



STORMY STORMY CC

The latest LED technology meets the charm of a classic strobe

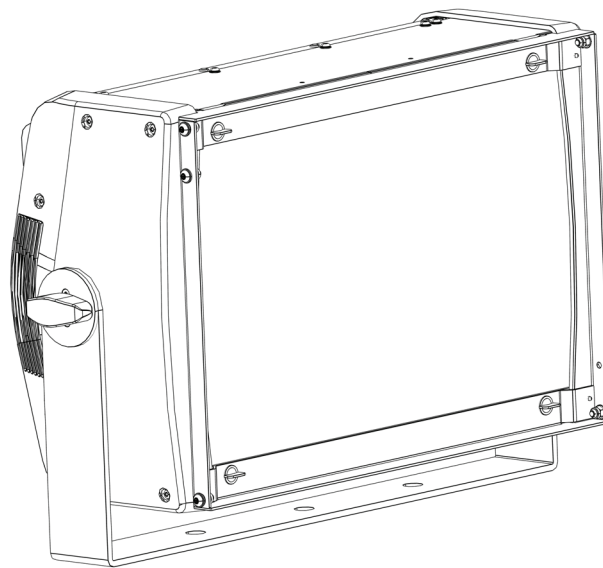


STORMY C71090
STORMY CC C71091



STORMY STORMY CC

The latest LED technology meets the charm of a classic strobe



Congratulations on choosing a Claypaky product!

We thank you for your choice. Please note that this product and all the others in the rich Claypaky range, has been designed and manufactured with total quality to ensure excellent performance and best meet your expectations and requirements.



Carefully read this instruction manual and keep in its entirety and keep it safe for future reference.

It is essential to know the information supplied in this manual in order to ensure that the fitting is installed, used and serviced correctly and safely.



CLAY PAKY S.p.A. disclaims all liability for damage to the fitting or to the other property or persons deriving from installation, use and maintenance that have not been carried out in conformity with this instructions manual, which must always accompany the fitting.

CLAY PAKY S.p.A. reserves the right to modify the characteristics stated in this instructions manual at any time and channel list without prior notice.



STORMY STORMY CC

The latest LED technology meets the charm of a classic strobe

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1. SAFETY INFORMATION

EN

How to get your SAFETY INSTRUCTIONS in multilingual version

You may always download the multilingual Safety Instruction manual for this Clay Paky product from:

<http://www.claypaky.it/en/download>

Ref: [FIS00N – Safety Information Stormy / Stormy CC]

IT

Come ottenere le INFORMAZIONI DI SICUREZZA nella versione multilingue

Puoi sempre scaricare la versione multilingue delle Informazioni di Sicurezza per questo prodotto Clay Paky al seguente link:

<http://www.claypaky.it/en/download>

Rif: [FIS00N – Safety Information Stormy / Stormy CC]

DE

So erhalten Sie Ihr INFORMATIONEN ZUR SICHERHEIT in der mehrsprachigen Version

Sie können die mehrsprachige Version des Handbuchs mit Sicherheitshinweisen für dieses Clay Paky-Produkt unter folgendem Link herunterladen:

<http://www.claypaky.it/en/download>

Ref: [FIS00N – Safety Information Stormy / Stormy CC]

ES

Cómo obtener tu INFORMACIONES DE SEGURIDAD en la versión multilingüe

Siempre puedes descargar la versión multilingüe del Manual de Instrucciones de Seguridad para este producto Clay Paky en el siguiente enlace

<http://www.claypaky.it/en/download>

Ref: [FIS00N – Safety Information Stormy / Stormy CC]

FR

Comment obtenir votre CONSIGNES DE SÉCURITÉ dans la version multilingue

Vous pouvez toujours télécharger la version multilingue du Manuel d'Instructions de Sécurité pour ce produit Clay Paky

au lien suivant :

<http://www.claypaky.it/en/download>

Réf. : [FIS00N – Safety Information Stormy / Stormy CC]

RU

Где достать ИНСТРУКЦИЮ ПО ТЕХНИКЕ БЕЗОПАСНОСТИ на нескольких языках

Вы всегда можете скачать многоязычную инструкцию по технике безопасности для данного изделия Clay Paky по ссылке:

<http://www.claypaky.it/en/download>

Наименование: [FIS00N – Safety Information Stormy / Stormy CC]

2. UNPACKING AND PREPARATION

1

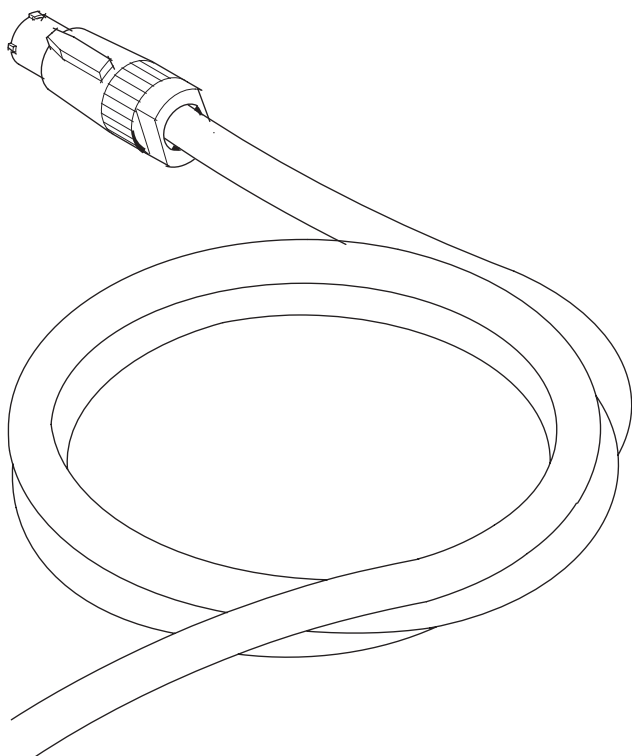


Fig. 1 - Packing content

3. INSTALLATION AND START-UP

2

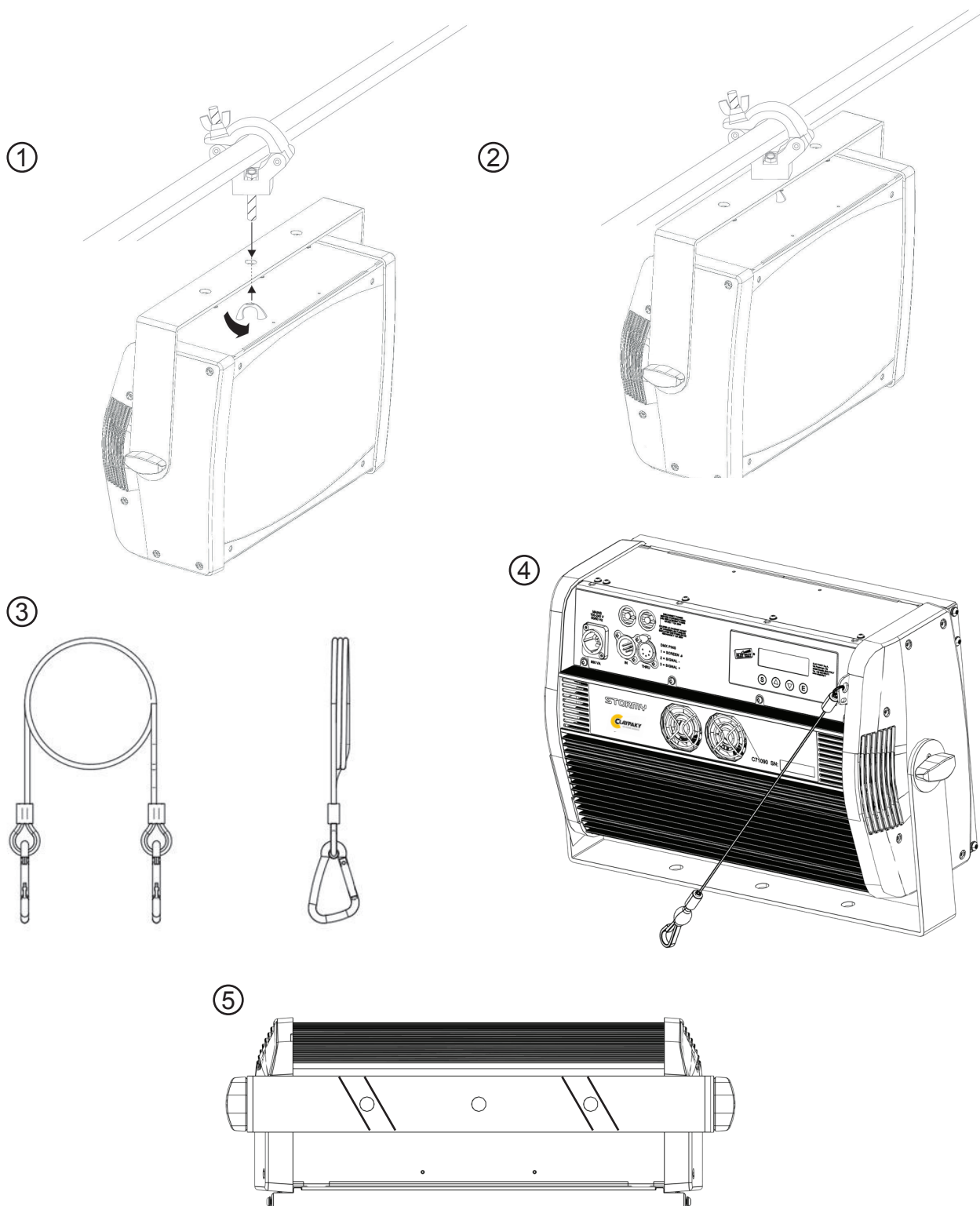


Fig. 2 - Projector installation

The projector can be installed on the floor, on a truss, on the ceiling or wall. **WARNING: the safety chain must be installed except when the projector rests on the floor. (Code 105015/801 available upon request).** This must be secured to the projector support structure and then hooked to the fastening point at the centre of the fixture.

