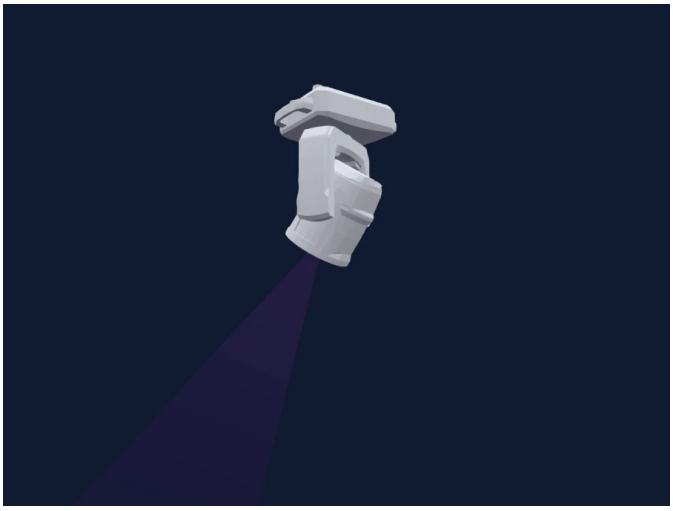
CKC Lighting

ZB7X IP



Manufacturer	**CKC Lighting**
Type	**Moving head**
DMX modes	**3**
DMX footprint	**17, 21, 45 channels**
Beam angle	**4-54°**
Pan range	**540°**
Tilt range	**270°**
Heads / cells	**7**
Size (W × H × D)	**224 × 260 × 211 mm**
GDTF fixture type	**458CCF0F-74C2-4B01-87A4-C1…**

Controls

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

Safety-relevant functions

Fixture reset · Built-in effect programmes

DMX modes

Basic 17CH	17 ch
Standard 21CH	21 ch
Extended 45CH	45 ch

Basic 17CH

17 channels

Ch	Function	Default	DMX values
1	Pan	128	
2	Tilt	128	
3	Dimmer	0	0–254 0% 255–255 100%
4	Shutter / Strobe	50	0–31 Closed 32–63 Open1 64–94 Min Strobe 95–95 Max Strobe 96–127 Open2 128–158 Min Pulse 159–159 Max Pulse 160–191 Open3 192–222 Min Random 223–223 Max Random 224–255 Open4
5	Red	255	
6	Green	255	
7	Blue	255	
8	White	255	
9	Color Effects1	0	0–0 Forcolor NO Function 1–1 10000K 2–2 8000K 3–3 6500K 4–4 5600K 5–5 5000K 6–6 4500K 7–7 4000K 8–8 3200K 9–9 3000K 10–10 2700K 11–250 Virtual color wheel 251–253 Color Wheel rotation between the color level 254–255 Color rotation backward
10	Color Effects2	0	0–0 Backcolor NO Function 1–1 10000K 2–2 8000K 3–3 6500K 4–4 5600K 5–5 5000K 6–6 4500K 7–7 4000K 8–8 3200K 9–9 3000K 10–10 2700K 11–250 Virtual color wheel 251–253 Color Wheel rotation between the color level 254–255 Color rotation backward
11	Color Macro1Rate	0	0–254 Slow 255–255 Fast

Basic 17CH (continued)

Ch	Function	Default	DMX values
12	Effect	0	0–9 No Program 10–19 Program 1 20–29 Program 2 30–39 Program 3 40–49 Program 4 50–59 Program 5 60–69 Program 6 70–79 Program 7 80–89 Program 8 90–99 Program 9 100–109 Program 10 110–119 Program 11 120–129 Program 12 130–139 Program 13 140–149 Program 14 150–159 Program 15 160–169 Program 16 170–179 Program 17 180–189 Program 18 190–199 Program 19 200–209 Program 20 210–255 No used
13	Effect Speed	0	0–4 Static step 1 5–9 Static step 2 10–14 Static step 3 15–19 Static step 4 20–24 Static step 5 25–29 Static step 6 30–34 Static step 7 35–39 Static step 8 40–145 Chase Forward F > S 146–149 Stop 150–255 Chase Backward S > F
14	Effects1Fade	0	0–254 Fast 255–255 Slow
15	Zoom	0	0–127 Narrow 128–254 Center 255–255 Wide
16	Dimmer Mode	0	0–20 Standard 21–40 Stage 41–60 TV 61–80 Architectural 81–100 Theatre 101–255 Default to Unit Setting

Basic 17CH (continued)

