

| DigitalSpot 5000 DT- DMX Protocol | | | | | | |
|-----------------------------------|-----|-----|-----|-----------|--|-----------------|
| Protocol ver./Channel | | | | DMX Value | Function | Type of control |
| 3.8 | 4.6 | 5.4 | 6.2 | | | |
| 1 | 1 | 1 | 1 | 0-255 | Pan Pan movement by 530° | proportional |
| 2 | 2 | 2 | 2 | 0-255 | Pan Fine Fine control of pan movement | proportional |
| 3 | 3 | 3 | 3 | 0-255 | Tilt Tilt movement by 280° | proportional |
| 4 | 4 | 4 | 4 | 0-255 | Tilt Fine Fine control of tilt movement | proportional |
| 5 | 5 | 5 | 5 | 0 | Pan/Tilt speed,Pan/Tilt time Max.speed (tracking mode) | step |
| | | | | 1-255 | <i>P./T. speed-set Speed Mode in menu: Pan/Tilt Mode</i> Speed from max. to min.(vector mode) | step |
| | | | | 1-255 | <i>P./T. time-set Time Mode in menu: Pan/Tilt Mode</i> Time from 0.1s to 25.5s | step |
| 6 | 6 | 6 | 6 | 0-9 | Pan/Tilt macro selection Disabled pan/tilt macro | step |
| | | | | 10-31 | Reserved | |
| | | | | 32-63 | Figure of circle (from small to large) | proportional |
| | | | | 64-95 | Figure of horizontal eight (from small to large) | proportional |
| | | | | 96-127 | Figure of vertical eight (from small to large) | proportional |
| | | | | 128-159 | Figure of reactangle (from small to large) | proportional |
| | | | | 160-191 | Figure of triangle (from small to large) | proportional |
| | | | | 192-223 | Figure of star (from small to large) | proportional |
| | | | | 224-255 | Figure of cross (from small to large) | proportional |
| 7 | 7 | 7 | 7 | 0 | Pan/Tilt macro speed No macro | step |
| | | | | 1-127 | Macro generation from fast to slow (forwards) | proportional |
| | | | | 128-129 | No macro | step |
| | | | | 130-255 | Macro generation from slow to fast (backwards) | proportional |
| 8 | 8 | 8 | 8 | 0-39 | Power/Special functions Reserved | |
| | | | | | To activate following function,hold DMX value 3 sec. and mechanical iris must be closed at least 3 sec. (channel 12 must be at 255 DMX). | |
| | | | | 40-44 | Internal Hardware (PC) reset | step |
| | | | | 45-49 | Reserved | |
| | | | | | To activate following function,hold DMX value 3 sec. and digital iris must be closed at least 3 sec. (channel 75/76/80/28 must be at 255 DMX).Corresponding menu items are temporarily overriden | |
| | | | | 50-59 | Pan/Tilt speed mode | |
| | | | | 60-69 | Pan/Tilt time mode | step |
| | | | | 70-79 | Blackout while pan/tilt moving | step |
| | | | | 80-89 | Disabled blackout while pan/tilt moving | step |
| | | | | 90-94 | Ceiling projection On | step |
| | | | | 95-99 | Ceiling projection Off | step |
| | | | | 100-104 | Rear projection On | step |
| | | | | 105-109 | Rear projection Off | step |
| | | | | 110-114 | DMX In | step |
| | | | | 115-119 | Artnet In | step |
| 8 | 8 | 8 | 8 | 120-129 | Reserved | |

Appendix - DMX protocol

| Protocol ver./Channel | | | | DMX Value | Function | Type of control |
|---|-----------|-----------|-----------|-----------|--|-----------------|
| 3.8 | 4.6 | 5.4 | 6.2 | | | |
| | | | | | To activate following function,hold DMX value 3 seconds | |
| | | | | 130-139 | Lamp On | step |
| | | | | 140-149 | Pan/Tilt reset | step |
| | | | | 180-189 | Focus/Zoom reset | step |
| | | | | 190-199 | Analog iris reset | step |
| | | | | 200-209 | Total reset | step |
| | | | | 210-215 | Graphic engine reset/software update executing | step |
| | | | | 216-229 | Reserved | |
| | | | | 230-239 | Lamp Off | step |
| | | | | 240-249 | Lamp Off,Fixture Off (<i>hold DMX value 5 seconds</i>) | step |
| | | | | 250-255 | Reserved | |
| 9 | 9 | 9 | 9 | | Video input selection | |
| | | | | 0-63 | Internal graphic engine | step |
| | | | | 64-127 | External VGA to projector | step |
| | | | | 128-191 | External S-video to projector | step |
| | | | | 192-255 | Reserved | |
| 10 | 10 | 10 | 10 | | Zoom | |
| | | | | 0-255 | Zoom from min. to max. (128-default) | proportional |
| 11 | 11 | 11 | 11 | | Focus | |
| | | | | 0-255 | Continuous adjustment from far to near (128-default) | proportional |
| 12 | 12 | 12 | 12 | | Mechanical Iris | |
| | | | | 0 | Open | step |
| | | | | 1-255 | From max. diameter to min. diameter | proportional |
| Common digital effects for all gobo layers | | | | | | |
| 13 | 13 | 13 | 13 | | KeyStone Top Left X | |
| | | | | 0-255 | Move top left corner X value to center (0-default) | proportional |
| 14 | 14 | 14 | 14 | | KeyStone Top Left Y | |
| | | | | 0-255 | Move top left corner Y value to center (0-default) | proportional |
| 15 | 15 | 15 | 15 | | KeyStone Top Right X | |
| | | | | 0-255 | Move top right corner X value to center (0-default) | proportional |
| 16 | 16 | 16 | 16 | | KeyStone Top Right Y | |
| | | | | 0-255 | Move top right corner Y value to center (0-default) | proportional |
| 17 | 17 | 17 | 17 | | KeyStoneBottom Right X | |
| | | | | 0-255 | Move bottom right corner X value to center (0-default) | proportional |
| 18 | 18 | 18 | 18 | | KeyStone Bottom Right Y | |
| | | | | 0-255 | Move bottom right corner Y value to center (0-default) | proportional |
| 19 | 19 | 19 | 19 | | KeyStone Bottom Left X | |
| | | | | 0-255 | Move bottom left corner X value to center (0-default) | proportional |
| 20 | 20 | 20 | 20 | | KeyStone Bottom Left Y | |
| | | | | 0-255 | Move bottom left corner Y value to center (0-default) | proportional |
| 21 | 21 | - | - | | Reserved | |
| - | - | 21 | 21 | | KeyStone X-ratio | |
| | | | | 0-127 | Ratio control from left to center | proportional |
| | | | | 128 | Center (default) | step |
| | | | | 129-255 | Ratio control from center to right | proportional |
| - | - | 22 | 22 | | KeyStone Y-ratio | |
| | | | | 0-127 | Ratio control from bottom to center | proportional |
| | | | | 128 | Center (default) | step |
| | | | | 129-255 | Ratio control from center to top | proportional |
| 72 | 72 | 75 | 23 | | Cyan | |

Appendix - DMX protocol

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|-----------------------|-----|-----|-----|-----------|---|-----------------|
| 3.8 | 4.6 | 5.4 | 6.2 | | | |
| | | | | 0-255 | Cyan continuously (0-white,255-full cyan) | proportional |
| 73 | 73 | 76 | 24 | | Magenta | |
| | | | | 0-255 | Magenta continuously (0-white,255-full magenta) | proportional |
| 74 | 74 | 77 | 25 | | Yellow | |
| | | | | 0-255 | Yellow continuously (0-white,255-full yellow) | proportional |
| - | 75 | 78 | 26 | | CTF | |
| | | | | 0 | Without CTF | step |
| | | | | 1 | 14000 K | step |
| | | | | 2 | 13000 K | step |
| | | | | 3 | 12500 K | step |
| | | | | 4 | 12000 K | step |
| | | | | 5 | 11500 K | step |
| | | | | 6 | 11000 K | step |
| | | | | 7 | 10500 K | step |
| | | | | 8 | 10000 K | step |
| | | | | 9 | 9500 K | step |
| | | | | 10 | 9000 K | step |
| | | | | 11 | 8600 K | step |
| | | | | 12 | 8575 K | step |
| | | | | 13 | 8550 K | step |
| | | | | : | : | : |
| | | | | 255 | 2500 K | step |
| - | - | 79 | 27 | | Digital Iris-type selection | |
| | | | | 0 | Circular ,outside-->in,sharp edge | step |
| | | | | 1 | Circular ,outside-->in,fuzzy edge 1 | step |
| | | | | 2 | Circular ,outside-->in,fuzzy edge 2 | step |
| | | | | 3 | Circular ,outside-->in,fuzzy edge 3 | step |
| | | | | 4 | Circular ,outside-->in,fuzzy edge 4 (maximum) | step |
| | | | | 5 | Circular ,inside-->out,sharp edge | step |
| | | | | 6 | Circular ,inside-->out,fuzzy edge 1 | step |
| | | | | 7 | Circular ,inside-->out,fuzzy edge 2 | step |
| | | | | 8 | Circular ,inside-->out,fuzzy edge 3 | step |
| | | | | 9 | Circular ,inside-->out,fuzzy edge 4 (maximum) | step |
| | | | | 10 | Horizontal ellipse ,outside-->in,sharp edge | step |
| | | | | 11 | Horizontal ellipse ,outside-->in,fuzzy edge 1 | step |
| | | | | 12 | Horizontal ellipse ,outside-->in,fuzzy edge 2 | step |
| | | | | 13 | Horizontal ellipse ,outside-->in,fuzzy edge 3 | step |
| | | | | 14 | Horizontal ellipse ,outside-->in,fuzzy edge 4 (maximum) | step |
| | | | | 15 | Horizontal ellipse ,inside-->out,sharp edge | step |
| | | | | 16 | Horizontal ellipse ,inside-->out,fuzzy edge 1 | step |
| | | | | 17 | Horizontal ellipse ,inside-->out,fuzzy edge 2 | step |
| | | | | 18 | Horizontal ellipse ,inside-->out,fuzzy edge 3 | step |
| | | | | 19 | Horizontal ellipse ,inside-->out,fuzzy edge 4 (maximum) | step |
| | | | | 20 | Vertical ellipse ,outside-->in,sharp edge | step |
| | | | | 21 | Vertical ellipse ,outside-->in,fuzzy edge 1 | step |
| | | | | 22 | Vertical ellipse ,outside-->in,fuzzy edge 2 | step |
| | | | | 23 | Vertical ellipse ,outside-->in,fuzzy edge 3 | step |
| | | | | 24 | Vertical ellipse ,outside-->in,fuzzy edge 4 (maximum) | step |
| | | | | 25 | Vertical ellipse ,inside-->out,sharp edge | step |
| | | | | 26 | Vertical ellipse ,inside-->out,fuzzy edge 1 | step |

