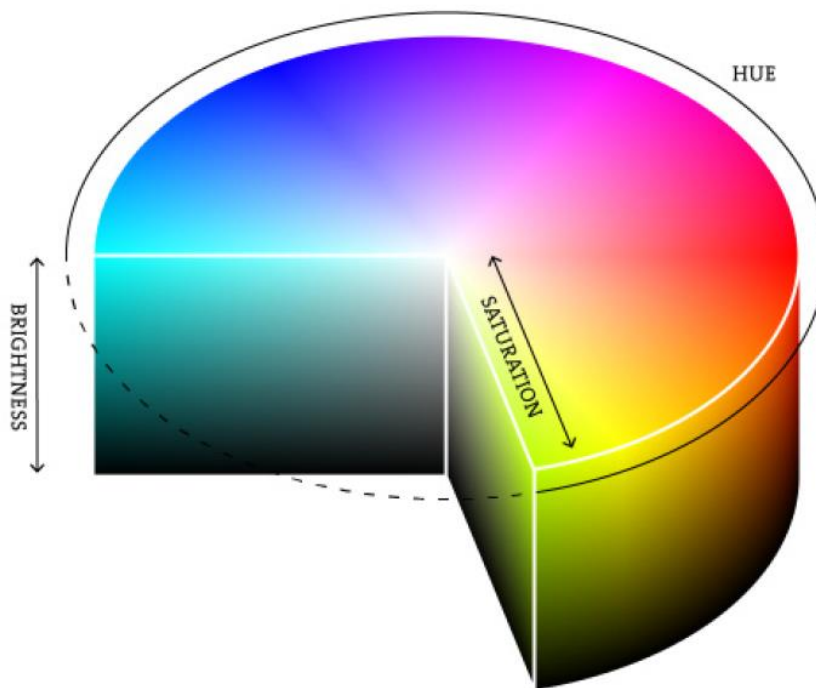


## OPERATING MODES

The projector has 4 operating modes: Raw Mode, HSV, RGB emulation and CMY emulation. Raw Mode enables specific control of each color. HSV Mode is based on a complex algorithm for a new type of management of both color and white light. In this mode, the CRI is kept constantly above 97 CRI, irrespective of colour temperature. HSV mode has the following characteristics:



## DMX MODES

| DMX Mode     | Parameter | Color Control Mode | RAW Mode      |
|--------------|-----------|--------------------|---------------|
| Basic RGB    | 15        | RGB or CMY         | Not available |
| Basic HSV    | 15        | HSV                | Not available |
| Extended RGB | 28        | RGB or CMY         | CCMode RAW    |
| Extended HSV | 28        | HSV                | CCMode RAW    |

## BASIC MODE

**Note:** With Basic mode selected is not possible to control the singles LEDs colour values of fixture (RAW mode).

| Number | RGB ( / CMY)  | HSV           | Note                                                                                             |
|--------|---------------|---------------|--------------------------------------------------------------------------------------------------|
| 1      | Red/Cyan      | Hue           | Red with Color Control Mode RGB (CCMOD RGB)<br>Cyan with Color Control Mode CMY (CCMOD CMY)      |
| 2      | Green/Magenta | Hue fine      | Green with Color Control Mode RGB (CCMOD RGB)<br>Magenta with Color Control Mode CMY (CCMOD CMY) |
| 3      | Blue/Yellow   | Saturation    | Blue with Color Control Mode RGB (CCMOD RGB)<br>Yellow with Color Control Mode CMY (CCMOD CMY)   |
| 4      | CTO           | CTO           | Filter mode or White mode available                                                              |
| 5      | Macro colours | Macro colours |                                                                                                  |
| 6      | Strobe        | Strobe        |                                                                                                  |
| 7      | Dimmer        | Dimmer        |                                                                                                  |
| 8      | Dimmer fine   | Dimmer fine   |                                                                                                  |
| 9      | Dummy         | Dummy         | -                                                                                                |
| 10     | Dummy         | Dummy         | -                                                                                                |
| 11     | Tint          | Tint          |                                                                                                  |
| 12     | Zoom          | Zoom          |                                                                                                  |
| 13     | Function      | Function      |                                                                                                  |
| 14     | Reset         | Reset         |                                                                                                  |
| 15     | Frequency     | Frequency     |                                                                                                  |

