Black Light Design

Martin MAC Quantum Wash



Manufacturer	**Black Light Design**
Type	**Moving head**
DMX modes	**2**
DMX footprint	**17, 33 channels**
Beam angle	**11-53°**
Pan range	**540°**
Tilt range	**270°**
Heads / cells	**5**
Size (W × H × D)	**310 × 276 × 316 mm**
GDTF fixture type	**FF9744BF-5301-4544-97E9-356…**

Controls

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

Safety-relevant functions

Fixture reset · Service functions · Built-in effect programmes

DMX modes

Basic	17 ch
Extended	33 ch

Basic

17 channels

Ch	Function	Default	DMX values
1	Shutter / Strobe	30	0–19 Closed 20–49 Open 50–124 Strobe · Slow 1–10.4 Hz 125–199 Strobe · Medium 10.5–19.9 Hz 200–200 Strobe · Fast 20 Hz 201–210 Open 211–232 Strobe Random · Slow 1–10.1 Hz 233–254 Strobe Random · Medium 10.5–19.6 Hz 255–255 Strobe Random · Fast 20 Hz
2	Dimmer	0	0–63 Closed 64–127 25% 128–191 50% 192–254 75% 255–255 Open
3	Dimmer Fine	0	Fine byte of Dimmer
4	Red	255	0–63 Min 64–127 25% 128–191 50% 192–254 75% 255–255 Max
5	Red Fine	255	Fine byte of Red
6	Green	255	0–63 Min 64–127 25% 128–191 50% 192–254 75% 255–255 Max
7	Green Fine	255	Fine byte of Green
8	Blue	255	0–63 Min 64–127 25% 128–191 50% 192–254 75% 255–255 Max
9	Blue Fine	255	Fine byte of Blue
10	C TC	0	

Basic (continued)

Ch	Function	Default	DMX values
11	Color Wheel	0	0–10 Open (wheel slot 1) 11–12 Moroccan Pink (wheel slot 2) 13–14 Pink (wheel slot 3) 15–16 Special Rose Pink (wheel slot 4) 17–18 Follies Pink (wheel slot 5) 19–20 Fuchsia Pink (wheel slot 6) 21–22 Surprise Pink (wheel slot 7) 23–24 Congo Blue (wheel slot 8) 25–26 Tokyo Blue (wheel slot 9) 27–28 Deep Blue (wheel slot 10) 29–30 Just Blue (wheel slot 11) 31–32 Medium Blue (wheel slot 12) 33–34 Double CT Blue (wheel slot 13) 35–36 Slate Blue (wheel slot 14) 37–38 Full CT Blue (wheel slot 15) 39–40 Half CT Blue (wheel slot 16) 41–42 Steel Blue (wheel slot 17) 43–44 Lighter Blue (wheel slot 18) 45–46 Light Blue (wheel slot 19) 47–48 Medium Blue Green (wheel slot 20) 49–50 Dark Green (wheel slot 21) 51–52 Primary Green (wheel slot 22) 53–54 Moss Green (wheel slot 23) 55–56 Fern Green (wheel slot 24) 57–58 Jas Green (wheel slot 25) 59–60 Lime Green (wheel slot 26) 61–62 Spring Yellow (wheel slot 27) 63–64 Deep Amber (wheel slot 28) 65–66 Chrome Orange (wheel slot 29) 67–68 Orange (wheel slot 30) 69–70 Gold Amber (wheel slot 31) 71–72 Millennium Gold (wheel slot 32) 73–74 Deep Golden Amber (wheel slot 33) 75–76 Flame Red (wheel slot 34) 77–78 Red Magenta (wheel slot 35) 79–80 Medium Lavender (wheel slot 36) 81–82 Pure White (wheel slot 37) 83–92 CW Max 93–102 CW Med 103–103 CW Min 104–106 Stop 107–116 CCW Min 117–126 CCW Med 127–127 CCW Max 128–129 Macro 1 130–131 Macro 2 132–133 Macro 3 134–135 Macro 4 136–137 Macro 5 138–139 Macro 6 140–141 Macro 7 142–143 Macro 8 144–145 Macro 9 146–147 Macro 10 148–149 Macro 11 150–151 Macro 12 152–153 Macro 13 154–155 Macro 14 156–157 Macro 15 158–159 Macro 16 160–161 Macro 17 162–163 Macro 18 164–165 Macro 19 166–167 Macro 20

Basic (continued)

