



## **RGBW 3x4 Brick & 10x4 Batten**



## **USER MANUAL**

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# 1. INTRODUCTION

## PRODUCT OVERVIEW

These fixtures are linear LED fixtures with high-intensity RGBW single-chip Cree® LEDs grouped into multiple independent pixels. In-lens color mixing prevents multicolor shadows. Advanced fixture electronics deliver flicker-free output with smooth 16-bit dimming.

- In-lens color mixing.
- Multiple control modes including parametric modes with effects, whole fixture control, and pixel control.
- Flicker-free output with smooth 16-bit dimming.
- 16-bit DMX512 control.

## WHAT IS INCLUDED

- 1x Solaris LED RGBW 10x4 or 3x4 fixture w/ heavy duty trunnions
- 1x Power cable
- 1x User manual

## AVAILABLE OPTIONS

- Partial frost strips
- Heavy-duty bar yoke (Batten and Half-Batten only)
- Lenses: 16°, 22°, 36°, 47°

## UNPACKING INSTRUCTIONS

Upon receipt of the fixture, carefully unpack the carton and check the contents to ensure that all parts are present and in good condition. Notify the shipper immediately and retain packing material for inspection if any parts appear to be damaged from shipping or if the carton itself shows signs of mishandling. Save the carton and all packing materials. In the event that a fixture must be returned to the factory, it is important that the fixture be returned in the original factory box and packing.

## POWER REQUIREMENTS

Before powering the unit, make sure the line voltage is within the range of accepted voltages. This fixture accommodates 100-240VAC, 50/60Hz. All fixtures must be powered directly from a switched circuit and cannot be operated with a rheostat (variable resistor) or dimmer circuit, even if the rheostat or dimmer channel is used solely as a 0-100% switch.

When powered up, Solaris LED performs a preprogrammed internal test. On initial power-up the factory default DMX address appears on the display screen and Solaris LED is ready for operation. After initial power-up, the last-saved DMX address will appear.

## FREQUENCY SETTING

Depending on location, change the Default Frequency setting to match the mains power (e.g., US and Canada should be set at 60Hz). Proper frequency setting will ensure minimum amount of visible artifacts when using Solaris LED on camera.

## SAFETY INSTRUCTIONS



Please read these instructions carefully. This user guide contains important information about the installation, usage and maintenance of this fixture.

- Please keep this Operation Manual for future reference. If unit is sold to another user, make sure they also receive this instruction booklet.
- Ensure fixture is connected to proper voltage, and that line voltage is not higher than that stated on the fixture.
- Make sure there are no flammable materials close to the unit while operating.
- Always disconnect from the power source before servicing or fuse replacement. Always use the fuse specified in this manual.
- Always use a safety cable when hanging fixture overhead.
- Maximum ambient temperature (Ta) is 40°C (104°F). Do not operate fixture at temperatures above this rating.
- In the event of a serious operating problem, stop using the unit immediately. Repairs must be carried out by trained, authorized personnel. Contact the nearest authorized technical assistance center. Only OEM spare parts should be used.
- Do not connect the device to a dimmer pack.
- Make sure power cord is never crimped or damaged.
- Never disconnect power cord by pulling or tugging on the cord.
- Avoid direct eye exposure to the light source during operation.

**Caution! There are no user serviceable parts inside the unit. Do not open the housing or attempt any repairs yourself. In the unlikely event your unit may require service, please contact your distributor.**

## 2. SETUP



Disconnect the power cord before replacing the fuse. Always replace with the correct fuse type.



### FUSE REPLACEMENT

Solaris LEDs use a 6A (10x4) and 4A (3x4) 250V slow-blow fuse. To replace fuse:

1. With a screwdriver turn the fuse cap counter-clockwise to remove fuse cap with fuse.
2. Replace fuse attached to fuse cap.
3. Reinsert fuse cap with new fuse and tighten clockwise.

### FIXTURE LINKING

A DMX data link is needed to operate one or more fixtures via a DMX-512 lighting console. The combined number of channels required by all the fixtures on a DMX data link determines the number of fixtures the DMX data link can support.

***Important: Fixtures on a DMX data link must be daisy-chained in one single line. To comply with the EIA-485 standard, no more than 32 devices should be connected on one data link. Connecting more than 32 fixtures on one serial data link without the use of a DMX optically-isolated splitter may result in deterioration of the digital DMX signal.***

Maximum recommended DMX data link distance between fixtures: 984 ft. (300 meters).

### DMX DATA CABLE

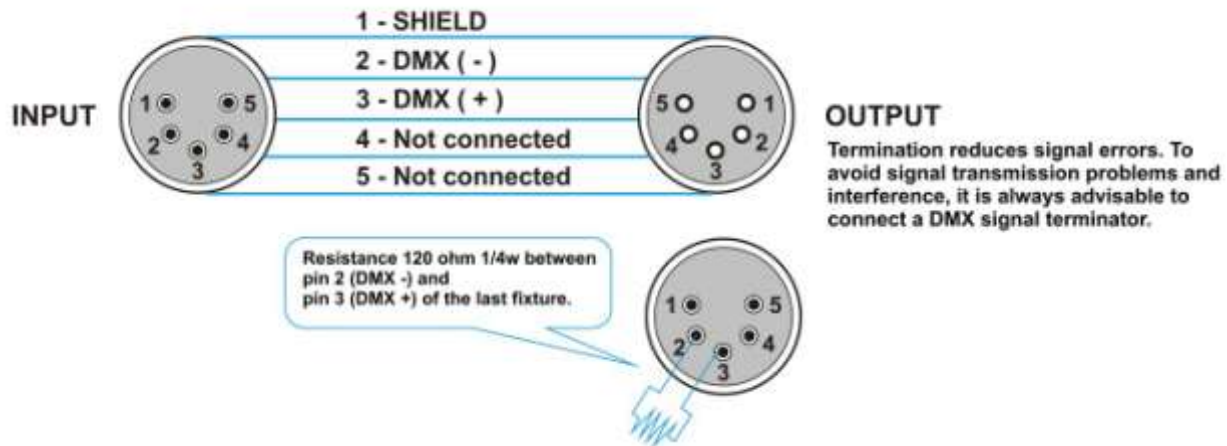
Use a ProPlex® DMX cable or equivalent which meets the specifications for EIA RS-485 applications. Standard microphone cables cannot transmit DMX data reliably over long distances. The data cable must have the following characteristics:

- 2-conductor twisted pair plus a shield
- Max. capacitance between conductors – 30 pF/ft.
- Max. capacitance between conductor and shield – 55 pF/ft.
- Max. resistance of 20 ohms / 1000 ft.
- Nominal impedance 100-140 ohms

## CABLE / CONNECTORS

Cabling must have a male XLR connector on one end and a female XLR connector on the other end.

### DMX connector configuration



**CAUTION:** Do not allow contact between the common and the fixture's chassis ground. Grounding the common can cause a ground loop, and your fixture may perform erratically. Test cables with an ohm meter to verify correct polarity and to make sure the pins are not grounded or shorted to the shield or each other.

## 3-PIN TO 5-PIN CONVERSION CHART

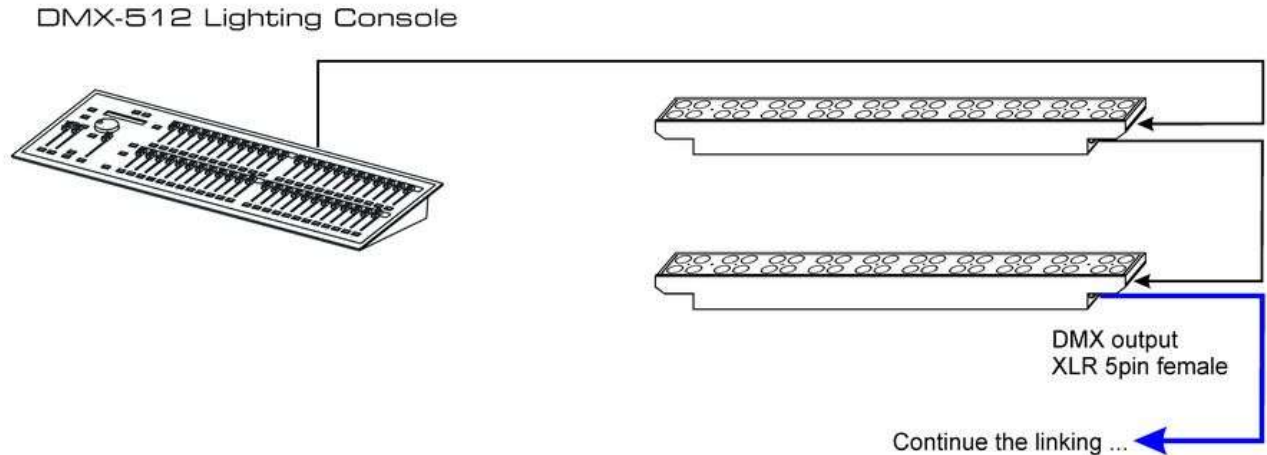
If using a console with a 3-pin DMX output connector, a 3-pin to 5-pin adapter is needed. The chart below details a proper cable conversion:

3-PIN TO 5-PIN CONVERSION CHART

| Conductor         | 3 Pin Female (output) | 5 Pin Male (Input) |
|-------------------|-----------------------|--------------------|
| Ground / Shield   | Pin 1                 | Pin 1              |
| Data ( - ) signal | Pin 2                 | Pin 2              |
| Data ( + ) signal | Pin 3                 | Pin 3              |
| Do not use        |                       | Do not use         |
| Do not use        |                       | Do not use         |

## SETTING UP A DMX SERIAL DATA LINK

- 1) Connect the male 5-pin XLR connector of the data cable to the female 5-pin XLR output of the DMX console. Connect the other end of the data cable (female 5-pin XLR) to the male 5-pin XLR connector located on the Solaris LED.
- 2) Connect from the fixture output as stated above to the input of the following fixture, and so forth.
- 3) Continue linking until the last fixture is connected in your DMX signal data chain.



**IMPORTANT:** In the AutoLink control modes, if the first fixture in chain is set to work in AutoLink 1 or 2 mode, it will take a priority over all subsequent fixtures in the chain. Note! In this case communication between fixtures is done using a proprietary protocol, other DMX devices in the chain after the first Solaris LED fixture will not run properly. Powering off one of the fixtures in data chain, will result in a loss of signal for the remainder of the chain. When using an AutoLink mode, do not connect any other type of fixtures in your Solaris LED fixture data link.

## FIXTURE MOUNTING/RIGGING

### Orientation

Solaris LED fixtures may be mounted in any position. Always make sure there is adequate room for ventilation. Do not obstruct unit's fan or vents.

### Support Stand

Always use a professional stand rated to support weight greater than the Solaris LED weight (see specifications). Attach a TVMP spigot to the yoke of the Solaris LED and mount on the stand.

**Rigging** – Always consult a qualified, certified rigging engineer before suspending any fixture overhead.

Use ProBurger® couplers or equivalent C- or O-type clamps for attaching to truss. Do not obstruct vents. Adjust the fixture angle by loosening both knobs and tilting the fixture as needed. After establishing the desired position, retighten both knobs.

- Always use safety cables!
- When selecting installation location, consider routine maintenance.
- Never mount fixture where it will be exposed to moisture, high humidity, extreme temperatures, or restricted ventilation.



## 3. OPERATING INSTRUCTIONS

### CONTROL PANEL NAVIGATION

Access control panel functions via four control panel buttons surrounding the LCD display. Buttons are indicated by a concentric circle.



The Control Panel LCD Display shows the menu items selected from the menu map (see page 9). When a menu function is selected, the display will show the first available option for the selected menu function. To select a menu item, press **<MENU>**.

Press and hold the **<MENU>** button to scroll through the top level menu items. Use the **<UP>** and **<DOWN>** buttons, located to the right of the LCD screen, to navigate the menu map and menu options. Press the **<MENU>** button to access the menu function currently displayed or to enable a menu option. To return to the top of the menu map or menu without changing the value, press the **< X >** button.

#### Main Menu Functions:

**DMX Address** – DMX address selection  
**Control** – Control mode selection menu  
**Manual** – Manual Control  
**Demo** – Demonstration scenes  
**Config** – Configuration Menu

During normal operation, the Control Panel LED Display indicates DMX start address. When the DMX signal is not connected, or if the Solaris LED is not receiving a DMX signal, the address blinks RED.



