DMX REFERENCE

HP1000

HP1000BSWF

GTB



Manufacturer	GTB
GDTF file	GTB_HP1000_95778.gdtf
GDTF revision	HP1000BSWF · 2025-05-06
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Contents

1 About this manual 2
2 Quick reference 3
3 Safety instructions 4
4 Product description 5
5 Installation 6
6 Connections 6
7 Operation 7
8 Functions at a glance 8
9 DMX channels 10
Mode 35CH 11
Mode 26CH 16
Mode 29CH 18
Mode 20CH 20
10 Technical specifications 21
11 Maintenance and cleaning 22
12 Troubleshooting 23
13 Disposal 23

1 About this manual

This document describes the HP1000BSWF by GTB. It was compiled from the GDTF file GTB_HP1000_95778.gdtf from the GDTF-Share library.

File revision: “HP1000BSWF”.

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 GTB; 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
Power consumption	850 W
Weight	35 kg

DMX modes

Mode	Channels	Units in one universe	First start addresses
35CH	35	14	1, 36, 71, 106, ...
26CH	26	19	1, 27, 53, 79, ...
29CH	29	17	1, 30, 59, 88, ...
20CH	20	25	1, 21, 41, 61, ...

No light? Check these channels

- 35CH: CH 23 Shutter at 8–15, 132–139, 185, 235, 255 “Open” or 182–184, 186–189 or 232–234, 236–239 or 248–254; CH 24 Dimmer above 0
- 26CH: CH 23 Shutter at 8–15, 132–139, 185, 235, 255 “Open” or 182–184, 186–189 or 232–234, 236–239 or 248–254; CH 24 Dimmer above 0
- 29CH: CH 17 Shutter at 8–15, 132–139, 185, 235, 255 “Open” or 182–184, 186–189 or 232–234, 236–239 or 248–254; CH 18 Dimmer above 0
- 20CH: CH 17 Shutter at 8–15, 132–139, 185, 235, 255 “Open” or 182–184, 186–189 or 232–234, 236–239 or 248–254; CH 18 Dimmer above 0


Read the manual before use


Risk of electric shock


Do not stare into the light


Indoor use only

3 Safety instructions


Read the manual before use


Risk of electric shock


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

- Connect the device only to a properly installed mains outlet with a protective earth (ground) contact. The outlet or other means of disconnection must remain easily accessible.
- Power supply: 100–240 V, 50/60 Hz. Before connecting, make sure that the mains voltage matches this value and the value on the rating plate of the device.
- Do not connect the device to a dimmer or to a dimmed circuit.
- Use only the original power cable or a cable with identical ratings. Protect the cable from damage, do not run it over sharp edges, and never unplug it by pulling on the cable.
- When connecting several devices to one circuit, do not exceed its permitted load.
- Do not touch the device with wet hands.

⚠ 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.

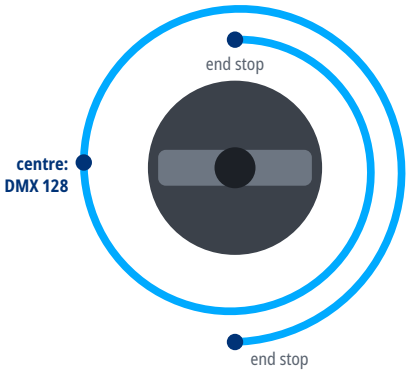
> ⚠ **WARNING**
>
> - The moving parts of the device (for example the head or arms) can move quickly and unexpectedly at any time – after power-on, during a reset, or on a command from the controller.
> - Keep yourself and any objects out of the range of movement. While the device is switched on, do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

