JB-Lighting

P12 Wash HC



Manufacturer	**JB-Lighting**
Type	**Profile spot**
DMX modes	**8**
DMX footprint	**36, 54 channels**
Beam angle	**5.7-60°**
Pan range	**546.74°**
Tilt range	**281.16°**
Size (W × H × D)	**274 × 478 × 247 mm**
GDTF fixture type	**9D193798-515A-44D9-AF4B-7C…**

Controls

Focus · Frost · Iris · Zoom · CMY colour mixing · Colour temperature · Colour wheel · Strobe · Dimmer · Pan and tilt · Movement speed · Gobos · Gobo rotation

DMX modes

Wash Mode 1 (36 ch) Frame Mode AB	36 ch
Wash Mode 1 (36 ch) Frame Mode AB 70%	36 ch
Wash Mode 1 (36 ch) Frame Mode TA	36 ch
Wash Mode 1 (36 ch) Frame Mode TA 70%	36 ch
Wash Mode 2 (54 ch) Frame Mode AB	54 ch
Wash Mode 2 (54 ch) Frame Mode AB 70%	54 ch
Wash Mode 2 (54 ch) Frame Mode TA	54 ch
Wash Mode 2 (54 ch) Frame Mode TA 70%	54 ch

Wash Mode 1 (36 ch) Frame Mode AB

36 channels

Ch	Function	Default	DMX values
1	Pan	128	
2	Pan Fine	0	Fine byte of Pan
3	Tilt	128	
4	Tilt Fine	0	Fine byte of Tilt
5	Control1	0	
6	Shutter / Strobe	16	0–15 closed 16–95 open 96–97 StrobePulseOpen · 20Hz 20–18.6 Hz 98–99 StrobePulseOpen · 15Hz 17.2–15.7 Hz 100–101 StrobePulseOpen · 10Hz 14.3–12.9 Hz 102–104 StrobePulseOpen · 5Hz 11.5–8.63 Hz 105–109 StrobePulseOpen · 1Hz 7.21–1.52 Hz 110–110 StrobePulseOpen · 1/10Hz 0.1 Hz 111–111 open (2) 112–124 Shutter Fade Effect strobe · fade effect slow 1–18.5… 125–125 Shutter Fade Effect strobe · fade effect fast 20 Hz 126–126 open (3) 127–127 closed (2) 128–141 pulse open fast 142–142 pulse open slow 143–143 open (4) 144–157 pulse close fast 158–158 pulse close slow 159–159 closed (3) 160–173 Shutter Fade close strobe · fade close fast 20–1.52 … 174–174 Shutter Fade close strobe · fade close slow 0.1 Hz 175–175 open (5) 176–189 fade open fast 190–190 fade open slow 191–191 closed (4) 192–205 rnd open fast 206–206 rnd open slow 207–207 open (6) 208–221 Shutter Rnd Close strobe · rnd close fast 20–1.52 Hz 222–222 Shutter Rnd Close strobe · rnd close slow 0.1 Hz 223–223 closed (5) 224–237 rnd pulse close fast 238–238 rnd pulse close slow 239–239 open (7) 240–253 rnd pulse open fast 254–254 rnd pulse open slow 255–255 open (8)
7	Dimmer	0	0–24 closed 25–50 10% 51–63 20% 64–75 25% 76–101 30% 102–127 40% 128–152 50% 153–178 60% 179–190 70% 191–203 75% 204–229 80% 230–254 90% 255–255 open
8	Focus	128	0–127 min 128–254 medium 255–255 max

Wash Mode 1 (36 ch) Frame Mode AB (continued)

Ch	Function	Default	DMX values
9	Zoom	0	0–127 narrow 128–254 medium 255–255 wide
10	Focus1Distance	0	0–9 off 10–19 1m 20–29 2m 30–39 3m 40–49 4m 50–59 5m 60–69 6m 70–79 7m 80–89 8m 90–99 9m 100–109 10m 110–119 11m 120–129 12m 130–139 13m 140–149 14m 150–159 15m 160–169 16m 170–179 17m 180–189 18m 190–199 19m 200–209 20m 210–219 21m 220–229 22m 230–239 23m 240–249 24m 250–254 25m 255–255 far
11	No Feature	128	
12	Iris	0	0–254 open 255–255 closed
13	Gobo	0	0–7 open (wheel slot 1) 8–15 1 Dash (wheel slot 2) 16–23 2 Dots Square (wheel slot 3) 24–31 3 Sandglass (wheel slot 4) 32–39 4 Triangle (wheel slot 5) 40–47 5 Tiger (wheel slot 6) 48–127 6 Multicolor (wheel slot 7) 128–135 open (wheel slot 1) 136–142 1 Dash shake fast (wheel slot 2) 143–143 1 Dash shake slow (wheel slot 2) 144–150 2 Dots Square shake fast (wheel slot 3) 151–151 2 Dots Square shake slow (wheel slot 3) 152–158 3 Sandglass shake fast (wheel slot 4) 159–159 3 Sandglass shake slow (wheel slot 4) 160–166 4 Triangle shake fast (wheel slot 5) 167–167 4 Triangle shake slow (wheel slot 5) 168–174 5 Tiger shake fast (wheel slot 6) 175–175 5 Tiger shake slow (wheel slot 6) 176–190 6 Multicolor shake fast (wheel slot 7) 191–191 6 Multicolor shake slow (wheel slot 7) 192–222 spin >>> fast 223–223 spin >>> slow 224–254 spin <<< slow 255–255 spin <<< fast

Wash Mode 1 (36 ch) Frame Mode AB (continued)

Ch	Function	Default	DMX values
14	Gobo Rotation	0	0–31 0 32–63 90 64–95 180 96–127 270 128–159 360 160–190 450 191–191 540 192–192 >>> 193–222 rotate 100__1% 223–224 Stop 225–254 rotate -1__-100% 255–255 <<<
15	Blade1A	0	0–24 min 25–50 10% 51–75 20% 76–101 30% 102–127 40% 128–152 50% 153–178 60% 179–203 70% 204–229 80% 230–254 90% 255–255 max
16	Blade1B	0	0–24 min 25–50 10% 51–75 20% 76–101 30% 102–127 40% 128–152 50% 153–178 60% 179–203 70% 204–229 80% 230–254 90% 255–255 max
17	Blade2A	0	0–24 min 25–50 10% 51–75 20% 76–101 30% 102–127 40% 128–152 50% 153–178 60% 179–203 70% 204–229 80% 230–254 90% 255–255 max
18	Blade2B	0	0–24 min 25–50 10% 51–75 20% 76–101 30% 102–127 40% 128–152 50% 153–178 60% 179–203 70% 204–229 80% 230–254 90% 255–255 max

Wash Mode 1 (36 ch) Frame Mode AB (continued)

Ch	Function	Default	DMX values
19	Blade3A	0	0–24 min 25–50 10% 51–75 20% 76–101 30% 102–127 40% 128–152 50% 153–178 60% 179–203 70% 204–229 80% 230–254 90% 255–255 max
20	Blade3B	0	0–24 min 25–50 10% 51–75 20% 76–101 30% 102–127 40% 128–152 50% 153–178 60% 179–203 70% 204–229 80% 230–254 90% 255–255 max
21	Blade4A	0	0–24 min 25–50 10% 51–75 20% 76–101 30% 102–127 40% 128–152 50% 153–178 60% 179–203 70% 204–229 80% 230–254 90% 255–255 max
22	Blade4B	0	0–24 min 25–50 10% 51–75 20% 76–101 30% 102–127 40% 128–152 50% 153–178 60% 179–203 70% 204–229 80% 230–254 90% 255–255 max

Wash Mode 1 (36 ch) Frame Mode AB (continued)

Ch	Function	Default	DMX values
23	Shaper Rot	128	0–10 55 11–22 50 23–33 45 34–45 40 46–57 35 58–68 30 69–80 25 81–92 20 93–103 15 104–115 10 116–127 5 128–138 0 139–150 -5 151–161 -10 162–173 -15 174–185 -20 186–196 -25 197–208 -30 209–220 -35 221–231 -40 232–243 -45 244–254 -50 255–255 -55
24	Color Wheel	0	0–1 open (wheel slot 1) 2–3 white / red (wheel slot 1) 4–5 red (wheel slot 2) 6–7 red / yellow (wheel slot 2) 8–9 yellow (wheel slot 3) 10–11 yellow / magenta (wheel slot 3) 12–13 magenta (wheel slot 4) 14–15 magenta / green (wheel slot 4) 16–17 green (wheel slot 5) 18–19 green / orange (wheel slot 5) 20–21 orange (wheel slot 6) 22–23 orange / blue (wheel slot 6) 24–25 blue (wheel slot 7) 26–27 blue / pink (wheel slot 7) 28–29 pink (wheel slot 8) 30–31 pink / ctb (wheel slot 8) 32–33 ctb (wheel slot 9) 34–63 ctb / white (wheel slot 9) 64–76 open (2) (wheel slot 1) 77–89 red (wheel slot 2) 90–101 yellow (wheel slot 3) 102–114 magenta (wheel slot 4) 115–127 green (wheel slot 5) 128–140 orange (wheel slot 6) 141–153 blue (wheel slot 7) 154–165 pink (wheel slot 8) 166–178 ctb (wheel slot 9) 179–191 open (3) (wheel slot 1) 192–222 spin >>> fast 223–223 spin >>> slow 224–254 spin <<< slow 255–255 spin <<< fast

Wash Mode 1 (36 ch) Frame Mode AB (continued)

Ch	Function	Default	DMX values
25	Color Wheel 2	0	0–1 open (wheel slot 1) 2–3 white / cto1 (wheel slot 1) 4–5 cto1 (wheel slot 2) 6–7 cto1 / cto2 (wheel slot 2) 8–9 cto2 (wheel slot 3) 10–11 cto2 / cto3 (wheel slot 3) 12–13 cto3 (wheel slot 4) 14–15 cto3 / ctb1 (wheel slot 4) 16–17 ctb1 (wheel slot 5) 18–19 ctb1 / ctb2 (wheel slot 5) 20–21 ctb2 (wheel slot 6) 22–23 ctb2 / ctb3 (wheel slot 6) 24–25 ctb3 (wheel slot 7) 26–27 ctb3 / dark blue (wheel slot 7) 28–29 dark blue (wheel slot 8) 30–31 dark blue / dark red (wheel slot 8) 32–33 dark red (wheel slot 9) 34–63 dark red / white (wheel slot 9) 64–76 open (2) (wheel slot 1) 77–89 cto1 (wheel slot 2) 90–101 cto2 (wheel slot 3) 102–114 cto3 (wheel slot 4) 115–127 ctb1 (wheel slot 5) 128–140 ctb2 (wheel slot 6) 141–153 ctb3 (wheel slot 7) 154–165 dark blue (wheel slot 8) 166–178 dark red (wheel slot 9) 179–191 open (3) (wheel slot 1) 192–222 spin >>> fast 223–223 spin >>> slow 224–254 spin <<< slow 255–255 spin <<< fast
26	Cyan	0	0–63 min 64–127 25% 128–190 50% 191–254 75% 255–255 max
27	Magenta	0	0–63 min 64–127 25% 128–190 50% 191–254 75% 255–255 max
28	Yellow	0	0–63 min 64–127 25% 128–190 50% 191–254 75% 255–255 max
29	C TO	0	0–63 min 64–127 25% 128–190 50% 191–254 75% 255–255 max
30	Sparkle	0	0–63 0% sparkle 64–127 25% sparkle 128–190 50% sparkle 191–254 75% sparkle 255–255 100% sparkle

Wash Mode 1 (36 ch) Frame Mode AB (continued)

Ch	Function	Default	DMX values
31	Sparkle Speed	0	0–0 sparkle faded slow 1–30 sparkle faded 1__99% 31–31 sparkle faded fast 32–32 sparkle switched slow 33–62 sparkle switched 1__99% 63–63 sparkle switched fast 64–64 sparkle faded slow 65–94 sparkle faded 1__99% 95–95 sparkle faded fast 96–96 sparkle switched slow 97–126 sparkle switched 1__99% 127–127 sparkle switched fast 128–128 sparkle faded slow 129–158 sparkle faded 1__99% 159–159 sparkle faded fast 160–160 sparkle switched slow 161–190 sparkle switched 1__99% 191–191 sparkle switched fast 192–192 sparkle faded slow 193–222 sparkle faded 1__99% 223–223 sparkle faded fast 224–224 sparkle switched slow 225–254 sparkle switched 1__99% 255–255 sparkle switched fast
32	Frost1	0	0–63 0% frost 64–127 25% frost 128–190 50% frost 191–254 75% frost 255–255 100% frost
33	Frost2	0	0–63 0% frost 64–127 25% frost 128–190 50% frost 191–254 75% frost 255–255 100% frost
34	Position MSpeed	0	0–3 real time movement 4–254 movement fast 255–255 movement slow
35	Global MSpeed	0	0–3 realtime effects 4–254 effects fast 255–255 effects slow
36	Blackout Mode	0	0–95 no bo 96–126 bo at p/t slow 127–127 bo at p/t fast 128–158 bo at go co pr cmy ir fr slow 159–159 bo at go co pr cmy ir fr fast 160–190 bo at go co pr cmy ir fr fo zo slow 191–191 bo at go co pr cmy ir fr fo zo fast 192–222 bo at go co pr cmy ir fr p/t slow 223–223 bo at go co pr cmy ir fr p/t fast 224–254 bo at go co pr cmy ir fr fo zo p/t slow 255–255 bo at go co pr cmy ir fr fo zo p/t fast

