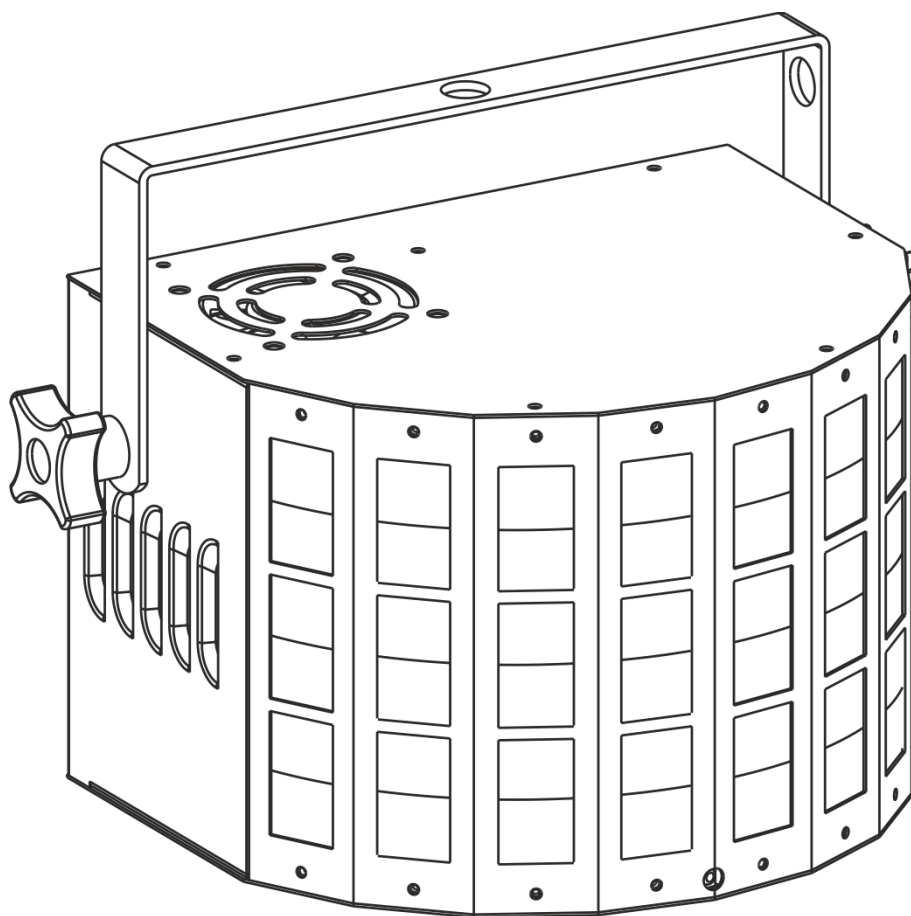




MANUAL



ENGLISH

Techno Derby

V1

Ordercode: 43156

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Warning



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

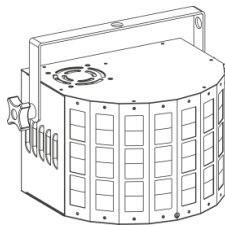


Unpacking Instructions

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 Techno Derby
- IEC power cable (1,75 m)
- Remote control
- User manual



LED Expected Lifespan

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



CAUTION!

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



Safety Instructions

Every person involved with the installation, operation and maintenance of this device has to:

- be qualified
- follow the instructions of this manual



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



Before 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 maintain perfect condition and to ensure a safe operation, it is absolutely necessary for the user to follow the safety instructions and warning notes contained 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 to qualified technicians only.

IMPORTANT:

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

- Never let the power cord come into contact with other cables! Handle the power cord and all connections with the mains with particular caution!
- Never remove warning or informative labels from the unit.
- Never use anything to cover the ground contact.
- Never lift the fixture holding it by the projector-head, as the mechanics may be damaged. Always hold the fixture by the transport handles.
- Never place any material over the lens.
- Never look directly into the light source.
- Never leave any cables lying around.
- Never loosen the screws of the gobo, otherwise you risk opening of the ball bearing.
- Do not insert objects into air vents.
- Do not connect this device to a dimmerpack.
- Do not switch the device on and off in short intervals, as this will reduce the device's life.
- Do not touch the device's housing bare-handed during its operation (housing becomes very hot). Allow the fixture to cool for at least 5 minutes before handling.
- Do not shake the device. Avoid brute force when installing or operating the device.
- Only use the device indoors, avoid contact with water or other liquids.
- Only operate the fixture after having checked if the housing is firmly closed and all screws are tightly fastened.
- Only operate the device after having familiarized with its functions.
- Avoid flames and do not put close to flammable liquids or gases.
- Always keep the case closed while operating.
- Always allow a 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 holding it by the plug. Never pull out the plug by tugging the power cord.
- Make sure that the device is not exposed to extreme heat, moisture or dust.
- Make sure that the available voltage is not higher than stated on the rear panel.
- Make sure that the power cord is never crimped or damaged. Check the device and the power cord from time to time.
- If the lens is obviously damaged, it has to be replaced.
- If device was 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 the 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. The moving head must be installed beyond the reach of children. Never leave the unit running unattended.
- Never attempt to bypass the thermostatic switch or fuses.
- For replacement use fuses of same type and rating only.
- The user is responsible for correct positioning and operating of the Techno Derby. The manufacturer will not accept liability for damages caused by the misuse or incorrect installation of this device.
- This device falls under protection class I. Therefore it is essential to connect the yellow/green conductor to earth.
- During the initial start-up some smoke or smell may arise. This is a normal process and does not necessarily mean that the device is defective.
- Repairs, servicing and electric connection must be carried out by a qualified technician.
- **WARRANTY:** Till one year after date of purchase.