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| Protocol ver./Channel | | | | DMX Value | Function | Type of control |
|-----------------------|-----|-----|-----|-----------|---|-----------------|
| 3.8 | 4.6 | 5.4 | 6.2 | | | |
| - | - | 79 | 27 | 27 | Vertical ellipse ,inside-->out,fuzzy edge 2 | step |
| | | | | 27 | Vertical ellipse ,inside-->out,fuzzy edge 3 | step |
| | | | | 29 | Vertical ellipse ,inside-->out,fuzzy edge 4 (maximum) | step |
| | | | | 30 | Clockwise wipe,sharp edge | step |
| | | | | 31 | Clockwise wipe,fuzzy edge 1 | step |
| | | | | 32 | Clockwise wipe,fuzzy edge 2 | step |
| | | | | 33 | Clockwise wipe,fuzzy edge 3 | step |
| | | | | 34 | Clockwise wipe,fuzzy edge 4 (maximum) | step |
| | | | | 35 | Anticlockwise wipe,sharp edge | step |
| | | | | 36 | Anticlockwise wipe,fuzzy edge 1 | step |
| | | | | 37 | Anticlockwise wipe,fuzzy edge 2 | step |
| | | | | 38 | Anticlockwise wipe,fuzzy edge 3 | step |
| | | | | 39 | Anticlockwise wipe,fuzzy edge 4 (maximum) | step |
| | | | | 40 | Wedge wipe ,top-->down, sharp edge | step |
| | | | | 41 | Wedge wipe ,top-->down, fuzzy edge 1 | step |
| | | | | 42 | Wedge wipe ,top-->down, fuzzy edge 2 | step |
| | | | | 43 | Wedge wipe ,top-->down, fuzzy edge 3 | step |
| | | | | 44 | Wedge wipe ,top-->down, fuzzy edge 4 (maximum) | step |
| | | | | 45 | Wedge wipe ,bottom-->up, sharp edge | step |
| | | | | 46 | Wedge wipe ,bottom-->up, fuzzy edge 1 | step |
| | | | | 47 | Wedge wipe ,bottom-->up, fuzzy edge 2 | step |
| | | | | 48 | Wedge wipe,bottom-->up, fuzzy edge 3 | step |
| | | | | 49 | Wedge wipe,bottom-->up, fuzzy edge 4 (maximum) | step |
| | | | | 50 | Radial wipe ,left -->bottom,sharp edge | step |
| | | | | 51 | Radial wipe ,left -->bottom,fuzzy edge 1 | step |
| | | | | 52 | Radial wipe ,left -->bottom,fuzzy edge 2 | step |
| | | | | 53 | Radial wipe ,left -->bottom,fuzzy edge 3 | step |
| | | | | 54 | Radial wipe ,left -->bottom,fuzzy edge 4 (maximum) | step |
| | | | | 55 | Radial wipe ,bottom-->left,sharp edge | step |
| | | | | 56 | Radial wipe ,bottom-->left,fuzzy edge 1 | step |
| | | | | 57 | Radial wipe ,bottom-->left,fuzzy edge 2 | step |
| | | | | 58 | Radial wipe ,bottom-->left,fuzzy edge 3 | step |
| | | | | 59 | Radial wipe ,bottom-->left,fuzzy edge 4 (maximum) | step |
| | | | | 60 | Radial wipe ,top-->left,sharp edge | step |
| | | | | 61 | Radial wipe ,top-->left,fuzzy edge 1 | step |
| | | | | 62 | Radial wipe ,top-->left,fuzzy edge 2 | step |
| | | | | 63 | Radial wipe ,top-->left,fuzzy edge 3 | step |
| | | | | 64 | Radial wipe ,top-->left,fuzzy edge 4 (maximum) | step |
| | | | | 65 | Radial wipe ,left-->top,sharp edge | step |
| | | | | 66 | Radial wipe ,left-->top,fuzzy edge 1 | step |
| | | | | 67 | Radial wipe ,left-->top,fuzzy edge 2 | step |
| | | | | 68 | Radial wipe ,left-->top,fuzzy edge 3 | step |
| | | | | 69 | Radial wipe ,left-->top,fuzzy edge 4 (maximum) | step |
| | | | | 70 | Vertical barn-doors,outside-->in,sharp edge | step |
| | | | | 71 | Vertical barn-doors,outside-->in,fuzzy edge 1 | step |
| | | | | 72 | Vertical barn-doors,outside-->in,fuzzy edge 2 | step |
| | | | | 73 | Vertical barn-doors,outside-->in,fuzzy edge 3 | step |
| | | | | 74 | Vertical barn-doors,outside-->in,fuzzy edge 4 (maximum) | step |
| | | | | 75 | Vertical barn-doors,inside-->out,sharp edge | step |
| | | | | 76 | Vertical barn-doors,inside-->out,fuzzy edge 1 | step |
| | | | | 77 | Vertical barn-doors,inside-->out,fuzzy edge 2 | step |

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| Protocol ver./Channel | | | | DMX Value | Function | Type of control |
|-----------------------|-----|-----|-----|-----------|---|-----------------|
| 3.8 | 4.6 | 5.4 | 6.2 | | | |
| | | | | 78 | Vertical barn-doors,inside-->out,fuzzy edge 3 | step |
| | | | | 79 | Vertical barn-doors,inside-->out,fuzzy edge 4 (maximum) | step |
| | | | | 80 | Horizontal barn-doors,outside-->in,sharp edge | step |
| | | | | 81 | Horizontal barn-doors,outside-->in,fuzzy edge 1 | step |
| | | | | 82 | Horizontal barn-doors,outside-->in,fuzzy edge 2 | step |
| | | | | 83 | Horizontal barn-doors,outside-->in,fuzzy edge 3 | step |
| | | | | 84 | Horizontal barn-doors,outside-->in,fuzzy edge 4 (maximum) | step |
| | | | | 85 | Horizontal barn-doors,inside-->out,sharp edge | step |
| | | | | 86 | Horizontal barn-doors,inside-->out,fuzzy edge 1 | step |
| | | | | 87 | Horizontal barn-doors,inside-->out,fuzzy edge 2 | step |
| | | | | 88 | Horizontal barn-doors,inside-->out,fuzzy edge 3 | step |
| | | | | 89 | Horizontal barn-doors,inside-->out,fuzzy edge 4 (maximum) | step |
| | | | | 90 | Horizontal one-way band wipe,top left-->bottom right | step |
| | | | | 91 | Horizontal one-way band wipe,bottom right-->top left | step |
| | | | | 92 | Horizontal one-way band wipe,top right-->bottom left | step |
| | | | | 93 | Horizontal one-way band wipe,bottom left-->top right | step |
| | | | | 94 | Horizontal two-way band wipe,top left-->bottom right | step |
| | | | | 95 | Horizontal two-way band wipe,bottom right-->top left | step |
| | | | | 96 | Horizontal two-way band wipe,top right-->bottom left | step |
| | | | | 97 | Horizontal two-way band wipe,bottom left-->top right | step |
| | | | | 98 | Vertical one-way band wipe,top left-->bottom right | step |
| | | | | 99 | Vertical one-way band wipe,bottom right-->top left | step |
| | | | | 100 | Vertical one-way band wipe,bottom left-->top right | step |
| | | | | 101 | Vertical one-way band wipe,top right-->bottom left | step |
| | | | | 102 | Vertical two-way band wipe,top right-->bottom left | step |
| | | | | 103 | Vertical two-way band wipe,bottom right-->top left | step |
| | | | | 104 | Vertical two-way band wipe,bottom left-->top right | step |
| | | | | 105 | Vertical two-way band wipe,top right-->bottom left | step |
| | | | | 106 | Horizontal bands 4x,top-->bottom | step |
| | | | | 107 | Horizontal bands 4x,bottom-->top | step |
| | | | | 108 | Vertical bands 4x,left -->right | step |
| | | | | 109 | Vertical bands 4x,right -->left | step |
| | | | | 110 | Horizontal bands 8x,top-->bottom | step |
| | | | | 111 | Horizontal bands 8x,bottom-->top | step |
| | | | | 112 | Vertical bands 8x,left-->right | step |
| | | | | 113 | Vertical bands 8x,right-->left | step |
| | | | | 114 | Horizontal bands 16x,top-->bottom | step |
| | | | | 115 | Horizontal bands 16x,bottom-->top | step |
| | | | | 116 | Vertical bands 16x,left-->right | step |
| | | | | 117 | Vertical bands 16x,right-->left | step |
| | | | | 118 | Horizontal bands 32x,top-->bottom | step |
| | | | | 119 | Horizontal bands 32x,bottom-->top | step |
| | | | | 120 | Vertical bands 32x,left-->right | step |
| | | | | 121 | Vertical bands 32x,right-->left | step |
| | | | | 122 | Horizontal crossing 4x | step |
| | | | | 123 | Horizontal crossing 4x,inverse | step |
| | | | | 124 | Vertical crossing 4x | step |
| | | | | 125 | Vertical crossing 4x,inverse | step |
| | | | | 126 | Horizontal crossing 8x | step |
| - | - | 79 | 27 | 127 | Horizontal crossing 8x,inverse | step |
| | | | | 128 | Vertical crossing 8x | step |

