

FRAME-PF-UNI-PORAD

Portrait Adapter

Manual Version 1.4



Date	Revision No.	Author	1 st Check	Final Check	Description
04.10.2016	1.0	VIU	GCU	DWN / TSN	First Draft
22.02.2019	1.1	VIU	CHZ	VIU	50 mm Clamps removed
02.01.2020	1.2	TSN	VIU	DWN	Layout change
03.04.2020	1.3	VIU	DWN	DWN	EVO Link added
15.03.2024	1.4	GJN	TSN	RBR	Complete revision

Frames compatible with the Portrait Adapter:

FRAME-EVO-P10	FRAME-EVO-P20
FRAME-EVO-P11	FRAME-EVO-E10
FRAME-EVO-P14	FRAME-EVO-C20
FRAME-EVO-P17	

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Tools required



1 x Nr. 10 Screw-wrench
1 x Nr. 13 Screw-wrench
1 x Nr. 17 Screw-wrench



- 1 x Nr. 5 Allen key
- 1 x Nr. 6 Allen key



1 x Universal torque wrench

These installation instructions must always be handed over to the installing person¹. Read these instructions carefully before installing the system.

¹ Only a qualified person should install this product

1. IMPORTANT SAFETY NOTICE

Congratulations on your purchase of the PF-UNI-PORAD Portrait Adapter from EXACT solutions.

Please read very carefully the instructions provided in this manual and you will find all the information needed for a safe and fast installation.

After the installation is done properly, you can enjoy all the features of your new product.

Please consider keeping the original box and packaging materials in case you ever need to ship the Portrait Adapter.

Model number: **FRAME-PF-UNI-PORAD**
 FRAME-PF-UNI-PORAD-US

INTENDED USE

The Portrait Adapter is intended for use by fully qualified, trained, and competent persons as an aid to provide safe and secure installation and adjustment of projector frames.

Only use the Portrait Adapter with the projector frame in a closed environment (conference rooms, theatres, convention halls, etc.) where there is no wind, moisture, heat, etc.

Make sure that only the corresponding projector frames are installed with this Portrait Adapter! Do not try to use it with other projector frames because serious accidents can occur!

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WARNING

Installation work should only be carried out by a qualified technician.

- If this product is not installed correctly, serious accidents may result.

Do not use the Portrait Adapter outdoors.

- This product is made only for indoor usage. If the Portrait Adapter is installed outdoor there are many influences like wind or rain that can influence the stability of the whole system. This can cause serious accidents and property damage.



For indoor usage only

Do not hang the Portrait Adapter on unstable structures.

- If the Portrait Adapter is hanged on an unstable structure, the entire system can fall, and injuries may occur. Make sure that the construction on which the Portrait Adapter is hanged can support a total weight of 200 kg (440.924 lbs.).



Make sure to not exceed the maximum weight load limits (WLL)

- For suspended installations, use only designated hanging accessories, like EVO-LINK-200 series.
- When installing the Portrait Adapter with the EVO-LINK-200 series make sure to not exceed the maximum weight load limits of 150 kg (330.69 lbs.)



Do not install the Portrait Adapter while people are present under the installation zone.

- When installing the projector, make sure no one is in the area underneath the installation zone. **Otherwise, serious accidents may occur if the projector is dropped during installation.**



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Always secure the frame to the rigging truss with safety cable.



- The frame should always be secured with an appropriate safety cable so that in case of a malfunction it doesn't fall more than 5cm. Please consult the local laws or regulations regarding the additional safety of hanging equipment.

CAUTION

Before installing the projector frames with the Portrait Adapter, please read the projector's user manual and the frame installation guide.

- The Portrait Adapter with the projector and the projector frame must be installed only in an environment that is recommended by the projector manufacturer.

Minimum 2 persons are required to install the Portrait Adapter.

- With regard to the overall weight of all necessary installation devices, make sure to handle those with at least two people.

Make sure that the structure from which you hang the Portrait Adapter and the projector frame is capable of carrying the overall weight of approx. 200 kg (440.924 lbs.) plus cabling etc.

- Prior to any installation, you have to do a visual inspection to make sure that the setup is in a good condition.

Always double check the clamps against fissures and loose screws.

- Before and after the setup please perform a visual inspection of the clamps and make sure that they are not damaged or bended.
- Also make sure that the main screw (the one that is used for securing the clamps jaws together) is not damaged and the two nuts are properly tightened.

