PoweFlash SERIES

USER MANUAL

COMPANY NA STAGE & LIGHT

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- ► 1 x ColorFlash
- ► Warranty Card
- ► Users Manual

Unpacking Instructions

Immediately upon receiving a fixture, carefully unpack the carton, check the contents to ensure that all parts are present, and have been received in good condition. Notify the shipper immediately and retain packing material for inspection if any parts appear damaged from shipping or the carton it self 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.

AC Power

The only thing necessary to do before powering on the unit is to make sure the line voltage you are applying is within the range of accepted voltages. This fixture will accommodate 190V - 240V AC 45/65 Hz. All fixtures must be powered directly off a switched circuit and can not run off a rheostat (variable resistor) or dimmer circuit, even if the rheostat or dimmer channel is used solely for a 0% to 100% switch.

Power-Up Procedure

Switching on the power PowerFlash performs a pre-programmed self-test. If the test is revealed a fault , that prevents the normal operation of the fixture, display shows at the end of the test legend **„Err”**. In this case the fixture signals about the damage for some time blinking. Then pressing any button on the control panel, the display indicates for all the errors:

„cXY” – where ”**c**” means it is the color changer error indication. „**X**” is tape or motor error number. „**Y**” is position sensor error

After that, on the control panel display is shown planted DMX address and the PowerFlash enters the work state

Contact Us

General Information ***Company NA***
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Safety Instructions

Please read these instructions carefully, which includes important information about the installation, usage and maintenance of this product.

- Please keep this User Guide for future consultation. If you sell the unit to another user, be sure that they also receive this instruction booklet.
- Always make sure that you are connecting to the proper voltage, and that the line voltage you are connecting to is not higher than that stated on the decal or rear panel of the fixture.
- Make sure there are no flammable materials close to the unit while operating.
- Always disconnect from power source before servicing or replacing fuse and be sure to replace with same fuse source.
- Secure fixture to fastening device using a safety chain.
- Maximum ambient temperature (Ta) is (40°C). Do not operate fixture at temperatures higher than this.
- In the event of a serious operating problem, stop using the unit immediately. Never try to repair the unit by yourself. Repairs carried out by unskilled person can lead to damage or malfunction. Please contact the nearest authorized technical assistance center. Always use the same type spare parts.
- Don't connect the device to a dimmer pack.
- Make sure the power cord is never crimped or damaged.
- Never disconnect the power cord by pulling or tugging on the cord.
- Avoid direct eye exposure to the light source while it is on.

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 „Company NA" at: +37167801110.***

2. INTRODUCTION

Features

- 3 and 4 channel DMX-512 stroboscope fixture
- Various flash intensity 0% - 100%
- Flash Duration control 0ms – 650ms
- Flash Rate control 0flash – 33 flashes per second
- Continous blinder effect up to 30 seconds with 3000W
- Flash intensity curve selection
- LED control panel display

Additional Features

- Aviable optional color changer unit with 11 colors (ColorFlash)
- Aviable optional beam clamp
- Aviable optional safety cable
- Aviable optional road case (4 PowerFlash and 4 ColorFlash)

PowerFlash - 3 kW stroboscope with powerful Blinder effect in 50Hz or 100Hz modes. Possible to control flash intensity, frequency, duration flash curves and effects. Continues blinder effect with max power. For smooth and intelligent flash - 100Hz mode, ideal for TV productions. Optional data/power output for ColorFlash color changer, made for PowerFlash strobe. PowerFlash provides use in touring, disco clubs, concerts, theatre performances or TV.

ColorFlash is color changer designed for use together with high output strobes. High speed color frame changing function as well as effective cooling system allow to create colorful strobe, blinder and fade effects. The ColorFlash do not require additional power supply unit in case of usage together with Power-Flash strobe, or optional 2 or 8 changer power supply units available in case of other brand strobes.

