EK Lights

MC6X



Manufacturer	**EK Lights**
Type	**Profile spot**
DMX modes	**3**
DMX footprint	**39, 41, 47 channels**
Beam angle	**4.4-52°**
Pan range	**540°**
Tilt range	**270°**
Size (W × H × D)	**252 × 437 × 225 mm**
GDTF fixture type	**2DE1167F-C884-445D-ABBB-86…**

Controls

Focus · Frost · Iris · Prism · Prism rotation · Zoom · CMY colour mixing · Extra LED colours · RGB colour mixing · Colour temperature · Colour wheel · Strobe · Dimmer · Pan and tilt · Animation wheel · Gobos · Gobo rotation

Safety-relevant functions

Fixture reset · Service functions

DMX modes

XY 39CH	39 ch
CMY 41CH	41 ch
RGBCAM 47CH	47 ch

XY 39CH

39 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	Shutter / Strobe	255	0–10 Open 11–11 Strobe · Min 1 Hz 12–81 Strobe · Min<Max 1.41–29.6 Hz 82–82 Strobe · Max 30 Hz 83–93 Open 94–94 StrobePulse · Min 1 Hz 95–162 StrobePulse · Min<Max 1.42–29.6 Hz 163–163 StrobePulse · Max 30 Hz 164–174 Open 175–175 StrobeRandom · Min 1 Hz 176–243 StrobeRandom · Min<Max 1.42–29.6 Hz 244–244 StrobeRandom · Max 30 Hz 245–255 Open
6	Dimmer	0	
7	Dimmer Fine	0	Fine byte of Dimmer
8	C TC	0	
9	Tint	128	0–127 Red Shift 128–128 Off 129–255 Green Shift
10	Cross Fade	255	
11	C IEX	76	
12	C IEX Fine	204	Fine byte of C IEX
13	C IEY	76	
14	C IEY Fine	204	Fine byte of C IEY
15	Gobo	0	0–8 Open (wheel slot 1) 9–17 Gobo 1 (wheel slot 2) 18–26 Gobo 2 (wheel slot 3) 27–35 Gobo 3 (wheel slot 4) 36–44 Gobo 4 (wheel slot 5) 45–53 Gobo 5 (wheel slot 6) 54–62 Gobo 6 (wheel slot 7) 63–71 Gobo 7 (wheel slot 8) 72–113 Fast to Slow(Revers Spin) 114–117 Stop (Stop Rotation) 118–159 Slow to Fast(Forward Spin) 160–174 Gobo1 Shak (wheel slot 2) 175–187 Gobo2 Shak (wheel slot 3) 188–201 Gobo3 Shak (wheel slot 4) 202–214 Gobo4 Shak (wheel slot 5) 215–228 Gobo5 Shak (wheel slot 6) 229–241 Gobo6 Shak (wheel slot 7) 242–255 Gobo7 Shak (wheel slot 8)
16	Gobo Rotation	0	0–127 Indexing 128–190 F > S - Rotate CW 191–192 Stop 193–255 S > F - Rotate CCW
17	Prism	0	0–127 Open (wheel slot 1) 128–255 Prism (wheel slot 2)
18	Prism Rotation	0	0–127 indexing 128–190 F > S - Rotate CW 191–192 Stop 193–255 S > F - Rotate CCW

XY 39CH (continued)

Ch	Function	Default	DMX values
19	Frost1	0	0–0 Min 1–254 Min<Max 255–255 Max
20	Frost2	0	0–0 Min 1–254 Min<Max 255–255 Max
21	Color Mixing OPT	0	0–0 Min 1–254 Min<Max 255–255 Max
22	Animation Wheel1	0	0–127 No function 128–255 Animation insert
23	Animation Wheel1Pos Rotate	0	0–3 Open 4–127 F > S - Rotate CW 128–132 Stop 133–255 S > F - Rotate CCW
24	Iris	0	0–126 Max 127–127 Min 128–131 Maximum Aperture 132–171 Slow to Fast Pulsation 172–211 Slow to Fast Pulsation Fast Opening 212–251 Slow to Fast Pulsation Fast Closing 252–255 Maximum Aperture
25	Focus	221	
26	Focus Fine	221	Fine byte of Focus
27	Zoom	131	0–254 Wide 255–255 Narrow
28	Zoom Fine	131	Fine byte of Zoom
29	Auto Focus	0	0–10 Auto Focus OFF 11–20 4 metres 21–30 6 metres 31–40 8 metres 41–50 10 metres 51–60 12 metres 61–70 14 metres 71–80 16 metres 81–90 18 metres 91–100 4 metres 101–110 6 metres 111–120 8 metres 121–130 10 metres 131–140 12 metres 141–150 14 metres 151–160 16 metres 161–170 18 metres 171–180 4 metres 181–190 6 metres 191–200 8 metres 201–210 10 metres 211–220 12 metres 221–230 14 metres 231–240 16 metres 241–250 18 metres 251–255 Auto Focus OFF
30	Blade1A	0	0–126 Min 127–254 50% 255–255 Max
31	Blade1Rot	127	