| RGB       | HSV      | DMX value   | Function                                                                                                                                          |
|-----------|----------|-------------|---------------------------------------------------------------------------------------------------------------------------------------------------|
| 1         | -        |             | <b>RED (RGB mode) / CYAN (CMY mode)</b>                                                                                                           |
|           |          | 000 - 255   | Red or Cyan colour linearly increases from no-light to maximum intensity                                                                          |
| 2         | -        |             | <b>GREEN (RGB mode) / MAGENTA (CMY mode)</b>                                                                                                      |
|           |          | 000 - 255   | Green or Magenta colour linearly increases from no-light to maximum intensity                                                                     |
| 3         | -        |             | <b>BLUE (RGB mode) / YELLOW (CMY mode)</b>                                                                                                        |
|           |          | 000 - 255   | Blue or Yellow colour linearly increases from no-light to maximum intensity                                                                       |
| -         | 1        |             | <b>HUE</b>                                                                                                                                        |
|           |          | 000 - 255   | Linear Hue setting, define the target point color in the HSV color representation system (range from 0° (Red) to 360°)                            |
| -         | 2        |             | <b>HUE FINE</b>                                                                                                                                   |
|           |          | 000 - 255   | Fine Hue setting                                                                                                                                  |
| -         | 3        |             | <b>SATURATION</b>                                                                                                                                 |
|           |          | 000 - 255   | Linear Saturation setting, define the INTENSITY/PURITY of the color at a constant lightness level. It ranges from 100% (pure color) to 0% (white) |
| 4         | 4        |             | <b>CTO</b><br>The CTO parameter allows the control of Colour Temperature linearly from 8000K to 2500K                                             |
|           |          | 000         | OFF                                                                                                                                               |
|           |          | 001 ...     | 8000 K                                                                                                                                            |
|           |          | ... 047 ... | 7000 K                                                                                                                                            |
|           |          | ... 093 ... | 6000 K                                                                                                                                            |
|           |          | ... 112 ... | 5600 K                                                                                                                                            |
|           |          | ... 139 ... | 5000 K                                                                                                                                            |
|           |          | ... 186 ... | 4000 K                                                                                                                                            |
|           |          | ... 222 ... | 3200 K                                                                                                                                            |
|           |          | ... 245 ... | 2700 K                                                                                                                                            |
| ... 255   | 2500 K   |             |                                                                                                                                                   |
| 5         | 5        |             | <b>MACRO COLORS</b>                                                                                                                               |
|           |          | 000 - 255   | The MACRO COLORS channels allows to select a specific colour palette from a pre-built library.                                                    |
| 6         | 6        |             | <b>STROBE</b>                                                                                                                                     |
|           |          | 000 - 003   | Light OFF                                                                                                                                         |
|           |          | 004 - 103   | Strobe at linearly variable frequency from low (1Hz) to fast (16Hz)                                                                               |
|           |          | 104 - 107   | Light ON                                                                                                                                          |
|           |          | 108 - 207   | Pulsation at linearly variable speed from slow (0.5 Hz) to fast (25 Hz)                                                                           |
|           |          | 208 - 212   | Light ON                                                                                                                                          |
|           |          | 213 - 255   | Random Slow Strobe                                                                                                                                |
|           |          | 226 - 238   | Random Medium Strobe                                                                                                                              |
|           |          | 239 - 251   | Random Fast Strobe                                                                                                                                |
| 252 - 255 | Light ON |             |                                                                                                                                                   |

| RGB | HSV | DMX value | Function                                                                                    |
|-----|-----|-----------|---------------------------------------------------------------------------------------------|
| 7   | 7   |           | <b>DIMMER</b>                                                                               |
|     |     | 000 - 255 | Light output linearly increases from off to maximum brightness                              |
| 8   | 8   |           | <b>DIMMER FINE</b>                                                                          |
|     |     | 000 - 255 | Fine Dimmer positioning                                                                     |
| 9   | 9   |           | <b>DUMMY</b>                                                                                |
|     |     | 000 - 255 | -                                                                                           |
| 10  | 10  |           | <b>DUMMY</b>                                                                                |
|     |     | 000 - 255 | -                                                                                           |
| 11  | 11  |           | <b>TINT</b><br>The tint control is normally set by sight to create satisfactory skin tones. |
|     |     | 000 - 127 | Linear Tint setting, define the target point correction from Magenta (0 Bit) to OFF         |
|     |     | 128       | Tint adjustment OFF (To put as default setting)                                             |
|     |     | 129 - 255 | Linear Tint setting, define the target point correction from OFF to Green (255 bit)         |
| 12  | 12  | 000 - 255 | <b>ZOOM</b><br>Zoom linearly moves from narrow to wide beam                                 |