3. INSTALLATION AND START-UP

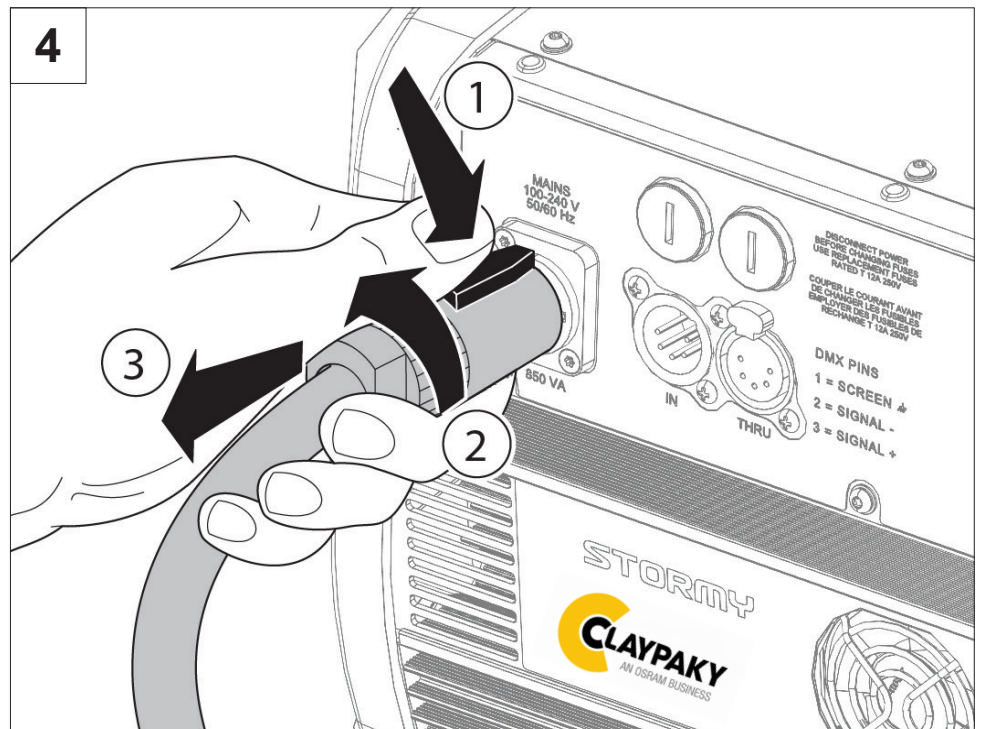
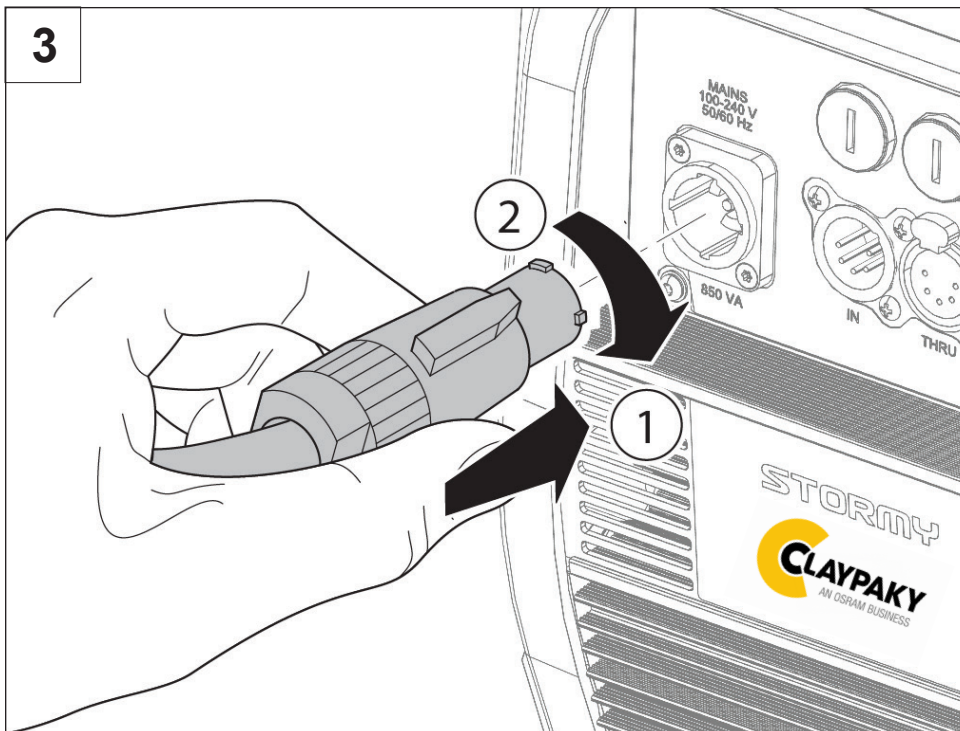
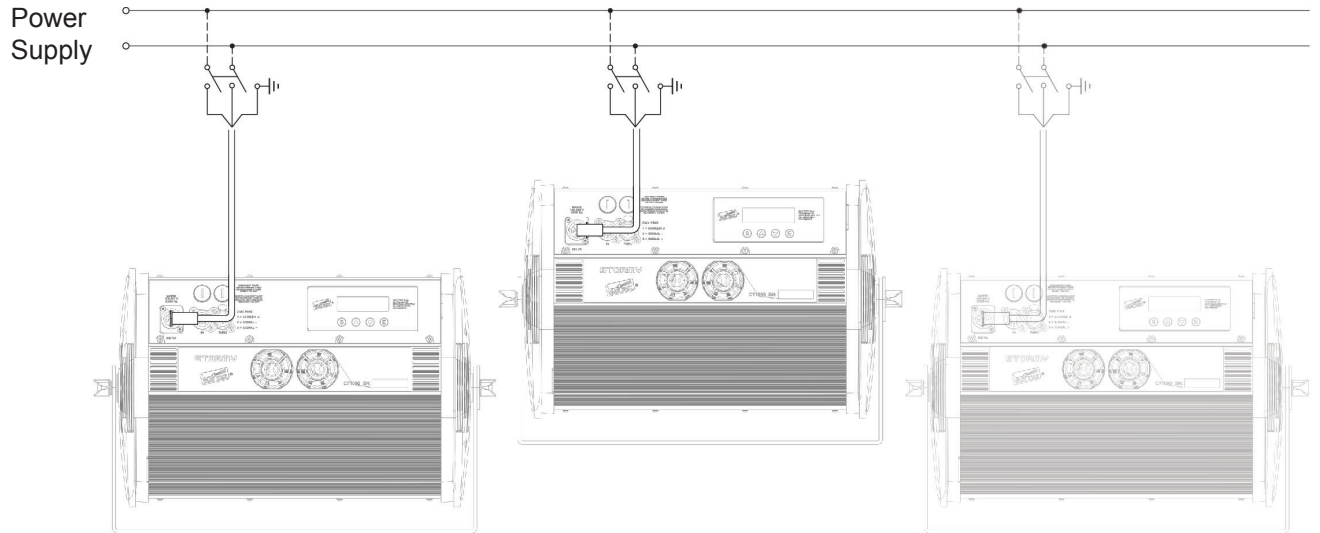


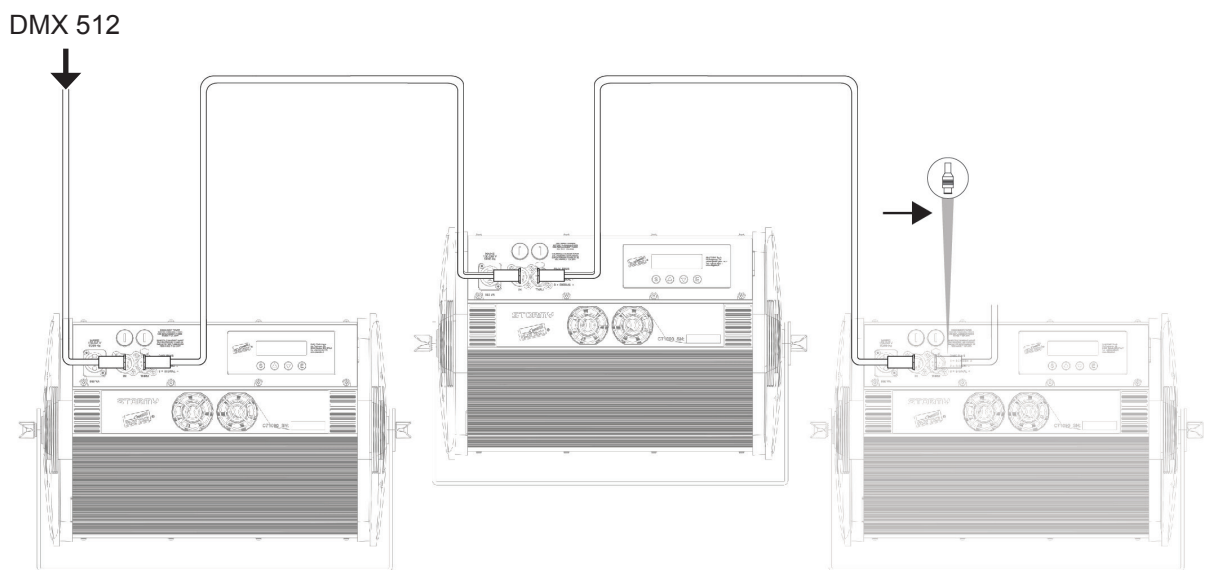
Fig. 3, 4 - Connecting and disconnecting the power cord

4. CONTROL PANEL

5



6



DMX 512
5 PIN

Fig. 5 - Connection to the power mains

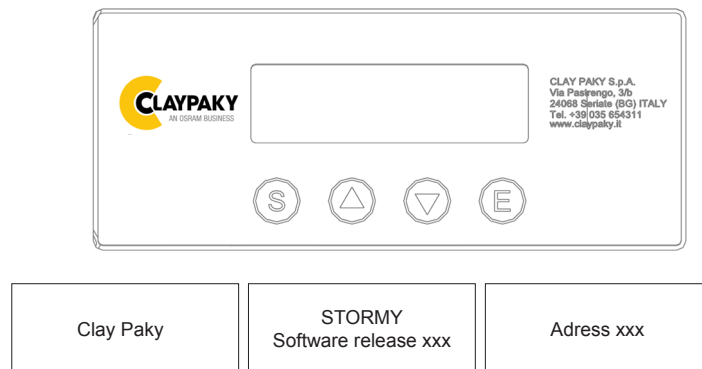
Fig. 6 - Connections to the control signal line (DMX)

Use a cable conforming to specifications EIA RS-485: 2-pole twisted, shielded, 120Ω characteristic impedance, 22-24 AWG, low capacity. Do not use microphone cable or other cable with characteristics differing from those specified. End connections must be made using XLR type 3-pin male/female connectors. A terminating plug must be inserted on the last projector with a resistance of 120 (minimum 1/4 W) between terminals 2 and 3.