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



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.
- The maximum ambient temperature $t_a = 40^\circ\text{C}$ must never be exceeded.
- The relative humidity must not exceed 50 % with ambient temperature of 40°C .
- If this device is operated in any other way than the one described in this manual, the product may suffer damages and the warranty becomes void.
- Any other operation may lead to dangers like short-circuit, burns, electric shock, crash, etc.

You endanger your own safety and the safety of others!

Rigging

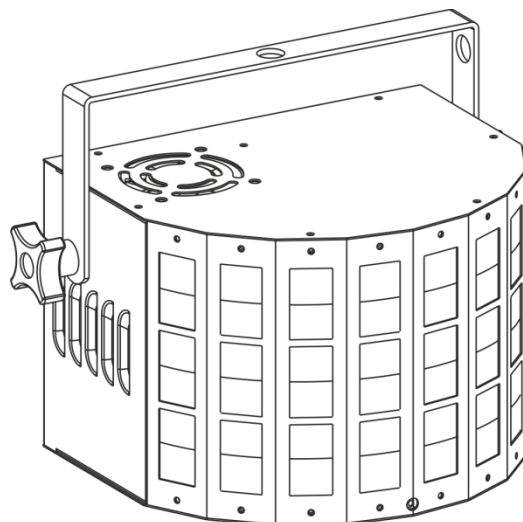
Please follow the European and national guidelines concerning rigging, trussing and all other safety issues.

Do not attempt the installation yourself !

Always let the installation be carried out by an authorized dealer!

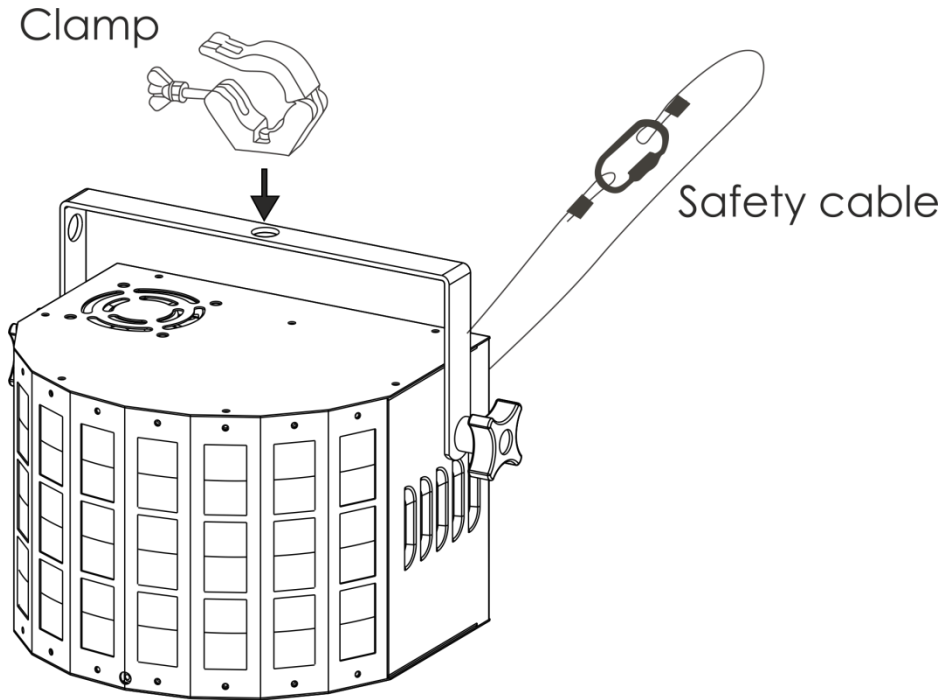
Procedure:

- If the projector is lowered from the ceiling or high joists, professional trussing systems have to be used.
- Use a clamp to mount the projector, with the mounting bracket, to the trussing system.
- The projector must never be fixed swinging freely in the room.
- The installation must always be secured with a safety attachment, e.g. an appropriate safety net or safety cable.
- When rigging, de-rigging or servicing the projector, always make sure, that the area below the installation site is secured and that there are not any unauthorized people around.



The Techno Derby can be placed on a flat stage floor or mounted to any kind of truss with a clamp.

Mounting a clamp to the Techno Derby



Improper installation can cause serious injuries to people and/or damage of property !

Connection with the mains

Connect the device to the mains with the power plug.
Always check if 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 properly connected to the earth!

Improper installation can cause serious injuries to people and/or damage of 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 shortcomings 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 Techno Derby is a light fixture with high output and great effects.

- Power: 100~240VAC 60/50Hz
- Power consumption: 30W
- 4-digit LED display
- 1 and 4 DMX channels
- Colors: Red, Green, Blue, White
- Control modes: Auto, Sound, Master/Slave, DMX-512
- Built-in automatic shows
- Metal & Flame-retardant plastic housing
- DMX Data IN/OUT
- Light source: 4 x 3W LED
- Strobe: 16 x 0,5W
- Fuse: T1A/250V
- Control protocol: DMX-512
- Dimensions: 265 mm x 190 mm x 190 mm (LxWxH)
- Weight: 1,5 kg

