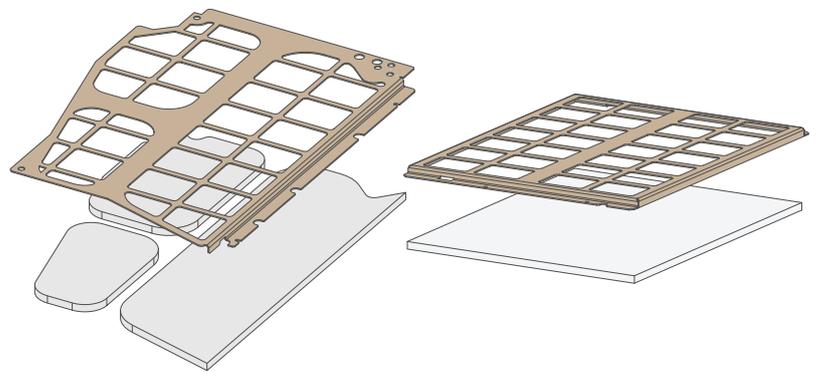


# UDX Bottom filter



Installation manual



# Safety

# 1

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## About this chapter

Read this chapter attentively. It contains important information to prevent damage to the projector. Ensure that you understand and follow all safety instructions mentioned in this chapter before installing the bottom filter. After this chapter, additional “warnings” and “cautions” are given depending on the installation procedure. Read and follow these “warnings” and “cautions” as well.

## 1.1 Safety instructions



**WARNING:** Before Mounting and removing the bottom filter, disconnect the power to the unit mains appliance inlet.

### Installation personnel

This assembly of the frame and installation of the projector must be performed by authorized and qualified technical personnel only.

### Transportation of the frame

Never transport the multifunctional frame in portrait position with a projector mounted. Failure to do so can cause damage the multifunctional frame. Refer to [Image 1-1](#) for a bad and good example of transportation.

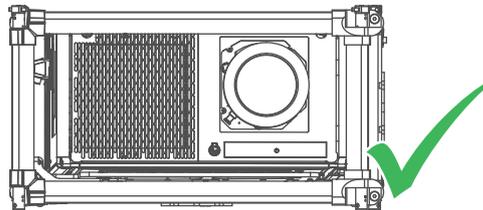
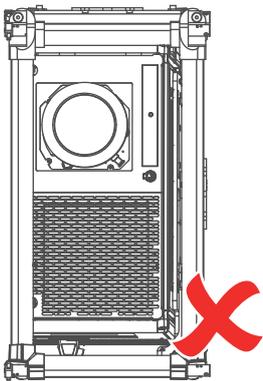


Image 1-1 Transportation method of the frame



This limitation only counts for **transportation** of a rigging frame with projector mounted. You can still **install** the projector in portrait position while in the rigging frame.

## 1.2 Safety precautions Hazardous Chemicals

### Cleansing agent: sodium carbonate crystals ( $\text{Na}_2\text{CO}_3$ )



Handling the cleansing agent:

- Conserve the product in the original container in a cool, well ventilated place.
- Keep away from Incompatible materials: sources of ignition, direct sunlight.
- Keep container closed when not in use.
- After handling: Wash hands and other exposed areas with mild soap and water.

Personal protection rules:

- Handle the cleansing agent in a well ventilated area.
- Do not eat, drink or smoke during use.
- Wear gloves (Butyl rubber, PVC....) and goggles.
- Wear suitable protection clothing.



**WARNING:** Before handling Hazardous Chemicals ensure that you have read and understood the safety instructions provided by the supplier of the chemical in the Safety Data Sheet.

## Safety Data Sheets for Hazardous Chemicals

For safe handling information on chemical products, consult the Safety Data Sheet (SDS). SDSs are available upon request via [safetydatasheets@barco.com](mailto:safetydatasheets@barco.com).



# Bottom filter

# 2

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2.2	Mounting the filter on UDX with rigging frame.....	8
2.3	Mounting the filter on UDX without rigging frame .....	10
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## 2.1 Overview

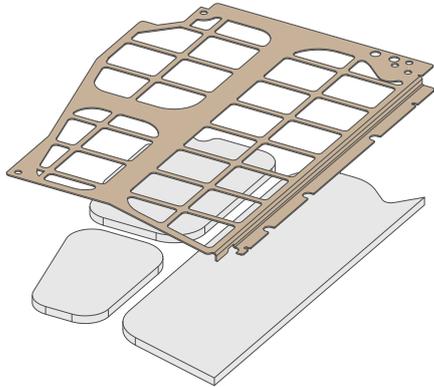
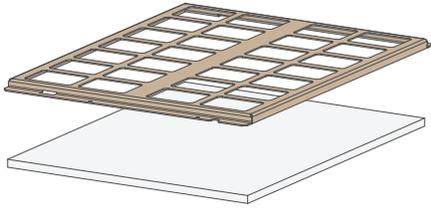
### Purpose of the UDX series bottom filter

The UDX series bottom filters are exclusively designed for the Barco UDX projectors and can thus not be used on any other equipment.