IMPORTANT: The wires must not make contact with each other or with the metal casing of the connectors. The casing must be connected to the shield braid and pin 1 of the connectors.

4. CONTROL PANEL

7







Menu settings status

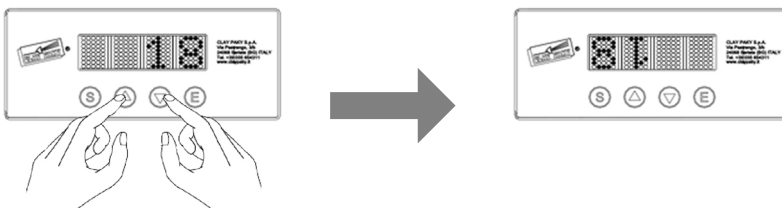
If no button is pressed after a wait period (about 60 seconds) → the display automatically returns to idle status.

Any modified value that has not yet been confirmed with the E key will be cancelled.

Button functions – Menu SET

| | |
|--|--|
| <p>SELECT</p>  | <ul style="list-style-type: none"> • If pressed in idle status: Cyclically switches between idle status and menu settings. • If pressed while setting a menu: Moves to an upper level without changing anything (exits the function) |
| <p>DOWN</p>  | <p>Decreases the value displayed (with auto-repetitions), or passes to the next item on the menu. For quick access to the minimum parameter value, press the UP key while holding down the DOWN key.</p> |
| <p>UP</p>  | <p>Increases the value displayed (with auto-repetitions), or passes to the previous item on the menu. For quick access to the maximum parameter value, press the DOWN key while holding down the UP key.</p> |
| <p>ENTER</p>  | <p>Confirms the displayed value or activates the displayed function or opens the next menu.</p> |

Display inversion



To activate this function press at the same time UP and DOWN keys while the display is in standby.

The condition is memorized and saved even for the subsequent switching. To return to the initial state repeat the operation again.

Fig. 7 - Switching on the projector

The projector immediately turns on when the power cord is plugged

5. MENU SETTING

| Main Menu | Level 1 | Level 2 | Level 3 | Choices / Values |
|----------------|------------------------------|---------------------|---------------------|---------------------|
| SET UP | DMX Address | | | 001-512 |
| | Channel Mod | Standard | | |
| | | Xenon | | |
| | | Independent | | |
| Extended | | | | |
| Fixture ID | | | 001-255 | |
| OPTION | Dimmer Curve | Curve 1 | | |
| | | Curve 2 | | |
| | Minimum Ton Value | | | 000-255 |
| | LED mode (Stormy CC only) | Raw | | |
| | | Balance | | |
| | Silent Mode | Standard | | |
| | | Quiet | | |
| | Display | | | On / Off |
| | Settings | Default preset | Reset to default | Yes / No |
| | | User preset 1 | Load preset 1 | Yes / No |
| | | | Save to preset 1 | Yes / No |
| User preset 2 | | Load preset 2 | Yes / No | |
| | | Save to preset 2 | Yes / No | |
| User preset 3 | | Load preset 3 | Yes / No | |
| | Save to preset 3 | Yes / No | | |
| INFORMATION | Fixture hours | Total | | |
| | | Partial | | |
| | System Version | Strobe firmware | | |
| | | Boot firmware | | |
| | | Driver firmware | | |
| | | CPU board | | |
| | | CPU SN | | |
| | Driver diagnostic | LED Temperature | Current | |
| | | | Maximum | |
| | | | Minimum | |
| | | Driver Temperature | Current | |
| | | | Maximum | |
| | | | Minimum | |
| | LED channel | | CH1 - CH4 (R-G-B-W) | |
| | DMX Monitor | Red | | 000-255bit / 0-100% |
| Green | | | 000-255bit / 0-100% | |
| Blue | | | 000-255bit / 0-100% | |
| White | | | 000-255bit / 0-100% | |
| Intensity | | | 000-255bit / 0-100% | |
| Duration | | | 000-255bit / 0-100% | |
| Rate | | | 000-255bit / 0-100% | |
| Fans Monitor | Head | | Speed xxxx RPM | |
| MANUAL CONTROL | Reset | | Yes / No | |
| | Channel | Red | | 000-255bit / 0-100% |
| | | Green | | 000-255bit / 0-100% |
| | | Blue | | 000-255bit / 0-100% |
| | | Whjite | | 000-255bit / 0-100% |
| | | Intensity | | 000-255bit / 0-100% |
| | | Duration | | 000-255bit / 0-100% |
| Rate | | 000-255bit / 0-100% | | |
| ADVANCED | Access Code <u>1234</u> | Firmware uploader | | Yes / No |
| | | Model SetUp | Undefined mode | |
| | | | Stormy | |
| | Stormy CC | | | |

5.1 SET-UP MENU

SET UP - DMX ADDRESS

It allows to set DMX address to be assigned to the projector, it's possible to select a DMX address between 1 and 512.

> **NOTE:** In case of absence of DMX input signal, the displayed projector address flashes.

SET UP - CHANNEL MODE

It allows to set the operation mode of the projector selecting from the following:

- **Standard:** max 7 DMX channels occupied for "Stormy CC" / max 3 DMX channels occupied for "Stormy".
 - **Xenon:** max 4 DMX channels occupied for "Stormy"
 - **Independent:** max 14 DMX channels for "Stormy CC"
 - **Extended:** max 15 DMX channels for "Stormy CC"
-

SET UP - FIXTURE ID

It allows to set a "Fixture ID" to be assigned to the projector, for easier identification of the same projector in an installation. It's possible to select a "Fixture ID" between 1 and 255.

5.2 OPTIONS MENU

OPTION - DIMMER CURVE

It allows the selection of one of the following two Dimmer curves:

- **Curve 1**
 - **Curve 2**
-

OPTION - MINIMUM TON VALUE

It allows to set the minimum "T ON" duration of strobe flash under which it's not possible to come down. It's possible to select a value between 0 and 255.

With the "Duration" channel you set the flash duration. At every level of the DMX signal corresponds a duration. The value "**Minimum T ON value**" represents the level of the DMX channel **Duration** under which the TON value does not change.

OPTION - LED MODE

It allows the selection of one of the following two methods of LEDs management

- **Row:** RGBW channels are independent.
 - **Balance:** RGBW components are optimized to have a white color with maximum light output.
-

OPTION - SILENT MODE

It allows the selection of one of the following two alternatives:

- **Standard:** Maximum fans' speed; therefore maximum noise level and maximum light output of the LEDs.
- **Quiet:** It reduces the fans' speed and, as a consequence, the noise; the maximum brightness of the LEDs. It reduces also subject to decrease according to the conditions of use (ambient temperature, used effect type).

OPTIONS - **DISPLAY**

The enabled DISPLAY option (ON) allows to reduce the display backlight on the machine, after a 30 seconds in standby mode. To restart is enough to press any key. Select OFF to disable this option.

OPTIONS - **SETTING**

It allows to save in the machine memory 3 different settings of the options menu items and its submenus:

- **User preset 1**
- **User preset 2**
- **User preset 3**

- **Load preset 1, 2 o 3:** It is used to display a previously configuration saved by the user.

- **Save to preset 1, 2 o 3:** It is used to save the current configuration set by the user.

- **Default preset**

It allows to reset to the default values (factory settings) on all the voices of the option menu and of the related submenus.

5.3 INFORMATION MENU

INFORMATION MENU - **FIXTURE HOURS**

It allows to display the projector operating hours (total and partial).

Total hours: it counts the number of projector working life hours (from manufacture to date).

Partial hours: it counts the number of partial projector working life hours since the last reset up to date.

Press **ENTER** to reset partial projector working life hours, a confirmation message (Are you sure ?) appears on the display. Select **YES** to confirm the cancellation.

INFORMATION MENU - **SYSTEM VERSION**

It allows to display the firmware/hardware versions of installed machine components:

Strobe firmware: Strobe application firmware

Boot firmware: Safety software

Driver firmware: Driver application firmware

CPU board: Hardware revision of CPU Board

CPU SN: Serial number of CPU Board

INFORMATION MENU - DRIVER DIAGNOSTIC - **LED TEMPERATURE**

It allows to display some details about the functionality of the card/cards and LEDs:

- **Current:** Instantly detected operating temperature
 - **Maximum:** Maximum detected temperature
 - **Minimum:** Minimum detected temperature
-

INFORMATION MENU - DRIVER DIAGNOSTIC - **DRIVER TEMPERATURE**

It allows to view some details about the functionality of the driver card for LED:

- **Current:** Instantly detected operating temperature
 - **Maximum:** Maximum detected temperature
 - **Minimum:** Minimum detected temperature
-

INFORMATION MENU - DRIVER DIAGNOSTIC - **LED CHANNEL**

It displays the diagnostics from the driver card: for each of the 4 channels a SYSTEM information and a ERROR information is reported (the decoding is specified in the driver's specifications).

