

## User Guide

PLEASE READ & SAVE THESE ORIGINAL INSTRUCTIONS

# **X-Effects® LED Projector**

This guide applies to the following X-Effects models:

X-Effects LED Projector 5500K Black (297000055001) White (297000055002) Silver (29700005503) X-Effects LED Projector RGBW Black (2970000RGBW1) White (2970000RGBW2) Silver (2970000RGBW3)

For professional use only. Not for residential use.



### **TABLE OF CONTENTS**

Introduction	4
Important Safeguards	4
Unpacking	7
Assembly	8
Mounting, Controls & Operation	
Ordering Accessories	20
Specifications	23
Warranty	25

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 Rosco X-Effects LED Projector. The IP65-rated Rosco X-Effects LED Projector offers the perfect balance of performance, durability and affordability by providing dramatic illumination effects for a broad range of lighting-applications. Designed to create dynamic lighting effects, the X-Effects LED Projector is quick and easy to set-up with convenient on-board or remote DMX controls.

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 info on.



Warning, Danger or Caution Risk of Personal Injury



**Risk of Electric Shock** Risk of severe 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 X-Effects LED'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.



- Do not look directly into the X-Effects LED Projector. Prolonged exposure to the light beam can cause damage to the eyesight.
- Use only Rosco spare parts and accessories so as to not void the system warranty.
- Allow the unit to cool before attempting to service.
- Rosco X-Effects LED Projectors must only be serviced by a qualified technician.
- Rosco X-Effects LED Projector is not certified for use in hazardous locations
- Rosco X-Effects LED Projector is designed for operation within the range of -4° to 113°F (-20° to +45°C).
- Ensure Rosco X-Effects LED Projector 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 your Rosco X-Effects LED Projector if there are any signs of physical damage. In case of damage, contact your Rosco dealer.

### ASSEMBLY

### 1.) Insert Effects Glass Gobos

Prior to operating the X-Effects LED Projector, it is recommended that the unit's Effects Glass Gobos (96mm) be inserted into the fixture's Motor Rotation Module.

The Motor Rotation Module can be accessed by loosening the (4) recessed quick-turn screws on the front of the unit. (Image A)

Carefully remove the front Lens Tube Module and set aside. Check to ensure Effects Glass Gobos are free of dust, fingerprints and other residue prior to inserting into the projector.

Insert the Effects Glass Gobos into the rotation carriers, ensuring that the flat portions of the effects wheel flanges are facing each other. Improper orientation of the effects wheels can cause damage to the unit or may not produce the desired illumination effect. (Image C, D)

Replace the front Lens Tube Module and securely tighten the (4) quick-turn screws.



Image A



Image C



Image B



Image D

An assortment of Static and Dynamic Gobos and Filters are available as accessories and can be used to create Blue Water, Red Fire and a wide variety dynamic effects with your X-Effects LED Projector.

#### **Static Filters**

Simply insert the X-Effects LED Filter or Gobo into the pocket in the center of the Motor Rotation module, behind the Dynamic Effects Glass Gobos. (Image B)

#### **Static Filter Part Numbers:**

29700000085	X-Effects LED Amber Filter - Fire Effect
297000000090	X-Effects LED Green Filter - Aurora Effect
297000000095	X-Effects LED Blue Filter - Water Effect
120X-YYYY-SXFX	X-Effects LED Permacolor Dichroic Glass Filter (YYYY = four digit color number)

Your X-Effects LED Projector can also be used for static image projections. Simply insert the X-Effects LED Gobo into the pocket in the center of the Motor Rotation module, and remove any Effects Glass Gobos if present. (Image B)

Visit the Image Glass page to see all of the available options: www.rosco.com/imageglass

#### Static Gobo Part Numbers:

2507210ISXFX	X-Effects LED Static Custom Steel Gobo
260CUSBWSXFX	X-Effects LED Static Custom B&W Glass Gobo
260CUS1CSXFX	X-Effects LED Static Custom One-Color Glass Gobo
260CUS2CSXFX	X-Effects LED Static Custom Two-Color Glass Gobo
260CUSMCSXFX	X-Effects LED Static Custom Multi-Color Glass Gobo
255XXXXXSXFX	X-Effects LED Static Image Glass Gobo
255XXXXXSXFX	X-Effects LED Static ColorWave Gobo (XXXXX = five digit gobo number)

### All X-Effects LED Projectors include two Dynamic Effects Glass Gobos (96mm):

297000000075 X-Effects LED Effects Glass (96mm) - Single

An assortment of (96mm) ColorWave, Textured or Custom Gobos can be used in place of one or both Dynamic Effects Gobos to create a variety of unique lighting effects.