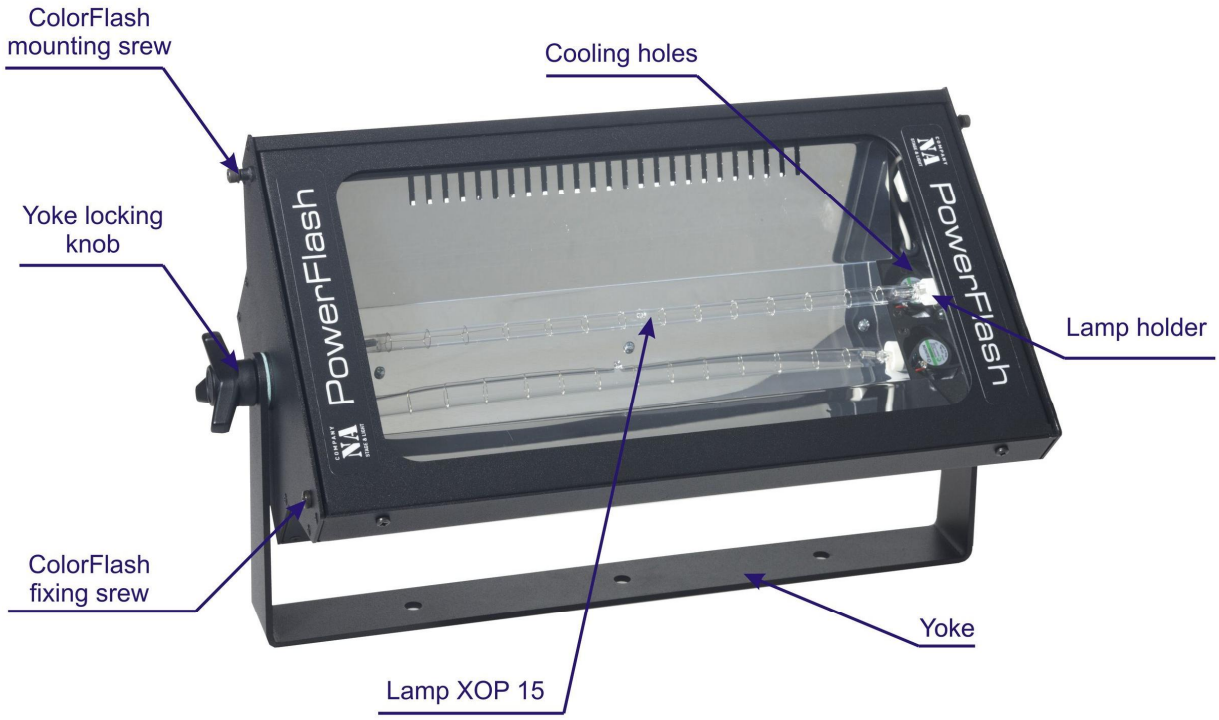
3C (3 channel mode)

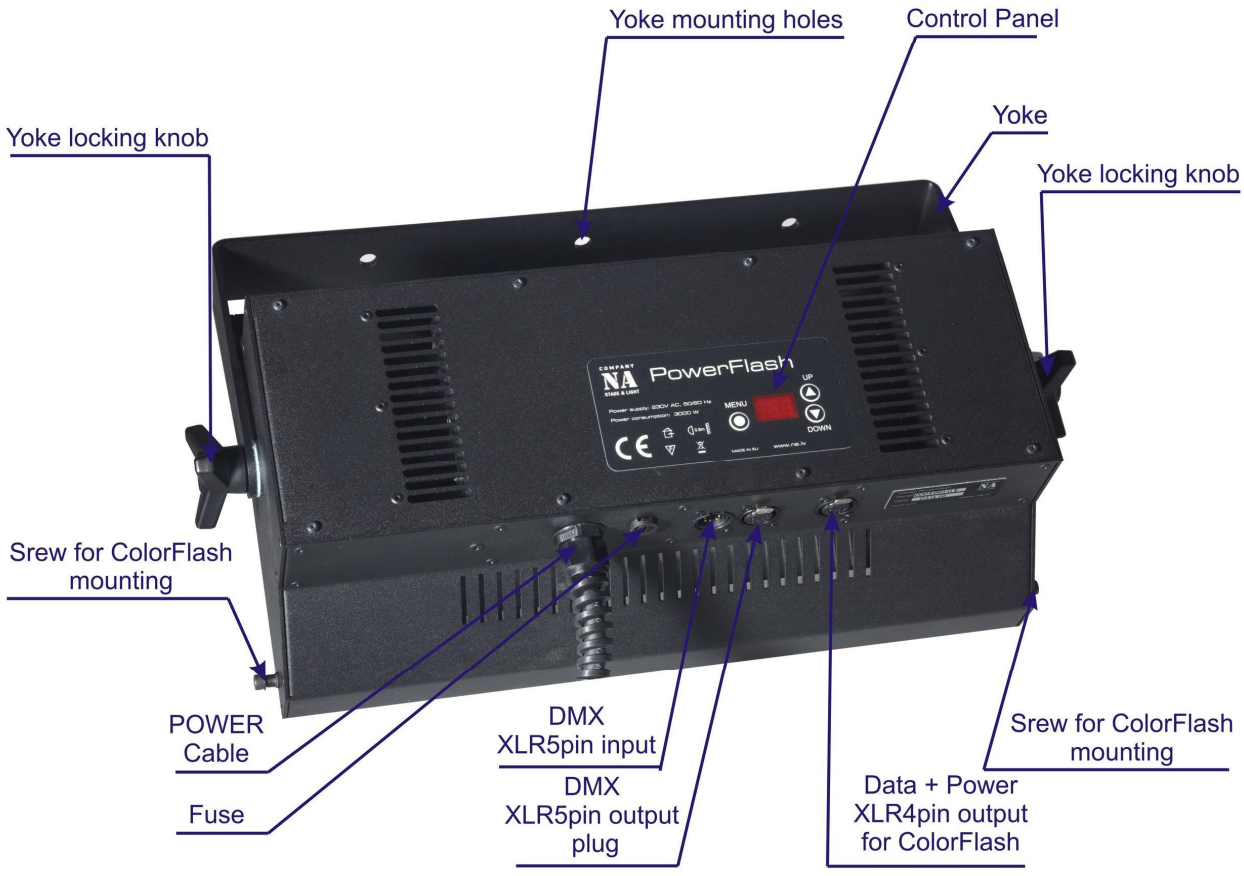
CHANNEL	FUNCTION
1	Flash intensity
2	Flash duration
3	Flash rate
4	ColorFlash (if connected)

