DMX REFERENCE

# MP600

Meanreal MP600

Meanreal



| | |
|---|---|
| **Manufacturer** | Meanreal |
| **GDTF file** | Meanreal_MP600_89185.gdtf |
| **GDTF revision** | 34 channel mode: Gobo Fix · 2025-03-12 |
| **Generated** | 2026-11-24 |

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# 1 About this manual

This document describes the Meanreal MP600 by Meanreal. It was compiled from the GDTF file Meanreal_MP600_89185.gdtf from the GDTF-Share library.

File revision: “34 channel mode: Gobo Fix”.

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 Meanreal; 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 | 670 W |
| Weight | 23.5 kg |

### DMX modes

| Mode | Channels | Units in one universe | First start addresses |
|---|---|---|---|
| 39 Channel | 39 | 13 | 1, 40, 79, 118, ... |
| 34 Channel | 34 | 15 | 1, 35, 69, 103, ... |

### No light? Check these channels

- 39 Channel: CH 37 Shutter at 32–63, 96–127, 160–191 or 224–255 “Open”; CH 38 Dimmer above 0
- 34 Channel: CH 33 Shutter at 32–63, 96–127, 160–191 or 224–255 “Open”; CH 34 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.

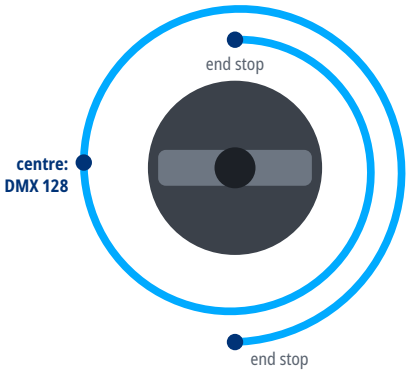
> ⚠ **WARNING**
>
> - The moving parts of the device (for example the head or arms) can move quickly and unexpectedly at any time – after power-on, during a reset, or on a command from the controller.
> - Keep yourself and any objects out of the range of movement. While the device is switched on, do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

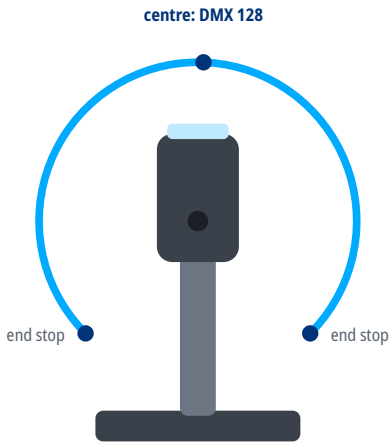
top view




**full travel in 3.1 s**

**Tilt 270°**

side view




**full travel in 1.5 s**

Full-travel times as stated in the GDTF file.

# 5 Installation

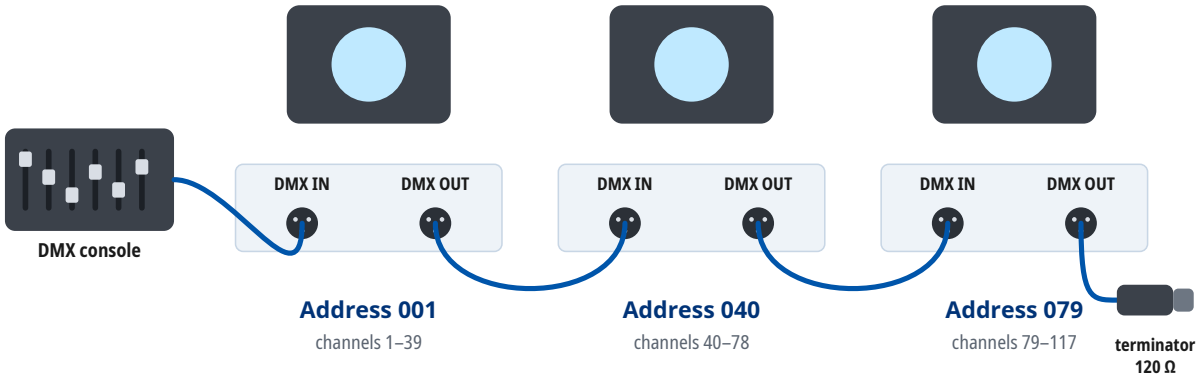
⚠ **WARNING**

- 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: 23.5 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 39 Channel: every unit occupies 39 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 “39 Channel”: 39.
- 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 “39 Channel”, you can use, for example, the start addresses 1, 40, 79, 118.
- 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

| | 39 Channel<br>39 channels | 34 Channel<br>34 channels |
|---|---|---|
| Pan / Tilt | 1, 3 | 1, 3 |
| Dimmer | 38 | 34 |
| Dimmer resolution | 16 bit | 8 bit |
| Shutter / strobe | 37 | 33 |
| Color mixing | 7–9 | 7–9 |
| Color temperature | 16, 18 | 11 |
| Color wheel | 10, 12 | 10 |
| Gobo wheel | 19, 20 | 18, 19 |
| Gobo rotation | 21 * | 20 * |
| Prism | 23–27 | 21–25 |
| Frost | 31 | 29 |
| Zoom | 32 | 30 |
| Focus | 34, 36 | 31 |
| Effects / macros | 27 | 25, 32 |