Visit the Image Glass page to see all of the available options: www.rosco.com/imageglass

### Other Dynamic Effects Gobo Part Numbers:

2507210IDXFX	X-Effects LED Dynamic Custom Steel Gobo
255XXXXXDXFX	X-Effects LED Dynamic Image Glass Gobo (XXXXX = five digit gobo number)
255XXXXXDXFX	X-Effects LED Dynamic ColorWave Gobo (XXXXX = five digit gobo number)
260CUSBWDXFX	X-Effects LED Dynamic Custom B&W Glass Gobo
260CUS1CDXFX	X-Effects LED Dynamic Custom One-Color Glass Gobo
260CUS2CDXFX	X-Effects LED Dynamic Custom Two-Color Glass Gobo
260CUSMCDXFX	X-Effects LED Dynamic Custom Multi-Color Glass Gobo

### 2.) Insert Focusing Lens

Your Rosco X-Effects LED Projector requires a focusing lens (sold separately) to project its effects properly. Four X-Effects LED Projector Lens options are available, providing a range of beam angles for various projection distances. Select the appropriate lens to optimize the effect in your venue:

297000000019	X-Effects LED Projector Lens - 19°, Black
297000000030	X-Effects LED Projector Lens - 30°, Black
297000000050	X-Effects LED Projector Lens - 50°, Black
297000000070	X-Effects LED Projector Lens - 70°, Black
297000000S19	X-Effects LED Projector Lens - 19°, Silver
297000000530	X-Effects LED Projector Lens - 30°, Silver
297000000550	X-Effects LED Projector Lens - 50°, Silver
297000000S70	X-Effects LED Projector Lens - 70°, Silver



Use a non-abrasive micro-fiber cloth with lens cleaner to remove residue from the X-Effects LED Projector lenses.

Install the X-Effects LED Projector Lens into the opening on the front of the unit prior to operation. Insert the small diameter of the lens tube into the opening on the front of the projector and rotate clockwise to thread the lens into place. Rotate the lens clockwise or counter-clockwise to adjust the desired focal position.

### 3.) Wiring Instructions

Your Rosco X-Effects LED Projector will include a detached power+data cable with female UTL connector that mates with the connector on the back of the luminaire. Units sold in North America will utilize a cable harness assembly. Units sold outside of North America will utilize a hybrid power+ data cable. The user end of the cables are unterminated and should be connected to appropriate power and data supplies.

Note: Power and data connections should be performed by a qualified electrician and are the responsibility of the installer or end user.

The power wiring color-code for all product sold in North America is as follows:

Black – Live/Hot lead

White - Neutral lead

Green - Ground

The data wiring color-code is as follows:

D

MX II	Ν		DMX OUT		
	Red:	Data+	Gree	en:	Data+
	Black:	Data –	Whi	te:	Data-
	Shield:	Ground	Shie	eld:	Ground

The power wiring color-code for all product sold outside of North America is as follows:

Core No1:	Live (Hot) Lead
Core No2:	Neutral Lead
Yellow/Green: (YE-GN)	Ground

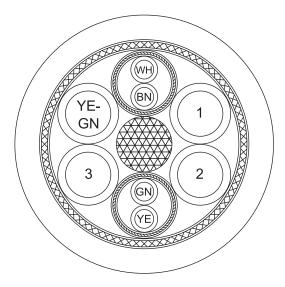
The data wiring color-code is as follows:

### DMX IN

Green (GN):	Data+
Yellow (YE):	Data –
Shield:	Ground

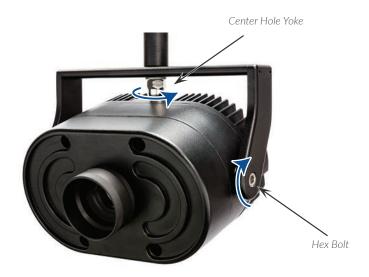
### DMX OUT

White (WH):	Data+
Brown (BN):	Data-
Shield:	Ground



### MOUNTING, CONTROLS & OPERATION

Mount the X-Effects LED Projector via the center hole in the yoke in the desired location, making sure it is located at least 4" (100mm) above ground level. Adjust pan and tilt as required and secure via the hex bolts on the sides of the yoke.



The Rosco X-Effects LED Projector offers manual operation, or remote operation via user-supplied DMX512 data input.

#### **Manual Mode**

The X-Effects LED Projector beam intensity, motor speeds and direction can be adjusted independently via the dials on the rear panel.

Rotating the motor speed/direction dials fully clockwise or counter-clockwise will achieve maximum forward/reverse rotation speed. Centering the indicator in a vertical position will bring the motor to a complete stop.

The output intensity on 5500K/White LED unit can be adjusted from 0-100% using the bottom center control knob on the rear panel. The RGBW units will default to all LEDs operating @ 70% maximum output, providing a mixed White light @ 5500K. Turning the Dimming knob will override the default output condition, with all LED colors moving in sync (maintains 5500K White light). Adjustments to the individual Red, Green Blue and White LEDs will require DMX control.



### **DMX Control**

Rosco X-Effects LED Projectors are equipped with RDM, allowing DMX addressing to be established remotely via your DMX/RDM controls device. The RDM function also provides the ability to track operating temperature and run hours on your X-Effects LED Projector.

- The default DMX address is 001 on all X-Effects LED units shipped from the factory.
- The RDM address will reference Rosco's 16-bit UID (0x5252) with the fixture's 6-digit serial number as the suffix.

When a valid DMX signal is presented to the X-Effects LED Projector, DMX takes precedence over any manual settings. In the event of an interruption to the DMX signal, the X-Effects LED Projector will maintain the last acquired DMX input settings, however any subsequent adjustment to the manual controls will override any stored settings.

5500K X-Effects LED Projectors require 5 DMX channels for control:

- 1. Motor 1 Speed
- 2. Motor 1 Direction
- 3. Motor 2 Speed
- 4. Motor 2 Direction
- 5. % Output (dimming)

### RGBW X-Effects LED Projectors require a total of 8 DMX channels for control:

- 1. Motor 1 Speed
- 5. Red Color Output
- 2. Motor 1 Direction 6. Green Color Output 3. Motor 2 Speed

  - 7. Blue Color Output
- 4. Motor 2 Direction
- 8. White Color Output

### Operation

Ensure the correct power and data connections (if applicable) have been made to the X-Effects LED Projector. Power up the unit and adjust the focus of the beam pattern by rotating the lens tube clockwise or counter-clockwise.

Adjust speed and direction of the left and right drive motors using the on-board controls or remote DMX console.

Adjust dimming/output level via on-board control or remote DMX console.

Adjust color (RGBW units) using remote DMX console.

### **ORDERING ACCESSORIES**

297000000019	X-Effects LED Projector Lens - 19°, Black
297000000030	X-Effects LED Projector Lens - 30°, Black
297000000050	X-Effects LED Projector Lens - 50°, Black
297000000070	X-Effects LED Projector Lens - 70°, Black
297000000S19	X-Effects LED Projector Lens - 19°, Silver
297000000530	X-Effects LED Projector Lens - 30°, Silver
297000000550	X-Effects LED Projector Lens - 50°, Silver
297000000570	X-Effects LED Projector Lens - 70°, Silver
296000005001	Pole Mount Accessory, Black
296000005002	Pole Mount Accessory, White
296000005003	3-Pack 24" SS Strap Kit for Pole Mount
296000005004	Wall Mount Accessory, Black
296000005005	Wall Mount Accessory, White
296000010012	Safety Cable, 3-ft (1m)

