



# x-rite Judge LED Light Booth User Guide

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## Product Specifications

- **Product Name:** Judge LED
- **Type:** Visual Color Evaluation System
- **Standardized Light Sources:** Selectable
- **Weight:** 29.4 kg

## Product Usage Instructions

### Introduction and Setup

The Judge LED is a visual color evaluation system that provides selectable standardized light sources.

### Switch Panel

The luminaire includes a switch panel with the following components:

- Luminaire Info Slider
- Button LED backlight: Illuminates white when the selected light source is in use.
- System Status LED

### Key Features

The system includes a status LED that indicates the hour count and day count action based on the color:

- **GREEN:** 0-4000 hours (and UV < 1500), 0-365 days – No action required
- **ORANGE:** 4001-8760 hours (and UV < 1500), 365-1095 days – Contact X-Rite service for maintenance
- **RED:** Over 8760 hours (or UV > 1500), over 1095 days – Contact X-Rite service for immediate attention

### Recommendations for Placement

Ensure the unit is placed on a stable, vibration-free surface capable of supporting its weight. Consider the following factors when positioning the light booth:

- Stability of the surface
- Weight-bearing capacity

- Adequate space for assembly and operation

### **Light Booth Assembly**

To assemble the light booth:

1. Move the light booth shipping container to the intended area of use.
2. Allow enough space for assembly and operation.
3. Unpack all contents from the packaging before discarding.

### **JUDGE LED**

Consult this documentation in all cases where the Attention symbol appears. This symbol is used to inform you of any potential hazards or actions that may require your attention.

### **CE Declaration**

Hereby, X-Rite declares that Judge LED complies with the essential requirements and other relevant provisions of Directive(s) 2014/30/EU, LVD 2014/35/EU, and RoHS 2011/65/EU.

### **Federal Communications Commission Notice**

#### **NOTE:**

This equipment has been tested and found to comply with the limits for a Class A digital device, under Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used by the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following conditions:

1. this device may not cause harmful interference, and
2. this device must accept any interference received, including interference that may cause undesired operation.

### **Industry Canada Compliance Statement**

This Class A digital apparatus complies with Canadian ICES-003.

### **USA Canada Notice**

This device complies with Part 15 of the FCC Rules and with Industry Canada license-exempt RSS standard(s). Operation is subject to the following two conditions:

1. This device may not cause harmful interference, and
2. This device must accept any interference received, including interference that may cause undesired operation.

**NOTE:** Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

### **Safety Information**

IF THE EQUIPMENT IS USED IN A MANNER NOT SPECIFIED BY X-RITE, THE PROTECTION PROVIDED BY THE EQUIPMENT MAY BE IMPAIRED.

- **PLEASE READ AND FOLLOW INSTRUCTIONS.** Read and follow all instructions before you attempt to assemble, install, or operate the unit. • **CAUTION! THIS UNIT MUST BE EARTHED.** DO NOT connect to an ungrounded outlet. DO NOT use with 2-wire extension cords or adaptors.
- **OBEY WARNINGS.** Please comply with all warnings and safeguards that we provide in this manual. They have been written to keep you and your unit safe. If the unit is used in a manner not specified in this manual, the protection provided by the unit may be impaired.
- **LUMINAIRE WEIGHS APPROXIMATELY 18.1 kg. ASSEMBLED UNIT WEIGHS APPROXIMATELY 29.4 kg.** Take care when lifting and obey manual handling safety procedures.
- **TAKE CARE NOT TO TRAP FINGERS OR HANDS WHEN POSITIONING THE LUMINAIRE ON TOP OF THE BACK, SIDES AND BASE DURING ASSEMBLY.** Place hands under the front edge and on the outside of the luminaire only.
- **CHECK VOLTAGE SETTING BEFORE PLUGGING IN THE UNIT.** Applying the incorrect voltage may cause the fuses to blow. Contact your local X-Rite representative for replacement fuses and follow the fuse replacement procedure in this manual.
- **ALWAYS UNPLUG THE UNIT BEFORE CHANGING THE VOLTAGE SELECTOR OR FUSE.**
- **NEVER BLOCK ACCESS TO THE MAINS INLET AND POWER SWITCH.** The mains inlet and power switch are located at the rear of the unit.
- **DO NOT BLOCK VENTS.** The vents allow air to circulate between the luminaire interior and the ambient air. Blocking the vents will cause heat buildup within the luminaire which may result in inaccurate lighting conditions, damage to the equipment, and possible personal injury.
- **USE ONLY A PROPER POWER SOURCE.** Use the proper power source for this unit. Consult the power label on the back of the unit for this information. Operation with a power source not specified on the power label may result in inaccurate lighting conditions, damage to the equipment, and possible personal injury.
- **SERVICE PROPERLY.** Except lamp replacement, do not attempt to service this product yourself. If you should attempt unauthorized repairs, you invalidate the warranty that is active on your unit. For any other malfunctions in operation, contact X-Rite Technical Service.
- **CLEAN PROPERLY.** You can wipe the unit with a clean, white lint-free cloth. Do not apply liquid cleaners or agents containing wax, since these can yellow and change reflectance and gloss properties. Clean outer surfaces with a dampened cloth containing a mild soap.
- **PROTECT FROM WATER AND MOISTURE.** Maintain electrical safety when you use this unit. Do not use it in an area where there is a possible hazard of electric shock from spilled water or other liquids or uncontrolled moisture.
- **DAMAGE REQUIRING SERVICE.** The unit must be serviced by qualified service personnel when the unit has been dropped or damaged, water or other liquid(s) have been spilled into the electrical components or the unit does not operate normally.
- **WARNING.** This instrument is not for use in explosive or sulfide environments, nor any environments with metallic particle dust.
- **RETAIN THIS MANUAL FOR FUTURE REFERENCE.** Once you have read this manual, keep it handy for others to read or refer to when they need to operate the unit.

