



### MISTRAL DMX CHART V3

DMX channel's functions and their values (39DMX channels):

| Mode/Channel |                            |         | Value                | Function                          |
|--------------|----------------------------|---------|----------------------|-----------------------------------|
| St           | Ba                         | Ex      |                      |                                   |
| 28           | 26                         | 39      |                      |                                   |
| 1            | 1                          | 1       |                      | <b>PAN Movement 8bit :</b>        |
|              |                            |         | 0-255                | Pan Movement                      |
| 2            |                            | 2       |                      | <b>Pan Fine 16bit</b>             |
|              |                            |         | 0-255                | Fine control of Pan movement      |
| 3            | 2                          | 3       |                      | <b>TILT Movement 8bit :</b>       |
|              |                            |         | 0-255                | Tilt Movement                     |
| 4            |                            | 4       |                      | <b>Tilt Fine 16bit</b>            |
|              |                            |         | 0-255                | Fine control of Tilt movement     |
| 5            | 3                          | 5       |                      | <b>Speed Pan/Tilt movement:</b>   |
|              |                            |         | 0-225                | max to min speed                  |
|              |                            |         | 226-235              | blackout by movement              |
|              |                            |         | 236-245              | blackout by all wheel changing    |
|              |                            | 246-255 | no function          |                                   |
| 6            | 4                          | 6       |                      | <b>Shutter, strobe:</b>           |
|              |                            |         | 0-10                 | Shutter closed                    |
|              |                            |         | 11-20                | No function (shutter open)        |
|              |                            |         | 21-117               | Strobe effect slow to fast        |
|              |                            |         | 118-126              | No function (shutter open)        |
|              |                            |         | 127-180              | Pulse-effect in sequences         |
|              |                            |         | 181-191              | No function (shutter open)        |
|              |                            |         | 192-245              | Random strobe effect slow to fast |
| 246-255      | No function (shutter open) |         |                      |                                   |
| 7            | 5                          | 7       |                      | <b>Dimmer intensity:</b>          |
|              |                            |         | 0-255                | Intensity 0 to 100%               |
|              |                            | 8       |                      | <b>Fine Dimmer intensity:</b>     |
|              |                            |         | 0-255                | Dimmer intensity fine             |
| 8            | 6                          | 9       |                      | <b>Chase Patterns:</b>            |
|              |                            |         | 0-9                  | Open                              |
|              |                            |         | 10-19                | Chase 1                           |
|              |                            |         | 20-29                | Chase 2                           |
|              |                            |         | 30-39                | Chase 3                           |
|              |                            |         | 40-49                | Chase 4                           |
| 50-59        | Reserved                   |         |                      |                                   |
| 9            | 7                          | 10      |                      | <b>Chase Speed:</b>               |
|              |                            |         | 0-125                | Fast to Slow Backward             |
|              |                            |         | 126-130              | Stop(Speed=0)                     |
|              |                            | 131-255 | Slow to Fast Forward |                                   |
| 10           | 8                          | 11      |                      | <b>Chase Fade:</b>                |
|              |                            |         | 0-255                | Fade Chase                        |