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| Protocol ver./Channel | | | | DMX Value | Function | Type of control |
|-----------------------|-----|-----|-----|-----------|--|-----------------|
| 3.8 | 4.6 | 5.4 | 6.2 | | | |
| | | | | 129 | Vertical crossing 8x,inverse | step |
| | | | | 130 | Horizontal crossing 16x | step |
| | | | | 131 | Horizontal crossing 16x,inverse | step |
| | | | | 132 | Vertical crossing 16x | step |
| | | | | 133 | Vertical crossing 16x,inverse | step |
| | | | | 134 | Checker wipe 3x4, left-->right | step |
| | | | | 135 | Checker wipe 3x4, right-->left | step |
| | | | | 136 | Checker wipe 4x4, left-->right | step |
| | | | | 137 | Checker wipe 4x4, right-->left | step |
| | | | | 138 | Checker wipe 5x8, left-->right | step |
| | | | | 139 | Checker wipe 5x8, right-->left | step |
| | | | | 140 | Checker wipe 9x8, left-->right | step |
| | | | | 141 | Checker wipe 9x8, right-->left | step |
| | | | | 142 | Checker wipe 9x16, left-->right | step |
| | | | | 143 | Checker wipe 9x16, right-->left | step |
| | | | | 144 | Checker wipe 10x32, left-->right | step |
| | | | | 145 | Checker wipe 10x32, right-->left | step |
| | | | | 146 | 2 diagonal curtains, bottom left-->center<-- top right | step |
| | | | | 147 | 2 diagonal curtains, top left-->center<-- bottom right | step |
| | | | | 148 | Grid wipe 8x8,bottom right-->top left | step |
| | | | | 149 | Grid wipe 8x8,bottom right-->top left,inverse | step |
| | | | | 150 | Grid wipe 8x8,top right-->bottom left | step |
| | | | | 151 | Grid wipe 8x8,top right-->bottom left,inverse | step |
| | | | | 152 | Grid wipe 16x16,bottom right-->top left | step |
| | | | | 153 | Grid wipe 16x16,bottom right-->top left,inverse | step |
| | | | | 154 | Grid wipe 16x16,top right-->bottom left | step |
| | | | | 155 | Grid wipe 16x16,top right-->bottom left,inverse | step |
| | | | | 156 | Grid wipe 32x32,bottom right-->top left | step |
| | | | | 157 | Grid wipe 32x32,bottom right-->top left,inverse | step |
| | | | | 158 | Grid wipe 32x32,top right-->bottom left | step |
| | | | | 159 | Grid wipe 32x32,top right-->bottom left,inverse | step |
| | | | | 160 | 4 sliding triangles | step |
| | | | | 161-169 | Reserved | |
| | | | | 170 | Rectangular ,outside-->in,sharp edge | step |
| | | | | 171 | Rectangular ,outside-->in,fuzzy edge 1 | step |
| | | | | 172 | Rectangular ,outside-->in,fuzzy edge 2 | step |
| | | | | 173 | Rectangular ,outside-->in,fuzzy edge 3 | step |
| | | | | 174 | Rectangular ,outside-->in,fuzzy edge 4 (maximum) | step |
| | | | | 175 | Rectangular ,inside-->out,sharp edge | step |
| | | | | 176 | Rectangular ,inside-->out,fuzzy edge 1 | step |
| | | | | 177 | Rectangular ,inside-->out,fuzzy edge 2 | step |
| | | | | 178 | Rectangular ,inside-->out,fuzzy edge 3 | step |
| | | | | 179 | Rectangular ,inside-->out,fuzzy edge 4 (maximum) | step |
| | | | | 180-255 | Reserved | step |
| 75 | 76 | 80 | 28 | | Digital Iris | |
| | | | | 0 | Open iris | step |
| | | | | 1-254 | From max. diameter to min. diameter | proportional |
| | | | | 255 | Closed iris | step |
| 76 | 77 | 81 | 29 | | Digital Iris fine | |
| | | | | 0-255 | Iris fine | proportional |

Appendix - DMX protocol

| Protocol ver./Channel | | | | DMX Value | Function | Type of control |
|-----------------------|-----------------------------------|------------|-----|-----------|---|-----------------|
| 3.8 | 4.6 | 5.4 | 6.2 | | | |
| 77 | 78 | 82 | 30 | | Digital Strobe | |
| | | | | 0 - 30 | Open light output | step |
| | | | | 31 - 80 | Digital Strobe-effect from slow to fast | proportional |
| | | | | 81 - 110 | Open light output | step |
| | | | | 111 - 140 | Digital random strobe-effect from slow to fast | proportional |
| | | | | 141 - 149 | Open light output | step |
| | | | | 150 - 154 | Iris displays current gobo from gobo layer 1 | step |
| | | | | 155 - 159 | Iris displays current gobo from gobo layer 2 | step |
| | | | | 160 - 189 | Reserved | |
| | | | | 190-194 | Banner displays current gobo from gobo layer 1 | step |
| | | | | 195-199 | Banner displays current gobo from gobo layer 2 | step |
| | | | | 200-244 | Reserved | |
| 245-255 | Digital strobe closed | step | | | | |
| 78 | 79 | 83 | 31 | | Banner left positioning | |
| | | | | 0-255 | Positioning from left to right (0-default) | proportional |
| 79 | 80 | 84 | 32 | | Banner left rotation | |
| | | | | 0-255 | Rotation +/- 45° (128-default) | proportional |
| 80 | 81 | 85 | 33 | | Banner right positioning | |
| | | | | 0-255 | Positioning from right to left (0-default) | proportional |
| 81 | 82 | 86 | 34 | | Banner right rotation | |
| | | | | 0-255 | Rotation +/- 45° (128-default) | proportional |
| 82 | 83 | 87 | 35 | | Banner top positioning | |
| | | | | 0-255 | Positioning from top to bottom (0-default) | proportional |
| 83 | 84 | 88 | 36 | | Banner top rotation | |
| | | | | 0-255 | Rotation +/- 45° (128-default) | proportional |
| 84 | 85 | 89 | 37 | | Banner bottom positioning | |
| | | | | 0-255 | Positioning from bottom to top (0-default) | proportional |
| 85 | 86 | 90 | 38 | | Banner bottom rotation | |
| | | | | 0-255 | Rotation +/- 45° (128-default) | proportional |
| 86 | 87 | 91 | 39 | | All Banners rotation | |
| | | | | 0-255 | Rotation +/- 45° (128-default) | proportional |
| - | - | 92 | 40 | | Global Effect 1 | |
| | | | | 0 | No effect | step |
| | | | | | <u>Picture merging -selection of width of overlapping edges:</u> | |
| | | | | 1 | Width of overlapping edges -10 % | P1, P2, P3 |
| | | | | 2 | Width of overlapping edges - 0 % | P1, P2, P3 |
| | | | | 3 | Width of overlapping edges - 15 % | P1, P2, P3 |
| | | | | 4 | Width of overlapping edges - 20 % | P1, P2, P3 |
| | | | | 5 | Width of overlapping edges - 25 % | P1, P2, P3 |
| | | | | 6 | Width of overlapping edges - 30 % | P1, P2, P3 |
| | | | | 7 | Width of overlapping edges - 35 % | P1, P2, P3 |
| | | | | 8-10 | Reserved | |
| | | | | | <u>Picture merging -selection of width of overlapping edges for pre-cut content mode:</u> | |
| | | | | 11 | Width of overlapping edges -10 % | P1, P2, P3 |
| | | | | 12 | Width of overlapping edges - 0 % | P1, P2, P3 |
| | | | | 13 | Width of overlapping edges - 15 % | P1, P2, P3 |
| | | | | 14 | Width of overlapping edges - 20 % | P1, P2, P3 |
| 15 | Width of overlapping edges - 25 % | P1, P2, P3 | | | | |
| 16 | Width of overlapping edges - 30 % | P1, P2, P3 | | | | |

Appendix - DMX protocol

| Protocol ver./Channel | | | | DMX Value | Function | Type of control |
|-----------------------|-----|-----|-----|-----------|--|-------------------|
| 3.8 | 4.6 | 5.4 | 6.2 | | | |
| | | | | 17 | Width of overlapping edges - 35 % <i>P1- field configuration, P2- segment selection, P3- segment edge</i> | P1, P2, P3 |
| | | | | 18-255 | Reserved | |
| - | - | 93 | 41 | | Global effect 1- Parameter 1 | |
| | | | | 0 | None <u>Image field configuration for Picture merging</u> | |
| | | | | 1-109 | Non-mirrored configurations | step |
| | | | | 110-127 | Reserved | |
| | | | | 128-163 | Horizontally mirrored configurations | step |
| | | | | 164-199 | Vertically mirrored configurations | step |
| | | | | 200-235 | Horizontally and vertically mirrored configurations | step |
| | | | | 236-255 | Reserved | |
| - | - | 94 | 42 | | Global effect 1- Parameter 2 | |
| | | | | 0-255 | Segment selection for Pixture merging | step |
| - | - | 95 | 43 | | Global effect 1- Parameter 3 | |
| | | | | 0-170 | Segment edge display for <u>Pixture merging</u> | step |
| | | | | 171-180 | <u>Showing aspect ratio of image projected on the wall</u> | step |
| | | | | 181-255 | Reserved | |
| | | | 44 | | Global Effect 2 | |
| | | | | 0 | None | P1, P2, P3 |
| | | | | 1 | Vertical inside corner mapping | P1, P2, P3 |
| | | | | 2 | Vertical outside corner mapping | P1, P2, P3 |
| | | | | 3 | Horizontal inside corner mapping | P1, P2, P3 |
| | | | | 4 | Horizontal outside corner mapping | P1, P2, P3 |
| | | | | 5 | Vertical convex cylinder mapping | P1, P2, P3 |
| | | | | 6 | Vertical concave cylinder mapping | P1, P2, P3 |
| | | | | 7 | Horizontal convex cylinder mapping | P1, P2, P3 |
| | | | | 8 | Horizontal concave cylinder mapping | P1, P2, P3 |
| | | | | 9 | Ortographic sphere mapping | P1, P2, P3 |
| | | | | 10 | Rectangle on circle (sphere) mapping * | P1, P2, P3 |
| | | | | 11 | Square on circle (sphere) mapping * | P1, P2, P3 |
| | | | | 12 | Rectangle on circle (sphere) mapping with picture merging | step |
| | | | | 13-19 | Reserved | |
| | | | | 20 | Picture merging - R/G/B gamma adjustment in blended edges <i>P 1- red, P 2 - green, P 3- blue</i> | step |
| | | | | 21-255 | Reserved | |
| - | - | - | 45 | | Global Effect 2 - Parameter 1 | |
| | | | | 0-255 | Function depends on selected Global Effect 2 | depends on effect |
| - | - | - | 46 | | Global Effect 2 - Parameter 2 | |
| | | | | 0-255 | Function depends on selected Global Effect 2 | depends on effect |
| - | - | - | 47 | | Global Effect 2 - Parameter 3 | |
| | | | | 0-255 | Function depends on selected Global Effect 2 | depends on effect |
| Gobo Layer 1 | | | | | | |
| 22 | 22 | 23 | 48 | | Dimmer | |
| | | | | 0-255 | Dimmer intensity from 0% to 100% (255-default) | proportional |
| 23 | 23 | 24 | 49 | | Gobo Folder selection | |
| | | | | 0-20 | Factory folders | step |
| | | | | 21-240 | User folders | step |
| | | | | 241-250 | Reserved | |
| | | | | 251 | Live input (grab. card)- see channel 24/25/50 | step |

