



# User Guide

PLEASE READ & SAVE THESE ORIGINAL INSTRUCTIONS

## Image Spot<sup>®</sup>



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*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.*

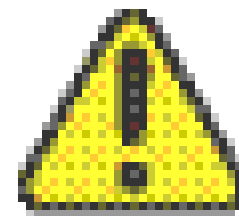
## INTRODUCTION

Congratulations on your purchase of a Rosco Image Spot projector, designed to provide crystal-clear imaging. The Image Spot is quick and easy to set up. Please refer to your Image Spot box's label for the specifications of your Image Spot variant, IP rating, and more.

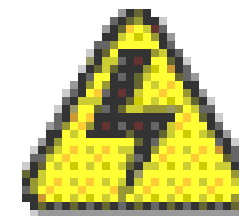
To ensure efficient and safe operation, please take a few moments to read this manual completely.

## 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 100-277VAC nominal. 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 Image Spot'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

Do not look directly into the Image Spot projector. Prolonged exposure to the light beam can cause damage to eyesight.

Use only Rosco spare parts and accessories so as to not void the product warranty.

The Image Spot's surface temperature can approach 184°F (84°C) during operation. Keep minimum 4 inches (10cm) distance away from flammable materials / objects. Contact with the fixture during, or immediately following, operation may result in burns.

Allow the unit to cool before attempting to service.

Rosco Image Spot must only be serviced by a qualified technician.

Rosco Image Spot is not certified for use in hazardous locations.

Rosco Image Spot is designed for operation within the range of -13° to 104°F (-25° to +40°C); Image Spot HT is designed for operation up to 122°F (+50°C).

Ensure Rosco Image Spot is stored within the range of -4° to 140°F (-20° to +60°C).

**WARNING FOR IMAGE SPOT UV:** Do not look directly into the UV light during operation. Eye and skin exposure to UV light can cause severe damage to humans and animals. Take every precaution to limit exposure to UV light (including the use of UV-blocking eye protection).

## UNPACKING

Carefully remove the unit from the box.

Do not attempt to operate Rosco Image Spot projector if there are any signs of physical damage. In case of damage, contact your local Rosco contact.

Your Rosco Image Spot projector requires that an Image Spot focusing lens tube (purchased separately) be inserted into the opening on the front of the unit prior to operation.

Four lens options are available, providing Very Narrow, Narrow, Medium and Wide beam angles. The size of the image or the beam angle can be adjusted by replacing the lens tube with an alternate size:

Item No. 296000010009	Very Narrow 10°
Item No. 296000010019	Narrow 19°
Item No. 296000010025	Medium 25°
Item No. 296000010030	Wide 30°

## INSTALLING LENS TUBE

IP40 Units: Insert the small diameter end of the lens tube into the opening on the front of the projector.

IP65 Units: Slip the 2 provided O-rings onto the grooves on the back end of the lens tube. Gently insert the end of the lens tube with O-rings into the opening on the front of the projector.



Please note: if there is any resistance or pressure when installing the lens, you may need to remove the gobo cassette to allow air to flow out of the fixture.

## GOBO PROJECTION

Prior to operating the Image Spot HO projector insert an Image Spot gobo and/or Permacolor dichroic glass filter into the gobo cassette located on the underside of the fixture. Check to ensure the gobos are free of dust, fingerprints and other residue prior to inserting the cassette into the accessory slot. Up to two Rosco gobos or Permacolor dichroic glass filters can be stacked in the gobo cassette. For sharpest gobo imaging, place any filters in the gobo cassette first, then any gobos on top. Gobos with logos or other oriented graphics must be inserted upside down and backwards for proper projection. Be sure to tighten the thumb screws on the gobo cassette after re-inserting to maintain protection from dust and moisture. A flat tipped screw driver should be used for additional torque\* to tighten the thumb screws. For optimum image quality, use Rosco Image Spot gobos, which feature custom bezels that fit securely inside the Image Spot gobo cassette.