RISK SITUATIONS

Risk of injury due to the possibility of falling objects during the assembly or disassembly of the Portrait Adapter

- Protection objective: avoid injury from falling parts.
- Wear appropriate safety shoes, gloves and helmet.
- Make sure the area is clear under the frame during installation.

Risk of hitting the head with the Portrait Adapter during the hanging setup process

- Protection objective: avoid injury from hitting the head.
- Wear a helmet.

Incorrect installation may lead to certain parts of the Portrait Adapter or the entire Portrait Adapter to fall.

- Protection objective: prevent personal injury and property damage.
- Double check the Portrait Adapter and its installation.

Insufficient load capacity of the supporting structure may lead to certain parts of the Portrait Adapter or the entire Portrait Adapter to fall.

- Protection objective: prevent personal injury and property damage.
- Provide adequate dimensioning of the supporting structure.
- Ensure correct installation of the supporting structure.

Missing components

- Protection objective: prevent personal injuries and property damage.
- Always check prior to every installation that there are no missing parts.

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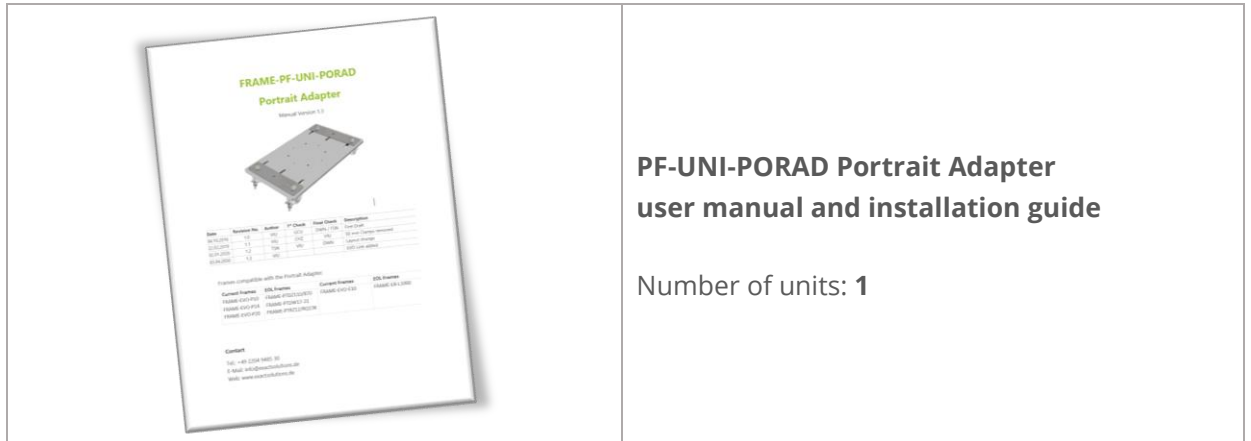
Loose components

- Protection objective: prevent personal injuries and property damage.
- Always check prior to every installation if there are no loose parts.

2. What's in the box?

	<p>FRAME-PF-UNI-PORAD Portrait Adapter Used for hanging projector frames in portrait mode. WLL 150kg </p> <p>Number of units: 1 Weight: 4,5 kg / 9.92 lbs</p> <p>Including:</p> <ul style="list-style-type: none">• 4 x 30mm rigging clamps• 4 x 10mm RippLock™ Zinc-Plated washers 400-500 HV• 4 x M10x35 DIN933/ISO4017 Zinc-Plated Steel-Class 8.8• 4 x M10 DIN 980 nuts Zinc-Plated Steel-Class 8* <p>*do not change the DIN980 nuts with other types of nuts (normal DIN 934 or DIN 985 Nylon-insert).</p>
<p>1) </p> <p>2) </p>	<p>1) 4 x M6 DIN 439 Zinc-Plated Steel-Class 4 2) 4 x M8 DIN 439 Zinc-Plated Steel-Class 4</p>

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**PF-UNI-PORAD Portrait Adapter
user manual and installation guide**

Number of units: **1**

Make sure your box contains everything you ordered. If any pieces are missing, contact the vendor.