## MENU MAP – SOLARIS LED LINEAR RGBW 10x4

| Back-Enter  |          |                     |                                                                            |
|-------------|----------|---------------------|----------------------------------------------------------------------------|
| Level 1     | Level 2  | Level 3             | Notes                                                                      |
| DMX Address |          |                     | Set the DMX start address                                                  |
| Control     |          |                     | Set Fixture operating mode                                                 |
|             | Basic    |                     | Simple control as RGB or RGBW wash fixture                                 |
|             |          | RGB 1pix            | RGB 1 pixel 8-bit control mode                                             |
|             |          | RGBW 1pix           | RGBW 1 pixel 8-bit control mode                                            |
|             |          | RGB 1pix 16bit      | RGB 1 pixel 16-bit control mode                                            |
|             |          | RGBW 1pix 16bit     | RGBW 1 pixel 16-bit control mode                                           |
|             |          | RGB 2pix            | RGB 2 pixel 8-bit control mode                                             |
|             |          | RGBW 2pix           | RGBW 2 pixel 8-bit control mode                                            |
|             |          | RGB 2pix 16bit      | RGB 2 pixel 16-bit control mode                                            |
|             |          | RGBW 2pix 16bit     | RGBW 2 pixel 16-bit control mode                                           |
|             |          | RGB 5pix            | RGB 5 pixel 8-bit control mode                                             |
|             |          | RGBW 5pix           | RGBW 5 pixel 8-bit control mode                                            |
|             |          | RGB 5pix 16bit      | RGB 5 pixel 16-bit control mode                                            |
|             |          | RGBW 5pix 16bit     | RGBW 5 pixel 16-bit control mode                                           |
|             |          | RGB 10pix           | RGB 10 pixel 8-bit control mode                                            |
|             |          | RGBW 10pix          | RGBW 10 pixel 8-bit control mode                                           |
|             |          | RGB 10pix 16bit     | RGB 10 pixel 16-bit control mode                                           |
|             |          | RGBW 10pix 16bit    | RGBW 10 pixel 16-bit control mode                                          |
|             |          |                     |                                                                            |
|             |          |                     |                                                                            |
|             |          |                     |                                                                            |
|             |          |                     |                                                                            |
|             |          | AutoLink mode 1     | Parametric control mode 1                                                  |
|             |          | AutoLink mode 2     | Parametric control mode 2                                                  |
|             | Advanced |                     | Control all fixtures as strobe and wash light with pixels at the same time |
|             |          | Strobe + RGB 1pix   | Strobe + RGB 1 pixel 8-bit mode                                            |
|             |          | Strobe + RGBW 1pix  | Strobe + RGBW 1 pixel 8-bit mode                                           |
|             |          | Strobe + RGB 2pix   | Strobe + RGB 2 pixel 8-bit mode                                            |
|             |          | Strobe + RGBW 2pix  | Strobe + RGBW 2 pixel 8-bit mode                                           |
|             |          | Strobe + RGB 5pix   | Strobe + RGB 5 pixel 8-bit mode                                            |
|             |          | Strobe + RGBW 5pix  | Strobe + RGBW 5 pixel 8-bit mode                                           |
|             |          | Strobe + RGB 10 pix | Strobe + RGB 10 pixel 8-bit mode                                           |
|             |          | Strobe + RGBW 10pix | Strobe + RGBW 10 pixel 8-bit mode                                          |
|             |          |                     |                                                                            |
|             |          |                     |                                                                            |
| Manual      |          |                     | Manual control for stand-alone operation                                   |
|             | RED      | 0-255               | Red intensity                                                              |
|             | GREEN    | 0-255               | Green intensity                                                            |
|             | BLUE     | 0-255               | Blue intensity                                                             |
|             | WHITE    | 0-255               | White intensity                                                            |
| Demo        |          |                     | Will activate preprogrammed self-test                                      |
|             | Demo 1   |                     | Red color test                                                             |

|           |            |     |                                                                                                                                                                                 |
|-----------|------------|-----|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| DONW - UP | Demo 2     |     | Green color test                                                                                                                                                                |
|           | Demo 3     |     | Blue color test                                                                                                                                                                 |
|           | Demo 4     |     | White color test                                                                                                                                                                |
|           | Demo 5     |     | Yellow color test                                                                                                                                                               |
|           | Demo 6     |     | Cyan color test                                                                                                                                                                 |
|           | Demo 7     |     | Pink color test                                                                                                                                                                 |
|           | Demo 8     |     | White color test                                                                                                                                                                |
|           | Demo 9     |     | Color Amplitude Modulation soft transition test                                                                                                                                 |
|           | Demo 10    |     | Color Amplitude Modulation sharp transition test                                                                                                                                |
|           | Demo 11    |     | Color + Intensity Amplitude Modulation test                                                                                                                                     |
|           | Demo 12    |     | Color + Intensity Amplitude Modulation test                                                                                                                                     |
|           | Demo 13    |     | White Intensity Amplitude Modulation test                                                                                                                                       |
|           | Demo 14    |     | Red color strobe test                                                                                                                                                           |
|           | Demo 15    |     | Green color strobe test                                                                                                                                                         |
|           | Demo 16    |     | Blue color strobe test                                                                                                                                                          |
|           | Demo 17    |     | White color strobe test                                                                                                                                                         |
|           | Demo 18    |     | Red flash delay test                                                                                                                                                            |
|           | Demo 19    |     | Green flash delay test                                                                                                                                                          |
|           | Demo 20    |     | Blue flash delay test                                                                                                                                                           |
|           | Auto       |     | Automatic selection of all tests 1- 20                                                                                                                                          |
| DONW - UP | Config     |     |                                                                                                                                                                                 |
|           | DMX Loss   |     | Desired function should Solaris LED lose DMX signal                                                                                                                             |
|           |            | OFF | Do not hold the last-received DMX values, stop light output.                                                                                                                    |
|           | Fan        | ON  | Hold the last-received DMX values when DMX signal is lost.                                                                                                                      |
|           |            |     | This function offers to limit the cooling fan operation.                                                                                                                        |
|           | Display    | OFF | Fan off                                                                                                                                                                         |
|           |            | ON  | Fan on                                                                                                                                                                          |
|           | Fade Time  |     | Display backlight control                                                                                                                                                       |
|           |            | ON  | Backlight on all the time                                                                                                                                                       |
|           |            | 10s | Backlight will turn off after 10 seconds                                                                                                                                        |
|           | SmartFade  | 30s | Backlight will turn off after 30 seconds                                                                                                                                        |
|           |            |     | Fade time setup. Set the way the Solaris LED reacts to change of DMX values. Designed to allow the light output to react as smoothly as possible when crossfading DMX values.   |
|           |            | OFF | Solaris LED will not change the smoothness of crossfading of values coming from the lighting control.                                                                           |
|           | Fixed fade |     | To add smoothness to slow crossfading DMX values coming from the lighting controller, but will also allow for very quick changing of values where smoothness is not applicable. |
|           |            |     | Fade time for any change in DMX values can be set manually. Timing values can be set between 0.00 and 2.50 seconds.                                                             |

DONW - UP



|              |          |                                                                                                                                                                                                                                                             |
|--------------|----------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Gamma        | Gamma 8  | Gamma correction for 8-bit parameter width                                                                                                                                                                                                                  |
|              | Gamma 16 | Gamma correction for 16-bit parameter width                                                                                                                                                                                                                 |
| Async Strobe |          | In Advanced control modes where there are Strobe controls, when set to ON, a change in strobe intensity will one-shot the strobe and/or effect when strobe rate is set at 0.                                                                                |
|              | OFF      |                                                                                                                                                                                                                                                             |
| Thermometer  | ON       |                                                                                                                                                                                                                                                             |
|              |          | Display internal temperature                                                                                                                                                                                                                                |
| Line Freq.   |          | Line Frequency. Setting depends on the country you are using the Solaris LED in and power provided.                                                                                                                                                         |
|              | 50 Hz    |                                                                                                                                                                                                                                                             |
| Upload       | 60 Hz    |                                                                                                                                                                                                                                                             |
|              | Password | If fixture has newer firmware, it can update other Solaris LED fixtures connected to DMX output. Password: 111.<br><i>Warning: Do not use splitters or any other devices, or disconnect power while updating. This can permanently damage the fixtures.</i> |
| Reset        |          | Reset fixture to factory defaults                                                                                                                                                                                                                           |
|              | NO       |                                                                                                                                                                                                                                                             |
|              | YES      |                                                                                                                                                                                                                                                             |

## DMX CONTROL MODES SUMMARY – 10x4

### BASIC CONTROL MODES

- **RGB Xpix** – RGB control mode, use fixture as 1, 2, 5, or 10 independent pixels. 8 or 16 bit parameter width.
- **RGBW Xpix** – RGBW control mode, use fixture as 1, 2, 5, or 10 independent pixels. 8 or 16 bit parameter width.
- **AutoLink mode 1** – Parametric control mode with various scene, color mixing and effects possibilities, 20 channels per link (link can contain various count of units). Link can contain 2-255 pixel-long fixture chain without repeated segments. One link occupies only 20 DMX channels regardless of fixture count. AutoLink mode 1 uses 8 bit parameter width.
- **AutoLink mode 2** – Second parametric control mode, includes black level control. 17 channels per link (link can contain various numbers of units). Link can contain 2-255 pixel-long fixture chain without repeated segments. One link occupies only 20 DMX channels regardless of fixture count. AutoLink mode 2 uses 8 bit parameter width.

### ADVANCED CONTROL MODES

- **Strobe + RGB Xpix** – RGB strobe + RGB pixel control mode. Use fixture as RGB strobe and 1, 2, 5, or 10 independent RGB pixels at the same time. 8 bit parameter width.
- **Strobe + RGBW Xpix** - RGBW strobe + RGBW pixel control mode. Use fixture as RGBW strobe and 1, 2, 5, or 10 independent RGBW pixels at the same time. 8 bit parameter width.

## RGB XPIX DMX CHANNELS – 10x4

| PIXEL MODE | CHANNEL | DMX VALUE | PERCENT | FUNCTION               |
|------------|---------|-----------|---------|------------------------|
| RGB 1pix   | 1       | 0 - 255   | 0 - 100 | 1 pix Red intensity    |
|            | 2       | 0 - 255   | 0 - 100 | 1 pix Green intensity  |
|            | 3       | 0 - 255   | 0 - 100 | 1 pix Blue intensity   |
| RGB 2pix   | 4       | 0 - 255   | 0 - 100 | 2 pix Red intensity    |
|            | 5       | 0 - 255   | 0 - 100 | 2 pix Green intensity  |
|            | 6       | 0 - 255   | 0 - 100 | 2 pix Blue intensity   |
| RGB 5 pix  | 7       | 0 - 255   | 0 - 100 | 3 pix Red intensity    |
|            | 8       | 0 - 255   | 0 - 100 | 3 pix Green intensity  |
|            | 9       | 0 - 255   | 0 - 100 | 3 pix Blue intensity   |
|            | 10      | 0 - 255   | 0 - 100 | 4 pix Red intensity    |
|            | 11      | 0 - 255   | 0 - 100 | 4 pix Green intensity  |
|            | 12      | 0 - 255   | 0 - 100 | 4 pix Blue intensity   |
| RGB 10 pix | 13      | 0 - 255   | 0 - 100 | 5 pix Red intensity    |
|            | 14      | 0 - 255   | 0 - 100 | 5 pix Green intensity  |
|            | 15      | 0 - 255   | 0 - 100 | 5 pix Blue intensity   |
|            | 16      | 0 - 255   | 0 - 100 | 6 pix Red intensity    |
|            | 17      | 0 - 255   | 0 - 100 | 6 pix Green intensity  |
|            | 18      | 0 - 255   | 0 - 100 | 6 pix Blue intensity   |
|            | 19      | 0 - 255   | 0 - 100 | 7 pix Red intensity    |
|            | 20      | 0 - 255   | 0 - 100 | 7 pix Green intensity  |
|            | 21      | 0 - 255   | 0 - 100 | 7 pix Blue intensity   |
|            | 22      | 0 - 255   | 0 - 100 | 8 pix Red intensity    |
|            | 23      | 0 - 255   | 0 - 100 | 8 pix Green intensity  |
|            | 24      | 0 - 255   | 0 - 100 | 8 pix Blue intensity   |
|            | 25      | 0 - 255   | 0 - 100 | 9 pix Red intensity    |
|            | 26      | 0 - 255   | 0 - 100 | 9 pix Green intensity  |
|            | 27      | 0 - 255   | 0 - 100 | 9 pix Blue intensity   |
|            | 28      | 0 - 255   | 0 - 100 | 10 pix Red intensity   |
|            | 29      | 0 - 255   | 0 - 100 | 10 pix Green intensity |
|            | 30      | 0 - 255   | 0 - 100 | 10 pix Blue intensity  |

## RGB XPIX 16BIT DMX CHANNELS – 10x4

| PIXEL MODE     | CHANNEL | DMX VALUE | PERCENT | FUNCTION                        |
|----------------|---------|-----------|---------|---------------------------------|
| RGB 1pix 16bit | 1       | 0 - 255   | 0 - 100 | 1 pix Red intensity HIGH Byte   |
|                | 2       | 0 - 255   | 0 - 100 | 1 pix Red intensity LOW Byte    |
|                | 3       | 0 - 255   | 0 - 100 | 1 pix Green intensity HIGH Byte |
|                | 4       | 0 - 255   | 0 - 100 | 1 pix Green intensity LOW Byte  |
|                | 5       | 0 - 255   | 0 - 100 | 1 pix Blue intensity HIGH Byte  |
|                | 6       | 0 - 255   | 0 - 100 | 1 pix Blue intensity LOW Byte   |
| RGB 2pix 16bit | 7       | 0 - 255   | 0 - 100 | 2 pix Red intensity HIGH Byte   |
|                | 8       | 0 - 255   | 0 - 100 | 2 pix Red intensity LOW Byte    |
|                | 9       | 0 - 255   | 0 - 100 | 2 pix Green intensity HIGH Byte |
|                | 10      | 0 - 255   | 0 - 100 | 2 pix Green intensity LOW Byte  |
|                | 11      | 0 - 255   | 0 - 100 | 2 pix Blue intensity HIGH Byte  |
|                | 12      | 0 - 255   | 0 - 100 | 2 pix Blue intensity LOW Byte   |
| RGB 5pix 16bit | 13      | 0 - 255   | 0 - 100 | 3 pix Red intensity HIGH Byte   |
|                | 14      | 0 - 255   | 0 - 100 | 3 pix Red intensity LOW Byte    |
|                | 15      | 0 - 255   | 0 - 100 | 3 pix Green intensity HIGH Byte |

