DMX REFERENCE

Premium 300

Lotus Light



Manufacturer	Lotus Light
GDTF file	Lotus_Light_Premium_300_113344.gdtf
GDTF revision	Rev 1 · 2025-10-10
Generated	2026-11-24

Contents

1 About this manual 2
2 Quick reference 2
3 Safety instructions 3
4 Product description 4
5 Installation 4
6 Connections 4
7 Operation 5
8 Functions at a glance 6
9 DMX channels 8
Mode Default 8
10 Technical specifications 12
11 Maintenance and cleaning 12
12 Troubleshooting 13
13 Disposal 13

1 About this manual

This document describes the Premium 300 by Lotus Light. It was compiled from the GDTF file Lotus_Light_Premium_300_113344.gdtf from the GDTF-Share library.

File revision: “Rev 1”.

The DMX modes, the channel functions and the technical data are given as the GDTF file states them. Installation, operation from the device's control panel, service and safety instructions are described in the manufacturer's original user manual, which takes precedence over this document.

This document was not issued or endorsed by Lotus Light; product names and trademarks belong to their owners.

Safety notices are marked with signal words according to the severity of the hazard: DANGER – an imminent hazard that will result in death or serious injury; WARNING – a potential hazard that could result in death or serious injury; CAUTION – a potential hazard that could result in minor injury or property damage; NOTE – additional information for correct and safe use.

> **NOTE** This product is designed for stage and effect lighting. It is not suitable for household room illumination.

2 Quick reference

Parameter	Value
Weight	19 kg

DMX modes

Mode	Channels	Units in one universe	First start addresses
Default	16	32	1, 17, 33, 49, …

No light? Check these channels

- Default: CH 6 Shutter at 104–107, 208–212 or 252–255 “open”; CH 7 Dimmer above 0


Read the manual before use


Do not stare into the light


Indoor use only

3 Safety instructions



Read the manual before use



Do not stare into the light



Indoor use only

⚠ WARNING

- This device is intended for professional use. Installation, connection, setup and maintenance must be carried out only by suitably qualified persons who have read this manual.
- Use the device only for its intended purpose and as described in this manual.
- Do not open the housing and do not modify or tamper with the device. Refer all repairs to an authorized service center.
- Do not use the device if its housing, power or data cable, or a connector is damaged, if the device has been dropped, or if liquid or a foreign object has entered it. In such a case, have it checked by a service center.
- Disconnect the device from the power supply before cleaning, maintenance or any work on the connections.
- After moving the device from a cold to a warm environment, let it reach room temperature before switching it on to prevent condensation inside.
- The device is not a toy; keep it out of the reach of children.

⚠ WARNING

- This device is designed for indoor use only. Protect it from rain, splashing water, moisture and dust, and do not place containers with liquids on it.
- Do not operate the device in high humidity, near water, or where condensation can form on it.

⚠ CAUTION

- This device emits intense light. Do not look directly into the light source or the beam at close range; doing so may damage your eyes.
- Do not aim the beam at the eyes of people or animals at close range, and do not view the light source through optical instruments (binoculars, camera lenses).
- Do not aim the beam at flammable or heat-sensitive materials at close range.

