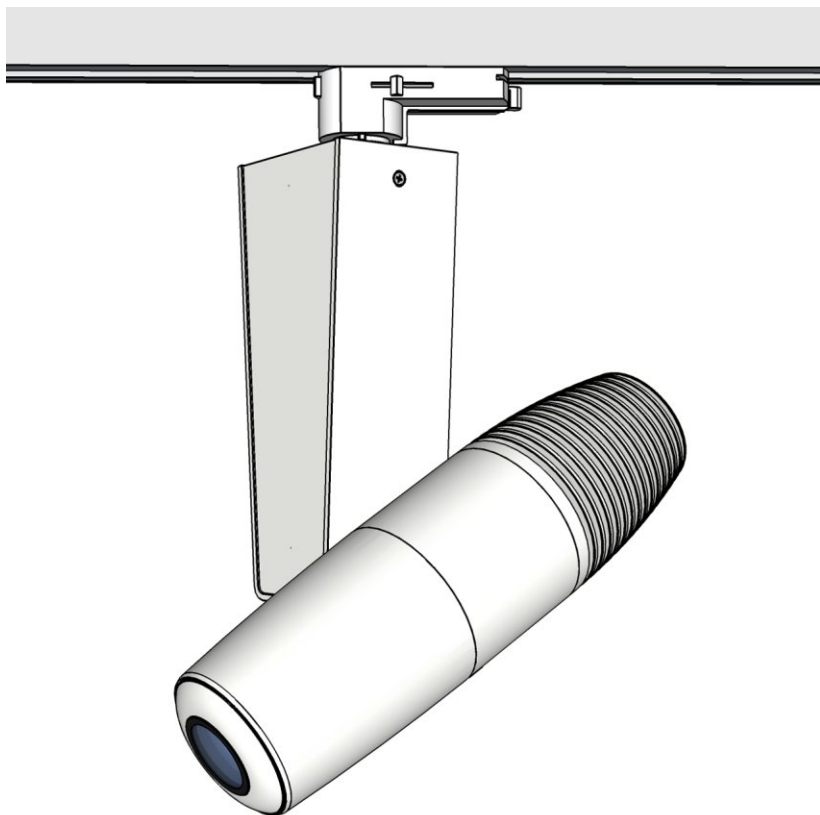


PHOS 20 LT

OPERATING INSTRUCTIONS



derksen®
lichttechnik

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OPERATING INSTRUCTIONS

Thank you for deciding to purchase this high quality product. The PHOS 20 LT projector is produced exclusively in Germany and meets the highest standards of quality and safety. We hope you enjoy many fascinating hours with your new LED projector! To use the device effectively and safely, please read this operating instruction carefully first!



Package Contents:

- LED Projector PHOS 20 LT
- Operating instructions

These optional accessories are available:

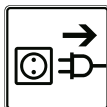
- Glass gobos, custom made according to your specifications

WARNING!

**Read the safety instructions
before operating the appliance or performing maintenance.**

SAFETY INSTRUCTIONS

ELECTRICAL SAFETY



- Disconnect the lighting track system from the mains before you install or remove the LED projector or make modifications to the system.



- Verify that the voltage of the electricity supply system and the voltage of the device are compatible. To this end take note of the type label on the projector.
- Operate the device only with the housing closed completely.
- The device may only be used in dry, closed rooms. Do not operate the device in a humid environment or near dripping or splashing water.
- Do not place any containers with liquids next to the device, such as flower vases or drinks. If the device comes into contact with any liquids it may result in electric shock or fire.
- If, despite all precautions, liquid is spilled into the unit, it must immediately be disconnected from the mains. Do not touch the housing - ingress of liquids may cause an electric shock! Turn on the power again, if you are sure that the device is thoroughly dried.
- If you hear unusual noises, see smoke or strong odor strikes, disconnect the track from the mains immediately and contact your technical service. Continued use could result in electric shock or fire.

BURNS AND FIRE SAFETY

- Do not operate the unit near easily flammable substances such as alcohol or benzine.
- Avoid touching the hot device during operation. Turn the unit off and let it cool at least 10 minutes before servicing the unit or changing the gobo.
- The device is designed for normal room temperature. High ambient temperatures or direct sunlight may damage the unit.
- Make sure that the device is adequately supplied with fresh air, so that it does not overheat. Never cover the projector with objects.
- When the device is installed in a closed wall, ceiling or cabinet, ensure a sufficient supply of fresh air.