|                    |    |         |         |                                  |
|--------------------|----|---------|---------|----------------------------------|
|                    | 16 | 0 - 255 | 0 - 100 | 3 pix Green intensity LOW Byte   |
|                    | 17 | 0 - 255 | 0 - 100 | 3 pix Blue intensity HIGH Byte   |
|                    | 18 | 0 - 255 | 0 - 100 | 3 pix Blue intensity LOW Byte    |
|                    | 19 | 0 - 255 | 0 - 100 | 4 pix Red intensity HIGH Byte    |
|                    | 20 | 0 - 255 | 0 - 100 | 4 pix Red intensity LOW Byte     |
|                    | 21 | 0 - 255 | 0 - 100 | 4 pix Green intensity HIGH Byte  |
|                    | 22 | 0 - 255 | 0 - 100 | 4 pix Green intensity LOW Byte   |
|                    | 23 | 0 - 255 | 0 - 100 | 4 pix Blue intensity HIGH Byte   |
| RGB 10pix<br>16bit | 24 | 0 - 255 | 0 - 100 | 4 pix Blue intensity LOW Byte    |
|                    | 25 | 0 - 255 | 0 - 100 | 5 pix Red intensity HIGH Byte    |
|                    | 26 | 0 - 255 | 0 - 100 | 5 pix Red intensity LOW Byte     |
|                    | 27 | 0 - 255 | 0 - 100 | 5 pix Green intensity HIGH Byte  |
|                    | 28 | 0 - 255 | 0 - 100 | 5 pix Green intensity LOW Byte   |
|                    | 29 | 0 - 255 | 0 - 100 | 5 pix Blue intensity HIGH Byte   |
|                    | 30 | 0 - 255 | 0 - 100 | 5 pix Blue intensity LOW Byte    |
|                    | 31 | 0 - 255 | 0 - 100 | 6 pix Red intensity HIGH Byte    |
|                    | 32 | 0 - 255 | 0 - 100 | 6 pix Red intensity LOW Byte     |
|                    | 33 | 0 - 255 | 0 - 100 | 6 pix Green intensity HIGH Byte  |
|                    | 34 | 0 - 255 | 0 - 100 | 6 pix Green intensity LOW Byte   |
|                    | 35 | 0 - 255 | 0 - 100 | 6 pix Blue intensity HIGH Byte   |
|                    | 36 | 0 - 255 | 0 - 100 | 6 pix Blue intensity LOW Byte    |
|                    | 37 | 0 - 255 | 0 - 100 | 7 pix Red intensity HIGH Byte    |
|                    | 38 | 0 - 255 | 0 - 100 | 7 pix Red intensity LOW Byte     |
|                    | 39 | 0 - 255 | 0 - 100 | 7 pix Green intensity HIGH Byte  |
|                    | 40 | 0 - 255 | 0 - 100 | 7 pix Green intensity LOW Byte   |
|                    | 41 | 0 - 255 | 0 - 100 | 7 pix Blue intensity HIGH Byte   |
|                    | 42 | 0 - 255 | 0 - 100 | 7 pix Blue intensity LOW Byte    |
|                    | 43 | 0 - 255 | 0 - 100 | 8 pix Red intensity HIGH Byte    |
|                    | 44 | 0 - 255 | 0 - 100 | 8 pix Red intensity LOW Byte     |
|                    | 45 | 0 - 255 | 0 - 100 | 8 pix Green intensity HIGH Byte  |
|                    | 46 | 0 - 255 | 0 - 100 | 8 pix Green intensity LOW Byte   |
| RGB 10pix<br>16bit | 47 | 0 - 255 | 0 - 100 | 8 pix Blue intensity HIGH Byte   |
|                    | 48 | 0 - 255 | 0 - 100 | 8 pix Blue intensity LOW Byte    |
|                    | 49 | 0 - 255 | 0 - 100 | 9 pix Red intensity HIGH Byte    |
|                    | 50 | 0 - 255 | 0 - 100 | 9 pix Red intensity LOW Byte     |
|                    | 51 | 0 - 255 | 0 - 100 | 9 pix Green intensity HIGH Byte  |
|                    | 52 | 0 - 255 | 0 - 100 | 9 pix Green intensity LOW Byte   |
|                    | 53 | 0 - 255 | 0 - 100 | 9 pix Blue intensity HIGH Byte   |
|                    | 54 | 0 - 255 | 0 - 100 | 9 pix Blue intensity LOW Byte    |
|                    | 55 | 0 - 255 | 0 - 100 | 10 pix Red intensity HIGH Byte   |
|                    | 56 | 0 - 255 | 0 - 100 | 10 pix Red intensity LOW Byte    |
|                    | 57 | 0 - 255 | 0 - 100 | 10 pix Green intensity HIGH Byte |
|                    | 58 | 0 - 255 | 0 - 100 | 10 pix Green intensity LOW Byte  |
|                    | 59 | 0 - 255 | 0 - 100 | 10 pix Blue intensity HIGH Byte  |
|                    | 60 | 0 - 255 | 0 - 100 | 10 pix Blue intensity LOW Byte   |

## RGBW *XPIX* DMX CHANNELS – 10x4

| PIXEL MODE | CHANNEL | DMX VALUE | PERCENT | FUNCTION              |
|------------|---------|-----------|---------|-----------------------|
| RGBW 1pix  | 1       | 0 - 255   | 0 - 100 | 1 pix Red intensity   |
|            | 2       | 0 - 255   | 0 - 100 | 1 pix Green intensity |
|            | 3       | 0 - 255   | 0 - 100 | 1 pix Blue intensity  |
|            | 4       | 0 - 255   | 0 - 100 | 1 pix White intensity |
| RGBW 2pix  | 5       | 0 - 255   | 0 - 100 | 2 pix Red intensity   |
|            | 6       | 0 - 255   | 0 - 100 | 2 pix Green intensity |
|            | 7       | 0 - 255   | 0 - 100 | 2 pix Blue intensity  |
|            | 8       | 0 - 255   | 0 - 100 | 2 pix White intensity |
| RGBW 5pix  | 9       | 0 - 255   | 0 - 100 | 3 pix Red intensity   |
|            | 10      | 0 - 255   | 0 - 100 | 3 pix Green intensity |
|            | 11      | 0 - 255   | 0 - 100 | 3 pix Blue intensity  |
|            | 12      | 0 - 255   | 0 - 100 | 3 pix White intensity |
|            | 13      | 0 - 255   | 0 - 100 | 4 pix Red intensity   |
|            | 14      | 0 - 255   | 0 - 100 | 4 pix Green intensity |

|            |    |         |         |                        |
|------------|----|---------|---------|------------------------|
| RGBW 10pix | 15 | 0 - 255 | 0 - 100 | 4 pix Blue intensity   |
|            | 16 | 0 - 255 | 0 - 100 | 4 pix White intensity  |
|            | 17 | 0 - 255 | 0 - 100 | 5 pix Red intensity    |
|            | 18 | 0 - 255 | 0 - 100 | 5 pix Green intensity  |
|            | 19 | 0 - 255 | 0 - 100 | 5 pix Blue intensity   |
|            | 20 | 0 - 255 | 0 - 100 | 5 pix White intensity  |
|            | 21 | 0 - 255 | 0 - 100 | 6 pix Red intensity    |
|            | 22 | 0 - 255 | 0 - 100 | 6 pix Green intensity  |
|            | 23 | 0 - 255 | 0 - 100 | 6 pix Blue intensity   |
|            | 24 | 0 - 255 | 0 - 100 | 6 pix White intensity  |
|            | 25 | 0 - 255 | 0 - 100 | 7 pix Red intensity    |
|            | 26 | 0 - 255 | 0 - 100 | 7 pix Green intensity  |
|            | 27 | 0 - 255 | 0 - 100 | 7 pix Blue intensity   |
|            | 28 | 0 - 255 | 0 - 100 | 7 pix White intensity  |
|            | 29 | 0 - 255 | 0 - 100 | 8 pix Red intensity    |
|            | 30 | 0 - 255 | 0 - 100 | 8 pix Green intensity  |
| RGBW 10pix | 31 | 0 - 255 | 0 - 100 | 8 pix Blue intensity   |
|            | 32 | 0 - 255 | 0 - 100 | 8 pix White intensity  |
|            | 33 | 0 - 255 | 0 - 100 | 9 pix Red intensity    |
|            | 34 | 0 - 255 | 0 - 100 | 9 pix Green intensity  |
|            | 35 | 0 - 255 | 0 - 100 | 9 pix Blue intensity   |
|            | 36 | 0 - 255 | 0 - 100 | 9 pix White intensity  |
|            | 37 | 0 - 255 | 0 - 100 | 10 pix Red intensity   |
|            | 38 | 0 - 255 | 0 - 100 | 10 pix Green intensity |
|            | 39 | 0 - 255 | 0 - 100 | 10 pix Blue intensity  |
|            | 40 | 0 - 255 | 0 - 100 | 10 pix White intensity |

## RGBW $X_{PIX}$ 16BIT DMX CHANNELS – 10x4

| PIXEL MODE | CHANNEL | DMX VALUE | PERCENT | FUNCTION                        |
|------------|---------|-----------|---------|---------------------------------|
| RGBW 1pix  | 1       | 0 - 255   | 0 - 100 | 1 pix Red intensity HIGH byte   |
|            | 2       | 0 - 255   | 0 - 100 | 1 pix Red intensity LOW byte    |
|            | 3       | 0 - 255   | 0 - 100 | 1 pix Green intensity HIGH byte |
|            | 4       | 0 - 255   | 0 - 100 | 1 pix Green intensity LOW byte  |
|            | 5       | 0 - 255   | 0 - 100 | 1 pix Blue intensity HIGH byte  |
|            | 6       | 0 - 255   | 0 - 100 | 1 pix Blue intensity LOW byte   |
|            | 7       | 0 - 255   | 0 - 100 | 1 pix White intensity HIGH byte |
|            | 8       | 0 - 255   | 0 - 100 | 1 pix White intensity LOW byte  |
| RGBW 2pix  | 9       | 0 - 255   | 0 - 100 | 2 pix Red intensity HIGH byte   |
|            | 10      | 0 - 255   | 0 - 100 | 2 pix Red intensity LOW byte    |
|            | 11      | 0 - 255   | 0 - 100 | 2 pix Green intensity HIGH byte |
|            | 12      | 0 - 255   | 0 - 100 | 2 pix Green intensity LOW byte  |
|            | 13      | 0 - 255   | 0 - 100 | 2 pix Blue intensity HIGH byte  |
|            | 14      | 0 - 255   | 0 - 100 | 2 pix Blue intensity LOW byte   |
|            | 15      | 0 - 255   | 0 - 100 | 2 pix White intensity HIGH byte |
|            | 16      | 0 - 255   | 0 - 100 | 2 pix White intensity LOW byte  |
| RGBW 5pix  | 17      | 0 - 255   | 0 - 100 | 3 pix Red intensity HIGH byte   |
|            | 18      | 0 - 255   | 0 - 100 | 3 pix Red intensity LOW byte    |
|            | 19      | 0 - 255   | 0 - 100 | 3 pix Green intensity HIGH byte |
|            | 20      | 0 - 255   | 0 - 100 | 3 pix Green intensity LOW byte  |
|            | 21      | 0 - 255   | 0 - 100 | 3 pix Blue intensity HIGH byte  |
|            | 22      | 0 - 255   | 0 - 100 | 3 pix Blue intensity LOW byte   |
| RGBW 5pix  | 23      | 0 - 255   | 0 - 100 | 3 pix White intensity HIGH byte |
|            | 24      | 0 - 255   | 0 - 100 | 3 pix White intensity LOW byte  |
|            | 25      | 0 - 255   | 0 - 100 | 4 pix Red intensity HIGH byte   |

|            |    |         |         |                                         |
|------------|----|---------|---------|-----------------------------------------|
|            | 26 | 0 - 255 | 0 - 100 | <b>4 pix Red</b> intensity LOW byte     |
|            | 27 | 0 - 255 | 0 - 100 | <b>4 pix Green</b> intensity HIGH byte  |
| RGBW 10pix | 28 | 0 - 255 | 0 - 100 | <b>4 pix Green</b> intensity LOW byte   |
|            | 29 | 0 - 255 | 0 - 100 | <b>4 pix Blue</b> intensity HIGH byte   |
|            | 30 | 0 - 255 | 0 - 100 | <b>4 pix Blue</b> intensity LOW byte    |
|            | 31 | 0 - 255 | 0 - 100 | <b>4 pix White</b> intensity HIGH byte  |
|            | 32 | 0 - 255 | 0 - 100 | <b>4 pix White</b> intensity LOW byte   |
|            | 33 | 0 - 255 | 0 - 100 | <b>5 pix Red</b> intensity HIGH byte    |
|            | 34 | 0 - 255 | 0 - 100 | <b>5 pix Red</b> intensity LOW byte     |
|            | 35 | 0 - 255 | 0 - 100 | <b>5 pix Green</b> intensity HIGH byte  |
|            | 36 | 0 - 255 | 0 - 100 | <b>5 pix Green</b> intensity LOW byte   |
|            | 37 | 0 - 255 | 0 - 100 | <b>5 pix Blue</b> intensity HIGH byte   |
|            | 38 | 0 - 255 | 0 - 100 | <b>5 pix Blue</b> intensity LOW byte    |
|            | 39 | 0 - 255 | 0 - 100 | <b>5 pix White</b> intensity HIGH byte  |
|            | 40 | 0 - 255 | 0 - 100 | <b>5 pix White</b> intensity LOW byte   |
|            | 41 | 0 - 255 | 0 - 100 | <b>6 pix Red</b> intensity HIGH byte    |
|            | 42 | 0 - 255 | 0 - 100 | <b>6 pix Red</b> intensity LOW byte     |
|            | 43 | 0 - 255 | 0 - 100 | <b>6 pix Green</b> intensity HIGH byte  |
|            | 44 | 0 - 255 | 0 - 100 | <b>6 pix Green</b> intensity LOW byte   |
|            | 45 | 0 - 255 | 0 - 100 | <b>6 pix Blue</b> intensity HIGH byte   |
|            | 46 | 0 - 255 | 0 - 100 | <b>6 pix Blue</b> intensity LOW byte    |
|            | 47 | 0 - 255 | 0 - 100 | <b>6 pix White</b> intensity HIGH byte  |
|            | 48 | 0 - 255 | 0 - 100 | <b>6 pix White</b> intensity LOW byte   |
|            | 49 | 0 - 255 | 0 - 100 | <b>7 pix Red</b> intensity HIGH byte    |
|            | 50 | 0 - 255 | 0 - 100 | <b>7 pix Red</b> intensity LOW byte     |
|            | 51 | 0 - 255 | 0 - 100 | <b>7 pix Green</b> intensity HIGH byte  |
|            | 52 | 0 - 255 | 0 - 100 | <b>7 pix Green</b> intensity LOW byte   |
|            | 53 | 0 - 255 | 0 - 100 | <b>7 pix Blue</b> intensity HIGH byte   |
|            | 54 | 0 - 255 | 0 - 100 | <b>7 pix Blue</b> intensity LOW byte    |
|            | 55 | 0 - 255 | 0 - 100 | <b>7 pix White</b> intensity HIGH byte  |
|            | 56 | 0 - 255 | 0 - 100 | <b>7 pix White</b> intensity LOW byte   |
|            | 57 | 0 - 255 | 0 - 100 | <b>8 pix Red</b> intensity HIGH byte    |
|            | 58 | 0 - 255 | 0 - 100 | <b>8 pix Red</b> intensity LOW byte     |
|            | 59 | 0 - 255 | 0 - 100 | <b>8 pix Green</b> intensity HIGH byte  |
|            | 60 | 0 - 255 | 0 - 100 | <b>8 pix Green</b> intensity LOW byte   |
|            | 61 | 0 - 255 | 0 - 100 | <b>8 pix Blue</b> intensity HIGH byte   |
|            | 62 | 0 - 255 | 0 - 100 | <b>8 pix Blue</b> intensity LOW byte    |
|            | 63 | 0 - 255 | 0 - 100 | <b>8 pix White</b> intensity HIGH byte  |
|            | 64 | 0 - 255 | 0 - 100 | <b>8 pix White</b> intensity LOW byte   |
| RGBW 10pix | 65 | 0 - 255 | 0 - 100 | <b>9 pix Red</b> intensity HIGH byte    |
|            | 66 | 0 - 255 | 0 - 100 | <b>9 pix Red</b> intensity LOW byte     |
|            | 67 | 0 - 255 | 0 - 100 | <b>9 pix Green</b> intensity HIGH byte  |
|            | 68 | 0 - 255 | 0 - 100 | <b>9 pix Green</b> intensity LOW byte   |
|            | 69 | 0 - 255 | 0 - 100 | <b>9 pix Blue</b> intensity HIGH byte   |
|            | 70 | 0 - 255 | 0 - 100 | <b>9 pix Blue</b> intensity LOW byte    |
|            | 71 | 0 - 255 | 0 - 100 | <b>9 pix White</b> intensity HIGH byte  |
|            | 72 | 0 - 255 | 0 - 100 | <b>9 pix White</b> intensity LOW byte   |
|            | 73 | 0 - 255 | 0 - 100 | <b>10 pix Red</b> intensity HIGH byte   |
|            | 74 | 0 - 255 | 0 - 100 | <b>10 pix Red</b> intensity LOW byte    |
|            | 75 | 0 - 255 | 0 - 100 | <b>10 pix Green</b> intensity HIGH byte |
|            | 76 | 0 - 255 | 0 - 100 | <b>10 pix Green</b> intensity LOW byte  |
|            | 77 | 0 - 255 | 0 - 100 | <b>10 pix Blue</b> intensity HIGH byte  |
|            | 78 | 0 - 255 | 0 - 100 | <b>10 pix Blue</b> intensity LOW byte   |
|            | 79 | 0 - 255 | 0 - 100 | <b>10 pix White</b> intensity HIGH byte |
|            | 80 | 0 - 255 | 0 - 100 | <b>10 pix White</b> intensity LOW byte  |