⚠ CAUTION

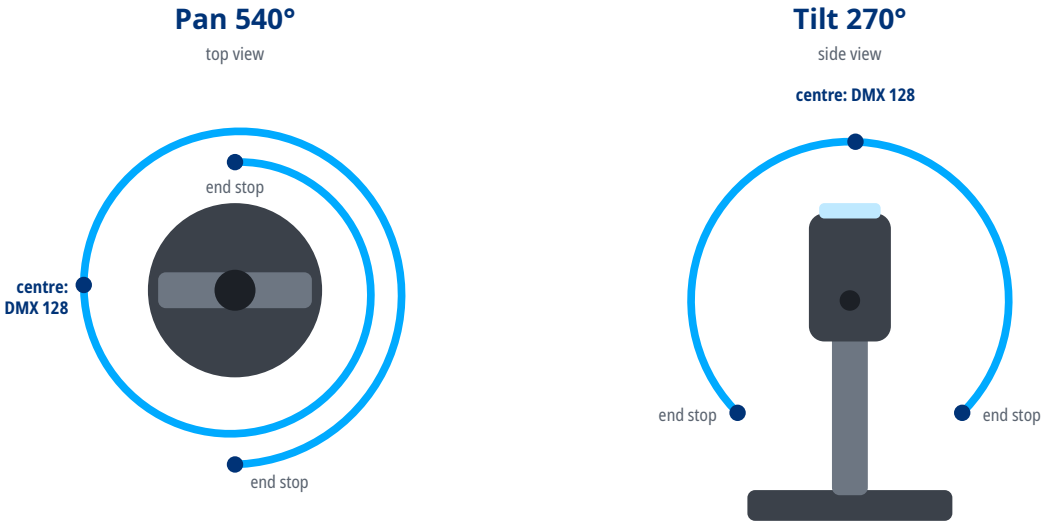
- Strobe and fast flashing light effects can trigger epileptic seizures in susceptible people (photosensitive epilepsy) and can cause nausea or disorientation.
- Inform the audience and performers in advance that strobe effects will be used, for example with a notice at the entrance, and do not use them longer than necessary.

⚠ **WARNING**

- The moving parts of the device (for example the head or arms) can move quickly and unexpectedly at any time – after power-on, during a reset, or on a command from the controller.
- Keep yourself and any objects out of the range of movement. While the device is switched on, do not touch the moving parts, move them by hand, or obstruct their movement; this can cause injury (pinching) and damage the drive.
- Do not carry the device by its moving parts. If the device has a transport lock, engage it before transport and release it before switching on.

4 Product description

Range of movement



5 Installation

⚠ **WARNING**

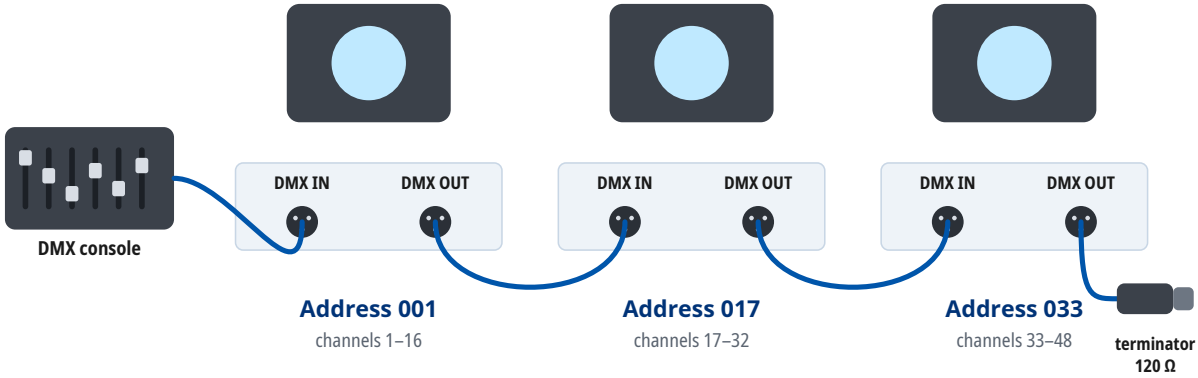
- Rigging must be carried out only by qualified persons in accordance with applicable regulations, in particular those for work at height.
- The supporting structure and fixings must safely carry the weight of all suspended devices; verify their load capacity in advance.
- Weight of the device: 19 kg.
- Use suitable mounting hardware (for example truss clamps) and tighten all screw connections properly.
- Always secure the suspended device against falling with a safety cable of adequate load capacity, routed through a fixed point of the device and around the supporting structure.
- During installation and removal, keep people out of the area below the work position.
- Regularly inspect the fixings and the safety cable for damage, corrosion and loosening.

6 Connections

- Use shielded cable designed for DMX512 with an impedance of 110 Ω. Ordinary microphone cable is not suitable for DMX, especially over longer distances.