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

## Gobo wheel 1

1 
G1 Reducer Mid
DMX 200–202

2 
No Gobo (G1 Reducer)
DMX 0

3 
Gobo 1
DMX 5–7

4 
Gobo 2
DMX 8–10

5 
Gobo 3
DMX 11–13

6 
Gobo 4
DMX 14–16

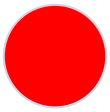
7 
Gobo 5
DMX 17–19

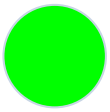
8 
Gobo 6
DMX 20–22

9 
7 Lotus
DMX 23–32

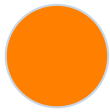
## Color wheel 1

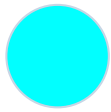
1 
Color: Open
DMX 0–6

2 
Color: Red
DMX 7–22

3 
Color: Green
DMX 23–38

4 
Color: Pink
DMX 39–55

5 
Color: Orange
DMX 56–70

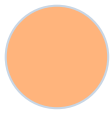
6 
Color: Cyan
DMX 71–87

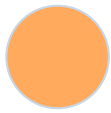
7 
Color: UV
DMX 88–103

8 
Color: CRI
DMX 104–119

9 
C08 CTB 9000K
DMX 120–128

10 
CTO Min
DMX 167

11 
C10 CTO 3

12 
C11 CTO 3
DMX 189–190

## Gobo wheel 2

1 
1 Reducer Mid
DMX 0–3

2 
2 Reducer Small
DMX 4–9

3 
3 Dots
DMX 10–15

4 
4 Grid
DMX 16–21

5 
5 Moons
DMX 22–27

6 
6 Eclipse
DMX 28–33

7 
7 Flower
DMX 34–39

8 
8 Spin
DMX 40–45

9 
9 Lines
DMX 46–51

10 
10 Disco Ball
DMX 52–57

11 
11 Seeds
DMX 58–63

12 
12 Fingerprint
DMX 64–69

13 
Open
DMX 70–88

## Prism 1

1 
Open
DMX 0–3

2 
4 facets
Prism 1 - 4 Facet
DMX 4–255

## Prism 2

1 
Open
DMX 0–3

2 
5 facets
Prism 2 - 5 Facet
DMX 4–255

## Color wheel 2

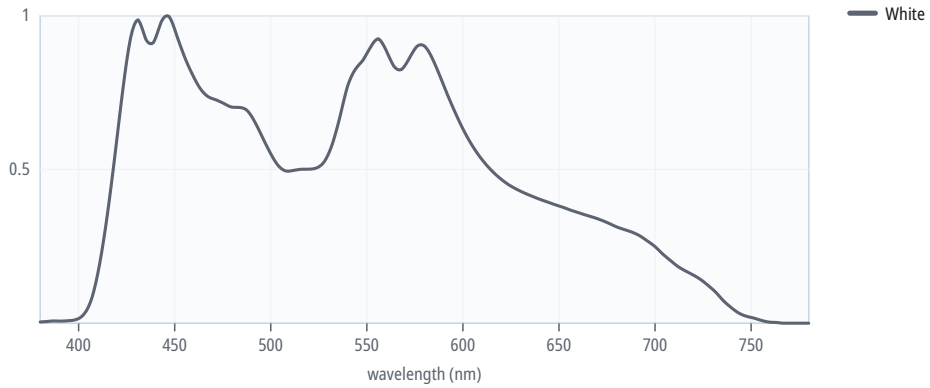


49 48 Gold
50 49 Violet
51 50 Dark Violet
52 51 Sky Cyan
53 52 Soft Blue
54 53 Soft Light Blue
55 54 Soft Melon
56 55 Full CT Orange
57 56 Apricot
58 57 Hubba Bubba
59 58 Light Magenta
60 59 More Light Magenta
61 60 Light Aqua
62 61Gold Amber
63 62 Sea Breze
64 63 Green Sea
65 64 Pandora Blue
66 65 Red Hot
67 66 Magenta Pink
68 67 White Beam

## Color wheel 3

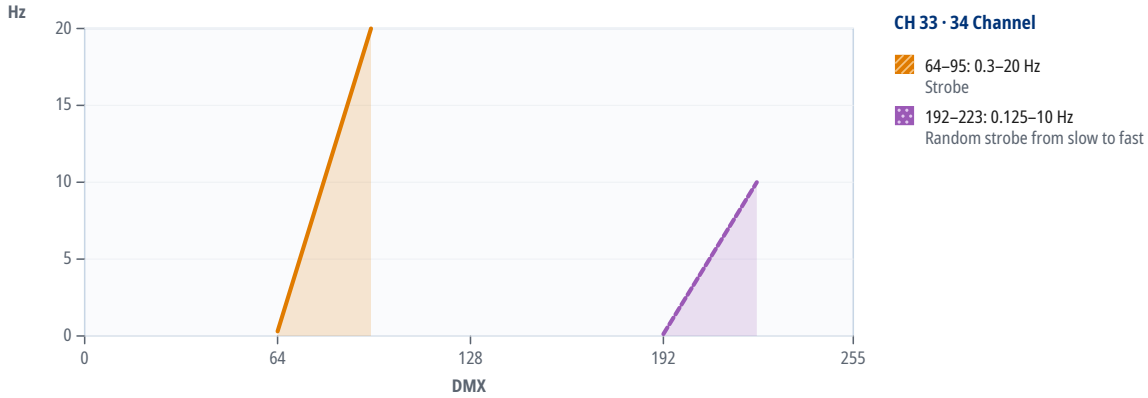
1 Open
**DMX 0–51**
2 7000K
**DMX 51**
3 5000K
**DMX 114**
4 3500K
**DMX 191**
5 2700K
**DMX 255**

## Spectra of the light sources



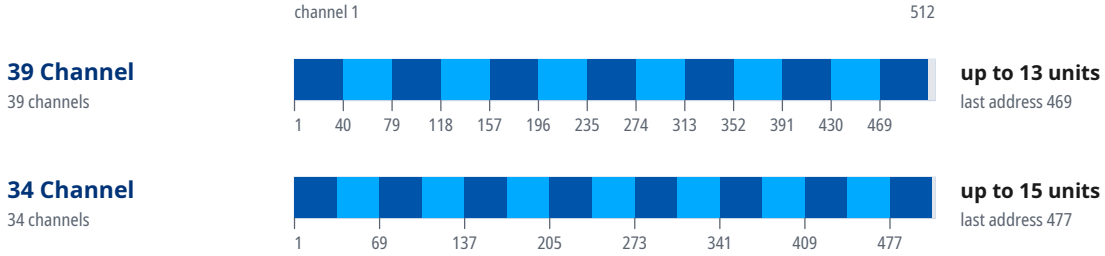

Relative spectrum of each light source as the GDTF file states it; each curve is scaled to its own maximum.

