

V-SNAP CS

DMX CHART



1 DMX Protocol V-Snap CS

1.1 DMX Personality 1

DMX Personality 1: (default)

1. Pan
2. Pan Fine
3. Tilt
4. Tilt Fine
5. Pan&Tilt Speed
6. Reserved
7. Shutter
8. Dimmer
9. Dimmer Fine
10. CCT (CTH – CTD) CTH= Converter to Halogen 3000k – CTD= Converter to Daylight 6000k
11. Color Wheel
12. Color Mode
13. Gobo Wheel
14. Gobo Mode
15. Gobo Shake
16. Frost / Static Prism
17. Prism Wheel
18. Prism Position
19. Prism Rotation/Index
20. Dynamic Prism
21. Focus
22. Focus Fine
23. Fixture Control
24. Reset
25. Shutter RGBW
26. Dimmer RGBW
27. Strip 1 - Red
28. Strip 1 - Green
29. Strip 1 - Blue
30. Strip 1 - White
31. Strip 2 - Red
32. Strip 2 - Green
33. Strip 2 - Blue
34. Strip 2 - White

1	Pan
DMX value	Function
000-255	Pan Movement - Coarse control (MSB)

2	Pan Fine
DMX value	Function
000-255	Pan Movement - Fine control (LSB, for 16-bit resolution)

3	Tilt
DMX value	Function
000-255	Tilt Movement - Coarse control (MSB)

4	Tilt Fine
DMX value	Function
000-255	Tilt Movement - Fine control (LSB, for 16-bit resolution)

5	Pan&Tilt Speed
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DMX value	Function
000-009	No function – Pan/Tilt speed as set from display menu (Smooth / Standard / Fast) or via Function Channel – Pan/Tilt Speed Selection .
010-031	Speed 1
032-053	Speed 2
054-075	Speed 3
076-097	Speed 4
098-119	Speed 5
120-141	Speed 6
142-163	Speed 7
164-185	Speed 8
186-207	Speed 9 (default)
208-229	Speed 10
230-255	Speed 11

6	Reserved
DMX value	Function
000-255	Reserved – No Function

7	Shutter / Strobe
DMX value	Function
000-009	Blackout
010-019	Open
020-029	Blackout
030-119	Strobe (slow → fast) 0.3 → 33 Hz / 3270 → 30 ms
120-149	Pulse Up (slow → fast) 0.02 → 8 Hz / 42600 → 120 ms
150-179	Pulse Down (slow → fast) 0.02 → 8 Hz / 42600 → 120 ms
180-189	Random Strobe
190-199	Open
200-209	CCT - Blackout during insertion
210-219	Pan/Tilt - Blackout during movement
220-222	Color - Blackout during insertion
223-224	Frost / Prism / Dynaprism - Blackout during Frost / Prism insertion / Dynaprism movement
225-226	Gobo - Blackout during insertion
227-229	CCT / Effect wheel / Pan / Tilt / Color / Frost / Prism / Dynaprism / Gobo - Blackout during insertion or movement
230-255	Open

8	Dimmer
DMX value	Function
000-255	Master Dimmer - Coarse control (MSB)

9	Dimmer Fine
DMX value	Function
000-255	Master Dimmer - Fine control (LSB for 16-bit resolution)

10	CCT Control
DMX value	Function
000-009	Open
010-127	CTH (Halogen 3000K) direct path – from open to CTH direct without passing through CTD
128-255	CTD (Daylight 6000K) direct path – from open to CTD direct without passing through CTH

11	Color Wheel
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Full Color (if channel 12 “Color Mode” = DMX range value 0-63)

DMX value	Function
000-009	Open 1
010-024	Color 1
025-039	Color 2
040-054	Open 2
055-069	Color 3

070–084	Color 4
085–099	Open 3
100–114	Color 5
115–129	Color 6
130–144	Open 4
145–159	Color 7
160–174	Color 8
175–189	Open 5
190–204	Color 9
205–219	Color 10
220–234	Color 11
235–255	Color 12

Half Color (if channel 12 “Color Mode” = DMX range value 64-127)

