

MediaHub 2x4DT - DMX Protocol - version 1.0

Channel	Value	Function	Type of control
Gobo layer 1			
1	0 - 255	Dimmer 1 Dimmer intensity from 0% to 100%	proportional
2	0	Gobo 1 selection White	step
	1	Gobo 1-black and white	step
	2	Gobo 2-black and white	step
	3	Gobo 3-black and white	step
	4	Gobo 4-black and white	step
	5	Gobo 5-black and white	step
	6	Gobo 6-black and white	step
	7	Gobo 7-black and white	step
	8	Gobo 8-black and white	step
	9	Gobo 9-black and white	step
	10	Gobo 10-black and white	step
	11	Gobo 11-black and white	step
	12	Gobo 12-black and white	step
	13	Gobo 13-black and white	step
	14	Gobo 14-black and white	step
	15	Gobo 15-black and white	step
	16	Gobo 16-black and white	step
	17	Gobo 17-black and white	step
	18	Gobo 18-black and white	step
	19	Gobo 19-black and white	step
	20	Gobo 20-black and white	step
	21	Gobo 21-black and white	step
	22	Gobo 22-black and white	step
	23	Gobo 23-black and white	step
	24	Gobo 24-black and white	step
	25	Gobo 25-black and white	step
	26	Gobo 26-black and white	step
	27	Gobo 27-black and white	step
	28	Gobo 28-black and white	step
	29	Gobo 29-black and white	step
	30	Gobo 30-black and white	step
	31	Gobo 31-black and white	step
	32	Gobo 32-black and white	step
	33	Gobo 33-black and white	step
	34	Gobo 34-from yellow to green	step
	35	Gobo 35-from red to yellow	step
	36	Gobo 36-from magenta to red	step
	37	Gobo 37-from blue to magenta	step
	38	Gobo 38-from cyan to blue	step
	39	Gobo 39-from light green to cyan	step
	40	Gobo 40-RGB strips	step
	41	Gobo 41-colour animation	step
	42	Gobo 42-colour animation	step
	43	Gobo 43-colour animation	step
	44	Gobo 44-colour animation	step
	45	Gobo 45-colour animation	step
	46	Gobo 46-colour animation	step
	47	Gobo 47-colour animation	step
	48	Gobo 48-colour animation	step
	49	Gobo 49-colour animation	step
	50	Gobo 50-colour animation	step
	51	Gobo 51-black and white animation	step
	52	Gobo 52-black and white animation	step

Channel	Value	Function	Type of control
2	53	Gobo 53-black and white animation	step
	54	Gobo 54-black and white animation	step
	55	Gobo 55-black and white animation	step
	56	Gobo 56-black and white animation	step
	57	Gobo 57-black and white animation	step
	58	Gobo 58-black and white animation	step
	59	Gobo 59-black and white animation	step
	60	Gobo 60-black and white animation	step
	61	Gobo 61-Robe logo animation	step
	62	Gobo 62-Robe logo	step
	63-255	Reserved	
3	0	Gobo 1 control Stop	step
	1-127	Play slow---> normal	proportional
	128	Play loop	step
	129-254	Play normal---> fast	proportional
	255	Pause	step
4	0 -63	Gobo 1 Indexing and rotation Clockwise rotation from fast to slow	proportional
	64-127	Indexing	proportional
	128	No rotation-centre	step
	129-192	Indexing	proportional
	193-255	Anticlockwise rotation from slow to fast	proportional
5	0 - 255	Gobo 1 fine indexing (rotation) Fine indexing (rotation)	proportional
6		Gobo 1 effect Selection	Type of effect control
	1	Zoom sinus	speed
	2	Zoom bump in fade out	speed
	3	Zoom fade in bump out	speed
	4	Zoom bump in out	speed
	5	Zoom in fade	speed
	6	Zoom out fade	speed
	7	Scale xy sinus	speed
	8	Scale xy bump in fade out	speed
	9	Scale xy fade in bump out	speed
	10	Scale xy bump in out	speed
	11	XY pos. circle ccw	speed
	12	XY pos. circle cw	speed
	13	XY pos. scroll up	speed
	14	XY pos. scroll down	speed
	15	XY pos. scroll left	speed
	16	XY pos.scroll right	speed
	17	Left-right diag. down scroll	speed
	18	Left-right diag. up scroll	speed
	19	Right-left diag. down scroll	speed
	20	Right-left diag. up scroll	speed
	21	X rotate	speed
	22	Y rotate	speed
	23	XY rotate	speed
	24	XY inv. rotate	speed
	25	X inv. y rotate	speed
	26	Tile xy	amount
	27	Tile xy	speed
	28	XYZ rot. cube	speed
	29	XYZ rot. sphere	speed
	30	X rot. cylinder	speed
	31	Y rot. cylinder	speed
	32	Cone z scale sinus	speed
33	Kaleidoscope	none	

