

# RoscoLED™ Control Box

## User Guide



This guide applies to the following RoscoLED™ Control Box models:

- RoscoLED™ Control Box 300W/Static White (293 22250 0000)
- RoscoLED™ Control Box 400W/VariWhite (293 22260 0000)
- RoscoLED™ Control Box 400W/VariColor (293 22270 0000)



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# TABLE OF CONTENTS

|                                |     |
|--------------------------------|-----|
| Introduction .....             | 2   |
| Important Safeguards .....     | 2-4 |
| Unpacking.....                 | 5   |
| Control .....                  | 6   |
| Operation.....                 | 8   |
| Powering On.....               | 8   |
| Dip switch.....                | 8   |
| Test Mode.....                 | 10  |
| DMX Operation.....             | 11  |
| Connecting RoscoLED Tape ..... | 12  |
| Troubleshooting .....          | 13  |
| Specifications .....           | 14  |
| Warranty .....                 | 16  |

Information and specifications in this document are subject to change without notice.

Rosco assumes no responsibility or liability for any errors or inaccuracies that may appear in this manual.

## INTRODUCTION

Congratulations on your purchase of a RoscoLED Control Box. Designed to power and control RoscoLED Tape, the Control Box provides quick and easy set-up with convenient plug-and-play user connections. The RoscoLED Control Box provides a perfect balance of performance, reliability and affordability.

To ensure efficient and safe operation, please take a few moments to read this manual completely.

## IMPORTANT SAFEGUARDS

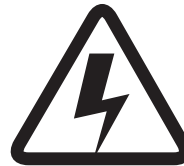
The symbols below are used throughout this manual to identify important safety information.

Heed all warnings and safety information.



**Warning, Danger or  
Caution.**

Risk of personal injury.



**Risk of Electric Shock.**

Risk of severe electric shock.



## PREVENTING ELECTRIC SHOCK

- This machine uses mains electrical power at 100-240VAC. When directly contacted, such voltages are hazardous to human life. Follow all local electrical codes and take precautions when using this product.
- This product is designed to operate from three-wire power systems, where one of the wires is a safety ground. DO NOT disconnect the safety ground, or use extension cords or adapter plugs to connect this machine to a two-wire system. Operation without a safety ground may result in hazardous electrical shock.
- Use only extension cords that are of appropriate length and are rated for Control Box's specified voltage and current. If an extension cord shows signs of wear or gets warm to the touch, discontinue its use and obtain a cord with a higher current rating. Improper extension cords are hazardous and may result in poor performance due to excessive voltage drop.
- Disconnect unit from power source before servicing and when not in use.





## MAINTAINING SAFE OPERATION

- Use only Rosco spare parts and accessories so as to not void the system warranty.
- Allow the unit to cool before attempting to service. RoscoLED Control Box must only be serviced by a qualified technician.
- RoscoLED Control Box is not intended for residential use. Use only in a professional studio or mobile broadcast environment.
- RoscoLED Control Box is IP20 rated – for indoor use only. Do not operate outdoors in a wet environment.
- RoscoLED Control Box is not certified for use in hazardous locations.
- RoscoLED Control Box is designed for operation within the range of 32° to 122°F (0° to +50°C).
- Ensure RoscoLED Control Box is stored within the range of -4° to 140°F (-20° to +60°C).

## UNPACKING

Carefully remove the unit from the box.

Do not attempt to operate RoscoLED Control Box if there are any signs of physical damage. In case of damage, contact your local Rosco dealer.

Your RoscoLED™ Control Box will arrive with a power cord detached from the unit. Plug the Neutrik Powercon into the “Power In” connector on the Control Panel of the RoscoLED™ Control Box.

Note that the holes on the Control Panel, Output Panel and top side of the box should not be covered. This can result in Control Box overheating.