| RGB       | HSV                                                                                                                                                  | DMX value | Function                                                                                                                                                         |                    |
|-----------|------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------|
| 13        | 13                                                                                                                                                   |           | <b>FUNCTION</b><br>The function is enable passing through the unused range and then selecting the required function level. It will be activated after 5 seconds. |                    |
|           |                                                                                                                                                      | 000 - 011 | Unused range                                                                                                                                                     |                    |
|           |                                                                                                                                                      | 012 - 037 | Reserved                                                                                                                                                         |                    |
|           |                                                                                                                                                      | 038 - 042 | Linear ( <b>Default</b> )                                                                                                                                        |                    |
|           |                                                                                                                                                      | 043 - 047 | Square                                                                                                                                                           | Details at page 13 |
|           |                                                                                                                                                      | 048 - 052 | Smooth Square                                                                                                                                                    |                    |
|           |                                                                                                                                                      | 053 - 057 | S Curve                                                                                                                                                          |                    |
|           |                                                                                                                                                      | 058 - 062 | Raw color channels gamma 1                                                                                                                                       |                    |
|           |                                                                                                                                                      | 063 - 067 | Raw color channels gamma 1.5                                                                                                                                     | Details at page 13 |
|           |                                                                                                                                                      | 068 - 072 | Raw color channels gamma 2.2 ( <b>Default</b> )                                                                                                                  |                    |
|           |                                                                                                                                                      | 073 - 077 | Halogen mode disabled ( <b>Default</b> )                                                                                                                         |                    |
|           |                                                                                                                                                      | 078 - 082 | Halogen mode 1, 750W lamp emulation                                                                                                                              |                    |
|           |                                                                                                                                                      | 083 - 087 | Halogen mode 2, 1000W lamp emulation                                                                                                                             |                    |
|           |                                                                                                                                                      | 088 - 092 | Halogen mode 3, 1200W lamp emulation                                                                                                                             |                    |
|           |                                                                                                                                                      | 093 - 097 | Halogen mode 4, 2000W lamp emulation                                                                                                                             |                    |
|           |                                                                                                                                                      | 098 - 102 | Halogen mode 5, 2500W lamp emulation                                                                                                                             |                    |
|           |                                                                                                                                                      | 103 - 105 | Reserved                                                                                                                                                         |                    |
|           |                                                                                                                                                      | 106 - 108 | CCMOD: RAW ( <b>Default</b> )                                                                                                                                    |                    |
|           |                                                                                                                                                      | 109 - 111 | CCMOD: RGB or HSV                                                                                                                                                |                    |
|           |                                                                                                                                                      | 112 - 114 | CCMOD: CMY                                                                                                                                                       |                    |
|           |                                                                                                                                                      | 115 - 117 | Reserved                                                                                                                                                         |                    |
|           |                                                                                                                                                      | 118 - 122 | Reserved                                                                                                                                                         |                    |
|           |                                                                                                                                                      | 123       | CTO Filter ( <b>Default</b> )                                                                                                                                    |                    |
|           |                                                                                                                                                      | 124       | CTO White                                                                                                                                                        |                    |
|           |                                                                                                                                                      | 125       | Reserved                                                                                                                                                         |                    |
|           |                                                                                                                                                      | 126 - 127 | Gamut Adaptation Relative                                                                                                                                        |                    |
|           |                                                                                                                                                      | 128 - 129 | Gamut Adaptation Absolute                                                                                                                                        |                    |
|           |                                                                                                                                                      | 130 - 133 | Reserved                                                                                                                                                         |                    |
|           |                                                                                                                                                      | 134       | RGB Color Space Native                                                                                                                                           |                    |
|           |                                                                                                                                                      | 135       | RGB Color Space sRGB                                                                                                                                             |                    |
|           |                                                                                                                                                      | 136 - 163 | Reserved                                                                                                                                                         |                    |
|           |                                                                                                                                                      | 164       | Base frequency=1000Hz                                                                                                                                            |                    |
|           |                                                                                                                                                      | 165       | Base frequency=1500Hz ( <b>Default</b> )                                                                                                                         |                    |
|           |                                                                                                                                                      | 166       | Base frequency=2400Hz                                                                                                                                            |                    |
|           |                                                                                                                                                      | 167       | Base frequency=3700Hz                                                                                                                                            |                    |
|           |                                                                                                                                                      | 168       | Base frequency=5600Hz                                                                                                                                            |                    |
|           |                                                                                                                                                      | 169       | Base frequency=9400Hz                                                                                                                                            |                    |
|           |                                                                                                                                                      | 170       | Base frequency=15100Hz                                                                                                                                           |                    |
|           |                                                                                                                                                      | 171       | Base frequency=21400Hz                                                                                                                                           |                    |
|           |                                                                                                                                                      | 172       | Base frequency=31000Hz                                                                                                                                           |                    |
| 173       | Base frequency=43700Hz                                                                                                                               |           |                                                                                                                                                                  |                    |
| 174 - 250 | Reserved                                                                                                                                             |           |                                                                                                                                                                  |                    |
| 251 - 255 | Default function recall<br><b>Note:</b> all the functions are non-volatile settings. It means that the configuration remains active after power off. |           |                                                                                                                                                                  |                    |

| RGB | HSV | DMX value | Function                                                                                                                        |
|-----|-----|-----------|---------------------------------------------------------------------------------------------------------------------------------|
| 14  | 14  |           | <b>RESET</b>                                                                                                                    |
|     |     | 000 - 025 | Unused range                                                                                                                    |
|     |     | 026 - 255 | It does the complete reset sequence of fixture passing through the unused levels range and staying in this range for 5 seconds. |
| 15  | 15  |           | <b>FREQUENCY</b>                                                                                                                |
|     |     | 000 - 255 | It allows a fine adjusting of frequency base value selected with Function parameter (number 12) - Details of values at page 14. |

## EXTENDED MODE

| Number | RGB (/CMY)    | HSV           | Note                                                                                                     |
|--------|---------------|---------------|----------------------------------------------------------------------------------------------------------|
| 1      | Red           | Red           | Active in RAW mode only                                                                                  |
| 2      | Red fine      | Red fine      | Active in RAW mode only                                                                                  |
| 3      | PC Amber      | PC Amber      | Active in RAW mode only                                                                                  |
| 4      | PC Amber fine | PC Amber fine | Active in RAW mode only                                                                                  |
| 5      | PC Green      | PC Green      | Active in RAW mode only                                                                                  |
| 6      | PC Green fine | PC Green fine | Active in RAW mode only                                                                                  |
| 7      | Green         | Green         | Active in RAW mode only                                                                                  |
| 8      | Green fine    | Green fine    | Active in RAW mode only                                                                                  |
| 9      | Cyan          | Cyan          | Active in RAW mode only                                                                                  |
| 10     | Cyan fine     | Cyan fine     | Active in RAW mode only                                                                                  |
| 11     | Blu           | Blu           | Active in RAW mode only                                                                                  |
| 12     | Blu fine      | Blu fine      | Active in RAW mode only                                                                                  |
| 13     | CTO           | CTO           | In RAW mode only the White mode is available. If Halogen mode is selected the CTO parameter is disabled. |
| 14     | Macro colors  | Macro Colors  |                                                                                                          |
| 15     | Strobe        | Strobe        |                                                                                                          |
| 16     | Dimmer        | Dimmer        |                                                                                                          |
| 17     | Dimmer fine   | Dimmer fine   |                                                                                                          |
| 18     | Red/Cyan      | Hue           | Red with Color Control Mode RGB (CCMOD RGB)<br>Cyan with Color Control Mode CMY (CCMOD CMY)              |
| 19     | Green/Magenta | Hue fine      | Green with Color Control Mode RGB (CCMOD RGB)<br>Magenta with Color Control Mode CMY (CCMOD CMY)         |
| 20     | Blue/Yellow   | Saturation    | Blue with Color Control Mode RGB (CCMOD RGB)<br>Yellow with Color Control Mode CMY (CCMOD CMY)           |
| 21     | Dummy         | Dummy         | -                                                                                                        |
| 22     | Dummy         | Dummy         | -                                                                                                        |
| 23     | Dummy         | Dummy         | -                                                                                                        |
| 24     | Tint          | Tint          | Not activated when used RAW mode                                                                         |
| 25     | Zoom          | Zoom          |                                                                                                          |
| 26     | Function      | Function      |                                                                                                          |
| 27     | Reset         | Reset         |                                                                                                          |
| 28     | Frequency     | Frequency     |                                                                                                          |

