EK Lights

MC15 FS



Manufacturer	**EK Lights**
Type	**Profile spot**
DMX modes	**3**
DMX footprint	**42, 44, 50 channels**
Beam angle	**4.4-52°**
Pan range	**540°**
Tilt range	**270°**
Size (W × H × D)	**313 × 465 × 225 mm**
GDTF fixture type	**BF5619FC-F8AA-4066-8F79-54…**

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 42CH	42 ch
CMY 44CH	44 ch
RGBCAM 50CH	50 ch

XY 42CH

42 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	0	0–1 No Effect 2–3 Full Minus Green 4–126 -99% to 1% 127–128 No Effect 129–253 1% to 99% 254–255 Full Plus Green
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	Color Wheel	0	0–10 Open (wheel slot 1) 11–23 Open + Color1 (wheel slot 2) 24–36 Color 1 (wheel slot 3) 37–49 Color 1 + Color 2 (wheel slot 4) 50–62 Color 2 (wheel slot 5) 63–75 Color 2 + Color 3 (wheel slot 6) 76–88 Color 3 (wheel slot 7) 89–101 Color 3 + Color 4 (wheel slot 8) 102–114 Color 4 (wheel slot 9) 115–127 Color 4 + Open (wheel slot 10) 128–190 Fast to Slow(Forward Spin) 191–192 Stop (Stop Rotation) 193–255 Slow to Fast(Revers Spin)

XY 42CH (continued)

Ch	Function	Default	DMX values
16	Gobo	0	0–10 Open (wheel slot 1) 11–20 Gobo 1 (wheel slot 2) 21–30 Gobo 2 (wheel slot 3) 31–40 Gobo 3 (wheel slot 4) 41–50 Gobo 4 (wheel slot 5) 51–60 Gobo 5 (wheel slot 6) 61–71 Gobo 6 (wheel slot 7) 72–113 Fast to Slow(Revers Spin) 114–117 Stop (Stop Rotation) 118–159 Slow to Fast(Forward Spin) 160–175 Gobo1 Shak (wheel slot 2) 176–191 Gobo2 Shak (wheel slot 3) 192–207 Gobo3 Shak (wheel slot 4) 208–223 Gobo4 Shak (wheel slot 5) 224–239 Gobo5 Shak (wheel slot 6) 240–255 Gobo6 Shak (wheel slot 7)
17	Gobo Rotation	0	0–127 Indexing 128–190 F > S - Rotate CW 191–192 Stop 193–255 S > F - Rotate CCW
18	Gobo 2	0	0–10 Open (wheel slot 1) 11–20 Gobo 1 (wheel slot 2) 21–30 Gobo 2 (wheel slot 3) 31–40 Gobo 3 (wheel slot 4) 41–50 Gobo 4 (wheel slot 5) 51–60 Gobo 5 (wheel slot 6) 61–71 Gobo 6 (wheel slot 7) 72–113 Fast to Slow(Revers Spin) 114–117 Stop (Stop Rotation) 118–159 Slow to Fast(Forward Spin) 160–175 Gobo1 Shak (wheel slot 2) 176–191 Gobo2 Shak (wheel slot 3) 192–207 Gobo3 Shak (wheel slot 4) 208–223 Gobo4 Shak (wheel slot 5) 224–239 Gobo5 Shak (wheel slot 6) 240–255 Gobo6 Shak (wheel slot 7)
19	Gobo Rotation 2	0	0–127 Indexing 128–190 F > S - Rotate CW 191–192 Stop 193–255 S > F - Rotate CCW
20	Prism	0	0–127 Open (wheel slot 1) 128–255 Prism (wheel slot 2)
21	Prism Rotation	0	0–127 indexing 128–190 F > S - Rotate CW 191–192 Stop 193–255 S > F - Rotate CCW
22	Prism	0	0–127 Open (wheel slot 1) 128–255 Prism (wheel slot 2)
23	Prism Rotation	0	0–127 indexing 128–190 F > S - Rotate CW 191–192 Stop 193–255 S > F - Rotate CCW
24	Frost1	0	0–0 Min 1–254 Min<Max 255–255 Max
25	Animation Wheel1	0	0–127 No function 128–255 Animation insert

XY 42CH (continued)