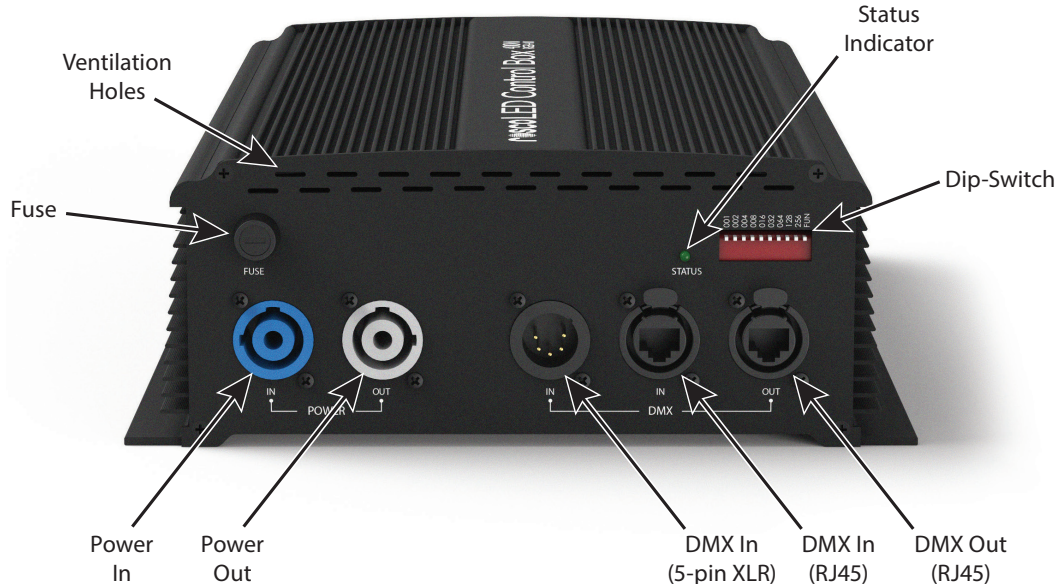
RoscoLED™ Control Box should be mounted onto a flat surface using the side flanges.

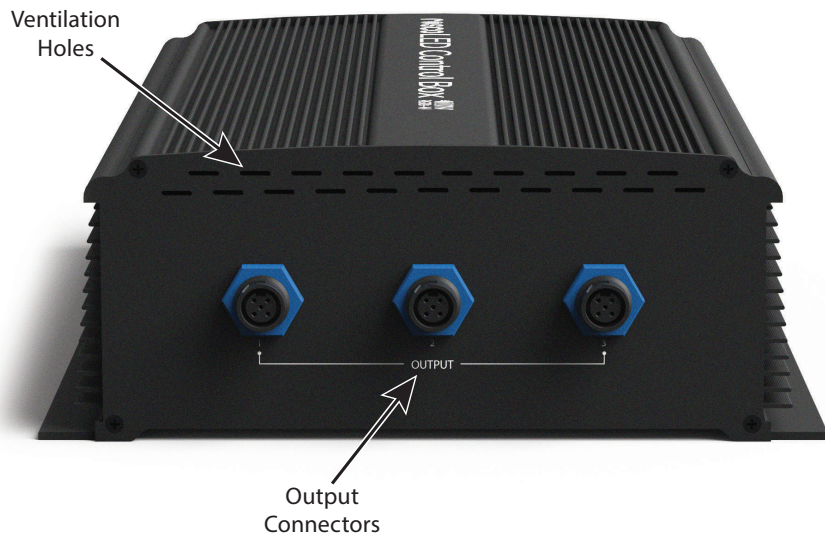


# CONTROL

RoscoLED™ Control Box can be operated via the Control Panel. The Control Box offers stand-alone operation, or via user-supplied DMX512 data input. Power and DMX inputs are located on one end of the Control Box. Outputs for the RoscoLED tape are located on the other end of the Control Box.

## Control Panel





# OPERATION

## **Powering On**

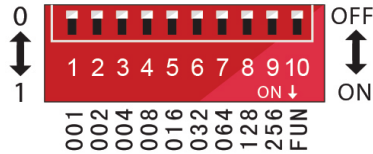
1. RoscoLED™ Control Box is supplied with 24VDC switching power supply. A Neutrik PowerCon brings AC power from mains power to the RoscoLED™ Control Box.
  - a) To supply power to the Control Box, connect a power cord with Neutrik Powercon to the Power In connector on the Control Box. Plug the power cord into AC mains power (100–240 VAC).
  - b) It is possible to pass power through to a series of Control Boxes, using the Power Out connector and appropriate cable. Up to 4 Control Boxes can be connected in series from one AC mains power input.
2. If power is connected properly the Status light should start blinking. The Control Box can now be manually tested.
3. If desired connect the RoscoLED Control Box to a DMX console using either the 5-pin XLR or RJ45 DMX IN ports on the Control Panel.
  - a) For DMX operation, Dip Switch 1 should be at position “1” On. Dip Switches 2–9 should be at position “0” Off.
  - b) If there is DMX signal detected by the Control Box the Status light will start blinking rapidly.

