MANUAL

Galactic 1K20 TXT V1

Ordercode: 51344

Table of contents

Warning

> ⚠ **For your own safety, please read this user manual carefully before your initial start-up!** ⚠

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 Galactic 1K20 TXT
- IEC power cable (1,5 m)
- USB cable (5 m)
- PS2/USB adapter
- Remote control
- Remote control plug and 2 interlock keys
- Keyboard
- User manual
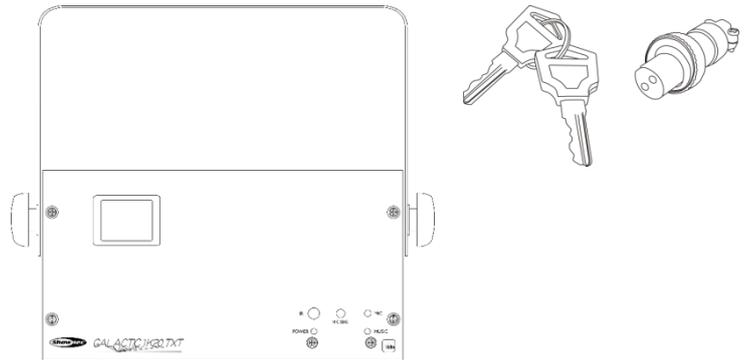
> **CAUTION! Eyedamages!!!**
> **Never look directly into the lightsource!!!**
> **Never project a single laser point!!!**

> **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 place any material over the lens.
- Never look directly into the light source.
- Never leave any cables lying around.
- Never aim the laser beam at people or animals!
- Never use the device during thunderstorms, unplug the device immediately.
- Never point a laser at aircraft. This is a federal offense.
- Never point un-terminated laser beams into the sky.
- Never open the laser housing. The high laser power levels inside of the protective housing can start fires, burn skin and will cause instant eye injury.
- Do not insert objects into air vents.
- Do not connect this device to a dimmer pack.
- Do not open the device and do not modify the device.
- Do not point lasers at highly reflective surfaces such as windows, mirrors and shiny metal. Even laser reflections can be hazardous.
- Do not expose the output optic (aperture) to cleaning chemicals.
- Do not use laser if the laser appears to be emitting only one or two beams.
- Do not use laser if housing is damaged or open, or if optics appear damaged in any way.
- Do not operate laser without first reading and understanding all safety and technical data in this manual. Never look into the laser aperture or laser beams.
- 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 or operating the device.
- After set up and prior to public use, test laser to ensure proper function. Do not use the laser if any defect is detected. Do not use, if the laser emits only one or two laser beams rather than dozens/hundreds, as this could indicate damage to the diffraction grating optic, and could allow emission of higher laser levels.
- Only use device indoors, 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 check the regulations when using a class 4 laser product.
- Always check and position the laser before anybody enters the room, when the laser is facing an area with people.
- 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 external cable is damaged, it has to be replaced by a qualified technician.
- 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. Device 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 operation of a class 4 laser show laser is only allowed if the show is controlled by a skilled and well-trained operator familiar with the data included in this manual.
- The user is responsible for correct positioning and operating of the Galactic. 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.
- The laser will only work between 15-35°C.
- After 3 hours working, you must shut off the laser and let the laser diode cool off for 30 minutes, otherwise the laser may become damaged and the warranty becomes void.
- Repairs, servicing and electric connection must be carried out by a qualified technician.
- WARRANTY: Till one year after date of purchase.

CAUTION! Eyedamages!!!
Never look directly into the lightsource!!!
Never project a single laser point!!!

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 bigger than 1 meter.
- To eliminate wear and improve lifespan, during periods of non-use, completely disconnect from power via breaker or by unplugging.
- The maximum ambient temperature ta = 35°C must never be exceeded.
- The relative humidity must not exceed 50 % with an ambient temperature of 35°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!

Laser safety for a Class 4 Laser Product

This product is a Class 4 laser with 1000 mW visible output.

Class 4 is the highest and most dangerous class of laser, including all lasers that exceed the Class 3B AEL. By definition, a class 4 laser can burn the skin or cause devastating and permanent eye damage as a result of direct, diffuse, specular reflections or indirect beam viewing.

These lasers may ignite combustible materials, and thus may represent a fire risk.

These hazards may also apply to indirect or non-specular reflections of the beam, even from apparently matte surfaces—meaning that great care must be taken to control the beam path.

Class 4 lasers must be equipped with a key switch and a safety interlock.

CAUTION! Only Laser Safety Officers who are officially certified by a regulatory body or authorized training organization are allowed to use class 4 lasers in public. The Laser Safety Officer is responsible for all aspects when using this laser, including following all locally applicable safety laws and regulations. The manufacturer will not accept liability for damages caused by the misuse or incorrect installation of this laser.

CAUTION: AVOID EXPOSURE TO BEAM: Avoid direct eye contact with laser light. Never intentionally expose your eyes or others to direct laser radiation.

Compliance Statement

Your Galactic Laser has been designed to comply with FDA and IEC Standards for it classification. The Galactic is a Class 4 laser product.

Laser Safety and Compliance Information

The Galactic is manufactured to comply with the IEC 60825-1 and in accordance with U.S. Food and Drug Administration (FDA) Standards Listed under FDA Document 21 CFR 1040 and subsequent laser notices.

Product Classification and Manufacturing Label Identification

Laser Classification	Class 4, full diode laser
Cooling	Cooling fan
Laser medium	wavelength 450 nm / Blue (Laser Diode), 600mW
	wavelength 520 nm / Green (Laser Diode), 200mW
	wavelength 638 nm / Red (Laser Diode), 200mW
Output	1000 mW
Beam Diameter	<20mm at aperture
Pulse Data All pulses	< 4Hz (>0.25sec)
Divergence (each beam)	<2 mrad
Divergence (total light)	<160 degrees

The legal requirements for using laser entertainment products vary from country to country. The user is responsible for the legal requirements at the location/country of use.

Further guidelines and safety programs for safe use of lasers can be found in the ANSI Z136.1 Standard "For Safe Use of Lasers", available from www.laserinstitute.org. Many local governments, corporations, agencies, military and others, require all lasers to be used under the guidelines of ANSI Z136.1. Laser Display guidance can be obtained via the International Laser Display Association, www.laserist.org.

CAUTION: *The use of corrective eye wear or optics for viewing at distances such as telescopes or binoculars within a distance of 100mm may pose an eye hazard.*

This laser product is a Class 4 laser and has an interlocked housing.

Show tec®

There are no user serviceable parts inside. Tampering or removing warranty seals will void your products limited warranty.

Combo label with the Product Model Number, Serial Number, Date of Manufacturing, Laser Light Warning Label, Warranty Void Label and Interlocked Housing Label

Proper Usage Safety and Compliance Information
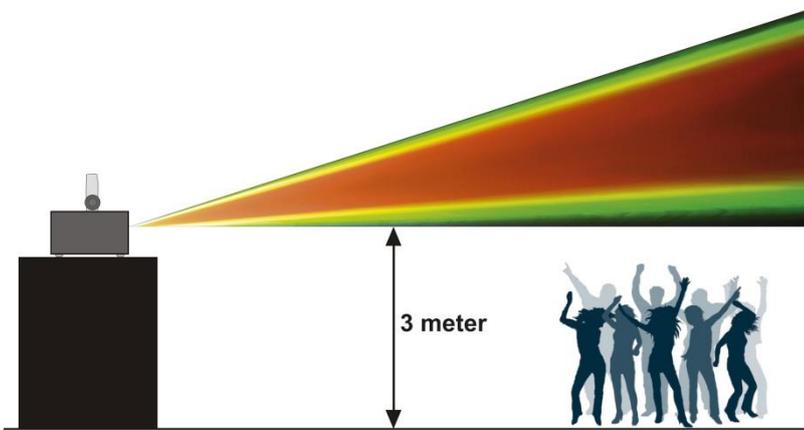
According to FDA Regulations you should operate this product as stated on the left.

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 Galactic is lowered from the ceiling or high joists, professional trussing systems have to be used.
- Use a clamp to mount the Galactic, with the mounting-bracket, to the trussing system.
- The Galactic 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 a safety cable.
- When rigging, derigging or servicing the Galactic, always make sure that the area below the installation is unavailable for any unauthorized persons.

Improper installation can cause serious injuries and damage of property !