| RGB | HSV | DMX value | Function                                                           |
|-----|-----|-----------|--------------------------------------------------------------------|
| 1   | 1   |           | <b>RED</b>                                                         |
|     |     | 000 - 255 | Red colour linearly increases from no-light to maximum intensity   |
| 2   | 2   |           | <b>RED FINE</b>                                                    |
|     |     | 000 - 255 | Red fine intensity                                                 |
| 3   | 3   |           | <b>AMBER</b>                                                       |
|     |     | 000 - 255 | Amber colour linearly increases from no-light to maximum intensity |
| 4   | 4   |           | <b>AMBER FINE</b>                                                  |
|     |     | 000 - 255 | Amber fine intensity                                               |
| 5   | 5   |           | <b>LIME</b>                                                        |
|     |     | 000 - 255 | Lime colour linearly increases from no-light to maximum intensity  |
| 6   | 6   |           | <b>LIME FINE</b>                                                   |
|     |     | 000 - 255 | Lime fine intensity                                                |
| 7   | 7   |           | <b>GREEN</b>                                                       |
|     |     | 000 - 255 | Green colour linearly increases from no-light to maximum intensity |
| 8   | 8   |           | <b>GREEN FINE</b>                                                  |
|     |     | 000 - 255 | Green fine intensity                                               |
| 9   | 9   |           | <b>CYAN</b>                                                        |
|     |     | 000 - 255 | Cyan colour linearly increases from no-light to maximum intensity  |
| 10  | 10  |           | <b>CYAN FINE</b>                                                   |
|     |     | 000 - 255 | Cyan fine intensity                                                |
| 11  | 11  |           | <b>BLUE</b>                                                        |
|     |     | 000 - 255 | Blue colour linearly increases from no-light to maximum intensity  |
| 12  | 12  |           | <b>BLUE FINE</b>                                                   |
|     |     | 000 - 255 | Blue fine intensity                                                |



