minutes without the need of a ny special tools
- LED source the shutter is electronic not mec hanical.
- On-Board: 16x2 Character display
- Gobo inner dia meter: 23 mm , G obo outer dia meter. 27 mm
- DMX-control via standard DMX-c ontroller
- User-selectable Pan \& Tilt ranges, $540^{\circ} / 360^{\circ} / 180^{\circ}$
- Reverse Pan / Tilt movement
- Special: Pan / Tilt movement, Color, Gobo blackout
- Pan 0o--540, Tilt 0o--270ㅇ
- Pan/Tilt resolution: 16 bit
- Control: DMX-512, Master/Sla ve, Built-in Programs
- 10 Built in programs selectable by DMX
- Light Source: 100W White LED
- Gobowheel 1: Rotating Gobowheel with 2 glass +5 metal gobos (Interchangeable)
- Gobowheel 2: Static Gobowheel with 8 metal gobos
- Gobo functions: Gobo-flow effect, Gobo shake
- Colorwheel 1: 8 dic hroic-filters and white
- Colorfunctions: Split colors, Rainbow-flow effect
- Rotation: Bi-directional
- Prism: 3-facet prisml
- Output: 52.400 Lux @ 1m.
- Beam Angle: $15^{\circ}$
- Input Volta ge: 100-240 VAC
- Continuous Power 220W max. at full output
- Dimmer: 0-100\%
- Strobe: $0-20 \mathrm{~Hz}$
- Focus: Motorized focus
- Variable motorized Iris (2-100\%)
- Housing: Black Metal \& Flame-reta rdant plastic
- Fixture Connection: XLR Data in/out (XLR 3-pin) a nd XLR Data in/out (XLR 5-pin)
- Neutrik Powercon IN / OUT
- Fuse F5AL / 250V
- Dimensions: $304 \times 366 \times 485 \mathrm{~mm}$ (LxWxH)
- Weight: $16,5 \mathrm{~kg}$
- Userselectable Basic (16CH) orAdvanced (19CH) operating modes


## Optional accessories

MOD41500 - Wireless DMX upgrade kit
The Wireless DMX upgrade kitshould be installed ONLY by a qualified technician. Do not attempt installation yourself!

## Ovenview



Fig. 01

1) Lens
2) Menu Buttons + LCD Display

## Backside



Fig. 02
03) DMX signal connector (IN) 5-pin
04) DMX signal connector (OUT) 5-pin
05) DMX signal connector (IN) 3-pin
06) DMX signal connector (OUT) 3-pin
07) Neutrik Powercon IN
08) Neutrik Powercon OUT
09) ON/OFF
10) Fuse F5AL 250 V

NOTE: Knowledge of DMX is required to fully utilize this unit.

## Installation

Remove all packing materials from the Infinity is-100 LED Spot. 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 orservicing.
Damages caused by non-obsenvance are not subject to warranty.

## Set Up and Operation

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

## Control Modes

There are 3 modes:

- Stand-alone (built-in programs)
- Master/Sla ve
- DMX512 (19 Channels ADVANCED or 16 channel BASIC)

One Infinity (Built-in Programs)

1) Fasten the effect light onto firm trussing. Leave at least 1 meter on all sides for a ir circulation.
2) Always use a safety cable (ordercode 70140/70141).
3) Plug the end of the electric mains power cord into a proper electric power supply socket.
4) When the Infinity is not connected by a DMX-cable, it functions as a stand-alone device.
5) Please see page 16 for more information about the built-in programs.

## Multiple Infinity's (Master/ Slave control)

1) Fasten the effect light onto fim trussing. Leave at least 1 meter on all sides for a ir circulation.
2) Always use a safety cable (ordercode 70140 / 70141).
3) Plug the end of the electric mains power cord into a proper electric power supply socket.
4) Use a 3-p XLR cable to connect the Infinity.

The pins:

1. Earth
2. Signal (-)
3. Signal (+)
5) Link the units as shown in (Fig. 3), Connect a DMX signal cable from the first unit's DMX "out" socket to the sec ond 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 15 (Built-in Programsor 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 Infinity's (Master/ Slave control)



Fig. 03

## Infinity is-100

## Multiple Infinity's (DMX C ontrol)

1) Fa sten the effect light onto firm trussing. Leave at least 1 meter on all sides for a ir circulation.
2) Always use a safety cable (orderc ode 70140 / 70141).
3) Plug the end of the electric mains powercord into a proper electric power supply socket.
4) Use a 3-p XLR cable to connect the Infinity'sand other devices.