Wash Mode 1 (36 ch) Frame Mode AB 70%

36 channels

Ch	Function	Default	DMX values
1	Pan	128	
2	Pan Fine	0	Fine byte of Pan
3	Tilt	128	

Wash Mode 1 (36 ch) Frame Mode AB 70% (continued)

Ch	Function	Default	DMX values
4	Tilt Fine	0	Fine byte of Tilt
5	Control1	0	
6	Shutter / Strobe	16	0–15 closed 16–95 open 96–97 StrobePulseOpen · 20Hz 20–18.6 Hz 98–99 StrobePulseOpen · 15Hz 17.2–15.7 Hz 100–101 StrobePulseOpen · 10Hz 14.3–12.9 Hz 102–104 StrobePulseOpen · 5Hz 11.5–8.63 Hz 105–109 StrobePulseOpen · 1Hz 7.21–1.52 Hz 110–110 StrobePulseOpen · 1/10Hz 0.1 Hz 111–111 open (2) 112–124 Shutter Fade Effect strobe · fade effect slow 1–18.5… 125–125 Shutter Fade Effect strobe · fade effect fast 20 Hz 126–126 open (3) 127–127 closed (2) 128–141 pulse open fast 142–142 pulse open slow 143–143 open (4) 144–157 pulse close fast 158–158 pulse close slow 159–159 closed (3) 160–173 Shutter Fade close strobe · fade close fast 20–1.52 … 174–174 Shutter Fade close strobe · fade close slow 0.1 Hz 175–175 open (5) 176–189 fade open fast 190–190 fade open slow 191–191 closed (4) 192–205 rnd open fast 206–206 rnd open slow 207–207 open (6) 208–221 Shutter Rnd Close strobe · rnd close fast 20–1.52 Hz 222–222 Shutter Rnd Close strobe · rnd close slow 0.1 Hz 223–223 closed (5) 224–237 rnd pulse close fast 238–238 rnd pulse close slow 239–239 open (7) 240–253 rnd pulse open fast 254–254 rnd pulse open slow 255–255 open (8)
7	Dimmer	0	0–24 closed 25–50 10% 51–63 20% 64–75 25% 76–101 30% 102–127 40% 128–152 50% 153–178 60% 179–190 70% 191–203 75% 204–229 80% 230–254 90% 255–255 open
8	Focus	128	0–127 min 128–254 medium 255–255 max
9	Zoom	0	0–127 narrow 128–254 medium 255–255 wide

Wash Mode 1 (36 ch) Frame Mode AB 70% (continued)

Ch	Function	Default	DMX values
10	Focus1Distance	0	0–9 off 10–19 1m 20–29 2m 30–39 3m 40–49 4m 50–59 5m 60–69 6m 70–79 7m 80–89 8m 90–99 9m 100–109 10m 110–119 11m 120–129 12m 130–139 13m 140–149 14m 150–159 15m 160–169 16m 170–179 17m 180–189 18m 190–199 19m 200–209 20m 210–219 21m 220–229 22m 230–239 23m 240–249 24m 250–254 25m 255–255 far
11	No Feature	128	
12	Iris	0	0–254 open 255–255 closed
13	Gobo	0	0–7 open (wheel slot 1) 8–15 1 Dash (wheel slot 2) 16–23 2 Dots Square (wheel slot 3) 24–31 3 Sandglass (wheel slot 4) 32–39 4 Triangle (wheel slot 5) 40–47 5 Tiger (wheel slot 6) 48–127 6 Multicolor (wheel slot 7) 128–135 open (wheel slot 1) 136–142 1 Dash shake fast (wheel slot 2) 143–143 1 Dash shake slow (wheel slot 2) 144–150 2 Dots Square shake fast (wheel slot 3) 151–151 2 Dots Square shake slow (wheel slot 3) 152–158 3 Sandglass shake fast (wheel slot 4) 159–159 3 Sandglass shake slow (wheel slot 4) 160–166 4 Triangle shake fast (wheel slot 5) 167–167 4 Triangle shake slow (wheel slot 5) 168–174 5 Tiger shake fast (wheel slot 6) 175–175 5 Tiger shake slow (wheel slot 6) 176–190 6 Multicolor shake fast (wheel slot 7) 191–191 6 Multicolor shake slow (wheel slot 7) 192–222 spin >>> fast 223–223 spin >>> slow 224–254 spin <<< slow 255–255 spin <<< fast

Wash Mode 1 (36 ch) Frame Mode AB 70% (continued)

Ch	Function	Default	DMX values
14	Gobo Rotation	0	0–31 0 32–63 90 64–95 180 96–127 270 128–159 360 160–190 450 191–191 540 192–192 >>> 193–222 rotate 100__1% 223–224 Stop 225–254 rotate -1__-100% 255–255 <<<
15	Blade1A	0	0–35 min 36–72 10% 73–108 20% 109–145 30% 146–181 40% 182–218 50% 219–254 60% 255–255 70%
16	Blade1B	0	0–35 min 36–72 10% 73–108 20% 109–145 30% 146–181 40% 182–218 50% 219–254 60% 255–255 70%
17	Blade2A	0	0–35 min 36–72 10% 73–108 20% 109–145 30% 146–181 40% 182–218 50% 219–254 60% 255–255 70%
18	Blade2B	0	0–35 min 36–72 10% 73–108 20% 109–145 30% 146–181 40% 182–218 50% 219–254 60% 255–255 70%
19	Blade3A	0	0–35 min 36–72 10% 73–108 20% 109–145 30% 146–181 40% 182–218 50% 219–254 60% 255–255 70%
20	Blade3B	0	0–35 min 36–72 10% 73–108 20% 109–145 30% 146–181 40% 182–218 50% 219–254 60% 255–255 70%

Wash Mode 1 (36 ch) Frame Mode AB 70% (continued)

Ch	Function	Default	DMX values
21	Blade4A	0	0–35 min 36–72 10% 73–108 20% 109–145 30% 146–181 40% 182–218 50% 219–254 60% 255–255 70%
22	Blade4B	0	0–35 min 36–72 10% 73–108 20% 109–145 30% 146–181 40% 182–218 50% 219–254 60% 255–255 70%
23	Shaper Rot	128	0–10 55 11–22 50 23–33 45 34–45 40 46–57 35 58–68 30 69–80 25 81–92 20 93–103 15 104–115 10 116–127 5 128–138 0 139–150 -5 151–161 -10 162–173 -15 174–185 -20 186–196 -25 197–208 -30 209–220 -35 221–231 -40 232–243 -45 244–254 -50 255–255 -55

Wash Mode 1 (36 ch) Frame Mode AB 70% (continued)

Ch	Function	Default	DMX values
24	Color Wheel	0	0–1 open (wheel slot 1) 2–3 white / red (wheel slot 1) 4–5 red (wheel slot 2) 6–7 red / yellow (wheel slot 2) 8–9 yellow (wheel slot 3) 10–11 yellow / magenta (wheel slot 3) 12–13 magenta (wheel slot 4) 14–15 magenta / green (wheel slot 4) 16–17 green (wheel slot 5) 18–19 green / orange (wheel slot 5) 20–21 orange (wheel slot 6) 22–23 orange / blue (wheel slot 6) 24–25 blue (wheel slot 7) 26–27 blue / pink (wheel slot 7) 28–29 pink (wheel slot 8) 30–31 pink / ctb (wheel slot 8) 32–33 ctb (wheel slot 9) 34–63 ctb / white (wheel slot 9) 64–76 open (2) (wheel slot 1) 77–89 red (wheel slot 2) 90–101 yellow (wheel slot 3) 102–114 magenta (wheel slot 4) 115–127 green (wheel slot 5) 128–140 orange (wheel slot 6) 141–153 blue (wheel slot 7) 154–165 pink (wheel slot 8) 166–178 ctb (wheel slot 9) 179–191 open (3) (wheel slot 1) 192–222 spin >>> fast 223–223 spin >>> slow 224–254 spin <<< slow 255–255 spin <<< fast

Wash Mode 1 (36 ch) Frame Mode AB 70% (continued)

Ch	Function	Default	DMX values
25	Color Wheel 2	0	0–1 open (wheel slot 1) 2–3 white / cto1 (wheel slot 1) 4–5 cto1 (wheel slot 2) 6–7 cto1 / cto2 (wheel slot 2) 8–9 cto2 (wheel slot 3) 10–11 cto2 / cto3 (wheel slot 3) 12–13 cto3 (wheel slot 4) 14–15 cto3 / ctb1 (wheel slot 4) 16–17 ctb1 (wheel slot 5) 18–19 ctb1 / ctb2 (wheel slot 5) 20–21 ctb2 (wheel slot 6) 22–23 ctb2 / ctb3 (wheel slot 6) 24–25 ctb3 (wheel slot 7) 26–27 ctb3 / dark blue (wheel slot 7) 28–29 dark blue (wheel slot 8) 30–31 dark blue / dark red (wheel slot 8) 32–33 dark red (wheel slot 9) 34–63 dark red / white (wheel slot 9) 64–76 open (2) (wheel slot 1) 77–89 cto1 (wheel slot 2) 90–101 cto2 (wheel slot 3) 102–114 cto3 (wheel slot 4) 115–127 ctb1 (wheel slot 5) 128–140 ctb2 (wheel slot 6) 141–153 ctb3 (wheel slot 7) 154–165 dark blue (wheel slot 8) 166–178 dark red (wheel slot 9) 179–191 open (3) (wheel slot 1) 192–222 spin >>> fast 223–223 spin >>> slow 224–254 spin <<< slow 255–255 spin <<< fast
26	Cyan	0	0–63 min 64–127 25% 128–190 50% 191–254 75% 255–255 max
27	Magenta	0	0–63 min 64–127 25% 128–190 50% 191–254 75% 255–255 max
28	Yellow	0	0–63 min 64–127 25% 128–190 50% 191–254 75% 255–255 max
29	C TO	0	0–63 min 64–127 25% 128–190 50% 191–254 75% 255–255 max
30	Sparkle	0	0–63 0% sparkle 64–127 25% sparkle 128–190 50% sparkle 191–254 75% sparkle 255–255 100% sparkle

Wash Mode 1 (36 ch) Frame Mode AB 70% (continued)

Ch	Function	Default	DMX values
31	Sparkle Speed	0	0–0 sparkle faded slow 1–30 sparkle faded 1__99% 31–31 sparkle faded fast 32–32 sparkle switched slow 33–62 sparkle switched 1__99% 63–63 sparkle switched fast 64–64 sparkle faded slow 65–94 sparkle faded 1__99% 95–95 sparkle faded fast 96–96 sparkle switched slow 97–126 sparkle switched 1__99% 127–127 sparkle switched fast 128–128 sparkle faded slow 129–158 sparkle faded 1__99% 159–159 sparkle faded fast 160–160 sparkle switched slow 161–190 sparkle switched 1__99% 191–191 sparkle switched fast 192–192 sparkle faded slow 193–222 sparkle faded 1__99% 223–223 sparkle faded fast 224–224 sparkle switched slow 225–254 sparkle switched 1__99% 255–255 sparkle switched fast
32	Frost1	0	0–63 0% frost 64–127 25% frost 128–190 50% frost 191–254 75% frost 255–255 100% frost
33	Frost2	0	0–63 0% frost 64–127 25% frost 128–190 50% frost 191–254 75% frost 255–255 100% frost
34	Position MSpeed	0	0–3 real time movement 4–254 movement fast 255–255 movement slow
35	Global MSpeed	0	0–3 realtime effects 4–254 effects fast 255–255 effects slow
36	Blackout Mode	0	0–95 no bo 96–126 bo at p/t slow 127–127 bo at p/t fast 128–158 bo at go co pr cmy ir fr slow 159–159 bo at go co pr cmy ir fr fast 160–190 bo at go co pr cmy ir fr fo zo slow 191–191 bo at go co pr cmy ir fr fo zo fast 192–222 bo at go co pr cmy ir fr p/t slow 223–223 bo at go co pr cmy ir fr p/t fast 224–254 bo at go co pr cmy ir fr fo zo p/t slow 255–255 bo at go co pr cmy ir fr fo zo p/t fast