Ch	Function	Default	DMX values
26	Animation Wheel1Pos Rotate	0	0–3 Open 4–127 F > S - Rotate CW 128–132 Stop 133–255 S > F - Rotate CCW
27	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
28	Focus	127	
29	Focus Fine	255	Fine byte of Focus
30	Zoom	127	0–254 Wide 255–255 Narrow
31	Zoom Fine	255	Fine byte of Zoom
32	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
33	Blade1A	0	0–126 Min 127–254 50% 255–255 Max
34	Blade1Rot	127	
35	Blade2A	0	0–126 Min 127–254 50% 255–255 Max
36	Blade2Rot	127	
37	Blade3A	0	0–126 Min 127–254 50% 255–255 Max
38	Blade3Rot	127	
39	Blade4A	0	0–126 Min 127–254 50% 255–255 Max

XY 42CH (continued)

Ch	Function	Default	DMX values
40	Blade4Rot	128	
41	Shaper Rot	127	
42	Control1	0	0–5 No Function 6–10 Dimmer Mode Auto 11–15 Dimmer Mode Off 16–20 Dimmer Mode 1 21–25 Dimmer Mode 2 26–30 Dimmer Mode 3 31–35 Linear 36–40 Square 41–45 Inverse Square 46–50 curve S 51–55 Reserve 56–60 1200 Hz 61–75 Reserve 76–80 25000Hz 81–85 Pan Inverse Off 86–90 Pan Inverse On 91–95 Tilt Inverse Off 96–100 Tilt Inverse On 101–105 Swap Pan Tilt Off 106–110 Swap Pan Tilt On 111–115 Fan Auto 116–120 Fan On 121–125 Fan Off 126–130 Fan Silent 131–135 Color Calibration Off 136–140 Factory Calibration 141–150 Reserve 151–155 Red Shift ON 156–160 Red Shift OFF 161–165 Framing Shutter Independent Mode 166–170 Framing Shutter Mixed Mode 171–175 All Control 176–180 XY Control 181–185 ALL follow spot XY off 186–190 ALL follow spot Follow spot priority 191–240 Reserve 241–245 Head Reset 246–250 Pan/Tilt Reset 251–255 Complete Reset

CMY 44CH

44 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 44CH (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	0	0–1 No Effect 2–3 Full Minus Green 4–126 -99% to 1% 127–128 No Effect 129–253 1% to 99% 254–255 Full Plus Green
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	Color Wheel	0	0–10 Open (wheel slot 1) 11–23 Open + Color1 (wheel slot 2) 24–36 Color 1 (wheel slot 3) 37–49 Color 1 + Color 2 (wheel slot 4) 50–62 Color 2 (wheel slot 5) 63–75 Color 2 + Color 3 (wheel slot 6) 76–88 Color 3 (wheel slot 7) 89–101 Color 3 + Color 4 (wheel slot 8) 102–114 Color 4 (wheel slot 9) 115–127 Color 4 + Open (wheel slot 10) 128–190 Fast to Slow(Forward Spin) 191–192 Stop (Stop Rotation) 193–255 Slow to Fast(Revers Spin)
18	Gobo	0	0–10 Open (wheel slot 1) 11–20 Gobo 1 (wheel slot 2) 21–30 Gobo 2 (wheel slot 3) 31–40 Gobo 3 (wheel slot 4) 41–50 Gobo 4 (wheel slot 5) 51–60 Gobo 5 (wheel slot 6) 61–71 Gobo 6 (wheel slot 7) 72–113 Fast to Slow(Revers Spin) 114–117 Stop (Stop Rotation) 118–159 Slow to Fast(Forward Spin) 160–175 Gobo1 Shak (wheel slot 2) 176–191 Gobo2 Shak (wheel slot 3) 192–207 Gobo3 Shak (wheel slot 4) 208–223 Gobo4 Shak (wheel slot 5) 224–239 Gobo5 Shak (wheel slot 6) 240–255 Gobo6 Shak (wheel slot 7)

CMY 44CH (continued)