## DIP Switch

The Dip Switch array is located on the Control Panel end of the Control Box and is used for two purposes:

1. Manual testing the connected RoscoLED Tape
2. Assigning addresses for control by a remote DMX console

There are two positions of the 10 DIP switches — position “0” or “1”, which in turn are Off and On states. When assigning a DMX address, the sum of the numbers on the Dip Switch display expresses the address number. See **DMX Operation** for additional details.

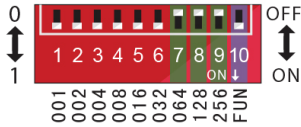


| Switch  | 1   | 2   | 3   | 4   | 5   | 6   | 7   | 8   | 9   | 10  |
|---------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Address | 001 | 002 | 004 | 008 | 016 | 032 | 064 | 128 | 256 | FUN |

## Test Mode

There are several cases when doing a test might be needed. Using the Test Function of the Control Box one can see if everything is connected properly. To enter the FUN mode the FUN switch must be at position “1”. Switches 1–6 must be at position “1”. Switches 7–9 are used to set the brightness during the test function.

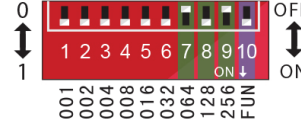
13% Brightness



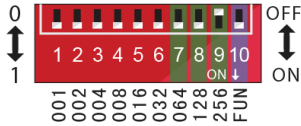
25% Brightness



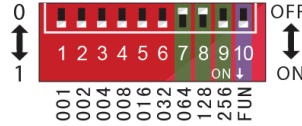
38% Brightness



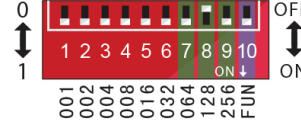
50% Brightness



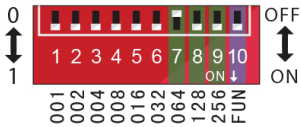
63% Brightness



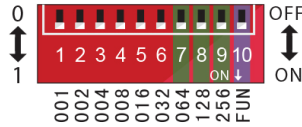
75% Brightness



88% Brightness



100% Brightness

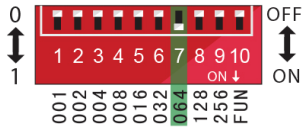


## DMX Operation

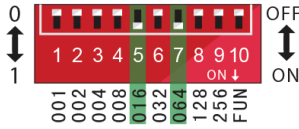
RoscoLED Control Boxes can be operated via DMX512 protocol using the 5-pin XLR or RJ45 DMX IN connectors on the Control Panel. To receive a DMX signal, Dip Switch FUN should be in the Off position. The Status light will blink rapidly when a valid DMX signal is detected.

The address of the device is set by combining the values on the different DIP switches. Once the address is set DMX consoles or other DMX512 devices can send signal to the specific address that the Control Box has been set to.

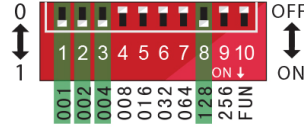
Address set to 64



Address set to 80



Address set to 135

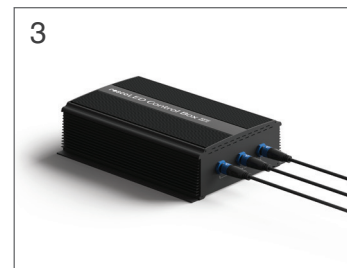
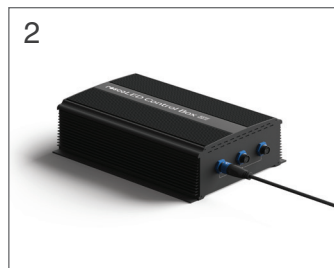




# CONNECTING THE ROSCOLED TAPE

Before connecting the RoscoLED Tape that is included in this set, the Control Box has to be connected to mains power or to be provided with power from another Control Box. The desired DMX address or testing function must be set.