Clamp

Safety cable
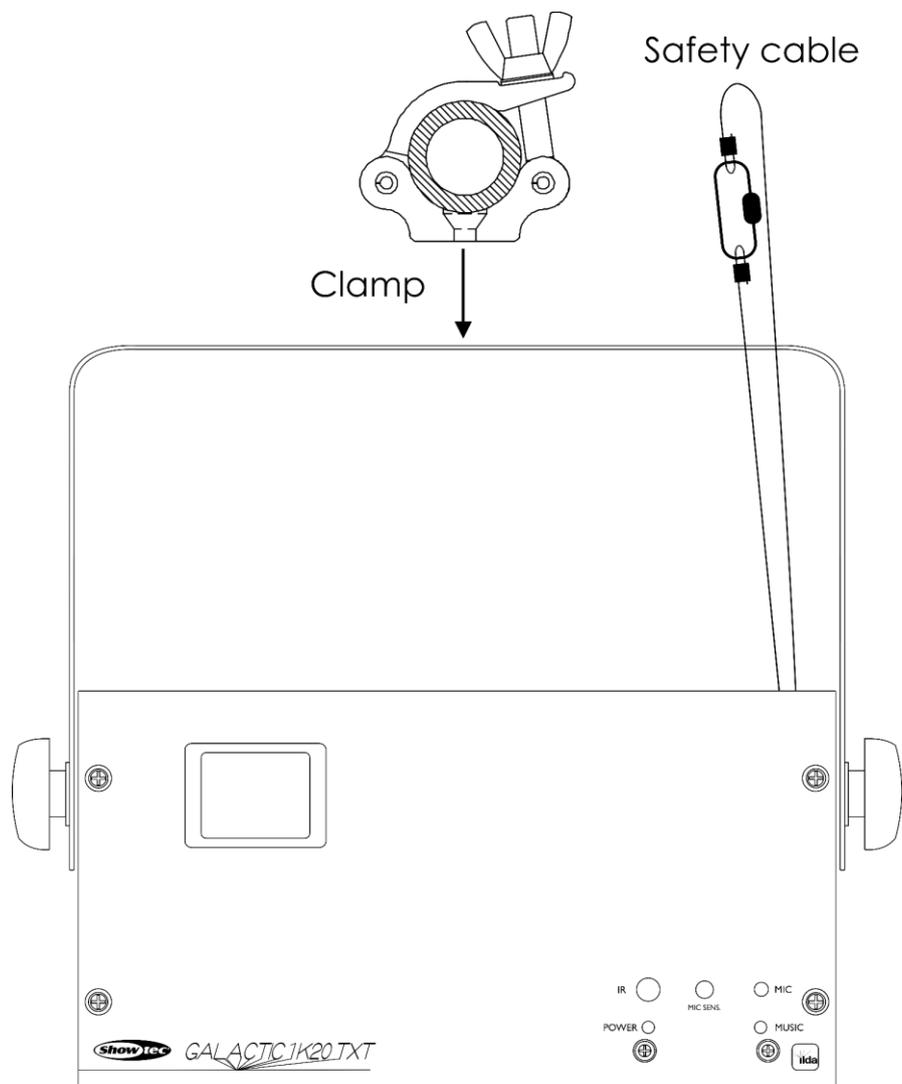
The Galactic can be placed on a flat stage floor or mounted to any kind of truss with a clamp.

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	PHASE
N	BLUE	BLACK	SILVER	NEUTRAL
⏚	YELLOW/GREEN	GREEN	GREEN	PROTECTIVE GROUND

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

Improper installation can cause serious damage to people and property!

⚠️ **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:
01) Your name
02) Your address
03) Your phone number
04) 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 Galactic 1K20 TXT is a laser effect with high output and great effects.
- Input voltage: 100-240V AC, 50/60Hz
- Power consumption: 25W
- Laser color: Red, Yellow, Green, Blue, Purple, Cyan, White
- Laser power: 1000mW (200mW 638nm Red, 200mW 520nm Green, 600mW 450nm Blue)
- Laser modulation: TTL
- Laser class: 4
- Scan speed: 20K
- Scan angle: +/-60°
- Control modes: Built-in, Sound, Text, Time, Countdown, Master/Slave, DMX
- Beam diameter <20mm at aperture
- DMX channels: 20 channels
- Laser safety: EN/IEC 60825-1 Ed 2, 2007-03
- Divergence (each beam) <2 mrad; Divergence (total light) <160 degrees
- Connections: 3-pin DMX IN/OUT, IEC power connector IN, ILDA IN/THROUGH
- LED display for easy setup
- Housing: Metal & flame-retardant plastic
- Safety features: Key switch, Interlock, safety eye
- Fuse: T1,6L/250V
- Dimensions: 283 x 200 x 215 mm (LxWxH)
- Weight: 3,9 kg
- Accessories: 2 keys, interlock remote plug, remote control, keyboard, PS2/USB adapter, USB cable (5 m)

Frontside

Fig. 01
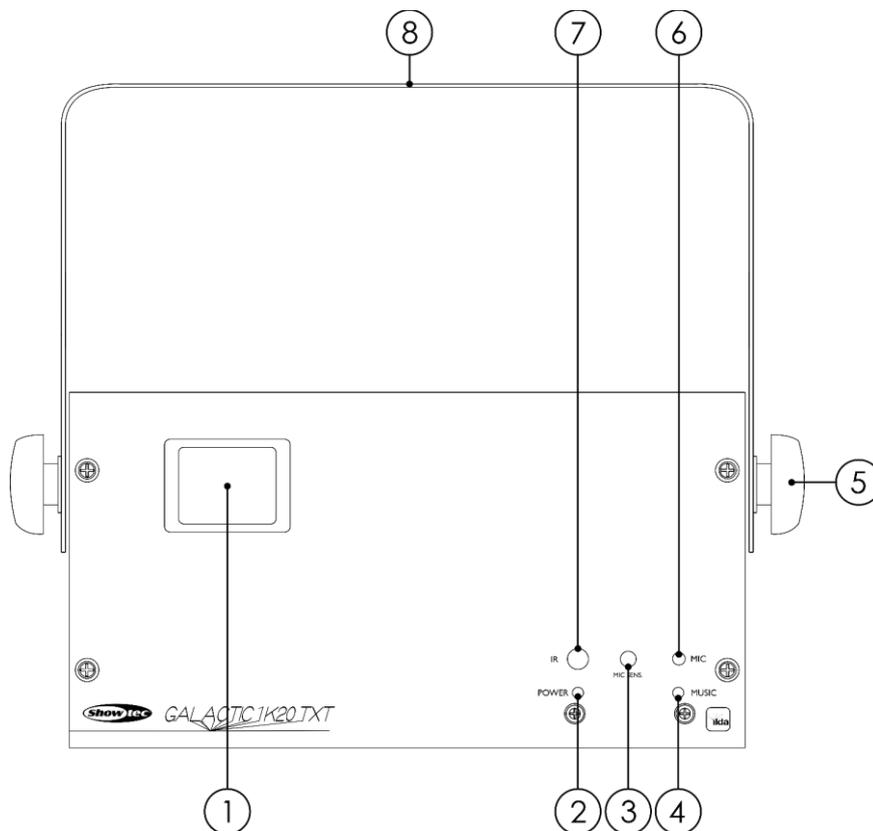
01) Lens
02) LED power indicator
03) Sound sensitivity control
04) LED sound control indicator
05) Adjustment screw
06) Built-in microphone
07) Remote control LED indicator
08) Mounting bracket with inclination screw

Backside
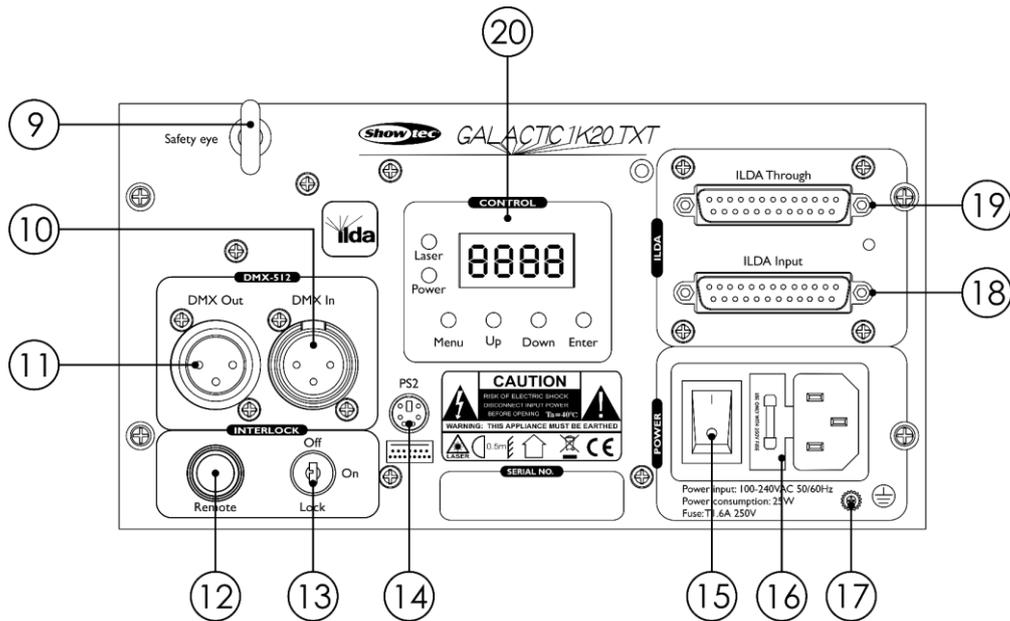
Fig. 02

09) Safety eye
10) 3-pin DMX signal connector IN
11) 3-pin DMX signal connector OUT
12) Remote control plug
13) Interlock
14) PS2 keyboard connector (connect the keyboard via the included PS2/USB adapter)
15) Power switch ON/OFF
16) IEC power connector 100-240V AC + Fuse T1,6L/250V
17) Ground/Earth connection
18) ILDA connector IN
19) ILDA connector THROUGH
20) LED display + control buttons + LED indicators

Installation

Remove all packing materials from the Galactic 1K20 TXT. Check if 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.
Connect the device to the main power supply.

The Interlock plug/remote plug and safety keys are included in the box.
The interlock is the "included-in-the-box" successor for the optional remote interlock (51316).

⚠️ **They should be kept with the Galactic laser !!!** ⚠️
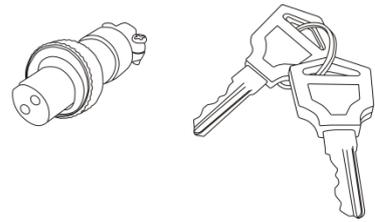
The following safety precautions should be followed:
● The remote control plug should be placed on the backside **(12)** of your Galactic laser.
● The keys should be put into the lock **(13)** of your Galactic laser.

