

HORSEMAN

Axella **SX**

Digital View Camera w/Fine Adjustment Controls



HORSEMAN Axella SX

The Horseman Axella SX is a L-shaped view camera which enables camera movements by supporting Digital cameras and Digital camera backs etc. Four independent camera movements, Tilt, Shift, Swing and Rise/Fall, are available both at the front side (lens) and the back side (sensor). A fine focus adjusting control is installed at the front side, as well as a fine shift adjusting control at the back side.



Abundant camera movement amounts

The Horseman Axella SX has abundant front and back camera movement amounts :

- Tilt: $\pm 45^\circ$ or over
- Swing: $\pm 45^\circ$ or over
- Rise / Fall: 30mm each direction
- Shift: 30mm each direction

Utilizing a large-format camera lens having a generous image circle, the Horseman Axella S enables new and creative expression.



Length of Flange Back 41mm*

The Length of the flange back of the Horseman Axella SX is shortened to 41mm.* Using a digital camera back, you can utilize a digital lens such as the HR Digaron S 23mm. The enables Wide-angle photography, now possible with this type of view camera ever. Also, when used with a T mount adapter, up to a 210mm lens can be used with extension of the bellows.

* when attached with Hasselblad V mount



Fine shift adjustment /Fine focus adjustment

The Micro Drive System allows up to 5mm of fine adjustment left-and rightward.

The Micro Drive System allows up to 5mm of fine adjustment back and forth.



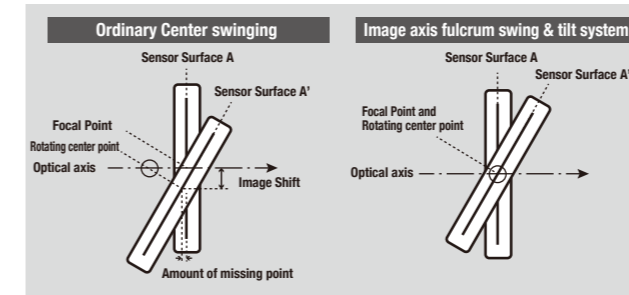
Light weight and compact design

In addition to the exceptional sturdiness and durability of the metallic material, the Horseman Axella SX is extremely compact. Gross weight is only 2.9kg. It can be stored in a compact way by removing the rail.

Made in Japan

Horseman Axella SX is manufactured and assembled with all Japan-made parts under the strict quality control according to the rigid production standard.

Highly accurate camera movements



*1) When shooting A with Tilt movement and its axis is displaced from the sensor position, the image will be defocused and deformed as in the picture B. Then, readjustment is needed.



The tilt axis can be varied up to 30mm



Image axis fulcrum swing & tilt system

The L shaped standards of the Horseman Axella SX provides a center pivot or fulcrum for all camera movements. Even with rear Full Camera Movement, this prevents defocusing of the image center or the displacement of a composition. As no image re-composition or refocusing*1) is needed, this greatly aids speed and efficiency.

M.F.D.(Main Frame Drive)

M.F.D. function is a variable system to translate the main frame with improvement on the image axis fulcrum Full Camera Movement. When focusing on an oblique object with Tilt movement and the object is off the center of the image plane, the axis of Tilt movement can be moved up to 30mm. The focal point of the object is set accurately with the scale. Horseman employs the M.F.D. function for Rise-Fall, which is very useful for a fine-arrangement of framing after focused with Tilt movement. It moves parallel to lens surface in the front and to sensor surface in the rear. Therefore, the focus plane is set by Tilt movement and can be maintained so as to not cause defocusing. Stitching in the longitudinal direction can be easily done as well.

A switch between vertical and horizontal positions can be made quite easily by a one-touch operation!

With the revolving system, switching from the vertical position to the horizontal position and vice versa can be easily achieved. Loosen the knob on the camera mount and then, turn the camera. Just one-touch operation! You can always select any framing freely.

Linhof standard Lens Panel



Various types of Lens can be used

Lenses are attached with Linhof standard lens panels. This includes large-format camera lenses as well. A Rodagon lens can be attached with the Linhof standard panel special for Rodagon (Optional).