DMX value	Function
000–009	Open 1
010–023	Open 1 ↔ Color 1
024–037	Color 1 ↔ Color 2
038–051	Color 2 ↔ Open 2
052–065	Open 2 ↔ Color 3
066–079	Color 3 ↔ Color 4
080–093	Color 4 ↔ Open 3
094–107	Open 3 ↔ Color 5
108–121	Color 5 ↔ Color 6
122–135	Color 6 ↔ Open 4
136–149	Open 4 ↔ Color 7
150–163	Color 7 ↔ Color 8
164–177	Color 8 ↔ Open 5
178–191	Open 5 ↔ Color 9
192–205	Color 9 ↔ Color 10
206–219	Color 10 ↔ Color 11
220–233	Color 11 ↔ Color 12
234–255	Color 12 ↔ Open 1

Proportional Color (if channel 12 “Color Mode” = DMX range value 128-191)

DMX value	Function
000–009	Open / Color 0
010–255	Proportional Color
010	Open 1 ↔ Color 1
017	Color 1 – center
024	Color 1 ↔ Color 2
032	Color 2 – center
040	Color 2 ↔ Open 2
047	Open 2 – center
055	Open 2 ↔ Color 3
062	Color 3 – center
070	Color 3 ↔ Color 4
077	Color 4 – center
085	Color 4 ↔ Open 3
092	Open 3 – center
100	Open 3 ↔ Color 5
107	Color 5 – center
114	Color 5 ↔ Color 6
122	Color 6 – center
130	Color 6 ↔ Open 4
137	Open 4 – center
145	Open 4 ↔ Color 7
152	Color 7 – center
160	Color 7 ↔ Color 8
167	Color 8 – center
175	Color 8 ↔ Open 5
182	Open 5 – center

DMX value	Function
190	Open 5 ↔ Color 9
197	Color 9 – center
205	Color 9 ↔ Color 10
212	Color 10 – center
220	Color 10 ↔ Color 11
227	Color 11 – center
235	Color 11 ↔ Color 12
245	Color 12 – center
255	Color 12 ↔ Open 1

Rainbow (if channel 12 “Color Mode” = DMX range value 192-255)

DMX value	Function
000-009	Open
010-127	CW rotation speed – from fast to slow
128-137	Stop / Hold current color
138-255	CCW rotation speed – from slow to fast

12	Color Mode
DMX value	Function
000-063	Full Color
064-127	Half Color
128-191	Proportional Color
192-255	Rainbow

13	Gobo Wheel
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Full Gobo (if channel 14 “Gobo Mode” = DMX range value 0-63)

DMX value	Function
000-009	Open /Gobo 0
010-019	Gobo 1
020-029	Gobo 2
030-039	Gobo 3
040-049	Gobo 4
050-059	Gobo 5
060-069	Gobo 6
070-079	Gobo 7
080-089	Gobo 8
090-099	Gobo 9
100-109	Gobo 10
110-119	Gobo 11
120-129	Gobo 12
130-139	Gobo 13
140-149	Gobo 14
150-159	Gobo 15
160-169	Gobo 16
170-179	Gobo 17
180-189	Gobo 18
190-199	Gobo 19
200-209	Gobo 20
210-219	Gobo 21
220-229	Gobo 22
230-255	Gobo 23

Proportional Gobo (if channel 14 “Gobo Mode” = DMX range value 128-191)

DMX value	Function
000-009	Open
010-255	Proportional Gobo

Each gobo gets a fixed 10-DMX wide window.

- **Start Edge HOLD (2 values):** land and hold at the visible edge of the gobo.
- **Active Proportional (6 values):** linear index from start edge → end edge
- **Auto-Skip (2 values):** immediately jump (at max speed) to the **next gobo’s Start Edge**.
No dwell allowed in the dark gap.