Channel	Value	Function	Type of effect control
6	34	Fisheye in	none
	35	Fisheye out	none
	36	Swirl left	none
	37	Swirl right	none
	38	Bend x	none
	39	Bend y	none
	40	Tile frame	none
	41	Frame	none
	42	Plane ip x	none
	43	Plane ip y	none
	44	Plane ip x y	none
	45	Plane mirror x	none
	46	Plane mirror y	none
	47	Plane mirror xy	none
	48	Plane tile 2x	none
	49	Plane tile 3x	none
	50	Plane tile 4x	none
	51	Plane tile 5x	none
	52	Disc	none
	53	Disc ip x	none
	54	Disc ip y	none
	55	Disc ip x y	none
	56	Disc mirror x	none
	57	Disc mirror y	none
	58	Disc mirror xy	none
	59	Squeeze in	none
	60	Squeeze out	none
	61	Plane wavy diag 1	none
	62	Plane wavy diag 2	none
	63	Stretch x	none
	64	Stretch y	none
	65	Colour to BW	amount
	66	Colour to BW INV	amount
	67	BW to BW INV	amount
	68	INV	amount
	69	Black Mask	amount
	70	Black Mask INV	amount
	71	Contrast	amount
	72	Brightness	amount
	73	RGB to GBR	amount
	74	RGB to BRG	amount
	75	RGB to RBG	amount
	76	BW to BW INV timed	speed
	77	Colour to BW timed	speed
	78	Colour to INV timed	speed
	79	Cycle	speed
	80	Cycle INV	speed
	81	Sepia	amount
	82	Sepia INV	amount
	83	Colour Key	amount
	84	Colour Key INV	amount
	85	Key Black	amount
	86	Key Black INV	amount
	87	Key White	amount
	88	Key White INV	amount
	89	White ash	speed
	90	Black ash	speed
	91	Alpha ash	speed
	92	Invert ash	speed
	93	BW ash	speed

Channel	Value	Function	Type of control
6	94	BW to BW INV Flash	speed
	95	Gradient Wipe x	speed
	96	Gradient Wipe y	speed
	97-254	Reserved	
	255	Shut down=255 for 5 sec.	step
7	0 - 255	Gobo 1 effect control Control of amount/speed	proportional
8	0-127	Gobo 1 Position X coarse Movement to the left	proportional
	128	Centre	step
	129-255	Movement to the right	proportional
9	0-255	Gobo 1 position X fine Position X fine	proportional
10	0-127	Gobo 1 Position Y coarse Movement down	proportional
	128	Centre	step
	129-255	Movement up	proportional
11	0-255	Gobo 1 position Y fine Position Y fine	proportional
12	0-127	Gobo 1 zoom X coarse Narrowing	proportional
	128	Centre	step
	129-255	Widening	proportional
13	0-255	Gobo 1 zoom X fine Zoom X fine	proportional
14	0-127	Gobo 1 zoom Y coarse Narrowing	proportional
	128	Centre	step
	129-255	Widening	proportional
15	0-255	Gobo 1 zoom Y fine Zoom Y fine	proportional