5) 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.
6) Supply electric power. Plug electric mains powercords into each unit's IEC socket, then plug the otherend of the mainspower 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 Infinity's DMX Set Up



Fig. 04
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 optic ally isolated splitter may result in deterioration of the digital DMX signal.

4Maximum recommended DMX data link distance: 100 meters Maximum recommended number of Infinity'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 cablesthat can camy a high quality signaland are less prone to electromagnetic interference.

## DAP Audio Certified DMX Data Cables

- DAP Audio 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 a nd connector made by Neutrik®. Orderc ode FL71150 (1,5m.), FL713 (3m.), FL716 (6m.), FL7110 (10m.).

The Infinity iS-200 LED Spot can be operated with a controller in control mode or without the controller in stand-alone mode.

## Control Panel


A) Home button
B) Edit Menu button
C) Settings Mode Button
D) Address Setting Button
E) Infinity Logo Button
F) Up Button
G) Down Button
H) OK/ENTER
I) Left Button
J) Right Button
K) LCD Display

Fig. 05

## 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 Infinity will respond to the controller.
Please note when you use the controller, the unit has 19 channels. When using multiple Infinity's, make sure you set the DMX addresses right. Therefore, the DMX address of the first Infinity's should be 1(001); the DMX address of the sec ond Infinity should be 1+19=20(020); the DMX address of the third Infinity should be 20+19=39 (039), etc.
Please, be sure that you don't have any overlapping channels in order to control each Infinity correctly. If two or more Infinity's are addressed similarly, they will work simila rly.
For address settings, please refer to the instructions under "Addressing'.

## Controlling:

After having addressed all Infinity fixtures, you may now start operating these via your lighting controller. Note: After switc hing on, the Infinity will a uto matically detect whether DMX 512 data is received or not. If there is no data received at the DMX-input, the "IED" on the control panel will not flash.
The problem may be:
The XLR cable from the controller is not connected with the input of the Infinity.
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 Ovenview



## Main Menu Options



DMX address

Edit Mode


Settings Menu
Edit Mode

Built-in Programs


Test Mode


Info

| A | Home | $\wedge$ | Up |
| :---: | :---: | :---: | :---: |
| $\Gamma$ | Edit Menu | V | Down |
| * | Setting Mode | $\checkmark$ | OK |
| 品 | Address Setting | $<$ | Left |
| 5 | Infinity Logo | $>$ | Right |

## 1. DMX Addressing

With this menu you can set the DMX address.

1) Press the

button and select
Address
2) Press the $\square$ button, to confirm. You can choose 512 different DMX addresses. Use the Left / Right / Up / Down buttons to select the required address from
3) Once you have set the desired DMX address, press the $\square$ button to store your DMX address.

## Infinity is $\mathbf{1 0 0}$

## 2. Edit Mode

With this menu you can set your desired mode.

1) Press the
 button and select
2) Press the button, to confirm. You can choose 3 different modes.

Use the Up / Down buttons to select the required mode:

03) Once you have selected the desired mode, press the No to YES
04) Once you have selected the desired setting, press the
 button to store your settings.
05) If the device has been set to master, all slave devices will follow the master movement.
06) If the device has been set to slave, it will react the same as its master device.

## 3. Settings Menu

With this menu you can set your desired mode.

1) Press the
 button and select

2) Press the button, to confirm. You can choose 14 different modes.