- Connect the devices in a daisy chain: connect the DMX OUT of one device to the DMX IN of the next. Do not split the line with Y-cables or wire it in a star; the line may be split only with a DMX splitter.
- Connect the shield to pin 1 only. Do not connect the shield (ground) to the metal shell of the connector; this can cause short circuits or erratic behavior.
- XLR pin assignment: pin 1 – shield (ground), pin 2 – Data- (Data Complement), pin 3 – Data+ (Data True). On 5-pin connectors, pins 4 and 5 are not connected; a 5-pin connector can be connected to a 3-pin one with a cable adapter.
- Terminate the end of the line (for impedance matching): plug an XLR connector with a 120 Ω, ¼ W resistor between pins 2 and 3 into the DMX OUT of the last device. This reduces the risk of erratic behavior.
- Connect no more than 32 devices to one DMX line. For more devices or longer runs, use a DMX splitter or booster.

DMX line



Mode Default: every unit occupies 16 channels from its address. At most 32 units on one line; for more units or longer runs use a DMX splitter. A 120 Ω terminator closes the last DMX OUT.

7 Operation

Setting the DMX address

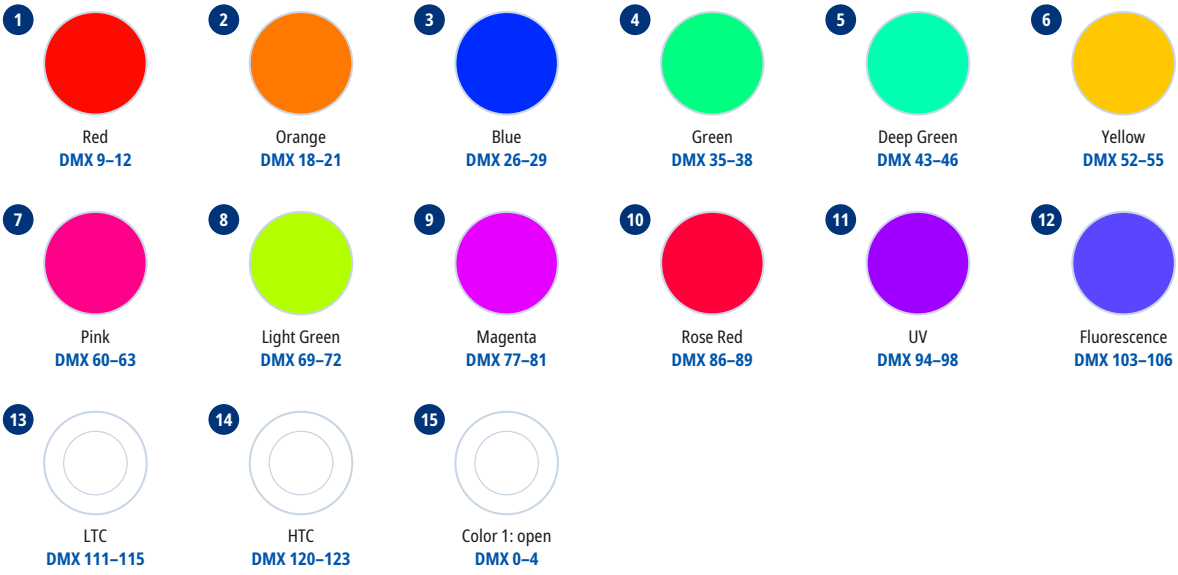
- The device occupies as many consecutive channels in the DMX universe as the selected DMX mode uses, starting at the set start address.
- Number of channels occupied in the DMX mode “Default”: 16.
- Choose start addresses so that the channels of individual devices do not overlap and the last occupied channel does not exceed 512. Devices with the same start address and mode respond identically.
- For several devices in a row in the DMX mode “Default”, you can use, for example, the start addresses 1, 17, 33, 49.
- The DMX mode set on the device must match the fixture profile (personality) used in the controller.