010-011	Gobo 1 – Start Edge (HOLD)
012-017	Gobo 1 – Proportional (start → end)
018-019	Auto-Skip to Gobo 2 – Start Edge
020-021	Gobo 2 – Start Edge (HOLD)
022-027	Gobo 2 – Proportional (start → end)
028-029	Auto-Skip to Gobo 3 – Start Edge
030-031	Gobo 3 – Start Edge (HOLD)
032-037	Gobo 3 – Proportional (start → end)
038-039	Auto-Skip to Gobo 4 – Start Edge
040-041	Gobo 4 – Start Edge (HOLD)
042-047	Gobo 4 – Proportional (start → end)
048-049	Auto-Skip to Gobo 5 – Start Edge
050-051	Gobo 5 – Start Edge (HOLD)
052-057	Gobo 5 – Proportional (start → end)
058-059	Auto-Skip to Gobo 6 – Start Edge
060-061	Gobo 6 – Start Edge (HOLD)
062-067	Gobo 6 – Proportional (start → end)
068-069	Auto-Skip to Gobo 7 – Start Edge
070-071	Gobo 7 – Start Edge (HOLD)
072-077	Gobo 7 – Proportional (start → end)
078-079	Auto-Skip to Gobo 8 – Start Edge
080-081	Gobo 8 – Start Edge (HOLD)
082-087	Gobo 8 – Proportional (start → end)
088-089	Auto-Skip to Gobo 9 – Start Edge
090-091	Gobo 9 – Start Edge (HOLD)
092-097	Gobo 9 – Proportional (start → end)
098-099	Auto-Skip to Gobo 10 – Start Edge
100-101	Gobo 10 – Start Edge (HOLD)
102-107	Gobo 10 – Proportional (start → end)
108-109	Auto-Skip to Gobo 11 – Start Edge
110-111	Gobo 11 – Start Edge (HOLD)
112-117	Gobo 11 – Proportional (start → end)
118-119	Auto-Skip to Gobo 12 – Start Edge
120-121	Gobo 12 – Start Edge (HOLD)
122-127	Gobo 12 – Proportional (start → end)
128-129	Auto-Skip to Gobo 13 – Start Edge
130-131	Gobo 13 – Start Edge (HOLD)
132-137	Gobo 13 – Proportional (start → end)
138-139	Auto-Skip to Gobo 14 – Start Edge
140-141	Gobo 14 – Start Edge (HOLD)
142-147	Gobo 14 – Proportional (start → end)
148-149	Auto-Skip to Gobo 15 – Start Edge
150-151	Gobo 15 – Start Edge (HOLD)
152-157	Gobo 15 – Proportional (start → end)
158-159	Auto-Skip to Gobo 16 – Start Edge
160-161	Gobo 16 – Start Edge (HOLD)
162-167	Gobo 16 – Proportional (start → end)
168-169	Auto-Skip to Gobo 17 – Start Edge
170-171	Gobo 17 – Start Edge (HOLD)
172-177	Gobo 17 – Proportional (start → end)
178-179	Auto-Skip to Gobo 18 – Start Edge
180-181	Gobo 18 – Start Edge (HOLD)
182-187	Gobo 18 – Proportional (start → end)
188-189	Auto-Skip to Gobo 19 – Start Edge
190-191	Gobo 19 – Start Edge (HOLD)
192-197	Gobo 19 – Proportional (start → end)
198-199	Auto-Skip to Gobo 20 – Start Edge
200-201	Gobo 20 – Start Edge (HOLD)
202-207	Gobo 20 – Proportional (start → end)

208–209	Auto-Skip to Gobo 21 – Start Edge
210–211	Gobo 21 – Start Edge (HOLD)
212–217	Gobo 21 – Proportional (start → end)
218–219	Auto-Skip to Gobo 22 – Start Edge
220–221	Gobo 22 – Start Edge (HOLD)
222–227	Gobo 22 – Proportional (start → end)
228–229	Auto-Skip to Gobo 23 – Start Edge
230–231	Gobo 23 – Start Edge (HOLD)
232–237	Gobo 23 – Proportional (start → end)
238–239	Auto-Skip to Open / Gobo 0 – Start Edge
240–241	Gobo 0 (Open) – Start Edge (HOLD)
242–247	Gobo 0 (Open) – Proportional (start → end)
248–255	Gobo 0 (Open) – Center / Hold

Gobo Wheel Rotation (if channel 14 “Gobo Mode” = DMX range value 192-255)

DMX value	Function
000-009	Stop/ Open /Gobo 0
010-127	CW rotation speed from fast to slow
128-137	Stop
138-255	CCW rotation speed from slow to fast

14	Gobo Mode
DMX value	Function
000-063	Full Gobo
064-127	Reserved for future use – (Half Gobo)
128-191	Proportional Gobo
192-255	Gobo Wheel Rotation