Use the Up / Down buttons to select the required mode:

| 介 F * | 品 | 0 |
| :---: | :---: | :---: |
| Settings |  |  |
| Pan Reserve |  |  |
| Tilt Reserve |  | NO |
| Screen Reverse |  | NO |
| Auto Screen. Re |  | NO |
| Pan Angle |  | 540 |
| Tilt Angle |  | 270 |
| BL.0.P/T Move |  | NO |
| BL.O.Color Move |  | NO |
| BL.O.Gobo Move |  | NO |
| Wireless Enable |  | NO |
| Wireless Unlink |  | NO |
| Life Time |  |  |
| Reset Function |  |  |
| Factory Settings |  | NO |
| $\boldsymbol{\wedge} \mathbf{~} \mathbf{V}^{\text {a }}$ | $<$ | $>$ |


03) Once you have selected the desired mode, press the
 buttons to change the value from No to YES.
04) If you press the OK button at the Reset function, a new Menu will open.
05) You can set 6 different reset options.
06) Once you have selected the desired setting, press the
button to store your settings.

### 3.1. Life Time

With this menu you can reset the device's counters.

1) Press the
 buttons to select Life Time and press the button to open the menu.
2) Press the $\mathbf{\Lambda} \mathbf{V}$ buttons to choose one of the 3 reset options:

- Time Counter (the time counter will be reset)
- Total Life Time (the device's operation time counter will be reset)
- Set Password

3) If you select Time Counter or Total Life Time, press the $\boldsymbol{\checkmark}$ button to open the selection menu.
4) Press the $\rangle$ buttons to choose either YES or NO. Press the $\downarrow$ button to confim.

### 3.1.1. Set Password

With this menu you can set the new password for the device.

1) Press the $\mathbf{\Lambda} \mathbf{V}$ buttonsto select Set Password and press the $\boldsymbol{\checkmark}$ button to open the menu.
2) The following screen will pop up:


| 03) Press the | $<$ | $>$ | buttons to select the digit which you want to edit. |
| :--- | :--- | :--- | :--- |
| 04) Press the | $\mathbf{\wedge}$ | $\mathbf{V}$ | buttons to adjust the values. |

## 4. Built-in Programs

With this menu you can set your desired mode.

1) Press the
 button and select

Built-in
02) Press the $\downarrow$ button, to confirm. You can choose 10 different modes.
Use the Up / Down buttons to select the required mode:

| Program Number 0 | YES |
| :--- | :--- |
| Program Number 1 | NO |
| Program Number 2 | NO |
| Program Number 3 | NO |
| Program Number 4 | NO |
| Program Number 5 | NO |
| Program Number 6 | NO |
| Program Number 7 | NO |
| Program Number 8 | NO |

3) Once you have selected the desired mode, press the buttons to change the value from No to YES.
4) Once you have selected the desired setting, press the
button to store your settings.

## Infinity is 100

## 5. Test Menu

With this menu you can set your desired mode.

1) Press the
 button and select Test
2) Press the button, to confirm. You can choose 2 different modes.
Use the Up / Down buttons to select the required mode:


3) Once you have selected the desired mode, press the
 buttonsto change the value from No to YES.
4) If you press the OK button at the Reset function, a new Menu will open.
5) You can set 21 different Test options.
6) Once you have selected the desired setting, press the
button to store your settings.

## 6. Information Menu

With this menu you can set your desired mode

1) Press the
 button and select

2) Press the $\sqrt{ }$ button, to confirm.
3) You can only view 6 c urrent settings, you cannot change a nything

| ヘ | F * | 品 | 0 |
| :---: | :---: | :---: | :---: |
| System Information |  |  |  |
| Ver |  |  |  |
| Running Mode |  |  | MX |
| DMX Address |  |  | 1 |
| Temperature |  |  | 46 |
| Total life time |  |  |  |
| Time counter |  |  |  |
|  | $\checkmark \quad$ V | < | > |

## Infinity is-100

## DMX Channels

## 19 Channels (Advanced)

## 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 tumed by $540^{\circ}$ a nd stopped at a ny position you wish.

## Channel 2 - Vertical movement (Tilt)

Push the slider, up in order to move head vertic a lly (TILT).
Gradual head adjustment from one end of the slider to the other (0-255, 128-center).
The head can be tumed by $270^{\circ}$ and stopped at any position you wish.
Channel 3 - Pan fine 16 bit
Channel 4 - Tilt fine 16 bit

## Channel 5 - PAN/TILTSpeed

0-255 From Max Speed (0) to Min. Speed (255)
Channel 6 - Dimmer intensity (Shutter must be open $\Delta$ )
0-255 From black to brightest

