Please read this manual carefully before using the Actus-MV
Thank you for purchasing a Cambo product.

The Actus-MV is a view camera system featuring lateral and vertical shift, tilt and focus movement on the front and rear standard as well as swing movement on the front standard. The Actus-MV is compatible with a wide range of mirrorless and mirror reflex system cameras.

The geared drives on rise/fall, shift and focus movements enable great control over perspective, image displacement and high quality panoramic stitching. Geared tilt and front swing movement enable the photographer to optimize spatial sharpness. The rear focus and front tilt movements are fitted with dual speed gearing for maximal movement control.
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1 Warnings

⚠️ Due to the modularity of the Actus camera system, many camera-lens combinations are possible. Please beware of the possible collision of the rear lens element and the rear standard and/or the sensor. Please note that Cambo is not responsible for any damage done to the Actus, lens or camera, due to improper or careless use.

⚠️ Before changing the camera orientation from landscape to portrait or vice-versa, ensure that there is enough clearance between the camera body and the rear housing of the Actus. If necessary (this depends on the camera body used) use the vertical shift to lift the camera to gain more clearance.

⚠️ Ensure that there is enough clearance between the camera body and the rear housing of the Actus, before dismounting the camera body.

⚠️ (Over)exposure to direct sunlight or heat sources will damage the leather bellows. Keep/store the leather bellows in a cool, dry, dust-free and ventilated place.

⚠️ The Actus uses disc magnets to mount the bellows. These permanent magnets (magnetism N45) could cause temporary or permanent damage to equipment sensitive to magnetism like magnetic cards (credit card, ATM card).

⚠️ Beware that some combinations of swing, tilt, shift and focus adjustments can dismount the bellows.

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1 Please note that memory cards are not magnetic data carriers and will therefore not be damaged by static magnetic fields.
2 Key features

- High grade CNC milled aluminium body
- High precision laser engraved millimetre/ degree scales
- Durable genuine leather bellows
- 70mm telescopic rail extension
- 70mm geared focus\(^2\)
- 40mm horizontal shift (20mm left/ 20mm right)
- 30mm vertical shift (15mm up/ 15mm down)
- 30° dual ratio geared tilt (+15°/ -15°) \(^3\)
- 60° swing (30° left/ 30° right) \(^4\)
- Friction knobs on all movements
- 2-way/ 4-way stitching possibilities
- Zero position click indication
- Interchangeable interface plate, lens panel, rail and bellow\(^5\)
- Integrated 3/8” and ¼” tripod mounting (rail)
- Integrated Arca compatible dovetail
- Optional adjustable safety stop to prevent collision of rear lens element

\(^2\) Dual ratio gear on rear standard
\(^3\) Dependant on camera, lens and bellow combination
\(^4\) Front standard only
\(^5\) All toolless interchangeable
3 Actus-MV overview

3.1 Actus-MV controls

Figure 1 Actus-MV controls 1
A. Rear standard spirit levels  
B. Rear shift drive knob  
C. Rear tilt drive knob  
D. Rear rise/fall drive knob  
E. Rear focus drive knob  
F. Rear focus fine drive knob (1:5 speed reduction)  
G. Interface plate slot  
H. Interface plate locking lever  
I. Lens panel interface slot  
J. Lens panel interface locking lever  
K. Accessory mount cover  
L. Front standard spirit level  
M. Swing drive knob  
N. Front tilt drive knob  
O. Front tilt fine drive knob (1:5 speed reduction)  
P. Front rise/fall drive knob  
Q. Front focus knob  
R. Front shift knob
Figure 2 Actus-MV controls 2

S. Swing friction knob
T. Front tilt friction knob
U. Front shift friction knob
V. Front rise/fall friction knob
W. Front geared focus friction knob
X. Front telescopic rail extension friction knob
Y. Rear tilt friction knob
Z. Rear shift friction knob
AA. Rear rise/fall friction knob
BB. Rear telescopic rail extension friction knob
CC. Rear geared focus friction knob
3.2 Interface plate mounting

The Actus-MV uses standardized ACMV interface plates for mounting various mirrorless and DSLR camera bodies as well as digital backs. To mount the interface plates please perform the following steps.

1. Completely open the locking lever to the right
2. Slide the interface plate in the designated slot
3. Firmly push the locking lever left to fixate the interface plate

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6 Actus-G range interchangeable and dedicated bayonet holders share the same interface and can also be fitted to the Actus-MV. Note these do cause a limitation to the rise/fall range
3.3 Lens panel mounting

The Actus-MV is fitted with the standardized lens panel mount which is used over the full range of Actus view cameras. To mount a lens panel to the Actus-MV please perform the following steps.