SAFE USE OF LIGHTING TRACKS

- Lighting tracks must be installed by a qualified electrician in accordance with the local safety regulations. Always follow the installation instructions that came with your lighting track system!
- Never install lighting tracks in a damp or wet location.
- Disconnect the track system from the mains before you install or remove the LED projector or make modifications to the system.
- The adapter is made from highly durable polycarbonate. Avoid contact with lubricants, solvents or cleaning solutions, because these may decrease the durability of the plastic.
- Cleaning: Unplug the lighting track system from the mains and use only a damp cloth.

SAFETY DURING INSTALLATION AND OPERATION

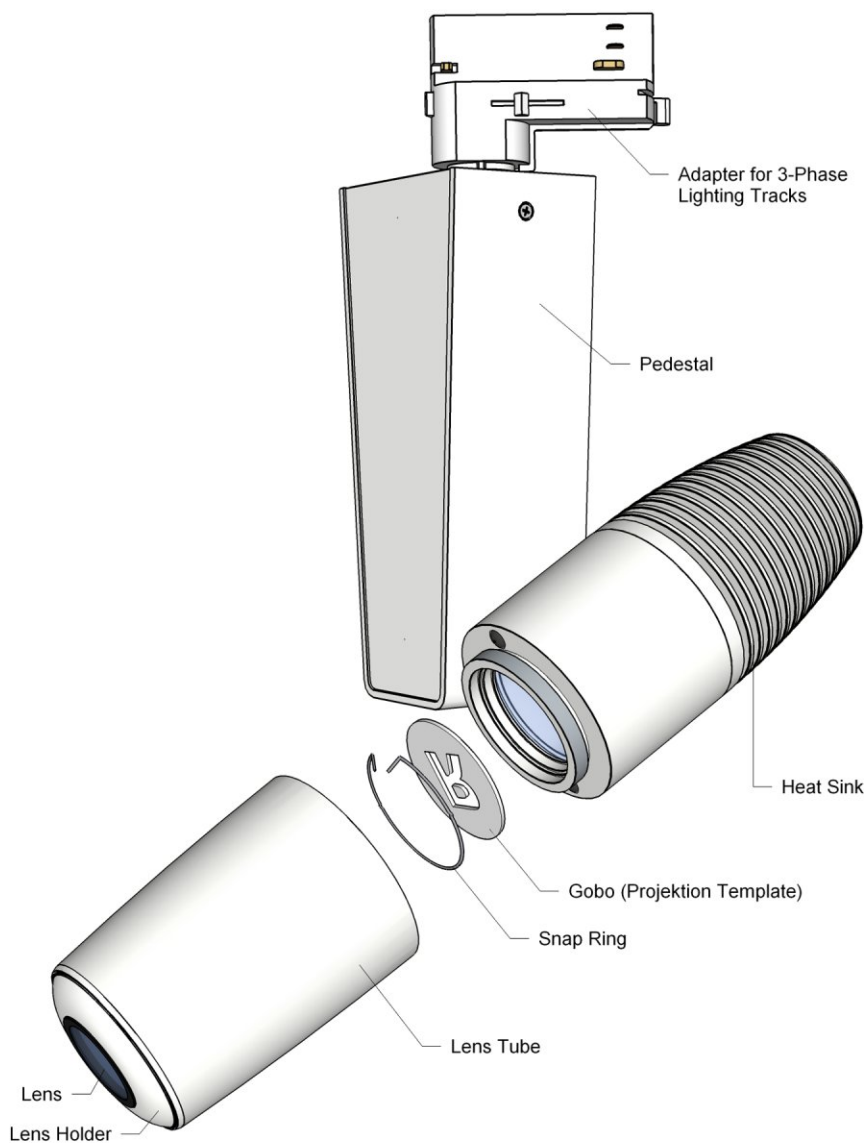


- Ensure that the supporting structure, such as ceiling, curtain wall or truss system, can carry at least four times the weight of the device, so at least 11.2 kg (safety factor 4). Observe the local safety regulations!
- Always use the appropriate mounting accessories according to the local conditions, such as anchors, screws, etc.
- Make sure that the lens tube and lens are attached firmly so that they can not fall down.
- Use only genuine accessories and spare parts from Derksen Lichttechnik, which have been specially developed for use with the device. Use only glass gobos, metal gobos or special color slides as projection templates.
- Do not alter, disassemble, or otherwise damage the projector, since otherwise it will no longer meet the safety requirements.

LAMP SAFETY

- Do not look directly into the light beam of the LED.