## AUTOLINK MODE 1 – 10x4

| Channel | Value                                                                                                | Function                                                                                                                                                                                                                                                                                                                                                                                                                                    | DESCRIPTION                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|---------|------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1       | 000 ↔ 255                                                                                            | RED intensity 0% - 100%                                                                                                                                                                                                                                                                                                                                                                                                                     | Background color               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| 2       | 000 ↔ 255                                                                                            | GREEN intensity 0% - 100%                                                                                                                                                                                                                                                                                                                                                                                                                   | Background color               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| 3       | 000 ↔ 255                                                                                            | BLUE intensity 0% - 100%                                                                                                                                                                                                                                                                                                                                                                                                                    | Background color               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| 4       | 000 ↔ 255                                                                                            | WHITE intensity 0% - 100%                                                                                                                                                                                                                                                                                                                                                                                                                   | Background color               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| 5       | 000 ↔ 255<br>000<br>020<br>030<br>050<br>080<br>100<br>120<br>140<br>170<br>200<br>220<br>230<br>255 | HUE (when Saturation value is 255)<br>Red<br>Orange<br>Yellow<br>Light green<br>Green<br>Blue – Green<br>Cyan<br>Light Blue<br>Blue<br>Lavender<br>Pink<br>Magenta<br>Red                                                                                                                                                                                                                                                                   | Effect Color                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| 6       | 000 ↔ 255                                                                                            | Saturation 0% - 100%                                                                                                                                                                                                                                                                                                                                                                                                                        | Effect Color                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| 7       | 000 ↔ 255                                                                                            | Intensity (for effects) 0% - 100%                                                                                                                                                                                                                                                                                                                                                                                                           | Effect Color                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| 8       | 000 ↔ 255                                                                                            | Color Deep                                                                                                                                                                                                                                                                                                                                                                                                                                  | Color Amplitude Modulation     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| 9       | 000 ↔ 255<br>000<br>001<br>002<br>003<br>005<br>008<br>012<br>019<br>032<br>073<br>154<br>255        | Color Length<br>Full data chain length<br>9/10 from all data chain length<br>8/10 from all data chain length<br>7/10 from all data chain length<br>6/10 from all data chain length<br>5/10 from all data chain length<br>4/10 from all data chain length<br>3/10 from all data chain length<br>2/10 from all data chain length<br>1/10 from all data chain length<br>1/20 from all data chain length<br>1/30 from all data chain length     | Color Amplitude Modulation     | Color effect – modifies selected effect color Hue. If value 80 is selected for effect color Hue (ch. 5) and size (ch. 8) is set to 20, color effect will alternate between Hue 80 and 100. Ch. 10 selects soft or hard transition between colors. It is recommended to begin with this channel at full to better see changes made.                                                                                                                                                            |
| 10      | 000 ↔ 255<br>000<br>255                                                                              | Color Ascent (color transition)<br>Soft color transition 0%<br>Sharp color transition 100%                                                                                                                                                                                                                                                                                                                                                  | Color Amplitude Modulation     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| 11      | 000 ↔ 255<br>000<br>000 ↔ 127<br>128 ↔ 254<br>255                                                    | Color Speed and Direction<br>Color Speed 0%<br>Color Speed from 1% to 100%<br>Color Direction: From start to end<br>Color Speed from 100% to 1%<br>Direction: from end to start<br>Color Speed 0%                                                                                                                                                                                                                                           | Color Amplitude Modulation     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| 12      | 000 ↔ 255                                                                                            | Intensity Deep                                                                                                                                                                                                                                                                                                                                                                                                                              | Intensity Amplitude Modulation | Intensity effect – applied on top of color effect. To get solid color with “black” holes, set background color (ch. 1 thru 4) to 0, set desired effect color (ch. 5 thru 7), color effect size to 0 (ch. 8), and intensity effect size to desired level (ch. 12). Controls work the same way as color effect, but size defines intensity effect size – 100% means alternation between 100% and 0% intensity. It is recommended to begin with transition set to 255 to better see effect size. |
| 13      | 000 ↔ 255<br>000<br>001<br>002<br>003<br>005<br>008<br>012<br>019<br>032<br>073<br>154<br>255        | Intensity Length<br>Full data chain length<br>9/10 from all data chain length<br>8/10 from all data chain length<br>7/10 from all data chain length<br>6/10 from all data chain length<br>5/10 from all data chain length<br>4/10 from all data chain length<br>3/10 from all data chain length<br>2/10 from all data chain length<br>1/10 from all data chain length<br>1/20 from all data chain length<br>1/30 from all data chain length | Intensity Amplitude Modulation |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| 14      | 000 ↔ 255<br>000<br>255                                                                              | Intensity Ascent (intensity transition)<br>Soft intensity transition<br>Sharp intensity transition                                                                                                                                                                                                                                                                                                                                          | Intensity Amplitude Modulation |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |



|           |                                                                                                             |                                                                                                                                                                                                                                     |                                   |                                                                                                                                                                                                                                                                                         |
|-----------|-------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>15</b> | 000 ↔ 255<br>000<br>000 ↔ 127<br>128↔254<br>255                                                             | Intensity Speed and Direction<br>Intensity Speed 0%<br>Intensity Speed from 1% to 100%<br>Intensity Direction: From start to end<br>Intensity Speed from 100% to 1%<br>Intensity Direction: from end to start<br>Intensity Speed 0% | Intensity Amplitude<br>Modulation |                                                                                                                                                                                                                                                                                         |
| <b>16</b> | 000 ↔ 255<br>000<br>001<br>020<br>030<br>050<br>080<br>100<br>120<br>140<br>170<br>200<br>220<br>230<br>255 | Flash Color<br>White<br>Red<br>Orange<br>Yellow<br>Light green<br>Green<br>Blue – Green<br>Cyan<br>Light Blue<br>Blue<br>Lavender<br>Pink<br>Magenta<br>Red                                                                         | Flash Controls                    | Strobe with color select. Flash delay sets delay between devices in DMX chain – if set to value above 0, each unit will delay its flash by a preset time. Flash Forced is to create a single asynchronous flash, similar to other popular strobes when the intensity channel is raised. |
| <b>17</b> | 000 ↔ 255                                                                                                   | Flash Level ( flash intensity )                                                                                                                                                                                                     | Flash Controls                    |                                                                                                                                                                                                                                                                                         |
| <b>18</b> | 000 ↔ 255                                                                                                   | Flash Speed ( flash rate )                                                                                                                                                                                                          | Flash Controls                    |                                                                                                                                                                                                                                                                                         |
| <b>19</b> | 000 ↔ 255<br>000<br>000 ↔ 254<br>255                                                                        | Flash Delay<br>Flash Delay 0%<br>Flash Delay 1% - 100%<br>Flash Delay 0%                                                                                                                                                            | Flash Controls                    |                                                                                                                                                                                                                                                                                         |
| <b>20</b> | 000 ↔ 255<br>000 ↔ 127<br>128<br>129 ↔ 255                                                                  | Flash Forced<br>Off<br>Flash 1 time<br>Off                                                                                                                                                                                          | Flash Controls                    |                                                                                                                                                                                                                                                                                         |

## AUTO LINK MODE 2 – 10x4

| CHANNEL | VALUE                | FUNCTION                                                        | DESCRIPTION                                |                                                                                                                                                                                                                                                                                                                                                                                                    |
|---------|----------------------|-----------------------------------------------------------------|--------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1       | 0 - 255              | RED intensity 0% - 100%                                         | Background Red                             | HTP merged to effects, EXCEPT when channel 12 set to >0.                                                                                                                                                                                                                                                                                                                                           |
| 2       | 0 - 255              | GREEN intensity 0% - 100%                                       | Background Green                           |                                                                                                                                                                                                                                                                                                                                                                                                    |
| 3       | 0 - 255              | BLUE intensity 0% - 100%                                        | Background Blue                            |                                                                                                                                                                                                                                                                                                                                                                                                    |
| 4       | 0 - 255              | White intensity 0% - 100%                                       | Background White                           |                                                                                                                                                                                                                                                                                                                                                                                                    |
| 5       | 0 - 255              | Effect Red                                                      |                                            | Effect color                                                                                                                                                                                                                                                                                                                                                                                       |
| 6       | 0 - 255              | Effect Green                                                    |                                            |                                                                                                                                                                                                                                                                                                                                                                                                    |
| 7       | 0 - 255              | Effect Blue                                                     |                                            |                                                                                                                                                                                                                                                                                                                                                                                                    |
| 8       | 0 - 255              | Effect White                                                    |                                            |                                                                                                                                                                                                                                                                                                                                                                                                    |
| 9       | 2 - 255              |                                                                 | Pixel distance                             | Selects effect size (distance) in pixels. Min. length, 2 pixels.                                                                                                                                                                                                                                                                                                                                   |
| 10      | 1 - 255              | 1 to distance                                                   | Pixel width                                | Effect pixel filling in percent. For example, if pixel distance set to 10 pixels and width set to 30%, effect width is 3 pixels.                                                                                                                                                                                                                                                                   |
| 11      | 0 - 127<br>127 - 255 | 0 - max speed, right direction<br>max - 0 speed, left direction | Pixel movement speed and direction control |                                                                                                                                                                                                                                                                                                                                                                                                    |
| 12      | 0 - 255              | 0 - 100%                                                        | Pixel soft ( blur )                        |                                                                                                                                                                                                                                                                                                                                                                                                    |
| 13      | 0 - 255              | Black level under effect color                                  |                                            |                                                                                                                                                                                                                                                                                                                                                                                                    |
|         |                      |                                                                 |                                            | Changes merging of background channels to effect channels. If above zero, background channel intensity is reduced. This is to achieve “clean” colors in effects. For example, if background is set to RED and effect to BLUE, the resulting effect color is MAGENTA because the effect is merged to the background. If this channel is set to 100%, the effect color changes from MAGENTA to BLUE. |

|    |         |                     |  |                                                                                                                                                                     |
|----|---------|---------------------|--|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 14 | 0 - 255 | Pixel inverse point |  | Changes running order                                                                                                                                               |
| 15 | 0 - 255 | Pixel mirror        |  | Changes running direction at 0% – current direction; 1-50% – addition of reversed direction; 50-99% – removal of current direction; 100% – only reversed direction. |
| 16 | 0 - 255 | Flash rate          |  | At 0 – no strobing; 1-100% – strobing speed.                                                                                                                        |
| 17 | 0 - 255 | Flash random        |  | At 0 – synchronized strobe; 1-100% – strobe randomization.                                                                                                          |
| 18 |         | Reserved            |  |                                                                                                                                                                     |
| 19 |         | Reserved            |  |                                                                                                                                                                     |
| 20 |         | Reserved            |  |                                                                                                                                                                     |

## STROBE MODES – 10x4 AND 3x4

Four channels control the functions of the strobe parameter: Strobe Intensity, Strobe Duration, Strobe Rate and Strobe FX.