Appendix - DMX protocol

| Protocol ver./Channel | | | | DMX Value | Function | Type of control |
|-----------------------|-----|-----|-----|-----------|---|-----------------|
| 3.8 | 4.6 | 5.4 | 6.2 | | | |
| | | | | 252 | Streaming from remote sources | step |
| | | | | 253-255 | Reserved | |
| 24 | 24 | 25 | 50 | | Gobo selection | |
| | | | | 0 | White | step |
| | | | | 1-255 | 255 Gobos (one by one) | step |
| | | | | | If Live input (251 DMX) is selected on channel 23/24/49: | |
| | | | | 0 | White screen | step |
| | | | | 1-20 | Video composite input-PAL system | step |
| | | | | 21-40 | SVIDEO input- PAL system | step |
| | | | | 21-60 | Video composite input-NTSC system | step |
| | | | | 61-80 | SVIDEO input- NTSC system | step |
| | | | | 81-100 | Video composite input-SECAM system | step |
| | | | | 101-120 | SVIDEO input- SECAM system | step |
| | | | | 121-255 | Reserved | |
| 25 | 25 | 26 | 51 | | In Frame High | |
| | | | | 0-255 | Defines the beginning of a media file segment as a percentage of the movie length (0-default) | proportional |
| 26 | 26 | 27 | 52 | | In Frame Low | |
| | | | | 0-255 | Defines the beginning of a media file segment as a percentage of the movie length (0-default) | proportional |
| 27 | 27 | 28 | 53 | | Out Frame High | |
| | | | | 0-255 | Defines the end of a media file segment as a percentage of the movie length (255-default) | proportional |
| 28 | 28 | 29 | 54 | | Out Frame Low | |
| | | | | 0-255 | Defines the beginning of a media file segment as a percentage of the movie length (255-default) | proportional |
| 29 | 29 | 30 | 55 | | Gobo control | |
| | | | | | <u>Copy mode</u> | |
| | | | | | <i>Video stream 1:</i> | |
| | | | | 0 | Play forward if dimmer (on layer 1) > 0, looping continuously | step |
| | | | | 1 | Play forward if dimmer (on layer 1) > 0, hold on last frame | step |
| | | | | 2 | Pause | step |
| | | | | 3 | Play forward in continuous loop | step |
| | | | | 4 | Play forward once and hold on the last frame | step |
| | | | | 5 | No function | |
| | | | | 6 | Scrub (Display) the selected In Frame | step |
| | | | | 7 | Scrub (Display) the selected Out Frame | step |
| | | | | 8-9 | Reserved | |
| | | | | | <i>Video stream 2 (the same functionality as for Video stream 1):</i> | |
| | | | | 10 | Play forward if dimmer (on layer 1) > 0, looping continuously | step |
| | | | | 11 | Play forward if dimmer (on layer 1) > 0, hold on last frame | step |
| | | | | 12 | Pause | step |
| | | | | 13 | Play forward in continuous loop | step |
| | | | | 14 | Play forward once and hold on the last frame | step |
| | | | | 15 | No function | |
| | | | | 16 | Scrub (Display) the selected In Frame | step |
| | | | | 17 | Scrub (Display) the selected Out Frame | step |
| | | | | 18-19 | Reserved | |
| | | | | | <u>Addition mode</u> | |
| | | | | | <i>Video stream 1:</i> | |

Appendix - DMX protocol

| Protocol ver./Channel | | | | DMX Value | Function | Type of control |
|-----------------------|---|------|-----|-----------|---|-----------------|
| 3.8 | 4.6 | 5.4 | 6.2 | | | |
| 29 | 29 | 30 | 55 | 20 | Play forward if dimmer (on layer 1) > 0, looping continuously | step |
| | | | | 21 | Play forward if dimmer (on layer 1) > 0, hold on last frame | step |
| | | | | 22 | Pause | step |
| | | | | 23 | Play forward in continuous loop | step |
| | | | | 24 | Play forward once and hold on the last frame | step |
| | | | | 25 | No function | |
| | | | | 26 | Scrub (Display) the selected In Frame | step |
| | | | | 27 | Scrub (Display) the selected Out Frame | step |
| | | | | 28-29 | Reserved | |
| | | | | | <i>Video stream 2:</i> | |
| | | | | 30-37 | <i>The same functionality as for Video stream 1</i> | step |
| | | | | 38-39 | Reserved | |
| | | | | | <u>Substraction mode</u> | |
| | | | | | <i>Video stream 1:</i> | |
| | | | | 40 | Play forward if dimmer (on layer 1) > 0, looping continuously | step |
| | | | | 41 | Play forward if dimmer (on layer 1) > 0, hold on last frame | step |
| | | | | 42 | Pause | step |
| | | | | 43 | Play forward in continuous loop | step |
| | | | | 44 | Play forward once and hold on the last frame | step |
| | | | | 45 | No function | |
| | | | | 46 | Scrub (Display) the selected In Frame | step |
| | | | | 47 | Scrub (Display) the selected Out Frame | step |
| | | | | 48-49 | Reserved | |
| | | | | | <i>Video stream 2:</i> | |
| | | | | 50-57 | <i>The same functionality as for Video stream 1</i> | step |
| | | | | 58-59 | Reserved | |
| | | | | | <u>Multiplication mode</u> | |
| | | | | | <i>Video stream 1:</i> | |
| | | | | 60 | Play forward if dimmer (on layer 1) > 0, looping continuously | step |
| | | | | 61 | Play forward if dimmer (on layer 1) > 0, hold on last frame | step |
| | | | | 62 | Pause | step |
| | | | | 63 | Play forward in continuous loop | step |
| | | | | 64 | Play forward once and hold on the last frame | step |
| | | | | 65 | No function | |
| | | | | 66 | Scrub (Display) the selected In Frame | step |
| | | | | 67 | Scrub (Display) the selected Out Frame | step |
| | | | | 68-69 | Reserved | |
| | | | | | <i>Video stream 2:</i> | |
| | | | | 70-77 | <i>The same functionality as for Video stream 1</i> | step |
| | | | | 78-79 | Reserved | |
| | <u>Minimum mode</u> | | | | | |
| | <i>Video stream 1:</i> | | | | | |
| 80 | Play forward if dimmer (on layer 1) > 0, looping continuously | step | | | | |
| 81 | Play forward if dimmer (on layer 1) > 0, hold on last frame | step | | | | |
| 82 | Pause | step | | | | |
| 83 | Play forward in continuous loop | step | | | | |
| 84 | Play forward once and hold on the last frame | step | | | | |
| 85 | No function | | | | | |
| 86 | Scrub (Display) the selected In Frame | step | | | | |
| 87 | Scrub (Display) the selected Out Frame | step | | | | |
| 88-89 | Reserved | | | | | |

Appendix - DMX protocol

| Protocol ver./Channel | | | | DMX Value | Function | Type of control |
|-----------------------|---|--------------|-----|-----------|---|-----------------|
| 3.8 | 4.6 | 5.4 | 6.2 | | | |
| 29 | 29 | 30 | 55 | | <i>Video stream 2:</i> | |
| | | | | 90-97 | <i>The same functionality as for Video stream 1</i> | |
| | | | | 98-99 | Reserved | |
| | | | | | <u>Maximum mode</u> | |
| | | | | | <i>Video stream 1:</i> | |
| | | | | 100 | Play forward if dimmer (on layer 1) > 0, looping continuously | step |
| | | | | 101 | Play forward if dimmer (on layer 1) > 0, hold on last frame | step |
| | | | | 102 | Pause | step |
| | | | | 103 | Play forward in continuous loop | step |
| | | | | 104 | Play forward once and hold on the last frame | step |
| | | | | 105 | No function | |
| | | | | 106 | Scrub (Display) the selected In Frame | step |
| | | | | 107 | Scrub (Display) the selected Out Frame | step |
| | | | | 108-109 | Reserved | |
| | | | | | <i>Video stream 2:</i> | |
| | <i>The same functionality as for Video stream 1</i> | step | | | | |
| | 118-255 | Reserved | | | | |
| 30 | 30 | 31 | 56 | | Playback Speed | |
| | | | | 0 | Normal Speed | step |
| | | | | 1-127 | Slow speeds from slowest ---> normal | proportional |
| | | | | 128 | Normal Speed | step |
| | | | | 129-255 | Faster than Normal ---> Fastest | proportional |
| 31 | 31 | 32 | 57 | | Gobo rotation and indexing | |
| | | | | 0-63 | Clockwise rotation from fast to slow | proportional |
| | | | | 64-127 | Indexing | proportional |
| | | | | 128 | No rotation-centre (default) | step |
| | | | | 129-192 | Indexing | proportional |
| 193-255 | Anticlockwise rotation from slow to fast | proportional | | | | |
| 32 | 32 | 33 | 58 | | Gobo fine indexing (rotation) | |
| | | | | 0-255 | Fine indexing (rotation) | proportional |
| 33 | 33 | 34 | 59 | | Gobo effect 1 Selection | |
| | | | | 0 | No effect | |
| | | | | 1 | Zoom sinus | P1-speed |
| | | | | 2 | Zoom bump in fade out | P1-speed |
| | | | | 3 | Zoom fade in bump out | P1-speed |
| | | | | 4 | Reserved | |
| | | | | 5 | Zoom in fade | P1-speed |
| | | | | 6 | Zoom out fade | P1-speed |
| | | | | 7 | Scale xy sinus | P1-speed |
| | | | | 8 | Reserved | |
| | | | | 9 | Reserved | |
| | | | | 10 | Reserved | |
| | | | | 11 | XY pos. circle counter-clockwise | P1-speed |
| | | | | 12 | XY pos. circle clockwise | P1-speed |
| | | | | 13 | XY pos. scroll up | P1-speed |
| | | | | 14 | XY pos. scroll down | P1-speed |
| | | | | 15 | XY pos. scroll left | P1-speed |
| | | | | 16 | XY pos. scroll right | P1-speed |
| | | | | 17 | Right-left diag. down scroll | P1-speed |
| 18 | Right-left diag. up scroll | P1-speed | | | | |

