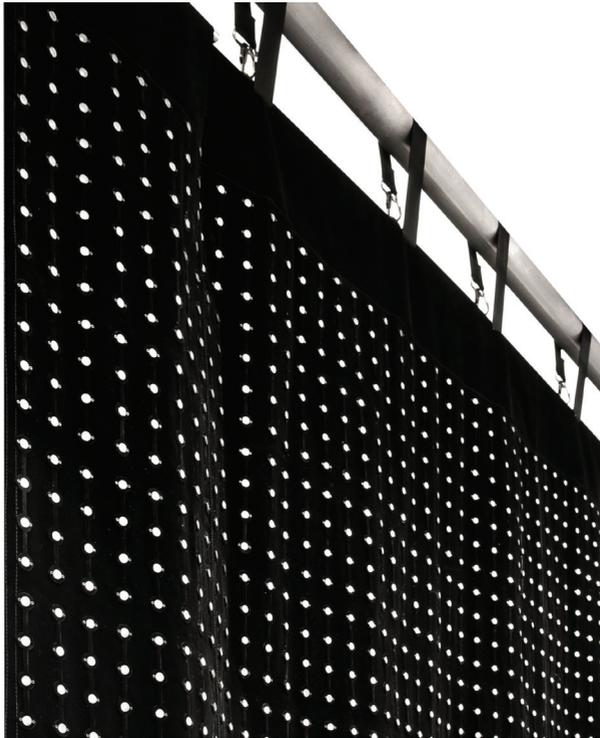


# LED SOFT 18

FLEXIBLE LED SCREENS



USER MANUAL

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**Warranty**



**WARNING!** Before carrying out any operations with the unit, carefully read this instruction manual and keep it with care for future reference. It contains important information about the installation, usage and maintenance of the unit.



## SAFETY

### General instruction

- The products referred to in this manual conform to the European Community Directives and are therefore marked with **CE**.
- The unit is supplied with hazardous network voltage (230V~). Leave servicing to skilled personnel only. Never make any modifications on the unit not described in this instruction manual, otherwise you will risk an electric shock.
- Connection must be made to a power supply system fitted with efficient earthing (Class I appliance according to standard EN 60598-1). It is, moreover, recommended to protect the supply lines of the units from indirect contact and/or shorting to earth by using appropriately sized residual current devices.
- The connection to the main network of electric distribution must be carried out by a qualified electrical installer. Check that the main frequency and voltage correspond to those for which the unit is designed as given on the electrical data label.
- This unit is not for home use, only professional applications.
- Never use the fixture under the following conditions:
  - in places subject to vibrations or bumps;
  - in places with a temperature of over 50 °C.
- Make certain that no inflammable liquids, water or metal objects enter the fixture.
- Do not dismantle or modify the fixture.
- All work must always be carried out by qualified technical personnel. Contact the nearest sales point for an inspection or contact the manufacturer directly.
- If the unit is to be put out of operation definitively, take it to a local recycling plant for a disposal which is not harmful to the environment. 

### Warnings and installation precautions

- If this device will be operated in any way different to the one described in this manual, it may suffer damage and the guarantee becomes void. Furthermore, any other operation may lead to dangers like short circuit, burns, electric shock, etc.
- Before starting any maintenance work or cleaning the projector, cut off power from the main supply.
- The connection, installation and operation of LED screen should be processed as per instruction by special person.
- Keep any inflammable material at a safe distance from the unit.
- Install the unit in a well ventilated place.
- Never try to trample and tear the LED screen, keep the internal cable connection and electronic in order.
- Keep the hard or sharp article from lacerating the product.
- Prohibit sinking into the pouring water or other liquid.
- Handle with care when install and disassembly the LED screen to avoid the damage of the connecting wire and other electronic component.
- The power cable should be connected to the power supply with ground.
- Prohibit connecting the power when LED screen was folded.
- Before finishing the installation, please do not connect the power.
- When there is wind, the display should be fixed firmly with safe belt.
- When folding the LED screen, the surface of the curtain should be face to face.
- Please comply with the local relative regulations.

## GENERAL INFORMATION

### Shipments and claims

The goods are sold "ex works" and always travel at the risk and danger of the distributor. Eventual damage will have to be claimed to the freight forwarder. Any claim for broken packs will have to be forwarded within 8 days from the reception of the goods.

### Warranty and returns

The guarantee covers the fixture in compliance with existing regulations. You can find the full version of the "General Guarantee Conditions" on our web site [www.musiclights.it](http://www.musiclights.it). Please remember to register the piece of equipment soon after you purchase it, logging on [www.musiclights.it](http://www.musiclights.it). The product can be also registered filling in and sending the form available on your guarantee certificate. For all purposes, the validity of the guarantee is endorsed solely on presentation of the guarantee certificate. Music & Lights will verify the validity of the claim through examination of the defect in relation to proper use and the actual validity of the guarantee. Music & Lights will eventually provide replacement or repair of the products declining, however, any obligation of compensation for direct or indirect damage resulting from faultiness.

## - 1 - INTRODUCTION

### 1.1 DESCRIPTION

LEDSOFT series of flexible LED screens is composed of a set of models having pitch value between 18mm and 100mm, allowing advanced creative possibilities combined with simplified use and quick setup operations.

LEDSOFT screens are conceived for projection of videos, images, backgrounds and texts, different models are available with regards to viewing distance. Reduced mounting time and minimal required structures are further advantages made possible by limited weight and volume.

All models are equipped with RGB 3-in-1 SMD LED sources, allowing an amazing light output (up to 3240 NIT for LEDSOFT18 featuring 18mm pitch value).

The modular concept and the simplified connection between modules enable build-up of large displays in outdoor locations implying long viewing distances.

LEDSOFT screens are made in flexible PVC, water-repellent and flame-resistant, ideal for design of geometrical shapes (ie. corners, columns, circles) normally critical for conventional LED screens.

### 1.2 TECHNICAL SPECIFICATIONS

#### Applications

- For amazing set designs and events in indoor/outdoor locations
- In TV studios to have multiple viewing angles
- Touring and live events for real-time camera streaming
- Trade-show booths for creative video imaging
- In theme parks or public events

#### Mechanical features

- Module dimensions (WxH): 2.336x1.168mm
- Weight per square meter: 9.000g
- Flexible PVC, water-repellent and flame-retardant
- Cooling: natural airflow
- Vertical hanging system: built-in belts and clips
- Indoor/Outdoor use (IP44)

#### Electrical features

- Power supply: AC 90/240V 50/60Hz
- Power in/out connections: RJ-45
- Average power consumption (per square meter): 32W
- Max power consumption (per square meter): 80W
- Working temperature: -10° / 50°
- Max ambience humidity: 10% - 90%

#### Video features

- LED source: hi-efficiency SMD 3528 Tri-Color
- Pixel pitch: 18,25mm
- LED density: 3.002 LED/sqm
- Luminous flux: 3.240cd/sqm (NIT)
- Suggested viewing distance: 8m
- Pixel color depth: 36bit
- LED life span: >80.000h

- Colours: >68,7 billions through RGB mixing
- Data refresh rate: >600Hz
- Colour calibration through PC software
- Maximum video IN signal resolution: 1024x768 pixel
- Viewing angle: 120° horizontal, 120° vertical

**Control system**

- Dedicated interface (Sender box) for video signal distribution and screen configuration
- Data IN sender box: DVI connector
- Data IN module: RJ45 connectors
- Connection between sender box and videowall: CAT5 data cable + RJ-45 connectors

