Black Light Design

ART WashFX 1000 IP65



Manufacturer	**Black Light Design**
Type	**Moving head**
DMX modes	**18**
DMX footprint	**21, 24, 25, 34, 35, 38, 39, 41, 42, 43, 45, 48, 49, 51, 52 channels**
Beam angle	**5-46°**
Pan range	**540°**
Tilt range	**200°**
Heads / cells	**6**
Size (W × H × D)	**339 × 225 × 333 mm**
GDTF fixture type	**6E42C807-1746-470F-9DC0-50…**

Controls

Zoom · Extra LED colours · RGB colour mixing · Colour temperature · Colour wheel · Strobe · Dimmer · Pixel control · Pan and tilt · Movement speed · Gobos · Gobo rotation

Safety-relevant functions

Fixture reset

DMX modes

STAND - 21ch	21 ch
ST1px - 78ch - standard + pixel engine RGB	24 ch
ST2px - 97ch - standard + pixel engine RGBW	25 ch
ST1pxO - 88ch - standard + outline + pixel engine RGB v3	34 ch
SHAPES - 35ch	35 ch
ST2pxO - 107ch - standard + outline + pixel engine RGBW v2	35 ch
RINGS - 38ch	38 ch
SH1px - 92ch - shapes + pixel engine RGB	38 ch
SH2px 111ch - shapes + pixel engine RGBW	39 ch
R1px - 95ch - rings + pixel engine RGB	41 ch
R2px - 114ch - rings + pixel engine RGBW	42 ch
43ch - old firmware	43 ch
SHAPEo - 45ch - SHAPES+OUTLINE v2	45 ch
RINGo - 48ch - RINGS + OUTLINE v2	48 ch
SH1pxO - 102ch - shapes + outline + pixel engine RGB v2	48 ch
SH2pxO 121ch - shapes + outline + pixel engine RGBW v2	49 ch
R1pxO - 105ch - rings + outline + pixel engine RGB v2	51 ch
R2pxO - 124ch - rings + outline + pixel engine RGBW v2	52 ch

STAND - 21ch

21 channels

Ch	Function	Default	DMX values
1	Red	255	
2	Red Fine	255	Fine byte of Red
3	Green	255	
4	Green Fine	255	Fine byte of Green
5	Blue	255	
6	Blue Fine	255	Fine byte of Blue
7	White	255	
8	White Fine	255	Fine byte of White
9	C TO	0	0–9 CTO OFF 10–53 8000 K 54–98 7000 K 99–116 6000 K 117–143 5600 K 144–187 5000 K 188–223 4000 K 224–254 3200 K 255–255 2500 K

STAND - 21ch (continued)

Ch	Function	Default	DMX values
10	Color Wheel	0	0–9 No function (wheel slot 66) 10–10 Red (wheel slot 1) 11–11 Green (wheel slot 2) 12–12 Blue (wheel slot 3) 13–13 Cyan (wheel slot 4) 14–14 Yellow (wheel slot 5) 15–15 Magenta (wheel slot 6) 16–16 White 7000 K (wheel slot 7) 17–17 White 3700 K (wheel slot 8) 18–18 White 5000 K (wheel slot 9) 19–19 Black (wheel slot 10) 20–22 Medium Yellow (wheel slot 11) 23–26 Straw Tint (wheel slot 12) 27–28 Surprise Peach (wheel slot 13) 29–29 Fire (wheel slot 14) 30–30 Medium Amber (wheel slot 15) 31–31 Gold Amber (wheel slot 16) 32–34 Dark Amber (wheel slot 17) 35–44 Sunrise Red (wheel slot 18) 45–45 Light Pink (wheel slot 19) 46–48 Medium Pink (wheel slot 20) 49–61 Pink Carnation (wheel slot 21) 62–67 Light Lavender (wheel slot 22) 68–77 Lavender (wheel slot 23) 78–88 Sky Blue (wheel slot 24) 89–99 Just Blue (wheel slot 25) 100–109 Dark yellow green (wheel slot 26) 110–111 Spring Yellow (wheel slot 27) 112–112 Light Amber (wheel slot 28) 113–113 Straw (wheel slot 29) 114–114 Deep Amber (wheel slot 30) 115–116 Orange (wheel slot 31) 117–117 Light Rose (wheel slot 32) 118–118 English Rose (wheel slot 33) 119–119 Light Salmon (wheel slot 34) 120–120 Middle Rose (wheel slot 35) 121–122 Dark Pink (wheel slot 36) 123–124 Magenta 1 (wheel slot 37) 125–125 Peacock Blue (wheel slot 38) 126–126 Med Blu Green (wheel slot 39) 127–127 Steel Blue (wheel slot 40) 128–128 Light Blue (wheel slot 41) 129–130 Dark blue (wheel slot 42) 131–133 Leaf Green (wheel slot 43) 134–135 Dark Green (wheel slot 44) 136–137 Mauve (wheel slot 45) 138–141 Bright Pink (wheel slot 46) 142–144 Medium Blue (wheel slot 47) 145–145 Deep Golden Amber (wheel slot 48) 146–146 Pale Lavender (wheel slot 49) 147–148 Special Lavender (wheel slot 50) 149–150 Primary Green (wheel slot 51) 151–156 Bright Blue (wheel slot 52) 157–161 Apricot (wheel slot 53) 162–167 Pale Gold (wheel slot 54) 168–171 Deep Oranger (wheel slot 55) 172–173 Bastard Amber (wheel slot 56) 174–174 Flame Red (wheel slot 57) 175–178 Daylight Blue (wheel slot 58) 179–179 Lilac Tint (wheel slot 59) 180–183 Deep Lavender (wheel slot 60) 184–190 Dark Steel Blue (wheel slot 61) 191–206 Congo Blue (wheel slot 62) 207–207 Alice Blue (wheel slot 63)

STAND - 21ch (continued)

Ch	Function	Default	DMX values
11	Shutter / Strobe	255	0–3 Closed 4–24 Strobe · str > 0.5–5.45 Hz 25–101 Strobe · str >> 5.7–24.5 Hz 102–103 Strobe · str >>> 24.8–25 Hz 104–107 Open 108–120 pulse > 121–179 pulse >> 180–207 pulse >>> 208–212 Open 213–224 Random · rnd > 1–3.61 Hz 225–239 Random · rnd >> 3.84–7.16 Hz 240–251 Random · rnd >>> 7.39–10 Hz 252–255 Open
12	Dimmer	0	0–254 Closed 255–255 Open
13	Dimmer Fine	0	Fine byte of Dimmer
14	Pan	128	
15	Pan Fine	0	Fine byte of Pan
16	Tilt	128	
17	Tilt Fine	0	Fine byte of Tilt
18	Function	0	0–37 No function 38–42 Linear 43–47 Square 48–52 Inv square 53–57 S-Curve 58–190 No function 1 191–192 Fast 193–194 Smooth 195–255 Function 4
19	Control1	0	0–25 No function 26–76 Zoom reset 77–127 P/T reset 128–255 Total reset
20	Zoom	128	0–127 narrow 128–254 mid 255–255 wide
21	Beam Shaper	0	0–9 Lens < 1 10–20 Lens < 2 21–30 Lens < 3 31–40 Lens < 4 41–51 Lens < 5 52–61 Lens < 6 62–72 Lens < > 73–83 Lens > 1 84–94 Lens > 2 95–104 Lens > 3 105–115 Lens > 4 116–126 Lens > 5 127–127 Lens > 6 128–158 << 159–189 < 190–190 < 191–192 >< 193–223 > 224–254 >> 255–255 >>>

ST1px - 78ch - standard + pixel engine RGB

24 channels

Ch	Function	Default	DMX values
1	Red	255	
2	Red Fine	255	Fine byte of Red
3	Green	255	
4	Green Fine	255	Fine byte of Green
5	Blue	255	
6	Blue Fine	255	Fine byte of Blue
7	White	255	
8	White Fine	255	Fine byte of White
9	C TO	0	0–9 CTO OFF 10–53 8000 K 54–98 7000 K 99–116 6000 K 117–143 5600 K 144–187 5000 K 188–223 4000 K 224–254 3200 K 255–255 2500 K

ST1px - 78ch - standard + pixel engine RGB (continued)

Ch	Function	Default	DMX values
10	Color Wheel	0	0–9 No function (wheel slot 66) 10–10 Red (wheel slot 1) 11–11 Green (wheel slot 2) 12–12 Blue (wheel slot 3) 13–13 Cyan (wheel slot 4) 14–14 Yellow (wheel slot 5) 15–15 Magenta (wheel slot 6) 16–16 White 7000 K (wheel slot 7) 17–17 White 3700 K (wheel slot 8) 18–18 White 5000 K (wheel slot 9) 19–19 Black (wheel slot 10) 20–22 Medium Yellow (wheel slot 11) 23–26 Straw Tint (wheel slot 12) 27–28 Surprise Peach (wheel slot 13) 29–29 Fire (wheel slot 14) 30–30 Medium Amber (wheel slot 15) 31–31 Gold Amber (wheel slot 16) 32–34 Dark Amber (wheel slot 17) 35–44 Sunrise Red (wheel slot 18) 45–45 Light Pink (wheel slot 19) 46–48 Medium Pink (wheel slot 20) 49–61 Pink Carnation (wheel slot 21) 62–67 Light Lavender (wheel slot 22) 68–77 Lavender (wheel slot 23) 78–88 Sky Blue (wheel slot 24) 89–99 Just Blue (wheel slot 25) 100–109 Dark yellow green (wheel slot 26) 110–111 Spring Yellow (wheel slot 27) 112–112 Light Amber (wheel slot 28) 113–113 Straw (wheel slot 29) 114–114 Deep Amber (wheel slot 30) 115–116 Orange (wheel slot 31) 117–117 Light Rose (wheel slot 32) 118–118 English Rose (wheel slot 33) 119–119 Light Salmon (wheel slot 34) 120–120 Middle Rose (wheel slot 35) 121–122 Dark Pink (wheel slot 36) 123–124 Magenta 1 (wheel slot 37) 125–125 Peacock Blue (wheel slot 38) 126–126 Med Blu Green (wheel slot 39) 127–127 Steel Blue (wheel slot 40) 128–128 Light Blue (wheel slot 41) 129–130 Dark blue (wheel slot 42) 131–133 Leaf Green (wheel slot 43) 134–135 Dark Green (wheel slot 44) 136–137 Mauve (wheel slot 45) 138–141 Bright Pink (wheel slot 46) 142–144 Medium Blue (wheel slot 47) 145–145 Deep Golden Amber (wheel slot 48) 146–146 Pale Lavender (wheel slot 49) 147–148 Special Lavender (wheel slot 50) 149–150 Primary Green (wheel slot 51) 151–156 Bright Blue (wheel slot 52) 157–161 Apricot (wheel slot 53) 162–167 Pale Gold (wheel slot 54) 168–171 Deep Oranger (wheel slot 55) 172–173 Bastard Amber (wheel slot 56) 174–174 Flame Red (wheel slot 57) 175–178 Daylight Blue (wheel slot 58) 179–179 Lilac Tint (wheel slot 59) 180–183 Deep Lavender (wheel slot 60) 184–190 Dark Steel Blue (wheel slot 61) 191–206 Congo Blue (wheel slot 62) 207–207 Alice Blue (wheel slot 63)

ST1px - 78ch - standard + pixel engine RGB (continued)

Ch	Function	Default	DMX values
11	Shutter / Strobe	255	0–3 Closed 4–24 Strobe · str > 0.5–5.45 Hz 25–101 Strobe · str >> 5.7–24.5 Hz 102–103 Strobe · str >>> 24.8–25 Hz 104–107 Open 108–120 pulse > 121–179 pulse >> 180–207 pulse >>> 208–212 Open 213–224 Random · rnd > 1–3.61 Hz 225–239 Random · rnd >> 3.84–7.16 Hz 240–251 Random · rnd >>> 7.39–10 Hz 252–255 Open
12	Dimmer	0	0–254 Closed 255–255 Open
13	Dimmer Fine	0	Fine byte of Dimmer
14	Pan	128	
15	Pan Fine	0	Fine byte of Pan
16	Tilt	128	
17	Tilt Fine	0	Fine byte of Tilt
18	Function	0	0–37 No function 38–42 Linear 43–47 Square 48–52 Inv square 53–57 S-Curve 58–190 No function 1 191–192 Fast 193–194 Smooth 195–255 Function 4
19	Control1	0	0–25 No function 26–76 Zoom reset 77–127 P/T reset 128–255 Total reset
20	Zoom	128	0–127 narrow 128–254 mid 255–255 wide
21	Beam Shaper	0	0–9 Lens < 1 10–20 Lens < 2 21–30 Lens < 3 31–40 Lens < 4 41–51 Lens < 5 52–61 Lens < 6 62–72 Lens < > 73–83 Lens > 1 84–94 Lens > 2 95–104 Lens > 3 105–115 Lens > 4 116–126 Lens > 5 127–127 Lens > 6 128–158 << 159–189 < 190–190 < 191–192 >< 193–223 > 224–254 >> 255–255 >>>
22	Red	255	
23	Green	255	

ST1px - 78ch - standard + pixel engine RGB (continued)

Ch	Function	Default	DMX values
24	Blue	255	

ST2px - 97ch - standard + pixel engine RGBW

25 channels

Ch	Function	Default	DMX values
1	Red	255	
2	Red Fine	255	Fine byte of Red
3	Green	255	
4	Green Fine	255	Fine byte of Green
5	Blue	255	
6	Blue Fine	255	Fine byte of Blue
7	White	255	
8	White Fine	255	Fine byte of White
9	C TO	0	0–9 CTO OFF 10–53 8000 K 54–98 7000 K 99–116 6000 K 117–143 5600 K 144–187 5000 K 188–223 4000 K 224–254 3200 K 255–255 2500 K

ST2px - 97ch - standard + pixel engine RGBW (continued)

Ch	Function	Default	DMX values
10	Color Wheel	0	0–9 No function (wheel slot 66) 10–10 Red (wheel slot 1) 11–11 Green (wheel slot 2) 12–12 Blue (wheel slot 3) 13–13 Cyan (wheel slot 4) 14–14 Yellow (wheel slot 5) 15–15 Magenta (wheel slot 6) 16–16 White 7000 K (wheel slot 7) 17–17 White 3700 K (wheel slot 8) 18–18 White 5000 K (wheel slot 9) 19–19 Black (wheel slot 10) 20–22 Medium Yellow (wheel slot 11) 23–26 Straw Tint (wheel slot 12) 27–28 Surprise Peach (wheel slot 13) 29–29 Fire (wheel slot 14) 30–30 Medium Amber (wheel slot 15) 31–31 Gold Amber (wheel slot 16) 32–34 Dark Amber (wheel slot 17) 35–44 Sunrise Red (wheel slot 18) 45–45 Light Pink (wheel slot 19) 46–48 Medium Pink (wheel slot 20) 49–61 Pink Carnation (wheel slot 21) 62–67 Light Lavender (wheel slot 22) 68–77 Lavender (wheel slot 23) 78–88 Sky Blue (wheel slot 24) 89–99 Just Blue (wheel slot 25) 100–109 Dark yellow green (wheel slot 26) 110–111 Spring Yellow (wheel slot 27) 112–112 Light Amber (wheel slot 28) 113–113 Straw (wheel slot 29) 114–114 Deep Amber (wheel slot 30) 115–116 Orange (wheel slot 31) 117–117 Light Rose (wheel slot 32) 118–118 English Rose (wheel slot 33) 119–119 Light Salmon (wheel slot 34) 120–120 Middle Rose (wheel slot 35) 121–122 Dark Pink (wheel slot 36) 123–124 Magenta 1 (wheel slot 37) 125–125 Peacock Blue (wheel slot 38) 126–126 Med Blu Green (wheel slot 39) 127–127 Steel Blue (wheel slot 40) 128–128 Light Blue (wheel slot 41) 129–130 Dark blue (wheel slot 42) 131–133 Leaf Green (wheel slot 43) 134–135 Dark Green (wheel slot 44) 136–137 Mauve (wheel slot 45) 138–141 Bright Pink (wheel slot 46) 142–144 Medium Blue (wheel slot 47) 145–145 Deep Golden Amber (wheel slot 48) 146–146 Pale Lavender (wheel slot 49) 147–148 Special Lavender (wheel slot 50) 149–150 Primary Green (wheel slot 51) 151–156 Bright Blue (wheel slot 52) 157–161 Apricot (wheel slot 53) 162–167 Pale Gold (wheel slot 54) 168–171 Deep Oranger (wheel slot 55) 172–173 Bastard Amber (wheel slot 56) 174–174 Flame Red (wheel slot 57) 175–178 Daylight Blue (wheel slot 58) 179–179 Lilac Tint (wheel slot 59) 180–183 Deep Lavender (wheel slot 60) 184–190 Dark Steel Blue (wheel slot 61) 191–206 Congo Blue (wheel slot 62) 207–207 Alice Blue (wheel slot 63)

ST2px - 97ch - standard + pixel engine RGBW (continued)

Ch	Function	Default	DMX values
11	Shutter / Strobe	255	0–3 Closed 4–24 Strobe · str > 0.5–5.45 Hz 25–101 Strobe · str >> 5.7–24.5 Hz 102–103 Strobe · str >>> 24.8–25 Hz 104–107 Open 108–120 pulse > 121–179 pulse >> 180–207 pulse >>> 208–212 Open 213–224 Random · rnd > 1–3.61 Hz 225–239 Random · rnd >> 3.84–7.16 Hz 240–251 Random · rnd >>> 7.39–10 Hz 252–255 Open
12	Dimmer	0	0–254 Closed 255–255 Open
13	Dimmer Fine	0	Fine byte of Dimmer
14	Pan	128	
15	Pan Fine	0	Fine byte of Pan
16	Tilt	128	
17	Tilt Fine	0	Fine byte of Tilt
18	Function	0	0–37 No function 38–42 Linear 43–47 Square 48–52 Inv square 53–57 S-Curve 58–190 No function 1 191–192 Fast 193–194 Smooth 195–255 Function 4
19	Control1	0	0–25 No function 26–76 Zoom reset 77–127 P/T reset 128–255 Total reset
20	Zoom	128	0–127 narrow 128–254 mid 255–255 wide
21	Beam Shaper	0	0–9 Lens < 1 10–20 Lens < 2 21–30 Lens < 3 31–40 Lens < 4 41–51 Lens < 5 52–61 Lens < 6 62–72 Lens < > 73–83 Lens > 1 84–94 Lens > 2 95–104 Lens > 3 105–115 Lens > 4 116–126 Lens > 5 127–127 Lens > 6 128–158 << 159–189 < 190–190 < 191–192 >< 193–223 > 224–254 >> 255–255 >>>
22	Red	255	
23	Green	255	

ST2px - 97ch - standard + pixel engine RGBW (continued)

Ch	Function	Default	DMX values
24	Blue	255	
25	White	255	

ST1pxO - 88ch - standard + outline + pixel engine RGB v3

34 channels

Ch	Function	Default	DMX values
1	Red	255	
2	Red Fine	255	Fine byte of Red
3	Green	255	
4	Green Fine	255	Fine byte of Green
5	Blue	255	
6	Blue Fine	255	Fine byte of Blue
7	White	255	
8	White Fine	255	Fine byte of White
9	C TO	0	0–9 CTO OFF 10–53 8000 K 54–98 7000 K 99–116 6000 K 117–143 5600 K 144–187 5000 K 188–223 4000 K 224–254 3200 K 255–255 2500 K

ST1pxO - 88ch - standard + outline + pixel engine RGB v3 (continued)