Lens Panel for Pentax 645

Lens Panel for Rodagon [M39]

Rodagon lens mounted



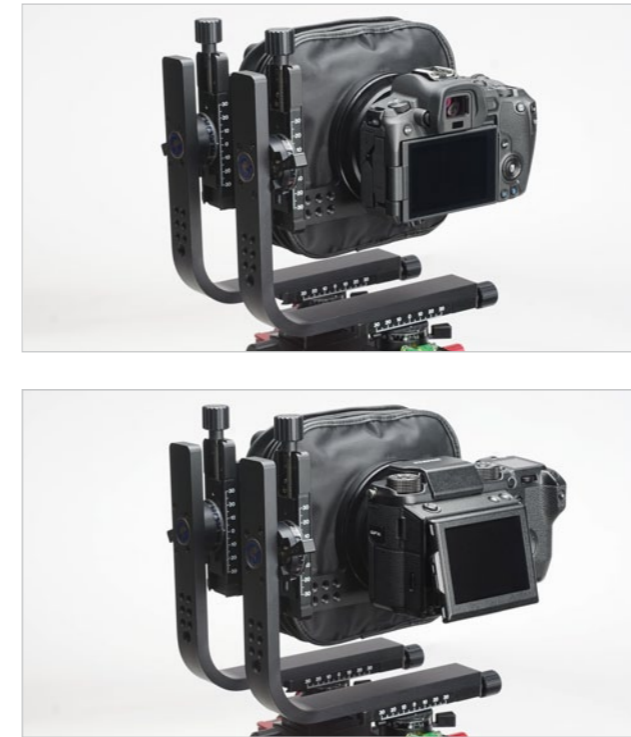
Various types of Digital camera can be used



Various types of camera can be used

For compatibility with various cameras, the corresponding mounts are provided as follows:

- For Sony E, Canon EF, Canon EOS-R, Nikon F, Nikon Z, Fujifilm X, and Panasonic S1 are available.
- For Pentax 645Z/D, Hasselblad/X1D, Fujifilm GFX50s and GFX100 are available.
- For Phase One Mamiya mount and Hasselblad V/H mount digital backs are available.



For Full Camera Movement photography, large sized image circles are needed.

The image circle of a lens for DSLR camera is designed to cover the camera sensor narrowly. For use of Full Camera Movement, a comparatively large sized image circle is required. With Rodenstock, or similar lenses from other manufacturers, you can make Full Camera Movement photography effectively as they have large enough image circles to accommodate the camera Full Camera Movement.

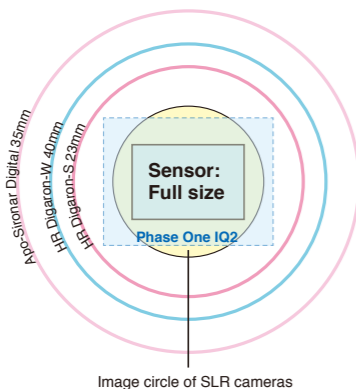


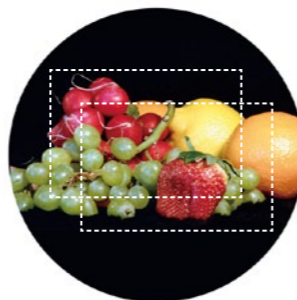
Image circle of SLR cameras

Image circle and technical camera movement

As light passes through the lens, it forms an image circle at the imaging plane (where the film or sensor is placed). The illumination is greatest at the image circle center and diminishes towards to edge of the field, eventually passing no light. The "usable" portion of this illumination for purposes of imaging is generally referred to as the "image circle". The size of the image circle varies according to the lens design and focusing distance. It is critical to match the size of this image circle to the imaging needs of the subject. It governs, among other things, the amount of camera movement that can be achieved at a given format size, focusing distance, and field-of-view. If the circle is not sufficiently large to accommodate all of these conditions, the result will be vignetting, or insufficient illumination on part of the subject or field.

