DMX REFERENCE

Protege XS

Protégé XS

ADJ



Manufacturer	ADJ
GDTF file	ADJ_Protege_XS_124853.gdtf
GDTF revision	26-14-01 Release · 2026-01-14
Generated	2026-11-23

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1 About this manual

This document describes the Protégé XS by ADJ. It was compiled from the GDTF file ADJ_Protege_XS_124853.gdtf from the GDTF-Share library.

File revision: “26-14-01 Release”.

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 ADJ; 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	17.9 kg

DMX modes

Mode	Channels	Units in one universe	First start addresses
Extended	31	16	1, 32, 63, 94, ...
Standard	27	18	1, 28, 55, 82, ...
Basic	22	23	1, 23, 45, 67, ...

No light? Check these channels

- Extended: CH 13 Shutter at 32–63, 160–191 or 224–255 “Shutter Open”; CH 29 Dimmer Curve above 20
- Standard: CH 13 Shutter at 32–63, 160–191 or 224–255 “Shutter Open”; CH 25 Dimmer Curve above 20
- Basic: CH 9 Shutter at 32–63, 160–191 or 224–255 “Shutter Open”


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.

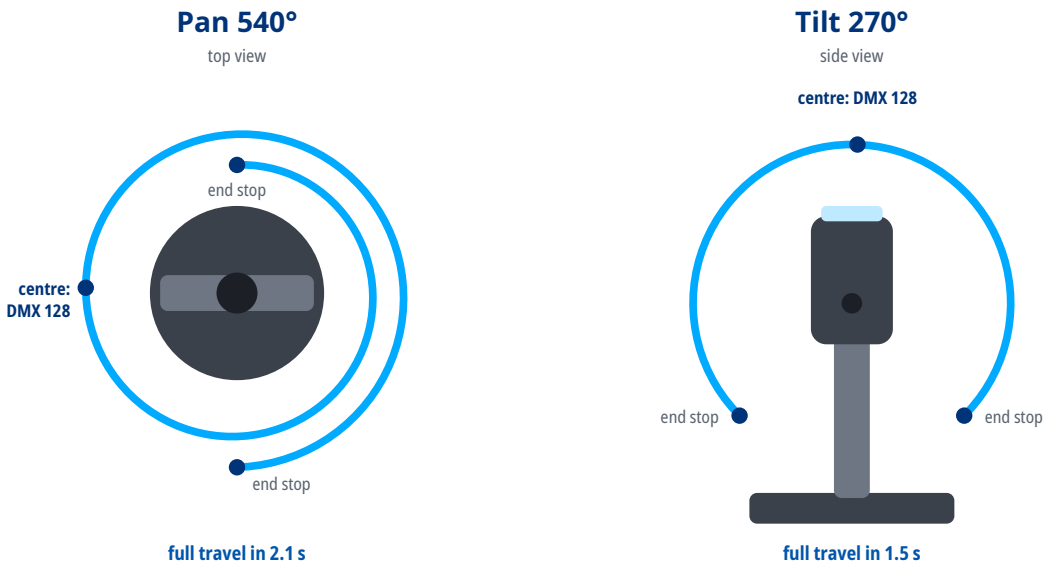
> ⚠ **WARNING**
>
> - The moving parts of the device (for example the head or arms) can move quickly and unexpectedly at any time – after power-on, during a reset, or on a command from the controller.
> - Keep yourself and any objects out of the range of movement. While the device is switched on, do 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

“Offering an impressive feature set from a compact fixture, the Protégé XS is an LED-powered Beam/Spot/Wash moving head spot luminaire. Designed for applications that require a small unit that delivers big creative potential, it harnesses the power of a 250-watt LED engine to deliver an output of up to 9800 lumens. Packed with beam-shaping tools, it features motorized zoom and focus, two 8-position color wheels, two GOBO wheels (one rotating and replaceable, the other fixed), two rotating prisms (linear and circular), a frost filter and an animation wheel. Ensuring simple integration into any lighting system, the unit features both 5-pin DMX sockets and integrated Aria X2 wireless management.”

Range of movement



Full-travel times as stated in the GDTF file.

