EK Lights

EC7X



Manufacturer	**EK Lights**
Type	**Moving head**
DMX modes	**3**
DMX footprint	**16, 37, 38 channels**
Beam angle	**3.2-54°**
Pan range	**540°**
Tilt range	**247°**
Heads / cells	**7**
Size (W × H × D)	**197 × 203 × 187 mm**
GDTF fixture type	**2AB1E4CD-A28D-4DA6-A05B-2…**

Controls

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

Safety-relevant functions

Fixture reset · Service functions · Built-in effect programmes

DMX modes

Channel Mode 1-16CH	16 ch
Channel Mode 3-37CH	37 ch
Channel Mode 2-38CH	38 ch

Channel Mode 1-16CH

16 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	Zoom	255	0–0 Max 1–254 Max>Min 255–255 Min
6	Shutter / Strobe	245	0–10 Open 11–11 Strobe · slow 1 Hz 12–81 Strobe · slow to fast 1.41–29.6 Hz 82–82 Strobe · fast 30 Hz 83–93 Open 94–94 StrobePulse · slow 0.5 Hz 95–162 StrobePulse · slow to fast 0.855–24.6 Hz 163–163 StrobePulse · fast 25 Hz 164–174 Open 175–175 StrobeRandom · slow 1 Hz 176–243 StrobeRandom · slow to fast 1.35–24.7 Hz 244–244 StrobeRandom · fast 25 Hz 245–255 Open
7	Dimmer	0	0–254 Closed 255–255 Open
8	Dimmer Fine	0	Fine byte of Dimmer
9	C TO	0	
10	Tint	128	0–127 Red Shift 128–128 Off 129–255 Green Shift
11	Crossfade	255	
12	Red	255	0–0 Min 1–254 Min>Max 255–255 Max
13	Green	255	0–0 Min 1–254 Min>Max 255–255 Max
14	Blue	255	0–0 Min 1–254 Min>Max 255–255 Max
15	White	255	0–0 Min 1–254 Min>Max 255–255 Max

Channel Mode 1-16CH (continued)

Ch	Function	Default	DMX values
16	Control1	0	0–5 No Function 6–10 Dimmer Mode Off 11–15 Dimmer Mode 1 16–20 Dimmer Mode 2 21–25 Dimmer Mode 3 26–30 Linear 31–35 Square 36–40 Inverse Square 41–45 S Curve 46–50 600Hz 51–55 1200Hz 56–60 2000Hz 61–65 4000Hz 66–70 6000Hz 71–75 25KHz 76–80 Pan Inverse Off 81–85 Pan Inverse On 86–90 Tilt Inverse Off 91–95 Tilt Inverse On 96–100 Swap PanTilt Off 101–105 Swap PanTilt On 106–110 Fan Auto 111–115 Fan On 116–120 Fan Off 121–125 Fan Silent 126–130 Color Calibration Off 131–135 Color Calibration Adjust 136–140 Calibration Factory 141–145 Pixel Reverse Off 146–150 Pixel Reverse On 151–240 Reserve 241–245 Head Reset 246–250 Pan/Tilt Reset 251–255 All Reset

Channel Mode 3-37CH

37 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	Zoom	255	0–0 Min 1–254 Min>Max 255–255 Max
6	Shutter / Strobe	245	0–10 Open 11–11 Strobe · slow 1 Hz 12–81 Strobe · slow to fast 1.41–29.6 Hz 82–82 Strobe · fast 30 Hz 83–93 Open 94–94 StrobePulse · slow 0.5 Hz 95–162 StrobePulse · slow to fast 0.855–24.6 Hz 163–163 StrobePulse · fast 25 Hz 164–174 Open 175–175 StrobeRandom · slow 1 Hz 176–243 StrobeRandom · slow to fast 1.35–24.7 Hz 244–244 StrobeRandom · fast 25 Hz 245–255 Open

Channel Mode 3-37CH (continued)

Ch	Function	Default	DMX values
7	Dimmer	0	0–254 Closed 255–255 open
8	Dimmer Fine	0	Fine byte of Dimmer
9	Red	255	
10	Green	255	
11	Blue	255	
12	White	255	
13	Red	255	
14	Green	255	
15	Blue	255	
16	White	255	
17	Red	255	
18	Green	255	
19	Blue	255	
20	White	255	
21	Red	255	
22	Green	255	
23	Blue	255	
24	White	255	
25	Red	255	
26	Green	255	
27	Blue	255	
28	White	255	
29	Red	255	
30	Green	255	
31	Blue	255	
32	White	255	
33	Red	255	
34	Green	255	
35	Blue	255	
36	White	255	

Channel Mode 3-37CH (continued)

Ch	Function	Default	DMX values
37	Control1	0	0–5 No Function 6–10 Dimmer Mode Off 11–15 Dimmer Mode 1 16–20 Dimmer Mode 2 21–25 Dimmer Mode 3 26–30 Linear 31–35 Square 36–40 Inverse Square 41–45 S Curve 46–50 600Hz 51–55 1200Hz 56–60 2000Hz 61–65 4000Hz 66–70 6000Hz 71–75 25KHz 76–80 Pan Inverse Off 81–85 Pan Inverse On 86–90 Tilt Inverse Off 91–95 Tilt Inverse On 96–100 Swap PanTilt Off 101–105 Swap PanTilt On 106–110 Fan Auto 111–115 Fan On 116–120 Fan Off 121–125 Fan Silent 126–130 Color Calibration Off 131–135 Color Calibration Adjust 136–140 Calibration Factory 141–145 Pixel Reverse Off 146–150 Pixel Reverse On 151–240 Reserve 241–245 Head Reset 246–250 Pan/Tilt Reset 251–255 All Reset