Ch	Function	Default	DMX values
12	Zoom	128	0–127 Wide 128–254 Medium 255–255 Narrow
13	Pan	128	
14	Pan Fine	0	Fine byte of Pan
15	Tilt	128	
16	Tilt Fine	0	Fine byte of Tilt
17	Control1	0	0–9 Idle 10–14 Reset Entire Fixture (5s) 15–15 Reset Shutter/Dimmer Only (5s) 16–16 Reset Color Only (5s) 17–17 Reset Beam Only (5s) 18–18 Reset Pan and Tilt Only (5s) 19–22 No Function 1 23–23 Linear (1s) 24–24 Square (1s) 25–25 Inverse Square (1s) 26–26 S-Curve (1s) 27–27 No Function 2 28–28 Fast (1s) 29–29 Smooth (1s) 30–30 Shortcuts ON 31–31 Shortcuts OFF 32–35 No Function 3 36–36 Video Tracking ON (1s) 37–37 Video Tracking OFF (1s) 38–38 Extended Color Mode (1s) 39–39 Calibrated Color Mode (1s) 40–49 No Function 4 50–50 Regulated Fan Speed (1s) 51–51 Fixed Fan Speed (1s) 52–52 Control Panel Display ON (1s) 53–53 Control Panel Display OFF (1s) 54–99 No Function 5 100–100 Enable Calibration (5s) 101–101 Store Pan and Tilt Calibration (5s) 102–110 Store Dimmer Calibration (5s) 111–113 Store Beam Twister Calibration (5s) 114–114 Store Zoom Calibration (5s) 115–115 Store Pan Calibration 116–198 Store Tilt Calibration 199–199 Reset All Calibration To Factory Default (5s) 200–255 No Function 6

Extended

33 channels

Ch	Function	Default	DMX values
1	Shutter / Strobe	30	0–19 Closed 20–49 Open 50–124 Strobe · Slow 1–10.4 Hz 125–199 Strobe · Medium 10.5–19.9 Hz 200–200 Strobe · Fast 20 Hz 201–210 Open 211–232 Strobe Random · Slow 1–10.1 Hz 233–254 Strobe Random · Medium 10.5–19.6 Hz 255–255 Strobe Random · Fast 20 Hz

Extended (continued)

Ch	Function	Default	DMX values
2	Dimmer	0	0–63 Closed 64–127 25% 128–191 50% 192–254 75% 255–255 Open
3	Dimmer Fine	0	Fine byte of Dimmer
4	C TC	0	

Extended (continued)

Ch	Function	Default	DMX values
5	Color Wheel	0	0–10 Open (wheel slot 1) 11–12 Moroccan Pink (wheel slot 2) 13–14 Pink (wheel slot 3) 15–16 Special Rose Pink (wheel slot 4) 17–18 Follies Pink (wheel slot 5) 19–20 Fuchsia Pink (wheel slot 6) 21–22 Surprise Pink (wheel slot 7) 23–24 Congo Blue (wheel slot 8) 25–26 Tokyo Blue (wheel slot 9) 27–28 Deep Blue (wheel slot 10) 29–30 Just Blue (wheel slot 11) 31–32 Medium Blue (wheel slot 12) 33–34 Double CT Blue (wheel slot 13) 35–36 Slate Blue (wheel slot 14) 37–38 Full CT Blue (wheel slot 15) 39–40 Half CT Blue (wheel slot 16) 41–42 Steel Blue (wheel slot 17) 43–44 Lighter Blue (wheel slot 18) 45–46 Light Blue (wheel slot 19) 47–48 Medium Blue Green (wheel slot 20) 49–50 Dark Green (wheel slot 21) 51–52 Primary Green (wheel slot 22) 53–54 Moss Green (wheel slot 23) 55–56 Fern Green (wheel slot 24) 57–58 Jas Green (wheel slot 25) 59–60 Lime Green (wheel slot 26) 61–62 Spring Yellow (wheel slot 27) 63–64 Deep Amber (wheel slot 28) 65–66 Chrome Orange (wheel slot 29) 67–68 Orange (wheel slot 30) 69–70 Gold Amber (wheel slot 31) 71–72 Millennium Gold (wheel slot 32) 73–74 Deep Golden Amber (wheel slot 33) 75–76 Flame Red (wheel slot 34) 77–78 Red Magenta (wheel slot 35) 79–80 Medium Lavender (wheel slot 36) 81–82 Pure White (wheel slot 37) 83–92 CW Max 93–102 CW Med 103–103 CW Min 104–106 Stop 107–116 CCW Min 117–126 CCW Med 127–127 CCW Max 128–129 Macro 1 130–131 Macro 2 132–133 Macro 3 134–135 Macro 4 136–137 Macro 5 138–139 Macro 6 140–141 Macro 7 142–143 Macro 8 144–145 Macro 9 146–147 Macro 10 148–149 Macro 11 150–151 Macro 12 152–153 Macro 13 154–155 Macro 14 156–157 Macro 15 158–159 Macro 16 160–161 Macro 17 162–163 Macro 18 164–165 Macro 19 166–167 Macro 20

