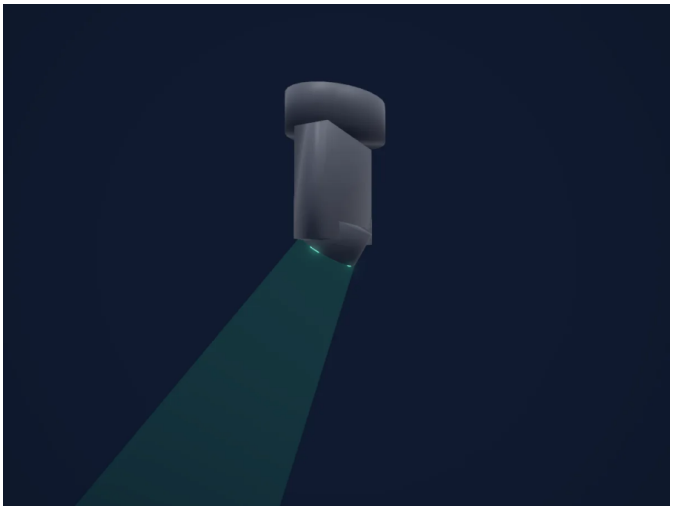
DTS

NICK NRG 1401



Manufacturer	**DTS**
Type	**Moving head**
DMX modes	**6**
DMX footprint	**20, 31, 33, 111 channels**
Beam angle	**13.5-40°**
Pan range	**540°**
Tilt range	**270°**
Heads / cells	**24**
Size (W × H × D)	**180 × 100 × 180 mm**
GDTF fixture type	**017F8468-39D4-40BC-8697-A5…**

Controls

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

Safety-relevant functions

Fixture reset · Service functions

DMX modes

COMPATIBILITY	20 ch
Compatibility EXT	20 ch
SECTOR	31 ch
Shapes STD	33 ch
Pixels EXTENDED	111 ch
Pixels STD	111 ch

COMPATIBILITY

20 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	0–10 Standard 11–25 Fast Movement 26–126 Fast Vect 127–127 Slow Vect 128–247 Variable time reaction 248–254 Fast React 255–255 Slow React
6	Pan Rotate	0	0–10 Position mode 540 degrees 11–20 Position mode 360 degrees 1 turn 21–30 Position mode 720 degrees - 2 turns 31–40 Position mode 1080 degrees - 3 turns 41–50 Position mode 1440 degrees - 4 turns 51–60 Position mode 1800 degrees - 5 turn 61–70 Position mode 2160 degrees - 6 turns 71–80 Position mode 2520 degrees - 7 turns 81–90 Position mode 2880 degrees - 8 turns 91–100 Position mode 3240 degrees - 9 turns 101–110 Position mode 3600 degrees - 10 turns 111–120 Position mode 360 degrees - smart path 121–181 >>> max 182–182 >>> min 183–193 stop 194–254 <<< min 255–255 <<< max
7	L EDFrequency	0	0–45 No function 46–55 Out Freq 610 Hz 56–65 Out Freq 800 Hz 66–75 Out Freq 1000 Hz 76–85 Out Freq 1500 HZ 86–95 Out Freq 2000 Hz 96–105 Out Freq 2500 Hz 106–115 Out Freq 3000 Hz 116–125 Out Freq 3500 Hz 126–135 Out Freq 4000 Hz 136–145 Out Freq 4500 Hz 146–155 Out Freq 5000 Hz 156–165 Out Freq 5500 Hz 166–175 Out Freq 6000 Hz 176–185 Out Freq 6500 Hz 186–195 Out Freq 7000 Hz 196–205 Out Freq 7500 HZ 206–215 Out Freq 8000 Hz 216–225 Out Freq 8500 Hz 226–235 Out Freq 9000 Hz 236–245 Out Freq 9500 Hz 246–255 Out Freq 10000 Hz

COMPATIBILITY (continued)