### Strobe rate




# 9 DMX channels

### Units in one DMX universe




### Start addresses of 20 units in the mode “39 Channel”

| Unit | Start address | Unit | Start address | Unit | Start address | Unit | Start address |
|---|---|---|---|---|---|---|---|
| 1 | 1 | 6 | 196 | 11 | 391 | 16 | U2 · 79 |
| 2 | 40 | 7 | 235 | 12 | 430 | 17 | U2 · 118 |
| 3 | 79 | 8 | 274 | 13 | 469 | 18 | U2 · 157 |
| 4 | 118 | 9 | 313 | 14 | U2 · 1 | 19 | U2 · 196 |
| 5 | 157 | 10 | 352 | 15 | U2 · 40 | 20 | U2 · 235 |

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 39 Channel

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 37 Shutter at 32–63, 96–127, 160–191 or 224–255 “Open”; CH 38 Dimmer above 0. The GDTF file gives these values for a console's Highlight function: CH 7 Cyan 0, CH 8 Magenta 0, CH 9 Yellow 0, CH 10 Colors 0, CH 12 Color Macro 0, CH 16 CTO 0, CH 18 CTB 0, CH 37 Shutter 32, CH 38 Dimmer 255.

### Channel functions at a glance




| CH | Function | DMX | Description |
|---|---|---|---|
| **1** | Pan | 0–85 | Min ... 90 Deg |
| | | 85–127 | 90 Deg ... Center |
| | | 128–170 | Center ... -90 Deg |
| | | 170–255 | -90 Deg ... Max |
| | | 255 | Max |
| **2** | Pan Fine | 0–255 | Fine adjustment of CH 1 |

| CH | Function | DMX | Description |
|---|---|---|---|
| **3** | Tilt | 0–42 | Min ... 90 Deg |
| | | 42–127 | 90 Deg ... Center |
| | | 128–213 | Center ... -90 Deg |
| | | 213–255 | -90 Deg ... Max |
| | | 255 | Max |
| **4** | Tilt Fine | 0–255 | Fine adjustment of CH 3 |
| **5** | Speed Pan/Tilt | | Pan/Tilt speed / Time |
| | | 0 | Fast |
| | | 1–254 | Fast ... Slow |
| | | 255 | Slow |
| **6** | Control | 0–139 | No function |
| | | 140–149 | Pan/Tilt reset |
| | | 150–159 | Colour system reset |
| | | 160–169 | Gobo wheels reset |
| | | 170–179 | Zoom/focus/frost/prism wheels reset |
| | | 180–255 | Reserved |
| **7** | Cyan | 0 | Min |
| | | 1–254 | Min ... Max |
| | | 255 | Max |
| **8** | Magenta | 0 | Min |
| | | 1–254 | Min ... Max |
| | | 255 | Max |
| **9** | Yellow | 0 | Min |
| | | 1–254 | Min ... Max |
| | | 255 | Max |
| **10** | Colors | 0–6 | Color: Open |
| | | 7–22 | Color: Red |
| | | 23–38 | Color: Green |
| | | 39–55 | Color: Pink |
| | | 56–70 | Color: Orange |
| | | 71–87 | Color: Cyan |
| | | 88–103 | Color: UV |
| | | 103 | UV ... CRI |
| | | 104–119 | Color: CRI |
| | | 120–127 | Color: CTB |
| | | 128–129 | Color 1 Indexing: Open |
| | | 130–134 | Color 1 Indexing: Red |
| | | 135–138 | Color 1 Indexing: Green |
| | | 139–143 | Color 1 Indexing: Pink |
| | | 144–147 | Color 1 Indexing: Orange |
| | | 148–152 | Color 1 Indexing: Cyan |
| | | 153–157 | Color 1 Indexing: UV |

| CH | Function | DMX | Description |
|---|---|---|---|
| **10** | Colors (continued) | 158–161 | Color 1 Indexing: CRI |
| | | 162–166 | Color 1 Indexing: CTB |
| | | 167–189 | CTO Min … CTO Max |
| | | 189 | CTO Max |
| | | 190–191 | Color 1 Wheel Spin: <<< Fast (470.3–441.8 °/s) |
| | | 192–215 | Color 1 Wheel Spin: <<< Fast … Stop |
| | | 216–217 | Color 1 Wheel Spin: Stop |
| | | 218–255 | Color 1 Wheel Spin: Stop … >>> Fast |
| | | 255 | Color 1 Wheel Spin: >>> Fast |
| **11** | Colors Fine | 0–255 | Fine adjustment of CH 10 |
| **12** | Color Macro | | Mix Color Macro |
| | | 0 | Open |
| | | 1–2 | 1 Pinky |
| | | 3–4 | 2 Yellow |
| | | 5–6 | 3 Magenta |
| | | 7–8 | 4 More Yellow |
| | | 9–10 | 5 More Magenta |
| | | 11–12 | 6 Sky Blue |
| | | 13–14 | 7 White |
| | | 15–16 | 8 Just Blue Sky |
| | | 17–18 | 9 Light Pink |
| | | 19–20 | 10 Green Lime |
| | | 21–22 | 11 Copper Yellow |
| | | 23–24 | 12 Mustard |
| | | 25–26 | 13 Eclipse |
| | | 27–28 | 14 Vanilla |
| | | 29–30 | 15 Deep Amber |
| | | 31–32 | 16 Spicy |
| | | 33–34 | 17 F*king Magenta |
| | | 35–36 | 18 Dark Pink |
| | | 37–38 | 19 Sprite |
| | | 39–40 | 20 Mint |
| | | 41–42 | 21 Fresh Green |
| | | 43–44 | 22 Guava |
| | | 45–46 | 23 Ocean Blue |
| | | 47–48 | 24 Aquamarine |
| | | 49–50 | 25 Melon Tellow |
| | | 51–52 | 26 Raspberry Red |
| | | 53–54 | 27 Mont Azure |
| | | 55–56 | 28 Cyan |
| | | 57–58 | 29 Dark Orange |
| | | 59–60 | 30 More Dark Orange |