5 Installation

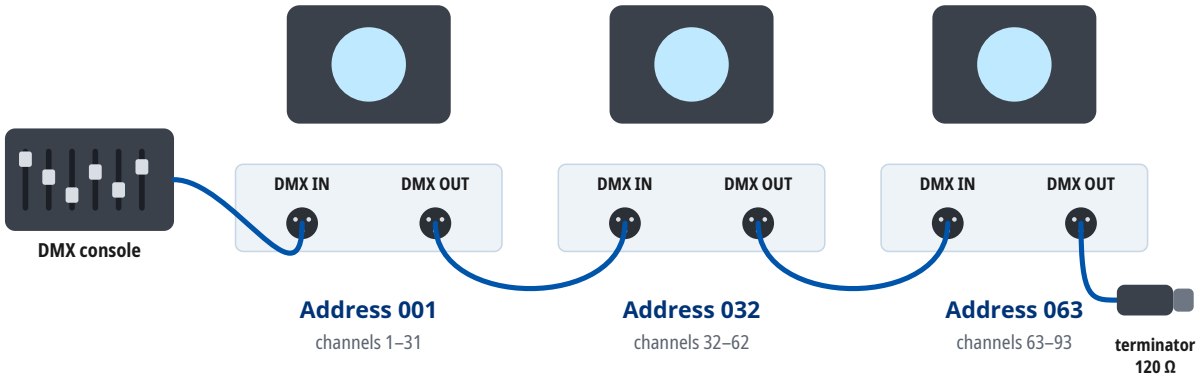
⚠ **WARNING**

- 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: 17.85 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 Extended: every unit occupies 31 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 “Extended”: 31.
- 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 “Extended”, you can use, for example, the start addresses 1, 32, 63, 94.
- 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

	Extended 31 channels	Standard 27 channels	Basic 22 channels
Pan / Tilt	1, 3, 5	1, 3, 5	1–3
Pan / Tilt resolution	16 bit	16 bit	8 bit
Dimmer	14	14	10
Dimmer resolution	16 bit	8 bit	8 bit
Shutter / strobe	13	13	9
Color wheel	6, 7	6, 7	4, 5
Gobo wheel	9, 12	9, 12	6, 8
Gobo rotation	10	10	7
Prism	16–18, 20	15–18	11–14
Frost	25	21	17
Zoom	23	20	16
Focus	21	19	15
Animation wheel	26, 27	22, 23	18, 19
Effects / macros	8, 20	8, 18	14

Color wheel



25 Color Macro 24

26 Color Macro 25

27 Color Macro 26

28 Color Macro 27

29 Color Macro 28

30 Color Macro 29

31 Color Macro 30

32 Color Macro 31

33 Color Macro 32

34 Color Macro 33

35 Color Macro 34

36 Color Macro 35

37 Color Macro 36

38 Color Macro 37

39 Color Macro 38

40 Color Macro 39

41 Color Macro 40

42 Color Macro 41

43 Color Macro 42

44 Color Macro 43

45 Color Macro 44

46 Color Macro 45

47 Color Macro 46

48 Color Macro 47

49 Color Macro 48

50 Color Macro 49

51 Color Macro 50

52 Color Macro 51

53 Color Macro 52

54 Color Macro 53

55 Color Macro 54

56 Color Macro 55

57 Color Macro 56

58 Color Macro 57

59 Color Macro 58

60 Color Macro 59

61 Color Macro 60

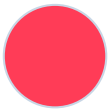
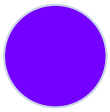
62 Color Macro 61

63 Color Macro 62

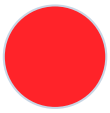
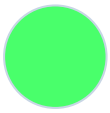
64 Color Macro 63

65 Color Macro 64

Gobo wheel 1

1.
   Color Wheel: Open
   DMX 0–5
2. 
   Dark Red
   DMX 12–17
3.
   Light Turquiosise
   DMX 24–29
4. 
   UV
   DMX 36–41
5.
   Pink
   DMX 48–53
6. 
   Quad Color 2
   DMX 60–65
7. 
   Lavender
   DMX 72–77
8.
   CTO (3200K)
   DMX 84–89
9.
   CTB (9000K)
   DMX 96–101
10.
    Open 2