3. Optional accessories

	<p>EVO-LINK-200</p> <p>Optional accessory for ceiling mount installations. It has M8 and M6 mounting screws.</p> <p><i>More information can be found in the "EVO-LINK-200 series" manual.</i></p>
	<p>EVO-LINK-201</p> <p>Optional accessory for ceiling mount installations. It has M8 and M6 mounting screws and additional fine adjustment.</p> <p><i>More information can be found in the "EVO-LINK-200 series" manual.</i></p>
	<p>EVO-LINK-210</p> <p>Optional accessory for ceiling mount installations with crossbeam and two clamps. It has M8 and M6 mounting screws.</p> <p><i>More information can be found in the "EVO-LINK-200 series" manual.</i></p>
	<p>EVO-LINK-211</p> <p>Optional accessory for ceiling mount installations with crossbeam and two clamps. It has M8 and M6 mounting screws and additional fine adjustment.</p> <p><i>More information can be found in the "EVO-LINK-200 series" manual.</i></p>

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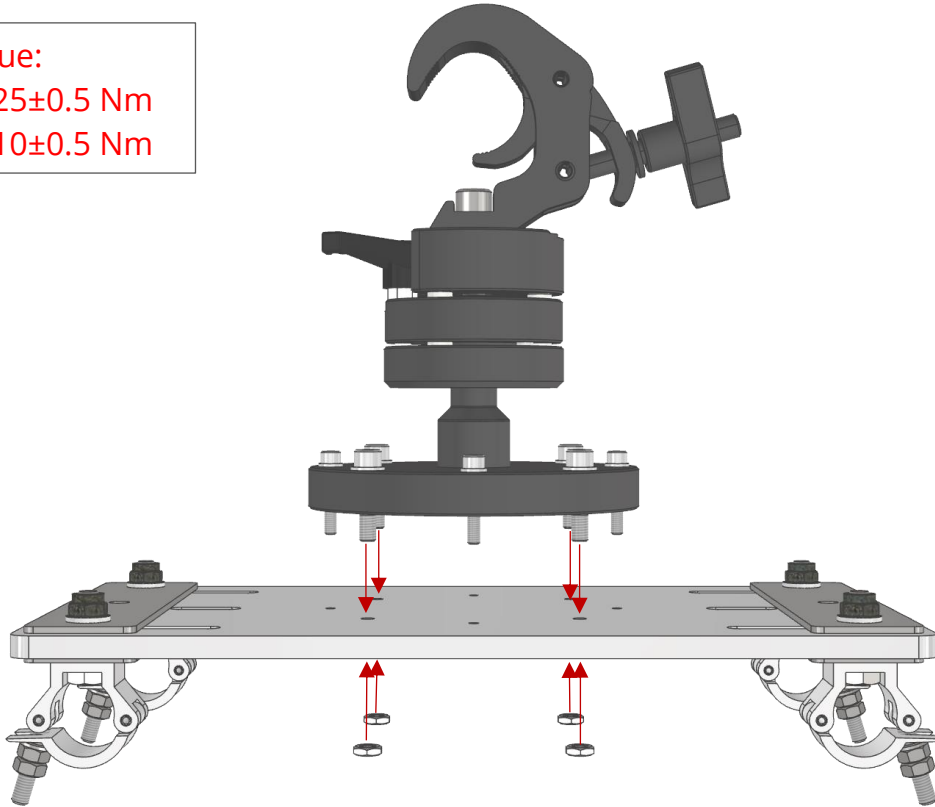
EVO-LINK SK

The EVO-LINK Safety Kit consists of two rigging slings with steel cable insert and two shackles.

The optional accessories must be purchased separately. They are not included in the standard package!

4. Assembling the portrait adapter with EVO-LINK-200

Torque:
M8: 25 ± 0.5 Nm
M6: 10 ± 0.5 Nm



Step1: EVO-LINK-200 series mounts have four M6 and four M8 screws to fix it to the portrait adapter. **All four M6 or all M8 screws have to be used.**