Channel	Value	Function	Type of control
Gobo layer 2			
16		Dimmer 2 Dimmer intensity from 0% to 100%	proportional
		Gobo 2 selection	
	0	White	step
	1	Gobo 1-black and white mask	step
	2	Gobo 2-black and white mask	step
	3	Gobo 3-black and white mask	step
	4	Gobo 4-black and white mask	step
	5	Gobo 5-black and white mask	step
	6	Gobo 6-black and whitemask	step
	7	Gobo 7-black and white mask	step
	8	Gobo 8-black and white mask	step
	9	Gobo 9-black and white mask	step
	10	Gobo 10-black and white mask	step
	11	Gobo 11-black and white mask	step
	12	Gobo 12-black and white mask	step
	13	Gobo 13-black and white mask	step
	14	Gobo 14-black and white mask	step
	15	Gobo 15-black and white mask	step
	16	Gobo 16-black and white mask	step
	17	Gobo 17-black and white mask	step
	18	Gobo 18-black and white mask	step
	19	Gobo 19-black and white mask	step
	20	Gobo 20-colour	step
	21	Gobo 21-colour	step
17	22	Gobo 22-colour	step
	23	Gobo 23-colour	step
	24	Gobo 24-colour	step
	25	Gobo 25-gray	step
	26	Gobo 26-colour	step
	27	Gobo 27-gray	step
	28	Gobo 28-gray	step
	29	Gobo 29-colour	step
	30	Gobo 30-colour	step
	31	Gobo 31-colour	step
	32	Gobo 32-black and white	step
	33	Gobo 33-from yellow to green	step
	34	Gobo 34-from red to yellow	step
	35	Gobo 35-from magenta to red	step
	36	Gobo 36-from blue to magenta	step
	37	Gobo 37-from cyan to blue	step
	38	Gobo 38-from light green to cyan	step
	39	Gobo 39-RGB strips	step
	40	Gobo 40-colour animation	step
	41	Gobo 41-colour animation	step
	42	Gobo 42-colour animation	step
	43	Gobo 43-colour animation	step
	44	Gobo 44-colour animation	step
	45	Gobo 45-colour animation	step
	46	Gobo 46-colour animation	step
	47	Gobo 47-colour animation	step
	48	Gobo 48-colour animation	step
	49	Gobo 49-colour animation	step
	50	Gobo 50-colour animation	step
	51	Gobo 51-black and white animation	step
	52	Gobo 52-black and white animation	step
	53	Gobo 53-black and white animation	step

Channel	Value	Function	Type of control
17	54	Gobo 54-black and white animation	step
	55	Gobo 55-black and white animation	step
	56	Gobo 56-black and white animation	step
	57	Gobo 57-black and white animation	step
	58	Gobo 58-black and white animation	step
	59	Gobo 59-black and white animation	step
	60	Gobo 60-black and white animation	step
	61	Gobo 61-Robe logo animation	step
	62	Gobo 62-Robe logo	step
	63-255	Reserved	
18	0	Gobo 2 control Stop	step
	1-127	Play slow---> normal	proportional
	128	Play loop	step
	129-254	Play normal---> fast	proportional
	255	Pause	step
19	0 -63	Gobo 2 Indexing and rotation Clockwise rotation from fast to slow	proportional
	64-127	Indexing	proportional
	128	No rotation-centre	step
	129-192	Indexing	proportional
	193-255	Anticlockwise rotation from slow to fast	proportional
20	0 - 255	Gobo 2 fine indexing (rotation) Fine indexing (rotation)	proportional
21		Gobo 2 effect Selection	Type of effect control
	1	Zoom sinus	speed
	2	Zoom bump in fade out	speed
	3	Zoom fade in bump out	speed
	4	Zoom bump in out	speed
	5	Zoom in fade	speed
	6	Zoom out fade	speed
	7	Scale xy sinus	speed
	8	Scale xy bump in fade out	speed
	9	Scale xy fade in bump out	speed
	10	Scale xy bump in out	speed
	11	XY pos.circle ccw	speed
	12	XY pos. circle cw	speed
	13	XY pos. scroll up	speed
	14	XY pos. scroll down	speed
	15	XY pos. scroll left	speed
	16	XY pos.scroll right	speed
	17	Left-right diag. down scroll	speed
	18	Left-right diag. up scroll	speed
	19	Right-left diag. down scroll	speed
	20	Right-left diag up scroll	speed
	21	X rotate	speed
	22	Y rotate	speed
	23	XY rotate	speed
	24	XY inv. rotate	speed
	25	X inv. y rotate	speed
	26	Tilexy	amount
	27	Tilexy	speed
	28	XYZ rot. cube	speed
	29	XYZ rot. sphere	speed
	30	X rot. cylinder	speed
	31	Y rot. cylinder	speed
	32	Cone z scale sinus	speed
	33	Kaleidoscope	none
	34	Fisheye in	none
35	Fisheye out	none	