15	Gobo Shake
DMX value	Function
000-009	Stop
010-022	Gobo shake R-L speed 1
023-035	Gobo shake R-L speed 2
036-048	Gobo shake R-L speed 3
049-061	Gobo shake R-L speed 4
062-074	Gobo shake R-L speed 5
075-087	Gobo shake R-L speed 6
088-100	Gobo shake R-L speed 7
101-113	Gobo shake R-L speed 8
114-126	Gobo shake R-L speed 9
127-138	Stop
139-151	Gobo shake L-R speed 1
152-164	Gobo shake L-R speed 2
165-177	Gobo shake L-R speed 3
178-190	Gobo shake L-R speed 4
191-203	Gobo shake L-R speed 5
204-216	Gobo shake L-R speed 6
217-229	Gobo shake L-R speed 7
230-242	Gobo shake L-R speed 8
243-255	Gobo shake L-R speed 9

16	Frost / Static Prism
DMX value	Function
000-009	Open / No Function
010-085	Frost
086-170	Static Prism 4F (direct path – from open to prism 4F direct without passing through Frost)
171-255	Static Prism 8F

17	Prism Wheel
DMX value	Function
000-009	Open / No Function
010-085	Prism 1 – Linear

086-170	Prism 2 – 15 Facets
171-255	Prism 3 – 8 Facets (<i>direct path – from open to prism 8F without passing through Linear Prism</i>)

18	Prism Position
DMX value	Function
000–009	Centre position
010–063	Outward left → centre (<i>proportional movement, left edge to centre</i>)
064–073	Centre (stable position)
074–127	Outward centre → right (<i>proportional movement, centre to right edge</i>)
128-137	Centre (reset reference for shake)
138–149	Prism shake R–L speed 1
150–161	Prism shake R–L speed 2
162–173	Prism shake R–L speed 3
174–185	Prism shake R–L speed 4
186–197	Prism shake R–L speed 5
198–209	Prism shake L–R speed 1
210–221	Prism shake L–R speed 2
222–233	Prism shake L–R speed 3
234–245	Prism shake L–R speed 4
246–255	Prism shake L–R speed 5

19	Prism Rotation / Index
DMX value	Function
000–127	Proportional index 0° → 360°
128–180	CW rotation – from fast to slow
181–202	Stop / Hold
203–255	CCW rotation – from slow to fast

20	Dynamic Prism
DMX value	Function
000-127	Linear Position from min to Centre
128	Centre (default)
129-255	Linear Position from Centre to Max

21	Focus
DMX value	Function
000-255	Focus adjustment – Coarse control (MSB) Works in 16-bit mode when paired with CH22 (Focus Fine)

22	Focus Fine
DMX value	Function
000-255	Focus adjustment – Fine control (LSB) Extends precision of CH21 Focus for smoother and more accurate focusing

23	Fixture Control (Active after 3s hold)
DMX value	Function
000-009	No effect
010-024	Smooth Dimming OFF
025-026	Smooth Dimming 1
027-028	Smooth Dimming 2
029-030	Smooth Dimming 3
031-032	Smooth Dimming 4 (Default)
033-034	Smooth Dimming 5
035-036	Smooth Dimming 6
037-038	Smooth Dimming 7
039-040	Smooth Dimming 8
041-042	Smooth Dimming 9
043-044	Smooth Dimming 10
045-046	Smooth Dimming 11
047-048	Smooth Dimming 12
049-050	Smooth Dimming 13