| CH | Function | DMX | Description |
|---|---|---|---|
| **12** | Color Macro (continued) | 61–62 | 31 Pink Lady |
| | | 63–64 | 32 Barbie Pink |
| | | 65–66 | 33 Mountain Dew |
| | | 67–68 | 34 Cold White |
| | | 69–70 | 35 Bright Blue |
| | | 71–72 | 36 Red Mars |
| | | 73–74 | 37 Coral Red |
| | | 75–76 | 38 Pink Rose |
| | | 77–78 | 39 Chandon Rose |
| | | 79–80 | 40 Red Pamelo |
| | | 81–82 | 41 Hot Metal |
| | | 83–84 | 42 Light Peach |
| | | 85–86 | 43 Lavender |
| | | 87–88 | 44 Light Cyan |
| | | 89–90 | 45 Dark Pink |
| | | 91–92 | 46 Vanila Sky |
| | | 93–94 | 47 Green Tea |
| | | 95–96 | 48 Gold |
| | | 97–98 | 49 Violet |
| | | 99–100 | 50 Dark Violet |
| | | 101–102 | 51 Sky Cyan |
| | | 103–104 | 52 Soft Blue |
| | | 105–106 | 53 Soft Light Blue |
| | | 107–108 | 54 Soft Melon |
| | | 109–110 | 55 Full CT Orange |
| | | 111–112 | 56 Apricot |
| | | 113–114 | 57 Hubba Bubba |
| | | 115–116 | 58 Light Magenta |
| | | 117–118 | 59 More Light Magenta |
| | | 119–120 | 60 Light Aqua |
| | | 121–122 | 61 Gold Amber |
| | | 123–124 | 62 Sea Breze |
| | | 125–126 | 63 Green Sea |
| | | 127–128 | 64 Pandora Blue |
| | | 129–130 | 65 Red Hot |
| | | 131–132 | 66 Magenta Pink |
| | | 133–255 | 67 White Beam |
| **14** | Color Mix Speed | | Colors System Speed |
| | | 0 | Fast |
| | | 1–126 | Fast ... Mid |
| | | 127 | Mid |
| | | 128–254 | Mid ... Slow |

| CH | Function | DMX | Description |
|---|---|---|---|
| **14** | Color Mix Speed (continued) | 255 | Slow |
| **15** | Focus Speed | | Zoom Focus Speed |
| | | 0 | Fast |
| | | 1–127 | Fast ... Mid |
| | | 128 | Mid |
| | | 129–254 | Mid ... Slow |
| | | 255 | Slow |
| **16** | CTO | 0–50 | Open |
| | | 51 | 7000K |
| | | 52–113 | 7000K ... 5000K |
| | | 114 | 5000K |
| | | 115–190 | 5000K ... 3500K |
| | | 191 | 3500K |
| | | 192–254 | 3500K ... 2700K |
| | | 255 | 2700K |
| **17** | CRI Mode | | High CRI |
| | | 0–127 | Open |
| | | 128–255 | High CRI |
| **18** | CTB | 0–127 | Open |
| | | 128–255 | CTB |
| **19** | Gobo | 0–3 | 1 Reducer Mid |
| | | 4–9 | 2 Reducer Small |
| | | 10–15 | 3 Dots |
| | | 16–21 | 4 Grid |
| | | 22–27 | 5 Moons |
| | | 28–33 | 6 Eclipse |
| | | 34–39 | 7 Flower |
| | | 40–45 | 8 Spin |
| | | 46–51 | 9 Lines |
| | | 52–57 | 10 Disco Ball |
| | | 58–63 | 11 Seeds |
| | | 64–69 | 12 Fingerprint |
| | | 70–87 | Static Gobo: Open |
| | | 88–95 | 2 Shake Reducer Small (1.5–5.46 Hz) |
| | | 96–103 | 3 Shake Dots (1.5–5.46 Hz) |
| | | 104–111 | 4 SHake Dots (1.5–5.46 Hz) |
| | | 112–119 | 5 Shake Moons (1.5–5.46 Hz) |
| | | 120–127 | 6 Shake Eclipse (1.5–5.46 Hz) |
| | | 128–135 | 7 Shake Flower (1.5–5.46 Hz) |
| | | 136–143 | 8 SHake Spin (1.5–5.46 Hz) |
| | | 144–151 | 9 Shake Lines (1.5–5.46 Hz) |
| | | 152–159 | 10 Shake Disco Ball (1.5–5.46 Hz) |