Overview

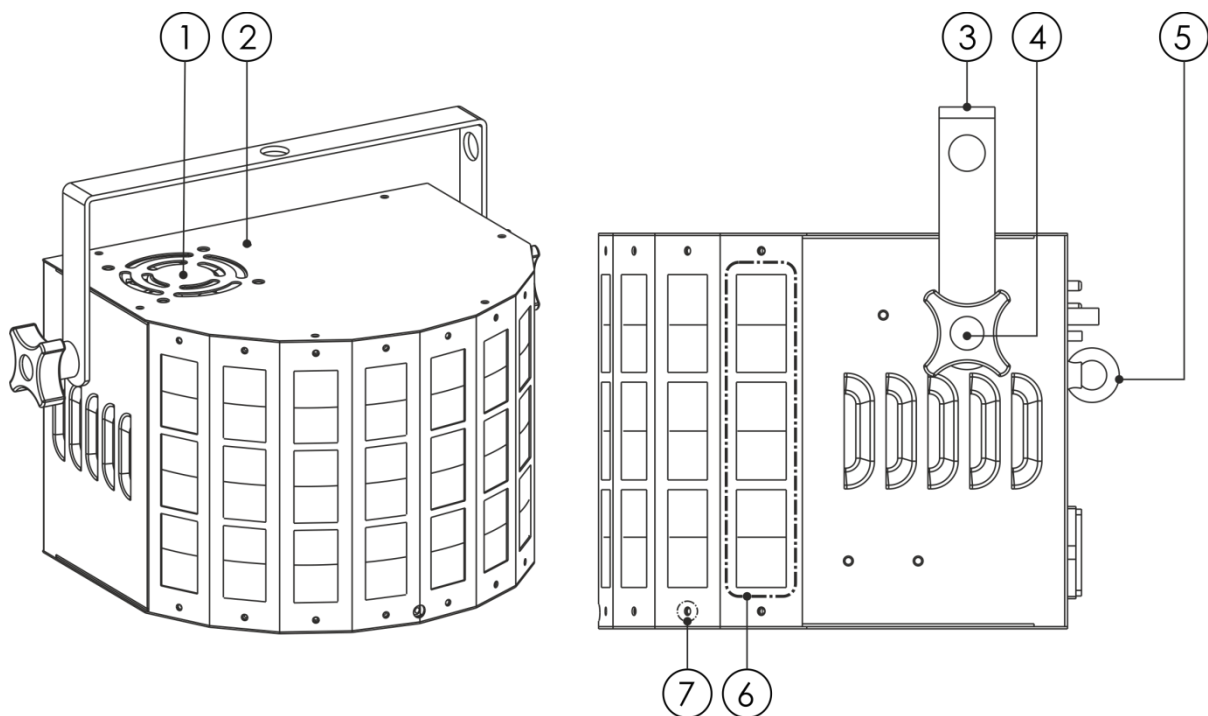


Fig. 01

- 01) Cooling fan
- 02) Ground/earth connection
- 03) Mounting bracket with inclined screw
- 04) Adjustment screw
- 05) Safety eye
- 06) LED lens
- 07) Strobe lens

Backside

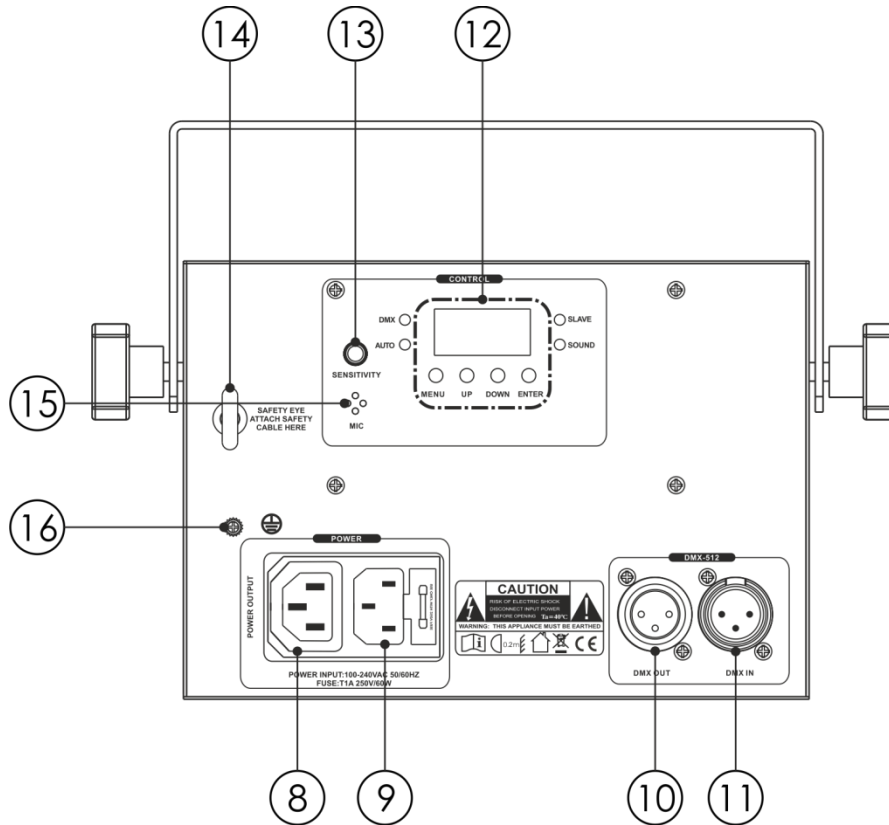


Fig. 02

- 08) IEC power connector OUT
- 09) IEC power connector IN + Fuse T1A/250V
- 10) 3-pin DMX signal connector OUT
- 11) 3-pin DMX signal connector IN
- 12) LED display + control buttons
- 13) Sound sensitivity control
- 14) Safety eye
- 15) Built-in microphone
- 16) Ground/earth connection

Installation

Remove all packing materials from the Techno Derby. 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.

Control Modes

There are 4 modes:

- Built-in programs (stand-alone)
- Sound-controlled
- Master/Slave
- DMX-512 (1CH, 4CH)

One Techno Derby (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 Techno Derby is not connected with a DMX cable, it functions as a stand-alone device.
- 05) Please see page 14 for more information about the Built-in auto programs.

One Techno Derby (Sound-controlled)

- 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 Techno Derby is not connected with a DMX cable, it functions as a stand-alone device.
- 05) Please see page 14 for more information about the Sound-controlled mode.

Multiple Techno Derbys (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 Techno Derbys.