Ch	Function	Default	DMX values
10	Color Wheel	0	0–9 No function (wheel slot 66) 10–10 Red (wheel slot 1) 11–11 Green (wheel slot 2) 12–12 Blue (wheel slot 3) 13–13 Cyan (wheel slot 4) 14–14 Yellow (wheel slot 5) 15–15 Magenta (wheel slot 6) 16–16 White 7000 K (wheel slot 7) 17–17 White 3700 K (wheel slot 8) 18–18 White 5000 K (wheel slot 9) 19–19 Black (wheel slot 10) 20–22 Medium Yellow (wheel slot 11) 23–26 Straw Tint (wheel slot 12) 27–28 Surprise Peach (wheel slot 13) 29–29 Fire (wheel slot 14) 30–30 Medium Amber (wheel slot 15) 31–31 Gold Amber (wheel slot 16) 32–34 Dark Amber (wheel slot 17) 35–44 Sunrise Red (wheel slot 18) 45–45 Light Pink (wheel slot 19) 46–48 Medium Pink (wheel slot 20) 49–61 Pink Carnation (wheel slot 21) 62–67 Light Lavender (wheel slot 22) 68–77 Lavender (wheel slot 23) 78–88 Sky Blue (wheel slot 24) 89–99 Just Blue (wheel slot 25) 100–109 Dark yellow green (wheel slot 26) 110–111 Spring Yellow (wheel slot 27) 112–112 Light Amber (wheel slot 28) 113–113 Straw (wheel slot 29) 114–114 Deep Amber (wheel slot 30) 115–116 Orange (wheel slot 31) 117–117 Light Rose (wheel slot 32) 118–118 English Rose (wheel slot 33) 119–119 Light Salmon (wheel slot 34) 120–120 Middle Rose (wheel slot 35) 121–122 Dark Pink (wheel slot 36) 123–124 Magenta 1 (wheel slot 37) 125–125 Peacock Blue (wheel slot 38) 126–126 Med Blu Green (wheel slot 39) 127–127 Steel Blue (wheel slot 40) 128–128 Light Blue (wheel slot 41) 129–130 Dark blue (wheel slot 42) 131–133 Leaf Green (wheel slot 43) 134–135 Dark Green (wheel slot 44) 136–137 Mauve (wheel slot 45) 138–141 Bright Pink (wheel slot 46) 142–144 Medium Blue (wheel slot 47) 145–145 Deep Golden Amber (wheel slot 48) 146–146 Pale Lavender (wheel slot 49) 147–148 Special Lavender (wheel slot 50) 149–150 Primary Green (wheel slot 51) 151–156 Bright Blue (wheel slot 52) 157–161 Apricot (wheel slot 53) 162–167 Pale Gold (wheel slot 54) 168–171 Deep Oranger (wheel slot 55) 172–173 Bastard Amber (wheel slot 56) 174–174 Flame Red (wheel slot 57) 175–178 Daylight Blue (wheel slot 58) 179–179 Lilac Tint (wheel slot 59) 180–183 Deep Lavender (wheel slot 60) 184–190 Dark Steel Blue (wheel slot 61) 191–206 Congo Blue (wheel slot 62) 207–207 Alice Blue (wheel slot 63)

ST1pxO - 88ch - standard + outline + pixel engine RGB v3 (continued)

Ch	Function	Default	DMX values
11	Shutter / Strobe	255	0–3 Closed 4–24 Strobe · str > 0.5–5.45 Hz 25–101 Strobe · str >> 5.7–24.5 Hz 102–103 Strobe · str >>> 24.8–25 Hz 104–107 Open 108–120 pulse > 121–179 pulse >> 180–207 pulse >>> 208–212 Open 213–224 Random · rnd > 1–3.61 Hz 225–239 Random · rnd >> 3.84–7.16 Hz 240–251 Random · rnd >>> 7.39–10 Hz 252–255 Open
12	Dimmer	0	0–254 Closed 255–255 Open
13	Dimmer Fine	0	Fine byte of Dimmer
14	Pan	128	
15	Pan Fine	0	Fine byte of Pan
16	Tilt	128	
17	Tilt Fine	0	Fine byte of Tilt
18	Function	0	0–37 No function 38–42 Linear 43–47 Square 48–52 Inv square 53–57 S-Curve 58–190 No function 1 191–192 Fast 193–194 Smooth 195–255 Function 4
19	Control1	0	0–25 No function 26–76 Zoom reset 77–127 P/T reset 128–255 Total reset
20	Zoom	128	0–127 narrow 128–254 mid 255–255 wide
21	Beam Shaper	0	0–9 Lens < 1 10–20 Lens < 2 21–30 Lens < 3 31–40 Lens < 4 41–51 Lens < 5 52–61 Lens < 6 62–72 Lens < > 73–83 Lens > 1 84–94 Lens > 2 95–104 Lens > 3 105–115 Lens > 4 116–126 Lens > 5 127–127 Lens > 6 128–158 << 159–189 < 190–190 < 191–192 >< 193–223 > 224–254 >> 255–255 >>>
22	Dimmer	0	0–254 Closed 255–255 Open

ST1pxO - 88ch - standard + outline + pixel engine RGB v3 (continued)

Ch	Function	Default	DMX values
23	Shutter / Strobe 3	255	0–3 Closed 4–24 Strobe · str > 0.5–5.45 Hz 25–101 Strobe · str >> 5.7–24.5 Hz 102–103 Strobe · str >>> 24.8–25 Hz 104–107 Open 108–120 pulse > 121–179 pulse >> 180–207 pulse >>> 208–212 Open 213–224 Random · rnd > 1–3.61 Hz 225–239 Random · rnd >> 3.84–7.16 Hz 240–251 Random · rnd >>> 7.39–10 Hz 252–255 Open
24	Red	255	
25	Green	255	
26	Blue	255	
27	Gobo 3	0	0–7 Open (wheel slot 1) 8–8 Shape 1 (wheel slot 2) 9–9 Shape 2 (wheel slot 3) 10–10 Shape 3 (wheel slot 4) 11–11 Shape 4 (wheel slot 5) 12–12 Shape 5 (wheel slot 6) 13–13 Shape 6 (wheel slot 7) 14–14 Shape 7 (wheel slot 8) 15–15 Shape 8 (wheel slot 9) 16–16 Shape 9 (wheel slot 10) 17–17 Shape 10 (wheel slot 11) 18–18 Shape 11 (wheel slot 12) 19–19 Shape 12 (wheel slot 13) 20–20 Shape 13 (wheel slot 14) 21–21 Shape 14 (wheel slot 15) 22–22 Shape 15 (wheel slot 16) 23–23 Shape 16 (wheel slot 17) 24–24 Shape 17 (wheel slot 18) 25–25 Shape 18 (wheel slot 19) 26–26 Shape 19 (wheel slot 20) 27–27 Shape 20 (wheel slot 21) 28–28 Shape 21 (wheel slot 22) 29–29 Shape 22 (wheel slot 23) 30–30 Shape 23 (wheel slot 24) 31–31 Shape 24 (wheel slot 25) 32–32 Shape 25 (wheel slot 26) 33–33 Shape 26 (wheel slot 27) 34–34 Shape 27 (wheel slot 28) 35–35 Shape 28 (wheel slot 29) 36–36 Shape 29 (wheel slot 30) 37–255 Shape 30 (wheel slot 31)

ST1pxO - 88ch - standard + outline + pixel engine RGB v3 (continued)

Ch	Function	Default	DMX values
28	Gobo Rotation 3	0	0–6 pos 1 7–13 pos 2 14–20 pos 3 21–27 pos 4 28–34 pos 5 35–41 pos 6 42–48 pos 7 49–55 pos 8 56–62 pos 9 63–63 pos 10 64–111 <<< 112–157 << 158–158 < 159–160 >< 161–207 > 208–254 >> 255–255 >>>
29	Red	255	
30	Green	255	
31	Blue	255	
32	Red	255	
33	Green	255	
34	Blue	255	

SHAPES - 35ch

35 channels

Ch	Function	Default	DMX values
1	Red	255	
2	Red Fine	255	Fine byte of Red
3	Green	255	
4	Green Fine	255	Fine byte of Green
5	Blue	255	
6	Blue Fine	255	Fine byte of Blue
7	White	255	
8	White Fine	255	Fine byte of White
9	C TO	0	0–9 CTO OFF 10–53 8000 K 54–98 7000 K 99–116 6000 K 117–143 5600 K 144–187 5000 K 188–223 4000 K 224–254 3200 K 255–255 2500 K

SHAPES - 35ch (continued)

Ch	Function	Default	DMX values
10	Color Wheel	0	0–9 No function (wheel slot 66) 10–10 Red (wheel slot 1) 11–11 Green (wheel slot 2) 12–12 Blue (wheel slot 3) 13–13 Cyan (wheel slot 4) 14–14 Yellow (wheel slot 5) 15–15 Magenta (wheel slot 6) 16–16 White 7000 K (wheel slot 7) 17–17 White 3700 K (wheel slot 8) 18–18 White 5000 K (wheel slot 9) 19–19 Black (wheel slot 10) 20–22 Medium Yellow (wheel slot 11) 23–26 Straw Tint (wheel slot 12) 27–28 Surprise Peach (wheel slot 13) 29–29 Fire (wheel slot 14) 30–30 Medium Amber (wheel slot 15) 31–31 Gold Amber (wheel slot 16) 32–34 Dark Amber (wheel slot 17) 35–44 Sunrise Red (wheel slot 18) 45–45 Light Pink (wheel slot 19) 46–48 Medium Pink (wheel slot 20) 49–61 Pink Carnation (wheel slot 21) 62–67 Light Lavender (wheel slot 22) 68–77 Lavender (wheel slot 23) 78–88 Sky Blue (wheel slot 24) 89–99 Just Blue (wheel slot 25) 100–109 Dark yellow green (wheel slot 26) 110–111 Spring Yellow (wheel slot 27) 112–112 Light Amber (wheel slot 28) 113–113 Straw (wheel slot 29) 114–114 Deep Amber (wheel slot 30) 115–116 Orange (wheel slot 31) 117–117 Light Rose (wheel slot 32) 118–118 English Rose (wheel slot 33) 119–119 Light Salmon (wheel slot 34) 120–120 Middle Rose (wheel slot 35) 121–122 Dark Pink (wheel slot 36) 123–124 Magenta 1 (wheel slot 37) 125–125 Peacock Blue (wheel slot 38) 126–126 Med Blu Green (wheel slot 39) 127–127 Steel Blue (wheel slot 40) 128–128 Light Blue (wheel slot 41) 129–130 Dark blue (wheel slot 42) 131–133 Leaf Green (wheel slot 43) 134–135 Dark Green (wheel slot 44) 136–137 Mauve (wheel slot 45) 138–141 Bright Pink (wheel slot 46) 142–144 Medium Blue (wheel slot 47) 145–145 Deep Golden Amber (wheel slot 48) 146–146 Pale Lavender (wheel slot 49) 147–148 Special Lavender (wheel slot 50) 149–150 Primary Green (wheel slot 51) 151–156 Bright Blue (wheel slot 52) 157–161 Apricot (wheel slot 53) 162–167 Pale Gold (wheel slot 54) 168–171 Deep Oranger (wheel slot 55) 172–173 Bastard Amber (wheel slot 56) 174–174 Flame Red (wheel slot 57) 175–178 Daylight Blue (wheel slot 58) 179–179 Lilac Tint (wheel slot 59) 180–183 Deep Lavender (wheel slot 60) 184–190 Dark Steel Blue (wheel slot 61) 191–206 Congo Blue (wheel slot 62) 207–207 Alice Blue (wheel slot 63)

SHAPES - 35ch (continued)

Ch	Function	Default	DMX values
11	Shutter / Strobe	255	0–3 Closed 4–24 Strobe · str > 0.5–5.45 Hz 25–101 Strobe · str >> 5.7–24.5 Hz 102–103 Strobe · str >>> 24.8–25 Hz 104–107 Open 108–120 pulse > 121–179 pulse >> 180–207 pulse >>> 208–212 Open 213–224 Random · rnd > 1–3.61 Hz 225–239 Random · rnd >> 3.84–7.16 Hz 240–251 Random · rnd >>> 7.39–10 Hz 252–255 Open
12	Dimmer	0	0–254 Closed 255–255 Open
13	Dimmer Fine	0	Fine byte of Dimmer
14	Pan	128	
15	Pan Fine	0	Fine byte of Pan
16	Tilt	128	
17	Tilt Fine	0	Fine byte of Tilt
18	Function	0	0–37 No function 38–42 Linear 43–47 Square 48–52 Inv square 53–57 S-Curve 58–190 No function 1 191–192 Fast 193–194 Smooth 195–255 Function 4
19	Control1	0	0–25 No function 26–76 Zoom reset 77–127 P/T reset 128–255 Total reset
20	Zoom	128	0–127 narrow 128–254 mid 255–255 wide
21	Beam Shaper	0	0–9 Lens < 1 10–20 Lens < 2 21–30 Lens < 3 31–40 Lens < 4 41–51 Lens < 5 52–61 Lens < 6 62–72 Lens < > 73–83 Lens > 1 84–94 Lens > 2 95–104 Lens > 3 105–115 Lens > 4 116–126 Lens > 5 127–127 Lens > 6 128–158 << 159–189 < 190–190 < 191–192 >< 193–223 > 224–254 >> 255–255 >>>

SHAPES - 35ch (continued)

Ch	Function	Default	DMX values
22	Gobo	0	0–7 Open (wheel slot 1) 8–8 Pixel 1 (wheel slot 2) 9–9 Ring 1 (wheel slot 3) 10–10 Ring 2 (wheel slot 4) 11–11 Ring 3 (wheel slot 5) 12–12 Pixel 1+Ring 1 (wheel slot 6) 13–13 Pixel 1+Ring 2 (wheel slot 7) 14–14 Pixel 1+Ring 3 (wheel slot 8) 15–15 Single ring (Ramp -/+) (wheel slot 9) 16–16 Filled rings (ramp -/+) (wheel slot 10) 17–17 Open/Close 1 (wheel slot 11) 18–18 Open/Close 2 (wheel slot 12) 19–19 Random pixels 1 (wheel slot 13) 20–20 Random pixels 2 (wheel slot 14) 21–21 Rainbow 1 (Variable speed) (wheel slot 15) 22–22 Rainbow 2 (Fixed speed with variable color offset) (w… 23–23 Fan (wheel slot 17) 24–24 Bar 1 (wheel slot 18) 25–25 Half moon (wheel slot 19) 26–26 Triangle (wheel slot 20) 27–27 Segment 1 (wheel slot 21) 28–28 Arc 1 (wheel slot 22) 29–29 Arc 2 (wheel slot 23) 30–30 Bar 2 (Variable size) (wheel slot 24) 31–31 Random explosion (wheel slot 25) 32–32 Segment 2 (wheel slot 26) 33–33 x Bump (wheel slot 27) 34–34 Image (wheel slot 28) 35–35 Bumping section (wheel slot 29) 36–36 Ramp by 6 (wheel slot 30) 37–37 Ramp by 4 (wheel slot 31) 38–38 Left/Right scrolling bar (wheel slot 32) 39–39 Up/Down scrolling bar (wheel slot 33) 40–40 Bar 3 (wheel slot 34) 41–41 Vertical arc 1 (wheel slot 35) 42–42 Vertical arc 2 (wheel slot 36) 43–43 Horizontal arc 1 (wheel slot 37) 44–44 Horizontal arc 2 (wheel slot 38) 45–45 Mirrored pixel (wheel slot 39) 46–46 Pixel animation 1 (wheel slot 40) 47–47 Pixel animation 2 (wheel slot 41) 48–48 Pixel animation 3 (wheel slot 42) 49–49 Pixel animation 4 (wheel slot 43) 50–50 Pixel animation 5 (wheel slot 44) 51–51 Semi arc (Ramp /+) (wheel slot 45) 52–52 Bumping arc section (wheel slot 46) 53–53 Pixel animation 6 (wheel slot 47) 54–54 Vertical ramp by 2 (wheel slot 48) 55–55 Following pixel by 2 (wheel slot 49) 56–56 Syncopation (wheel slot 50) 57–57 Bumping 1 (wheel slot 51) 58–58 Bumping 2 (wheel slot 52) 59–59 Bumping 3 (wheel slot 53) 60–60 Vertical pixel scrolling (wheel slot 54) 61–61 Random vertical section (wheel slot 55) 62–62 Random central section (wheel slot 56) 63–63 Random ring 2 (wheel slot 57) 64–64 Random ring 3 (wheel slot 58) 65–65 Random ring 1+3 (wheel slot 59) 66–66 Random ring 2+3 (wheel slot 60) 67–67 Single pixel ring 1 (wheel slot 61) 68–68 Single pixel ring 2 (wheel slot 62) 69–69 Single pixel ring 3 (wheel slot 63) 70–255 Spiral (wheel slot 64)

SHAPES - 35ch (continued)

Ch	Function	Default	DMX values
23	Gobo Rotation	0	0–6 pos 1 7–13 pos 2 14–20 pos 3 21–27 pos 4 28–34 pos 5 35–41 pos 6 42–48 pos 7 49–55 pos 8 56–62 pos 9 63–63 pos 10 64–111 << 112–157 < 158–158 < 159–160 >< 161–207 > 208–254 >> 255–255 >>>
24	Shape Fade	0	0–15 Snap 16–113 gamma 05 114–244 gamma 1 245–245 gamma 2 246–255 automatic gamma
25	Red	255	
26	Green	255	
27	Blue	255	
28	White	255	
29	Dimmer	255	0–254 Closed 255–255 Open
30	Dimmer Background	255	0–254 Closed 255–255 Open
31	Shape Transition	0	0–4 No fade 5–72 100 ms 73–112 500 ms 113–170 1 s 171–215 2 s 216–254 3 s 255–255 4 s
32	Shape Offset	0	
33	Shutter / Strobe 2	255	0–3 Closed 4–24 Strobe · str > 0.5–5.45 Hz 25–101 Strobe · str >> 5.7–24.5 Hz 102–103 Strobe · str >>> 24.8–25 Hz 104–107 Open 108–120 pulse > 121–179 pulse >> 180–207 pulse >>> 208–212 Open 213–224 Random · rnd > 1–3.61 Hz 225–239 Random · rnd >> 3.84–7.16 Hz 240–251 Random · rnd >>> 7.39–10 Hz 252–255 Open

SHAPES - 35ch (continued)

Ch	Function	Default	DMX values
34	Shutter / Strobe 2	255	0–3 Closed 4–24 Strobe · str > 0.5–5.45 Hz 25–101 Strobe · str >> 5.7–24.5 Hz 102–103 Strobe · str >>> 24.8–25 Hz 104–107 Open 108–120 pulse > 121–179 pulse >> 180–207 pulse >>> 208–212 Open 213–224 Random · rnd > 1–3.61 Hz 225–239 Random · rnd >> 3.84–7.16 Hz 240–251 Random · rnd >>> 7.39–10 Hz 252–255 Open
35	Gobo 2	0	0–8 No selection (wheel slot 1) 9–9 Pixel 1 (wheel slot 2) 10–10 Ring 2 (wheel slot 3) 11–11 Ring 3 (wheel slot 4) 12–12 Ring 4 (wheel slot 5) 13–13 Pixel 1 + Ring 2 (wheel slot 6) 14–14 Pixel 1 + Ring 2 + Ring 3 (wheel slot 7) 15–15 Pixel 1 + Ring 2 + Ring 3 + Ring 4 (wheel slot 8) 16–16 Ring 2 + Ring 3 + Ring 4 (wheel slot 9) 17–17 Ring 3 + Ring 4 (wheel slot 10) 18–18 Pixel 1 + Ring 4 (wheel slot 11) 19–19 Ring 2 + Ring 3 (wheel slot 12) 20–20 Pixel 1 + Ring 3 (wheel slot 13) 21–21 Ring 2 + Ring 4 (wheel slot 14) 22–22 Pixel 1 + Ring 3 + Ring 4 (wheel slot 15) 23–254 Pixel 1 + Ring 2 + Ring 4 (wheel slot 16) 255–255 No function

ST2pxO - 107ch - standard + outline + pixel engine RGBW v2

35 channels

Ch	Function	Default	DMX values
1	Red	255	
2	Red Fine	255	Fine byte of Red
3	Green	255	
4	Green Fine	255	Fine byte of Green
5	Blue	255	
6	Blue Fine	255	Fine byte of Blue
7	White	255	
8	White Fine	255	Fine byte of White
9	C TO	0	0–9 CTO OFF 10–53 8000 K 54–98 7000 K 99–116 6000 K 117–143 5600 K 144–187 5000 K 188–223 4000 K 224–254 3200 K 255–255 2500 K

ST2pxO - 107ch - standard + outline + pixel engine RGBW v2 (continued)