Appendix - DMX protocol

| Protocol ver./Channel | | | | DMX Value | Function | Type of control | | |
|-----------------------|------------------------------|-----|-----|-----------|------------------------------|-----------------|-----------|------|
| 3.8 | 4.6 | 5.4 | 6.2 | | | | | |
| 33 | 33 | 34 | 59 | 19 | Left-right diag. down scroll | P1-speed | | |
| | | | | 20 | Left-right diag. up scroll | P1-speed | | |
| | | | | 21 | X rotate | P1-speed | | |
| | | | | 22 | Y rotate | P1-speed | | |
| | | | | 23 | XY rotate | P1-speed | | |
| | | | | 24 | XY inv. rotate | P1-speed | | |
| | | | | 25 | X inv. y rotate | P1-speed | | |
| | | | | 26 | Tile xy | P1-amount | | |
| | | | | 27 | Tile xy | P1-speed | | |
| | | | | 28 | XYZ rot. cube | P1-speed | | |
| | | | | 29 | XYZ rot. sphere | P1-speed | | |
| | | | | 30 | X rot. cylinder | P1-speed | | |
| | | | | 31 | Y rot. cylinder | P1-speed | | |
| | | | | 32 | Reserved | | | |
| | | | | 33 | Kaleidoscope | none | | |
| | | | | 34 | Squeeze in | none | | |
| | | | | 35 | Squeeze out | none | | |
| | | | | 36 | Bend X | none | | |
| | | | | 37 | Bend Y | none | | |
| | | | | 38 | Tile frame | none | | |
| | | | | 39 | Frame | none | | |
| | | | | 40 | Plane Flip X | none | | |
| | | | | 41 | Plane Flip Y | none | | |
| | | | | 42 | Plane Flip XY | none | | |
| | | | | 43 | Plane mirror X top | none | | |
| | | | | 44 | Plane mirror X bottom | none | | |
| | | | | 45 | Plane mirror Y left | none | | |
| | | | | 46 | Plane mirror Y right | none | | |
| | | | | 47 | Plane mirror XY segment 1 | | | none |
| | | | | 48 | Plane mirror XY segment 2 | segment 1 | segment 2 | none |
| | | | | 49 | Plane mirror XY segment 3 | | | none |
| | | | | 50 | Plane mirror XY segment 4 | segment 4 | segment 3 | none |
| | | | | 51 | Plane tile 2x | | | none |
| 52 | Plane tile 3x | | | none | | | | |
| 53 | Plane tile 4x | | | none | | | | |
| 54 | Plane tile 5x | | | none | | | | |
| 55 | Plane cross tile 2x | | | none | | | | |
| 56 | Plane cross tile 2x inverse | | | none | | | | |
| 57 | Plane cross tile 3x | | | none | | | | |
| 58 | Plane cross tile 3x inverse | | | none | | | | |
| 59 | Plane cross tile 4x | | | none | | | | |
| 60 | Plane cross tile 4x inverse | | | none | | | | |
| 61 | Plane cross tile 5x | | | none | | | | |
| 62 | Plane cross tile 5x inverse | | | none | | | | |
| 63 | Plane cross tiler 5x | | | none | | | | |
| 64 | Plane cross tiler 5x inverse | | | none | | | | |
| 65 | Plane bar | | | none | | | | |
| 66 | Plane bar inverse | | | none | | | | |
| 67 | Plane bar left-right | | | none | | | | |
| 68 | Plane bar top-bottom | | | none | | | | |
| 69 | Reserved | | | | | | | |

Appendix - DMX protocol

| Protocol ver./Channel | | | | DMX Value | Function | Type of control | | | |
|--|--|------------|-------|--|---|-------------------|--|--|--|
| 3.8 | 4.6 | 5.4 | 6.2 | | | | | | |
| 33 | 33 | 34 | 59 | 70 | Reserved | | | | |
| | | | | 71 | Gobo disc | none | | | |
| | | | | 72 | Gobo disc Flip X | none | | | |
| | | | | 73 | Gobo disc Flip Y | none | | | |
| | | | | 74 | Gobo disc Flip XY | none | | | |
| | | | | 75 | Gobo disc mirror X | none | | | |
| | | | | 76 | Gobo disc mirror Y | none | | | |
| | | | | 77 | Gobo disc mirror XY | none | | | |
| | | | | 78-79 | Reserved | | | | |
| | | | | 80 | Plane mirror X top inverse | none | | | |
| | | | | 81 | Plane mirror X bottom inverse | none | | | |
| | | | | 82 | Plane mirror Y left inverse | none | | | |
| | | | | 83 | Plane mirror Y right inverse | none | | | |
| | | | | 84 | Plane mirror XY inverse | none | | | |
| | | | | 85 | Plane mirror X-inverse,Y | none | | | |
| | | | | 86 | Plane mirror X,Y-inverse | none | | | |
| | | | | 87-99 | Reserved | | | | |
| | | | | 90 | Circular effect (Fish eye) <i>P1-character, P2-X ratio, P3-Y ratio</i> | P1, P2, P3 | | | |
| | | | | 91 | Iris on layer <i>P1-size, P2-iris type, P3-texture mode</i> | P1, P2, P3 | | | |
| | | | | 92-99 | Reserved | | | | |
| | | | | kaleidoscope - mode and mosaic segment selection: | | | | | |
| | | | | 100 | Square -static mode | P1, P2, P3 | | | |
| | | | | 101 | Square -dynamic mode | P1, P2, P3 | | | |
| | | | | 102 | Right triangular - static mode | P1, P2, P3 | | | |
| | | | | 103 | Right triangular - dynamic mode | P1, P2, P3 | | | |
| | | | | 104 | Isosceles triangular - static mode | P1, P2, P3 | | | |
| | | | | 105 | Isosceles triangular - dynamic mode | P1, P2, P3 | | | |
| | | | | 106 | Triangular 1 - static mode | P1, P2, P3 | | | |
| | | | | 107 | Triangular 1 -dynamic mode | P1, P2, P3 | | | |
| | | | | 108 | Triangular 2 -static mode | P1, P2, P3 | | | |
| | | | | 109 | Triangular 2 - dynamic mode | P1, P2, P3 | | | |
| | | | | <i>Stat. mode:P1-density, P2-content (coarse), P3-content (fine)</i> | | | | | |
| | | | | <i>Dyn. mode:P1-density, P2-size and pulsation, P3-movement</i> | | | | | |
| 110 | Centered kaleidoscope (rough)-static mode | P1, P2, P3 | | | | | | | |
| 111 | Centered kaleidoscope (rough)-dynamic mode | P1, P2, P3 | | | | | | | |
| 112 | Centered kaleidoscope (fine)-static mode | P1, P2, P3 | | | | | | | |
| 113 | Centered kaleidoscope (fine)-dynamic mode | P1, P2, P3 | | | | | | | |
| <i>Stat. mode:P1-density, P2-content (coarse), P3-content (fine)</i> | | | | | | | | | |
| <i>Dyn. mode:P1-density, P2-size and pulsation, P3-movement</i> | | | | | | | | | |
| 114-149 | Reserved | | | | | | | | |
| 150 | Layer keystoneing <i>P1-skewing in X, P2-skewing in Y, P3-squeezing/stretching in Y</i> | P1,P2,P3 | | | | | | | |
| 151-255 | Reserved | | | | | | | | |
| 34 | 34 | 35 | 60 | Gobo effect 1-Parameter 1 | | | | | |
| | | | 0-255 | Effect control | | depends on effect | | | |
| - | - | - | 61 | Gobo effect 1-Parameter 2 | | | | | |
| | | | 0-255 | Effect control | | depends on effect | | | |
| - | - | - | 62 | Gobo effect 1- Parameter 3 | | | | | |