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 page 14 (Built-in or Sound-controlled). This means 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 Techno Derbys Master/Slave Set Up

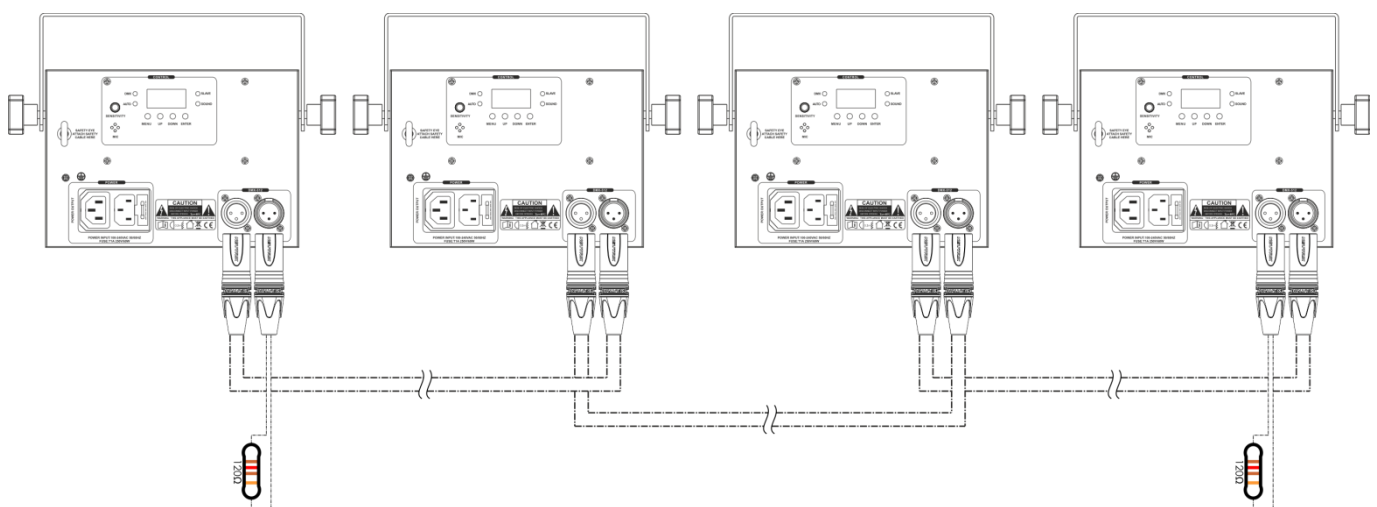
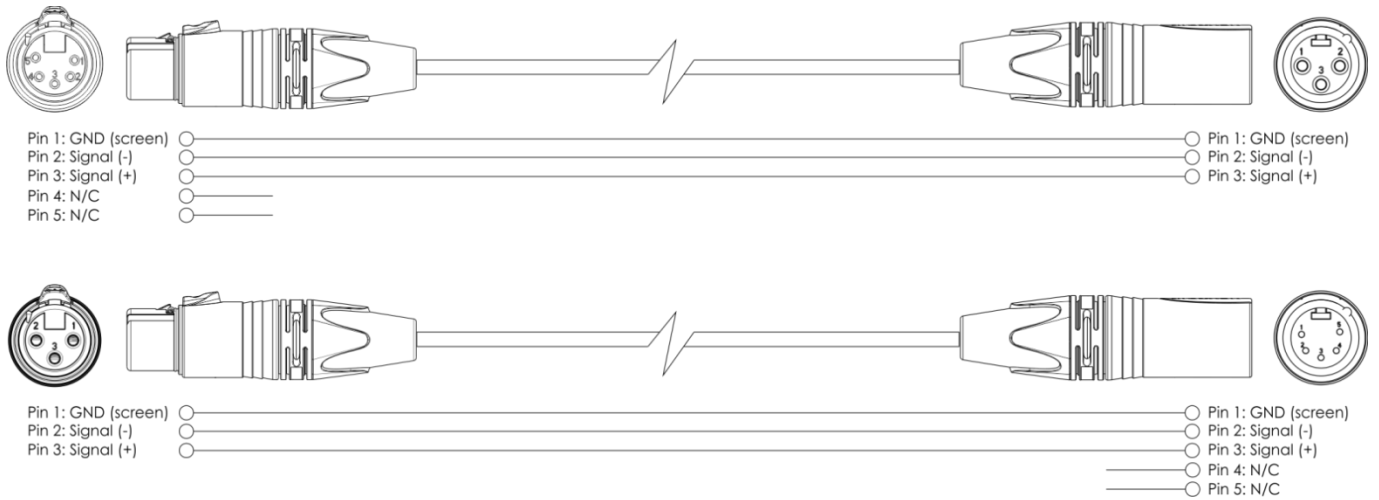


Fig. 03

Multiple Techno Derbys (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-p XLR cable to connect the Techno Derbys and other devices.



