## MANUAL



## Hydrogen DMX MKII

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## Unpacking Instructions

Immediately upon receiving this product, carefully unpack the carton and check the contents to ensure that all partsare present, and have been received in good condition. Notify the dealer immediately and reta in packing material for inspection if a ny 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 inc ludes:

- Showtec Hydrogen DMX MKII including a hanging bracket
- IEC powercable 1,5 m
- Usermanual



## LED Expected Lifespan

LEDs gradually decline in brightness overtime. HEAT is the dominant factor that leads to the acceleration of this dec line. Packaged in clusters, LEDs exhibit higher operating temperatures than in ideal or singular optimum conditions. For this rea son when all color LEDs are used at their fullest intensity, life of the LEDs is significantly reduced. If improving the device's lifespan expectancy is of higher priority, place care in provid ing forloweroperational temperatures. This may include climatic-environmental and the reduction of overa ll 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 maintena nce 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 the 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 mainta in 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 manual.

Please consider that damages caused by manual modifications to the device a re not subject to wa ranty.

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

## IMPORTANT:

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

- Neverlet the power cord come into contact with other cables! Handle the power cord and all connections with the mains with particular caution!
- Never remove wa ming or informative labels from the unit.
- Do not open the device and do not modify the device.
- Neveruse anything to cover the ground contact.
- Neverleave the device running without a lamp!
- Neverlook directly into the light source.
- Neverleave any cableslying around.
- Do not insert objec ts 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 shake the device. Avoid brute force when installing oroperating the device. The Hydrogen DMX MKII reacts very sensitively to movement.
- Neveruse the device during thunderstorms, unplug the device immediately.
- Only use device indoor, a void contact with water or other liq uids.
- Do not touch the device'shousing bare-handed during its operation (housing becomeshot).
- Only operate the device after having fa miliarized 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 a round the unit for ventilation.
- Always disconnect power from the mains, when device is not used or before cleaning! Only handle the powercord by the plug. Neverpull out the plug by tugging the power cord.
- Make sure that the device is not exposed to extreme heat, moisture or dust.
- Only install the device with the hanging bracket.
- Make sure that the available voltage is not higher than stated on the rearpanel.
- Make sure that the powercord is nevercrimped or damaged. Check the device and the powercord from time to time.
- If the extemal cable is damaged, it has to be replaced by a qualified technician.
- If the lens orglassis obviously damaged, it has to be replaced. So that itsfunctionsare not impaired, due to cracksordeep scratches.
- If device isdropped orstruck, disc onnect mains power supply immediately. Have a qualified eng ineer inspect for safety before operating.
- If the device has been exposed to drastic temperature fluctuation (e.g. aftertransportation), do not switch it on immediately. The a rising condensation water might damage your device. Leave the device switched off until it ha seached room temperature.
- If your Showtec device fails to work properly, discontinue use immediately. Pack the unit securely (preferably in the original packing material), and retum it to your Showtec dealerfor senvice.
- For adult use only. Light effect must be installed out of the reach of children. Never leave the unit running unattended.
- For replacement, use fuses of same type and rating only.
- The user is responsible for correct positioning and operating of the Hydrogen DMX MKII. The manufac turer will not accept liability for da mages caused by the misuse or incorrect installation of this device.


## Hydrogen DMX MKI

- This device falls under protection classl. Therefore it is essential to connect the yellow/green conductorto earth.
- During the initial start-up some smoke orsmell may a rise. This is a nomal process and does not necessa rily mean that the device is defective.
- Repairs, servicing and electric connection must be camied out by a qualified technician.
- WARRANTY: Till one year after date of purchase.


## CAUTION! EYEDAMAGES !!! NEVER LOOK DIRECTLY INTO THE LIGHTSOURCE !!!

## Operating Determinations

- This device is not designed for perma nent operation. Consistent operation brea ks will ensure that the device will serve you for a long time without defects.
- The minimum distance between light-output a nd the illuminated surface must be more than 1 meter.
- The maximum a mbient temperature ta $=45^{\circ} \mathrm{C}$ must never be exceeded.
- The rela tive humidity must not exceed $50 \%$ with an a mbient temperature of $40^{\circ} \mathrm{C}$.
- If this device is operated in any other way, than the one described in this manual, the product may suffer da mages and the wa ranty becomes void.
- Any other operation may lead to dangers like short-circuit, bums, electric shock, crash etc.