***To best prevent ingress of dirt and moisture, orient the Image Spot projector with the gobo cassette on the underside of the unit and only replace the lens assembly and gobo cassette when the unit is cooled and fully dry.***

\*Recommended to be tightened to 4N•m min. or hand tighten plus an additional quarter turn with screwdriver.

## DICHROIC COLOR FILTERS

Rosco Permacolor dichroic filters are available to provide fully customizable, long-term color options for your Image Spot. For optimal performance and installation, specify Image Spot Permacolor Filters that feature custom bezels to fit securely inside the Image Spot gobo cassette.

Install the Image Spot Permacolor Filter into the gobo cassette. The gobo cassette is deep enough to accept both an Image Spot Gobo and an Image Spot Permacolor Filter. It is recommended that the Permacolor Filter be installed on the “lamp-side” of the two. When properly installed, the order should be lamp -> Image Spot Permacolor Filter -> Image Spot Gobo -> Lens Tube.



## IP40 WIRING

Your IP40 rated Rosco Image Spot projector will arrive with an unterminated power cord attached to the unit, see wiring below (for IP65 rated projectors, see next page). Wiring to an appropriate connector (not included with Image Spot purchase) or to line voltage should be performed by a qualified electrician and is the responsibility of the installer or end user. The power cord wiring code is as follows:

Core No1:	Live (Hot) Lead
Core No2:	Neutral Lead
Core No3:	Push DIM
Green/Yellow:	Ground



Ensure the correct power connections have been made to the Image Spot projector. The fixture will immediately illuminate upon receiving power.

## IP65 WIRING

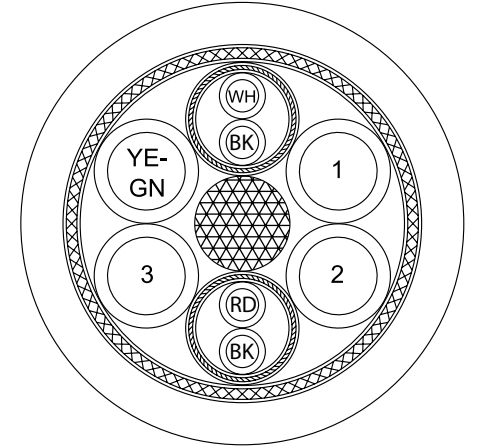
Your IP rated Rosco Image Spot projector will arrive with an unterminated hybrid power/data cord attached to the unit. Wiring to appropriate connectors (not included with Image Spot purchase) or to line voltage should be performed by a qualified electrician and is the responsibility of the installer or end user. The power cord wiring code is as follows:

The power wiring is labelled as follows, using 18AWG (41/34) wires:

Core No1:	Live (Hot) Lead
Core No2:	Neutral Lead
Core No3:	Push DIM
Yellow/Green (YE-GM):	Ground

The data wiring is color-coded as follows, using 26AWG (7/34) wires:

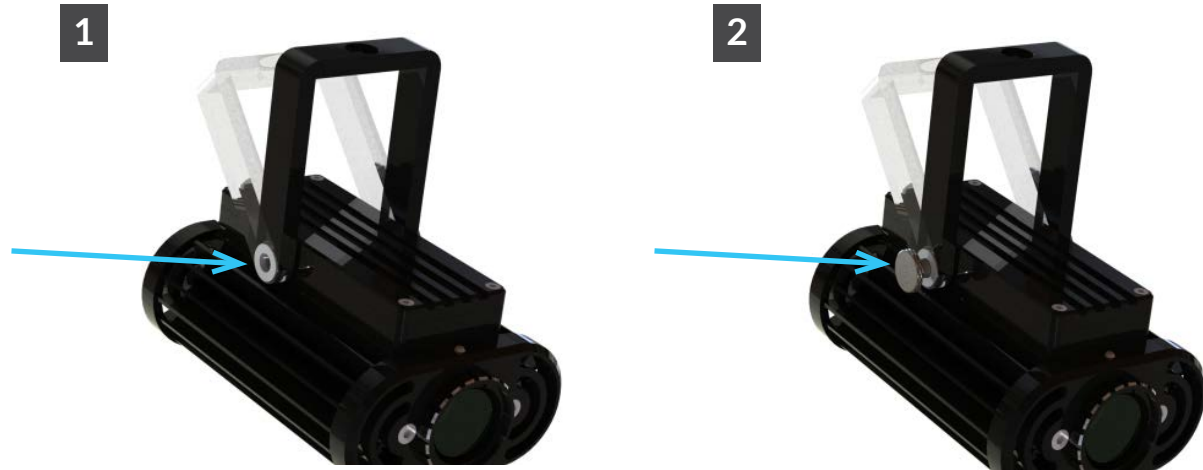
DATA IN		DATA OUT	
RED (RD):	Data+	White (WH):	Data+
BLACK (BK):	Data -	BLACK (BK):	Data-
Shield/Screen:	Ground	Shield/Screen:	Ground