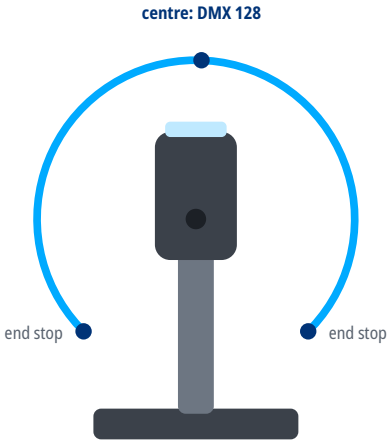
Pan 540°

top view



Tilt 270°

side view



5 Installation

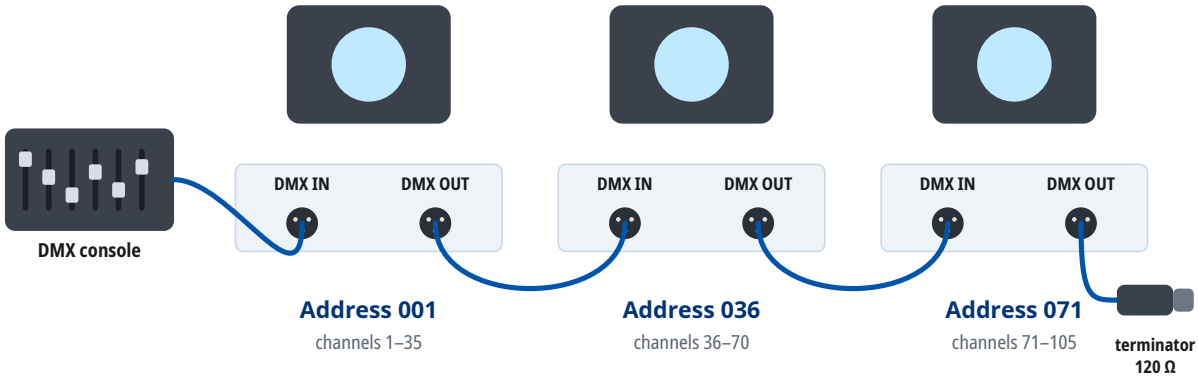
⚠ **WARNING**

- 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: 35 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 35CH: every unit occupies 35 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 “35CH”: 35.
- 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 “35CH”, you can use, for example, the start addresses 1, 36, 71, 106.
- 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.

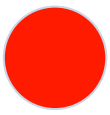
8 Functions at a glance

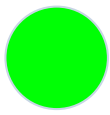
Functions in each DMX mode

	35CH 35 channels	26CH 26 channels	29CH 29 channels	20CH 20 channels
Pan / Tilt	1, 3	1, 3	1, 3	1, 3
Dimmer	24	24	18	18
Shutter / strobe	23	23	17	17
Color mixing	6–8	6–8	6–8	6–8
Color temperature	9	9	9	9
Color wheel	10	10	10	10
Gobo wheel	11, 13	11, 13	11	
Gobo rotation	12	12		
Prism	16, 17	16, 17		
Frost	19, 20	19, 20	13, 14	13, 14
Zoom	21	21	15	15
Focus	22	22	16	16
Iris	15	15		11
Animation wheel	14	14		