You endanger your own safety and the safety of others!

## Rigging

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

Do not attempt the installation yourself !
Always let the installation be caried 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 a ppro priate safety net or a safety cable.
- When rigging, derigging orservicing the projector, always make sure, that the area below the installation place is blocked and staying in the area is forbidden.


## Improper installation can cause serious injuries and damage of property !

## Hydrogen DMX MKII



Hydrogen DMX MKII can be fitted to any kind of truss, with a safety cable and a clamp.

## Connection with the mains

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

| Intemational |  | EUCable | UK Cable | US Cable |
| :---: | :---: | :---: | :---: | :---: |
| Pin |  |  |  |  |
| $N$ | BROWN | RED | YELOW/COPPER | PHASE |
|  | BLUE | BLACK | SILVER | NEUTRAL |
| $($ YEШOW/GREEN | GREEN | GREEN | PROTEC TIVE GROUND |  |

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

## Hydrogen DMX MKI



## A Retum Procedure A

Retumed mercha nd ise must be sent prepaid and in the original packing, call ta gs 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 goodsor any responsibility. Ca ll Highlite 0031-455667723 or mail a ftersales@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, any shipping da mage resulting from inadequate packaging is the customer's responsibility. Highlite reserves the right to use itsown 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 inc lude the following information on a piece of paper inside the box:

1) Yourname
2) Youraddress
3) Yourphone number
4) A brief description of the symptoms

## Claims

The client has the obligation to check the delivered goods immediately upon delivery for any shortcomings and/or visible defects, or perform this check after our a nno uncement that the goodsare at their disposal. Damage incurred 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 has to be reported to us within 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.
Compla ints a ga inst 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 consid ered if the client has so far complied with all parts of the agreement, regardless of the agreement of which the obligation is resulting.

## Hydrogen DMX MKI

## Description of the device

## Features

The Showtec Hydrogen DMX MKII is a light effect with high output and great effects.

- Input voltage: $100-240 \mathrm{~V} 50 / 60 \mathrm{~Hz}$
- Continuouspower. 30W
- Control: Built-in programs, DMX-512, Master/Slave
- Light source: $1 \times 20 W$ LED
- DMX control via standard DMX-controller
- 4 DMX channels
- Fixture Connection: XLR Data in/out (XLR 3-pin)
- 4-digit LED display
- Housing: Black Metal \& Fla me-reta rdant pla stic
- Long LED lifetime
- Strobe: 20 Hz
- Power connector: IEC In/Out
- Beam angle: $25^{\circ}$
- Plug \& Play
- Manual focus
- Strong light output
- Device slowly switches between the colors: Red, Green, Blue, Purple, Yellow and White in a realistic water wave effect
- Fuse: TIAL/250V
- Dimensions: $275 \times 250 \times 135 \mathrm{~mm}$ LxWxH (excl. bracket)
- Weight: $3,5 \mathrm{Kg}$


## Ovenview



Fig. 01

1) Adjustment screw
2) Lens

## Hydrogen DMX MKII

## Backside



Fig. 02
03) DMX signal IN
04) DMX signal OUT
05) IEC Power OUTDC $100-240 \mathrm{~V}$
06) IEC Power IN DC $100-240 \mathrm{~V}+$ Fuse TIAL/250V
07) Ground/earth connection

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

## Installation

Remove all packing materials from the Hydrogen DMX MKII. Check if all foam and plastic padding is removed. Connectall 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 servic ing. Damages caused by non-observance are not subject to warranty.

