JB-Lighting

# Sparx18



| | |
|---|---|
| Manufacturer | **JB-Lighting** |
| Type | **Moving head** |
| DMX modes | **3** |
| DMX footprint | **23, 34, 49 channels** |
| Beam angle | **3-70°** |
| Pan range | **540.73°** |
| Tilt range | **323.79°** |
| Heads / cells | **2** |
| Size (W × H × D) | **344 × 280 × 344 mm** |
| GDTF fixture type | **5C1FB8E6-C582-4C5B-BBBC-C0…** |

## Controls

Zoom · Extra LED colours · RGB colour mixing · Colour temperature · Colour wheel · Effect speed · Strobe · Dimmer · Pixel control · Pan and tilt

## Safety-relevant functions

Built-in effect programmes

## DMX modes

| | |
|---|---|
| Mode3 (23) | 23 ch |
| Mode1 (34) | 34 ch |
| Mode2 (49) | 49 ch |

## Mode3 (23)

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

## Mode3 (23) (continued)

| Ch | Function | Default | DMX values |
|---|---|---|---|
| **10** | Zoom | 0 | 0–127 narrow<br>128–254 medium<br>255–255 wide |
| **11** | Beam Shaper Pos | 0 | 0–47 0<br>48–95 90<br>96–142 180<br>143–190 270<br>191–191 360<br>192–192 >>><br>193–222 rotate 100__1%<br>223–224 Stop<br>225–254 rotate -1__-100%<br>255–255 <<< |
| **12** | C TO | 0 | 0–63 0% cto<br>64–127 25% cto<br>128–190 50% cto<br>191–254 75% cto<br>255–255 100% cto |
| **13** | Color Wheel | 0 | 0–0 inactive colors rgb (wheel slot 1)<br>1–3 white (wheel slot 1)<br>4–7 white / red (wheel slot 19)<br>8–11 red (wheel slot 2)<br>12–15 red / yellow (wheel slot 20)<br>16–19 yellow (wheel slot 3)<br>20–23 yellow / magenta (wheel slot 21)<br>24–27 magenta (wheel slot 4)<br>28–31 magenta / green (wheel slot 22)<br>32–35 green (wheel slot 5)<br>36–39 green / orange (wheel slot 23)<br>40–43 orange (wheel slot 6)<br>44–47 orange / blue (wheel slot 24)<br>48–51 blue (wheel slot 7)<br>52–55 blue / turquoise (wheel slot 25)<br>56–59 turquoise (wheel slot 8)<br>60–63 turquoise / white (wheel slot 26)<br>64–64 2700K (wheel slot 9)<br>65–65 2700K tungsten dimming (wheel slot 10)<br>66–66 3200K (wheel slot 11)<br>67–67 3200K tungsten dimming (wheel slot 12)<br>68–68 4200K (wheel slot 13)<br>69–69 5600K (wheel slot 14)<br>70–70 6000K (wheel slot 15)<br>71–71 6500K (wheel slot 16)<br>72–72 7000K (wheel slot 17)<br>73–191 8000K (wheel slot 18)<br>192–222 spin >>> fast<br>223–223 spin >>> slow<br>224–254 spin <<< slow<br>255–255 spin <<< fast |
| **14** | Red | 255 | 0–63 0% red<br>64–127 25% red<br>128–190 50% red<br>191–254 75% red<br>255–255 100% red |
| **15** | Green | 255 | 0–63 0% green<br>64–127 25% green<br>128–190 50% green<br>191–254 75% green<br>255–255 100% green |