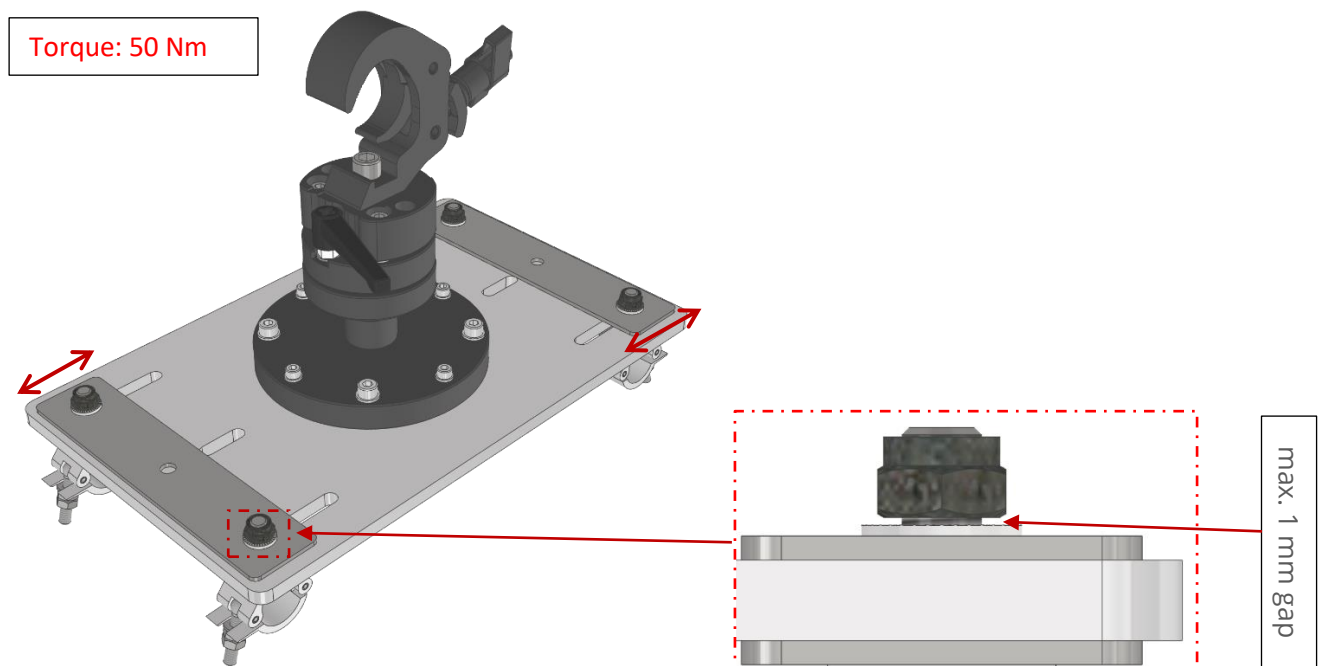
Place the Portrait Adapter on a suitable surface and make sure that the four M8 and the four M6 EVO-LINK-200 series screws are aligned with the four M8 and the four M6 portrait adapter holes.

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Step 2: One can choose between those two sets of screws. Use the 5 mm hex key to tighten the four M6 screws with a torque of 10 ± 0.5 Nm and the 6 mm hex key to tighten the four M8 screws with a torque of 25 ± 0.5 Nm. All four M6 screws or all four M8 screws have to be used.

Step 3: With the help of the Nr 13. screw wrench, tighten the four M8 DIN 439 nuts. If the M6 screws are chosen, please use the Nr 10. screw wrench for tighten the four M6 DIN 439 nuts.

5. Adjusting the rigging clamp position



Step 1: Untighten the four M10 DIN 980 safety nuts until there is a gap of max.1 mm between the nut and the 10 mm safety washer.



Do not remove the M10 DIN 980 safety nuts completely because accidents can occur!

Step 2: Move the rigging clamps together with the four stainless steel plates until the desired position is reached and then tighten back the four M10 DIN 980