Wash Mode 1 (36 ch) Frame Mode TA

36 channels

Ch	Function	Default	DMX values
1	Pan	128	
2	Pan Fine	0	Fine byte of Pan
3	Tilt	128	

Wash Mode 1 (36 ch) Frame Mode TA (continued)

Ch	Function	Default	DMX values
4	Tilt Fine	0	Fine byte of Tilt
5	Control1	0	
6	Shutter / Strobe	16	0–15 closed 16–95 open 96–97 StrobePulseOpen · 20Hz 20–18.6 Hz 98–99 StrobePulseOpen · 15Hz 17.2–15.7 Hz 100–101 StrobePulseOpen · 10Hz 14.3–12.9 Hz 102–104 StrobePulseOpen · 5Hz 11.5–8.63 Hz 105–109 StrobePulseOpen · 1Hz 7.21–1.52 Hz 110–110 StrobePulseOpen · 1/10Hz 0.1 Hz 111–111 open (2) 112–124 Shutter Fade Effect strobe · fade effect slow 1–18.5… 125–125 Shutter Fade Effect strobe · fade effect fast 20 Hz 126–126 open (3) 127–127 closed (2) 128–141 pulse open fast 142–142 pulse open slow 143–143 open (4) 144–157 pulse close fast 158–158 pulse close slow 159–159 closed (3) 160–173 Shutter Fade close strobe · fade close fast 20–1.52 … 174–174 Shutter Fade close strobe · fade close slow 0.1 Hz 175–175 open (5) 176–189 fade open fast 190–190 fade open slow 191–191 closed (4) 192–205 rnd open fast 206–206 rnd open slow 207–207 open (6) 208–221 Shutter Rnd Close strobe · rnd close fast 20–1.52 Hz 222–222 Shutter Rnd Close strobe · rnd close slow 0.1 Hz 223–223 closed (5) 224–237 rnd pulse close fast 238–238 rnd pulse close slow 239–239 open (7) 240–253 rnd pulse open fast 254–254 rnd pulse open slow 255–255 open (8)
7	Dimmer	0	0–24 closed 25–50 10% 51–63 20% 64–75 25% 76–101 30% 102–127 40% 128–152 50% 153–178 60% 179–190 70% 191–203 75% 204–229 80% 230–254 90% 255–255 open
8	Focus	128	0–127 min 128–254 medium 255–255 max
9	Zoom	0	0–127 narrow 128–254 medium 255–255 wide

Wash Mode 1 (36 ch) Frame Mode TA (continued)

Ch	Function	Default	DMX values
10	Focus1Distance	0	0–9 off 10–19 1m 20–29 2m 30–39 3m 40–49 4m 50–59 5m 60–69 6m 70–79 7m 80–89 8m 90–99 9m 100–109 10m 110–119 11m 120–129 12m 130–139 13m 140–149 14m 150–159 15m 160–169 16m 170–179 17m 180–189 18m 190–199 19m 200–209 20m 210–219 21m 220–229 22m 230–239 23m 240–249 24m 250–254 25m 255–255 far
11	No Feature	128	
12	Iris	0	0–254 open 255–255 closed
13	Gobo	0	0–7 open (wheel slot 1) 8–15 1 Dash (wheel slot 2) 16–23 2 Dots Square (wheel slot 3) 24–31 3 Sandglass (wheel slot 4) 32–39 4 Triangle (wheel slot 5) 40–47 5 Tiger (wheel slot 6) 48–127 6 Multicolor (wheel slot 7) 128–135 open (wheel slot 1) 136–142 1 Dash shake fast (wheel slot 2) 143–143 1 Dash shake slow (wheel slot 2) 144–150 2 Dots Square shake fast (wheel slot 3) 151–151 2 Dots Square shake slow (wheel slot 3) 152–158 3 Sandglass shake fast (wheel slot 4) 159–159 3 Sandglass shake slow (wheel slot 4) 160–166 4 Triangle shake fast (wheel slot 5) 167–167 4 Triangle shake slow (wheel slot 5) 168–174 5 Tiger shake fast (wheel slot 6) 175–175 5 Tiger shake slow (wheel slot 6) 176–190 6 Multicolor shake fast (wheel slot 7) 191–191 6 Multicolor shake slow (wheel slot 7) 192–222 spin >>> fast 223–223 spin >>> slow 224–254 spin <<< slow 255–255 spin <<< fast

Wash Mode 1 (36 ch) Frame Mode TA (continued)

Ch	Function	Default	DMX values
14	Gobo Rotation	0	0–31 0 32–63 90 64–95 180 96–127 270 128–159 360 160–190 450 191–191 540 192–192 >>> 193–222 rotate 100__1% 223–224 Stop 225–254 rotate -1__-100% 255–255 <<<
15	Blade1A	0	0–24 min 25–50 10% 51–75 20% 76–101 30% 102–127 40% 128–152 50% 153–178 60% 179–203 70% 204–229 80% 230–254 90% 255–255 max
16	Blade1Rot	128	0–42 max ccw 43–84 -20 85–127 -10 128–169 zero 170–212 10 213–254 20 255–255 max cw
17	Blade2A	0	0–24 min 25–50 10% 51–75 20% 76–101 30% 102–127 40% 128–152 50% 153–178 60% 179–203 70% 204–229 80% 230–254 90% 255–255 max
18	Blade2Rot	128	0–42 max ccw 43–84 -20 85–127 -10 128–169 zero 170–212 10 213–254 20 255–255 max cw
19	Blade3A	0	0–24 min 25–50 10% 51–75 20% 76–101 30% 102–127 40% 128–152 50% 153–178 60% 179–203 70% 204–229 80% 230–254 90% 255–255 max

Wash Mode 1 (36 ch) Frame Mode TA (continued)

Ch	Function	Default	DMX values
20	Blade3Rot	128	0–42 max ccw 43–84 -20 85–127 -10 128–169 zero 170–212 10 213–254 20 255–255 max cw
21	Blade4A	0	0–24 min 25–50 10% 51–75 20% 76–101 30% 102–127 40% 128–152 50% 153–178 60% 179–203 70% 204–229 80% 230–254 90% 255–255 max
22	Blade4Rot	128	0–42 max ccw 43–84 -20 85–127 -10 128–169 zero 170–212 10 213–254 20 255–255 max cw
23	Shaper Rot	128	0–10 55 11–22 50 23–33 45 34–45 40 46–57 35 58–68 30 69–80 25 81–92 20 93–103 15 104–115 10 116–127 5 128–138 0 139–150 -5 151–161 -10 162–173 -15 174–185 -20 186–196 -25 197–208 -30 209–220 -35 221–231 -40 232–243 -45 244–254 -50 255–255 -55

Wash Mode 1 (36 ch) Frame Mode TA (continued)

Ch	Function	Default	DMX values
24	Color Wheel	0	0–1 open (wheel slot 1) 2–3 white / red (wheel slot 1) 4–5 red (wheel slot 2) 6–7 red / yellow (wheel slot 2) 8–9 yellow (wheel slot 3) 10–11 yellow / magenta (wheel slot 3) 12–13 magenta (wheel slot 4) 14–15 magenta / green (wheel slot 4) 16–17 green (wheel slot 5) 18–19 green / orange (wheel slot 5) 20–21 orange (wheel slot 6) 22–23 orange / blue (wheel slot 6) 24–25 blue (wheel slot 7) 26–27 blue / pink (wheel slot 7) 28–29 pink (wheel slot 8) 30–31 pink / ctb (wheel slot 8) 32–33 ctb (wheel slot 9) 34–63 ctb / white (wheel slot 9) 64–76 open (2) (wheel slot 1) 77–89 red (wheel slot 2) 90–101 yellow (wheel slot 3) 102–114 magenta (wheel slot 4) 115–127 green (wheel slot 5) 128–140 orange (wheel slot 6) 141–153 blue (wheel slot 7) 154–165 pink (wheel slot 8) 166–178 ctb (wheel slot 9) 179–191 open (3) (wheel slot 1) 192–222 spin >>> fast 223–223 spin >>> slow 224–254 spin <<< slow 255–255 spin <<< fast

Wash Mode 1 (36 ch) Frame Mode TA (continued)

Ch	Function	Default	DMX values
25	Color Wheel 2	0	0–1 open (wheel slot 1) 2–3 white / cto1 (wheel slot 1) 4–5 cto1 (wheel slot 2) 6–7 cto1 / cto2 (wheel slot 2) 8–9 cto2 (wheel slot 3) 10–11 cto2 / cto3 (wheel slot 3) 12–13 cto3 (wheel slot 4) 14–15 cto3 / ctb1 (wheel slot 4) 16–17 ctb1 (wheel slot 5) 18–19 ctb1 / ctb2 (wheel slot 5) 20–21 ctb2 (wheel slot 6) 22–23 ctb2 / ctb3 (wheel slot 6) 24–25 ctb3 (wheel slot 7) 26–27 ctb3 / dark blue (wheel slot 7) 28–29 dark blue (wheel slot 8) 30–31 dark blue / dark red (wheel slot 8) 32–33 dark red (wheel slot 9) 34–63 dark red / white (wheel slot 9) 64–76 open (2) (wheel slot 1) 77–89 cto1 (wheel slot 2) 90–101 cto2 (wheel slot 3) 102–114 cto3 (wheel slot 4) 115–127 ctb1 (wheel slot 5) 128–140 ctb2 (wheel slot 6) 141–153 ctb3 (wheel slot 7) 154–165 dark blue (wheel slot 8) 166–178 dark red (wheel slot 9) 179–191 open (3) (wheel slot 1) 192–222 spin >>> fast 223–223 spin >>> slow 224–254 spin <<< slow 255–255 spin <<< fast
26	Cyan	0	0–63 min 64–127 25% 128–190 50% 191–254 75% 255–255 max
27	Magenta	0	0–63 min 64–127 25% 128–190 50% 191–254 75% 255–255 max
28	Yellow	0	0–63 min 64–127 25% 128–190 50% 191–254 75% 255–255 max
29	C TO	0	0–63 min 64–127 25% 128–190 50% 191–254 75% 255–255 max
30	Sparkle	0	0–63 0% sparkle 64–127 25% sparkle 128–190 50% sparkle 191–254 75% sparkle 255–255 100% sparkle

Wash Mode 1 (36 ch) Frame Mode TA (continued)

Ch	Function	Default	DMX values
31	Sparkle Speed	0	0–0 sparkle faded slow 1–30 sparkle faded 1__99% 31–31 sparkle faded fast 32–32 sparkle switched slow 33–62 sparkle switched 1__99% 63–63 sparkle switched fast 64–64 sparkle faded slow 65–94 sparkle faded 1__99% 95–95 sparkle faded fast 96–96 sparkle switched slow 97–126 sparkle switched 1__99% 127–127 sparkle switched fast 128–128 sparkle faded slow 129–158 sparkle faded 1__99% 159–159 sparkle faded fast 160–160 sparkle switched slow 161–190 sparkle switched 1__99% 191–191 sparkle switched fast 192–192 sparkle faded slow 193–222 sparkle faded 1__99% 223–223 sparkle faded fast 224–224 sparkle switched slow 225–254 sparkle switched 1__99% 255–255 sparkle switched fast
32	Frost1	0	0–63 0% frost 64–127 25% frost 128–190 50% frost 191–254 75% frost 255–255 100% frost
33	Frost2	0	0–63 0% frost 64–127 25% frost 128–190 50% frost 191–254 75% frost 255–255 100% frost
34	Position MSpeed	0	0–3 real time movement 4–254 movement fast 255–255 movement slow
35	Global MSpeed	0	0–3 realtime effects 4–254 effects fast 255–255 effects slow
36	Blackout Mode	0	0–95 no bo 96–126 bo at p/t slow 127–127 bo at p/t fast 128–158 bo at go co pr cmy ir fr slow 159–159 bo at go co pr cmy ir fr fast 160–190 bo at go co pr cmy ir fr fo zo slow 191–191 bo at go co pr cmy ir fr fo zo fast 192–222 bo at go co pr cmy ir fr p/t slow 223–223 bo at go co pr cmy ir fr p/t fast 224–254 bo at go co pr cmy ir fr fo zo p/t slow 255–255 bo at go co pr cmy ir fr fo zo p/t fast

Wash Mode 1 (36 ch) Frame Mode TA 70%

36 channels

Ch	Function	Default	DMX values
1	Pan	128	
2	Pan Fine	0	Fine byte of Pan
3	Tilt	128	

Wash Mode 1 (36 ch) Frame Mode TA 70% (continued)