## Mode3 (23) (continued)

| Ch | Function | Default | DMX values |
|---|---|---|---|
| **16** | Blue | 255 | 0–63 0% blue<br>64–127 25% blue<br>128–190 50% blue<br>191–254 75% blue<br>255–255 100% blue |
| **17** | White | 0 | 0–63 0% white<br>64–127 25% white<br>128–190 50% white<br>191–254 75% white<br>255–255 100% white |
| **18** | Sparkle | 0 | 0–63 0% sparkle<br>64–127 25% sparkle<br>128–190 50% sparkle<br>191–254 75% sparkle<br>255–255 100% sparkle |
| **19** | Sparkle Speed | 0 | 0–0 sparkle faded slow<br>1–14 sparkle faded 1__99%<br>15–15 sparkle faded fast<br>16–16 sparkle switched slow<br>17–30 sparkle switched 1__99%<br>31–31 sparkle switched fast<br>32–32 sparkle faded slow<br>33–46 sparkle faded 1__99%<br>47–47 sparkle faded fast<br>48–48 sparkle switched slow<br>49–62 sparkle switched 1__99%<br>63–63 sparkle switched fast<br>64–64 sparkle faded slow<br>65–78 sparkle faded 1__99%<br>79–79 sparkle faded fast<br>80–80 sparkle switched slow<br>81–94 sparkle switched 1__99%<br>95–95 sparkle switched fast<br>96–96 sparkle faded slow<br>97–110 sparkle faded 1__99%<br>111–111 sparkle faded fast<br>112–112 sparkle switched slow<br>113–126 sparkle switched 1__99%<br>127–127 sparkle switched fast<br>128–128 sparkle faded slow<br>129–142 sparkle faded 1__99%<br>143–143 sparkle faded fast<br>144–144 sparkle switched slow<br>145–158 sparkle switched 1__99%<br>159–159 sparkle switched fast<br>160–160 sparkle faded slow<br>161–174 sparkle faded 1__99%<br>175–175 sparkle faded fast<br>176–176 sparkle switched slow<br>177–190 sparkle switched 1__99%<br>191–255 sparkle switched fast |
| **20** | Effects1Mode | 0 | |

## Mode3 (23) (continued)

| Ch | Function | Default | DMX values |
|---|---|---|---|
| **21** | Effect | 0 | 0–0 no macro<br>1–1 2 color complete shutter<br>2–2 2 color inner shutter<br>3–3 2 color outer shutter<br>4–4 2 color no shutter<br>5–5 2 color complete shutter<br>6–6 2 color inner shutter<br>7–7 2 color outer shutter<br>8–8 2 color no shutter<br>9–10 2 color complete shutter<br>11–11 1<br>12–12 2<br>13–13 3<br>14–14 4<br>15–15 5<br>16–16 6<br>17–17 7<br>18–18 8<br>19–19 9<br>20–20 0<br>21–21 1<br>22–22 2<br>23–23 3<br>24–24 4<br>25–25 5<br>26–26 6<br>27–27 7<br>28–28 8<br>29–29 9<br>30–30 smily small<br>31–31 smily big<br>32–32 smily small upside down<br>33–33 smiley big upside down<br>34–34 pattern beam 1<br>35–35 pattern beam 2<br>36–36 pattern beam 3<br>37–37 pattern beam 4<br>38–38 pattern beam 5<br>39–39 pattern beam 6<br>40–40 pattern beam 7<br>41–41 pattern beam 8<br>42–42 pattern beam 9<br>43–43 pattern beam 10<br>44–44 pattern beam 11<br>45–45 pattern beam 12<br>46–46 pattern beam 13<br>47–47 pattern beam 14<br>48–48 pattern beam 15<br>49–49 pattern beam 16<br>50–50 pattern beam 17<br>51–51 pattern beam 18<br>52–52 pattern beam 19<br>53–54 no pattern beam<br>55–59 circles<br>60–79 cake slices<br>80–86 lines horizontal<br>87–93 lines vertical<br>94–100 lines diagonal 1<br>101–107 lines diagonal 2<br>108–114 circle lines<br>115–122 half beam<br>123–129 dots<br>130–130 color spread circles<br>131–132 color spread cake slices |

### Mode3 (23) (continued)

| Ch | Function | Default | DMX values |
|---|---|---|---|
| **22** | Effect Speed | 0 | 0–0 >>><br>1–126 forward 100__1%<br>127–128 stop<br>129–254 backward -1__-100%<br>255–255 <<< |
| **23** | Transition | 0 | 0–24 0%<br>25–50 10%<br>51–63 20%<br>64–75 25%<br>76–101 30%<br>102–127 40%<br>128–152 50%<br>153–178 60%<br>179–190 70%<br>191–203 75%<br>204–229 80%<br>230–254 90%<br>255–255 100% |