8 Functions at a glance

Functions in each DMX mode

	Default 16 channels
Pan / Tilt	1, 3
Dimmer	7
Shutter / strobe	6
Color wheel	8
Gobo wheel	9
Prism	10–12
Frost	13
Focus	14

Color wheel



Gobo wheel

1
Gobo 1 Wheel Index: open
DMX 0–3

2 
gobo1
DMX 4–7

3 
gobo2
DMX 8–11

4 
gobo3
DMX 12–15

5 
gobo4
DMX 16–19

6 
gobo5
DMX 20–23

7 
gobo6
DMX 24–27

8 
gobo7
DMX 28–31

9 
gobo8
DMX 32–35

10 
gobo9
DMX 36–39

11 
gobo10
DMX 40–43

12 
gobo11
DMX 44–47

13 
gobo12
DMX 48–51

14 
gobo13
DMX 52–55

15 
gobo14
DMX 56–59

16 
gobo15
DMX 60–63

17 
gobo16
DMX 64–67

18 
gobo17
DMX 68–72

Prism 1

1
Open
DMX 0–63

2 
8 facets
Prisn 8facet
DMX 64–255

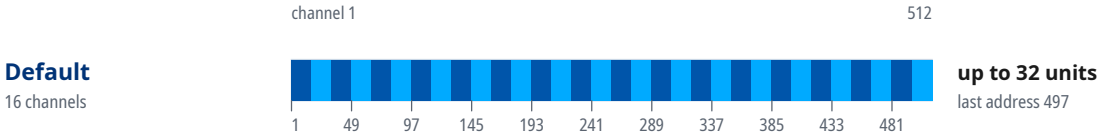
Prism 2

1
Open
DMX 0–63

2 
16 facets
Prism 16 facet
DMX 64–255

9 DMX channels

Units in one DMX universe



Start addresses of 20 units in the mode “Default”

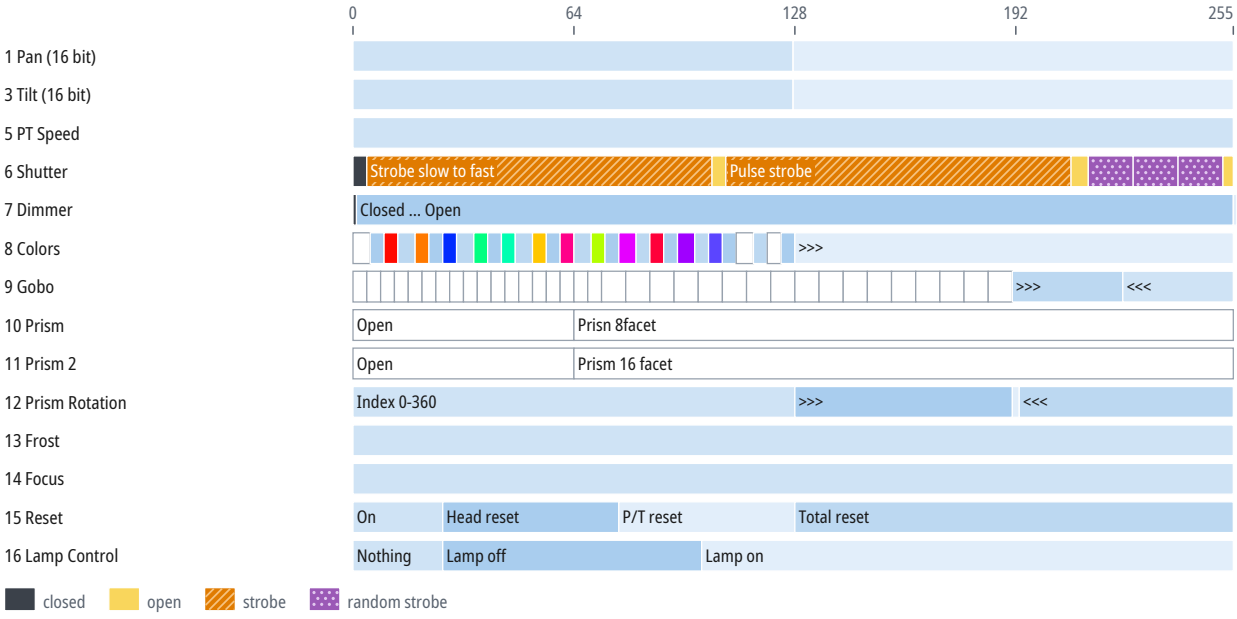
Unit	Start address	Unit	Start address	Unit	Start address	Unit	Start address
1	1	6	81	11	161	16	241
2	17	7	97	12	177	17	257
3	33	8	113	13	193	18	273
4	49	9	129	14	209	19	289
5	65	10	145	15	225	20	305

Mode Default

16-bit parameters use two channels, coarse and fine: value = 256 × coarse value + fine value.