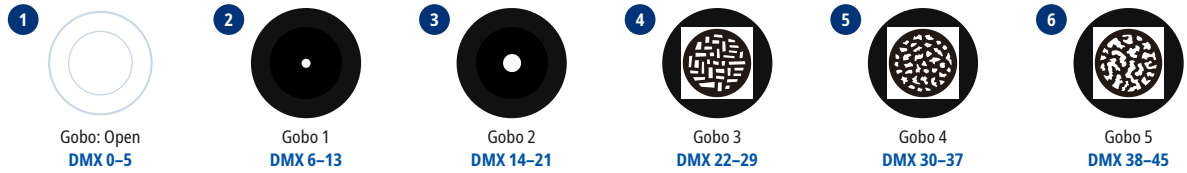
Gobo wheel 2

1.
   Color Wheel: Open
   DMX 0–5
2. 
   Red
   DMX 12–17
3. 
   Blue
   DMX 24–29
4. 
   Green
   DMX 36–41
5. 
   Orange
   DMX 48–53
6. 
   Quad Color 1
   DMX 60–65
7.
   Yellow
   DMX 72–77
8.
   Magenta
   DMX 84–89
9. 
   Congo Blue
   DMX 96–101
10.
    Open 2

Gobo wheel 3

1.
   Gobo: Open
   DMX 0–9
2. 
   Gobo 1
   DMX 10–19
3. 
   Gobo 2
   DMX 20–29
4. 
   Gobo 3
   DMX 30–39
5. 
   Gobo 4
   DMX 40–49
6. 
   Gobo 5
   DMX 50–59
7. 
   Gobo 6
   DMX 60–69
8. 
   Gobo 7
   DMX 70–80

