

DMX protocols

The DMX protocols each have two modes:

- *DMX mode 1* uses 9 channels and does not allow fine adjustment of movement and effects.
- *DMX mode 2*, which is the default, uses 12 channels and allows fine adjustment of movement and effects.

The DMX mode that is used is specified using the Profile menu in the control panel (see “Control menu structure” on page 66).

Choose the protocol appropriate to the your Imager model:

- “Imager 04 DMX-Gobo Wheel” on page 71.
- “Imager 04 DMX-Gobo Wheel with moving-mirror fitted” on page 72.
- “Imager 01 DMX-Gobo” on page 74.
- “Imager 01 DMX-Gobo with moving-mirror fitted” on page 76.

Imager 04 DMX-Gobo Wheel

Start code = 0

DMX2	DMX 2	Value	Percent	Function
1		0 - 208	0 - 81	Reset, Lamp On/Off
		208 - 217	81 - 85	Reserved (no change)
		218 - 227	85 - 87	Reset fixture
		228 - 237	89 - 93	Reserved (no change)
		238 - 247	93 - 97	Lamp power on
		248 - 255	97 - 100	Reserved (no change)
				Lamp power off: T>= for 5 seconds. If reset or power off are disabled, confirm on channel 3, by selecting image 4, either in indexed or continuous rotation, and focus in near position (channel 5 or 6).
2		0 - 255	0 - 100	Intensity Intensity 0→100%
3		0 - 19	0 - 7	Image Selection Image 1, indexed rotation
		20 - 39	7 - 15	Image 2, indexed rotation
		40 - 59	15 - 23	Image 3, indexed rotation
		60 - 79	23 - 31	Image 4, indexed rotation
		80 - 99	31 - 39	Image 1, continuous rotation
		100 - 119	39 - 46	Image 2, continuous rotation
		120 - 139	47 - 54	Image 3, continuous rotation
		140 - 159	55 - 62	Image 4, continuous rotation
		160 - 198	63 - 78	CW (Clockwise) wheel rot., slow→fast
		199 - 237	78 - 93	CCW wheel rot. fast→slow
		238 - 255	93 - 100	Reserved (no change)
4		0 - 255	0 - 100	Image Rotation (select indexed image rotation, on channel 3) Coarse position index (MSB), Min→Max
				Rotation Velocity (select cont. image rotation, on channel 3)
		0 - 2	0	No rotation
		3 - 127	1 - 50	CW rotation, slow→fast
		128 - 252	50 - 99	CCW rotation, fast→slow
		253 - 255	99 - 100	No rotation
	5	0-255	0-100	Image Rotation, Fine Position Fine position index (LSB), Min→Max
5	6	0-255	0-100	Focus Infinity→near

Start code = 0

DMX2	DMX 2	Value	Percent	Function
6	7	0-255	0-100	Reserved (no change)
	8	0-255	0-100	Reserved (no change)
7	9	0-255	0-100	Reserved (no change)
	10	0-255	0-100	Reserved (no change)
8	11	0-255	0-100	Reserved (no change)
9	12	0 - 2 3 - 251 252 - 255	0 1 - 96 97 - 100	Image and Focus Speed Tracking mode Fast→slow Blackout while moving

Imager 04 DMX-Gobo Wheel with moving-mirror fitted

Start code = 0

DMX 1	DMX 2	Value	Percent	Function
1		0 - 208 208 - 217 218 - 227 228 - 237 238 - 247 248 - 255	0 - 81 81 - 85 85 - 87 89 - 93 93 - 97 97 - 100	Reset, Lamp On/Off Reserved (no change) Reset fixture Reserved (no change) Lamp power on Reserved (no change) Lamp power off: T >= for 5 seconds If reset or power off are disabled, confirm on channel 3, by selecting image 4, either in indexed or continuous rotation, and focus in near position (channel 5 or 6).
2		0 - 255	0 - 100	Intensity Intensity 0→100%

Start code = 0

DMX 1	DMX 2	Value	Percent	Function
3		0 - 19	0 - 7	Image Selection Image 1, indexed rotation
		20 - 39	7 - 15	Image 2, indexed rotation
		40 - 59	15 - 23	Image 3, indexed rotation
		60 - 79	23 - 31	Image 4, indexed rotation
		80 - 99	31 - 39	Image 1, continuous rotation
		100 - 119	39 - 46	Image 2, continuous rotation
		120 - 139	47 - 54	Image 3, continuous rotation
		140 - 159	55 - 62	Image 4, continuous rotation
		160 - 198	63 - 78	CCW wheel rotation, slow→fast
		199 - 237	78 - 93	CW (Clockwise) wheel rot., fast→slow
		238 - 255	93 - 100	Reserved (no change)
4		0 - 255	0 - 100	Image Rotation (select indexed image rotation, on channel 3) Coarse position index (MSB), Min→Max
		0 - 2	0	Rotation Velocity (select cont. image rotation, on channel 3) No rotation
		3 - 127	1 - 50	CCW rotation, slow→fast
		128 - 252	50 - 99	CW rotation, fast→slow
		253 - 255	99 - 100	No rotation
	5	0-255	0-100	Image Rotation, Fine Position Fine position index (LSB), Min→Max
5	6	0-255	0-100	Focus Infinity→near
6	7	0-255	0-100	Pan Left→right (128 = neutral)
	8	0-255	0-100	Pan fine (LSB) Left→right
7	9	0-255	0-100	Tilt Up→down (128 = neutral)
	10	0-255	0-100	Tilt fine (LSB) Up→down
8	11	0 - 2 3 - 251 252 - 255	0 1 - 98 99 - 100	Pan/Tilt Speed Tracking mode Fast→slow Blackout while moving
9	12	0 - 2 3 - 251 252 - 255	0 1 - 96 97 - 100	Image and Focus Speed Tracking mode Fast→slow Blackout while moving

