DMX REFERENCE

BTX-TITAN

Briteq



Manufacturer	Briteq
GDTF file	Briteq_BTX-TITAN_125995.gdtf
GDTF revision	20260123_Rev02, Uploaded to GDTF Share. · 2026-01-23
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1 About this manual

This document describes the BTX-Titan by Briteq. It was compiled from the GDTF file Briteq_BTX-TITAN_125995.gdtf from the GDTF-Share library.

File revision: “20260123_Rev02, Uploaded to GDTF Share.”.

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 Briteq; 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	22 kg

DMX modes

Mode	Channels	Units in one universe	First start addresses
24Ch	24	21	1, 25, 49, 73, ...
25Ch	25	20	1, 26, 51, 76, ...
17Ch	17	30	1, 18, 35, 52, ...

No light? Check these channels

- 24Ch: CH 22 Shutter at 32–63 “Open”; CH 23 Dimmer above 0
- 25Ch: CH 23 Shutter at 32–63 “Open”; CH 24 Dimmer above 0
- 17Ch: CH 16 Shutter at 32–63 “Open”; CH 17 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

Description in the GDTF file

“Hybrid indoor moving head based on the OSRAM SIRIUS HRI 280 Fast moving, punching beams and unparalled performance”

Range of movement



5 Installation

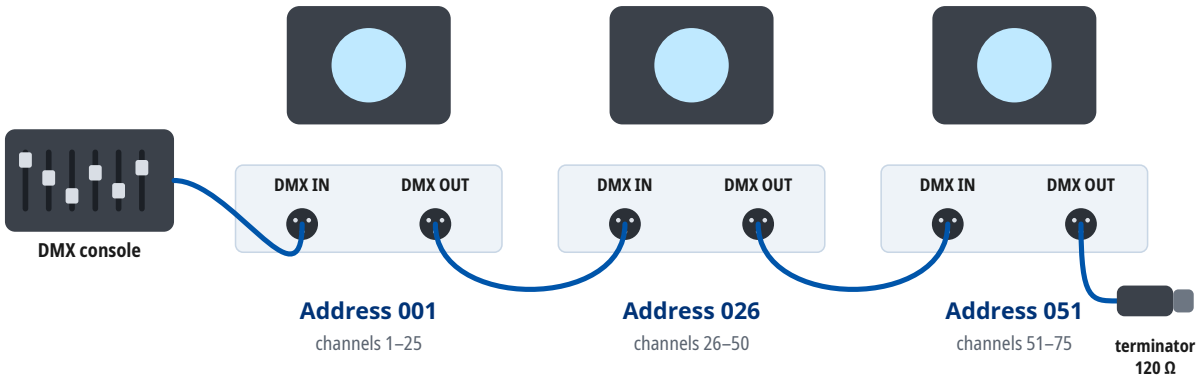
⚠ WARNING

- 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: 22 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 25Ch: every unit occupies 25 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 “25Ch”: 25.
- 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 “25Ch”, you can use, for example, the start addresses 1, 26, 51, 76.
- The DMX mode set on the device must match the fixture profile (personality) used in the controller.
- The device supports RDM (Remote Device Management), two-way communication with the controller over the DMX line.

8 Functions at a glance

Functions in each DMX mode

	24Ch 24 channels	25Ch 25 channels	17Ch 17 channels
Pan / Tilt	**1, 3**	**1, 3**	**1, 2**
Pan / Tilt resolution	16 bit	16 bit	8 bit
Dimmer	**23**	**24**	**17**
Dimmer resolution	16 bit	16 bit	8 bit
Shutter / strobe	**22**	**23**	**16**
Color wheel	**7**	**7**	**5**
Gobo wheel	**10, 11**	**10, 11**	**7, 8**
Gobo rotation	**12 ***	**12 ***	**9 ***
Prism	**14, 15**	**14–16**	**10–12**
Frost	**16**	**17**	**13**
Zoom	**17**	**18**	**14**
Focus	**19, 21**	**20, 22**	**15**
Effects / macros	**14**	**14**	**10**

* The function works only when another channel switches it on; see the DMX table.