Gobo wheel 4



1 Gobo: Open
DMX 0–5

2 Gobo 1
DMX 6–13

3 Gobo 2
DMX 14–21

4 Gobo 3
DMX 22–29

5 Gobo 4
DMX 30–37

6 Gobo 5
DMX 38–45

7 Gobo 6
DMX 46–53

8 Gobo 7
DMX 54–61

9 Gobo 8
DMX 62–69

10 Gobo 9
DMX 70–77

11 Gobo 10
DMX 78–85

12 Gobo 11
DMX 86–94

Prism

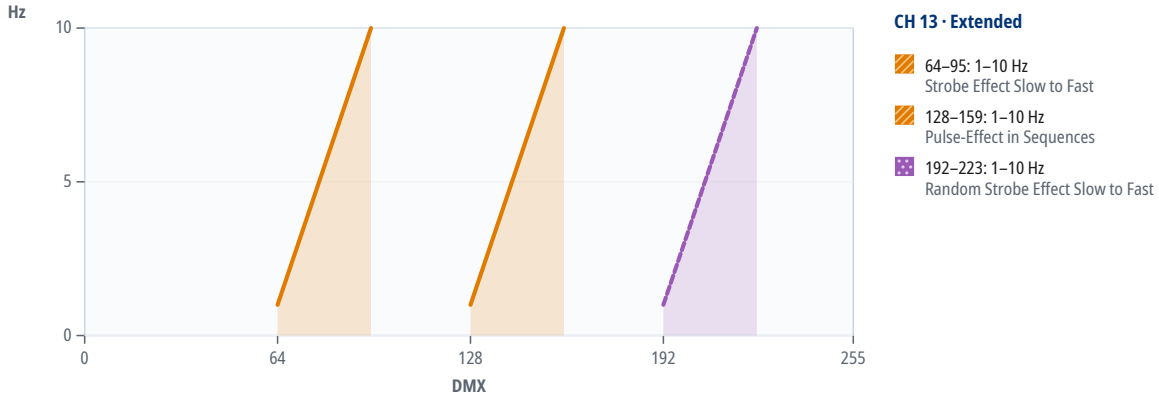


1 No Effect
CH 16: DMX 0–31

2 6 facets
Prism 1
CH 16: DMX 32–255

3 6 facets
Prism 2
CH 17: DMX 32–255

Strobe rate

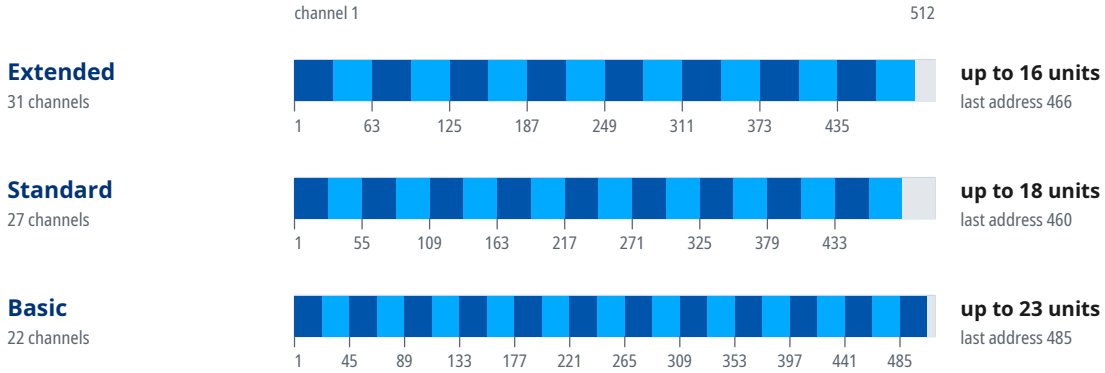


CH 13 · Extended

- 64–95: 1–10 Hz
  Strobe Effect Slow to Fast
- 128–159: 1–10 Hz
  Pulse-Effect in Sequences
- 192–223: 1–10 Hz
  Random Strobe Effect Slow to Fast

9 DMX channels

Units in one DMX universe



Start addresses of 20 units in the mode “Extended”

Unit	Start address	Unit	Start address	Unit	Start address	Unit	Start address
1	1	6	156	11	311	16	466
2	32	7	187	12	342	17	U2 · 1
3	63	8	218	13	373	18	U2 · 32
4	94	9	249	14	404	19	U2 · 63
5	125	10	280	15	435	20	U2 · 94

Where a DMX universe is full, the next units continue in the next universe: “U2 · 1” is address 1 in the second universe, counted from the universe of the first unit.

Mode Extended

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 13 Shutter at 32–63, 160–191 or 224–255 “Shutter Open”; CH 29 Dimmer Curve above 20. The GDTF file gives these values for a console's Highlight function: CH 6 Colors 0, CH 7 Colors 2 0, CH 8 Color Macro 0, CH 13 Shutter 47, CH 14 Dimmer 255.

Channel functions at a glance



CH	Function	DMX	Description
1	Pan	0–127	Min ... Center
		128–255	Center ... Max
		255	Max
2	Pan Fine	0–255	Fine adjustment of CH 1
3	Tilt	0–127	Min ... Center
		128–255	Center ... Max
		255	Max
4	Tilt Fine	0–255	Fine adjustment of CH 3
5	Pan Rotation	0–6	No fuction
		7–130	CW from slow to fast (30–360 °/s)

CH	Function	DMX	Description
5	Pan Rotation (continued)	131–255	CCW from slow to fast (30–360 °/s)
6	Colors	0–5	Color Wheel: Open
		6–11	Open / Red
		12–17	Red
		18–23	Red / Blue
		24–29	Blue
		30–35	Blue / Green
		36–41	Green
		42–47	Green / Orange
		48–53	Orange
		54–59	Orange / Quad Color 1
		60–65	Quad Color 1
		66–71	Quad Color 1 / Yellow
		72–77	Yellow
		78–83	Yellow / Magenta
		84–89	Magenta
		90–95	Magenta / Congo Blue
		96–101	Congo Blue
		102–107	Congo Blue / Open
		108–178	CW Rotation Fast to Slow (360–30 °/s)
		179–184	No Rot
		185–255	CCW Slow to Fast (30–360 °/s)
7	Colors 2	0–5	Color Wheel: Open
		6–11	Open / Dark Red
		12–17	Dark Red
		18–23	Dark Red /Light Turquiosise
		24–29	Light Turquiosise
		30–35	Light Turquiosise / UV
		36–41	UV
		42–47	UV / Pink
		48–53	Pink
		54–59	Pink / Quad Color 2
		60–65	Quad Color 2
		66–71	Quad Color 2 / Lavender
		72–77	Lavender
		78–83	Lavender / CTO (3200K)
		84–89	CTO (3200K)
		90–95	CTO / CTB (9000K)
		96–101	CTB (9000K)
		102–107	CTB / Open
		108–178	CW Rotation Fast to Slow (360–30 °/s)
		179–184	No Rot