Imager 01 DMX-Gobo

Start code = 0

DMX2	DMX 2	Value	Percent	Function
1		0 - 208	0 - 81	Reset, Lamp On/Off
		208 - 217	81 - 85	Reserved (no change)
		218 - 227	85 - 87	Reset fixture
		228 - 237	89 - 93	Reserved (no change)
		238 - 247	93 - 97	Lamp power on
		248 - 255	97 - 100	Reserved (no change)
				Lamp power off: T>= for 5 seconds. If reset or power off are disabled, confirm by setting DMX-channel 3 to any value in the ranges 60-79 or 140-159, and focus in near position. (channel 5 or 6).
2		0 - 255	0 - 100	Intensity Intensity 0→100%
3		0 - 79	0 - 31	Image Selection
		80 - 159	31 - 62	Image, indexed rotation
		160 - 255	63 - 100	Image, continuous rotation
				Reserved (no change)
4		0 - 255	0 - 100	Image Rotation (select indexed image rotation, on channel 3) Coarse position index (MSB), Min→Max
		0 - 2	0	Rotation Velocity (select cont. image rotation, on channel 3) No rotation
		3 - 127	1 - 50	CW rotation, slow→fast
		128 - 252	50 - 99	CCW rotation, fast→slow
		253 - 255	99 - 100	No rotation
	5	0-255	0-100	Image Rotation, Fine Position Fine position index (LSB), Min→Max
5	6	0-255	0-100	Focus Infinity→near
6	7	0-255	0-100	Reserved (no change)
	8	0-255	0-100	Reserved (no change)
7	9	0-255	0-100	Reserved (no change)
	10	0-255	0-100	Reserved (no change)
8	11	0-255	0-100	Reserved (no change)

Start code = 0

DMX2	DMX 2	Value	Percent	Function
9	12	0 - 2	0	Image and Focus Speed
		3 - 251	1 - 96	Tracking mode
		252 - 255	97 - 100	Fast→slow
				Blackout while moving

Imager 01 DMX-Gobo with moving-mirror fitted

Start code = 0

DMX 1	DMX 2	Value	Percent	Function
1		0 - 208	0 - 81	Reset, Lamp On/Off
		208 - 217	81 - 85	Reserved (no change)
		218 - 227	85 - 87	Reset fixture
		228 - 237	89 - 93	Reserved (no change)
		238 - 247	93 - 97	Lamp power on
		248 - 255	97 - 100	Reserved (no change)
				Lamp power off: T >= for 5 seconds If reset or power off are disabled, confirm by setting DMX-channel 3 to any value in the ranges 60-79 or 140-159, and focus in near position. (channel 5 or 6).
2		0 - 255	0 - 100	Intensity Intensity 0→100%
3		0 - 79	0 - 31	Image Selection
		80 - 159	31 - 62	Image, indexed rotation
		160 - 255	63 - 100	Image, continuous rotation Reserved (no change)
4		0 - 255	0 - 100	Image Rotation (select indexed image rotation, on channel 3) Coarse position index (MSB), Min→Max
		0 - 2	0	Rotation Velocity (select cont. image rotation, on channel 3) No rotation
		3 - 127	1 - 50	CCW rotation, slow→fast
		128 - 252	50 - 99	CW rotation, fast→slow
		253 - 255	99 - 100	No rotation
	5	0-255	0-100	Image Rotation, Fine Position Fine position index (LSB), Min→Max
5	6	0-255	0-100	Focus Infinity→near
6	7	0-255	0-100	Pan Left→right (128 = neutral)
	8	0-255	0-100	Pan fine (LSB) Left→right
7	9	0-255	0-100	Tilt Up→down (128 = neutral)

Start code = 0

DMX 1	DMX 2	Value	Percent	Function
	10	0-255	0-100	Tilt fine (LSB) Up→down
8	11	0 - 2 3 - 251 252 - 255	0 1 - 98 99 - 100	Pan/Tilt Speed Tracking mode Fast→slow Blackout while moving
9	12	0 - 2 3 - 251 252 - 255	0 1 - 96 97 - 100	Image and Focus Speed Tracking mode Fast→slow Blackout while moving