Ch	Function	Default	DMX values
10	Color Wheel	0	0–9 No function (wheel slot 66) 10–10 Red (wheel slot 1) 11–11 Green (wheel slot 2) 12–12 Blue (wheel slot 3) 13–13 Cyan (wheel slot 4) 14–14 Yellow (wheel slot 5) 15–15 Magenta (wheel slot 6) 16–16 White 7000 K (wheel slot 7) 17–17 White 3700 K (wheel slot 8) 18–18 White 5000 K (wheel slot 9) 19–19 Black (wheel slot 10) 20–22 Medium Yellow (wheel slot 11) 23–26 Straw Tint (wheel slot 12) 27–28 Surprise Peach (wheel slot 13) 29–29 Fire (wheel slot 14) 30–30 Medium Amber (wheel slot 15) 31–31 Gold Amber (wheel slot 16) 32–34 Dark Amber (wheel slot 17) 35–44 Sunrise Red (wheel slot 18) 45–45 Light Pink (wheel slot 19) 46–48 Medium Pink (wheel slot 20) 49–61 Pink Carnation (wheel slot 21) 62–67 Light Lavender (wheel slot 22) 68–77 Lavender (wheel slot 23) 78–88 Sky Blue (wheel slot 24) 89–99 Just Blue (wheel slot 25) 100–109 Dark yellow green (wheel slot 26) 110–111 Spring Yellow (wheel slot 27) 112–112 Light Amber (wheel slot 28) 113–113 Straw (wheel slot 29) 114–114 Deep Amber (wheel slot 30) 115–116 Orange (wheel slot 31) 117–117 Light Rose (wheel slot 32) 118–118 English Rose (wheel slot 33) 119–119 Light Salmon (wheel slot 34) 120–120 Middle Rose (wheel slot 35) 121–122 Dark Pink (wheel slot 36) 123–124 Magenta 1 (wheel slot 37) 125–125 Peacock Blue (wheel slot 38) 126–126 Med Blu Green (wheel slot 39) 127–127 Steel Blue (wheel slot 40) 128–128 Light Blue (wheel slot 41) 129–130 Dark blue (wheel slot 42) 131–133 Leaf Green (wheel slot 43) 134–135 Dark Green (wheel slot 44) 136–137 Mauve (wheel slot 45) 138–141 Bright Pink (wheel slot 46) 142–144 Medium Blue (wheel slot 47) 145–145 Deep Golden Amber (wheel slot 48) 146–146 Pale Lavender (wheel slot 49) 147–148 Special Lavender (wheel slot 50) 149–150 Primary Green (wheel slot 51) 151–156 Bright Blue (wheel slot 52) 157–161 Apricot (wheel slot 53) 162–167 Pale Gold (wheel slot 54) 168–171 Deep Oranger (wheel slot 55) 172–173 Bastard Amber (wheel slot 56) 174–174 Flame Red (wheel slot 57) 175–178 Daylight Blue (wheel slot 58) 179–179 Lilac Tint (wheel slot 59) 180–183 Deep Lavender (wheel slot 60) 184–190 Dark Steel Blue (wheel slot 61) 191–206 Congo Blue (wheel slot 62) 207–207 Alice Blue (wheel slot 63)

ST2pxO - 107ch - standard + outline + pixel engine RGBW v2 (continued)

Ch	Function	Default	DMX values
11	Shutter / Strobe	255	0–3 Closed 4–24 Strobe · str > 0.5–5.45 Hz 25–101 Strobe · str >> 5.7–24.5 Hz 102–103 Strobe · str >>> 24.8–25 Hz 104–107 Open 108–120 pulse > 121–179 pulse >> 180–207 pulse >>> 208–212 Open 213–224 Random · rnd > 1–3.61 Hz 225–239 Random · rnd >> 3.84–7.16 Hz 240–251 Random · rnd >>> 7.39–10 Hz 252–255 Open
12	Dimmer	0	0–254 Closed 255–255 Open
13	Dimmer Fine	0	Fine byte of Dimmer
14	Pan	128	
15	Pan Fine	0	Fine byte of Pan
16	Tilt	128	
17	Tilt Fine	0	Fine byte of Tilt
18	Function	0	0–37 No function 38–42 Linear 43–47 Square 48–52 Inv square 53–57 S-Curve 58–190 No function 1 191–192 Fast 193–194 Smooth 195–255 Function 4
19	Control1	0	0–25 No function 26–76 Zoom reset 77–127 P/T reset 128–255 Total reset
20	Zoom	128	0–127 narrow 128–254 mid 255–255 wide
21	Beam Shaper	0	0–9 Lens < 1 10–20 Lens < 2 21–30 Lens < 3 31–40 Lens < 4 41–51 Lens < 5 52–61 Lens < 6 62–72 Lens < > 73–83 Lens > 1 84–94 Lens > 2 95–104 Lens > 3 105–115 Lens > 4 116–126 Lens > 5 127–127 Lens > 6 128–158 << 159–189 < 190–190 < 191–192 >< 193–223 > 224–254 >> 255–255 >>>
22	Dimmer	0	0–254 Closed 255–255 Open

ST2pxO - 107ch - standard + outline + pixel engine RGBW v2 (continued)

Ch	Function	Default	DMX values
23	Shutter / Strobe 3	255	0–3 Closed 4–24 Strobe · str > 0.5–5.45 Hz 25–101 Strobe · str >> 5.7–24.5 Hz 102–103 Strobe · str >>> 24.8–25 Hz 104–107 Open 108–120 pulse > 121–179 pulse >> 180–207 pulse >>> 208–212 Open 213–224 Random · rnd > 1–3.61 Hz 225–239 Random · rnd >> 3.84–7.16 Hz 240–251 Random · rnd >>> 7.39–10 Hz 252–255 Open
24	Red	255	
25	Green	255	
26	Blue	255	
27	Gobo 3	0	0–7 Open (wheel slot 1) 8–8 Shape 1 (wheel slot 2) 9–9 Shape 2 (wheel slot 3) 10–10 Shape 3 (wheel slot 4) 11–11 Shape 4 (wheel slot 5) 12–12 Shape 5 (wheel slot 6) 13–13 Shape 6 (wheel slot 7) 14–14 Shape 7 (wheel slot 8) 15–15 Shape 8 (wheel slot 9) 16–16 Shape 9 (wheel slot 10) 17–17 Shape 10 (wheel slot 11) 18–18 Shape 11 (wheel slot 12) 19–19 Shape 12 (wheel slot 13) 20–20 Shape 13 (wheel slot 14) 21–21 Shape 14 (wheel slot 15) 22–22 Shape 15 (wheel slot 16) 23–23 Shape 16 (wheel slot 17) 24–24 Shape 17 (wheel slot 18) 25–25 Shape 18 (wheel slot 19) 26–26 Shape 19 (wheel slot 20) 27–27 Shape 20 (wheel slot 21) 28–28 Shape 21 (wheel slot 22) 29–29 Shape 22 (wheel slot 23) 30–30 Shape 23 (wheel slot 24) 31–31 Shape 24 (wheel slot 25) 32–32 Shape 25 (wheel slot 26) 33–33 Shape 26 (wheel slot 27) 34–34 Shape 27 (wheel slot 28) 35–35 Shape 28 (wheel slot 29) 36–36 Shape 29 (wheel slot 30) 37–255 Shape 30 (wheel slot 31)

ST2pxO - 107ch - standard + outline + pixel engine RGBW v2 (continued)

Ch	Function	Default	DMX values
28	Gobo Rotation 3	0	0–6 pos 1 7–13 pos 2 14–20 pos 3 21–27 pos 4 28–34 pos 5 35–41 pos 6 42–48 pos 7 49–55 pos 8 56–62 pos 9 63–63 pos 10 64–111 << 112–157 < 158–158 < 159–160 >< 161–207 > 208–254 >> 255–255 >>>
29	Red	255	
30	Green	255	
31	Blue	255	
32	Red	255	
33	Green	255	
34	Blue	255	
35	White	255	

RINGS - 38ch

38 channels

Ch	Function	Default	DMX values
1	Pan	127	
2	Pan Fine	255	Fine byte of Pan
3	Tilt	127	
4	Tilt Fine	127	Fine byte of Tilt
5	Position MSpeed	0	0–254 fast 255–255 slow
6	Control1	0	0–19 No function 20–21 Linear 22–23 Square 24–25 Inv square 26–27 S-Curve 28–129 No function 1 130–131 Fast 132–133 Smooth 134–139 No function 2 140–149 P/T reset 150–179 No function 3 180–189 Zoom reset 190–199 No function 4 200–209 Total reset 210–255 No function 5
7	Red	255	
8	Red Fine	255	Fine byte of Red
9	Green	255	
10	Green Fine	255	Fine byte of Green
11	Blue	255	

RINGS - 38ch (continued)

Ch	Function	Default	DMX values
12	Blue Fine	255	Fine byte of Blue
13	White	0	
14	White Fine	0	Fine byte of White
15	Red	255	
16	Red Fine	255	Fine byte of Red
17	Green	255	
18	Green Fine	255	Fine byte of Green
19	Blue	255	
20	Blue Fine	255	Fine byte of Blue
21	White	0	
22	White Fine	0	Fine byte of White
23	Red	255	
24	Red Fine	255	Fine byte of Red
25	Green	255	
26	Green Fine	255	Fine byte of Green
27	Blue	255	
28	Blue Fine	255	Fine byte of Blue
29	White	0	
30	White Fine	0	Fine byte of White
31	C TO	0	0–9 CTO OFF 10–53 8000 K 54–98 7000 K 99–116 6000 K 117–143 5600 K 144–187 5000 K 188–223 4000 K 224–254 3200 K 255–255 2500 K
32	Color Macro1	0	0–0 No function 1–3 2700K 4–6 3200K 7–9 4200K 10–12 5600K 13–15 8000K 16–55 Blue 56–95 Cyan 96–96 Green 97–174 Yellow 175–214 Red 215–246 Magenta 247–247 Blue 248–248 Fade rainbow 249–249 Chase rainbow 250–250 Effect 1 251–251 Effect 2 252–252 Effect 3 253–253 Effect 4 254–254 Effect 5 255–255 Effect 6

RINGS - 38ch (continued)

Ch	Function	Default	DMX values
33	Beam Shaper	0	0–9 Lens < 1 10–20 Lens < 2 21–30 Lens < 3 31–40 Lens < 4 41–51 Lens < 5 52–61 Lens < 6 62–72 Lens < > 73–83 Lens > 1 84–94 Lens > 2 95–104 Lens > 3 105–115 Lens > 4 116–126 Lens > 5 127–127 Lens > 6 128–158 <<< 159–189 << 190–190 < 191–192 >< 193–223 > 224–254 >> 255–255 >>>
34	Zoom	128	0–127 narrow 128–254 mid 255–255 wide
35	Zoom Fine	128	Fine byte of Zoom
36	Shutter / Strobe	255	0–31 Closed 32–62 Strobe 3 zone · slow 0.5–19.4 Hz 63–63 Strobe 3 zone · fast 20 Hz 64–94 Strobe all zones · slow 0.5–0.984 Hz 95–95 Strobe all zones · fast 1 Hz 96–110 CCW slow 111–111 CCW fast 112–126 CW fast 127–127 CW slow 128–142 slow 143–143 fast 144–158 slow 159–159 fast 160–174 Strobe random zones · slow 0.5–18.7 Hz 175–175 Strobe random zones · fast 20 Hz 176–190 Random strobe random zones · slow 0.5–18.7 Hz 191–191 Random strobe random zones · fast 20 Hz 192–222 Random strobe all zones · slow 0.5–19.4 Hz 223–223 Random strobe all zones · fast 20 Hz 224–255 Open
37	Dimmer	0	0–254 Closed 255–255 Open
38	Dimmer Fine	0	Fine byte of Dimmer

SH1px - 92ch - shapes + pixel engine RGB

38 channels

Ch	Function	Default	DMX values
1	Red	255	
2	Red Fine	255	Fine byte of Red
3	Green	255	
4	Green Fine	255	Fine byte of Green
5	Blue	255	
6	Blue Fine	255	Fine byte of Blue

SH1px - 92ch - shapes + pixel engine RGB (continued)

Ch	Function	Default	DMX values
7	White	255	
8	White Fine	255	Fine byte of White
9	C TO	0	0–9 CTO OFF 10–53 8000 K 54–98 7000 K 99–116 6000 K 117–143 5600 K 144–187 5000 K 188–223 4000 K 224–254 3200 K 255–255 2500 K

SH1px - 92ch - shapes + pixel engine RGB (continued)

Ch	Function	Default	DMX values
10	Color Wheel	0	0–9 No function (wheel slot 66) 10–10 Red (wheel slot 1) 11–11 Green (wheel slot 2) 12–12 Blue (wheel slot 3) 13–13 Cyan (wheel slot 4) 14–14 Yellow (wheel slot 5) 15–15 Magenta (wheel slot 6) 16–16 White 7000 K (wheel slot 7) 17–17 White 3700 K (wheel slot 8) 18–18 White 5000 K (wheel slot 9) 19–19 Black (wheel slot 10) 20–22 Medium Yellow (wheel slot 11) 23–26 Straw Tint (wheel slot 12) 27–28 Surprise Peach (wheel slot 13) 29–29 Fire (wheel slot 14) 30–30 Medium Amber (wheel slot 15) 31–31 Gold Amber (wheel slot 16) 32–34 Dark Amber (wheel slot 17) 35–44 Sunrise Red (wheel slot 18) 45–45 Light Pink (wheel slot 19) 46–48 Medium Pink (wheel slot 20) 49–61 Pink Carnation (wheel slot 21) 62–67 Light Lavender (wheel slot 22) 68–77 Lavender (wheel slot 23) 78–88 Sky Blue (wheel slot 24) 89–99 Just Blue (wheel slot 25) 100–109 Dark yellow green (wheel slot 26) 110–111 Spring Yellow (wheel slot 27) 112–112 Light Amber (wheel slot 28) 113–113 Straw (wheel slot 29) 114–114 Deep Amber (wheel slot 30) 115–116 Orange (wheel slot 31) 117–117 Light Rose (wheel slot 32) 118–118 English Rose (wheel slot 33) 119–119 Light Salmon (wheel slot 34) 120–120 Middle Rose (wheel slot 35) 121–122 Dark Pink (wheel slot 36) 123–124 Magenta 1 (wheel slot 37) 125–125 Peacock Blue (wheel slot 38) 126–126 Med Blu Green (wheel slot 39) 127–127 Steel Blue (wheel slot 40) 128–128 Light Blue (wheel slot 41) 129–130 Dark blue (wheel slot 42) 131–133 Leaf Green (wheel slot 43) 134–135 Dark Green (wheel slot 44) 136–137 Mauve (wheel slot 45) 138–141 Bright Pink (wheel slot 46) 142–144 Medium Blue (wheel slot 47) 145–145 Deep Golden Amber (wheel slot 48) 146–146 Pale Lavender (wheel slot 49) 147–148 Special Lavender (wheel slot 50) 149–150 Primary Green (wheel slot 51) 151–156 Bright Blue (wheel slot 52) 157–161 Apricot (wheel slot 53) 162–167 Pale Gold (wheel slot 54) 168–171 Deep Oranger (wheel slot 55) 172–173 Bastard Amber (wheel slot 56) 174–174 Flame Red (wheel slot 57) 175–178 Daylight Blue (wheel slot 58) 179–179 Lilac Tint (wheel slot 59) 180–183 Deep Lavender (wheel slot 60) 184–190 Dark Steel Blue (wheel slot 61) 191–206 Congo Blue (wheel slot 62) 207–207 Alice Blue (wheel slot 63)

SH1px - 92ch - shapes + pixel engine RGB (continued)

Ch	Function	Default	DMX values
11	Shutter / Strobe	255	0–3 Closed 4–24 Strobe · str > 0.5–5.45 Hz 25–101 Strobe · str >> 5.7–24.5 Hz 102–103 Strobe · str >>> 24.8–25 Hz 104–107 Open 108–120 pulse > 121–179 pulse >> 180–207 pulse >>> 208–212 Open 213–224 Random · rnd > 1–3.61 Hz 225–239 Random · rnd >> 3.84–7.16 Hz 240–251 Random · rnd >>> 7.39–10 Hz 252–255 Open
12	Dimmer	0	0–254 Closed 255–255 Open
13	Dimmer Fine	0	Fine byte of Dimmer
14	Pan	128	
15	Pan Fine	0	Fine byte of Pan
16	Tilt	128	
17	Tilt Fine	0	Fine byte of Tilt
18	Function	0	0–37 No function 38–42 Linear 43–47 Square 48–52 Inv square 53–57 S-Curve 58–190 No function 1 191–192 Fast 193–194 Smooth 195–255 Function 4
19	Control1	0	0–25 No function 26–76 Zoom reset 77–127 P/T reset 128–255 Total reset
20	Zoom	128	0–127 narrow 128–254 mid 255–255 wide
21	Beam Shaper	0	0–9 Lens < 1 10–20 Lens < 2 21–30 Lens < 3 31–40 Lens < 4 41–51 Lens < 5 52–61 Lens < 6 62–72 Lens < > 73–83 Lens > 1 84–94 Lens > 2 95–104 Lens > 3 105–115 Lens > 4 116–126 Lens > 5 127–127 Lens > 6 128–158 << 159–189 < 190–190 < 191–192 >< 193–223 > 224–254 >> 255–255 >>>

SH1px - 92ch - shapes + pixel engine RGB (continued)

Ch	Function	Default	DMX values
22	Gobo	0	0–7 Open (wheel slot 1) 8–8 Pixel 1 (wheel slot 2) 9–9 Ring 1 (wheel slot 3) 10–10 Ring 2 (wheel slot 4) 11–11 Ring 3 (wheel slot 5) 12–12 Pixel 1+Ring 1 (wheel slot 6) 13–13 Pixel 1+Ring 2 (wheel slot 7) 14–14 Pixel 1+Ring 3 (wheel slot 8) 15–15 Single ring (Ramp -/+) (wheel slot 9) 16–16 Filled rings (ramp -/+) (wheel slot 10) 17–17 Open/Close 1 (wheel slot 11) 18–18 Open/Close 2 (wheel slot 12) 19–19 Random pixels 1 (wheel slot 13) 20–20 Random pixels 2 (wheel slot 14) 21–21 Rainbow 1 (Variable speed) (wheel slot 15) 22–22 Rainbow 2 (Fixed speed with variable color offset) (w… 23–23 Fan (wheel slot 17) 24–24 Bar 1 (wheel slot 18) 25–25 Half moon (wheel slot 19) 26–26 Triangle (wheel slot 20) 27–27 Segment 1 (wheel slot 21) 28–28 Arc 1 (wheel slot 22) 29–29 Arc 2 (wheel slot 23) 30–30 Bar 2 (Variable size) (wheel slot 24) 31–31 Random explosion (wheel slot 25) 32–32 Segment 2 (wheel slot 26) 33–33 x Bump (wheel slot 27) 34–34 Image (wheel slot 28) 35–35 Bumping section (wheel slot 29) 36–36 Ramp by 6 (wheel slot 30) 37–37 Ramp by 4 (wheel slot 31) 38–38 Left/Right scrolling bar (wheel slot 32) 39–39 Up/Down scrolling bar (wheel slot 33) 40–40 Bar 3 (wheel slot 34) 41–41 Vertical arc 1 (wheel slot 35) 42–42 Vertical arc 2 (wheel slot 36) 43–43 Horizontal arc 1 (wheel slot 37) 44–44 Horizontal arc 2 (wheel slot 38) 45–45 Mirrored pixel (wheel slot 39) 46–46 Pixel animation 1 (wheel slot 40) 47–47 Pixel animation 2 (wheel slot 41) 48–48 Pixel animation 3 (wheel slot 42) 49–49 Pixel animation 4 (wheel slot 43) 50–50 Pixel animation 5 (wheel slot 44) 51–51 Semi arc (Ramp /+) (wheel slot 45) 52–52 Bumping arc section (wheel slot 46) 53–53 Pixel animation 6 (wheel slot 47) 54–54 Vertical ramp by 2 (wheel slot 48) 55–55 Following pixel by 2 (wheel slot 49) 56–56 Syncopation (wheel slot 50) 57–57 Bumping 1 (wheel slot 51) 58–58 Bumping 2 (wheel slot 52) 59–59 Bumping 3 (wheel slot 53) 60–60 Vertical pixel scrolling (wheel slot 54) 61–61 Random vertical section (wheel slot 55) 62–62 Random central section (wheel slot 56) 63–63 Random ring 2 (wheel slot 57) 64–64 Random ring 3 (wheel slot 58) 65–65 Random ring 1+3 (wheel slot 59) 66–66 Random ring 2+3 (wheel slot 60) 67–67 Single pixel ring 1 (wheel slot 61) 68–68 Single pixel ring 2 (wheel slot 62) 69–69 Single pixel ring 3 (wheel slot 63) 70–255 Spiral (wheel slot 64)

SH1px - 92ch - shapes + pixel engine RGB (continued)

Ch	Function	Default	DMX values
23	Gobo Rotation	0	0–6 pos 1 7–13 pos 2 14–20 pos 3 21–27 pos 4 28–34 pos 5 35–41 pos 6 42–48 pos 7 49–55 pos 8 56–62 pos 9 63–63 pos 10 64–111 <<< 112–157 << 158–158 < 159–160 >< 161–207 > 208–254 >> 255–255 >>>
24	Shape Fade	0	0–15 Snap 16–113 gamma 05 114–244 gamma 1 245–245 gamma 2 246–255 automatic gamma
25	Red	255	
26	Green	255	
27	Blue	255	
28	White	255	
29	Dimmer	255	0–254 Closed 255–255 Open
30	Dimmer Background	255	0–254 Closed 255–255 Open
31	Shape Transition	0	0–4 No fade 5–72 100 ms 73–112 500 ms 113–170 1 s 171–215 2 s 216–254 3 s 255–255 4 s
32	Shape Offset	0	
33	Shutter / Strobe 2	255	0–3 Closed 4–24 Strobe · str > 0.5–5.45 Hz 25–101 Strobe · str >> 5.7–24.5 Hz 102–103 Strobe · str >>> 24.8–25 Hz 104–107 Open 108–120 pulse > 121–179 pulse >> 180–207 pulse >>> 208–212 Open 213–224 Random · rnd > 1–3.61 Hz 225–239 Random · rnd >> 3.84–7.16 Hz 240–251 Random · rnd >>> 7.39–10 Hz 252–255 Open