Remove the RoscoLED Tape from its pouch. Connect the Tape to the Control Box via the attached multi-pin connector by rotating the blue release ring counter-clockwise 15 degrees. Insert the connector into a mating output on the Control Box and release blue ring to lock into place.



# TROUBLESHOOTING

| SYMPTOM   | POSSIBLE CAUSE  | SOLUTION  |
|---|---|---|
| <p>When connected to AC Mains power the power indicator light does not illuminate.</p>              | <p>Fuse is damaged.</p>                                   | <p>Check to confirm power cable is properly inserted into Control Box and into AC Mains supply.</p> <p>Check fuse and replace if blown.</p> |
|   | <p>Power cable is damaged.</p>                            |   |
| <p>Status light does not blink rapidly when signal is sent through the DMX IN ports of the unit</p> | <p>Check to confirm DMX cable connections are secure.</p> | <p>Check cable. Check DMX output device for valid DMX signal.</p> <p>Follow DIP switch setting for DMX operation.</p>                       |
|   | <p>Check DMX address.</p>                                 |   |
|   | <p>Bad Cable</p>  |   |
|   | <p>No DMX plugged in</p>                                  |   |
|   | <p>Power off at the console.</p>                          |   |

# SPECIFICATIONS

## **Power**

|                            |  |
|----------------------------|--|
| Input Voltage:             | 100–240 VDC  |
| Power Supply:              | Universal 100–240VAC input/12VDC–24VDC output  |
| Maximum Power Consumption: | RoscoLED™ Control Box 300W/Static White (293 22250 0000)<br>RoscoLED™ Control Box 400W/VariWhite (293 22260 0000)<br>RoscoLED™ Control Box 400W/VariColor (293 22270 0000) |

## **Physical Characteristics**

|  |   |
|--|---|
| Dimensions:                            | 8.25" × 8.25" × 2.82" (210 mm × 210 mm × 72 mm) |
| Weight:<br>(only RoscoLED Control Box) | 9.5 lb (4.3 kg)                                 |

## **Working Environment**

|                      |                                 |
|----------------------|---------------------------------|
| Working temperature: | Working temperature: 0°C ~ 65°C |
| Working environment: | 20 ~ 90% RH non-condensing      |

**Data:** DMX 512 – 5-pin XLR; RJ45 In/Out

**Approvals:** CE  
RoHS

**Environmental:** Disposal of Old Electrical & Electronic Equipment



This symbol on the product or on its packaging indicates that this product shall not be treated as household waste.

## 3-YEAR LIMITED WARRANTY

Rosco Laboratories warrants to the first retail purchaser that this Product will be free from defects in workmanship and material for a period of 36 months from the date of original purchase. For warranty service you must be able to provide proof of purchase. Should this Product prove defective during the warranty period, please contact your local Rosco office for Return Authorization. No warranty service will be performed without Return Authorization. At Rosco's sole discretion, covered Products will be repaired or replaced with new or refurbished equipment or a model of like kind and quality. Exchanged or replaced parts and Products assume the remaining warranty period of the original product covered by this limited warranty. You are responsible for securely packaging the defective Product and returning it to Rosco as per the instructions of the Return Authorization. Within North America, Rosco will ship the repaired or replaced Product to you freight prepaid. Shipments to other locations will be made freight collect.

This warranty is non-transferable and does not extend beyond the first retail purchase of the Product.

This warranty does not cover damage to the Rosco Product caused by parts not manufactured, distributed or certified by Rosco.

Rosco is not obligated to provide warranty service should the Product fail to be properly maintained or fail to function properly as a result of misuse, abuse, improper installation, neglect, improper shipping, damage caused by disasters such as flood, fire and lightning,

improper electrical current or unauthorized service repairs other than those by a Rosco Authorized Servicer.

If a claimed defect cannot be identified or reproduced, you will be held responsible for the costs incurred. Unless otherwise stipulated by state law, all warranties expressed or implied are limited to the twelve (12) month period of this warranty.

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