## Disposal

Instructions for disposal: Please dispose of Waste Electrical and Electronic Equipment (WEEE) at designated collection points for the recycling of such equipment.

## Proprietary Notice

The contents of this manual are the property of X-Rite and are copyrighted. Any reproduction in whole or part is strictly prohibited. Publication of this information does not imply any rights to reproduce or use this manual for any purpose other than installing, operating, or maintaining this instrument. No part of this manual may be reproduced, transcribed, transmitted, stored in a retrieval system, or translated into any language or computer language, in any form or by any means, electronic, magnetic, mechanical, optical, manual, or otherwise, without the prior written permission of an officer of X-Rite. This product may be covered by one or more patents.

Copyright © 2025 by X-Rite "ALL RIGHTS RESERVED".

## Warranty Information

- X-Rite warrants this Product against defects in material and workmanship for twelve (12) months from the date of shipment from X-Rite's facility, unless mandatory law provides for longer periods. During such time, X-Rite will either replace or repair at its discretion defective parts free of charge.
- X-Rite's warranties herein do not cover failure of warranted goods resulting from: (i) damage after shipment, accident, abuse, misuse, neglect, alteration, or any other use not by X-Rite's recommendations, accompanying documentation, published specifications, and standard industry practice; using the device in an operating environment outside the recommended specifications or failure to follow the maintenance procedures in X-Rite's accompanying documentation or published specifications; (iii) repair or service by anyone other than X-Rite or its authorized representatives; (iv) the failure of the warranted goods caused by use of any parts or consumables not manufactured, distributed, or approved by X-Rite; (v) any attachments or modifications to the warranted goods that are not manufactured, distributed or approved by X-Rite. Consumable parts and Product cleaning are also not covered by the warranty.
- X-Rite's sole and exclusive obligation for breach of the above warranties shall be the repair or replacement of any part, without charge, which within the warranty period is proven to X-Rite's reasonable satisfaction to have been defective. Repairs or replacement by X-Rite shall not revive an otherwise expired warranty, nor shall the same extend the duration of a warranty.
- The customer shall be responsible for packaging and shipping the defective product to the service center designated by X-Rite. X-Rite shall pay for the return of the product to the Customer if the shipment is to a location within the region in which the X-Rite service center is located. The customer shall be responsible for paying all shipping charges, duties, taxes, and any other charges for products returned to any other locations. Proof of purchase in the form of a bill of sale or receipted invoice which is evidence that the unit is within the Warranty period must be presented to obtain warranty service.
- Do not try to dismantle the Product. Unauthorized dismantling of the equipment will void all warranty claims. Contact the X-Rite Support or the nearest X-Rite Service Center, if you believe that the unit does not work anymore or does not work correctly.
- THESE WARRANTIES ARE GIVEN SOLELY TO BUYER AND ARE INSTEAD OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR APPLICATION, AND NONINFRINGEMENT. NO EMPLOYEE OR AGENT OF X-RITE, OTHER THAN AN OFFICER OF X-RITE, IS AUTHORIZED TO MAKE ANY WARRANTY IN ADDITION TO THE FOREGOING.
- IN NO EVENT WILL X-RITE BE LIABLE FOR ANY OF BUYER'S MANUFACTURING COSTS, OVERHEAD, LOST PROFITS, GOODWILL, OTHER EXPENSES OR ANY INDIRECT, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES BASED UPON BREACH OF ANY WARRANTY, BREACH OF CONTRACT, NEGLIGENCE, STRICT TORT, OR ANY OTHER LEGAL THEORY.
- IN ANY EVENT OF LIABILITY, X-RITE'S MAXIMUM LIABILITY HEREUNDER WILL NOT EXCEED THE

PRICE OF THE GOODS OR SERVICES FURNISHED BY X-RITE GIVING RISE TO THE CLAIM.

## INTRODUCTION AND SETUP

The Judge LED is a visual color evaluation system that provides selectable standardized light sources.



### x-rite Judge LED Light Booth



## Product Specifications

- **Product Name:** Judge LED
- **Type:** Visual Color Evaluation System
- **Standardized Light Sources:** Selectable
- **Weight:** 29.4 kg

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### Introduction and Setup

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### Switch Panel

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## Recommendations for Placement

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- Stability of the surface
- Weight-bearing capacity
- Adequate space for assembly and operation

## Light Booth Assembly

To assemble the light booth:

1. Move the light booth shipping container to the intended area of use.
2. Allow enough space for assembly and operation.
3. Unpack all contents from the packaging before discarding.

## JUDGE LED

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moisture.