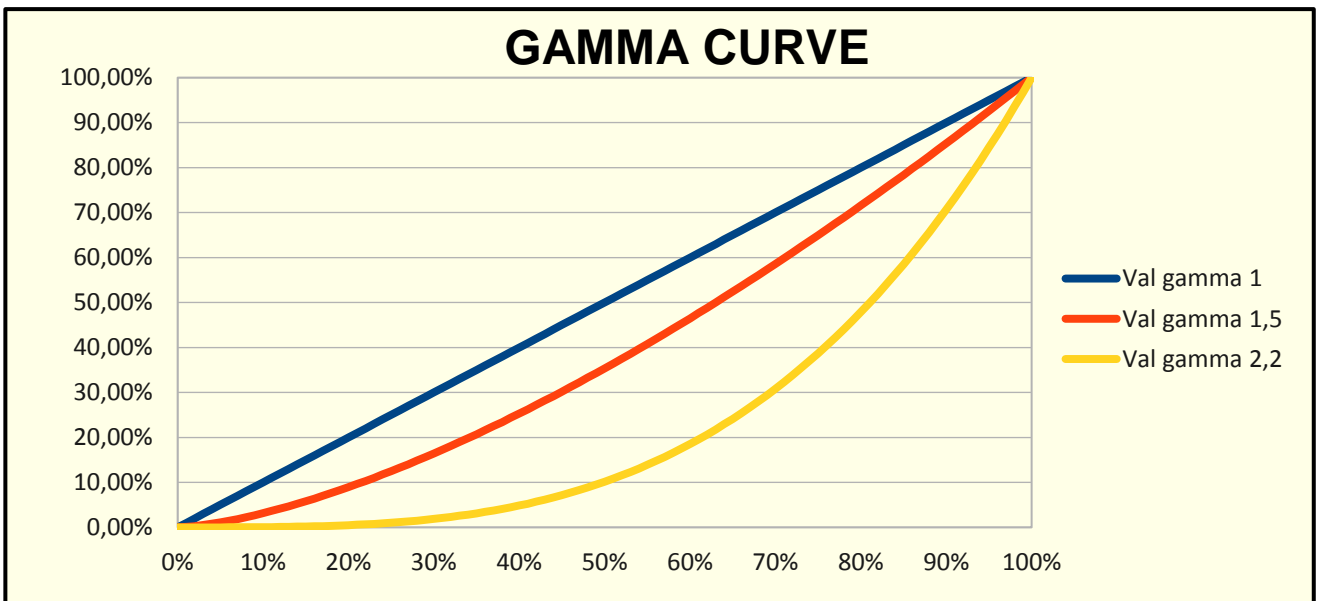
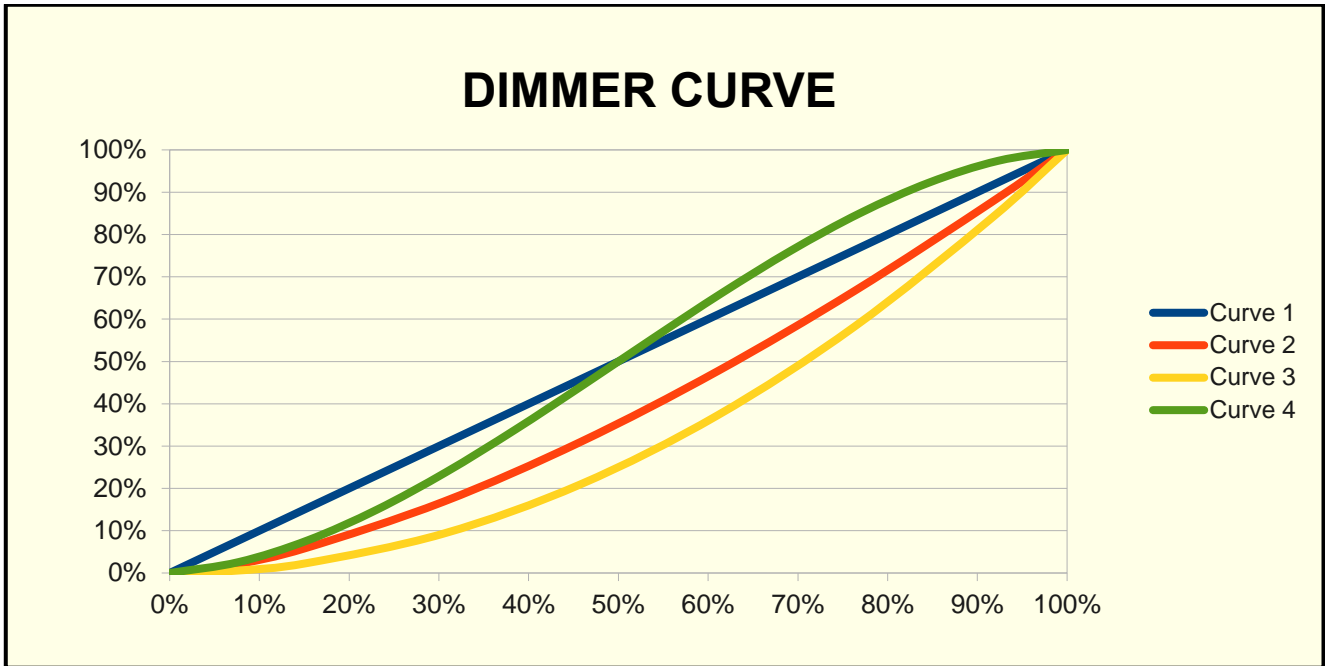
| RGB         | HSV    | DMX value   | Function                                                                                              |
|-------------|--------|-------------|-------------------------------------------------------------------------------------------------------|
| 13          | 13     |             | <b>CTO</b><br>The CTO parameter allows the control of Colour Temperature linearly from 8000K to 2500K |
|             |        | 000         | OFF                                                                                                   |
|             |        | 001 ...     | 8000 K                                                                                                |
|             |        | ... 047 ... | 7000 K                                                                                                |
|             |        | ... 093 ... | 6000 K                                                                                                |
|             |        | ... 112 ... | 5600 K                                                                                                |
|             |        | ... 116 ... | 5500 K                                                                                                |
|             |        | ... 139 ... | 5000 K                                                                                                |
|             |        | ... 176 ... | 4200 K                                                                                                |
|             |        | ... 186 ... | 4000 K                                                                                                |
|             |        | ... 197 ... | 3750 K                                                                                                |
|             |        | ... 223 ... | 3200 K                                                                                                |
|             |        | ... 227 ... | 3100 K                                                                                                |
|             |        | ... 232 ... | 3000 K                                                                                                |
|             |        | ... 241 ... | 2800 K                                                                                                |
| ... 246 ... | 2700 K |             |                                                                                                       |
| ... 255     | 2500 K |             |                                                                                                       |

