

For the Digital Image Artists



# HORSEMAN LD FOR DSLRs

System Chart

Specifications



## Full Bellows Functions for Your Digital SLR

Whether you are using a Canon® or Nikon® digital single lens reflex, Horseman now gives you an opportunity to add full bellows functions -- like in a medium or large format view camera. The Horseman LD comes in two models that accept Nikon or Canon DSLR bodies, maintaining all their normal functions. Up front, you can attach any standard medium or large format camera lens (including those with Hasselblad and Mamiya mounts).



Two types of camera mounts  
· Canon EOS mount  
· Nikon F mount

[Regarding compatibility and limitations in using DSLRs with Canon or Nikon mounts made by manufacturers other than Canon and Nikon, please click here.](#)

## Why Bellows Movements in A Digital SLR?

Bellows functions are one of the chief attractions of medium and large format photography. Especially in architectural work and industrial product photography, but also in restricted spaces, you can use tilt, swing, shift, fall, rise and any combination of these to change the lens position and angle versus the image plane.

An obvious example is to get an entire object plane into focus even when it is not parallel to the camera's image plane. Think of photos for a cookbook, for instance; you're shooting at an angle but still want the whole dish in focus. Tilt the lens with the bellows and see what happens.

Bellows movements let you avoid, correct -- or deliberately introduce -- image distortions and gives you great new freedom in focusing and image composition."

## What Types of Lenses Can You Use?

- \* Large-format camera lenses (with focal lengths of 90mm and up)
- \* Horseman VCC lens unit (80, 105, 135mm)
- \* Interchangeable lenses with Hasselblad V-system mounts
- \* Mamiya 645/67\*<sup>1</sup> lenses
- \* Asahi Pentax 645/67 lenses



Medium-format camera lenses



Large-format camera lenses



Horseman VCC lens unit

# Each type requires a special lens adaptor (not included).

\*<sup>1</sup> With a Mamiya 67 lens, the aperture lever must be fixed in place.

## Switch to Portrait Or Landscape Format with One Snap.

As the camera is fixed to a revolving mount, you can easily switch between landscape and portrait positions with a single turn of a knob.



## Wide Range of Bellows Adjustments. For "Stitching" Images Together, Too

Bellows adjustments are possible at the front and rear. Swing and center tilt can cover a full 360 degrees\*<sup>2</sup> (at the image center). Maximum rise and fall are 30mm in either direction, and shift also comprises up to 30mm either way. By combining rise, fall and shift, images can be "stitched" together for novel effects. As bellows movements are performed by an ultra-precise rack-and-pinion drive, inaccuracies between successive pictures are held to an absolute minimum, making post-editing an easy task.



Swing:  
360 degrees  
Shift:  
Left: 30mm  
Right: 30mm



Center tilt:  
360 degrees  
Rise: 30mm  
fall: 30mm

# While applying rear tilt, vertical "stitching" is not possible with normal rise-fall adjustments.

# "Stitching" is also limited by the diameter of the lens image circle and by vignetting due to the camera's lens mount.

\*2 Limited by maximum bellows extension

## Focusing Possible without Changing Image Ratio

Especially in close-up photography, you will find the possibility of re-focusing without using the bellows very attractive. The camera base is mounted on monorail on which it can be moved back and forth by a rack-and-pinion drive. Without moving the tripod, and without in any way changing the bellows extension, the entire camera can be slid along this monorail for re-focusing.