- **DAMAGE REQUIRING SERVICE.** The unit must be serviced by qualified service personnel when the unit has been dropped or damaged, water or other liquid(s) have been spilled into the electrical components or the unit does not operate normally.
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Copyright © 2025 by X-Rite "ALL RIGHTS RESERVED".

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- X-Rite's sole and exclusive obligation for breach of the above warranties shall be the repair or replacement of any part, without charge, which within the warranty period is proven to X-Rite's reasonable satisfaction to have been defective. Repairs or replacement by X-Rite shall not revive an otherwise expired warranty, nor shall the same extend the duration of a warranty.
- The customer shall be responsible for packaging and shipping the defective product to the service center designated by X-Rite. X-Rite shall pay for the return of the product to the Customer if the shipment is to a location within the region in which the X-Rite service center is located. The customer shall be responsible for paying all shipping charges, duties, taxes, and any other charges for products returned to any other locations. Proof of purchase in the form of a bill of sale or receipted invoice which is evidence that the unit is within the Warranty period must be presented to obtain warranty service.

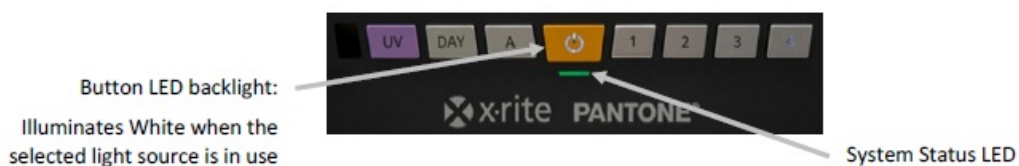
- Do not try to dismantle the Product. Unauthorized dismantling of the equipment will void all warranty claims. Contact the X-Rite Support or the nearest X-Rite Service Center, if you believe that the unit does not work anymore or does not work correctly.
- THESE WARRANTIES ARE GIVEN SOLELY TO BUYER AND ARE INSTEAD OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR APPLICATION, AND NONINFRINGEMENT. NO EMPLOYEE OR AGENT OF X-RITE, OTHER THAN AN OFFICER OF X-RITE, IS AUTHORIZED TO MAKE ANY WARRANTY IN ADDITION TO THE FOREGOING.
- IN NO EVENT WILL X-RITE BE LIABLE FOR ANY OF BUYER'S MANUFACTURING COSTS, OVERHEAD, LOST PROFITS, GOODWILL, OTHER EXPENSES OR ANY INDIRECT, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES BASED UPON BREACH OF ANY WARRANTY, BREACH OF CONTRACT, NEGLIGENCE, STRICT TORT, OR ANY OTHER LEGAL THEORY.
- IN ANY EVENT OF LIABILITY, X-RITE'S MAXIMUM LIABILITY HEREUNDER WILL NOT EXCEED THE PRICE OF THE GOODS OR SERVICES FURNISHED BY X-RITE GIVING RISE TO THE CLAIM.

## INTRODUCTION AND SETUP

The Judge LED is a visual color evaluation system that provides selectable standardized light sources.



### Switch Panel



## Key Features

Seven light sources + Directional D65:

- UV: Ultraviolet 385 nm, or Ultraviolet 365 nm with CIE D65 (6500 K) / CIE D50 (5000 K)
- DAY: CIE D65 (6500 K) or Directional CIE D65 (6500 K)
- A: CIE Illuminant A (2856 K)
- 1: CIE D50 (5000 K) in Dual Daylight models or U35 L (3500 K)
- 2: CWF L (Cool White LED) (4200 K) or L35 (LED) (3500 K)
- 3: U30 L (LED) (3000 K) or TL84 L (LED) (4000 K) or CIE L30-B2 (LED) (3000 K)

- 4: CIE L40-B3 (LED) (4100 K)

**NOTE:** Refer to the sticker on the info slider located at the right side of the luminaire to identify which illuminant is enabled in each position.

#### Other features:

- Balanced light that conforms to or exceeds published international standards for the visual evaluation of color.
- A Status LED indicates when illuminants are nearing the end of their usable life.

### Frequently Asked Questions

#### • What should I do if the status LED shows a red indication?

If the status LED shows red, indicating that the illuminants are out of the manufacturer's stated lifetime, contact X-Rite service for immediate attention and replacement.

#### • How do I identify which illuminant is enabled in each position on the info slider?

Refer to the sticker on the info slider located at the right side of the luminaire to identify which illuminant is enabled in each position.

Status LED	Hour Count	Day Count	Action
GREEN	0-4000 (and UV < 1500)	0-365	None. Illuminants are within the manufacturer's stated lifetime.
ORANGE	4001-8760 (and UV < 1500)	365-1095	Contact X-Rite service. Illuminants are approaching the end of their usable life or their last certification has expired.
RED	> 8760 (or UV > 1500)	> 1095	Contact X-Rite service. Illuminants are out of the manufacturer's stated lifetime and specifications.

- Durable, neutral matte paint finish – Munsell N7.
- Instant illumination allows for rapid switching between illuminates.

### Recommendations for Placement

- NEVER BLOCK ACCESS TO THE MAINS INLET AND POWER SWITCH. The mains inlet and power switch are located at the rear of the unit.
- DO NOT BLOCK VENTS. The vents allow air to circulate between the luminaire interior and the ambient air. Blocking the vents will cause heat buildup within the luminaire which may result in inaccurate lighting conditions, damage to the equipment, and possible personal injury.