| RGB | HSV | DMX value | Function                                                                                                                                          |
|-----|-----|-----------|---------------------------------------------------------------------------------------------------------------------------------------------------|
| 14  | 14  |           | <b>MACRO COLOR</b>                                                                                                                                |
|     |     | 000 - 255 | The MACRO COLORS channels allows to select a specific colour palette from a pre-built library. See details at page 12.                            |
| 15  | 15  |           | <b>STROBE</b>                                                                                                                                     |
|     |     | 000 - 003 | Light OFF                                                                                                                                         |
|     |     | 004 - 103 | Strobe at linearly variable frequency from low (1Hz) to fast (16Hz)                                                                               |
|     |     | 104 - 107 | Light ON                                                                                                                                          |
|     |     | 108 - 207 | Pulsation at linearly variable speed from slow (0.5 Hz) to fast (25 Hz)                                                                           |
|     |     | 208 - 212 | Light ON                                                                                                                                          |
|     |     | 213 - 255 | Random Slow Strobe                                                                                                                                |
|     |     | 226 - 238 | Random Medium Strobe                                                                                                                              |
|     |     | 239 - 251 | Random Fast Strobe                                                                                                                                |
|     |     | 252 - 255 | Light ON                                                                                                                                          |
| 16  | 16  |           | <b>DIMMER</b>                                                                                                                                     |
|     |     | 000 - 255 | Light output linearly increases from off to maximum brightness                                                                                    |
| 17  | 17  |           | <b>DIMMER FINE</b>                                                                                                                                |
|     |     | 000 - 255 | Fine Dimmer positioning                                                                                                                           |
| 18  | -   |           | <b>RED (RGB mode) / CYAN (CMY mode)</b>                                                                                                           |
|     |     | 000 - 255 | Red or Cyan colour linearly increases from no-light to maximum intensity                                                                          |
| 19  | -   |           | <b>GREEN (RGB mode) / MAGENTA (CMY mode)</b>                                                                                                      |
|     |     | 000 - 255 | Green or Magenta colour linearly increases from no-light to maximum intensity                                                                     |
| 20  | -   |           | <b>BLUE (RGB mode) / YELLOW (CMY mode)</b>                                                                                                        |
|     |     | 000 - 255 | Blue or Yellow colour linearly increases from no-light to maximum intensity                                                                       |
| -   | 18  |           | <b>HUE</b>                                                                                                                                        |
|     |     | 000 - 255 | Linear Hue setting, define the target point color in the HSV color representation system (range from 0° (Red) to 360°)                            |
| -   | 19  |           | <b>HUE FINE</b>                                                                                                                                   |
|     |     | 000 - 255 | Fine Hue setting                                                                                                                                  |
| -   | 20  |           | <b>SATURATION</b>                                                                                                                                 |
|     |     | 000 - 255 | Linear Saturation setting, define the INTENSITY/PURITY of the color at a constant lightness level. It ranges from 100% (pure color) to 0% (white) |
| 21  | 21  |           | <b>DUMMY</b>                                                                                                                                      |
|     |     | 000 - 255 | -                                                                                                                                                 |

| RGB | HSV | DMX value | Function                                                                                    |
|-----|-----|-----------|---------------------------------------------------------------------------------------------|
| 22  | 22  |           | <b>DUMMY</b>                                                                                |
|     |     | 000 - 255 | -                                                                                           |
| 23  | 23  |           | <b>DUMMY</b>                                                                                |
|     |     | 000 - 255 | -                                                                                           |
| 24  | 24  |           | <b>TINT</b><br>The tint control is normally set by sight to create satisfactory skin tones. |
|     |     | 000 - 127 | Linear Tint setting, define the target point correction from Magenta (0 Bit) to OFF         |
|     |     | 128       | Tint adjustment OFF                                                                         |
|     |     | 129 - 255 | Linear Tint setting, define the target point correction from OFF to Green (255 bit)         |
| 25  | 25  |           | <b>ZOOM</b>                                                                                 |
|     |     | 000 - 255 | Zoom linearly moves from narrow to wide beam                                                |