XY 39CH (continued)

Ch	Function	Default	DMX values
32	Blade2A	0	0–126 Min 127–254 50% 255–255 Max
33	Blade2Rot	127	
34	Blade3A	0	0–126 Min 127–254 50% 255–255 Max
35	Blade3Rot	127	
36	Blade4A	0	0–126 Min 127–254 50% 255–255 Max
37	Blade4Rot	128	
38	Shaper Rot	127	
39	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 Reserve 51–55 1200 Hz 56–70 Reserve 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 Pan Tilt Off 101–105 Swap Pan Tilt On 106–110 Fan Auto 111–115 Fan On 116–120 Fan Off 121–125 Fan Silent 126–130 Color Calibration Off 131–135 Factory Calibration 136–150 Reserve 151–155 Red Shift Off 156–160 Red Shift On 161–165 Framing Shutter Independent Mode 166–170 Framing Shutter Mixed Mode 171–175 Independent Mode 176–180 Mixed Mode 181–240 Reserve 241–245 Head Reset 246–250 Pan/Tilt Reset 251–255 Complete Reset

CMY 41CH

41 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

CMY 41CH (continued)

Ch	Function	Default	DMX values
5	Shutter / Strobe	255	0–10 Open 11–11 Strobe · Min 1 Hz 12–81 Strobe · Min<Max 1.41–29.6 Hz 82–82 Strobe · Max 30 Hz 83–93 Open 94–94 StrobePulse · Min 1 Hz 95–162 StrobePulse · Min<Max 1.42–29.6 Hz 163–163 StrobePulse · Max 30 Hz 164–174 Open 175–175 StrobeRandom · Min 1 Hz 176–243 StrobeRandom · Min<Max 1.42–29.6 Hz 244–244 StrobeRandom · Max 30 Hz 245–255 Open
6	Dimmer	0	
7	Dimmer Fine	0	Fine byte of Dimmer
8	C TC	0	
9	Tint	128	0–127 Red Shift 128–128 Off 129–255 Green Shift
10	Cross Fade	255	
11	Cyan	0	
12	Cyan Fine	0	Fine byte of Cyan
13	Magenta	0	
14	Magenta Fine	0	Fine byte of Magenta
15	Yellow	0	
16	Yellow Fine	0	Fine byte of Yellow
17	Gobo	0	0–8 Open (wheel slot 1) 9–17 Gobo 1 (wheel slot 2) 18–26 Gobo 2 (wheel slot 3) 27–35 Gobo 3 (wheel slot 4) 36–44 Gobo 4 (wheel slot 5) 45–53 Gobo 5 (wheel slot 6) 54–62 Gobo 6 (wheel slot 7) 63–71 Gobo 7 (wheel slot 8) 72–113 Fast to Slow(Revers Spin) 114–117 Stop (Stop Rotation) 118–159 Slow to Fast(Forward Spin) 160–174 Gobo1 Shak (wheel slot 2) 175–187 Gobo2 Shak (wheel slot 3) 188–201 Gobo3 Shak (wheel slot 4) 202–214 Gobo4 Shak (wheel slot 5) 215–228 Gobo5 Shak (wheel slot 6) 229–241 Gobo6 Shak (wheel slot 7) 242–255 Gobo7 Shak (wheel slot 8)
18	Gobo Rotation	0	0–127 Indexing 128–190 F > S - Rotate CW 191–192 Stop 193–255 S > F - Rotate CCW
19	Prism	0	0–127 Open (wheel slot 1) 128–255 Prism (wheel slot 2)
20	Prism Rotation	0	0–127 indexing 128–190 F > S - Rotate CW 191–192 Stop 193–255 S > F - Rotate CCW
21	Frost1	0	0–0 Min 1–254 Min<Max 255–255 Max