Movement toward front



Movement toward back

## Tilt And Swing Axis Stays at Center of Image

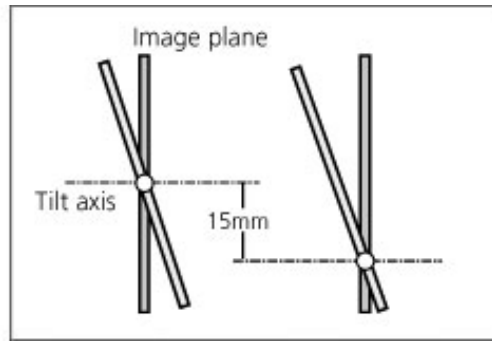
Photos A and B illustrate this effect. Assuming that the tilt axis in photo A moved out of the image plane, the frame and focus would become blurred as in photo B, requiring re-framing and re-focusing. In the Horseman design, on the other hand, the remains coincident with the image plane, eliminating any need to re-frame or re-focus.



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## "Variable Axis Tilt" Possible, However

There are times, however, when it is practical to be able to move the tilt axis; for example, when the point to be focused upon is not at the center of the object. In such cases, the tilt axis can be moved up or down the image plane with the help of an accurate adjustment scale.



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### Coming Attraction :

#### •Adaptor for High End Digital Camera Backs

With the new slide adaptor whose development is now nearing completion, the Horseman LD can be used in combination with high end professional digital camera backs.



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#### •Converts into A 4x5 Inch Film Camera, Too

Horseman will also provide a conversion kit that will change the LD into a 4x5 inch film camera. This kit will comprise a main frame, connector frame, ground glass and bellows. By using an additional roll film holder, it will be possible to shoot in the following formats: 6x7, 6x9 or 6x12cm.



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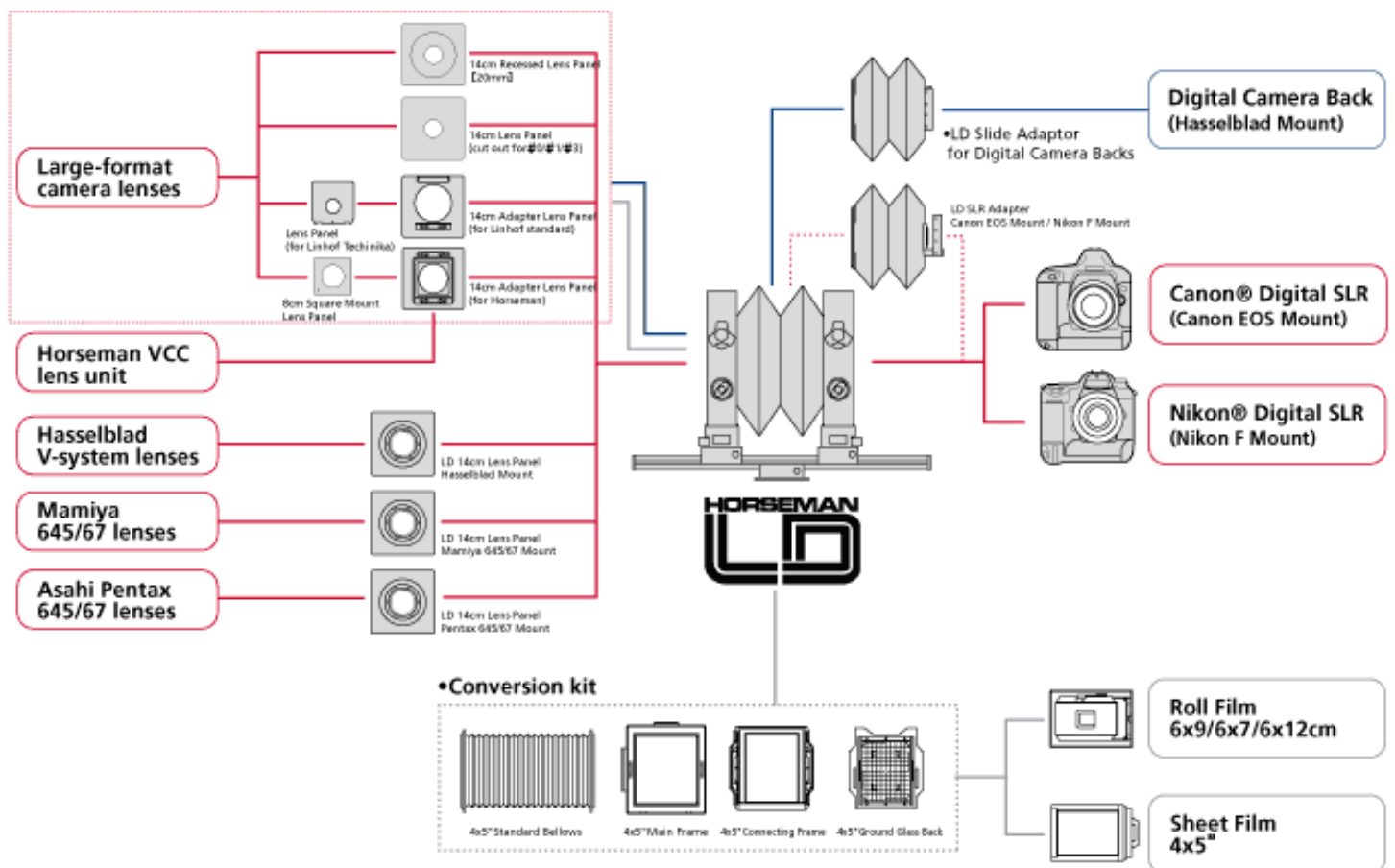
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For the Digital Image Artists