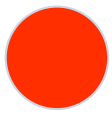
Color wheel

1.
Color 1: Open
DMX 0–7

2. 
Red
DMX 8–15

3. 
Green
DMX 16–23

4. 
Magenta
DMX 24–31

5. 
Orange
DMX 32–39

6. 
Blue
DMX 40–47

7. 
UV
DMX 48–55

8.
Yellow
DMX 56–64

Gobo wheel 1

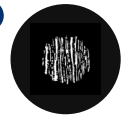
1.
Gobo 1: Open
DMX 0–5

2. 
Gobo1
DMX 6–15

3. 
Gobo2
DMX 16–25

4. 
Gobo3
DMX 26–35

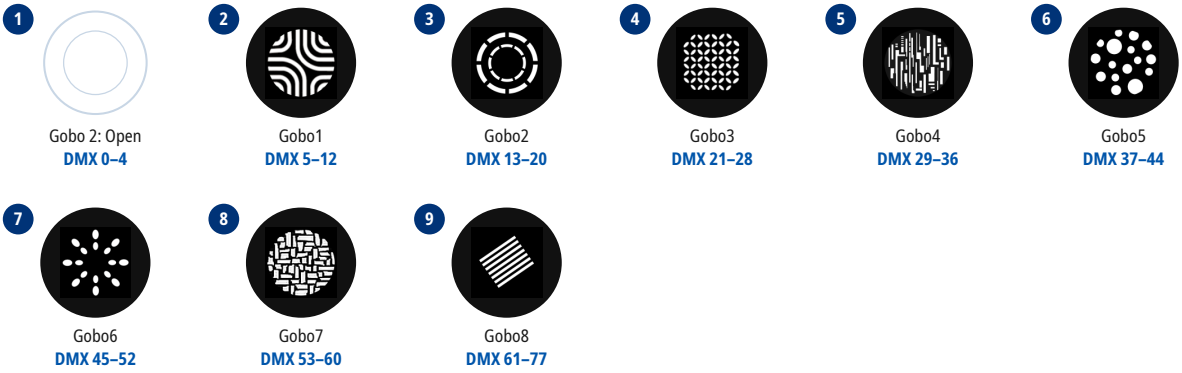
5. 
Gobo4
DMX 36–45

6. 
Gobo5
DMX 46–55

7. 
Gobo6
DMX 56–65

8. 
Gobo7
DMX 66–76

Gobo wheel 2



1 Gobo 2: Open
DMX 0–4

2 Gobo1
DMX 5–12

3 Gobo2
DMX 13–20

4 Gobo3
DMX 21–28

5 Gobo4
DMX 29–36

6 Gobo5
DMX 37–44

7 Gobo6
DMX 45–52

8 Gobo7
DMX 53–60

9 Gobo8
DMX 61–77

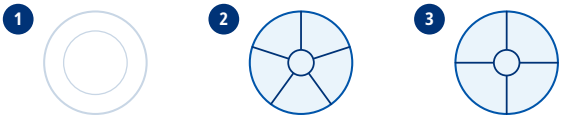
Animation wheel



1 Open

2 Animation

Prism

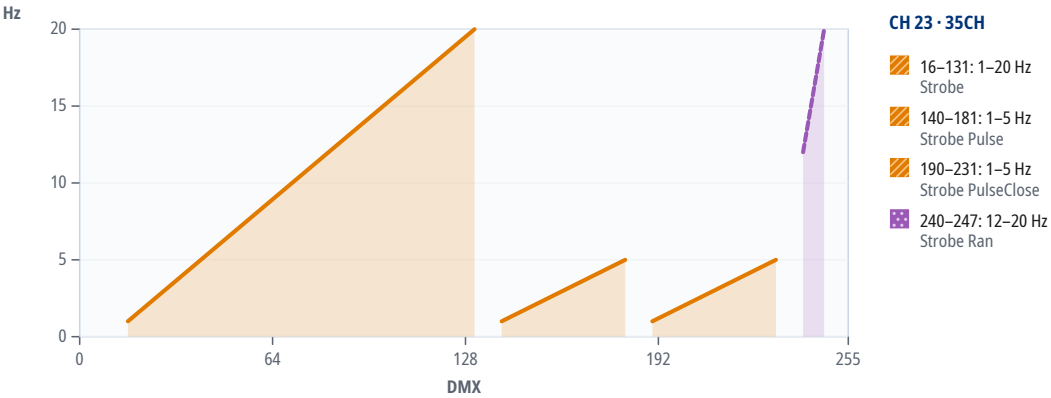


1 Open
DMX 3

2 5 facets
Prism1
DMX 125

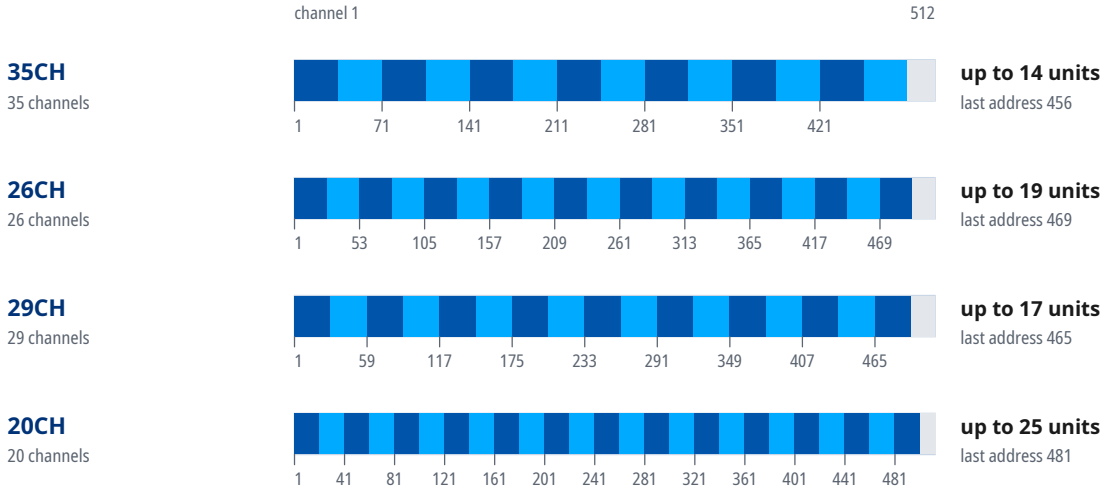
3 4 facets
Prism2
DMX 255

Strobe rate



9 DMX channels

Units in one DMX universe



Start addresses of 20 units in the mode “35CH”

Unit	Start address	Unit	Start address	Unit	Start address	Unit	Start address
1	1	6	176	11	351	16	U2 · 36
2	36	7	211	12	386	17	U2 · 71
3	71	8	246	13	421	18	U2 · 106
4	106	9	281	14	456	19	U2 · 141
5	141	10	316	15	U2 · 1	20	U2 · 176

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 35CH

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 8–15, 132–139, 185, 235, 255 “Open” or 182–184, 186–189 or 232–234, 236–239 or 248–254; CH 24 Dimmer above 0. The GDTF file gives these values for a console's Highlight function: CH 6 Red 255, CH 7 Green 255, CH 8 Blue 255, CH 23 Shutter 255, CH 24 Dimmer 255.