Control of framing

To adjust framing, while shifting the direction of camera or position of tripod or changing of lens should be done in an ordinal shooting, camera with Full Camera Movement can control framing at the same position only by moving lens or back around in the image circle of lens.



Control of focus

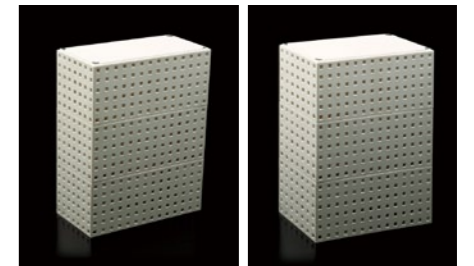
With Full Camera Movement, you can focus wholly even on deep subject that continues away from the camera by controlling the focal plane with adjustments of the optical axis. Intentional "Bokeh" is also created: Good for motion picture filming.



With the counter Tilt just a certain part of a subject can be focused on, very effective for product image.

Control of perspective

When shooting with an ordinary camera, an object located at a farther distance appears smaller while the same object placed closer to the camera would appear larger. It also causes a bending of perpendicular line of buildings and box-shaped objects, leading deformation of image of the objects. This optical distortion is commonly referred to as the "Ships Prow Effect". To correct the deformation, use Full Camera Movement to control framing.