⚠️ Warning ⚠️
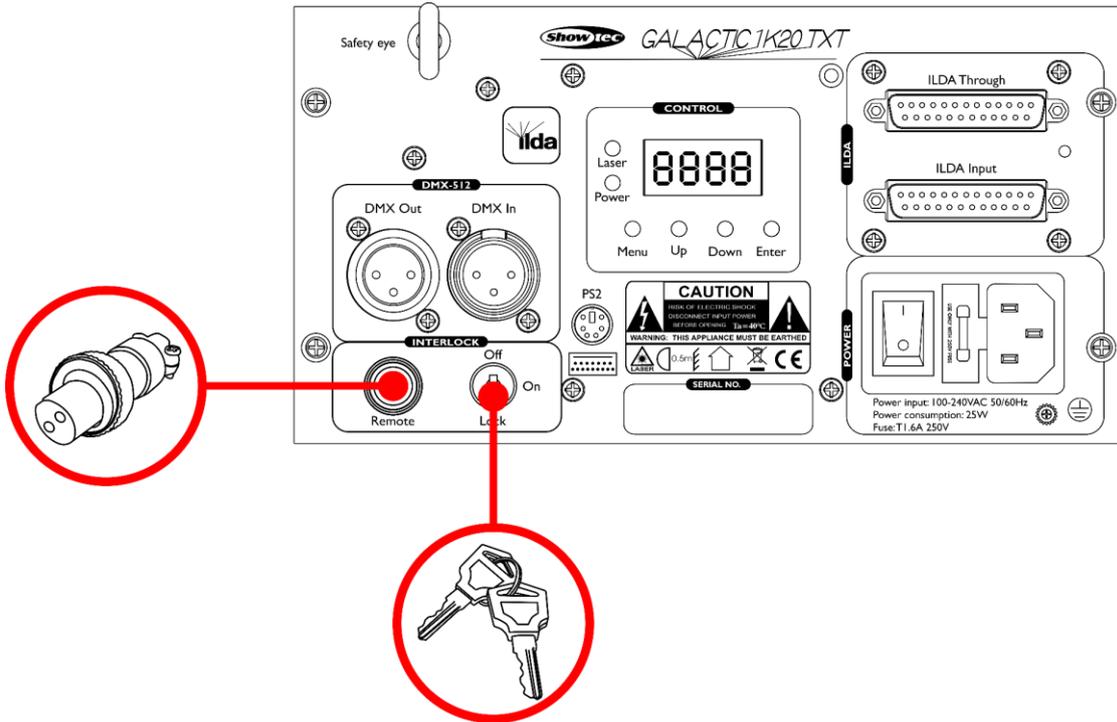
Exclusion of liability
Be aware that in some countries, there are additional regulations regarding the use of laser devices. Therefore, we strongly advise you to verify your national laws with your authorities: We do not take any responsibility for discrepancies, changes or adaptions regarding lawful use of laser devices.
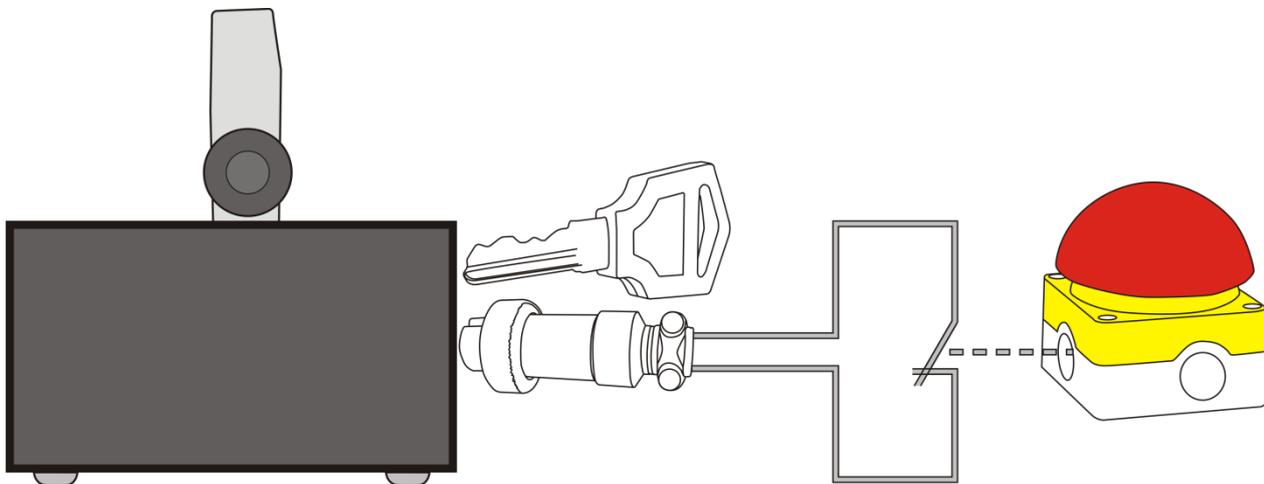
Control Modes

There are 7 modes:
- Built-in programs
- Sound-controlled
- Text mode
- Time Mode
- Countdown mode
- Master/Slave
- DMX-512 (20CH)

One Galactic (Stand-alone)
01) Fasten the effect light onto firm trussing. Leave at least 0,5 meter on all sides for air circulation.
02) Always use a safety cable (ordercode 70140 / 70141).
03) Plug the end of the electric mains power cord into a proper electric power supply socket.
04) When the Galactic is not connected by a DMX-cable, it functions as a stand-alone device.
05) Please see pages 18-19 for more information about the Built-in programs, Text, Time and Countdown modes.

One Galactic (Sound-controlled)
01) Fasten the effect light to a firm trussing. Leave at least 0,5 meter on all sides for air circulation.
02) Plug the end of the electric mains power cord into a proper electric power supply socket.
03) Turn on the music. If the device is set to sound-control, then the Galactic will react to the beat of the music. Please see page 18 for more information about the sound-control options.

Multiple Galactics (Master/Slave Mode)
01) Fasten the effect light onto firm trussing. Leave at least 0,5 meter on all sides for air circulation.
02) Always use a safety cable (ordercode 70140 / 70141).
03) Plug the end of the electric mains power cord into a proper electric power supply socket.
04) Use a 3-pin XLR cable to connect the Galactics.

The pins:

01) Earth
02) Signal (-)
03) Signal (+)

05) Link the units as shown in fig. 03, 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 pages 18-19 (Built-in, Sound-controlled, Text, Time or Countdown). This means you can set your desired operation mode on the master device and all slave devices will react the same as the master device.

Multiple Galactics Master/Slave Set Up
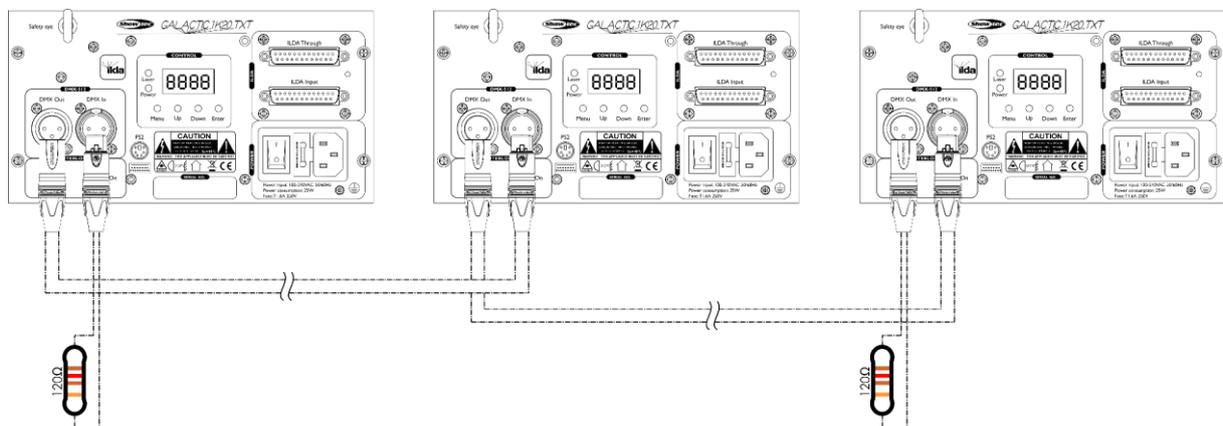
Fig. 03

Multiple Galactics (DMX Control)
01) Fasten the effect light onto firm trussing. Leave at least 1 meter on all sides for air circulation.
02) Always use a safety cable (ordercode 70140 / 70141).
03) Plug the end of the electric mains power cord into a proper electric power supply socket.
04) Use a 3-pin XLR cable to connect the Galactics and other devices.

