

User Manual

impression FR2 Wash

Document revision: 20261020-01

Fixture software version TBC

GLP German Light Products

Document revisions

Revision number	Notes	Date released
20261029-01 (Rev A)		October 2026

GLP impression FR2 Wash User Manual

© 2026 German Light Products GmbH. All rights reserved.

The marks ‘GLP’ and ‘German Light Products’ are trademarks registered as the property of German Light Products GmbH in Germany, in the United States of America and in other countries.

The information contained in this document is subject to change without notice. German Light Products GmbH and all affiliated companies disclaim liability for any injury, damage, direct or indirect loss, consequential or economic loss or any other loss occasioned by the use of, inability to use or reliance on the information contained in this document.

Manufacturer’s head office

GLP German Light Products GmbH, Industriestrasse 2, 76307 Karlsbad, Germany
Tel (Germany): +49 7248 92719-0

Service & Support EMEA

GLP, Industriestrasse 2, 76307 Karlsbad, Germany
Tel: +49 7248 9271955 | support@glp.de | www.glp.de

Service & Support USA

GLP USA
Tel: +1 818 767 8899 | info@germanlightproducts.com
www.germanlightproducts.com

Service & Support UK Ltd.

GLP UK
Tel: +44 1392 690140 | uk@glp.de
www.glp.de

Table of Contents

Safety **7**

Key to symbols . . . 7

General safety information . . . 7

Electrical safety . . . 8

Fire safety and protection from burns . . . 8

Eye safety . . . 9

Strobe safety . . . 9

Installation safety and protection from personal injury . . . 9

Avoiding damage to the fixture **10**

General precautions . . . 10

Avoiding damage from light sources . . . 10

Avoiding damage from dust and airborne particles . . . 10

Transportation and storage . . . 11

Overview **12**

Preparation for use **13**

Included items . . . 13

Additional accessory items . . . 13

Lifting and carrying . . . 13

Orientation and location . . . 13

Identifying the front of the fixture . . . 13

Mounting . . . 14

Securing the fixture with a safety cable . . . 15

Fastener options in baseplate . . . 15

Connections **16**

AC power . . . 16

Connecting to control data . . . 17

Features **18**

Light source . . . 18

Control options . . . 18
Pan and tilt . . . 18
Fixture performance and speed options . . . 18
Zoom . . . 18
Individual segment or pixel control . . . 18
Color mixing . . . 19
iQ.Gamut . . . 19
Mix Priority . . . 19
White point . . . 19
Color temperature control (CTC) . . . 19
Color Quality Control (CQC) . . . 19
Magenta/Green Shift (M/G Shift) . . . 19
Tungsten simulation . . . 20
Shutter . . . 20
Dimmer . . . 20
Pattern control . . . 20
Control/Settings DMX channel . . . 20
Loss of DMX signal . . . 20
Service and maintenance . . . 20

Fixture Settings **21**

Color Mix Mode . . . 21
RGB White point . . . 21
RGB Color Space . . . 21
Dimmer Curve . . . 21
Fan Mode . . . 22
Performance . . . 22
PWM Frequency . . . 22
No-Signal . . . 22
Pan Invert . . . 22
Tilt Invert . . . 22
Pan Range . . . 23
Pan Disable and Tilt Disable . . . 23
Position Feedback . . . 23

Display Mode . . . 23
Display Orientation . . . 23
Hibernation . . . 23
Load User Settings . . . 23
Information . . . 23
Manual Control . . . 23
Service . . . 24
Load Factory Defaults . . . 24

Control panel **25**
Default information screen . . . 25
Using the control panel . . . 25
Control button shortcuts . . . 26

Setting up the control protocol **27**

Control menus **28**
Quick menu . . . 28
Main menu . . . 28

Pixel layout **32**

Service and maintenance **33**
Cleaning . . . 33
Suggested maintenance intervals . . . 33
Main fuse . . . 33

Technical specifications **35**
Light source . . . 35
Optical system . . . 35
Dynamic effects and movement . . . 35
Control and programming . . . 35
Connections . . . 36
Electrical . . . 36
Construction and installation . . . 36
Thermal . . . 36

Dimensions **37**

Fixture Dimensions 37
DRX Sleeve Dimensions 39
DRX Sleeve with Fixture 40

Safety

Key to symbols

The following symbols are used in the user documentation and on the product:

Symbol	Label	Meaning
	WARNING	Safety hazard. Risk of severe injury or death.
	WARNING – VOLTAGE	Hazardous voltage. Risk of lethal or severe electric shock.
	WARNING – FIRE	Fire hazard.
	WARNING – EYES	Risk of eye injury.
	WARNING – HOT SURFACE	Hot surface. Risk of burn injury.
	NOTE	See the user documentation for important safety information.

General safety information

Read this section and the safety instructions (packaged with the fixture) carefully before installing or using the product. If you have any doubts or questions about how to use the product safely, contact your GLP supplier for assistance.

The impression FR2 Wash and this user documentation are intended for use by experienced professionals with the knowledge and skills to set up, operate and maintain remotely controlled lighting equipment safely and efficiently.

- Respect all warnings and directions given in the fixture's user documentation and on the fixture.
- The manufacturer takes no responsibility for damage or harm resulting from disregard of this information.
- Check www.glp.de for the latest version of this manual, and check that the firmware version stated on page 2 matches the version installed in the product.
- Make all user documentation available to everyone who will install, operate or service the fixture, and keep

it for future reference.

- Use the product only as directed in this manual. Refer any service operation not described here, and all repairs, to a technician authorized by GLP.
- The light source in this product must not be changed.
- Read and follow the user documentation for all additional equipment.

Electrical safety

- Do not allow the product to come into contact with water or moisture.
- Use only an AC mains supply that complies with local building and electrical codes and has both overload and ground-fault (earth-fault) protection.
- Ensure that the product is electrically connected to ground (earth).
- Disconnect the product from AC mains power before any installation or maintenance work and when it is not in use.
- Neutrik powerCON connectors are not suitable for hot-plugging. Locate power outlets or switches near the product so it can be disconnected easily.
- Disconnect the product from power immediately if the power plug or any seal, cover, cable or other component is damaged, defective, deformed, wet or shows signs of overheating. Do not reapply power until the product has been repaired by a technician authorized by GLP.
- Before use, check that all power distribution equipment and cables are in perfect condition and rated for the electrical requirements of all connected devices.
- If a fuse blows, replace it only with one of the original type and rating (T4A 250 V, 5×20 mm). If new fuses blow, disconnect the product and send it to an authorized technician.
- Do not connect devices to power in a daisy chain if their combined maximum current draw would exceed the current rating of any cable or connector in the chain. The maximum number of FR2 fixtures per chain is 8 at 110V and 18 at 230V.

Fire safety and protection from burns

- Do not operate the product if the ambient temperature exceeds 45 °C (113 °F).
- The surface of the casing can become hot during operation. Avoid contact by persons and materials, and allow the product to cool before handling.
- Keep all combustible materials (for example fabric, wood, paper) at least 0.1 m (4 in.) away from the product.
- Ensure free and unobstructed airflow around the product and its air vents.
- Do not illuminate surfaces closer than 1.0 m (3.3 ft) to the product.
- Do not install a fuse with a higher rating than the original. Do not bypass fuses.
- Do not stick filters, masks or other materials onto optical components.
- The optical components can focus the sun's rays, creating a risk of fire and damage. Do not expose the front of the product to sunlight or any other intense light source, even from an angle.

Eye safety

WARNING – EYES The impression FR2 Wash is classified as Risk Group 2 according to EN 62471. Possibly hazardous radiation is emitted.

- Do not stare into the light output. It may be harmful to the eyes.
- Do not look at the light output with optical instruments or any device that may concentrate it.
- Make sure persons working on or near the product are not looking directly into the light output when it lights up suddenly, for example when power is applied, when a DMX signal is received or when certain menu items are selected.
- Provide well-lit conditions to reduce the pupil diameter of anyone working on or near the product.

Strobe safety

- Flashing light, particularly at 5–30 Hz, may cause seizures in persons with photosensitive epilepsy. Do not use strobe effects for extended periods.
- Comply with local regulations on the use of strobe lighting and warn the public in advance with highly visible signs.
- If a seizure occurs, stop using strobe effects and seek professional medical help. Call emergency services if the seizure lasts more than five minutes, if it is the person's first seizure, or if the person is injured.