Appendix - DMX protocol

| Protocol ver./Channel | | | | DMX Value | Function | Type of control |
|-----------------------|------------------|-----------|-----|-----------|--|-------------------|
| 3.8 | 4.6 | 5.4 | 6.2 | | | |
| | | | | 0-255 | Effect control | depends on effect |
| 35 | 35 | 36 | 63 | | Gobo effect 2 Selection | |
| | | | | 0 | No effect | |
| | | | | 1 | Colour to black and white | P1-amount |
| | | | | 2 | Colour to black and white inverse | P1-amount |
| | | | | 3 | Black and white to black and white inverse | P1-amount |
| | | | | 4 | Inversion | P1-amount |
| | | | | 5 | Black Mask | P1-amount |
| | | | | 6 | Black Mask inverse | P1-amount |
| | | | | 7 | Contrast | P1-amount |
| | | | | 8 | Brightness | P1-amount |
| | | | | 9 | RGB to GBR | P1-amount |
| | | | | 10 | RGB to BRG | P1-amount |
| | | | | 11 | RGB to RBG | P1-amount |
| | | | | 12 | Black and white to black and white inverse timed | P1-speed |
| | | | | 13 | Colour to black and white timed | P1-speed |
| | | | | 14 | Colour to inverse timed | P1-speed |
| | | | | 15 | Cycle | P1-speed |
| | | | | 16 | Cycle inverse | P1-speed |
| | | | | 17 | Reserved | |
| | | | | 18 | Reserved | |
| | | | | 19 | Colour Key | P1-amount |
| | | | | 20 | Colour Key inverse | P1-amount |
| | | | | 21 | Key Black | P1-amount |
| | | | | 22 | Key Black inverse | P1-amount |
| | | | | 23 | Key White | P1-amount |
| | | | | 24 | Key White inverse | P1-amount |
| | | | | 25 | White flash | P1-amount |
| | | | | 26 | Black flash | P1-amount |
| | | | | 27 | Alpha flash | P1-amount |
| | | | | 28 | Invert flash | P1-amount |
| | | | | 29 | BW Flash | P1-amount |
| | | | | 30 | Black and white to black and white inverse Flash | P1-amount |
| | | | | 31 | Gradient Wipe X | P1-amount |
| 32 | Gradient Wipe Y | P1-amount | | | | |
| 33-39 | Reserved | | | | | |
| 40 | Gaussian filter | P1-amount | | | | |
| 41 | Mean filter | P1-amount | | | | |
| 42 | Laplacian filter | P1-amount | | | | |
| 43 | Emboss filter | P1-amount | | | | |
| 44 | Sharpness filter | P1-amount | | | | |
| 45-49 | Reserved | | | | | |
| | | | | | RGB effects: | |
| | | | | 50 | RGB subtract All Pixels | P1, P2, P3 |
| | | | | 51 | RGB add All Pixels | P1, P2, P3 |
| | | | | 52 | RGB add non-black Pixels | P1, P2, P3 |
| | | | | 53 | RGB subtract/add All Pixels | P1, P2, P3 |
| | | | | 54 | Swap RGB to RBG | P1, P2, P3 |
| | | | | 55 | Swap RGB to GRB | P1, P2, P3 |
| | | | | 56 | Swap RGB to GBR | P1, P2, P3 |

Appendix - DMX protocol

| Protocol ver./Channel | | | | DMX Value | Function | Type of control |
|-----------------------|-----|-----|-----|-----------|--|-------------------|
| 3.8 | 4.6 | 5.4 | 6.2 | | | |
| | | | | 57 | Swap RGB to BRG | P1, P2, P3 |
| | | | | 58 | Swap RGB to BGR | P1, P2, P3 |
| | | | | 59 | RGB invert | P1, P2, P3 |
| | | | | 60 | Invert and swap RGB to BRG | P1, P2, P3 |
| | | | | 61 | Invert and swap RGB to GBR | P1, P2, P3 |
| | | | | 62 | Colour to Alpha | P1, P2, P3 |
| | | | | 63 | Colour to Alpha inverted | P1, P2, P3 |
| | | | | 64-67 | Reserved | P1, P2, P3 |
| | | | | 68 | RGB scale <i>P1-red, P2-green, P3-blue</i> | P1, P2, P3 |
| | | | | 69 | Brightness scale <i>P1, P2 - inclination of conversion line</i> | P1, P2 |
| | | | | 70-149 | Reserved | |
| | | | | 150 | Layer keystoneing <i>P1-squeezing/stretching in X, P2/P3-compressing & expanding in X/Y</i> | P1,P2,P3 |
| | | | | 151-199 | Reserved | |
| | | | | 200 | Picture merging - R/G/B gamma adjustment in blended edges <i>P 1- red, P 2 - green, P 3- blue</i> | P1, P2,P3 |
| | | | | 201-255 | Reserved | |
| 36 | 36 | 37 | 64 | | Gobo effect 2 -Parameter 1 | |
| | | | | 0-255 | Effect control | depends on effect |
| 37 | 37 | 38 | 65 | | Gobo effect 2 -Parameter 2 | |
| | | | | 0-255 | Effect control | depends on effect |
| 38 | 38 | 39 | 66 | | Gobo effect 2 -Parameter 3 | |
| | | | | 0-255 | Effect control | depends on effect |
| 39 | 39 | 40 | 67 | | Gobo Position X coarse | |
| | | | | 0-127 | Movement forward | proportional |
| | | | | 128 | Centre (128-default) | step |
| | | | | 129-255 | Movement backward | proportional |
| 40 | 40 | 41 | 68 | | Gobo position X fine | |
| | | | | 0-255 | Position X fine | proportional |
| 41 | 41 | 42 | 69 | | Gobo position Y coarse | |
| | | | | 0-127 | Movement down | proportional |
| | | | | 128 | Centre (128-default) | step |
| | | | | 129-255 | Movement up | proportional |
| 42 | 42 | 43 | 70 | | Gobo position Y fine | |
| | | | | 0-255 | Position Y fine | proportional |
| 43 | 43 | 44 | 71 | | Gobo zoom X coarse | |
| | | | | 0-127 | Narrowing | proportional |
| | | | | 128 | Centre (128-default) | step |
| | | | | 129-255 | Widening | proportional |
| 44 | 44 | 45 | 72 | | Gobo zoom X fine | |
| | | | | 0-255 | Zoom X fine | proportional |
| 45 | 45 | 46 | 73 | | Gobo zoom Y coarse | |
| | | | | 0-127 | Narrowing | proportional |
| | | | | 128 | Centre (128-default) | step |
| | | | | 129-255 | Widening | proportional |
| 46 | 46 | 47 | 74 | | Gobo zoom Y fine | |
| | | | | 0-255 | Zoom Y fine | proportional |
| - | - | 48 | 75 | | Synchronization to ID | |

Appendix - DMX protocol

| Protocol ver./Channel | | | | DMX Value | Function | Type of control |
|-----------------------|-----|-----|-----|-----------|---|-----------------|
| 3.8 | 4.6 | 5.4 | 6.2 | | | |
| | | | | 0 | No function | step |
| | | | | 1-255 | Synchronization to fixture ID | proportional |
| Gobo Layer 2 | | | | | | |
| 47 | 47 | 49 | 76 | | Dimmer | |
| | | | | 0-255 | Dimmer intensity from 0% to 100% (255-default) | proportional |
| 48 | 48 | 50 | 77 | | Gobo Folder selection | |
| | | | | 0-20 | Factory folders | step |
| | | | | 21-240 | User folders | step |
| | | | | 241-250 | Reserved | |
| | | | | 251 | Live input (grab. card)- see channel 49/51/78 | step |
| | | | | 252 | Streaming from remote sources | step |
| | | | | 253-255 | Reserved | |
| 49 | 49 | 51 | 78 | | Gobo selection | |
| | | | | 0 | White | step |
| | | | | 1-255 | 255 Gobos (one by one) | step |
| | | | | | <i>If Live input (251 DMX) is selected on channel 48/50/77:</i> | |
| | | | | 0 | White screen | step |
| | | | | 1-20 | Video composite input-PAL system | step |
| 49 | 49 | 51 | 78 | 21-40 | SVIDEO input- PAL system | step |
| | | | | 21-60 | Video composite input-NTSC system | step |
| | | | | 61-80 | SVIDEO input- NTSC system | step |
| | | | | 81-100 | Video composite input-SECAM system | step |
| | | | | 101-120 | SVIDEO input- SECAM system | step |
| | | | | 121-255 | Reserved | |
| 50 | 50 | 52 | 79 | | In Frame High | |
| | | | | 0-255 | Defines the beginning of a media file segment as a percentage of the movie length (0-default) | proportional |
| 51 | 51 | 53 | 80 | | In Frame Low | |
| | | | | 0-255 | Defines the beginning of a media file segment as a percentage of the movie length (0-default) | proportional |
| 52 | 52 | 54 | 81 | | Out Frame High | |
| | | | | 0-255 | Defines the end of a media file segment as a percentage of the movie length (255-default) | proportional |
| 53 | 53 | 55 | 82 | | Out Frame Low | |
| | | | | 0-255 | Defines the beginning of a media file segment as a percentage of the movie length (255-default) | proportional |
| 54 | 54 | 56 | 83 | | Gobo control | |
| | | | | | <u>Copy mode</u> | |
| | | | | | <i>Video stream 1:</i> | |
| | | | | 0 | Play forward if dimmer (on layer 1) > 0, looping continuously | step |
| | | | | 1 | Play forward if dimmer (on layer 1) > 0, hold on last frame | step |
| | | | | 2 | Pause | step |
| | | | | 3 | Play forward in continuous loop | step |
| | | | | 4 | Play forward once and hold on the last frame | step |
| | | | | 5 | No function | |
| | | | | 6 | Scrub (Display) the selected In Frame | step |
| | | | | 7 | Scrub (Display) the selected Out Frame | step |
| | | | | 8-9 | Reserved | |
| | | | | | <i>Video stream 2 (the same functionality as for Video stream 1):</i> | |
| | | | | 10 | Play forward if dimmer (on layer 1) > 0, looping continuously | step |

