

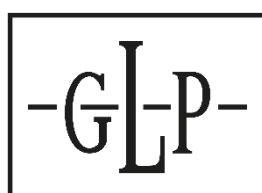
# DMX Channel Index

## impression<sup>&</sup> S500 **Wash**



Document revision: 20241209-01

Fixture software version 0.2.2



## Document revisions

Revision number	Notes	Date released
20241209-01	First release of the DMX Channel Index for the impression S500 Wash. Covers firmware v. 0.2.2	December 2024

GLP® impression S500 Wash DMX Channel Index

---

© 2023-24 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:  
German Light Products GmbH (GLP),  
Industriestrasse 2, 76307 Karlsbad,  
Germany  
Tel (Germany): +49 7248 92719 – 0

Service & Support EMEA:  
GLP, Industriestrasse 2,  
76307 Karlsbad, Germany  
Tel. (Germany): +49 7248 9271955  
Email: support@glp.de  
www.glp.de

Service & Support USA:  
GLP USA, 16170 Stagg Street,  
91406 Van Nuys, California  
Tel (USA): +1 818 767 8899  
Support (US):  
info@germanlightproducts.com  
www.germanlightproducts.com

## Table of Contents

1.	DMX control modes overview.....	4
2.	DMX control channel layout.....	5
	Pan & Tilt.....	5
	Color Wheel.....	5
	Cyan / Magenta / Yellow Colormix.....	5
	CTO Wheel.....	6
	Shutter.....	7
	Intensity.....	7
	Focus.....	7
	Zoom.....	7
	Framing module indexing.....	8
	Framing Blade 1-4 control.....	8
	Iris.....	8
	Special / Control.....	9

## 1. DMX control modes overview

The impression S500 Wash has only one DMX control mode and the channels are allocated as follows:

### CH Normal (Default)

1	Pan coarse
2	Pan fine
3	Tilt coarse
4	Tilt Fine
5	Color Wheel
6	Cyan
7	Magenta
8	Yellow
9	CTC
10	Shutter
11	Intensity coarse
12	Intensity fine
13	Focus
14	Zoom
15	Framing Module Position (Index)
16	Framing Blade 1 ( PI: Position / LR: Left)
17	Framing blade 1 (PI: Index / LR: Right)
18	Framing blade 2 / ( PI: Position / LR: Left)
19	Framing blade 2 / (PI: Index / LR: Right)
20	Framing blade 3 / ( PI: Position / LR: Left)
21	Framing blade 3 / (PI: Index / LR: Right)
22	Framing blade 4 / ( PI: Position / LR: Left)
23	Framing blade 4 / (PI: Index / LR: Right)
24	Iris
25	Control / Special
26	FX1 selection
27	FX1 adjustment

## 2. DMX control channel layout

In the following DMX channel layout tables:

- The default/home value to be sent by a control console is normally 0. If a different value should be sent this is shown at the end of the table

### ***Pan & Tilt***

Tilt	DMX range	fade	Note	
Pan coarse	0	65535	fade	-282.5° to +282.5° (16 bit)
Pan fine				
Tilt coarse	0	65535	fade	-128° to +128° (16 bit)
Tilt fine				

Default/Home value: 32768

### ***Color Wheel***

ColorWheel	DMX range	fade	Note	
Open	0	3	snap	
Color 01 – Congo blue (UV)	4	7	snap	
Color 02 – Green	8	11	snap	
Color 03 – Orange	12	15	snap	
Color 04 – Magenta	16	19	snap	
Color 05 – Blue	20	23	snap	
Color 06 – CTC 1	24	27	snap	
Color 07 – CTC 2	28	31	snap	
Color 08 – CTC 3 (High CRI)	32	35	snap	
Color 09 – Minus green	36	39	snap	
Color 10 – Red	40	43	snap	
Color wheel indexing	44	167	fade	0 – 360°
Color wheel rotation CW	168	211	fade	fast – slow
Color wheel rotation stop	212	212	snap	
Color wheel rotation CCW	213	225	fade	slow – fast

### ***Cyan / Magenta / Yellow Colormix***

Colors	DMX range	fade	Note	
Cyan	0	255	fade	0..100%
Magenta	0	255	fade	0..100%
Yellow	0	255	fade	0..100%