There are a number of effects that also use the strobe rate and duration controls to affect the effect's look. Please experiment to find the right duration and rate for your application.

| <b>DMX value</b> | <b>%</b> | <b>Flash intensity</b>                                                          |
|------------------|----------|---------------------------------------------------------------------------------|
| 0 - 5            | 0 - 2    | Blackout                                                                        |
| 6 - 255          | 3 - 100  | Intensity level                                                                 |
|                  |          | <b>Flash duration</b>                                                           |
| 0 - 254          | 0 - 99   | 0 - 650 ms (50Hz AC)                                                            |
| 255              | 100      | HYPER                                                                           |
|                  |          | <b>Flash rate</b>                                                               |
| 0 - 5            | 0 - 2    | No flash                                                                        |
| 6 - 255          | 3 - 100  | 0.5 - 25Hz (50Hz AC); 0.6 - 30Hz (60Hz AC)                                      |
|                  |          | <b>Flash effects</b>                                                            |
| 0 - 4            | 0 - 2    | No effect                                                                       |
| 5                | 3        | Wash Override (only available in RGB Strobe and RGBW Strobe modes) <sup>1</sup> |
| 6 - 42           | 4 - 16   | Ramp up                                                                         |
| 43 - 85          | 17 - 33  | Ramp down                                                                       |
| 86 - 128         | 34 - 50  | Ramp up - down                                                                  |
| 129 - 171        | 51 - 67  | Random                                                                          |
| 172 - 214        | 68 - 84  | Lighting                                                                        |
| 215 - 240        | 85 - 92  | Spikes                                                                          |
| 241 - 245        | 93 - 95  | Burst (use Rate at full) <sup>2</sup>                                           |
| 246 - 250        | 96 - 98  | "Meltdown" Random Pixels w/ Solid Background <sup>3</sup>                       |

|           |          |                                                           |
|-----------|----------|-----------------------------------------------------------|
| 251 - 255 | 99 - 100 | "Meltdown" Random Pixels w/ Burst Background <sup>4</sup> |
|-----------|----------|-----------------------------------------------------------|

Notes:

- 1) In RGB Strobe and RGBW Strobe modes, a feature in the Strobe FX channel allows the 10x4 or 3x4 fixtures to become a temporary wash/blinder fixture. If the Strobe FX channel is set to DMX value 5, the Strobe color Channels become strobe wash/blinder color channels.

For example, the fixtures can be strobing in White, and then quickly changed to a Blue Wash fixture.

- a) White strobing: Strobe Color Channels @ DMX 255, Strobing channels as desired.
- b) Blue Wash: Strobe Color channels to Blue-only @ DMX 255, Strobe FX @ DMX 5, the other strobe channels are ignored.

- 2) When Burst is activated, use the rate channel at FULL to access a hyper-speed strobe
- 3) When Meltdown with solid background is active, the Strobe Color determines the random pixel color, and the background color is determined by the pixel colors after the strobe fx channels. There is no background color when in RGB Strobe and RGBW Strobe mode. The background pixels are continuous-on in this mode. The foreground strobe is randomized and not achievable in any other mode, and is difficult to reproduce with most DMX controllers at this rate.
- 4) When Meltdown with Burst background is active, the Strobe Color determines the random pixel color, and the background color is determined by the pixel colors after the strobe fx channels. There is no background color when in RGB Strobe and RGBW Strobe mode. The background pixels run at Burst speed in this mode. The foreground strobe is randomized and not achievable in any other mode, and is difficult to reproduce with most DMX controllers at this rate.

### ASYNCR STROBO (Found in the CONFIG Menu)

The purpose of this mode is to make quick one-shot effects within the Strobe FX channel much easier.

If the Strobe Rate and Duration channels are at zero, and FX channel is at a value for one of the strobe effects, any change in the strobe intensity channel will cause the Strobe FX effect to one-shot at this intensity value. This feature facilitates firing a single-shot effect, reducing the number of cues by half.

Note: When in this mode, any change to the strobe intensity channel within DMX values 1-255 will cause the fixture to fire a single shot of either an effect or a single strobe at the intensity value you have selected.

### STROBE + RGB XPIX – 10X4 AND 3X4

| PIXEL MODE           | CHANNEL | DMX VALUE | PERCENT | FUNCTION               |
|----------------------|---------|-----------|---------|------------------------|
| Strobe + RGB<br>1pix | 1       | 0 - 255   | 0 - 100 | Strobe Red intensity   |
|                      | 2       | 0 - 255   | 0 - 100 | Strobe Green intensity |
|                      | 3       | 0 - 255   | 0 - 100 | Strobe Blue intensity  |
|                      | 4       | 0 - 255   | 0 - 100 | Strobe Intensity       |
|                      | 5       | 0 - 255   | 0 - 100 | Strobe Duration        |
|                      | 6       | 0 - 255   | 0 - 100 | Strobe Rate            |
|                      | 7       | 0 - 255   | 0 - 100 | Strobe FX              |
|                      | 8       | 0 - 255   | 0 - 100 | 1 pix Red intensity    |
|                      | 9       | 0 - 255   | 0 - 100 | 1 pix Green intensity  |
|                      | 10      | 0 - 255   | 0 - 100 | 1 pix Blue intensity   |
|                      | 11      | 0 - 255   | 0 - 100 | 2 pix Red intensity    |

|                               |    |         |         |                               |
|-------------------------------|----|---------|---------|-------------------------------|
| <b>Strobe + RGB<br/>2pix</b>  | 12 | 0 - 255 | 0 - 100 | <b>2 pix Green</b> intensity  |
|                               | 13 | 0 - 255 | 0 - 100 | <b>2 pix Blue</b> intensity   |
| <b>Strobe + RGB<br/>5pix</b>  | 14 | 0 - 255 | 0 - 100 | <b>3 pix Red</b> intensity    |
|                               | 15 | 0 - 255 | 0 - 100 | <b>3 pix Green</b> intensity  |
|                               | 16 | 0 - 255 | 0 - 100 | <b>3 pix Blue</b> intensity   |
|                               | 17 | 0 - 255 | 0 - 100 | <b>4 pix Red</b> intensity    |
|                               | 18 | 0 - 255 | 0 - 100 | <b>4 pix Green</b> intensity  |
| <b>Strobe + RGB<br/>5pix</b>  | 19 | 0 - 255 | 0 - 100 | <b>4 pix Blue</b> intensity   |
|                               | 20 | 0 - 255 | 0 - 100 | <b>5 pix Red</b> intensity    |
|                               | 21 | 0 - 255 | 0 - 100 | <b>5 pix Green</b> intensity  |
|                               | 22 | 0 - 255 | 0 - 100 | <b>5 pix Blue</b> intensity   |
|                               | 23 | 0 - 255 | 0 - 100 | <b>6 pix Red</b> intensity    |
|                               | 24 | 0 - 255 | 0 - 100 | <b>6 pix Green</b> intensity  |
|                               | 25 | 0 - 255 | 0 - 100 | <b>6 pix Blue</b> intensity   |
|                               | 26 | 0 - 255 | 0 - 100 | <b>7 pix Red</b> intensity    |
|                               | 27 | 0 - 255 | 0 - 100 | <b>7 pix Green</b> intensity  |
|                               | 28 | 0 - 255 | 0 - 100 | <b>7 pix Blue</b> intensity   |
|                               | 29 | 0 - 255 | 0 - 100 | <b>8 pix Red</b> intensity    |
| <b>Strobe + RGB<br/>10pix</b> | 30 | 0 - 255 | 0 - 100 | <b>8 pix Green</b> intensity  |
|                               | 31 | 0 - 255 | 0 - 100 | <b>8 pix Blue</b> intensity   |
|                               | 32 | 0 - 255 | 0 - 100 | <b>9 pix Red</b> intensity    |
|                               | 33 | 0 - 255 | 0 - 100 | <b>9 pix Green</b> intensity  |
|                               | 34 | 0 - 255 | 0 - 100 | <b>9 pix Blue</b> intensity   |
|                               | 35 | 0 - 255 | 0 - 100 | <b>10 pix Red</b> intensity   |
|                               | 36 | 0 - 255 | 0 - 100 | <b>10 pix Green</b> intensity |
|                               | 37 | 0 - 255 | 0 - 100 | <b>10 pix Blue</b> intensity  |

## STROBE + RGBW XPIX – 10x4 AND 3x4

| PIXEL MODE                    | CHANNEL | DMX<br>VALUE | PERCENT | FUNCTION                      |
|-------------------------------|---------|--------------|---------|-------------------------------|
| <b>Strobe + RGBW<br/>1pix</b> | 1       | 0 - 255      | 0 - 100 | <b>Strobe Red</b> intensity   |
|                               | 2       | 0 - 255      | 0 - 100 | <b>Strobe Green</b> intensity |
|                               | 3       | 0 - 255      | 0 - 100 | <b>Strobe Blue</b> intensity  |
|                               | 4       | 0 - 255      | 0 - 100 | <b>Strobe White</b> intensity |
|                               | 5       | 0 - 255      | 0 - 100 | <b>Strobe Intensity</b>       |
|                               | 6       | 0 - 255      | 0 - 100 | <b>Strobe Duration</b>        |
|                               | 7       | 0 - 255      | 0 - 100 | <b>Strobe Rate</b>            |
|                               | 8       | 0 - 255      | 0 - 100 | <b>Strobe FX</b>              |
|                               | 9       | 0 - 255      | 0 - 100 | <b>1 pix Red</b> intensity    |
|                               | 10      | 0 - 255      | 0 - 100 | <b>1 pix Green</b> intensity  |
|                               | 11      | 0 - 255      | 0 - 100 | <b>1 pix Blue</b> intensity   |
|                               | 12      | 0 - 255      | 0 - 100 | <b>1 pix White</b> intensity  |
| <b>Strobe + RGBW<br/>2pix</b> | 13      | 0 - 255      | 0 - 100 | <b>2 pix Red</b> intensity    |
|                               | 14      | 0 - 255      | 0 - 100 | <b>2 pix Green</b> intensity  |
|                               | 15      | 0 - 255      | 0 - 100 | <b>2 pix Blue</b> intensity   |
|                               | 16      | 0 - 255      | 0 - 100 | <b>2 pix White</b> intensity  |
| <b>Strobe + RGBW<br/>5pix</b> | 17      | 0 - 255      | 0 - 100 | <b>3 pix Red</b> intensity    |
|                               | 18      | 0 - 255      | 0 - 100 | <b>3 pix Green</b> intensity  |
|                               | 19      | 0 - 255      | 0 - 100 | <b>3 pix Blue</b> intensity   |
|                               | 20      | 0 - 255      | 0 - 100 | <b>3 pix White</b> intensity  |
|                               | 21      | 0 - 255      | 0 - 100 | <b>4 pix Red</b> intensity    |
|                               | 22      | 0 - 255      | 0 - 100 | <b>4 pix Green</b> intensity  |
|                               | 23      | 0 - 255      | 0 - 100 | <b>4 pix Blue</b> intensity   |
|                               | 24      | 0 - 255      | 0 - 100 | <b>4 pix White</b> intensity  |
|                               | 25      | 0 - 255      | 0 - 100 | <b>5 pix Red</b> intensity    |

|                                |    |         |         |                               |
|--------------------------------|----|---------|---------|-------------------------------|
| <b>Strobe + RGBW<br/>10pix</b> | 26 | 0 - 255 | 0 - 100 | <b>5 pix Green</b> intensity  |
|                                | 27 | 0 - 255 | 0 - 100 | <b>5 pix Blue</b> intensity   |
|                                | 28 | 0 - 255 | 0 - 100 | <b>5 pix White</b> intensity  |
|                                | 29 | 0 - 255 | 0 - 100 | <b>6 pix Red</b> intensity    |
|                                | 30 | 0 - 255 | 0 - 100 | <b>6 pix Green</b> intensity  |
|                                | 31 | 0 - 255 | 0 - 100 | <b>6 pix Blue</b> intensity   |
|                                | 32 | 0 - 255 | 0 - 100 | <b>6 pix White</b> intensity  |
|                                | 33 | 0 - 255 | 0 - 100 | <b>7 pix Red</b> intensity    |
|                                | 34 | 0 - 255 | 0 - 100 | <b>7 pix Green</b> intensity  |
|                                | 35 | 0 - 255 | 0 - 100 | <b>7 pix Blue</b> intensity   |
|                                | 36 | 0 - 255 | 0 - 100 | <b>7 pix White</b> intensity  |
|                                | 37 | 0 - 255 | 0 - 100 | <b>8 pix Red</b> intensity    |
|                                | 38 | 0 - 255 | 0 - 100 | <b>8 pix Green</b> intensity  |
|                                | 39 | 0 - 255 | 0 - 100 | <b>8 pix Blue</b> intensity   |
|                                | 40 | 0 - 255 | 0 - 100 | <b>8 pix White</b> intensity  |
| <b>Strobe + RGBW<br/>10pix</b> | 41 | 0 - 255 | 0 - 100 | <b>9 pix Red</b> intensity    |
|                                | 42 | 0 - 255 | 0 - 100 | <b>9 pix Green</b> intensity  |
|                                | 43 | 0 - 255 | 0 - 100 | <b>9 pix Blue</b> intensity   |
|                                | 44 | 0 - 255 | 0 - 100 | <b>9 pix White</b> intensity  |
|                                | 45 | 0 - 255 | 0 - 100 | <b>10 pix Red</b> intensity   |
|                                | 46 | 0 - 255 | 0 - 100 | <b>10 pix Green</b> intensity |
|                                | 47 | 0 - 255 | 0 - 100 | <b>10 pix Blue</b> intensity  |
|                                | 48 | 0 - 255 | 0 - 100 | <b>10 pix White</b> intensity |