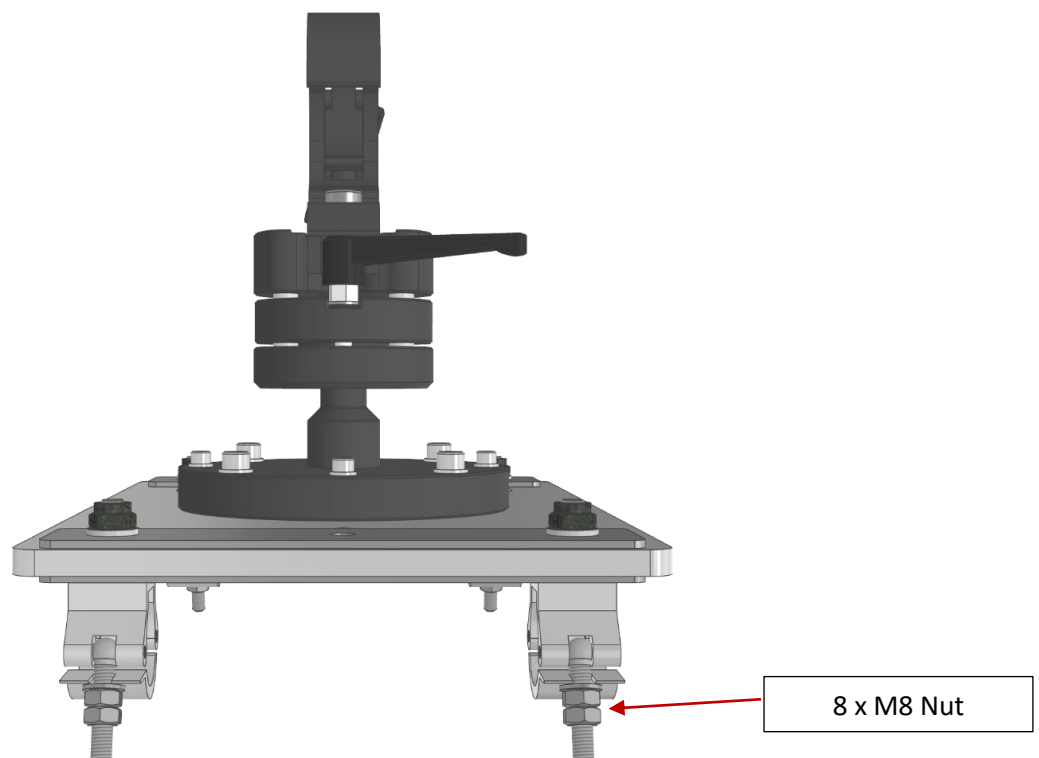
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safety nuts with a torque of 50 Nm. Please move the rigging clamps and the stainless-steel plates in such a way that when the desired position is reached, they are symmetric toward the centre of the Portrait Adapter

To have a guide before attaching to the frame, the distances between the rigging clamps for the below listed frames are as follows:

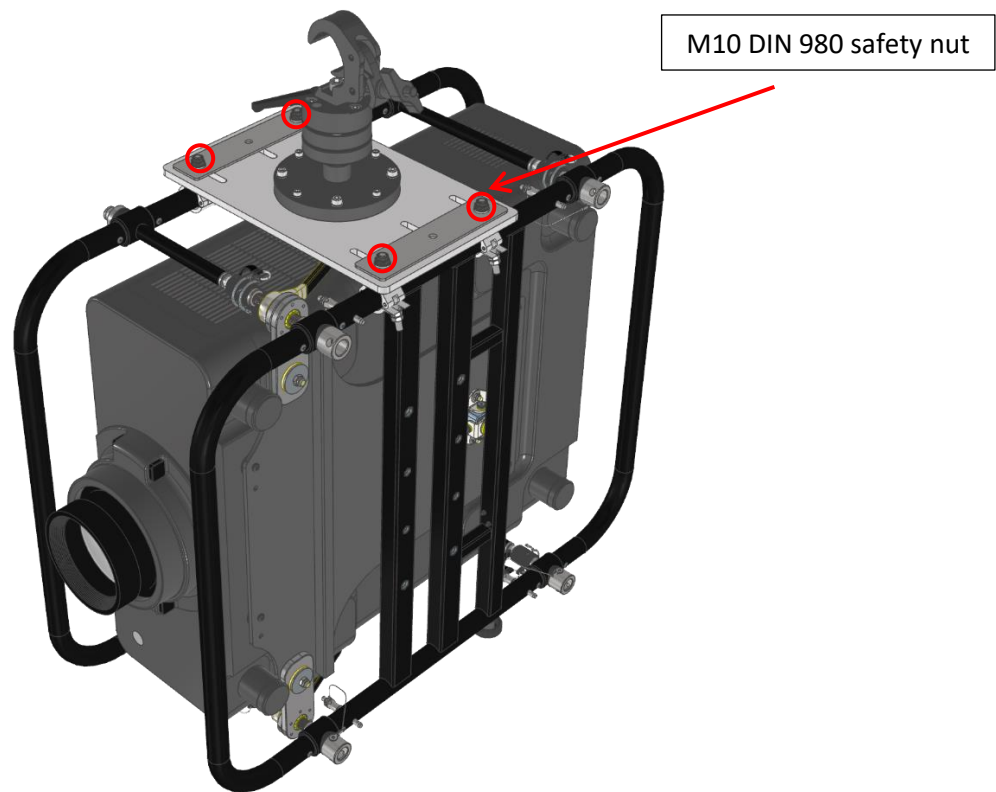
Frame name	Distance between two clamps
FRAME-EVO-P10	265 mm / 10.433 In
FRAME-EVO-P11	300 mm / 11,811 In
FRAME-EVO-E10	265 mm / 10.433 In
FRAME-EVO-P14	275 mm / 10.826 In
FRAME-EVO-P17	300 mm / 11,811 In
FRAME-EVO-P20	337 mm / 13.267 In
FRAME-EVO-C20	337 mm / 13.267 In