4C (4 channel mode)

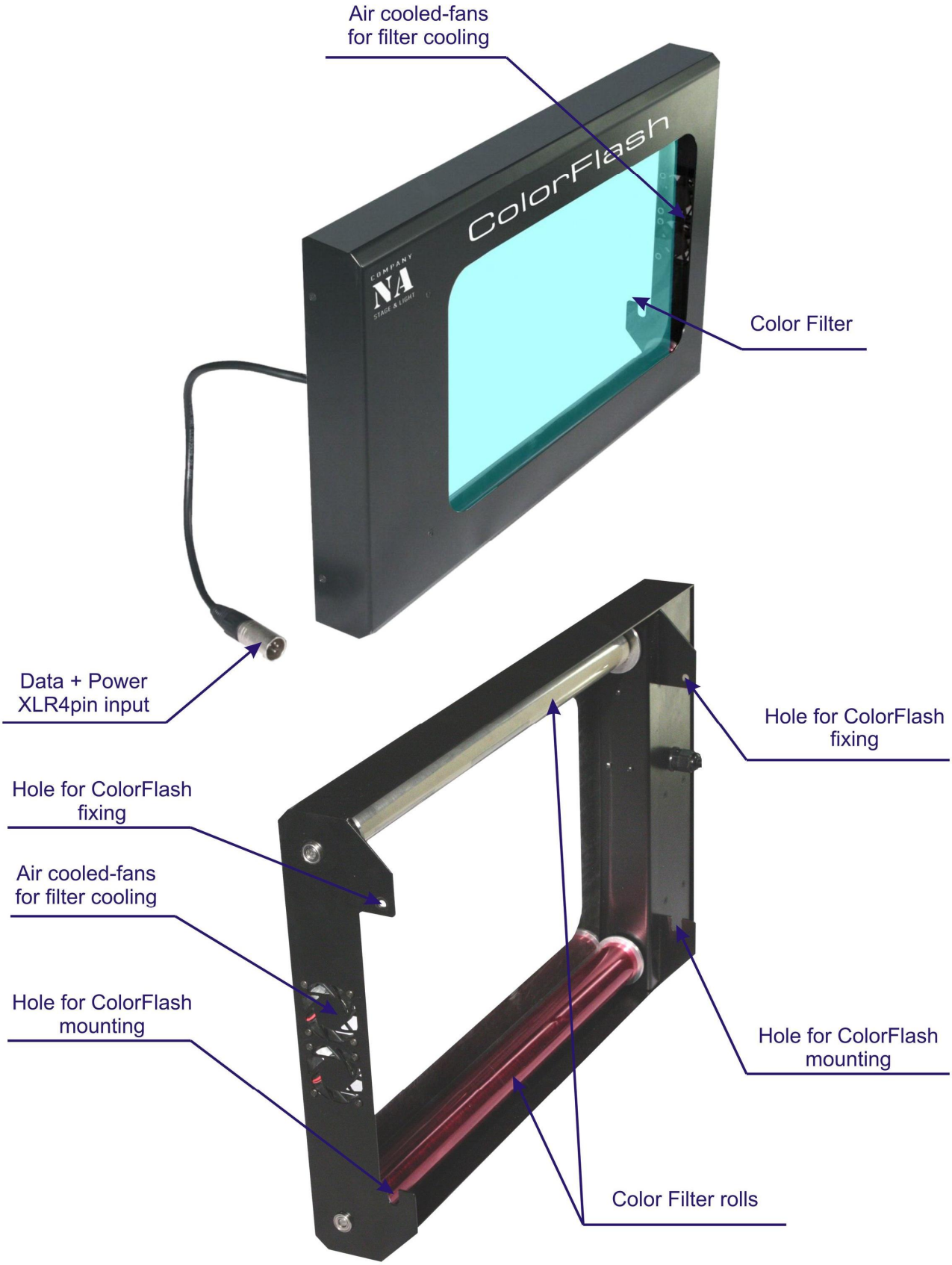
CHANNEL	FUNCTION
1	Flash intensity
2	Flash duration
3	Flash rate
4	Flash intensity curve selection
5	ColorFlash (if connected)