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

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

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

Pin 1: GND (screen)
Pin 2: Signal (-)
Pin 3: Signal (+)
Pin 4: N/C
Pin 5: N/C
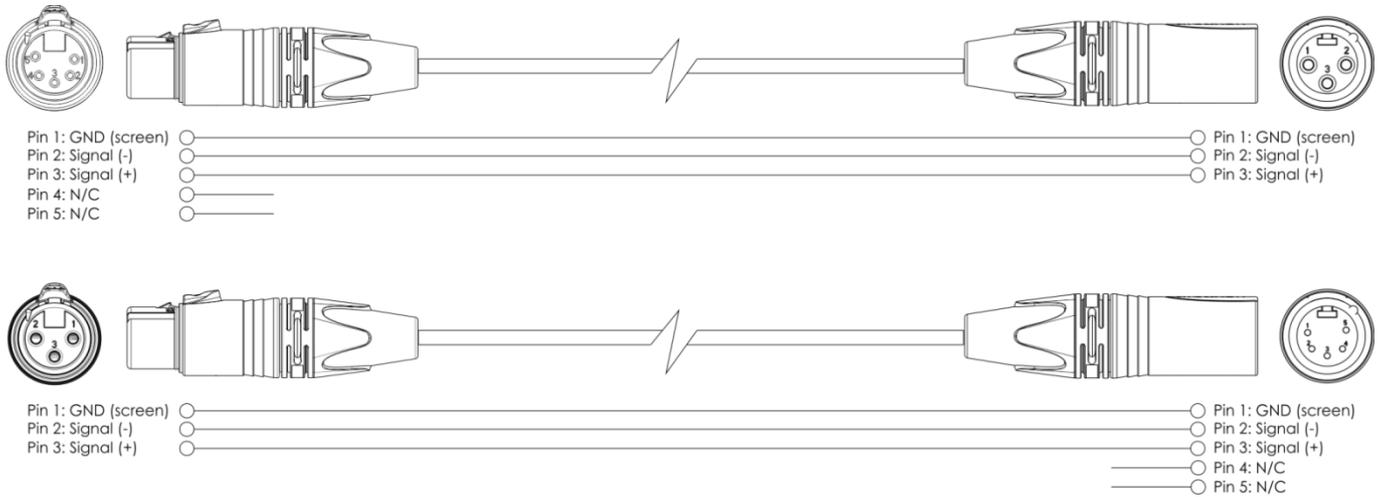
05) Link the units as shown in fig. 04. Connect a DMX signal cable from the first unit's DMX "out" socket to the second unit's "in" socket. Repeat this process to link the second, third, and fourth units.
06) Supply electric power: Plug electric mains power cords into each unit's IEC socket, then plug 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 Galactics DMX Set Up
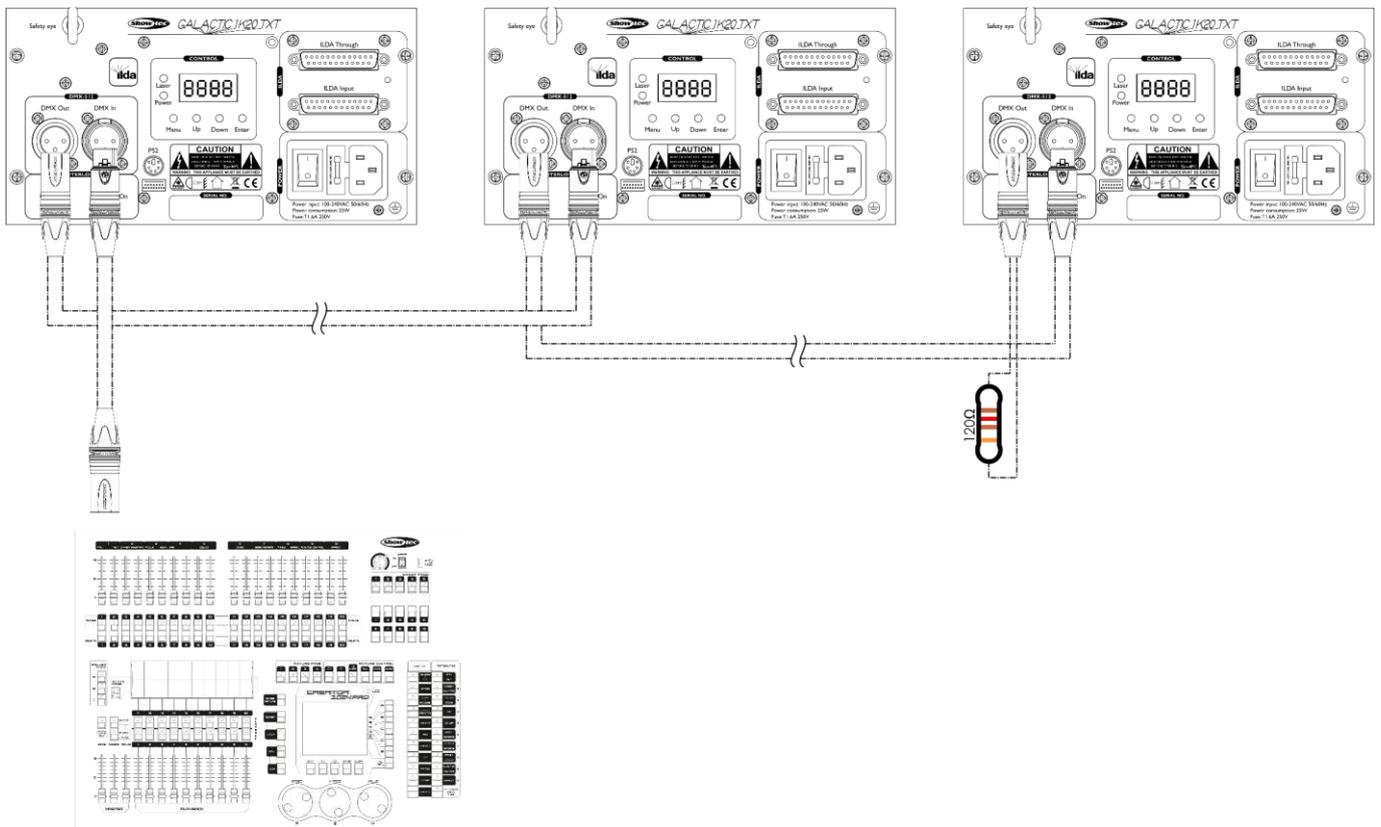
Fig. 04

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 optically isolated splitter may result in deterioration of the digital DMX signal.
Maximum recommended DMX data link distance: 100 meters
Maximum recommended number of fixtures on a DMX data link: 30 fixtures
Maximum recommended number of fixtures on a power link @110V: 36 fixtures
Maximum recommended number of fixtures on a power link @230V: 72 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 DMX Data Cables
- DAP Audio Basic microphone cable for allround use. bal. XLR/M 3-pin > XLR/F 3-pin.
  Ordercode FL01150 (1,5 m), FL013 (3 m), FL016 (6 m), FL0110 (10 m), FL0115 (15 m), FL0120 (20 m).
- DAP Audio X-type data cable XLR/M 3-pin > XLR/F 3-pin. **Ordercode** FLX0175 (0,75 m), FLX01150 (1,5 m), FLX013 (3 m), FLX016 (6 m), FLX0110 (10 m).
- DAP Audio cable for the demanding user with exceptional audio-qualities and connector made by Neutrik®. **Ordercode** FL71150 (1,5 m), FL713 (3 m), FL716 (6 m), FL7110 (10 m).
- DAP Audio cable for the demanding user with exceptional audio-qualities and connector made by Neutrik®. **Ordercode** FL7275 (0,75 m), FL72150 (1,5 m), FL723 (3 m), FL726 (6 m), FL7210 (10 m).
- DAP Audio 110 Ohm cable with digital signal transmission. **Ordercode** FL0975 (0,75 m), FL09150 (1,5 m), FL093 (3 m), FL096 (6 m), FL0910 (10 m), FL0915 (15 m), FL0920 (20 m).

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

Control Panel
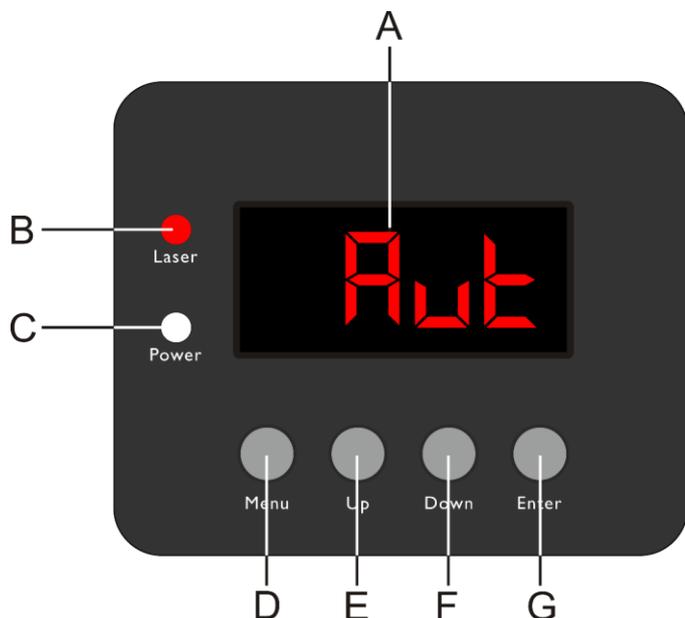
A) LED display
B) Laser LED indicator
C) Power LED indicator
D) MENU button
E) UP button
F) DOWN button
G) ENTER button

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 Galactic will respond to the controller.
Please note when you use the controller, the unit has **20** channels.
When using multiple Galactics, make sure you set the DMX addresses right.
Therefore, the DMX address of the first Galactics should be **1(001)**; the DMX address of the second Galactic should be **1+20=21 (021)**; the DMX address of the third Galactic should be **21+20=41 (041)**, etc.
Please, make sure that you do not have any overlapping channels in order to control each Galactic correctly.If two or more Galactics are addressed similarly, they will work similarly.

Controlling:
After having addressed all Galactic fixtures, you may now start operating these via your lighting controller.
Note: After switching on, the Galactic 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.
The problem may be:
● The XLR cable from the controller is not connected with the input of the Galactic.
● The controller is switched off or defective, the cable or connector is defective, or the signal wires are swapped in the input connector.

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

Menu Overview

MENU

Aut → Enter → Aut1 → Up/Down → Aut9

Sou → Enter → Sou1 → Up/Down → Sou9

tHt → Enter → tEHt → Up/Down → t-00 → Up/Down → t-09

tiM → Enter → tiME → Enter → SMod → Enter → d-dt → Up/Down → d--t

Up/Down

SEtt → Enter → 1900 → Up/Down → 2099 → Enter
M 01 → Up/Down → M 12 → Enter
d 01 → Up/Down → d 31 → Enter
h-00 → Up/Down → h-23 → Enter
M-00 → Up/Down → M-59 → Enter
S-00 → Up/Down → S-59 → Enter
12h → Up/Down → 24h → Enter

Cnt → Enter → Coun → Enter → 0000 → Up/Down → 9999 → Enter
0 → Up/Down → 9

dMH → Enter → d001 → Enter → 001 → Up/Down → 492

SLA → Enter → SLAU

SYS → Enter → Mirr → Enter → M-PP → Up/Down → M-nn → Up/Down → M-Pn → Up/Down → M-nP

Up/Down

SirE → Enter → SH01 → Up/Down → SH16 → Enter
SY01 → Up/Down → SY16

Up/Down

M-En → Enter → on → Up/Down → oFF

Up/Down

irEn → Enter → on → Up/Down → oFF

Up/Down

rSEt → Enter → U200

Up/Down

Main Menu Options

Aut		1. Built-in Auto Shows
Sou		2. Sound-controlled Shows
tHt		3. Text Mode
tiM		4. Time Mode
Cnt		5. Countdown Mode
dMH		6. DMX Mode
SLA		7. Master/Slave Mode
SyS		8. System Settings

⚠ **Before using the control modes, it is highly advised to get acquainted with the chapter on keyboard operations, pages 21-27.** ⚠

1. Built-in Auto Shows

01) While in main menu, press the **UP/DOWN** buttons until the display shows **Aut** and press the **ENTER** button.
02) Press **UP/DOWN** buttons to choose one of the 9 built-in auto shows: **Aut1** ^Up/Down^ **Aut9** .
03) The device will now run the automatic built-in show.