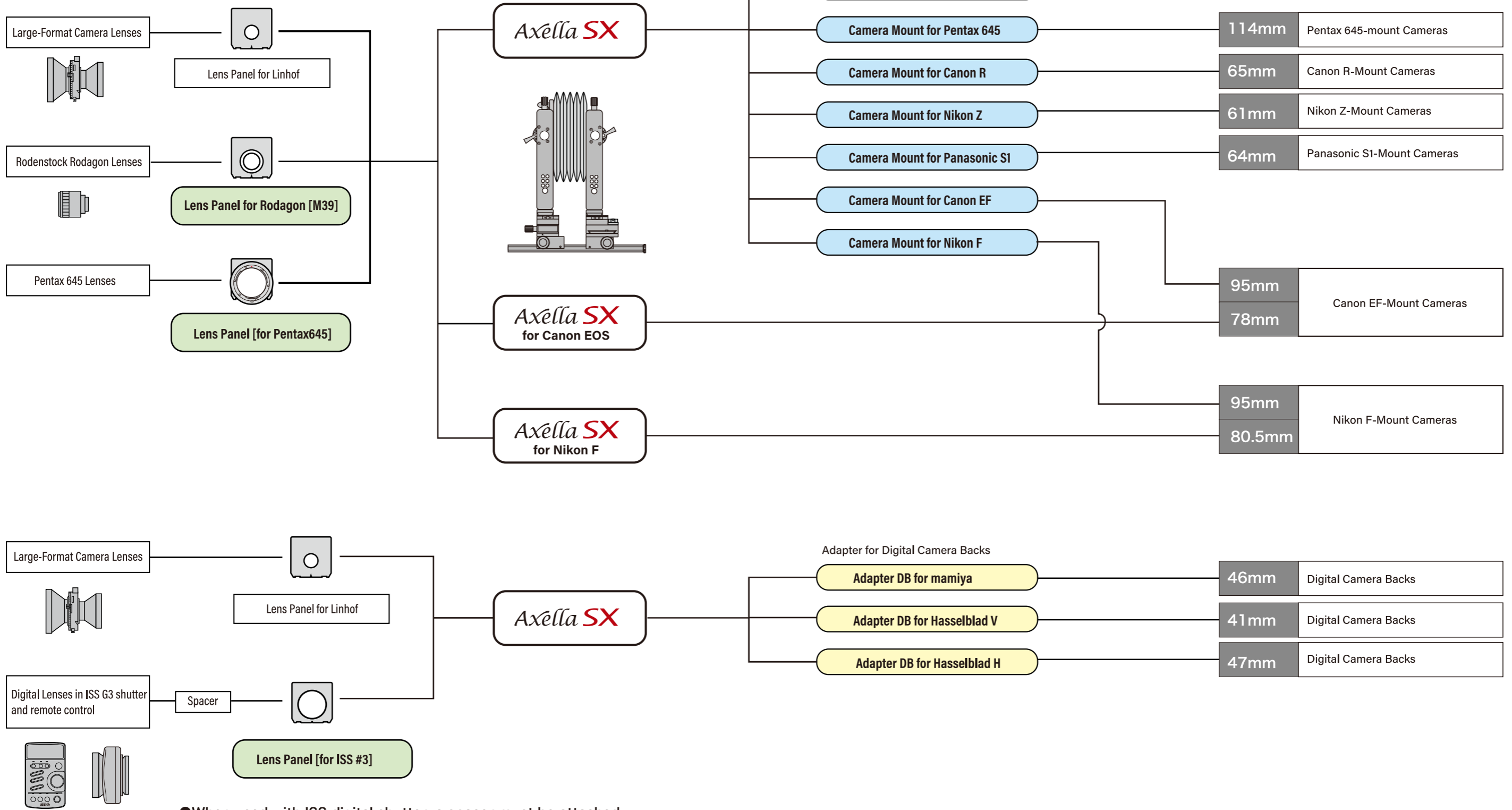


Intentional deformation can be also created in order to accentuate the shape.



System Chart

- The Minimum flange distance differs from type of camera.
For available lenses, please refer to "Minimum Flange Distance" in the System Chart.
- With Linhof M39 standard lens adaptor, the flange back will be shortened at 12mm from the shortest flange back due to its hollow specification.



●When used with ISS digital shutter, a spacer must be attached and the flange back will be extended to 6.5mm.

Technical data

Type	Monorail module camera	
Material	Aluminum	
Focus adjustment	By rack-and-pinion on the monorail / tremor knob	
Lens mount	Linhof standard panel	
Movements	Rise / Fall	30mm each
	Shift	30mm each
	Swing	±45° or over
	Tilt	±45° or over
Monorail	250mm(standard) Option: 150mm, 200mm	
Base	Compatible with ARCA SWISS	
Size	310 (H) x 220 (W) x 250 (L) mm	
Weight	2.9kg	

Products

Product code	Product name	Jan
Axella SX		
512528	Axella SX Camera Body	4962420233078
512561	Axella SX Camera Body [for Canon EOS]	4962420233108
512562	Axella SX Camera Body [for Nikon F]	4962420233115
Axella SX Camera Mount Kits		
512563	Sony E Mount Kit	4962420233122
512564	Fuji GFX Mount Kit	4962420233139
512565	Fuji X Mount Kit	4962420233146
512566	Canon R Mount Kit	4962420233153
512567	Nikon Z Mount Kit	4962420233160
512568	Panasonic S1 Kit	4962420233177
512569	Hasselblad X1D Kit	4962420233184
512570	Pentax 645 Kit	4962420233191
512571	DB Hasselblad V Kit	4962420233207
512572	DB Hasselblad H Kit	4962420233214
512573	DB Mamiya 645 Kit	4962420233221

*Attention
Each Axella SX Camera Mount Kit doesn't include lens board or lens mount.
Axella SX can be used with Linhof lens standard board with lens

Product code	Product name	Jan
Camera Mounts (for Axella SX/S)		
512390	Camera Mount for Sony E	4962420231791
512391	Camera Mount for Fuji GFX	4962420231807
512495	Camera Mount for Fuji X	4962420233054
512392	Camera Mount for Hasselblad X1D	4962420231814
512496	Camera Mount for Pentax 645	4962420233061
512393	Adapter DB for mamiya	4962420231821
512394	Adapter DB for Hasselblad V	4962420231838
512395	Adapter DB for Hasselblad H	4962420231845
512481	Camera Mount for Canon EF	4962420231906
512482	Camera Mount for Nikon F	4962420231913
512483	Camera Mount for Canon R	4962420231920
512484	Camera Mount for Nikon Z	4962420231937
512574	Camera Mount for Panasonic S1	4962420233238
Lens Panels (for Axella SX/S)		
512397	Lens Panel for Rodagon[M39]	4962420231869
512398	Lens Panel for Pentax 645	4962420231876
510248	Lens Panel for ISS #3	4962420232552



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