PowerFlash Overview





ColorFlash Overview



3. SETUP

Disconnect the power cord before replacing a fuse and always replace with the same type fuse.

Fuse Replacement

The fuse for this fixture is located outside the chassis. Remove the damaged fuse from its holder and replace with exact same type fuse. Reconnect power.

Fixture Linking

You will need a DMX data link to run light shows of one or more fixtures using 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: 300 meters (984 ft.)

DMX DATA CABLE

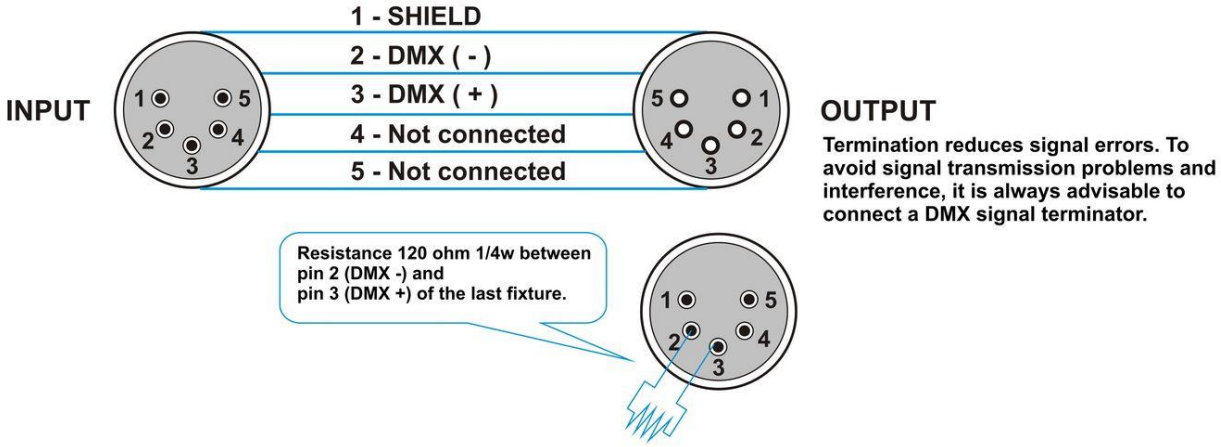
Use a Belden© 9841 or equivalent cable which meets the specifications for EIA RS-485 applications. Standard microphone cables cannot transmit DMX data reliably over long distances. The cable will have the following characteristics:

2-conductor twisted pair plus a shield
Maximum capacitance between conductors – 30 pF/ft.
Maximum capacitance between conductor and shield – 55 pF/ft.
Maximum 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