Make certain that the unit is placed on a stable, vibration-free surface that will support the weight of the unit. Assembled weight 29.4 kg.

When choosing where to position the light booth the following factors should be taken into consideration:

- Avoid placing near other light sources, i.e. windows, luminaires, spotlights, etc.
- If lighting in the immediate vicinity is required we recommend artificial CIE daylight to match the light booth (D50/D65) at a level of approximately 200 to 300 lux.
- Nearby windows should be fitted with suitable light-excluding blinds.
- Strong colors should not be visible in the observer's field of view. Ideally, the walls directly behind the light booth should be neutral grey – Munsell N7.
- The operator carrying out a visual assessment should not wear clothing of a strong color.
- The ideal ambient temperature of the room should be between 18 to 25°C.

### **Light Booth Assembly**

- LUMINAIRE WEIGHS APPROXIMATELY 18.1 kg. ASSEMBLED UNIT WEIGHS APPROXIMATELY 29.4 kg. Take care when lifting and obey manual handling safety procedures.
- TAKE CARE NOT TO TRAP FINGERS OR HANDS WHEN PLACING THE LUMINAIRE ONTO THE BACK, SIDES, AND BASE DURING ASSEMBLY. Place hands under the front edge and on the external surfaces of the luminaire only.

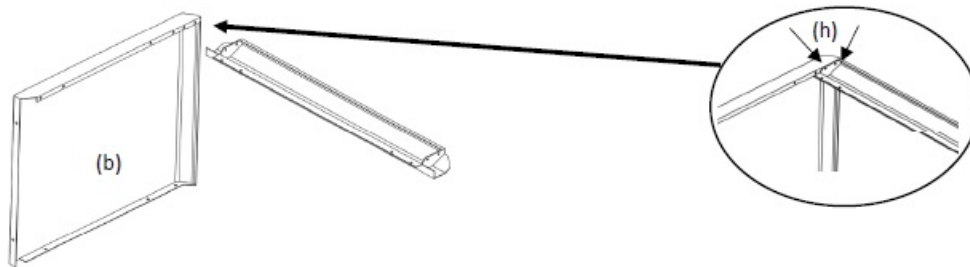
Move the light booth shipping container to the general area where the light booth is to be used. Be sure to allow sufficient room for assembly. Make sure to remove all contents from the packaging before discarding.

Please check to ensure the items below were enclosed with the Judge LED:

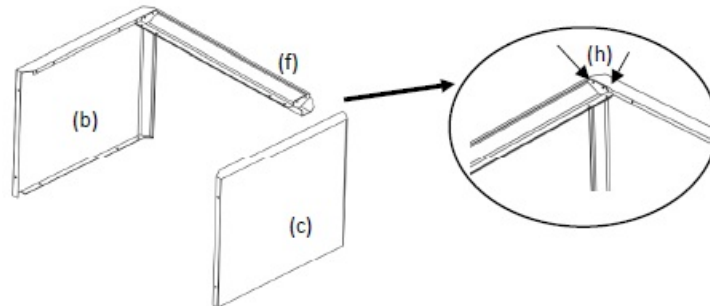
- a. Base Panel
- b. Left Side
- c. Right Side
- d. 4x Triangle Holder
- e. Back Panel
- f. Base holder
- g. Luminaire
- h. 25 pcs M4 Screws
- i. Power line cord
- j. Quick start guide
- k. X-Rite certificate
- l. Remote controller (optional)
- m. Monitor holder (optional)
- n. Sample holder (optional)

TAKE CARE to avoid scratching light booth powder-coated surfaces in the following assembly steps. We strongly recommend performing the following steps on top of a protected table to avoid scratches on both, frames and table.

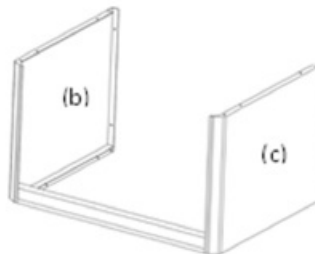
1. **Step 1.** Put the Left Side (b) upside down, secure one end of the Base Holder (f) into the Left Side (b) using two screws (h).



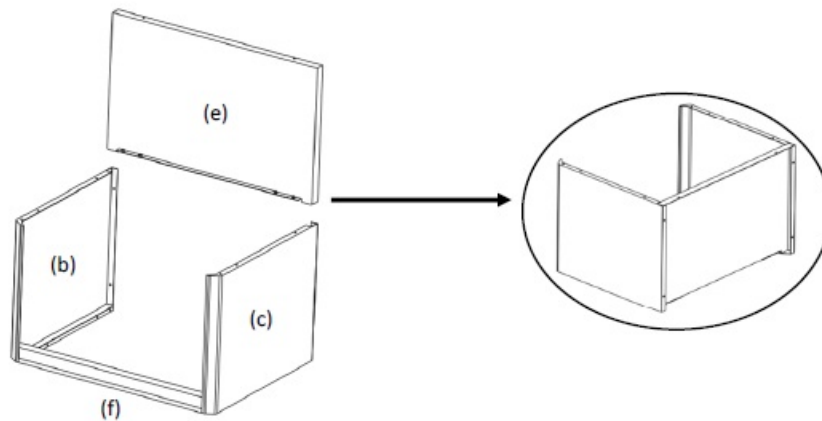
2. **Step 2.** Repeat steps 1. for the Right Side (c).