23	Fixture Control (Active after 3s hold)
DMX value	Function
051-052	Smooth Dimming 14
053-054	Smooth Dimming 15
055-056	Smooth Dimming 16
057-058	Smooth Dimming 17
059-060	Smooth Dimming 18
061-062	Smooth Dimming 19
063-064	Smooth Dimming 20
065-066	Gamma Correction: Quadratic (Default)
067-068	Gamma Correction: Linear
069-070	Gamma Correction: S-curve
071-072	Gamma: 2.2
073-084	Reserved
085-104	Output Frequency = 610 Hz
105	Output Frequency = 800 Hz
106	Output Frequency = 1000 Hz (Default)
107	Output Frequency = 1500 Hz
108	Output Frequency = 2000 Hz
109	Output Frequency = 2500 Hz
110	Output Frequency = 3000 Hz
111	Output Frequency = 3500 Hz
112	Output Frequency = 4000 Hz
113	Output Frequency = 4500 Hz
114	Output Frequency = 5000 Hz
115	Output Frequency = 5500 Hz
116	Output Frequency = 6000 Hz
117	Output Frequency = 6500 Hz
118	Output Frequency = 7000 Hz
119	Output Frequency = 7500 Hz
120	Output Frequency = 8000 Hz
121	Output Frequency = 8500 Hz
122	Output Frequency = 9000 Hz
123	Output Frequency = 9500 Hz
124	Output Frequency = 10000 Hz
125	Output Frequency = 11000 Hz
126	Output Frequency = 12000 Hz
127	Output Frequency = 13000 Hz
128	Output Frequency = 14000 Hz
129	Output Frequency = 15000 Hz
130	Output Frequency = 16000 Hz
131	Output Frequency = 17000 Hz
132	Output Frequency = 18000 Hz
133	Output Frequency = 19000 Hz
134	Output Frequency = 20000 Hz
135-154	Reserved
155-156	Display Standby Disabled
157-158	Display Standby Enabled (Default)
159-160	Display Standby Forced Enabled
161-174	Reserved
175-176	No DMX Action – Hold Last Value (Default)
177-178	No DMX Action – BlackOut
179-180	Reserved
181-182	No DMX Action – Demo Program (Steps 01..48)
183-184	No DMX Action – Single Cue
185-186	Pan Normal (Default)
187-188	Pan Reverse
189-196	Reserved
197-198	Tilt Normal (Default)
199-200	Tilt Reverse
201-202	Reserved
203-204	Strip Direction Normal (Default)

23	Fixture Control (Active after 3s hold)
DMX value	Function
205-206	Strip Direction Reverse
207-208	Reserved
209-210	Pan Tilt speed Smooth
211-212	Pan Tilt speed Standard
213-214	Pan Tilt speed Fast (default)
215-234	Reserved
235-236	Fan Mode: Silent
237-238	Fan Mode: Standard (Default)
239-242	Reserved
243-244	Fan Mode: Auto
245-252	Reserved
253-255	Set Functions to Default: -Smooth Dimming = 4 -Gamma = Quadratic -Output Frequency = 1000 Hz -Display Standby = Enabled -No DMX Action = Hold Last Value -Pan Direction = Normal -Tilt Direction = Normal Pan Tilt speed = Fast -Fan Mode = Standard

24	Reset
DMX value	Function
000-009	No effect
010-075	Pan/Tilt Reset
076-095	Internal Motors reset
096-239	Reserved
240-255	Total Reset (Pan / Tilt / Internal Motors)

25	RGBW Shutter / Strobe
DMX value	Function
000-009	Blackout
010-019	Open
020-029	Blackout
030-119	Strobe (slow → fast) 0.3 → 33 Hz / 3270 → 30 ms
120-149	Pulse Up (slow → fast) 0.02 → 8 Hz / 42600 → 120 ms
150-179	Pulse Down (slow → fast) 0.02 → 8 Hz / 42600 → 120 ms
180-189	Random Strobe
190-255	Open

26	RGBW Dimmer
DMX value	Function
000-255	Global RGBW intensity 0 % → 100 %

27	Strip 1 – Red
DMX value	Function
000-255	Red Intensity 0% → 100%

28	Strip 1 – Green
DMX value	Function
000-255	Green Intensity 0% → 100%

29	Strip 1 – Blue
DMX value	Function
000-255	Blue Intensity 0% → 100%

30	Strip 1 – White
DMX value	Function
000-255	White Intensity 0% → 100%

31	Strip 2 – Red
DMX value	Function
000-255	Red Intensity 0% → 100%

32	Strip 2 – Green
DMX value	Function
000-255	Green Intensity 0% → 100%

33	Strip 2 – Blue
DMX value	Function
000-255	Blue Intensity 0% → 100%

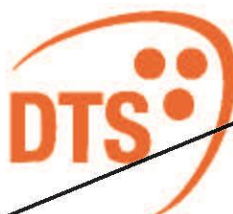
34	Strip 2 – White
DMX value	Function
000-255	White Intensity 0% → 100%



NOTES

ISO 9001:2015

DTS quality system is
certified to the ISO
9001:2015 standard.



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PROFESSIONAL
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