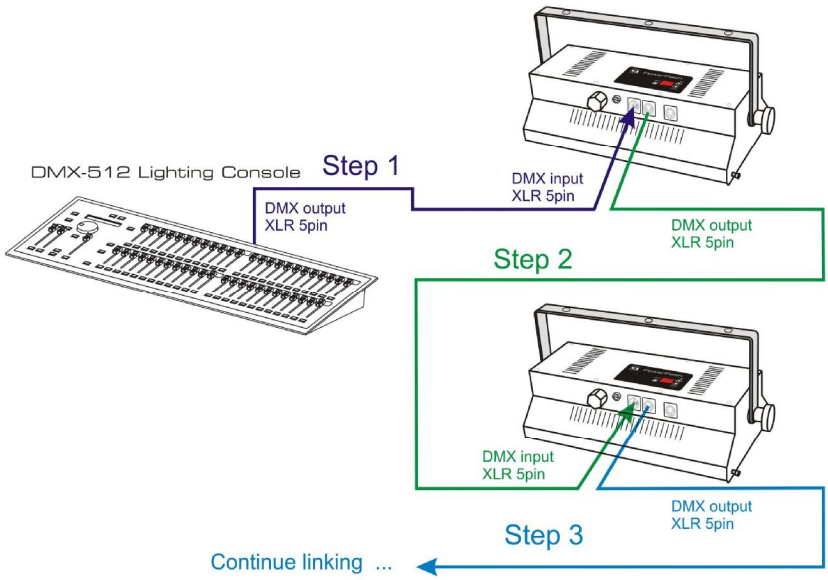
NOTE ! **If you use a console with a 5 pin DMX output connector, you will need to use a 5 pin to 3 pin adapter. The chart below details a proper cable conversion:**

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 side of the DMX cable to the output (female) 5 pin XLR connector of the DMX console. Connect the end of the cable coming from the DMX console which will have a (female) 5 pin XLR connector to the input connector of the fixture consisting of a (male) 5 pin XLR connector.



2. Then, proceed to connect from the fixture output as stated above to the input of the following fixture and so on.

3. Then, coninue the linking till last planted fixture is conected in your DMX signal data chain.

Mounting

ORIENTATION

This fixture may be mounted in any position provided there is adequate room for ventilation.

RIGGING

It is important never to obstruct the fan or vents pathway. Mount the fixture using, a suitable “C” or “O” type clamp. Adjust the angle of the fixture by loosening both knobs and tilting the fixture. After finding the desired position, retighten both knobs.

- When selecting installation location, take into consideration lamp replacement access and routine maintenance.
- Safety cables must always be used.
- Never mount in places where the fixture will be exposed to rain, high humidity, extreme temperature changes or restricted ventilation.

Hanging Clamps

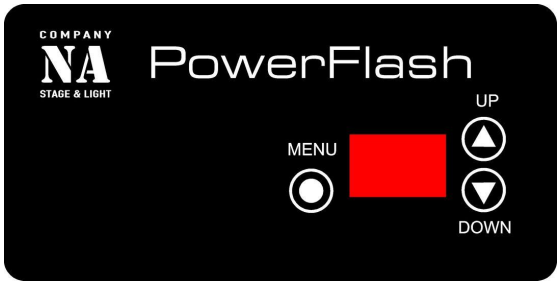
NOTE !
Clamp is sold separately.

4. OPERATING INSTRUCTIONS

Navigating the Control Panel

Access control panel functions using the three control panel buttons located directly underneath the LCD Display.

Button	Function
<MENU>	Used to access the menu. And used to select and store the current menu or option within a menu.
<UP>	Scrolls through menu options in ascending order.
<DOWN>	Scrolls through menu options in descending order



The Control Panel LED Display shows the menu items you select from the menu map on page #.
When a menu function is selected, the display will show immediately the first available option for the selected menu function. To select a menu item, press **<MENU>**.