Channel functions at a glance



CH	Function	DMX	Description
1	Pan	0–127	Pan 1
		128	Home
		128–255	Pan 1

CH	Function	DMX	Description
2	Pan Fine	0–255	Fine adjustment of CH 1
3	Tilt	0–127	Tilt 1
		128	Home
		128–255	Tilt 1
4	Tilt Fine	0–255	Fine adjustment of CH 3
5	PT Speeed	0–255	
6	Red	0–255	Cyan
7	Green	0–255	Magenta
8	Blue	0–255	Yellow
9	CTO	0–255	6500–2800 K
10	Colors	0–7	Color 1: Open
		8–15	Red
		16–23	Green
		24–31	Magenta
		32–39	Orange
		40–47	Blue
		48–55	UV
		56–63	Yellow
		64–65	Color 1 Spin 1
		66	Max CCW
		67–184	Max CCW ... min CCW
		185	Min CCW
		186–189	Color 1 Spin 1
		190–193	Stop
		194–195	Color 1 Spin 2
		196	Min CW
		197–254	Min CW ... max CW
		255	Max CW
11	Gobo	0–5	Gobo 1: Open
		6–15	Gobo1
		16–25	Gobo2
		26–35	Gobo3
		36–45	Gobo4
		46–55	Gobo5
		56–65	Gobo6
		66–75	Gobo7
		76–92	Gobo 1 Shake
		93–109	Gobo2 Shake
		110–126	Gobo3 Shake
		127–143	Gobo4 Shake
		144–160	Gobo5 Shake
		161–177	Gobo6 Shake

CH	Function	DMX	Description
11	Gobo (continued)	178–201	Gobo7 Shake
		202	Gobo 1 Spin 1
		203	Max CCW
		204–224	Max CCW ... min CCW
		225	Min CCW
		226–227	Gobo 1 Spin 1
		228–229	Stop
		230–231	Gobo 1 Spin 2
		232	Min CW
		233–254	Min CW ... max CW
		255	Max CW
12	Gobo Rotation	0	Gobo 1 Pos: Open
		1–127	Gobo1Index
		128	Max CCW
		129–188	Max CCW ... min CCW
		189	Min CCW
		190–191	Gobo 1 Rotate
		192–193	Gobo 1 Rotate 2
		194	Min CW
		195–254	Min CW ... max CW
		255	Max CW
13	Gobo 2	0–4	Gobo 2: Open
		5–12	Gobo1
		13–20	Gobo2
		21–28	Gobo3
		29–36	Gobo4
		37–44	Gobo5
		45–52	Gobo6
		53–60	Gobo7
		61–76	Gobo8
		77–89	Gobo1 Shake
		90–102	Gobo 2 Shake
		103–115	Gobo3 Shake
		116–128	Gobo4 Shake
		129–141	Gobo5 Shake
		142–154	Gobo6 Shake
		155–167	Gobo7 Shake
		168–180	Gobo8 Shake
		181–201	Gobo 2 Shake
		202–203	Gobo 2 Spin
		204	Max CCW
		205–224	Max CCW ... min CCW

CH	Function	DMX	Description
13	Gobo 2 (continued)	225	Min CCW
		226–227	Gobo 2 Spin
		228–229	Stop
		230–231	Gobo 2 Spin 2
		232	Min CW
		233–254	Min CW ... max CW
		255	Max CW
14	Animation Wheel	0–6	Open
		7–9	Animation Spin
		10	Max CCW
		11–124	Max CCW ... min CCW
		125	Min CCW
		126–129	Animation Spin
		130–133	Stop
		134–135	Animation Spin 2
		136	Min CW
		137–254	Min CW ... max CW
		255	Max CW
15	Iris	0–255	
16	Prism	0–7	Open
		8–131	Prism 1
		132–255	Prism 2
17	Prism Rotation	0–127	Index (360°)
		128–129	Prism Rotate
		130	Max CCW
		131–187	Max CCW ... minCCW
		188	minCCW
		189–190	Prism Rotate
		191–192	Stop
		193–194	Prism Rotate 2
		195	Min CW
		196–254	Min CW ... max CW
		255	Max CW
18	CRI	0–30	Open
		31–255	CRI
19	Frost	0–255	
20	Frost 2	0–255	
21	Zoom	0–255	5–50°
22	Focus	0–255	Focus
23	Shutter	0–7	Closed
		8–15	Open
		16	Min Strobe

CH	Function	DMX	Description
23	Shutter (continued)	17–130	Min Strobe … max Strobe
		131	Max Strobe
		132–139	Open
		140	Min Pulse Open
		141–180	Min Pulse Open … max Pulse Open
		181	Max Pulse Open
		182–184	Open 2
		185	Open
		186–189	Open 2
		190	Min Pulse Close
		191–230	Min Pulse Close … max Pulse Close
		231	Max Pulse Close
		232–234	Open 3
		235	Open
		236–239	Open 3
		240–247	Strobe Ran (12–20 Hz)
		248–254	Open 4
		255	Open
24	Dimmer	0–255	Closed … Open
		255	Open
25	Dimmer Fine	0–255	Fine adjustment of CH 24
26	Blade 1 Rotation	0–127	Blade 1 Rot 1
		128	Blade 1 Rot 2
		129–255	Blade 1 Rot 3
27	Blade 1 A	0–255	
28	Blade 1 B	0–255	
29	Blade 2 A	0–255	
30	Blade 2 B	0–255	
31	Blade 3 A	0–255	
32	Blade 3 B	0–255	
33	Blade 4 A	0–255	
34	Blade 4 B	0–255	
35	Function	0–29	None
		30–39	Dim Square Law
		40–49	Dim Inv Square Law
		50–59	Dim Curve Line
		60–69	Dim Curve S
		70–79	Standard
		80–89	Quiet
		90–99	Dimmer Mode: None
		100–109	Frequency Setting
		110–119	Frequency Disable