Color wheel



Gobo wheel 1

1 
Gobo: Open
DMX 0–3

2 
Gobo 1
DMX 4–9

3 
Gobo 2
DMX 10–15

4 
Gobo 3
DMX 16–21

5 
Gobo 4
DMX 22–27

6 
Gobo 5
DMX 28–33

7 
Gobo 6
DMX 34–39

8 
Gobo 7
DMX 40–45

9 
Gobo 8
DMX 46–51

10 
Gobo 9
DMX 52–57

11 
Gobo 10
DMX 58–63

12 
Beam reducer 1
DMX 64–69

13 
Beam reducer 2
DMX 70–75

14 
Beam reducer 3
DMX 76–81

15 
Beam reducer 4
DMX 82–88

Gobo wheel 2

1 
Gobo 2 - Index: Open
DMX 0

2 
Gobo 2 - Index: Gobo 1
DMX 5–7

3 
Gobo 2 - Index: Gobo 2
DMX 8–10

4 
Gobo 2 - Index: Gobo 3
DMX 11–13

5 
Gobo 2 - Index: Gobo 4
DMX 14–16

6 
Gobo 2 - Index: Gobo 5
DMX 17–19

7 
Gobo 2 - Index: Gobo 6
DMX 20–22

8 
Gobo 2 - Index: Gobo 7
DMX 23–25

9 
Gobo 2 - Index: Gobo 8
DMX 26–28

10 
Gobo 9
DMX 29–32

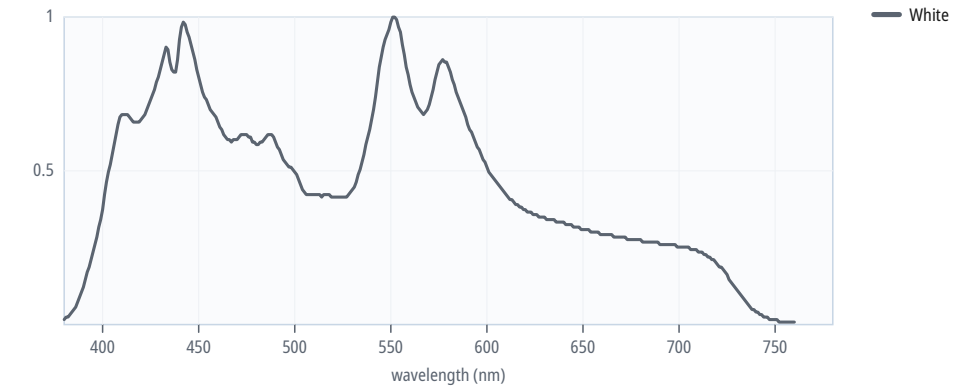
Prism

1
Prism: Open
DMX 0–19

2 
6 facets
6-facet linear - Index
DMX 20–39

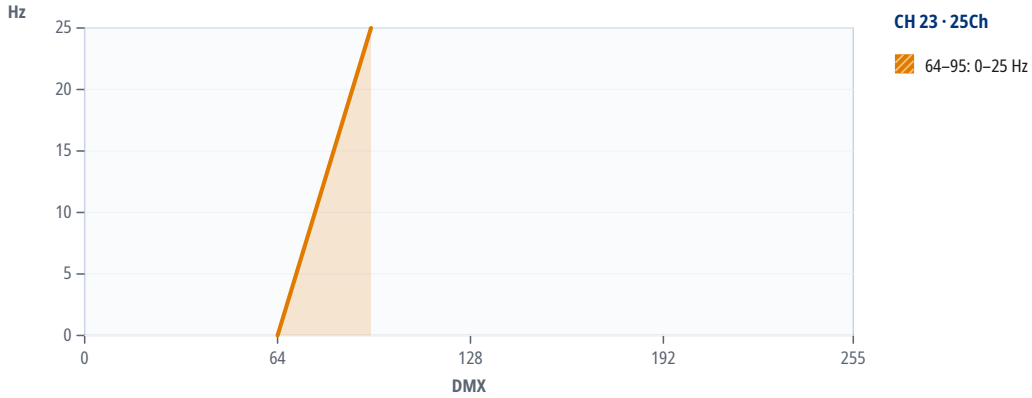
3 
8 facets
8-facet circular - index
DMX 50–59

Spectra of the light sources



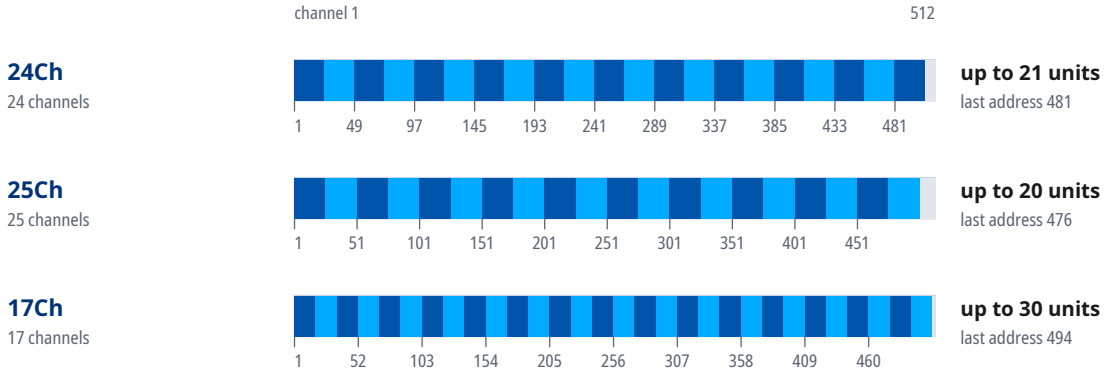
Relative spectrum of each light source as the GDTF file states it; each curve is scaled to its own maximum.