CH	Function	DMX	Description
7	Colors 2 (continued)	185–255	CCW Slow to Fast (30–360 °/s)
8	Color Macro		Color Macro 1-27
		0–31	Off
		32–39	Color Macro 1
		40–47	Color Macro 2
		48–55	Color Macro 3
		56–63	Color Macro 4
		64–71	Color Macro 5
		72–79	Color Macro 6
		80–87	Color Macro 7
		88–95	Color Macro 8
		96–103	Color Macro 9
		104–111	Color Macro 10
		112–119	Color Macro 11
		120–127	Color Macro 12
		128–135	Color Macro 13
		136–143	Color Macro 14
		144–151	Color Macro 15
		152–159	Color Macro 16
		160–167	Color Macro 17
		168–175	Color Macro 18
		176–183	Color Macro 19
		184–191	Color Macro 20
		192–199	Color Macro 21
		200–207	Color Macro 22
		208–215	Color Macro 23
		216–223	Color Macro 24
		224–231	Color Macro 25
		232–239	Color Macro 26
		240–247	Color Macro 27
		248–255	Random CMY
9	Gobo	0–9	Gobo: Open
		10–19	Gobo 1
		20–29	Gobo 2
		30–39	Gobo 3
		40–49	Gobo 4
		50–59	Gobo 5
		60–69	Gobo 6
		70–79	Gobo 7
		80–94	Gobo 1 Select Shake: Gobo 1 (1–5 Hz)
		95–109	Gobo 1 Select Shake: Gobo 2 (1–5 Hz)
		110–124	Gobo 1 Select Shake: Gobo 3 (1–5 Hz)

CH	Function	DMX	Description
9	Gobo (continued)	125–139	Gobo 1 Select Shake: Gobo 4 (1–5 Hz)
		140–154	Gobo 1 Select Shake: Gobo 5 (1–5 Hz)
		155–169	Gobo 1 Select Shake: Gobo 6 (1–5 Hz)
		170–189	Gobo 1 Select Shake: Gobo 7 (1–5 Hz)
		190–221	CW Fast to Slow (360–30 °/s)
		222–223	Gobo 1 Wheel Spin: Stop
		224–255	CCW Slow to Fast (30–360 °/s)
10	Gobo Rotation	0–127	Gobo Indexing 0 to 540
		127–128	Gobo 1 Pos
		128–189	CW Fast to Slow (360–30 °/s)
		190–193	No Rotation
		194–255	CCW Slow to Fast (30–360 °/s)
11	Gobo Rotation Fine	0–255	Fine adjustment of CH 10
12	Gobo 2	0–5	Gobo: Open
		6–13	Gobo 1
		14–21	Gobo 2
		22–29	Gobo 3
		30–37	Gobo 4
		38–45	Gobo 5
		46–53	Gobo 6
		54–61	Gobo 7
		62–69	Gobo 8
		70–77	Gobo 9
		78–85	Gobo 10
		86–93	Gobo 11
		94–101	Gobo 1 Select Shake: Gobo 1 (1–5 Hz)
		102–109	Gobo 1 Select Shake: Gobo 2 (1–5 Hz)
		110–117	Gobo 1 Select Shake: Gobo 3 (1–5 Hz)
		118–125	Gobo 1 Select Shake: Gobo 4 (1–5 Hz)
		126–133	Gobo 1 Select Shake: Gobo 5 (1–5 Hz)
		134–141	Gobo 1 Select Shake: Gobo 6 (1–5 Hz)
		142–149	Gobo 1 Select Shake: Gobo 7 (1–5 Hz)
		150–157	Gobo 1 Select Shake: Gobo 8 (1–5 Hz)
		158–165	Gobo 1 Select Shake: Gobo 9 (1–5 Hz)
		166–173	Gobo 1 Select Shake: Gobo 10 (1–5 Hz)
		174–181	Gobo 1 Select Shake: Gobo 11 (1–5 Hz)
		182–217	CW Fast to Slow (360–30 °/s)
		218–219	Gobo 1 Wheel Spin: Stop
		220–255	CCW Slow to Fast (30–360 °/s)
13	Shutter	0–31	Shutter Closed
		32–63	Shutter Open
		64–95	Strobe Effect Slow to Fast (1–10 Hz)

CH	Function	DMX	Description
13	Shutter (continued)	96–127	No Function (Shutter Open)
		128–159	Pulse-Effect in Sequences (1–10 Hz)
		160–191	Shutter Open
		192–223	Random Strobe Effect Slow to Fast (1–10 Hz)
		224–255	Shutter Open
14	Dimmer	0–63	0 % … 25 %
		63	25 %
		64–127	25 % … 50 %
		127	50 %
		128–191	50 % … 75 %
		191	75 %
		192–255	75 % … 100 %
		255	100 %
15	Dimmer Fine	0–255	Fine adjustment of CH 14
16	Prism		Prism 1
		0–31	No Effect
		32–255	Prism 1
17	Prism 2	0–31	No Effect
		32–255	Prism 2
18	Prism Rotation	0–127	Prism Indexing 0 to 540
		127–128	Prism Pos 1
		128–189	CW Fast to Slow (360–30 °/s)
		190–193	No Rotation
		194–255	CCW Slow to Fast (30–360 °/s)
19	Prism Rotation Fine	0–255	Fine adjustment of CH 18
20	Prism Macro	0–9	No Prism Open
		10–19	Color Macro 1
		20–29	Color Macro 2
		30–39	Color Macro 3
		40–49	Color Macro 4
		50–59	Color Macro 5
		60–69	Color Macro 6
		70–79	Color Macro 7
		80–89	Color Macro 8
		90–99	Color Macro 9
		100–109	Color Macro 10
		110–119	Color Macro 11
		120–129	Color Macro 12
		130–139	Color Macro 13
		140–149	Color Macro 14
		150–159	Color Macro 15
		160–169	Color Macro 16