Installation safety and protection from personal injury

- Installation must be performed by qualified personnel only and in accordance with applicable local regulations (such as DIN VDE 0711-217).
- Ensure that the supporting structure and installation hardware can hold at least 10 times the weight of the load they support.
- Suspend the product with hardware specifically designed and rated for the purpose, in perfect condition. Fasteners must be steel grade 8.8 or better. Rigging clamps must be half-coupler type that completely encircle the truss chord.
- If the product is installed where it may cause injury or damage if it falls, install a safety cable or similar secondary attachment that will hold the product if the primary attachment fails. It must be approved for the weight it secures, comply with EN 60598-2-17 Section 17.6.6 and support a static load of ten times that weight. Never use safety cables as the primary means of support.
- Before applying power, ensure that the moving head can move through its full range without risk of collision. The minimum center-to-center spacing between fixtures is 310mm.
- Check that all covers and rigging hardware are secure. Do not operate the product with missing or damaged covers, shields or optical components.
- Restrict access below the work area and work from a stable platform whenever installing, servicing or moving the product.
- If the product becomes damaged, stop using it immediately and disconnect it from power.
- Do not modify the product in any way not described in this manual. Install genuine GLP parts only.

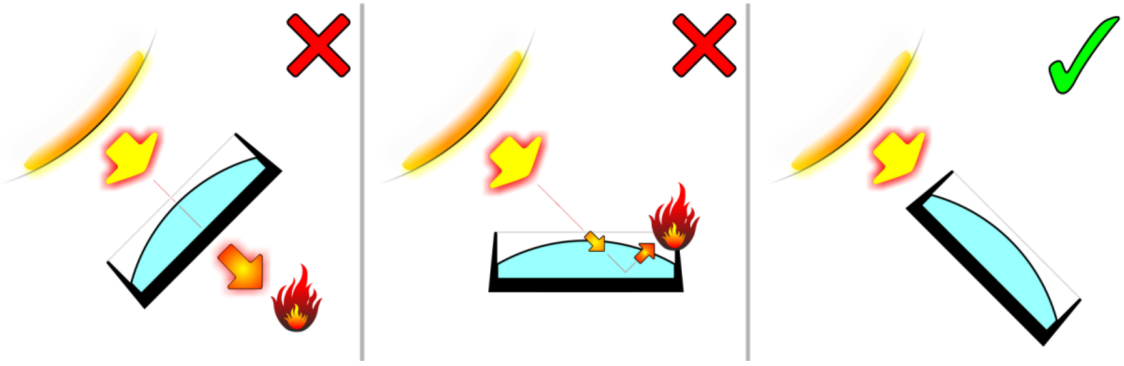
Avoiding damage to the fixture

General precautions

- Use only original spare parts. Any structural modification of the fixture voids the product warranty.
- Inspect the fixture regularly and clean it only as directed in this manual. Oils, solvents and other chemicals can damage lens coatings and surfaces.
- Do not drop the fixture or expose it to mechanical stress or to heat from other fixtures.
- Do not pick up or carry the fixture by the front lens or by the LCD display. Damage caused this way is not covered by the warranty.

Avoiding damage from light sources

Do not point the front of the fixture towards the sun or other strong light sources. The front lens focuses and concentrates light like a magnifying glass. Strong light can cause internal damage, melt components or start an internal fire within seconds, whether the fixture is powered on or off. Damage can also occur if the light hits the front of the fixture at an angle.



Avoiding damage from light sources: the lens can focus sunlight (left, middle); keep the front shielded or pointed away (right).

- Do not expose the front of the fixture to sunlight or any other strong light source.
- In daylight applications, shield the front of the fixture or point it away from the sun, even when not in use.
- Avoid pointing other high-powered lights directly at the fixture.

Avoiding damage from dust and airborne particles

Dust, smoke fluid residue and other airborne particles reduce light output and can damage the fixture. Keep the fixture and its air vents clean (see Service and maintenance). The permitted environment is dry, indoor, with an ambient temperature of 5°C to 45°C.

Transportation and storage

Transport the fixture in a flightcase or in its original packaging (DRX sleeve) to protect it from shocks. Store the fixture in a dry location when not in use.

Overview



Overview

Item	Description
A	**Display**
B	**Front lens assembly**
C	**Power Out**
D	**DMX Out**
E	**Accessory mounting points**
F	**Safety cable point**
G	**Cooling Vents**
H	**DMX In**
I	**Power In**

Preparation for use

WARNING Read the Safety chapter and safety instructions (packaged with the fixture) before you install or operate the fixture.

Included items

A single fixture is packed in a cardboard box or DRX sleeve. Other supplied items:

- Power cable
- Omega bracket
- Safety instructions

Additional accessory items

A floor standing tripod for the fixture is available as an optional accessory.

3D print files for front accessories (tophat, ...) can be downloaded from the GLP website.

Lifting and carrying

The fixture weighs 5.2 kg (11.46 lbs). Lift it by the yoke and base. Do not lift or carry it by the front lens or the display.

Orientation and location

- The fixture may be used in any orientation.
- Use in dry, indoor, temporary locations only. Ambient temperature range: 5°C to 45°C (40°F to 113°F).
- Keep the fixture at least 0.1 m from combustible materials and at least 1.0 m from illuminated surfaces.
- Make sure the head cannot collide with anything when it pans and tilts.

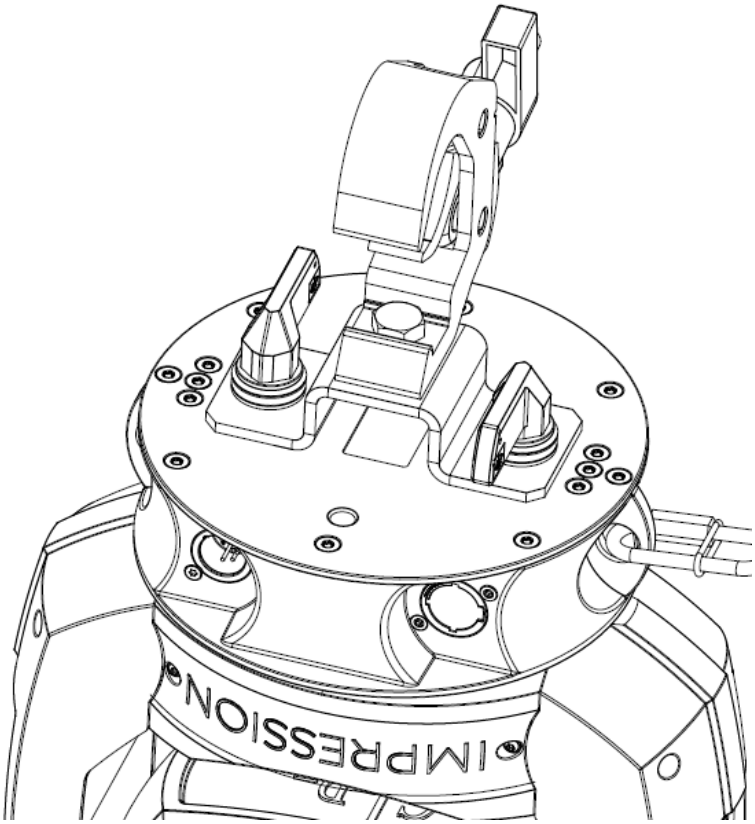
Identifying the front of the fixture

The black safety cable eyelet identifies the front of the fixture, the gray safety cable eylet identifies the back of the fixture. A silkscreen printed arrow at the bottom of the fixture also identifies the front.

Mounting

The fixture is attached with one pair of $\frac{1}{4}$-turn locks in the base.