CMY 41CH (continued)

Ch	Function	Default	DMX values
22	Frost2	0	0–0 Min 1–254 Min<Max 255–255 Max
23	Color Mixing OPT	0	0–0 Min 1–254 Min<Max 255–255 Max
24	Animation Wheel1	0	0–127 No function 128–255 Animation insert
25	Animation Wheel1Pos Rotate	0	0–3 Open 4–127 F > S - Rotate CW 128–132 Stop 133–255 S > F - Rotate CCW
26	Iris	0	0–126 Max 127–127 Min 128–131 Maximum Aperture 132–171 Slow to Fast Pulsation 172–211 Slow to Fast Pulsation Fast Opening 212–251 Slow to Fast Pulsation Fast Closing 252–255 Maximum Aperture
27	Focus	221	
28	Focus Fine	221	Fine byte of Focus
29	Zoom	131	0–254 Wide 255–255 Narrow
30	Zoom Fine	131	Fine byte of Zoom
31	Auto Focus	0	0–10 Auto Focus OFF 11–20 4 metres 21–30 6 metres 31–40 8 metres 41–50 10 metres 51–60 12 metres 61–70 14 metres 71–80 16 metres 81–90 18 metres 91–100 4 metres 101–110 6 metres 111–120 8 metres 121–130 10 metres 131–140 12 metres 141–150 14 metres 151–160 16 metres 161–170 18 metres 171–180 4 metres 181–190 6 metres 191–200 8 metres 201–210 10 metres 211–220 12 metres 221–230 14 metres 231–240 16 metres 241–250 18 metres 251–255 Auto Focus OFF
32	Blade1A	0	0–126 Min 127–254 50% 255–255 Max
33	Blade1Rot	127	
34	Blade2A	0	0–126 Min 127–254 50% 255–255 Max
35	Blade2Rot	127	

CMY 41CH (continued)

Ch	Function	Default	DMX values
36	Blade3A	0	0–126 Min 127–254 50% 255–255 Max
37	Blade3Rot	127	
38	Blade4A	0	0–126 Min 127–254 50% 255–255 Max
39	Blade4Rot	128	
40	Shaper Rot	127	
41	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 Reserve 51–55 1200 Hz 56–70 Reserve 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 Pan Tilt Off 101–105 Swap Pan Tilt On 106–110 Fan Auto 111–115 Fan On 116–120 Fan Off 121–125 Fan Silent 126–130 Color Calibration Off 131–135 Factory Calibration 136–150 Reserve 151–155 Red Shift Off 156–160 Red Shift On 161–165 Framing Shutter Independent Mode 166–170 Framing Shutter Mixed Mode 171–175 Independent Mode 176–180 Mixed Mode 181–240 Reserve 241–245 Head Reset 246–250 Pan/Tilt Reset 251–255 Complete Reset

RGBCAM 47CH

47 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

RGBCAM 47CH (continued)

Ch	Function	Default	DMX values
5	Shutter / Strobe	255	0–10 Open 11–11 Strobe · Min 1 Hz 12–81 Strobe · Min<Max 1.41–29.6 Hz 82–82 Strobe · Max 30 Hz 83–93 Open 94–94 StrobePulse · Min 1 Hz 95–162 StrobePulse · Min<Max 1.42–29.6 Hz 163–163 StrobePulse · Max 30 Hz 164–174 Open 175–175 StrobeRandom · Min 1 Hz 176–243 StrobeRandom · Min<Max 1.42–29.6 Hz 244–244 StrobeRandom · Max 30 Hz 245–255 Open
6	Dimmer	0	
7	Dimmer Fine	0	Fine byte of Dimmer
8	C TC	0	
9	Tint	128	0–127 Red Shift 128–128 Off 129–255 Green Shift
10	Cross Fade	255	
11	Red	255	
12	Red Fine	255	Fine byte of Red
13	Green	255	
14	Green Fine	255	Fine byte of Green
15	Blue	255	
16	Blue Fine	255	Fine byte of Blue
17	Color Add C	255	
18	Color Add C Fine	255	Fine byte of Color Add C
19	Color Add RY	255	
20	Color Add RY Fine	255	Fine byte of Color Add RY
21	Color Add GY	255	
22	Color Add GY Fine	255	Fine byte of Color Add GY
23	Gobo	0	0–8 Open (wheel slot 1) 9–17 Gobo 1 (wheel slot 2) 18–26 Gobo 2 (wheel slot 3) 27–35 Gobo 3 (wheel slot 4) 36–44 Gobo 4 (wheel slot 5) 45–53 Gobo 5 (wheel slot 6) 54–62 Gobo 6 (wheel slot 7) 63–71 Gobo 7 (wheel slot 8) 72–113 Fast to Slow(Revers Spin) 114–117 Stop (Stop Rotation) 118–159 Slow to Fast(Forward Spin) 160–174 Gobo1 Shak (wheel slot 2) 175–187 Gobo2 Shak (wheel slot 3) 188–201 Gobo3 Shak (wheel slot 4) 202–214 Gobo4 Shak (wheel slot 5) 215–228 Gobo5 Shak (wheel slot 6) 229–241 Gobo6 Shak (wheel slot 7) 242–255 Gobo7 Shak (wheel slot 8)
24	Gobo Rotation	0	0–127 Indexing 128–190 F > S - Rotate CW 191–192 Stop 193–255 S > F - Rotate CCW