SH1px - 92ch - shapes + pixel engine RGB (continued)

Ch	Function	Default	DMX values
34	Shutter / Strobe 2	255	0–3 Closed 4–24 Strobe · str > 0.5–5.45 Hz 25–101 Strobe · str >> 5.7–24.5 Hz 102–103 Strobe · str >>> 24.8–25 Hz 104–107 Open 108–120 pulse > 121–179 pulse >> 180–207 pulse >>> 208–212 Open 213–224 Random · rnd > 1–3.61 Hz 225–239 Random · rnd >> 3.84–7.16 Hz 240–251 Random · rnd >>> 7.39–10 Hz 252–255 Open
35	Gobo 2	0	0–8 No selection (wheel slot 1) 9–9 Pixel 1 (wheel slot 2) 10–10 Ring 2 (wheel slot 3) 11–11 Ring 3 (wheel slot 4) 12–12 Ring 4 (wheel slot 5) 13–13 Pixel 1 + Ring 2 (wheel slot 6) 14–14 Pixel 1 + Ring 2 + Ring 3 (wheel slot 7) 15–15 Pixel 1 + Ring 2 + Ring 3 + Ring 4 (wheel slot 8) 16–16 Ring 2 + Ring 3 + Ring 4 (wheel slot 9) 17–17 Ring 3 + Ring 4 (wheel slot 10) 18–18 Pixel 1 + Ring 4 (wheel slot 11) 19–19 Ring 2 + Ring 3 (wheel slot 12) 20–20 Pixel 1 + Ring 3 (wheel slot 13) 21–21 Ring 2 + Ring 4 (wheel slot 14) 22–22 Pixel 1 + Ring 3 + Ring 4 (wheel slot 15) 23–254 Pixel 1 + Ring 2 + Ring 4 (wheel slot 16) 255–255 No function
36	Red	255	
37	Green	255	
38	Blue	255	

SH2px 111ch - shapes + pixel engine RGBW

39 channels

Ch	Function	Default	DMX values
1	Red	255	
2	Red Fine	255	Fine byte of Red
3	Green	255	
4	Green Fine	255	Fine byte of Green
5	Blue	255	
6	Blue Fine	255	Fine byte of Blue
7	White	255	
8	White Fine	255	Fine byte of White
9	C TO	0	0–9 CTO OFF 10–53 8000 K 54–98 7000 K 99–116 6000 K 117–143 5600 K 144–187 5000 K 188–223 4000 K 224–254 3200 K 255–255 2500 K

SH2px 111ch - shapes + pixel engine RGBW (continued)

Ch	Function	Default	DMX values
10	Color Wheel	0	0–9 No function (wheel slot 66) 10–10 Red (wheel slot 1) 11–11 Green (wheel slot 2) 12–12 Blue (wheel slot 3) 13–13 Cyan (wheel slot 4) 14–14 Yellow (wheel slot 5) 15–15 Magenta (wheel slot 6) 16–16 White 7000 K (wheel slot 7) 17–17 White 3700 K (wheel slot 8) 18–18 White 5000 K (wheel slot 9) 19–19 Black (wheel slot 10) 20–22 Medium Yellow (wheel slot 11) 23–26 Straw Tint (wheel slot 12) 27–28 Surprise Peach (wheel slot 13) 29–29 Fire (wheel slot 14) 30–30 Medium Amber (wheel slot 15) 31–31 Gold Amber (wheel slot 16) 32–34 Dark Amber (wheel slot 17) 35–44 Sunrise Red (wheel slot 18) 45–45 Light Pink (wheel slot 19) 46–48 Medium Pink (wheel slot 20) 49–61 Pink Carnation (wheel slot 21) 62–67 Light Lavender (wheel slot 22) 68–77 Lavender (wheel slot 23) 78–88 Sky Blue (wheel slot 24) 89–99 Just Blue (wheel slot 25) 100–109 Dark yellow green (wheel slot 26) 110–111 Spring Yellow (wheel slot 27) 112–112 Light Amber (wheel slot 28) 113–113 Straw (wheel slot 29) 114–114 Deep Amber (wheel slot 30) 115–116 Orange (wheel slot 31) 117–117 Light Rose (wheel slot 32) 118–118 English Rose (wheel slot 33) 119–119 Light Salmon (wheel slot 34) 120–120 Middle Rose (wheel slot 35) 121–122 Dark Pink (wheel slot 36) 123–124 Magenta 1 (wheel slot 37) 125–125 Peacock Blue (wheel slot 38) 126–126 Med Blu Green (wheel slot 39) 127–127 Steel Blue (wheel slot 40) 128–128 Light Blue (wheel slot 41) 129–130 Dark blue (wheel slot 42) 131–133 Leaf Green (wheel slot 43) 134–135 Dark Green (wheel slot 44) 136–137 Mauve (wheel slot 45) 138–141 Bright Pink (wheel slot 46) 142–144 Medium Blue (wheel slot 47) 145–145 Deep Golden Amber (wheel slot 48) 146–146 Pale Lavender (wheel slot 49) 147–148 Special Lavender (wheel slot 50) 149–150 Primary Green (wheel slot 51) 151–156 Bright Blue (wheel slot 52) 157–161 Apricot (wheel slot 53) 162–167 Pale Gold (wheel slot 54) 168–171 Deep Oranger (wheel slot 55) 172–173 Bastard Amber (wheel slot 56) 174–174 Flame Red (wheel slot 57) 175–178 Daylight Blue (wheel slot 58) 179–179 Lilac Tint (wheel slot 59) 180–183 Deep Lavender (wheel slot 60) 184–190 Dark Steel Blue (wheel slot 61) 191–206 Congo Blue (wheel slot 62) 207–207 Alice Blue (wheel slot 63)

SH2px 111ch - shapes + pixel engine RGBW (continued)

Ch	Function	Default	DMX values
11	Shutter / Strobe	255	0–3 Closed 4–24 Strobe · str > 0.5–5.45 Hz 25–101 Strobe · str >> 5.7–24.5 Hz 102–103 Strobe · str >>> 24.8–25 Hz 104–107 Open 108–120 pulse > 121–179 pulse >> 180–207 pulse >>> 208–212 Open 213–224 Random · rnd > 1–3.61 Hz 225–239 Random · rnd >> 3.84–7.16 Hz 240–251 Random · rnd >>> 7.39–10 Hz 252–255 Open
12	Dimmer	0	0–254 Closed 255–255 Open
13	Dimmer Fine	0	Fine byte of Dimmer
14	Pan	128	
15	Pan Fine	0	Fine byte of Pan
16	Tilt	128	
17	Tilt Fine	0	Fine byte of Tilt
18	Function	0	0–37 No function 38–42 Linear 43–47 Square 48–52 Inv square 53–57 S-Curve 58–190 No function 1 191–192 Fast 193–194 Smooth 195–255 Function 4
19	Control1	0	0–25 No function 26–76 Zoom reset 77–127 P/T reset 128–255 Total reset
20	Zoom	128	0–127 narrow 128–254 mid 255–255 wide
21	Beam Shaper	0	0–9 Lens < 1 10–20 Lens < 2 21–30 Lens < 3 31–40 Lens < 4 41–51 Lens < 5 52–61 Lens < 6 62–72 Lens < > 73–83 Lens > 1 84–94 Lens > 2 95–104 Lens > 3 105–115 Lens > 4 116–126 Lens > 5 127–127 Lens > 6 128–158 << 159–189 < 190–190 < 191–192 >< 193–223 > 224–254 >> 255–255 >>>

SH2px 111ch - shapes + pixel engine RGBW (continued)

Ch	Function	Default	DMX values
22	Gobo	0	0–7 Open (wheel slot 1) 8–8 Pixel 1 (wheel slot 2) 9–9 Ring 1 (wheel slot 3) 10–10 Ring 2 (wheel slot 4) 11–11 Ring 3 (wheel slot 5) 12–12 Pixel 1+Ring 1 (wheel slot 6) 13–13 Pixel 1+Ring 2 (wheel slot 7) 14–14 Pixel 1+Ring 3 (wheel slot 8) 15–15 Single ring (Ramp -/+) (wheel slot 9) 16–16 Filled rings (ramp -/+) (wheel slot 10) 17–17 Open/Close 1 (wheel slot 11) 18–18 Open/Close 2 (wheel slot 12) 19–19 Random pixels 1 (wheel slot 13) 20–20 Random pixels 2 (wheel slot 14) 21–21 Rainbow 1 (Variable speed) (wheel slot 15) 22–22 Rainbow 2 (Fixed speed with variable color offset) (w… 23–23 Fan (wheel slot 17) 24–24 Bar 1 (wheel slot 18) 25–25 Half moon (wheel slot 19) 26–26 Triangle (wheel slot 20) 27–27 Segment 1 (wheel slot 21) 28–28 Arc 1 (wheel slot 22) 29–29 Arc 2 (wheel slot 23) 30–30 Bar 2 (Variable size) (wheel slot 24) 31–31 Random explosion (wheel slot 25) 32–32 Segment 2 (wheel slot 26) 33–33 x Bump (wheel slot 27) 34–34 Image (wheel slot 28) 35–35 Bumping section (wheel slot 29) 36–36 Ramp by 6 (wheel slot 30) 37–37 Ramp by 4 (wheel slot 31) 38–38 Left/Right scrolling bar (wheel slot 32) 39–39 Up/Down scrolling bar (wheel slot 33) 40–40 Bar 3 (wheel slot 34) 41–41 Vertical arc 1 (wheel slot 35) 42–42 Vertical arc 2 (wheel slot 36) 43–43 Horizontal arc 1 (wheel slot 37) 44–44 Horizontal arc 2 (wheel slot 38) 45–45 Mirrored pixel (wheel slot 39) 46–46 Pixel animation 1 (wheel slot 40) 47–47 Pixel animation 2 (wheel slot 41) 48–48 Pixel animation 3 (wheel slot 42) 49–49 Pixel animation 4 (wheel slot 43) 50–50 Pixel animation 5 (wheel slot 44) 51–51 Semi arc (Ramp /+) (wheel slot 45) 52–52 Bumping arc section (wheel slot 46) 53–53 Pixel animation 6 (wheel slot 47) 54–54 Vertical ramp by 2 (wheel slot 48) 55–55 Following pixel by 2 (wheel slot 49) 56–56 Syncopation (wheel slot 50) 57–57 Bumping 1 (wheel slot 51) 58–58 Bumping 2 (wheel slot 52) 59–59 Bumping 3 (wheel slot 53) 60–60 Vertical pixel scrolling (wheel slot 54) 61–61 Random vertical section (wheel slot 55) 62–62 Random central section (wheel slot 56) 63–63 Random ring 2 (wheel slot 57) 64–64 Random ring 3 (wheel slot 58) 65–65 Random ring 1+3 (wheel slot 59) 66–66 Random ring 2+3 (wheel slot 60) 67–67 Single pixel ring 1 (wheel slot 61) 68–68 Single pixel ring 2 (wheel slot 62) 69–69 Single pixel ring 3 (wheel slot 63) 70–255 Spiral (wheel slot 64)

SH2px 111ch - shapes + pixel engine RGBW (continued)

Ch	Function	Default	DMX values
23	Gobo Rotation	0	0–6 pos 1 7–13 pos 2 14–20 pos 3 21–27 pos 4 28–34 pos 5 35–41 pos 6 42–48 pos 7 49–55 pos 8 56–62 pos 9 63–63 pos 10 64–111 <<< 112–157 << 158–158 < 159–160 >< 161–207 > 208–254 >> 255–255 >>>
24	Shape Fade	0	0–15 Snap 16–113 gamma 05 114–244 gamma 1 245–245 gamma 2 246–255 automatic gamma
25	Red	255	
26	Green	255	
27	Blue	255	
28	White	255	
29	Dimmer	255	0–254 Closed 255–255 Open
30	Dimmer Background	255	0–254 Closed 255–255 Open
31	Shape Transition	0	0–4 No fade 5–72 100 ms 73–112 500 ms 113–170 1 s 171–215 2 s 216–254 3 s 255–255 4 s
32	Shape Offset	0	
33	Shutter / Strobe 2	255	0–3 Closed 4–24 Strobe · str > 0.5–5.45 Hz 25–101 Strobe · str >> 5.7–24.5 Hz 102–103 Strobe · str >>> 24.8–25 Hz 104–107 Open 108–120 pulse > 121–179 pulse >> 180–207 pulse >>> 208–212 Open 213–224 Random · rnd > 1–3.61 Hz 225–239 Random · rnd >> 3.84–7.16 Hz 240–251 Random · rnd >>> 7.39–10 Hz 252–255 Open

SH2px 111ch - shapes + pixel engine RGBW (continued)

Ch	Function	Default	DMX values
34	Shutter / Strobe 2	255	0–3 Closed 4–24 Strobe · str > 0.5–5.45 Hz 25–101 Strobe · str >> 5.7–24.5 Hz 102–103 Strobe · str >>> 24.8–25 Hz 104–107 Open 108–120 pulse > 121–179 pulse >> 180–207 pulse >>> 208–212 Open 213–224 Random · rnd > 1–3.61 Hz 225–239 Random · rnd >> 3.84–7.16 Hz 240–251 Random · rnd >>> 7.39–10 Hz 252–255 Open
35	Gobo 2	0	0–8 No selection (wheel slot 1) 9–9 Pixel 1 (wheel slot 2) 10–10 Ring 2 (wheel slot 3) 11–11 Ring 3 (wheel slot 4) 12–12 Ring 4 (wheel slot 5) 13–13 Pixel 1 + Ring 2 (wheel slot 6) 14–14 Pixel 1 + Ring 2 + Ring 3 (wheel slot 7) 15–15 Pixel 1 + Ring 2 + Ring 3 + Ring 4 (wheel slot 8) 16–16 Ring 2 + Ring 3 + Ring 4 (wheel slot 9) 17–17 Ring 3 + Ring 4 (wheel slot 10) 18–18 Pixel 1 + Ring 4 (wheel slot 11) 19–19 Ring 2 + Ring 3 (wheel slot 12) 20–20 Pixel 1 + Ring 3 (wheel slot 13) 21–21 Ring 2 + Ring 4 (wheel slot 14) 22–22 Pixel 1 + Ring 3 + Ring 4 (wheel slot 15) 23–254 Pixel 1 + Ring 2 + Ring 4 (wheel slot 16) 255–255 No function
36	Red	255	
37	Green	255	
38	Blue	255	
39	White	255	

R1px - 95ch - rings + pixel engine RGB

41 channels

Ch	Function	Default	DMX values
1	Pan	127	
2	Pan Fine	255	Fine byte of Pan
3	Tilt	127	
4	Tilt Fine	127	Fine byte of Tilt
5	Position MSpeed	0	0–254 fast 255–255 slow

R1px - 95ch - rings + pixel engine RGB (continued)

Ch	Function	Default	DMX values
6	Control1	0	0–19 No function 20–21 Linear 22–23 Square 24–25 Inv square 26–27 S-Curve 28–129 No function 1 130–131 Fast 132–133 Smooth 134–139 No function 2 140–149 P/T reset 150–179 No function 3 180–189 Zoom reset 190–199 No function 4 200–209 Total reset 210–255 No function 5
7	Red	255	
8	Red Fine	255	Fine byte of Red
9	Green	255	
10	Green Fine	255	Fine byte of Green
11	Blue	255	
12	Blue Fine	255	Fine byte of Blue
13	White	0	
14	White Fine	0	Fine byte of White
15	Red	255	
16	Red Fine	255	Fine byte of Red
17	Green	255	
18	Green Fine	255	Fine byte of Green
19	Blue	255	
20	Blue Fine	255	Fine byte of Blue
21	White	0	
22	White Fine	0	Fine byte of White
23	Red	255	
24	Red Fine	255	Fine byte of Red
25	Green	255	
26	Green Fine	255	Fine byte of Green
27	Blue	255	
28	Blue Fine	255	Fine byte of Blue
29	White	0	
30	White Fine	0	Fine byte of White
31	C TO	0	0–9 CTO OFF 10–53 8000 K 54–98 7000 K 99–116 6000 K 117–143 5600 K 144–187 5000 K 188–223 4000 K 224–254 3200 K 255–255 2500 K

R1px - 95ch - rings + pixel engine RGB (continued)

Ch	Function	Default	DMX values
32	Color Macro1	0	0–0 No function 1–3 2700K 4–6 3200K 7–9 4200K 10–12 5600K 13–15 8000K 16–55 Blue 56–95 Cyan 96–96 Green 97–174 Yellow 175–214 Red 215–246 Magenta 247–247 Blue 248–248 Fade rainbow 249–249 Chase rainbow 250–250 Effect 1 251–251 Effect 2 252–252 Effect 3 253–253 Effect 4 254–254 Effect 5 255–255 Effect 6
33	Beam Shaper	0	0–9 Lens < 1 10–20 Lens < 2 21–30 Lens < 3 31–40 Lens < 4 41–51 Lens < 5 52–61 Lens < 6 62–72 Lens < > 73–83 Lens > 1 84–94 Lens > 2 95–104 Lens > 3 105–115 Lens > 4 116–126 Lens > 5 127–127 Lens > 6 128–158 << 159–189 < 190–190 < 191–192 >< 193–223 > 224–254 >> 255–255 >>>
34	Zoom	128	0–127 narrow 128–254 mid 255–255 wide
35	Zoom Fine	128	Fine byte of Zoom

R1px - 95ch - rings + pixel engine RGB (continued)

Ch	Function	Default	DMX values
36	Shutter / Strobe	255	0–31 Closed 32–62 Strobe 3 zone · slow 0.5–19.4 Hz 63–63 Strobe 3 zone · fast 20 Hz 64–94 Strobe all zones · slow 0.5–0.984 Hz 95–95 Strobe all zones · fast 1 Hz 96–110 CCW slow 111–111 CCW fast 112–126 CW fast 127–127 CW slow 128–142 slow 143–143 fast 144–158 slow 159–159 fast 160–174 Strobe random zones · slow 0.5–18.7 Hz 175–175 Strobe random zones · fast 20 Hz 176–190 Random strobe random zones · slow 0.5–18.7 Hz 191–191 Random strobe random zones · fast 20 Hz 192–222 Random strobe all zones · slow 0.5–19.4 Hz 223–223 Random strobe all zones · fast 20 Hz 224–255 Open
37	Dimmer	0	0–254 Closed 255–255 Open
38	Dimmer Fine	0	Fine byte of Dimmer
39	Red	255	
40	Green	255	
41	Blue	255	

R2px - 114ch - rings + pixel engine RGBW

42 channels

Ch	Function	Default	DMX values
1	Pan	127	
2	Pan Fine	255	Fine byte of Pan
3	Tilt	127	
4	Tilt Fine	127	Fine byte of Tilt
5	Position MSpeed	0	0–254 fast 255–255 slow
6	Control1	0	0–19 No function 20–21 Linear 22–23 Square 24–25 Inv square 26–27 S-Curve 28–129 No function 1 130–131 Fast 132–133 Smooth 134–139 No function 2 140–149 P/T reset 150–179 No function 3 180–189 Zoom reset 190–199 No function 4 200–209 Total reset 210–255 No function 5
7	Red	255	
8	Red Fine	255	Fine byte of Red
9	Green	255	
10	Green Fine	255	Fine byte of Green

R2px - 114ch - rings + pixel engine RGBW (continued)

Ch	Function	Default	DMX values
11	Blue	255	
12	Blue Fine	255	Fine byte of Blue
13	White	0	
14	White Fine	0	Fine byte of White
15	Red	255	
16	Red Fine	255	Fine byte of Red
17	Green	255	
18	Green Fine	255	Fine byte of Green
19	Blue	255	
20	Blue Fine	255	Fine byte of Blue
21	White	0	
22	White Fine	0	Fine byte of White
23	Red	255	
24	Red Fine	255	Fine byte of Red
25	Green	255	
26	Green Fine	255	Fine byte of Green
27	Blue	255	
28	Blue Fine	255	Fine byte of Blue
29	White	0	
30	White Fine	0	Fine byte of White
31	C TO	0	0–9 CTO OFF 10–53 8000 K 54–98 7000 K 99–116 6000 K 117–143 5600 K 144–187 5000 K 188–223 4000 K 224–254 3200 K 255–255 2500 K
32	Color Macro1	0	0–0 No function 1–3 2700K 4–6 3200K 7–9 4200K 10–12 5600K 13–15 8000K 16–55 Blue 56–95 Cyan 96–96 Green 97–174 Yellow 175–214 Red 215–246 Magenta 247–247 Blue 248–248 Fade rainbow 249–249 Chase rainbow 250–250 Effect 1 251–251 Effect 2 252–252 Effect 3 253–253 Effect 4 254–254 Effect 5 255–255 Effect 6