| CH | Function | DMX | Description |
|---|---|---|---|
| **19** | Gobo (continued) | 160–167 | 11 Shake Seeds (1.5–5.46 Hz) |
| | | 168–175 | 12 Shake Fingerprint (1.5–5.46 Hz) |
| | | 176–183 | 13 Shake Fingerprint (1.5–5.46 Hz) |
| | | 184–191 | 14 Shake Fingerprint (1.5–5.46 Hz) |
| | | 192–199 | 15 Shake Fingerprint (1.5–5.46 Hz) |
| | | 200–201 | Open Mid |
| | | 202 | Static Wheel Spin: <<< Fast |
| | | 203–221 | Static Wheel Spin: <<< Fast to SLow (270–0.69 °/s) |
| | | 222 | Static Wheel Spin: <<< Slow |
| | | 223 | Static Wheel Spin: >>> Slow |
| | | 224–254 | Static Wheel Spin: >>> Slow to Fast (0.69–270 °/s) |
| | | 255 | Static Wheel Spin: >>> Fast |
| **20** | Gobo 2 | 0–4 | Gobo 2 Index: Open/Hole |
| | | 5–7 | Gobo 1 |
| | | 8–10 | Gobo 2 |
| | | 11–13 | Gobo 3 |
| | | 14–16 | Gobo 4 |
| | | 17–19 | Gobo 5 |
| | | 20–22 | Gobo 6 |
| | | 23–31 | Gobo 7 |
| | | 32–34 | Gobo 1 - Rotation |
| | | 35–37 | Gobo 2 - Rotation |
| | | 38–40 | Gobo 3 - Rotation |
| | | 41–43 | Gobo 4 - Rotation |
| | | 44–46 | Gobo 5 - Rotation |
| | | 47–49 | Gobo 6 - Rotation |
| | | 50–59 | Gobo 7 - Rotation |
| | | 60–67 | Gobo 1 - Shaking Index (0.5–4 Hz) |
| | | 68–75 | Gobo 2 - Shaking Index (0.5–4 Hz) |
| | | 76–83 | Gobo 3 - Shaking Index (0.5–4 Hz) |
| | | 84–91 | Gobo 4 - Shaking Index (0.5–4 Hz) |
| | | 92–99 | Gobo 5 - Shaking Index (0.5–4 Hz) |
| | | 100–107 | Gobo 6 - Shaking Index (0.5–4 Hz) |
| | | 108–129 | Gobo 7 - Shaking Index (0.5–4 Hz) |
| | | 130–137 | Gobo 1 - Shaking Rotation (5.33–0.141 Hz) |
| | | 138–145 | Gobo 2 - Shaking Rotation (5.33–0.141 Hz) |
| | | 146–153 | Gobo 3 - Shaking Rotation (5.33–0.141 Hz) |
| | | 154–161 | Gobo 4 - Shaking Rotation (5.33–0.141 Hz) |
| | | 162–169 | Gobo 5 - Shaking Rotation (5.33–0.141 Hz) |
| | | 170–177 | Gobo 6 - Shaking Rotation (5.33–0.141 Hz) |
| | | 178–199 | Gobo 7 - Shaking Rotation (5.33–0.141 Hz) |
| | | 200–201 | Gobo 2 Shake Rot: Open/Hole |

| CH | Function | DMX | Description |
|---|---|---|---|
| **20** | Gobo 2 (continued) | 202 | Gobo 2 Wheel Spin: Fast to slow - Fast |
| | | 203–220 | Gobo 2 Wheel Spin: Fast to slow - Fast ... Fast to slow - Slow (56.7–3.33 °/s) |
| | | 221–222 | Gobo 2 Wheel Spin: Fast to slow - Slow (3.33–2.63 °/s) |
| | | 223–224 | Gobo 2 Wheel Spin: Slow to fast - Slow (2.63–3.32 °/s) |
| | | 225–254 | Gobo 2 Wheel Spin: Slow to fast - Slow ... Slow to fast - Fast |
| | | 255 | Gobo 2 Wheel Spin: Slow to fast - Fast |
| **21** | Gobo 2 Rotation | | When CH 20 is 0–31: |
| | | 0–127 | Min |
| | | 128 | Center |
| | | 128–255 | Max |
| | | | When CH 20 is 32–59: |
| | | 0 | No rotation |
| | | 1–24 | Fast to Slow - Fast (900–372.3 °/s) |
| | | 25–123 | Fast to Slow - Fast ... Fast to Slow - Slow (372.3–0.658 °/s) |
| | | 124–127 | Fast to Slow - Slow (0.658–0.215 °/s) |
| | | 128 | Stop |
| | | 129–132 | Slow to Fast - Slow (0.215–0.658 °/s) |
| | | 133–231 | Slow to Fast - Slow ... Slow to Fast - Fast (0.658–372.3 °/s) |
| | | 232–255 | Slow to Fast - Fast (372.3–900 °/s) |
| | | | When CH 20 is 60–129: |
| | | 0–127 | Min |
| | | 128 | Center |
| | | 128–255 | Max |
| | | | When CH 20 is 130–199: |
| | | 0 | No rotation |
| | | 1–24 | Fast to Slow - Fast (900–372.3 °/s) |
| | | 25–123 | Fast to Slow - Fast ... Fast to Slow - Slow (372.3–0.658 °/s) |
| | | 124–127 | Fast to Slow - Slow (0.658–0.215 °/s) |
| | | 128 | Stop |
| | | 129–132 | Slow to Fast - Slow (0.215–0.658 °/s) |
| | | 133–231 | Slow to Fast - Slow ... Slow to Fast - Fast (0.658–372.3 °/s) |
| | | 232–255 | Slow to Fast - Fast (372.3–900 °/s) |
| **22** | Gobo 2 Rotation Fine | 0–255 | Fine adjustment of CH 21 |
| **23** | Prism | 0–3 | Open |
| | | 4–255 | Prism 1 - 4 Facet |
| **24** | Prism Rotation | 0 | 0 Deg |
| | | 1–31 | 0 Deg ... 90 Deg |
| | | 32 | 90 Deg |
| | | 33–63 | 90 Deg ... 180 Deg |
| | | 64 | 180 Deg |
| | | 65–95 | 180 Deg ... 270 Deg |