CH	Function	DMX	Description
20	Prism Macro (continued)	170–179	Color Macro 17
		180–189	Color Macro 18
		190–199	Color Macro 19
		200–209	Color Macro 20
		210–219	Color Macro 21
		220–229	Color Macro 22
		230–239	Color Macro 23
		240–255	Color Macro 24
21	Focus	0–255	Narrow to wide
22	Focus Fine	0–255	Fine adjustment of CH 21
23	Zoom	0–255	Narrow to Wide (4.8–38°)
24	Zoom Fine	0–255	Fine adjustment of CH 23
25	Frost	0–255	0% to 100%
26	Animation Wheel	0–19	No function
		20–127	Enter in proportion
		128–170	All on - all in - all out (fast - slow)
		171–213	Half open - full access - half open (fast - slow)
		214–255	Half open - all out - half open (fast - slow)
27	Animation Wheel Rotation Speed	0	No function
		1–127	CW fast to slow (360–30 °/s)
		128	Stop
		129–255	CCW slow to fast (30–360 °/s)
28	Dimmer Mode	0–20	Default to unit setting
		21–40	Standard
		41–60	Stage
		61–80	TV
		81–100	Architectural
		101–120	Theatre
		121–140	Stage 2
		141	0/1s Delay
		142	0/2s Delay
		143	0/3s Delay
		144	0/4s Delay
		145	0/5s Delay
		146	0/6s Delay
		147	0/7s Delay
		148	0/8s Delay
		149	0/9s Delay
		150	1s Delay
		151	1/5s Delay
		152–160	2...10s Delay
		161–255	Default

CH	Function	DMX	Description
29	Dimmer Curve		Dimmer Curves
		0–20	No Function
		21–40	Linear
		41–60	Square
		61–80	Inv Squa
		81–100	S Curve
		101–255	No Function
30	Speed Pan/Tilt	0–225	Max to Min speed
		226–235	Blackout by movement
		236–245	Blackout by all wheel changing
		246–255	No Function
31	Function	0–29	No Function/ Idle: No Function
		30–39	Fan Control - Mute (Hold 3s)
		40–49	Fan Control - Low (Hold 3s)
		50–59	Fan Control - High (Hold 3s)
		60–69	Fan Control - Auto (Hold 3s)
		70–74	All Motor Reset
		75–79	Pan / Tilt Motors Reset
		80–84	CMY Reset
		85–89	No Function
		90–94	Effect Reset 1 (Color Gobo and Animation)
		95–99	Effect Reset 2 (Prism Frost Focus and Zoom)
		100–142	No function
		143–144	Pan/Tilt Speed Standard (Hold 3s)
		145–146	Pan/Tilt Speed Fast (Hold 3s)
		147–148	Pan/Tilt Speeds: No Function
		149–150	Aria ON (Default) (Hold 3s)
		151–152	Aria OFF (Hold 5s)
		153–154	Hibernation Enable (Hold 3s)
		155–156	Hibernation OFF (Hold 5s)
		157–158	Display Backlight ON (Hold 3s)
		159–160	Display Backlight OFF (Hold 5s)
		161–164	Wireless/Hibernation/Display: No Function
		165–166	Invert Pan ON (Hold 3s)
		167–168	Invert Pan OFF (Hold 5s)
		169–170	Invert Tilt ON (Hold 3s)
		171–172	Invert Tilt OFF (Hold 5s)
		173	900
		174	910
		175	920
		176	930
		177	940