Ch	Function	Default	DMX values
19	Gobo Rotation	0	0–127 Indexing 128–190 F > S - Rotate CW 191–192 Stop 193–255 S > F - Rotate CCW
20	Gobo 2	0	0–10 Open (wheel slot 1) 11–20 Gobo 1 (wheel slot 2) 21–30 Gobo 2 (wheel slot 3) 31–40 Gobo 3 (wheel slot 4) 41–50 Gobo 4 (wheel slot 5) 51–60 Gobo 5 (wheel slot 6) 61–71 Gobo 6 (wheel slot 7) 72–113 Fast to Slow(Revers Spin) 114–117 Stop (Stop Rotation) 118–159 Slow to Fast(Forward Spin) 160–175 Gobo1 Shak (wheel slot 2) 176–191 Gobo2 Shak (wheel slot 3) 192–207 Gobo3 Shak (wheel slot 4) 208–223 Gobo4 Shak (wheel slot 5) 224–239 Gobo5 Shak (wheel slot 6) 240–255 Gobo6 Shak (wheel slot 7)
21	Gobo Rotation 2	0	0–127 Indexing 128–190 F > S - Rotate CW 191–192 Stop 193–255 S > F - Rotate CCW
22	Prism	0	0–127 Open (wheel slot 1) 128–255 Prism (wheel slot 2)
23	Prism Rotation	0	0–127 indexing 128–190 F > S - Rotate CW 191–192 Stop 193–255 S > F - Rotate CCW
24	Prism	0	0–127 Open (wheel slot 1) 128–255 Prism (wheel slot 2)
25	Prism Rotation	0	0–127 indexing 128–190 F > S - Rotate CW 191–192 Stop 193–255 S > F - Rotate CCW
26	Frost1	0	0–0 Min 1–254 Min<Max 255–255 Max
27	Animation Wheel1	0	0–127 No function 128–255 Animation insert
28	Animation Wheel1Pos Rotate	0	0–3 Open 4–127 F > S - Rotate CW 128–132 Stop 133–255 S > F - Rotate CCW
29	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
30	Focus	127	
31	Focus Fine	255	Fine byte of Focus
32	Zoom	127	0–254 Wide 255–255 Narrow
33	Zoom Fine	255	Fine byte of Zoom

CMY 44CH (continued)

Ch	Function	Default	DMX values
34	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
35	Blade1A	0	0–126 Min 127–254 50% 255–255 Max
36	Blade1Rot	127	
37	Blade2A	0	0–126 Min 127–254 50% 255–255 Max
38	Blade2Rot	127	
39	Blade3A	0	0–126 Min 127–254 50% 255–255 Max
40	Blade3Rot	127	
41	Blade4A	0	0–126 Min 127–254 50% 255–255 Max
42	Blade4Rot	128	
43	Shaper Rot	127	

CMY 44CH (continued)

Ch	Function	Default	DMX values
44	Control1	0	0–5 No Function 6–10 Dimmer Mode Auto 11–15 Dimmer Mode Off 16–20 Dimmer Mode 1 21–25 Dimmer Mode 2 26–30 Dimmer Mode 3 31–35 Linear 36–40 Square 41–45 Inverse Square 46–50 curve S 51–55 Reserve 56–60 1200 Hz 61–75 Reserve 76–80 25000Hz 81–85 Pan Inverse Off 86–90 Pan Inverse On 91–95 Tilt Inverse Off 96–100 Tilt Inverse On 101–105 Swap Pan Tilt Off 106–110 Swap Pan Tilt On 111–115 Fan Auto 116–120 Fan On 121–125 Fan Off 126–130 Fan Silent 131–135 Color Calibration Off 136–140 Factory Calibration 141–150 Reserve 151–155 Red Shift ON 156–160 Red Shift OFF 161–165 Framing Shutter Independent Mode 166–170 Framing Shutter Mixed Mode 171–175 All Control 176–180 XY Control 181–185 ALL follow spot XY off 186–190 ALL follow spot Follow spot priority 191–240 Reserve 241–245 Head Reset 246–250 Pan/Tilt Reset 251–255 Complete Reset

RGBCAM 50CH

50 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

RGBCAM 50CH (continued)

Ch	Function	Default	DMX values
6	Dimmer	0	
7	Dimmer Fine	0	Fine byte of Dimmer
8	C TC	0	
9	Tint	0	0–1 No Effect 2–3 Full Minus Green 4–126 -99% to 1% 127–128 No Effect 129–253 1% to 99% 254–255 Full Plus Green
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	Color Wheel	0	0–10 Open (wheel slot 1) 11–23 Open + Color1 (wheel slot 2) 24–36 Color 1 (wheel slot 3) 37–49 Color 1 + Color 2 (wheel slot 4) 50–62 Color 2 (wheel slot 5) 63–75 Color 2 + Color 3 (wheel slot 6) 76–88 Color 3 (wheel slot 7) 89–101 Color 3 + Color 4 (wheel slot 8) 102–114 Color 4 (wheel slot 9) 115–127 Color 4 + Open (wheel slot 10) 128–190 Fast to Slow(Forward Spin) 191–192 Stop (Stop Rotation) 193–255 Slow to Fast(Revers Spin)
24	Gobo	0	0–10 Open (wheel slot 1) 11–20 Gobo 1 (wheel slot 2) 21–30 Gobo 2 (wheel slot 3) 31–40 Gobo 3 (wheel slot 4) 41–50 Gobo 4 (wheel slot 5) 51–60 Gobo 5 (wheel slot 6) 61–71 Gobo 6 (wheel slot 7) 72–113 Fast to Slow(Revers Spin) 114–117 Stop (Stop Rotation) 118–159 Slow to Fast(Forward Spin) 160–175 Gobo1 Shak (wheel slot 2) 176–191 Gobo2 Shak (wheel slot 3) 192–207 Gobo3 Shak (wheel slot 4) 208–223 Gobo4 Shak (wheel slot 5) 224–239 Gobo5 Shak (wheel slot 6) 240–255 Gobo6 Shak (wheel slot 7)
25	Gobo Rotation	0	0–127 Indexing 128–190 F > S - Rotate CW 191–192 Stop 193–255 S > F - Rotate CCW