1. Flip the lens panel locking lever completely up
2. Push back the locking screw (if necessary)
3. Slide the lens panel in the designated slot
4. Push the lens panel locking lever completely down

Figure 4 Mounting the lens panel
3.4 Bellow mounting

The Actus-MV uses the same bellows which are used over the full range of the Actus view cameras. To correctly mount the bellow please follow the steps listed below.

1. Move the front and rear standard apart
2. Align the indication screw [A] with the cavity in the lens panel. Apply the front of the bellow to the magnetic interface of the lens panel.
3. Apply the rear of the bellow to the magnetic interface of the camera mount.

Figure 5 Mounting the bellow
3.5 Rail (dis)mounting and features

The Actus-MV comes with the standard 290mm rail assembly. In the face of portability the Actus-MV is fitted with a toolless removable rail. To remove or exchange the rail please follow the steps listed below.

Figure 6 Dismounting the rail

1. Slide the front and rear standard to the maximum extend of the telescopic rail.
2. Use the focus drive knobs to slide the front and rear standard in such way the dismounting pin [3] becomes visible through the telescopic rail.
3. Use a narrow tool, for example a pencil, to press the spring loaded pin and pull the front or rear standard towards the end of the rail.
4. To re mount the front and rear standard, make sure to align the angled area with the spring loaded pin.
The Actus-MV has several built in features. The bottom of the rail is an Arca compatible dovetail which makes it able to be fitted on most common quick release tripod heads. Further features are listed below.

![Actus-MV rail features](image.png)

**Figure 7 Actus-MV rail features**

A. **Spring loaded telescopic rail end stops**
B. **Removable M3 Arca rail safety stop screws**
C. **Threaded M3 hole for end stop screw storage**
D. **4x M4 accessory mounting holes**
E. **3/8” threaded tripod mounting hole**
F. **¼” threaded tripod mounting hole**
3.6 Actus-Mv accessory mount

The Actus-MV is fitted with accessory mounts on the bottom of the rail and underneath the Cambo logo plate on the front standard. To remove the Cambo logo plate use the supplied T6 torx key and unscrew the two m2x4 T6 screws.

The two M2 thread holes now are available for mounting accessories, for example the ACMV-350 Compendium.

Figure 8 Actus-MV accessory mount
4 Actus-MV system

4.1 Camera options

The Actus-MV is part of the Actus family and shares many accessories with its siblings. Interface plates with the ACMV prefix are designated mounts for use on the Actus-MV system. Actus-G interface plates are also usable on the Actus-MV, just note that these will affect the rise and fall range of the Actus-MV.

Current ACMV Camera interface plates are:

<table>
<thead>
<tr>
<th>Code:</th>
<th>Name:</th>
<th>Description:</th>
</tr>
</thead>
<tbody>
<tr>
<td>9910086E</td>
<td>ACMV-86E</td>
<td>Interchangeable bayonet camera interface plate</td>
</tr>
<tr>
<td>99100861</td>
<td>ACMV-861</td>
<td>Dedicated Leica SL interface plate</td>
</tr>
<tr>
<td>99100862</td>
<td>ACMV-862</td>
<td>Dedicated Fuji GFX-50 interface plate</td>
</tr>
<tr>
<td>99100863</td>
<td>ACMV-863</td>
<td>Dedicated Fuji GFX-100 interface plate</td>
</tr>
<tr>
<td>99100864</td>
<td>ACMV-864</td>
<td>Dedicated Nikon-Z interface plate</td>
</tr>
<tr>
<td>99100989</td>
<td>ACDB-989</td>
<td>Interchangeable DB Module for SLW adapters</td>
</tr>
<tr>
<td>99100990</td>
<td>ACDB-990</td>
<td>Dedicated Rotating DB Module for PhaseOne IQ</td>
</tr>
<tr>
<td>99100991</td>
<td>ACDB-991</td>
<td>Dedicated Rotating DB Module for Hasselblad HV</td>
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**Note** that Camera options for the Actus systems are constantly updated as camera manufactures launch new camera models. To find the most up to date list of Actus-MV camera options please visit our website, your local distributor or contact the Cambo sales department.
4.2  Lens options

The Actus-MV mechanically accepts all Actus Lens panels. Note that the usability of any lens on the Actus-MV depends on the lens + camera combination. Determining factor is the flange focal distance of the lens and the mount to sensor distance of the camera. To determine if your desired lens + camera combination is possible please visit our website, your local dealer or contact the Cambo sales department for the most up to date information.

4.3  Various accessories

All dedicated accessories for the Actus-MV share the “ACMV” prefix in the product name. Apart from the dedicated accessories many of the existing Actus family accessories are suitable for the Actus-MV.

For a complete list of Actus-MV accessories please visit our website, your local dealer or contact the Cambo sales department.