If the device receives DMX in this mode but gives no light, check these channels: CH 6 Shutter at 104–107, 208–212 or 252–255 “open”; CH 7 Dimmer above 0. The GDTF file gives these values for a console's Highlight function: CH 7 Dimmer 255.

Channel functions at a glance



CH	Function	DMX	Description
1	Pan	0–127	Pan 1
		128	Home
		128–255	Pan 1
2	Pan Fine	0–255	Fine adjustment of CH 1
3	Tilt	0–127	Tilt 1

CH	Function	DMX	Description
3	Tilt (continued)	128	Home
		128–255	Tilt 1
4	Tilt Fine	0–255	Fine adjustment of CH 3
5	PT Speed	0–255	
6	Shutter	0–3	Shutter 1: close
		4–103	Strobe slow to fast (0.1–30 Hz)
		104–107	Shutter 1: open
		108–207	Pulse strobe
		208–212	Shutter 1: open
		213–225	Random strobe slow
		226–238	Random strobe medium
		239–251	Random strobe fast
		252–255	Shutter 1: open
7	Dimmer	0	Closed
		1–254	Closed ... Open
		255	Open
8	Colors	0–4	Color 1: open
		5–8	Open+red
		9–12	Red
		13–17	Red+crimson
		18–21	Orange
		22–25	Crimson+golden
		26–29	Blue
		30–34	Golden+yellow
		35–38	Green
		39–42	Yellow+navy blue
		43–46	Deep Green
		47–51	Navy blue+sky blue
		52–55	Yellow
		56–59	Sky blue+green
		60–63	Pink
		64–68	Green+light green
		69–72	Light Green
		73–76	Light green+orange
		77–81	Magenta
		82–85	Orange+rose red
		86–89	Rose Red
		90–93	Rose red+blue green
		94–98	UV
		99–102	Blue green+fluo
		103–106	Fluorescence
		107–110	Fluor+ltc

CH	Function	DMX	Description
8	Colors (continued)	111–115	LTC
		116–119	LTC+HTC
		120–123	HTC
		124–127	HTC+OPEN
		128–255	>>> (0–360 °/s)
9	Gobo	0–3	Gobo 1 Wheel Index: open
		4–7	gobo1
		8–11	gobo2
		12–15	gobo3
		16–19	gobo4
		20–23	gobo5
		24–27	gobo6
		28–31	gobo7
		32–35	gobo8
		36–39	gobo9
		40–43	gobo10
		44–47	gobo11
		48–51	gobo12
		52–55	gobo13
		56–59	gobo14
		60–63	gobo15
		64–67	gobo16
		68–71	gobo17
		72–78	gobo1shake
		79–85	gobo2shake
		86–92	gobo3shake
		93–99	gobo4shake
		100–106	gobo5shake
		107–113	gobo6shake
		114–120	gobo7shake
		121–127	gobo8shake
		128–134	gobo9shake
		135–141	gobo10shake
		142–148	gobo11shake
		149–155	gobo12shake
		156–162	gobo13shake
		163–169	gobo14shake
		170–176	gobo15shake
		177–183	gobo16shake
		184–190	gobo17shake
		191–222	>>> (1–360 °/s)
		223–255	<<< (1–360 °/s)

CH	Function	DMX	Description
10	Prism	0–63	Open
		64–255	Prisn 8facet
11	Prism 2	0–63	Open
		64–255	Prism 16 facet
12	Prism Rotation	0–127	Index 0-360 (360°)
		128–190	>>> (1–360 °/s)
		191–192	Prism 1 Pos Rotate: stop
		193–255	<<< (1–360 °/s)
13	Frost	0–255	
14	Focus	0–255	
15	Reset	0–25	On
		26–76	Head reset
		77–127	P/T reset
		128–255	Total reset
16	Lamp Control	0–25	Nothing
		26–100	Lamp off
		101–255	Lamp on