6. Attaching the portrait adapter to FRAME-EVO-P10/P11/P17/P20/C20



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Step 1: Unscrew the eight M8 nuts and open the four rigging clamps jaws.



Step 2: Attach the Portrait Adapter to the frame and tighten back the eight M8 nuts using the Nr.13 screw wrench.



Please make sure that the nuts are properly tightened, otherwise accidents can occur!

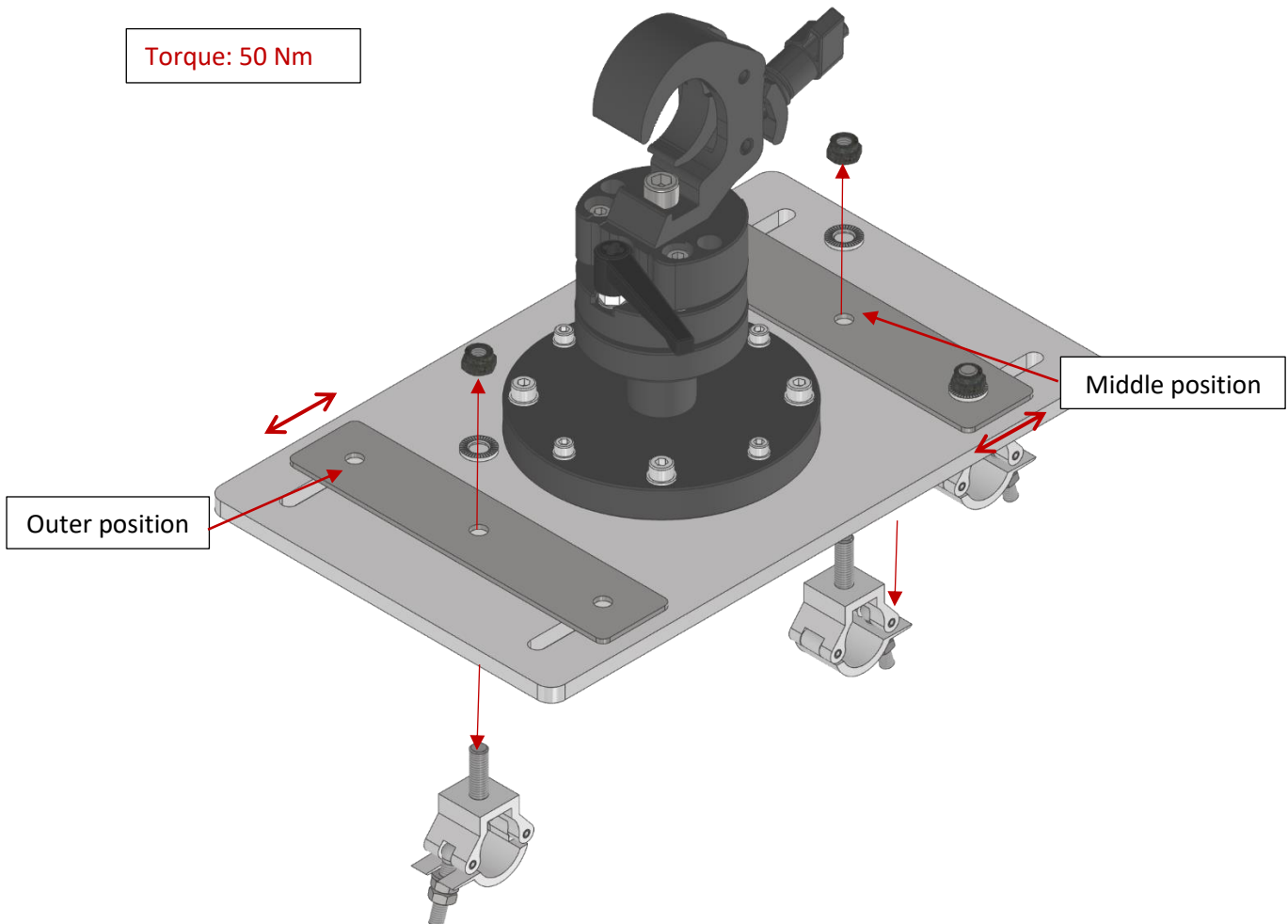
Step 3: Adjust the PORTRAIT ADAPTER to the desired position between the bottom and top pipe of the frame by moving the plate body. Make sure that the stainless steel plates are arranged parallel to each other. Now tighten the M10 DIN 980 safety nuts from **Step 5.1** again.