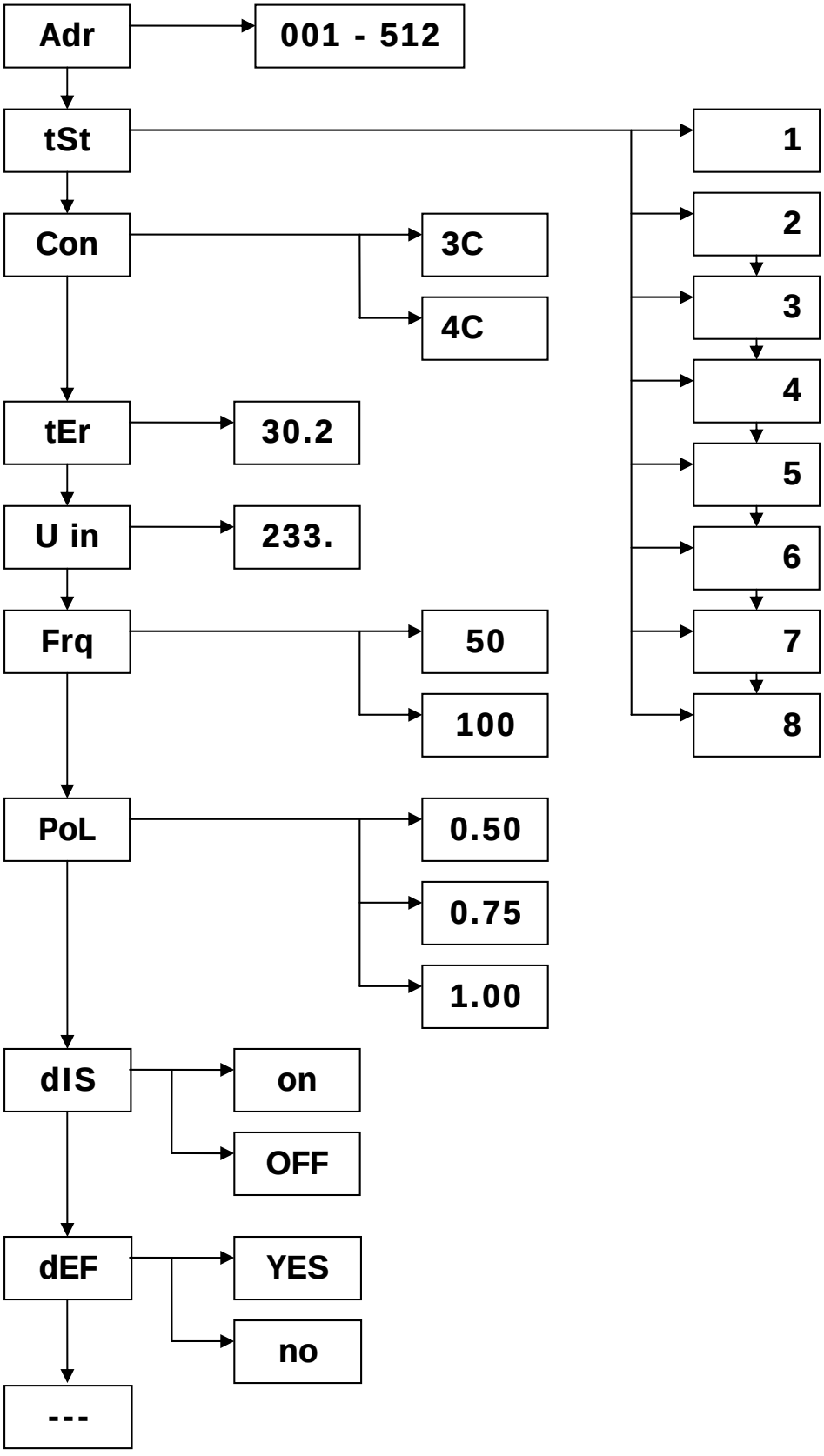
Press and hold the **<MENU>** button to scroll through the top level menu items. This is the top of the menu map. Use the **<UP>** and **<DOWN>** buttons to navigate the menu map and menu options. Press the **<MENU>** button to access the menu function currently displayed or to enable a menu option.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

Menu Functions:

Adr – DMX address selection
tSt – Pre-programmed self test
Con – Channel configuration
tEr – Internal thermometer
U in – Mains power
Frq – Frequence
PoL – Power limit
dIS – Display
dEF – Factory defaults
– – – – Exit from menu

Normally operation of the system during the Control Panel LED Display indicates DMX start address. When the DMX signal is not connected, or for any other reason, PowerFlash does not receive DMX signal, the Display blinks.