### Static Filter Part Numbers

29700000085	X-Effects LED Amber Filter - Fire Effect
297000000090	X-Effects LED Green Filter - Aurora Effect
297000000095	X-Effects LED Blue Filter - Water Effect
120X-YYYY-SXFX	X-Effects LED Permacolor Dichroic Glass Filter (YYYY = four digit color number)

### Static Gobo Part Numbers

2507210ISXFX	X-Effects LED Static Custom Steel Gobo
260CUSBWSXFX	X-Effects LED Static Custom B&W Glass Gobo
260CUS1CSXFX	X-Effects LED Static Custom One-Color Glass Gobo
260CUS2CSXFX	X-Effects LED Static Custom Two-Color Glass Gobo
260CUSMCSXFX	X-Effects LED Static Custom Multi-Color Glass Gobo
255XXXXXSXFX	X-Effects LED Static Image Glass Gobo (XXXXX = five digit gobo number)
255XXXXXSXFX	X-Effects LED Static ColorWave Gobo (XXXXX = five digit gobo number)

### Dynamic Effects Gobo (96mm) Part Numbers

297000000075	X-Effects LED Effects Glass (96mm) - Single
2507210IDXFX	X-Effects LED Dynamic Custom Steel Gobo
255XXXXXDXFX	X-Effects LED Dynamic Image Glass Gobo (XXXXX = five digit gobo number)
255XXXXXDXFX	X-Effects LED Dynamic ColorWave Gobo (XXXXX = five digit gobo number)
260CUSBWDXFX	X-Effects LED Dynamic Custom B&W Glass Gobo
260CUS1CDXFX	X-Effects LED Dynamic Custom One-Color Glass Gobo
260CUS2CDXFX	X-Effects LED Dynamic Custom Two-Color Glass Gobo
260CUSMCDXFX	X-Effects LED Dynamic Custom Multi-Color Glass Gobo

### **SPECIFICATIONS**

#### Power

Data:

Input	Voltage:
-------	----------

Universal 100-240VAC 50-60 Hz

Maximum Power Consumption:

DMX 512 – UTL Connector

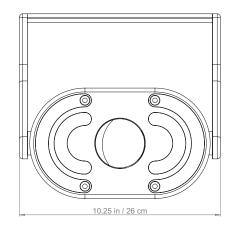
65W

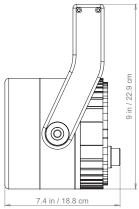
### **Physical Characteristics**

Dimensions: (including yoke)	10.25in x 9in x 7.4 in (26cm x 22.9cm x 18.8cm)
Weight:	9 lb (4.1 kg)
LED:	Color Temperature = 5500K or RGBW 4,000 lumen output (5500K units) LM-79-08 : 50,000 hours @ 45C

### **Working Environment**

Ambient Temperature:Working temperature:-20°C ~ 45°C (-4°F ~113°F)Humidity:20 ~ 90% RH non-condensing





Approvals:	CE
	ETL: Meets UL standards #1573, #8750
	cETL: Meets CSA standards C22.2 #166, #250
Ratings:	IP65 Outdoor Use in Wet Environments



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 thirty six (36) month period of this warranty.

THE WARRANTY AND REMEDY PROVIDED ABOVE ARE EXCLUSIVE AND IN LIEU OF ALL OTHER EXPRESS OR IMPLIED WARRANT IES INCLUDING BUT NOT LIMITED TO THE IMPLIED WARRANTIES OF MERCHANTABILITY, NON-INFRINGEMENT OR FITNESS FOR A PARTICULAR PURPOSE. EXCEPT AS PROVIDED IN THIS WRITTEN WARRANTY AND UNLESS EXCLUSIONS ARE SPECIFICALLY FORBIDDEN BY STATE LAW, NEITHER ROSCO NOR ITS AFFILIATES WILL BE LIABLE FOR ANY LOSS, INCONVENIENCE, OR DAMAGE, INCLUDING DIRECT, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES, INCLUDING INJURY TO PERSONS OR PROPERTY, RESULTING FROM THE USE OR INABILITY TO USE THE ROSCO PRODUCT, WHETHER RESULTING FROM BREACH OF WARRANTY OR ANY OTHER LEGAL THEORY.



