High End Systems

TurboRay



Manufacturer	**High End Systems**
Type	**Moving head**
DMX modes	**2**
DMX footprint	**25, 53 channels**
Beam angle	**3-24°**
Pan range	**540°**
Tilt range	**270°**
Heads / cells	**5**
Size (W × H × D)	**319 × 472 × 296 mm**
GDTF fixture type	**76179201-7927-442F-B766-1B5…**

Controls

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

Safety-relevant functions

Fixture reset · Service functions · Built-in effect programmes

DMX modes

Reduced	25 ch
Standard	53 ch

Reduced

25 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	Color Mix Mode	0	0–90 RGB 91–180 CMY 181–195 Cycle 196–255 Random
6	Red	255	
7	Green	255	
8	Blue	255	
9	White	0	
10	C TO	0	0–4 disabled 5–254 min CTO 255–255 max CTO
11	Color1Mode	0	0–15 Index 16–31 Spin > 32–47 Spin < 48–63 Continuous 64–79 Scan 80–95 Random 96–255 NoFeature 1
12	Color Wheel	0	0–0 open (wheel slot 1) 1–27 > 28–41 open / DarkBlue (wheel slot 1) 42–83 Dark Blue (wheel slot 2) 84–97 DarkBlue / CTO (wheel slot 2) 98–139 CTO (wheel slot 3) 140–153 CTO / Red (wheel slot 3) 154–195 Red (wheel slot 4) 196–209 Red / open (wheel slot 4) 210–254 open (2) (wheel slot 1) 255–255 >>>
13	Gobo1Wheel Mode	0	0–15 Index 16–31 Continuous 32–47 Spin > 48–63 Spin < 64–79 Animate 80–255 NoFeature 1
14	Gobo	0	0–0 Diffusion (wheel slot 1) 1–31 > 32–63 Open (wheel slot 2) 64–95 Hash (wheel slot 3) 96–126 Dots (wheel slot 4) 127–127 Hash fast (wheel slot 3) 128–128 Diffusion (2) (wheel slot 1) 129–254 Dots slow (wheel slot 4) 255–255 >>>
15	Frost1	0	0–254 min Frost 255–255 max Frost
16	Zoom	128	0–127 narrow 128–254 normal 255–255 wide
17	Zoom Fine	0	Fine byte of Zoom

Reduced (continued)

Ch	Function	Default	DMX values
18	Strobe Mode	0	0–15 Normal 16–31 Random 32–47 Rnd Pulse 48–63 Rnd Sync 64–255 NoFeature 1
19	Shutter / Strobe	0	0–0 open 1–254 min Strobe 255–255 max Strobe
20	Dimmer	0	0–254 closed 255–255 open
21	Dimmer Fine	0	Fine byte of Dimmer
22	Effect	0	0–0 Standard 1–1 Right 2–2 Upside Down 3–3 Left 4–4 TwoColor Top / Bottom 5–5 TwoColor Left / Right 6–6 4 Color Rotation 7–7 2 Color Rotation 8–8 2 Color Single 9–9 Left and Right 10–10 Top and Bottom 11–255 Crosses
23	Effect Speed	0	0–125 <<< 126–126 < 127–128 stop 129–254 > 255–255 >>>
24	Effects1Fade	0	0–254 min Fade 255–255 max Fade
25	Control1	0	0–31 normal 32–47 Display off 48–63 Display on 64–79 Reset 80–95 Shutdown 96–101 Fans Silent 102–107 Fans Continuous 108–113 Fans Standard 114–119 Fans Studio 120–123 Redshift on 124–126 Redshift off 127–128 Dim Frequency 1 129–131 Dim Frequency 2 132–133 Dim Frequency 3 134–136 Dim Frequency 4 137–255 NoFeature 1

Standard

53 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

Standard (continued)