## Mode1 (34)

34 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 | |

## Mode1 (34) (continued)

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

## Mode1 (34) (continued)

| Ch | Function | Default | DMX values |
|---|---|---|---|
| **11** | Beam Shaper Pos | 0 | 0–47 0<br>48–95 90<br>96–142 180<br>143–190 270<br>191–191 360<br>192–192 >>><br>193–222 rotate 100__1%<br>223–224 Stop<br>225–254 rotate -1__-100%<br>255–255 <<< |
| **12** | C TO | 0 | 0–63 0% cto<br>64–127 25% cto<br>128–190 50% cto<br>191–254 75% cto<br>255–255 100% cto |
| **13** | Blackout Mode | 0 | 0–0 not used (1_0)<br>1–70 segment selection for shutter<br>71–95 not used (1_1)<br>96–126 bo at p/t slow<br>127–127 bo at p/t fast<br>128–158 bo at co rgbw slow<br>159–159 bo at co rgbw fast<br>160–223 not used (1_2)<br>224–254 bo at p/t co rgbw slow<br>255–255 bo at p/t co rgbw fast |
| **14** | Effects Sync | 0 | 0–24 0%<br>25–50 10%<br>51–63 20%<br>64–75 25%<br>76–101 30%<br>102–127 40%<br>128–152 50%<br>153–178 60%<br>179–190 70%<br>191–203 75%<br>204–229 80%<br>230–254 90%<br>255–255 100% |
| **15** | Dimmer | 255 | 0–24 closed<br>25–50 10%<br>51–63 20%<br>64–75 25%<br>76–101 30%<br>102–127 40%<br>128–152 50%<br>153–178 60%<br>179–190 70%<br>191–203 75%<br>204–229 80%<br>230–254 90%<br>255–255 open |

## Mode1 (34) (continued)

| Ch | Function | Default | DMX values |
|---|---|---|---|
| **16** | Dimmer | 255 | 0–24 closed<br>25–50 10%<br>51–63 20%<br>64–75 25%<br>76–101 30%<br>102–127 40%<br>128–152 50%<br>153–178 60%<br>179–190 70%<br>191–203 75%<br>204–229 80%<br>230–254 90%<br>255–255 open |
| **17** | Color Wheel | 0 | 0–0 inactive colors rgb (wheel slot 1)<br>1–3 white (wheel slot 1)<br>4–7 white / red (wheel slot 19)<br>8–11 red (wheel slot 2)<br>12–15 red / yellow (wheel slot 20)<br>16–19 yellow (wheel slot 3)<br>20–23 yellow / magenta (wheel slot 21)<br>24–27 magenta (wheel slot 4)<br>28–31 magenta / green (wheel slot 22)<br>32–35 green (wheel slot 5)<br>36–39 green / orange (wheel slot 23)<br>40–43 orange (wheel slot 6)<br>44–47 orange / blue (wheel slot 24)<br>48–51 blue (wheel slot 7)<br>52–55 blue / turquoise (wheel slot 25)<br>56–59 turquoise (wheel slot 8)<br>60–63 turquoise / white (wheel slot 26)<br>64–64 2700K (wheel slot 9)<br>65–65 2700K tungsten dimming (wheel slot 10)<br>66–66 3200K (wheel slot 11)<br>67–67 3200K tungsten dimming (wheel slot 12)<br>68–68 4200K (wheel slot 13)<br>69–69 5600K (wheel slot 14)<br>70–70 6000K (wheel slot 15)<br>71–71 6500K (wheel slot 16)<br>72–72 7000K (wheel slot 17)<br>73–191 8000K (wheel slot 18)<br>192–222 spin >>> fast<br>223–223 spin >>> slow<br>224–254 spin <<< slow<br>255–255 spin <<< fast |
| **18** | Red | 255 | 0–63 0% red<br>64–127 25% red<br>128–190 50% red<br>191–254 75% red<br>255–255 100% red |
| **19** | Green | 255 | 0–63 0% green<br>64–127 25% green<br>128–190 50% green<br>191–254 75% green<br>255–255 100% green |
| **20** | Blue | 255 | 0–63 0% blue<br>64–127 25% blue<br>128–190 50% blue<br>191–254 75% blue<br>255–255 100% blue |