1.3 OPERATING ELEMENTS AND CONNECTIONS

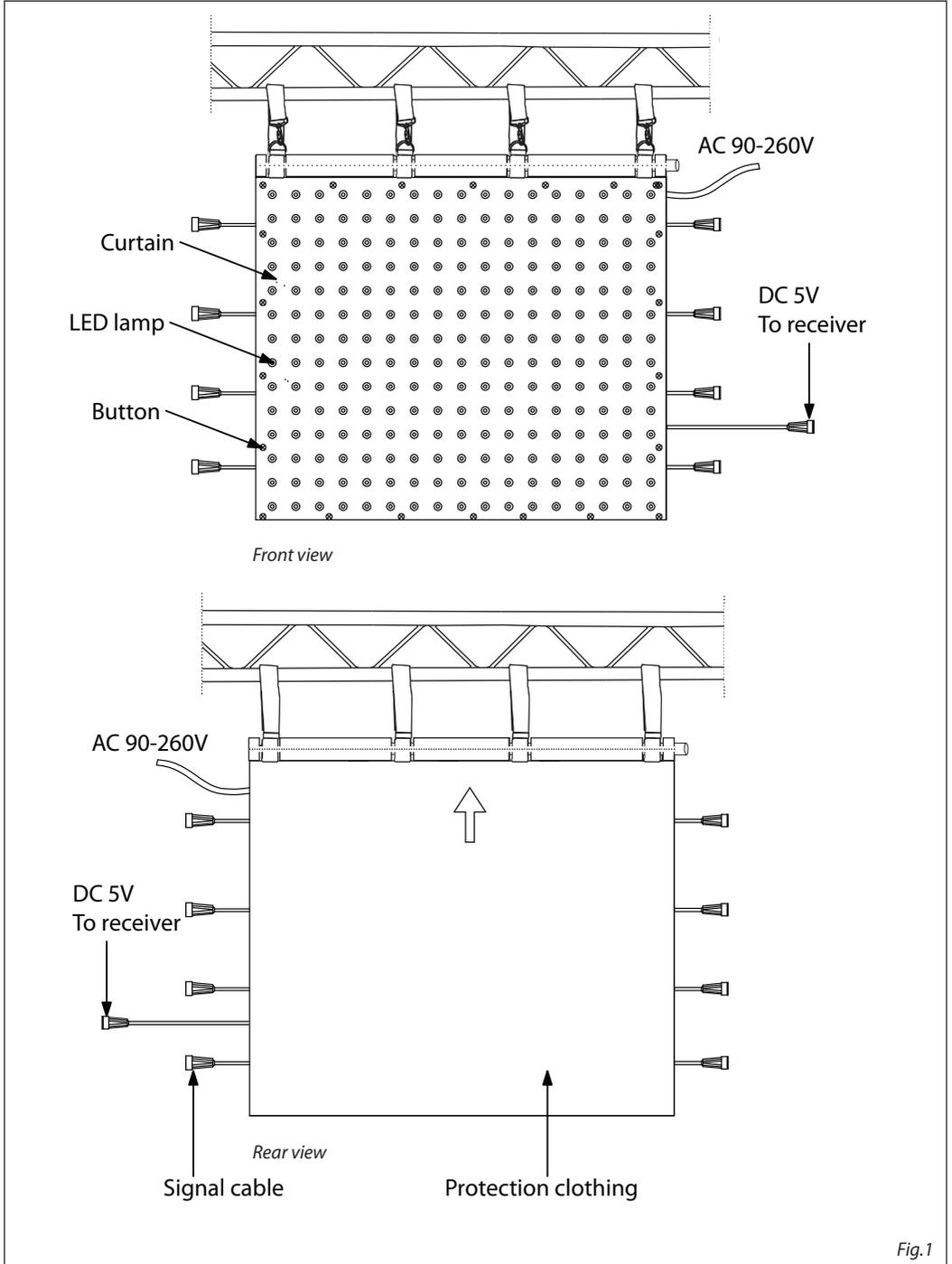


Fig.1

## - 2 - INSTALLATION

### 2.1 MOUNTING

LEDSOFT18 screen can be used by single or through combining to make a large LED screen, notice to make the arrow up at the back of the display. Please install it according to the following step.

1. After receiving the LEDSOFT18 screen, take out to check whether the LEDSOFT18 screen is damaged, whether all accessories is all ready. The accessories include supporting steel stick tube, hanging belt, spare parts.
2. Unfold the LEDSOFT18 screen, insert supporting steel stick tube into the sheath at the top side of the LEDSOFT18 screen and the loop of the hanging belt, several piece of steel tube can be connected together by screw.
3. Hang the LEDSOFT18 screen on the truss with hanging belt, and fasten the hooks at the two end of the hanging belt.
4. Use button around the LEDSOFT18 screen to make the nearby display connect together.