Ch	Function	Default	DMX values
17	Control1	0	0–5 No function 6–17 Invert Pan on (Hold 3s) 18–29 Invert Pan off (Hold 3s) 30–41 Invert Tilt on (Hold 3s) 42–53 Invert Tilt off (Hold 3s) 54–65 Fan Silent (Hold 3s) 66–77 Fan Auto (Hold 3s) 78–89 Fan High (Hold 3s) 90–101 Linear Dimmer Curve (Hold 3s) 102–113 Square Dimmer Curve (Hold 3s) 114–125 Inv-Square Dimmer Curve (Hold 3s) 126–131 S - Dimmer Curve (Hold 3s) 132–137 900 Hz (Hold 3s) 138–143 1000 Hz (Hold 3s) 144–149 1100 Hz (Hold 3s) 150–155 1200 Hz (Hold 3s) 156–161 1300 Hz (Hold 3s) 162–167 1400 Hz (Hold 3s) 168–173 1500 Hz (Hold 3s) 174–179 2500 Hz (Hold 3s) 180–185 4000 Hz (Hold 3s) 186–191 5000 Hz (Hold 3s) 192–197 10000 Hz (Hold 3s) 198–203 15000 Hz (Hold 3s) 204–209 20000 Hz (Hold 3s) 210–215 25000 Hz (Hold 3s) 216–218 Reset Pan/Tilt (Hold 3s) 219–221 Reset only Head (Hold 3s) 222–224 Reset All Functions (Hold 3s) 225–249 No used 250–252 White Calibred by IC (Hold 3s) 253–255 Fixed White values (Hold 3s)

Standard 21CH

21 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	Position MSpeed	0	0–225 Max to min speed 226–235 Blackout by movement 236–255 No function
6	Dimmer	0	0–254 0% 255–255 100%
7	Dimmer Fine	0	Fine byte of Dimmer
8	Shutter / Strobe	50	0–31 Closed 32–63 Open1 64–94 Min Strobe 95–95 Max Strobe 96–127 Open2 128–158 Min Pulse 159–159 Max Pulse 160–191 Open3 192–222 Min Random 223–223 Max Random 224–255 Open4
9	Red	255	

Standard 21CH (continued)

Ch	Function	Default	DMX values
10	Green	255	
11	Blue	255	
12	White	255	
13	Color Effects1	0	0–0 Forcolor NO Function 1–1 10000K 2–2 8000K 3–3 6500K 4–4 5600K 5–5 5000K 6–6 4500K 7–7 4000K 8–8 3200K 9–9 3000K 10–10 2700K 11–250 Virtual color wheel 251–253 Color Wheel rotation between the color level 254–255 Color rotation backward
14	Color Effects2	0	0–0 Backcolor NO Function 1–1 10000K 2–2 8000K 3–3 6500K 4–4 5600K 5–5 5000K 6–6 4500K 7–7 4000K 8–8 3200K 9–9 3000K 10–10 2700K 11–250 Virtual color wheel 251–253 Color Wheel rotation between the color level 254–255 Color rotation backward
15	Color Macro1Rate	0	0–254 Slow 255–255 Fast
16	Effect	0	0–9 No Program 10–19 Program 1 20–29 Program 2 30–39 Program 3 40–49 Program 4 50–59 Program 5 60–69 Program 6 70–79 Program 7 80–89 Program 8 90–99 Program 9 100–109 Program 10 110–119 Program 11 120–129 Program 12 130–139 Program 13 140–149 Program 14 150–159 Program 15 160–169 Program 16 170–179 Program 17 180–189 Program 18 190–199 Program 19 200–209 Program 20 210–255 No used

Standard 21CH (continued)

Ch	Function	Default	DMX values
17	Effect Speed	0	0–4 Static step 1 5–9 Static step 2 10–14 Static step 3 15–19 Static step 4 20–24 Static step 5 25–29 Static step 6 30–34 Static step 7 35–39 Static step 8 40–145 Chase Forward F > S 146–149 Stop 150–255 Chase Backward S > F
18	Effects1Fade	0	0–254 Fast 255–255 Slow
19	Zoom	0	0–127 Narrow 128–254 Center 255–255 Wide
20	Dimmer Mode	0	0–20 Standard 21–40 Stage 41–60 TV 61–80 Architectural 81–100 Theatre 101–255 Default to Unit Setting
21	Control1	0	0–5 No function 6–17 Invert Pan on (Hold 3s) 18–29 Invert Pan off (Hold 3s) 30–41 Invert Tilt on (Hold 3s) 42–53 Invert Tilt off (Hold 3s) 54–65 Fan Silent (Hold 3s) 66–77 Fan Auto (Hold 3s) 78–89 Fan High (Hold 3s) 90–101 Linear Dimmer Curve (Hold 3s) 102–113 Square Dimmer Curve (Hold 3s) 114–125 Inv-Square Dimmer Curve (Hold 3s) 126–131 S - Dimmer Curve (Hold 3s) 132–137 900 Hz (Hold 3s) 138–143 1000 Hz (Hold 3s) 144–149 1100 Hz (Hold 3s) 150–155 1200 Hz (Hold 3s) 156–161 1300 Hz (Hold 3s) 162–167 1400 Hz (Hold 3s) 168–173 1500 Hz (Hold 3s) 174–179 2500 Hz (Hold 3s) 180–185 4000 Hz (Hold 3s) 186–191 5000 Hz (Hold 3s) 192–197 10000 Hz (Hold 3s) 198–203 15000 Hz (Hold 3s) 204–209 20000 Hz (Hold 3s) 210–215 25000 Hz (Hold 3s) 216–218 Reset Pan/Tilt (Hold 3s) 219–221 Reset only Head (Hold 3s) 222–224 Reset All Functions (Hold 3s) 225–249 No used 250–252 White Calibred by IC (Hold 3s) 253–255 Fixed White values (Hold 3s)

