

DMX PROTOCOL

Short mode	Standard mode	Extended mode	FUNCTION	DMX	DESCRIPTION
1	1	1	Strobe	000-010	Black
				011-025	Open
				026-225	Strobe speed from slow to fast
				226-255	Open
2	2	2	Dimmer	000-007	Black
				008-255	Dimming from dark to light (0-100%)
		3	Dimmer Fine	000-255	Dimmer in 16 Bit precision
3	3	4	CYM Macro	000-016	White
				017-035	Yellow+ Magenta=Red
				036-054	Yellow
				055-073	Yellow+ Cyan=Green
				074-092	Cyan
				093-110	Cyan+ Magenta=Blue
				111-128	Magenta
129-255	CYM colour mixing from slow to fast				
4	4	5	CYM-Cyan	000-255	Cyan (Linear 0-100%)
		6	CYM-Cyan Fine	000-255	Cyan in 16 Bit precision
5	5	7	CYM-Yellow	000-255	Yellow (Linear 0-100%)
		8	CYM-Yellow Fine	000-255	Yellow in 16 Bit precision
6	6	9	CYM-Magenta	000-255	Magenta (Linear 0-100%)
		10	CYM-Magenta Fine	000-255	Magenta in 16 Bit precision
7	7	11	CTO	000-255	Linear adjust from high to low
		12	CTO Fine	000-255	CTO in 16 Bit precision
8	8	13	Colour Wheel	000-016	White
				017-024	White/colour 1
				025-032	Colour 1
				033-040	Colour 1/colour 2
				041-048	Colour 2
				049-056	Colour 2/colour 3
				057-064	Colour 3
				065-072	Colour 3/colour 4
				073-080	Colour 4
				081-088	Colour 4/colour 5
				089-096	Colour 5
				097-104	Colour 5/colour 6
				105-112	Colour 6
				113-120	Colour 6/ white
				121-127	white
				128-133	Rainbow rotation speed 1 (slowest)
				134-139	Rainbow rotation speed 2
140-145	Rainbow rotation speed 3				
146-151	Rainbow rotation speed 4				

				152-157	Rainbow rotation speed 5
				158-163	Rainbow rotation speed 6
				164-169	Rainbow rotation speed 7
				170-175	Rainbow rotation speed 8
				176-181	Rainbow rotation speed 9
				182-187	Rainbow rotation speed 10
				188-195	Stop in current position
				196-201	Rainbow reverse rotation speed 1(slowest)
				202-207	Rainbow reverse rotation speed 2
				208-213	Rainbow reverse rotation speed 3
				214-219	Rainbow reverse rotation speed 4
				220-225	Rainbow reverse rotation speed 5
				226-231	Rainbow reverse rotation speed 6
				232-237	Rainbow reverse rotation speed 7
				238-243	Rainbow reverse rotation speed 8
				244-249	Rainbow reverse rotation speed 9
				250-255	Rainbow reverse rotation speed 10
9	9	14	Iris	000-135	Iris from large to small (0-100%)
				136-231	Macro
				232-255	Minimal
		15	Iris Fine	000-255	Iris n 16 Bit precision
10	10	16	Fixed Gobo Wheel	000-016	Clear
				017-032	Gobo1
				033-048	Gobo 2
				049-064	Gobo 3
				065-080	Gobo 4
				081-096	Gobo 5
				097-112	Gobo 6
				113-127	Gobo 7
				128-132	Reverse rotation speed 1 (slowest)
				133-135	Reverse rotation speed 2
				136-138	Reverse rotation speed 3
				139-141	Reverse rotation speed 4
				142-144	Reverse rotation speed 5
				145-147	Reverse rotation speed 6
				148-150	Reverse rotation speed 7(fastest)
				151-153	Rotation speed 1 (slowest)
				154-156	Rotation speed 2
				157-159	Rotation speed 3
				160-162	Rotation speed 4
				163-165	Rotation speed 5
				166-168	Rotation speed 6
				169-171	Rotation speed 7(fastest)
				172-174	Gobo 1 shake 1(slowest)
				175-177	Gobo 1 shake 2
				178-180	Gobo 1 shake 3
				181-183	Gobo 1 shake 4 (fastest)
				184-186	Gobo 2 shake 1(slowest)
				187-189	Gobo 2 shake 2
				190-192	Gobo 2 shake 3
				193-195	Gobo 2 shake 4 (fastest)
				196-198	Gobo 3 shake 1(slowest)
				199-201	Gobo 3 shake 2
				202-204	Gobo 3 shake 3
				205-207	Gobo 3 shake 4 (fastest)