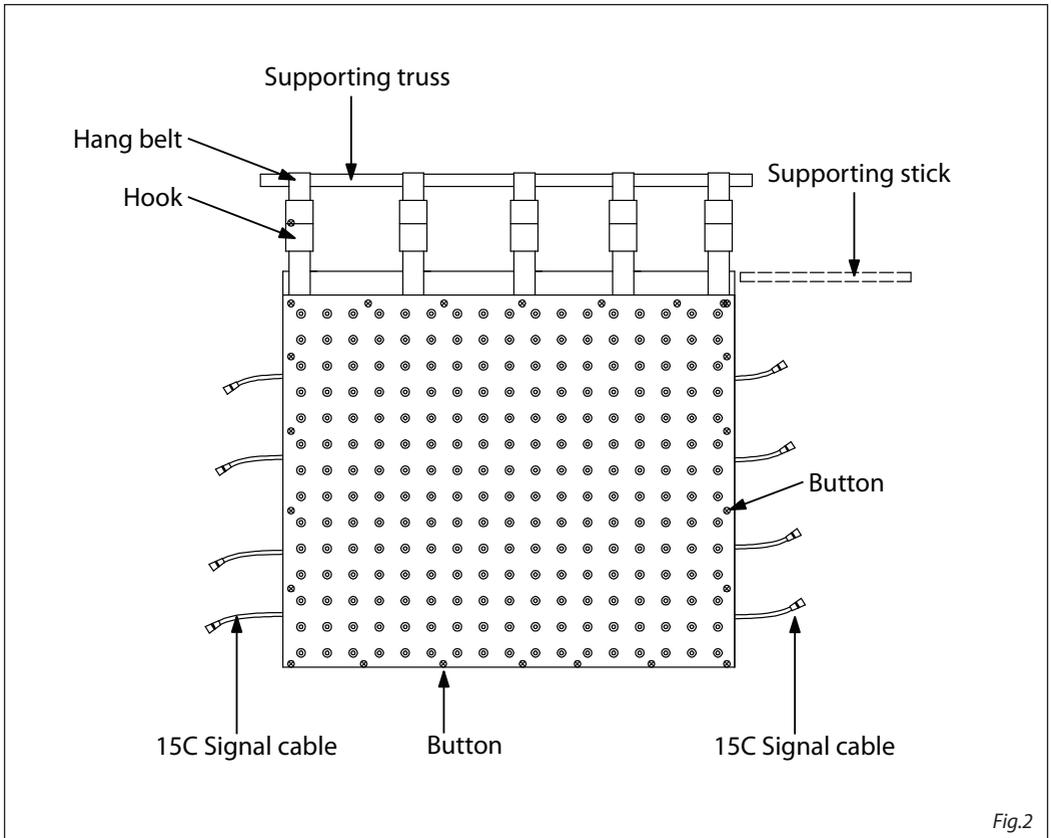


Fig.2

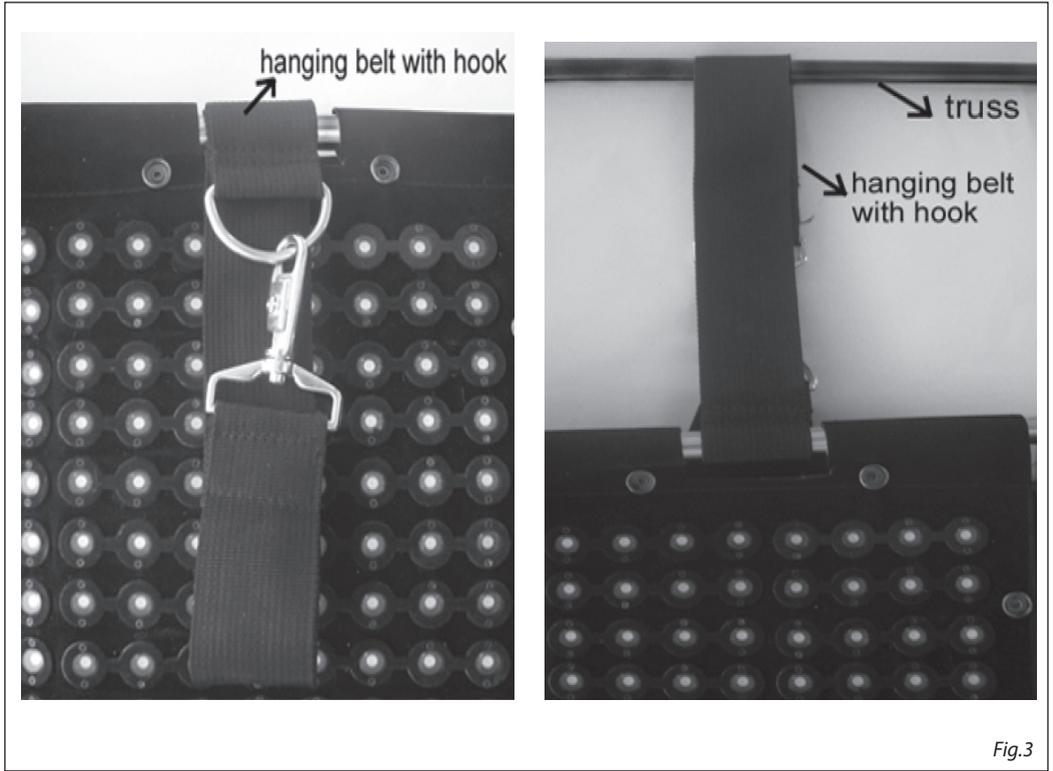


Fig.3

## 2.2 HOW TO COMBINE SEVERAL PIECE OF SCREENS

There are buttons around every LEDSOFT18 screen, after adjusting the distance between the two curtains, fasten the button. Button is composed of Part A (female) and Part B (male), fasten them together to connect several pieces of LEDSOFT18 screen together to make a larger display.

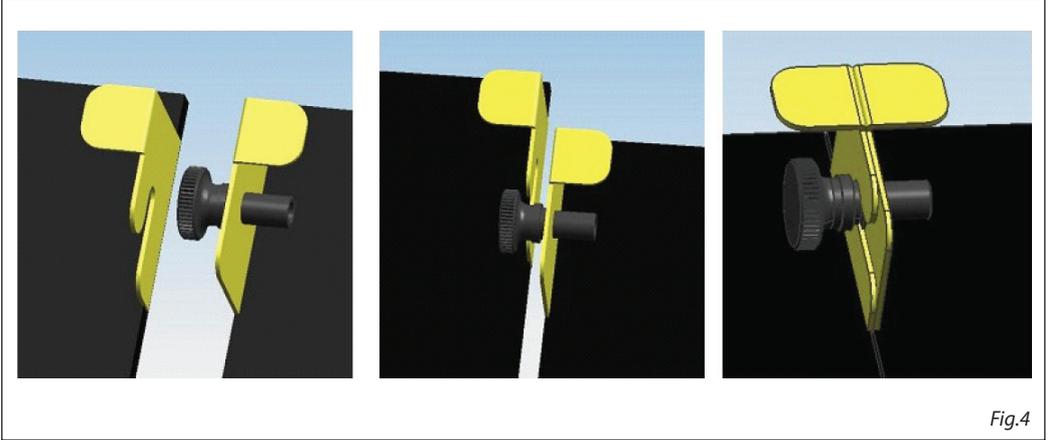


Fig.4

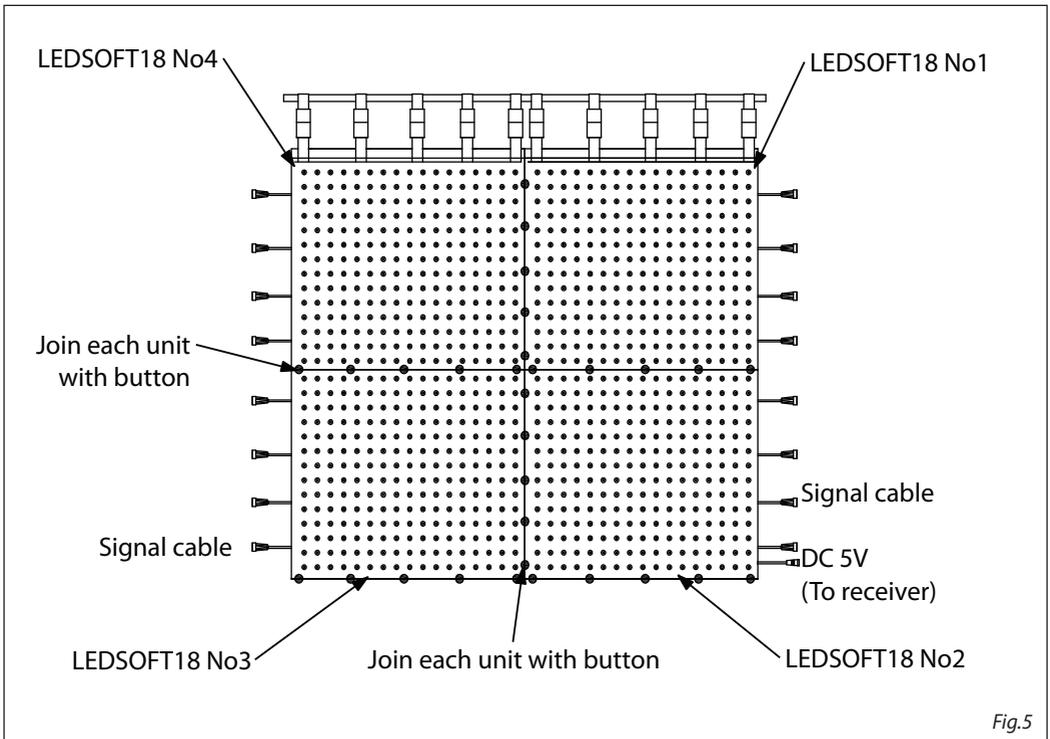
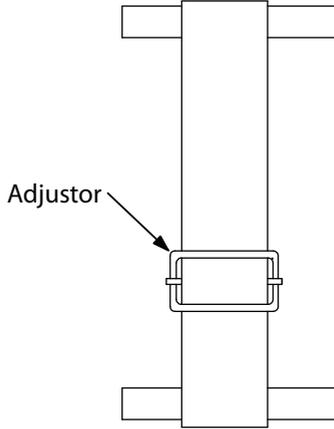


Fig.5

### 2.3 HOW TO ADJUST THE DISTANCE BETWEEN TWO SCREENS

In the middle of every hanging belt, there is an adjuster for adjusting the length of the hanging belt, with which the distance between the upper curtain and the below curtain can be adjusted.