Ch	Function	Default	DMX values
4	Tilt Fine	0	Fine byte of Tilt
5	Control1	0	
6	Shutter / Strobe	16	0–15 closed 16–95 open 96–97 StrobePulseOpen · 20Hz 20–18.6 Hz 98–99 StrobePulseOpen · 15Hz 17.2–15.7 Hz 100–101 StrobePulseOpen · 10Hz 14.3–12.9 Hz 102–104 StrobePulseOpen · 5Hz 11.5–8.63 Hz 105–109 StrobePulseOpen · 1Hz 7.21–1.52 Hz 110–110 StrobePulseOpen · 1/10Hz 0.1 Hz 111–111 open (2) 112–124 Shutter Fade Effect strobe · fade effect slow 1–18.5… 125–125 Shutter Fade Effect strobe · fade effect fast 20 Hz 126–126 open (3) 127–127 closed (2) 128–141 pulse open fast 142–142 pulse open slow 143–143 open (4) 144–157 pulse close fast 158–158 pulse close slow 159–159 closed (3) 160–173 Shutter Fade close strobe · fade close fast 20–1.52 … 174–174 Shutter Fade close strobe · fade close slow 0.1 Hz 175–175 open (5) 176–189 fade open fast 190–190 fade open slow 191–191 closed (4) 192–205 rnd open fast 206–206 rnd open slow 207–207 open (6) 208–221 Shutter Rnd Close strobe · rnd close fast 20–1.52 Hz 222–222 Shutter Rnd Close strobe · rnd close slow 0.1 Hz 223–223 closed (5) 224–237 rnd pulse close fast 238–238 rnd pulse close slow 239–239 open (7) 240–253 rnd pulse open fast 254–254 rnd pulse open slow 255–255 open (8)
7	Dimmer	0	0–24 closed 25–50 10% 51–63 20% 64–75 25% 76–101 30% 102–127 40% 128–152 50% 153–178 60% 179–190 70% 191–203 75% 204–229 80% 230–254 90% 255–255 open
8	Focus	128	0–127 min 128–254 medium 255–255 max
9	Zoom	0	0–127 narrow 128–254 medium 255–255 wide

Wash Mode 1 (36 ch) Frame Mode TA 70% (continued)

Ch	Function	Default	DMX values
10	Focus1Distance	0	0–9 off 10–19 1m 20–29 2m 30–39 3m 40–49 4m 50–59 5m 60–69 6m 70–79 7m 80–89 8m 90–99 9m 100–109 10m 110–119 11m 120–129 12m 130–139 13m 140–149 14m 150–159 15m 160–169 16m 170–179 17m 180–189 18m 190–199 19m 200–209 20m 210–219 21m 220–229 22m 230–239 23m 240–249 24m 250–254 25m 255–255 far
11	No Feature	128	
12	Iris	0	0–254 open 255–255 closed
13	Gobo	0	0–7 open (wheel slot 1) 8–15 1 Dash (wheel slot 2) 16–23 2 Dots Square (wheel slot 3) 24–31 3 Sandglass (wheel slot 4) 32–39 4 Triangle (wheel slot 5) 40–47 5 Tiger (wheel slot 6) 48–127 6 Multicolor (wheel slot 7) 128–135 open (wheel slot 1) 136–142 1 Dash shake fast (wheel slot 2) 143–143 1 Dash shake slow (wheel slot 2) 144–150 2 Dots Square shake fast (wheel slot 3) 151–151 2 Dots Square shake slow (wheel slot 3) 152–158 3 Sandglass shake fast (wheel slot 4) 159–159 3 Sandglass shake slow (wheel slot 4) 160–166 4 Triangle shake fast (wheel slot 5) 167–167 4 Triangle shake slow (wheel slot 5) 168–174 5 Tiger shake fast (wheel slot 6) 175–175 5 Tiger shake slow (wheel slot 6) 176–190 6 Multicolor shake fast (wheel slot 7) 191–191 6 Multicolor shake slow (wheel slot 7) 192–222 spin >>> fast 223–223 spin >>> slow 224–254 spin <<< slow 255–255 spin <<< fast

Wash Mode 1 (36 ch) Frame Mode TA 70% (continued)

Ch	Function	Default	DMX values
14	Gobo Rotation	0	0–31 0 32–63 90 64–95 180 96–127 270 128–159 360 160–190 450 191–191 540 192–192 >>> 193–222 rotate 100__1% 223–224 Stop 225–254 rotate -1__-100% 255–255 <<<
15	Blade1A	0	0–35 min 36–72 10% 73–108 20% 109–145 30% 146–181 40% 182–218 50% 219–254 60% 255–255 70%
16	Blade1Rot	128	0–42 max ccw 43–84 -20 85–127 -10 128–169 zero 170–212 10 213–254 20 255–255 max cw
17	Blade2A	0	0–35 min 36–72 10% 73–108 20% 109–145 30% 146–181 40% 182–218 50% 219–254 60% 255–255 70%
18	Blade2Rot	128	0–42 max ccw 43–84 -20 85–127 -10 128–169 zero 170–212 10 213–254 20 255–255 max cw
19	Blade3A	0	0–35 min 36–72 10% 73–108 20% 109–145 30% 146–181 40% 182–218 50% 219–254 60% 255–255 70%
20	Blade3Rot	128	0–42 max ccw 43–84 -20 85–127 -10 128–169 zero 170–212 10 213–254 20 255–255 max cw

Wash Mode 1 (36 ch) Frame Mode TA 70% (continued)

Ch	Function	Default	DMX values
21	Blade4A	0	0–35 min 36–72 10% 73–108 20% 109–145 30% 146–181 40% 182–218 50% 219–254 60% 255–255 70%
22	Blade4Rot	128	0–42 max ccw 43–84 -20 85–127 -10 128–169 zero 170–212 10 213–254 20 255–255 max cw
23	Shaper Rot	128	0–10 55 11–22 50 23–33 45 34–45 40 46–57 35 58–68 30 69–80 25 81–92 20 93–103 15 104–115 10 116–127 5 128–138 0 139–150 -5 151–161 -10 162–173 -15 174–185 -20 186–196 -25 197–208 -30 209–220 -35 221–231 -40 232–243 -45 244–254 -50 255–255 -55

Wash Mode 1 (36 ch) Frame Mode TA 70% (continued)

Ch	Function	Default	DMX values
24	Color Wheel	0	0–1 open (wheel slot 1) 2–3 white / red (wheel slot 1) 4–5 red (wheel slot 2) 6–7 red / yellow (wheel slot 2) 8–9 yellow (wheel slot 3) 10–11 yellow / magenta (wheel slot 3) 12–13 magenta (wheel slot 4) 14–15 magenta / green (wheel slot 4) 16–17 green (wheel slot 5) 18–19 green / orange (wheel slot 5) 20–21 orange (wheel slot 6) 22–23 orange / blue (wheel slot 6) 24–25 blue (wheel slot 7) 26–27 blue / pink (wheel slot 7) 28–29 pink (wheel slot 8) 30–31 pink / ctb (wheel slot 8) 32–33 ctb (wheel slot 9) 34–63 ctb / white (wheel slot 9) 64–76 open (2) (wheel slot 1) 77–89 red (wheel slot 2) 90–101 yellow (wheel slot 3) 102–114 magenta (wheel slot 4) 115–127 green (wheel slot 5) 128–140 orange (wheel slot 6) 141–153 blue (wheel slot 7) 154–165 pink (wheel slot 8) 166–178 ctb (wheel slot 9) 179–191 open (3) (wheel slot 1) 192–222 spin >>> fast 223–223 spin >>> slow 224–254 spin <<< slow 255–255 spin <<< fast

Wash Mode 1 (36 ch) Frame Mode TA 70% (continued)

Ch	Function	Default	DMX values
25	Color Wheel 2	0	0–1 open (wheel slot 1) 2–3 white / cto1 (wheel slot 1) 4–5 cto1 (wheel slot 2) 6–7 cto1 / cto2 (wheel slot 2) 8–9 cto2 (wheel slot 3) 10–11 cto2 / cto3 (wheel slot 3) 12–13 cto3 (wheel slot 4) 14–15 cto3 / ctb1 (wheel slot 4) 16–17 ctb1 (wheel slot 5) 18–19 ctb1 / ctb2 (wheel slot 5) 20–21 ctb2 (wheel slot 6) 22–23 ctb2 / ctb3 (wheel slot 6) 24–25 ctb3 (wheel slot 7) 26–27 ctb3 / dark blue (wheel slot 7) 28–29 dark blue (wheel slot 8) 30–31 dark blue / dark red (wheel slot 8) 32–33 dark red (wheel slot 9) 34–63 dark red / white (wheel slot 9) 64–76 open (2) (wheel slot 1) 77–89 cto1 (wheel slot 2) 90–101 cto2 (wheel slot 3) 102–114 cto3 (wheel slot 4) 115–127 ctb1 (wheel slot 5) 128–140 ctb2 (wheel slot 6) 141–153 ctb3 (wheel slot 7) 154–165 dark blue (wheel slot 8) 166–178 dark red (wheel slot 9) 179–191 open (3) (wheel slot 1) 192–222 spin >>> fast 223–223 spin >>> slow 224–254 spin <<< slow 255–255 spin <<< fast
26	Cyan	0	0–63 min 64–127 25% 128–190 50% 191–254 75% 255–255 max
27	Magenta	0	0–63 min 64–127 25% 128–190 50% 191–254 75% 255–255 max
28	Yellow	0	0–63 min 64–127 25% 128–190 50% 191–254 75% 255–255 max
29	C TO	0	0–63 min 64–127 25% 128–190 50% 191–254 75% 255–255 max
30	Sparkle	0	0–63 0% sparkle 64–127 25% sparkle 128–190 50% sparkle 191–254 75% sparkle 255–255 100% sparkle

Wash Mode 1 (36 ch) Frame Mode TA 70% (continued)

Ch	Function	Default	DMX values
31	Sparkle Speed	0	0–0 sparkle faded slow 1–30 sparkle faded 1__99% 31–31 sparkle faded fast 32–32 sparkle switched slow 33–62 sparkle switched 1__99% 63–63 sparkle switched fast 64–64 sparkle faded slow 65–94 sparkle faded 1__99% 95–95 sparkle faded fast 96–96 sparkle switched slow 97–126 sparkle switched 1__99% 127–127 sparkle switched fast 128–128 sparkle faded slow 129–158 sparkle faded 1__99% 159–159 sparkle faded fast 160–160 sparkle switched slow 161–190 sparkle switched 1__99% 191–191 sparkle switched fast 192–192 sparkle faded slow 193–222 sparkle faded 1__99% 223–223 sparkle faded fast 224–224 sparkle switched slow 225–254 sparkle switched 1__99% 255–255 sparkle switched fast
32	Frost1	0	0–63 0% frost 64–127 25% frost 128–190 50% frost 191–254 75% frost 255–255 100% frost
33	Frost2	0	0–63 0% frost 64–127 25% frost 128–190 50% frost 191–254 75% frost 255–255 100% frost
34	Position MSpeed	0	0–3 real time movement 4–254 movement fast 255–255 movement slow
35	Global MSpeed	0	0–3 realtime effects 4–254 effects fast 255–255 effects slow
36	Blackout Mode	0	0–95 no bo 96–126 bo at p/t slow 127–127 bo at p/t fast 128–158 bo at go co pr cmy ir fr slow 159–159 bo at go co pr cmy ir fr fast 160–190 bo at go co pr cmy ir fr fo zo slow 191–191 bo at go co pr cmy ir fr fo zo fast 192–222 bo at go co pr cmy ir fr p/t slow 223–223 bo at go co pr cmy ir fr p/t fast 224–254 bo at go co pr cmy ir fr fo zo p/t slow 255–255 bo at go co pr cmy ir fr fo zo p/t fast

Wash Mode 2 (54 ch) Frame Mode AB

54 channels

Ch	Function	Default	DMX values
1	Pan	128	
2	Pan Fine	0	Fine byte of Pan
3	Tilt	128	

Wash Mode 2 (54 ch) Frame Mode AB (continued)

Ch	Function	Default	DMX values
4	Tilt Fine	0	Fine byte of Tilt
5	Control1	0	
6	Shutter / Strobe	16	0–15 closed 16–95 open 96–97 StrobePulseOpen · 20Hz 20–18.6 Hz 98–99 StrobePulseOpen · 15Hz 17.2–15.7 Hz 100–101 StrobePulseOpen · 10Hz 14.3–12.9 Hz 102–104 StrobePulseOpen · 5Hz 11.5–8.63 Hz 105–109 StrobePulseOpen · 1Hz 7.21–1.52 Hz 110–110 StrobePulseOpen · 1/10Hz 0.1 Hz 111–111 open (2) 112–124 Shutter Fade Effect strobe · fade effect slow 1–18.5… 125–125 Shutter Fade Effect strobe · fade effect fast 20 Hz 126–126 open (3) 127–127 closed (2) 128–141 pulse open fast 142–142 pulse open slow 143–143 open (4) 144–157 pulse close fast 158–158 pulse close slow 159–159 closed (3) 160–173 Shutter Fade close strobe · fade close fast 20–1.52 … 174–174 Shutter Fade close strobe · fade close slow 0.1 Hz 175–175 open (5) 176–189 fade open fast 190–190 fade open slow 191–191 closed (4) 192–205 rnd open fast 206–206 rnd open slow 207–207 open (6) 208–221 Shutter Rnd Close strobe · rnd close fast 20–1.52 Hz 222–222 Shutter Rnd Close strobe · rnd close slow 0.1 Hz 223–223 closed (5) 224–237 rnd pulse close fast 238–238 rnd pulse close slow 239–239 open (7) 240–253 rnd pulse open fast 254–254 rnd pulse open slow 255–255 open (8)
7	Dimmer	0	0–24 closed 25–50 10% 51–63 20% 64–75 25% 76–101 30% 102–127 40% 128–152 50% 153–178 60% 179–190 70% 191–203 75% 204–229 80% 230–254 90% 255–255 open
8	Dimmer Fine	0	Fine byte of Dimmer
9	Focus	128	0–126 min 127–254 medium 255–255 max
10	Focus Fine	0	Fine byte of Focus
11	Zoom	0	0–127 narrow 128–254 medium 255–255 wide