Strobe rate



9 DMX channels

Units in one DMX universe



Start addresses of 20 units in the mode “25Ch”

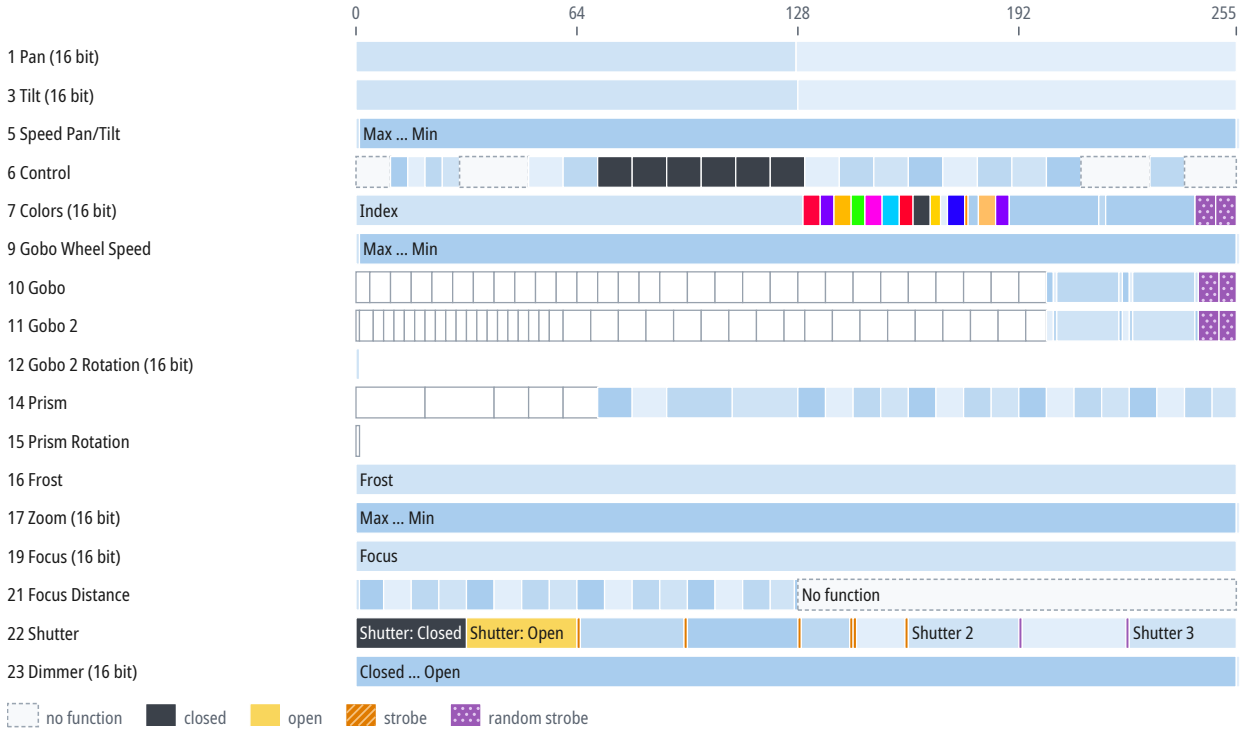
Unit	Start address	Unit	Start address	Unit	Start address	Unit	Start address
1	1	6	126	11	251	16	376
2	26	7	151	12	276	17	401
3	51	8	176	13	301	18	426
4	76	9	201	14	326	19	451
5	101	10	226	15	351	20	476

Mode 24Ch

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 22 Shutter at 32–63 “Open”; CH 23 Dimmer above 0. The GDTF file gives these values for a console's Highlight function: CH 7 Colors 0, CH 22 Shutter 45, CH 23 Dimmer 255.

Channel functions at a glance



CH	Function	DMX	Description
1	Pan	0–127	Pan
		128	Center
		128–255	Pan
2	Pan Fine	0–255	Fine adjustment of CH 1
3	Tilt	0–128	Tilt
		128	Center
		128–255	Tilt
4	Tilt Fine	0–255	Fine adjustment of CH 3
5	Speed Pan/Tilt	0	Max
		1–254	Max ... Min
		255	Min
6	Control	0–9	No function
		10–14	DMX input: Wired DMX
		15–19	DMX input: Wireless DMX
		20–24	Eco mode
		25–29	Standard mode
		30–49	No function

CH	Function	DMX	Description
6	Control (continued)	50–59	P/T speed mode
		60–69	P/T Time mode
		70–79	Blackout on P/T enabled
		80–89	Blackout on P/T disabled
		90–99	Blackout on color enabled
		100–109	Blackout on color disabled
		110–119	Blackout on gobo enabled
		120–129	Blackout on gobo disabled
		130–139	Lamp on
		140–149	P/T reset
		150–159	Color reset
		160–169	Gobo reset
		170–179	Shutter reset
		180–189	Zoom/prism reset
		190–199	Zoom/prism reset ... Total reset
		200–209	Total reset
		210–229	No function
		230–239	Lamp Off
		240–255	No function
7	Colors	0–129	Index
		130–134	Deep Red
		135–138	Deep Blue
		139–143	Yellow
		144–147	Green
		148–152	Magenta
		153–157	Azure
		158–161	Red
		162–166	Dark Green
		167–169	Amber
		170–171	Amber ... Blue
		172–176	Blue
		177	Orange
		178–180	Orange ... CTO
		181–185	CTO
		186–189	UV
		190–215	CW spin Max ... CW spin min
		215	CW spin min
		216–217	No spin
		218–243	CCW Spin min ... CCW spin max
		243	CCW spin max
		244–249	Random color Audio
		250–255	Random color