- 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 Techno Derbys DMX Set Up

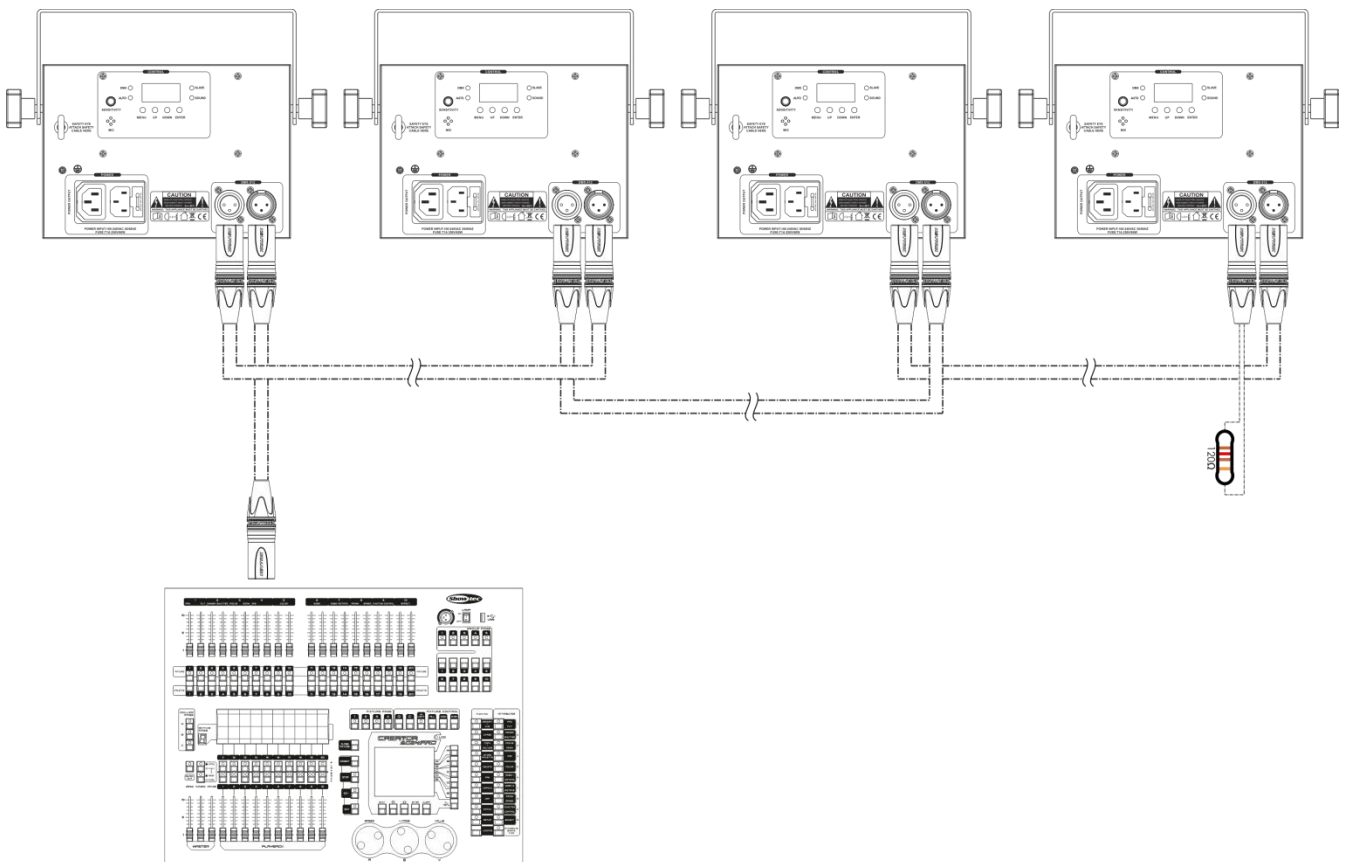


Fig. 04

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 of 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 a 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

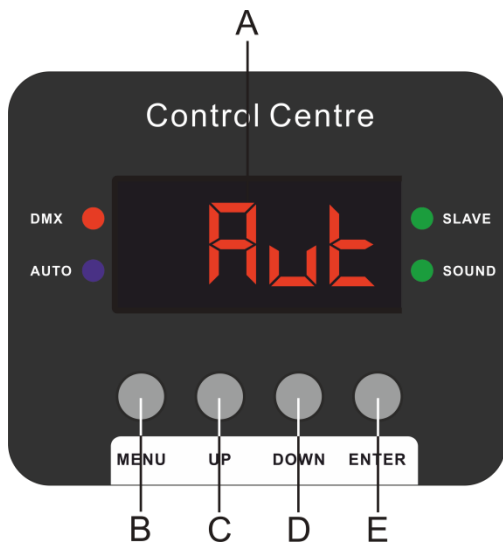
Data Cabling

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

DAP Audio Certified DMX Data Cables

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

Control Panel



- A) LED display
- B) MENU button
- C) UP button
- D) DOWN button
- E) 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 Techno Derby will respond to the controller.

Please note when you use the controller, the unit has **4** channels.

When using multiple Techno Derbys, make sure you set the DMX addresses right.

Therefore, the DMX address of the first Techno Derby should be **1(001)**; the DMX address of the second Techno Derby should be **1+4=5 (005)**; the DMX address of the third Techno Derby should be **5+4=9 (009)**, etc.

Please, make sure that you do not have any overlapping channels in order to control each Techno Derby correctly. If two or more Techno Derbys are addressed similarly, they will work similarly.

Controlling:

After having addressed all Techno Derby fixtures, you may now start operating these via your lighting controller.

Note: After switching on, the Techno Derby 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 Techno Derby.
- 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.