## Mode1 (34) (continued)

| Ch | Function | Default | DMX values |
|---|---|---|---|
| **21** | White | 0 | 0–63 0% white<br>64–127 25% white<br>128–190 50% white<br>191–254 75% white<br>255–255 100% white |
| **22** | Red | 0 | 0–63 0% red<br>64–127 25% red<br>128–190 50% red<br>191–254 75% red<br>255–255 100% red |
| **23** | Green | 0 | 0–63 0% green<br>64–127 25% green<br>128–190 50% green<br>191–254 75% green<br>255–255 100% green |
| **24** | Blue | 0 | 0–63 0% blue<br>64–127 25% blue<br>128–190 50% blue<br>191–254 75% blue<br>255–255 100% blue |
| **25** | White | 0 | 0–63 0% white<br>64–127 25% white<br>128–190 50% white<br>191–254 75% white<br>255–255 100% white |
| **26** | Sparkle | 0 | 0–63 0% sparkle<br>64–127 25% sparkle<br>128–190 50% sparkle<br>191–254 75% sparkle<br>255–255 100% sparkle |

## Mode1 (34) (continued)

| Ch | Function | Default | DMX values |
|---|---|---|---|
| **27** | Sparkle Speed | 0 | 0–0 sparkle faded slow<br>1–14 sparkle faded 1__99%<br>15–15 sparkle faded fast<br>16–16 sparkle switched slow<br>17–30 sparkle switched 1__99%<br>31–31 sparkle switched fast<br>32–32 sparkle faded slow<br>33–46 sparkle faded 1__99%<br>47–47 sparkle faded fast<br>48–48 sparkle switched slow<br>49–62 sparkle switched 1__99%<br>63–63 sparkle switched fast<br>64–64 sparkle faded slow<br>65–78 sparkle faded 1__99%<br>79–79 sparkle faded fast<br>80–80 sparkle switched slow<br>81–94 sparkle switched 1__99%<br>95–95 sparkle switched fast<br>96–96 sparkle faded slow<br>97–110 sparkle faded 1__99%<br>111–111 sparkle faded fast<br>112–112 sparkle switched slow<br>113–126 sparkle switched 1__99%<br>127–127 sparkle switched fast<br>128–128 sparkle faded slow<br>129–142 sparkle faded 1__99%<br>143–143 sparkle faded fast<br>144–144 sparkle switched slow<br>145–158 sparkle switched 1__99%<br>159–159 sparkle switched fast<br>160–160 sparkle faded slow<br>161–174 sparkle faded 1__99%<br>175–175 sparkle faded fast<br>176–176 sparkle switched slow<br>177–190 sparkle switched 1__99%<br>191–255 sparkle switched fast |
| **28** | Effects1Mode | 0 | |

## Mode1 (34) (continued)

| Ch | Function | Default | DMX values |
|---|---|---|---|
| **29** | Effect | 0 | 0–0 no macro<br>1–1 2 color complete shutter<br>2–2 2 color inner shutter<br>3–3 2 color outer shutter<br>4–4 2 color no shutter<br>5–5 2 color complete shutter<br>6–6 2 color inner shutter<br>7–7 2 color outer shutter<br>8–8 2 color no shutter<br>9–10 2 color complete shutter<br>11–11 1<br>12–12 2<br>13–13 3<br>14–14 4<br>15–15 5<br>16–16 6<br>17–17 7<br>18–18 8<br>19–19 9<br>20–20 0<br>21–21 1<br>22–22 2<br>23–23 3<br>24–24 4<br>25–25 5<br>26–26 6<br>27–27 7<br>28–28 8<br>29–29 9<br>30–30 smily small<br>31–31 smily big<br>32–32 smily small upside down<br>33–33 smiley big upside down<br>34–34 pattern beam 1<br>35–35 pattern beam 2<br>36–36 pattern beam 3<br>37–37 pattern beam 4<br>38–38 pattern beam 5<br>39–39 pattern beam 6<br>40–40 pattern beam 7<br>41–41 pattern beam 8<br>42–42 pattern beam 9<br>43–43 pattern beam 10<br>44–44 pattern beam 11<br>45–45 pattern beam 12<br>46–46 pattern beam 13<br>47–47 pattern beam 14<br>48–48 pattern beam 15<br>49–49 pattern beam 16<br>50–50 pattern beam 17<br>51–51 pattern beam 18<br>52–52 pattern beam 19<br>53–54 no pattern beam<br>55–59 circles<br>60–79 cake slices<br>80–86 lines horizontal<br>87–93 lines vertical<br>94–100 lines diagonal 1<br>101–107 lines diagonal 2<br>108–114 circle lines<br>115–122 half beam<br>123–129 dots<br>130–130 color spread circles<br>131–132 color spread cake slices |