Adjust the length of hang belt with adjustor

Fig.6

## - 3 - THE CONNECTIONS

There are power cable and signal cable at the back of every LEDSOFT18 screen, after fixing well the LEDSOFT18 screen, please connect them correctly as following picture.

### 3.1 TO CONNECT THE POWER CABLE

There is power wire at the back of the LEDSOFT18 screen. When finishing installation, make sure the power wire is connected correctly and turn on the power supply, the input power is AC 90V ~260V 50~60Hz, which must be contacted with ground to ensure the safety of the whole system.

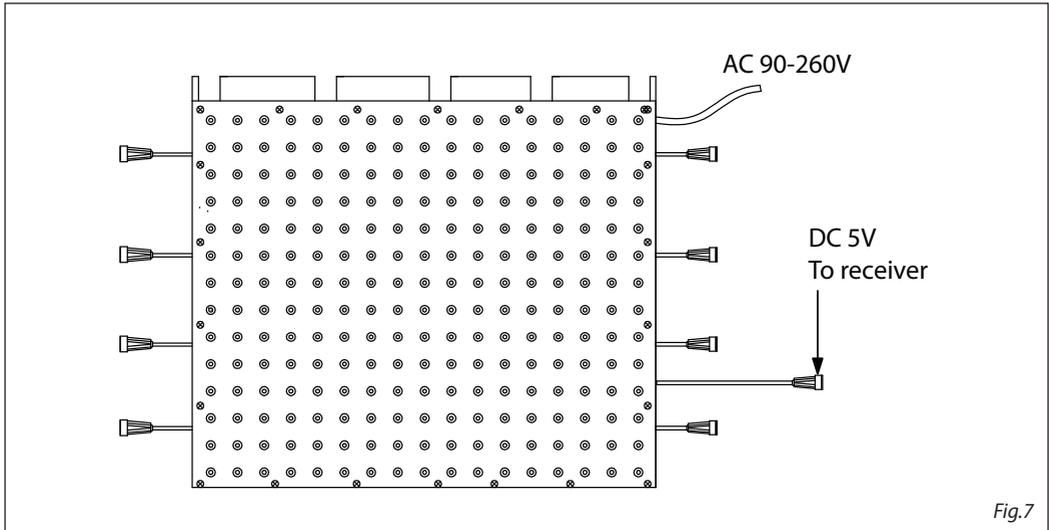


Fig.7

### 3.2 TO CONNECT THE SIGNAL CABLE

#### Connect the signal wire between LEDSOFT18 screen and Receiver

There are signal wire with 15pin plug at one side of the LEDSOFT18 screen, from up to down, connect them with the signal cable on the receiver one by one, then lock the nut on the plug. At the right sides of the LEDSOFT18 screen, there is a output power w cable signed DC 5V, connect it with receiver.

#### Connect the signal wire between LEDSOFT18 screen

Connect the signal wire one by one between two curtain nearby, lock the nut on the plug.

#### Caution

The function of the button is just to combine several piece into one, but not to load too much weight, must not connect many display just by button if not, there may be following result.

- Breaking the button;
- Breaking LEDSOFT18 screen;
- Falling off the LED screen cause other unsafe affair.

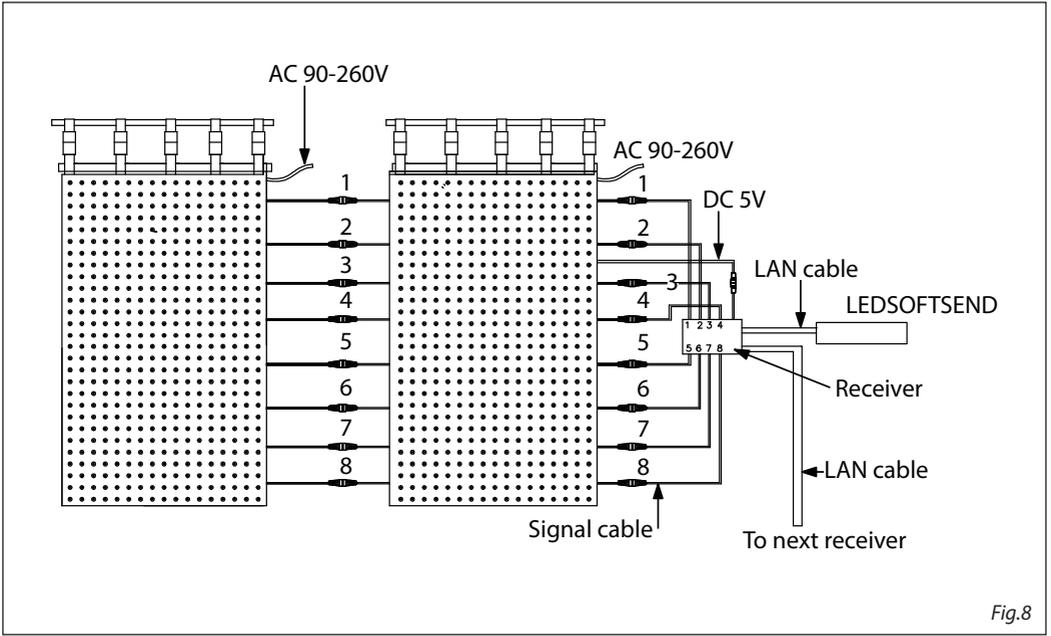


Fig.8

### 3.3 SET UP AND OPERATION

Depending on the control system, the matching PC program must be installed before taking the displays into operation. Please refer to the corresponding user manuals for further information regarding installation, configuration and operation.

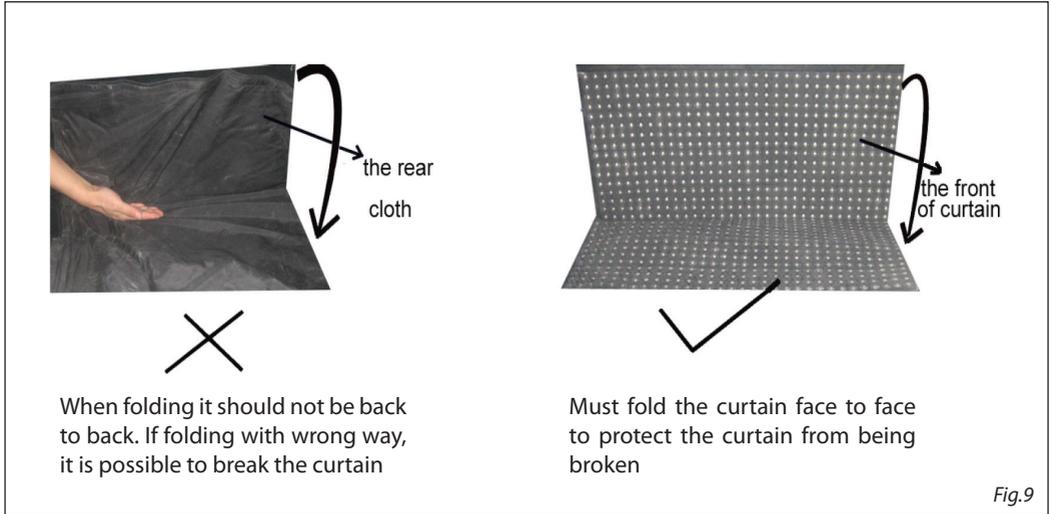
#### The guide of faster operation

1. Install and fasten all LEDSOFT18 screen.
2. Connect all power and signal cable.
3. Install the software in your computer.
4. Set up system.