The filters has are designed to help protect the LDMS present in UDX projectors, while mounted in environments with polluted air.

### Two types of filters

The UDX projectors have several variants in the field, and thus two types of filter have been designed:

Product number	R9802352	R9802353
Description	Filter for UDX projector with rigging frame (either with or without motorization)	Filter for UDX projector without rigging frame
Kit content	Filter holder and three types of filter pieces (1 piece of each type)	Filter holder and one filter piece
Image of kit content		

## 2.2 Mounting the filter on UDX with rigging frame

### Required tools

- Allen wrench 3 mm
- Allen wrench 5 mm
- Allen wrench 6 mm

### How to prepare the UDX

1. Place the UDX with rigging frame upside down.
2. If the UDX motorization is installed on the rigging frame, temporary release the Skew actuator from the rigging frame.

 *Tip:* For detailed instructions on the removal and installation of the skew actuator, refer to the motorization installation manual (R5906146).

 *Tip:* The filter will be mounted partially underneath the skew actuator. If not removed, the installation will be quite cumbersome.

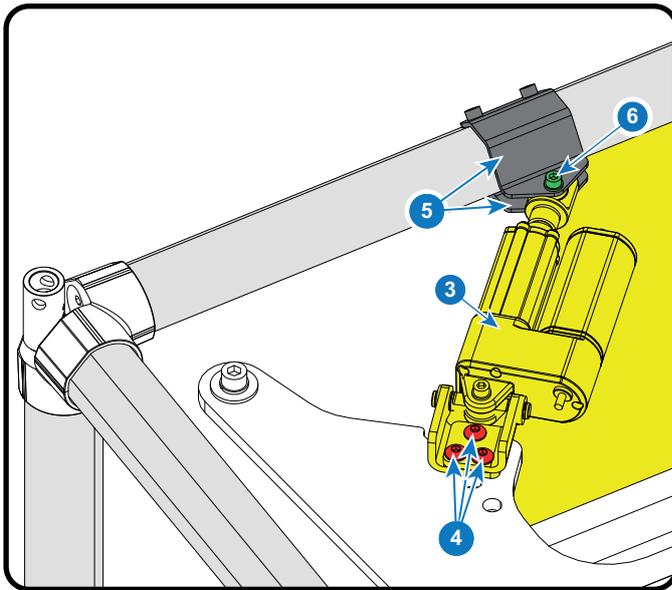


Image 2-1 Location of the skew actuator

3. Release two of the M8 screws and washers mounted into the bottom of the rigging frame, as indicated in the following picture (reference 1, [Image 2-2](#)). Use a 6 mm Allen wrench.
4. Release two of the M4 screws on the bottom plate of the projector as indicated in the following picture (reference 2, [Image 2-2](#)). Use a 3 mm Allen wrench