INFORMATION MENU - **DMX MONITOR**

It allows to visualize the DMX input level (in bits or as a percentage) of each channel of the projector (value Between 0 and 255 bit or between 0 and 100%).

INFORMATION MENU - **FANS MONITOR**

It allows to display the rotation speed (**RPM Speed**) of the fans installed on the machine.
Head = Power Supply fans.

5.4 MANUAL CONTROL MENU

MANUAL CONTROL - **RESET**

It allows to reset the projector's CPU in case of anomalies.

MANUAL CONTROL - **CHANNEL**

It allows to set a value in bit to the channels, from the projector control panel for manual control of each effect without the need of a DMX input signal (values between 0 and 255 bits).

5.5 ADVANCED MENU

To access to the Advanced menu (only recommended for experienced users), you need to set the access code 1234.

ADVANCED MENU - **FIRMWARE UPLOAD**

It allows to transfer the firmware from one projector to the others connected to it.

ADVANCED MENU - **MODEL SETUP**

It allows to change the projector's model set, selecting among the available:

- **Undefined**
- **Stormy**
- **Stormy CC**

6. MAINTENANCE

8



Fig. 8 - Fuses replacing

Each product has 2 fuses associated with the main power cord connection.

6. MAINTENANCE

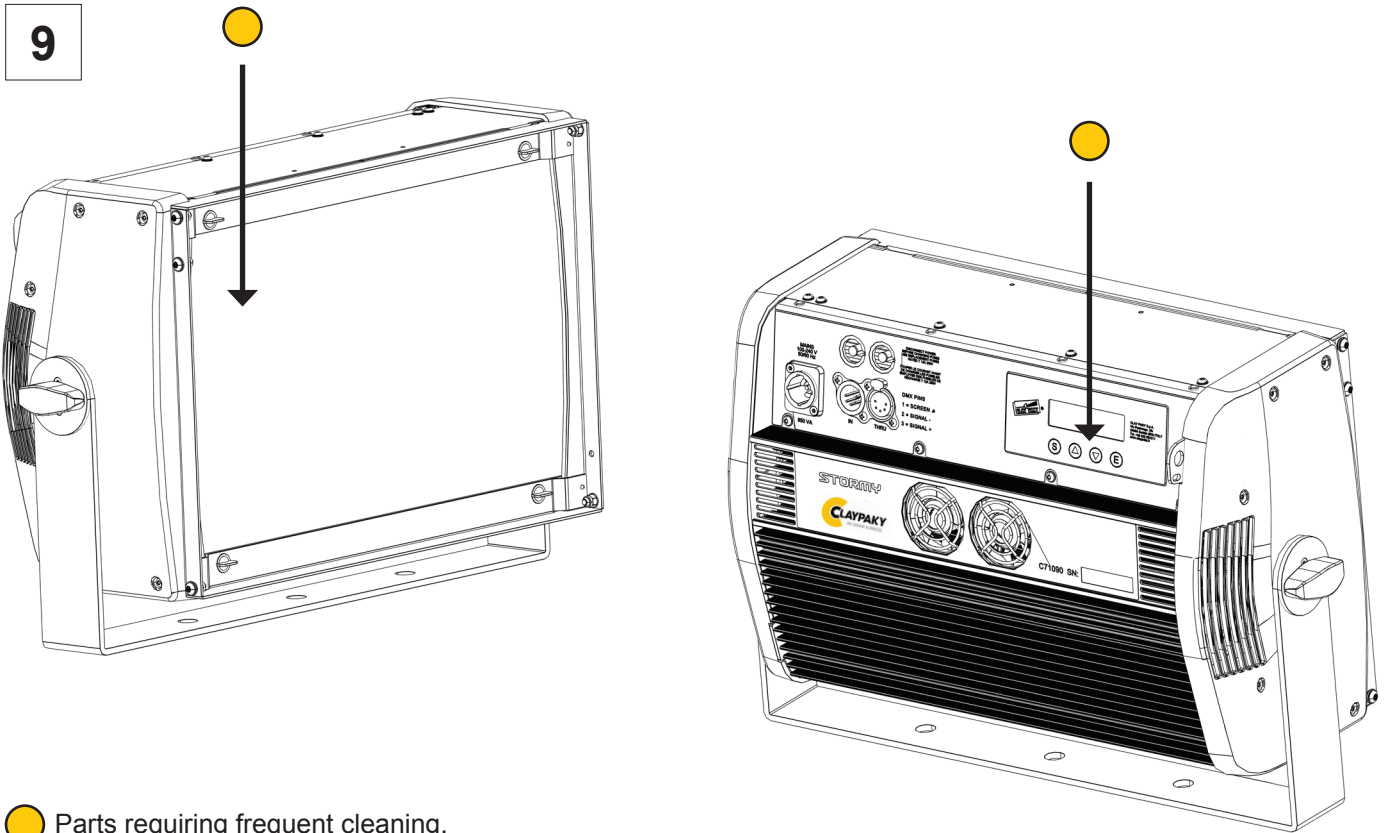


Fig. 9 - Periodic cleaning

To ensure optimal operation and performance for a long time it is essential to periodically clean the parts subject to dust and grease deposits. The frequency with which the following operations are to be carried out depends on various factors such as wear and the work environment quality (air humidity, dust, salinity, etc.). To remove dirt from external parts, use a soft cloth dampened with any liquid glass cleaning detergent.

It is recommended that the projector undergoes an annual service by a qualified technician for special maintenance involving at least the following operations:

- General cleaning of internal parts.
- General visual check of internal parts, cabling, mechanical parts, etc.
- Electrical, photometric and functional checks; eventual repairs.

IMPORTANT: Cleaning transparent cover

Only use neutral soap and water to clean the transparent cover then dry it carefully with a soft, non-abrasive cloth. (WARNING: the use of alcohol or any other detergent could damage the transparent cover.)

7. ACCESSORIES

10

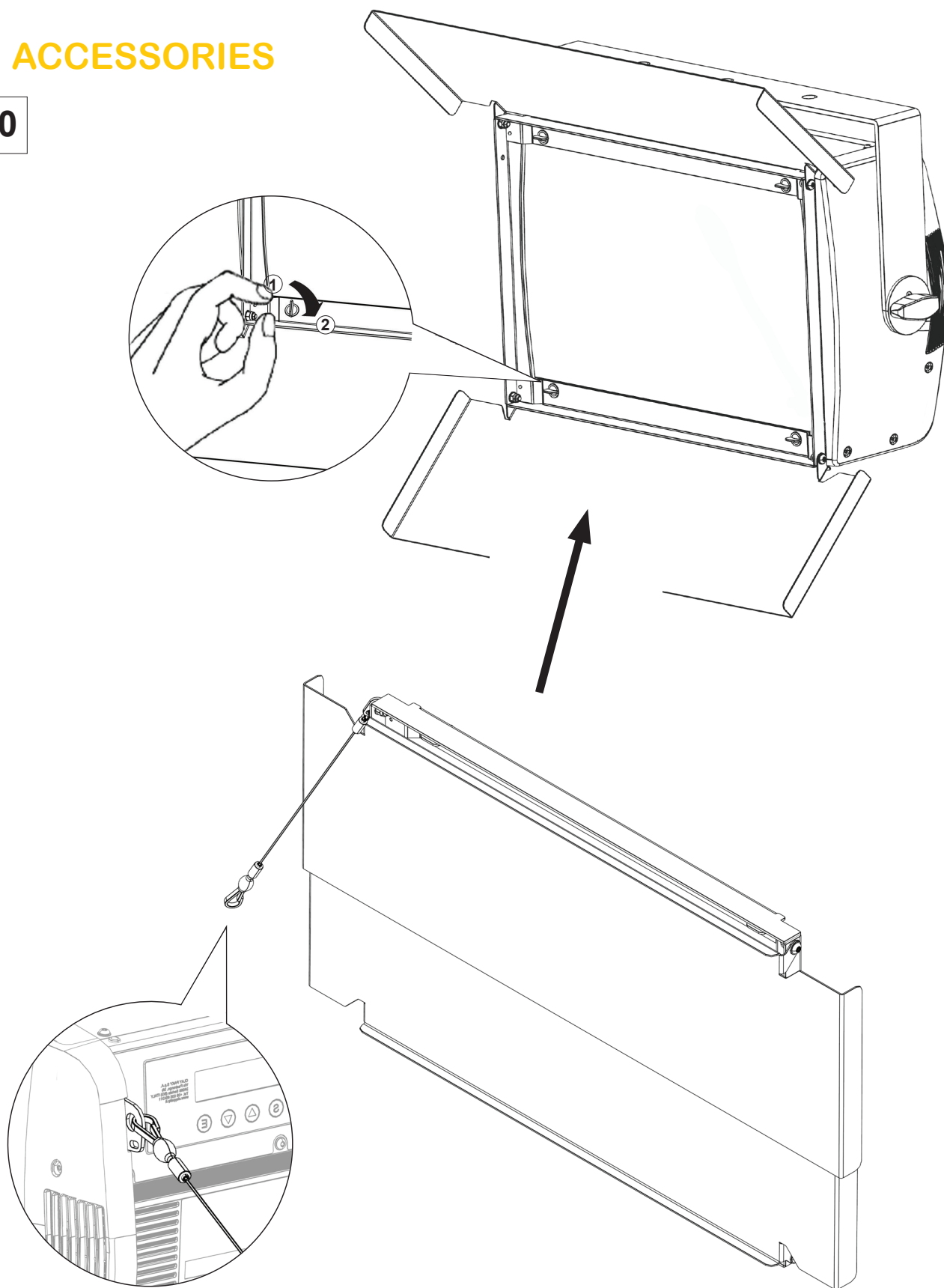
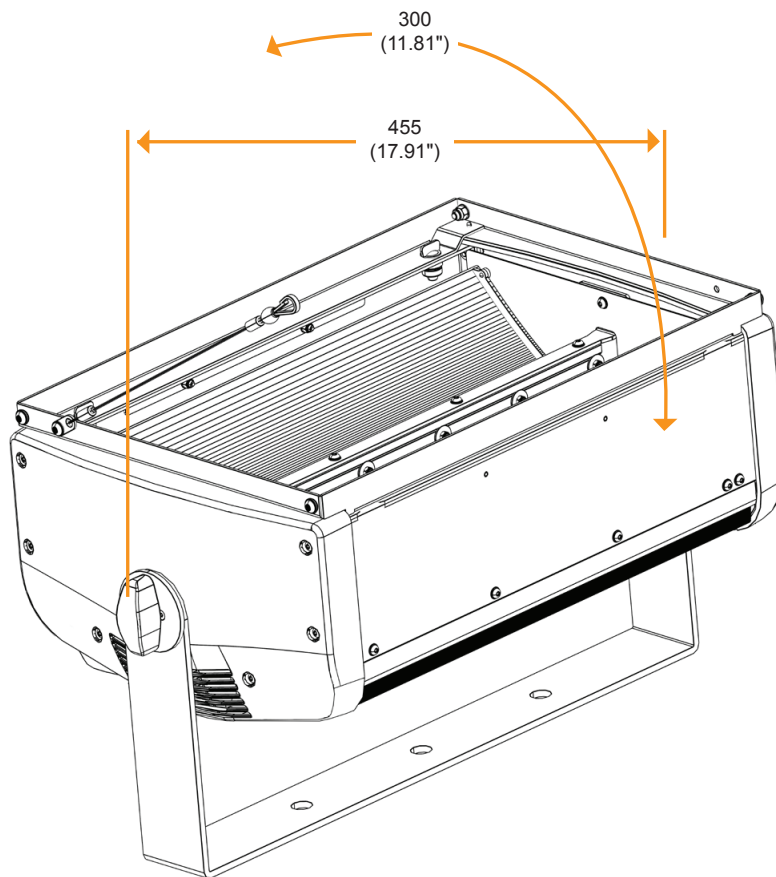