## - 4 - DISASSEMBLY

### 4.1 DISASSEMBLY PROCEDURE

- Disconnect all power connections and all data signal connections.
- Unbutton the button between LEDSOFT18 screens and then release all hanging belt and hook.
- Take off the display from the truss and pull out the supporting stick.
- Fold the display and put into the case. When folding the LEDSOFT18 screen the surface of the curtain should be face to face.



#### Caution:

- If there is water or dirt on the LEDSOFT18 screen, Please dry and clean display before packing.
- When folding the display the surface of the curtain should be face to face.

## - 5 - MAINTENANCE

### 5.1 CLEANING AND MAINTENANCE

We recommend a frequent cleaning of the device. Please use a soft lint-free and moistened cloth. Never use alcohol or solvents!

ATTENTION! Disconnect from mains before starting maintenance operation!

Should you need any spare parts, please use genuine parts.

ATTENTION! Maintenance and service operations are only to be carried out by authorized dealers.

### 5.2 TROUBLESHOOTING

Problems	Possible causes	Checks and remedies
Without image on the whole curtain	<ul style="list-style-type: none"> <li>• The LAN cable between PC and receiver is not well connected</li> <li>• The sending card or receiver is out of order</li> <li>• System setting wrong</li> </ul>	<ul style="list-style-type: none"> <li>• Check the LAN cable connection or change the LAN cable</li> <li>• Check sending card, correct installation</li> <li>• Resetting the computer and software</li> </ul>
Partial no image	<ul style="list-style-type: none"> <li>• The LAN cable between receiver is not well connected</li> <li>• The data processor at the back of the LEDSOFT18 screen input or output no signal</li> <li>• The connector of the signal wire between LEDSOFT18 screen and the receiver is not connected correctly</li> <li>• Power adapter spoiled</li> </ul>	<ul style="list-style-type: none"> <li>• Check the LAN cable connection or change the LAN cable</li> <li>• Check whether the signal wire between controller and PCB is well connected</li> <li>• Check the connector, fasten the locknut again, make sure the connector touch together</li> <li>• Replace the Power adapter</li> </ul>
Some pixel is not working	<ul style="list-style-type: none"> <li>• LED damaged</li> </ul>	<ul style="list-style-type: none"> <li>• Replace LED</li> </ul>
Some row or column LED is not working	<ul style="list-style-type: none"> <li>• The connect wire between pixel is not well connected</li> </ul>	<ul style="list-style-type: none"> <li>• Take off protection clothing at the back of the LEDSOFT18 screen, check row wire connection, renew the connection wire and cover the shell</li> </ul>

### 5.3 REPLACING A POWER ADAPTOR

Caution: cut off all power before replacing and maintaining the power adaptor

Technical parameter of the power adaptor

Input voltage: AC 90~260V 50~60Hz.

Output voltage: DC 5V 5A

Size: L145×W22×H28mm

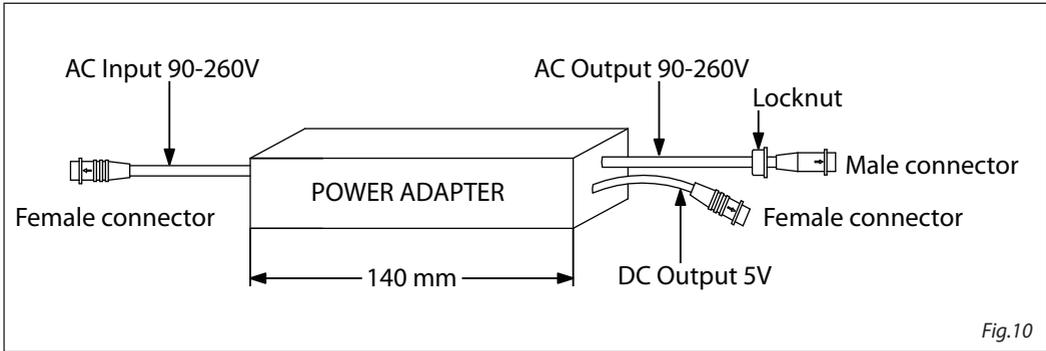


Fig.10

The power adaptors are located at the back of the displays and are connected in series.

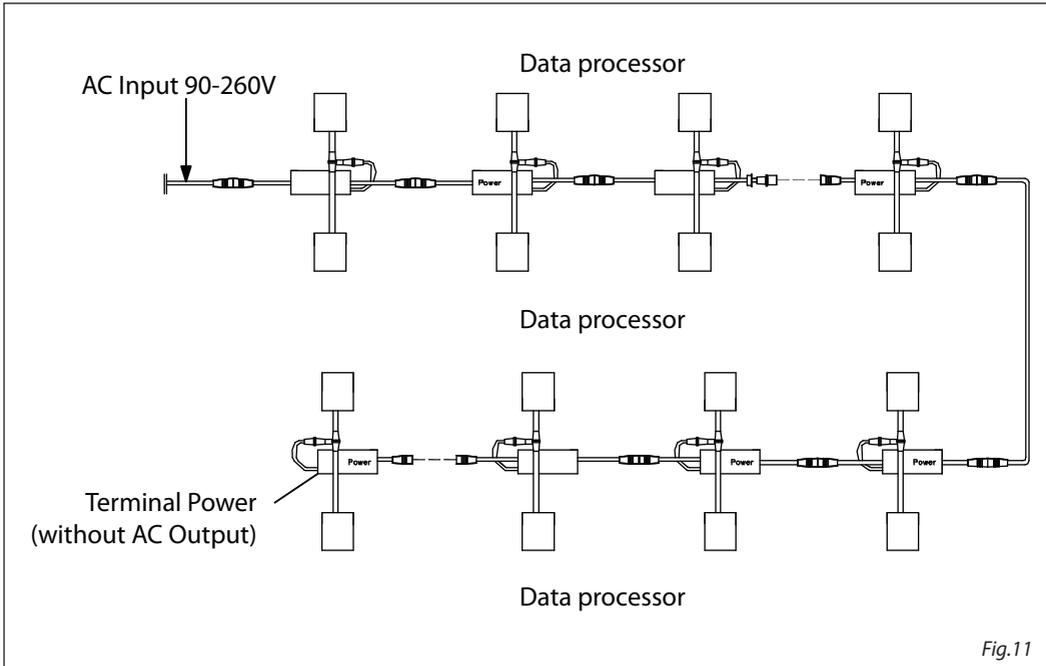


Fig.11

The power adaptors are located at the back of the displays and are connected in series.