## Mode1 (34) (continued)

| Ch | Function | Default | DMX values |
|---|---|---|---|
| **30** | Effect Speed | 0 | 0–0 >>><br>1–126 forward 100__1%<br>127–128 stop<br>129–254 backward -1__-100%<br>255–255 <<< |
| **31** | Effects2Mode | 0 | |

## Mode1 (34) (continued)

| Ch | Function | Default | DMX values |
|---|---|---|---|
| **32** | Effect 2 | 0 | 0–0 no macro<br>1–1 2 color complete shutter<br>2–2 2 color inner shutter<br>3–3 2 color outer shutter<br>4–4 2 color no shutter<br>5–5 2 color complete shutter<br>6–6 2 color inner shutter<br>7–7 2 color outer shutter<br>8–8 2 color no shutter<br>9–10 2 color complete shutter<br>11–11 1<br>12–12 2<br>13–13 3<br>14–14 4<br>15–15 5<br>16–16 6<br>17–17 7<br>18–18 8<br>19–19 9<br>20–20 0<br>21–21 1<br>22–22 2<br>23–23 3<br>24–24 4<br>25–25 5<br>26–26 6<br>27–27 7<br>28–28 8<br>29–29 9<br>30–30 smily small<br>31–31 smily big<br>32–32 smily small upside down<br>33–33 smiley big upside down<br>34–34 pattern beam 1<br>35–35 pattern beam 2<br>36–36 pattern beam 3<br>37–37 pattern beam 4<br>38–38 pattern beam 5<br>39–39 pattern beam 6<br>40–40 pattern beam 7<br>41–41 pattern beam 8<br>42–42 pattern beam 9<br>43–52 pattern beam 10<br>53–54 no pattern beam<br>55–59 circles<br>60–79 cake slices<br>80–86 lines horizontal<br>87–93 lines vertical<br>94–100 lines diagonal 1<br>101–107 lines diagonal 2<br>108–114 circle lines<br>115–122 half beam<br>123–129 dots<br>130–130 color spread circles<br>131–132 color spread cake slices<br>133–137 color spread lines<br>138–138 dots<br>139–145 circles<br>146–165 cake slices<br>166–172 lines horizontal<br>173–179 lines vertical<br>180–186 lines diagonal 1<br>187–193 lines diagonal 2<br>194–200 circle lines |

### Mode1 (34) (continued)

| Ch | Function | Default | DMX values |
|---|---|---|---|
| **33** | Effect Speed 2 | 0 | 0–0 >>><br>1–126 forward 100__1%<br>127–128 stop<br>129–254 backward -1__-100%<br>255–255 <<< |
| **34** | Transition | 0 | 0–24 0%<br>25–50 10%<br>51–63 20%<br>64–75 25%<br>76–101 30%<br>102–127 40%<br>128–152 50%<br>153–178 60%<br>179–190 70%<br>191–203 75%<br>204–229 80%<br>230–254 90%<br>255–255 100% |