| CH | Function | DMX | Description |
|---|---|---|---|
| **24** | Prism Rotation (continued) | 96 | 270 Deg |
| | | 97–126 | 270 Deg ... 360 Deg |
| | | 127 | 360 Deg |
| | | 128 | Prism 1 Rotation: <<< Fast |
| | | 129–190 | Prism 1 Rotation: <<< Fast to Slow (236.2–5.67 °/s) |
| | | 191–192 | Prism 1 Rotation: Stop |
| | | 193–254 | Prism 1 Rotation: >>> Slow to Fast (5.67–236.2 °/s) |
| | | 255 | Prism 1 Rotation: >>> Fast |
| **25** | Prism 2 | 0–3 | Open |
| | | 4–255 | Prism 2 - 5 Facet |
| **26** | Prism 2 Rotation | 0 | 0 Deg |
| | | 1–31 | 0 Deg ... 90 Deg |
| | | 32 | 90 Deg |
| | | 33–63 | 90 Deg ... 180 Deg |
| | | 64 | 180 Deg |
| | | 65–95 | 180 Deg ... 270 Deg |
| | | 96 | 270 Deg |
| | | 97–126 | 270 Deg ... 360 Deg |
| | | 127 | 360 Deg |
| | | 128 | Prism 2 Pos Rotate: <<< Fast |
| | | 129–190 | Prism 2 Pos Rotate: <<< Fast to Slow (236.2–5.67 °/s) |
| | | 191–192 | Prism 2 Pos Rotate: Stop |
| | | 193–254 | Prism 2 Pos Rotate: >>> Slow to Fast (5.67–236.2 °/s) |
| | | 255 | Prism 2 Pos Rotate: >>> Fast |
| **27** | Prism Macro | 0–3 | Open |
| | | 4–11 | Prism Macro 1 |
| | | 12–19 | Prism Macro 2 |
| | | 20–27 | Prism Macro 3 |
| | | 28–35 | Prism Macro 4 |
| | | 36–43 | Prism Macro 5 |
| | | 44–51 | Prism Macro 6 |
| | | 52–59 | Prism Macro 7 |
| | | 60–67 | Prism Macro 8 |
| | | 68–255 | No Function |
| **31** | Frost | 0 | Open |
| | | 1–254 | Open ... Frost |
| | | 255 | Frost |
| **32** | Zoom | 0–127 | Min Angle ... Center |
| | | 127 | Center |
| | | 128–255 | Center ... Max Angle |
| | | 255 | Max Angle |
| **33** | Zoom Fine | 0–255 | Fine adjustment of CH 32 |

| CH | Function | DMX | Description |
|---|---|---|---|
| **34** | Focus | 0–255 | Min … Max |
| | | 255 | Max |
| **35** | Focus Fine | 0–255 | Fine adjustment of CH 34 |
| **36** | Focus Distance | | Hot - Spot control |
| | | 0–10 | None |
| | | 11–54 | 5M |
| | | 55–104 | 10M |
| | | 105–154 | 15M |
| | | 155–204 | 20M |
| | | 205–255 | 25M |
| **37** | Shutter | 0–31 | Open/Closed: Closed |
| | | 32–63 | Open/Closed: Open |
| | | 64–66 | Strobe: Slow to fast 1/12 (0.409–0.466 Hz) |
| | | 67–78 | Strobe: Slow to fast 1/12 … Slow to fast 6/12 (0.496–1.7 Hz) |
| | | 79–82 | Strobe: Slow to fast 6/12 (1.92–3.39 Hz) |
| | | 83–94 | Strobe: Slow to fast 6/12 … Slow to fast 11/12 (4.54–8.06 Hz) |
| | | 95 | Strobe: Slow to fast 11/12 |
| | | 96–127 | Open |
| | | 128–130 | Strobe Pulse Open: Slow to fast 1/7 |
| | | 131–134 | Strobe Pulse Open: Slow to fast 1/7 … Slow to fast 4/7 (0.087–0.182 Hz) |
| | | 135–136 | Strobe Pulse Open: Slow to fast 4/7 (0.274–0.37 Hz) |
| | | 137–140 | Strobe Pulse Open: Slow to fast 4/7 … Slow to fast 7/7 (0.526–1 Hz) |
| | | 141–143 | Strobe Pulse Open: Slow to fast 7/7 (1.08–1.47 Hz) |
| | | 144–145 | Strobe Pulse Close: Fast to slow 1/7 (1.47–1.16 Hz) |
| | | 146–149 | Strobe Pulse Close: Fast to slow 1/7 … Fast to slow 4/7 (1.08–0.667 Hz) |
| | | 150–151 | Strobe Pulse Close: Fast to slow 4/7 (0.526–0.37 Hz) |
| | | 152–155 | Strobe Pulse Close: Fast to slow 4/7 … Fast to slow 7/7 (0.274–0.098 Hz) |
| | | 156–159 | Strobe Pulse Close: Fast to slow 7/7 |
| | | 160–191 | Open |
| | | 192–223 | Random strobe from slow to fast (0.125–10 Hz) |
| | | 224–255 | Open |
| **38** | Dimmer | 0–127 | Closed … 50% |
| | | 127 | 50% |
| | | 128–191 | 50% … 75% |
| | | 191 | 75% |
| | | 192–255 | 75% … Open |
| | | 255 | Open |
| **39** | Dimmer Fine | 0–255 | Fine adjustment of CH 38 |

## Mode 34 Channel

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 33 Shutter at 32–63, 96–127, 160–191 or 224–255 “Open”; CH 34 Dimmer above 0. The GDTF file gives these values for a console's Highlight function: CH 7 Cyan 0, CH 8 Magenta 0, CH 9 Yellow 0, CH 10 Colors 0, CH 11 CTO 0, CH 33 Shutter 32, CH 34 Dimmer 255.