Please make sure that the nuts are properly tightened, otherwise accidents can occur!

7. Attaching the portrait adapter to FRAME-EVO-P14/ E10

Torque: 50 Nm



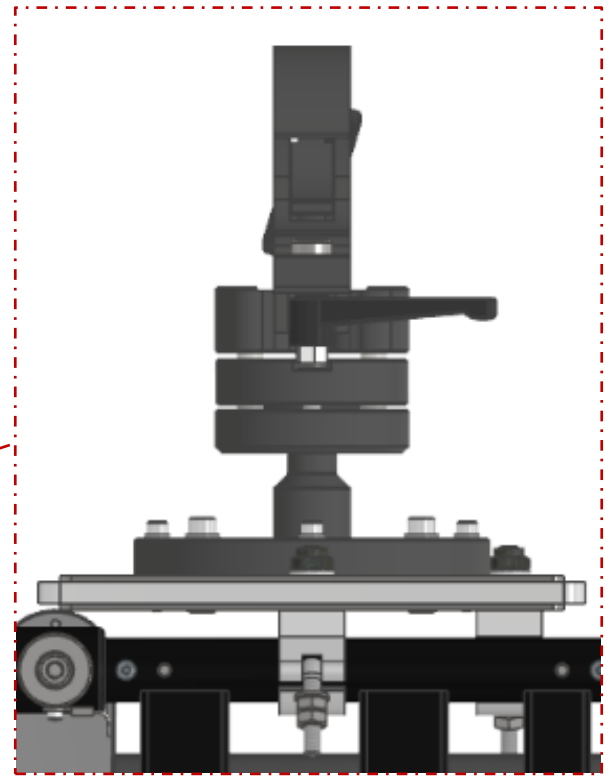
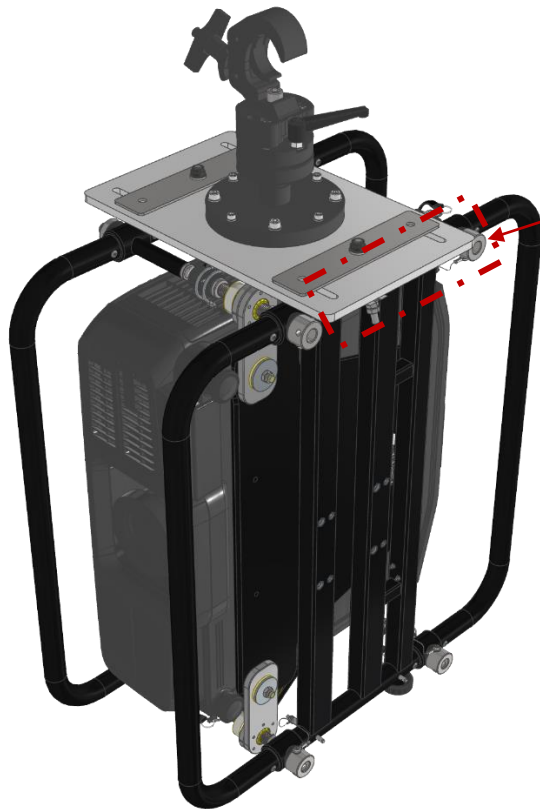
For attaching the Portrait Adapter to the FRMAE-EVO-E10 or P14, two rigging clamps must be repositioned from the outer position to the middle position and one rigging clamp can be removed.

Step 1: Completely remove the two M10 DIN 980 safety nuts by using the Nr.17 screw wrench,

Step 2: Reposition the two clamps in the middle of the plate and then secure the rigging clamps by screwing the two M10 DIN 980 safety nuts.