R2px - 114ch - rings + pixel engine RGBW (continued)

Ch	Function	Default	DMX values
33	Beam Shaper	0	0–9 Lens < 1 10–20 Lens < 2 21–30 Lens < 3 31–40 Lens < 4 41–51 Lens < 5 52–61 Lens < 6 62–72 Lens < > 73–83 Lens > 1 84–94 Lens > 2 95–104 Lens > 3 105–115 Lens > 4 116–126 Lens > 5 127–127 Lens > 6 128–158 <<< 159–189 << 190–190 < 191–192 >< 193–223 > 224–254 >> 255–255 >>>
34	Zoom	128	0–127 narrow 128–254 mid 255–255 wide
35	Zoom Fine	128	Fine byte of Zoom
36	Shutter / Strobe	255	0–31 Closed 32–62 Strobe 3 zone · slow 0.5–19.4 Hz 63–63 Strobe 3 zone · fast 20 Hz 64–94 Strobe all zones · slow 0.5–0.984 Hz 95–95 Strobe all zones · fast 1 Hz 96–110 CCW slow 111–111 CCW fast 112–126 CW fast 127–127 CW slow 128–142 slow 143–143 fast 144–158 slow 159–159 fast 160–174 Strobe random zones · slow 0.5–18.7 Hz 175–175 Strobe random zones · fast 20 Hz 176–190 Random strobe random zones · slow 0.5–18.7 Hz 191–191 Random strobe random zones · fast 20 Hz 192–222 Random strobe all zones · slow 0.5–19.4 Hz 223–223 Random strobe all zones · fast 20 Hz 224–255 Open
37	Dimmer	0	0–254 Closed 255–255 Open
38	Dimmer Fine	0	Fine byte of Dimmer
39	Red	255	
40	Green	255	
41	Blue	255	
42	White	0	

43ch - old firmware

43 channels

Ch	Function	Default	DMX values
1	Red	255	
2	Red Fine	255	Fine byte of Red

43ch - old firmware (continued)

Ch	Function	Default	DMX values
3	Green	255	
4	Green Fine	255	Fine byte of Green
5	Blue	255	
6	Blue Fine	255	Fine byte of Blue
7	White	255	
8	White Fine	255	Fine byte of White
9	C TO	0	0–9 CTO OFF 10–53 8000 K 54–98 7000 K 99–116 6000 K 117–143 5600 K 144–187 5000 K 188–223 4000 K 224–254 3200 K 255–255 2500 K

43ch - old firmware (continued)

Ch	Function	Default	DMX values
10	Color Wheel	0	0–9 No function (wheel slot 66) 10–10 Red (wheel slot 1) 11–11 Green (wheel slot 2) 12–12 Blue (wheel slot 3) 13–13 Cyan (wheel slot 4) 14–14 Yellow (wheel slot 5) 15–15 Magenta (wheel slot 6) 16–16 White 7000 K (wheel slot 7) 17–17 White 3700 K (wheel slot 8) 18–18 White 5000 K (wheel slot 9) 19–19 Black (wheel slot 10) 20–22 Medium Yellow (wheel slot 11) 23–26 Straw Tint (wheel slot 12) 27–28 Surprise Peach (wheel slot 13) 29–29 Fire (wheel slot 14) 30–30 Medium Amber (wheel slot 15) 31–31 Gold Amber (wheel slot 16) 32–34 Dark Amber (wheel slot 17) 35–44 Sunrise Red (wheel slot 18) 45–45 Light Pink (wheel slot 19) 46–48 Medium Pink (wheel slot 20) 49–61 Pink Carnation (wheel slot 21) 62–67 Light Lavender (wheel slot 22) 68–77 Lavender (wheel slot 23) 78–88 Sky Blue (wheel slot 24) 89–99 Just Blue (wheel slot 25) 100–109 Dark yellow green (wheel slot 26) 110–111 Spring Yellow (wheel slot 27) 112–112 Light Amber (wheel slot 28) 113–113 Straw (wheel slot 29) 114–114 Deep Amber (wheel slot 30) 115–116 Orange (wheel slot 31) 117–117 Light Rose (wheel slot 32) 118–118 English Rose (wheel slot 33) 119–119 Light Salmon (wheel slot 34) 120–120 Middle Rose (wheel slot 35) 121–122 Dark Pink (wheel slot 36) 123–124 Magenta 1 (wheel slot 37) 125–125 Peacock Blue (wheel slot 38) 126–126 Med Blu Green (wheel slot 39) 127–127 Steel Blue (wheel slot 40) 128–128 Light Blue (wheel slot 41) 129–130 Dark blue (wheel slot 42) 131–133 Leaf Green (wheel slot 43) 134–135 Dark Green (wheel slot 44) 136–137 Mauve (wheel slot 45) 138–141 Bright Pink (wheel slot 46) 142–144 Medium Blue (wheel slot 47) 145–145 Deep Golden Amber (wheel slot 48) 146–146 Pale Lavender (wheel slot 49) 147–148 Special Lavender (wheel slot 50) 149–150 Primary Green (wheel slot 51) 151–156 Bright Blue (wheel slot 52) 157–161 Apricot (wheel slot 53) 162–167 Pale Gold (wheel slot 54) 168–171 Deep Oranger (wheel slot 55) 172–173 Bastard Amber (wheel slot 56) 174–174 Flame Red (wheel slot 57) 175–178 Daylight Blue (wheel slot 58) 179–179 Lilac Tint (wheel slot 59) 180–183 Deep Lavender (wheel slot 60) 184–190 Dark Steel Blue (wheel slot 61) 191–206 Congo Blue (wheel slot 62) 207–207 Alice Blue (wheel slot 63)

43ch - old firmware (continued)

Ch	Function	Default	DMX values
11	Shutter / Strobe	255	0–3 Closed 4–24 Strobe · str > 0.5–5.45 Hz 25–101 Strobe · str >> 5.7–24.5 Hz 102–103 Strobe · str >>> 24.8–25 Hz 104–107 Open 108–120 pulse > 121–179 pulse >> 180–207 pulse >>> 208–212 Open 213–224 Random · rnd > 1–3.61 Hz 225–239 Random · rnd >> 3.84–7.16 Hz 240–251 Random · rnd >>> 7.39–10 Hz 252–255 Open
12	Dimmer	0	0–254 Closed 255–255 Open
13	Dimmer Fine	0	Fine byte of Dimmer
14	Pan	128	
15	Pan Fine	0	Fine byte of Pan
16	Tilt	128	
17	Tilt Fine	0	Fine byte of Tilt
18	Function	0	0–37 No function 38–42 Linear 43–47 Square 48–52 Inv square 53–57 S-Curve 58–190 No function 1 191–192 Fast 193–194 Smooth 195–255 Function 4
19	Control1	0	0–25 No function 26–76 Zoom reset 77–127 P/T reset 128–255 Total reset
20	Zoom	128	0–127 narrow 128–254 mid 255–255 wide
21	Beam Shaper	0	0–9 Lens < 1 10–20 Lens < 2 21–30 Lens < 3 31–40 Lens < 4 41–51 Lens < 5 52–61 Lens < 6 62–72 Lens < > 73–83 Lens > 1 84–94 Lens > 2 95–104 Lens > 3 105–115 Lens > 4 116–126 Lens > 5 127–127 Lens > 6 128–158 << 159–189 < 190–190 < 191–192 >< 193–223 > 224–254 >> 255–255 >>>

43ch - old firmware (continued)

Ch	Function	Default	DMX values
22	Gobo	0	0–7 Open (wheel slot 1) 8–8 Pixel 1 (wheel slot 2) 9–9 Ring 1 (wheel slot 3) 10–10 Ring 2 (wheel slot 4) 11–11 Ring 3 (wheel slot 5) 12–12 Pixel 1+Ring 1 (wheel slot 6) 13–13 Pixel 1+Ring 2 (wheel slot 7) 14–14 Pixel 1+Ring 3 (wheel slot 8) 15–15 Single ring (Ramp -/+) (wheel slot 9) 16–16 Filled rings (ramp -/+) (wheel slot 10) 17–17 Open/Close 1 (wheel slot 11) 18–18 Open/Close 2 (wheel slot 12) 19–19 Random pixels 1 (wheel slot 13) 20–20 Random pixels 2 (wheel slot 14) 21–21 Rainbow 1 (Variable speed) (wheel slot 15) 22–22 Rainbow 2 (Fixed speed with variable color offset) (w… 23–23 Fan (wheel slot 17) 24–24 Bar 1 (wheel slot 18) 25–25 Half moon (wheel slot 19) 26–26 Triangle (wheel slot 20) 27–27 Segment 1 (wheel slot 21) 28–28 Arc 1 (wheel slot 22) 29–29 Arc 2 (wheel slot 23) 30–30 Bar 2 (Variable size) (wheel slot 24) 31–31 Random explosion (wheel slot 25) 32–32 Segment 2 (wheel slot 26) 33–33 x Bump (wheel slot 27) 34–34 Image (wheel slot 28) 35–35 Bumping section (wheel slot 29) 36–36 Ramp by 6 (wheel slot 30) 37–37 Ramp by 4 (wheel slot 31) 38–38 Left/Right scrolling bar (wheel slot 32) 39–39 Up/Down scrolling bar (wheel slot 33) 40–40 Bar 3 (wheel slot 34) 41–41 Vertical arc 1 (wheel slot 35) 42–42 Vertical arc 2 (wheel slot 36) 43–43 Horizontal arc 1 (wheel slot 37) 44–44 Horizontal arc 2 (wheel slot 38) 45–45 Mirrored pixel (wheel slot 39) 46–46 Pixel animation 1 (wheel slot 40) 47–47 Pixel animation 2 (wheel slot 41) 48–48 Pixel animation 3 (wheel slot 42) 49–49 Pixel animation 4 (wheel slot 43) 50–50 Pixel animation 5 (wheel slot 44) 51–51 Semi arc (Ramp /+) (wheel slot 45) 52–52 Bumping arc section (wheel slot 46) 53–53 Pixel animation 6 (wheel slot 47) 54–54 Vertical ramp by 2 (wheel slot 48) 55–55 Following pixel by 2 (wheel slot 49) 56–56 Syncopation (wheel slot 50) 57–57 Bumping 1 (wheel slot 51) 58–58 Bumping 2 (wheel slot 52) 59–59 Bumping 3 (wheel slot 53) 60–60 Vertical pixel scrolling (wheel slot 54) 61–61 Random vertical section (wheel slot 55) 62–62 Random central section (wheel slot 56) 63–63 Random ring 2 (wheel slot 57) 64–64 Random ring 3 (wheel slot 58) 65–65 Random ring 1+3 (wheel slot 59) 66–66 Random ring 2+3 (wheel slot 60) 67–67 Single pixel ring 1 (wheel slot 61) 68–68 Single pixel ring 2 (wheel slot 62) 69–69 Single pixel ring 3 (wheel slot 63) 70–255 Spiral (wheel slot 64)

43ch - old firmware (continued)

Ch	Function	Default	DMX values
23	Gobo Rotation	0	0–6 pos 1 7–13 pos 2 14–20 pos 3 21–27 pos 4 28–34 pos 5 35–41 pos 6 42–48 pos 7 49–55 pos 8 56–62 pos 9 63–63 pos 10 64–111 <<< 112–157 << 158–158 < 159–160 >< 161–207 > 208–254 >> 255–255 >>>
24	Shape Fade	0	0–15 Snap 16–113 gamma 05 114–244 gamma 1 245–245 gamma 2 246–255 automatic gamma
25	Red	255	
26	Green	255	
27	Blue	255	
28	White	255	
29	Dimmer	255	0–254 Closed 255–255 Open
30	Dimmer Background	255	0–254 Closed 255–255 Open
31	Shape Transition	0	0–4 No fade 5–72 100 ms 73–112 500 ms 113–170 1 s 171–215 2 s 216–254 3 s 255–255 4 s
32	Shape Offset	0	
33	Shutter / Strobe 2	255	0–3 Closed 4–24 Strobe · str > 0.5–5.45 Hz 25–101 Strobe · str >> 5.7–24.5 Hz 102–103 Strobe · str >>> 24.8–25 Hz 104–107 Open 108–120 pulse > 121–179 pulse >> 180–207 pulse >>> 208–212 Open 213–224 Random · rnd > 1–3.61 Hz 225–239 Random · rnd >> 3.84–7.16 Hz 240–251 Random · rnd >>> 7.39–10 Hz 252–255 Open

43ch - old firmware (continued)

Ch	Function	Default	DMX values
34	Shutter / Strobe 2	255	0–3 Closed 4–24 Strobe · str > 0.5–5.45 Hz 25–101 Strobe · str >> 5.7–24.5 Hz 102–103 Strobe · str >>> 24.8–25 Hz 104–107 Open 108–120 pulse > 121–179 pulse >> 180–207 pulse >>> 208–212 Open 213–224 Random · rnd > 1–3.61 Hz 225–239 Random · rnd >> 3.84–7.16 Hz 240–251 Random · rnd >>> 7.39–10 Hz 252–255 Open
35	Gobo 2	0	0–8 No selection (wheel slot 1) 9–9 Pixel 1 (wheel slot 2) 10–10 Ring 2 (wheel slot 3) 11–11 Ring 3 (wheel slot 4) 12–12 Ring 4 (wheel slot 5) 13–13 Pixel 1 + Ring 2 (wheel slot 6) 14–14 Pixel 1 + Ring 2 + Ring 3 (wheel slot 7) 15–15 Pixel 1 + Ring 2 + Ring 3 + Ring 4 (wheel slot 8) 16–16 Ring 2 + Ring 3 + Ring 4 (wheel slot 9) 17–17 Ring 3 + Ring 4 (wheel slot 10) 18–18 Pixel 1 + Ring 4 (wheel slot 11) 19–19 Ring 2 + Ring 3 (wheel slot 12) 20–20 Pixel 1 + Ring 3 (wheel slot 13) 21–21 Ring 2 + Ring 4 (wheel slot 14) 22–22 Pixel 1 + Ring 3 + Ring 4 (wheel slot 15) 23–254 Pixel 1 + Ring 2 + Ring 4 (wheel slot 16) 255–255 No function
36	Dummy	0	
37	Dimmer	0	0–254 Closed 255–255 Open
38	Shutter / Strobe 3	255	0–3 Closed 4–24 Strobe · str > 0.5–5.45 Hz 25–101 Strobe · str >> 5.7–24.5 Hz 102–103 Strobe · str >>> 24.8–25 Hz 104–107 Open 108–120 pulse > 121–179 pulse >> 180–207 pulse >>> 208–212 Open 213–224 Random · rnd > 1–3.61 Hz 225–239 Random · rnd >> 3.84–7.16 Hz 240–251 Random · rnd >>> 7.39–10 Hz 252–255 Open
39	Red	255	
40	Green	255	
41	Blue	255	

43ch - old firmware (continued)

Ch	Function	Default	DMX values
42	Gobo 3	0	0–7 Open (wheel slot 1) 8–8 Shape 1 (wheel slot 2) 9–9 Shape 2 (wheel slot 3) 10–10 Shape 3 (wheel slot 4) 11–11 Shape 4 (wheel slot 5) 12–12 Shape 5 (wheel slot 6) 13–13 Shape 6 (wheel slot 7) 14–14 Shape 7 (wheel slot 8) 15–15 Shape 8 (wheel slot 9) 16–16 Shape 9 (wheel slot 10) 17–17 Shape 10 (wheel slot 11) 18–18 Shape 11 (wheel slot 12) 19–19 Shape 12 (wheel slot 13) 20–20 Shape 13 (wheel slot 14) 21–21 Shape 14 (wheel slot 15) 22–22 Shape 15 (wheel slot 16) 23–23 Shape 16 (wheel slot 17) 24–24 Shape 17 (wheel slot 18) 25–25 Shape 18 (wheel slot 19) 26–26 Shape 19 (wheel slot 20) 27–27 Shape 20 (wheel slot 21) 28–28 Shape 21 (wheel slot 22) 29–29 Shape 22 (wheel slot 23) 30–30 Shape 23 (wheel slot 24) 31–31 Shape 24 (wheel slot 25) 32–32 Shape 25 (wheel slot 26) 33–33 Shape 26 (wheel slot 27) 34–34 Shape 27 (wheel slot 28) 35–35 Shape 28 (wheel slot 29) 36–36 Shape 29 (wheel slot 30) 37–255 Shape 30 (wheel slot 31)
43	Gobo Rotation 3	0	0–6 pos 1 7–13 pos 2 14–20 pos 3 21–27 pos 4 28–34 pos 5 35–41 pos 6 42–48 pos 7 49–55 pos 8 56–62 pos 9 63–63 pos 10 64–111 << 112–157 < 158–158 < 159–160 >< 161–207 > 208–254 >> 255–255 >>>

SHAPEo - 45ch - SHAPES+OUTLINE v2

45 channels

Ch	Function	Default	DMX values
1	Red	255	
2	Red Fine	255	Fine byte of Red
3	Green	255	
4	Green Fine	255	Fine byte of Green
5	Blue	255	
6	Blue Fine	255	Fine byte of Blue
7	White	255	

SHAPEo - 45ch - SHAPES+OUTLINE v2 (continued)

Ch	Function	Default	DMX values
8	White Fine	255	Fine byte of White
9	C TO	0	0–9 CTO OFF 10–53 8000 K 54–98 7000 K 99–116 6000 K 117–143 5600 K 144–187 5000 K 188–223 4000 K 224–254 3200 K 255–255 2500 K

SHAPEo - 45ch - SHAPES+OUTLINE v2 (continued)

Ch	Function	Default	DMX values
10	Color Wheel	0	0–9 No function (wheel slot 66) 10–10 Red (wheel slot 1) 11–11 Green (wheel slot 2) 12–12 Blue (wheel slot 3) 13–13 Cyan (wheel slot 4) 14–14 Yellow (wheel slot 5) 15–15 Magenta (wheel slot 6) 16–16 White 7000 K (wheel slot 7) 17–17 White 3700 K (wheel slot 8) 18–18 White 5000 K (wheel slot 9) 19–19 Black (wheel slot 10) 20–22 Medium Yellow (wheel slot 11) 23–26 Straw Tint (wheel slot 12) 27–28 Surprise Peach (wheel slot 13) 29–29 Fire (wheel slot 14) 30–30 Medium Amber (wheel slot 15) 31–31 Gold Amber (wheel slot 16) 32–34 Dark Amber (wheel slot 17) 35–44 Sunrise Red (wheel slot 18) 45–45 Light Pink (wheel slot 19) 46–48 Medium Pink (wheel slot 20) 49–61 Pink Carnation (wheel slot 21) 62–67 Light Lavender (wheel slot 22) 68–77 Lavender (wheel slot 23) 78–88 Sky Blue (wheel slot 24) 89–99 Just Blue (wheel slot 25) 100–109 Dark yellow green (wheel slot 26) 110–111 Spring Yellow (wheel slot 27) 112–112 Light Amber (wheel slot 28) 113–113 Straw (wheel slot 29) 114–114 Deep Amber (wheel slot 30) 115–116 Orange (wheel slot 31) 117–117 Light Rose (wheel slot 32) 118–118 English Rose (wheel slot 33) 119–119 Light Salmon (wheel slot 34) 120–120 Middle Rose (wheel slot 35) 121–122 Dark Pink (wheel slot 36) 123–124 Magenta 1 (wheel slot 37) 125–125 Peacock Blue (wheel slot 38) 126–126 Med Blu Green (wheel slot 39) 127–127 Steel Blue (wheel slot 40) 128–128 Light Blue (wheel slot 41) 129–130 Dark blue (wheel slot 42) 131–133 Leaf Green (wheel slot 43) 134–135 Dark Green (wheel slot 44) 136–137 Mauve (wheel slot 45) 138–141 Bright Pink (wheel slot 46) 142–144 Medium Blue (wheel slot 47) 145–145 Deep Golden Amber (wheel slot 48) 146–146 Pale Lavender (wheel slot 49) 147–148 Special Lavender (wheel slot 50) 149–150 Primary Green (wheel slot 51) 151–156 Bright Blue (wheel slot 52) 157–161 Apricot (wheel slot 53) 162–167 Pale Gold (wheel slot 54) 168–171 Deep Oranger (wheel slot 55) 172–173 Bastard Amber (wheel slot 56) 174–174 Flame Red (wheel slot 57) 175–178 Daylight Blue (wheel slot 58) 179–179 Lilac Tint (wheel slot 59) 180–183 Deep Lavender (wheel slot 60) 184–190 Dark Steel Blue (wheel slot 61) 191–206 Congo Blue (wheel slot 62) 207–207 Alice Blue (wheel slot 63)

SHAPEo - 45ch - SHAPES+OUTLINE v2 (continued)