Ch	Function	Default	DMX values
8	Shutter / Strobe	14	0–9 closed 10–19 open 20–29 closed (2) 30–118 min Strobe 119–119 max Strobe 120–148 min Pulse Open 149–149 max Pulse Open 150–178 min Pulse Close 179–179 max Pulse Close 180–203 min Rnd 204–204 max Rnd 205–228 min Rnd (2) 229–229 max Rnd (2) 230–255 open (2)
9	Dimmer	0	0–7 closed 8–254 Dim 0 100% 255–255 open
10	Red	255	
11	Green	255	
12	Blue	255	
13	White	0	
14	Color Macro2	0	0–55 No Function 56–105 RGBW at full 106–155 White DTS 156–205 Custom white create 206–255 White CTC
15	C TO	0	0–254 min ColorTemperature 255–255 max ColorTemperature
16	Color Macro1	0	0–14 No Function 15–30 Macro 1 31–46 Macro 2 47–62 Macro 3 63–78 Macro 4 79–94 Macro 5 95–110 Macro 6 111–126 Macro 7 127–142 Macro 8 143–158 Macro 9 159–174 Macro 10 175–190 Macro 11 191–206 Macro 12 207–222 Macro 13 223–238 Macro 14 239–254 Macro 15 255–255 Macro 16
17	Color Effects1	0	0–79 Custom White Recall 80–160 Custom White Create 161–255 Custom White Store
18	Zoom	128	0–127 narrow 128–254 normal 255–255 wide
19	Zoom MSpeed	0	0–24 Standard speed 25–25 Max speed 26–127 max to min speed 128–247 reac to DMX 248–255 slow react time DMX

COMPATIBILITY (continued)

Ch	Function	Default	DMX values
20	Fixture Global Reset	0	0–15 No Function 16–75 Pan/Tilt reset 76–239 Zoom reset 240–255 Reset

Compatibility EXT

20 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	0–10 Standard 11–25 Fast Movement 26–126 Fast Vect 127–127 Slow Vect 128–247 Variable time reaction 248–254 Fast React 255–255 Slow React
6	Pan Rotate	0	0–10 Position mode 540 degrees 11–20 Position mode 360 degrees 1 turn 21–30 Position mode 720 degrees - 2 turns 31–40 Position mode 1080 degrees - 3 turns 41–50 Position mode 1440 degrees - 4 turns 51–60 Position mode 1800 degrees - 5 turn 61–70 Position mode 2160 degrees - 6 turns 71–80 Position mode 2520 degrees - 7 turns 81–90 Position mode 2880 degrees - 8 turns 91–100 Position mode 3240 degrees - 9 turns 101–110 Position mode 3600 degrees - 10 turns 111–120 Position mode 360 degrees - smart path 121–181 >>> max 182–182 >>> min 183–193 stop 194–254 <<< min 255–255 <<< max
7	L EDFrequency	0	0–45 No function 46–55 Out Freq 610 Hz 56–65 Out Freq 800 Hz 66–75 Out Freq 1000 Hz 76–85 Out Freq 1500 HZ 86–95 Out Freq 2000 Hz 96–105 Out Freq 2500 Hz 106–115 Out Freq 3000 Hz 116–125 Out Freq 3500 Hz 126–135 Out Freq 4000 Hz 136–145 Out Freq 4500 Hz 146–155 Out Freq 5000 Hz 156–165 Out Freq 5500 Hz 166–175 Out Freq 6000 Hz 176–185 Out Freq 6500 Hz 186–195 Out Freq 7000 Hz 196–205 Out Freq 7500 HZ 206–215 Out Freq 8000 Hz 216–225 Out Freq 8500 Hz 226–235 Out Freq 9000 Hz 236–245 Out Freq 9500 Hz 246–255 Out Freq 10000 Hz

Compatibility EXT (continued)

Ch	Function	Default	DMX values
8	Shutter / Strobe	14	0–9 closed 10–19 open 20–29 closed (2) 30–118 min Strobe 119–119 max Strobe 120–148 min Pulse Open 149–149 max Pulse Open 150–178 min Pulse Close 179–179 max Pulse Close 180–203 min Rnd 204–204 max Rnd 205–228 min Rnd (2) 229–229 max Rnd (2) 230–255 open (2)
9	Dimmer	0	0–7 closed 8–254 Dim 0 100% 255–255 open
10	Red	255	
11	Green	255	
12	Blue	255	
13	White	0	
14	Color Macro2	0	0–55 No Function 56–105 RGBW at full 106–155 White DTS 156–205 Custom white create 206–255 White CTC
15	C TO	0	0–254 min ColorTemperature 255–255 max ColorTemperature
16	Color Macro1	0	0–14 No Function 15–24 Macro 1 25–34 Macro 2 35–44 Macro 3 45–54 Macro 4 55–64 Macro 5 65–74 Macro 6 75–84 Macro 7 85–94 Macro 8 95–104 Macro 9 105–114 Macro 10 115–124 Macro 11 125–134 Macro 12 135–144 Macro 13 145–154 Macro 14 155–164 Macro 15 165–174 Macro 16 175–184 Rainbow speed 1 185–194 Rainbow speed 2 195–204 Rainbow speed 3 205–214 Rainbow speed 4 215–224 Rainbow speed 5 225–234 Rainbow speed 6 235–244 Rainbow speed 7 245–255 Rainbow speed 8
17	Color Effects1	0	0–79 Custom White Recall 80–160 Custom White Create 161–255 Custom White Store
18	Zoom	128	0–127 narrow 128–254 normal 255–255 wide