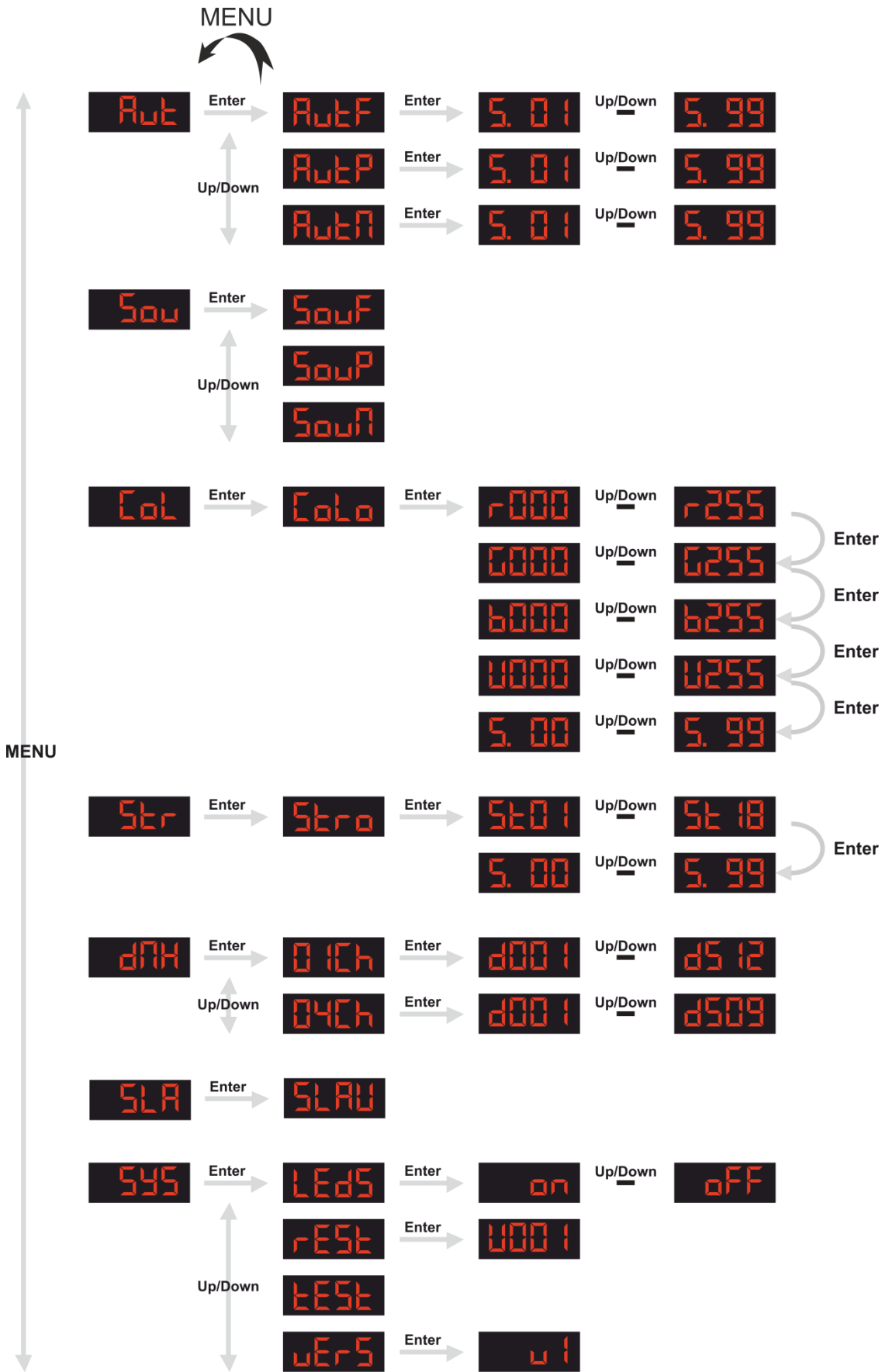
Display Off after 35 seconds

When no button is pressed for 35 seconds, the display will turn off.

To light up the display, you have to press the MENU, UP, DOWN or ENTER button.

Once you have pressed the button, the display will light up.

Menu Overview



Main Menu Options

Aut	Built-in Shows
Sou	Sound-controlled
Col	Color Settings
Str	Strobe Shows
dMx	DMX-512 Mode
SLA	Master/Slave Mode
SYS	System Settings

1. Built-in Shows

- 01) Press the **MENU** button until the display shows **Aut**.
- 02) Press the **ENTER** button to enter the menu.
- 03) Press the **UP** and **DOWN** buttons to choose between the 3 built-in shows:
AutF
AutP
AutN
- 04) Press the **ENTER** button to choose your preferred built-in show.
- 05) Press the **UP** and **DOWN** buttons to adjust the speed of your preferred show.
The adjustment range is between **5.01** ^{Up/Down} **5.99**, from slow to fast.
- 06) Press the **ENTER** button to set the speed.

2. Sound-controlled

- 01) Press the **MENU** button until the display shows **Sou**.
- 02) Press the **ENTER** button to enter the menu.
- 03) Press the **UP** and **DOWN** buttons to choose between the 3 sound-controlled shows:
SouF
SouP
SouN
- 04) Press the **ENTER** button to choose your preferred sound-controlled show.
- 05) Decrease or increase the sound sensitivity by turning the control **(13)**, respectively to the left or right, on the backside of the device.

3. Color Settings

- 01) Press the **UP** and **DOWN** buttons until the display shows **Col.**
- 02) Press the **ENTER** button to proceed. The display will show **CoLo.**
- 03) Press the **ENTER** button to enter the edition mode.
- 04) Repeatedly press the **ENTER** button to toggle between the following color settings:

r000 ^{Up/Down} **r255** Red color intensity
000 = OFF, 255 = Full ON

G000 ^{Up/Down} **G255** Green color intensity
000 = OFF, 255 = Full ON

b000 ^{Up/Down} **b255** Blue color intensity
000 = OFF, 255 = Full ON

W000 ^{Up/Down} **W255** White color intensity
000 = OFF, 255 = Full ON

S. 00 ^{Up/Down} **S. 99** Strobe speed
00 = OFF, 99 = Fast

- 05) Press the **UP** and **DOWN** buttons to adjust the settings above, as required.
- 06) Press the **ENTER** button to save the settings.

4. Strobe Shows

- 01) Press the **MENU** button until the display shows **Str.**
- 02) Press the **ENTER** button to enter the menu. The display will show **Stro.**
- 03) Press the **ENTER** button to proceed.
- 04) Press the **UP** and **DOWN** buttons to choose one of the 18 strobe shows: **St01** ^{Up/Down} **St18**.
- 05) Press the **ENTER** button to proceed to the strobe show speed settings.
- 06) Press the **UP** and **DOWN** buttons to adjust the strobe show speed.

The adjustment range is between **S. 00** ^{Up/Down} **S. 99**, from slow to fast.