2. Sound-controlled Shows

01) While in main menu, press the **UP/DOWN** buttons until the display shows **Sou** and press the **ENTER** button.
02) Press **UP/DOWN** buttons to choose one of the 9 sound-controlled shows: **Sou1** ^Up/Down^ **Sou9** .
03) The device will now run the automatic, built-in, sound-controlled show.

3. Text Mode

In this menu you can choose the text which is going to be displayed.

01) While in main menu, press the **UP/DOWN** buttons until the display shows **tHt** and press the **ENTER** button. The display will show **tEHt** .
02) Press the **UP/DOWN** buttons to toggle between **t-00** ^Up/Down^ **t-09** . Each number corresponds with a single user-made text.
03) If you choose **tEHt** , the device will play all saved texts in a sequence.
04) The device will now display the desired text.

Note: To be able to use Text Mode to the full extent, use the included keyboard and get acquainted with the keyboard operations, see pages 21-27.

Show tec

4. Time Mode

In this menu you can select the desired time display mode and set the clock.

01) While in main menu, press the **UP/DOWN** buttons until the display shows `ti M` .

02) Press the **ENTER** button to confirm. The display will show `tiME` .

03) Press the **ENTER** button again. The display will show `SMod` . Press the **ENTER** button to enter time display mode. Press the **UP/DOWN** buttons to choose one of the 2 options:

`d-dt`   Day and time

`d--t`   Only time

04) In step 3, while the display shows `SMod` , press the **UP/DOWN** buttons. The display will show `SEtt` .
05) Press the **ENTER** button to enter time display settings.
06) There are several adjustable time display parameters. Press the **ENTER** button to toggle between:

`1900` Up/Down `2099`   Year

`M 01` Up/Down `M 12`   Month

`d 01` Up/Down `d 31`   Day

`h-00` Up/Down `h-23`   Hour

`M-00` Up/Down `M-59`   Minutes

`S-00` Up/Down `S-59`   Seconds

`12h` Up/Down `24h`   12 or 24-hour time display mode

07) Press the **UP/DOWN** buttons to adjust the options listed above.

5. Countdown Mode

In this menu you can activate a time countdown.

01) While in main menu, press the **UP/DOWN** buttons until the display shows `Cnt` .
02) Press the **ENTER** button, the display will show `Coun` .
03) Press the **ENTER** button again. Press the **UP/DOWN** buttons to set the length of the countdown. The adjustment range is between `0000` Up/Down `9999` seconds.
04) Once the length has been set, press the **ENTER** button again.
05) Press the **UP/DOWN** buttons to choose the text which will be displayed once the countdown time has run up. The adjustment range is between `0` Up/Down `9` . Each number corresponds with the user-made texts.
06) Press the **ENTER** button to link the countdown to the desired text.
07) Press the **UP/DOWN** buttons to start the countdown.
08) If you want to pause the countdown, press the **UP/DOWN** buttons again.
09) Press the **UP/DOWN** buttons again, to resume the countdown.

6. DMX Mode

In this menu you can set the DMX starting address.

01) While in main menu, press the **UP/DOWN** buttons until the display shows `dMH` .
02) Press the **ENTER** button. The display will show `d001` .
03) Press the **ENTER** button again.
04) Press the **UP/DOWN** buttons to set the desired DMX address between `001` Up/Down `492` .
05) Press the **ENTER** button to confirm.

Show tec®

7. Master/Slave Mode
In this menu you can set the fixture as a slave device.

01) While in main menu, press the **UP/DOWN** buttons until the display shows `SLA` .
02) Press the **ENTER** button. The display will show `SLAU` .
03) The device is now operating in Slave mode. It means that it will react the same as the master device.

8. System Settings
In this menu you can adjust the system settings.

01) While in main menu, press the **UP/DOWN** buttons until the display shows `SYS` .
02) Press the **ENTER** button to enter the menu.
03) Press the **UP/DOWN** buttons to choose one of the 5 options:

`Mirr`	Text flip
`SizE`	Image size
`M-En`	Master mode
`irEn`	Remote control mode
`rSEt`	Reset settings

04) While the display shows `Mirr` , press the **ENTER** button to proceed to the text flip options.
05) Press the **UP/DOWN** buttons to choose one of the 4 possibilities:

`M-PP`	Normal view
`M-nn`	Horizontal + vertical flip
`M-Pn`	Vertical flip
`M-nP`	Horizontal flip

06) While the display shows `SizE` , press the **ENTER** button to proceed to the image size settings.
07) Press the **UP/DOWN** buttons to set the width of the projected image. The adjustment range is between `SH01` _Up/Down_ `SH16` , from small to big . Press the **ENTER** button to save changes.
08) Press the **UP/DOWN** buttons to set the height of the projected image. The adjustment range is between `SY01` _Up/Down_ `SY16` , from small to big. Press the **ENTER** button to save changes.
09) While the display shows `M-En` , press the **ENTER** button to proceed to the master settings.
10) Press the **UP/DOWN** buttons to choose between `on` _Up/Down_ `oFF` . If set to ON, the device will be classified as a master device. If set to OFF, the device is no longer classified as a master device.
11) While the display shows `irEn` , press the **ENTER** button to proceed to the remote control settings.
12) Press the **UP/DOWN** buttons to choose between `on` _Up/Down_ `oFF` . If set to ON, the device will recognize the included remote control. If set to OFF, the remote control will not be recognized.
13) While the display shows `rSEt` , press the **ENTER** button to restore default settings. The display will show `U200` and the settings will have been reset.

Keyboard

It is possible to operate the device by means of the included keyboard.
The keyboard should be plugged into the PS2 keyboard connector **(14)** on the backside of the device via the included PS2/USB adapter.
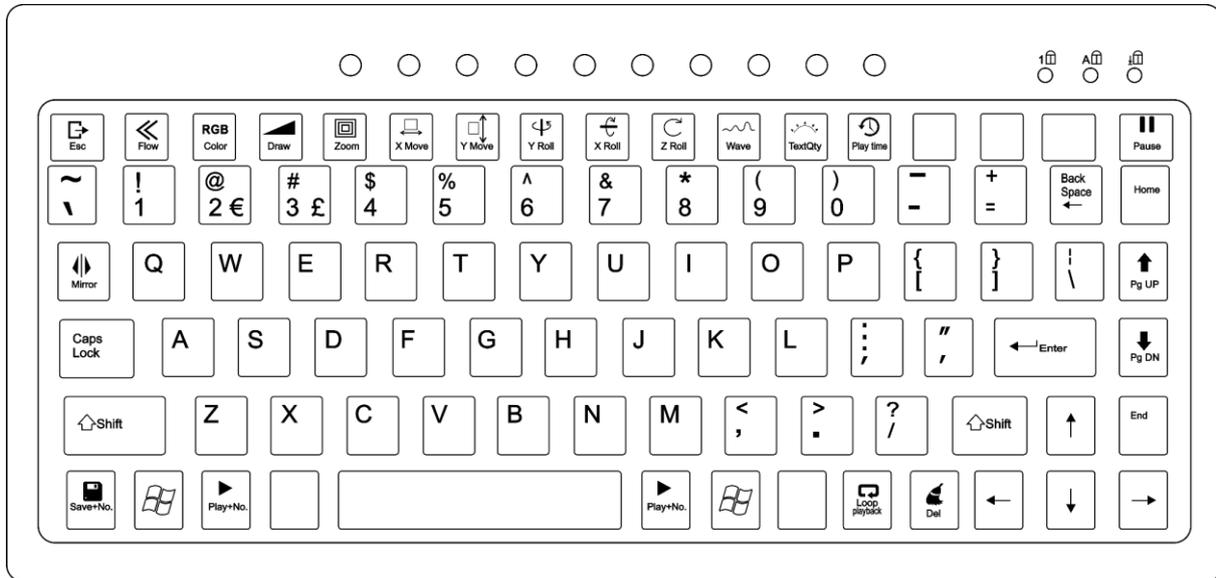
1. Built-in Auto Shows

01) Press the ⊞ key to proceed to main menu.
02) Press the **UP/DOWN** keys until the display shows **Aut** .
03) Press the **ENTER** key to proceed.
04) Press the **UP/DOWN** keys to choose one of the 9 built-in auto shows: **Aut1** Up/Down **Aut9** .
05) The device will now run the automatic built-in show.
06) Repeatedly press the Mirror key. The projected image will flip accordingly.
07) Repeatedly press the RGB Color key to change color.
08) Press the Pause key to pause the show. Press the button again, to resume.

2. Sound-controlled Shows

01) Press the ⊞ key to proceed to main menu.
02) Press the **UP/DOWN** keys until the display shows **Sou** .
03) Press the **ENTER** key to proceed.
04) Press the **UP/DOWN** keys to choose one of the 9 sound-controlled shows: **Sou1** Up/Down **Sou9** .
05) The device will now run the automatic, built-in, sound-controlled show.
06) Repeatedly press the Mirror key. The projected image will flip accordingly.
07) Repeatedly press the RGB Color key to change color.
08) Press the Pause key to pause the show. Press the button again, to resume.