1. The LED in back area in horizontal (dashed area) will not work from the broken one.

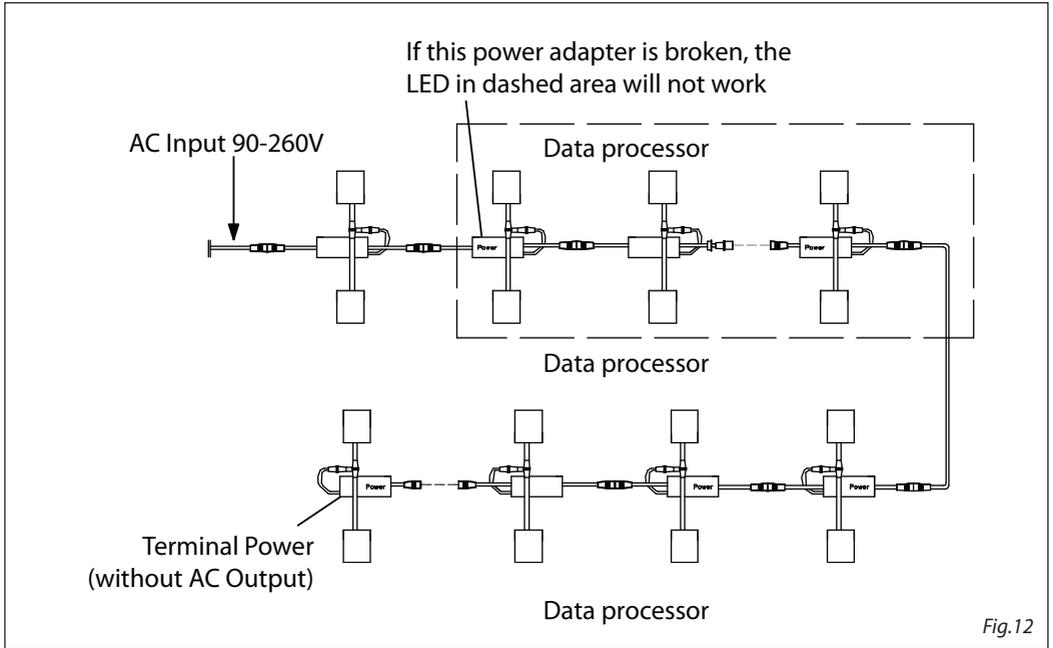


Fig.12

2. All LED in dashed area will not work from the broken one.

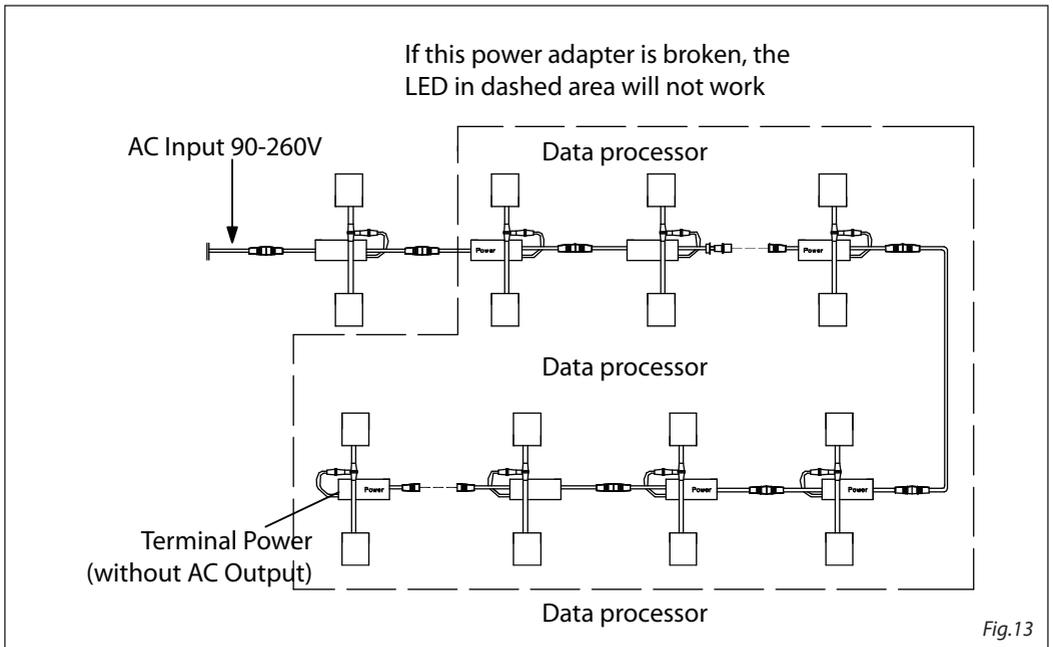


Fig.13

In case one of the situations occurs, follow these steps:

- Disconnect all displays from mains power.
- Remove the rear protection cover.
- Check if all connectors are fastened in the area where the LEDs are not working. Then reconnect the displays to mains power for testing.
- If the problem still persists use a multimeter to test whether the AC and DC output voltage is steady. If there is not output voltage or unsteady voltage replace the power adaptor: Plug out the connectors at both ends of the power adaptor and remove the broken the broken power adaptor from its pocket. Insert a now power adaptor and fasten the connectors with their locknuts.
- Make sure that the new power adaptor is correctly connected and reconnect the displays to mains power for testing. Reattach the protective cover.