Menu Map


Adr
001 - 512
tSt
1
2
3
4
5
6
7
8
Con
3C
4C
tEr
30.2
U in
233.
Frq
50
100
PoL
0.50
0.75
1.00
dIS
on
OFF
dEF
YES
no

Function Description

Adr – Use the **<UP>** and **<DOWN>** buttons to enter the DMX address from 1 to 512. Holding the **<UP>** and **<DOWN>** buttons change in address happen to acceleration. Blinking indicator means the unconfirmed address. To confirm the address press **<MENU>** button. Only after the **<MENU>** button is pressed address is changed. After the defeat on the display will be shown to the last confirmed DMX address.

tSt – Will be activated the pre-programmed self test. It is possible the eight test versions:

1 - Flash intensity 100%, Flash Rate 3Hz
2 - Flash intensity 100%, Flash Rate 4Hz
3 - Flash intensity 100%, Flash Rate 11Hz
4 - Flash intensity 100%, Flash Rate 14Hz
5 - Flash intensity 100%, Flash Rate 18Hz
6 - Flash intensity 100%, Flash Rate 21Hz
7 - Flash intensity 100%, Flash Rate 25Hz
8 - Flash intensity 0%, Flash Reate 0Hz

During the test, using the **<UP>** and **<DOWN>** buttons you can change the test versions. To exit **tSt** mode, you need to press and hold the **<MENU>** button.

Con – DMX control mode selection. The PowerFlash has 2 operating modes. In each of the control modes fixture occupies different DMX adresses quantity and are various controlled:

DMX modes	Address number	Mode description
3C	3	3 chanel mode - Flash intensity, duration, reate control
4C	4	4 chanel mode - Flash intensity, duration, reate, curve type

If at the PowerFlash XLR-4 pin output is attached to a color changer unit (ColorFlash), then at any PowerFlash control mode are added one more DMX channel that provides the color changer control ! See DMX channel values ...

tEr – Built-in thermometer will provide full information about fixtures the current temperature.

U in – Mains voltage

Frq – Chenge frequency 50Hz to ***100Hz****

Warning!!!

****** 100 Hz frequency setting requires to use a 20A circuit breakers if you work in 220V AC, and wire cross section must be at least 2.5 square.***
As well as this mode shortens the lamp life (and color gel for ColorFlash or added scroler).

PoL – Power limit - limiting the average and peak power. Chose 1.00 - device works in full (100%) power range. Power of device can be limited to 0.75 (75%) and 0.50 (50%).

dIS – Display on/OFF. Dispaly is switched on all the time or switches off in standby mode.

dEF – Set factory default.

--- – Exit from the menu and return to working mode.

DMX Channel Values

DMX Channel Values 3C mode (50Hz)

Channel	Value	Function
1	000 ↔ 003 003 ↔ 255	**Flash intensity** lamp is turned off lamp dimming up to 100%
2	000 ↔ 255	**Flash duration** 0ms – 650ms 100%
3	000 ↔ 003 003 ↔ 255	**Flash reate** No flash 0.5Hz – 25Hz
4	000 ↔ 255	**ColorFlash control if connected** 11 colours 0 – 100%

DMX Channel Values 3C mode (100Hz)***

Channel	Value	Function
1	000 ↔ 003 003 ↔ 255	**Flash intensity** lamp is turned off lamp dimming up to 100%
2	000 ↔ 255	**Flash duration** 0ms – 650ms 100%
3	000 ↔ 003 003 ↔ 255	**Flash reate** No flash **0.5Hz – 100Hz*****
4	000 ↔ 255	**ColorFlash control if connected** 11 colours 0 – 100%

*****

Warning!
100 Hz frequency setting requires to use a 20A circuit breakers if you work in 220V AC, and wire cross section must be at least 2.5 square.
As well as this mode shortens life of the lamp (and color gel for ColorFlash or added scroler).

DMX Channel Values 4C mode (50Hz)

Channel	Value	Function
1	000 ↔ 003 003 ↔ 255	**Flash intensity** lamp is turned off lamp dimming up to 100%
2	000 ↔ 255	**Flash duration** 0ms – 650ms 100%
3	000 ↔ 003 003 ↔ 255	**Flash reate** No flash 0Hz – 25Hz
4	000 ↔ 005 006 ↔ 042 043 ↔ 085 086 ↔ 128 129 ↔ 171 172 ↔ 214 215 ↔ 255	**Flash intensity curve selection** No special intensity curves Ramp up Ramp-down Ramp-up-down Random Lighting Spikes
5	000 ↔ 255	**ColorFlash control if connected** 11 colours 0 – 100%