Default/Home value: 255

**CTO Wheel**

CTC	DMX range		Fade	Note
Open	0	31	Snap	Open – White 6000 K
8000 K	32	35	Fade	Fade through Color temperatures of 8000K to 2500K stepless
7900 K	36	39		
7800 K	40	43		
7700 K	44	47		
7600 K	48	51		
7500 K	52	55		
7400 K	56	59		
7300 K	60	63		
7200 K	64	67		
7100 K	68	71		
7000 K	72	75		
6900 K	76	79		
6800 K	80	83		
6700 K	84	87		
6600 K	88	91		
6500 K	92	95		
6400 K	96	99		
6300 K	100	103		
6200 K	104	17		
6100 K	18	111		
6000 K	112	115		
5900 K	116	119		
5800 K	120	123		
5700 K	124	127		
5600 K	128	131		
5500 K	132	135		
5400 K	136	139		
5300 K	140	143		
5200 K	144	147		
5100 K	148	151		
5000 K	152	155		
4900 K	156	159		
4800 K	160	163		
4700 K	164	167		
4600 K	168	171		
4500 K	172	175		
4400 K	176	179		
4300 K	180	183		
4200 K	184	178		
4100 K	179	191		
4000 K	192	195		
3900 K	196	199		
3800 K	200	203		
3700 K	204	207		
3600 K	208	211		
3500 K	212	215		
3400 K	216	219		
3300 K	220	223		
3200 K	224	227		
3100 K	228	231		

CTC	DMX range		Fade	Note
3000 K	232	235		
2900 K	236	239		
2800 K	240	243		
2700 K	244	247		
2600 K	248	251		
2500 K	252	255		

## Shutter

Shutter	DMX range		fade	Note
Closed	0	15	snap	blackout
Strobe Random (slow → Fast)	16	47	fade	Random strobe flashes
Pulse open (slow → Fast)	48	79	fade	Fade to 100% then snap blackout
Pulse close (slow → Fast)	80	111	fade	Snap open then Fade to 0%
Pulse (slow → Fast)	112	143	fade	Fade to 100% then fade to 0%
Strobe with b/o pause	144	199	fade	5 – 0.1 sec.
Strobe	200	239	fade	1 – 10 Hz
Open	240	255	snap	Open

Default/Home value: 255

## Intensity

Intensity	DMX range		fade	Note
Intensity coarse	0	65535	fade	Intensity 0..100%
Intensity fine				

## Focus

Focus	DMX range		fade	Note
Beam softness	0	255	fade	Softer edge to harder edge

## Zoom

Zoom	DMX range		fade	Note
Beam Angle	0	255	fade	Wide to narrow

**Framing module indexing**

Framing module indexing	DMX range		fade	Note
CW indexing	0	127	fade	-45° to 0°
Center: 0°	128	128	snap	0°
CCW indexing	129	255	fade	0° to +45°

**Framing Blade 1-4 control**

Position	DMX range		fade	Note
<i>P/I Mode (Position/Index):</i>				
Blade In / Out control	0	0	fade	Blade out 0% (open)
	128	128		Blade 50% in
	255	255		Blade 100% in (blackout)
Blade Tilt control	0	0	fade	Blade -30° tilt
	128	128		Blade 0° tilt
	255	255		Blade +30° tilt
<i>LR Mode (Left/Right):</i>				
Blade left side control	0	0	fade	Left side out 0% (open)
	128	128		Left side 50% in
	255	255		Left side 100% in
Blade right side control	0	0	fade	right side out 0% (open)
	128	128		right side 50% in
	255	255		right side 100% in

**Iris**

Iris	DMX range		fade	Note
Iris size	0	255	fade	Large aperture to small aperture



## Special / Control

- Fixture Option Default settings are indicated with **bold type**.
- Where commands are marked **(3s hold)**, you must send that DMX value continuously for 3 seconds (or other duration if indicated in the table) to apply the command.