Extended (continued)

Ch	Function	Default	DMX values
6	Zoom	128	0–127 Wide 128–254 Medium 255–255 Narrow
7	Beam Shaper	0	0–31 0 deg 32–63 90 deg 64–95 180 deg 96–127 270 deg 128–155 360 deg 156–174 CW Max 175–194 CW Med 195–213 CW Min 214–233 CCW Med 234–234 CCW Max 235–235 Texture 236–236 Donut 237–237 Beam 2 238–238 Mixed 239–239 Separation 2 240–240 Two Areas 241–255 Crossover
8	Beam Shaper Fine	0	Fine byte of Beam Shaper
9	Pan	128	
10	Pan Fine	0	Fine byte of Pan
11	Tilt	128	
12	Tilt Fine	0	Fine byte of Tilt

Extended (continued)

Ch	Function	Default	DMX values
13	Control1	0	0–9 Idle 10–14 Reset Entire Fixture (5s) 15–15 Reset Shutter/Dimmer Only (5s) 16–16 Reset Color Only (5s) 17–17 Reset Beam Only (5s) 18–18 Reset Pan and Tilt Only (5s) 19–22 No Function 1 23–23 Linear (1s) 24–24 Square (1s) 25–25 Inverse Square (1s) 26–26 S-Curve (1s) 27–27 No Function 2 28–28 Fast (1s) 29–29 Smooth (1s) 30–30 Shortcuts ON 31–31 Shortcuts OFF 32–35 No Function 3 36–36 Video Tracking ON (1s) 37–37 Video Tracking OFF (1s) 38–38 Extended Color Mode (1s) 39–39 Calibrated Color Mode (1s) 40–49 No Function 4 50–50 Regulated Fan Speed (1s) 51–51 Fixed Fan Speed (1s) 52–52 Control Panel Display ON (1s) 53–53 Control Panel Display OFF (1s) 54–99 No Function 5 100–100 Enable Calibration (5s) 101–101 Store Pan and Tilt Calibration (5s) 102–110 Store Dimmer Calibration (5s) 111–113 Store Beam Twister Calibration (5s) 114–114 Store Zoom Calibration (5s) 115–115 Store Pan Calibration 116–198 Store Tilt Calibration 199–199 Reset All Calibration To Factory Default (5s) 200–255 No Function 6

Extended (continued)

Ch	Function	Default	DMX values
14	Effect	0	0–0 No Effect 1–1 Aura All Sync Center 2–2 Aura All Sync Middle 3–3 Aura All Sync Outside 4–4 Aura Color offset 5–5 Aura Dimmer Sync 6–6 Aura Strobe Sync 7–8 Aura DimmerStrobe Sync 9–9 Beam Color Tuner 10–10 Ring Chase Fader 11–11 Ring Chase Ramp 12–12 Sinewave Roll 13–13 Ring Chase Fade Random 14–14 Ring Pulse VU 15–15 Ring Roll 16–16 Ring Strobe 17–17 Ring Strobe Random 18–18 Ring Strobe Random MidFast 19–19 Ring Chase Strobe Uni 20–20 Ring Random Strobe Uni 21–21 Ring Chase Random Strobe 22–22 Ring Random Strobe Random 23–23 Ring Random Strobe MidFast Unit 24–24 Flash RingScroll 25–25 Strobe Alternate 1 26–26 Strobe Alternate 2 27–27 Strobe Alternate 3 28–28 3-Step Strobe 29–29 Tick Tock 30–31 Tick Tock Random 32–32 Beam Pulse 33–33 Beam Ramp 34–34 Aura Pulse 35–35 Aura Ramp 36–36 Aura Ramp Beam Flash 37–37 Beam Ramp Aura Flash 38–38 BeamAura Ramp 39–45 Ring Random Strobe Uni 46–46 Electric Arc 47–47 Atomic Lighting 48–48 Thunderstorm 49–49 Welding 50–50 Rainbow Fade 51–51 Rainbow Solid 52–52 Rainbow Roll 53–53 RGB Fade 54–54 RGB Step 55–55 RGB Roll 56–56 CMY Fade 57–57 CMY Step 58–58 CMY Roll 59–59 Beam RedWhiteBlue 60–60 Beam RedWhite 61–61 Beam White Chase 62–62 Beam Random White Chase 63–63 Beam Random Color Rings 64–64 Beam Color Flicker 65–79 No Function 1 80–80 Twister Animate 1 81–89 Twister Animate 2 90–90 Zoom Ramp 91–91 Zoom Sawtooth 92–92 Zoom Dimmer Ramp 93–93 Zoom Dimmer Sawtooth