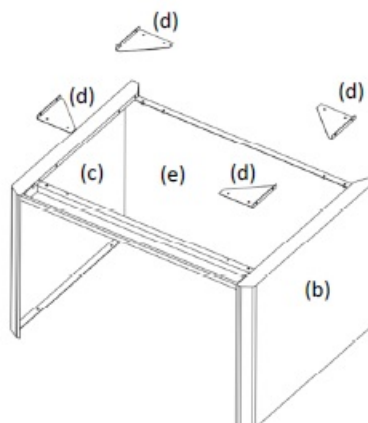
3. **Step 3.** Rotate the entire frame structure.



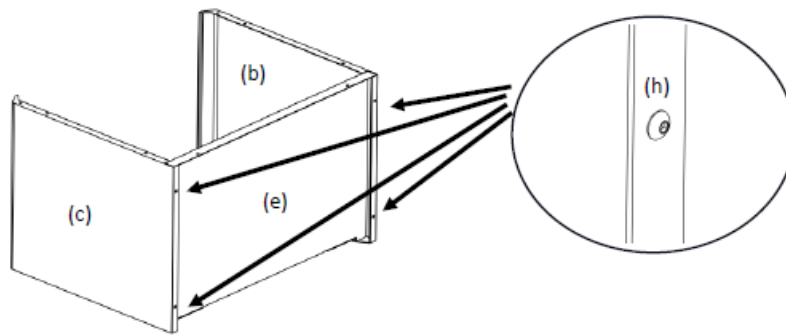
4. **Step 4.** Slide the Back Panel (e) down inside the folds on the Left Side (b) and Right Side (c), until it rests on the bottom.



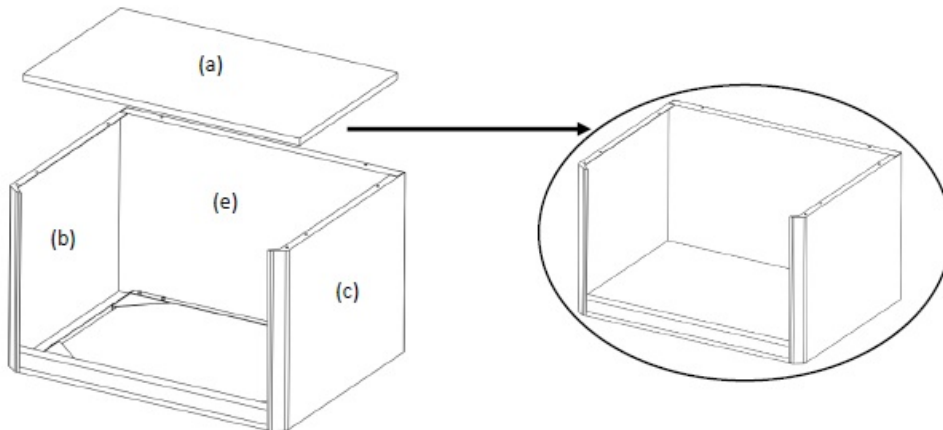
5. **Step 5.** Rotate the entire frame structure. Secure the four Triangle Holders (d) with four screws (h) each.



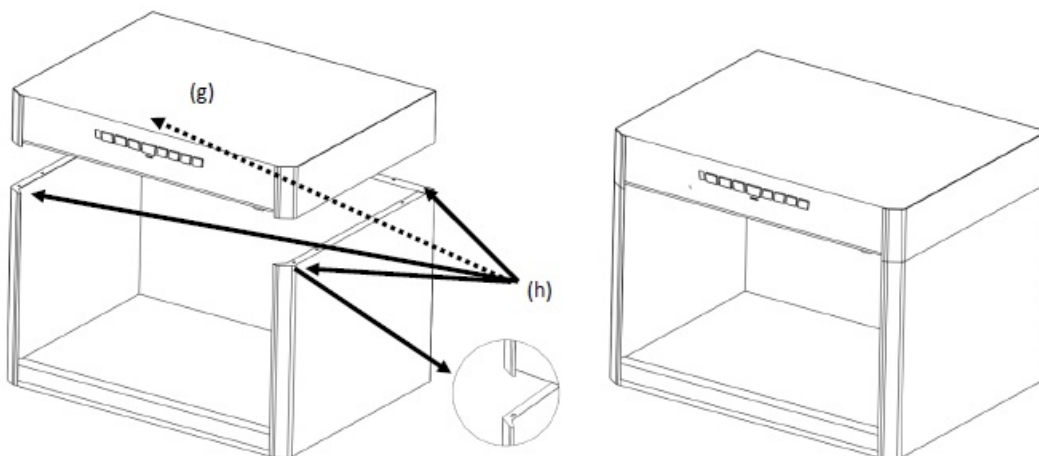
6. **Step 6.** Rotate the entire frame structure. Secure the Back Panel (e) using four screws (h).



7. **Step 7.** Place the Base Panel (a) down into the assembled base frames and secure it with two screws (h) on the backside.