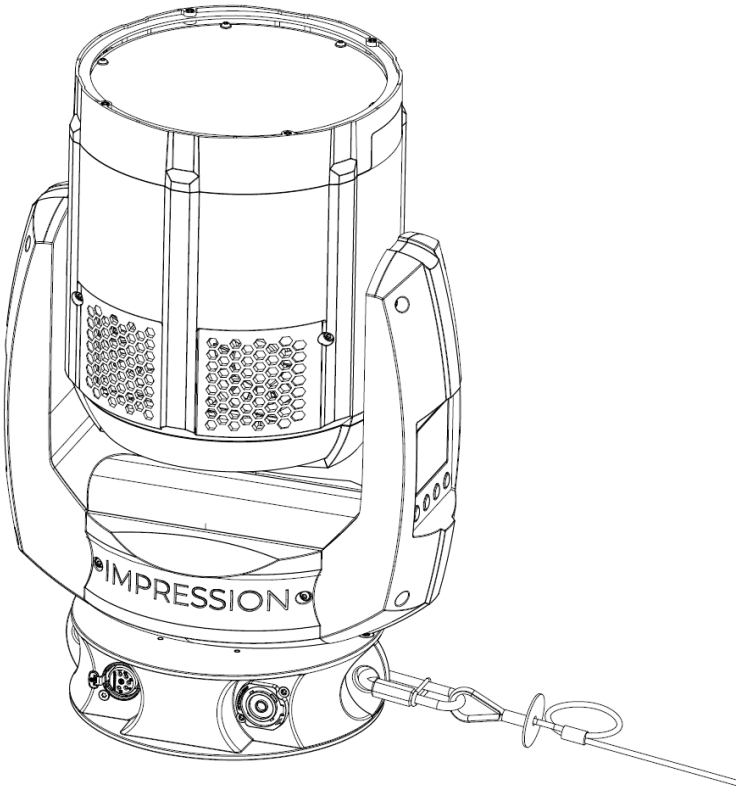
1. Attach a rated mounting clamp or adapter to the omega bracket and fasten it securely to the support.
2. Attach a safety cable as described below.
3. Check that the head is unlocked and can move freely through its full range.



Mounting points in the base

Securing the fixture with a safety cable

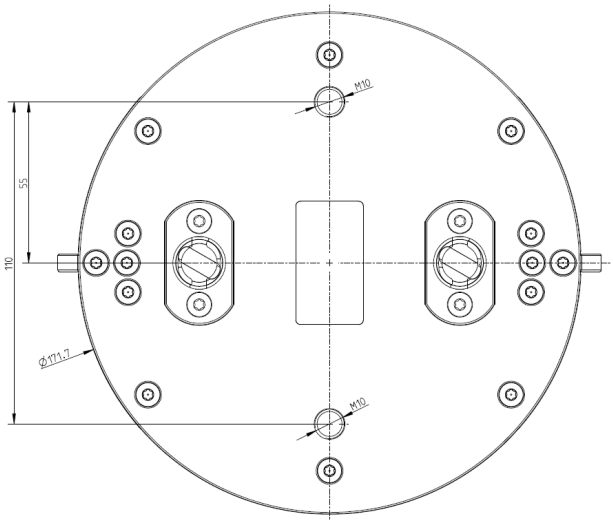
Attach a safety cable to one of the two eyelets and loop it around the truss or support so it holds the fixture if the primary attachment fails. Take up as much slack as possible, for example by looping the cable more than once around the truss. The cable must meet the requirements in the Installation safety section.



Safety cable attachment

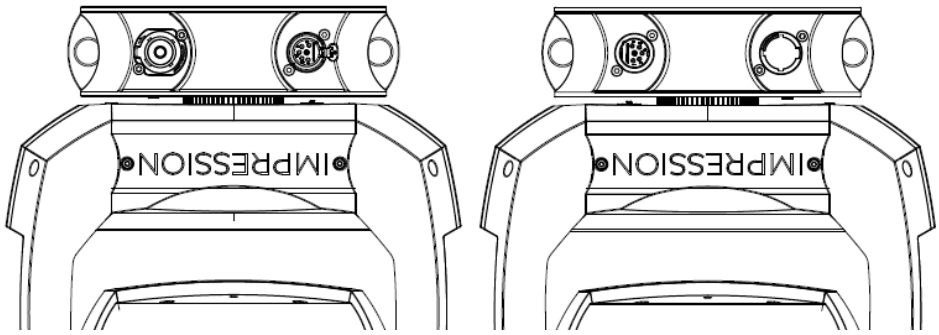
Fastener options in baseplate

The bottom of the fixture offers two M10 threaded holes (max. depth 15mm) for permanent mounting.



Bolt holes pattern in the base

Connections



Connector panel: mains In/Out and DMX In/Out

AC power

The fixture has an auto-ranging switch-mode power supply for 100–240 V AC, 50/60 Hz, and draws a maximum of 200 W at 230 V. The mains supply must include a protective earth connection and be protected against earth leakage and overload. Do not connect the fixture to an external dimmer.

Mains connections are Neutrik powerCON TRUE1 In and Out. Shut down power to the cable before connecting or disconnecting it. TRUE1 connectors are not designed for hot-plugging or for switching under load. The fixture has no power switch.

1. Check that power to the supply cable is off.
2. Insert the powerCON TRUE1 cable connector into the Mains In socket and twist to lock.
3. Before applying power, check that the head is free to move and that nobody is looking into the front of the fixture.

The Mains Out socket passes through the supply voltage from Mains In. Add together the maximum current draw of all devices in a chain and make sure it does not exceed the rating of any cable or connector. The maximum number of fixtures per chain is 8 on 110V and 18 on 230V.

Connecting to control data

The fixture provides 5-pin XLR In and Out sockets for a DMX512 data link:

Pin	Signal
1	Ground / shield
2	Data − (cold)
3	Data + (hot)
4, 5	Not used

Use cable suitable for DMX data and terminate the last device on the link. The fixture also supports RDM (ANSI/ESTA E1.20) and GLP iQ.Mesh.

Features

Light source

The main light source is a single 150 W RGBL (red, green, blue, lime) LED engine with a rated lifetime of 50,000 hours. Around it, the halo is an FX layer of RGBW pixels arranged in three rings.

Control options

The fixture is compatible with DMX512 (USITT DMX512-A) and RDM (ANSI/ESTA E1.20). It also features GLP iQ.Mesh, which allows configuration, control, service and maintenance via the GLP iQ.Service App. The fixture can connect to the App from the Quick menu (iQ.Service Connect), by NFC, or by pressing and holding ENTER for 6 seconds; the connection stays active for 5 minutes. Firmware can be updated with GLP iQ.Mesh, GLP iQ.Tool or the GLP iQ.Control App.

Pan and tilt

Pan and tilt have coarse and fine control channels (16-bit).

The Pan/Tilt Motor Mode channel selects between indexing (conventional or shortest path) and continuous pan rotation clockwise or counter-clockwise, each with a “stop spinout” or “stop shortcut” behavior when returning to indexing. The Pan/Tilt Motor Speed channel sets the movement speed from tracking (fastest) to slowest, or stops the movement. Pan and tilt direction can be inverted, movement can be disabled and position feedback can be switched on or off (see Fixture Settings).

Fixture performance and speed options

Three performance modes set the speed and noise of all mechanical effects: Fast, Normal and Smooth (see Fixture Settings).

Zoom

The fixture has a motorized zoom from 4.6° (narrowest) to 34° (widest). On the DMX zoom channel, 000 is narrow and 255 is wide.

Individual segment or pixel control

The halo can be controlled in different ways, depending on the DMX control mode: as a background color (halo LEDs), with patterns (halo FX), by ring (Mode 4), as 32 pixel groups (Mode 5) or as 96 individual pixels (Mode 6). See DMX control modes overview.

Color mixing

The main source provides 16-bit color mixing with RGB or RGBL control, selected with the Color Mix Mode setting. In RGB mode the fixture mixes the colors referenced to the selected white point or the CTC channel. In RGBL mode the four LED colors are controlled separately. A third option, x;y (CIE 1931 coordinates), appears in the menu structure; the DMX chart does not yet list it (to be confirmed). RGB+Lime mixing gives rich saturated colors, soft pastels and natural skin tones.

iQ.Gamut

The fixture uses GLP iQ.Gamut color mixing, so its colors match other iQ.Gamut-based fixtures such as the impression X5 Series, GLP Creos and GLP TWYN. The RGB Color Space setting selects the target gamut: FULL (default), Rec.709, Rec.2020, DCI P3.65 or X5. See Fixture Settings.

Mix Priority

The Mix Prio channel defines how the Main, Pattern and Pixel engines are merged: highest value wins (HTP, default), any single engine only, additive and subtractive combinations, snap priority and crossfades. See the DMX channel details.

White point

The white point is the white obtained when the shutter is open. In RGB color mix mode you can choose 8000 K, 6500 K (default), 5600 K, 4200 K or 3200 K.