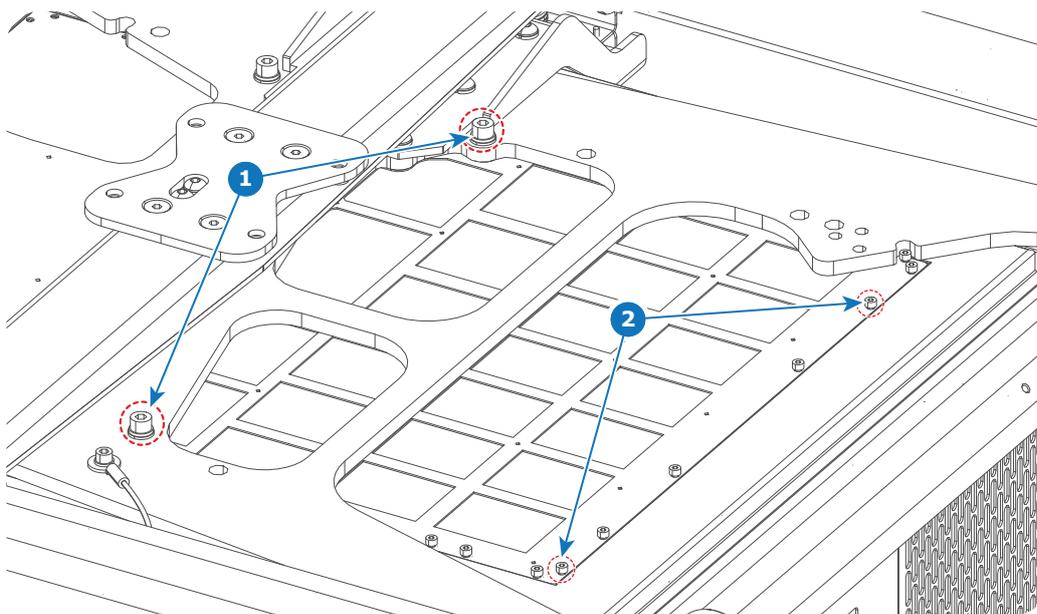


Image 2-2 Location of the screws to be removed

5. Place the three filter foam pieces in the appropriate openings, as indicated in the following picture ([Image 2-3](#)).

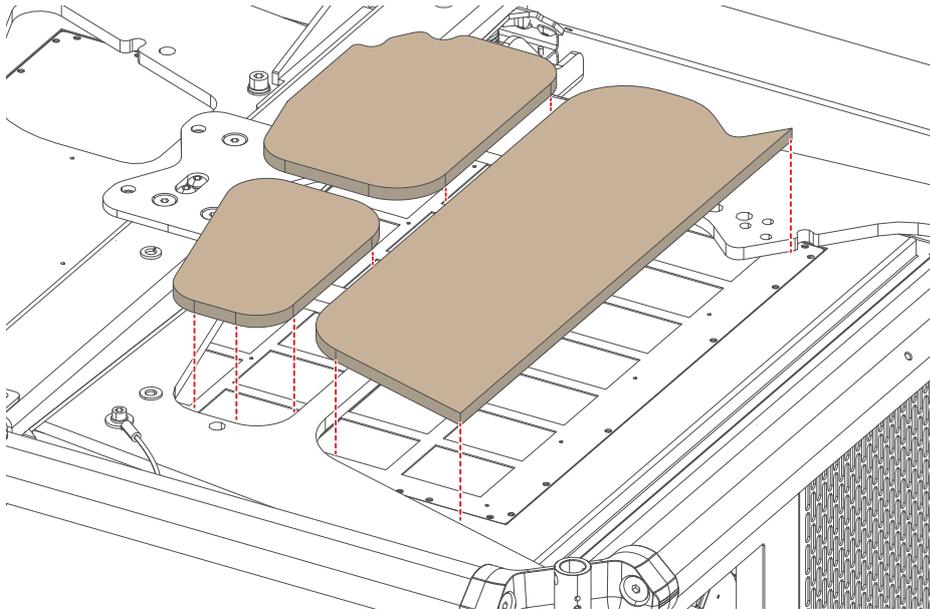


Image 2-3 Placing the filter foam pieces

6. Place the filter frame on the projector bottom plate as illustrated and drive the previously released screws back in.

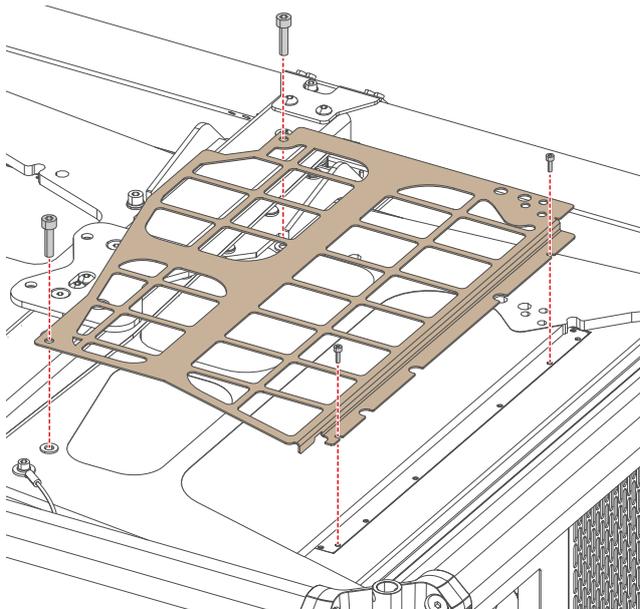


Image 2-4

7. If the UDX motorization is installed on the rigging frame, mount back the Skew actuator from the rigging frame.



*Tip:* For detailed instructions on the removal and installation of the skew actuator, refer to the motorization installation manual (R5906146).