## Channel 7 - Dimmer Fine (Shutter must be open

0-255 From black to brightest
Channel 8 - Shutter / Strobe (Dimmer must be open
0-3 Close
4-7 Shutter open

8-76 Strobe effect, from slow to fast ( $0-10$ fla shes/ sec.)
77-145 Pulse Strobe effect, from slow to fast ( $0-10$ fla shes/ sec.)
146-215 Random Shutter
216-255 Shutter open

## Infinity is 100

## Channel 9 - Colourwheel 1

Linear color change following the movement of the slider. Between 128-255, the color-wheel rotates continuously the so-c alled "Ra inbow" effect.

| O-6 | Open / White |
| :--- | :--- |
| $7-13$ | High Transparent Red |
| $14-20$ | Orange |
| $21-27$ | Light Green |
| $28-34$ | Light Yellow |
| $35-41$ | Blue |
| $42-48$ | Warm White |
| $49-55$ | Pink |
| $56-63$ | UV |
| $64-70$ | Split Color White / High Transparent Red |
| $71-77$ | Split Color High Transparent Red / Orange |
| $78-84$ | Split Color Orange / Light Green |
| $85-91$ | Split Colol Light Green / Light Yellow |
| $92-98$ | Split Colol Light Yellow / Blue |
| $99-105$ | Split Colol Blue / Wam White |
| $106-112$ | Split Color Wam White / Pink |
| $113-119$ | Split Color Pink / UV |
| $120-127$ | Split Color UV / White |
| $128-191$ | Clockwise rotation (CW) rainbow effect from slow to fast |
| $192-255$ | Counter-clockwise rotation (CCW) rainbow effect from slow to fast |



Channel 10-Rotating Gobo-wheel + Gobo Shake
$\left.\begin{array}{ll}\text { Open / White } \\ \text { O-7 } \\ \text { Gobo 1 (Glass) }\end{array}\right)$


64-71 Gobo Shake 7 from slow to fast
72-79 Gobo Shake 6 from slow to fast
80-87 Gobo Shake 5 from slow to fast
88-95 Gobo Shake 4 from slow to fast
96-103 Gobo Shake 3 from slow to fast
Gobo Shake 2 from slow to fast
120-127 Open / White
192-255 Counter-clockwise rotation (CCW) rainbow effect from slow to fast

## Channel 11-Gobo rotation

| 0-63 | Gobo-indexing |
| :--- | :--- |
| $64-147$ | Clockwise rotation (CW) from slow to fast |
| $148-231$ | Counter-clockwise rotation (CCW) from slow to fast |
| $232-255$ | Gobo bouncing |

## Infinity is-100

| Channel 12 - Static Gobo-wheel + Gobo Shake |  |
| :---: | :---: |
| 0-6 | Open / White |
| 7-13 | Gobo 1 |
| 14-20 | Gobo 2 |
| 21-27 | Gobo 3 |
| 28-34 | Gobo 4 |
| 35-41 | Gobo 5 |
| 42-48 | Gobo 6 |
| 49-55 | Gobo 7 |
| 56-63 | Gobo 8 |
| 64-71 | Gobo Shake 8 from slow to fast |
| 72-78 | Gobo Shake 7 from slow to fast |
| 79-85 | Gobo Shake 6 from slow to fast |
| 86-92 | Gobo Shake 5 from slow to fast |
| 93-99 | Gobo Shake 4 from slow to fast |
| 100-106 | Gobo Shake 3 from slow to fast |
| 107-113 | Gobo Shake 2 from slow to fast |
| 114-120 | Gobo Shake 1 from slow to fast |
| 121-127 | Open |
| 128-191 | Clockwise rotation (CW) rainbow effect from slow to fast |
| 192-255 | Counter-clockwise rotation (CCW) rainbow effect from slow to fast |
| Channel 13 - Prism |  |
| $0-4$ | Open |
| 5-255 | 3-facet Prism Effect, |
| Channel 14 - Prism rotation |  |
| 0-127 | Prism-indexing |
| 128-189 | Clockwise rotation (CW) from fast to slow |
| 190-193 | Stop |
| 194-255 | Counter-clockwise rotation (CCW) from slow to fast |