CH	Function	DMX	Description
31	Function (continued)	178	950
		179	960
		180	970
		181	980
		182	990
		183	1000
		184	1010
		185	1020
		186	1030
		187	1040
		188	1050
		189	1060
		190	1070
		191	1080
		192	1090
		193	1100
		194	1110
		195	1120
		196	1130
		197	1140
		198	1150
		199	1160
		200	1170
		201	1180
		202	1190
		203	1200
		204	1210
		205	1220
		206	1230
		207	1240
		208	1250
		209	1260
		210	1270
		211	1280
		212	1290
		213	1300
		214	1310
		215	1320
		216	1330
		217	1340
		218	1350
		219	1360

CH	Function	DMX	Description
31	Function (continued)	220	1370
		221	1380
		222	1390
		223	1400
		224	1410
		225	1420
		226	1430
		227	1440
		228	1450
		229	1460
		230	1470
		231	1480
		232	1490
		233	1500
		234	2500
		235	4000
		236	5000
		237	6000
		238	10000
		239	15000
		240	20000
		241	25000
		242	Internal Program 1 (Scene 1-8)
		243	Internal Program 2 (Scene 9 -16)
		244	Internal Program 3 (Scene17-24)
		245	Internal Program 4 (Scene 25-32)
		246	Internal Program 5 (Scene 33-40)
		247	Internal Program 6 (Scene 41-48)
		248	Internal Program 7 (Scene 49-56)
		249	Internal Program off
		250–252	Enable CT
		253–255	Disable CT Mode

Mode Standard

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 13 Shutter at 32–63, 160–191 or 224–255 “Shutter Open”; CH 25 Dimmer Curve above 20. The GDTF file gives these values for a console's Highlight function: CH 6 Colors 0, CH 7 Colors 2 0, CH 8 Color Macro 0, CH 13 Shutter 47, CH 14 Dimmer 255.

Channel functions at a glance



CH	Function	DMX	Description
1	Pan		Same as CH 1 in the mode “Extended” (p. 13)
2	Pan Fine	0–255	Fine adjustment of CH 1
3	Tilt		Same as CH 3 in the mode “Extended” (p. 13)
4	Tilt Fine	0–255	Fine adjustment of CH 3
5	Pan Rotation		Same as CH 5 in the mode “Extended” (p. 13)
6	Colors		Same as CH 6 in the mode “Extended” (p. 14)
7	Colors 2		Same as CH 7 in the mode “Extended” (p. 14)
8	Color Macro		Same as CH 8 in the mode “Extended” (p. 15)
9	Gobo		Same as CH 9 in the mode “Extended” (p. 15)
10	Gobo Rotation		Same as CH 10 in the mode “Extended” (p. 16)

CH	Function	DMX	Description
11	Gobo Rotation Fine	0–255	Fine adjustment of CH 10
12	Gobo 2		Same as CH 12 in the mode “Extended” (p. 16)
13	Shutter		Same as CH 13 in the mode “Extended” (p. 16)
14	Dimmer	0	0 %
		1–62	0 % … 25 %
		63	25 %
		64–126	25 % … 50 %
		127	50 %
		128–190	50 % … 75 %
		191	75 %
		192–254	75 % … 100 %
		255	100 %
15	Prism		Same as CH 16 in the mode “Extended” (p. 17)
16	Prism 2		Same as CH 17 in the mode “Extended” (p. 17)
17	Prism Rotation	0–127	Prism Indexing 0 to 540 (360°)
		128–189	CW Fast to Slow (360–30 °/s)
		190–193	No Rotation
		194–255	CCW Slow to Fast (30–360 °/s)
18	Prism Macro		Same as CH 20 in the mode “Extended” (p. 17)
19	Focus	0–255	Narrow to wide
20	Zoom	0–255	Narrow to Wide (4.8–38°)
21	Frost	0–255	0% to 100%
22	Animation Wheel		Same as CH 26 in the mode “Extended” (p. 18)
23	Animation Wheel Rotation Speed		Same as CH 27 in the mode “Extended” (p. 18)
24	Dimmer Mode		Same as CH 28 in the mode “Extended” (p. 18)
25	Dimmer Curve		Same as CH 29 in the mode “Extended” (p. 19)
26	Speed Pan/Tilt		Same as CH 30 in the mode “Extended” (p. 19)
27	Function		Same as CH 31 in the mode “Extended” (p. 19)

Mode Basic

If the device receives DMX in this mode but gives no light, check these channels: CH 9 Shutter at 32–63, 160–191 or 224–255 “Shutter Open”. The GDTF file gives these values for a console's Highlight function: CH 4 Colors 0, CH 5 Colors 2 0, CH 9 Shutter 47, CH 10 Dimmer 255.