Compatibility EXT (continued)

Ch	Function	Default	DMX values
19	Zoom MSpeed	0	0–24 Standard speed 25–25 Max speed 26–127 max to min speed 128–247 reac to DMX 248–255 slow react time DMX
20	Fixture Global Reset	0	0–15 No Function 16–75 Pan/Tilt reset 76–239 Zoom reset 240–255 Reset

SECTOR

31 channels

Ch	Function	Default	DMX values
1	Red	255	
2	Green	255	
3	Blue	255	
4	White	255	
5	Shutter / Strobe	14	0–9 Black-out 10–19 open 20–29 Black out 30–119 Strobe (from 3 27s to 30ms) 120–149 Pulse up (from 42 6 to 120 ms) 150–179 Pulse down (from 42 6 to 120 ms 180–204 random strobe 205–229 full indipendent random strobe 230–255 open1
6	Dimmer	0	0–254 closed 255–255 open
7	Dimmer Fine	0	Fine byte of Dimmer
8	C TO	0	0–10 no function 11–255 linear control temperature
9	Color Macro1	0	0–14 no function 15–30 COL1 RGBW 31–46 COL2 RGBW 47–62 COL3 RGBW 63–78 COL4 RGBW 79–94 COL5 RGBW 95–110 COL6 RGBW 111–126 COL7 RGBW 127–142 COL8 RGBW 143–158 COL9 RGBW 159–174 COL10 RGBW 175–190 COL11 RGBW 191–206 COL12 RGBW 207–222 COL13 RGBW 223–238 COL14 RGBW 239–254 COL15 RGBW 255–255 COL16 RGBW
10	Pan	128	0–127 min 128–254 home 255–255 max
11	Reserved 11	0	
12	Tilt	128	0–127 min 128–254 home 255–255 max
13	Tilt Fine	0	Fine byte of Tilt

SECTOR (continued)

Ch	Function	Default	DMX values
14	Position MSpeed	0	0–10 Standard 11–25 max speed 26–127 From maximum to minimum speed 128–247 Variable reaction 248–255 slow reaction
15	Pan Rotate	0	0–10 pos mode 540 (std path) 11–20 pos mode 360 21–30 pos mode 720 31–60 pos mode 1080 61–70 pos mode 2160 71–80 pos mode 2520 81–90 pos mode 2880 91–100 pos mode 3240 101–110 pos mode 3600 111–120 pos mode 360 smarth path 121–182 forward spin rotation speed max to min 183–193 stop 194–255 reverse spin rotation speed min to max
16	Control1	0	0–10 no function 11–244 reserved 245–255 activate function chanel
17	Control1	0	
18	Zoom	0	
19	Fixture Global Reset	0	0–15 NO Function 16–75 Pan Tilt Reset 76–239 ZOOM Reset 240–255 TOTAL unit reset
20	Color Adjust R	0	
21	Color Adjust G	0	
22	Color Adjust B	0	
23	Color Adjust W	0	
24	Shape Color R	0	
25	Shape Color G	0	
26	Shape Color B	0	
27	Shape Color W	0	
28	Sector R	254	
29	Sector G	0	
30	Sector B	0	
31	Sector W	0	

Shapes STD

33 channels

Ch	Function	Default	DMX values
1	Red	255	0–254 min Red 255–255 max Red
2	Green	255	0–254 min Green 255–255 max Green
3	Blue	255	0–254 min Blue 255–255 max Blue
4	White	255	0–254 min White 255–255 max White

Shapes STD (continued)

