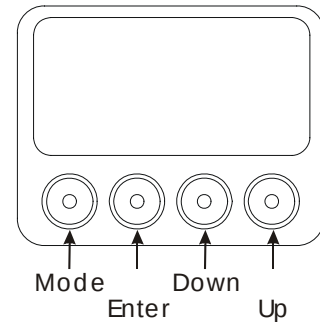


### 3 The Menu Field

You'll find the control board on the side part of the arm. It allows you to make all necessary adjustments of the **IMPRESSION**. With the **Mode**-key you get into the main menu. Afterwards you can navigate through the menu with the **Up/Down**-keys. Push the **Enter**-key to get in the next menu level or to confirm your settings. Make them and set functions **ON/OFF** with the **Up/Down**-keys. Confirm and save it with the **Enter**-key (the display shows **OK**). Push the **Mode**-key to cancel the entry and go back to the main menu.



#### ← MODE - ENTER →

| Level1                | Level 2             | Level 3            | Remark                                                                                                   |
|-----------------------|---------------------|--------------------|----------------------------------------------------------------------------------------------------------|
| DMX Start Address 001 |                     |                    | Define the DMX start address                                                                             |
| Special               | Manual DMX          |                    | Manual control of all system functions                                                                   |
|                       |                     | Pan                | Manual control for Pan (X-movement)                                                                      |
|                       |                     | Pan/Tilt Movements | Manual control for Pan/Tilt movement                                                                     |
|                       |                     | Special            | Activate the White- or Full-Power Mode; see also DMX table                                               |
|                       |                     | Dimmer             | Manual control for Dimmer                                                                                |
|                       |                     | Shutter            | Manual control for Shutter                                                                               |
|                       |                     | Blue               | Manual control for blue                                                                                  |
|                       |                     | Green              | Manual control for green                                                                                 |
|                       |                     | Red                | Manual control for red                                                                                   |
|                       |                     | Color Wheel        | Manual control for the color wheel                                                                       |
|                       |                     | Tilt               | Manual control for Tilt (Y-movement)                                                                     |
|                       | Default Set         |                    | Resetting all functions to original values                                                               |
|                       | Adjust              | Key code xxxx      | Use the code for entering the calibration menu (for authorized persons only)                             |
|                       |                     | Pan Offset         | Calibration for Pan-Offset                                                                               |
|                       |                     | Tilt Offset        | Calibration for Tilt-Offset                                                                              |
|                       |                     | Adjust LED current | Calibration for LED current                                                                              |
|                       |                     | Clear EEPROM       | Erase EEPROM                                                                                             |
|                       | Temperature Arm     |                    | Indicates the arm temperature                                                                            |
|                       | Temperature Head    |                    | Indicates the head temperature                                                                           |
|                       | Lamp Off if DMX off |                    | Defines whether the last DMX signal is stored or the lamp is switched OFF in case of signal interruption |
|                       | Position Feedback   |                    | Automatically position feedback (correction) for Pan/Tilt movement                                       |
|                       | White Adjust        |                    | Adjustments for a uniform white color (white balance); only in white-mode                                |
|                       |                     | Red                | Input for red adjustments                                                                                |
|                       |                     | Blue               | Input for blue adjustments                                                                               |
|                       |                     | Green              | Input for green adjustments                                                                              |
|                       | DMX input Monitor   |                    | Indicates the presently received DMX signal per DMX channel                                              |
|                       |                     | Pan                | Instantaneous value for Pan                                                                              |
|                       |                     | Pan/Tilt Movements | Instantaneous value for Pan/Tilt movements                                                               |

← DOWN - UP →

← DOWN - UP →

|  |  |                                   |                                                                       |
|--|--|-----------------------------------|-----------------------------------------------------------------------|
|  |  | <b>Special</b>                    | Instantaneous value for Special                                       |
|  |  | <b>Dimmer</b>                     | Instantaneous value for Dimmer                                        |
|  |  | <b>Shutter</b>                    | Instantaneous value for Shutter                                       |
|  |  | <b>Blue</b>                       | Instantaneous value for Blue                                          |
|  |  | <b>Green</b>                      | Instantaneous value for Green                                         |
|  |  | <b>Red</b>                        | Instantaneous value for Red                                           |
|  |  | <b>Color Wheel</b>                | Instantaneous value for Color Wheel                                   |
|  |  | <b>Tilt</b>                       | Instantaneous value for Tilt movement                                 |
|  |  | <b>Live time</b>                  | Indicates the overall operation time of the system                    |
|  |  | <b>Display</b>                    | Adjust the display                                                    |
|  |  | <b>Blackout</b><br><b>Reverse</b> | ON/OFF: Display OFF                                                   |
|  |  |                                   | ON/OFF: Display upside down                                           |
|  |  | <b>Compressed Mode</b>            | ON/OFF: Only 10 DMX channels are being used if this Mode is activated |
|  |  |                                   | ON/OFF: Adjustments for white-balance are activated                   |
|  |  | <b>White Mode</b>                 | ON/OFF: Invert Pan movements                                          |
|  |  | <b>Reverse Pan</b>                | ON/OFF: Invert Tilt movements                                         |
|  |  | <b>Reverse Tilt</b>               | RESET and new calibration for all functions                           |
|  |  | <b>Reset</b>                      |                                                                       |
|  |  |                                   |                                                                       |
|  |  |                                   |                                                                       |