Wash Mode 2 (54 ch) Frame Mode AB (continued)

Ch	Function	Default	DMX values
12	Zoom Fine	0	Fine byte of Zoom
13	Focus1Distance	0	0–9 off 10–19 1m 20–29 2m 30–39 3m 40–49 4m 50–59 5m 60–69 6m 70–79 7m 80–89 8m 90–99 9m 100–109 10m 110–119 11m 120–129 12m 130–139 13m 140–149 14m 150–159 15m 160–169 16m 170–179 17m 180–189 18m 190–199 19m 200–209 20m 210–219 21m 220–229 22m 230–239 23m 240–249 24m 250–254 25m 255–255 far
14	No Feature	128	
15	Iris	0	0–254 open 255–255 closed
16	Iris Fine	0	Fine byte of Iris
17	Gobo	0	0–7 open (wheel slot 1) 8–15 1 Dash (wheel slot 2) 16–23 2 Dots Square (wheel slot 3) 24–31 3 Sandglass (wheel slot 4) 32–39 4 Triangle (wheel slot 5) 40–47 5 Tiger (wheel slot 6) 48–127 6 Multicolor (wheel slot 7) 128–135 open (wheel slot 1) 136–142 1 Dash shake fast (wheel slot 2) 143–143 1 Dash shake slow (wheel slot 2) 144–150 2 Dots Square shake fast (wheel slot 3) 151–151 2 Dots Square shake slow (wheel slot 3) 152–158 3 Sandglass shake fast (wheel slot 4) 159–159 3 Sandglass shake slow (wheel slot 4) 160–166 4 Triangle shake fast (wheel slot 5) 167–167 4 Triangle shake slow (wheel slot 5) 168–174 5 Tiger shake fast (wheel slot 6) 175–175 5 Tiger shake slow (wheel slot 6) 176–190 6 Multicolor shake fast (wheel slot 7) 191–191 6 Multicolor shake slow (wheel slot 7) 192–222 spin >>> fast 223–223 spin >>> slow 224–254 spin <<< slow 255–255 spin <<< fast

Wash Mode 2 (54 ch) Frame Mode AB (continued)

Ch	Function	Default	DMX values
18	Gobo Rotation	0	0–31 0 32–63 90 64–95 180 96–127 270 128–159 360 160–190 450 191–191 540 192–222 << 223–224 Stop 225–254 rotate 1__100% 255–255 >>>
19	Gobo Rotation Fine	0	Fine byte of Gobo Rotation
20	Blade1A	0	0–24 min 25–50 10% 51–75 20% 76–101 30% 102–127 40% 128–152 50% 153–178 60% 179–203 70% 204–229 80% 230–254 90% 255–255 max
21	Blade1A Fine	0	Fine byte of Blade1A
22	Blade1B	0	0–24 min 25–50 10% 51–75 20% 76–101 30% 102–127 40% 128–152 50% 153–178 60% 179–203 70% 204–229 80% 230–254 90% 255–255 max
23	Blade1B Fine	0	Fine byte of Blade1B
24	Blade2A	0	0–24 min 25–50 10% 51–75 20% 76–101 30% 102–127 40% 128–152 50% 153–178 60% 179–203 70% 204–229 80% 230–254 90% 255–255 max
25	Blade2A Fine	0	Fine byte of Blade2A
26	Blade2B	0	0–24 min 25–50 10% 51–75 20% 76–101 30% 102–127 40% 128–152 50% 153–178 60% 179–203 70% 204–229 80% 230–254 90% 255–255 max

Wash Mode 2 (54 ch) Frame Mode AB (continued)

Ch	Function	Default	DMX values
27	Blade2B Fine	0	Fine byte of Blade2B
28	Blade3A	0	0–24 min 25–50 10% 51–75 20% 76–101 30% 102–127 40% 128–152 50% 153–178 60% 179–203 70% 204–229 80% 230–254 90% 255–255 max
29	Blade3A Fine	0	Fine byte of Blade3A
30	Blade3B	0	0–24 min 25–50 10% 51–75 20% 76–101 30% 102–127 40% 128–152 50% 153–178 60% 179–203 70% 204–229 80% 230–254 90% 255–255 max
31	Blade3B Fine	0	Fine byte of Blade3B
32	Blade4A	0	0–24 min 25–50 10% 51–75 20% 76–101 30% 102–127 40% 128–152 50% 153–178 60% 179–203 70% 204–229 80% 230–254 90% 255–255 max
33	Blade4A Fine	0	Fine byte of Blade4A
34	Blade4B	0	0–24 min 25–50 10% 51–75 20% 76–101 30% 102–127 40% 128–152 50% 153–178 60% 179–203 70% 204–229 80% 230–254 90% 255–255 max
35	Blade4B Fine	0	Fine byte of Blade4B

Wash Mode 2 (54 ch) Frame Mode AB (continued)

Ch	Function	Default	DMX values
36	Shaper Rot	128	0–10 55 11–22 50 23–33 45 34–45 40 46–57 35 58–68 30 69–80 25 81–92 20 93–103 15 104–115 10 116–127 5 128–138 0 139–150 -5 151–161 -10 162–173 -15 174–185 -20 186–196 -25 197–208 -30 209–220 -35 221–231 -40 232–243 -45 244–254 -50 255–255 -55
37	Shaper Rot Fine	0	Fine byte of Shaper Rot
38	Color Wheel	0	0–1 open (wheel slot 1) 2–3 white / red (wheel slot 1) 4–5 red (wheel slot 2) 6–7 red / yellow (wheel slot 2) 8–9 yellow (wheel slot 3) 10–11 yellow / magenta (wheel slot 3) 12–13 magenta (wheel slot 4) 14–15 magenta / green (wheel slot 4) 16–17 green (wheel slot 5) 18–19 green / orange (wheel slot 5) 20–21 orange (wheel slot 6) 22–23 orange / blue (wheel slot 6) 24–25 blue (wheel slot 7) 26–27 blue / pink (wheel slot 7) 28–29 pink (wheel slot 8) 30–31 pink / ctb (wheel slot 8) 32–33 ctb (wheel slot 9) 34–63 ctb / white (wheel slot 9) 64–76 open (2) (wheel slot 1) 77–89 red (wheel slot 2) 90–101 yellow (wheel slot 3) 102–114 magenta (wheel slot 4) 115–127 green (wheel slot 5) 128–140 orange (wheel slot 6) 141–153 blue (wheel slot 7) 154–165 pink (wheel slot 8) 166–178 ctb (wheel slot 9) 179–191 open (3) (wheel slot 1) 192–222 spin >>> fast 223–223 spin >>> slow 224–254 spin <<< slow 255–255 spin <<< fast

Wash Mode 2 (54 ch) Frame Mode AB (continued)

Ch	Function	Default	DMX values
39	Color Wheel 2	0	0–1 open (wheel slot 1) 2–3 white / cto1 (wheel slot 1) 4–5 cto1 (wheel slot 2) 6–7 cto1 / cto2 (wheel slot 2) 8–9 cto2 (wheel slot 3) 10–11 cto2 / cto3 (wheel slot 3) 12–13 cto3 (wheel slot 4) 14–15 cto3 / ctb1 (wheel slot 4) 16–17 ctb1 (wheel slot 5) 18–19 ctb1 / ctb2 (wheel slot 5) 20–21 ctb2 (wheel slot 6) 22–23 ctb2 / ctb3 (wheel slot 6) 24–25 ctb3 (wheel slot 7) 26–27 ctb3 / dark blue (wheel slot 7) 28–29 dark blue (wheel slot 8) 30–31 dark blue / dark red (wheel slot 8) 32–33 dark red (wheel slot 9) 34–63 dark red / white (wheel slot 9) 64–76 open (2) (wheel slot 1) 77–89 cto1 (wheel slot 2) 90–101 cto2 (wheel slot 3) 102–114 cto3 (wheel slot 4) 115–127 ctb1 (wheel slot 5) 128–140 ctb2 (wheel slot 6) 141–153 ctb3 (wheel slot 7) 154–165 dark blue (wheel slot 8) 166–178 dark red (wheel slot 9) 179–191 open (3) (wheel slot 1) 192–222 spin >>> fast 223–223 spin >>> slow 224–254 spin <<< slow 255–255 spin <<< fast
40	Cyan	0	0–63 min 64–127 25% 128–190 50% 191–254 75% 255–255 max
41	Cyan Fine	0	Fine byte of Cyan
42	Magenta	0	0–63 min 64–127 25% 128–190 50% 191–254 75% 255–255 max
43	Magenta Fine	0	Fine byte of Magenta
44	Yellow	0	0–63 min 64–127 25% 128–190 50% 191–254 75% 255–255 max
45	Yellow Fine	0	Fine byte of Yellow
46	C TO	0	0–63 min 64–127 25% 128–190 50% 191–254 75% 255–255 max
47	C TO Fine	0	Fine byte of C TO

Wash Mode 2 (54 ch) Frame Mode AB (continued)

Ch	Function	Default	DMX values
48	Sparkle	0	0–63 0% sparkle 64–127 25% sparkle 128–190 50% sparkle 191–254 75% sparkle 255–255 100% sparkle
49	Sparkle Speed	0	0–0 sparkle faded slow 1–30 sparkle faded 1__99% 31–31 sparkle faded fast 32–32 sparkle switched slow 33–62 sparkle switched 1__99% 63–63 sparkle switched fast 64–64 sparkle faded slow 65–94 sparkle faded 1__99% 95–95 sparkle faded fast 96–96 sparkle switched slow 97–126 sparkle switched 1__99% 127–127 sparkle switched fast 128–128 sparkle faded slow 129–158 sparkle faded 1__99% 159–159 sparkle faded fast 160–160 sparkle switched slow 161–190 sparkle switched 1__99% 191–191 sparkle switched fast 192–192 sparkle faded slow 193–222 sparkle faded 1__99% 223–223 sparkle faded fast 224–224 sparkle switched slow 225–254 sparkle switched 1__99% 255–255 sparkle switched fast
50	Frost1	0	0–63 0% frost 64–127 25% frost 128–190 50% frost 191–254 75% frost 255–255 100% frost
51	Frost2	0	0–63 0% frost 64–127 25% frost 128–190 50% frost 191–254 75% frost 255–255 100% frost
52	Position MSpeed	0	0–3 real time movement 4–254 movement fast 255–255 movement slow
53	Global MSpeed	0	0–3 realtime effects 4–254 effects fast 255–255 effects slow
54	Blackout Mode	0	0–95 no bo 96–126 bo at p/t slow 127–127 bo at p/t fast 128–158 bo at go co pr cmy ir fr slow 159–159 bo at go co pr cmy ir fr fast 160–190 bo at go co pr cmy ir fr fo zo slow 191–191 bo at go co pr cmy ir fr fo zo fast 192–222 bo at go co pr cmy ir fr p/t slow 223–223 bo at go co pr cmy ir fr p/t fast 224–254 bo at go co pr cmy ir fr fo zo p/t slow 255–255 bo at go co pr cmy ir fr fo zo p/t fast