Ch	Function	Default	DMX values
5	Shutter / Strobe	10	0–9 closed 10–19 open 20–29 closed (2) 30–118 min Strobe 119–119 max Strobe 120–148 min Pulse Open 149–149 max Pulse Open 150–178 min Pulse Close 179–179 max Pulse Close 180–203 min Rnd 204–204 max Rnd 205–228 min Rnd (2) 229–229 max Rnd (2) 230–255 open (2)
6	Dimmer	0	0–254 closed 255–255 open
7	Dimmer Fine	0	Fine byte of Dimmer
8	C TO	0	0–10 No function 11–254 2700K 255–255 8000K
9	Color Macro1	0	0–14 No function 15–30 COL 1 31–46 COL 2 47–62 COL 3 63–78 COL 4 79–94 COL 5 95–110 COL 6 111–126 COL 7 127–142 COL 8 143–158 COL 9 159–174 COL 10 175–190 COL 11 191–206 COL 12 207–222 COL 13 223–238 COL 14 239–254 COL 15 255–255 COL 16
10	Pan	0	
11	Pan Fine	0	Fine byte of Pan
12	Tilt	128	
13	Tilt Fine	0	Fine byte of Tilt
14	Position MSpeed	0	0–10 Standard 11–25 Max speed 26–126 Maximum speed 127–127 Minimum speed 128–247 React DMX signal 248–255 React time DMX

Shapes STD (continued)

Ch	Function	Default	DMX values
15	Pan Rotate	0	0–10 Position mode 540 degrees 11–20 Position mode 360 degrees 1 turn 21–30 Position mode 720 degrees - 2 turns 31–40 Position mode 1080 degrees - 3 turns 41–50 Position mode 1440 degrees - 4 turns 51–60 Position mode 1800 degrees - 5 turn 61–70 Position mode 2160 degrees - 6 turns 71–80 Position mode 2520 degrees - 7 turns 81–90 Position mode 2880 degrees - 8 turns 91–100 Position mode 3240 degrees - 9 turns 101–110 Position mode 3600 degrees - 10 turns 111–120 Position mode 360 degrees - smart path 121–181 >>> max 182–182 >>> min 183–193 stop 194–254 <<< min 255–255 <<< max
16	Control1	0	0–244 No function 245–255 Activating Functions
17	Control1	0	
18	Zoom	128	0–127 narrow 128–254 normal 255–255 wide
19	Fixture Global Reset	0	0–15 No function 16–75 Pan Tilt Reset 76–239 Zoom Reset 240–255 Total Reset
20	Shape Selection	0	
21	Shape Speed	0	0–127 Index 128–179 <<< fast 180–180 <<< slow 181–202 stop 203–254 >>> slow 255–255 >>> fast
22	Reserved 22	0	
23	Shape Color R	0	
24	Shape Color G	0	
25	Shape Color B	0	
26	Shape Color W	0	
27	Shape Dimmer	0	
28	Background Dimmer	0	
29	Reserved 29	0	
30	Shape Offset	0	
31	Reserved 31	0	
32	Reserved 32	0	
33	Background Selection	0	0–10 No function 11–15 Pixel1 16–20 Ring1 21–25 Pixel1+ Ring1 26–30 Ring2 31–35 Pixel1+Ring2 36–40 Ring1+Ring2 41–45 Pixel1+Ring1+Ring2 46–255 No function

Pixels EXTENDED

111 channels

Ch	Function	Default	DMX values
1	Red	255	
2	Green	255	
3	Blue	255	
4	White	255	
5	Shutter / Strobe	10	0–9 closed 10–19 open 20–29 closed (2) 30–118 min Strobe 119–119 max Strobe 120–148 min Pulse Open 149–149 max Pulse Open 150–178 min Pulse Close 179–179 max Pulse Close 180–203 min Rnd 204–204 max Rnd 205–228 min Rnd (2) 229–229 max Rnd (2) 230–255 open (2)
6	Dimmer	0	
7	Dimmer Fine	0	Fine byte of Dimmer
8	C TO	0	
9	Color Macro1	0	
10	Pan	0	
11	Pan Fine	0	Fine byte of Pan
12	Tilt	128	
13	Tilt Fine	0	Fine byte of Tilt
14	Position MSpeed	0	
15	Pan Rotate	0	
16	Control1	0	
17	Control1	0	
18	Zoom	128	
19	Fixture Global Reset	0	
20	Red	255	
21	Green	255	
22	Blue	255	
23	White	0	
24	Red	255	
25	Green	255	
26	Blue	255	
27	White	0	
28	Red	255	
29	Green	255	
30	Blue	255	
31	White	0	
32	Red	255	
33	Green	255	
34	Blue	255	
35	White	0	
36	Red	255	

Pixels EXTENDED (continued)