DMX Channel Values 4C mode (100Hz)***

Channel	Value	Function
1	000 ↔ 003 003 ↔ 255	**Flash intensity** lamp is turned off lamp dimming up to 100%
2	000 ↔ 255	**Flash duration** 0ms – 650ms 100%
3	000 ↔ 003 003 ↔ 255	**Flash reate** No flash **0.5Hz – 100Hz*** **
4	000 ↔ 005 006 ↔ 042 043 ↔ 085 086 ↔ 128 129 ↔ 171 172 ↔ 214 215 ↔ 255	**Flash intensity curve selection** No special intensity curves Ramp up Ramp-down Ramp-up-down Random Lighting Spikes
5	000 ↔ 255	**ColorFlash control if connected** 11 colours 0 – 100%

***

Warning!
100 Hz frequency setting requires to use a 20A circuit breakers if you work in 220V AC, and wire cross section must be at least 2.5 square.
As well as this mode shortens the lamp life (and color gel for ColorFlash or added scroler).

5. APPENDIX

DMX Primer

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 fixtures whose starting address is set incorrectly. 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 respond exactly the same.

DMX fixtures are designed to receive data through a DMX Chain. A DMX Chain connection 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 lihgting 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 with three pin XLR male to female connectors. The shield connection is pin 1, while pin 2 is Data Negative (S-) and pin 3 is Data positive (S+). Company NA carries 3-pin and 5-pin XLR DMX compliant cables.

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 power off 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 surrounding 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 / 60 days.

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. Call Company NA 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. Company NA 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

Claims

Damage incurred in shipping is the responsibility of the shipper; therefore the damage must be reported to the carrier upon receipt of merchandise. It is the customer's responsibility to notify and submit claims with the shipper in the event that a fixture is damaged due to shipping. Any other claim for items such as missing component/part, damage not related to shipping, and concealed damage, must be made within seven (7) days of receiving merchandise.

PowerFlash Technical Specifications

WEIGHT & DIMENSIONS

Length ..... 433 mm
Width .....130 mm
Height .....240 mm
Weight .....4,9 kg

POWER

Operating Voltage .....190V ~ 240V 45/65 Hz
Fuse.....20A
Power Consumption (50Hz mode)..... 3000W
Power Consumption (100Hz mode)..... 4500W

LIGHT SOURCE

Lamp..... XOP 15

THERMAL

Maximum ambient temperature.....+40°C
Minimum ambient temperature..... .....-25°C
Cooling .... air cooled - fan

CONTROL & PROGRAMMING

DMX input ..... locking 5-pin XLR male socket
DMX output ..... locking 5-pin XLR female socket
Data + power output for ColorFlash ..... locking 4-pin XLR female socket
DMX pin config. .....pin 1 shield, pin 2 (-), pin 3 (+), pin 4 don't use, pin 5 don't use
Protocol..... DMX-512
DMX Channels .....3 , 4 , 5

WARRANTY INFORMATION

Warranty..... 2-year limited warranty

ColorFlash Technical Specifications

WEIGHT & DIMENSIONS

Length ..... 500 mm
Width ..... 30 mm
Height .....300 mm
Weight .....3,4 kg

POWER

Operating Voltage .....24 V DC
Power Consumption.....max. 0.15A
Aviable optional power supply for 2 or 8 Color Flash units

Colours

Color changer.....11 colors

THERMAL

Maximum ambient temperature.....+40°C
Minimum ambient temperature..... .....-25°C
Cooling .... air cooled - fan

CONTROL & PROGRAMMING

Data + power input ..... locking 4-pin XLR male socket
Protocol..... DMX-512
DMX Channels 1

WARRANTY INFORMATION

Warranty..... 2-year limited warranty

Gel position	Color	Dimension	No.	Manufacturer	Level 0<100%	Level 0<255
0	Clear	350x372mm	R-00	Rosco	0 %	0
1	Straw	300x372mm	R-12	Rosco	10 %	25
2	Pale Amber Gold	300x372mm	R-09	Rosco	20 %	48
3	Orange	300x372mm	R-23	Rosco	30 %	71
4	Red	300x372mm	R-26	Rosco	41 %	94
5	Broadway Pink	300x372mm	R-339	Rosco	50 %	130
6	Light Lavender	300x372mm	R-52	Rosco	61 %	156
7	Aquamarine	300x372mm	R-363	Rosco	71 %	181
8	Green Blue	300x372mm	R-77	Rosco	81 %	207
9	Light Green	300x372mm	R-88	Rosco	90 %	230
10	Blue Glass	350x372mm	R-2005	Rosco	100%	255