Show tec®

3. Text Mode
In this menu you can create and edit custom texts which can be displayed during a show.

01) Press the ⊞ key to proceed to main menu.
02) Press the **UP/DOWN** keys until the display shows `tHt` .
03) Press the **ENTER** key to proceed to edition mode.
04) Type in your custom text.
05) Press the following keys to adjust the characteristics of your text:

Note: Each press of the following keys corresponds with a different function. Press the **UP/DOWN** keys to adjust settings.

Key	Action

Flow — **Flow settings**

- **Flow OFF**
- **Flow ON**

RGB Color — **Color settings**

- **Manual adjustment**
  Press the **UP/DOWN** keys to manually choose one of the available colors: Red, Green, Yellow, Blue, Purple, Cyan, White.
- **Color switch**
  Press the **UP/DOWN** keys to adjust the color switch speed.
- **Color flow**
  Press the **UP/DOWN** keys to adjust the color flow speed.

Draw — **Pattern drawing settings**

- **Drawing OFF**
- **Drawing ON**
  Press the **UP/DOWN** keys to adjust the drawing speed.

Zoom — **Zoom settings**

- **Manual adjustment**
  Press the **UP/DOWN** keys to manually adjust the zoom.
- **Zoom out**
  Press the **UP/DOWN** keys to adjust the zoom out speed.
- **Zoom in**
  Press the **UP/DOWN** keys to adjust the zoom in speed.
- **Zoom in/out**
  Press the **UP/DOWN** keys to adjust the zoom in/out speed.

X Move — **Horizontal movement settings**

- **Manual adjustment**
  Press the **UP/DOWN** keys to manually adjust the horizontal text position.
- **From left to right**
  Press the **UP/DOWN** keys to adjust the movement speed.
- **From right to left**
  Press the **UP/DOWN** keys to adjust the movement speed.

Vertical movement settings

- **Manual adjustment**
  Press the **UP**/**DOWN** keys to manually adjust the vertical text position.
- **From top to bottom**
  Press the **UP**/**DOWN** keys to adjust the movement speed.
- **From bottom to top**
  Press the **UP**/**DOWN** keys to adjust the movement speed.

Y-axis rotation settings

- **Manual adjustment**
  Press the **UP**/**DOWN** keys to manually adjust the text position.
- **Effect 1**
  Press the **UP**/**DOWN** keys to adjust the movement speed.
- **Effect 2**
  Press the **UP**/**DOWN** keys to adjust the movement speed.

X-axis rotation settings

- **Manual adjustment**
  Press the **UP**/**DOWN** keys to manually adjust the text position.
- **Effect 1**
  Press the **UP**/**DOWN** keys to adjust the movement speed.
- **Effect 2**
  Press the **UP**/**DOWN** keys to adjust the movement speed.

Z-axis rotation settings

- **Manual adjustment**
  Press the **UP**/**DOWN** keys to manually adjust the text position.
- **Effect 1**
  Press the **UP**/**DOWN** keys to adjust the movement speed.
- **Effect 2**
  Press the **UP**/**DOWN** keys to adjust the movement speed.

Wave effect settings

- **Wave range**
- **Wave frequency**
- **Wave speed**

Press the **UP**/**DOWN** keys to adjust the intensity of each of those parameters.

Character display settings
Press the **UP/DOWN** keys to adjust the number of the displayed characters (12/10/8/6/4 characters).

Play time settings
Press the numeric keys **0-9** to set the duration of a single text playback. For example, 0008 = 8 seconds.

Image flip
Repeatedly press this key to set one of the 4 image flips: horizontal flip, vertical flip, horizontal+vertical flip, normal view.

Delete
Press this key to delete the whole text, along with all its characteristics.

Backspace
Press this key to remove one character.

Home
Press this key to set the cursor in front of the initial character.

End
Press the key to set the cursor behind the final character.

Main menu key
Press this key to return to main menu.
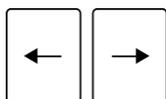
LEFT and RIGHT keys
Press the key to move back and forth in your text.

06) To save your custom text with all its characteristics, press the key combination of the Save+No. key and the **numeric keys 0-9**. Always save your texts starting with 0, then 1,2, etc. If the **0-slot** remains empty, the loop playback mode **will not** function.

07) Repeat the steps 1-6 as many times as needed.

08) To display all the texts one-by-one, press the Loop playback key. All the saved texts will now be displayed in a sequence.

09) Press the **PgUP** and **PgDN** keys to manually toggle between your saved texts.

10) To call up one particular text, press the key combination of the Play+No. key and the **numeric keys 0-9.**

11) To delete all the created texts, use the following key combination:
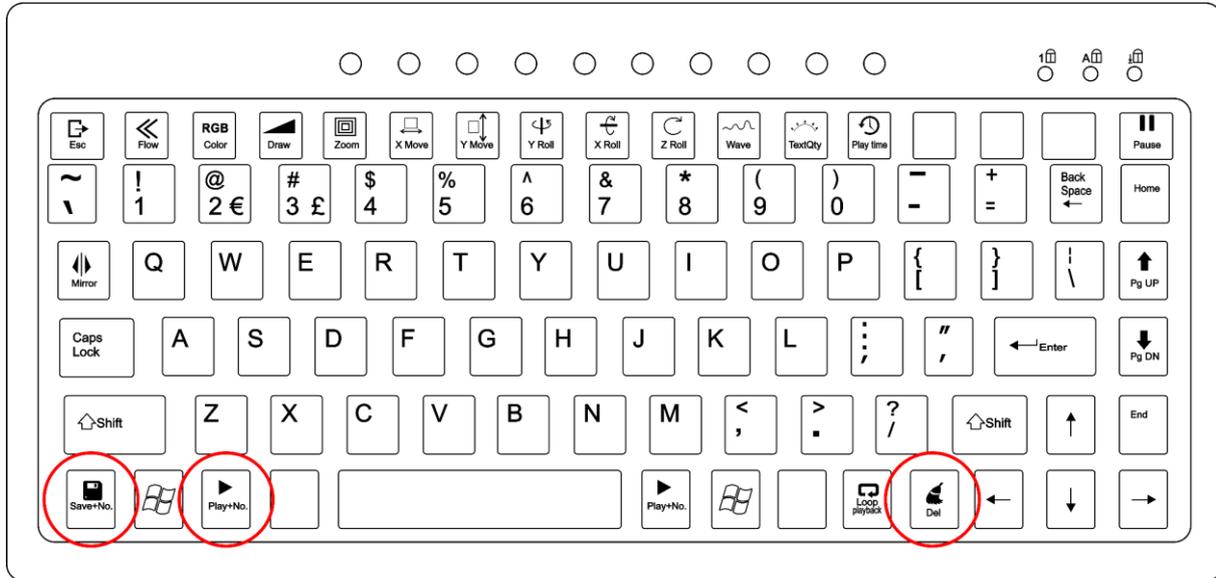
12) All the texts have now been deleted.
13) To create new texts, repeat steps 1-10.

4. Time Mode

01) Press the ⊞ key to proceed to main menu.
02) While in main menu, press the **UP/DOWN** keys until the display shows `ti.N` .
03) Press the **ENTER** key to confirm. The display will show `tiNE` .
04) Press the **ENTER** key again. The display will show `SNod` . Press the **ENTER** key to enter time display mode. Press the **UP/DOWN** keys to choose one of the 2 options:

`d-dt`   Day and Time

`d--t`   Only Time

05) While the display shows `SNod` , press the **UP/DOWN** keys. The display will show `SEtt` .
06) Press the **ENTER** key to enter time display settings.
07) There are several adjustable time display parameters. Press the **ENTER** key to toggle between:

`1900` Up/Down `2099`   Year

`N 01` Up/Down `N 12`   Month

`d 01` Up/Down `d 31`   Day

`h-00` Up/Down `h-23`   Hour

`N-00` Up/Down `N-59`   Minutes

`S-00` Up/Down `S-59`   Seconds

`12h` Up/Down `24h`   12 or 24-hour time display mode

08) To change the values, press the **UP/DOWN** keys.
09) Repeatedly press the Mirror key. The projected image will flip accordingly.
10) Repeatedly press the **RGB** Color key to change color.

5. Countdown Mode

In this menu you can activate a time countdown.

01) Press the ⊞ key to proceed to main menu.

02) While in main menu, press the **UP/DOWN** keys until the display shows `Cnt` .

03) Press the **ENTER** key, the display will show `Coun` .

04) Press the **ENTER** key again. Press the **UP/DOWN** keys to set the length of the countdown. The adjustment range is between `0000` _Up/Down_ `9999` seconds.

05) Once the length has been set, press the **ENTER** key again.

06) Press the **UP/DOWN** keys to choose the text which will be displayed once the countdown time has run up. The adjustment range is between `0` _Up/Down_ `9` . Each number corresponds with the user-made texts.

07) Press the **ENTER** key to confirm.

08) Press the **SPACE** key to start the countdown.

09) If you want to pause the countdown, press the **SPACE** key again.

10) Similarly, press the **SPACE** key to resume the countdown.

11) Repeatedly press the ◀▮▶ Mirror key. The projected image will flip accordingly.

12) Repeatedly press the RGB Color key to change color.

6. DMX Mode

In this menu you can set the DMX starting address.

01) Press the ⊞ key to proceed to main menu.

02) While in main menu, press the **UP/DOWN** keys until the display shows `dNH` .

03) Press the **ENTER** key. The display will show `d001` .

04) Press the **ENTER** key again.

05) Press the **UP/DOWN** keys to set the desired DMX address between `001` _Up/Down_ `492` .

06) Press the **ENTER** key to set the address.

7. Master/Slave Mode

In this menu you can set the fixture as a slave device.

01) Press the ⊞ key to proceed to main menu.

02) While in main menu, press the **UP/DOWN** keys until the display shows `SLA` .

03) Press the **ENTER** key. The display will show `SLAU` .

04) The device is now operating in Slave mode. It means that it will react the same as the master device.

Show tec®

8. System Settings

In this menu you can adjust the system settings.

01) Press the ⊞ to proceed to main menu.

02) While in main menu, press the **UP/DOWN** keys until the display shows `5y5` .