CH	Function	DMX	Description
8	Colors Fine	0–255	Fine adjustment of CH 7
9	Gobo Wheel Speed	0	Max
		1–254	Max ... Min
		255	Min
10	Gobo	0–3	Gobo: Open
		4–9	Gobo 1
		10–15	Gobo 2
		16–21	Gobo 3
		22–27	Gobo 4
		28–33	Gobo 5
		34–39	Gobo 6
		40–45	Gobo 7
		46–51	Gobo 8
		52–57	Gobo 9
		58–63	Gobo 10
		64–69	Beam reducer 1
		70–75	Beam reducer 2
		76–81	Beam reducer 3
		82–87	Beam reducer 4
		88–95	Shake Gobo 1 (0–3 Hz)
		96–103	Shake Gobo 2 (0–3 Hz)
		104–111	Shake Gobo 3 (0–3 Hz)
		112–119	Shake Gobo 4 (0–3 Hz)
		120–127	Shake Gobo 5 (0–3 Hz)
		128–135	Shake Gobo 6 (0–3 Hz)
		136–143	Shake Gobo 7 (0–3 Hz)
		144–151	Shake Gobo 8 (0–3 Hz)
		152–159	Shake Gobo 9 (0–3 Hz)
		160–167	Shake Gobo 10 (0–3 Hz)
		168–175	Shake Beam reducer 1 (0–3 Hz)
		176–183	Shake Beam reducer 2 (0–3 Hz)
		184–191	Shake Beam reducer 3 (0–3 Hz)
		192–199	Shake Beam reducer 4 (0–3 Hz)
		200–201	Gobo 1 Wheel Spin: Open
		202	CW spin max
		203–220	CW spin max ... CW spin min
		221	CW spin min
		222–223	No spin
		224	CCW spin min
		225–242	CCW spin min ... CCW spin max
		243	CCW spin max
		244–249	Random gobo audio

CH	Function	DMX	Description
10	Gobo (continued)	250–255	Random gobo
11	Gobo 2	0	Gobo 2 - Index: Open
		1–4	Hole
		5–7	Gobo 2 - Index: Gobo 1
		8–10	Gobo 2 - Index: Gobo 2
		11–13	Gobo 2 - Index: Gobo 3
		14–16	Gobo 2 - Index: Gobo 4
		17–19	Gobo 2 - Index: Gobo 5
		20–22	Gobo 2 - Index: Gobo 6
		23–25	Gobo 2 - Index: Gobo 7
		26–28	Gobo 2 - Index: Gobo 8
		29–31	Gobo 2 - Index: Gobo 9
		32–34	Gobo 2 - Rotation: Gobo 1
		35–37	Gobo 2 - Rotation: Gobo 2
		38–40	Gobo 2 - Rotation: Gobo 3
		41–43	Gobo 2 - Rotation: Gobo 4
		44–46	Gobo 2 - Rotation: Gobo 5
		47–49	Gobo 2 - Rotation: Gobo 6
		50–52	Gobo 2 - Rotation: Gobo 7
		53–55	Gobo 2 - Rotation: Gobo 8
		56–59	Gobo 2 - Rotation: Gobo 9
		60–67	Gobo 2 Select Shake - Index: Gobo 1 (0.18–5.5 Hz)
		68–75	Gobo 2 Select Shake - Index: Gobo 2 (0.18–5.5 Hz)
		76–83	Gobo 2 Select Shake - Index: Gobo 3 (0.18–5.5 Hz)
		84–91	Gobo 2 Select Shake - Index: Gobo 4 (0.18–5.5 Hz)
		92–99	Gobo 2 Select Shake - Index: Gobo 5 (0.18–5.5 Hz)
		100–107	Gobo 2 Select Shake - Index: Gobo 6 (0.18–5.5 Hz)
		108–115	Gobo 2 Select Shake - Index: Gobo 7 (0.18–5.5 Hz)
		116–123	Gobo 2 Select Shake - Index: Gobo 8 (0.18–5.5 Hz)
		124–129	Gobo 2 Select Shake - Index: Gobo 9 (0.18–5.5 Hz)
		130–137	Gobo 2 Select Shake - Rotation: Gobo 1 (0.2–5.5 Hz)
		138–145	Gobo 2 Select Shake - Rotation: Gobo 2 (0.2–5.5 Hz)
		146–153	Gobo 2 Select Shake - Rotation: Gobo 3 (0.2–5.5 Hz)
		154–161	Gobo 2 Select Shake - Rotation: Gobo 4 (0.2–5.5 Hz)
		162–169	Gobo 2 Select Shake - Rotation: Gobo 5 (0.2–5.5 Hz)
		170–177	Gobo 2 Select Shake - Rotation: Gobo 6 (0.2–5.5 Hz)
		178–185	Gobo 2 Select Shake - Rotation: Gobo 7 (0.2–5.5 Hz)
		186–193	Gobo 2 Select Shake - Rotation: Gobo 8 (0.2–5.5 Hz)
		194–199	Gobo 2 Select Shake - Rotation: Gobo 9 (0.2–5.5 Hz)
		200–201	Gobo 2 Wheel Spin: Open
		202	Spin CW max
		203–220	Spin CW max ... Spin CW min