Wash Mode 2 (54 ch) Frame Mode AB 70%

54 channels

Ch	Function	Default	DMX values
1	Pan	128	
2	Pan Fine	0	Fine byte of Pan
3	Tilt	128	
4	Tilt Fine	0	Fine byte of Tilt
5	Control1	0	
6	Shutter / Strobe	16	0–15 closed 16–95 open 96–97 StrobePulseOpen · 20Hz 20–18.6 Hz 98–99 StrobePulseOpen · 15Hz 17.2–15.7 Hz 100–101 StrobePulseOpen · 10Hz 14.3–12.9 Hz 102–104 StrobePulseOpen · 5Hz 11.5–8.63 Hz 105–109 StrobePulseOpen · 1Hz 7.21–1.52 Hz 110–110 StrobePulseOpen · 1/10Hz 0.1 Hz 111–111 open (2) 112–124 Shutter Fade Effect strobe · fade effect slow 1–18.5… 125–125 Shutter Fade Effect strobe · fade effect fast 20 Hz 126–126 open (3) 127–127 closed (2) 128–141 pulse open fast 142–142 pulse open slow 143–143 open (4) 144–157 pulse close fast 158–158 pulse close slow 159–159 closed (3) 160–173 Shutter Fade close strobe · fade close fast 20–1.52 … 174–174 Shutter Fade close strobe · fade close slow 0.1 Hz 175–175 open (5) 176–189 fade open fast 190–190 fade open slow 191–191 closed (4) 192–205 rnd open fast 206–206 rnd open slow 207–207 open (6) 208–221 Shutter Rnd Close strobe · rnd close fast 20–1.52 Hz 222–222 Shutter Rnd Close strobe · rnd close slow 0.1 Hz 223–223 closed (5) 224–237 rnd pulse close fast 238–238 rnd pulse close slow 239–239 open (7) 240–253 rnd pulse open fast 254–254 rnd pulse open slow 255–255 open (8)
7	Dimmer	0	0–24 closed 25–50 10% 51–63 20% 64–75 25% 76–101 30% 102–127 40% 128–152 50% 153–178 60% 179–190 70% 191–203 75% 204–229 80% 230–254 90% 255–255 open
8	Dimmer Fine	0	Fine byte of Dimmer
9	Focus	128	0–126 min 127–254 medium 255–255 max

Wash Mode 2 (54 ch) Frame Mode AB 70% (continued)

Ch	Function	Default	DMX values
10	Focus Fine	0	Fine byte of Focus
11	Zoom	0	0–127 narrow 128–254 medium 255–255 wide
12	Zoom Fine	0	Fine byte of Zoom
13	Focus1Distance	0	0–9 off 10–19 1m 20–29 2m 30–39 3m 40–49 4m 50–59 5m 60–69 6m 70–79 7m 80–89 8m 90–99 9m 100–109 10m 110–119 11m 120–129 12m 130–139 13m 140–149 14m 150–159 15m 160–169 16m 170–179 17m 180–189 18m 190–199 19m 200–209 20m 210–219 21m 220–229 22m 230–239 23m 240–249 24m 250–254 25m 255–255 far
14	No Feature	128	
15	Iris	0	0–254 open 255–255 closed
16	Iris Fine	0	Fine byte of Iris
17	Gobo	0	0–7 open (wheel slot 1) 8–15 1 Dash (wheel slot 2) 16–23 2 Dots Square (wheel slot 3) 24–31 3 Sandglass (wheel slot 4) 32–39 4 Triangle (wheel slot 5) 40–47 5 Tiger (wheel slot 6) 48–127 6 Multicolor (wheel slot 7) 128–135 open (wheel slot 1) 136–142 1 Dash shake fast (wheel slot 2) 143–143 1 Dash shake slow (wheel slot 2) 144–150 2 Dots Square shake fast (wheel slot 3) 151–151 2 Dots Square shake slow (wheel slot 3) 152–158 3 Sandglass shake fast (wheel slot 4) 159–159 3 Sandglass shake slow (wheel slot 4) 160–166 4 Triangle shake fast (wheel slot 5) 167–167 4 Triangle shake slow (wheel slot 5) 168–174 5 Tiger shake fast (wheel slot 6) 175–175 5 Tiger shake slow (wheel slot 6) 176–190 6 Multicolor shake fast (wheel slot 7) 191–191 6 Multicolor shake slow (wheel slot 7) 192–222 spin >>> fast 223–223 spin >>> slow 224–254 spin <<< slow 255–255 spin <<< fast

Wash Mode 2 (54 ch) Frame Mode AB 70% (continued)

Ch	Function	Default	DMX values
18	Gobo Rotation	0	0–31 0 32–63 90 64–95 180 96–127 270 128–159 360 160–190 450 191–191 540 192–222 << 223–224 Stop 225–254 rotate 1__100% 255–255 >>>
19	Gobo Rotation Fine	0	Fine byte of Gobo Rotation
20	Blade1A	0	0–35 min 36–72 10% 73–108 20% 109–145 30% 146–181 40% 182–218 50% 219–254 60% 255–255 70%
21	Blade1A Fine	0	Fine byte of Blade1A
22	Blade1B	0	0–35 min 36–72 10% 73–108 20% 109–145 30% 146–181 40% 182–218 50% 219–254 60% 255–255 70%
23	Blade1B Fine	0	Fine byte of Blade1B
24	Blade2A	0	0–35 min 36–72 10% 73–108 20% 109–145 30% 146–181 40% 182–218 50% 219–254 60% 255–255 70%
25	Blade2A Fine	0	Fine byte of Blade2A
26	Blade2B	0	0–35 min 36–72 10% 73–108 20% 109–145 30% 146–181 40% 182–218 50% 219–254 60% 255–255 70%
27	Blade2B Fine	0	Fine byte of Blade2B
28	Blade3A	0	0–35 min 36–72 10% 73–108 20% 109–145 30% 146–181 40% 182–218 50% 219–254 60% 255–255 70%
29	Blade3A Fine	0	Fine byte of Blade3A

Wash Mode 2 (54 ch) Frame Mode AB 70% (continued)

Ch	Function	Default	DMX values
30	Blade3B	0	0–35 min 36–72 10% 73–108 20% 109–145 30% 146–181 40% 182–218 50% 219–254 60% 255–255 70%
31	Blade3B Fine	0	Fine byte of Blade3B
32	Blade4A	0	0–35 min 36–72 10% 73–108 20% 109–145 30% 146–181 40% 182–218 50% 219–254 60% 255–255 70%
33	Blade4A Fine	0	Fine byte of Blade4A
34	Blade4B	0	0–35 min 36–72 10% 73–108 20% 109–145 30% 146–181 40% 182–218 50% 219–254 60% 255–255 70%
35	Blade4B Fine	0	Fine byte of Blade4B
36	Shaper Rot	128	0–10 55 11–22 50 23–33 45 34–45 40 46–57 35 58–68 30 69–80 25 81–92 20 93–103 15 104–115 10 116–127 5 128–138 0 139–150 -5 151–161 -10 162–173 -15 174–185 -20 186–196 -25 197–208 -30 209–220 -35 221–231 -40 232–243 -45 244–254 -50 255–255 -55
37	Shaper Rot Fine	0	Fine byte of Shaper Rot

Wash Mode 2 (54 ch) Frame Mode AB 70% (continued)

Ch	Function	Default	DMX values
38	Color Wheel	0	0–1 open (wheel slot 1) 2–3 white / red (wheel slot 1) 4–5 red (wheel slot 2) 6–7 red / yellow (wheel slot 2) 8–9 yellow (wheel slot 3) 10–11 yellow / magenta (wheel slot 3) 12–13 magenta (wheel slot 4) 14–15 magenta / green (wheel slot 4) 16–17 green (wheel slot 5) 18–19 green / orange (wheel slot 5) 20–21 orange (wheel slot 6) 22–23 orange / blue (wheel slot 6) 24–25 blue (wheel slot 7) 26–27 blue / pink (wheel slot 7) 28–29 pink (wheel slot 8) 30–31 pink / ctb (wheel slot 8) 32–33 ctb (wheel slot 9) 34–63 ctb / white (wheel slot 9) 64–76 open (2) (wheel slot 1) 77–89 red (wheel slot 2) 90–101 yellow (wheel slot 3) 102–114 magenta (wheel slot 4) 115–127 green (wheel slot 5) 128–140 orange (wheel slot 6) 141–153 blue (wheel slot 7) 154–165 pink (wheel slot 8) 166–178 ctb (wheel slot 9) 179–191 open (3) (wheel slot 1) 192–222 spin >>> fast 223–223 spin >>> slow 224–254 spin <<< slow 255–255 spin <<< fast

Wash Mode 2 (54 ch) Frame Mode AB 70% (continued)

Ch	Function	Default	DMX values
39	Color Wheel 2	0	0–1 open (wheel slot 1) 2–3 white / cto1 (wheel slot 1) 4–5 cto1 (wheel slot 2) 6–7 cto1 / cto2 (wheel slot 2) 8–9 cto2 (wheel slot 3) 10–11 cto2 / cto3 (wheel slot 3) 12–13 cto3 (wheel slot 4) 14–15 cto3 / ctb1 (wheel slot 4) 16–17 ctb1 (wheel slot 5) 18–19 ctb1 / ctb2 (wheel slot 5) 20–21 ctb2 (wheel slot 6) 22–23 ctb2 / ctb3 (wheel slot 6) 24–25 ctb3 (wheel slot 7) 26–27 ctb3 / dark blue (wheel slot 7) 28–29 dark blue (wheel slot 8) 30–31 dark blue / dark red (wheel slot 8) 32–33 dark red (wheel slot 9) 34–63 dark red / white (wheel slot 9) 64–76 open (2) (wheel slot 1) 77–89 cto1 (wheel slot 2) 90–101 cto2 (wheel slot 3) 102–114 cto3 (wheel slot 4) 115–127 ctb1 (wheel slot 5) 128–140 ctb2 (wheel slot 6) 141–153 ctb3 (wheel slot 7) 154–165 dark blue (wheel slot 8) 166–178 dark red (wheel slot 9) 179–191 open (3) (wheel slot 1) 192–222 spin >>> fast 223–223 spin >>> slow 224–254 spin <<< slow 255–255 spin <<< fast
40	Cyan	0	0–63 min 64–127 25% 128–190 50% 191–254 75% 255–255 max
41	Cyan Fine	0	Fine byte of Cyan
42	Magenta	0	0–63 min 64–127 25% 128–190 50% 191–254 75% 255–255 max
43	Magenta Fine	0	Fine byte of Magenta
44	Yellow	0	0–63 min 64–127 25% 128–190 50% 191–254 75% 255–255 max
45	Yellow Fine	0	Fine byte of Yellow
46	C TO	0	0–63 min 64–127 25% 128–190 50% 191–254 75% 255–255 max
47	C TO Fine	0	Fine byte of C TO

Wash Mode 2 (54 ch) Frame Mode AB 70% (continued)

Ch	Function	Default	DMX values
48	Sparkle	0	0–63 0% sparkle 64–127 25% sparkle 128–190 50% sparkle 191–254 75% sparkle 255–255 100% sparkle
49	Sparkle Speed	0	0–0 sparkle faded slow 1–30 sparkle faded 1__99% 31–31 sparkle faded fast 32–32 sparkle switched slow 33–62 sparkle switched 1__99% 63–63 sparkle switched fast 64–64 sparkle faded slow 65–94 sparkle faded 1__99% 95–95 sparkle faded fast 96–96 sparkle switched slow 97–126 sparkle switched 1__99% 127–127 sparkle switched fast 128–128 sparkle faded slow 129–158 sparkle faded 1__99% 159–159 sparkle faded fast 160–160 sparkle switched slow 161–190 sparkle switched 1__99% 191–191 sparkle switched fast 192–192 sparkle faded slow 193–222 sparkle faded 1__99% 223–223 sparkle faded fast 224–224 sparkle switched slow 225–254 sparkle switched 1__99% 255–255 sparkle switched fast
50	Frost1	0	0–63 0% frost 64–127 25% frost 128–190 50% frost 191–254 75% frost 255–255 100% frost
51	Frost2	0	0–63 0% frost 64–127 25% frost 128–190 50% frost 191–254 75% frost 255–255 100% frost
52	Position MSpeed	0	0–3 real time movement 4–254 movement fast 255–255 movement slow
53	Global MSpeed	0	0–3 realtime effects 4–254 effects fast 255–255 effects slow
54	Blackout Mode	0	0–95 no bo 96–126 bo at p/t slow 127–127 bo at p/t fast 128–158 bo at go co pr cmy ir fr slow 159–159 bo at go co pr cmy ir fr fast 160–190 bo at go co pr cmy ir fr fo zo slow 191–191 bo at go co pr cmy ir fr fo zo fast 192–222 bo at go co pr cmy ir fr p/t slow 223–223 bo at go co pr cmy ir fr p/t fast 224–254 bo at go co pr cmy ir fr fo zo p/t slow 255–255 bo at go co pr cmy ir fr fo zo p/t fast