## Channel 15- Iris

| 0-63 | Ins from big to small |
| :--- | :--- |
| 64-127 | Auto Zoom from slow to fast |
| 128-191 | Zoom in slowly, zoom out fast |
| 192-255 | Zoom in fast, zoom out slowly |

## Channel 16-Focus

0-255 Continuous adjustment from far to near

## Channel 17-Channel Functions

| 0-7 | No Function |
| :---: | :---: |
| 8-14 | Blackout during Pan/Tilt movement |
| 15-23 | Blackout during Colorwheel movement |
| 24-31 | Blackout during Gobowheel movement (both gobo wheels) |
| 32-39 | Blackout duning Pan/Tilt/Colorwheel movement |
| 40-47 | Blackout during Pan/Tilt/Gobowheel movement (both gobo wheels) |
| 48-55 | Blackout duning Pan/Tilt/Gobowheel/Colorwheelmovement |
| 56-87 | No Function |
| 88-95 | No Function |
| 96-103 | Reset Pan after 3 seconds |
| 104-111 | Reset Tilt after 3 seconds |
| 112-119 | Reset Colorwheel after 3 seconds |
| 120-127 | Reset Gobowheel after 3 seconds |
| 128-135 | Reset Gobo rotation after 3 seconds |
| 136-143 | Reset Prism after 3 seconds (Tip: nice fade out prism effect) |
| 144-151 | Reset focus after 3 seconds |
| 152-159 | Reset All channels after 3 seconds |
| 160-167 | Reset lins |
| 168-175 | No function |
| 176-239 | No Function |
| 240-247 | XY Smoothing model open |
| 248-255 | XY Smoothing model to shut down |

## Infinity is-100

| Channel 18 - Built-in Programs |  |
| :---: | :---: |
| 0-7 | No Function |
| 8-15 | Built-in Program 1 |
| 16-23 | Built-in Program 2 |
| 24-31 | Built-in Program 3 |
| 32-39 | Built-in Program 4 |
| 40-47 | Built-in Program 5 |
| 48-55 | Built-in Program 6 |
| 56-63 | Built-in Program 7 |
| 64-71 | Built-in Program 8 |
| 72-79 | Built-in Program 9 |
| 80-87 | Built-in Program 10 |
| 88-95 | Built-in Program 11 |
| 96-103 | Built-in Program 12 |
| 104-111 | Built-in Program 13 |
| 112-119 | Built-in Program 14 |
| 120-127 | Built-in Program 15 |
| 128-135 | Built-in Program 16 |
| 136-143 | Built-in Program 17 |
| 144-151 | Built-in Program 18 |
| 152-159 | Built-in Program 19 |
| 160-167 | Built-in Program 20 |
| 168-175 | Built-in Program 21 |
| 176-183 | Built-in Program 22 |
| 184-191 | Built-in Program 23 |
| 192-199 | Built-in Program 24 |
| 200-207 | Built-in Program 25 |
| 208-215 | Built-in Program 26 |
| 216-223 | Built-in Program 27 |
| 224-231 | Built-in Program 28 |
| 232-239 | Built-in Program 29 |
| 240-247 | Built-in Program 30 |
| 248-255 | Built-in Program 31 |

## Channel 19 - Program Speed

0-255 From fast to slow

## Infinity is- $\mathbf{1 0 0}$

## 16 Channels (Basic)

## 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 tumed by $540^{\circ}$ a nd stopped at a ny position you wish.

## Channel 2 - Vertical movement (Tilt)

Push the slider, up in order to move head vertic ally (TILT).
Gradual head adjustment from one end of the slider to the other (0-255, 128-center).
The head can be tumed by $270^{\circ}$ a nd stopped at a ny position you wish.