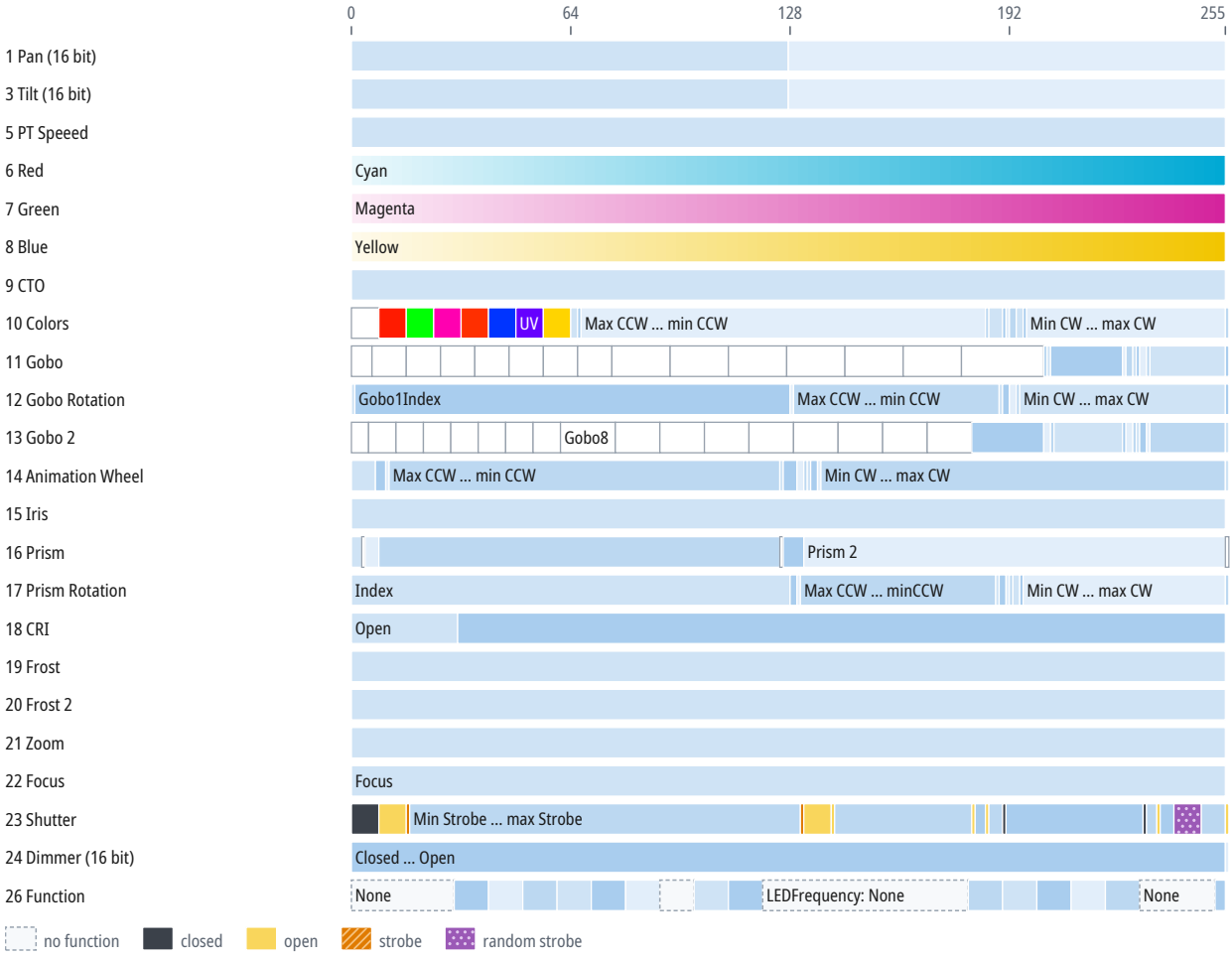
CH	Function	DMX	Description
35	Function (continued)	120–179	LEDFrequency: None
		180–189	Dimmer Fast
		190–199	Dim Smooth
		200–209	Reset All
		210–219	Reset Eff
		220–229	Reset PT
		230–251	None
		252–255	Full Mode

Mode 26CH

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 8–15, 132–139, 185, 235, 255 “Open” or 182–184, 186–189 or 232–234, 236–239 or 248–254; CH 24 Dimmer above 0. The GDTF file gives these values for a console's Highlight function: CH 6 Red 255, CH 7 Green 255, CH 8 Blue 255, CH 23 Shutter 255, CH 24 Dimmer 255.