CH	Function	DMX	Description
11	Gobo 2 (continued)	221	Spin CW min
		222–223	No spin
		224	Spin CCW min
		225–242	Spin CCW min ... Spin CCW max
		243	Spin CCW max
		244–249	Random gobo audio
		250–255	Random gobo
12	Gobo 2 Rotation		When CH 11 is 0–31:
		0–255	Index (360°)
13	Gobo 2 Rotation Fine	0–255	Fine adjustment of CH 12
14	Prism	0–19	Prism: Open
		20–39	6-facet linear - Index
		40–49	6-facet linear - rotating
		50–59	8-facet circular - index
		60–69	8-facet circular - rotating
		70–79	Prism 1 + prism 2 indexing
		80–89	Prism 1 + prism 2 rotating
		90–108	Prism 1 rotation + prism 2 index
		109–127	Prism 1 index + prism 2 rotation
		128–135	Macro 1
		136–143	Macro 2
		144–151	Macro 3
		152–159	Macro 4
		160–167	Macro 5
		168–175	Macro 6
		176–183	Macro 7
		184–191	Macro 8
		192–199	Macro 9
		200–207	Macro 10
		208–215	Macro 11
		216–223	Macro 12
		224–231	Macro 13
		232–239	Macro 14
		240–247	Macro 15
		248–255	Macro 16
15	Prism Rotation		When CH 14 is 20–29:
		0–255	Index
			When CH 14 is 50–59:
		0–255	Index
			When CH 14 is 40–49:
		0	No rotation
		1	Rotation CW max

CH	Function	DMX	Description
15	Prism Rotation (continued)	2–126	Rotation CW max … Rotation CW min
		127	Rotation CW min
		128–129	No rotation (0.5–0.51 °/s)
		130	Rotation CCW min
		131–254	Rotation CCW min … Rotation CCW max
		255	Rotation CCW max
			When CH 14 is 60–69:
		0	No rotation
		1	Rotation CW max
		2–126	Rotation CW max … Rotation CW min
		127	Rotation CW min
		128–129	No rotation
		130	Rotation CCW min
		131–254	Rotation CCW min … Rotation CCW max
		255	Rotation CCW max
			When CH 14 is 90–127:
		0	No rotation
		1	Rotation CW max
		2–126	Rotation CW max … Rotation CW min
		127	Rotation CW min
		128–129	No rotation
		130	Rotation CCW min
		131–254	Rotation CCW min … Rotation CCW max
		255	Rotation CCW max
			When CH 14 is 80–89:
		0	No rotation
		1	Rotation CW max
		2–126	Rotation CW max … Rotation CW min
		127	Rotation CW min
		128–129	No rotation
		130	Rotation CCW min
		131–254	Rotation CCW min … Rotation CCW max
		255	Rotation CCW max
			When CH 14 is 70–79:
		0–255	Index
16	Frost	0–255	Frost
17	Zoom		When CH 11 is 0:
		0–255	Max … Min
		255	Min
			When CH 11 is 1–255:
		0–255	Max … Min
		255	Min

CH	Function	DMX	Description
18	Zoom Fine	0–255	Fine adjustment of CH 17
19	Focus	0–255	Focus
20	Focus Fine	0–255	Fine adjustment of CH 19
21	Focus Distance	0	Autofocus disabled
		1–7	Focus 1 Distance - Gobo: 10m
		8–15	Focus 1 Distance - Gobo: 15m
		16–23	Focus 1 Distance - Gobo: 20m
		24–31	Focus 1 Distance - Gobo: 25m
		32–39	Focus 1 Distance - Gobo: 30m
		40–47	Focus 1 Distance - Gobo: 35m
		48–55	Focus 1 Distance - Gobo: 40m
		56–63	Focus 1 Distance - Gobo: 45m
		64–71	Focus 1 Distance - Gobo: 10m
		72–79	Focus 1 Distance - Gobo: 15m
		80–87	Focus 1 Distance - Gobo: 20m
		88–95	Focus 1 Distance - Gobo: 25m
		96–103	Focus 1 Distance - Gobo: 30m
		104–111	Focus 1 Distance - Gobo: 35m
		112–119	Focus 1 Distance - Gobo: 40m
		120–126	Focus 1 Distance - Gobo: 45m
		127	Infinity
		128–255	No function
22	Shutter	0–31	Shutter: Closed
		32–63	Shutter: Open
		64	Shutter Strobe: Min
		65–94	Shutter Strobe: Min ... Max
		95	Shutter Strobe: Max
		96–127	Shutter 1
		128	Shutter Strobe Pulse Open: Min
		129–142	Shutter Strobe Pulse Open: Min ... Max
		143	Shutter Strobe Pulse Open: Max
		144	Shutter Strobe Pulse Close: Max
		145–158	Shutter Strobe Pulse Close: Max ... Min
		159	Shutter Strobe Pulse Close: Min
		160–191	Shutter 2
		192	Shutter Strobe Random: Min
		193–222	Shutter Strobe Random: Min ... Max
		223	Shutter Strobe Random: Max
		224–255	Shutter 3
23	Dimmer	0–255	Closed ... Open
		255	Open
24	Dimmer Fine	0–255	Fine adjustment of CH 23