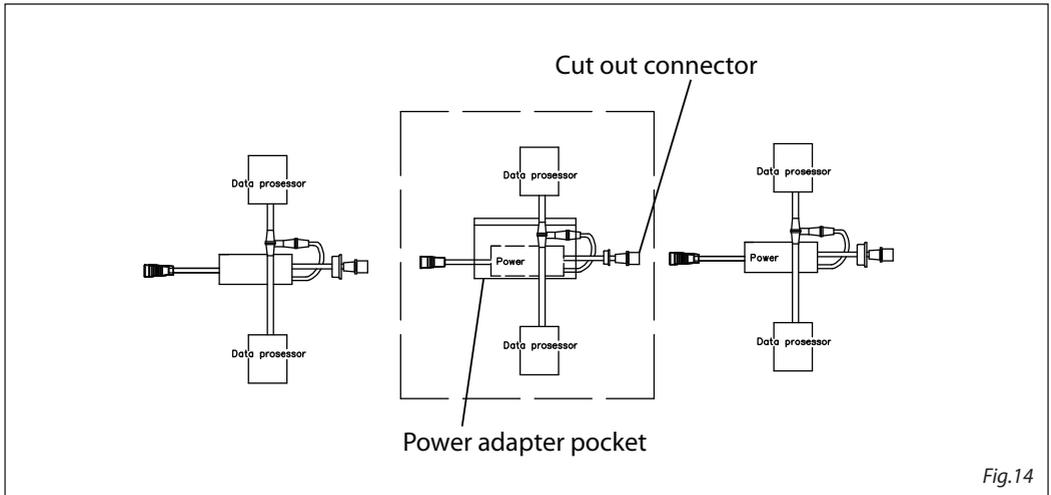


Fig.14

## 5.4 REPLACING LEDs

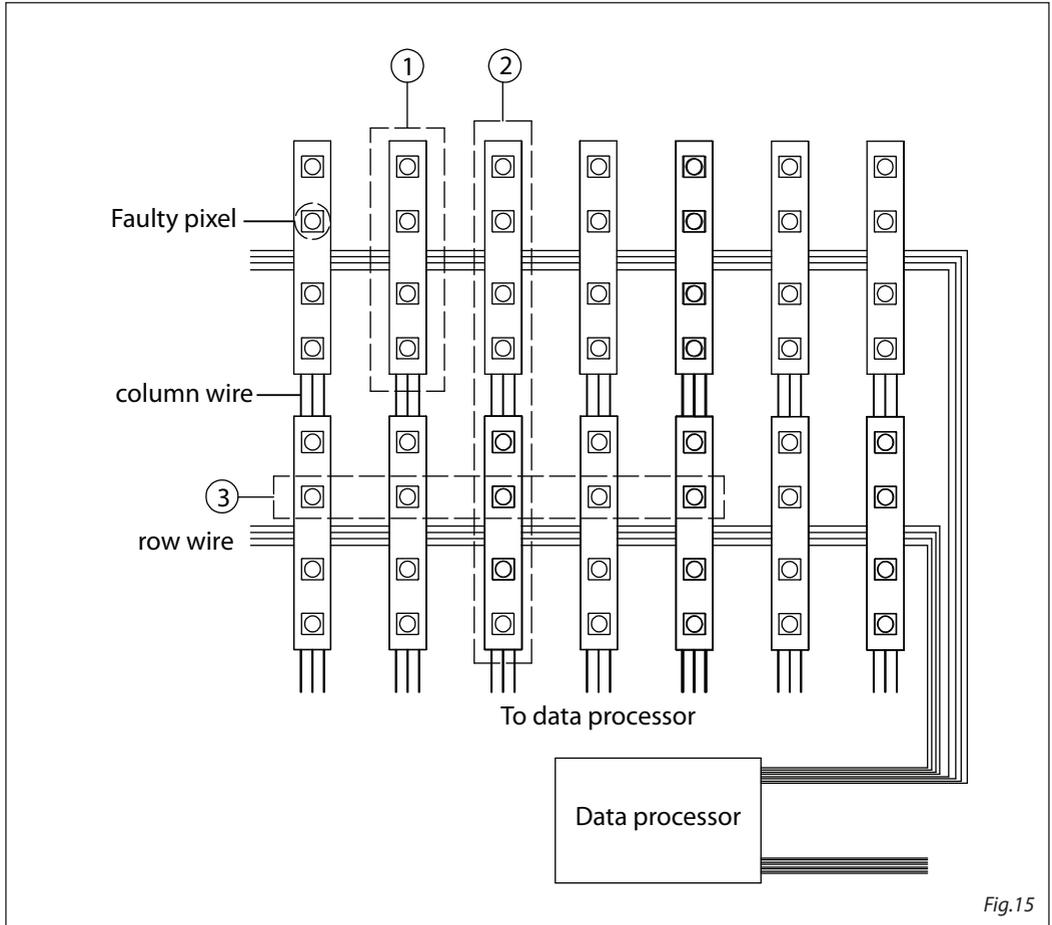


Fig.15

In case one of the following situations occurs check and replace the LEDs if necessary:

1. Replace the LED if a single pixel does not work or displays irregular colors. For this purpose, remove the rear protection cover with a screw driver, take out the PCB with the LED and replace the broken LED with a new one and solder it. Reattach the protection cover.
2. If one vertical LED column does not work properly (point 1 in the figure): Remove the rear protection cover with a screw driver, take out the PCB with the LED and check the wiring. If one of the wires is loose solder it on the PCB and reattach the protection cover.
3. If two vertical LED columns do not work properly (point 2 in the figure): Remove the rear protection cover with a screw driver, take out the PCB with the LED and check the wiring. If none of the wires is loose or if there is no short circuit, open the box marked [Data Processor Box] and check if the counterpart connector on the PCB is properly connected.
4. If a horizontal LED row does not work properly (point 3 in the figure): Remove the rear protection cover with a screw driver, take out the PCB with the LED and check the wiring. If one of the wires is loose, solder it on the PCB and reattach the protection cover.

Steps for replacing LEDs:



Fig.16

1. Screw out rear black plastic cover.



Fig.17

2. Solder the wires.

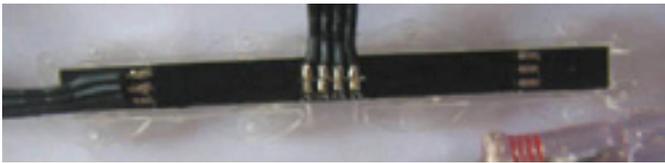


Fig.18



**Il prodotto è coperto da garanzia in base alle vigenti normative. Sul sito [www.musiclights.it](http://www.musiclights.it) è possibile consultare il testo integrale delle "Condizioni Generali di Garanzia".**

#### **Estratto dalle**

#### **Condizioni Generali di Garanzia**

- *Si prega, dopo l'acquisto, di procedere alla registrazione del prodotto sul sito [www.musiclights.it](http://www.musiclights.it). In alternativa il prodotto può essere registrato compilando e inviando il modulo riportato sul retro.*
- *Sono esclusi i guasti causati da imperizia e da uso non appropriato dell'apparecchio.*
- *La garanzia non ha più alcun effetto qualora l'apparecchio sia stato manomesso.*
- *La garanzia non prevede la sostituzione dell'apparecchio.*
- *Sono escluse dalla garanzia le parti esterne, le lampade, le manopole, gli interruttori e le parti asportabili.*
- *Le spese di trasporto e i rischi conseguenti sono a carico del possessore dell'apparecchio.*
- *A tutti gli effetti la validità della garanzia è avallata unicamente dalla presentazione del certificato di garanzia.*

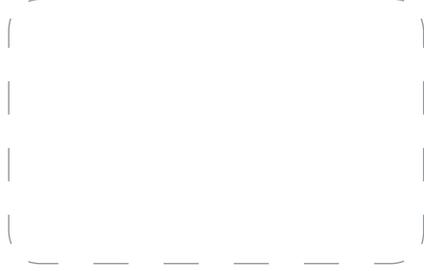
**The guarantee covers the unit in compliance with existing regulations. You can find the full version of the "General Guarantee Conditions" on our web site [www.musiclights.it](http://www.musiclights.it).**

#### **Abstract**

#### **General Guarantee Conditions**

- Please remember to register the piece of equipment soon after you purchase it, logging on [www.musiclights.it](http://www.musiclights.it). The product can be also registered filling in and sending the form available on your guarantee certificate.
- Defects caused by inexperience and incorrect handling of the equipment are excluded.
- The guarantee will no longer be effective if the equipment has been tampered.
- The guarantee makes no provision for the replacement of the equipment.
- External parts, lamps, handles, switches and removable parts are not included in the guarantee.
- Transport costs and subsequent risks are responsibility of the owner of the equipment.
- For all purposes, the validity of the guarantee is endorsed solely on presentation of the guarantee certificate.

## **CERTIFICATO DI GARANZIA GUARANTEE CERTIFICATE**



Spett.le  
**Music&Lights S.r.l.**  
Via Appia Km 136.200  
04020 Itri (LT) Italy

Place Stamp Here  
Affrancare

Place Stamp Here  
Affrancare

MODEL / MODELLO

SERIAL N° / SERIE N°

Purchased by / Acquistato da

SURNAME / COGNOME

NAME / NOME

ADDRESS / VIA

N.

CITY / CITTÀ

ZIP CODE / C.A.P.

PROV.

Dealer's stamp  
and signature

Timbro e firma  
del Rivenditore

Purchasing date

Data acquisto

FORM TO BE FILLED IN AND MAILED / CEDOLA DA COMPILARE E SPEDIRE

MODEL / MODELLO

SERIAL N° / SERIE N°

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ADDRESS / VIA

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CITY / CITTÀ

ZIP CODE / C.A.P.

PROV.