5. DMX-512 Mode

- 01) Press the **MENU** button until the display shows **dMx.**
- 02) Press the **ENTER** button to enter the menu.
- 03) Press the **UP** and **DOWN** buttons to choose one of the available DMX channel modes:

01Ch 1-channel mode

04Ch 4-channel mode

- 04) While the display shows **01Ch**, press the **ENTER** button to proceed to the 1-channel mode.
- 05) Press the **UP** and **DOWN** buttons to set the DMX address between **2001** ^{Up/Down} **2512**.
- 06) Press the **ENTER** button to confirm the address.
- 07) While the display shows **04Ch**, press the **ENTER** button to proceed to the 4-channel mode.
- 08) Press the **UP** and **DOWN** buttons to set the DMX address between **2001** ^{Up/Down} **2509**.
- 09) Press the **ENTER** button to confirm the address.

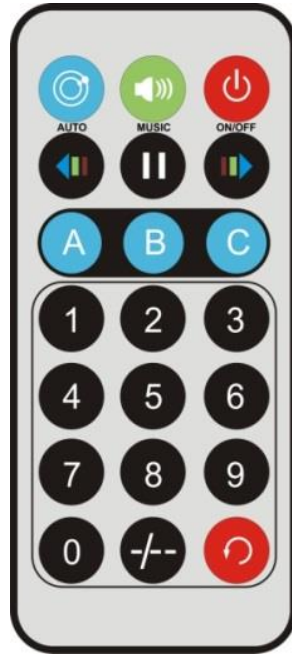
6. Master/Slave Mode

- 01) Press the **MENU** button until the display shows **SLA.**
- 02) Press the **ENTER** button. The display will show **SLAV.**
- 03) The device is now operating in Master/Slave mode. It means that it will react the same as the master device.

7. System Settings

- 01) Press the **UP** and **DOWN** buttons until the display shows **595**.
- 02) Press the **ENTER** button to enter the menu.
- 03) Repeatedly press the **UP** and **DOWN** buttons to toggle between the following system settings:
 - LEdS** LED power saving mode
 - rESt** Setting Reset
 - tEST** Test Mode
 - uErS** Current Software Version
- 04) While the display shows **LEdS**, press the **ENTER** button to proceed to the power saving mode.
- 05) Press the **UP** and **DOWN** buttons to choose between **on** ^{Up/Down} **off**.
- 06) While the display shows **rESt**, press the **ENTER** button to reset the device's settings.
The display will promptly show **0001**. The settings have now been reset.
- 07) While the display shows **tEST**, the device will perform a full test of all the features available on the device.
- 08) While the display shows **uErS**, press the **ENTER** button to see the current software version, installed on the device.

Remote Control



Button	Function	Description
	On / Off	Switch the device ON or OFF
	Auto Mode	Activate/deactivate Built-in Auto Shows mode
	Sound-controlled Mode	Activate/deactivate Sound-controlled mode
	LED Mode	Activate/deactivate LED mode
	Strobe Show	Activate strobe shows (press repeatedly to toggle between different strobe shows)
	Strobe	Switch the strobe ON or OFF
	Pause	Play/pause the show
	Speed	Adjust the show speed. 0 = slow, 9 = fast
	Color setting	Adjust the colors

DMX Channels

1 channel

Channel 1 – Control Modes

0-9	Off
10-50	Built-in shows 1 (RGB beams + White Strobe Flashing)s
51-90	Built-in shows 2 (RGB beams)
91-130	Built-in show 3 (White Strobe Flashing)
131-255	Sound-controlled mode

4 channels**Channel 1 – LED Color Settings**

0-5	Not functional
6-20	Red
21-35	Green
36-50	Blue
51-65	White
66-80	Red + Green
81-95	Red + Blue
96-110	Red + White
111-125	Green + Blue
126-140	Green + White
141-155	Blue + White
156-170	Red + Green + Blue
171-185	Red + Green + White
186-200	Green + Blue + White
201-215	Red + Green + Blue + White
216-229	Slow color switch
230-255	Fast color switch

Channel 2 – Strobe

0-5	Strobe Off
6-255	Strobe speed, from slow to fast

Channel 3 – Pattern Rotation Settings

0	Not functional
1-127	Manual pattern rotation adjustment
128-255	Rotation speed, from slow to fast

Channel 4 – Strobe Effects

0-9	Not functional
10-19	Effect 1, from slow to fast
20-29	Effect 2, from slow to fast
30-39	Effect 3, from slow to fast
40-49	Effect 4, from slow to fast
50-59	Effect 5, from slow to fast
60-69	Effect 6, from slow to fast
70-79	Effect 7, from slow to fast
80-89	Effect 8, from slow to fast
90-99	Effect 9, from slow to fast
100-109	Effect 10, from slow to fast
110-119	Effect 11, from slow to fast
120-129	Effect 12, from slow to fast
130-139	Effect 13, from slow to fast
140-149	Effect 14, from slow to fast
150-159	Effect 15, from slow to fast
160-169	Effect 16, from slow to fast
170-179	Effect 17, from slow to fast
180-255	Effect 18, Strobe continuously On

Maintenance

The Showtec Techno Derby 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-relating and machine-technical installations are to be inspected by an expert after every year in the course of an acceptance test.

The operator has to make sure that safety-relating and machine-technical installations are to be inspected by a skilled person once a year.

The following points have to be considered during the inspection:

- 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.

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

- 01) Power supply. Check if the unit is plugged into an appropriate power supply.
- 02) The LEDs. Return the Techno Derby to your Showtec dealer.
- 03) The fuse. Replace the fuse. See page 19 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 Techno Derby, as this may damage the unit and the warranty will become void.
- 06) Return 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.