### Channel functions at a glance




| CH | Function | DMX | Description |
|---|---|---|---|
| **1** | Pan | | Same as CH 1 in the mode “39 Channel” (p. 13) |
| **2** | Pan Fine | 0–255 | Fine adjustment of CH 1 |
| **3** | Tilt | | Same as CH 3 in the mode “39 Channel” (p. 14) |

| CH | Function | DMX | Description |
|---|---|---|---|
| **4** | Tilt Fine | 0–255 | Fine adjustment of CH 3 |
| **5** | Speed Pan/Tilt | | Same as CH 5 in the mode “39 Channel” (p. 14) |
| **6** | Control | | Same as CH 6 in the mode “39 Channel” (p. 14) |
| **7** | Cyan | | Same as CH 7 in the mode “39 Channel” (p. 14) |
| **8** | Magenta | | Same as CH 8 in the mode “39 Channel” (p. 14) |
| **9** | Yellow | | Same as CH 9 in the mode “39 Channel” (p. 14) |
| **10** | Colors | 0–6 | Color: Open |
| | | 7–22 | Color: Red |
| | | 23–38 | Color: Green |
| | | 39–55 | Color: Pink |
| | | 56–70 | Color: Orange |
| | | 71–87 | Color: Cyan |
| | | 88–103 | Color: UV |
| | | 104–119 | Color: CRI |
| | | 120–127 | Color: CTB |
| | | 128–129 | Color 1 Indexing: Open |
| | | 130–134 | Color 1 Indexing: Red |
| | | 135–138 | Color 1 Indexing: Green |
| | | 139–143 | Color 1 Indexing: Pink |
| | | 144–147 | Color 1 Indexing: Orange |
| | | 148–152 | Color 1 Indexing: Cyan |
| | | 153–157 | Color 1 Indexing: UV |
| | | 158–161 | Color 1 Indexing: CRI |
| | | 162–166 | Color 1 Indexing: CTB |
| | | 167 | CTO Min |
| | | 168–188 | CTO Min … CTO Max |
| | | 189 | CTO Max |
| | | 190–191 | Color 1 Wheel Spin: <<< Fast (470.3–441.8 °/s) |
| | | 192–215 | Color 1 Wheel Spin: <<< Fast … Stop |
| | | 216–217 | Color 1 Wheel Spin: Stop |
| | | 218–254 | Color 1 Wheel Spin: Stop … >>> Fast |
| | | 255 | Color 1 Wheel Spin: >>> Fast |
| **11** | CTO | | Same as CH 16 in the mode “39 Channel” (p. 17) |
| **12** | Undefined | 0–255 | |
| **13** | Color Mix Speed | | Same as CH 14 in the mode “39 Channel” (p. 16) |
| **14** | Focus Speed | | Same as CH 15 in the mode “39 Channel” (p. 17) |
| **15** | Undefined | 0–255 | |
| **16** | Undefined | 0–255 | |
| **17** | Undefined | 0–255 | |
| **18** | Gobo | | Same as CH 19 in the mode “39 Channel” (p. 17) |
| **19** | Gobo 2 | 0 | No Gobo (G1 Reducer) |

| CH | Function | DMX | Description |
|---|---|---|---|
| **19** | Gobo 2 (continued) | 1–4 | Gobo 2 Index: Open (G1 Open) |
| | | 5–7 | Gobo 1 |
| | | 8–10 | Gobo 2 |
| | | 11–13 | Gobo 3 |
| | | 14–16 | Gobo 4 |
| | | 17–19 | Gobo 5 |
| | | 20–22 | Gobo 6 |
| | | 23–31 | Gobo 7 |
| | | 32–34 | Gobo 1 - Rotation |
| | | 35–37 | Gobo 2 - Rotation |
| | | 38–40 | Gobo 3 - Rotation |
| | | 41–43 | Gobo 4 - Rotation |
| | | 44–46 | Gobo 5 - Rotation |
| | | 47–49 | Gobo 6 - Rotation |
| | | 50–59 | Gobo 7 - Rotation |
| | | 60–67 | Gobo 1 - Shaking Index (0.5–4 Hz) |
| | | 68–75 | Gobo 2 - Shaking Index (0.5–4 Hz) |
| | | 76–83 | Gobo 3 - Shaking Index (0.5–4 Hz) |
| | | 84–91 | Gobo 4 - Shaking Index (0.5–4 Hz) |
| | | 92–99 | Gobo 5 - Shaking Index (0.5–4 Hz) |
| | | 100–107 | Gobo 6 - Shaking Index (0.5–4 Hz) |
| | | 108–129 | Gobo 7 - Shaking Index (0.5–4 Hz) |
| | | 130–137 | Gobo 1 - Shaking Rotation (5.33–0.141 Hz) |
| | | 138–145 | Gobo 2 - Shaking Rotation (5.33–0.141 Hz) |
| | | 146–153 | Gobo 3 - Shaking Rotation (5.33–0.141 Hz) |
| | | 154–161 | Gobo 4 - Shaking Rotation (5.33–0.141 Hz) |
| | | 162–169 | Gobo 5 - Shaking Rotation (5.33–0.141 Hz) |
| | | 170–177 | Gobo 6 - Shaking Rotation (5.33–0.141 Hz) |
| | | 178–199 | Gobo 7 - Shaking Rotation (5.33–0.141 Hz) |
| | | 200–201 | Open/Hole |
| | | 202 | Gobo 2 Wheel Spin: Fast to slow - Fast |
| | | 203–220 | Gobo 2 Wheel Spin: Fast to slow - Fast ... Fast to slow - Slow (56.7–3.33 °/s) |
| | | 221–222 | Gobo 2 Wheel Spin: Fast to slow - Slow (3.33–2.63 °/s) |
| | | 223–224 | Gobo 2 Wheel Spin: Slow to fast - Slow (2.63–3.32 °/s) |
| | | 225–254 | Gobo 2 Wheel Spin: Slow to fast - Slow ... Slow to fast - Fast |
| | | 255 | Gobo 2 Wheel Spin: Slow to fast - Fast |
| **20** | Gobo 2 Rotation | | When CH 19 is 0–31: |
| | | 0–127 | Min |
| | | 128 | Center |
| | | 129–255 | Max |
| | | | When CH 19 is 32–59: |