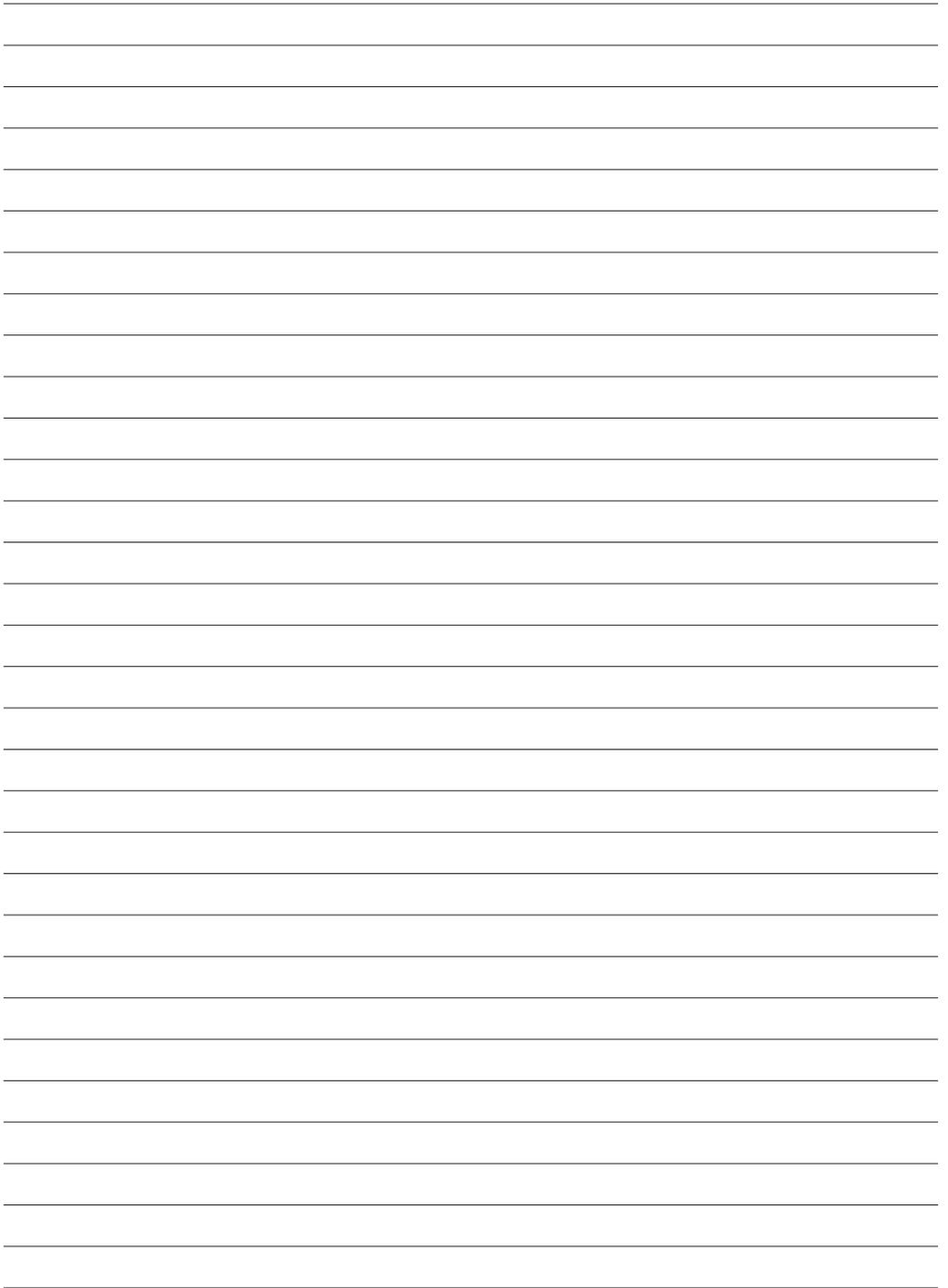
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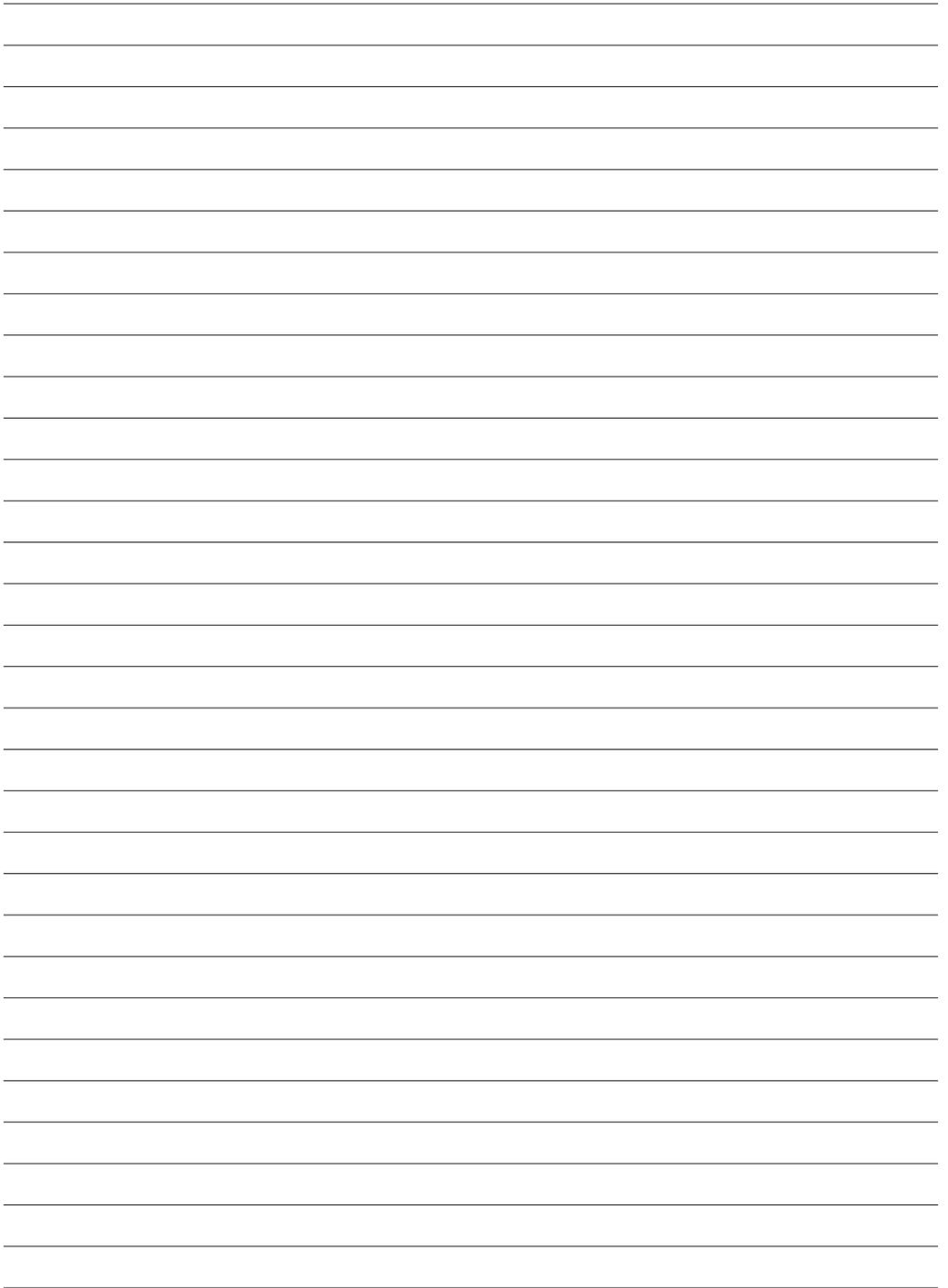
Timbro e firma  
del Rivenditore

Purchasing date

Data acquisto

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**MUSIC & LIGHTS S.r.l.**

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ISO 9001:2008 Certified Company

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