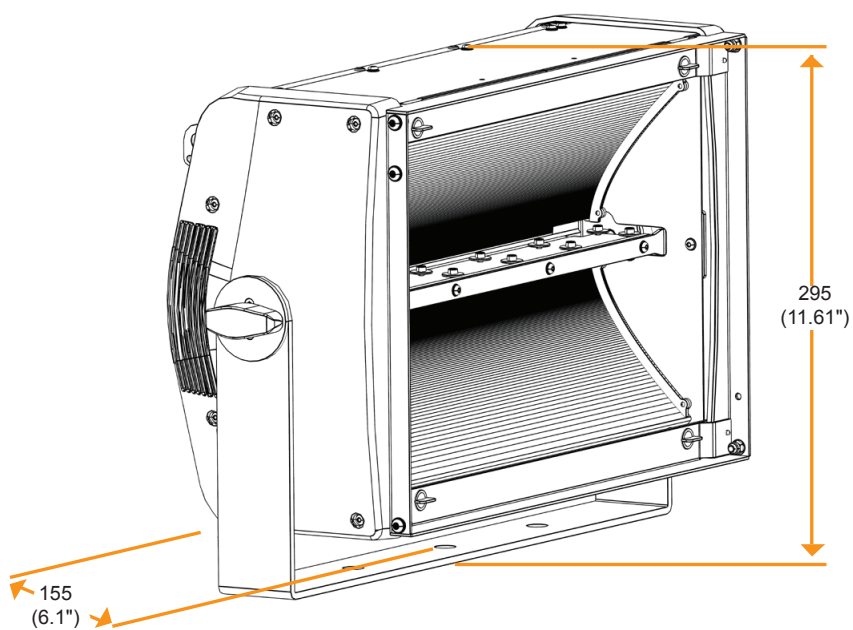
Fig. 10 - Barn-doors - C71116

8. TECHNICAL DATA STORMY - STORMY CC

| | |
|--------------------------------|--|
| POWER SUPPLIES | AC power input Neutrik PowerCON TRUE1 (IP65) 100-240V 50-60Hz |
| INPUT POWER | 850 VA |
| LIGHT SOURCE | 144 x 7W Oslon Osram LEDs LED Power: pulsed mode 980W max, continuous mode 720W max. Color Temperature: 5700 K Average Life of the LEDs: 50,000 h |
| OPTICS | High efficiency parabolic reflector Perfect emulation of a bright Xenon linear lamp 42° beam aperture; 130° spatial diffusion Beam opening control by optional barndoors Total brightness: - 80,000 lm (Stormy) - 40,000 lm (Stormy CC) |
| COLOR SYSTEM | RGBW system for Stormy CC |
| EFFECTS SECTION | 0-100% adjustable dimmer Strobe pulse duration Strobe pulse rate |
| CONTROL AND PROGRAMMING | DMX 512 control channels: • 3 (Stormy) • 7 (Stormy CC) DMX protocol signal: USITT DMX 512 RDM Pre-set macros Display: Graphic LCD backlit blue-white Display Dimmer and colors Resolution: 8 bit DMX signal connection: 5 pole XLR input and output Software upload through DMX input Firmware upload from another fixture |
| BODY | Body extruded in black anodized aluminium 4 membrane buttons |
| SUPPORT | Bracket adjustable on 360° |
| ELECTRONICS | “AUTOTEST” function from menu Electronic monitoring with status error Cooling system monitoring DMX level monitoring on all channels Internal data transmission diagnostics |
| SAFETY DEVICES | Forced ventilation with axial fans |
| WORKING POSITION | Working in any position |
| WEIGHT & DIMENSIONS | 7.2 Kg (15.13 lbs) |



7.2 Kg
(15.13 lbs)



STORMY - CHANNEL LIST

| CHANNEL | CHANNEL MODE | |
|---------|--------------|-----------|
| | STANDARD | XENON |
| 1 | INTENSITY | INTENSITY |
| 2 | DURATION | DURATION |
| 3 | RATE | RATE |
| 4 | - | MACRO |

STORMY - CHANNEL FUNCTION

| Channel Mode | | DMX Value | Function |
|--------------|------------------|-----------|--|
| Standard | Xenon | | |
| 1 | 1 | | INTENSITY |
| | | 0 - 5 | Light OFF |
| | | 6 - 255 | Light output linearly increase from minimum to maximum brightness |
| 2 | 2 | | DURATION |
| | | 0 - 255 | Light time (versus dark time) linearly increases from shorter time (2.5msec) to longer time (650msec) <i>See details in a following dedicated table.</i> IMPORTANT: Duration Time must be lower than Rate Time (Period) for flashing. If Duration Time is equal or greater than Rate Time (Period) the light is continuously on. |
| 3 | 3 | | RATE |
| | | 0 - 5 | Light OFF |
| | | 6 - 255 | Flashing at linearly variable frequency from low: (~0.3 flashes/sec or 1 flash every period of 3.5sec) to high (25 flashes/sec or 1°flash every period of 40msec) <i>See details in a following dedicated table.</i> |
| - | 4 | | MACRO |
| | | 0 - 2 | Macro OFF |
| | | 3 - 5 | Xenon effect OFF |
| | | 6 - 42 | Macro 1 – UP ramp |
| | | 43 - 85 | Macro 2 – DOWN ramp |
| | | 86 - 128 | Macro 3 - UP↔DOWN ramp |
| | | 129 - 171 | Macro 4 – Random |
| | | 172 - 214 | Macro 5 – Lightning |
| 215 - 255 | Macro 6 – Spikes | | |

STORMY CC - CHANNEL LIST

| CHANNEL | CHANNEL MODE | | |
|---------|------------------|------------------|-------------------|
| | STANDARD | INDEPENDENT | EXTENDED |
| 1 | RED INTENSITY | RED INTENSITY | RED FOREGROUND |
| 2 | GREEN INTENSITY | RED DURATION | GREEN FOREGROUND |
| 3 | BLUE INTENSITY | RED RATE | BLUE FOREGROUND |
| 4 | WHITE INTENSITY | GREEN INTENSITY | WHITE FOREGROUND |
| 5 | MASTER INTENSITY | GREEN DURATION | DIMMER FOREGROUND |
| 6 | MASTER DURATION | GREEN RATE | MASTER DURATION |
| 7 | MASTER RATE | BLUE INTENSITY | MASTER RATE |
| 8 | - | BLU DURATION | MACRO t.b.d |
| 9 | - | BLU RATE | OFFSET t.b.d |
| 10 | - | WHITE INTENSITY | FUNCTION |
| 11 | - | WHITE DURATION | RED BACKGROUND |
| 12 | - | WHITE RATE | GREEN BACKGROUND |
| 13 | - | MASTER INTENSITY | BLUE BACKGROUND |
| 14 | - | MASK | WHITE BACKGROUND |
| 15 | - | - | DIMMER BACKGROUND |

STORMY CC - “STANDARD” CHANNEL FUNCTION

| Channel Mode | DMX Value | Function |
|--------------|----------------|---|
| Standard | | |
| 1 | | RED INTENSITY |
| | 0 - 255 | Red colour linearly increase from no-light to maximum intensity |
| 2 | | GREEN INTENSITY |
| | 0 - 255 | Green colour linearly increase from no-light to maximum intensity |
| 3 | | BLUE INTENSITY |
| | 0 - 255 | Blue colour linearly increase from no-light to maximum intensity |
| 4 | | WHITE INTENSITY |
| | 0 - 255 | White colour linearly increase from no-light to maximum intensity |
| 5 | | MASTER INTENSITY |
| | 0 - 5 | No Light output |
| | 6 - 255 | Light output linearly increase from minimum to maximum brightness |
| 6 | | MASTER DURATION |
| | 0 - 255 | Light time (versus dark time) linearly increases from shorter time (2.5msec) to longer time (650msec) See details in a following dedicated table. IMPORTANT: Duration Time must be lower than Rate Time (Period) for flashing. If Duration Time is equal or greater than Rate Time (Period) the light is continuously on. |
| 7 | | MASTER RATE |
| | 0 - 5 | Light OFF |
| | 6 - 255 | Flashing at linearly variable frequency from low: (~0.3 flashes/sec or 1 flash every period of 3.5sec) to high (25 flashes/sec or 1°flash every period of 40msec). See details in a following dedicated table. |

