

Phantom offers four DMX personalities, selected under **Channel Mode**. All modes work over DMX, Art-Net and sACN; Modes 2–4 also support dual control (DMX + Art-Net / sACN), with the control channels on DMX and the pixel channels on the network.

Mode	Channels	Description	Dual-control split	Fixtures / universe
Mode 1	26	Simple: master color, dimmer, strobe and macros for both LED systems	Single control only	19
Mode 2	98	Basic: primary LEDs mapped per pixel (RGLB); GLODOT master color and macros	DMX 1–22 Net 23–98	5
Mode 3	251	Pixel control: primary master color and macros; GLODOT mapped per pixel (RGB)	DMX 1–23 Net 24–251	2
Mode 4	321	Pixel control extended: every primary and GLODOT pixel mapped	DMX 1–17 Net 18–321	1

Channel assignment by mode

Function	Mode 1 (26CH)	Mode 2 (98CH)	Mode 3 (251CH)	Mode 4 (321CH)
Pan	1	1	1	1
Pan fine	2	2	2	2
Tilt	3	3	3	3
Tilt fine	4	4	4	4
Pan / tilt speed	5	5	5	5
Zoom	6	6	6	6
Zoom fine	7	7	7	7
Lens rotate FX	8	8	8	8
Control / reset *	9	9	9	9
Master dimmer (both LED systems)	10	–	–	–
Master dimmer fine	11	–	–	–
Primary LED dimmer	–	18	10	10
Primary LED dimmer fine	–	19	11	11
Primary LED shutter / strobe	12	20	12	12
Primary LED red / green / blue / lime	14–17	–	13–16	–
Primary LED macro	21	–	17	–
Primary LED macro speed	22	–	18	–
GLODOT dimmer	–	10	21	13
GLODOT dimmer fine	–	11	22	14
GLODOT shutter / strobe	13	12	23	15
GLODOT red / green / blue	18–20	13–15	–	–
GLODOT macro	23	16	–	–
GLODOT macro speed	24	17	–	–
Macro color (virtual color wheel)	25	21	19	16
CTO	26	22	20	17
Primary pixels 1–19 (RGLB, 4 ch each)	–	23–98	–	18–93
GLODOT pixels 20–95 (RGB, 3 ch each)	–	–	24–251	94–321

– = not present in that mode. * Control / reset functions take effect after the value is held for 5 seconds. Rotation direction depends on the head orientation and pan/tilt settings.

Value ranges

Function	DMX value	Setting
Pan / tilt	0–255	Pan 0–540° tilt 0–210°
Pan / tilt speed	0–255	Fast to slow (default 0)
Zoom	0–255	Narrow to wide
Lens rotate FX	0–5	Stop / default position (beam)
	6–62	Clockwise indexing
	63–127	Counterclockwise indexing
	128–192	Clockwise continuous rotation, slow to fast
	193–255	Counterclockwise continuous rotation, slow to fast <i>Requires the zoom at its narrow position.</i>
Control / reset *	0–200	Reserved
	201–215	Lens assembly reset
	216–230	Pan / tilt reset
	231–245	Full fixture reset
Dimmers	0–255	0–100%
Shutter / strobe (primary and GLODOT)	0–9	Shutter closed (blackout)
	10–49	Synchronous strobe, slow to fast
	50–89	Pulse strobe, slow to fast
	90–129	Random strobe, slow to fast
	130–169	Gradient strobe 1 (dark to light), slow to fast
	170–209	Gradient strobe 2 (light to dark), slow to fast
	210–255	Shutter open <i>Set to 210–255 for light output.</i>
Color channels	0–255	0–100% (red, green, blue, lime)
Macros (primary and GLODOT)	0–3	Off (default)
	4–20	Macro program 1
	21–245	Macro programs 2–16 (15 values each: 21–35, 36–50, 51–65 ... 231–245)
	246–255	Random macro scroll
Macro speed	0–255	Slow to fast
Macro color	0–255	Virtual color wheel presets
CTO	0–17	Open
	18–34	8,000 K
	35–51	7,500 K
	52–68	6,500 K
	69–85	6,000 K
	86–102	5,600 K
	103–119	5,000 K
	120–136	4,500 K
	137–153	4,000 K
	154–170	3,500 K
	171–187	3,200 K
	188–204	3,000 K
	205–221	2,700 K
	222–238	2,500 K
	239–255	2,000 K

Pixel channel map

First (red) channel of each pixel. Primary pixels use four consecutive channels (R, G, B, L); GLODOT pixels use three (R, G, B). In dual control, these channels are on the network universe. See the Pixel Cell Reference Chart for pixel positions.

Primary	Mode 2	Mode 4	GLOD OT	Mode 3	Mode 4	GLOD OT	Mode 3	Mode 4	GLOD OT	Mode 3	Mode 4	GLOD OT	Mode 3	Mode 4
1	23	18	20	24	94	39	81	151	58	138	208	77	195	265
2	27	22	21	27	97	40	84	154	59	141	211	78	198	268
3	31	26	22	30	100	41	87	157	60	144	214	79	201	271
4	35	30	23	33	103	42	90	160	61	147	217	80	204	274
5	39	34	24	36	106	43	93	163	62	150	220	81	207	277
6	43	38	25	39	109	44	96	166	63	153	223	82	210	280
7	47	42	26	42	112	45	99	169	64	156	226	83	213	283
8	51	46	27	45	115	46	102	172	65	159	229	84	216	286
9	55	50	28	48	118	47	105	175	66	162	232	85	219	289
10	59	54	29	51	121	48	108	178	67	165	235	86	222	292
11	63	58	30	54	124	49	111	181	68	168	238	87	225	295
12	67	62	31	57	127	50	114	184	69	171	241	88	228	298
13	71	66	32	60	130	51	117	187	70	174	244	89	231	301
14	75	70	33	63	133	52	120	190	71	177	247	90	234	304
15	79	74	34	66	136	53	123	193	72	180	250	91	237	307
16	83	78	35	69	139	54	126	196	73	183	253	92	240	310
17	87	82	36	72	142	55	129	199	74	186	256	93	243	313
18	91	86	37	75	145	56	132	202	75	189	259	94	246	316
19	95	90	38	78	148	57	135	205	76	192	262	95	249	319

Address spacing: Mode 1 001, 027, 053... | Mode 2 001, 099, 197... | Mode 3 001, 252 | Mode 4 one fixture per universe.