Extended 45CH

45 channels

Ch	Function	Default	DMX values
1	Pan	128	

Extended 45CH (continued)

Ch	Function	Default	DMX values
2	Pan Fine	0	Fine byte of Pan
3	Tilt	128	
4	Tilt Fine	0	Fine byte of Tilt
5	Position MSpeed	0	0–225 Max to min speed 226–235 Blackout by movement 236–255 No function
6	Dimmer	255	0–254 0% 255–255 100%
7	Dimmer Fine	255	Fine byte of Dimmer
8	Shutter / Strobe	50	0–31 Closed 32–63 Open1 64–94 Min Strobe 95–95 Max Strobe 96–127 Open2 128–158 Min Pulse 159–159 Max Pulse 160–191 Open3 192–222 Min Random 223–223 Max Random 224–255 Open4
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	

Extended 45CH (continued)

Ch	Function	Default	DMX values
37	Color Effects1	0	0–0 Forcolor NO Function 1–1 10000K 2–2 8000K 3–3 6500K 4–4 5600K 5–5 5000K 6–6 4500K 7–7 4000K 8–8 3200K 9–9 3000K 10–10 2700K 11–250 Virtual color wheel 251–253 Color Wheel rotation between the color level 254–255 Color rotation backward
38	Color Effects2	0	0–0 Backcolor NO Function 1–1 10000K 2–2 8000K 3–3 6500K 4–4 5600K 5–5 5000K 6–6 4500K 7–7 4000K 8–8 3200K 9–9 3000K 10–10 2700K 11–250 Virtual color wheel 251–253 Color Wheel rotation between the color level 254–255 Color rotation backward
39	Color Macro1Rate	0	0–254 Slow 255–255 Fast
40	Effect	0	0–9 No Program 10–19 Program 1 20–29 Program 2 30–39 Program 3 40–49 Program 4 50–59 Program 5 60–69 Program 6 70–79 Program 7 80–89 Program 8 90–99 Program 9 100–109 Program 10 110–119 Program 11 120–129 Program 12 130–139 Program 13 140–149 Program 14 150–159 Program 15 160–169 Program 16 170–179 Program 17 180–189 Program 18 190–199 Program 19 200–209 Program 20 210–255 No used

Extended 45CH (continued)

Ch	Function	Default	DMX values
41	Effect Speed	0	0–4 Static step 1 5–9 Static step 2 10–14 Static step 3 15–19 Static step 4 20–24 Static step 5 25–29 Static step 6 30–34 Static step 7 35–39 Static step 8 40–145 Chase Forward F > S 146–149 Stop 150–255 Chase Backward S > F
42	Effects1Fade	0	0–254 Fast 255–255 Slow
43	Zoom	0	0–127 Narrow 128–254 Center 255–255 Wide
44	Dimmer Mode	0	0–20 Standard 21–40 Stage 41–60 TV 61–80 Architectural 81–100 Theatre 101–255 Default to Unit Setting
45	Control1	0	0–5 No function 6–17 Invert Pan on (Hold 3s) 18–29 Invert Pan off (Hold 3s) 30–41 Invert Tilt on (Hold 3s) 42–53 Invert Tilt off (Hold 3s) 54–65 Fan Silent (Hold 3s) 66–77 Fan Auto (Hold 3s) 78–89 Fan High (Hold 3s) 90–101 Linear Dimmer Curve (Hold 3s) 102–113 Square Dimmer Curve (Hold 3s) 114–125 Inv-Square Dimmer Curve (Hold 3s) 126–131 S - Dimmer Curve (Hold 3s) 132–137 900 Hz (Hold 3s) 138–143 1000 Hz (Hold 3s) 144–149 1100 Hz (Hold 3s) 150–155 1200 Hz (Hold 3s) 156–161 1300 Hz (Hold 3s) 162–167 1400 Hz (Hold 3s) 168–173 1500 Hz (Hold 3s) 174–179 2500 Hz (Hold 3s) 180–185 4000 Hz (Hold 3s) 186–191 5000 Hz (Hold 3s) 192–197 10000 Hz (Hold 3s) 198–203 15000 Hz (Hold 3s) 204–209 20000 Hz (Hold 3s) 210–215 25000 Hz (Hold 3s) 216–218 Reset Pan/Tilt (Hold 3s) 219–221 Reset only Head (Hold 3s) 222–224 Reset All Functions (Hold 3s) 225–249 No used 250–252 White Calibred by IC (Hold 3s) 253–255 Fixed White values (Hold 3s)