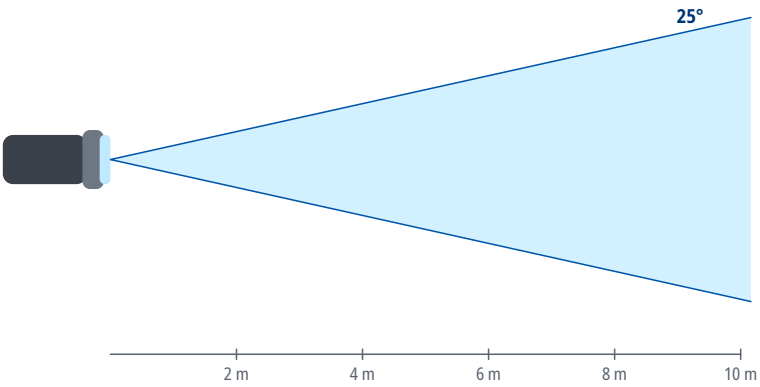
10 Technical specifications

Parameter	Value
Light	
Light source	LED
LED power	1,000 W
Luminous flux	1,000 lm
Color temperature	6,000 K
Color rendering index (CRI)	100
Optics	
Beam angle	25°
Movement	
Pan	540°
Tilt	270°
Dimensions and construction	
Weight	19 kg
Operating environment	
Operating temperature	0 to 40 °C

Speeds and ranges

Parameter	Value
Strobe frequency	0.1–30 Hz
Color wheel rotation	up to 360 °/s (60 rpm)
Gobo wheel rotation	up to 360 °/s (60 rpm)
Prism 1 rotation	up to 360 °/s (60 rpm)

Spot diameter



Distance	Ø 25°
2 m	0.89 m
4 m	1.8 m
6 m	2.7 m
8 m	3.5 m
10 m	4.4 m
15 m	6.7 m

Spot diameter square to the beam axis, calculated from the beam angle.

11 Maintenance and cleaning

- Before cleaning and maintenance, switch the device off, disconnect it from the power supply and let it cool down.
- Clean the housing with a soft, dry or slightly damp cloth. Do not use solvents, abrasive cleaners or

pressure washers, and make sure no liquid gets into the device.

- Clean optical parts (lenses, front glass), if the device has any, with a soft lint-free cloth and a cleaner intended for optics or glass.
- Regularly inspect the housing, cables, connectors and fixings. Have damaged parts replaced by a service center.
- How often to clean depends on the environment; dust, smoke and fog make the device dirty much faster.

12 Troubleshooting

Problem	Remedy
The device does not switch on	Check the supply voltage, the cables and the fuse, if the device has one.
The device does not respond to DMX	Check the start address, the selected DMX mode and whether it matches the profile in the controller, the cable connection to DMX IN, and the controller output (universe).
The device behaves erratically or flickers	Check the terminator at the end of the line, the condition and wiring of the cables (shield on pin 1 only), the number of devices on the line (32 at most), and that the line is not split without a splitter.
Only some devices on the line respond	Check the cable and connectors between the last working and the first non-working device, and make sure all devices on the line are switched on.
Devices respond to the wrong channels or affect each other	Check that the addresses do not overlap and that the DMX mode on the devices matches the patch in the controller.
The device or the connected load does not light up although it receives DMX	Check the values of the dimmer, shutter and strobe channels against the DMX channel table. For the DMX modes for which the sources state it, the chapter DMX channels gives under the mode's heading which channels must be open.
Movement is reversed	Check whether Pan/Tilt inversion is enabled in the device menu or in the controller.
Moving parts do not reach the correct position after power-on or transport	Switch the device off and on again to reset the position, and make sure the transport lock, if any, is released. If this does not help, contact a service center.
Movement is jerky	Check the value of the Pan/Tilt speed channel, if the device has one, and the stability of the DMX signal.

13 Disposal

The crossed-out wheeled bin symbol on the product, in the manual or on the packaging means that the product must not be disposed of with unsorted household waste at the end of its life.

Take the end-of-life equipment to a collection point, for example a municipal collection site or a retailer. Proper disposal enables materials to be recycled and helps prevent possible negative effects on the environment and human health.

Follow the regulations applicable in your country; in the Czech Republic, take-back is governed by Act No. 542/2020 Coll., on End-of-Life Products.

Recycle the packaging materials according to their type.