03) Press the **ENTER** key to enter the menu.

04) Press the **UP/DOWN** keys to choose one of the 5 options:

`Airr`	Text flip
`Size`	Image size
`A-En`	Master mode
`irEn`	Remote control mode
`rSEt`	Reset settings

05) While the display shows `Airr` , press the **RIGHT** key to proceed to the text flip options.

06) Press the **UP/DOWN** keys to choose one of the 4 possibilities:

`A-PP`	Normal view
`A-nn`	Horizontal + vertical flip
`A-Pn`	Vertical flip
`A-nP`	Horizontal flip

07) While the display shows `Size` , press the **RIGHT** key to proceed to the image size settings.

08) Press the **UP/DOWN** keys to set the width of the projected image. The adjustment range is between `SH01` _Up/Down_ `SH16` , from small to big . Press the **RIGHT** key to proceed.

09) Press the **UP/DOWN** keys to set the height of the projected image. The adjustment range is between `SY01` _Up/Down_ `SY16` , from small to big.

10) While the display shows `A-En` , press the **RIGHT** key to proceed to the master settings.

11) Press the **UP/DOWN** keys to choose between `on` _Up/Down_ `oFF` . If set to ON, the device will be classified as a master device.

12) While the display shows `irEn` , press the **RIGHT** key to proceed to the remote control settings.

13) Press the **UP/DOWN** keys to choose between `on` _Up/Down_ `oFF` . If set to ON, the device will recognize the included remote control. If set to OFF, the remote control will not be recognized.

14) While the display shows `rSEt` , press the **ENTER** key to restore default settings. The display will show `U200` and the settings will have been reset.

Remote Control
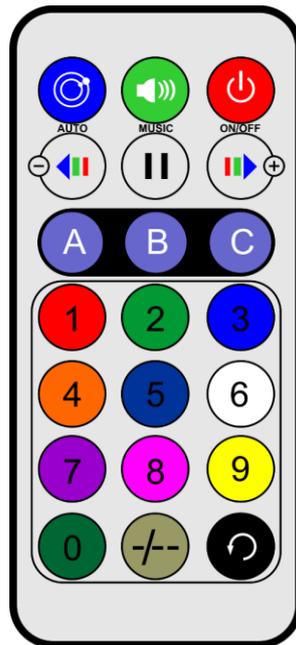
Button	Function	Description
⏻	ON/OFF	Switch the device ON/OFF
◎	Auto Mode	Activate Built-in Auto Shows
🔊	Sound-controlled Mode	Activate Sound-controlled mode
A	Time Mode	Activate Time mode
B	Countdown Mode	Activate Countdown mode
C	Text Mode	Activate Text Mode
↺	Mirror	Set the image flip mode
⏸	Pause	Play/pause the show; start/pause the countdown
◁II◁ II▷▷	Adjustment	Adjust parameters

⚠️ The **IrEn** option **should be set to ON**. ⚠️
Otherwise, the remote control **will not function**. See page 20 for more information.

1. Built-in Auto Shows

01) Press the ◎ button to activate Built-in Auto Shows mode.
02) Press the ◎ button repeatedly to toggle between the 9 shows: **Aut1** ᵁᵖ/ᴰᵒʷⁿ **Aut9**.
03) Press the ⏸ button to pause the show. Press again to resume.

2. Sound-controlled Shows

01) Press the 🔊 button to activate Sound-controlled mode.
02) Press the 🔊 button repeatedly to toggle between the 9 shows: **Sou1** ᵁᵖ/ᴰᵒʷⁿ **Sou9**.
03) Press the ⏸ button to pause the show. Press again to resume.

3. Time Mode

01) Press the (A) button to activate Time mode.
02) Press and hold down the (A) button for 3 seconds to enter edition mode and adjust the following time parameters:

`1900` Up/Down `2099`		Year
`n 01` Up/Down `n 12`		Month
`d 01` Up/Down `d 31`		Day
`h-00` Up/Down `h-23`		Hour
`n-00` Up/Down `n-59`		Minutes
`5-00` Up/Down `5-59`		Seconds
`12h` Up/Down `24h`		12 or 24-hour time display mode

03) Keep pressing the (A) button to toggle through the parameters.
04) Press the buttons to adjust values.

4. Countdown Mode

01) Press the (B) button to activate Countdown mode.
02) Press and hold down the (B) button for 3 seconds to enter the countdown setup.
03) Press the numeric (0)-(9) buttons to set the length of the countdown. The adjustment range is between `0000` Up/Down `9999` . For example, 0008 = 8 seconds.
04) Press the (B) button to confirm.
05) Press the numeric (0)-(9) buttons to select the text which will be triggered by the countdown.
06) Press the (B) button to confirm.
07) Press the (II) button to start/pause the countdown.

5. Text Mode

01) Press the (C) button to activate Text mode.
02) Press the numeric (0)-(9) buttons to call up one of the previously created custom texts.
03) Press the (C) button again to activate a loop playback of all the saved texts in a sequence.

Show tec®

DMX Channels

20 channels

Channel 1 – Control modes

0-9	Blackout
10-49	Auto Mode
50-99	Sound-controlled Mode
100-149	Text Mode
150-199	Background patterns (use **CH2** and **CH3**)
200-255	Foreground patterns (use **CH2** and **CH3**)

Channel 2 – Auto Mode ⚠️ **CH1 must be set between 10-49** ⚠️

0-29	Auto 1
30-59	Auto 2
60-89	Auto 3
90-119	Auto 4
120-149	Auto 5
150-179	Auto 6
180-209	Auto 7
210-239	Auto 8
240-255	Auto 9

Channel 2 – Sound-controlled Mode ⚠️ **CH1 must be set between 50-99** ⚠️

0-29	Music 1
30-59	Music 2
60-89	Music 3
90-119	Music 4
120-149	Music 5
150-179	Music 6
180-209	Music 7
210-239	Music 8
240-255	Music 9

Channel 2 – Text Mode ⚠️ **CH1 must be set between 100-149** ⚠️

0-25	Text 0
26-51	Text 1
52-77	Text 2
78-103	Text 3
104-129	Text 4
130-155	Text 5
156-181	Text 6
182-207	Text 7
208-233	Text 8
234-255	Text 9

Channel 2 – Pattern progression ⚠️ **CH1 must be set between 150-199 or 200-255** ⚠️

0-31	1st form
32-63	2nd form
64-95	3rd form
96-127	4th form
128-159	5th form
160-191	6th form
192-223	7th form
224-255	8th form

Show tec®

Channel 3 – Text Movement Speed ⚠️ **CH1 must be set between 100-149** ⚠️

0-255	From fast to slow (only if Flow effect has been added to the currently active text)

Channel 3 – Patterns ⚠️ **When CH1 is set between 150-199 or 200-255, CH2 and CH3 are connected to each other** ⚠️

Choose your preferred pattern by adjusting the value of Channel 3. Subsequently, adjust the value of Channel 2 to gain access to secondary patterns.

For the full pattern chart, see page 33.

Channel 4 – Color ⚠️ **CH1 must be set between 100-149** ⚠️

0-7	Default colors
8-15	Red
16-23	Green
24-31	Yellow
32-39	Blue
40-47	Purple
48-55	Cyan
56-63	White
64-111	Color switch 1, from slow to fast
112-159	Color switch 2, from slow to fast
160-207	Color flow, from slow to fast
208-255	Strobe, from low to high frequency

Channel 5 – Gradual pattern drawing ⚠️ **CH1 must be set between 100-149** ⚠️

0	Off
1-127	Manual pattern drawing
128-255	Automatic pattern drawing, from slow to fast

Channel 6 – Zoom ⚠️ **CH1 must be set between 100-149** ⚠️

0-127	Gradual zoom adjustment, from big to small
128-169	Zoom out
170-209	Zoom in
210-255	Zoom in/zoom out

Channel 7 – Zoom speed ⚠️ **CH1 must be set between 100-149, CH6 must be set between 128-255**

0-255	Zoom speed adjustment, from fast to slow

Channel 8 – Y-axis rotation ⚠️ **CH1 must be set between 100-149** ⚠️

0-127	Gradual Y-axis rotation adjustment
128-191	Clockwise rotation
192-255	Counterclockwise rotation

Channel 9 – Y-axis rotation speed

⚠️ **CH1 must be set between 100-149, CH8 must be set between 128-255** ⚠️

0-255	Y-axis rotation speed, from fast to slow

Channel 10 – X-axis rotation ⚠️ **CH1 must be set between 100-149** ⚠️

0-127	Gradual X-axis rotation adjustment
128-191	Clockwise rotation
192-255	Counterclockwise rotation

Channel 11 – X-axis rotation speed
⚠ **CH1 must be set between 100-149, CH10 must be set between 128-255** ⚠

0-255	X-axis rotation speed, from fast to slow

Channel 12 – Z-axis rotation ⚠ **CH1 must be set between 100-149** ⚠

0-127	Gradual Z-axis rotation adjustment
128-191	Clockwise rotation
192-255	Counterclockwise rotation

Channel 13 – Z-axis rotation speed
⚠ **CH1 must be set between 100-149, CH12 must be set between 128-255** ⚠

0-255	Z-axis rotation speed, from fast to slow

Channel 14 – Horizontal movement ⚠ **CH1 must be set between 100-149** ⚠

0-127	Gradual adjustment
128-191	From right to left movement
192-255	From left to right movement

Channel 15 – Horizontal movement speed
⚠ **CH1 must be set between 100-149, CH14 must be set between 128-255** ⚠

0-255	Horizontal speed, from fast to slow

Channel 16 – Vertical movement ⚠ **CH1 must be set between 100-149** ⚠

0-127	Gradual adjustment
128-191	Ascending movement
192-255	Descending movement

Channel 17 – Vertical movement speed
⚠ **CH1 must be set between 100-149, CH16 must be set between 128-255** ⚠