Channel functions at a glance



CH	Function	DMX	Description
1	Pan	0	Min
		1–127	Min ... Center
		128	Center
		129–254	Center ... Max
		255	Max
2	Tilt	0	Min
		1–127	Min ... Center
		128	Center
		129–254	Center ... Max
		255	Max
3	Pan Rotation		Same as CH 5 in the mode “Extended” (p. 13)
4	Colors		Same as CH 6 in the mode “Extended” (p. 14)
5	Colors 2		Same as CH 7 in the mode “Extended” (p. 14)
6	Gobo		Same as CH 9 in the mode “Extended” (p. 15)

CH	Function	DMX	Description
7	Gobo Rotation	0–127	Gobo Indexing 0 to 540 (360°)
		128–189	CW Fast to Slow (360–30 °/s)
		190–193	No Rotation
		194–255	CCW Slow to Fast (30–360 °/s)
8	Gobo 2		Same as CH 12 in the mode “Extended” (p. 16)
9	Shutter		Same as CH 13 in the mode “Extended” (p. 16)
10	Dimmer		Same as CH 14 in the mode “Standard” (p. 23)
11	Prism		Same as CH 16 in the mode “Extended” (p. 17)
12	Prism 2		Same as CH 17 in the mode “Extended” (p. 17)
13	Prism Rotation		Same as CH 17 in the mode “Standard” (p. 23)
14	Prism Macro		Same as CH 20 in the mode “Extended” (p. 17)
15	Focus	0–255	Narrow to wide
16	Zoom	0–255	Narrow to Wide (4.8–38°)
17	Frost	0–255	0% to 100%
18	Animation Wheel		Same as CH 26 in the mode “Extended” (p. 18)
19	Animation Wheel Rotation Speed		Same as CH 27 in the mode “Extended” (p. 18)
20	Dimmer Mode		Same as CH 28 in the mode “Extended” (p. 18)
21	Speed Pan/Tilt		Same as CH 30 in the mode “Extended” (p. 19)
22	Function		Same as CH 31 in the mode “Extended” (p. 19)

10 Technical specifications

Parameter	Value
Light	
Light source	LED
LED power	350 W
Luminous flux	16,000 lm
Color temperature	8,000 K
Color rendering index (CRI)	70
Optics	
Zoom	4.8–38°
Movement	
Pan	540°
Tilt	270°
Control	
RDM	yes (manufacturer ID 0x1900, device model ID 0x0125)
Dimensions and construction	
Weight	17.9 kg
Operating environment	
Operating temperature	-10 to 45 °C

Speeds and ranges

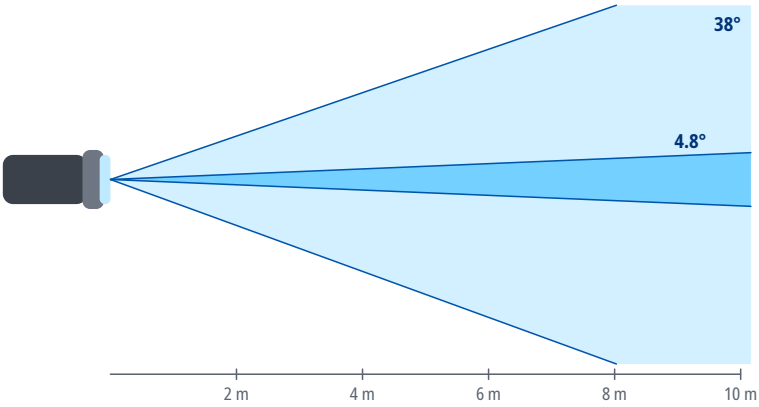
Parameter	Value
Strobe frequency	1–10 Hz
Color wheel 1 rotation	up to 360 °/s (60 rpm)
Color wheel 2 rotation	up to 360 °/s (60 rpm)
Gobo wheel 3 rotation	up to 360 °/s (60 rpm)
Gobo wheel 4 rotation	up to 360 °/s (60 rpm)
Gobo 3 rotation	up to 360 °/s (60 rpm)
Prism rotation	up to 360 °/s (60 rpm)
Animation wheel rotation	up to 360 °/s (60 rpm)

Dimensions

weight 17.9 kg



Spot diameter



Distance	Ø 4.8°	Ø 38°
2 m	0.17 m	1.4 m
4 m	0.34 m	2.8 m
6 m	0.5 m	4.1 m
8 m	0.67 m	5.5 m
10 m	0.84 m	6.9 m
15 m	1.3 m	10.3 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.