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Step 3: Move the rigging clamps together with the four stainless steel plates until the desired position is reached and then tighten back the two M10 DIN 980 safety nuts with a torque of 50 Nm.



Projection direction

Step 4: Attach the Portrait Adapter to the frame and tighten back the eight M8 nuts of the rigging clamps using the Nr.13 screw wrench.



Please make sure that the nuts are properly tightened, otherwise accidents can occur!

System maintenance and inspection (re-examination)

The Portrait Adapter does not require special maintenance but **a visual inspection** must be done **prior to every installation** in which the Adapter is involved:

- Please make a visual inspection to be sure that all the screws are in the right place and none are missing;
- Please control the Portrait Adapter plate threads (presented in chapter 4 and 5) to be sure that none is destroyed.
- Make sure that the screws, the rigging clamps, the stainless-steel plates and all the components are not damaged;
- Please control, with corresponding tool (torque screw wrench), that all the screws are properly tightened;
- If any parts are broken or missing, please contact the seller so he can provide the spare parts;



Do not exchange broken or malfunctioning parts with ones that are not accredited by the manufacturer because serious injuries and property damage can occur!

The inspection must be done by a qualified person!

One DGUV V17 inspection must be performed each year. For that, a qualified person needs to disassemble the entire device and carefully check that none of the components are damaged or broken.

Inspections and tests shall be performed according to the manufacturer's instructions and then documented. The tests must be repeated at least annually by an expert.

8. Declaration of Conformity



EC - Declaration of Conformity

We hereby confirm that the following described lifting accessory in its conception, construction and form put by us in circulation is in full accordance with all relevant health and safety requirements and complies with the following EC-directive:

2006 / 42 / EG (EG-Machinery Directive)

This declaration is no longer valid if the lifting accessory is modified without our written consent.

Manufacturer:

EXACT solutions GmbH
Lustheide 85
D-51427 Bergisch Gladbach
Tel.: +49 2204 9485 30

Description of the lifting accessory:

- Function: Hanging System for projector frames in portrait mode: FRAME-EVO P10 / P10US, FRAME EVO E10 / E10US, FRAME EVO P11 / P11US, FRAME EVO P14 / P14US, FRAME EVO P17 / P17US, FRAME EVO P20 / P20US, FRAME EVO C20 / C20US
- Type/model: **FRAME-PF-UNI-PORAD, FRAME-PF-UNI-PORAD-US**
- Serial number: **PF-UNI-PORAD-AA.xxx, PF-UNI-PORAD-US-AA.xxx,**
- Year of construction: 2016

The applied harmonized EN - standards include:

- **DIN EN ISO 1200:2010** Safety of machinery – General principles for design – Risk assessment and risk reduction

Further applied standards and regulations include:

- **DIN EN 1991-1** DE: Eurocode 1: Einwirkungen auf Tragwerke (12/2010)
EN: Eurocode 1: Actions on structures (12/2010)
- **DIN EN 1993 -1** DE: Eurocode 3: Bemessung und Konstruktion von Stahlbauten (12/2010)
EN: Eurocode 3: Design of steel structures (12/2010)
- **DIN EN 1999 -1** DE: Eurocode 9: Bemessung und Konstruktion von Aluminiumtragwerken (05/2010)
EN: Eurocode 9: Design of aluminum structures (05/2010)
- **DGUV V17/18** DE: UVV Veranstaltungs- und Produktionsstätten für szenische Darstellung, Stand Januar 2011 (bisher: BGV C1)
EN: Accident Prevention Regulation for Staging and Production Facilities for the Entertainment Industry (formerly BGV C1)
- **DGUV 315-390** DE: Grundsätze für die Prüfung maschinentechnischer Einrichtungen in Bühnen und Studios (bisher: BGG/GUV-G 912)
EN: Fundamentals for testing in stages and studios of the mechanical equipment (formerly BGG/GUV-G 912)
- **BGI 810-3** DE: Lasten über Personen. Sicherheit bei Produktionen und Veranstaltungen von Fernsehen, Hörfunk, Film, Theater, Messen, Veranstaltungen
EN: Safety at Productions and Events – Loads Suspended above Persons

Bergisch Gladbach, 16th of May 2024

Signature:



(Tobias Schwirten, Managing Director, EXACT solutions GmbH)

Imprint

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