- 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)	Solution
One or more fixtures do not function at all	No power to the fixture	<ul style="list-style-type: none"> • Check if power is switched on and cables are plugged in
	Primary fuse blown	<ul style="list-style-type: none"> • Replace fuse
Fixtures reset correctly, but all respond erratically or not at all to the controller	The controller is not connected.	<ul style="list-style-type: none"> • 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)	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • Inspect connections and cables. Correct poor connections. Repair or replace damaged cables
	Data link not terminated with 120 Ohm termination plug	<ul style="list-style-type: none"> • Insert termination plug in output jack of the last fixture on the link
	Incorrect addressing of the fixtures	<ul style="list-style-type: none"> • Check address setting
	One of the fixtures is defective and disturbs data transmission on the link	<ul style="list-style-type: none"> • Bypass one fixture at a time until normal operation is restored: 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)	<ul style="list-style-type: none"> • Install a phase-reversing cable between the fixtures or swap pin 2 and 3 in the fixture that behaves erratically
No light or lamp cuts out intermittently	Fixture is too hot	<ul style="list-style-type: none"> • Allow the fixture to cool down • Clean the fan • Make sure air vents in control panel and the front lens are not blocked • Turn up the air conditioning
	LEDs damaged	<ul style="list-style-type: none"> • Disconnect the fixture and return it to your dealer
	The power supply settings do not match local AC voltage and frequency	<ul style="list-style-type: none"> • Disconnect fixture. Check settings and correct if necessary

Product Specifications

Model	Showtec Techno Derby
Input Voltage:	100~240VAC 50/60Hz
Power consumption:	30W
Fuse:	T1A/250V
Dimensions:	265 mm x 190 mm x 190 mm (LxWxH)
Weight:	1,5 kg
Operation and Programming	
Signal pin OUT:	pin 1 earth, pin 2 (-), pin 3 (+)
Set Up and Addressing:	LED control panel
DMX Channels:	1 or 4
Signal input and output:	3-pin XLR male IN 3-pin XLR female OUT
Electro-mechanical effects	
<ul style="list-style-type: none"> ● Red 4-digit LED display ● DMX-control via standard DMX-controller ● Control modes: Auto, Sound, DMX, Master/Slave ● Colors: Red, Green, Blue, White ● Color functions: Rainbow effect ● Light source: 4 x 3W LED ● Strobe: 16 x 0,5W ● Housing: Black Metal & Flame-retardant plastic 	
Max. ambient temperature t_a :	40°C;
Max. housing temperature t_B :	80°C
Cooling:	Cooling fan
Motor:	high quality stepping-motor controlled by microprocessors
Minimum distance	
Minimum distance from flammable surfaces:	0.5 m
Minimum distance to lighted object:	1.3 m

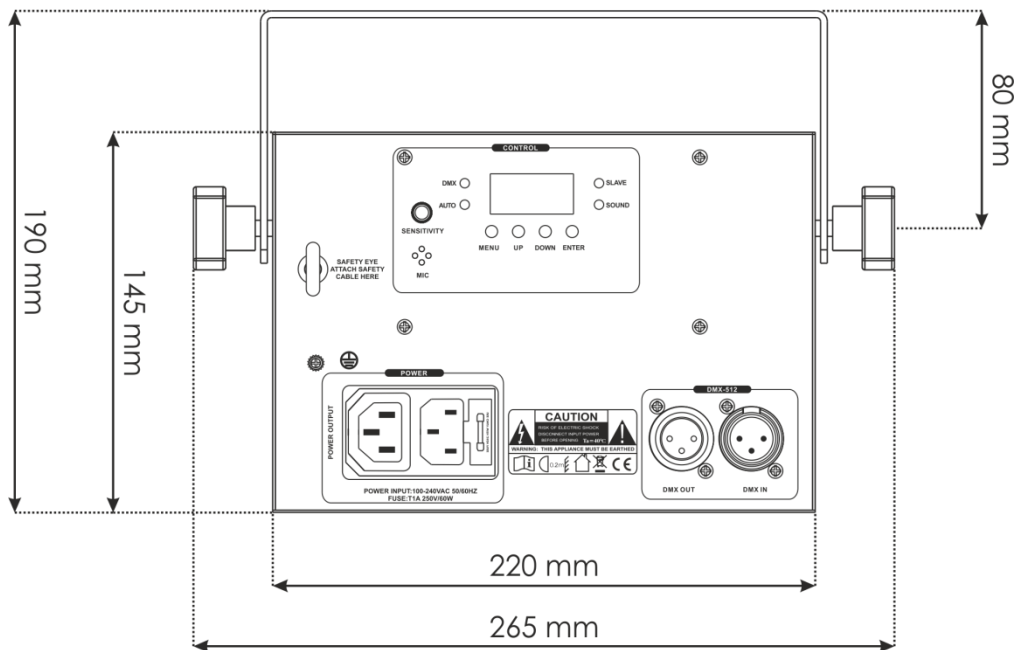
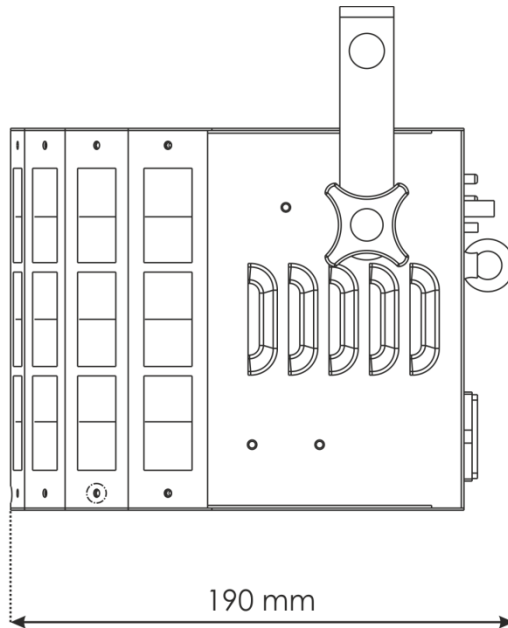
Design and product specifications are subject to change without prior notice



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Dimensions





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