Extended (continued)

Ch	Function	Default	DMX values
15	Effect Speed	128	0–63 Rev Max 64–125 Rev Med 126–126 Rev Min 127–128 Stop 129–191 Fwd Min 192–254 Fwd Med 255–255 Fwd Max

Extended (continued)

Ch	Function	Default	DMX values
16	Effect 2	0	0–0 No Effect 1–1 Aura All Sync Center 2–2 Aura All Sync Middle 3–3 Aura All Sync Outside 4–4 Aura Color offset 5–5 Aura Dimmer Sync 6–6 Aura Strobe Sync 7–8 Aura DimmerStrobe Sync 9–9 Beam Color Tuner 10–10 Ring Chase Fader 11–11 Ring Chase Ramp 12–12 Sinewave Roll 13–13 Ring Chase Fade Random 14–14 Ring Pulse VU 15–15 Ring Roll 16–16 Ring Strobe 17–17 Ring Strobe Random 18–18 Ring Strobe Random MidFast 19–19 Ring Chase Strobe Uni 20–20 Ring Random Strobe Uni 21–21 Ring Chase Random Strobe 22–22 Ring Random Strobe Random 23–23 Ring Random Strobe MidFast Unit 24–24 Flash RingScroll 25–25 Strobe Alternate 1 26–26 Strobe Alternate 2 27–27 Strobe Alternate 3 28–28 3-Step Strobe 29–29 Tick Tock 30–31 Tick Tock Random 32–32 Beam Pulse 33–33 Beam Ramp 34–34 Aura Pulse 35–35 Aura Ramp 36–36 Aura Ramp Beam Flash 37–37 Beam Ramp Aura Flash 38–38 BeamAura Ramp 39–45 Ring Random Strobe Uni 46–46 Electric Arc 47–47 Atomic Lighting 48–48 Thunderstorm 49–49 Welding 50–50 Rainbow Fade 51–51 Rainbow Solid 52–52 Rainbow Roll 53–53 RGB Fade 54–54 RGB Step 55–55 RGB Roll 56–56 CMY Fade 57–57 CMY Step 58–58 CMY Roll 59–59 Beam RedWhiteBlue 60–60 Beam RedWhite 61–61 Beam White Chase 62–62 Beam Random White Chase 63–63 Beam Random Color Rings 64–64 Beam Color Flicker 65–79 No Function 1 80–80 Twister Animate 1 81–89 Twister Animate 2 90–90 Zoom Ramp 91–91 Zoom Sawtooth 92–92 Zoom Dimmer Ramp 93–93 Zoom Dimmer Sawtooth

Extended (continued)

Ch	Function	Default	DMX values
17	Effect Speed 2	128	0–63 Rev Max 64–125 Rev Med 126–126 Rev Min 127–128 Stop 129–191 Fwd Min 192–254 Fwd Med 255–255 Fwd Max
18	Effects Sync	36	0–0 No Sync 1–1 Fixture Offset 10deg 2–2 Fixture Offset 20deg 3–3 Fixture Offset 30deg 4–4 Fixture Offset 40deg 5–5 Fixture Offset 50deg 6–6 Fixture Offset 60deg 7–7 Fixture Offset 70deg 8–8 Fixture Offset 80deg 9–9 Fixture Offset 90deg 10–10 Fixture Offset 100deg 11–11 Fixture Offset 110deg 12–12 Fixture Offset 120deg 13–13 Fixture Offset 130deg 14–14 Fixture Offset 140deg 15–15 Fixture Offset 150deg 16–16 Fixture Offset 160deg 17–17 Fixture Offset 170deg 18–18 Fixture Offset 180deg 19–19 Fixture Offset 190deg 20–20 Fixture Offset 200deg 21–21 Fixture Offset 210deg 22–22 Fixture Offset 220deg 23–23 Fixture Offset 230deg 24–24 Fixtrue Offset 240deg 25–25 Fixture Offset 250deg 26–26 Fixture Offset 260deg 27–27 Fixture Offset 270deg 28–28 Fixture Offset 280deg 29–29 Fixture Offset 290deg 30–30 Fixture Offset 300deg 31–31 Fixture Offset 310deg 32–32 Fixture Offset 320deg 33–33 Fixture Offset 330deg 34–34 Fixture Offset 340deg 35–35 Fixture Offset 350deg 36–100 Synchronized 101–120 Random Start 121–255 Random Duration
19	Red	255	0–63 Min 64–127 25% 128–191 50% 192–254 75% 255–255 Max
20	Green	255	0–63 Min 64–127 25% 128–191 50% 192–254 75% 255–255 Max
21	Blue	255	0–63 Min 64–127 25% 128–191 50% 192–254 75% 255–255 Max