Channel functions at a glance



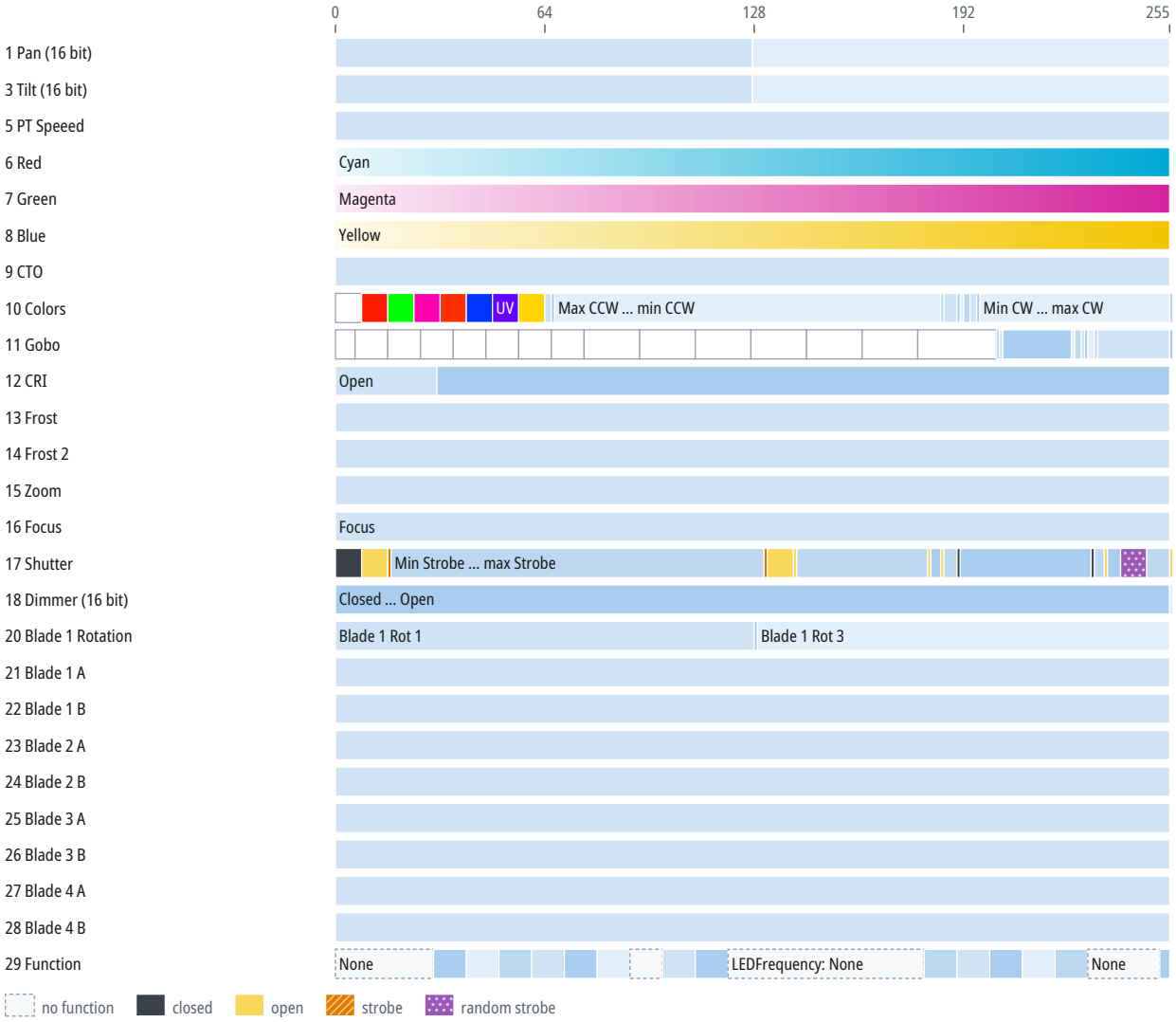
CH	Function	DMX	Description
1	Pan		Same as CH 1 in the mode “35CH” (p. 11)
2	Pan Fine	0–255	Fine adjustment of CH 1
3	Tilt		Same as CH 3 in the mode “35CH” (p. 12)
4	Tilt Fine	0–255	Fine adjustment of CH 3
5	PT Speeed	0–255	
6	Red	0–255	Cyan
7	Green	0–255	Magenta
8	Blue	0–255	Yellow
9	CTO	0–255	6500–2800 K
10	Colors		Same as CH 10 in the mode “35CH” (p. 12)
11	Gobo		Same as CH 11 in the mode “35CH” (p. 12)
12	Gobo Rotation		Same as CH 12 in the mode “35CH” (p. 13)
13	Gobo 2		Same as CH 13 in the mode “35CH” (p. 13)
14	Animation Wheel		Same as CH 14 in the mode “35CH” (p. 14)
15	Iris	0–255	
16	Prism		Same as CH 16 in the mode “35CH” (p. 14)
17	Prism Rotation		Same as CH 17 in the mode “35CH” (p. 14)
18	CRI		Same as CH 18 in the mode “35CH” (p. 14)
19	Frost	0–255	
20	Frost 2	0–255	
21	Zoom	0–255	5–50°
22	Focus	0–255	Focus
23	Shutter		Same as CH 23 in the mode “35CH” (p. 14)
24	Dimmer		Same as CH 24 in the mode “35CH” (p. 15)
25	Dimmer Fine	0–255	Fine adjustment of CH 24
26	Function		Same as CH 35 in the mode “35CH” (p. 15)