STORMY CC - “INDIPENDENT” CHANNEL FUNCTION

| Channel Mode | DMX Value | Function |
|--------------|----------------|--|
| 1 | | RED INTENSITY |
| | 0 - 255 | Red colour linearly increase from no-light to maximum intensity |
| 2 | | RED DURATION |
| | 0 - 255 | Light time (versus dark time) linearly increases from shorter time (2.5msec) to longer time (650msec) <i>See details in a following dedicated table.</i> IMPORTANT: Duration Time must be lower than Rate Time (Period) for flashing. If Duration Time is equal or greater than Rate Time (Period) the light is continuously on. |
| 3 | | RED RATE |
| | 0 - 5 | Single Dimmer flash |
| | 6 - 255 | Flashing at linearly variable frequency from low: (~0.3 flashes/sec or 1 flash every period of 3.5sec) to high (25 flashes/sec or 1°flash every period of 40msec). <i>See details in a following dedicated table.</i> |
| 4 | | GREEN INTENSITY |
| | 0 - 255 | Green colour linearly increase from no-light to maximum intensity |
| 5 | | GREEN DURATION |
| | 0 - 255 | Light time (versus dark time) linearly increases from shorter time (2.5msec) to longer time (650msec) <i>See details in a following dedicated table.</i> IMPORTANT: Duration Time must be lower than Rate Time (Period) for flashing. If Duration Time is equal or greater than Rate Time (Period) the light is continuously on. |
| 6 | | GREEN RATE |
| | 0 - 5 | Single Dimmer flash |
| | 6 - 255 | Flashing at linearly variable frequency from low: (~0.3 flashes/sec or 1 flash every period of 3.5sec) to high (25 flashes/sec or 1°flash every period of 40msec) <i>See details in a following dedicated table.</i> |
| 7 | | BLUE INTENSITY |
| | 0 - 255 | Blue colour linearly increase from no-light to maximum intensity |
| 8 | | BLUE DURATION |
| | 0 - 255 | Light time (versus dark time) linearly increases from shorter time (2.5msec) to longer time (650msec) <i>See details in a following dedicated table.</i> IMPORTANT: Duration Time must be lower than Rate Time (Period) for flashing. If Duration Time is equal or greater than Rate Time (Period) the light is continuously on. |
| 9 | | BLUE RATE |
| | 0 - 5 | Single Dimmer flash |
| | 6 - 255 | Flashing at linearly variable frequency from low: (~0.3 flashes/sec or 1 flash every period of 3.5sec) to high (25 flashes/sec or 1°flash every period of 40msec). <i>See details in a following dedicated table.</i> |

| Channel Mode | DMX Value | Function |
|--------------|----------------------------------|---|
| 10 | | WHITE INTENSITY |
| | 0 - 255 | White colour linearly increase from no-light to maximum intensity |
| 11 | | WHITE DURATION |
| | 0 - 255 | Light time (versus dark time) linearly increases from shorter time (2.5msec) to longer time (650msec) <i>See details in a following dedicated table.</i> IMPORTANT: Duration Time must be lower than Rate Time (Period) for flashing. If Duration Time is equal or greater than Rate Time (Period) the light is continuously on |
| 12 | | WHITE RATE |
| | 0 - 5 | Single Dimmer flash |
| 12 | 6 - 255 | Flashing at linearly variable frequency from low: (~0.3 flashes/sec or 1 flash every period of 3.5sec) to high (25 flashes/sec or 1°flash every period of 40msec) <i>See details in a following dedicated table.</i> |
| | | MASTER INTENSITY |
| 13 | 0 - 5 | No Light output |
| | 6 - 255 | <i>Light output linearly increase from minimum to maximum brightness</i> |
| 14 | | MASK |
| | 0-31 | No overwriting |
| | 32-47 | RED overwrites all other channels |
| | 48-63 | GREEN overwrites all other channels |
| | 64-79 | BLUE overwrites all other channels |
| | 80-95 | WHITE overwrites all other channels |
| | 96-111 | RED, GREEN overwrite BLUE, WHITE |
| | 112-127 | RED, BLUE overwrite GREEN, WHITE |
| | 128-143 | RED, WHITE overwrite GREEN, BLUE |
| | 144-159 | GREEN, BLUE overwrite RED, WHITE |
| | 160-175 | GREEN, WHITE overwrite RED, BLUE |
| | 176-191 | BLUE, WHITE overwrite RED, GREEN |
| | 192-207 | RED, GREEN, BLUE overwrite WHITE |
| | 208-223 | RED, GREEN, WHITE overwrite BLUE |
| 224-239 | RED, BLUE, WHITE overwrite GREEN | |
| 240-255 | GREEN, BLUE, WHITE overwrite RED | |

STORMY CC - "EXTENDED" CHANNEL FUNCTION

| Channel Mode | DMX Value | Function |
|--------------|-----------|--|
| Extended | | |
| 1 | | RED FOREGROUND |
| | 0 - 255 | Red Foreground Colour linearly increase from no-light to maximum intensity |
| 2 | | GREEN FOREGROUND |
| | 0 - 255 | Green Foreground Colour linearly increase from no-light to maximum intensity |
| 3 | | BLUE FOREGROUND |
| | 0 - 255 | Blue Foreground Colour linearly increase from no-light to maximum intensity |
| 4 | | WHITE FOREGROUND |
| | 0 - 255 | White Foreground Colour linearly increase from no-light to maximum intensity |
| 5 | | DIMMER FOREGROUND |
| | 0 - 5 | No Light output |
| | 6 - 255 | Light output linearly increase from minimum to maximum brightness |
| 6 | | MASTER DURATION |
| | 0 - 255 | Light time (versus dark time) linearly increases from shorter time (2.5msec) to longer time (650msec) <i>See details in a following dedicated table.</i> IMPORTANT: Duration Time must be lower than Rate Time (Period) for flashing. If Duration Time is equal or greater than Rate Time (Period) the light is continuously on. |
| 7 | | MASTER RATE |
| | 0 - 5 | Light OFF |
| | 6 - 255 | Flashing at linearly variable frequency from low: (~0.3 flashes/sec or 1 flash every period of 3.5sec) to high (25 flashes/sec or 1°flash every period of 40msec) <i>See details in a following dedicated table.</i> |
| 8 | | MACRO |
| | 0 - 255 | T.B.D. |
| 9 | | OFFSET |
| | 0 - 255 | T.B.D. |
| 10 | | FUNCTION |
| | 0 - 9 | Foreground overwrite Background (Xenon mode) |
| | 10 - 19 | Foreground + Background (Xenon mode) |
| | 20 - 29 | Foreground overwrite Background (Continuous mode) |
| 11 | | RED BACKGROUND |
| | 0 - 255 | Red Background Colour linearly increase from no-light to maximum intensity |
| 12 | | GREEN BACKGROUND |
| | 0 - 255 | Green Background Colour linearly increase from no-light to maximum intensity |

| Channel Mode | DMX Value | Function |
|--------------|----------------|--|
| Extended | | |
| 13 | | BLUE BACKGROUND |
| | 0 - 255 | Blue Background Colour linearly increase from no-light to maximum intensity |
| 14 | | WHITE BACKGROUND |
| | 0 - 255 | White Background Colour linearly increase from no-light to maximum intensity |
| 15 | | DIMMER BACKGROUND |
| | 0 - 5 | No Light output |
| | 6 - 255 | Light output linearly increase from minimum to maximum brightness |