Ch	Function	Default	DMX values
11	Shutter / Strobe	255	0–3 Closed 4–24 Strobe · str > 0.5–5.45 Hz 25–101 Strobe · str >> 5.7–24.5 Hz 102–103 Strobe · str >>> 24.8–25 Hz 104–107 Open 108–120 pulse > 121–179 pulse >> 180–207 pulse >>> 208–212 Open 213–224 Random · rnd > 1–3.61 Hz 225–239 Random · rnd >> 3.84–7.16 Hz 240–251 Random · rnd >>> 7.39–10 Hz 252–255 Open
12	Dimmer	0	0–254 Closed 255–255 Open
13	Dimmer Fine	0	Fine byte of Dimmer
14	Pan	128	
15	Pan Fine	0	Fine byte of Pan
16	Tilt	128	
17	Tilt Fine	0	Fine byte of Tilt
18	Function	0	0–37 No function 38–42 Linear 43–47 Square 48–52 Inv square 53–57 S-Curve 58–190 No function 1 191–192 Fast 193–194 Smooth 195–255 Function 4
19	Control1	0	0–25 No function 26–76 Zoom reset 77–127 P/T reset 128–255 Total reset
20	Zoom	128	0–127 narrow 128–254 mid 255–255 wide
21	Beam Shaper	0	0–9 Lens < 1 10–20 Lens < 2 21–30 Lens < 3 31–40 Lens < 4 41–51 Lens < 5 52–61 Lens < 6 62–72 Lens < > 73–83 Lens > 1 84–94 Lens > 2 95–104 Lens > 3 105–115 Lens > 4 116–126 Lens > 5 127–127 Lens > 6 128–158 << 159–189 < 190–190 < 191–192 >< 193–223 > 224–254 >> 255–255 >>>

SHAPEo - 45ch - SHAPES+OUTLINE v2 (continued)

Ch	Function	Default	DMX values
22	Gobo	0	0–7 Open (wheel slot 1) 8–8 Pixel 1 (wheel slot 2) 9–9 Ring 1 (wheel slot 3) 10–10 Ring 2 (wheel slot 4) 11–11 Ring 3 (wheel slot 5) 12–12 Pixel 1+Ring 1 (wheel slot 6) 13–13 Pixel 1+Ring 2 (wheel slot 7) 14–14 Pixel 1+Ring 3 (wheel slot 8) 15–15 Single ring (Ramp -/+) (wheel slot 9) 16–16 Filled rings (ramp -/+) (wheel slot 10) 17–17 Open/Close 1 (wheel slot 11) 18–18 Open/Close 2 (wheel slot 12) 19–19 Random pixels 1 (wheel slot 13) 20–20 Random pixels 2 (wheel slot 14) 21–21 Rainbow 1 (Variable speed) (wheel slot 15) 22–22 Rainbow 2 (Fixed speed with variable color offset) (w… 23–23 Fan (wheel slot 17) 24–24 Bar 1 (wheel slot 18) 25–25 Half moon (wheel slot 19) 26–26 Triangle (wheel slot 20) 27–27 Segment 1 (wheel slot 21) 28–28 Arc 1 (wheel slot 22) 29–29 Arc 2 (wheel slot 23) 30–30 Bar 2 (Variable size) (wheel slot 24) 31–31 Random explosion (wheel slot 25) 32–32 Segment 2 (wheel slot 26) 33–33 x Bump (wheel slot 27) 34–34 Image (wheel slot 28) 35–35 Bumping section (wheel slot 29) 36–36 Ramp by 6 (wheel slot 30) 37–37 Ramp by 4 (wheel slot 31) 38–38 Left/Right scrolling bar (wheel slot 32) 39–39 Up/Down scrolling bar (wheel slot 33) 40–40 Bar 3 (wheel slot 34) 41–41 Vertical arc 1 (wheel slot 35) 42–42 Vertical arc 2 (wheel slot 36) 43–43 Horizontal arc 1 (wheel slot 37) 44–44 Horizontal arc 2 (wheel slot 38) 45–45 Mirrored pixel (wheel slot 39) 46–46 Pixel animation 1 (wheel slot 40) 47–47 Pixel animation 2 (wheel slot 41) 48–48 Pixel animation 3 (wheel slot 42) 49–49 Pixel animation 4 (wheel slot 43) 50–50 Pixel animation 5 (wheel slot 44) 51–51 Semi arc (Ramp /+) (wheel slot 45) 52–52 Bumping arc section (wheel slot 46) 53–53 Pixel animation 6 (wheel slot 47) 54–54 Vertical ramp by 2 (wheel slot 48) 55–55 Following pixel by 2 (wheel slot 49) 56–56 Syncopation (wheel slot 50) 57–57 Bumping 1 (wheel slot 51) 58–58 Bumping 2 (wheel slot 52) 59–59 Bumping 3 (wheel slot 53) 60–60 Vertical pixel scrolling (wheel slot 54) 61–61 Random vertical section (wheel slot 55) 62–62 Random central section (wheel slot 56) 63–63 Random ring 2 (wheel slot 57) 64–64 Random ring 3 (wheel slot 58) 65–65 Random ring 1+3 (wheel slot 59) 66–66 Random ring 2+3 (wheel slot 60) 67–67 Single pixel ring 1 (wheel slot 61) 68–68 Single pixel ring 2 (wheel slot 62) 69–69 Single pixel ring 3 (wheel slot 63) 70–255 Spiral (wheel slot 64)

SHAPEo - 45ch - SHAPES+OUTLINE v2 (continued)

Ch	Function	Default	DMX values
23	Gobo Rotation	0	0–6 pos 1 7–13 pos 2 14–20 pos 3 21–27 pos 4 28–34 pos 5 35–41 pos 6 42–48 pos 7 49–55 pos 8 56–62 pos 9 63–63 pos 10 64–111 <<< 112–157 << 158–158 < 159–160 >< 161–207 > 208–254 >> 255–255 >>>
24	Shape Fade	0	0–15 Snap 16–113 gamma 05 114–244 gamma 1 245–245 gamma 2 246–255 automatic gamma
25	Red	255	
26	Green	255	
27	Blue	255	
28	White	255	
29	Dimmer	255	0–254 Closed 255–255 Open
30	Dimmer Background	255	0–254 Closed 255–255 Open
31	Shape Transition	0	0–4 No fade 5–72 100 ms 73–112 500 ms 113–170 1 s 171–215 2 s 216–254 3 s 255–255 4 s
32	Shape Offset	0	
33	Shutter / Strobe 2	255	0–3 Closed 4–24 Strobe · str > 0.5–5.45 Hz 25–101 Strobe · str >> 5.7–24.5 Hz 102–103 Strobe · str >>> 24.8–25 Hz 104–107 Open 108–120 pulse > 121–179 pulse >> 180–207 pulse >>> 208–212 Open 213–224 Random · rnd > 1–3.61 Hz 225–239 Random · rnd >> 3.84–7.16 Hz 240–251 Random · rnd >>> 7.39–10 Hz 252–255 Open

SHAPEo - 45ch - SHAPES+OUTLINE v2 (continued)

Ch	Function	Default	DMX values
34	Shutter / Strobe 2	255	0–3 Closed 4–24 Strobe · str > 0.5–5.45 Hz 25–101 Strobe · str >> 5.7–24.5 Hz 102–103 Strobe · str >>> 24.8–25 Hz 104–107 Open 108–120 pulse > 121–179 pulse >> 180–207 pulse >>> 208–212 Open 213–224 Random · rnd > 1–3.61 Hz 225–239 Random · rnd >> 3.84–7.16 Hz 240–251 Random · rnd >>> 7.39–10 Hz 252–255 Open
35	Gobo 2	0	0–8 No selection (wheel slot 1) 9–9 Pixel 1 (wheel slot 2) 10–10 Ring 2 (wheel slot 3) 11–11 Ring 3 (wheel slot 4) 12–12 Ring 4 (wheel slot 5) 13–13 Pixel 1 + Ring 2 (wheel slot 6) 14–14 Pixel 1 + Ring 2 + Ring 3 (wheel slot 7) 15–15 Pixel 1 + Ring 2 + Ring 3 + Ring 4 (wheel slot 8) 16–16 Ring 2 + Ring 3 + Ring 4 (wheel slot 9) 17–17 Ring 3 + Ring 4 (wheel slot 10) 18–18 Pixel 1 + Ring 4 (wheel slot 11) 19–19 Ring 2 + Ring 3 (wheel slot 12) 20–20 Pixel 1 + Ring 3 (wheel slot 13) 21–21 Ring 2 + Ring 4 (wheel slot 14) 22–22 Pixel 1 + Ring 3 + Ring 4 (wheel slot 15) 23–254 Pixel 1 + Ring 2 + Ring 4 (wheel slot 16) 255–255 No function
36	Dimmer	0	0–254 Closed 255–255 Open
37	Shutter / Strobe 3	255	0–3 Closed 4–24 Strobe · str > 0.5–5.45 Hz 25–101 Strobe · str >> 5.7–24.5 Hz 102–103 Strobe · str >>> 24.8–25 Hz 104–107 Open 108–120 pulse > 121–179 pulse >> 180–207 pulse >>> 208–212 Open 213–224 Random · rnd > 1–3.61 Hz 225–239 Random · rnd >> 3.84–7.16 Hz 240–251 Random · rnd >>> 7.39–10 Hz 252–255 Open
38	Red	255	
39	Green	255	
40	Blue	255	

SHAPEo - 45ch - SHAPES+OUTLINE v2 (continued)

Ch	Function	Default	DMX values
41	Gobo 3	0	0–7 Open (wheel slot 1) 8–8 Shape 1 (wheel slot 2) 9–9 Shape 2 (wheel slot 3) 10–10 Shape 3 (wheel slot 4) 11–11 Shape 4 (wheel slot 5) 12–12 Shape 5 (wheel slot 6) 13–13 Shape 6 (wheel slot 7) 14–14 Shape 7 (wheel slot 8) 15–15 Shape 8 (wheel slot 9) 16–16 Shape 9 (wheel slot 10) 17–17 Shape 10 (wheel slot 11) 18–18 Shape 11 (wheel slot 12) 19–19 Shape 12 (wheel slot 13) 20–20 Shape 13 (wheel slot 14) 21–21 Shape 14 (wheel slot 15) 22–22 Shape 15 (wheel slot 16) 23–23 Shape 16 (wheel slot 17) 24–24 Shape 17 (wheel slot 18) 25–25 Shape 18 (wheel slot 19) 26–26 Shape 19 (wheel slot 20) 27–27 Shape 20 (wheel slot 21) 28–28 Shape 21 (wheel slot 22) 29–29 Shape 22 (wheel slot 23) 30–30 Shape 23 (wheel slot 24) 31–31 Shape 24 (wheel slot 25) 32–32 Shape 25 (wheel slot 26) 33–33 Shape 26 (wheel slot 27) 34–34 Shape 27 (wheel slot 28) 35–35 Shape 28 (wheel slot 29) 36–36 Shape 29 (wheel slot 30) 37–255 Shape 30 (wheel slot 31)
42	Gobo Rotation 3	0	0–6 pos 1 7–13 pos 2 14–20 pos 3 21–27 pos 4 28–34 pos 5 35–41 pos 6 42–48 pos 7 49–55 pos 8 56–62 pos 9 63–63 pos 10 64–111 << 112–157 < 158–158 < 159–160 >< 161–207 > 208–254 >> 255–255 >>>
43	Red	255	
44	Green	255	
45	Blue	255	

RINGo - 48ch - RINGS + OUTLINE v2

48 channels

Ch	Function	Default	DMX values
1	Pan	127	
2	Pan Fine	255	Fine byte of Pan
3	Tilt	127	
4	Tilt Fine	127	Fine byte of Tilt

RINGo - 48ch - RINGS + OUTLINE v2 (continued)

Ch	Function	Default	DMX values
5	Position MSpeed	0	0–254 fast 255–255 slow
6	Control1	0	0–19 No function 20–21 Linear 22–23 Square 24–25 Inv square 26–27 S-Curve 28–129 No function 1 130–131 Fast 132–133 Smooth 134–139 No function 2 140–149 P/T reset 150–179 No function 3 180–189 Zoom reset 190–199 No function 4 200–209 Total reset 210–255 No function 5
7	Red	255	
8	Red Fine	255	Fine byte of Red
9	Green	255	
10	Green Fine	255	Fine byte of Green
11	Blue	255	
12	Blue Fine	255	Fine byte of Blue
13	White	0	
14	White Fine	0	Fine byte of White
15	Red	255	
16	Red Fine	255	Fine byte of Red
17	Green	255	
18	Green Fine	255	Fine byte of Green
19	Blue	255	
20	Blue Fine	255	Fine byte of Blue
21	White	0	
22	White Fine	0	Fine byte of White
23	Red	255	
24	Red Fine	255	Fine byte of Red
25	Green	255	
26	Green Fine	255	Fine byte of Green
27	Blue	255	
28	Blue Fine	255	Fine byte of Blue
29	White	0	
30	White Fine	0	Fine byte of White
31	C TO	0	0–9 CTO OFF 10–53 8000 K 54–98 7000 K 99–116 6000 K 117–143 5600 K 144–187 5000 K 188–223 4000 K 224–254 3200 K 255–255 2500 K

RINGo - 48ch - RINGS + OUTLINE v2 (continued)

Ch	Function	Default	DMX values
32	Color Macro1	0	0–0 No function 1–3 2700K 4–6 3200K 7–9 4200K 10–12 5600K 13–15 8000K 16–55 Blue 56–95 Cyan 96–96 Green 97–174 Yellow 175–214 Red 215–246 Magenta 247–247 Blue 248–248 Fade rainbow 249–249 Chase rainbow 250–250 Effect 1 251–251 Effect 2 252–252 Effect 3 253–253 Effect 4 254–254 Effect 5 255–255 Effect 6
33	Beam Shaper	0	0–9 Lens < 1 10–20 Lens < 2 21–30 Lens < 3 31–40 Lens < 4 41–51 Lens < 5 52–61 Lens < 6 62–72 Lens < > 73–83 Lens > 1 84–94 Lens > 2 95–104 Lens > 3 105–115 Lens > 4 116–126 Lens > 5 127–127 Lens > 6 128–158 << 159–189 < 190–190 < 191–192 >< 193–223 > 224–254 >> 255–255 >>>
34	Zoom	128	0–127 narrow 128–254 mid 255–255 wide
35	Zoom Fine	128	Fine byte of Zoom

RINGo - 48ch - RINGS + OUTLINE v2 (continued)

Ch	Function	Default	DMX values
36	Shutter / Strobe	255	0–31 Closed 32–62 Strobe 3 zone · slow 0.5–19.4 Hz 63–63 Strobe 3 zone · fast 20 Hz 64–94 Strobe all zones · slow 0.5–0.984 Hz 95–95 Strobe all zones · fast 1 Hz 96–110 CCW slow 111–111 CCW fast 112–126 CW fast 127–127 CW slow 128–142 slow 143–143 fast 144–158 slow 159–159 fast 160–174 Strobe random zones · slow 0.5–18.7 Hz 175–175 Strobe random zones · fast 20 Hz 176–190 Random strobe random zones · slow 0.5–18.7 Hz 191–191 Random strobe random zones · fast 20 Hz 192–222 Random strobe all zones · slow 0.5–19.4 Hz 223–223 Random strobe all zones · fast 20 Hz 224–255 Open
37	Dimmer	0	0–254 Closed 255–255 Open
38	Dimmer Fine	0	Fine byte of Dimmer
39	Dimmer	0	0–254 Closed 255–255 Open
40	Shutter / Strobe 3	255	0–3 Closed 4–24 Strobe · str > 0.5–5.45 Hz 25–101 Strobe · str >> 5.7–24.5 Hz 102–103 Strobe · str >>> 24.8–25 Hz 104–107 Open 108–120 pulse > 121–179 pulse >> 180–207 pulse >>> 208–212 Open 213–224 Random · rnd > 1–3.61 Hz 225–239 Random · rnd >> 3.84–7.16 Hz 240–251 Random · rnd >>> 7.39–10 Hz 252–255 Open
41	Red	255	
42	Green	255	
43	Blue	255	

RINGo - 48ch - RINGS + OUTLINE v2 (continued)

Ch	Function	Default	DMX values
44	Gobo 3	0	0–7 Open (wheel slot 1) 8–8 Shape 1 (wheel slot 2) 9–9 Shape 2 (wheel slot 3) 10–10 Shape 3 (wheel slot 4) 11–11 Shape 4 (wheel slot 5) 12–12 Shape 5 (wheel slot 6) 13–13 Shape 6 (wheel slot 7) 14–14 Shape 7 (wheel slot 8) 15–15 Shape 8 (wheel slot 9) 16–16 Shape 9 (wheel slot 10) 17–17 Shape 10 (wheel slot 11) 18–18 Shape 11 (wheel slot 12) 19–19 Shape 12 (wheel slot 13) 20–20 Shape 13 (wheel slot 14) 21–21 Shape 14 (wheel slot 15) 22–22 Shape 15 (wheel slot 16) 23–23 Shape 16 (wheel slot 17) 24–24 Shape 17 (wheel slot 18) 25–25 Shape 18 (wheel slot 19) 26–26 Shape 19 (wheel slot 20) 27–27 Shape 20 (wheel slot 21) 28–28 Shape 21 (wheel slot 22) 29–29 Shape 22 (wheel slot 23) 30–30 Shape 23 (wheel slot 24) 31–31 Shape 24 (wheel slot 25) 32–32 Shape 25 (wheel slot 26) 33–33 Shape 26 (wheel slot 27) 34–34 Shape 27 (wheel slot 28) 35–35 Shape 28 (wheel slot 29) 36–36 Shape 29 (wheel slot 30) 37–255 Shape 30 (wheel slot 31)
45	Gobo Rotation 3	0	0–6 pos 1 7–13 pos 2 14–20 pos 3 21–27 pos 4 28–34 pos 5 35–41 pos 6 42–48 pos 7 49–55 pos 8 56–62 pos 9 63–63 pos 10 64–111 << 112–157 < 158–158 < 159–160 >< 161–207 > 208–254 >> 255–255 >>>
46	Red	255	
47	Green	255	
48	Blue	255	

SH1pxO - 102ch - shapes + outline + pixel engine RGB v2

48 channels

Ch	Function	Default	DMX values
1	Red	255	
2	Red Fine	255	Fine byte of Red
3	Green	255	
4	Green Fine	255	Fine byte of Green

SH1pxO - 102ch - shapes + outline + pixel engine RGB v2 (continued)

Ch	Function	Default	DMX values
5	Blue	255	
6	Blue Fine	255	Fine byte of Blue
7	White	255	
8	White Fine	255	Fine byte of White
9	C TO	0	0–9 CTO OFF 10–53 8000 K 54–98 7000 K 99–116 6000 K 117–143 5600 K 144–187 5000 K 188–223 4000 K 224–254 3200 K 255–255 2500 K

SH1pxO - 102ch - shapes + outline + pixel engine RGB v2 (continued)

Ch	Function	Default	DMX values
10	Color Wheel	0	0–9 No function (wheel slot 66) 10–10 Red (wheel slot 1) 11–11 Green (wheel slot 2) 12–12 Blue (wheel slot 3) 13–13 Cyan (wheel slot 4) 14–14 Yellow (wheel slot 5) 15–15 Magenta (wheel slot 6) 16–16 White 7000 K (wheel slot 7) 17–17 White 3700 K (wheel slot 8) 18–18 White 5000 K (wheel slot 9) 19–19 Black (wheel slot 10) 20–22 Medium Yellow (wheel slot 11) 23–26 Straw Tint (wheel slot 12) 27–28 Surprise Peach (wheel slot 13) 29–29 Fire (wheel slot 14) 30–30 Medium Amber (wheel slot 15) 31–31 Gold Amber (wheel slot 16) 32–34 Dark Amber (wheel slot 17) 35–44 Sunrise Red (wheel slot 18) 45–45 Light Pink (wheel slot 19) 46–48 Medium Pink (wheel slot 20) 49–61 Pink Carnation (wheel slot 21) 62–67 Light Lavender (wheel slot 22) 68–77 Lavender (wheel slot 23) 78–88 Sky Blue (wheel slot 24) 89–99 Just Blue (wheel slot 25) 100–109 Dark yellow green (wheel slot 26) 110–111 Spring Yellow (wheel slot 27) 112–112 Light Amber (wheel slot 28) 113–113 Straw (wheel slot 29) 114–114 Deep Amber (wheel slot 30) 115–116 Orange (wheel slot 31) 117–117 Light Rose (wheel slot 32) 118–118 English Rose (wheel slot 33) 119–119 Light Salmon (wheel slot 34) 120–120 Middle Rose (wheel slot 35) 121–122 Dark Pink (wheel slot 36) 123–124 Magenta 1 (wheel slot 37) 125–125 Peacock Blue (wheel slot 38) 126–126 Med Blu Green (wheel slot 39) 127–127 Steel Blue (wheel slot 40) 128–128 Light Blue (wheel slot 41) 129–130 Dark blue (wheel slot 42) 131–133 Leaf Green (wheel slot 43) 134–135 Dark Green (wheel slot 44) 136–137 Mauve (wheel slot 45) 138–141 Bright Pink (wheel slot 46) 142–144 Medium Blue (wheel slot 47) 145–145 Deep Golden Amber (wheel slot 48) 146–146 Pale Lavender (wheel slot 49) 147–148 Special Lavender (wheel slot 50) 149–150 Primary Green (wheel slot 51) 151–156 Bright Blue (wheel slot 52) 157–161 Apricot (wheel slot 53) 162–167 Pale Gold (wheel slot 54) 168–171 Deep Oranger (wheel slot 55) 172–173 Bastard Amber (wheel slot 56) 174–174 Flame Red (wheel slot 57) 175–178 Daylight Blue (wheel slot 58) 179–179 Lilac Tint (wheel slot 59) 180–183 Deep Lavender (wheel slot 60) 184–190 Dark Steel Blue (wheel slot 61) 191–206 Congo Blue (wheel slot 62) 207–207 Alice Blue (wheel slot 63)