Ch	Function	Default	DMX values
37	Green	255	
38	Blue	255	
39	White	0	
40	Red	255	
41	Green	255	
42	Blue	255	
43	White	0	
44	Red	255	
45	Green	255	
46	Blue	255	
47	White	0	
48	Red	255	
49	Green	255	
50	Blue	255	
51	White	0	
52	Red	255	
53	Green	255	
54	Blue	255	
55	White	0	
56	Red	255	
57	Green	255	
58	Blue	255	
59	White	0	
60	Red	255	
61	Green	255	
62	Blue	255	
63	White	0	
64	Red	255	
65	Green	255	
66	Blue	255	
67	White	0	
68	Red	255	
69	Green	255	
70	Blue	255	
71	White	0	
72	Red	255	
73	Green	255	
74	Blue	255	
75	White	0	
76	Red	255	
77	Green	255	
78	Blue	255	
79	White	0	
80	Red	255	
81	Green	255	

Pixels EXTENDED (continued)

Ch	Function	Default	DMX values
82	Blue	255	
83	White	0	
84	Red	255	
85	Green	255	
86	Blue	255	
87	White	0	
88	Red	255	
89	Green	255	
90	Blue	255	
91	White	0	
92	Red	255	
93	Green	255	
94	Blue	255	
95	White	0	
96	Red	255	
97	Green	255	
98	Blue	255	
99	White	0	
100	Red	255	
101	Green	255	
102	Blue	255	
103	White	0	
104	Red	255	
105	Green	255	
106	Blue	255	
107	White	0	
108	Red	255	
109	Green	255	
110	Blue	255	
111	White	0	

Pixels STD

111 channels

Ch	Function	Default	DMX values
1	Red	255	
2	Green	255	
3	Blue	255	
4	White	255	

Pixels STD (continued)

Ch	Function	Default	DMX values
5	Shutter / Strobe	10	0–9 closed 10–19 open 20–29 closed (2) 30–118 min Strobe 119–119 max Strobe 120–148 min Pulse Open 149–149 max Pulse Open 150–178 min Pulse Close 179–179 max Pulse Close 180–203 min Rnd 204–204 max Rnd 205–228 min Rnd (2) 229–229 max Rnd (2) 230–255 open (2)
6	Dimmer	0	
7	Dimmer Fine	0	Fine byte of Dimmer
8	C TO	0	
9	Color Macro1	0	
10	Pan	0	
11	Pan Fine	0	Fine byte of Pan
12	Tilt	128	
13	Tilt Fine	0	Fine byte of Tilt
14	Position MSpeed	0	
15	Pan Rotate	0	
16	Control1	0	
17	Control1	0	
18	Zoom	128	
19	Fixture Global Reset	0	
20	Red	255	
21	Green	255	
22	Blue	255	
23	White	0	
24	Red	255	
25	Green	255	
26	Blue	255	
27	White	0	
28	Red	255	
29	Green	255	
30	Blue	255	
31	White	0	
32	Red	255	
33	Green	255	
34	Blue	255	
35	White	0	
36	Red	255	
37	Green	255	
38	Blue	255	
39	White	0	
40	Red	255	

Pixels STD (continued)

Ch	Function	Default	DMX values
41	Green	255	
42	Blue	255	
43	White	0	
44	Red	255	
45	Green	255	
46	Blue	255	
47	White	0	
48	Red	255	
49	Green	255	
50	Blue	255	
51	White	0	
52	Red	255	
53	Green	255	
54	Blue	255	
55	White	0	
56	Red	255	
57	Green	255	
58	Blue	255	
59	White	0	
60	Red	255	
61	Green	255	
62	Blue	255	
63	White	0	
64	Red	255	
65	Green	255	
66	Blue	255	
67	White	0	
68	Red	255	
69	Green	255	
70	Blue	255	
71	White	0	
72	Red	255	
73	Green	255	
74	Blue	255	
75	White	0	
76	Red	255	
77	Green	255	
78	Blue	255	
79	White	0	
80	Red	255	
81	Green	255	
82	Blue	255	
83	White	0	
84	Red	255	
85	Green	255	

Pixels STD (continued)

Ch	Function	Default	DMX values
86	Blue	255	
87	White	0	
88	Red	255	
89	Green	255	
90	Blue	255	
91	White	0	
92	Red	255	
93	Green	255	
94	Blue	255	
95	White	0	
96	Red	255	
97	Green	255	
98	Blue	255	
99	White	0	
100	Red	255	
101	Green	255	
102	Blue	255	
103	White	0	
104	Red	255	
105	Green	255	
106	Blue	255	
107	White	0	
108	Red	255	
109	Green	255	
110	Blue	255	
111	White	0	