## 2.3 Mounting the filter on UDX without rigging frame

### Required tools

Allen wrench 3 mm

## How to mount

1. Flip the projector upside down.
2. Release four screws from the bottom plate, as indicated by the following picture (reference 1, [Image 2-5](#)). Use a 3 mm Allen wrench to loosen the screws.

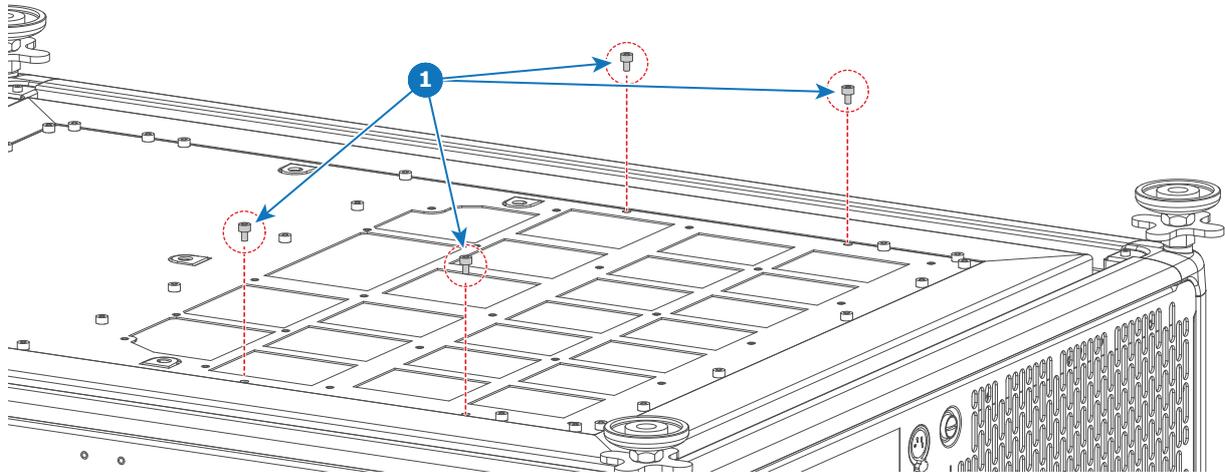


Image 2-5 Screws from the bottom plate to be removed

3. Mount the foam and filter on the bottom plate as illustrated in the following picture.

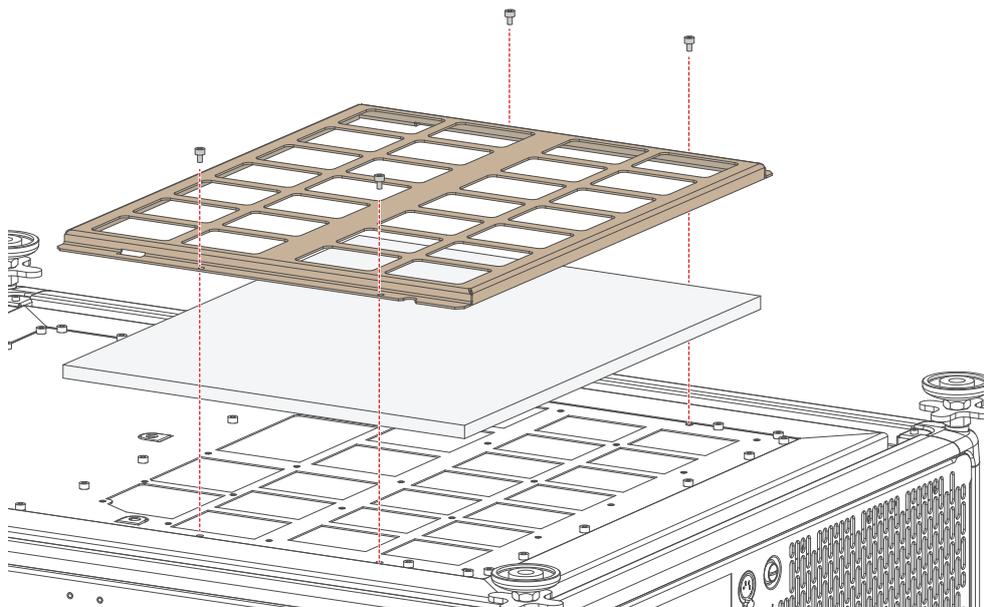


Image 2-6 Mounting the botto filter

4. Drive the previously removed screws back into the bottom plate of the projector. Use a 3 mm Allen wrench to tighten the screws.