SH1pxO - 102ch - shapes + outline + pixel engine RGB v2 (continued)

Ch	Function	Default	DMX values
11	Shutter / Strobe	255	0–3 Closed 4–24 Strobe · str > 0.5–5.45 Hz 25–101 Strobe · str >> 5.7–24.5 Hz 102–103 Strobe · str >>> 24.8–25 Hz 104–107 Open 108–120 pulse > 121–179 pulse >> 180–207 pulse >>> 208–212 Open 213–224 Random · rnd > 1–3.61 Hz 225–239 Random · rnd >> 3.84–7.16 Hz 240–251 Random · rnd >>> 7.39–10 Hz 252–255 Open
12	Dimmer	0	0–254 Closed 255–255 Open
13	Dimmer Fine	0	Fine byte of Dimmer
14	Pan	128	
15	Pan Fine	0	Fine byte of Pan
16	Tilt	128	
17	Tilt Fine	0	Fine byte of Tilt
18	Function	0	0–37 No function 38–42 Linear 43–47 Square 48–52 Inv square 53–57 S-Curve 58–190 No function 1 191–192 Fast 193–194 Smooth 195–255 Function 4
19	Control1	0	0–25 No function 26–76 Zoom reset 77–127 P/T reset 128–255 Total reset
20	Zoom	128	0–127 narrow 128–254 mid 255–255 wide
21	Beam Shaper	0	0–9 Lens < 1 10–20 Lens < 2 21–30 Lens < 3 31–40 Lens < 4 41–51 Lens < 5 52–61 Lens < 6 62–72 Lens < > 73–83 Lens > 1 84–94 Lens > 2 95–104 Lens > 3 105–115 Lens > 4 116–126 Lens > 5 127–127 Lens > 6 128–158 << 159–189 < 190–190 < 191–192 >< 193–223 > 224–254 >> 255–255 >>>

SH1pxO - 102ch - shapes + outline + pixel engine RGB v2 (continued)

Ch	Function	Default	DMX values
22	Gobo	0	0–7 Open (wheel slot 1) 8–8 Pixel 1 (wheel slot 2) 9–9 Ring 1 (wheel slot 3) 10–10 Ring 2 (wheel slot 4) 11–11 Ring 3 (wheel slot 5) 12–12 Pixel 1+Ring 1 (wheel slot 6) 13–13 Pixel 1+Ring 2 (wheel slot 7) 14–14 Pixel 1+Ring 3 (wheel slot 8) 15–15 Single ring (Ramp -/+) (wheel slot 9) 16–16 Filled rings (ramp -/+) (wheel slot 10) 17–17 Open/Close 1 (wheel slot 11) 18–18 Open/Close 2 (wheel slot 12) 19–19 Random pixels 1 (wheel slot 13) 20–20 Random pixels 2 (wheel slot 14) 21–21 Rainbow 1 (Variable speed) (wheel slot 15) 22–22 Rainbow 2 (Fixed speed with variable color offset) (w… 23–23 Fan (wheel slot 17) 24–24 Bar 1 (wheel slot 18) 25–25 Half moon (wheel slot 19) 26–26 Triangle (wheel slot 20) 27–27 Segment 1 (wheel slot 21) 28–28 Arc 1 (wheel slot 22) 29–29 Arc 2 (wheel slot 23) 30–30 Bar 2 (Variable size) (wheel slot 24) 31–31 Random explosion (wheel slot 25) 32–32 Segment 2 (wheel slot 26) 33–33 x Bump (wheel slot 27) 34–34 Image (wheel slot 28) 35–35 Bumping section (wheel slot 29) 36–36 Ramp by 6 (wheel slot 30) 37–37 Ramp by 4 (wheel slot 31) 38–38 Left/Right scrolling bar (wheel slot 32) 39–39 Up/Down scrolling bar (wheel slot 33) 40–40 Bar 3 (wheel slot 34) 41–41 Vertical arc 1 (wheel slot 35) 42–42 Vertical arc 2 (wheel slot 36) 43–43 Horizontal arc 1 (wheel slot 37) 44–44 Horizontal arc 2 (wheel slot 38) 45–45 Mirrored pixel (wheel slot 39) 46–46 Pixel animation 1 (wheel slot 40) 47–47 Pixel animation 2 (wheel slot 41) 48–48 Pixel animation 3 (wheel slot 42) 49–49 Pixel animation 4 (wheel slot 43) 50–50 Pixel animation 5 (wheel slot 44) 51–51 Semi arc (Ramp /+) (wheel slot 45) 52–52 Bumping arc section (wheel slot 46) 53–53 Pixel animation 6 (wheel slot 47) 54–54 Vertical ramp by 2 (wheel slot 48) 55–55 Following pixel by 2 (wheel slot 49) 56–56 Syncopation (wheel slot 50) 57–57 Bumping 1 (wheel slot 51) 58–58 Bumping 2 (wheel slot 52) 59–59 Bumping 3 (wheel slot 53) 60–60 Vertical pixel scrolling (wheel slot 54) 61–61 Random vertical section (wheel slot 55) 62–62 Random central section (wheel slot 56) 63–63 Random ring 2 (wheel slot 57) 64–64 Random ring 3 (wheel slot 58) 65–65 Random ring 1+3 (wheel slot 59) 66–66 Random ring 2+3 (wheel slot 60) 67–67 Single pixel ring 1 (wheel slot 61) 68–68 Single pixel ring 2 (wheel slot 62) 69–69 Single pixel ring 3 (wheel slot 63) 70–255 Spiral (wheel slot 64)

SH1pxO - 102ch - shapes + outline + pixel engine RGB v2 (continued)

Ch	Function	Default	DMX values
23	Gobo Rotation	0	0–6 pos 1 7–13 pos 2 14–20 pos 3 21–27 pos 4 28–34 pos 5 35–41 pos 6 42–48 pos 7 49–55 pos 8 56–62 pos 9 63–63 pos 10 64–111 <<< 112–157 << 158–158 < 159–160 >< 161–207 > 208–254 >> 255–255 >>>
24	Shape Fade	0	0–15 Snap 16–113 gamma 05 114–244 gamma 1 245–245 gamma 2 246–255 automatic gamma
25	Red	255	
26	Green	255	
27	Blue	255	
28	White	255	
29	Dimmer	255	0–254 Closed 255–255 Open
30	Dimmer Background	255	0–254 Closed 255–255 Open
31	Shape Transition	0	0–4 No fade 5–72 100 ms 73–112 500 ms 113–170 1 s 171–215 2 s 216–254 3 s 255–255 4 s
32	Shape Offset	0	
33	Shutter / Strobe 2	255	0–3 Closed 4–24 Strobe · str > 0.5–5.45 Hz 25–101 Strobe · str >> 5.7–24.5 Hz 102–103 Strobe · str >>> 24.8–25 Hz 104–107 Open 108–120 pulse > 121–179 pulse >> 180–207 pulse >>> 208–212 Open 213–224 Random · rnd > 1–3.61 Hz 225–239 Random · rnd >> 3.84–7.16 Hz 240–251 Random · rnd >>> 7.39–10 Hz 252–255 Open

SH1pxO - 102ch - shapes + outline + pixel engine RGB v2 (continued)

Ch	Function	Default	DMX values
34	Shutter / Strobe 2	255	0–3 Closed 4–24 Strobe · str > 0.5–5.45 Hz 25–101 Strobe · str >> 5.7–24.5 Hz 102–103 Strobe · str >>> 24.8–25 Hz 104–107 Open 108–120 pulse > 121–179 pulse >> 180–207 pulse >>> 208–212 Open 213–224 Random · rnd > 1–3.61 Hz 225–239 Random · rnd >> 3.84–7.16 Hz 240–251 Random · rnd >>> 7.39–10 Hz 252–255 Open
35	Gobo 2	0	0–8 No selection (wheel slot 1) 9–9 Pixel 1 (wheel slot 2) 10–10 Ring 2 (wheel slot 3) 11–11 Ring 3 (wheel slot 4) 12–12 Ring 4 (wheel slot 5) 13–13 Pixel 1 + Ring 2 (wheel slot 6) 14–14 Pixel 1 + Ring 2 + Ring 3 (wheel slot 7) 15–15 Pixel 1 + Ring 2 + Ring 3 + Ring 4 (wheel slot 8) 16–16 Ring 2 + Ring 3 + Ring 4 (wheel slot 9) 17–17 Ring 3 + Ring 4 (wheel slot 10) 18–18 Pixel 1 + Ring 4 (wheel slot 11) 19–19 Ring 2 + Ring 3 (wheel slot 12) 20–20 Pixel 1 + Ring 3 (wheel slot 13) 21–21 Ring 2 + Ring 4 (wheel slot 14) 22–22 Pixel 1 + Ring 3 + Ring 4 (wheel slot 15) 23–254 Pixel 1 + Ring 2 + Ring 4 (wheel slot 16) 255–255 No function
36	Dimmer	0	0–254 Closed 255–255 Open
37	Shutter / Strobe 3	255	0–3 Closed 4–24 Strobe · str > 0.5–5.45 Hz 25–101 Strobe · str >> 5.7–24.5 Hz 102–103 Strobe · str >>> 24.8–25 Hz 104–107 Open 108–120 pulse > 121–179 pulse >> 180–207 pulse >>> 208–212 Open 213–224 Random · rnd > 1–3.61 Hz 225–239 Random · rnd >> 3.84–7.16 Hz 240–251 Random · rnd >>> 7.39–10 Hz 252–255 Open
38	Red	255	
39	Green	255	
40	Blue	255	

SH1pxO - 102ch - shapes + outline + pixel engine RGB v2 (continued)

Ch	Function	Default	DMX values
41	Gobo 3	0	0–7 Open (wheel slot 1) 8–8 Shape 1 (wheel slot 2) 9–9 Shape 2 (wheel slot 3) 10–10 Shape 3 (wheel slot 4) 11–11 Shape 4 (wheel slot 5) 12–12 Shape 5 (wheel slot 6) 13–13 Shape 6 (wheel slot 7) 14–14 Shape 7 (wheel slot 8) 15–15 Shape 8 (wheel slot 9) 16–16 Shape 9 (wheel slot 10) 17–17 Shape 10 (wheel slot 11) 18–18 Shape 11 (wheel slot 12) 19–19 Shape 12 (wheel slot 13) 20–20 Shape 13 (wheel slot 14) 21–21 Shape 14 (wheel slot 15) 22–22 Shape 15 (wheel slot 16) 23–23 Shape 16 (wheel slot 17) 24–24 Shape 17 (wheel slot 18) 25–25 Shape 18 (wheel slot 19) 26–26 Shape 19 (wheel slot 20) 27–27 Shape 20 (wheel slot 21) 28–28 Shape 21 (wheel slot 22) 29–29 Shape 22 (wheel slot 23) 30–30 Shape 23 (wheel slot 24) 31–31 Shape 24 (wheel slot 25) 32–32 Shape 25 (wheel slot 26) 33–33 Shape 26 (wheel slot 27) 34–34 Shape 27 (wheel slot 28) 35–35 Shape 28 (wheel slot 29) 36–36 Shape 29 (wheel slot 30) 37–255 Shape 30 (wheel slot 31)
42	Gobo Rotation 3	0	0–6 pos 1 7–13 pos 2 14–20 pos 3 21–27 pos 4 28–34 pos 5 35–41 pos 6 42–48 pos 7 49–55 pos 8 56–62 pos 9 63–63 pos 10 64–111 << 112–157 < 158–158 < 159–160 > 161–207 > 208–254 >> 255–255 >>>
43	Red	255	
44	Green	255	
45	Blue	255	
46	Red	255	
47	Green	255	
48	Blue	255	

SH2pxO 121ch - shapes + outline + pixel engine RGBW v2

49 channels

Ch	Function	Default	DMX values
1	Red	255	
2	Red Fine	255	Fine byte of Red
3	Green	255	
4	Green Fine	255	Fine byte of Green
5	Blue	255	
6	Blue Fine	255	Fine byte of Blue
7	White	255	
8	White Fine	255	Fine byte of White
9	C TO	0	0–9 CTO OFF 10–53 8000 K 54–98 7000 K 99–116 6000 K 117–143 5600 K 144–187 5000 K 188–223 4000 K 224–254 3200 K 255–255 2500 K

SH2pxO 121ch - shapes + outline + pixel engine RGBW v2 (continued)

Ch	Function	Default	DMX values
10	Color Wheel	0	0–9 No function (wheel slot 66) 10–10 Red (wheel slot 1) 11–11 Green (wheel slot 2) 12–12 Blue (wheel slot 3) 13–13 Cyan (wheel slot 4) 14–14 Yellow (wheel slot 5) 15–15 Magenta (wheel slot 6) 16–16 White 7000 K (wheel slot 7) 17–17 White 3700 K (wheel slot 8) 18–18 White 5000 K (wheel slot 9) 19–19 Black (wheel slot 10) 20–22 Medium Yellow (wheel slot 11) 23–26 Straw Tint (wheel slot 12) 27–28 Surprise Peach (wheel slot 13) 29–29 Fire (wheel slot 14) 30–30 Medium Amber (wheel slot 15) 31–31 Gold Amber (wheel slot 16) 32–34 Dark Amber (wheel slot 17) 35–44 Sunrise Red (wheel slot 18) 45–45 Light Pink (wheel slot 19) 46–48 Medium Pink (wheel slot 20) 49–61 Pink Carnation (wheel slot 21) 62–67 Light Lavender (wheel slot 22) 68–77 Lavender (wheel slot 23) 78–88 Sky Blue (wheel slot 24) 89–99 Just Blue (wheel slot 25) 100–109 Dark yellow green (wheel slot 26) 110–111 Spring Yellow (wheel slot 27) 112–112 Light Amber (wheel slot 28) 113–113 Straw (wheel slot 29) 114–114 Deep Amber (wheel slot 30) 115–116 Orange (wheel slot 31) 117–117 Light Rose (wheel slot 32) 118–118 English Rose (wheel slot 33) 119–119 Light Salmon (wheel slot 34) 120–120 Middle Rose (wheel slot 35) 121–122 Dark Pink (wheel slot 36) 123–124 Magenta 1 (wheel slot 37) 125–125 Peacock Blue (wheel slot 38) 126–126 Med Blu Green (wheel slot 39) 127–127 Steel Blue (wheel slot 40) 128–128 Light Blue (wheel slot 41) 129–130 Dark blue (wheel slot 42) 131–133 Leaf Green (wheel slot 43) 134–135 Dark Green (wheel slot 44) 136–137 Mauve (wheel slot 45) 138–141 Bright Pink (wheel slot 46) 142–144 Medium Blue (wheel slot 47) 145–145 Deep Golden Amber (wheel slot 48) 146–146 Pale Lavender (wheel slot 49) 147–148 Special Lavender (wheel slot 50) 149–150 Primary Green (wheel slot 51) 151–156 Bright Blue (wheel slot 52) 157–161 Apricot (wheel slot 53) 162–167 Pale Gold (wheel slot 54) 168–171 Deep Oranger (wheel slot 55) 172–173 Bastard Amber (wheel slot 56) 174–174 Flame Red (wheel slot 57) 175–178 Daylight Blue (wheel slot 58) 179–179 Lilac Tint (wheel slot 59) 180–183 Deep Lavender (wheel slot 60) 184–190 Dark Steel Blue (wheel slot 61) 191–206 Congo Blue (wheel slot 62) 207–207 Alice Blue (wheel slot 63)

SH2pxO 121ch - shapes + outline + pixel engine RGBW v2 (continued)

Ch	Function	Default	DMX values
11	Shutter / Strobe	255	0–3 Closed 4–24 Strobe · str > 0.5–5.45 Hz 25–101 Strobe · str >> 5.7–24.5 Hz 102–103 Strobe · str >>> 24.8–25 Hz 104–107 Open 108–120 pulse > 121–179 pulse >> 180–207 pulse >>> 208–212 Open 213–224 Random · rnd > 1–3.61 Hz 225–239 Random · rnd >> 3.84–7.16 Hz 240–251 Random · rnd >>> 7.39–10 Hz 252–255 Open
12	Dimmer	0	0–254 Closed 255–255 Open
13	Dimmer Fine	0	Fine byte of Dimmer
14	Pan	128	
15	Pan Fine	0	Fine byte of Pan
16	Tilt	128	
17	Tilt Fine	0	Fine byte of Tilt
18	Function	0	0–37 No function 38–42 Linear 43–47 Square 48–52 Inv square 53–57 S-Curve 58–190 No function 1 191–192 Fast 193–194 Smooth 195–255 Function 4
19	Control1	0	0–25 No function 26–76 Zoom reset 77–127 P/T reset 128–255 Total reset
20	Zoom	128	0–127 narrow 128–254 mid 255–255 wide
21	Beam Shaper	0	0–9 Lens < 1 10–20 Lens < 2 21–30 Lens < 3 31–40 Lens < 4 41–51 Lens < 5 52–61 Lens < 6 62–72 Lens < > 73–83 Lens > 1 84–94 Lens > 2 95–104 Lens > 3 105–115 Lens > 4 116–126 Lens > 5 127–127 Lens > 6 128–158 << 159–189 < 190–190 < 191–192 >< 193–223 > 224–254 >> 255–255 >>>

SH2pxO 121ch - shapes + outline + pixel engine RGBW v2 (continued)

Ch	Function	Default	DMX values
22	Gobo	0	0–7 Open (wheel slot 1) 8–8 Pixel 1 (wheel slot 2) 9–9 Ring 1 (wheel slot 3) 10–10 Ring 2 (wheel slot 4) 11–11 Ring 3 (wheel slot 5) 12–12 Pixel 1+Ring 1 (wheel slot 6) 13–13 Pixel 1+Ring 2 (wheel slot 7) 14–14 Pixel 1+Ring 3 (wheel slot 8) 15–15 Single ring (Ramp -/+) (wheel slot 9) 16–16 Filled rings (ramp -/+) (wheel slot 10) 17–17 Open/Close 1 (wheel slot 11) 18–18 Open/Close 2 (wheel slot 12) 19–19 Random pixels 1 (wheel slot 13) 20–20 Random pixels 2 (wheel slot 14) 21–21 Rainbow 1 (Variable speed) (wheel slot 15) 22–22 Rainbow 2 (Fixed speed with variable color offset) (w… 23–23 Fan (wheel slot 17) 24–24 Bar 1 (wheel slot 18) 25–25 Half moon (wheel slot 19) 26–26 Triangle (wheel slot 20) 27–27 Segment 1 (wheel slot 21) 28–28 Arc 1 (wheel slot 22) 29–29 Arc 2 (wheel slot 23) 30–30 Bar 2 (Variable size) (wheel slot 24) 31–31 Random explosion (wheel slot 25) 32–32 Segment 2 (wheel slot 26) 33–33 x Bump (wheel slot 27) 34–34 Image (wheel slot 28) 35–35 Bumping section (wheel slot 29) 36–36 Ramp by 6 (wheel slot 30) 37–37 Ramp by 4 (wheel slot 31) 38–38 Left/Right scrolling bar (wheel slot 32) 39–39 Up/Down scrolling bar (wheel slot 33) 40–40 Bar 3 (wheel slot 34) 41–41 Vertical arc 1 (wheel slot 35) 42–42 Vertical arc 2 (wheel slot 36) 43–43 Horizontal arc 1 (wheel slot 37) 44–44 Horizontal arc 2 (wheel slot 38) 45–45 Mirrored pixel (wheel slot 39) 46–46 Pixel animation 1 (wheel slot 40) 47–47 Pixel animation 2 (wheel slot 41) 48–48 Pixel animation 3 (wheel slot 42) 49–49 Pixel animation 4 (wheel slot 43) 50–50 Pixel animation 5 (wheel slot 44) 51–51 Semi arc (Ramp /+) (wheel slot 45) 52–52 Bumping arc section (wheel slot 46) 53–53 Pixel animation 6 (wheel slot 47) 54–54 Vertical ramp by 2 (wheel slot 48) 55–55 Following pixel by 2 (wheel slot 49) 56–56 Syncopation (wheel slot 50) 57–57 Bumping 1 (wheel slot 51) 58–58 Bumping 2 (wheel slot 52) 59–59 Bumping 3 (wheel slot 53) 60–60 Vertical pixel scrolling (wheel slot 54) 61–61 Random vertical section (wheel slot 55) 62–62 Random central section (wheel slot 56) 63–63 Random ring 2 (wheel slot 57) 64–64 Random ring 3 (wheel slot 58) 65–65 Random ring 1+3 (wheel slot 59) 66–66 Random ring 2+3 (wheel slot 60) 67–67 Single pixel ring 1 (wheel slot 61) 68–68 Single pixel ring 2 (wheel slot 62) 69–69 Single pixel ring 3 (wheel slot 63) 70–255 Spiral (wheel slot 64)