				208-210	Gobo 4 shake 1(slowest)
				211-213	Gobo 4 shake 2
				214-216	Gobo 4 shake 3
				217-219	Gobo 4 shake 4 (fastest)
				220-222	Gobo 5 shake 1(slowest)
				223-225	Gobo 5 shake 2
				226-228	Gobo 5 shake 3
				229-231	Gobo 5 shake 4 (fastest)
				232-234	Gobo 6 shake 1(slowest)
				235-237	Gobo 6 shake 2
				238-240	Gobo 6 shake 3
				241-243	Gobo 6 shake 4 (fastest)
				244-246	Gobo 7 shake 1(slowest)
				247-249	Gobo 7 shake 2
				250-252	Gobo 7 shake 3
				253-255	Gobo 7 shake 4 (fastest)
11	11	17	Rotating Gobo Wheel 1	000-021	white
				022-042	Gobo1
				043-064	Gobo 2
				065-085	Gobo 3
				086-106	Gobo 4
				107-127	Gobo 5
				128-134	Rotation speed 1 (slowest)
				135-142	Rotation speed 2
				143-149	Rotation speed 3
				150-156	Rotation speed 4 (fastest)
				157-163	Reverse rotation speed 1 (slowest)
				164-170	Reverse rotation speed 2
				171-177	Reverse rotation speed 3
				178-184	Reverse rotation speed 4(fastest)
				185-191	Gobo 1 shake slow
				192-198	Gobo 1 shake fast
				199-205	Gobo 2 shake slow
				206-212	Gobo 2 shake fast
				213-219	Gobo 3 shake slow
				220-226	Gobo 3 shake fast
				227-233	Gobo 4 shake slow
				234-240	Gobo 4 shake fast
				241-247	Gobo 5 shake slow
				248-255	Gobo 5 shake fast
12	12	18	Gobo rotation 1	000-120	0~540°index
				121-127	Rotation speed 1 (slowest)
				128-135	Rotation speed 2
				136-143	Rotation speed 3
				144-151	Rotation speed 4
				152-159	Rotation speed 5
				160-167	Rotation speed 6
				168-175	Rotation speed 7
				176-183	Rotation speed 8 (fastest)
				184-191	Stop rotating
				192-199	Reverse rotation speed 1 (slowest)
				200-207	Reverse rotation speed 2
				208-215	Reverse rotation speed 3
				216-223	Reverse rotation speed 4
				224-231	Reverse rotation speed 5
				232-239	Reverse rotation speed 6
				240-247	Reverse rotation speed 7
				248-255	Reverse rotation speed 8 (fastest)
	13	19	Gobo rotation 1 Fine	000-255	Gobo rotation in 16 Bit precision
13	14	20	Rotating Gobo Wheel 2	000-021	white
				022-042	Gobo1

				152-157	Rainbow rotation speed 5
				158-163	Rainbow rotation speed 6
				164-169	Rainbow rotation speed 7
				170-175	Rainbow rotation speed 8
				176-181	Rainbow rotation speed 9
				182-187	Rainbow rotation speed 10
				188-195	Stop in current position
				196-201	Rainbow reverse rotation speed 1(slowest)
				202-207	Rainbow reverse rotation speed 2
				208-213	Rainbow reverse rotation speed 3
				214-219	Rainbow reverse rotation speed 4
				220-225	Rainbow reverse rotation speed 5
				226-231	Rainbow reverse rotation speed 6
				232-237	Rainbow reverse rotation speed 7
				238-243	Rainbow reverse rotation speed 8
				244-249	Rainbow reverse rotation speed 9
				250-255	Rainbow reverse rotation speed 10
9	9	14	Iris	000-135	Iris from large to small (0-100%)
				136-231	Macro
				232-255	Minimal
		15	Iris Fine	000-255	Iris in 16 Bit precision
10	10	16	Fixed Gobo Wheel	000-016	Clear
				017-032	Gobo1
				033-048	Gobo 2
				049-064	Gobo 3
				065-080	Gobo 4
				081-096	Gobo 5
				097-112	Gobo 6
				113-127	Gobo 7
				128-132	Reverse rotation speed 1 (slowest)
				133-135	Reverse rotation speed 2
				136-138	Reverse rotation speed 3
				139-141	Reverse rotation speed 4
				142-144	Reverse rotation speed 5
				145-147	Reverse rotation speed 6
				148-150	Reverse rotation speed 7(fastest)
				151-153	Rotation speed 1 (slowest)
				154-156	Rotation speed 2
				157-159	Rotation speed 3
				160-162	Rotation speed 4
				163-165	Rotation speed 5
				166-168	Rotation speed 6
				169-171	Rotation speed 7(fastest)
				172-174	Gobo 1 shake 1(slowest)
				175-177	Gobo 1 shake 2
				178-180	Gobo 1 shake 3
				181-183	Gobo 1 shake 4 (fastest)
				184-186	Gobo 2 shake 1(slowest)
				187-189	Gobo 2 shake 2
				190-192	Gobo 2 shake 3
				193-195	Gobo 2 shake 4 (fastest)
				196-198	Gobo 3 shake 1(slowest)
				199-201	Gobo 3 shake 2
				202-204	Gobo 3 shake 3
				205-207	Gobo 3 shake 4 (fastest)

				248-255	Rotation speed 8 (fastest)
17	19	25	Effect Wheel	000-020	White
				021-255	Wheel full into beam gradually
18	20	26	Effect Wheel Rotation	000-125	Rotation speed from slow to fast
				126-141	Stop in current position
				142-255	Reverse rotation speed from slow to fast
19	21	27	Focus	000-255	Linearly focusing
		28	Focus Fine	000-255	Focus in 16 precision
20	22	29	Zoom	000-255	From large to small
		30	Zoom Fine	000-255	Zoom in 16 precision
21	23	31	Beam Angle Lens	000-255	Wide Beam angle lens insert
22	24	32	Pan	000-255	Pan rotation 450°
	25	33	Pan Fine	000-255	Pan rotation in 16 precision
23	26	34	Tilt	000-255	Tilt rotation 270°
	27	35	Tilt Fine	000-255	Tilt rotation in 16 precision
	28	36	Pan & Tilt speed	000-255	Pan&Tilt speed from fast to slow
24	29	37	Control	000-048	Reserved
				049-080	Reset
				081-112	Reserved
				113-144	Lamp off (stop in DMX value for 10 s)
				145-168	Reserved
				169-200	Lamp power reduced to 50%
				201-223	Reserved
224-255	Lamp on (See remark below)				

Remark:

If you intend to turn on/off the lamp via the last channel of the controller, don't attempt to push the channel to value 224-255 immediately after turning it off, or push the slide bar to value 224-255 to wait it cooling. Under these 2 circumstances, the lamp can not be turned on. The right operation is: turn it off—cool down—push the slide bar to turn it on.