## Mode2 (49)

49 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 | |

## Mode2 (49) (continued)

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

## Mode2 (49) (continued)

| Ch | Function | Default | DMX values |
|---|---|---|---|
| **12** | Beam Shaper Pos | 0 | 0–47 0<br>48–94 90<br>95–142 180<br>143–190 270<br>191–191 360<br>192–192 >>><br>193–222 rotate 100__1%<br>223–224 Stop<br>225–254 rotate -1__-100%<br>255–255 <<< |
| **13** | Beam Shaper Pos Fine | 0 | Fine byte of Beam Shaper Pos |
| **14** | C TO | 0 | 0–63 0% cto<br>64–127 25% cto<br>128–190 50% cto<br>191–254 75% cto<br>255–255 100% cto |
| **15** | C TO Fine | 0 | Fine byte of C TO |
| **16** | Blackout Mode | 0 | 0–0 not used (1_0)<br>1–70 segment selection for shutter<br>71–95 not used (1_1)<br>96–126 bo at p/t slow<br>127–127 bo at p/t fast<br>128–158 bo at co rgbw slow<br>159–159 bo at co rgbw fast<br>160–223 not used (1_2)<br>224–254 bo at p/t co rgbw slow<br>255–255 bo at p/t co rgbw fast |
| **17** | Effects Sync | 0 | 0–24 0%<br>25–50 10%<br>51–63 20%<br>64–75 25%<br>76–101 30%<br>102–127 40%<br>128–152 50%<br>153–178 60%<br>179–190 70%<br>191–203 75%<br>204–229 80%<br>230–254 90%<br>255–255 100% |
| **18** | Effects Sync Fine | 0 | Fine byte of Effects Sync |
| **19** | Dimmer | 255 | 0–24 closed<br>25–50 10%<br>51–63 20%<br>64–75 25%<br>76–101 30%<br>102–127 40%<br>128–152 50%<br>153–178 60%<br>179–190 70%<br>191–203 75%<br>204–229 80%<br>230–254 90%<br>255–255 open |
| **20** | Dimmer Fine | 255 | Fine byte of Dimmer |

## Mode2 (49) (continued)

| Ch | Function | Default | DMX values |
|---|---|---|---|
| **21** | Dimmer | 255 | 0–24 closed<br>25–50 10%<br>51–63 20%<br>64–75 25%<br>76–101 30%<br>102–127 40%<br>128–152 50%<br>153–178 60%<br>179–190 70%<br>191–203 75%<br>204–229 80%<br>230–254 90%<br>255–255 open |
| **22** | Dimmer Fine | 255 | Fine byte of Dimmer |
| **23** | Color Wheel | 0 | 0–0 inactive colors rgb (wheel slot 1)<br>1–3 white (wheel slot 1)<br>4–7 white / red (wheel slot 19)<br>8–11 red (wheel slot 2)<br>12–15 red / yellow (wheel slot 20)<br>16–19 yellow (wheel slot 3)<br>20–23 yellow / magenta (wheel slot 21)<br>24–27 magenta (wheel slot 4)<br>28–31 magenta / green (wheel slot 22)<br>32–35 green (wheel slot 5)<br>36–39 green / orange (wheel slot 23)<br>40–43 orange (wheel slot 6)<br>44–47 orange / blue (wheel slot 24)<br>48–51 blue (wheel slot 7)<br>52–55 blue / turquoise (wheel slot 25)<br>56–59 turquoise (wheel slot 8)<br>60–63 turquoise / white (wheel slot 26)<br>64–64 2700K (wheel slot 9)<br>65–65 2700K tungsten dimming (wheel slot 10)<br>66–66 3200K (wheel slot 11)<br>67–67 3200K tungsten dimming (wheel slot 12)<br>68–68 4200K (wheel slot 13)<br>69–69 5600K (wheel slot 14)<br>70–70 6000K (wheel slot 15)<br>71–71 6500K (wheel slot 16)<br>72–72 7000K (wheel slot 17)<br>73–191 8000K (wheel slot 18)<br>192–222 spin >>> fast<br>223–223 spin >>> slow<br>224–254 spin <<< slow<br>255–255 spin <<< fast |
| **24** | Red | 255 | 0–63 0% red<br>64–127 25% red<br>128–191 50% red<br>192–254 75% red<br>255–255 100% red |
| **25** | Red Fine | 255 | Fine byte of Red |
| **26** | Green | 255 | 0–63 0% green<br>64–127 25% green<br>128–191 50% green<br>192–254 75% green<br>255–255 100% green |
| **27** | Green Fine | 255 | Fine byte of Green |