Color temperature control (CTC)

The CTC channel offers a smooth shift of the white point from 10,000 K to 2,500 K. Values 0–10 leave the selected white point unchanged. CTC is available in RGB and RGBL mode. Set the color mix channels to 100 % to obtain the exact color temperature.

Color Quality Control (CQC)

The CQC channel balances color rendering against output. High Quality (HQ) mixes the white with the best color rendering; High Output (HO) mixes it for the highest output. Between the HQ and HO ranges, the channel crossfades to desaturate or saturate a mixed color.

Magenta/Green Shift (M/G Shift)

The M/G-Shift channel shifts the white point or a mixed color towards magenta (up to −0.1 Duv) or green (up to +0.1 Duv). The center range has no effect.

Tungsten simulation

The Tungsten channel simulates the color temperature, time delay and red shift of reference tungsten sources (ACL 250 W/28 V, Blinder 650 W/120 V, 750 W/80 V, 1000 W/240 V, 1200 W/240 V, 2000 W/230 V, 2500 W/230 V and 5000 W/230 V). The first value range applies the full reference source; the “FX Tungsten” range applies only the dimming behavior to the current color or CTC setting. Tungsten simulation has higher priority than color mixing and CTC.

Shutter

The main shutter and the halo/pattern shutter provide closed, open, single flash, pulse, pulse open, pulse close, double flash and strobe effects (random on all pixels and synchronized). The ranges are listed in the DMX channel details.

Dimmer

Intensity is controlled in 16-bit resolution. Three dimming curves are available: Soft (square, default), Linear and S-Curve.

Pattern control

The Pattern Select channel chooses one of 41 static patterns, one of 81 dynamic patterns or a random pixel pattern. The Pattern Step/Speed, Step Crossfade and Transition channels set the movement through pattern steps, the fade between steps (snap, crossfade or crossfade with tail) and the transition between patterns (snap, normal fade, fade over blackout or fade over full).

Control/Settings DMX channel

Many fixture settings can also be changed from the DMX Control/Setting channel: iQ.Service connect, dimmer curve, display mode and orientation, no-signal behavior, scene capture, fan mode, position feedback, pan/tilt invert and disable, performance mode, RGB white point, color mode, color space, hibernation, pan range, PWM frequency, saving and loading user setting presets, and the reset commands. A value must be held for 3 seconds to take effect. See the DMX channel details.

Loss of DMX signal

The No-Signal setting selects the behavior when the DMX signal is lost or no signal is present at power-up: Blackout, Hold (default; the last DMX values are held) or Scene (the captured stand-alone scene is played).

Service and maintenance

Cleaning, maintenance intervals and fuse information are in the Quick Start and Safety Manual.

Fixture Settings

Fixture settings are in the main menu under Fixture Settings, Information, Manual Control, Service and Load Factory Defaults. Many can also be set from the DMX Control/Setting channel.

Color Mix Mode

Options: RGB [1] / RGBL [2] / x;y [3]. Default: RGB.

RGB: colors are controlled with the RGB channels inside the selected color gamut; the internal color algorithm mixes them referenced to the selected white point or the CTC channel. M/G-Shift and CQC are available. **RGBL:** the four LED colors are controlled separately; the open white point is 100 % RGBL and does not lie on the black body line. CTC, M/G-Shift and CQC are available. **x;y:** the controller sends x;y color coordinates and the fixture mixes the four LED colors to match them; the white point setting is disabled and CTC, M/G-Shift and CQC are not available.

RGB White point

Options: 8000 K / 6500 K / 5600 K / 4200 K / 3200 K. Sets the fixture white point (RGB at 100 %). Works in color mix mode RGB only. Default: 6500 K.

RGB Color Space

Options: FULL / Rec.709 / Rec.2020 / DCI P3.65 / X5. Default: FULL.

Selects the target gamut for color mixing. The fixture reproduces colors inside the selected color space as accurately as its calibrated native gamut allows; colors outside the physical gamut are limited to the nearest reproducible color.

- **FULL:** full calibrated native gamut, for maximum saturation and the deepest available colors.
- **Rec.709:** HD television compatibility and consistent color matching.
- **Rec.2020:** UHD television; limited by the native gamut.
- **DCI P3.65:** DCI-P3 gamut with a D65 white point for digital cinema and wide-gamut video.
- **X5:** maps color mixing to the calibrated gamut of the impression X5 series for the closest color match with X5 fixtures.

Dimmer Curve

Options: Linear / Soft / S-Curve. Default: Soft (square). The global output is controlled by an intensity channel in 16-bit resolution. Three dimming curves are available.

Fan Mode

Options: Regulated / High / Medium / Low / Minimum. Default: Regulated. Selects the fan and temperature management behavior.

- **Regulated:** fan speed follows temperature.
- **High:** maximum fan speed for maximum cooling.
- **Medium:** constant medium fan speed; output reduced for continuous use up to 40°C ambient.
- **Low:** constant fan speed; output reduced for continuous use up to 30°C ambient.
- **Minimum:** all fans that are not necessary are disabled; output is reduced.

Performance

Options: Fast / Normal / Smooth. Default: Normal. Selects the movement speed of all mechanical effects.

- **Fast:** maximum speed; positions may not match 100 %.
- **Normal:** speed and noise level balanced for optimal performance.
- **Smooth:** speeds limited for minimum noise and the most elegant movement.

PWM Frequency

Options: Low (L) / Optimal (O) / High 1 (H1) / High 2 (H2) / Max (M). Default: Optimal (O). Adjusts the LED frequency to camera shutter frequencies. The setting is shown on the display main screen.

No-Signal

Options: Blackout / Hold / Scene. Default: Hold. Selects what the fixture does if no DMX signal is present (the DMX signal stops, or power is applied without a DMX signal).

Capture DMX Values (with confirmation) stores the current light scene as the stand-alone scene, which the fixture plays if No-Signal is set to Scene and the DMX signal is lost. The same function is available on the DMX Control/Setting channel.

Pan Invert

Options: OFF / ON. Default: OFF. OFF: pan normal. ON: pan inverted.

Tilt Invert

Options: OFF / ON. Default: OFF. OFF: tilt normal (a positive tilt value turns the head to the front). ON: tilt inverted (a positive tilt value turns the head to the back).

Pan Range

Options: Normal / Extended / Dual. Default: Normal. Selects the pan range (see the DMX Channel Index: Normal 540°, Extended 650°, Dual −360° … +360°).

Pan Disable and Tilt Disable

Options: Off / Current / Disable. Default: Off. Disables pan or tilt movement.

Position Feedback

Options: ON / OFF. Default: ON. ON: position feedback enabled. OFF: position feedback disabled.

Display Mode

Options: Auto / On / Off. Default: Auto. Selects the display behavior. This can be helpful in case of errors or service situations.

Display Orientation

Options: Auto / Normal / Flip. Default: Auto. Selects the display orientation: normal or upside-down.

Hibernation

Options: On. Default: OFF. The fixture goes into an energy-saving mode and disables all electronic components except the DMX receiving module.

Load User Settings

Loads custom fixture setting presets 1 to 3 or the default settings. The command must be confirmed. Presets are saved in the Service menu (Advanced > Save Settings).

Information

The Information menu shows live diagnostics (signal quality and settings), errors, temperatures, fan status, controller information, iQ.Mesh status, LED calibration, fixture counters (total and resettable device hours, power cycles, air filter hours), the received DMX input and DMX packet loss.

Manual Control

Manual Control offers Reset All (full fixture reset), Reset P/T (pan/tilt reset) and Reset Head (reset of all head features), and the Manual DMX submenu, where you can set the values below directly at the fixture. While you are in the Manual DMX submenu these values take priority over an external DMX signal, and the menu timeout

is disabled. When you leave the submenu with external DMX connected, the DMX signal takes priority again; without external DMX the manual scene stays until a DMX signal is received or the fixture is power cycled.