## 4 DMX Channel Selection (DMX Protocol)

### Normal-Mode 14 DMX channels

| Channel          | Function                                | Time and Value | DMX      | HEX    | %        |
|------------------|-----------------------------------------|----------------|----------|--------|----------|
| 1) PAN-coarse    | 0 .. 660°                               | min. 3,2 s     | 0..255   | 00..FF | 0..100   |
| 2) PAN-fine      | High- Pos ... High- Pos + 2,6° (16 Bit) |                | 0..255   | 00..FF | 0..100   |
| 3) Tilt-coarse   | 0 .. 300°                               | min. 1,5 s     | 0..255   | 00..FF | 0..100   |
| 4) Tilt-fine     | High- Pos ... High- Pos + 1,2° (16 Bit) |                | 0..255   | 00..FF | 0..100   |
| 5) Color (fixed) | Colors adjustable via RGB               |                | 0..7     | 00..07 | 0..2,5   |
|                  | Color 01 - Cyan                         |                | 8..15    | 08..0F | 3..5,5   |
|                  | Color 02 - Magenta                      |                | 16..23   | 10..17 | 6..8,5   |
|                  | Color 03 - Yellow                       |                | 24..31   | 18..1F | 9..12,5  |
|                  | Color 04 - Lavender                     |                | 32..39   | 20..27 | 13..15,5 |
|                  | Color 05 - Dark Lavender                |                | 40..47   | 28..2F | 16..18,5 |
|                  | Color 06 - Amber                        |                | 48..55   | 30..37 | 19..21,5 |
|                  | Color 07 - Deep Golden                  |                | 56..63   | 38..3F | 22..24,5 |
|                  | Color 08 - Dark Blue                    |                | 64..71   | 40..47 | 25..27,5 |
|                  | Color 09 - Pink                         |                | 72..79   | 48..4F | 28..30,5 |
|                  | Color 10 - Lime Green                   |                | 80..87   | 50..57 | 31..34,5 |
|                  | Color 11 - Light Blue                   |                | 88..95   | 58..5F | 35..37,5 |
|                  | Color 12 - Red                          |                | 96..103  | 60..67 | 38..40,5 |
|                  | Color 13 - Green                        |                | 104..111 | 68..6F | 41..43,5 |
|                  | Color 14 - Blue                         |                | 112..119 | 70..77 | 44..46,5 |
|                  | White                                   |                | 120..127 | 78..7F | 47..49,5 |
|                  | Rainbow Effect                          | slow - fast    | 128..255 | 80..FF | 50..100  |
| 6) Red           | Color mixing system - Red               | 0 - 100%       | 0..255   | 00..FF | 0..100   |
| 7) Green         | Color mixing system - Green             | 0 - 100%       | 0..255   | 00..FF | 0..100   |
| 8) Blue          | Color mixing system - Blue              | 0 - 100%       | 0..255   | 00..FF | 0..100   |
| 9) Shutter       | Shutter closed                          |                | 0..15    | 00..0F | 0..5,5   |
|                  | Random Strobe (different pattern)       |                | 16..47   | 10..2F | 6..18,5  |