Ch	Function	Default	DMX values
5	Color Mix Mode	0	0–90 RGB 91–180 CMY 181–195 Cycle 196–255 Random
6	Color1Mode	0	0–15 Index 16–31 Spin > 32–47 Spin < 48–63 Continuous 64–79 Scan 80–95 Random 96–255 NoFeature 1
7	Color Wheel	0	0–0 open (wheel slot 1) 1–27 > 28–41 open / DarkBlue (wheel slot 1) 42–83 Dark Blue (wheel slot 2) 84–97 DarkBlue / CTO (wheel slot 2) 98–139 CTO (wheel slot 3) 140–153 CTO / Red (wheel slot 3) 154–195 Red (wheel slot 4) 196–209 Red / open (wheel slot 4) 210–254 open (2) (wheel slot 1) 255–255 >>>
8	Gobo1Wheel Mode	0	0–15 Index 16–31 Continuous 32–47 Spin > 48–63 Spin < 64–79 Animate 80–255 NoFeature 1
9	Gobo	0	0–0 Diffusion (wheel slot 1) 1–31 > 32–63 Open (wheel slot 2) 64–95 Hash (wheel slot 3) 96–126 Dots (wheel slot 4) 127–127 Hash fast (wheel slot 3) 128–128 Diffusion (2) (wheel slot 1) 129–254 Dots slow (wheel slot 4) 255–255 >>>
10	Frost1	0	0–254 min Frost 255–255 max Frost
11	Zoom	128	0–127 narrow 128–254 normal 255–255 wide
12	Zoom Fine	0	Fine byte of Zoom
13	Effect	0	0–0 Standard 1–1 Right 2–2 Upside Down 3–3 Left 4–4 TwoColor Top / Bottom 5–5 TwoColor Left / Right 6–6 4 Color Rotation 7–7 2 Color Rotation 8–8 2 Color Single 9–9 Left and Right 10–10 Top and Bottom 11–255 Crosses

Standard (continued)

Ch	Function	Default	DMX values
14	Effect Speed	0	0–125 <<< 126–126 < 127–128 stop 129–254 > 255–255 >>>
15	Effects1Fade	0	0–254 min Fade 255–255 max Fade
16	Position MSpeed	0	0–3 max Track 4–254 max Time 255–255 min Time
17	Control1	0	0–31 normal 32–47 Display off 48–63 Display on 64–79 Reset 80–95 Shutdown 96–101 Fans Silent 102–107 Fans Continuous 108–113 Fans Standard 114–119 Fans Studio 120–123 Redshift on 124–126 Redshift off 127–128 Dim Frequency 1 129–131 Dim Frequency 2 132–133 Dim Frequency 3 134–136 Dim Frequency 4 137–255 NoFeature 1
18	Red	255	
19	Green	255	
20	Blue	255	
21	White	0	
22	C TO	0	0–4 disabled 5–254 min CTO 255–255 max CTO
23	Strobe Mode	0	0–15 Normal 16–31 Random 32–47 Rnd Pulse 48–63 Rnd Sync 64–255 NoFeature 1
24	Shutter / Strobe	255	0–0 open 1–254 StrobeRate 2 255–255 max Strobe
25	Dimmer	0	0–254 closed 255–255 open
26	Dimmer Fine	0	Fine byte of Dimmer
27	Red	255	
28	Green	255	
29	Blue	255	
30	White	0	
31	C TO	0	0–4 disabled 5–254 min CTO 255–255 max CTO
32	Strobe Mode	0	0–15 Normal 16–31 Random 32–47 Rnd Pulse 48–63 Rnd Sync 64–255 NoFeature 1

Standard (continued)

Ch	Function	Default	DMX values
33	Shutter / Strobe	255	0–0 open 1–254 StrobeRate 2 255–255 max Strobe
34	Dimmer	0	0–254 closed 255–255 open
35	Dimmer Fine	0	Fine byte of Dimmer
36	Red	255	
37	Green	255	
38	Blue	255	
39	White	0	
40	C TO	0	0–4 disabled 5–254 min CTO 255–255 max CTO
41	Strobe Mode	0	0–15 Normal 16–31 Random 32–47 Rnd Pulse 48–63 Rnd Sync 64–255 NoFeature 1
42	Shutter / Strobe	255	0–0 open 1–254 StrobeRate 2 255–255 max Strobe
43	Dimmer	0	0–254 closed 255–255 open
44	Dimmer Fine	0	Fine byte of Dimmer
45	Red	255	
46	Green	255	
47	Blue	255	
48	White	0	
49	C TO	0	0–4 disabled 5–254 min CTO 255–255 max CTO
50	Strobe Mode	0	0–15 Normal 16–31 Random 32–47 Rnd Pulse 48–63 Rnd Sync 64–255 NoFeature 1
51	Shutter / Strobe	255	0–0 open 1–254 StrobeRate 2 255–255 max Strobe
52	Dimmer	0	0–254 closed 255–255 open
53	Dimmer Fine	0	Fine byte of Dimmer