Manual DMX channel	Values
Pan	000 . . . 128 . . . 255
Tilt	000 . . . 128 . . . 255
Intensity	000 . . . 255
Shutter	000 . . . 255
Zoom	000 . . . 255
CCT	000 . . . 255
Magenta-Green-Shift	000 . . . 255
CQC – Color Quality Control	000 . . . 255
Tungsten Effect	000 . . . 255
Red	000 . . . 255
Green	000 . . . 255
Blue	000 . . . 255
White / Lime	000 . . . 255
Intensity Halo	000 . . . 255
Shutter Halo	000 . . . 255
Red Halo	000 . . . 255
Green Halo	000 . . . 255
Blue Halo	000 . . . 255
White Halo	000 . . . 255
Reset Manual values	Confirm for 3 s sets all manual DMX values to default

Service

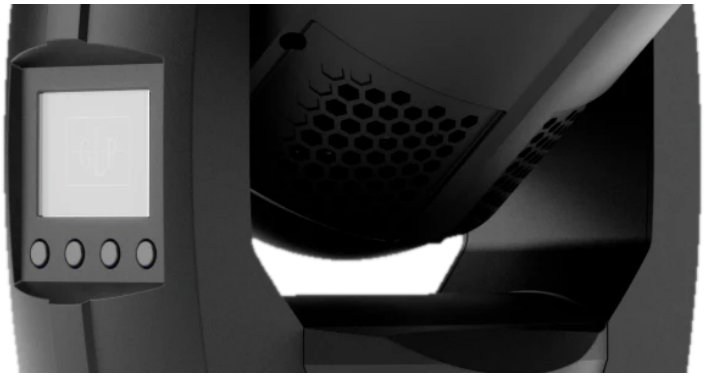
The Service menu contains live diagnostics, iQ.Service Connect and a set of tests (all, pan/tilt, LED, zoom, fans automatic and manual, encoders). Press and hold ENTER for 3 seconds to enter the Advanced level: Service Mode (disables pan/tilt movement and display timeouts for work inside the head; reset by a power cycle), Job Offset (temporary pan, tilt and zoom offsets), Reset Counters and Save Settings (user presets 1–3). Service functions are intended for authorized personnel.

Load Factory Defaults

Reloads all factory default fixture settings and the default fixture configuration. The display warns that the fixture may lose its connection to the controller; the command must be confirmed.

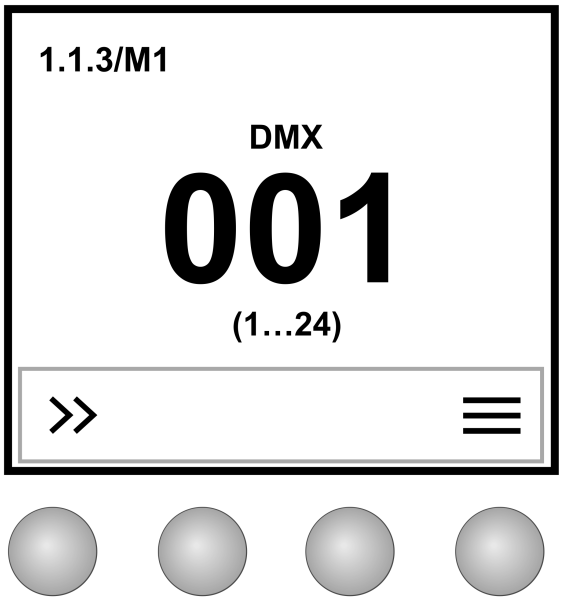
Control panel

WARNING DMX control is normally disabled while the control menus are active. Be prepared for the head to move as soon as you exit the menus. (Behavior to be verified for the FR2.)



Control panel and display

Default information screen



Main display screen

Using the control panel

The control panel has a backlit graphic LCD and a 4-button menu. Menu entries are selected and confirmed with ENTER, and “Back” returns to the previous level. Some commands show “≫ Confirm ≪” and must be confirmed.

Control button shortcuts

Press and hold ENTER for 6 seconds to start iQ.Service Connect. In the Service menu, press and hold ENTER for 3 seconds to enter the Advanced level.

Setting up the control protocol

Set the DMX address (001–512) with the DMX Address menu and the DMX control mode with the Control Mode menu:

- M1 Compact (20 channels),
- M2 Basic (30),
- M3 FX (42),
- M4 Rings (54),
- M5 Single Ring (173)
- M6 Ludicrous Pixel (429).

Only a valid address range for the selected control mode can be selected.

In Protocol Setup, set Data in to DMX to control the fixture via DMX, or to iQ.Mesh to control it via iQ.Mesh. Linking Options > Unlink removes the fixture from an existing iQ.Mesh network.

Control menus

Quick menu

Level 1	Level 2	Options / values	Function
Reset All			Resets the fixture. No confirmation is required.
Live Diagnostic			Wakes up the integrated GLP iQ.Mesh module for 5 minutes and enables connectivity to the GLP iQ.Service App.
iQ.Service Connect	Connect	Confirm	Enables connectivity to the GLP iQ.Service App for 5 minutes. The fixture can also connect by NFC ("iQ.Service Collect & Connect"), or by pressing and holding ENTER for 6 seconds.
Load User Settings	User Setting 1	Confirm	Loads custom fixture setting preset 1. Must be confirmed.
	User Setting 2	Confirm	Loads custom fixture setting preset 2. Must be confirmed.
	User Setting 3	Confirm	Loads custom fixture setting preset 3. Must be confirmed.
	Setting Defaults	Confirm	Loads the default settings. Must be confirmed.
Load Factory Defaults	Display message: "!!! Fixture may lose connection to controller !!!"	Confirm	Reloads all factory default fixture settings and default fixture configuration settings. Must be confirmed.

Main menu

Level 1	Level 2	Options / values	Function
DMX Address		001 . . . 512	Sets the DMX address. Depending on the selected control mode, only a valid address range can be selected.
Control Mode	M1 – Compact	(CH20)	Selects the DMX control mode. See the DMX Channel Index.
	M2 – Basic	(CH30)	
	M3 – FX	(CH42)	
	M4 – Rings	(CH54)	
	M5 – Single Ring	(CH173)	
	M6 – Ludicrous Pixel	(CH429)	
Protocol Setup	Data in	DMX / iQ.Mesh	DMX: control via the DMX protocol. iQ.Mesh: control via iQ.Mesh.
	Linking Options	Unlink	Unlinks the fixture from any existing iQ.Mesh network.

Level 1	Level 2	Options / values	Function
Fixture Settings	Color Mix Mode	RGB [1] / RGBL [2] / x;y [3]	RGB: colors are controlled with the RGB channels inside the selected color gamut; the internal color algorithm mixes them referenced to the selected white point or the CTC channel. M/G-Shift and CQC are available. RGBL: the four LED colors are controlled separately; the open white point is 100 % RGBL and does not lie on the black body line. CTC, M/G-Shift and CQC are available. x;y: the controller sends x;y color coordinates and the fixture mixes the four LED colors to match them; the white point setting is disabled and CTC, M/G-Shift and CQC are not available.
	RGB White point	8000 K / 6500 K / 5600 K / 4200 K / 3200 K	Sets the fixture white point (RGB at 100 %). Works in color mix mode RGB only.
	RGB Color Space	FULL / Rec.709 / Rec.2020 / DCI P3.65 / X5	Selects the target gamut for color mixing. The fixture reproduces colors inside the selected color space as accurately as its calibrated native gamut allows; colors outside the physical gamut are limited to the nearest reproducible color. FULL (default): full calibrated native gamut, for maximum saturation. Rec.709: HD television compatibility. Rec.2020: UHD television; limited by the native gamut. DCI P3.65: DCI-P3 gamut with a D65 white point for digital cinema and wide-gamut video. X5: maps color mixing to the calibrated gamut of the impression X5 series for the closest color match with X5 fixtures.
	Dimmer Curve	Linear / Soft / S-Curve	The global output is controlled by an intensity channel in 16-bit resolution. Three dimming curves are available.
	Fan Mode	Regulated / High / Medium / Low / Minimum	Selects the fan and temperature management behavior. Regulated: fan speed follows temperature. High: maximum fan speed for maximum cooling. Medium: constant medium fan speed, output reduced for continuous use up to 40 °C ambient. Low: constant fan speed, output reduced for continuous use up to 30 °C ambient. Minimum: all fans that are not necessary are disabled; output is reduced.
	Performance	Fast / Normal / Smooth	Selects the movement speed of all mechanical effects. Fast: maximum speed; positions may not match 100 %. Normal: speed and noise level balanced for optimal performance. Smooth: speeds limited for minimum noise and the most elegant movement.
	PWM Frequency	Low (L) / Optimal (O) / High 1 (H1) / High 2 (H2) / Max (M)	Adjusts the LED frequency to camera shutter frequencies. The setting is shown on the display main screen. Optimal (default) is the optimal frequency.
	No-Signal	Mode: Blackout / Hold / Scene	Selects what the fixture does if no DMX signal is present (the DMX signal stops, or power is applied without a DMX signal).
		Capture DMX Values – Confirm	Captures the current light scene for stand-alone use.
	Pan Invert	OFF / ON	OFF: pan normal. ON: pan inverted.