## MENU MAP – SOLARIS LED LINEAR RGBW 3x4

← Back-Enter →

| Level 1     | Level 2  | Level 3            | Notes                                                                     |
|-------------|----------|--------------------|---------------------------------------------------------------------------|
| DMX Address |          |                    | Set the DMX start address                                                 |
| Control     |          |                    | Set Fixture operating mode                                                |
|             | Basic    |                    | Simple control as RGB or RGBW wash fixture                                |
|             |          | RGB 1pix           | RGB 1 pixel 8-bit control mode                                            |
|             |          | RGBW 1pix          | RGBW 1 pixel 8-bit control mode                                           |
|             |          | RGB 1pix 16bit     | RGB 1 pixel 16-bit control mode                                           |
|             |          | RGBW 1pix 16bit    | RGBW 1 pixel 16-bit control mode                                          |
|             |          | RGB 3pix           | RGB 3 pixel 8-bit control mode                                            |
|             |          | RGBW 3pix          | RGBW 3 pixel 8-bit control mode                                           |
|             |          | RGB 3pix 16bit     | RGB 3 pixel 16-bit control mode                                           |
|             |          | RGBW 3pix 16bit    | RGBW 3 pixel 16-bit control mode                                          |
|             |          | AutoLink mode 1    | Parametric control mode 1                                                 |
|             |          | AutoLink mode 2    | Parametric control mode 2                                                 |
|             | Advanced |                    | Control all fixture as strobe and wash light with pixels at the same time |
|             |          | Strobe + RGB 1pix  | Strobe + RGB 1 pixel 8-bit mode                                           |
|             |          | Strobe + RGBW 1pix | Strobe + RGBW 1 pixel 8-bit mode                                          |
|             |          | Strobe + RGB 3pix  | Strobe + RGB 3 pixel 8-bit mode                                           |
|             |          | Strobe + RGBW 3pix | Strobe + RGBW 3 pixel 8-bit mode                                          |
| Manual      |          |                    | Manual control for standalone operation                                   |
|             | RED      | 0-255              | Red intensity                                                             |
|             | GREEN    | 0-255              | Green intensity                                                           |
|             | BLUE     | 0-255              | Blue intensity                                                            |

|        |           |       |                                                                                                                                                                                                             |
|--------|-----------|-------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Demo   | WHITE     | 0-255 | White intensity                                                                                                                                                                                             |
|        |           |       | Will activate pre-programmed self-test.                                                                                                                                                                     |
|        | Demo 1    |       | Red color test                                                                                                                                                                                              |
|        | Demo 2    |       | Green color test                                                                                                                                                                                            |
|        | Demo 3    |       | Blue color test                                                                                                                                                                                             |
|        | Demo 4    |       | White color test                                                                                                                                                                                            |
|        | Demo 5    |       | Yellow color test                                                                                                                                                                                           |
|        | Demo 6    |       | Cyan color test                                                                                                                                                                                             |
|        | Demo 7    |       | Pink color test                                                                                                                                                                                             |
|        | Demo 8    |       | White color test                                                                                                                                                                                            |
|        | Demo 9    |       | Color Amplitude Modulation soft transition test                                                                                                                                                             |
|        | Demo 10   |       | Color Amplitude Modulation sharp transition test                                                                                                                                                            |
|        | Demo 11   |       | Color + Intensity Amplitude Modulation test                                                                                                                                                                 |
|        | Demo 12   |       | Color + Intensity Amplitude Modulation test                                                                                                                                                                 |
|        | Demo 13   |       | White Intensity Amplitude Modulation test                                                                                                                                                                   |
|        | Demo 14   |       | Red color strobe test                                                                                                                                                                                       |
|        | Demo 15   |       | Green color strobe test                                                                                                                                                                                     |
|        | Demo 16   |       | Blue color strobe test                                                                                                                                                                                      |
|        | Demo 17   |       | White color strobe test                                                                                                                                                                                     |
|        | Demo 18   |       | Red flash delay test                                                                                                                                                                                        |
|        | Demo 19   |       | Green flash delay test                                                                                                                                                                                      |
|        | Demo 20   |       | Blue flash delay test                                                                                                                                                                                       |
| Config | Auto      |       | Automatic selection of all tests 1- 20                                                                                                                                                                      |
|        | DMX Loss  |       | Desired function should Solaris LED lose DMX signal                                                                                                                                                         |
|        |           | OFF   | Do not hold the last-received DMX values, stop light output.                                                                                                                                                |
|        |           | ON    | Hold the last-received DMX values when DMX signal is lost.                                                                                                                                                  |
|        | Fan       |       | This function offers to limit the cooling fan operation.                                                                                                                                                    |
|        |           | OFF   | Fan off                                                                                                                                                                                                     |
|        |           | ON    | Fan on                                                                                                                                                                                                      |
|        | Display   |       | Display backlight control                                                                                                                                                                                   |
|        |           | ON    | Backlight on all the time                                                                                                                                                                                   |
|        |           | 10s   | Backlight will turn off after 10 seconds                                                                                                                                                                    |
|        |           | 30s   | Backlight will turn off after 30 seconds                                                                                                                                                                    |
|        | Fade Time |       | Fade time setup. In this setup you can set the way the Solaris LED reacts to change of DMX values. This is designed to allow the light output to react as smoothly as possible when crossfading DMX values. |
|        |           | OFF   | Solaris LED will not change the smoothness of crossfading of values coming from the lighting control.                                                                                                       |

DOWN - UP

|  |              |                                                                                                                                                                                                                                                             |
|--|--------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  | SmartFade    | To add smoothness to slow crossfading DMX values coming from the lighting controller, but will also allow for very quick changing of values where smoothness is not applicable.                                                                             |
|  | Fixed fade   | The fade time for any change in DMX values can be set manually. The timing values can be set between 0.00 and 2.50 seconds.                                                                                                                                 |
|  | Gamma        |                                                                                                                                                                                                                                                             |
|  | Gamma 8      | Gamma correction for 8-bit parameter width                                                                                                                                                                                                                  |
|  | Gamma 16     | Gamma correction for 16-bit parameter width                                                                                                                                                                                                                 |
|  | Async Strobo | In Advanced control modes where there are Strobe controls, when set to ON, a change in strobe intensity will one-shot the strobe and/or effect when strobe rate is set at 0.                                                                                |
|  | OFF          |                                                                                                                                                                                                                                                             |
|  | ON           |                                                                                                                                                                                                                                                             |
|  | Thermometer  | Display internal temperature                                                                                                                                                                                                                                |
|  | Line Freq.   | Line Frequency. Setting depends on the country you are using the Solaris LED in and power provided.                                                                                                                                                         |
|  | 50 Hz        |                                                                                                                                                                                                                                                             |
|  | 60 Hz        |                                                                                                                                                                                                                                                             |
|  | Upload       | If fixture has newer firmware, it can update other Solaris LED fixtures connected to DMX output. Password: 111.<br><i>Warning: Do not use splitters or any other devices, or disconnect power while updating. This can permanently damage the fixtures.</i> |
|  | Reset        | Reset fixture to factory defaults                                                                                                                                                                                                                           |
|  | NO           |                                                                                                                                                                                                                                                             |
|  | YES          |                                                                                                                                                                                                                                                             |

## DMX CONTROL MODES SUMMARY – 3x4

### BASIC CONTROL MODES

- **RGB Xpix** – RGB control mode, use fixture as 1, or 3 independent pixels. 8 or 16 bit parameter width.
- **RGBW Xpix** – RGBW control mode, use fixture as 1, or 3 independent pixels. 8 or 16 bit parameter width.
- **AutoLink mode 1** – Parametric control mode with various scene, color mixing and effects possibilities, 20 channels per link (link can contain various count of units). Link can contain 2-255 pixel-long fixture chain without repeated segments. One link occupies only 20 DMX channels regardless of fixture count. AutoLink mode 1 uses 8 bit parameter width.
- **AutoLink mode 2** – Second parametric control mode, includes black level control. 17 channels per link (link can contain various numbers of units). Link can contain 2-255 pixel-long fixture chain without repeated

segments. One link occupies only 20 DMX channels regardless of fixture count. AutoLink mode 2 uses 8 bit parameter width.

## ADVANCED CONTROL MODES

- **Strobe + RGB  $X_{pix}$**  – RGB strobe + RGB pixel control mode. Use fixture as RGB strobe and 1 or 3 independent RGB pixels at the same time. 8 bit parameter width.
- **Strobe + RGBW  $X_{pix}$**  – RGBW strobe + RGBW pixel control mode. Use fixture as RGBW strobe and 1 or 3 independent RGBW pixels at the same time, 8 bit parameter width.

## RGB $X_{PIX}$ DMX CHANNELS – 3x4

| PIXEL MODE | CHANNEL | DMX VALUE | PERCENT | FUNCTION              |
|------------|---------|-----------|---------|-----------------------|
| RGB 1pix   | 1       | 0 - 255   | 0 - 100 | 1 pix Red intensity   |
|            | 2       | 0 - 255   | 0 - 100 | 1 pix Green intensity |
|            | 3       | 0 - 255   | 0 - 100 | 1 pix Blue intensity  |
| RGB 3pix   | 4       | 0 - 255   | 0 - 100 | 2 pix Red intensity   |
|            | 5       | 0 - 255   | 0 - 100 | 2 pix Green intensity |
|            | 6       | 0 - 255   | 0 - 100 | 2 pix Blue intensity  |
| RGB 3pix   | 7       | 0 - 255   | 0 - 100 | 3 pix Red intensity   |
|            | 8       | 0 - 255   | 0 - 100 | 3 pix Green intensity |
|            | 9       | 0 - 255   | 0 - 100 | 3 pix Blue intensity  |

## RGB $X_{PIX}$ 16BIT DMX CHANNELS – 3x4

| PIXEL MODE     | CHANNEL | DMX VALUE | PERCENT | FUNCTION                        |
|----------------|---------|-----------|---------|---------------------------------|
| RGB 1pix 16bit | 1       | 0 - 255   | 0 - 100 | 1 pix Red intensity HIGH Byte   |
|                | 2       | 0 - 255   | 0 - 100 | 1 pix Red intensity LOW Byte    |
|                | 3       | 0 - 255   | 0 - 100 | 1 pix Green intensity HIGH Byte |
|                | 4       | 0 - 255   | 0 - 100 | 1 pix Green intensity LOW Byte  |
|                | 5       | 0 - 255   | 0 - 100 | 1 pix Blue intensity HIGH Byte  |
|                | 6       | 0 - 255   | 0 - 100 | 1 pix Blue intensity LOW Byte   |
| RGB 3pix 16bit | 7       | 0 - 255   | 0 - 100 | 2 pix Red intensity HIGH Byte   |
|                | 8       | 0 - 255   | 0 - 100 | 2 pix Red intensity LOW Byte    |
|                | 9       | 0 - 255   | 0 - 100 | 2 pix Green intensity HIGH Byte |
|                | 10      | 0 - 255   | 0 - 100 | 2 pix Green intensity LOW Byte  |
|                | 11      | 0 - 255   | 0 - 100 | 2 pix Blue intensity HIGH Byte  |
|                | 12      | 0 - 255   | 0 - 100 | 2 pix Blue intensity LOW Byte   |
| RGB 3pix 16bit | 13      | 0 - 255   | 0 - 100 | 3 pix Red intensity HIGH Byte   |
|                | 14      | 0 - 255   | 0 - 100 | 3 pix Red intensity LOW Byte    |
|                | 15      | 0 - 255   | 0 - 100 | 3 pix Green intensity HIGH Byte |
|                | 16      | 0 - 255   | 0 - 100 | 3 pix Green intensity LOW Byte  |
|                | 17      | 0 - 255   | 0 - 100 | 3 pix Blue intensity HIGH Byte  |
|                | 18      | 0 - 255   | 0 - 100 | 3 pix Blue intensity LOW Byte   |

## RGBW $X_{PIX}$ DMX CHANNELS – 3x4

| PIXEL MODE | CHANNEL | DMX VALUE | PERCENT | FUNCTION              |
|------------|---------|-----------|---------|-----------------------|
| RGBW 1pix  | 1       | 0 - 255   | 0 - 100 | 1 pix Red intensity   |
|            | 2       | 0 - 255   | 0 - 100 | 1 pix Green intensity |
|            | 3       | 0 - 255   | 0 - 100 | 1 pix Blue intensity  |



|           |    |         |         |                       |
|-----------|----|---------|---------|-----------------------|
| RGBW 3pix | 4  | 0 - 255 | 0 - 100 | 1 pix White intensity |
|           | 5  | 0 - 255 | 0 - 100 | 2 pix Red intensity   |
|           | 6  | 0 - 255 | 0 - 100 | 2 pix Green intensity |
|           | 7  | 0 - 255 | 0 - 100 | 2 pix Blue intensity  |
|           | 8  | 0 - 255 | 0 - 100 | 2 pix White intensity |
| RGBW 3pix | 9  | 0 - 255 | 0 - 100 | 3 pix Red intensity   |
|           | 10 | 0 - 255 | 0 - 100 | 3 pix Green intensity |
|           | 11 | 0 - 255 | 0 - 100 | 3 pix Blue intensity  |
|           | 12 | 0 - 255 | 0 - 100 | 3 pix White intensity |

## RGBW $X_{PIX}$ 16BIT DMX CHANNELS – 3x4

| PIXEL MODE | CHANNEL | DMX VALUE | PERCENT | FUNCTION                        |
|------------|---------|-----------|---------|---------------------------------|
| RGBW 1pix  | 1       | 0 - 255   | 0 - 100 | 1 pix Red intensity HIGH byte   |
|            | 2       | 0 - 255   | 0 - 100 | 1 pix Red intensity LOW byte    |
|            | 3       | 0 - 255   | 0 - 100 | 1 pix Green intensity HIGH byte |
|            | 4       | 0 - 255   | 0 - 100 | 1 pix Green intensity LOW byte  |
|            | 5       | 0 - 255   | 0 - 100 | 1 pix Blue intensity HIGH byte  |
|            | 6       | 0 - 255   | 0 - 100 | 1 pix Blue intensity LOW byte   |
|            | 7       | 0 - 255   | 0 - 100 | 1 pix White intensity HIGH byte |
|            | 8       | 0 - 255   | 0 - 100 | 1 pix White intensity LOW byte  |
| RGBW 3pix  | 9       | 0 - 255   | 0 - 100 | 2 pix Red intensity HIGH byte   |
|            | 10      | 0 - 255   | 0 - 100 | 2 pix Red intensity LOW byte    |
|            | 11      | 0 - 255   | 0 - 100 | 2 pix Green intensity HIGH byte |
|            | 12      | 0 - 255   | 0 - 100 | 2 pix Green intensity LOW byte  |
|            | 13      | 0 - 255   | 0 - 100 | 2 pix Blue intensity HIGH byte  |
|            | 14      | 0 - 255   | 0 - 100 | 2 pix Blue intensity LOW byte   |
|            | 15      | 0 - 255   | 0 - 100 | 2 pix White intensity HIGH byte |
|            | 16      | 0 - 255   | 0 - 100 | 2 pix White intensity LOW byte  |
| RGBW 3pix  | 17      | 0 - 255   | 0 - 100 | 3 pix Red intensity HIGH byte   |
|            | 18      | 0 - 255   | 0 - 100 | 3 pix Red intensity LOW byte    |
|            | 19      | 0 - 255   | 0 - 100 | 3 pix Green intensity HIGH byte |
|            | 20      | 0 - 255   | 0 - 100 | 3 pix Green intensity LOW byte  |
|            | 21      | 0 - 255   | 0 - 100 | 3 pix Blue intensity HIGH byte  |
|            | 22      | 0 - 255   | 0 - 100 | 3 pix Blue intensity LOW byte   |
|            | 23      | 0 - 255   | 0 - 100 | 3 pix White intensity HIGH byte |
|            | 24      | 0 - 255   | 0 - 100 | 3 pix White intensity LOW byte  |