## Channel 3 - Pan fine 16 bit

Channel 4 - Tilt fine 16 bit
Channel 5 - PAN/TILTSpeed
0-255 From Max Speed (0) to Min. Speed (255)
Channel 6 - Dimmer intensity (Shutter must be open
0-255 From black to brightest

| Channel 7 - Dimmer Fine (Shutter must be open |  |
| :---: | :---: |
| 0-3 | Close |
| 4-7 | Shutter open |
| 8-76 | Strobe effect, from slow to fast (0-10 flashes/sec.) |
| 77-145 | Pulse Strobe effect, from slow to fast (0-10 fla shes/ sec.) |
| 146-215 | Random Shutter |
| 216-255 | Shutter open |

Channel 8 - Colourwheel 1
Linear color change following the movement of the slider. Between 128-255, the color-wheel rotates continuously the so-c alled "Ra inbow" effect.

| 0-6 | Open / White |
| :---: | :---: |
| 7-13 | High Transparent Red |
| 14-20 | Orange |
| 21-27 | Light Green |
| 28-34 | Light Yellow |
| 35-41 | Blue |
| 42-48 | Warm White |
| 49-55 | Pink |
| 56-63 | UV |
| 64-70 | Split Color White / High Transparent Red |
| 71-77 | Split Color High Transparent Red / Orange |
| 78-84 | Split Color Orange / Light Green |
| 85-91 | Split Color Light Green / Light Yellow |
| 92-98 | Split Color Light Yellow / Blue |
| 99-105 | Split Color Blue / Wa mm White |
| 106-112 | Split Color Wa m White / Pink |
| 113-119 | Split Color Pink / UV |
| 120-127 | Split Color UV / White |
| 128-191 | Clockwise rotation (CW) rainbow effect from slow to fast |
| 192-255 | Counter-clockwise rotation (CCW) rainbow effect from slow to fast |

## Infinity is 100

## Channel 09 - Rotating Gobo-wheel + Gobo Shake

| 0-7 | Open / White |
| :---: | :---: |
| 8-15 | Gobo 1 (Glass) |
| 16-23 | Gobo 2 (Glass) |
| 24-31 | Gobo 3 (Metal) |
| 32-39 | Gobo 4 (Metal) |
| 40-47 | Gobo 5 (Metal) |
| 48-55 | Gobo 6 (Metal) |
| 56-63 | Gobo 7 (Glass) |
| 64-71 | Gobo Shake 7 from slow to fast |
| 72-79 | Gobo Shake 6 from slow to fast |
| 80-87 | Gobo Shake 5 from slow to fast |
| 88-95 | Gobo Shake 4 from slow to fast |
| 96-103 | Gobo Shake 3 from slow to fast |
| 104-111 | Gobo Shake 2 from slow to fast |
| 112-119 | Gobo Shake 1 from slow to fast |
| 120-127 | Open / White |
| 128-191 | Clockwise rotation (CW) ra inbow effect from slow to fast |
| 192-255 | Counter-clockwise rotation (CCW) rainbow effect from slow to fast |

## Channel 10-Gobo rotation

| O-63 | Gobo-indexing |
| :--- | :--- |
| $64-147$ | Clockwise rotation (CW) from slow to fast |
| $148-231$ | Counter-clockwise rotation (CCW) from slow to fast |
| $232-255$ | Gobo bouncing |

## Channel 11-Static Gobo-wheel + Gobo Shake



## Channel 12 - Prism

| 0-7 | Open |
| :--- | :--- |
| $8-12$ | 3-facet Prism Effect, no rotation |
| $13-130$ | Clockwise rotation (CW) prism effect from slow to fast |
| $131-247$ | Counter-clockwise rotation (CCW) prism effect from slow to fast |
| $248-255$ | 3-facet Prism Effect, no rotation |

## Channel 13-Prism rotation

| 0-127 | Prism-indexing |
| :--- | :--- |
| $128-189$ | Clockwise rotation (CW) from fast to slow |
| $190-193$ | Stop |
| $194-255$ | Counter-clockwise rotation (CCW) from slow to fast |

## Channel 14- Iris

| 0-63 | Inis from big to small |
| :---: | :---: |
| 64-127 | Auto Zoom from slow to fast |
| 128-191 | Zoom in slowly, zoom out fast |
| 192-255 | Zoom in fast, zoom out slowly |