| RGB       | HSV                     | DMX value | Function                                                                                                                                                                                                                                                                                    |                    |
|-----------|-------------------------|-----------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------|
| 26        | 26                      |           | <b>FUNCTION</b><br>The function is enable passing through the unused range and then selecting the required function level. It will be activated after 5 seconds; All the functions are non-volatile settings. It means that the configuration setting still remains active after power off. |                    |
|           |                         | 000 - 011 | Unused range                                                                                                                                                                                                                                                                                |                    |
|           |                         | 012 - 037 | Linear ( <b>Default</b> )                                                                                                                                                                                                                                                                   |                    |
|           |                         | 038 - 042 | S Curve                                                                                                                                                                                                                                                                                     |                    |
|           |                         | 043 - 047 | Square                                                                                                                                                                                                                                                                                      | Details At page 13 |
|           |                         | 048 - 052 | Smooth Square                                                                                                                                                                                                                                                                               |                    |
|           |                         | 053 - 057 | S Curve                                                                                                                                                                                                                                                                                     |                    |
|           |                         | 058 - 062 | Raw color channels gamma 1 -                                                                                                                                                                                                                                                                | Details At page 13 |
|           |                         | 063 - 067 | Raw color channels gamma 1.5                                                                                                                                                                                                                                                                |                    |
|           |                         | 068 - 072 | Raw color channels gamma 2.2 ( <b>Default</b> )                                                                                                                                                                                                                                             |                    |
|           |                         | 073 - 077 | Halogen mode disabled ( <b>Default</b> )                                                                                                                                                                                                                                                    |                    |
|           |                         | 078 - 082 | Halogen mode 1, 750W lamp emulation                                                                                                                                                                                                                                                         |                    |
|           |                         | 083 - 087 | Halogen mode 2, 1000W lamp emulation                                                                                                                                                                                                                                                        |                    |
|           |                         | 088 - 092 | Halogen mode 3, 1200W lamp emulation                                                                                                                                                                                                                                                        |                    |
|           |                         | 093 - 097 | Halogen mode 4, 2000W lamp emulation                                                                                                                                                                                                                                                        |                    |
|           |                         | 098 - 102 | Halogen mode 5, 2500W lamp emulation                                                                                                                                                                                                                                                        |                    |
|           |                         | 103 - 105 | Reserved                                                                                                                                                                                                                                                                                    |                    |
|           |                         | 106 - 108 | CCMOD: RAW ( <b>Default</b> )                                                                                                                                                                                                                                                               |                    |
|           |                         | 109 - 111 | CCMOD: RGB (or HSV) mode                                                                                                                                                                                                                                                                    |                    |
|           |                         | 112 - 114 | CCMOD: RGB to CMY                                                                                                                                                                                                                                                                           |                    |
|           |                         | 115 - 117 | Reserved                                                                                                                                                                                                                                                                                    |                    |
|           |                         | 118 - 122 | Reserved                                                                                                                                                                                                                                                                                    |                    |
|           |                         | 123       | CTO Filter ( <b>Default</b> )                                                                                                                                                                                                                                                               |                    |
|           |                         | 124       | CTO White                                                                                                                                                                                                                                                                                   |                    |
|           |                         | 125 - 163 | Reserved                                                                                                                                                                                                                                                                                    |                    |
|           |                         | 126 - 127 | Gamut Adaptation Relative                                                                                                                                                                                                                                                                   |                    |
|           |                         | 128 - 129 | Gamut Adaptation Absolute                                                                                                                                                                                                                                                                   |                    |
|           |                         | 130 - 133 | Reserved                                                                                                                                                                                                                                                                                    |                    |
|           |                         | 134       | RGB Color Space Native                                                                                                                                                                                                                                                                      |                    |
|           |                         | 135       | RGB Color Space sRGB                                                                                                                                                                                                                                                                        |                    |
|           |                         | 136 - 163 | Reserved                                                                                                                                                                                                                                                                                    |                    |
|           |                         | 164       | Base frequency=1000Hz                                                                                                                                                                                                                                                                       |                    |
|           |                         | 165       | Base frequency=1500Hz ( <b>Default</b> )                                                                                                                                                                                                                                                    |                    |
|           |                         | 166       | Base frequency=2400Hz                                                                                                                                                                                                                                                                       |                    |
|           |                         | 167       | Base frequency=3700Hz                                                                                                                                                                                                                                                                       |                    |
|           |                         | 168       | Base frequency=5600Hz                                                                                                                                                                                                                                                                       |                    |
|           |                         | 169       | Base frequency=9400Hz                                                                                                                                                                                                                                                                       |                    |
|           |                         | 170       | Base frequency=15100Hz                                                                                                                                                                                                                                                                      |                    |
|           |                         | 171       | Base frequency=21400Hz                                                                                                                                                                                                                                                                      |                    |
|           |                         | 172       | Base frequency=31000Hz                                                                                                                                                                                                                                                                      |                    |
| 173       | Base frequency=43700Hz  |           |                                                                                                                                                                                                                                                                                             |                    |
| 174 - 250 | Reserved                |           |                                                                                                                                                                                                                                                                                             |                    |
| 251 - 255 | Default function recall |           |                                                                                                                                                                                                                                                                                             |                    |

| RGB | HSV | DMX value | Function                                                                                                                        |
|-----|-----|-----------|---------------------------------------------------------------------------------------------------------------------------------|
| 27  | 27  |           | <b>RESET</b>                                                                                                                    |
|     |     | 000 - 025 | Unused range                                                                                                                    |
|     |     | 026 - 255 | It does the complete reset sequence of fixture passing through the unused levels range and staying in this range for 5 seconds. |
| 28  | 28  |           | <b>FREQUENCY</b>                                                                                                                |
|     |     | 000 - 255 | It allows a fine adjusting of frequency base value selected with Function parameter (number 25) - Details of values at page 14. |



## Macro Colors Library

| DMX Value | LEE Filter references | Description       |
|-----------|-----------------------|-------------------|
| 000 – 009 | None                  | None              |
| 010 – 011 | 004                   | 4 Med Bast Amber  |
| 012 – 013 | 009                   | Pale Amber Gold   |
| 014 – 015 | -                     | <i>Reserved</i>   |
| 016 – 017 | 017                   | Surprise Peach    |
| 018 – 019 | 019                   | Fire              |
| 020 – 021 | 021                   | Gold Amber        |
| 022 – 023 | 026                   | Bright red        |
| 024 – 025 | 029                   | Plasa Red         |
| 026 – 027 | 035                   | Light Pink        |
| 028 – 029 | 058                   | Lavender          |
| 030 – 031 | 068                   | Sky Blue          |
| 032 – 033 | 071                   | Tokyo Blue        |
| 034 – 035 | 075                   | Evening Blue      |
| 036 – 037 | 079                   | Just Blue         |
| 038 – 039 | 088                   | Lime Green        |
| 040 – 041 | 090                   | Dark Yellow/Green |
| 042 – 043 | -                     | <i>Reserved</i>   |
| 044 – 045 | -                     | <i>Reserved</i>   |
| 046 – 047 | -                     | <i>Reserved</i>   |
| 048 – 049 | 103                   | Straw             |
| 050 – 051 | -                     | <i>Reserved</i>   |
| 052 – 053 | -                     | <i>Reserved</i>   |
| 054 – 055 | 106                   | Primary Red       |
| 056 – 057 | 108                   | English Rose      |
| 058 – 059 | 111                   | Dark Pink         |
| 060 – 061 | 113                   | Magenta           |
| 062 – 063 | 115                   | Peacock Blue      |
| 064 – 065 | 116                   | Med Blue-Green    |
| 066 – 067 | 117                   | Steel Blue        |
| 068 – 069 | 118                   | Light Blue        |
| 070 – 071 | 119                   | Dark Blue         |
| 072 – 073 | -                     | <i>Reserved</i>   |
| 074 – 075 | 121                   | Lee Green         |
| 076 – 077 | 122                   | Fern Green        |
| 078 – 079 | 124                   | Dark Green        |
| 080 – 081 | 127                   | Smokey Pink       |
| 082 – 083 | 128                   | Bright Pink       |
| 084 – 085 | 131                   | Marine Blue       |
| 086 – 087 | 132                   | Med Blue          |
| 088 – 089 | 134                   | Golden Amber      |
| 090 – 091 | 135                   | Dip Golden Amber  |
| 092 – 093 | 136                   | Pale Lavender     |
| 094 – 095 | 137                   | Spec Lavender     |
| 096 – 097 | 138                   | Pale Green        |
| 098 – 099 | 139                   | Primary Green     |
| 100 – 101 | 141                   | Bright Blue       |
| 102 – 103 | 143                   | Pale Navy Blue    |
| 104 – 105 | 147                   | Apricot           |

