| channel |  | function | type of control | effect | decimal |  | percentage |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 16 bit | 8 bit |  |  |  |  |  |  |  |
| 1 | 1 | $X$ axis, base movement (pan) coarse | proportional | proportional coarse control of the base motor movement | 0 | - 255 | 0\% | - 100\% |
| 2 | 2 | $X$ axis, base movement (pan) fine | proportional | proportional fine control of the base motor movement | 0 | - 255 | 0\% | - 100\% |
| 3 | 3 | Y axis, yoke movement (tilt) coarse | proportional | proportional coarse control of the yoke motor movement | 0 | - 255 | 0\% | - 100\% |
| 4 | 4 | Y axis, yoke movement (tilt) fine | proportional | proportional fine control of the yoke motor movement | 0 | - 255 | 0\% | - 100\% |
|  |  |  | step | standard (fast) | 0 | - 10 | 0\% | - 4\% |
|  |  |  | step | ultra fast movement (best for programming positions) | 11 | - 25 | 4\% | - 10\% |
| 5 | 5 | movement speed | proportional | vector mode (from fast to slow) | 26 | - 127 | 10\% | - 50\% |
|  |  |  | proportional | tracking mode (from fast to slow) | 128 | - 247 | 50\% | - 97\% |
|  |  |  | step | tracking mode (slow) | 248 | - 255 | 97\% | - 100\% |
| 6 | 6 | dimmer | proportional | gradual adjustment of luminous intensity from 0 to 100\% | 0 | - 255 | 0\% | - $100 \%$ |
| 7 | 7 | shutter,strobe and zap effect | step | shutter closed (zap off) | 0 | - 9 | 0\% | - 4\% |
|  |  |  | proportional | strobe effect with variable speed from slow to fast | 10 | - 66 | 4\% | - $26 \%$ |
|  |  |  | step | shutter open (zap off) | 67 | - 68 | 26\% | - 27\% |
|  |  |  | proportional | sequenced pulse effect, slow closing, fast opening (with variable speed from slow to fast) | 69 | - 125 | 27\% | - 49\% |
|  |  |  | step | shutter open (zap off) | 126 | - 127 | 49\% | - 50\% |
|  |  |  | proportional | sequenced pulse effect, fast closing, slow opening (with variable speed from fast to slow) | 128 | - 184 | 50\% | - 72\% |
|  |  |  | step | shutter open (zap off) | 185 | - 187 | 73\% | - 73\% |
|  |  |  | proportional | random strobe effect, non-synchronised, variable speed from slow to fast | 188 | - 244 | 74\% | - 96\% |
|  |  |  | step | shutter open (zap off) | 245 | - 255 | 96\% | - $100 \%$ |
| 8 | 8 | iris diaphragm (LIN-Linear) | step | open | 0 | - 9 | 0\% | - 4\% |
|  |  |  | proportional | from maximum to minimum aperture | 10 | - 255 | 4\% | - $100 \%$ |
| 8 | 8 | iris diaphragm (with internal PULS effect) | step | open | 0 | - 9 | 0\% | - 4\% |
|  |  |  | proportional | from maximum to minimum aperture | 10 | - 124 | 4\% | - 49\% |
|  |  |  | step | minimum diameter | 125 | - 129 | 49\% | - 51\% |
|  |  |  | proportional | pulsing with proportional increase in speed | 130 | - 189 | 51\% | - 74\% |
|  |  |  | step | open | 190 | - 192 | 75\% | - 75\% |
|  |  |  | proportional | pulse and flash effect with proportional increase in speed | 193 | - 255 | 76\% | - $100 \%$ |

Note 1: the iris diaphragm operation will vary according to the selection made for IRIS on the display panel (linear LIN or with internal PULS effect)

| 9 | 9 | zoom | proportional | proportional control of zoom from wide beam to narrow | 0 | - 255 | 0\% | - 100\% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 10 | 10 | focus | proportional | proportional control of focus | 0 | - 255 | 0\% | - 100\% |
| 11 | 11 | rotating gobo selection on wheel 1 (closest to lamp) (STRD standard) | step | no gobo | 0 | - 10 | 0\% | 4\% |
|  |  |  |  | gobo 1 | 11 | - 40 | 4\% | - 16\% |
|  |  |  |  | gobo 2 | 41 | - 70 | 16\% | - 27\% |
|  |  |  |  | gobo 3 | 71 | - 100 | 28\% | - 39\% |
|  |  |  |  | gobo 4 | 101 | - 130 | 40\% | - 51\% |
|  |  |  |  | gobo 5 | 131 | - 160 | 51\% | - 63\% |
|  |  |  |  | gobo 6 | 161 | - 192 | 63\% | - 75\% |
|  |  |  | proportional | continuous rotation of the gobo wheel from slow to fast | 193 | - 255 | 76\% | - 100\% |
| 11 | 11 | rotating gobo selection on wheel 1 (SPEC special) | step | no gobo | 0 | - 10 | 0\% | - 4\% |
|  |  |  | proportional | proportional positioning of gobo wheel 1 at $360^{\circ}$ | 11 | - 192 | 4\% | 75\% |
|  |  |  | proportional | continuous rotation of gobo wheel from slow to fast | 193 | - 255 | 76\% | - 100\% |