Channel Mode 2-38CH

38 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	Zoom	255	0–0 Max 1–254 Min>Max 255–255 Min
6	Shutter / Strobe	245	0–10 Open 11–11 Strobe · slow 1 Hz 12–81 Strobe · slow to fast 1.41–29.6 Hz 82–82 Strobe · fast 30 Hz 83–93 Open 94–94 StrobePulse · slow 0.5 Hz 95–162 StrobePulse · slow to fast 0.855–24.6 Hz 163–163 StrobePulse · fast 25 Hz 164–174 Open 175–175 StrobeRandom · slow 1 Hz 176–243 StrobeRandom · slow to fast 1.35–24.7 Hz 244–244 StrobeRandom · fast 25 Hz 245–255 Open

Channel Mode 2-38CH (continued)

Ch	Function	Default	DMX values
7	Dimmer	0	0–254 Closed 255–255 Open
8	Dimmer Fine	0	Fine byte of Dimmer
9	C TO	0	
10	Tint	128	0–127 Red Shift 128–128 Off 129–255 Green Shift
11	Crossfade	255	
12	Red	255	
13	Red Fine	255	Fine byte of Red
14	Green	255	
15	Green Fine	255	Fine byte of Green
16	Blue	255	
17	Blue Fine	255	Fine byte of Blue
18	White	255	
19	White Fine	255	Fine byte of White
20	Shutter / Strobe	245	0–10 Open 11–11 Strobe · slow 1 Hz 12–81 Strobe · slow to fast 1.34–24.7 Hz 82–82 Strobe · fast 25 Hz 83–93 Open 94–94 StrobePulse · slow 0.5 Hz 95–162 StrobePulse · slow to fast 0.855–24.6 Hz 163–163 StrobePulse · fast 25 Hz 164–174 Open 175–175 StrobeRandom · slow 1 Hz 176–243 StrobeRandom · slow to fast 1.35–24.7 Hz 244–244 StrobeRandom · fast 25 Hz 245–255 Open
21	Dimmer	255	0–254 Closed 255–255 Open
22	Dimmer Fine	255	Fine byte of Dimmer
23	C TO	0	
24	Tint	128	0–127 Red Shift 128–128 Off 129–255 Green Shift
25	Crossfade	255	
26	Red	255	0–0 Min 1–254 Min>Max 255–255 Max
27	Green	255	0–0 Min 1–254 Min>Max 255–255 Max
28	Blue	255	0–0 Min 1–254 Min>Max 255–255 Max
29	White	255	0–0 Min 1–254 Min>Max 255–255 Max

Channel Mode 2-38CH (continued)

Ch	Function	Default	DMX values
30	Shutter / Strobe	245	0–10 Open 11–11 Strobe · slow 1 Hz 12–81 Strobe · slow to fast 1.34–24.7 Hz 82–82 Strobe · fast 25 Hz 83–93 Open 94–94 StrobePulse · slow 0.5 Hz 95–162 StrobePulse · slow to fast 0.855–24.6 Hz 163–163 StrobePulse · fast 25 Hz 164–174 Open 175–175 StrobeRandom · slow 1 Hz 176–243 StrobeRandom · slow to fast 1.35–24.7 Hz 244–244 StrobeRandom · fast 25 Hz 245–255 Open
31	Dimmer	0	0–254 Closed 255–255 Open
32	Dimmer Fine	0	Fine byte of Dimmer
33	Effect Mode	0	0–5 Normal 6–130 Static 131–255 Dynamic
34	Effect	0	0–7 Effect 1 8–15 Effect 2 16–23 Effect 3 24–31 Effect 4 32–38 Effect 5 39–46 Effect 6 47–54 Effect 7 55–62 Effect 8 63–69 Effect 9 70–77 Effect 10 78–85 Effect 11 86–93 Effect 12 94–100 Effect 13 101–108 Effect 14 109–116 Effect 15 117–124 Effect 16 125–131 Effect 17 132–139 Effect 18 140–147 Effect 19 148–155 Effect 20 156–162 Effect 21 163–170 Effect 22 171–178 Effect 23 179–186 Effect 24 187–193 Effect 25 194–201 Effect 26 202–209 Effect 27 210–217 Effect 28 218–224 Effect 29 225–232 Effect 30 233–240 Effect 31 241–248 Effect 32 249–255 Effect 33
35	Effect Speed	0	0–124 fast to slow 125–130 Stop 131–255 slow to fast
36	Effects1Fade	0	0–5 Off 6–130 Fade (From fast to slow) 131–255 Wave (From fast to slow)
37	Effect Transition	0	

Channel Mode 2-38CH (continued)

Ch	Function	Default	DMX values
38	Control1	0	0–5 No Function 6–10 Dimmer Mode Off 11–15 Dimmer Mode 1 16–20 Dimmer Mode 2 21–25 Dimmer Mode 3 26–30 Linear 31–35 Square 36–40 Inverse Square 41–45 S Curve 46–50 600Hz 51–55 1200Hz 56–60 2000Hz 61–65 4000Hz 66–70 6000Hz 71–75 25KHz 76–80 Pan Inverse Off 81–85 Pan Inverse On 86–90 Tilt Inverse Off 91–95 Tilt Inverse On 96–100 Swap PanTilt Off 101–105 Swap PanTilt On 106–110 Fan Auto 111–115 Fan On 116–120 Fan Off 121–125 Fan Silent 126–130 Color Calibration Off 131–135 Color Calibration Adjust 136–140 Calibration Factory 141–145 Pixel Reverse Off 146–150 Pixel Reverse On 151–240 Reserve 241–245 Head Reset 246–250 Pan/Tilt Reset 251–255 All Reset