Wash Mode 2 (54 ch) Frame Mode TA

54 channels

Ch	Function	Default	DMX values
1	Pan	128	
2	Pan Fine	0	Fine byte of Pan
3	Tilt	128	
4	Tilt Fine	0	Fine byte of Tilt
5	Control1	0	
6	Shutter / Strobe	16	0–15 closed 16–95 open 96–97 StrobePulseOpen · 20Hz 20–18.6 Hz 98–99 StrobePulseOpen · 15Hz 17.2–15.7 Hz 100–101 StrobePulseOpen · 10Hz 14.3–12.9 Hz 102–104 StrobePulseOpen · 5Hz 11.5–8.63 Hz 105–109 StrobePulseOpen · 1Hz 7.21–1.52 Hz 110–110 StrobePulseOpen · 1/10Hz 0.1 Hz 111–111 open (2) 112–124 Shutter Fade Effect strobe · fade effect slow 1–18.5… 125–125 Shutter Fade Effect strobe · fade effect fast 20 Hz 126–126 open (3) 127–127 closed (2) 128–141 pulse open fast 142–142 pulse open slow 143–143 open (4) 144–157 pulse close fast 158–158 pulse close slow 159–159 closed (3) 160–173 Shutter Fade close strobe · fade close fast 20–1.52 … 174–174 Shutter Fade close strobe · fade close slow 0.1 Hz 175–175 open (5) 176–189 fade open fast 190–190 fade open slow 191–191 closed (4) 192–205 rnd open fast 206–206 rnd open slow 207–207 open (6) 208–221 Shutter Rnd Close strobe · rnd close fast 20–1.52 Hz 222–222 Shutter Rnd Close strobe · rnd close slow 0.1 Hz 223–223 closed (5) 224–237 rnd pulse close fast 238–238 rnd pulse close slow 239–239 open (7) 240–253 rnd pulse open fast 254–254 rnd pulse open slow 255–255 open (8)
7	Dimmer	0	0–24 closed 25–50 10% 51–63 20% 64–75 25% 76–101 30% 102–127 40% 128–152 50% 153–178 60% 179–190 70% 191–203 75% 204–229 80% 230–254 90% 255–255 open
8	Dimmer Fine	0	Fine byte of Dimmer
9	Focus	128	0–126 min 127–254 medium 255–255 max

Wash Mode 2 (54 ch) Frame Mode TA (continued)

Ch	Function	Default	DMX values
10	Focus Fine	0	Fine byte of Focus
11	Zoom	0	0–127 narrow 128–254 medium 255–255 wide
12	Zoom Fine	0	Fine byte of Zoom
13	Focus1Distance	0	0–9 off 10–19 1m 20–29 2m 30–39 3m 40–49 4m 50–59 5m 60–69 6m 70–79 7m 80–89 8m 90–99 9m 100–109 10m 110–119 11m 120–129 12m 130–139 13m 140–149 14m 150–159 15m 160–169 16m 170–179 17m 180–189 18m 190–199 19m 200–209 20m 210–219 21m 220–229 22m 230–239 23m 240–249 24m 250–254 25m 255–255 far
14	No Feature	128	
15	Iris	0	0–254 open 255–255 closed
16	Iris Fine	0	Fine byte of Iris
17	Gobo	0	0–7 open (wheel slot 1) 8–15 1 Dash (wheel slot 2) 16–23 2 Dots Square (wheel slot 3) 24–31 3 Sandglass (wheel slot 4) 32–39 4 Triangle (wheel slot 5) 40–47 5 Tiger (wheel slot 6) 48–127 6 Multicolor (wheel slot 7) 128–135 open (wheel slot 1) 136–142 1 Dash shake fast (wheel slot 2) 143–143 1 Dash shake slow (wheel slot 2) 144–150 2 Dots Square shake fast (wheel slot 3) 151–151 2 Dots Square shake slow (wheel slot 3) 152–158 3 Sandglass shake fast (wheel slot 4) 159–159 3 Sandglass shake slow (wheel slot 4) 160–166 4 Triangle shake fast (wheel slot 5) 167–167 4 Triangle shake slow (wheel slot 5) 168–174 5 Tiger shake fast (wheel slot 6) 175–175 5 Tiger shake slow (wheel slot 6) 176–190 6 Multicolor shake fast (wheel slot 7) 191–191 6 Multicolor shake slow (wheel slot 7) 192–222 spin >>> fast 223–223 spin >>> slow 224–254 spin <<< slow 255–255 spin <<< fast

Wash Mode 2 (54 ch) Frame Mode TA (continued)

Ch	Function	Default	DMX values
18	Gobo Rotation	0	0–31 0 32–63 90 64–95 180 96–127 270 128–159 360 160–190 450 191–191 540 192–222 << 223–224 Stop 225–254 rotate 1__100% 255–255 >>>
19	Gobo Rotation Fine	0	Fine byte of Gobo Rotation
20	Blade1A	0	0–24 min 25–50 10% 51–75 20% 76–101 30% 102–127 40% 128–152 50% 153–178 60% 179–203 70% 204–229 80% 230–254 90% 255–255 max
21	Blade1A Fine	0	Fine byte of Blade1A
22	Blade1Rot	128	0–41 max ccw 42–84 -20 85–127 -10 128–169 zero 170–212 10 213–254 20 255–255 max cw
23	Blade1Rot Fine	0	Fine byte of Blade1Rot
24	Blade2A	0	0–24 min 25–50 10% 51–75 20% 76–101 30% 102–127 40% 128–152 50% 153–178 60% 179–203 70% 204–229 80% 230–254 90% 255–255 max
25	Blade2A Fine	0	Fine byte of Blade2A
26	Blade2Rot	128	0–41 max ccw 42–84 -20 85–127 -10 128–169 zero 170–212 10 213–254 20 255–255 max cw
27	Blade2Rot Fine	0	Fine byte of Blade2Rot

Wash Mode 2 (54 ch) Frame Mode TA (continued)

Ch	Function	Default	DMX values
28	Blade3A	0	0–24 min 25–50 10% 51–75 20% 76–101 30% 102–127 40% 128–152 50% 153–178 60% 179–203 70% 204–229 80% 230–254 90% 255–255 max
29	Blade3A Fine	0	Fine byte of Blade3A
30	Blade3Rot	128	0–41 max cw 42–84 -20 85–127 -10 128–169 zero 170–212 10 213–254 20 255–255 max cw
31	Blade3Rot Fine	0	Fine byte of Blade3Rot
32	Blade4A	0	0–24 min 25–50 10% 51–75 20% 76–101 30% 102–127 40% 128–152 50% 153–178 60% 179–203 70% 204–229 80% 230–254 90% 255–255 max
33	Blade4A Fine	0	Fine byte of Blade4A
34	Blade4Rot	128	0–41 max ccw 42–84 -20 85–127 -10 128–169 zero 170–212 10 213–254 20 255–255 max cw
35	Blade4Rot Fine	0	Fine byte of Blade4Rot

Wash Mode 2 (54 ch) Frame Mode TA (continued)

Ch	Function	Default	DMX values
36	Shaper Rot	128	0–10 55 11–22 50 23–33 45 34–45 40 46–57 35 58–68 30 69–80 25 81–92 20 93–103 15 104–115 10 116–127 5 128–138 0 139–150 -5 151–161 -10 162–173 -15 174–185 -20 186–196 -25 197–208 -30 209–220 -35 221–231 -40 232–243 -45 244–254 -50 255–255 -55
37	Shaper Rot Fine	0	Fine byte of Shaper Rot
38	Color Wheel	0	0–1 open (wheel slot 1) 2–3 white / red (wheel slot 1) 4–5 red (wheel slot 2) 6–7 red / yellow (wheel slot 2) 8–9 yellow (wheel slot 3) 10–11 yellow / magenta (wheel slot 3) 12–13 magenta (wheel slot 4) 14–15 magenta / green (wheel slot 4) 16–17 green (wheel slot 5) 18–19 green / orange (wheel slot 5) 20–21 orange (wheel slot 6) 22–23 orange / blue (wheel slot 6) 24–25 blue (wheel slot 7) 26–27 blue / pink (wheel slot 7) 28–29 pink (wheel slot 8) 30–31 pink / ctb (wheel slot 8) 32–33 ctb (wheel slot 9) 34–63 ctb / white (wheel slot 9) 64–76 open (2) (wheel slot 1) 77–89 red (wheel slot 2) 90–101 yellow (wheel slot 3) 102–114 magenta (wheel slot 4) 115–127 green (wheel slot 5) 128–140 orange (wheel slot 6) 141–153 blue (wheel slot 7) 154–165 pink (wheel slot 8) 166–178 ctb (wheel slot 9) 179–191 open (3) (wheel slot 1) 192–222 spin >>> fast 223–223 spin >>> slow 224–254 spin <<< slow 255–255 spin <<< fast

Wash Mode 2 (54 ch) Frame Mode TA (continued)

Ch	Function	Default	DMX values
39	Color Wheel 2	0	0–1 open (wheel slot 1) 2–3 white / cto1 (wheel slot 1) 4–5 cto1 (wheel slot 2) 6–7 cto1 / cto2 (wheel slot 2) 8–9 cto2 (wheel slot 3) 10–11 cto2 / cto3 (wheel slot 3) 12–13 cto3 (wheel slot 4) 14–15 cto3 / ctb1 (wheel slot 4) 16–17 ctb1 (wheel slot 5) 18–19 ctb1 / ctb2 (wheel slot 5) 20–21 ctb2 (wheel slot 6) 22–23 ctb2 / ctb3 (wheel slot 6) 24–25 ctb3 (wheel slot 7) 26–27 ctb3 / dark blue (wheel slot 7) 28–29 dark blue (wheel slot 8) 30–31 dark blue / dark red (wheel slot 8) 32–33 dark red (wheel slot 9) 34–63 dark red / white (wheel slot 9) 64–76 open (2) (wheel slot 1) 77–89 cto1 (wheel slot 2) 90–101 cto2 (wheel slot 3) 102–114 cto3 (wheel slot 4) 115–127 ctb1 (wheel slot 5) 128–140 ctb2 (wheel slot 6) 141–153 ctb3 (wheel slot 7) 154–165 dark blue (wheel slot 8) 166–178 dark red (wheel slot 9) 179–191 open (3) (wheel slot 1) 192–222 spin >>> fast 223–223 spin >>> slow 224–254 spin <<< slow 255–255 spin <<< fast
40	Cyan	0	0–63 min 64–127 25% 128–190 50% 191–254 75% 255–255 max
41	Cyan Fine	0	Fine byte of Cyan
42	Magenta	0	0–63 min 64–127 25% 128–190 50% 191–254 75% 255–255 max
43	Magenta Fine	0	Fine byte of Magenta
44	Yellow	0	0–63 min 64–127 25% 128–190 50% 191–254 75% 255–255 max
45	Yellow Fine	0	Fine byte of Yellow
46	C TO	0	0–63 min 64–127 25% 128–190 50% 191–254 75% 255–255 max
47	C TO Fine	0	Fine byte of C TO

Wash Mode 2 (54 ch) Frame Mode TA (continued)

Ch	Function	Default	DMX values
48	Sparkle	0	0–63 0% sparkle 64–127 25% sparkle 128–190 50% sparkle 191–254 75% sparkle 255–255 100% sparkle
49	Sparkle Speed	0	0–0 sparkle faded slow 1–30 sparkle faded 1__99% 31–31 sparkle faded fast 32–32 sparkle switched slow 33–62 sparkle switched 1__99% 63–63 sparkle switched fast 64–64 sparkle faded slow 65–94 sparkle faded 1__99% 95–95 sparkle faded fast 96–96 sparkle switched slow 97–126 sparkle switched 1__99% 127–127 sparkle switched fast 128–128 sparkle faded slow 129–158 sparkle faded 1__99% 159–159 sparkle faded fast 160–160 sparkle switched slow 161–190 sparkle switched 1__99% 191–191 sparkle switched fast 192–192 sparkle faded slow 193–222 sparkle faded 1__99% 223–223 sparkle faded fast 224–224 sparkle switched slow 225–254 sparkle switched 1__99% 255–255 sparkle switched fast
50	Frost1	0	0–63 0% frost 64–127 25% frost 128–190 50% frost 191–254 75% frost 255–255 100% frost
51	Frost2	0	0–63 0% frost 64–127 25% frost 128–190 50% frost 191–254 75% frost 255–255 100% frost
52	Position MSpeed	0	0–3 real time movement 4–254 movement fast 255–255 movement slow
53	Global MSpeed	0	0–3 realtime effects 4–254 effects fast 255–255 effects slow
54	Blackout Mode	0	0–95 no bo 96–126 bo at p/t slow 127–127 bo at p/t fast 128–158 bo at go co pr cmy ir fr slow 159–159 bo at go co pr cmy ir fr fast 160–190 bo at go co pr cmy ir fr fo zo slow 191–191 bo at go co pr cmy ir fr fo zo fast 192–222 bo at go co pr cmy ir fr p/t slow 223–223 bo at go co pr cmy ir fr p/t fast 224–254 bo at go co pr cmy ir fr fo zo p/t slow 255–255 bo at go co pr cmy ir fr fo zo p/t fast