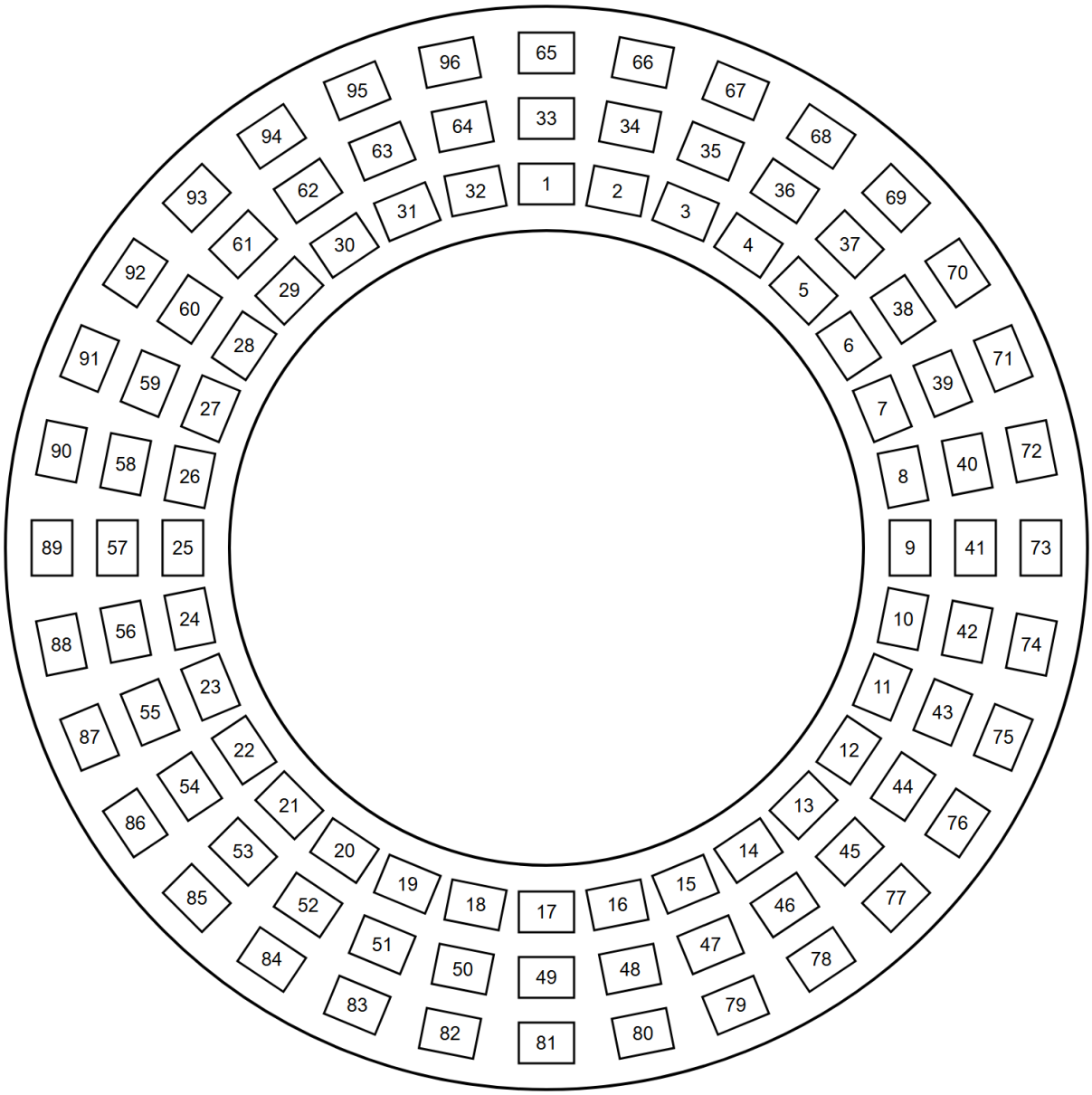
Level 1	Level 2	Options / values	Function
	Tilt Invert	OFF / ON	OFF: tilt normal (a positive tilt value turns the head to the front). ON: tilt inverted (a positive tilt value turns the head to the back).
	Pan Range	Normal / Extended / Dual	Selects the pan range (see DMX Channel Index: Normal 540°, Extended 650°, Dual −360° … +360°).
	Pan Disable	Off / Current / Disable	Disables pan movement.
	Tilt Disable	Off / Current / Disable	Disables tilt movement.
	Position Feedback	ON / OFF	ON: position feedback enabled. OFF: position feedback disabled.
	Display Mode	Auto / On / Off	Selects the display behavior. This can be helpful in case of errors or service situations.
	Display Orientation	Auto / Normal / Flip	Selects the display orientation: normal or upside-down.
	Hibernation	On	The fixture goes into an energy-saving mode and disables all electronic components except the DMX receiving module.
	Load User Settings	User Settings 1 / 2 / 3 – Confirm; Setting Defaults – Confirm	Loads custom fixture setting presets 1 to 3 or the default settings. Must be confirmed.
Information	Live Diagnostic		Shows an overview of all main fixture information, signal quality and settings. Helpful for troubleshooting or when talking to GLP Service.
	Show Errors		Shows information.
	Show Temperatures		Shows information.
	Show Fan Status		Shows information.
	Show Controllers Info		Shows information.
	Show iQ.Mesh Status		Shows information.
	Show LED Calibration		Shows information.
	Show Fixture Counters		Shows total device hours (not resettable), device hours (resettable), total power cycles (not resettable), power cycles (resettable) and air filter hours.
	Show DMX Input		Shows the received DMX values.
	Show DMX Info		Gives information about lost DMX packets.
Manual Control	Reset All		Performs a full fixture reset to initialize all features and effects.
	Reset P/T		Resets pan and tilt to initialize the position.
	Reset Head		Resets all features in the head.
	Manual DMX	See table below	While the Manual DMX submenu is open it has priority, also when an external DMX signal is connected. The menu timeout is disabled in this submenu. If external DMX is connected and the submenu is left, the DMX signal takes priority again. If no external DMX is connected and the submenu is left, the manual DMX scene stays until a DMX signal is received or the fixture is power cycled. Manual values stay stored until they are reset.
Service	Live Diagnostic		Shows an overview of all main fixture information, signal quality and settings.

Level 1	Level 2	Options / values	Function
	iQ.Service Connect	Connect	Wakes up the integrated GLP iQ.Mesh module for 5 minutes and enables connectivity to the GLP iQ.Service App.
	Tests	Test All	Continuous test sequence: pan/tilt first, then tilt, then zoom, then LEDs. Stop with "Back".
		Test P/T	Continuous test sequence of tilt only. Stop with "Back".
		Test LED	Continuous test sequence of all LEDs only. Stop with "Back".
		Test Zoom	Continuous test sequence of zoom only. Stop with "Back".
		Test Fans (Auto)	Starts a fan self-test. Tries to detect fan errors and clears any current errors if successful.
		Test Fans (Manual)	Tests the fans one by one manually.
		Test Encoders	Automatic test of all encoders.
	Advanced	Press and hold ENTER for 3 s	Enters the advanced service level.
	Service Mode	OFF / ON	Disables pan/tilt movement and all display timeouts for comfortable service inside the fixture head. Automatically disabled after a power cycle.
	Job Offset	Pan / Tilt / Zoom: +xxx . . . 0 . . . −xxx	Sets temporary offsets on mechanical effects to adjust fixtures for the same performance. Offsets do not affect the fixture effect calibration and are deleted at "Load Factory Defaults".
	Reset Counters	Lamp Hours / Service Timer (Confirm, 2 s); Air Filter (Confirm, 2 s)	Resets the counters; the air filter entry restores the air filter counter.
	Save Settings	User Setting 1 / 2 / 3 (Confirm, 2 s)	Saves the current fixture settings (not the fixture configuration) to preset 1, 2 or 3.
Load Factory Defaults	Display message: "!!! Fixture may lose connection to controller !!!"	Confirm	Reloads all factory default fixture settings and default fixture configuration settings. Must be confirmed.