Extended (continued)

Ch	Function	Default	DMX values
22	Red	255	0–63 Min 64–127 25% 128–191 50% 192–254 75% 255–255 Max
23	Green	255	0–63 Min 64–127 25% 128–191 50% 192–254 75% 255–255 Max
24	Blue	255	0–63 Min 64–127 25% 128–191 50% 192–254 75% 255–255 Max
25	Red	255	0–63 Min 64–127 25% 128–191 50% 192–254 75% 255–255 Max
26	Green	255	0–63 Min 64–127 25% 128–191 50% 192–254 75% 255–255 Max
27	Blue	255	0–63 Min 64–127 25% 128–191 50% 192–254 75% 255–255 Max
28	Shutter / Strobe	30	0–19 Closed 20–49 Open 50–124 Strobe · Slow 1–10.4 Hz 125–199 Strobe · Medium 10.5–19.9 Hz 200–200 Strobe · Fast 20 Hz 201–210 Open 211–232 Strobe Random · Slow 1–10.1 Hz 233–254 Strobe Random · Medium 10.5–19.6 Hz 255–255 Strobe Random · Fast 20 Hz
29	Dimmer	0	0–63 Closed 64–127 25% 128–191 50% 192–254 75% 255–255 Open
30	Red	255	0–63 Min 64–127 25% 128–191 50% 192–254 75% 255–255 Max
31	Green	255	0–63 Min 64–127 25% 128–191 50% 192–254 75% 255–255 Max
32	Blue	255	0–63 Min 64–127 25% 128–191 50% 192–254 75% 255–255 Max

Extended (continued)

Ch	Function	Default	DMX values
33	Color Wheel 2	0	0–10 Open (wheel slot 1) 11–15 Moroccan Pink (wheel slot 2) 16–20 Pink (wheel slot 3) 21–25 Special Rose Pink (wheel slot 4) 26–30 Follies Pink (wheel slot 5) 31–35 Fuchsia Pink (wheel slot 6) 36–40 Surprise Pink (wheel slot 7) 41–45 Congo Blue (wheel slot 8) 46–50 Tokyo Blue (wheel slot 9) 51–55 Deep Blue (wheel slot 10) 56–60 Just Blue (wheel slot 11) 61–65 Medium Blue (wheel slot 12) 66–70 Double CT Blue (wheel slot 13) 71–75 Slate Blue (wheel slot 14) 76–80 Full CT Blue (wheel slot 15) 81–85 Half CT Blue (wheel slot 16) 86–90 Steel Blue (wheel slot 17) 91–95 Lighter Blue (wheel slot 18) 96–100 Light Blue (wheel slot 19) 101–105 Medium Blue Green (wheel slot 20) 106–110 Dark Green (wheel slot 21) 111–115 Primary Green (wheel slot 22) 116–120 Moss Green (wheel slot 23) 121–125 Fern Green (wheel slot 24) 126–130 Jas Green (wheel slot 25) 131–135 Lime Green (wheel slot 26) 136–140 Spring Yellow (wheel slot 27) 141–145 Deep Amber (wheel slot 28) 146–150 Chrome Orange (wheel slot 29) 151–155 Orange (wheel slot 30) 156–160 Gold Amber (wheel slot 31) 161–165 Millennium Gold (wheel slot 32) 166–170 Deep Golden Amber (wheel slot 33) 171–175 Flame Red (wheel slot 34) 176–180 Red Magenta (wheel slot 35) 181–185 Medium Lavender (wheel slot 36) 186–190 Pure White (wheel slot 37) 191–201 CW Max 202–213 CW Med 214–214 CW Min 215–219 Stop 220–231 CCW Min 232–242 CCW Med 243–243 CCW Max 244–248 Fast 249–254 Medium 255–255 Slow