0-255	Vertical speed, from fast to slow

Channel 18 – Wave effect ⚠ **CH1 must be set between 100-149** ⚠

0-255	Wave effect range adjustment

Channel 19 – Wave frequency ⚠ **CH18 must be open** ⚠

0-31	1st form
32-63	2nd form
64-95	3rd form
96-127	4th form
128-159	5th form
160-191	6th form
192-223	7th form
224-255	8th form

Channel 20 – Wave speed ⚠ **CH18 must be open** ⚠

0-127	Gradual wave position adjustment
128-255	Wave effect speed, from slow to fast

Patterns

Channel 3	Channel 2 0-31	Channel 2 32-63	Channel 2 64-95	Channel 2 96-127	Channel 2 128-159	Channel 2 160-191 Symbols	Channel 2 192-223 Digits and letters	Channel 2 224-255 Words/Symbols
0-15	◯	∞	⌒	—	·········	✓	0	Crazy
16-31	◌	○○○	◡	– – –	·············	✗	1	Dance
32-47	◌	○○○	∿	– – – – – –	················	Boy	2	Good
48-63	◌	○○○○	∿∿	+	················	Girl	3	Happy
64-79	◎	☐☐	⸜⸝	═	⌃	Thumb up	4	Love
80-95	◎	☐☐☐☐	↺	∿∿∿	⌒	Hand	5	Music
96-111	☀	○○○	⸝⸜	⟍	⦿	V sign	6	Party
112-127	☀	○○○○○	⸝⸜	‖‖‖‖	⋰⋱	Yin Yang	7	Ready
128-143	✡	⬭⬭⬭	V	‖‖ ‖‖	⸜V	Pigeon	8	Start
144-159	❀	▷▷▷	⋁	⟍⟋	⋯	Heart	9	Stop
160-175	△	▯	W	‖‖‖‖‖	⋰⋱	Clock	A	Thank You
176-191	☐	○○○○○○○	⋎⋎	⸜⸝	⋰⋱	Smiley	B	·
192-207	⬚	○○○○○○○○○○	WWW	⋎⋏	⸝⸜	Rose	C	······· ·······
208-223	☆	⋰⋱	⦃	⸝⸜	❋	⬠	D	· · · ·
224-239	☆	○○○○	Cꝲ	✳	▦	⊞	?	· ⋮ ·
240-255	⬡	★★★ ★★★ ★★★	⨳	≡	▦	⊕	!	······ ······

Maintenance

The Showtec Galactic 1K20 TXT 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. Wipe the front glass panel clean with glass cleaner and 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.
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.

The operator has to make sure that safety-related 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-related 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:
01) All screws used for installing the device or parts of the device have to be tightly connected and must not be corroded.
02) There may not be any deformations on housings, fixations and installation spots.
03) Mechanically moving parts like axles, eyes and others may not show any traces of wearing.
04) The electric power supply cables must not show any damages or material fatigue.

Replacing the 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.
01) Unplug the unit from electric power source.
02) Insert a screwdriver into the slot in the fuse cover. Gently pry up the fuse cover. The fuse will come out.
03) Remove the used fuse. If brown or unclear, it is burned out.
04) 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.

Troubleshooting

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.

No Light

If the light effect does not operate properly, refer servicing to a technician.
Suspect three potential problem areas as: the power supply, the laser, the fuse.
01) Power supply. Check that the unit is plugged into an appropriate power supply.
02) The laser. Return the Galactic to your Showtec dealer.
03) The fuse. Replace the fuse. See page 34 for replacing the fuse.
04) If all of the above appears to be O.K., plug the unit in again.
05) If you are unable to determine the cause of the problem, do not open the Galactic, as this may damage the unit and the warranty will become void.
06) Return the device to your Showtec dealer.

No Response to DMX

Suspect the DMX cable or connectors, a controller malfunction, a light effect DMX card malfunction.
01) Check the DMX setting. Make sure that DMX addresses are correct.
02) Check the DMX cable: Unplug the unit; change the DMX cable; then reconnect to electrical power. Try your DMX control again.
03) 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.

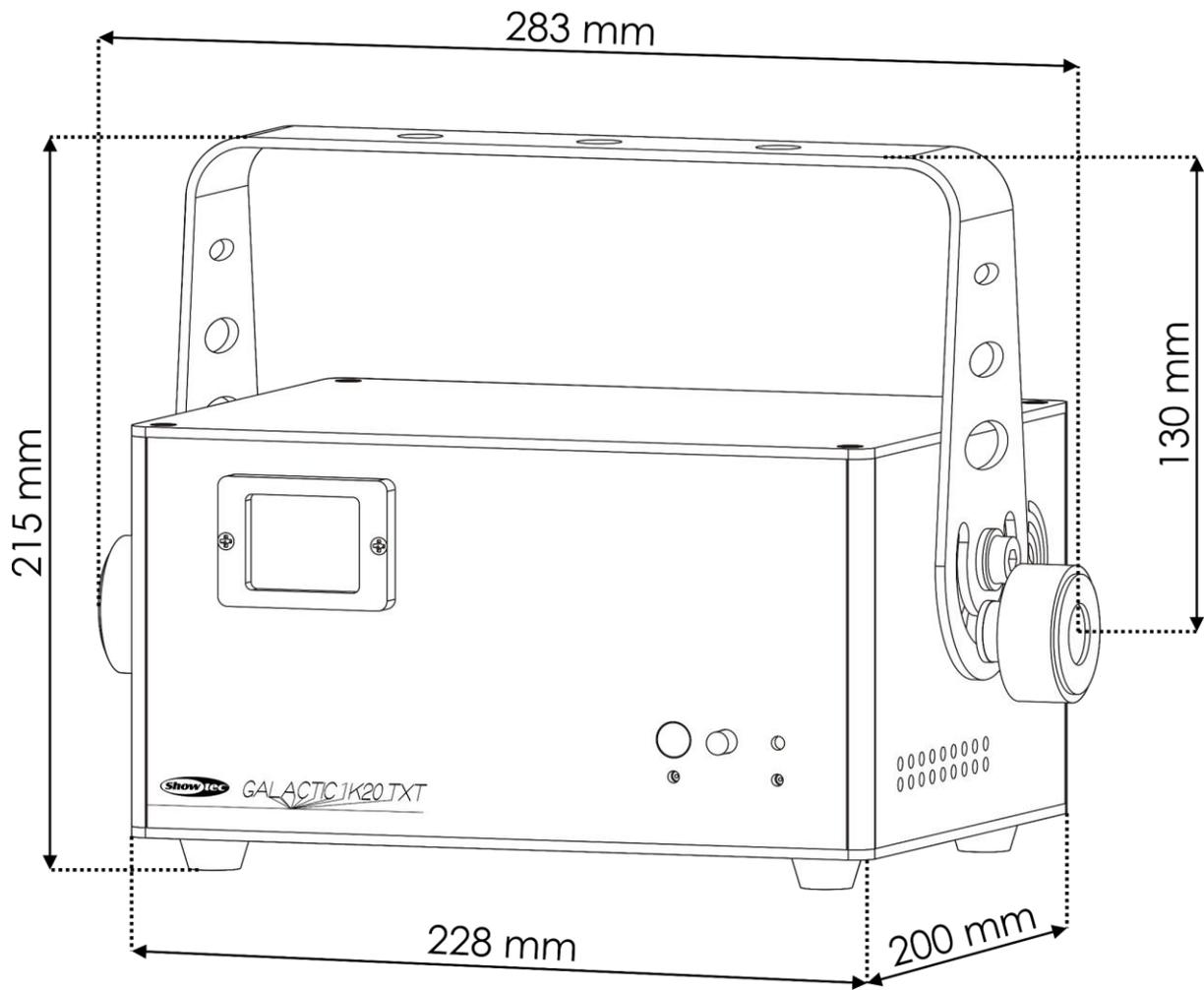| Problem	Probable cause(s)	Remedy
One or more fixtures do not function at all	No power to the fixture.	● Check that power is switched on and cables are plugged in
	Primary fuse blown.	● Replace fuse
Fixtures reset correctly, but all respond erratically or not at all to the controller.	The controller 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 laser diode has lost its index position and the fixture is resetting the effect.	● Contact a technician for servicing, if the problem persists
No light or laser cuts out intermittently	Fixture is too hot.	● Allow fixture to cool ● Make sure air vents at control panel and front lens are not blocked ● Turn up the air conditioning
	Laser 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

Show tec®

Product Specifications

Model:	Galactic 1K20 TXT
Input voltage:	100-240V AC, 50/60Hz
Power consumption:	25W
Fuse:	T1,6L/250V
Dimensions:	283 x 200 x 215 mm (LxWxH)
Weight:	3,9 kg
Operation and Programming	
Signal pin OUT:	pin 1 earth, pin 2 (-), pin 3 (+)
Setup and Addressing:	Red LED display for all settings
DMX channels:	20 channels
Signal input:	3-pin DMX signal connector IN
Signal output:	3-pin DMX signal connector OUT
Electro-mechanical effects	
Laser color:	Red, Yellow, Green, Blue, Purple, Cyan, White
Laser class:	4
Laser power:	1000mW (200mW 638nm Red, 200mW 520nm Green, 600mW 450nm Blue)
Laser modulation:	TTL
Scan speed:	20K
Scan angle:	+/-60°
Cooling:	Cooling fan
Beam diameter:	<20mm at aperture
Divergence (each beam):	<2 mrad;
Divergence (total light):	<160 degrees
Safety features:	Key switch, interlock, safety eye
DMX control:	Via standard DMX controller
Control Modes:	Built-in, Sound, Text, Time, Countdown, Master/Slave, DMX
Housing:	Metal & flame-retardant plastic
Connections:	3-pin DMX IN/OUT, IEC power connector IN, ILDA IN/THROUGH
Laser safety:	EN/IEC 60825-1 Ed 2, 2007-03
Max. ambient temperature t_a:	35°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.

 CE

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

Show tec®

Dimensions

283 mm

215 mm

130 mm

228 mm

200 mm