Mode 25Ch

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 23 Shutter at 32–63 “Open”; CH 24 Dimmer above 0. The GDTF file gives these values for a console's Highlight function: CH 7 Colors 0, CH 23 Shutter 45, CH 24 Dimmer 255.

Channel functions at a glance



CH	Function	DMX	Description
1	Pan		Same as CH 1 in the mode “24Ch” (p. 11)
2	Pan Fine	0–255	Fine adjustment of CH 1
3	Tilt		Same as CH 3 in the mode “24Ch” (p. 11)
4	Tilt Fine	0–255	Fine adjustment of CH 3
5	Speed Pan/Tilt		Same as CH 5 in the mode “24Ch” (p. 11)
6	Control		Same as CH 6 in the mode “24Ch” (p. 11)
7	Colors		Same as CH 7 in the mode “24Ch” (p. 12)
8	Colors Fine	0–255	Fine adjustment of CH 7
9	Gobo Wheel Speed		Same as CH 9 in the mode “24Ch” (p. 13)
10	Gobo		Same as CH 10 in the mode “24Ch” (p. 13)
11	Gobo 2		Same as CH 11 in the mode “24Ch” (p. 14)
12	Gobo 2 Rotation		Same as CH 12 in the mode “24Ch” (p. 15)
13	Gobo 2 Rotation Fine	0–255	Fine adjustment of CH 12
14	Prism		Same as CH 14 in the mode “24Ch” (p. 15)
15	Prism Rotation		When CH 14 is 20–39:
		0–255	Index

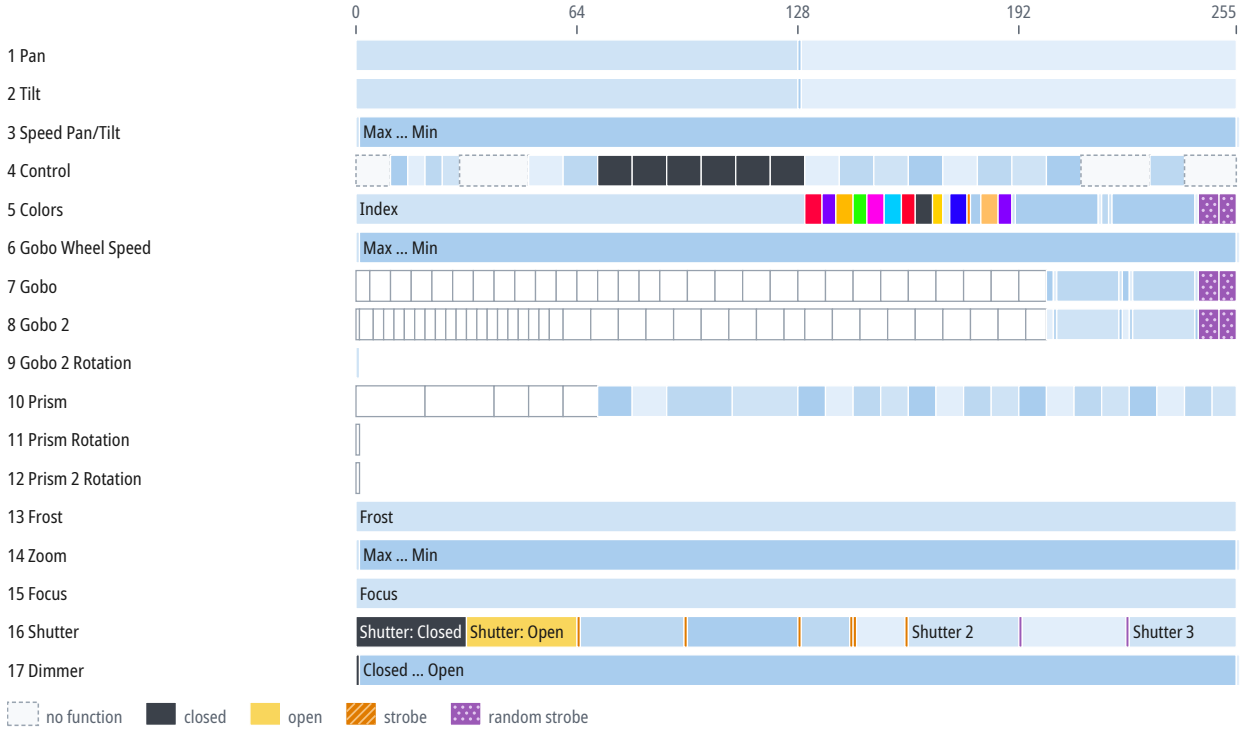
CH	Function	DMX	Description
15	Prism Rotation (continued)		When CH 14 is 40–49:
		0	No rotation
		1	Rotation CW max
		2–126	Rotation CW max … Rotation CW min
		127	Rotation CW min
		128–129	No rotation (0.5–0.51 °/s)
		130	Rotation CCW min
		131–254	Rotation CCW min … Rotation CCW max
		255	Rotation CCW max
			When CH 14 is 70–79:
		0–255	Index
			When CH 14 is 80–89:
		0	No rotation
		1	Rotation CW max
		2–126	Rotation CW max … Rotation CW min
		127	Rotation CW min
		128–129	No rotation
		130	Rotation CCW min
		131–254	Rotation CCW min … Rotation CCW max
		255	Rotation CCW max
			When CH 14 is 90–108:
		0–255	Index
			When CH 14 is 109–127:
		0	No rotation
		1	Rotation CW max
		2–126	Rotation CW max … Rotation CW min
		127	Rotation CW min
		128–129	No rotation
		130	Rotation CCW min
		131–254	Rotation CCW min … Rotation CCW max
		255	Rotation CCW max
16	Prism 2 Rotation		When CH 14 is 50–59:
		0–255	Index
			When CH 14 is 60–69:
		0	No rotation
		1	Rotation CW max
		2–126	Rotation CW max … Rotation CW min
		127	Rotation CW min
		128–129	No rotation (0.5–0.51 °/s)
		130	Rotation CCW min
		131–254	Rotation CCW min … Rotation CCW max