RGBCAM 50CH (continued)

Ch	Function	Default	DMX values
26	Gobo 2	0	0–10 Open (wheel slot 1) 11–20 Gobo 1 (wheel slot 2) 21–30 Gobo 2 (wheel slot 3) 31–40 Gobo 3 (wheel slot 4) 41–50 Gobo 4 (wheel slot 5) 51–60 Gobo 5 (wheel slot 6) 61–71 Gobo 6 (wheel slot 7) 72–113 Fast to Slow(Revers Spin) 114–117 Stop (Stop Rotation) 118–159 Slow to Fast(Forward Spin) 160–175 Gobo1 Shak (wheel slot 2) 176–191 Gobo2 Shak (wheel slot 3) 192–207 Gobo3 Shak (wheel slot 4) 208–223 Gobo4 Shak (wheel slot 5) 224–239 Gobo5 Shak (wheel slot 6) 240–255 Gobo6 Shak (wheel slot 7)
27	Gobo Rotation 2	0	0–127 Indexing 128–190 F > S - Rotate CW 191–192 Stop 193–255 S > F - Rotate CCW
28	Prism	0	0–127 Open (wheel slot 1) 128–255 Prism (wheel slot 2)
29	Prism Rotation	0	0–127 indexing 128–190 F > S - Rotate CW 191–192 Stop 193–255 S > F - Rotate CCW
30	Prism	0	0–127 Open (wheel slot 1) 128–255 Prism (wheel slot 2)
31	Prism Rotation	0	0–127 indexing 128–190 F > S - Rotate CW 191–192 Stop 193–255 S > F - Rotate CCW
32	Frost1	0	0–0 Min 1–254 Min<Max 255–255 Max
33	Animation Wheel1	0	0–127 No function 128–255 Animation insert
34	Animation Wheel1Pos Rotate	0	0–3 Open 4–127 F > S - Rotate CW 128–132 Stop 133–255 S > F - Rotate CCW
35	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
36	Focus	127	
37	Focus Fine	255	Fine byte of Focus
38	Zoom	127	0–254 Wide 255–255 Narrow
39	Zoom Fine	255	Fine byte of Zoom

RGBCAM 50CH (continued)

Ch	Function	Default	DMX values
40	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
41	Blade1A	0	0–126 Min 127–254 50% 255–255 Max
42	Blade1Rot	127	
43	Blade2A	0	0–126 Min 127–254 50% 255–255 Max
44	Blade2Rot	127	
45	Blade3A	0	0–126 Min 127–254 50% 255–255 Max
46	Blade3Rot	127	
47	Blade4A	0	0–126 Min 127–254 50% 255–255 Max
48	Blade4Rot	128	
49	Shaper Rot	127	

RGBCAM 50CH (continued)

Ch	Function	Default	DMX values
50	Control1	0	0–5 No Function 6–10 Dimmer Mode Auto 11–15 Dimmer Mode Off 16–20 Dimmer Mode 1 21–25 Dimmer Mode 2 26–30 Dimmer Mode 3 31–35 Linear 36–40 Square 41–45 Inverse Square 46–50 curve S 51–55 Reserve 56–60 1200 Hz 61–75 Reserve 76–80 25000Hz 81–85 Pan Inverse Off 86–90 Pan Inverse On 91–95 Tilt Inverse Off 96–100 Tilt Inverse On 101–105 Swap Pan Tilt Off 106–110 Swap Pan Tilt On 111–115 Fan Auto 116–120 Fan On 121–125 Fan Off 126–130 Fan Silent 131–135 Color Calibration Off 136–140 Factory Calibration 141–150 Reserve 151–155 Red Shift ON 156–160 Red Shift OFF 161–165 Framing Shutter Independent Mode 166–170 Framing Shutter Mixed Mode 171–175 All Control 176–180 XY Control 181–185 ALL follow spot XY off 186–190 ALL follow spot Follow spot priority 191–240 Reserve 241–245 Head Reset 246–250 Pan/Tilt Reset 251–255 Complete Reset