Channel 15 - Foc us
0-255 Continuous adjustment from farto near

## Channel 16-Channel Functions

| 0-7 | No Function |
| :---: | :---: |
| 8-14 | Blackout during Pan/Tilt movement |
| 15-23 | Blackout during Colorwheel movement |
| 24-31 | Blackout during Gobowheel movement |
| 32-39 | Blackout during Pan/Tilt/Colorwheel movement |
| 40-47 | Blackout during Pan/Tilt/Gobowheel movement |
| 48-55 | Blackout during Pan/Tilt/Gobowheel/Colorwheel movement |
| 56-87 | No Function |
| 88-95 | No Function |
| 96-103 | Reset Pan after 3 sec onds |
| 104-111 | Reset Tilt after 3 seconds |
| 112-119 | Reset Colorwheel after 3 sec onds |
| 120-127 | Reset Gobowheel after 3 seconds |
| 128-135 | Reset Gobo rotation after 3 sec onds |
| 136-143 | Reset Prism after 3 sec onds (Tip: nice fade out prism effect) |
| 144-151 | Reset Focus after 3 seconds |
| 152-159 | Reset All channels after 3 sec onds |
| 160-167 | Reset Ins |
| 168-175 | No Function |
| 176-239 | No Function |
| 240-247 | XY Smoothing model open |
| 248-255 | XY Smoothing model to shut down |

## Channel settings



Fig. 06

## Maintenance

The Infinity iS-100 LED Spot requiresalmost no maintenance. However, you should keep the unit clean. Otherwise, the fixture's light-output will be significantly reduced. Disc onnect the mainspower supply and then wipe the cover with a damp cloth. Wipe the front glass panel clean with glasscleanerand a soft cloth. Do not use alcohol or solvents. The front glass panel will require weekly cleaning, as smoke-fluid tends to build up residues, reducing the light-output very quickly. Do not immerse in liquid.
The cooling-fans, colour-wheel, the gobowheel, the gobos and the intemal lenses should be cleaned monthly with a soft brush.
Please clean intemal components once a year with a light brush and vacuum cleaner.
Keep connectionsclean. 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.

The operator hasto 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 a ny deformations on housings, fixations and installation spots.
3) Mechanic ally 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.

## Replacing a Fuse

Power surges, short-circ uit or inappropriate electrical power supply may cause a fuse to bum out. If the fuse bumsout, 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 screwdriver into the slot in the fuse cover. Tum the screwdriver to the left, at the same time gently push a bit (Tum and Push). The fuse will come out.
3) Remove the used fuse. If brown or unclear, it is bumed out.
4) Insert the replacement fuse into the holderwhere 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) Disc onnect ma ins 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.


Diameter
Fig. 07


Fig. 08
03) Loosen the service lid of the housing, by sliding it to the bottom.
04) Gently tilt the head so the small metal housing will slide out more easy.
05) Tum the gobo wheel, with the gobo you want to remove, to the upside.
06) Gently lift up the gobo holder 100 a nd then gently pull out the gobo from its position.


Fig. 09
07) Very carefully take the gobo out of the gobo holder with a pair of pliers.
08) 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.
09) Put the gobo holder back under the pressing snap and push it back.
10) 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 a gainst the spring. This provides the best results when combining rotating gobos.


When an object is held up to the coated side there is no space between the object and its reflection. The backedge of the gobo cannot be seen when looking through the coated side.

Unc oated 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.

## Colonwheel 1



Fig. 10

Rotating Gobo-wheel
Static Gobo-wheel


Fig. 11
Fig. 12

## Battery Replacement (must be camied out by a qualified technician!)

1) Unplug the unit from the electric power source.
2) Remove the 6 screws on the front side of the Infinity.
3) Gently pull the front cover from the device.
4) Disconnect the plug from the PCB.
5) Remove the 2 screws holding the battery pack in place.
6) Replace the old battery pack with a new one.
7) Replace the maintenance cap and fasten all screws.


Fig. 13

## Note: WARRANTY on batteries is only 6 months after date of purchase

When your battery remains dead after fully charging or it doesn't function or doesn't charge anymore, you can ordera new battery.

The spare part number for the Infinity Series Battery : SPCI157

## Troubleshooting

## No Light

This troubleshooting guide is meant to help solve simple problems.
If a problem occurs, camy out the steps below in sequence until a solution is found. Once the unit operates properly, do not camy out following steps.
If the light effect does not operate properly, refer servicing to a technician.
Response: Suspect four potential problem a reas as: factory reset, the power supply, the LED, the fuse.