Note 2: depending on the gobo selection on display panel (standard STRD or proportional SPEC) the gobo wheel has a different function

| channel |  | function | type of control | effect | decimal |  | percentage |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 16 bit | 8 bit |  |  |  |  |  |  |  |
| 12 | 12 | indexing gobo rotation on wheel 1 through $360^{\circ}$ | step | no effect | 0 | - 10 | 0\% | - $4 \%$ |
|  |  |  | proportional | proportional indexing of the gobos through $360^{\circ}$ | 11 | - 255 | 4\% | 100\% |
| 13 |  | fine indexing of the gobos 16 bit | proportional | fine indexing of the gobo (gobo wheel 1) | 0 | - 255 | 0\% | - 100\% |
| 14 | 13 | gobo rotation on wheel 1 | step | no effect | 0 | - 10 | 0\% | - $4 \%$ |
|  |  |  | proportional | continuous rotation of the gobo in a clockwise direction with proportional control over decreasing speed | 11 | - 131 | 4\% | - 51\% |
|  |  |  | step | gobo stop | 132 | - 134 | 52\% | 53\% |
|  |  |  | proportional | continuous rotation of the gobo in a counter-clockwise direction with proportional control over increasing speed | 135 | - 255 | 53\% | - 100\% |

Note 3: when channel 12 is set to a level between 0 and 10, gobo rotation (channel 14 at 16 bit or channel 13 at 8 bit) does not effect indexing,
the gobo stops instantly the gobo stops instantly

| 15 | 14 | rotating gobo selection on wheel 2 (STRD standard) | step | no gobo | 0 | - 10 | 0\% | 4\% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | gobo 1 | 11 | - 40 | 4\% | 16\% |
|  |  |  |  | gobo 2 | 41 | - 70 | 16\% | - 27\% |
|  |  |  |  | gobo 3 | 71 | - 100 | 28\% | - 39\% |
|  |  |  |  | gobo 4 | 101 | - 130 | 40\% | 51\% |
|  |  |  |  | gobo 5 | 131 | - 160 | 51\% | 63\% |
|  |  |  |  | gobo 6 | 161 | - 192 | 63\% | 75\% |
|  |  |  | proportional | continuous rotation of the gobo wheel from slow to fast | 193 | - 255 | 76\% | 100\% |
| 15 | 14 | rotating gobo selection on wheel 2 (SPEC special) | step | no gobo | 0 | - 10 | 0\% | 4\% |
|  |  |  | proportional | proportional positioning of gobo wheel 2 at $360^{\circ}$ | 11 | - 192 | 4\% | 75\% |
|  |  |  | proportional | continuous rotation of gobo wheel from slow to fast | 193 | - 255 | 76\% | 100\% |

Note 4: depending on the gobo selection on display panel (standard STRD or proportional SPEC) the gobo wheel has a different function

| 16 | 15 | indexing gobo rotation on wheel 2 through $360^{\circ}$ | step | no effect | 0 |  | 0\% |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | proportional | proportional indexing of the gobos through $360^{\circ}$ | 11 | - 255 | 4\% | - 100\% |
| 17 |  | fine indexing of the gobos 16 bit | proportional | fine indexing of the gobo (gobo wheel 2) | 0 | - 255 | 0\% | - $100 \%$ |
| 18 | 16 | gobo rotation on wheel 2 | step | no effect | 0 | - 10 | 0\% | - $4 \%$ |
|  |  |  | proportional | continuous rotation of the gobo in a clockwise direction with proportional control over decreasing speed | 11 | - 131 | 4\% | - 51\% |
|  |  |  | step | gobo stop | 132 | - 134 | 52\% | - $53 \%$ |
|  |  |  | proportional | continuous rotation of the gobo in a counter-clockwise direction with proportional control over increasing speed | 135 | - 255 | 53\% | - $100 \%$ |
| Note 5: when channel 16 or 15 (16bit or 8bit) is set to a level between 0 and 10, gobo rotation (channel 18 at 16 bit or channel 16 at 8 bit) does not affect indexing, the gobo stops instantly |  |  |  |  |  |  |  |  |
| 19 | 17 | selecting frost and prisms rotation | step | no effect | 0 | - 10 | 0\% | - 4\% |
|  |  |  | proportional | insert frost filter in the optical path | 11 | - 99 | 4\% | - 39\% |
|  |  |  | step | prism 1 | 100 | - 105 | 39\% | - 41\% |
|  |  |  | proportional | continuous rotation of prism 1 in a counter-clockwise direction, with proportional control over speed from maximum to minimum | 106 | - 137 | 42\% | - 54\% |
|  |  |  | step | stop rotation prism 1 | 138 | - 142 | 54\% | - $56 \%$ |
|  |  |  | proportional | continuous rotation of prism 1 in a clockwise direction, with proportional control over speed from minimum to maximum | 143 | - 174 | 56\% | - 68\% |
|  |  |  | step | stop rotation prism 1 | 175 | - 179 | 69\% | - 70\% |
|  |  |  | step | prism 2 | 180 | - 184 | 71\% | - 72\% |
|  |  |  | proportional | continuous rotation of prism 2 in a counter-clockwise direction, with proportional control over speed from maximum to minimum | 185 | - 216 | 73\% | - 85\% |
|  |  |  | step | stop rotation prism 2 | 217 | - 221 | 85\% | - 87\% |
|  |  |  | proportional | continuous rotation of prism 2 in a clockwise direction, with proportional control over speed from minimum to maximum | 222 | - 255 | 87\% | - 100\% |