Ensure the correct power connections have been made to the Image Spot projector. The fixture will immediately illuminate upon receiving power.

## MOUNTING

The Image Spot projector can be installed in the desired location via the 5/8" center hole in the yoke. Adjust pan as required. Adjust and fix the tilt of the projector via the threaded (1) hex screw using the included hex key or (2) optional knurled thumb knob (included with the Image Spot Welcome Pack) on the side of the yoke.



## FOCUSING

Adjust the coarse focus of the unit by moving the lens tube inward/outward from the projector. The fine focus can be adjusted by rotating the lens tube clockwise or counter-clockwise.

Due to the ultra-clear optics of the Image Spot projector, it is advised to keep the optic path clean of dust and debris. Use a non-abrasive micro-fiber cloth with Rosco Lens Cleaner to clean the Image Spot lenses and any glass gobos or Permacolor dichroic glass filters you may have installed.

## DIFFUSION FILTERS

An optional Image Spot OPTI-FLECS™ Filter Pack is available and features three pre-cut, 43mm round diffusion filters that soften Image Spot's beam for spot lighting purposes. The OPTI-FLECS Filter Pack includes:

- Retaining Ring
- Soft Diffusion – 43mm dia.
- Smoothing Frost – 43mm dia.
- Double Powder Frost – 43mm dia.



To install OPTI-FLECS filters into the Image Spot: insert the 43mm disc into the front end of the lens tube and then secure the filter into place using the Retaining Ring.

## MAINTAINING WATERPROOFING OF IP65 IMAGE SPOT

The Image Spot IP65 must be installed and serviced properly to maintain its waterproofing. Here is a summary of procedures to follow for long lasting outdoor operation:

- Do not install the unit without a lens tube. It is required for protecting and sealing the front opening from ingress.
- Allow unit to cool completely before removing gobo cassette or lens tube. This will prevent cool humid air from rushing into the hot internal cavity when exposed to the pressure and temperature difference.
- Install lens tube a minimum of 2 complete rotations or 5/8inch (16mm) past the O-rings to ensure the lens tube creates a watertight seal with the front opening.
- Install fixture with the gobo cassette slot screws tightened and facing downward to protect from direct exposure to elements and dust.
- Exercise caution while handling the hardwired hybrid power/data cord to prevent any undue stress or kinking against the unit. Improper handling may result in breakage and the increase risk of water seeping into the wiring or the unit.

## DIMMING CONTROL

The Rosco Image Spot projector offers offers four modes of control: Push DIM operation, user supplied DMX512 data, 0-10V dimming, or DALI controlled.

### PUSH DIM OPERATION

The Push DIM option is an easy and effective way to adjust the Image Spot projector for smaller installations without the need for a DMX/DALI controller or control system. To operate, you just need to connect a simple push-button controller to the projector to enable light dimming and a reliable memory function.

#### Dimmer control

- On/Off: short press
- Stepless dimming: long press
- Dimming direction is changed with each long press
- Memory: projector levels will be stored at last level set.