TECHNICAL OVERVIEW

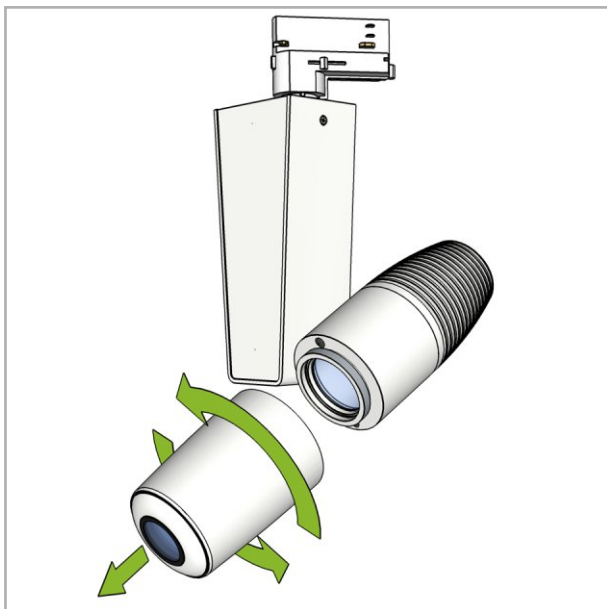


Technical overview of the projector and its components

SETTING UP

Step 1:

Turn the lens tube counterclockwise and remove it from the projector.

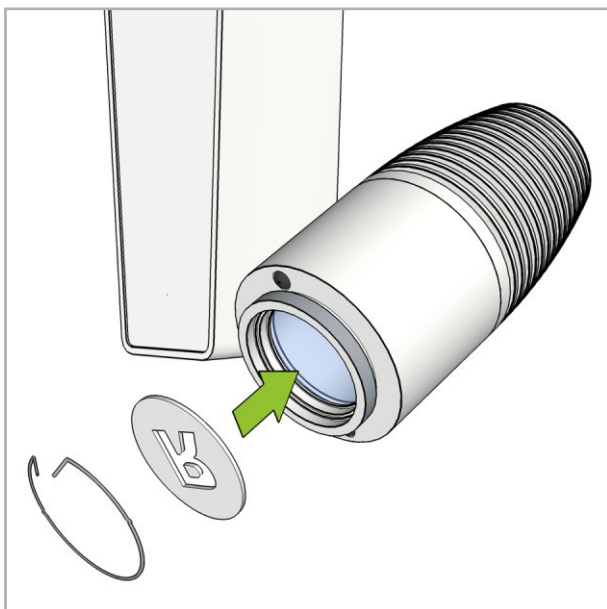


Step 2:

Insert the gobo in the light output of the device.

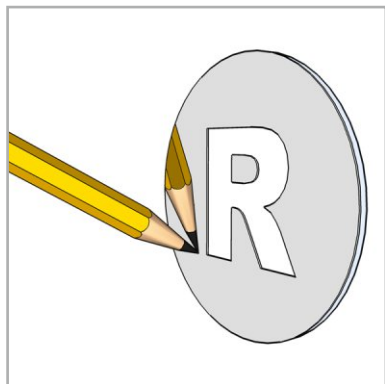
Insert the snap ring in the light output, while squeezing it slightly.

Push the snap ring inside until it fixes the gobo.

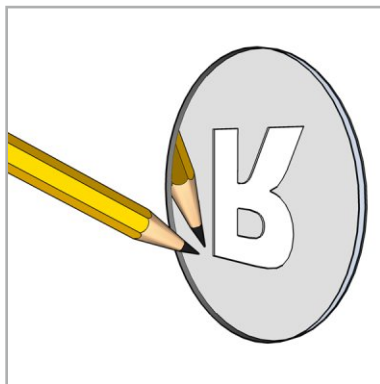


How to place a gobo correctly:

The coated side should face to the light source, the motif should be upside down.



Coated side: *the object is reflected directly and without a gap. The coated side should face the light source.*

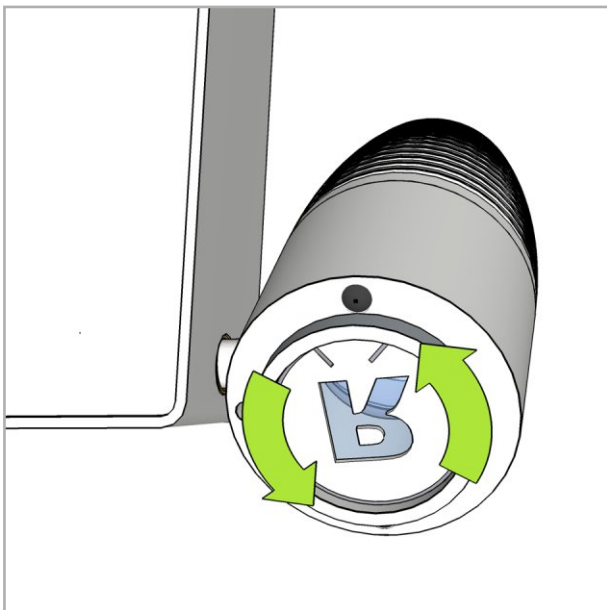


Glass side: *there is a small gap between the object and its reflection. The glass side should face the lens.*