1) First try to reset the device to its original factory default settings (3-Settings Menu Menu see page 15).
2) Power supply. Check that the unit is plugged into an appropriate power supply.
3) The LEDs. Retum the Infinity to your Infinity dealer.
4) The fuse. Replace the fuse. See page 28 for replacing the fuse.
5) If all of the above appears to be O.K., plug the unit in again.
6) If you are unable to determine the cause of the problem, do not open the Infinity, as this may damage the unit and the warranty will become void.
7) Retum the device to your Infinity dealer.

## No Response to DMX

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

1) Check the DMX setting. Make sure that DMX addresses a re correct.
2) Check the DMX cable: Unplug the unit; change the $D M X$ cable; then reconnect to electric al power. Try your DMX control aga in.
3) 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.

See next page formore problem solving.

| Problem | Probable cause(s) | Remedy |
| :---: | :---: | :---: |
| One ormore fixtures are completely dead. | No power to the fixture. | - Check that power is switched on and cablesare plugged in. |
|  | Primary fuse blown. | - Replace fuse. |
| Fixtures reset correctly, but all respond erratically or notatall 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. | Poordata quality | - Check data quality. If much lowerthan 100 percent, the problem may be a bad data link connection, poor quality orbroken cables, missing temination 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 temination 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. <br> - 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 beha ves erratic ally. |
| Shutter closes suddenly | The color wheel, gobowheel ora gobo has lost its index position and the fixture is resetting the effect. | - Contact a tec hnic ian forservicing the problem persists. |
| No light or lamp cuts out intermittently | Fixture is too hot. | - Allow fixture to cool. <br> - Clean fan. <br> - Make sure air vents at control panel and front lens are not blocked. <br> - Tum up the a ir conditioning. |
|  | LEDs damaged | - Disconnect fixture and retum 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


## Electro-mechanical effects

- On-Board: Battery powered full color display including gra vity sensor
- LED source the shutter is electronic not mechanical
- On-Board: $16 \times 2$ Character display
- Gobo inner dia meter: 23 mm , Gobo outer dia meter: 27 mm
- DMX-control via sta nda rd DMX-controller
- User-selectable Pan \& Tilt ranges, $540^{\circ} / 360^{\circ} / 180^{\circ}$
- Reverse Pan / Tilt movement
- Special: Pan / Tilt movement, Color, Gobo blackout
- Pan 0o- 540ㅇ, Tilt 0o-- 270ㅇ
- Pan/Tilt resolution: 16 bit
- Control: DMX-512, Master/Slave, Built-in Programs
- 10 Built in programs selectable by DMX
- Light Source: 100W White LED
- Gobowheel 1: Rotating Gobowheel with 2 glass +5 metal gobos (Interchangeable)
- Gobowheel 2: Static Gobowheel with 8 metal gobos
- Gobo functions: Gobo-flow effect, Gobo shake
- Colorwheel 1: 8 dic hroic-filters and white
- Color functions: Split colors, Ra inbow-flow effect
- Rotation: Bi-directional
- Prism: 3-facet prism
- Output: 52.400 Lux @ 1m
- Beam Angle: $15^{\circ}$
- Dimmer: 0-100\%
- Strobe: $0-20 \mathrm{~Hz}$
- Focus: Motorized focus
- Variable motorized Ins (2-100\%)
- Housing: Black Metal \& Fla me-retardant plastic
- Neutrik Powerc on IN / OUT

| Gobos |  |
| :---: | :---: |
| Colourwheel: | heat-resistant and intensify glass; dic hroic glas coating |
| Max. a mbient temperature $\mathrm{ta}_{\mathrm{a}}$ : | $40^{\circ} \mathrm{C}$; Max. housing temperature $\mathrm{t}_{8}: 80^{\circ} \mathrm{C}$ |
| Motor: | high quality stepping-motor controlled by mic roprocessors |
| Minimum distance: |  |
| Minimum distance from flammable surfaces: | 0.5 m |
| Minimum distance to lighted object: | 1.3 m |

Design and product specifications are subject to change without prior notice.
C $\epsilon$

Website: www.highlite.nl
Email: service@highlite.nl

Dimensions


Infinity is-100

Infinity is-100

02016 Infinity