| channel |  | function | type of control | effect | decimal |  | percentage |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 16 bit | 8 bit |  |  |  |  |  |  |  |
| 20 | 18 | selecting saturated colours from the colour wheel | step | no colour, white beam | 0 | - 5 | 0\% | - 2\% |
|  |  |  |  | colour 1 | 6 | - 14 | 2\% | - 5\% |
|  |  |  |  | colour 2 | 15 | - 22 | 6\% | - 9\% |
|  |  |  |  | colour 3 | 23 | - 30 | 9\% | - 12\% |
|  |  |  |  | colour 4 | 31 | - 38 | 12\% | - 15\% |
|  |  |  |  | colour 5 | 39 | - 45 | 15\% | - 18\% |
|  |  |  | proportional | from colour 5 to colour 1, proportional positioning | 46 | - 127 | 18\% | 50\% |
|  |  |  |  | rainbow effect from fast to slow in an anticlockwise direction | 128 | - 190 | 50\% | - 75\% |
|  |  |  |  | rainbow effect from slow to fast in a clockwise direction | 191 | - 255 | 75\% | - 100\% |
| 21 | 19 | cyan | proportional | proportional control of the percentage of cyan colour in the light beam from 0 to 100\% | 0 | - 255 | 0\% | - $100 \%$ |
| 22 | 20 | magenta | proportional | proportional control of the percentage of magenta colour in the light beam from 0 to $100 \%$ | 0 | - 255 | 0\% | - 100\% |
| 23 | 21 | yellow | proportional | proportional control of the percentage of yellow colour in the light beam from 0 to $100 \%$ | 0 | - 255 | 0\% | - $100 \%$ |
| 24 | 22 | conversion filters | step | no colour temperature correction, open beam $6000^{\circ} \mathrm{K}$ | 0 | - 10 | 0\% | - 4\% |
|  |  |  | proportional | control of the colour temperature of the light beam from $6000^{\circ} \mathrm{K}$ to $3200^{\circ} \mathrm{K}$ | 11 | - 250 | 4\% | - 98\% |
|  |  |  | step | control of the colour temperature of the light beam to $8000^{\circ} \mathrm{K}$ | 251 | - 255 | 98\% | - 100\% |
| 25 | 23 | zap effect (effect varies depending upon channel 7 strobe) | step | no effect | 0 | - 10 | 0\% | - $4 \%$ |
|  |  |  |  | zap effect synchronised with the strobe effect, speed and mode selected by strobe channel 7 | 11 | - 30 | 4\% | - 12\% |
|  |  |  |  | zap effect, flicker and speed adjustable, speed and mode selected by strobe channel 7 | 31 | - 249 | 12\% | - 98\% |
|  |  |  |  | black-out of the light beam during PAN/TILT movement, colours and gobos | 250 | - 255 | 98\% | - 100\% |
| 26 | 24 | lamp on/off and motors reset | step | park, no function | 0 | - 10 | 0\% | - 4\% |
|  |  |  |  | lamp off | 11 | - 29 | 4\% | - 11\% |
|  |  |  |  | pan and tilt reset (once only) | 30 | - 65 | 12\% | - 25\% |
|  |  |  |  | reset all motors except black-out, pan and tilt (once only) | 66 | - 100 | 26\% | - 39\% |
|  |  |  |  | reset all motors except black-out (once only) | 101 | - 135 | 40\% | - 53\% |
|  |  |  |  | reset all motors (once only) | 136 | - 170 | 53\% | - 67\% |
|  |  |  |  | lamp on - manual focus | 171 | - 212 | 67\% | - 83\% |
|  |  |  |  | lamp on - autofocus | 213 | - 255 | 84\% | - $100 \%$ |
| Note 6: the display panel may be used to disable the switching off of the lamp via DMX |  |  |  |  |  |  |  |  |
| Note 7: turning off the lamp and all reset functions are delayed by 6 seconds to prevent accidental activation |  |  |  |  |  |  |  |  |
| Note 8: the lamp on/off function can only be effected if an opposite level is set |  |  |  |  |  |  |  |  |
| Projector: coemar İ Spot S |  |  |  | Table name: DMX 512 functions |  |  |  |  |
| Table number: 265 |  |  | Edition: 1 | Date: 22/05/2006 |  |  |  |  |