Appendix - DMX protocol

| Protocol ver./Channel | | | | DMX Value | Function | Type of control |
|-----------------------|---|------|-----|-----------|---|-----------------|
| 3.8 | 4.6 | 5.4 | 6.2 | | | |
| 54 | 54 | 56 | 83 | 11 | Play forward if dimmer (on layer 1) > 0, hold on last frame | step |
| | | | | 12 | Pause | step |
| | | | | 13 | Play forward in continuous loop | step |
| | | | | 14 | Play forward once and hold on the last frame | step |
| | | | | 15 | No function | |
| | | | | 16 | Scrub (Display) the selected In Frame | step |
| | | | | 17 | Scrub (Display) the selected Out Frame | step |
| | | | | 18-19 | Reserved | |
| | | | | | <u>Addition mode</u> | |
| | | | | | <i>Video stream 1:</i> | |
| | | | | 20 | Play forward if dimmer (on layer 1) > 0, looping continuously | step |
| | | | | 21 | Play forward if dimmer (on layer 1) > 0, hold on last frame | step |
| | | | | 22 | Pause | step |
| | | | | 23 | Play forward in continuous loop | step |
| | | | | 24 | Play forward once and hold on the last frame | step |
| | | | | 25 | No function | |
| | | | | 26 | Scrub (Display) the selected In Frame | step |
| | | | | 27 | Scrub (Display) the selected Out Frame | step |
| | | | | 28-29 | Reserved | |
| | | | | | <i>Video stream 2:</i> | |
| | | | | 30-37 | <i>The same functionality as for Video stream 1</i> | step |
| | | | | 38-39 | Reserved | |
| | | | | | <u>Substraction mode</u> | |
| | | | | | <i>Video stream 1:</i> | |
| | | | | 40 | Play forward if dimmer (on layer 1) > 0, looping continuously | step |
| | | | | 41 | Play forward if dimmer (on layer 1) > 0, hold on last frame | step |
| | | | | 42 | Pause | step |
| | | | | 43 | Play forward in continuous loop | step |
| | | | | 44 | Play forward once and hold on the last frame | step |
| | | | | 45 | No function | |
| | | | | 46 | Scrub (Display) the selected In Frame | step |
| | | | | 47 | Scrub (Display) the selected Out Frame | step |
| | | | | 48-49 | Reserved | |
| | | | | | <i>Video stream 2:</i> | |
| | | | | 50-57 | <i>The same functionality as for Video stream 1</i> | step |
| | | | | 58-59 | Reserved | |
| | | | | | <u>Multiplication mode</u> | |
| | | | | | <i>Video stream 1:</i> | |
| | | | | 60 | Play forward if dimmer (on layer 1) > 0, looping continuously | step |
| | | | | 61 | Play forward if dimmer (on layer 1) > 0, hold on last frame | step |
| | | | | 62 | Pause | step |
| | | | | 63 | Play forward in continuous loop | step |
| | | | | 64 | Play forward once and hold on the last frame | step |
| | | | | 65 | No function | |
| | | | | 66 | Scrub (Display) the selected In Frame | step |
| | | | | 67 | Scrub (Display) the selected Out Frame | step |
| | | | | 68-69 | Reserved | |
| | <i>Video stream 2:</i> | | | | | |
| 70-77 | <i>The same functionality as for Video stream 1</i> | step | | | | |
| 78-79 | Reserved | | | | | |
| | <u>Minimum mode</u> | | | | | |

Appendix - DMX protocol

| Protocol ver./Channel | | | | DMX Value | Function | Type of control |
|-----------------------|-----|-----|-----|-----------|---|-----------------|
| 3.8 | 4.6 | 5.4 | 6.2 | | | |
| | | | | | <i>Video stream 1:</i> | |
| | | | | 80 | Play forward if dimmer (on layer 1) > 0, looping continuously | step |
| | | | | 81 | Play forward if dimmer (on layer 1) > 0, hold on last frame | step |
| | | | | 82 | Pause | step |
| | | | | 83 | Play forward in continuous loop | step |
| | | | | 84 | Play forward once and hold on the last frame | step |
| | | | | 85 | No function | |
| | | | | 86 | Scrub (Display) the selected In Frame | step |
| | | | | 87 | Scrub (Display) the selected Out Frame | step |
| | | | | 88-89 | Reserved | |
| | | | | | <i>Video stream 2:</i> | |
| | | | | 90-97 | <i>The same functionality as for Video stream 1</i> | |
| | | | | 98-99 | Reserved | |
| | | | | | <u>Maximum mode</u> | |
| | | | | | <i>Video stream 1:</i> | |
| | | | | 100 | Play forward if dimmer (on layer 1) > 0, looping continuously | step |
| | | | | 101 | Play forward if dimmer (on layer 1) > 0, hold on last frame | step |
| | | | | 102 | Pause | step |
| | | | | 103 | Play forward in continuous loop | step |
| | | | | 104 | Play forward once and hold on the last frame | step |
| | | | | 105 | No function | |
| | | | | 106 | Scrub (Display) the selected In Frame | step |
| | | | | 107 | Scrub (Display) the selected Out Frame | step |
| | | | | 108-109 | Reserved | |
| | | | | | <i>Video stream 2:</i> | |
| | | | | 110-117 | <i>The same functionality as for Video stream 1</i> | step |
| | | | | 118-255 | Reserved | |
| | | | | 55 | 55 | 57 |
| | | | | 0 | Normal Speed | step |
| | | | | 1-127 | Slow speeds from slowest ---> normal | proportional |
| | | | | 128 | Normal Speed | step |
| | | | | 129-255 | Faster than Normal ---> Fastest | proportional |
| 56 | 56 | 58 | 85 | | Gobo rotation and indexing | |
| | | | | 0-63 | Clockwise rotation from fast to slow | proportional |
| | | | | 64-127 | Indexing | proportional |
| | | | | 128 | No rotation-centre (default) | step |
| | | | | 129-192 | Indexing | proportional |
| | | | | 193-255 | Anticlockwise rotation from slow to fast | proportional |
| 57 | 57 | 59 | 86 | | Gobo fine indexing (rotation) | |
| | | | | 0-255 | Fine indexing (rotation) | proportional |
| 58 | 58 | 60 | 87 | | Gobo effect 1 Selection | |
| | | | | 0 | No effect | |
| | | | | 1 | Zoom sinus | P1-speed |
| | | | | 2 | Zoom bump in fade out | P1-speed |
| | | | | 3 | Zoom fade in bump out | P1-speed |
| | | | | 4 | Reserved | |
| | | | | 5 | Zoom in fade | P1-speed |
| | | | | 6 | Zoom out fade | P1-speed |
| | | | | 7 | Scale xy sinus | P1-speed |
| | | | | 8 | Reserved | |

Appendix - DMX protocol

| Protocol ver./Channel | | | | DMX Value | Function | Type of control | |
|-----------------------|-----|-----|-----|-----------|----------------------------------|---------------------|------|
| 3.8 | 4.6 | 5.4 | 6.2 | | | | |
| | | | | 9 | Reserved | | |
| | | | | 10 | Reserved | | |
| | | | | 11 | XY pos. circle counter-clockwise | P1-speed | |
| | | | | 12 | XY pos. circle clockwise | P1-speed | |
| | | | | 13 | XY pos. scroll up | P1-speed | |
| | | | | 14 | XY pos. scroll down | P1-speed | |
| | | | | 15 | XY pos. scroll left | P1-speed | |
| | | | | 16 | XY pos. scroll right | P1-speed | |
| | | | | 17 | Right-left diag. down scroll | P1-speed | |
| | | | | 18 | Right-left diag. up scroll | P1-speed | |
| | | | | 19 | Left-right diag. down scroll | P1-speed | |
| | | | | 20 | Left-right diag. up scroll | P1-speed | |
| | | | | 21 | X rotate | P1-speed | |
| | | | | 22 | Y rotate | P1-speed | |
| | | | | 23 | XY rotate | P1-speed | |
| | | | | 24 | XY inv. rotate | P1-speed | |
| | | | | 25 | X inv. y rotate | P1-speed | |
| | | | | 26 | Tile xy | P1-amount | |
| | | | | 27 | Tile xy | P1-speed | |
| | | | | 28 | XYZ rot. cube | P1-speed | |
| | | | | 29 | XYZ rot. sphere | P1-speed | |
| | | | | 30 | X rot. cylinder | P1-speed | |
| | | | | 31 | Y rot. cylinder | P1-speed | |
| | | | | 32 | Reserved | | |
| | | | | 33 | Kaleidoscope | none | |
| | | | | 34 | Squeeze in | none | |
| | | | | 35 | Squeeze out | none | |
| | | | | 36 | Bend X | none | |
| | | | | 37 | Bend Y | none | |
| | | | | 38 | Tile frame | none | |
| | | | | 39 | Frame | none | |
| | | | | 40 | Plane Flip X | none | |
| | | | | 41 | Plane Flip Y | none | |
| | | | | 42 | Plane Flip XY | none | |
| | | | | 43 | Plane mirror X top | none | |
| | | | | 44 | Plane mirror X bottom | none | |
| | | | | 45 | Plane mirror Y left | none | |
| | | | | 46 | Plane mirror Y right | none | |
| | | | | 47 | Plane mirror XY segment 1 | none | |
| | | | | 48 | Plane mirror XY segment 2 | segment 1 segment 2 | none |
| | | | | 49 | Plane mirror XY segment 3 | | none |
| | | | | 50 | Plane mirror XY segment 4 | segment 4 segment 3 | none |
| | | | | 51 | Plane tile 2x | none | |
| | | | | 52 | Plane tile 3x | none | |
| | | | | 53 | Plane tile 4x | none | |
| | | | | 54 | Plane tile 5x | none | |
| | | | | 55 | Plane cross tile 2x | none | |
| | | | | 56 | Plane cross tile 2x inverse | none | |
| 58 | 58 | 60 | 87 | 57 | Plane cross tile 3x | none | |
| | | | | 58 | Plane cross tile 3x inverse | none | |
| | | | | 59 | Plane cross tile 4x | none | |