|         |             |         |  |   |
|---------|-------------|---------|--|---|
| 11      | 9           | 12      |  | <b>Zoom :</b>                             |
|         |             | 0-255   | Zoom adjustment from small to big          |   |
|         |             | 13      |  | <b>Zoom Fine:</b>                         |
|         |             | 0-255   | Zoom adjustment Fine                       |   |
| 12      | 10          | 14      |  | <b>Focus :</b>                            |
|         |             | 0-255   | Continuous adjustment from near to far     |   |
|         |             | 15      |  | <b>Focus Fine:</b>                        |
|         |             | 0-255   | Continuous adjustment Fine                 |   |
| 13      | 11          | 16      |  | <b>Auto Focus :</b>                       |
|         |             |         | 0-50                                       | Auto Focus Off                            |
|         |             |         | 51-100                                     | 5m  |
|         |             |         | 101-150                                    | 7.5m                                      |
|         |             |         | 151-200                                    | 10m                                       |
|         |             | 201-255 | 15m  |   |
| 14      | 12          | 17      |  | <b>AutoFocus Fine:</b>                    |
|         |             |         | 0-255                                      | Continuous adjustment Fine                |
| 15      | 13          | 18      |  | <b>Color Wheel:</b>                       |
|         |             |         | 0-3  | Open / white                              |
|         |             |         | 4-7  | Color 1 (CTB)                             |
|         |             |         | 8-11                                       | Color 2 (Magenta)                         |
|         |             |         | 12-15                                      | Color 3 (Congo Blue)                      |
|         |             |         | 16-19                                      | Color 4 (Green)                           |
|         |             |         | 20-23                                      | Color 5 (Orange)                          |
|         |             |         | 24-27                                      | Color 6 (Light Blue)                      |
|         |             |         | 28-31                                      | Color 7 (Red)                             |
|         |             |         | 32-127                                     | Color indexing                            |
|         |             |         | 128-189                                    | Forwards rainbow effect from fast to slow |
| 190-193 | No rotation |         |  |   |
|         |             | 194-255 | Backwards rainbow effect from slow to fast |   |
|         |             | 19      |  | <b>Color Wheel Fine :</b>                 |
|         |             | 0-255   | Color Wheel colour change to any position  | Fine                                      |
| 16      | 14          | 20      |  | <b>Cyan Color :</b>                       |
|         |             |         | 0-255                                      | Cyan (0-white, 255-100% Cyan)             |
|         |             | 21      |  | <b>Cyan Color Fine :</b>                  |
|         |             | 0-255   | Cyan Fine                                  |   |
| 17      | 15          | 22      |  | <b>Magenta Color :</b>                    |
|         |             |         | 0-255                                      | Magenta (0-white, 255-100% magenta)       |
|         |             | 23      |  | <b>Magenta Color Fine :</b>               |
|         |             | 0-255   | Magenta Fine                               |   |
| 18      | 16          | 24      |  | <b>Yellow Color :</b>                     |
|         |             |         | 0-255                                      | Yellow (0-white, 255-100% Yellow)         |
|         |             | 25      |  | <b>Yellow Color Fine :</b>                |
|         |             | 0-255   | Yellow Fine                                |   |
| 19      | 17          | 26      |  | <b>CTO Color :</b>                        |
|         |             |         | 0-255                                      | CTO (0-white, 255-100% CTO)               |
|         |             | 27      |  | <b>CTO Color Fine :</b>                   |
|         |             | 0-255   | CTO Fine                                   |   |

|         |   |    |         |  |
|---------|---|----|---------|--|
| 20      | 18  | 28 |         | <b>Rotating gobos, cont. rotation 1:</b>             |
|         |   |    | 0-9     | Open   |
|         |   |    | 10-19   | Rot. gobo 1  |
|         |   |    | 20-29   | Rot. gobo 2  |
|         |   |    | 30-39   | Rot. gobo 3  |
|         |   |    | 40-49   | Rot. gobo 4  |
|         |   |    | 50-59   | Rot. gobo 5  |
|         |   |    | 60-69   | Rot. gobo 6  |
|         |   |    | 70-77   | Rot. Gobo 7  |
|         |   |    | 78-93   | Gobo 1 shake slow to fast                            |
|         |   |    | 94-109  | Gobo 2 shake slow to fast                            |
|         |   |    | 110-125 | Gobo 3 shake slow to fast                            |
|         |   |    | 126-141 | Gobo 4 shake slow to fast                            |
|         |   |    | 142-157 | Gobo 5 shake slow to fast                            |
|         |   |    | 158-173 | Gobo 6 shake slow to fast                            |
|         |   |    | 174-189 | Gobo 7 shake slow to fast                            |
|         |   |    | 190-221 | Gobo wheel rotation forwards from fast to slow       |
| 222-223 | No rotation                                       |    |         |  |
| 224-255 | Gobo wheel rotation f backwards from slow to fast |    |         |  |
| 21      | 19  | 29 |         | <b>Rotating gobo index,rotating gobo rotation 1:</b> |
|         |   |    | 0-127   | Gobo indexing  |
|         |   |    | 128-189 | Forwards gobo rotation from fast to slow             |
|         |   |    | 190-193 | No rotation  |
|         |   |    | 194-255 | Backwards gobo rotation from slow to fast            |
|         |   | 30 |         | <b>Rotating gobo indexing Fine 1:</b>                |
|         |   |    | 0-255   | Fine indexing  |
| 22      | 20  | 31 |         | <b>Fixed Gobo2 :</b>                                 |
|         |   |    | 0-9     | open   |
|         |   |    | 10-19   | Gobo 1   |
|         |   |    | 20-29   | Gobo 2   |
|         |   |    | 30-39   | Gobo 3   |
|         |   |    | 40-49   | Gobo 4   |
|         |   |    | 50-59   | Gobo 5   |
|         |   |    | 60-69   | Gobo 6   |
|         |   |    | 70-79   | Gobo 7   |
|         |   |    | 80-89   | Gobo 8   |
|         |   |    | 90-99   | Gobo 9   |
|         |   |    | 100-109 | Gobo 1 shake slow to fast                            |
|         |   |    | 110-119 | Gobo 2 shake slow to fast                            |
|         |   |    | 120-129 | Gobo 3 shake slow to fast                            |
|         |   |    | 130-139 | Gobo 4 shake slow to fast                            |
|         |   |    | 140-149 | Gobo 5 shake slow to fast                            |
|         |   |    | 150-159 | Gobo 6 shake slow to fast                            |
|         |   |    | 160-169 | Gobo 7 shake slow to fast                            |
|         |   |    | 170-179 | Gobo 8 shake slow to fast                            |
|         |   |    | 180-189 | Gobo 9 shake slow to fast                            |
| 190-221 | Clock-wise scroll from fast to slow               |    |         |  |
| 222-223 | Reserved  |    |         |  |
| 224-255 | Counter clock-wise scroll from slow to fast       |    |         |  |