Mode 29CH

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 17 Shutter at 8–15, 132–139, 185, 235, 255 “Open” or 182–184, 186–189 or 232–234, 236–239 or 248–254; CH 18 Dimmer above 0. The GDTF file gives these values for a console's Highlight function: CH 6 Red 255, CH 7 Green 255, CH 8 Blue 255, CH 17 Shutter 255, CH 18 Dimmer 255.

Channel functions at a glance



CH	Function	DMX	Description
1	Pan		Same as CH 1 in the mode “35CH” (p. 11)
2	Pan Fine	0–255	Fine adjustment of CH 1
3	Tilt		Same as CH 3 in the mode “35CH” (p. 12)
4	Tilt Fine	0–255	Fine adjustment of CH 3
5	PT Speeed	0–255	
6	Red	0–255	Cyan
7	Green	0–255	Magenta
8	Blue	0–255	Yellow

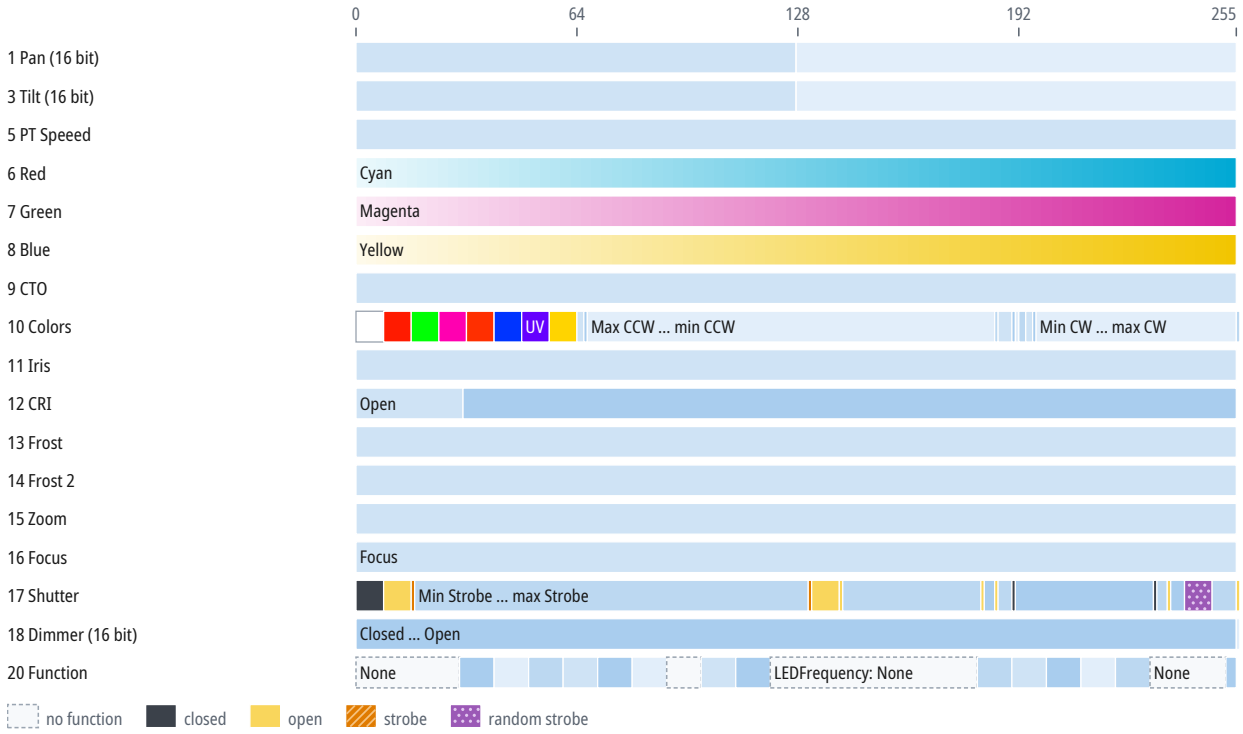
CH	Function	DMX	Description
9	CTO	0–255	6500–2800 K
10	Colors		Same as CH 10 in the mode “35CH” (p. 12)
11	Gobo		Same as CH 11 in the mode “35CH” (p. 12)
12	CRI		Same as CH 18 in the mode “35CH” (p. 14)
13	Frost	0–255	
14	Frost 2	0–255	
15	Zoom	0–255	5–50°
16	Focus	0–255	Focus
17	Shutter		Same as CH 23 in the mode “35CH” (p. 14)
18	Dimmer		Same as CH 24 in the mode “35CH” (p. 15)
19	Dimmer Fine	0–255	Fine adjustment of CH 18
20	Blade 1 Rotation		Same as CH 26 in the mode “35CH” (p. 15)
21	Blade 1 A	0–255	
22	Blade 1 B	0–255	
23	Blade 2 A	0–255	
24	Blade 2 B	0–255	
25	Blade 3 A	0–255	
26	Blade 3 B	0–255	
27	Blade 4 A	0–255	
28	Blade 4 B	0–255	
29	Function		Same as CH 35 in the mode “35CH” (p. 15)