8. **Step 8.** Using two people to lift the Luminaire (g) from either side and place it on top of the assembled frame structure. Warning: we recommend one person holds the luminaire in place through the keyhole shapes, pushes it forward and the second person secures it with four Screws (h), to avoid the luminaire from falling.



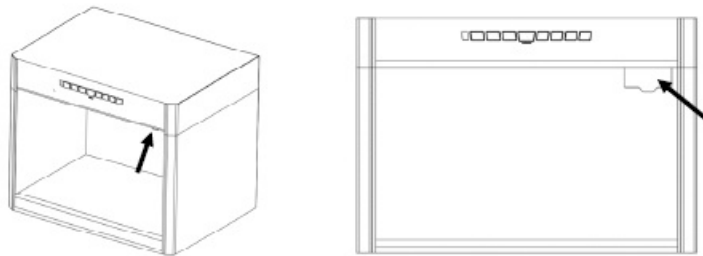
## OPERATION

- If the equipment is used in a manner not specified by X-Rite, the protection provided by the equipment may be impaired.
- ALWAYS UNPLUG THE UNIT BEFORE CHANGING THE FUSE.
- **CAUTION! THIS UNIT MUST BE EARTHED.** DO NOT connect to an ungrounded outlet. DO NOT use with 2-wire extension cords or adaptors.
- **USE ONLY A PROPER POWER SOURCE.** Use the proper power source for this unit. Consult the power label on the back of the unit for this information. Operation with a power source not specified on the power label may result in inaccurate lighting conditions, damage to the equipment, and possible personal injury.

The bottom-right side of the front part of the Judge LED luminaire contains an Info sticker highlighting key

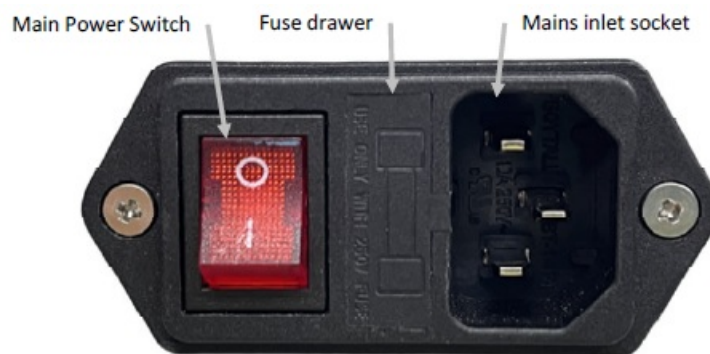
information, including:

- Position of each illuminant
- Color coding Status LED
- QR code guiding the user to X-Rite service contact details NOTE: Pull down the info slider to access the info sticker.



### Applying Power to the Assembled Unit

1. The mains inlet socket and the power switch are located on the rear of the light booth.
2. Plug the power cord into the mains inlet socket, then plug the cord into a properly rated wall socket.
3. Switch on the power switch.



### Fuse Check and Replacement Procedure

ALWAYS UNPLUG THE UNIT BEFORE CHANGING THE FUSE.

1. Locate the Fuse Drawer at the rear of the unit.
2. Replace only with a fuse of the fast-acting type rating: 250V~, 10A.
3. With the fuse properly seated, slide the Fuse Drawer back into the unit.
4. Gently press the Fuse Drawer until you hear a distinct click.
5. Reconnect the power cord to the unit and apply power. If the unit shows signs that the fuse may have blown again contact your X-Rite Service Representative.

### Selecting an Illuminant

**NOTE:** Refer to the sticker placed within the drawer located at the right side of the luminaire to identify which illuminant is enabled in each position.

- Before using any illuminants, the main power switch and front on/off button must be turned on.
- The backlight LEDs in each button will illuminate white when an illuminant is selected.
- All buttons except UV are interlocked; the current illuminant in use will switch off when the next illuminant is

selected.

- Pressing the same button again will also turn off the illuminant.

### **Press the button labeled:**

1. UV for the ultraviolet illuminant.

NOTE: The ultraviolet illuminant (UV) can be used in combination with DAY (CIE D65 LED) or CIE D50 LED illuminant radiating UV 365 nm or standalone for evaluation of optical brighteners, whitening agents, or fluorescent dyes or pigments radiating UV 385 nm.

2. DAY for the CIE D65 LED illuminant without UV radiation.
3. UV and DAY together for the CIE D65 LED illuminant with UV 365 nm radiation.
4. A for the LED illuminant replicating incandescent/halogen A.
5. 1 for CIE D50 LED illuminant without UV radiation or LED illuminant replicating fluorescent U35.  
When 1 for CIE D50 illuminant, UV and 1 for CIE D50 LED illuminant with UV 365 nm radiation.
6. 2 for LED illuminant replicating CWF L (Cool White LED) (4200 K) or L35 (LED) (3500 K).
7. 3 for LED illuminant replicating U30 L (LED) (3000 K) or TL84 L (LED) (4000 K) or CIE L30-B2 (LED) (3000 K).
8. 4 for LED illuminant replicating CIE L40-B3 (LED) (4100 K).
9. Long press DAY for 3 seconds for directional D65 LED illuminant after removal of the white diffuser (the Backlight of the DAY button turns blue).