## System Chart



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## Specifications

### HORSEMAN LD SPECIFICATIONS

Type	View Camera for 35mm Digital SLRs
Material	Die-cast and machined aluminium alloy
Camera mount	Canon EOS mount / Nikon F mount
Focusing	Rack and pinion drive
Lens panel	140mm x 140mm
Rise / fall	30mm+30mm rack and pinion

Lateral shift	30mm+30mm rack and pinion
Swing	360°
Center tilt	360°
Min. frange distance	70mm
Monorail	400mm
Tripod block	Rack and pinion
External dimentions	325mm(12.7")x 245mm(9.6")x 420mm(16.5")
Weight	4.0kg

PRODUCT CODE	PRODUCTS
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23141	Horseman LD Camera [Canon EOS Mount]
23142	Horseman LD Camera [Nikon F Mount]
23761	LD SLR Adapter [Canon EOS Mount]
23762	LD SLR Adapter [Nikon F Mount]

**·LENS PANELS**

23513	14cm Lens Panel (cut out for #0 shutter)
23514	14cm Lens Panel (cut out for #1 shutter)
23515	14cm Lens Panel (cut out for #3 shutter)
23523	14cm Recessed Lens Panel [20mm]
23516	14cm Adapter Lens Panel (for Linhof standard)
23517	14cm Adapter Lens Panel (for Horseman)
23525	LD 14cm Lens Panel [Hasselblad Mount]
23526	LD 14cm Lens Panel [Mamiya 645 Mount]
23527	LD 14cm Lens Panel [Mamiya 67 Mount]
23528	LD 14cm Lens Panel [Pentax 645 Mount]
23529	LD 14cm Lens Panel [Pentax 67 Mount]

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Regarding compatibility and limitations in using DSLRs

		Attach to LD	USB	IEEE1394	Ext. Power Cable
Kodak DCS Pro SLR/n 14n	Horizontal	No*(1)			
	Vertical	No*(1)			
Fuji S2 Pro	Horizontal	OK	OK	*(2)	No
	Vertical	OK	OK	OK	OK
Fuji S3 Pro	Horizontal	OK	OK	*(2)	No
	Vertical	OK	OK	OK	OK
Kodak DCS Pro SLR/c 14n	Horizontal	No*(3)			
	Vertical	No*(3)			

\*(1) Can be attached with using 25mm Extension Ring

\*(2) Use of Short plug type cable recommended

\*(3) Can be attached with using 12mm Extension Ring (Mamiya 645 lenses cannot be used at infinity.)