| DMX Value | LEE Filter references | Description         |
|-----------|-----------------------|---------------------|
| 106 – 107 | 152                   | Pale Gold           |
| 108 – 109 | 154                   | Pale Rose           |
| 110 – 111 | 157                   | Pink                |
| 112 – 113 | 158                   | Deep Orange         |
| 114 – 115 | 161                   | Slate Blue          |
| 116 – 117 | 162                   | Bastard Amber       |
| 118 – 119 | -                     | <i>Reserved</i>     |
| 120 – 121 | 165                   | Daylight Blue       |
| 122 – 123 | 169                   | Lilac Tint          |
| 124 – 125 | 170                   | Deep Lavender       |
| 126 – 127 | 172                   | Lagoon Blue         |
| 128 – 129 | 174                   | Dk Steel Blue       |
| 130 – 131 | -                     | <i>Reserved</i>     |
| 132 – 133 | 180                   | Dark Lavendar       |
| 134 – 135 | -                     | <i>Reserved</i>     |
| 136 – 137 | 182                   | Light Red           |
| 138 – 139 | 197                   | Alice Blue          |
| 140 – 141 | 200                   | Double C.T. Blue    |
| 142 – 143 | 201                   | Full C.T. Blue      |
| 144 – 145 | 202                   | 1/2 C.T. Blue       |
| 146 – 147 | 203                   | 1/4 C.T. Blue       |
| 148 – 149 | 204                   | Full C.T. Orange    |
| 150 – 151 | 205                   | 1/2 C.T. Orange     |
| 152 – 153 | 206                   | 1/4 C.T. Orange     |
| 154 – 155 | 241                   | Lee Fluor 5700K     |
| 156 – 157 | 242                   | Lee Fluor 4300K     |
| 158 – 159 | 247                   | Lee Minus Green     |
| 160 – 161 | 248                   | 1/2 Minus Green     |
| 162 – 163 | 281                   | 3/4 C.T. Blue       |
| 164 – 165 | 285                   | 3/4 C.T. Orange     |
| 166 – 167 | 328                   | Follies Pink        |
| 168 – 169 | 352                   | Glacier Blue        |
| 170 – 171 | 353                   | Lighter Blue        |
| 172 – 173 | 363                   | Special Medium Blue |
| 174 – 175 | 706                   | King Fals Lavender  |
| 176 – 177 | 711                   | Cold Blue           |
| 178 – 179 | 724                   | Ocean Blue          |
| 180 – 181 | 728                   | Steel Green         |
| 182 – 183 | 747                   | Easy White          |
| 184 – 185 | 778                   | Millenium Gold      |
| 186 – 187 | 793                   | Vanity Fair         |
| 188 – 189 | R05                   | Rose Tint (ROSCO)   |
| 190 – 255 | -                     | <i>Reserved</i>     |

## Frequency parameter levels

| Base Frequency setting | Value at 128 bit | Min value at 0 bit | Max value at 255 bit |
|------------------------|------------------|--------------------|----------------------|
| 1000 Hz                | <b>1000 Hz</b>   | 744 Hz             | 1254 Hz              |
| 1500 Hz (Default)      | <b>1500 Hz</b>   | 1244 Hz            | 1754 Hz              |
| 2400 Hz                | <b>2400 Hz</b>   | 1760 Hz            | 3035 Hz              |
| 3700 Hz                | <b>3700 Hz</b>   | 3060 Hz            | 4335 Hz              |
| 5600 Hz                | <b>5600 Hz</b>   | 4320 Hz            | 6870 Hz              |
| 9400 Hz                | <b>9400 Hz</b>   | 6840 Hz            | 11940 Hz             |
| 15100 Hz               | <b>15100 Hz</b>  | 11900 Hz           | 18275 Hz             |
| 21400 Hz               | <b>21400 Hz</b>  | 18200 Hz           | 24575 Hz             |
| 31000 Hz               | <b>31000 Hz</b>  | 24600 Hz           | 37350 Hz             |
| 43700 Hz               | <b>43700 Hz</b>  | 37300 Hz           | 50050 Hz             |