## Mode2 (49) (continued)

| Ch | Function | Default | DMX values |
|---|---|---|---|
| **28** | Blue | 255 | 0–63 0% blue<br>64–127 25% blue<br>128–191 50% blue<br>192–254 75% blue<br>255–255 100% blue |
| **29** | Blue Fine | 255 | Fine byte of Blue |
| **30** | White | 0 | 0–63 0% white<br>64–127 25% white<br>128–191 50% white<br>192–254 75% white<br>255–255 100% white |
| **31** | White Fine | 0 | Fine byte of White |
| **32** | Red | 0 | 0–63 0% red<br>64–127 25% red<br>128–191 50% red<br>192–254 75% red<br>255–255 100% red |
| **33** | Red Fine | 0 | Fine byte of Red |
| **34** | Green | 0 | 0–63 0% green<br>64–127 25% green<br>128–191 50% green<br>192–254 75% green<br>255–255 100% green |
| **35** | Green Fine | 0 | Fine byte of Green |
| **36** | Blue | 0 | 0–63 0% blue<br>64–127 25% blue<br>128–191 50% blue<br>192–254 75% blue<br>255–255 100% blue |
| **37** | Blue Fine | 0 | Fine byte of Blue |
| **38** | White | 0 | 0–63 0% white<br>64–127 25% white<br>128–191 50% white<br>192–254 75% white<br>255–255 100% white |
| **39** | White Fine | 0 | Fine byte of White |
| **40** | Sparkle | 0 | 0–63 0% sparkle<br>64–127 25% sparkle<br>128–190 50% sparkle<br>191–254 75% sparkle<br>255–255 100% sparkle |

## Mode2 (49) (continued)

| Ch | Function | Default | DMX values |
|---|---|---|---|
| **41** | Sparkle Speed | 0 | 0–0 sparkle faded slow<br>1–14 sparkle faded 1__99%<br>15–15 sparkle faded fast<br>16–16 sparkle switched slow<br>17–30 sparkle switched 1__99%<br>31–31 sparkle switched fast<br>32–32 sparkle faded slow<br>33–46 sparkle faded 1__99%<br>47–47 sparkle faded fast<br>48–48 sparkle switched slow<br>49–62 sparkle switched 1__99%<br>63–63 sparkle switched fast<br>64–64 sparkle faded slow<br>65–78 sparkle faded 1__99%<br>79–79 sparkle faded fast<br>80–80 sparkle switched slow<br>81–94 sparkle switched 1__99%<br>95–95 sparkle switched fast<br>96–96 sparkle faded slow<br>97–110 sparkle faded 1__99%<br>111–111 sparkle faded fast<br>112–112 sparkle switched slow<br>113–126 sparkle switched 1__99%<br>127–127 sparkle switched fast<br>128–128 sparkle faded slow<br>129–142 sparkle faded 1__99%<br>143–143 sparkle faded fast<br>144–144 sparkle switched slow<br>145–158 sparkle switched 1__99%<br>159–159 sparkle switched fast<br>160–160 sparkle faded slow<br>161–174 sparkle faded 1__99%<br>175–175 sparkle faded fast<br>176–176 sparkle switched slow<br>177–190 sparkle switched 1__99%<br>191–255 sparkle switched fast |
| **42** | Effects1Mode | 0 | |