## AUTOLINK MODE 1 – 3x4

| Channel | Value     | Function                  | DESCRIPTION      |  |
|---------|-----------|---------------------------|------------------|--|
| 1       | 000 ↔ 255 | RED intensity 0% - 100%   | Background color |  |
| 2       | 000 ↔ 255 | GREEN intensity 0% - 100% | Background color |  |
| 3       | 000 ↔ 255 | BLUE intensity 0% - 100%  | Background color |  |
| 4       | 000 ↔ 255 | WHITE intensity 0% - 100% | Background color |  |

|           |                                                                                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|-----------|------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>5</b>  | 000 ↔ 255<br>000<br>020<br>030<br>050<br>080<br>100<br>120<br>140<br>170<br>200<br>220<br>230<br>255 | HUE (when Saturation value is 255)<br>Red<br>Orange<br>Yellow<br>Light green<br>Green<br>Blue – Green<br>Cyan<br>Light Blue<br>Blue<br>Lavender<br>Pink<br>Magenta<br>Red                                                                                                                                                                                                                                                                   | Effect Color                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>6</b>  | 000 ↔ 255                                                                                            | Saturation 0% - 100%                                                                                                                                                                                                                                                                                                                                                                                                                        | Effect Color                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>7</b>  | 000 ↔ 255                                                                                            | Intensity (for effects) 0% - 100%                                                                                                                                                                                                                                                                                                                                                                                                           | Effect Color                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>8</b>  | 000 ↔ 255                                                                                            | Color Depth                                                                                                                                                                                                                                                                                                                                                                                                                                 | Color Amplitude Modulation     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>9</b>  | 000 ↔ 255<br>000<br>001<br>002<br>003<br>005<br>008<br>012<br>019<br>032<br>073<br>154<br>255        | Color Length<br>Full data chain length<br>9/10 from all data chain length<br>8/10 from all data chain length<br>7/10 from all data chain length<br>6/10 from all data chain length<br>5/10 from all data chain length<br>4/10 from all data chain length<br>3/10 from all data chain length<br>2/10 from all data chain length<br>1/10 from all data chain length<br>1/20 from all data chain length<br>1/30 from all data chain length     | Color Amplitude Modulation     | Color effect – modifies selected effect color Hue. If value 80 is selected for effect color Hue (ch. 5) and size (ch. 8) is set to 20, color effect will alternate between Hue 80 and 100. Ch. 10 selects soft or hard transition between colors. It is recommended to begin with this channel at full to better see changes made.                                                                                                                                                            |
| <b>10</b> | 000 ↔ 255<br>000<br>255                                                                              | Color Ascent (color transition)<br>Soft color transition 0%<br>Sharp color transition 100%                                                                                                                                                                                                                                                                                                                                                  | Color Amplitude Modulation     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>11</b> | 000 ↔ 255<br>000<br>000 ↔ 127<br>128↔254<br>255                                                      | Color Speed and Direction<br>Color Speed 0%<br>Color Speed from 1% to 100%<br>Color Direction: From start to end<br>Color Speed from 100% to 1%<br>Direction: from end to start<br>Color Speed 0%                                                                                                                                                                                                                                           | Color Amplitude Modulation     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>12</b> | 000 ↔ 255                                                                                            | Intensity Deep                                                                                                                                                                                                                                                                                                                                                                                                                              | Intensity Amplitude Modulation |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>13</b> | 000 ↔ 255<br>000<br>001<br>002<br>003<br>005<br>008<br>012<br>019<br>032<br>073<br>154<br>255        | Intensity Length<br>Full data chain length<br>9/10 from all data chain length<br>8/10 from all data chain length<br>7/10 from all data chain length<br>6/10 from all data chain length<br>5/10 from all data chain length<br>4/10 from all data chain length<br>3/10 from all data chain length<br>2/10 from all data chain length<br>1/10 from all data chain length<br>1/20 from all data chain length<br>1/30 from all data chain length | Intensity Amplitude Modulation | Intensity effect – applied on top of color effect. To get solid color with “black” holes, set background color (ch. 1 thru 4) to 0, set desired effect color (ch. 5 thru 7), color effect size to 0 (ch. 8), and intensity effect size to desired level (ch. 12). Controls work the same way as color effect, but size defines intensity effect size – 100% means alternation between 100% and 0% intensity. It is recommended to begin with transition set to 255 to better see effect size. |
| <b>14</b> | 000 ↔ 255<br>000<br>255                                                                              | Intensity Ascent ( intensity transition)<br>Soft intensity transition<br>Sharp intensity transition                                                                                                                                                                                                                                                                                                                                         | Intensity Amplitude Modulation |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>15</b> | 000 ↔ 255<br>000<br>000 ↔ 127<br>128↔254<br>255                                                      | Intensity Speed and Direction<br>Intensity Speed 0%<br>Intensity Speed from 1% to 100%<br>Intensity Direction: From start to end<br>Intensity Speed from 100% to 1%<br>Intensity Direction: from end to start<br>Intensity Speed 0%                                                                                                                                                                                                         | Intensity Amplitude Modulation |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |

|    |           |                                 |                |                                                                                                                                                                                                                                                                                         |
|----|-----------|---------------------------------|----------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 16 | 000 ↔ 255 | Flash Color                     | Flash Controls | Strobe with color select. Flash delay sets delay between devices in DMX chain – if set to value above 0, each unit will delay its flash by a preset time. Flash Forced is to create a single asynchronous flash, similar to other popular strobes when the intensity channel is raised. |
|    | 000       | White                           |                |                                                                                                                                                                                                                                                                                         |
|    | 001       | Red                             |                |                                                                                                                                                                                                                                                                                         |
|    | 020       | Orange                          |                |                                                                                                                                                                                                                                                                                         |
|    | 030       | Yellow                          |                |                                                                                                                                                                                                                                                                                         |
|    | 050       | Light green                     |                |                                                                                                                                                                                                                                                                                         |
|    | 080       | Green                           |                |                                                                                                                                                                                                                                                                                         |
|    | 100       | Blue – Green                    |                |                                                                                                                                                                                                                                                                                         |
|    | 120       | Cyan                            |                |                                                                                                                                                                                                                                                                                         |
|    | 140       | Light Blue                      |                |                                                                                                                                                                                                                                                                                         |
|    | 170       | Blue                            |                |                                                                                                                                                                                                                                                                                         |
|    | 200       | Lavender                        |                |                                                                                                                                                                                                                                                                                         |
|    | 220       | Pink                            |                |                                                                                                                                                                                                                                                                                         |
|    | 230       | Magenta                         |                |                                                                                                                                                                                                                                                                                         |
|    | 255       | Red                             |                |                                                                                                                                                                                                                                                                                         |
| 17 | 000 ↔ 255 | Flash Level ( flash intensity ) | Flash Controls |                                                                                                                                                                                                                                                                                         |
| 18 | 000 ↔ 255 | Flash Speed ( flash rate )      | Flash Controls |                                                                                                                                                                                                                                                                                         |
| 19 | 000 ↔ 255 | Flash Delay                     | Flash Controls |                                                                                                                                                                                                                                                                                         |
|    | 000       | Flash Delay 0%                  |                |                                                                                                                                                                                                                                                                                         |
|    | 000 ↔ 254 | Flash Delay 1% - 100%           |                |                                                                                                                                                                                                                                                                                         |
|    | 255       | Flash Delay 0%                  |                |                                                                                                                                                                                                                                                                                         |
| 20 | 000 ↔ 255 | Flash Forced                    | Flash Controls |                                                                                                                                                                                                                                                                                         |
|    | 000 ↔ 127 | Off                             |                |                                                                                                                                                                                                                                                                                         |
|    | 128       | Flash 1 time                    |                |                                                                                                                                                                                                                                                                                         |
|    | 129 ↔ 255 | Off                             |                |                                                                                                                                                                                                                                                                                         |

## AUTO LINK MODE 2 – 3x4

| CHANNEL | VALUE                | FUNCTION                                                        | DESCRIPTION                                |                                                                                                                                                                                                                                                                                                                                                                                                    |
|---------|----------------------|-----------------------------------------------------------------|--------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1       | 0 - 255              | RED intensity 0% - 100%                                         | Background Red                             | HTP merged to effects, EXCEPT when channel 12 set to >0                                                                                                                                                                                                                                                                                                                                            |
| 2       | 0 - 255              | GREEN intensity 0% - 100%                                       | Background Green                           |                                                                                                                                                                                                                                                                                                                                                                                                    |
| 3       | 0 - 255              | BLUE intensity 0% - 100%                                        | Background Blue                            |                                                                                                                                                                                                                                                                                                                                                                                                    |
| 4       | 0 - 255              | White intensity 0% - 100%                                       | Background White                           |                                                                                                                                                                                                                                                                                                                                                                                                    |
| 5       | 0 - 255              | Effect Red                                                      |                                            | Effect color                                                                                                                                                                                                                                                                                                                                                                                       |
| 6       | 0 - 255              | Effect Green                                                    |                                            |                                                                                                                                                                                                                                                                                                                                                                                                    |
| 7       | 0 - 255              | Effect Blue                                                     |                                            |                                                                                                                                                                                                                                                                                                                                                                                                    |
| 8       | 0 - 255              | Effect White                                                    |                                            |                                                                                                                                                                                                                                                                                                                                                                                                    |
| 9       | 2 - 255              |                                                                 | Pixel distance                             | Selects effect size (distance) in pixels. Min. length – 2 pixels                                                                                                                                                                                                                                                                                                                                   |
| 10      | 1 - 255              | 1 to distance                                                   | Pixel width                                | Effect pixel filling in percent. For example, if pixel distance set to 10 pixels and width set to 30%, effect width is 3 pixels.                                                                                                                                                                                                                                                                   |
| 11      | 0 - 127<br>127 - 255 | 0 - max speed, right direction<br>max - 0 speed, left direction | Pixel movement speed and direction control |                                                                                                                                                                                                                                                                                                                                                                                                    |
| 12      | 0 - 255              | 0 - 100%                                                        | Pixel soft ( blur )                        |                                                                                                                                                                                                                                                                                                                                                                                                    |
| 13      | 0 - 255              | Black level under effect color                                  |                                            | Changes merging of background channels to effect channels. If above zero, background channel intensity is reduced. This is to achieve "clean" colors in effects. For example, if background is set to RED and effect to BLUE, the resulting effect color is MAGENTA because the effect is merged to the background. If this channel is set to 100%, the effect color changes from MAGENTA to BLUE. |
| 14      | 0 - 255              | Pixel inverse point                                             |                                            | Changes running order                                                                                                                                                                                                                                                                                                                                                                              |
| 15      | 0 - 255              | Pixel mirror                                                    |                                            | Changes running direction at 0% – current direction; 1-50% – addition of reversed direction; 50-99% – removal of current direction; 100% – only reversed direction.                                                                                                                                                                                                                                |

|    |         |              |  |                                                               |
|----|---------|--------------|--|---------------------------------------------------------------|
| 16 | 0 - 255 | Flash rate   |  | At 0 – no strobing; 1-100% – strobing speed                   |
| 17 | 0 - 255 | Flash random |  | At 0 – synchronized strobe;<br>1-100% – strobe randomization. |
| 18 |         | Reserved     |  |                                                               |
| 19 |         | Reserved     |  |                                                               |
| 20 |         | Reserved     |  |                                                               |

## STROBE + RGB XPIX – 3x4

| PIXEL MODE           | CHANNEL | DMX VALUE | PERCENT | FUNCTION               |
|----------------------|---------|-----------|---------|------------------------|
| Strobe + RGB<br>1pix | 1       | 0 - 255   | 0 - 100 | Strobe Red intensity   |
|                      | 2       | 0 - 255   | 0 - 100 | Strobe Green intensity |
|                      | 3       | 0 - 255   | 0 - 100 | Strobe Blue intensity  |
|                      | 4       | 0 - 255   | 0 - 100 | Strobe Intensity       |
|                      | 5       | 0 - 255   | 0 - 100 | Strobe Duration        |
|                      | 6       | 0 - 255   | 0 - 100 | Strobe Rate            |
|                      | 7       | 0 - 255   | 0 - 100 | Strobe FX              |
|                      | 8       | 0 - 255   | 0 - 100 | 1 pix Red intensity    |
|                      | 9       | 0 - 255   | 0 - 100 | 1 pix Green intensity  |
|                      | 10      | 0 - 255   | 0 - 100 | 1 pix Blue intensity   |
| Strobe + RGB<br>3pix | 11      | 0 - 255   | 0 - 100 | 2 pix Red intensity    |
|                      | 12      | 0 - 255   | 0 - 100 | 2 pix Green intensity  |
|                      | 13      | 0 - 255   | 0 - 100 | 2 pix Blue intensity   |
|                      | 14      | 0 - 255   | 0 - 100 | 3 pix Red intensity    |
|                      | 15      | 0 - 255   | 0 - 100 | 3 pix Green intensity  |
|                      | 16      | 0 - 255   | 0 - 100 | 3 pix Blue intensity   |