## Hydrogen DMX MKI

## 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 120 V specific ation product on 240 V power, orvice versa.

## Control Modes

There are 3 modes:

Stand-alone (built-in programs)<br>Master/Sla ve<br>DMX-512 (4CH)

## One Hydrogen (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 Hydrogen is not connected with a DMX cable, it functions as a stand-a lone device.
5) Please see page 14 -15 for more information about the built-in programs.

## Multiple Hydrogens (Master/ Slave Mode)

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 (ordercode 70140 / 70141).
3) Plug the end of the electric mains power cord into a proper electric power supply socket.
4) Use a 3-pin XLR cable to connect the Hydrogens.

The pins:


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

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, a nd fourth units. You can use the same functions on the master device as described on pages 14-15. This mea ns that you can set your desired operation mode on the master device and all slave devices will react the same as the master device.

Multiple Hydrogens Master/ Slave Set Up


Fig. 03

## Hydrogen DMX MKII

## Multiple Hydrogens (DMX Control)

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 (ordercode 70140 / 70141).
3) Plug the end of the electric mainspowercord into a properelectric power supply socket.
4) Use a 3-p XLR cable to connect the Hydrogens and other devices.

5) Link the units as shown in (Fig. 04), 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 sec ond, third, and fourth units.
6) Sup ply electric power: Plug electric ma ins 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 Hydrogens DMX Set Up



Fig. 04
Note: Link all cables before connecting electric power

## Hydrogen DMX MKII

## 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.

$\theta$
Maximum recommended DMX data link distance: 100 meters Maximum recommended number of Hydrogens 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 signal and are lessprone 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.), FLO13 (3m.), FL016 (6m.), FL0110 (10m.), FL0115 (15m.), FL0120 (20m.).
- DAP Audio cable for the demanding user with exceptional a udio-qualities and connector made by Neutrik®. Ordercode FL71150 (1,5m.), FL713 (3m.), FL716 (6m.), FL7110 (10m.).

The Hydrogen can be operated with a controller in control mode or without the controller in stand-alone mode.

## Hydrogen DMX MKII

## Control Panel


A) LED display
B) Mode button
C) Setup button
D) Up button
E) Down button

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 Hydrogen will respond to the controller.
Please note when you use the controller, the unit has 4 channels.
When using multiple Hydrogens, make sure you set the DMX addresses right.
Therefore, the DMX address of the first Hydrogen should be 1(001); the DMX address of the second Hydrogen should be $\mathbf{1 + 4 = 5 ( 0 0 5 ) ; ~ t h e ~ D M X ~ a d d r e s s ~ o f ~ t h e ~ t h i r d ~ H y d r o g e n ~ s h o u l d ~ b e ~ 5 + 4 = 9 ~ ( 0 0 9 ) , ~ e t c . ~}$ Please, make sure that you do not have any overlapping channels in order to control each Hydrogen correctly. If two or more Hydrogen a re addressed similarly, they will work similarly.

## Controlling:

After having addressed all Hydrogen fixtures, you may now start operating these via your lighting controller.
Note: After switching on, the Hydrogen will automatic ally detect whether DMX 512 data is received or not. If there is no data received at the DMX-input, the "ID" 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 Hydrogen.
- 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.

## A. Display Off after 10 seconds

When no button is pressed for 10 seconds, the display will tum off. To light up the display, you have to press the MODE, SETUP, UP or DOWN button. Once you have pressed the button, the display will light up.

Hydrogen DMX MKI

## Menu Ovenview



## Hydrogen DMX MKI

## Main Menu Options

| 5还 | Settings Menu |
| :---: | :---: |
| Pr． | Built－in Programs |
| 5 | DMX address |
| 5L H $^{\text {L }}$ | Master／Slave Mode |

Upon every start－up，the device will reset the software．- －5L will a ppear on the display for a short period of time．Subsequently，the device will enter last active mode，before it was switc hed off．