RGBCAM 47CH (continued)

Ch	Function	Default	DMX values
25	Prism	0	0–127 Open (wheel slot 1) 128–255 Prism (wheel slot 2)
26	Prism Rotation	0	0–127 indexing 128–190 F > S - Rotate CW 191–192 Stop 193–255 S > F - Rotate CCW
27	Frost1	0	0–0 Min 1–254 Min<Max 255–255 Max
28	Frost2	0	0–0 Min 1–254 Min<Max 255–255 Max
29	Color Mixing OPT	0	0–0 Min 1–254 Min<Max 255–255 Max
30	Animation Wheel1	0	0–127 No function 128–255 Animation insert
31	Animation Wheel1Pos Rotate	0	0–3 Open 4–127 F > S - Rotate CW 128–132 Stop 133–255 S > F - Rotate CCW
32	Iris	0	0–126 Max 127–127 Min 128–131 Maximum Aperture 132–171 Slow to Fast Pulsation 172–211 Slow to Fast Pulsation Fast Opening 212–251 Slow to Fast Pulsation Fast Closing 252–255 Maximum Aperture
33	Focus	221	
34	Focus Fine	221	Fine byte of Focus
35	Zoom	131	0–254 Wide 255–255 Narrow
36	Zoom Fine	131	Fine byte of Zoom

RGBCAM 47CH (continued)

Ch	Function	Default	DMX values
37	Auto Focus	0	0–10 Auto Focus OFF 11–20 4 metres 21–30 6 metres 31–40 8 metres 41–50 10 metres 51–60 12 metres 61–70 14 metres 71–80 16 metres 81–90 18 metres 91–100 4 metres 101–110 6 metres 111–120 8 metres 121–130 10 metres 131–140 12 metres 141–150 14 metres 151–160 16 metres 161–170 18 metres 171–180 4 metres 181–190 6 metres 191–200 8 metres 201–210 10 metres 211–220 12 metres 221–230 14 metres 231–240 16 metres 241–250 18 metres 251–255 Auto Focus OFF
38	Blade1A	0	0–126 Min 127–254 50% 255–255 Max
39	Blade1Rot	127	
40	Blade2A	0	0–126 Min 127–254 50% 255–255 Max
41	Blade2Rot	127	
42	Blade3A	0	0–126 Min 127–254 50% 255–255 Max
43	Blade3Rot	127	
44	Blade4A	0	0–126 Min 127–254 50% 255–255 Max
45	Blade4Rot	128	
46	Shaper Rot	127	

RGBCAM 47CH (continued)

Ch	Function	Default	DMX values
47	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 Reserve 51–55 1200 Hz 56–70 Reserve 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 Pan Tilt Off 101–105 Swap Pan Tilt On 106–110 Fan Auto 111–115 Fan On 116–120 Fan Off 121–125 Fan Silent 126–130 Color Calibration Off 131–135 Factory Calibration 136–150 Reserve 151–155 Red Shift Off 156–160 Red Shift On 161–165 Framing Shutter Independent Mode 166–170 Framing Shutter Mixed Mode 171–175 Independent Mode 176–180 Mixed Mode 181–240 Reserve 241–245 Head Reset 246–250 Pan/Tilt Reset 251–255 Complete Reset