Pixel layout

The halo has pixels in three rings. The DMX chart numbers 96 pixels (3 rings $\times$ 32): pixel n, $n + 32$ and $n + 64$ (n = 1 to 32) sit at the same position in the inner, middle and outer ring.

In Mode 5 one set of RGBW channels controls all three of these pixels; in Mode 6 each of the 96 pixels has its own RGBW channels.



Pixel numbering

Service and maintenance

WARNING Disconnect the fixture from power and allow it to cool before any service work. Work in well-lit conditions and do not look into the light output.

Cleaning

Dust, dirt and smoke fluid residue reduce light output and may damage the fixture. Pay special attention to the air vents and the front lens. Do not let optical parts come into contact with oil or grease, and do not touch them with bare fingers. Wait until all parts are dry before operating the fixture.

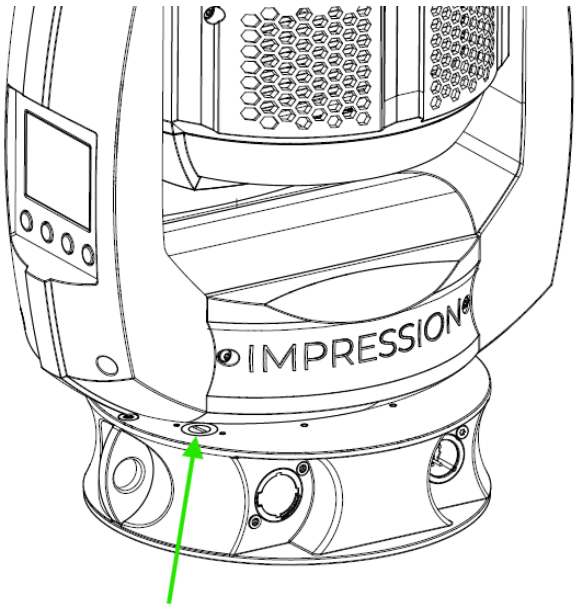
Suggested maintenance intervals

Intervals depend on the environment.

Task	Interval	How
Clean front lens	Weekly (adjust to environment)	Wipe with a soft cloth and glass cleaning fluid or water.
Clean fans and air channels	Monthly	Use a soft brush and vacuum cleaner. Hold fan blades still so they do not over-spin.

Main fuse

The fuse type is T4A 250 V, 5×20 mm. Disconnect the fixture from power before replacing the fuse and replace it only with one of the same type and rating.



Main fuse location

Technical specifications

Light source

Type	Main: RGBL; FX layer: RGBW (32 pixels)
Power	Main: 150 W
Count	Main: 1 LED; FX: 32 LEDs in 3 rings
Lifetime	50,000 h

Optical system

Zoom angle	4.6° (min.) to 34° (max.)
Output lens	Single micro-Fresnel, 165 mm diameter
Risk group (EN 62471)	Risk Group 2

Dynamic effects and movement

Dimmer resolution	16 bit
Dimming curves	Linear, Soft, S-Curve
Pan	Continuous 540°, 16 bit
Tilt	230°, 16 bit
Pattern FX	3-layer pattern FX engine

Control and programming

DMX channels	20 | 30 | 42 | 54 | 173 | 429
Control modes	6
Protocols	DMX (USITT DMX512-A), RDM (ANSI/ESTA E1.20), GLP iQ.Mesh
High-res channels	Dimmer, Pan, Tilt
Performance modes	Fast, Normal (Balanced), Smooth
Fan modes	Regulated, High, Medium, Low
Setting and addressing	Backlit graphic LCD, 4-button menu, DMX, RDM, iQ.Mesh
Firmware update	iQ.Mesh, iQ.Tool or iQ.Control App

Connections

Power	Neutrik powerCON TRUE1, In / Out
Signal	Neutrik XLR 5-pin, In / Out

Electrical

Power input	100–240 V AC, 50/60 Hz
Power supply	Auto-ranging electronic switch-mode
Max. power (@ 230 V)	200 W
Fuse	T4A 250 V, 5×20 mm

Construction and installation

Housing	Black; high-impact flame-retardant thermoplastic and aluminum
Protection rating	IP20
Mounting	1 pair of $\frac{1}{4}$-turn locks; 2 eyelets for safety cable
Orientation	Any
Location	Dry, indoor, temporary

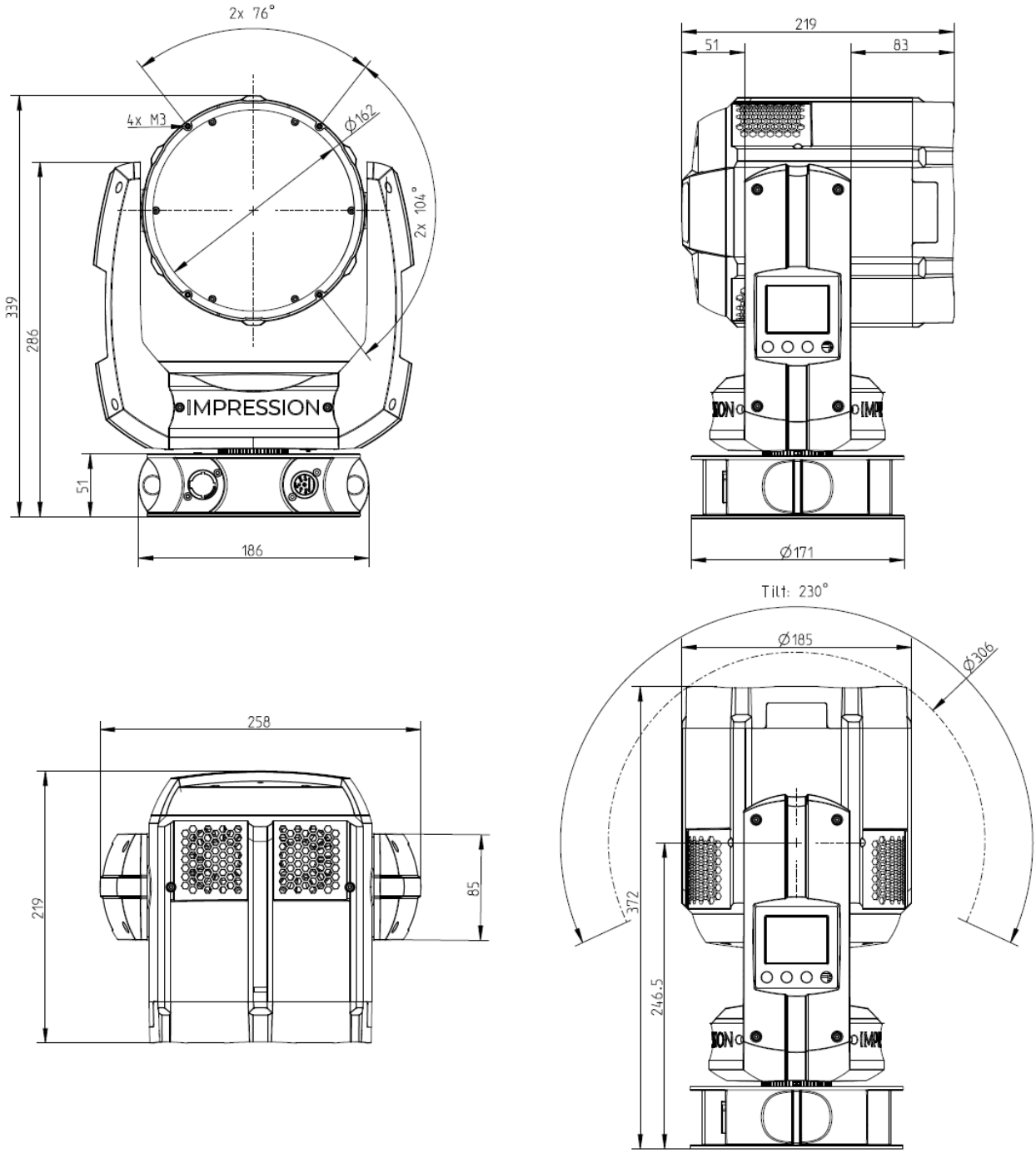
Thermal

Cooling	Combined convection and forced air; automatic overheating protection
Ambient temperature	5°C to 45°C (40°F to 113°F)
Min. distance to combustibles	0.1 m
Min. distance to illuminated surfaces	1.0 m