CH	Function	DMX	Description
16	Prism 2 Rotation (continued)	255	Rotation CCW max
			When CH 14 is 70–79:
		0–255	Index
			When CH 14 is 80–89:
		0	No rotation
		1	Rotation CW max
		2–126	Rotation CW max … Rotation CW min
		127	Rotation CW min
		128–129	No rotation
		130	Rotation CCW min
		131–254	Rotation CCW min … Rotation CCW max
		255	Rotation CCW max
			When CH 14 is 109–127:
		0–255	Index
			When CH 14 is 90–108:
		0	No rotation
		1	Rotation CW max
		2–126	Rotation CW max … Rotation CW min
		127	Rotation CW min
		128–129	No rotation
		130	Rotation CCW min
		131–254	Rotation CCW min … Rotation CCW max
		255	Rotation CCW max
17	Frost	0–255	Frost
18	Zoom		Same as CH 17 in the mode “24Ch” (p. 16)
19	Zoom Fine	0–255	Fine adjustment of CH 18
20	Focus	0–255	Focus
21	Focus Fine	0–255	Fine adjustment of CH 20
22	Focus Distance		Same as CH 21 in the mode “24Ch” (p. 17)
23	Shutter		Same as CH 22 in the mode “24Ch” (p. 17)
24	Dimmer		Same as CH 23 in the mode “24Ch” (p. 17)
25	Dimmer Fine	0–255	Fine adjustment of CH 24

Mode 17Ch

If the device receives DMX in this mode but gives no light, check these channels: CH 16 Shutter at 32–63 “Open”; CH 17 Dimmer above 0. The GDTF file gives these values for a console's Highlight function: CH 5 Colors 0, CH 16 Shutter 45, CH 17 Dimmer 255.

Channel functions at a glance



CH	Function	DMX	Description
1	Pan	0–127	Pan
		128	Center
		129–255	Pan
2	Tilt	0–127	Tilt
		128	Center
		129–255	Tilt
3	Speed Pan/Tilt		Same as CH 5 in the mode “24Ch” (p. 11)
4	Control		Same as CH 6 in the mode “24Ch” (p. 11)
5	Colors	0–129	Index
		130–134	Deep Red
		135–138	Deep Blue
		139–143	Yellow
		144–147	Green
		148–152	Magenta
		153–157	Azure
		158–161	Red
		162–166	Dark Green

CH	Function	DMX	Description
5	Colors (continued)	167–169	Amber
		170–171	Amber ... Blue
		172–176	Blue
		177	Orange
		178–180	Orange ... CTO
		181–185	CTO
		186–189	UV
		190	CW spin Max
		191–214	CW spin Max ... CW spin min
		215	CW spin min
		216–217	No spin
		218	CCW Spin min
		219–242	CCW Spin min ... CCW spin max
		243	CCW spin max
		244–249	Random color Audio
		250–255	Random color
6	Gobo Wheel Speed		Same as CH 9 in the mode “24Ch” (p. 13)
7	Gobo		Same as CH 10 in the mode “24Ch” (p. 13)
8	Gobo 2		Same as CH 11 in the mode “24Ch” (p. 14)
9	Gobo 2 Rotation		When CH 8 is 0–31:
		0–255	Index (360°)
10	Prism		Same as CH 14 in the mode “24Ch” (p. 15)
11	Prism Rotation		When CH 10 is 20–39:
		0–255	Index
			When CH 10 is 40–49:
		0	No rotation
		1	Rotation CW max
		2–126	Rotation CW max ... Rotation CW min
		127	Rotation CW min
		128–129	No rotation (0.5–0.51 °/s)
		130	Rotation CCW min
		131–254	Rotation CCW min ... Rotation CCW max
		255	Rotation CCW max
			When CH 10 is 70–79:
		0–255	Index
			When CH 10 is 80–89:
		0	No rotation
		1	Rotation CW max
		2–126	Rotation CW max ... Rotation CW min
		127	Rotation CW min
		128–129	No rotation