Appendix - DMX protocol

| Protocol ver./Channel | | | | DMX Value | Function | Type of control |
|-----------------------|-----|-----|-----|-----------|--|-----------------|
| 3.8 | 4.6 | 5.4 | 6.2 | | | |
| | | | | 60 | Plane cross tile 4x inverse | none |
| | | | | 61 | Plane cross tile 5x | none |
| | | | | 62 | Plane cross tile 5x inverse | none |
| | | | | 63 | Plane cross tiler 5x | none |
| | | | | 64 | Plane cross tiler 5x inverse | none |
| | | | | 65 | Plane bar | none |
| | | | | 66 | Plane bar inverse | none |
| | | | | 67 | Plane bar left-right | none |
| | | | | 68 | Plane bar top-bottom | none |
| | | | | 69 | Reserved | |
| | | | | 70 | Reserved | |
| | | | | 71 | Gobo disc | none |
| | | | | 72 | Gobo disc Flip X | none |
| | | | | 73 | Gobo disc Flip Y | none |
| | | | | 74 | Gobo disc Flip XY | none |
| | | | | 75 | Gobo disc mirror X | none |
| | | | | 76 | Gobo disc mirror Y | none |
| | | | | 77 | Gobo disc mirror XY | none |
| | | | | 78-79 | Reserved | |
| | | | | 80 | Plane mirror X top inverse | none |
| | | | | 81 | Plane mirror X bottom inverse | none |
| | | | | 82 | Plane mirror Y left inverse | none |
| | | | | 83 | Plane mirror Y right inverse | none |
| | | | | 84 | Plane mirror XY inverse | none |
| | | | | 85 | Plane mirror X-inverse,Y | none |
| | | | | 86 | Plane mirror X,Y-inverse | none |
| | | | | 87-89 | Reserved | |
| | | | | 90 | Circular effect (Fish eye) | P1, P2, P3 |
| | | | | | <i>P1-character, P2-X ratio, P3-Y ratio</i> | |
| | | | | 91 | Iris on layer | P1, P2, P3 |
| | | | | | <i>P1-size, P2-iris type, P3-texture mode</i> | |
| | | | | 92-99 | Reserved | |
| | | | | | <i>kaleidoscope - mode and mosaic segment selection:</i> | |
| | | | | 100 | Square -static mode | P1, P2, P3 |
| | | | | 101 | Square -dynamic mode | P1, P2, P3 |
| | | | | 102 | Right triangular - static mode | P1, P2, P3 |
| | | | | 103 | Right triangular - dynamic mode | P1, P2, P3 |
| | | | | 104 | Isosceles triangular - static mode | P1, P2, P3 |
| | | | | 105 | Isosceles triangular - dynamic mode | P1, P2, P3 |
| | | | | 106 | Triangular 1 - static mode | P1, P2, P3 |
| | | | | 107 | Triangular 1 -dynamic mode | P1, P2, P3 |
| | | | | 108 | Triangular 2 -static mode | P1, P2, P3 |
| | | | | 109 | Triangular 2 - dynamic mode | P1, P2, P3 |
| | | | | 110 | Centered kaleidoscope (rough)-static mode | P1, P2, P3 |
| | | | | 111 | Centered kaleidoscope (rough)-dynamic mode | P1, P2, P3 |
| | | | | 112 | Centered kaleidoscope (fine)-static mode | P1, P2, P3 |
| | | | | 113 | Centered kaleidoscope (fine)-dynamic mode | P1, P2, P3 |
| | | | | | <i>Stat. mode:P1-density, P2-content (coarse), P3-content (fine)</i> | |
| | | | | | <i>Dyn. mode:P1-density, P2-size and pulsation, P3-movement</i> | |
| | | | | 114-149 | Reserved | |
| | | | | 150 | Layer keystoneing | P1,P2,P3 |

Appendix - DMX protocol

| Protocol ver./Channel | | | | DMX Value | Function | Type of control |
|-----------------------|------------------|-----------|-----|-----------|---|-----------------|
| 3.8 | 4.6 | 5.4 | 6.2 | | | |
| | | | | 151-255 | <i>P1-skewing in X, P2-skewing in Y, P3-squeezing/stretching in Y</i> Reserved | |
| 59 | 59 | 61 | 88 | 0-255 | Gobo effect 1- Parameter 1 Control of amount/speed | proportional |
| - | - | - | 89 | 0-255 | Gobo effect 1- Parameter 2 Control of amount/speed | proportional |
| - | - | - | 90 | 0-255 | Gobo effect 1- Parameter 3 Control of amount/speed | proportional |
| 60 | 60 | 62 | 91 | | Gobo effect 2 Selection | |
| | | | | 0 | No effect | |
| | | | | 1 | Colour to black and white | P1-amount |
| | | | | 2 | Colour to black and white inverse | P1-amount |
| | | | | 3 | Black and white to black and white inverse | P1-amount |
| | | | | 4 | Inversion | P1-amount |
| | | | | 5 | Black Mask | P1-amount |
| | | | | 6 | Black Mask inverse | P1-amount |
| | | | | 7 | Contrast | P1-amount |
| | | | | 8 | Brightness | P1-amount |
| | | | | 9 | RGB to GBR | P1-amount |
| | | | | 10 | RGB to BRG | P1-amount |
| | | | | 11 | RGB to RBG | P1-amount |
| | | | | 12 | Black and white to black and white inverse timed | P1-speed |
| | | | | 13 | Colour to black and white timed | P1-speed |
| | | | | 14 | Colour to inverse timed | P1-speed |
| | | | | 15 | Cycle | P1-speed |
| | | | | 16 | Cycle inverse | P1-speed |
| | | | | 17 | Reserved | |
| | | | | 18 | Reserved | |
| | | | | 19 | Colour Key | P1-amount |
| | | | | 20 | Colour Key inverse | P1-amount |
| | | | | 21 | Key Black | P1-amount |
| | | | | 22 | Key Black inverse | P1-amount |
| | | | | 23 | Key White | P1-amount |
| | | | | 24 | Key White inverse | P1-amount |
| | | | | 25 | White flash | P1-amount |
| | | | | 26 | Black flash | P1-amount |
| | | | | 27 | Alpha flash | P1-amount |
| | | | | 28 | Invert flash | P1-amount |
| | | | | 29 | BW Flash | P1-amount |
| | | | | 30 | Black and white to black and white inverse Flash | P1-amount |
| | | | | 31 | Gradient Wipe X | P1-amount |
| 32 | Gradient Wipe Y | P1-amount | | | | |
| 33-39 | Reserved | | | | | |
| 40 | Gaussian filter | P1-amount | | | | |
| 41 | Mean filter | P1-amount | | | | |
| 42 | Laplacian filter | P1-amount | | | | |
| 43 | Emboss filter | P1-amount | | | | |
| 44 | Sharpness filter | P1-amount | | | | |
| 45-49 | Reserved | | | | | |
| RGB effects: | | | | | | |

Appendix - DMX protocol

| Protocol ver./Channel | | | | DMX Value | Function | Type of control |
|-----------------------|---|-----------|---------|-------------------|--|-------------------|
| 3.8 | 4.6 | 5.4 | 6.2 | | | |
| | | | | 50 | RGB subtract All Pixels | P1, P2, P3 |
| | | | | 51 | RGB add All Pixels | P1, P2, P3 |
| | | | | 52 | RGB add non-black Pixels | P1, P2, P3 |
| | | | | 53 | RGB subtract/add All Pixels | P1, P2, P3 |
| | | | | 54 | Swap RGB to RBG | P1, P2, P3 |
| | | | | 55 | Swap RGB to GRB | P1, P2, P3 |
| | | | | 56 | Swap RGB to GBR | P1, P2, P3 |
| | | | | 57 | Swap RGB to BRG | P1, P2, P3 |
| | | | | 58 | Swap RGB to BGR | P1, P2, P3 |
| | | | | 59 | RGB invert | P1, P2, P3 |
| | | | | 60 | Invert and swap RGB to BRG | P1, P2, P3 |
| | | | | 61 | Invert and swap RGB to GBR | P1, P2, P3 |
| | | | | 62 | Colour to Alpha | P1, P2, P3 |
| | | | | 63 | Colour to Alpha inverted | P1, P2, P3 |
| | | | | 64-67 | Reserved | P1, P2, P3 |
| | | | | 68 | RGB scale | P1, P2, P3 |
| | | | | | <i>P1-red, P2-green, P3-blue</i> | |
| | | | | 69 | Brightness scale | P1, P2 |
| | | | | | <i>P1, P2 - inclination of conversion line</i> | |
| | | | | | | |
| 150 | Layer keystoneing | P1,P2,P3 | | | | |
| | <i>P1-squeezing/stretching in X, P2/P3-compressing & expanding in X/Y</i> | | | | | |
| 151-199 | Reserved | | | | | |
| 200 | Picture merging - R/G/B gamma adjustment in blended edges | P1, P2,P3 | | | | |
| | <i>P 1- red, P 2 - green, P 3- blue</i> | | | | | |
| 201-255 | Reserved | | | | | |
| 61 | 61 | 63 | 92 | | Gobo effect 2 -Parameter 1 | |
| | | | | 0-255 | Effect control | depends on effect |
| 62 | 62 | 64 | 93 | | Gobo effect 2 -Parameter 2 | |
| | | | | 0-255 | Effect control | depends on effect |
| 63 | 63 | 65 | 94 | | Gobo effect 2 -Parameter 3 | |
| | | | | 0-255 | Effect control | depends on effect |
| 64 | 64 | 66 | 95 | | Gobo Position X coarse | |
| | | | | 0-127 | Movement forward | proportional |
| | | | | 128 | Centre (128-default) | step |
| | | | 129-255 | Movement backward | proportional | |
| 65 | 65 | 67 | 96 | | Gobo position X fine | |
| | | | | 0-255 | Position X fine | proportional |
| 66 | 66 | 68 | 97 | | Gobo position Y coarse | |
| | | | | 0-127 | Movement down | proportional |
| | | | | 128 | Centre (128-default) | step |
| | | | 129-255 | Movement up | proportional | |
| 67 | 67 | 69 | 98 | | Gobo position Y fine | |
| | | | | 0-255 | Position Y fine | proportional |
| 68 | 68 | 70 | 99 | | Gobo zoom X coarse | |
| | | | | 0-127 | Narrowing | proportional |
| | | | | 128 | Centre (128-default) | step |
| | | | 129-255 | Widening | proportional | |
| 69 | 69 | 71 | 100 | | Gobo zoom X fine | |
| | | | | 0-255 | Zoom X fine | proportional |

Appendix - DMX protocol

| Protocol ver./Channel | | | | DMX Value | Function | Type of control |
|---|-----|-----|-----|-----------|-------------------------------|-----------------|
| 3.8 | 4.6 | 5.4 | 6.2 | | | |
| 70 | 70 | 72 | 101 | | Gobo zoom Y coarse | |
| | | | | 0-127 | Narrowing | proportional |
| | | | | 128 | Centre (128-default) | step |
| | | | | 129-255 | Widening | proportional |
| 71 | 71 | 73 | 102 | | Gobo zoom Y fine | |
| | | | | 0-255 | Zoom Y fine | proportional |
| - | - | 74 | 103 | | Synchronization to ID | |
| | | | | 0 | No function | step |
| | | | | 1-255 | Synchronization to fixture ID | proportional |
| * DMX values 10 and 11 changing meaning of channels 13-20 | | | | | | |
| See chapter " Projection onto angular,cylindric or spheric surfaces" in User manual | | | | | | |