### **Advanced settings:**

#### **1. Daylight with or without UV radiation:**

In this light booth, users can use daylight with or without UV radiation. The system is set up by default using daylight with UV radiation. The following two steps explain how to change the default settings for both, CIE D65 and CIE D50 LED illuminant:

- a. Long press UV and DAY for 3 seconds (until UV button backlight changes) switches default status of CIE D65 LED illuminant between D65 with (DAY+UV) or without UV 365 nm radiation (DAY alone);
- b. When 1 is CIE D50 illuminant, long press UV and 1 for 3 seconds (until UV button backlight changes) switches default status of CIE D50 LED illuminant between D50 with (1+UV) or without UV 365 nm radiation (1 alone);

#### **2. Enabling directional D65 for beyond color assessment:**

In this light booth, users can use directional D65 for surface inspection, including defect inspection as well as surface characterization (e.g. orange peel). To enable this feature:

- a. Press and hold DAY button until LED backlight turns blue for DAY button (2-3 seconds).

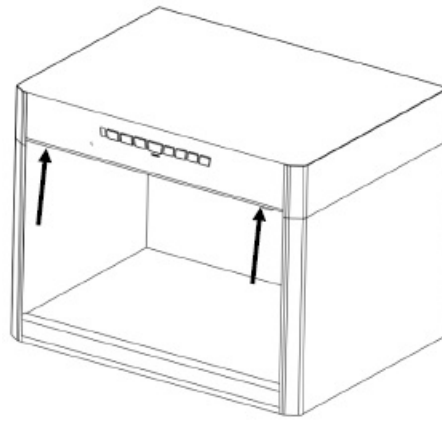
**NOTE:** For best directional D65 performance, X-Rite recommends removing the upper optical diffuser.

#### **3. For optimal performance of Directional D65:**

**NOTE:** The optical diffuser must be re-installed to use the other illuminants in the system to achieve best performance.

- a. With one hand, hold the diffuser frame to avoid from moving down and remove the two Screws at the bottom-front part of the Judge LED luminaire with the other hand.





- b. Carefully move down the diffuser frame to its resting position
- c. Remove the two Screws holding the upper optical diffuser
- d. Grab the optical diffuser from its left and right-front corner and slightly lift it up and pull it towards the front to remove it
- e. To re-install back the optical diffuser in its original position, follow the removal steps in reverse order and pay special attention to the orientation of the diffuser which is given by the rear design of the diffuser frame

### Using the Remote Control

**NOTE:** Refer to the sticker placed within the drawer located at the right side of the luminaire to identify which illuminant is enabled in each position.

- Before using any illuminant, main power switch must be turned on.
- The backlight LEDs in each button will illuminate white when an illuminant is selected.
- All buttons except UV are interlocked; current illuminant in use will switch off when the next illuminant is selected.
- Pressing the same button again will also turn off the illuminant.

### Press the button labeled:

1. In case the front ON/OFF button is OFF, please press the button to switch on the system.  
UV for the ultraviolet illuminant.
2. NOTE: The ultraviolet illuminant (UV) can be used in combination with DAY (CIE D65 LED) or CIE D50 LED illuminant radiating UV 365 nm or standalone for evaluation of optical brighteners, whitening agents, or fluorescent dyes or pigments radiating UV 385 nm.  
DAY for the CIE D65 LED illuminant without UV radiation.
3. UV and DAY together for the CIE D65 LED illuminant with UV 365 nm radiation.
4. A for the LED illuminant replicating incandescent/halogen A.
5. 1 for CIE D50 LED illuminant without UV radiation or LED illuminant replicating fluorescent U35.
6. When 1 for CIE D50 illuminant, UV and 1 for CIE D50 LED illuminant with UV 365 nm radiation.
7. 2 for LED illuminant replicating CWF L (Cool White LED) (4200 K) or L35 (LED)(3500 K).
8. 3 for LED illuminant replicating U30 L (LED) (3000 K) or TL84 L (LED) (4000 K) or CIE L30-B2 (LED) (3000 K).
9. 4 for LED illuminant replicating CIE L40-B3 (LED) (4100 K).
10. Long press DAY for 3 seconds for directional D65 LED illuminant after removal of white diffuser (Backlight of DAY button turns blue).



### Advanced settings:

#### 1. Daylight with or without UV radiation:

In this light booth, users can use daylight with or without UV radiation. The system is set up by default using daylight with UV radiation. The following two steps explain how to change the default settings for both, CIE D65 and CIE D50 LED illuminant:

- a. Long press UV and DAY for 3 seconds (until UV button backlight changes) switches default status of CIE D65 LED illuminant between D65 with (DAY+UV) or without UV 365 nm radiation (DAY alone).
- b. When 1 is CIE D50 illuminant, long press UV and 1 for 3 seconds (until UV button backlight changes) switches default status of CIE D50 LED illuminant between D50 with (1+UV) or without UV 365 nm radiation (1 alone).

#### 2. Enabling directional D65 for beyond color assessment:

In this light booth, users can use directional D65 for surface inspection, including defect inspection as well as surface characterization (e.g. orange peel). To enable this feature:

- a. Press and hold DAY button until LED backlight turns blue for DAY button (2-3 seconds).