## DMX OPERATION

Image Spot projectors are configured for DMX In/Out control. When the fixture recognizes a valid DMX signal, control of the unit will default to DMX. An interruption of the DMX signal will cause the Image Spot projector to revert to the last acquired output setting.

IP40 units have an RJ45 DMX connector on the rear panel. Pin assignments are:

Pin #	Assignment	Pin #	Assignment	Pin #	Assignment
1	DMX In Data +	4	DALI 1	7	0V
2	DMX In Data -	5	DALI 2	8	0V
3	DMX Out Data +	6	DMX Out Data -		

IP65 units are supplied with a factory-installed 2m length of hybrid mains/DMX cable that features a waterproof gland. The DMX wire assignment for IP65 units are:

Wire Color	Assignment	Wire Color	Assignment
Red	DMX In Data +	Black	DMX Out Data -
Black	DMX IN Data -	Shield	Ground
White	DMX Out Data +		

## DMX ADDRESSING

A single channel is required for output intensity control via DMX. In order to set the DMX address, an RDM configuration tool or RDM lighting control device may be used.

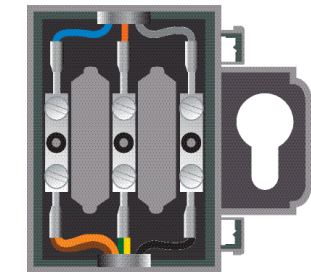
If your unit has a serial number preceding 202974 (IP40) or 203012 (IP65) please follow the instructions below:

In order to set the DMX address, an optional DMX Programming Cable (sold separately) is needed, as well as the free Image Spot Addressing Software that can be downloaded at [www.rosco.com/ImageSpot](http://www.rosco.com/ImageSpot)

IP40 units require a USB to RJ45 Programming Cable; IP65 units require a USB to RS485 Programming Cable accessory (both sold separately). Plug the USB connector into the computer running the Image Spot Addressing Software. Connect the output end of the cable to either the RJ45 connector (IP40 units) or use the multi-pin RS485 terminal block to connect to the bare-ends of the IP65 Image Spot DMX cable using the following terminal assignment:

	Programming Cable	Image Spot DMX Cable
Terminal 1 Data +	Brown/Orange	Blue
Terminal 2 Data -	Green/Yellow	Orange
Terminal 3 Ground	Black	Shield

Image Spot IP65 DMX Cable



USB/RS485 Programming

## DMX ADDRESSING (continued)

Follow the prompts from the software to set the DMX address (set value). The output of the unit can also be tested by entering a value between 255 (100%) and 1 (0%). Enter a value between 255 and 1, and observe that the fixture output changes briefly before returning to 100%. The fixture should be power cycled Off/On in order to properly respond to the newly programmed DMX address.



## DALI OPERATION

The DALI Control option makes it possible to control the Image Spot projector using a DALI or lighting control management system. The bi-directional protocol allows feedback from the Image Spot on different aspects and enables the unit to be controlled and set individually. The DALI protocol limits the number of DALI devices to 64. IP40 units have an RJ45 connector on the rear panel.

Pin Assignments

Pin #	Assignment	Pin #	Assignment	Pin #	Assignment
1	DMX In Data +	4	DALI 1	7	0V
2	DMX In Data -	5	DALI 2	8	0V
3	DMX Out Data +	6	DMX Out Data -		

IP65 units are supplied with a factory-installed 2m length of hybrid mains/DMX cable that features a waterproof gland. The DMX wire assignments for IP65 units are:

Wire Color	Assignment	Wire Color	Assignment
Red	DALI1	Black	NC
Black	DALI2		
White	NC		

## DIFFUSION FILTERS

An optional Image Spot OPTI-FLECS™ Filter Pack is available and features three pre-cut, 43mm round diffusion filters that soften Image Spot's beam for spot lighting purposes. The OPTI-FLECS Filter Pack includes:

- Retaining Ring
- Soft Diffusion – 43mm dia.
- Smoothing Frost – 43mm dia.
- Double Powder Frost – 43mm dia.