## Mode2 (49) (continued)

| Ch | Function | Default | DMX values |
|---|---|---|---|
| **43** | Effect | 0 | 0–0 no macro<br>1–1 2 color complete shutter<br>2–2 2 color inner shutter<br>3–3 2 color outer shutter<br>4–4 2 color no shutter<br>5–5 2 color complete shutter<br>6–6 2 color inner shutter<br>7–7 2 color outer shutter<br>8–8 2 color no shutter<br>9–10 2 color complete shutter<br>11–11 1<br>12–12 2<br>13–13 3<br>14–14 4<br>15–15 5<br>16–16 6<br>17–17 7<br>18–18 8<br>19–19 9<br>20–20 0<br>21–21 1<br>22–22 2<br>23–23 3<br>24–24 4<br>25–25 5<br>26–26 6<br>27–27 7<br>28–28 8<br>29–29 9<br>30–30 smily small<br>31–31 smily big<br>32–32 smily small upside down<br>33–33 smiley big upside down<br>34–34 pattern beam 1<br>35–35 pattern beam 2<br>36–36 pattern beam 3<br>37–37 pattern beam 4<br>38–38 pattern beam 5<br>39–39 pattern beam 6<br>40–40 pattern beam 7<br>41–41 pattern beam 8<br>42–42 pattern beam 9<br>43–43 pattern beam 10<br>44–44 pattern beam 11<br>45–45 pattern beam 12<br>46–46 pattern beam 13<br>47–47 pattern beam 14<br>48–48 pattern beam 15<br>49–49 pattern beam 16<br>50–50 pattern beam 17<br>51–51 pattern beam 18<br>52–52 pattern beam 19<br>53–54 no pattern beam<br>55–59 circles<br>60–79 cake slices<br>80–86 lines horizontal<br>87–93 lines vertical<br>94–100 lines diagonal 1<br>101–107 lines diagonal 2<br>108–114 circle lines<br>115–122 half beam<br>123–129 dots<br>130–130 color spread circles<br>131–132 color spread cake slices |

## Mode2 (49) (continued)

| Ch | Function | Default | DMX values |
|---|---|---|---|
| **44** | Effect Speed | 0 | 0–0 >>><br>1–126 forward 100__1%<br>127–128 stop<br>129–254 backward -1__-100%<br>255–255 <<< |
| **45** | Effects2Mode | 0 | |

## Mode2 (49) (continued)

| Ch | Function | Default | DMX values |
|---|---|---|---|
| **46** | Effect 2 | 0 | 0–0 no macro<br>1–1 2 color complete shutter<br>2–2 2 color inner shutter<br>3–3 2 color outer shutter<br>4–4 2 color no shutter<br>5–5 2 color complete shutter<br>6–6 2 color inner shutter<br>7–7 2 color outer shutter<br>8–8 2 color no shutter<br>9–10 2 color complete shutter<br>11–11 1<br>12–12 2<br>13–13 3<br>14–14 4<br>15–15 5<br>16–16 6<br>17–17 7<br>18–18 8<br>19–19 9<br>20–20 0<br>21–21 1<br>22–22 2<br>23–23 3<br>24–24 4<br>25–25 5<br>26–26 6<br>27–27 7<br>28–28 8<br>29–29 9<br>30–30 smily small<br>31–31 smily big<br>32–32 smily small upside down<br>33–33 smiley big upside down<br>34–34 pattern beam 1<br>35–35 pattern beam 2<br>36–36 pattern beam 3<br>37–37 pattern beam 4<br>38–38 pattern beam 5<br>39–39 pattern beam 6<br>40–40 pattern beam 7<br>41–41 pattern beam 8<br>42–42 pattern beam 9<br>43–52 pattern beam 10<br>53–54 no pattern beam<br>55–59 circles<br>60–79 cake slices<br>80–86 lines horizontal<br>87–93 lines vertical<br>94–100 lines diagonal 1<br>101–107 lines diagonal 2<br>108–114 circle lines<br>115–122 half beam<br>123–129 dots<br>130–130 color spread circles<br>131–132 color spread cake slices<br>133–137 color spread lines<br>138–138 dots<br>139–145 circles<br>146–165 cake slices<br>166–172 lines horizontal<br>173–179 lines vertical<br>180–186 lines diagonal 1<br>187–193 lines diagonal 2<br>194–200 circle lines |

## Mode2 (49) (continued)

| Ch | Function | Default | DMX values |
|---|---|---|---|
| **47** | Effect Speed 2 | 0 | 0–0 >>><br>1–126 forward 100__1%<br>127–128 stop<br>129–254 backward -1__-100%<br>255–255 <<< |
| **48** | Transition | 0 | 0–24 0%<br>25–50 10%<br>51–63 20%<br>64–75 25%<br>76–101 30%<br>102–127 40%<br>128–152 50%<br>153–178 60%<br>179–190 70%<br>191–203 75%<br>204–229 80%<br>230–254 90%<br>255–255 100% |
| **49** | Transition Fine | 0 | Fine byte of Transition |