SH2pxO 121ch - shapes + outline + pixel engine RGBW v2 (continued)

Ch	Function	Default	DMX values
23	Gobo Rotation	0	0–6 pos 1 7–13 pos 2 14–20 pos 3 21–27 pos 4 28–34 pos 5 35–41 pos 6 42–48 pos 7 49–55 pos 8 56–62 pos 9 63–63 pos 10 64–111 <<< 112–157 << 158–158 < 159–160 >< 161–207 > 208–254 >> 255–255 >>>
24	Shape Fade	0	0–15 Snap 16–113 gamma 05 114–244 gamma 1 245–245 gamma 2 246–255 automatic gamma
25	Red	255	
26	Green	255	
27	Blue	255	
28	White	255	
29	Dimmer	255	0–254 Closed 255–255 Open
30	Dimmer Background	255	0–254 Closed 255–255 Open
31	Shape Transition	0	0–4 No fade 5–72 100 ms 73–112 500 ms 113–170 1 s 171–215 2 s 216–254 3 s 255–255 4 s
32	Shape Offset	0	
33	Shutter / Strobe 2	255	0–3 Closed 4–24 Strobe · str > 0.5–5.45 Hz 25–101 Strobe · str >> 5.7–24.5 Hz 102–103 Strobe · str >>> 24.8–25 Hz 104–107 Open 108–120 pulse > 121–179 pulse >> 180–207 pulse >>> 208–212 Open 213–224 Random · rnd > 1–3.61 Hz 225–239 Random · rnd >> 3.84–7.16 Hz 240–251 Random · rnd >>> 7.39–10 Hz 252–255 Open

SH2pxO 121ch - shapes + outline + pixel engine RGBW v2 (continued)

Ch	Function	Default	DMX values
34	Shutter / Strobe 2	255	0–3 Closed 4–24 Strobe · str > 0.5–5.45 Hz 25–101 Strobe · str >> 5.7–24.5 Hz 102–103 Strobe · str >>> 24.8–25 Hz 104–107 Open 108–120 pulse > 121–179 pulse >> 180–207 pulse >>> 208–212 Open 213–224 Random · rnd > 1–3.61 Hz 225–239 Random · rnd >> 3.84–7.16 Hz 240–251 Random · rnd >>> 7.39–10 Hz 252–255 Open
35	Gobo 2	0	0–8 No selection (wheel slot 1) 9–9 Pixel 1 (wheel slot 2) 10–10 Ring 2 (wheel slot 3) 11–11 Ring 3 (wheel slot 4) 12–12 Ring 4 (wheel slot 5) 13–13 Pixel 1 + Ring 2 (wheel slot 6) 14–14 Pixel 1 + Ring 2 + Ring 3 (wheel slot 7) 15–15 Pixel 1 + Ring 2 + Ring 3 + Ring 4 (wheel slot 8) 16–16 Ring 2 + Ring 3 + Ring 4 (wheel slot 9) 17–17 Ring 3 + Ring 4 (wheel slot 10) 18–18 Pixel 1 + Ring 4 (wheel slot 11) 19–19 Ring 2 + Ring 3 (wheel slot 12) 20–20 Pixel 1 + Ring 3 (wheel slot 13) 21–21 Ring 2 + Ring 4 (wheel slot 14) 22–22 Pixel 1 + Ring 3 + Ring 4 (wheel slot 15) 23–254 Pixel 1 + Ring 2 + Ring 4 (wheel slot 16) 255–255 No function
36	Dimmer	0	0–254 Closed 255–255 Open
37	Shutter / Strobe 3	255	0–3 Closed 4–24 Strobe · str > 0.5–5.45 Hz 25–101 Strobe · str >> 5.7–24.5 Hz 102–103 Strobe · str >>> 24.8–25 Hz 104–107 Open 108–120 pulse > 121–179 pulse >> 180–207 pulse >>> 208–212 Open 213–224 Random · rnd > 1–3.61 Hz 225–239 Random · rnd >> 3.84–7.16 Hz 240–251 Random · rnd >>> 7.39–10 Hz 252–255 Open
38	Red	255	
39	Green	255	
40	Blue	255	

SH2pxO 121ch - shapes + outline + pixel engine RGBW v2 (continued)

Ch	Function	Default	DMX values
41	Gobo 3	0	0–7 Open (wheel slot 1) 8–8 Shape 1 (wheel slot 2) 9–9 Shape 2 (wheel slot 3) 10–10 Shape 3 (wheel slot 4) 11–11 Shape 4 (wheel slot 5) 12–12 Shape 5 (wheel slot 6) 13–13 Shape 6 (wheel slot 7) 14–14 Shape 7 (wheel slot 8) 15–15 Shape 8 (wheel slot 9) 16–16 Shape 9 (wheel slot 10) 17–17 Shape 10 (wheel slot 11) 18–18 Shape 11 (wheel slot 12) 19–19 Shape 12 (wheel slot 13) 20–20 Shape 13 (wheel slot 14) 21–21 Shape 14 (wheel slot 15) 22–22 Shape 15 (wheel slot 16) 23–23 Shape 16 (wheel slot 17) 24–24 Shape 17 (wheel slot 18) 25–25 Shape 18 (wheel slot 19) 26–26 Shape 19 (wheel slot 20) 27–27 Shape 20 (wheel slot 21) 28–28 Shape 21 (wheel slot 22) 29–29 Shape 22 (wheel slot 23) 30–30 Shape 23 (wheel slot 24) 31–31 Shape 24 (wheel slot 25) 32–32 Shape 25 (wheel slot 26) 33–33 Shape 26 (wheel slot 27) 34–34 Shape 27 (wheel slot 28) 35–35 Shape 28 (wheel slot 29) 36–36 Shape 29 (wheel slot 30) 37–255 Shape 30 (wheel slot 31)
42	Gobo Rotation 3	0	0–6 pos 1 7–13 pos 2 14–20 pos 3 21–27 pos 4 28–34 pos 5 35–41 pos 6 42–48 pos 7 49–55 pos 8 56–62 pos 9 63–63 pos 10 64–111 << 112–157 < 158–158 < 159–160 >< 161–207 > 208–254 >> 255–255 >>>
43	Red	255	
44	Green	255	
45	Blue	255	
46	Red	255	
47	Green	255	
48	Blue	255	
49	White	0	

R1pxO - 105ch - rings + outline + pixel engine RGB v2

51 channels

Ch	Function	Default	DMX values
1	Pan	127	
2	Pan Fine	255	Fine byte of Pan
3	Tilt	127	
4	Tilt Fine	127	Fine byte of Tilt
5	Position MSpeed	0	0–254 fast 255–255 slow
6	Control1	0	0–19 No function 20–21 Linear 22–23 Square 24–25 Inv square 26–27 S-Curve 28–129 No function 1 130–131 Fast 132–133 Smooth 134–139 No function 2 140–149 P/T reset 150–179 No function 3 180–189 Zoom reset 190–199 No function 4 200–209 Total reset 210–255 No function 5
7	Red	255	
8	Red Fine	255	Fine byte of Red
9	Green	255	
10	Green Fine	255	Fine byte of Green
11	Blue	255	
12	Blue Fine	255	Fine byte of Blue
13	White	0	
14	White Fine	0	Fine byte of White
15	Red	255	
16	Red Fine	255	Fine byte of Red
17	Green	255	
18	Green Fine	255	Fine byte of Green
19	Blue	255	
20	Blue Fine	255	Fine byte of Blue
21	White	0	
22	White Fine	0	Fine byte of White
23	Red	255	
24	Red Fine	255	Fine byte of Red
25	Green	255	
26	Green Fine	255	Fine byte of Green
27	Blue	255	
28	Blue Fine	255	Fine byte of Blue
29	White	0	
30	White Fine	0	Fine byte of White

R1pxO - 105ch - rings + outline + pixel engine RGB v2 (continued)

Ch	Function	Default	DMX values
31	C TO	0	0–9 CTO OFF 10–53 8000 K 54–98 7000 K 99–116 6000 K 117–143 5600 K 144–187 5000 K 188–223 4000 K 224–254 3200 K 255–255 2500 K
32	Color Macro1	0	0–0 No function 1–3 2700K 4–6 3200K 7–9 4200K 10–12 5600K 13–15 8000K 16–55 Blue 56–95 Cyan 96–96 Green 97–174 Yellow 175–214 Red 215–246 Magenta 247–247 Blue 248–248 Fade rainbow 249–249 Chase rainbow 250–250 Effect 1 251–251 Effect 2 252–252 Effect 3 253–253 Effect 4 254–254 Effect 5 255–255 Effect 6
33	Beam Shaper	0	0–9 Lens < 1 10–20 Lens < 2 21–30 Lens < 3 31–40 Lens < 4 41–51 Lens < 5 52–61 Lens < 6 62–72 Lens < > 73–83 Lens > 1 84–94 Lens > 2 95–104 Lens > 3 105–115 Lens > 4 116–126 Lens > 5 127–127 Lens > 6 128–158 << 159–189 < 190–190 < 191–192 >< 193–223 > 224–254 >> 255–255 >>>
34	Zoom	128	0–127 narrow 128–254 mid 255–255 wide
35	Zoom Fine	128	Fine byte of Zoom

R1pxO - 105ch - rings + outline + pixel engine RGB v2 (continued)

Ch	Function	Default	DMX values
36	Shutter / Strobe	255	0–31 Closed 32–62 Strobe 3 zone · slow 0.5–19.4 Hz 63–63 Strobe 3 zone · fast 20 Hz 64–94 Strobe all zones · slow 0.5–0.984 Hz 95–95 Strobe all zones · fast 1 Hz 96–110 CCW slow 111–111 CCW fast 112–126 CW fast 127–127 CW slow 128–142 slow 143–143 fast 144–158 slow 159–159 fast 160–174 Strobe random zones · slow 0.5–18.7 Hz 175–175 Strobe random zones · fast 20 Hz 176–190 Random strobe random zones · slow 0.5–18.7 Hz 191–191 Random strobe random zones · fast 20 Hz 192–222 Random strobe all zones · slow 0.5–19.4 Hz 223–223 Random strobe all zones · fast 20 Hz 224–255 Open
37	Dimmer	0	0–254 Closed 255–255 Open
38	Dimmer Fine	0	Fine byte of Dimmer
39	Dimmer	0	0–254 Closed 255–255 Open
40	Shutter / Strobe 3	255	0–3 Closed 4–24 Strobe · str > 0.5–5.45 Hz 25–101 Strobe · str >> 5.7–24.5 Hz 102–103 Strobe · str >>> 24.8–25 Hz 104–107 Open 108–120 pulse > 121–179 pulse >> 180–207 pulse >>> 208–212 Open 213–224 Random · rnd > 1–3.61 Hz 225–239 Random · rnd >> 3.84–7.16 Hz 240–251 Random · rnd >>> 7.39–10 Hz 252–255 Open
41	Red	255	
42	Green	255	
43	Blue	255	

R1pxO - 105ch - rings + outline + pixel engine RGB v2 (continued)

Ch	Function	Default	DMX values
44	Gobo 3	0	0–7 Open (wheel slot 1) 8–8 Shape 1 (wheel slot 2) 9–9 Shape 2 (wheel slot 3) 10–10 Shape 3 (wheel slot 4) 11–11 Shape 4 (wheel slot 5) 12–12 Shape 5 (wheel slot 6) 13–13 Shape 6 (wheel slot 7) 14–14 Shape 7 (wheel slot 8) 15–15 Shape 8 (wheel slot 9) 16–16 Shape 9 (wheel slot 10) 17–17 Shape 10 (wheel slot 11) 18–18 Shape 11 (wheel slot 12) 19–19 Shape 12 (wheel slot 13) 20–20 Shape 13 (wheel slot 14) 21–21 Shape 14 (wheel slot 15) 22–22 Shape 15 (wheel slot 16) 23–23 Shape 16 (wheel slot 17) 24–24 Shape 17 (wheel slot 18) 25–25 Shape 18 (wheel slot 19) 26–26 Shape 19 (wheel slot 20) 27–27 Shape 20 (wheel slot 21) 28–28 Shape 21 (wheel slot 22) 29–29 Shape 22 (wheel slot 23) 30–30 Shape 23 (wheel slot 24) 31–31 Shape 24 (wheel slot 25) 32–32 Shape 25 (wheel slot 26) 33–33 Shape 26 (wheel slot 27) 34–34 Shape 27 (wheel slot 28) 35–35 Shape 28 (wheel slot 29) 36–36 Shape 29 (wheel slot 30) 37–255 Shape 30 (wheel slot 31)
45	Gobo Rotation 3	0	0–6 pos 1 7–13 pos 2 14–20 pos 3 21–27 pos 4 28–34 pos 5 35–41 pos 6 42–48 pos 7 49–55 pos 8 56–62 pos 9 63–63 pos 10 64–111 << 112–157 < 158–158 < 159–160 >< 161–207 > 208–254 >> 255–255 >>>
46	Red	255	
47	Green	255	
48	Blue	255	
49	Red	255	
50	Green	255	
51	Blue	255	

R2pxO - 124ch - rings + outline + pixel engine RGBW v2

52 channels

Ch	Function	Default	DMX values
1	Pan	127	
2	Pan Fine	255	Fine byte of Pan
3	Tilt	127	
4	Tilt Fine	127	Fine byte of Tilt
5	Position MSpeed	0	0–254 fast 255–255 slow
6	Control1	0	0–19 No function 20–21 Linear 22–23 Square 24–25 Inv square 26–27 S-Curve 28–129 No function 1 130–131 Fast 132–133 Smooth 134–139 No function 2 140–149 P/T reset 150–179 No function 3 180–189 Zoom reset 190–199 No function 4 200–209 Total reset 210–255 No function 5
7	Red	255	
8	Red Fine	255	Fine byte of Red
9	Green	255	
10	Green Fine	255	Fine byte of Green
11	Blue	255	
12	Blue Fine	255	Fine byte of Blue
13	White	0	
14	White Fine	0	Fine byte of White
15	Red	255	
16	Red Fine	255	Fine byte of Red
17	Green	255	
18	Green Fine	255	Fine byte of Green
19	Blue	255	
20	Blue Fine	255	Fine byte of Blue
21	White	0	
22	White Fine	0	Fine byte of White
23	Red	255	
24	Red Fine	255	Fine byte of Red
25	Green	255	
26	Green Fine	255	Fine byte of Green
27	Blue	255	
28	Blue Fine	255	Fine byte of Blue
29	White	0	
30	White Fine	0	Fine byte of White

R2pxO - 124ch - rings + outline + pixel engine RGBW v2 (continued)

Ch	Function	Default	DMX values
31	C TO	0	0–9 CTO OFF 10–53 8000 K 54–98 7000 K 99–116 6000 K 117–143 5600 K 144–187 5000 K 188–223 4000 K 224–254 3200 K 255–255 2500 K
32	Color Macro1	0	0–0 No function 1–3 2700K 4–6 3200K 7–9 4200K 10–12 5600K 13–15 8000K 16–55 Blue 56–95 Cyan 96–96 Green 97–174 Yellow 175–214 Red 215–246 Magenta 247–247 Blue 248–248 Fade rainbow 249–249 Chase rainbow 250–250 Effect 1 251–251 Effect 2 252–252 Effect 3 253–253 Effect 4 254–254 Effect 5 255–255 Effect 6
33	Beam Shaper	0	0–9 Lens < 1 10–20 Lens < 2 21–30 Lens < 3 31–40 Lens < 4 41–51 Lens < 5 52–61 Lens < 6 62–72 Lens < > 73–83 Lens > 1 84–94 Lens > 2 95–104 Lens > 3 105–115 Lens > 4 116–126 Lens > 5 127–127 Lens > 6 128–158 << 159–189 < 190–190 < 191–192 >< 193–223 > 224–254 >> 255–255 >>>
34	Zoom	128	0–127 narrow 128–254 mid 255–255 wide
35	Zoom Fine	128	Fine byte of Zoom

R2pxO - 124ch - rings + outline + pixel engine RGBW v2 (continued)

Ch	Function	Default	DMX values
36	Shutter / Strobe	255	0–31 Closed 32–62 Strobe 3 zone · slow 0.5–19.4 Hz 63–63 Strobe 3 zone · fast 20 Hz 64–94 Strobe all zones · slow 0.5–0.984 Hz 95–95 Strobe all zones · fast 1 Hz 96–110 CCW slow 111–111 CCW fast 112–126 CW fast 127–127 CW slow 128–142 slow 143–143 fast 144–158 slow 159–159 fast 160–174 Strobe random zones · slow 0.5–18.7 Hz 175–175 Strobe random zones · fast 20 Hz 176–190 Random strobe random zones · slow 0.5–18.7 Hz 191–191 Random strobe random zones · fast 20 Hz 192–222 Random strobe all zones · slow 0.5–19.4 Hz 223–223 Random strobe all zones · fast 20 Hz 224–255 Open
37	Dimmer	0	0–254 Closed 255–255 Open
38	Dimmer Fine	0	Fine byte of Dimmer
39	Dimmer	0	0–254 Closed 255–255 Open
40	Shutter / Strobe 3	255	0–3 Closed 4–24 Strobe · str > 0.5–5.45 Hz 25–101 Strobe · str >> 5.7–24.5 Hz 102–103 Strobe · str >>> 24.8–25 Hz 104–107 Open 108–120 pulse > 121–179 pulse >> 180–207 pulse >>> 208–212 Open 213–224 Random · rnd > 1–3.61 Hz 225–239 Random · rnd >> 3.84–7.16 Hz 240–251 Random · rnd >>> 7.39–10 Hz 252–255 Open
41	Red	255	
42	Green	255	
43	Blue	255	

R2pxO - 124ch - rings + outline + pixel engine RGBW v2 (continued)

Ch	Function	Default	DMX values
44	Gobo 3	0	0–7 Open (wheel slot 1) 8–8 Shape 1 (wheel slot 2) 9–9 Shape 2 (wheel slot 3) 10–10 Shape 3 (wheel slot 4) 11–11 Shape 4 (wheel slot 5) 12–12 Shape 5 (wheel slot 6) 13–13 Shape 6 (wheel slot 7) 14–14 Shape 7 (wheel slot 8) 15–15 Shape 8 (wheel slot 9) 16–16 Shape 9 (wheel slot 10) 17–17 Shape 10 (wheel slot 11) 18–18 Shape 11 (wheel slot 12) 19–19 Shape 12 (wheel slot 13) 20–20 Shape 13 (wheel slot 14) 21–21 Shape 14 (wheel slot 15) 22–22 Shape 15 (wheel slot 16) 23–23 Shape 16 (wheel slot 17) 24–24 Shape 17 (wheel slot 18) 25–25 Shape 18 (wheel slot 19) 26–26 Shape 19 (wheel slot 20) 27–27 Shape 20 (wheel slot 21) 28–28 Shape 21 (wheel slot 22) 29–29 Shape 22 (wheel slot 23) 30–30 Shape 23 (wheel slot 24) 31–31 Shape 24 (wheel slot 25) 32–32 Shape 25 (wheel slot 26) 33–33 Shape 26 (wheel slot 27) 34–34 Shape 27 (wheel slot 28) 35–35 Shape 28 (wheel slot 29) 36–36 Shape 29 (wheel slot 30) 37–255 Shape 30 (wheel slot 31)
45	Gobo Rotation 3	0	0–6 pos 1 7–13 pos 2 14–20 pos 3 21–27 pos 4 28–34 pos 5 35–41 pos 6 42–48 pos 7 49–55 pos 8 56–62 pos 9 63–63 pos 10 64–111 <<< 112–157 << 158–158 < 159–160 >< 161–207 > 208–254 >> 255–255 >>>
46	Red	255	
47	Green	255	
48	Blue	255	
49	Red	255	
50	Green	255	
51	Blue	255	
52	White	0	