CH	Function	DMX	Description
11	Prism Rotation (continued)	130	Rotation CCW min
		131–254	Rotation CCW min … Rotation CCW max
		255	Rotation CCW max
			When CH 10 is 90–108:
		0–255	Index
			When CH 10 is 109–127:
		0	No rotation
		1	Rotation CW max
		2–126	Rotation CW max … Rotation CW min
		127	Rotation CW min
		128–129	No rotation
		130	Rotation CCW min
		131–254	Rotation CCW min … Rotation CCW max
		255	Rotation CCW max
12	Prism 2 Rotation		When CH 10 is 50–59:
		0–255	Index
			When CH 10 is 60–69:
		0	No rotation
		1	Rotation CW max
		2–126	Rotation CW max … Rotation CW min
		127	Rotation CW min
		128–129	No rotation (0.5–0.51 °/s)
		130	Rotation CCW min
		131–254	Rotation CCW min … Rotation CCW max
		255	Rotation CCW max
			When CH 10 is 70–79:
		0–255	Index
			When CH 10 is 80–89:
		0	No rotation
		1	Rotation CW max
		2–126	Rotation CW max … Rotation CW min
		127	Rotation CW min
		128–129	No rotation
		130	Rotation CCW min
		131–254	Rotation CCW min … Rotation CCW max
		255	Rotation CCW max
			When CH 10 is 109–127:
		0–255	Index
			When CH 10 is 90–108:
		0	No rotation
		1	Rotation CW max
		2–126	Rotation CW max … Rotation CW min

CH	Function	DMX	Description
12	Prism 2 Rotation (continued)	127	Rotation CW min
		128–129	No rotation
		130	Rotation CCW min
		131–254	Rotation CCW min … Rotation CCW max
		255	Rotation CCW max
13	Frost	0–255	Frost
14	Zoom		When CH 8 is 0:
		0	Max
		1–254	Max … Min
		255	Min
			When CH 8 is 1–255:
		0	Max
		1–254	Max … Min
		255	Min
15	Focus	0–255	Focus
16	Shutter		Same as CH 22 in the mode “24Ch” (p. 17)
17	Dimmer	0	Closed
		1–254	Closed … Open
		255	Open

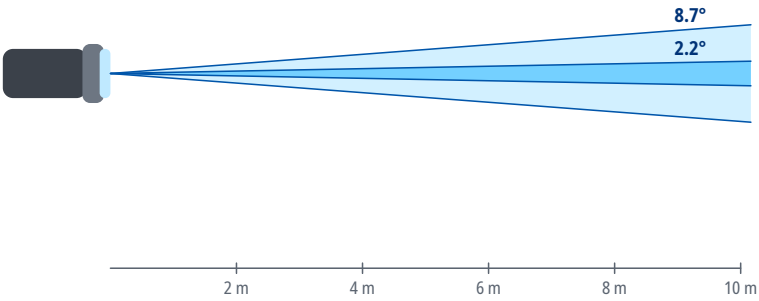
10 Technical specifications

Parameter	Value
Light	
Light source	discharge lamp
Lamp power	280 W
Luminous flux	8,600 lm
Color temperature	6,800 K
Color rendering index (CRI)	73
Optics	
Zoom	2.2–8.7°
Movement	
Pan	450°
Tilt	270°
Control	
DMX connection	3-pin XLR IN, 5-pin XLR IN/OUT
RDM	yes (manufacturer ID 0x2122, device model ID 0x0013)
Dimensions and construction	
Weight	22 kg
Operating environment	
Operating temperature	0 to 40 °C

Speeds and ranges

Parameter	Value
Strobe frequency	0–25 Hz
Gobo wheel 1 rotation	up to 270 °/s (45 rpm)
Gobo wheel 2 rotation	up to 50 °/s (8.3 rpm)
Gobo 2 rotation	up to 270 °/s (45 rpm)
Prism rotation	up to 0.51 °/s (0.1 rpm)
Prism rotation	up to 0.51 °/s (0.1 rpm)

Spot diameter



Distance	Ø 2.2°	Ø 8.7°
2 m	0.08 m	0.3 m
4 m	0.15 m	0.61 m
6 m	0.23 m	0.91 m
8 m	0.31 m	1.2 m
10 m	0.38 m	1.5 m
15 m	0.58 m	2.3 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.