- Put the lens tube on the projector and turn it clockwise until it is firmly attached.
- Switch the device on and align the projected image.
- Focus the projected image by turning the lens in the lens tube forward or backward (step 4).
- Eventually you need to align the projected image by rotating the gobo (step 3). Therefore, the lens tube must be removed again.

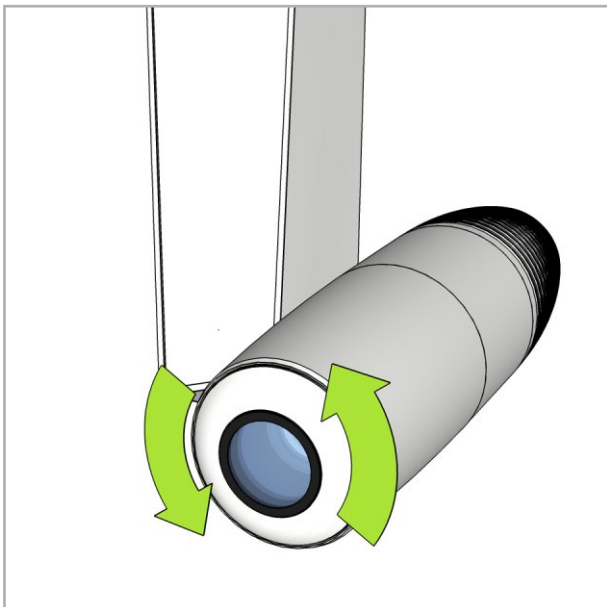
Step 3:

Rotate the gobo to align the projected image.



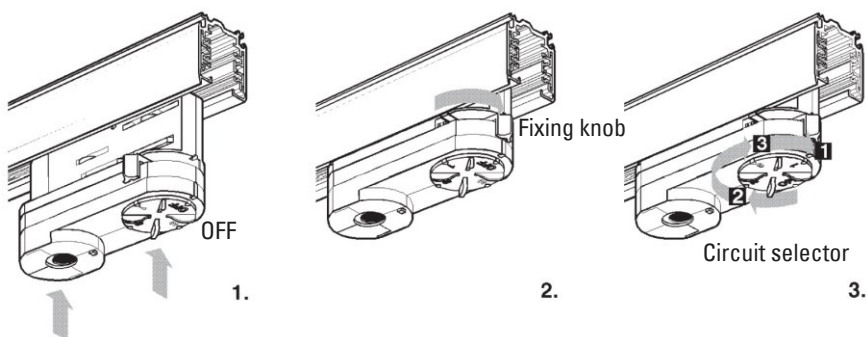
Step 4:

Focus the projected image by turning the lens.



INSTALLATION

- Do not shift the adapter in the track! To change the position of the LED projector, remove the adapter from the track and insert it in the new position.

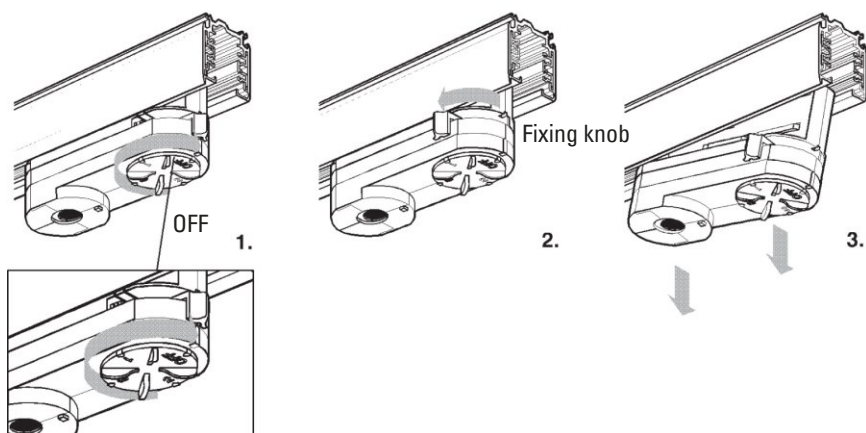


1. Push the adapter into the lighting track until it snaps into place.
2. Turn the fixing knob clockwise to lock the adapter firmly into the track.
3. Set the selector to the desired circuit (1 - 2 - 3).