| CH | Function | DMX | Description |
|---|---|---|---|
| **20** | Gobo 2 Rotation (continued) | 0 | No rotation |
| | | 1–24 | Fast to Slow - Fast (900–372.3 °/s) |
| | | 25–123 | Fast to Slow - Fast ... Fast to Slow - Slow (372.3–0.658 °/s) |
| | | 124–127 | Fast to Slow - Slow (0.658–0.215 °/s) |
| | | 128 | Stop |
| | | 129–132 | Slow to Fast - Slow (0.215–0.658 °/s) |
| | | 133–231 | Slow to Fast - Slow ... Slow to Fast - Fast (0.658–372.3 °/s) |
| | | 232–255 | Slow to Fast - Fast (372.3–900 °/s) |
| | | | When CH 19 is 60–129: |
| | | 0–127 | Min |
| | | 128 | Center |
| | | 129–255 | Max |
| | | | When CH 19 is 130–199: |
| | | 0 | No rotation |
| | | 1–24 | Fast to Slow - Fast (900–372.3 °/s) |
| | | 25–123 | Fast to Slow - Fast ... Fast to Slow - Slow (372.3–0.658 °/s) |
| | | 124–127 | Fast to Slow - Slow (0.658–0.215 °/s) |
| | | 128 | Stop |
| | | 129–132 | Slow to Fast - Slow (0.215–0.658 °/s) |
| | | 133–231 | Slow to Fast - Slow ... Slow to Fast - Fast (0.658–372.3 °/s) |
| | | 232–255 | Slow to Fast - Fast (372.3–900 °/s) |
| **21** | Prism 2 | | Same as CH 25 in the mode “39 Channel” (p. 20) |
| **22** | Prism 2 Rotation | | Same as CH 26 in the mode “39 Channel” (p. 20) |
| **23** | Prism | | Same as CH 23 in the mode “39 Channel” (p. 19) |
| **24** | Prism Rotation | | Same as CH 24 in the mode “39 Channel” (p. 19) |
| **25** | Prism Macro | | Same as CH 27 in the mode “39 Channel” (p. 20) |
| **26** | Undefined | 0–255 | |
| **27** | Undefined | 0–255 | |
| **28** | Undefined | 0–255 | |
| **29** | Frost | | Same as CH 31 in the mode “39 Channel” (p. 20) |
| **30** | Zoom | 0 | Min Angle |
| | | 1–126 | Min Angle ... Center |
| | | 127 | Center |
| | | 128–254 | Center ... Max Angle |
| | | 255 | Max Angle |
| **31** | Focus | 0 | Min |
| | | 1–254 | Min ... Max |
| | | 255 | Max |
| **32** | Dummy Macrodumm | 0–255 | |
| **33** | Shutter | | Same as CH 37 in the mode “39 Channel” (p. 21) |
| **34** | Dimmer | 0 | Closed |
| | | 1–126 | Closed ... 50% |

| CH | Function | DMX | Description |
|---|---|---|---|
| **34** | Dimmer (continued) | 127 | 50% |
| | | 128–190 | 50% … 75% |
| | | 191 | 75% |
| | | 192–254 | 75% … Open |
| | | 255 | Open |

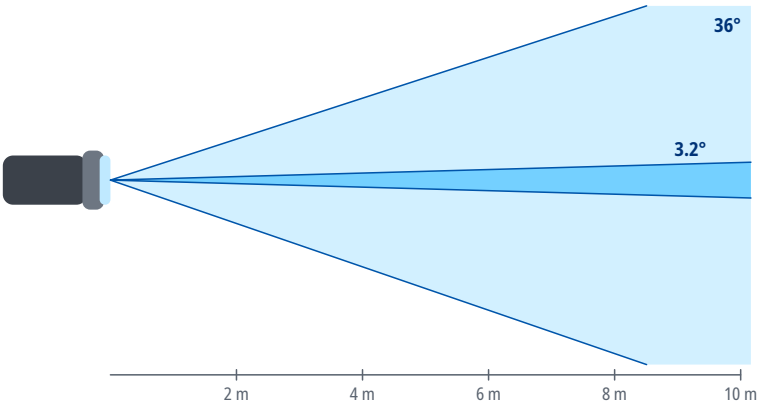
# 10 Technical specifications

| Parameter | Value |
|---|---|
| **Light** | |
| Light source | LED |
| LED power | 600 W |
| Luminous flux | 20,375 lm |
| Color temperature | 6,300 K |
| Color rendering index (CRI) | 80 |
| **Optics** | |
| Zoom | 3.2–36° |
| **Movement** | |
| Pan | 540° |
| Tilt | 270° |
| **Control** | |
| DMX connection | 5-pin XLR IN/OUT, 3-pin XLR IN/OUT |
| RJ45 connectors | RJ45 |
| **Electrical** | |
| Power supply | 100–240 V, 50/60 Hz |
| Power consumption | 670 W |
| Power connectors | powerCON TRUE1 IN |
| **Dimensions and construction** | |
| Weight | 23.5 kg |
| **Operating environment** | |
| Operating temperature | 0 to 45 °C |

### Speeds and ranges

| Parameter | Value |
|---|---|
| Color temperature range | 2700–7000 K |
| Strobe frequency | 0.3–20 Hz |
| Color wheel 1 rotation | up to 470.3 °/s (78 rpm) |
| Gobo wheel 1 rotation | up to 56.6 °/s (9.4 rpm) |
| Gobo wheel 2 rotation | up to 270 °/s (45 rpm) |
| Gobo 1 rotation | up to 900 °/s (150 rpm) |
| Prism 1 rotation | up to 240 °/s (40 rpm) |
| Prism 2 rotation | up to 240 °/s (40 rpm) |

### Spot diameter




| Distance | Ø 3.2° | Ø 36° |
|---|---|---|
| 2 m | 0.11 m | 1.3 m |
| 4 m | 0.22 m | 2.6 m |
| 6 m | 0.34 m | 3.9 m |
| 8 m | 0.45 m | 5.2 m |
| 10 m | 0.56 m | 6.5 m |
| 15 m | 0.84 m | 9.7 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.