|         |   |    |         |  |
|---------|---|----|---------|--|
| 23      | 21  | 32 |         | <b>Animation wheel:</b>                              |
|         |   |    | 0-7     | open   |
|         |   |    | 8-127   | Forwards rotation from fast to slow                  |
|         |   |    | 128-135 | No rotation  |
|         |   |    | 136-255 | Backwards rotation from slow to fast                 |
| 24      | 22  | 33 |         | <b>Iris:</b>   |
|         |   |    | 0-191   | Max. diameter to Min.diameter                        |
|         |   |    | 192-223 | Pulse closing fast to slow                           |
|         |   |    | 224-255 | Pulse opening slow to fast                           |
|         |   | 34 |         | <b>Iris Fine:</b>                                    |
|         |   |    | 0-255   | Iris Fine  |
| 25      | 23  | 35 |         | <b>Prism:</b>  |
|         |   |    | 0-127   | Open   |
|         |   |    | 128-255 | 5-Facet Prism  |
| 26      | 24  | 36 |         | <b>Rotating prism index, rotating prism rotation</b> |
|         |   |    | 0-127   | Prism indexing                                       |
|         |   |    | 128-189 | Forwards prism rotation from fast to slow            |
|         |   |    | 190-193 | No rotation  |
|         |   |    | 194-255 | Backwards prism rotation from slow to fast           |
|         |   | 37 |         | <b>Rotating prism indexing Fine :</b>                |
|         |   |    | 0-255   | Fine indexing  |
| 27      | 25  | 38 |         | <b>Frost:</b>  |
|         |   |    | 0-255   | 0-100% Frost   |
| 28      | 26  | 39 |         | <b>Lamp on/off, reset, internal programs:</b>        |
|         |   |    | 0-9     | unused   |
|         |   |    | 10-14   | Display Off  |
|         |   |    | 15-19   | Display On   |
|         |   |    | 20-24   | Display Invert Off                                   |
|         |   |    | 25-29   | Display Invert On                                    |
|         |   |    | 30-34   | Auto fan control mode                                |
|         |   |    | 35-39   | Stage fan control mode                               |
|         |   |    | 40-44   | Studio fan control mode                              |
|         |   |    | 45-49   | Silence fan control mode                             |
|         |   |    | 50-54   | Square   |
|         |   |    | 55-59   | Linear   |
|         |   |    | 60-64   | 1.2K   |
|         |   |    | 65-69   | 2.4K   |
|         |   |    | 70-74   | 16K  |
|         |   |    | 75-79   | unused   |
|         |   |    | 80-84   | All motor reset                                      |
|         |   |    | 85-87   | Scan motor reset                                     |
|         |   |    | 88-90   | Colors motor reset                                   |
|         |   |    | 91-93   | Gobo motor reset                                     |
|         |   |    | 94-96   | Unused   |
|         |   |    | 97-99   | Other motor reset                                    |
|         |   |    | 100-119 | Internal program 1 (scene1~8 of EEPROM)              |
| 120-139 | Internal program 2 (scene9~16 of EEPROM)  |    |         |  |
| 140-159 | Internal program 3 (scene17~24 of EEPROM) |    |         |  |
| 160-179 | Internal program 4 (scene25~32 of EEPROM) |    |         |  |
| 180-199 | Internal program 5 (scene33~40 of EEPROM) |    |         |  |
| 200-219 | Internal program 6 (scene41~48 of EEPROM) |    |         |  |
| 220-239 | Internal program 7 (scene49~56 of EEPROM) |    |         |  |
| 240-255 | Internal program 8 (scene49~56 of EEPROM) |    |         |  |