9.3 DURATION CHANNEL DETAILS

| DMX level | Time [msec] | DMX level | Time [msec] | DMX level | Time [msec] | DMX level | Time [msec] | DMX level | Time [msec] | DMX level | Time [msec] |
|-----------|-------------|-----------|-------------|-----------|-------------|-----------|-------------|-----------|-------------|-----------|-------------|
| 0 | 2.50 | 43 | 111.7 | 86 | 220.8 | 129 | 330.0 | 172 | 439.2 | 215 | 548.4 |
| 1 | 5.00 | 44 | 114.2 | 87 | 223.4 | 130 | 332.6 | 173 | 441.7 | 216 | 550.9 |
| 2 | 7.60 | 45 | 116.7 | 88 | 225.9 | 131 | 335.1 | 174 | 444.3 | 217 | 553.5 |
| 3 | 10.10 | 46 | 119.3 | 89 | 228.5 | 132 | 337.6 | 175 | 446.8 | 218 | 556.0 |
| 4 | 12.60 | 47 | 121.8 | 90 | 231.0 | 133 | 340.2 | 176 | 449.4 | 219 | 558.5 |
| 5 | 15.20 | 48 | 124.4 | 91 | 233.5 | 134 | 342.7 | 177 | 451.9 | 220 | 561.1 |
| 6 | 17.70 | 49 | 126.9 | 92 | 236.1 | 135 | 345.3 | 178 | 454.4 | 221 | 563.6 |
| 7 | 20.30 | 50 | 129.4 | 93 | 238.6 | 136 | 347.8 | 179 | 457.0 | 222 | 566.2 |
| 8 | 22.80 | 51 | 132.0 | 94 | 241.2 | 137 | 350.3 | 180 | 459.5 | 223 | 568.7 |
| 9 | 25.30 | 52 | 134.5 | 95 | 243.7 | 138 | 352.9 | 181 | 462.1 | 224 | 571.2 |
| 10 | 27.90 | 53 | 137.1 | 96 | 246.2 | 139 | 355.4 | 182 | 464.6 | 225 | 573.8 |
| 11 | 30.40 | 54 | 139.6 | 97 | 248.8 | 140 | 358.0 | 183 | 467.1 | 226 | 576.3 |
| 12 | 33.00 | 55 | 142.1 | 98 | 251.3 | 141 | 360.5 | 184 | 469.7 | 227 | 578.9 |
| 13 | 35.50 | 56 | 144.7 | 99 | 253.9 | 142 | 363.0 | 185 | 472.2 | 228 | 581.4 |
| 14 | 38.00 | 57 | 147.2 | 100 | 256.4 | 143 | 365.6 | 186 | 474.8 | 229 | 583.9 |
| 15 | 40.60 | 58 | 149.8 | 101 | 258.9 | 144 | 368.1 | 187 | 477.3 | 230 | 586.5 |
| 16 | 43.10 | 59 | 152.3 | 102 | 261.5 | 145 | 370.7 | 188 | 479.8 | 231 | 589.0 |
| 17 | 45.70 | 60 | 154.8 | 103 | 264.0 | 146 | 373.2 | 189 | 482.4 | 232 | 591.6 |
| 18 | 48.20 | 61 | 157.4 | 104 | 266.6 | 147 | 375.7 | 190 | 484.9 | 233 | 594.1 |
| 19 | 50.70 | 62 | 159.9 | 105 | 269.1 | 148 | 378.3 | 191 | 487.5 | 234 | 596.6 |
| 20 | 53.30 | 63 | 162.5 | 106 | 271.6 | 149 | 380.8 | 192 | 490.0 | 235 | 599.2 |
| 21 | 55.80 | 64 | 165.0 | 107 | 274.2 | 150 | 383.3 | 193 | 492.5 | 236 | 601.7 |
| 22 | 58.30 | 65 | 167.5 | 108 | 276.7 | 151 | 385.9 | 194 | 495.1 | 237 | 604.2 |
| 23 | 60.90 | 66 | 170.1 | 109 | 279.2 | 152 | 388.4 | 195 | 497.6 | 238 | 606.8 |
| 24 | 63.40 | 67 | 172.6 | 110 | 281.8 | 153 | 391.0 | 196 | 500.1 | 239 | 609.3 |
| 25 | 66.00 | 68 | 175.1 | 111 | 284.3 | 154 | 393.5 | 197 | 502.7 | 240 | 611.9 |
| 26 | 68.50 | 69 | 177.7 | 112 | 286.9 | 155 | 396.0 | 198 | 505.2 | 241 | 614.4 |
| 27 | 71.00 | 70 | 180.2 | 113 | 289.4 | 156 | 398.6 | 199 | 507.8 | 242 | 616.9 |
| 28 | 73.60 | 71 | 182.8 | 114 | 291.9 | 157 | 401.1 | 200 | 510.3 | 243 | 619.5 |
| 29 | 76.10 | 72 | 185.3 | 115 | 294.5 | 158 | 403.7 | 201 | 512.8 | 244 | 622.0 |
| 30 | 78.70 | 73 | 187.8 | 116 | 297.0 | 159 | 406.2 | 202 | 515.4 | 245 | 624.6 |
| 31 | 81.20 | 74 | 190.4 | 117 | 299.6 | 160 | 408.7 | 203 | 517.9 | 246 | 627.1 |
| 32 | 83.70 | 75 | 192.9 | 118 | 302.1 | 161 | 411.3 | 204 | 520.5 | 247 | 629.6 |
| 33 | 86.30 | 76 | 195.5 | 119 | 304.6 | 162 | 413.8 | 205 | 523.0 | 248 | 632.2 |
| 34 | 88.80 | 77 | 198.0 | 120 | 307.2 | 163 | 416.4 | 206 | 525.5 | 249 | 634.7 |
| 35 | 91.40 | 78 | 200.5 | 121 | 309.7 | 164 | 418.9 | 207 | 528.1 | 250 | 637.3 |
| 36 | 93.90 | 79 | 203.1 | 122 | 312.3 | 165 | 421.4 | 208 | 530.6 | 251 | 639.8 |
| 37 | 96.40 | 80 | 205.6 | 123 | 314.8 | 166 | 424.0 | 209 | 533.2 | 252 | 642.3 |
| 38 | 99.00 | 81 | 208.2 | 124 | 317.3 | 167 | 426.5 | 210 | 535.7 | 253 | 644.9 |
| 39 | 101.5 | 82 | 210.7 | 125 | 319.9 | 168 | 429.1 | 211 | 538.2 | 254 | 647.4 |
| 40 | 104.1 | 83 | 213.2 | 126 | 322.4 | 169 | 431.6 | 212 | 540.8 | 255 | 650.0 |
| 41 | 106.6 | 84 | 215.8 | 127 | 325.0 | 170 | 434.1 | 213 | 543.3 | | |
| 42 | 109.1 | 85 | 218.3 | 128 | 327.5 | 171 | 436.7 | 214 | 545.8 | | |

9.4 RATE CHANNEL DETAILS

| DMX level | Time [msec] | Frequency [flash/sec] |
|-----------|-------------|-----------------------|
| 0 | - | 0 |
| 1 | - | 0 |
| 2 | - | 0 |
| 3 | - | 0 |
| 4 | - | 0 |
| 5 | - | 0 |
| 6 | 3500 | 0.29 |
| 7 | 3500 | 0.29 |
| 8 | 2320 | 0.43 |
| 9 | 2320 | 0.43 |
| 10 | 1760 | 0.57 |
| 11 | 1760 | 0.57 |
| 12 | 1400 | 0.71 |
| 13 | 1400 | 0.71 |
| 14 | 1160 | 0.86 |
| 15 | 1160 | 0.86 |
| 16 | 1000 | 1.00 |
| 17 | 1000 | 1.00 |
| 18 | 880.0 | 1.14 |
| 19 | 880.0 | 1.14 |
| 20 | 760.0 | 1.32 |
| 21 | 740.0 | 1.35 |
| 22 | 720.0 | 1.39 |
| 23 | 700.0 | 1.43 |
| 24 | 640.0 | 1.56 |
| 25 | 600.0 | 1.67 |
| 26 | 580.0 | 1.72 |
| 27 | 570.0 | 1.75 |
| 28 | 560.0 | 1.79 |
| 29 | 540.0 | 1.85 |
| 30 | 500.0 | 2.00 |
| 31 | 490.0 | 2.04 |
| 32 | 480.0 | 2.08 |
| 33 | 460.0 | 2.17 |
| 34 | 440.0 | 2.27 |
| 35 | 430.0 | 2.33 |
| 36 | 420.0 | 2.38 |
| 37 | 410.0 | 2.44 |
| 38 | 400.0 | 2.50 |
| 39 | 390.0 | 2.56 |
| 40 | 384.0 | 2.60 |
| 41 | 376.0 | 2.66 |
| 42 | 360.0 | 2.78 |

| DMX level | Time [msec] | Frequency [flash/sec] |
|-----------|-------------|-----------------------|
| 43 | 350.0 | 2.86 |
| 44 | 336.0 | 2.98 |
| 45 | 330.0 | 3.03 |
| 46 | 320.0 | 3.13 |
| 47 | 315.0 | 3.17 |
| 48 | 310.0 | 3.23 |
| 49 | 305.0 | 3.28 |
| 50 | 300.0 | 3.33 |
| 51 | 290.0 | 3.45 |
| 52 | 284.0 | 3.52 |
| 53 | 280.0 | 3.57 |
| 54 | 275.0 | 3.64 |
| 55 | 270.0 | 3.70 |
| 56 | 264.0 | 3.79 |
| 57 | 255.0 | 3.92 |
| 58 | 250.0 | 4.00 |
| 59 | 245.0 | 4.08 |
| 60 | 240.0 | 4.17 |
| 61 | 237.0 | 4.22 |
| 62 | 234.0 | 4.27 |
| 63 | 231.0 | 4.33 |
| 64 | 227.0 | 4.41 |
| 65 | 224.0 | 4.46 |
| 66 | 220.0 | 4.55 |
| 67 | 217.0 | 4.61 |
| 68 | 214.0 | 4.67 |
| 69 | 211.0 | 4.74 |
| 70 | 208.0 | 4.81 |
| 71 | 205.0 | 4.88 |
| 72 | 200.0 | 5.00 |
| 73 | 197.5 | 5.06 |
| 74 | 195.0 | 5.13 |
| 75 | 192.5 | 5.19 |
| 76 | 190.0 | 5.26 |
| 77 | 187.5 | 5.33 |
| 78 | 185.0 | 5.41 |
| 79 | 182.5 | 5.48 |
| 80 | 180.0 | 5.56 |
| 81 | 178.0 | 5.62 |
| 82 | 176.0 | 5.68 |
| 83 | 174.0 | 5.75 |
| 84 | 172.0 | 5.81 |
| 85 | 170.0 | 5.88 |

| DMX level | Time [msec] | Frequency [flash/sec] |
|-----------|-------------|-----------------------|
| 86 | 168.0 | 5.95 |
| 87 | 166.0 | 6.02 |
| 88 | 164.0 | 6.10 |
| 89 | 162.0 | 6.17 |
| 90 | 160.0 | 6.25 |
| 91 | 158.0 | 6.33 |
| 92 | 156.0 | 6.41 |
| 93 | 154.0 | 6.49 |
| 94 | 152.0 | 6.58 |
| 95 | 151.0 | 6.62 |
| 96 | 150.0 | 6.67 |
| 97 | 149.0 | 6.71 |
| 98 | 148.0 | 6.76 |
| 99 | 147.0 | 6.80 |
| 100 | 146.0 | 6.85 |
| 101 | 145.0 | 6.90 |
| 102 | 144.0 | 6.94 |
| 103 | 142.0 | 7.04 |
| 104 | 140.0 | 7.14 |
| 105 | 138.0 | 7.25 |
| 106 | 136.0 | 7.35 |
| 107 | 134.0 | 7.46 |
| 108 | 132.0 | 7.58 |
| 109 | 130.0 | 7.69 |
| 110 | 128.0 | 7.81 |
| 111 | 127.0 | 7.87 |
| 112 | 126.0 | 7.94 |
| 113 | 125.0 | 8.00 |
| 114 | 124.0 | 8.06 |
| 115 | 123.0 | 8.13 |
| 116 | 122.0 | 8.20 |
| 117 | 121.0 | 8.26 |
| 118 | 120.0 | 8.33 |
| 119 | 119.0 | 8.40 |
| 120 | 118.0 | 8.47 |
| 121 | 117.0 | 8.55 |
| 122 | 116.0 | 8.62 |
| 123 | 115.0 | 8.70 |
| 124 | 114.0 | 8.77 |
| 125 | 113.0 | 8.85 |
| 126 | 112.0 | 8.93 |
| 127 | 111.0 | 9.01 |
| 128 | 110.0 | 9.09 |