DISMOUNTING



- Do not shift the adapter in the track! To change the position of the LED projector, remove the adapter from the track and insert it in the new position.



1. Turn the circuit selector to the "OFF" position.
2. Turn the fixing knob counterclockwise to unlock the adapter. Note: The adapter can only be unlocked when the circuit selector is set to the "OFF" position.
3. Pull the adapter with the end of the locking lever first out of the track.

CLEANING, REPAIR AND SERVICE

- Clean the device only from the outside with a soft cloth. Do not use strong detergents or solvents such as alcohol or benzine.
- Use only optical cleaning cloths to clean the front lens.
- Repairs and cleaning of the inside may only be performed by a qualified service technician.
- Devices can be returned for service or repair directly to Derksen Lichttechnik GmbH. Transport and ship the device in its original packaging. If this is not available anymore, you can use a cardboard box with adequate padding on the inside.
- Only use genuine spare parts from Derksen Lichttechnik.

TECHNICAL SPECIFICATIONS

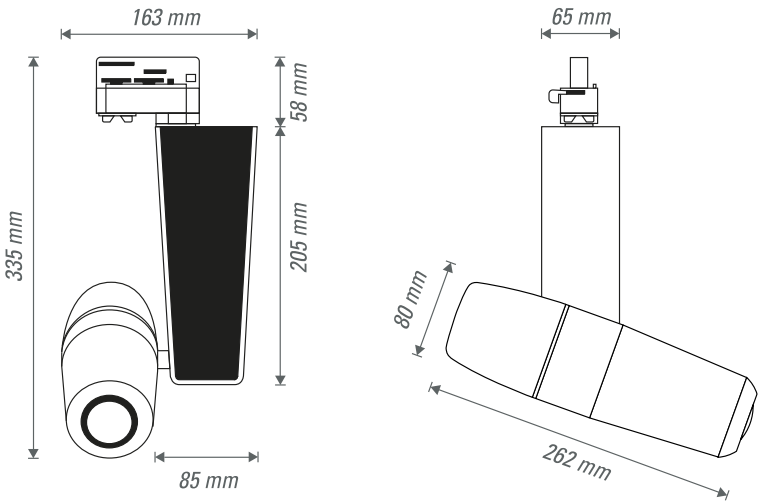
item:	PHOS 20 LT
housing:	aluminium
weight:	2.8 kg
on / off switch:	on the backside of the pedestal
environmental conditions:	for dry indoor environments only
pivot range:	approx. 320° vertical, 358 horizontal
cooling:	passiv, noiseless
light source:	20 W High-Power LED
recommended projection distance in normal room light:	3 m
recommended projection distance in darkness:	8 m
average lifetime of the LED:	65,000 operating hours
colour temperature:	6,500 - 8,000° Kelvin
luminous flux of the LED:	1,700 Lumen
gobo size / image size:	50 mm ø / 32 mm ø
voltage:	90 - 264 V AC / 47 - 63 Hz
active power (power consumption):	26 W
apparent power:	55 VA
efficiency:	0,48 cos. φ
electrical protection:	protection class I
item number:	
silver	20001430
black	20001420
white	20001410

Configuration

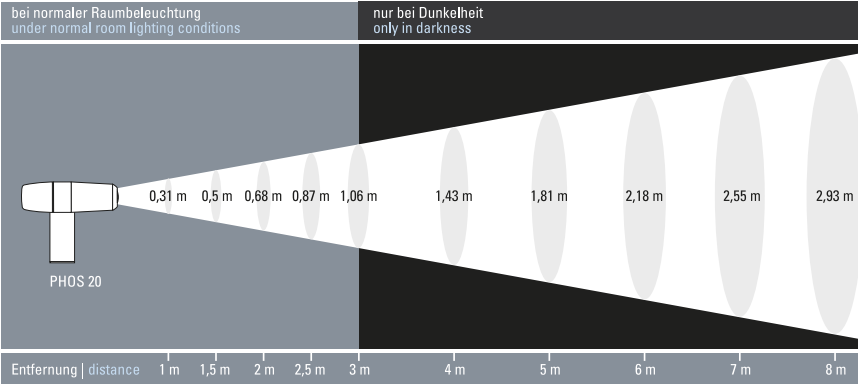
Standard series with high power LED, 85 mm standard lens, adapter to mount the projector on a 3-phase lighting track. The machine is ready to run. Required accessories: glass gobo with individually designed motif.



Dimensions



Projection diameter with increasing distance



*We reserve the right to make technical and optical modifications.
Our general terms and conditions apply.*



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