## 2.4 Maintenance of the filters

### Preventive maintenance period

Similar to the other filters of the UDX, it is advised to inspect the filters once per month. Do this by doing a quick check on the outside and comparing it to filters that are easier to access (top filter and side filter). Clean the filters if necessary.

Cleaning the filters should happen once every 2 years, or once every 1500 hour runtime.



Since it is more cumbersome to clean the bottom filter when compared to the regular UDX filters, it is advised to only remove the bottom filter when visual inspection and comparison point to it being necessary to clean the filters



Inspecting the filters can be performed by a trained projectionist who is aware of potential risks involved.  
Removing and cleaning the filter can only be performed by a certified service technician.

### How to clean the filters?

1. Remove the bottom filter from the projector in the same way you have mounted it.
2. Inspect the filter.
3. Clean the filter using a vacuum cleaner, or by using a by a  $\text{Na}_2\text{CO}_3$  mixture. For more info, see [“Washing and drying the dust filters”](#), page 12.  
or  
Replace the filter if it is too dirty or when damaged.
4. When cleaned, mount the filter back onto the projector.

## 2.5 Washing and drying the dust filters

### About filter washing and drying

For environments where popcorn grease and such can contaminate the filters, Barco advises the client to purchase one extra set of filters to cover drying time, as well as taking following extra precautions and instructions pertaining to filter cleaning and drying.

### Cleansing agent

To clean sticky, greasy dust filters we suggest usage of **Sodium carbonate** crystals ( $\text{Na}_2\text{CO}_3$ ). Sodium carbonate (Often called **washing soda**, **soda crystals**, or **sal soda** in the detergent section of stores) is widely used to effectively remove oil, grease, alcohol stains ... The product itself is relatively safe, sodium carbonate is used in toothpastes and as a food additive (E500). Potential Hazards are described in the section [“Safety precautions Hazardous Chemicals”](#), page 4.

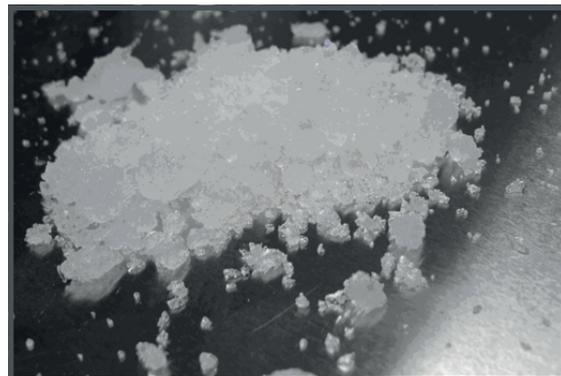


Image 2-7 Sodium carbonate crystals.



This cleaning procedure assumes that the filters are already removed from their slots.



Take into account that the time needed to dry the dust filters may be 24 hours or more. For that, it's recommended to have a second set of dust filters which can be used while cleaning the first set.

## Required tools

- Bucket with hot water
- Sodium carbonate, 30 gram (handful) per liter hot water

## How to wash and dry the dust filters?

1. Make a solution with a ratio of 30 gram (a handful) sodium carbonate to 1 liter **hot water**.
2. Soak the dust filters in the solution for **30 to 60 minutes**. The grease should be dissolved after 1 hour.
3. If the dust filter is still clogged repeat this procedure from step 1.
4. Rinse the dust filters with clean water to flush all grease residue away.
5. Shake out all excess liquid by repeatedly swinging the filter to-and-fro in a centrifugal action.
6. Then allow the filters to **dry thoroughly**.



*Note:* Drying time of the dust filters can be up to 24h or more. Drying time can be shorter when being done in a well-ventilated area.



*Tip:* To speed-up drying, allow the filter(s) to dry at 50°C max in a well ventilated room.



**CAUTION:** UNDER NO CIRCUMSTANCES SHOULD WET FILTERS BE INSTALLED BACK INTO THE PROJECTOR. THIS CAN HAVE SERIOUS SAFETY CONSEQUENCES AS WELL AS JEOPARDIZE THE INTERNAL OPTICS OF THE SYSTEM.



**CAUTION:** Do not install/use damaged dust filters. Replace damaged dust filters immediately with new dust filters of the same type. See <https://my.barco.com> for the correct replacement part.