| Channel               | Function                                                               |      |                           | Time and Value                                                                                      | DMX      | HEX    | %        |
|-----------------------|------------------------------------------------------------------------|------|---------------------------|-----------------------------------------------------------------------------------------------------|----------|--------|----------|
|                       | Strobe Pulse effect , slow - fast                                      |      |                           |                                                                                                     | 48..79   | 30..4F | 19..31,5 |
|                       | Strobe, slow - fast                                                    |      |                           | 1 Hz .. 10 Hz                                                                                       | 80..239  | 50..EF | 32..94,5 |
|                       | Shutter open                                                           |      |                           |                                                                                                     | 240..255 | F0..FF | 95..100  |
| 10) Dimmer            | Dimmer (0% - 100%)                                                     |      |                           |                                                                                                     | 0..255   | 0..FF  | 0..100   |
| 11) Color temperature | Continuous color temperature correction between 7200k - 3200k          |      |                           | 7200k - 3200k                                                                                       | 0..255   | 0..FF  | 0..100   |
| 12) Special           | Max. Power-Mode(*)                                                     |      |                           | Max. light output without white balance                                                             | 0..15    | 0..0F  | 0..5,5   |
|                       | White-Mode (*)                                                         |      |                           | White balance used                                                                                  | 16..31   | 10..1F | 6..12,5  |
|                       | Color1-Chaser C / C+1 slow – fast                                      |      |                           | 0,7 BPS ... 2,3 BPS<br>=> 1,43 s ... 0,43 s                                                         | 112..127 | 70..7F | 44..49,5 |
|                       | Color1-Chaser C / C+2 slow – fast                                      |      |                           | 0,7 BPS ... 2,0 BPS<br>=> 1,43 s ... 0,5 s                                                          | 128..143 | 80..8F | 50..56,5 |
|                       | Fan min. as long as temp. < 60°C                                       |      |                           |                                                                                                     | 224..229 | E0..E5 | 88..89,5 |
|                       | RESET (Normal Mode)                                                    |      |                           |                                                                                                     | 250..255 | FA..FF | 98..100  |
| 13) Move-<br>ment     | No movement                                                            |      |                           |                                                                                                     | 0        | 00     | 0        |
|                       | Movement                                                               | Size | Phase                     |                                                                                                     |          |        |          |
|                       | PAN                                                                    | 1    | 0°                        |                                                                                                     | 01..01   | 01..01 | 0,5      |
|                       |                                                                        | 1    | 90°                       |                                                                                                     | 02..03   | 02..03 | 1,0      |
|                       |                                                                        | 1    | 180°                      |                                                                                                     | 04..05   | 04..05 | 1,7      |
|                       |                                                                        | 1    | 270°                      |                                                                                                     | 06..07   | 06..07 | 2,5      |
|                       | PAN                                                                    | 2    | 0°                        |                                                                                                     | 08..09   | 08..09 | 3,3      |
|                       |                                                                        | 2    | 90°                       |                                                                                                     | 10..11   | 0A..0B | 4,1      |
|                       |                                                                        | 2    | 180°                      |                                                                                                     | 12..13   | 0C..0D | 4,9      |
|                       |                                                                        | 2    | 270°                      |                                                                                                     | 14..15   | 0E..0F | 5,7      |
|                       | PAN                                                                    | 3    | 0°                        |                                                                                                     | 16..17   | 11..11 | 6,5      |
|                       |                                                                        | 3    | 90°                       |                                                                                                     | 18..19   | 12..13 | 7,3      |
|                       |                                                                        | 3    | 180°                      |                                                                                                     | 20..21   | 14..15 | 8,0      |
|                       |                                                                        | 3    | 270°                      |                                                                                                     | 22..23   | 16..17 | 8,8      |
|                       | PAN                                                                    | 4    | 0°                        |                                                                                                     | 24..25   | 18..19 | 9,6      |
|                       |                                                                        | 4    | 90°                       |                                                                                                     | 26..27   | 1A..1B | 10,4     |
|                       |                                                                        | 4    | 180°                      |                                                                                                     | 28..29   | 1C..1D | 11,2     |
|                       |                                                                        | 4    | 270°                      |                                                                                                     | 30..31   | 1E..1F | 12       |
|                       | TILT                                                                   |      | size / phase see also PAN |                                                                                                     | 32..63   | 20..3F | 13..25   |
|                       | PAN / TILT                                                             |      | size / phase see also PAN |                                                                                                     | 64..95   | 40..5F | 26..37   |
|                       | PAN / TILT (inverse)                                                   |      | size / phase see also PAN |                                                                                                     | 96..127  | 60..7F | 38..50   |
|                       | Circle                                                                 |      | size / phase see also PAN |                                                                                                     | 128..159 | 80..9F | 51..62   |
|                       | Circle (inverse)                                                       |      | size / phase see also PAN |                                                                                                     | 160..191 | A0..BF | 63..75   |
|                       | lying eight                                                            |      | size / phase see also PAN |                                                                                                     | 192..223 | C0..DF | 76..87   |
|                       | random movement                                                        |      | size see also PAN         |                                                                                                     | 224..255 | E0..FF | 88..100  |
| 14) Speed<br>Pan/Tilt | Pan/Tilt relative movement                                             |      |                           |                                                                                                     | 0..15    | 00..0F | 0..6     |
|                       | Pan/Tilt slow – fast                                                   |      |                           | Pan Min. 530° = 200 s<br>Pan Max. 530° = 2,65 s<br>Tilt Min. 285° = 110 s<br>Tilt Max. 285° = 1,8 s | 16..255  | 10..FF | 7..100   |
|                       | Use this channel 14) also for the speed of the movements (channel 13). |      |                           |                                                                                                     |          |        |          |