Special/Control	DMX range		fade	Note
Idle	0	8	Snap	
No function	9	11		
iQ.Service Connect ON	12	14	Snap	(3s hold)
No function	15	26		
Performance: Fast	27	29	Snap	(3s hold)
<b>Performance: Normal</b>	30	32	Snap	(3s hold) DEFAULT
Performance: Smooth	33	35	Snap	(3s hold)
No function	36	38		
<b>Dimmer Curve: Soft</b>	39	41	Snap	(3s hold) DEFAULT
Dimmer Curve: Llinear	42	44	Snap	(3s hold)
Dimmer Curve: S-Curve	45	47	Snap	(3s hold)
No function	48	53		
Display Mode: Off	54	56		(3s hold)
<b>Display Mode: Auto</b>	57	59		(3s hold) DEFAULT
Display Mode: On	60	62		(3s hold)
Display Orientation: Normal	63	65		(3s hold)
Display Orientation: Flip	66	68		(3s hold)
Display Orientation: Auto	69	71		(3s hold)
No-Signal: Blackout	72	74		(3s hold)
<b>No-Signal: Hold</b>	75	77		(3s hold) DEFAULT
No-Signal: Scene	78	80		(3s hold)
No-Signal: Capture DMX Values	81	83		(3s hold)
No function	84	86		
<b>Fan Mode: Regulated</b>	87	89		(3s hold) DEFAULT
Fan Mode: High	90	92		(3s hold)
Fan Mode: Medium	93	95		(3s hold)
Fan Mode: Low	96	98		(3s hold)
Fan Mode: Minimum	99	101		(3s hold)
No function	102	104		
Position Feedback: Off	105	107		(3s hold)
<b>Position Feedback: On</b>	108	110		(3s hold) DEFAULT
Effect Shortway: Off	111	113		(3s hold)
<b>Effect Shortway: On</b>	114	116		(3s hold) DEFAULT
<b>Tilt Invert : Off</b>	117	119		(3s hold) DEFAULT
Tilt Invert: On	120	122		(3s hold)
<b>Pan Invert: Off</b>	123	125		(3s hold) DEFAULT
Pan Invert: On	126	128		(3s hold)
<b>Zoom Invert: Off</b>	129	131		(3s hold) DEFAULT
Zoom Invert: On	132	134		(3s hold)
No function	135	140		
Focus Tracking: Off	141	143		(3s hold)
Focus Tracking: Near	144	146		(3s hold)
<b>Focus Tracking: Medium</b>	147	149		(3s hold) DEFAULT
Focus Tracking: Far	150	152		(3s hold)
No function	153	158		

Special/Control	DMX range		fade	Note
<b>Framing Control: PI Mode (position/Index)</b>	159	161		(3s hold) DEFAULT
Framing Control: LR Mode (left/right)	162	164		(3s hold)
No function	165	191		
PWM: Low (L)	192	194		(3s hold) approx. 2200 Hz
<b>PWM: Optimal (O)</b>	195	197		(3s hold) approx. 3000 Hz
PWM: High 1 (H1)	198	200		(3s hold) approx. 4800 Hz
PWM: High 2 (H2)	201	203		(3s hold) approx. 9600 Hz
PWM: Max (M)	204	206		(3s hold) approx. 25kHz
No function	207	209		
Hibernation: On	210	212		(3s hold)
Hibernation: Off	213	215		(3s hold)
No function	216	218		
Save Setting: Preset 1	219	221		(3s hold)
Save Setting: Preset 2	222	224		(3s hold)
Save Setting: Preset 3	225	227		(3s hold)
No function	228	230		
Load Settings: Default	231	233		(3s hold)
Load Setting: Preset 1	234	236		(3s hold)
Load Setting: Preset 2	237	239		(3s hold)
Load Setting: Preset 3	240	242		(3s hold)
No function	243	245		
Reset pan/tilt *	246	248		(3s hold)
Reset head*	249	251		(3s hold)
Reset all*	252	255		(3s hold)

## FX1 selection

FX1 selection	DMX range		fade	Note
Off	0	10	snap	
LED cluster FX 01 Chaser	11	14	snap	
LED cluster FX 01 Crossfade	15	18	snap	
LED cluster FX 02 Chaser	19	22	snap	
LED cluster FX 02 Crossfade	23	26	snap	
LED cluster FX 03 Chaser	27	30	snap	
LED cluster FX 03 Crossfade	31	34	snap	
LED cluster FX 04 Chaser	35	38	snap	
random				
LED cluster FX 04 Crossfade	39	42	snap	
random				
No function	43	255	snap	

## ***FX1 adjustment***

<b>FX1 adjustment</b>	<b>DMX range</b>		<b>fade</b>	<b>Note</b>
FX1 speed	0	255	fade	slow – fast

-GLP-