## STROBE + RGBW XPIX – 3x4

| PIXEL MODE            | CHANNEL | DMX VALUE | PERCENT | FUNCTION               |
|-----------------------|---------|-----------|---------|------------------------|
| Strobe + RGBW<br>1pix | 1       | 0 - 255   | 0 - 100 | Strobe Red intensity   |
|                       | 2       | 0 - 255   | 0 - 100 | Strobe Green intensity |
|                       | 3       | 0 - 255   | 0 - 100 | Strobe Blue intensity  |
|                       | 4       | 0 - 255   | 0 - 100 | Strobe White intensity |
|                       | 5       | 0 - 255   | 0 - 100 | Strobe Intensity       |
|                       | 6       | 0 - 255   | 0 - 100 | Strobe Duration        |
| Strobe + RGBW<br>1pix | 7       | 0 - 255   | 0 - 100 | Strobe Rate            |
|                       | 8       | 0 - 255   | 0 - 100 | Strobe FX              |
|                       | 9       | 0 - 255   | 0 - 100 | 1 pix Red intensity    |
|                       | 10      | 0 - 255   | 0 - 100 | 1 pix Green intensity  |
|                       | 11      | 0 - 255   | 0 - 100 | 1 pix Blue intensity   |
|                       | 12      | 0 - 255   | 0 - 100 | 1 pix White intensity  |
| Strobe + RGBW<br>3pix | 13      | 0 - 255   | 0 - 100 | 2 pix Red intensity    |
|                       | 14      | 0 - 255   | 0 - 100 | 2 pix Green intensity  |
|                       | 15      | 0 - 255   | 0 - 100 | 2 pix Blue intensity   |
|                       | 16      | 0 - 255   | 0 - 100 | 2 pix White intensity  |
|                       | 17      | 0 - 255   | 0 - 100 | 3 pix Red intensity    |
|                       | 18      | 0 - 255   | 0 - 100 | 3 pix Green intensity  |
|                       | 19      | 0 - 255   | 0 - 100 | 3 pix Blue intensity   |
|                       | 20      | 0 - 255   | 0 - 100 | 3 pix White intensity  |

## 4. APPENDIX

### BASICS OF DMX CONTROL

There are 512 channels in a DMX-512 connection. Channels may be assigned in any manner. A fixture capable of receiving DMX-512 will require one or a number of sequential channels. The user must assign a starting address on the fixture that indicates the first channel reserved in the lighting console. There are many different types of DMX controllable fixtures and they all may vary in the total number of channels required. Choosing a start address should be planned in advance. Channels should never overlap. If they do, this will result in erratic operation of the overlapping fixtures. You can however, control multiple fixtures of the same type using the same starting address as long as the intended result is that of unison movement or operation. In other words, the fixtures will be slaved together and all will respond identically.

DMX fixtures are often designed to receive and transmit data through a DMX daisy-chain. A DMX daisy-chain is where the DMX OUT of one fixture connects to the DMX IN of the next fixture. The order in which the fixtures are connected is not important and has no effect on how a lighting console communicates to each fixture. Use an order that provides for the easiest and most direct cabling. Connect fixtures using shielded two conductor twisted pair cable such as ProPlex<sup>®</sup> DMX with 5-pin XLR male to female connectors. The shield/ground is pin 1, while pin 2 is Data Negative (D-) and pin 3 is Data positive (D+). Pins 4 and 5 are not used according to the DMX-512 standard.

### GENERAL MAINTENANCE

To maintain optimum performance and minimize wear fixtures should be cleaned frequently. Usage and environment are contributing factors in determining frequency. As a general rule, fixtures should be cleaned at least twice a month. Dust build up reduces light output performance and can cause overheating. This can lead to reduced lamp life and increased mechanical wear. Be sure to disconnect power to the fixture before conducting maintenance.

Unplug fixture from power. Use a vacuum or air compressor and a soft brush to remove dust collected on external vents and internal components. Clean all glass when the fixture is cold with a mild solution of glass cleaner or Isopropyl Alcohol and a soft lint free cotton cloth or lens tissue. Apply solution to the cloth or tissue and drag dirt and grime to the outside of the lens. Gently polish optical surfaces until they are free of haze and lint.

The cleaning of internal and external optical lenses and/or mirrors must be carried out periodically to optimize light output. Cleaning frequency depends on the environment in which the fixture operates: damp, smoky or particularly dirty surroundings can cause greater accumulation of dirt on the unit's optics. Clean with soft cloth using normal glass cleaning fluid. Always dry the parts carefully. Clean the external optics at least every 20 days. Clean the internal optics at least every 30 to 60 days.

### LIMITED WARRANTY

Solaris LED fixtures (the Product) are warranted by TMB against defective materials or workmanship for a period of two (2) years from the date of original sale by TMB. TMB's warranty shall be restricted to the repair or replacement of any part that proves to be defective and for which a claim is submitted to TMB before the expiration of the applicable warranty periods.

This Limited Warranty is void if the defects of the Product are the result of:

- Opening the casing, repair, or adjustment by anyone other than TMB or persons specifically authorized by TMB
- Accident, physical abuse, mishandling, or misapplication of the product.
- Damage due to lightning, earthquake, flood, terrorism, war, or act of God.

TMB will not assume responsibility for any labor expended, or materials used, to replace and/or repair the Product without TMB's prior written authorization. Any repair of the Product in the field, and any associated labor charges, must be authorized in advance by TMB. Freight costs on warranty repairs are split 50/50: Customer pays to ship defective product to TMB; TMB pays to ship repaired product, ground freight, back to Customer. This warranty DOES NOT cover consequential damages or costs of any kind.

A Return Merchandise Authorization (RMA) Number must be obtained from TMB prior to return of any defective merchandise for warranty or non-warranty repair. For all repairs please contact TMB Tech Support Repair using the contact information below or email TechSupportRepairna@tmb.com.

527 Park Ave., San Fernando, CA 91340

Tel: +1 818.899.8818

Fax: +1 818.899.8813

tmb-info@tmb.com

www.tmb.com

## RETURN PROCEDURE

Returned merchandise must be sent prepaid and in the original packing, call tags will not be issued. Package must be clearly labeled with a Return Merchandise Authorization Number (RMA #). Products returned without an RMA # will be refused. Please contact TMB and request RMA # prior to shipping the fixture. Be prepared to provide the model number, serial number and a brief description of the cause for the return. Be sure to properly pack fixture, any shipping damage resulting from inadequate packaging is the customer's responsibility. TMB reserves the right to use its own discretion to repair or replace product(s). As a suggestion, proper UPS packing or double-boxing is always a safe method to use.

**Note: If you are given an RMA #, please include the following information on a piece of paper inside the box:**

- 1) Your name
- 2) Your address
- 3) Your phone number
- 4) The RMA #.
- 5) A brief description of the symptoms

## CONTACT INFORMATION

### GENERAL INFORMATION

#### TMB

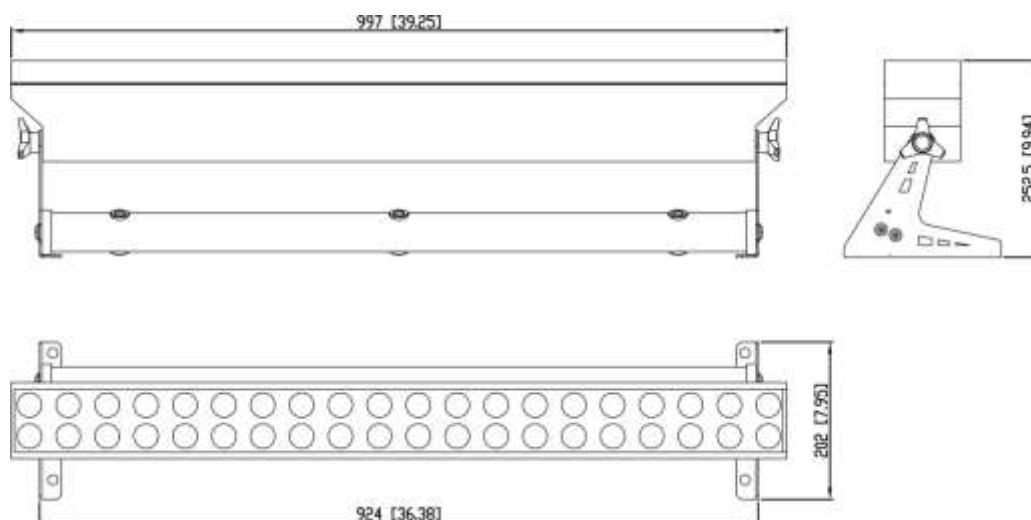
US Phone: +1 818.899.8818  
Fax: +1 818.899.8813  
UK Phone: +44 (0)20.8574.9700  
Fax: +44 (0)20.8574.9701  
e-mail: tmb-info@tmb.com  
web: www.tmb.com

### 24/7 TECHNICAL SUPPORT

#### TMB

US/Canada: 1 877.TMB.DUDE (+1 877.862.3833)  
Toll-free UK: 0800.652.5418  
International: +1 818.794.1286  
e-mail: techsupport@tmb.com

## TECHNICAL SPECIFICATIONS – SOLARIS LED RGBW 10x4 BATTEN



### WEIGHT & DIMENSIONS WITHOUT YOKE

LENGTH ..... 39.3 IN / 998 MM  
WIDTH ..... 3.8 IN / 97MM  
HEIGHT ..... 4.6 IN / 116 MM  
WEIGHT ..... 11.44 LB / 5.2 KG

### POWER

OPERATING VOLTAGE ..... 100-240V AC, 50/60 Hz  
FUSE ..... 6A, 250V SLOW-BLOW  
POWER CONSUMPTION ..... 400W MAX.  
POWER CONNECTORS ..... IN / OUT POWERCON 20A BLUE / GREY

### LIGHT SOURCE

LED COUNT ..... 40 CREE LEDs, 10 GROUPS (PIXELS)  
COLORS..... RED , GREEN , BLUE, WHITE  
BEAM SPREAD..... LENS 22°  
REFRESH RATE..... 1200HZ  
AVERAGE COLOR WAVELENGTH .....RED: 625 NM  
GREEN: 530 NM  
BLUE: 460 NM  
WHITE < 5700 K

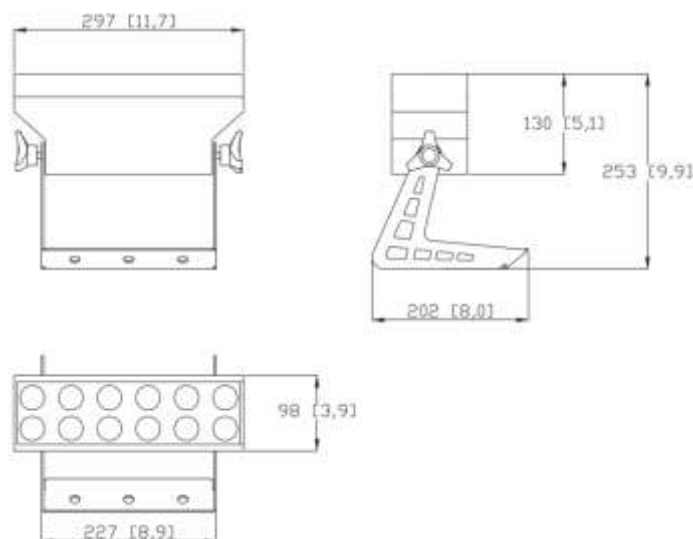
### THERMAL

MAXIMUM AMBIENT TEMPERATURE .....+40°C  
MINIMUM AMBIENT TEMPERATURE .....-20°C  
COOLING ..... AIR COOLED FAN

### CONTROL & PROGRAMMING

CONTROL..... DMX-512  
DMX CHANNELS ..... 3 - 80  
PRE-PROGRAMED TEST .....1 - 19 , ALL IN LOOP  
DMX INPUT..... LOCKING 5-PIN XLR MALE SOCKET  
DMX OUTPUT..... LOCKING 5-PIN XLR FEMALE SOCKET  
DMX PIN CONFIG.....PIN 1 SHIELD; PIN 2 (-); PIN 3 (+); PIN 4, PIN 5 N/A

## TECHNICAL SPECIFICATIONS – SOLARIS LED RGBW 3x4 BRICK



### WEIGHT & DIMENSIONS WITHOUT YOKE

|              |                  |
|--------------|------------------|
| LENGTH ..... | 11.7 IN / 298 MM |
| WIDTH .....  | 3.8 IN / 97MM    |
| HEIGHT ..... | 3.5 IN / 89 MM   |
| WEIGHT ..... | 5.1 LB / 2.3 KG  |

### POWER

|                         |                                   |
|-------------------------|-----------------------------------|
| OPERATING VOLTAGE ..... | 100-240V AC, 50/60 Hz             |
| FUSE .....              | 4A, 250V SLOW-BLOW                |
| POWER CONSUMPTION ..... | 120W MAX.                         |
| POWER CONNECTORS .....  | IN / OUT POWERCON 20A BLUE / GREY |

### LIGHT SOURCE

|                                |                                 |
|--------------------------------|---------------------------------|
| LED COUNT .....                | 12 CREE LEDs, 3 GROUPS (PIXELS) |
| COLORS.....                    | RED , GREEN , BLUE, WHITE       |
| BEAM SPREAD.....               | LENS 22°                        |
| REFRESH RATE.....              | 1200Hz                          |
| AVERAGE COLOR WAVELENGTH ..... | RED: 625 NM                     |
|                                | GREEN: 530 NM                   |
|                                | BLUE: 460 NM                    |
|                                | WHITE < 5700 K                  |

### THERMAL

|                                   |                |
|-----------------------------------|----------------|
| MAXIMUM AMBIENT TEMPERATURE ..... | +40°C          |
| MINIMUM AMBIENT TEMPERATURE ..... | -20°C          |
| COOLING .....                     | AIR COOLED FAN |

### CONTROL & PROGRAMMING

|                          |                                                      |
|--------------------------|------------------------------------------------------|
| CONTROL.....             | DMX-512                                              |
| DMX CHANNELS .....       | 3 - 24                                               |
| PRE-PROGRAMED TEST ..... | 1 - 19 , ALL IN LOOP                                 |
| DMX INPUT.....           | LOCKING 5-PIN XLR MALE SOCKET                        |
| DMX OUTPUT.....          | LOCKING 5-PIN XLR FEMALE SOCKET                      |
| DMX PIN CONFIG.....      | PIN 1 SHIELD; PIN 2 (-); PIN 3 (+); PIN 4, PIN 5 N/A |