Dimensions

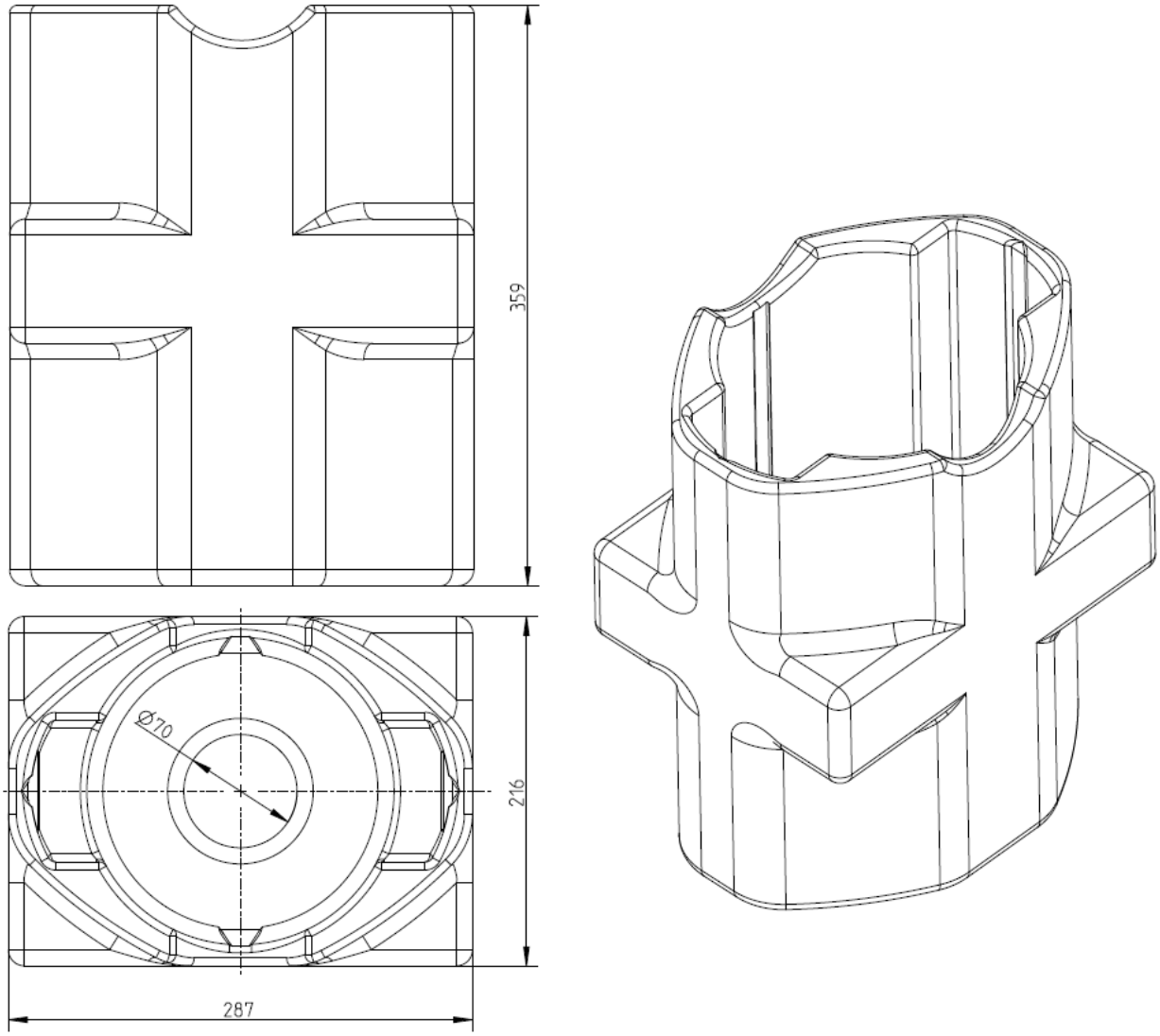
Fixture Dimensions

Height	311 mm / 12.24 in
Height, head straight up	354 mm / 13.93 in
Width across yoke	250 mm / 9.84 in
Depth, head straight up	185 mm / 7.28 in
Net weight	5.2 kg / 11.46 lbs



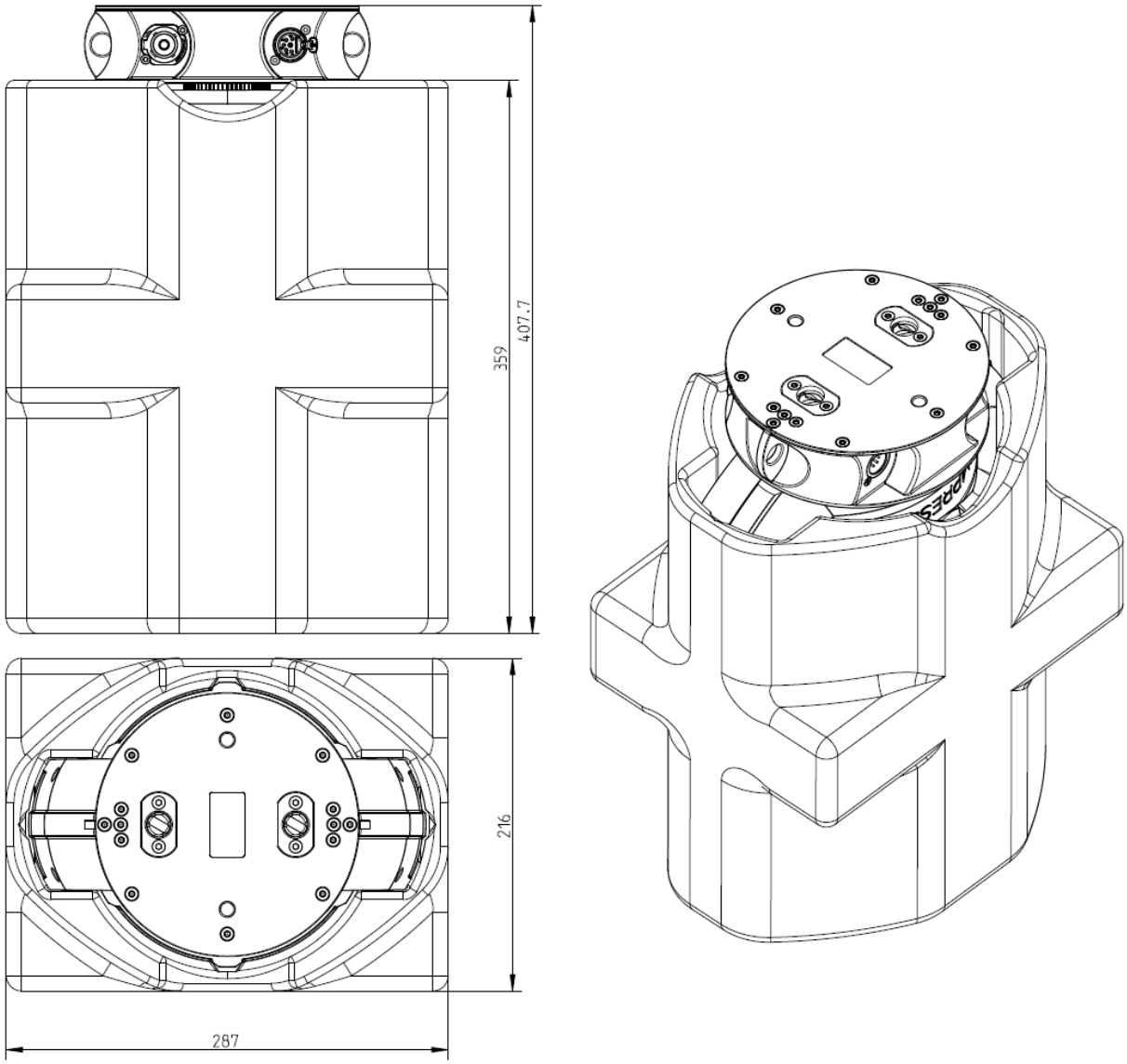
Dimensional drawing

DRX Sleeve Dimensions



DRX Sleeve

DRX Sleeve with Fixture



DRX Sleeve with fixture