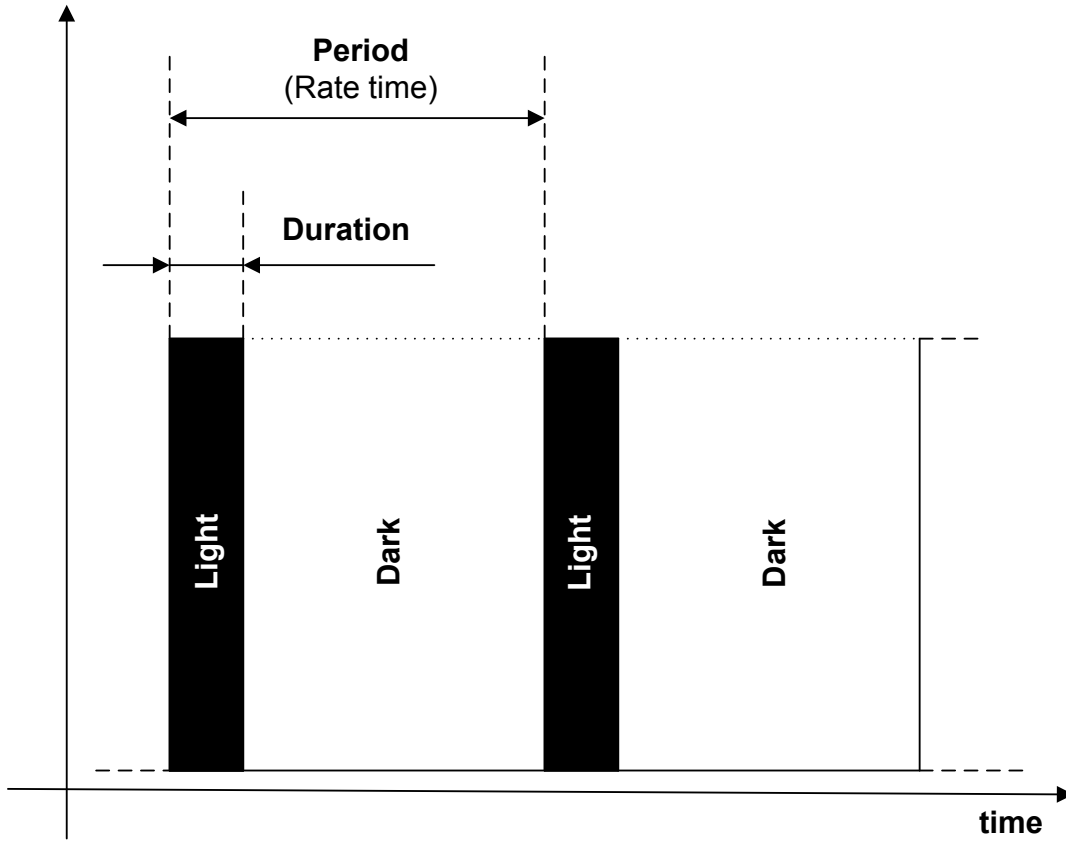
9.4 RATE CHANNEL DETAILS

| DMX level | Time [msec] | Frequency [flash/sec] |
|-----------|-------------|-----------------------|
| 129 | 109.0 | 9.17 |
| 130 | 110.0 | 9.09 |
| 131 | 109.5 | 9.13 |
| 132 | 109 | 9.17 |
| 133 | 108.5 | 9.22 |
| 134 | 108.0 | 9.26 |
| 135 | 107.5 | 9.30 |
| 136 | 107.0 | 9.35 |
| 137 | 106.5 | 9.39 |
| 138 | 106.0 | 9.43 |
| 139 | 105.5 | 9.48 |
| 140 | 105.0 | 9.52 |
| 141 | 104.5 | 9.57 |
| 142 | 104.0 | 9.62 |
| 143 | 103.0 | 9.71 |
| 144 | 102.0 | 9.80 |
| 145 | 101.0 | 9.90 |
| 146 | 100.0 | 10.00 |
| 147 | 99.0 | 10.10 |
| 148 | 98.0 | 10.20 |
| 149 | 97.0 | 10.31 |
| 150 | 96.0 | 10.42 |
| 151 | 95.0 | 10.53 |
| 152 | 94.0 | 10.64 |
| 153 | 93.0 | 10.75 |
| 154 | 92.0 | 10.87 |
| 155 | 91.0 | 10.99 |
| 156 | 90.0 | 11.11 |
| 157 | 89.5 | 11.17 |
| 158 | 89.0 | 11.24 |
| 159 | 88.5 | 11.30 |
| 160 | 88.0 | 11.36 |
| 161 | 87.5 | 11.43 |
| 162 | 87.0 | 11.49 |
| 163 | 86.5 | 11.56 |
| 164 | 86.0 | 11.63 |
| 165 | 85.5 | 11.70 |
| 166 | 85.0 | 11.76 |
| 167 | 84.5 | 11.83 |
| 168 | 84.0 | 11.90 |
| 169 | 83.5 | 11.98 |
| 170 | 83.0 | 12.05 |
| 171 | 82.5 | 12.12 |
| 172 | 82.0 | 12.20 |

| DMX level | Time [msec] | Frequency [flash/sec] |
|-----------|-------------|-----------------------|
| 173 | 81.5 | 12.27 |
| 174 | 81.0 | 12.35 |
| 175 | 80.5 | 12.42 |
| 176 | 80.0 | 12.50 |
| 177 | 79.6 | 12.56 |
| 178 | 79.2 | 12.63 |
| 179 | 78.8 | 12.69 |
| 180 | 78.4 | 12.76 |
| 181 | 78.0 | 12.82 |
| 182 | 77.6 | 12.89 |
| 183 | 77.2 | 12.95 |
| 184 | 76.8 | 13.02 |
| 185 | 76.4 | 13.09 |
| 186 | 76.0 | 13.16 |
| 187 | 75.6 | 13.23 |
| 188 | 75.2 | 13.30 |
| 189 | 74.8 | 13.37 |
| 190 | 74.4 | 13.44 |
| 191 | 74.0 | 13.51 |
| 192 | 73.6 | 13.59 |
| 193 | 73.2 | 13.66 |
| 194 | 72.8 | 13.74 |
| 195 | 72.4 | 13.81 |
| 196 | 72.0 | 13.89 |
| 197 | 71.6 | 13.97 |
| 198 | 71.2 | 14.04 |
| 199 | 70.8 | 14.12 |
| 200 | 70.4 | 14.20 |
| 201 | 70.0 | 14.29 |
| 202 | 69.6 | 14.37 |
| 203 | 69.2 | 14.45 |
| 204 | 69.0 | 14.49 |
| 205 | 68.7 | 14.56 |
| 206 | 68.4 | 14.62 |
| 207 | 68.1 | 14.68 |
| 208 | 67.8 | 14.75 |
| 209 | 67.5 | 14.81 |
| 210 | 67.2 | 14.88 |
| 211 | 66.9 | 14.95 |
| 212 | 66.6 | 15.02 |
| 213 | 66.3 | 15.08 |
| 214 | 66.0 | 15.15 |
| 215 | 65.7 | 15.22 |
| 216 | 65.4 | 15.29 |

| DMX level | Time [msec] | Frequency [flash/sec] |
|-----------|-------------|-----------------------|
| 217 | 65.1 | 15.36 |
| 218 | 64.8 | 15.43 |
| 219 | 64.5 | 15.50 |
| 220 | 64.2 | 15.58 |
| 221 | 63.9 | 15.65 |
| 222 | 63.6 | 15.72 |
| 223 | 63.3 | 15.80 |
| 224 | 63.0 | 15.87 |
| 225 | 62.7 | 15.95 |
| 226 | 62.4 | 16.03 |
| 227 | 62.1 | 16.10 |
| 228 | 61.8 | 16.18 |
| 229 | 61.5 | 16.26 |
| 230 | 61.2 | 16.34 |
| 231 | 60.9 | 16.42 |
| 232 | 60.6 | 16.50 |
| 233 | 60.3 | 16.58 |
| 234 | 60.0 | 16.67 |
| 235 | 59.0 | 16.95 |
| 236 | 58.0 | 17.24 |
| 237 | 57.0 | 17.54 |
| 238 | 56.0 | 17.86 |
| 239 | 55.0 | 18.18 |
| 240 | 54.0 | 18.52 |
| 241 | 53.0 | 18.87 |
| 242 | 52.0 | 19.23 |
| 243 | 51.0 | 19.61 |
| 244 | 50.0 | 20.00 |
| 245 | 49.0 | 20.41 |
| 246 | 48.0 | 20.83 |
| 247 | 47.0 | 21.28 |
| 248 | 46.0 | 21.74 |
| 249 | 45.0 | 22.22 |
| 250 | 44.0 | 22.73 |
| 251 | 43.0 | 23.26 |
| 252 | 42.0 | 23.81 |
| 253 | 41.0 | 24.39 |
| 254 | 40.0 | 25.00 |
| 255 | 40.0 | 25.00 |

10. DURATION time - RATE time (PERIOD) relation



Duration time < Period : Flashing
Duration time >= Period : Light continuously ON