Wash Mode 2 (54 ch) Frame Mode TA 70%

54 channels

Ch	Function	Default	DMX values
1	Pan	128	
2	Pan Fine	0	Fine byte of Pan
3	Tilt	128	
4	Tilt Fine	0	Fine byte of Tilt
5	Control1	0	
6	Shutter / Strobe	16	0–15 closed 16–95 open 96–97 StrobePulseOpen · 20Hz 20–18.6 Hz 98–99 StrobePulseOpen · 15Hz 17.2–15.7 Hz 100–101 StrobePulseOpen · 10Hz 14.3–12.9 Hz 102–104 StrobePulseOpen · 5Hz 11.5–8.63 Hz 105–109 StrobePulseOpen · 1Hz 7.21–1.52 Hz 110–110 StrobePulseOpen · 1/10Hz 0.1 Hz 111–111 open (2) 112–124 Shutter Fade Effect strobe · fade effect slow 1–18.5… 125–125 Shutter Fade Effect strobe · fade effect fast 20 Hz 126–126 open (3) 127–127 closed (2) 128–141 pulse open fast 142–142 pulse open slow 143–143 open (4) 144–157 pulse close fast 158–158 pulse close slow 159–159 closed (3) 160–173 Shutter Fade close strobe · fade close fast 20–1.52 … 174–174 Shutter Fade close strobe · fade close slow 0.1 Hz 175–175 open (5) 176–189 fade open fast 190–190 fade open slow 191–191 closed (4) 192–205 rnd open fast 206–206 rnd open slow 207–207 open (6) 208–221 Shutter Rnd Close strobe · rnd close fast 20–1.52 Hz 222–222 Shutter Rnd Close strobe · rnd close slow 0.1 Hz 223–223 closed (5) 224–237 rnd pulse close fast 238–238 rnd pulse close slow 239–239 open (7) 240–253 rnd pulse open fast 254–254 rnd pulse open slow 255–255 open (8)
7	Dimmer	0	0–24 closed 25–50 10% 51–63 20% 64–75 25% 76–101 30% 102–127 40% 128–152 50% 153–178 60% 179–190 70% 191–203 75% 204–229 80% 230–254 90% 255–255 open
8	Dimmer Fine	0	Fine byte of Dimmer
9	Focus	128	0–126 min 127–254 medium 255–255 max

Wash Mode 2 (54 ch) Frame Mode TA 70% (continued)

Ch	Function	Default	DMX values
10	Focus Fine	0	Fine byte of Focus
11	Zoom	0	0–127 narrow 128–254 medium 255–255 wide
12	Zoom Fine	0	Fine byte of Zoom
13	Focus1Distance	0	0–9 off 10–19 1m 20–29 2m 30–39 3m 40–49 4m 50–59 5m 60–69 6m 70–79 7m 80–89 8m 90–99 9m 100–109 10m 110–119 11m 120–129 12m 130–139 13m 140–149 14m 150–159 15m 160–169 16m 170–179 17m 180–189 18m 190–199 19m 200–209 20m 210–219 21m 220–229 22m 230–239 23m 240–249 24m 250–254 25m 255–255 far
14	No Feature	128	
15	Iris	0	0–254 open 255–255 closed
16	Iris Fine	0	Fine byte of Iris
17	Gobo	0	0–7 open (wheel slot 1) 8–15 1 Dash (wheel slot 2) 16–23 2 Dots Square (wheel slot 3) 24–31 3 Sandglass (wheel slot 4) 32–39 4 Triangle (wheel slot 5) 40–47 5 Tiger (wheel slot 6) 48–127 6 Multicolor (wheel slot 7) 128–135 open (wheel slot 1) 136–142 1 Dash shake fast (wheel slot 2) 143–143 1 Dash shake slow (wheel slot 2) 144–150 2 Dots Square shake fast (wheel slot 3) 151–151 2 Dots Square shake slow (wheel slot 3) 152–158 3 Sandglass shake fast (wheel slot 4) 159–159 3 Sandglass shake slow (wheel slot 4) 160–166 4 Triangle shake fast (wheel slot 5) 167–167 4 Triangle shake slow (wheel slot 5) 168–174 5 Tiger shake fast (wheel slot 6) 175–175 5 Tiger shake slow (wheel slot 6) 176–190 6 Multicolor shake fast (wheel slot 7) 191–191 6 Multicolor shake slow (wheel slot 7) 192–222 spin >>> fast 223–223 spin >>> slow 224–254 spin <<< slow 255–255 spin <<< fast

Wash Mode 2 (54 ch) Frame Mode TA 70% (continued)

Ch	Function	Default	DMX values
18	Gobo Rotation	0	0–31 0 32–63 90 64–95 180 96–127 270 128–159 360 160–190 450 191–191 540 192–222 << 223–224 Stop 225–254 rotate 1__100% 255–255 >>>
19	Gobo Rotation Fine	0	Fine byte of Gobo Rotation
20	Blade1A	0	0–35 min 36–72 10% 73–108 20% 109–145 30% 146–181 40% 182–218 50% 219–254 60% 255–255 70%
21	Blade1A Fine	0	Fine byte of Blade1A
22	Blade1Rot	128	0–41 max ccw 42–84 -20 85–127 -10 128–169 zero 170–212 10 213–254 20 255–255 max cw
23	Blade1Rot Fine	0	Fine byte of Blade1Rot
24	Blade2A	0	0–35 min 36–72 10% 73–108 20% 109–145 30% 146–181 40% 182–218 50% 219–254 60% 255–255 70%
25	Blade2A Fine	0	Fine byte of Blade2A
26	Blade2Rot	128	0–41 max ccw 42–84 -20 85–127 -10 128–169 zero 170–212 10 213–254 20 255–255 max cw
27	Blade2Rot Fine	0	Fine byte of Blade2Rot
28	Blade3A	0	0–35 min 36–72 10% 73–108 20% 109–145 30% 146–181 40% 182–218 50% 219–254 60% 255–255 70%
29	Blade3A Fine	0	Fine byte of Blade3A

Wash Mode 2 (54 ch) Frame Mode TA 70% (continued)

Ch	Function	Default	DMX values
30	Blade3Rot	128	0–41 max cw 42–84 -20 85–127 -10 128–169 zero 170–212 10 213–254 20 255–255 max cw
31	Blade3Rot Fine	0	Fine byte of Blade3Rot
32	Blade4A	0	0–35 min 36–72 10% 73–108 20% 109–145 30% 146–181 40% 182–218 50% 219–254 60% 255–255 70%
33	Blade4A Fine	0	Fine byte of Blade4A
34	Blade4Rot	128	0–41 max ccw 42–84 -20 85–127 -10 128–169 zero 170–212 10 213–254 20 255–255 max cw
35	Blade4Rot Fine	0	Fine byte of Blade4Rot
36	Shaper Rot	128	0–10 55 11–22 50 23–33 45 34–45 40 46–57 35 58–68 30 69–80 25 81–92 20 93–103 15 104–115 10 116–127 5 128–138 0 139–150 -5 151–161 -10 162–173 -15 174–185 -20 186–196 -25 197–208 -30 209–220 -35 221–231 -40 232–243 -45 244–254 -50 255–255 -55
37	Shaper Rot Fine	0	Fine byte of Shaper Rot

Wash Mode 2 (54 ch) Frame Mode TA 70% (continued)

Ch	Function	Default	DMX values
38	Color Wheel	0	0–1 open (wheel slot 1) 2–3 white / red (wheel slot 1) 4–5 red (wheel slot 2) 6–7 red / yellow (wheel slot 2) 8–9 yellow (wheel slot 3) 10–11 yellow / magenta (wheel slot 3) 12–13 magenta (wheel slot 4) 14–15 magenta / green (wheel slot 4) 16–17 green (wheel slot 5) 18–19 green / orange (wheel slot 5) 20–21 orange (wheel slot 6) 22–23 orange / blue (wheel slot 6) 24–25 blue (wheel slot 7) 26–27 blue / pink (wheel slot 7) 28–29 pink (wheel slot 8) 30–31 pink / ctb (wheel slot 8) 32–33 ctb (wheel slot 9) 34–63 ctb / white (wheel slot 9) 64–76 open (2) (wheel slot 1) 77–89 red (wheel slot 2) 90–101 yellow (wheel slot 3) 102–114 magenta (wheel slot 4) 115–127 green (wheel slot 5) 128–140 orange (wheel slot 6) 141–153 blue (wheel slot 7) 154–165 pink (wheel slot 8) 166–178 ctb (wheel slot 9) 179–191 open (3) (wheel slot 1) 192–222 spin >>> fast 223–223 spin >>> slow 224–254 spin <<< slow 255–255 spin <<< fast

Wash Mode 2 (54 ch) Frame Mode TA 70% (continued)

Ch	Function	Default	DMX values
39	Color Wheel 2	0	0–1 open (wheel slot 1) 2–3 white / cto1 (wheel slot 1) 4–5 cto1 (wheel slot 2) 6–7 cto1 / cto2 (wheel slot 2) 8–9 cto2 (wheel slot 3) 10–11 cto2 / cto3 (wheel slot 3) 12–13 cto3 (wheel slot 4) 14–15 cto3 / ctb1 (wheel slot 4) 16–17 ctb1 (wheel slot 5) 18–19 ctb1 / ctb2 (wheel slot 5) 20–21 ctb2 (wheel slot 6) 22–23 ctb2 / ctb3 (wheel slot 6) 24–25 ctb3 (wheel slot 7) 26–27 ctb3 / dark blue (wheel slot 7) 28–29 dark blue (wheel slot 8) 30–31 dark blue / dark red (wheel slot 8) 32–33 dark red (wheel slot 9) 34–63 dark red / white (wheel slot 9) 64–76 open (2) (wheel slot 1) 77–89 cto1 (wheel slot 2) 90–101 cto2 (wheel slot 3) 102–114 cto3 (wheel slot 4) 115–127 ctb1 (wheel slot 5) 128–140 ctb2 (wheel slot 6) 141–153 ctb3 (wheel slot 7) 154–165 dark blue (wheel slot 8) 166–178 dark red (wheel slot 9) 179–191 open (3) (wheel slot 1) 192–222 spin >>> fast 223–223 spin >>> slow 224–254 spin <<< slow 255–255 spin <<< fast
40	Cyan	0	0–63 min 64–127 25% 128–190 50% 191–254 75% 255–255 max
41	Cyan Fine	0	Fine byte of Cyan
42	Magenta	0	0–63 min 64–127 25% 128–190 50% 191–254 75% 255–255 max
43	Magenta Fine	0	Fine byte of Magenta
44	Yellow	0	0–63 min 64–127 25% 128–190 50% 191–254 75% 255–255 max
45	Yellow Fine	0	Fine byte of Yellow
46	C TO	0	0–63 min 64–127 25% 128–190 50% 191–254 75% 255–255 max
47	C TO Fine	0	Fine byte of C TO

Wash Mode 2 (54 ch) Frame Mode TA 70% (continued)

Ch	Function	Default	DMX values
48	Sparkle	0	0–63 0% sparkle 64–127 25% sparkle 128–190 50% sparkle 191–254 75% sparkle 255–255 100% sparkle
49	Sparkle Speed	0	0–0 sparkle faded slow 1–30 sparkle faded 1__99% 31–31 sparkle faded fast 32–32 sparkle switched slow 33–62 sparkle switched 1__99% 63–63 sparkle switched fast 64–64 sparkle faded slow 65–94 sparkle faded 1__99% 95–95 sparkle faded fast 96–96 sparkle switched slow 97–126 sparkle switched 1__99% 127–127 sparkle switched fast 128–128 sparkle faded slow 129–158 sparkle faded 1__99% 159–159 sparkle faded fast 160–160 sparkle switched slow 161–190 sparkle switched 1__99% 191–191 sparkle switched fast 192–192 sparkle faded slow 193–222 sparkle faded 1__99% 223–223 sparkle faded fast 224–224 sparkle switched slow 225–254 sparkle switched 1__99% 255–255 sparkle switched fast
50	Frost1	0	0–63 0% frost 64–127 25% frost 128–190 50% frost 191–254 75% frost 255–255 100% frost
51	Frost2	0	0–63 0% frost 64–127 25% frost 128–190 50% frost 191–254 75% frost 255–255 100% frost
52	Position MSpeed	0	0–3 real time movement 4–254 movement fast 255–255 movement slow
53	Global MSpeed	0	0–3 realtime effects 4–254 effects fast 255–255 effects slow
54	Blackout Mode	0	0–95 no bo 96–126 bo at p/t slow 127–127 bo at p/t fast 128–158 bo at go co pr cmy ir fr slow 159–159 bo at go co pr cmy ir fr fast 160–190 bo at go co pr cmy ir fr fo zo slow 191–191 bo at go co pr cmy ir fr fo zo fast 192–222 bo at go co pr cmy ir fr p/t slow 223–223 bo at go co pr cmy ir fr p/t fast 224–254 bo at go co pr cmy ir fr fo zo p/t slow 255–255 bo at go co pr cmy ir fr fo zo p/t fast