## 1．Settings Menu

Press the MODE button until 5P appears on the display．
01）Press the Up or Down button to toggle between the three following menus：
02）
－ar！
While in this menu，press the SEIUP button．The display will shortly flash．When it stops，the color wheel has been reset．If the reset process is not completed successfully，－rr will appear on the display． If this communicate persists，even if the fixture wastumed off and on，the fixture is damaged and requiresan inspection caried out by an authorized technician．
03）
MaEロ
This menu is designed to reset the motor．Press the SEIUP button and observe the display．
If $\Sigma^{-n}$ appears on the display，the reset process was not completed successfully．
If $E^{-}$叫 appears on the display，the reset process was successful．
04）
－ 5 5
While in this menu，press the SEIUP button and the fixture will restore the factory settings．The motor will reset，too．

## 2．Built－in Programs

With this menu you can you can set the built－in programs．
01）Press the MODE button and then the Up／Down buttons，until the display shows Pr．
02）Press the SEIUP button to open this menu．
03）You can use the SEIUP button to scroll through the following settings and adjust them，if need be：

| －5．， | Up／Down | 5－9． | Program＇s run speed，from off to full speed |
| :---: | :---: | :---: | :---: |
| ［5］，${ }^{\text {a }}$ | Up／Down | ［5］．⿹丁口 | Color change speed，from offto a fast－paced change |
| ［．］T］ | Up／Down | L．とこ】 | LED brightness，from off to very bright |
| F5hin | Up／Down | F5g | Strobe settings， $0=0$ ff，1－99 $=$ from slow to a fast－pa ced strobe fla sh |

04）Press the MODE button a nd then the Up／Down buttons，until the display shows Pr， In this menu，it is not possible to a djust the program＇s run speed settings，a s well as the color change settings．Nevertheless，the LED brightness a nd strobe settings remain adjustable，just as in case of Pr．！

## Hydrogen DMX MKI

## 3.DMX Mode

With this menu you can set the DMX a ddress.

1) Press the MODE button and then the Up and Down buttons, until the display shows 5
2) Press the SEIUP button to open this menu. You can choose 512 different DMX addresses.
 Once you have set the desired DMX address, you can also choose the desired DMX Mode.
3) Press SEIUP button a gain until you see 4, ■h. It indic ates that the fixture is equip ped with four a ctive DMX channels.

## 4.Master/ Slave Mode

With this menu you can set the Master or Slave.

1) Press the MODE button and then the Up and Down buttons, until the display shows 5LFレ.

If the device has not been set to slave, it is a utomatic ally classified as a master device. All slave devices will copy the actions of the master device.
If the device hasbeen set to slave, it will react the same as its master device.

## DMX Channels

## 4 channels

Channel 1 - LED brightness
0-255
From dark to brightest
Channel 2 - Water effect
0-127 Water effect active, from slow to fast
128-255 Wa ter effect ina ctive
Channel 3 - Water effect c olor change
0-127 Water effect color change active, from slow to fast
128-255 Water effect colorchange inactive
Channel 4 - LED strobe
0-9 LED strobe inactive
10-255 LED strobe active, from slow to fast fla sh

## Maintenance

The Showtec Hydrogen DMX MKII requires almost no maintenance. However, you should keep the unit clean. Otherwise, the fixture's light-output will be signific antly reduced. Disconnect the mains power supply, and then wipe the cover with a damp cloth. Do not immerse in liquid. Wipe lensclean with glass cleaner and a soft cloth. Do not use alcohol or solvents. Keep connections clean. Disc onnect electric power, a nd then wipe the connections with a damp cloth. Make sure connections are thoroughly dry before linking equipment orsupplying electric power.

The operator hasto make sure that the safety related and machine-technical installationsare to be inspected by an expert after every four years 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 forinstalling the device orparts 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.

## Replacing the fuse

Power surges, short-circuit or inappropriate electric al 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:

1) Unplug the unit from electric power source.
2) Insert a screwdriver into the slot in the fuse cover. Gently pry up the fuse cover. The fuse will come out.
3) Remove the used fuse. If brown orunclear, it is bumed 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 specific ation. See the product specification label fordetails.

## 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 op erates properly, do not camy out following steps.
If the light effect does not operate propenly, referservicing to a technician.
Response: Suspect three potential problem a reas: the power supply, the LEDs, the fuse.