### Compress-Mode 10 DMX channels

| Channel                 | Function                                | Time and Value     | DMX        | HEX       | %         |
|-------------------------|-----------------------------------------|--------------------|------------|-----------|-----------|
| <b>1) PAN-coarse</b>    | 0 .. 660°                               | min. 3,2 s         | 0..255     | 00..FF    | 0..100    |
| <b>2) PAN-fine</b>      | High- Pos ... High- Pos + 2,6° (16 Bit) |                    | 0..255     | 00..FF    | 0..100    |
| <b>3) Tilt-coarse</b>   | 0 .. 300°                               | min. 1,5 s         | 0..255     | 00..FF    | 0..100    |
| <b>4) Tilt-fine</b>     | High- Pos ... High- Pos + 1,2° (16 Bit) |                    | 0..255     | 00..FF    | 0..100    |
| <b>5) Color (fixed)</b> | Colors adjustable via RGB               |                    | 0..7       | 00..07    | 0..2,5    |
|                         | Color 01 - Cyan                         |                    | 8..15      | 08..0F    | 3..5,5    |
|                         | Color 02 - Magenta                      |                    | 16..23     | 10..17    | 6..8,5    |
|                         | Color 03 - Yellow                       |                    | 24..31     | 18..1F    | 9..12,5   |
|                         | Color 04 - Lavender                     |                    | 32..39     | 20..27    | 13..15,5  |
|                         | Color 05 - Dark Lavender                |                    | 40..47     | 28..2F    | 16..18,5  |
|                         | Color 06 - Amber                        |                    | 48..55     | 30..37    | 19..21,5  |
|                         | Color 07 - Deep Golden                  |                    | 56..63     | 38..3F    | 22..24,5  |
|                         | Color 08 - Dark Blue                    |                    | 64..71     | 40..47    | 25..27,5  |
|                         | Color 09 - Pink                         |                    | 72..79     | 48..4F    | 28..30,5  |
|                         | Color 10 - Lime Green                   |                    | 80..87     | 50..57    | 31..34,5  |
|                         | Color 11 - Light Blue                   |                    | 88..95     | 58..5F    | 35..37,5  |
|                         | Color 12 - Red                          |                    | 96..103    | 60..67    | 38..40,5  |
|                         | Color 13 - Green                        |                    | 104..111   | 68..6F    | 41..43,5  |
|                         | Color 14 - Blue                         |                    | 112..119   | 70..77    | 44..46,5  |
|                         | White                                   |                    | 120..127   | 78..7F    | 47..49,5  |
|                         | Rainbow Effect                          | slow - fast        | 128..255   | 80..FF    | 50..100   |
| <b>6) Red</b>           | Color mixing system - Red               | 0 - 100%           | 0..255     | 00..FF    | 0..100    |
| <b>7) Green</b>         | Color mixing system - Green             | 0 - 100%           | 0..255     | 00..FF    | 0..100    |
| <b>8) Blue</b>          | Color mixing system - Blue              | 0 - 100%           | 0..255     | 00..FF    | 0..100    |
| <b>9) Shutter</b>       | Shutter closed                          |                    | 0..15      | 00..0F    | 0..5,5    |
|                         | Random Strobe (different pattern)       |                    | 16..47     | 10..2F    | 6..18,5   |
|                         | Pulse effect , slow - fast              |                    | 48..79     | 30..4F    | 19..31,5  |
|                         | Strobe, slow - fast                     | 1 Hz .. 10 Hz      | 80..239    | 50..EF    | 32..94,5  |
|                         | Shutter open                            |                    | 240..249   | F0..F9    | 95..97,5  |
|                         | <b>RESET</b>                            | <b>Min. 3 Sec.</b> | <b>250</b> | <b>FA</b> | <b>98</b> |
| <b>10) Dimmer</b>       | Shutter open                            |                    | 251..255   | FB..FF    | 99..100   |
|                         | Dimmer (0% - 100%)                      |                    | 0..255     | 0..FF     | 0..100    |

#### **(\*) Max. Power-Mode vs. White-Mode**

The **IMPRESSION** can regard the white-balance adjustments for each individual color setting. Whether the White-Mode is used with RGB can be selected in the **Normal DMX-Mode** during operation with the Special DMX channel. If the Special channel is set to a value between DMX 0..15, the White-Mode is not used and the RGB goes for the maximum light output. If the Special channel is set to a value between DMX 16..31, the white balance is used for the RGB output.

Since there is no Special DMX channel in the **Compress DMX-Mode**, the possibility exists to likewise select these settings also in the display menu. Is the White-Mode set to "ON", the white-balance is activated. If the White-Mode is set to "OFF", the RGB goes for the maximum light output (Max. Power-Mode).