To install OPTI-FLECS filters into the Image Spot: insert the 43mm disc into the front end of the lens tube and then secure the filter into place using the Retaining Ring.

## ACCESSORIES

Item Number	Description
296000010009	Image Spot Very Narrow Angle Lens Optic / 10°
296000010019	Image Spot Narrow Angle Lens Optic / 19°
296000010025	Image Spot Medium Angle Lens Optic / 25°
296000010030	Image Spot Wide Angle Lens Optic / 30°
296000010013	Image Spot OPTI-FLECS Filter Pack with Retaining Ring
296000010012	Image Spot Safety Cable, 3-ft (1m)
296000005101	Rosco Pole Mount Accessory - Black
296000005102	Rosco Pole Mount Accessory - White
296000005104	Rosco Wall Mount Accessory - Black
296000005105	Rosco Wall Mount Accessory - White
296000005106	Rosco Surface Mount Accessory - Black
296000005107	Rosco Surface Mount Accessory - White

## ORDERING GOBOS & PERMACOLOR FILTERS

Gobos and Permacolor Dichroic Filters for the Image Spot projector can be easily ordered through any Rosco dealer. Visit [www.rosco.com](http://www.rosco.com) to locate the dealer nearest you and provide them with the information below.

### Standard Gobos

XXXXX-SPOT Image Spot Standard Gobo, XXXXX = the five digit standard gobo number

### Custom Gobos

2507210ISPOT Image Spot Custom Steel Gobo  
260CUSBWOSPO Image Spot Custom B&W Glass Gobo  
260CUS1COSPO Image Spot Custom One-Color Glass Gobo  
260CUS2COSPO Image Spot Custom Two-Color Glass Gobo  
260CUSMCOSPO Image Spot Custom Multi-Color Glass Gobo

### Permacolor Dichroic Filters

1203-XXXX-SPOT Image Spot Permacolor Dichroic Glass Filter for Gobo Slot, XXXX – four digit color number

For assistance ordering or specifying gobos or Permacolor filters for the Image Spot, please contact our Gobo Customer Service Centers:

Americas	Toll Free in the US: 866-228-2256	customgobo@rosco.com
	Outside of the US: 512-388-5299	
EMEA	+44 (0)20 8659 2300	salesadmin@rosco.com

## TECHNICAL SPECIFICATIONS

### Power

Input Voltage: Universal 100-277VAC+/-10%  
Maximum Power Consumption: 45W

**Data Control:** DMX 512/DALI – RJ45 (IP40)  
0-10V dimming connection/  
Cat5e Cable (IP65)  
Hybrid data/mains cable (IP65)

### Physical Characteristics

Dimensions: 7.8 in. x 4.8 in. x 6.8 in.  
(including yoke) (198 mm x 123 mm x 172 mm)  
HT Variant: 9.3 in x 4.8 in. x 6.8 in.  
(236 mm x 123 mm x 172 mm)  
Weight: 5.5 lbs. (2.5 kg)  
HT Variant: 5.9 lbs (2.7kg)

### LED

LED Options: 3000K/96 CRI/600lm  
5500K/80 CRI/800lm  
LM-79-08: 70,000 hours @ 25°C  
UV/385nm peak wavelength  
Image Spot UV: 20,000 hours @ 25°C

### Gobo Specifications

Rosco Image Spot Gobo with custom carrier

### Working Environment

Ambient Temp.: Working temperature:  
-13° to 104°F (-25° to +40°C)  
HT Variant: -13° to 122°F (-25° to +50°C)  
Humidity: 20 ~ 90% RH non-condensing

**Approvals:** Conforms to UL STD # 62368-1 & # 60950-22  
Certified to CSA STDS C22.2 # 62368-1 & # 60950-22



**Ratings:** IP40 Indoor Use Only  
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 three years 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 three (3) year period of this warranty.

THE WARRANTY AND REMEDY PROVIDED ABOVE ARE EXCLUSIVE AND IN LIEU OF ALL OTHER EXPRESS OR IMPLIED WARRANTIES 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.