1) Power supply. Check that the unit is plugged into an appropriate power supply.
2) The LEDs. Retum the Hydrogen DMX MKII to your Showtec dealer.
3) The fuse. Replace the fuse. See above, for replacing the fuse.
4) If all of the above appears to be O.K., plug the unit in again.
5) If you are unable to determine the cause of the problem, do not open the Hydrogen DMX MKII, as this may damage the unit and the wa ranty will become void.
6) Retum the device to your Showtec dealer.

## No Response to DMX

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

1) Check the DMX setting. Make sure that DMX addresses are correct.
2) Check the DMX cable: Unplug the unit; change the DMX cable; then reconnect to electrical power. Try your DMX c ontrol a ga in.
3) Determine whether the controller or the light effect is at fa ult. Does the controller operate properly with other DMX products? If not, take the controller in for repa ir. If so, take the DMX cable a nd the light effect to a qualified technician.

## Hydrogen DMX MKII

| Problem | Probable cause(s) | Solution |
| :---: | :---: | :---: |
| One ormore fixtures do not function at all | No power to the fixture | - Check if power is switched on and cablesare 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 | Poordata 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, ora 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 nomal operation is restored: unplug both connectors and connect them directly together. <br> - Have the defective fixture serviced by a qualified technician |
|  | 3-pin XLR O ut 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 haslost its index position and the fixture is resetting the effect | - Contact a technician for servicing if the problem persists |
| No light or la mp cutsout intermittently | Fixture is too hot | - Allow the fixture to cool down <br> - Clean the fan <br> - Make sure a ir vents in control panel and the front lens are not blocked <br> - Tum up the air conditioning |
|  | LEDsdamaged | - Disconnect the fixture and retum it to your dealer |
|  | The power supply settings do not match local AC voltage and frequency | - Disc onnect fixture. Check settings and correct if necessary |

## Product Spec ific ation

| Model: | Showtec Hydrogen DMX MKII |
| :---: | :---: |
| Input Voltage: | $100-240 \mathrm{~V} 50 / 60 \mathrm{~Hz}$ |
| Continuous Power: | 30 Watt |
| Fuse: | T1AL/250V |
| Dimensions: | $275 \times 250 \times 135 \mathrm{~mm}$ LxW $\times$ ( excl. bracket) |
| Weight: | $3,5 \mathrm{Kg}$ |
|  |  |
| Operation and Programming |  |
| Signal pin OUT: | pin 1 earth, pin 2 (-), pin 3 (+) |
| Set Up and Addressing: | LED control panel |
| DMX Channels: | 4 channels |
| Signal input: | 3-p in XLR male |
| Signal output: | $3-\mathrm{p}$ in XLR female |
|  |  |
| Eectro-mechanic al effects |  |
| Colour range: | Red, Green, Blue, Yellow, Pumle, White |
| Mounting: | Mounting bracket |
| DMX-control: | Via standard DMX-c ontroller |
| On Board: | Display for easy set up |
| Control: | DMX-512, Built-in Programs, Auto, Ma nual color, Master/Slave |
| Light Source: | $1 \times 20 \mathrm{~W}$ LED |
| Beam Angle: | $25^{\circ}$ |
| Strobe: | 0-20Hz |
| Housing: | Black Metal \& Flame-reta rdant pla stic |
| Connections: | Dedicated IEC Power \& Data connector |
| Cooling: | Convection (no fans) which eliminates the use of fans and noise |
|  |  |
| Max. ambient temperature $\mathrm{t}_{\mathrm{a}}$ : | $40^{\circ} \mathrm{C}$ |
| Max. housing temperature $\mathrm{t}_{\mathrm{B}}$ : | $80^{\circ} \mathrm{C}$ |
|  |  |
| Minimum distance: |  |
| Minimum distance from flammable surfaces: | 0.5 m |
| Minimum distance to lighted object: | 1 m |

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

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## Dimensions



Hydrogen DMX MKII

Notes
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