Channel	Value	Function	Type of effect control
21	36	Swirl left	speed
	37	Swirl right	none
	38	Bend x	none
	39	Bend y	none
	40	Tile frame	none
	41	Frame	none
	42	Plane Flip x	none
	43	Plane Flip y	none
	44	Plane Flip x y	none
	45	Plane mirror x	none
	46	Plane mirror y	none
	47	Plane mirror xy	none
	48	Plane tile 2x	none
	49	Plane tile 3x	none
	50	Plane tile 4x	none
	51	Plane tile 5x	none
	52	Disc	none
	53	Disc Flip x	none
	54	Disc Flip y	none
	55	Disc Flip x y	none
	56	Disc mirror x	none
	57	Disc mirror y	none
	58	Disc mirror xy	none
	59	Squeeze in	none
	60	Squeeze out	none
	61	Plane wavy diag 1	none
	62	Plane wavy diag 2	none
	63	Stretch x	none
	64	Stretch y	none
	65	Colour to BW	amount
	66	Colour to BW INV	amount
	67	BW to BW INV	amount
	68	INV	amount
	69	Black Mask	amount
	70	Black Mask INV	amount
	71	Contrast	amount
	72	Brightness	amount
	73	RGB to GBR	amount
	74	RGB to BRG	amount
	75	RGB to RBG	amount
	76	BW to BW INV timed	speed
	77	Colour to BW timed	speed
	78	Colour to INV timed	speed
	79	Cycle	speed
	80	Cycle INV	speed
	81	Sepia	amount
	82	Sepia INV	amount
	83	Colour Key	amount
	84	Colour Key INV	amount
	85	Key Black	amount
	86	Key Black INV	amount
	87	Key White	amount
	88	Key White INV	amount
	89	White Flash	speed
	90	Black Flash	speed
	91	Alpha Flash	speed
	92	Invert Flash	speed
	93	BW Flash	speed
	94	BW to BW INV Flash	speed
	95	Gradient Wipe x	speed

Channel	Value	Function	Type of control
21	96 97-254 255	Gradient Wipe y Reserved Shut down=255 for 5 sec.	speed Step
22	0-255	Gobo 2 effect control Control of amount/speed	proportional
23	0-127 128 129-255	Gobo 2 Position X coarse Movement to the left Centre Movement to the right	proportional step proportional
24	0-255	Gobo 2 position X fine Position X fine	proportional
25	0-127 128 129-255	Gobo 2 position Y coarse Movement down Centre Movement up	proportional step proportional
26	0-255	Gobo 2 position Y fine Position Y fine	proportional
27	0-127 128 129-255	Gobo 2 zoom X coarse Narrowing Centre Widening	proportional step proportional
28	0-255	Gobo 2 zoom X fine Zoom X fine	proportional
29	0-127 128 129-255	Gobo 2 zoom Y coarse Narrowing Centre Widening	proportional step proportional
30	0-255	Gobo 2 zoom Y fine Zoom Y fine	proportional
31	0-255	Cyan Cyan (0-white, 255-full cyan)	proportional
32	0-255	Magenta Magenta (0-white, 255-full magenta)	proportional
33	0-255	Yellow Yellow (0-white, 255-full yellow)	proportional
34	0 1-254 255	Iris Open iris From max.diameter to min.diameter Closed iris	step proportional step
35	0-255	Iris fine Iris fine	proportional
36	0 - 30 31 - 80 81 - 110 111 - 140 141 - 255	Strobe Open light output Strobe-effect from slow to fast Open light output Random strobe-effect from slow to fast Open light output	step proportional step proportional step