### System interfaces

In Judge LED system, different interfaces can be used to interact with the light booth:

- a. Daisy chain IN
- b. Daisy chain OUT
- c. DIP switch 1
- d. DIP switch 2
- e. USB-A
- f. USB-C



1. Daisy chain IN and Daisy chain OUT are connections to interconnect multiple Judge LED light booth luminaires via daisy chain cable to simultaneously control illuminants in multiple systems.
2. DIP switch 1 and DIP switch 2 define identification of individual Judge LED luminaire within a multiple Judge LED luminaire setup. By default, this option must not be changed after factory settings unless recommended by X-Rite service or application team.
3. USB-A and USB-C can only be used by X-Rite and its global service organization.

**NOTE:** All the above interfaces are protected with a rubber cap when leaving the factory and X-Rite recommends to not remove them.

## TECHNICAL SPECIFICATIONS

Device dimensions	H 545 mm x D 535 mm x W 710 mm
Shipping dimensions	Booth: H 280 mm x D 485 mm x W 755 mm Luminaire: H 220 mm x D 785 mm x W 750 mm
Device weight	29.4 kg
Shipping weight	39.8 kg
Electrical	Power 100-240Vac 50/60Hz Main Fuse Inlet Socket Live – 10A, 250Vac Power Line Cord Connector: country specific Plug: IEC 60320 C13 type MAINS supply voltage fluctuations up to $\pm 10$ % of the nominal voltage
Safety compliance	Pollution Degree: 2 Usage: Indoor Altitude: 2000M Transient Overvoltage: Category II
Environmental specification	Operating temperature: 0°C to 40°C (32°F to 104°F) Maximum relative humidity 80 % for 0~31 °C, relative humidity 80~50 % for 31~ 40 °C Not for WET LOCATION

Design and specifications subject to change without notice.

## TROUBLESHOOTING

Prior to contacting X-Rite support department for system problems, try the applicable solution(s) described below. If the condition persists, contact us using one of the methods listed in the Service Information section.

Problem	Cause/Solution
Unit not responding	Unit is in power down mode. Press a switch on the front display panel.
	Recycle the power.
	Unit is unplugged. Make sure the AC plug is connected.
	A fuse is blown. See section “Fuse Check and Replacement Procedure” for fuse replacement procedure.
	Contact X-Rite technical support
LED not working	LED burned out or LED panel not installed properly.
	Contact X-Rite technical support.
Remote control not working	Battery in remote is bad. Replace the battery.
	Contact X-Rite technical support.
Daisy chained luminaires not working	Coupling cables are not connected properly. Check all cables and verify connections.
	Recycle the power of the master (first device or control box).
	Contact X-Rite technical support.

## CHINA ROHS DISCLOSURE TABLE

X-Rite, Incorporated. Model Judge LED Series							
Instrument Assembly							
		(Pb)	(Hg)	(Cd)	(Cr6)	(PBB)	(PBDE)
All LED PCB Assembly	LED PCB	O	O	O	O	O	O
Controller PCB	PCB	X	O	O	O	O	O
Button PCB	PCB	X	O	O	O	O	O
AC-DC Adaptor	AC-DC	X	O	O	O	O	O
Cords & Cables		O	O	O	O	O	O
Optic Diffusors		O	O	O	O	O	O
All Frames		O	O	O	O	O	O
Remote Controller		O	O	O	O	O	O
Packaging Material		O	O	O	O	O	O
Table prepared in accordance with SJ/T 11364-2014 standards.							
<p>O GB/T 26572</p> <p>Indicates the concentration of the hazardous substance in all homogeneous material of the part is below the threshold GB/T 26572 standards.</p>							
<p>X Indicates the concentration of hazardous substance in at least one homogeneous material of the part is above the threshold of the GB/T 26572 standards.</p>							
<p>Products EPUP conditions of use – in Chinese sales of electrical and electronic products environmental protection on use period, expressed according to the following Safety Precautions for the use of the product, starting from the date of manufacture, the use of harmful product contained within the life signs substance does not have a serious impact on an environment, persons and property.</p>							

X-Rite makes no warranty of any kind with regard to the material contained in this manual, including implied warranties or fitness for a particular purpose. X-Rite shall not be liable for errors contained herein or for incidental or consequential damages in connection with the performance or use of this material. This manual is the copyright of X-Rite. Any reproduction of the publication in whole or in part without the express permission of X-Rite is a breach of this copyright. The Judge® is a registered trademark of X-Rite, Incorporated.

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### **Frequently Asked Questions**



- **What should I do if the status LED shows a red indication?**

If the status LED shows red, indicating that the illuminants are out of the manufacturer's stated lifetime, contact X-Rite service for immediate attention and replacement.

- **How do I identify which illuminant is enabled in each position on the info slider?**

Refer to the sticker on the info slider located at the right side of the luminaire to identify which illuminant is enabled in each position.

Documents / Resources

<div><div>Judge LED</div><div></div><div>User Guide</div><div><small>Download the User Guide for the Judge LED Light Booth. The User Guide is available in PDF format. Click on the link to download the User Guide.</small></div><div></div></div>	<div><div><a href="#">x-rite Judge LED Light Booth</a> [pdf] User Guide</div><div>JLSA-500, Judge LED Light Booth, Judge LED, Light Booth, Booth</div></div>
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References

- [User Manual](#)

[Manuals+](#), [Privacy Policy](#)

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