Mode 20CH

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 17 Shutter at 8–15, 132–139, 185, 235, 255 “Open” or 182–184, 186–189 or 232–234, 236–239 or 248–254; CH 18 Dimmer above 0. The GDTF file gives these values for a console's Highlight function: CH 6 Red 255, CH 7 Green 255, CH 8 Blue 255, CH 17 Shutter 255, CH 18 Dimmer 255.

Channel functions at a glance



CH	Function	DMX	Description
1	Pan		Same as CH 1 in the mode “35CH” (p. 11)
2	Pan Fine	0–255	Fine adjustment of CH 1
3	Tilt		Same as CH 3 in the mode “35CH” (p. 12)
4	Tilt Fine	0–255	Fine adjustment of CH 3
5	PT Speeed	0–255	
6	Red	0–255	Cyan
7	Green	0–255	Magenta
8	Blue	0–255	Yellow
9	CTO	0–255	6500–2800 K
10	Colors		Same as CH 10 in the mode “35CH” (p. 12)
11	Iris	0–255	
12	CRI		Same as CH 18 in the mode “35CH” (p. 14)
13	Frost	0–255	
14	Frost 2	0–255	
15	Zoom	0–255	5–50°
16	Focus	0–255	Focus

CH	Function	DMX	Description
17	Shutter		Same as CH 23 in the mode “35CH” (p. 14)
18	Dimmer		Same as CH 24 in the mode “35CH” (p. 15)
19	Dimmer Fine	0–255	Fine adjustment of CH 18
20	Function		Same as CH 35 in the mode “35CH” (p. 15)

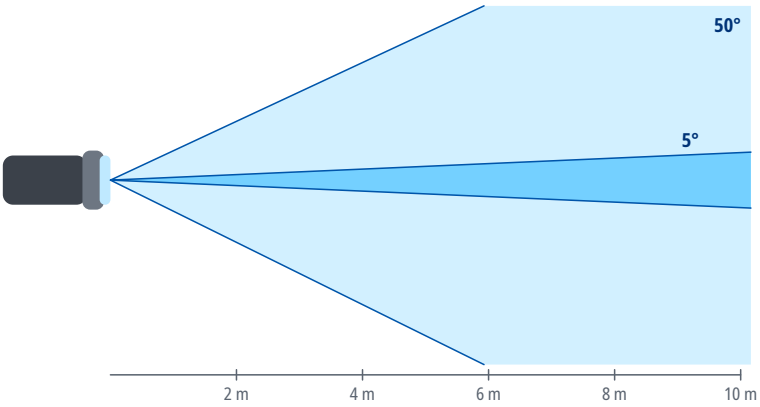
10 Technical specifications

Parameter	Value
Light	
Light source	LED
LED power	1,000 W
Luminous flux	150,000 lm
Color temperature	6,500 K
Color rendering index (CRI)	92
Optics	
Zoom	5–50°
Movement	
Pan	540°
Tilt	270°
Control	
DMX connection	5-pin XLR IN/OUT, 3-pin XLR IN/OUT
RJ45 connectors	RJ45 IN
RDM	yes (manufacturer ID 0x6695, device model ID 0x6695)
Electrical	
Power supply	100–240 V, 50/60 Hz
Power consumption	850 W
Power connectors	powerCON TRUE1 IN/OUT
Dimensions and construction	
Weight	35 kg
Operating environment	
Operating temperature	-10 to 60 °C

Speeds and ranges

Parameter	Value
Color temperature range	2800–6500 K
Strobe frequency	1–20 Hz
Color wheel rotation	up to 240 °/s (40 rpm)
Gobo wheel 1 rotation	up to 120 °/s (20 rpm)
Gobo wheel 2 rotation	up to 120 °/s (20 rpm)
Gobo 1 rotation	up to 240 °/s (40 rpm)
Prism rotation	up to 280 °/s (47 rpm)
Animation wheel rotation	up to 120 °/s (20 rpm)

Spot diameter



Distance	Ø 5°	Ø 50°
2 m	0.17 m	1.9 m
4 m	0.35 m	3.7 m
6 m	0.52 m	5.6 m
8 m	0.7 m	7.5 m
10 m	0.87 m	9.3 m
15 m	1.3 m	14 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.