### **ALVANDI CAMERA SYSTEMS Starting manual**

Thank you for purchasing a ALVANDI product.

These instructions will guide you to start working with ALVANDI Panoral camera.

# Installing Ground glass and Fresnel for Panoral 810, 57, 45, 617, 612 and 679

When you receive the camera box, the ground glass and Fresnel is separate from the camera. This is done for safety. You must install them correctly. Please follow this instruction.

1. Remove the ground glass part from the camera and put it on the table. Remove the ground glass retaining spring by loosening 4 screws on both sides of the ground glass part. The ground glass part has two places. One for Fresnel (it is at the bottom) and the other for ground glass (it is at the top).

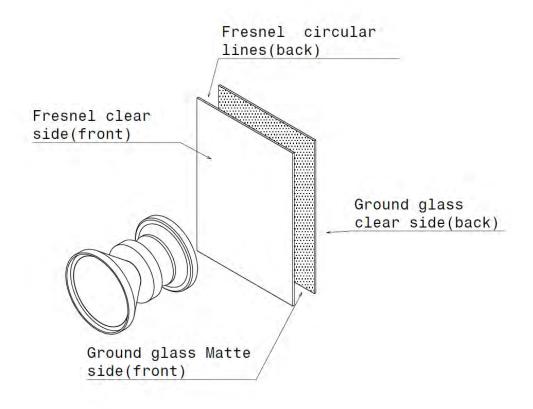


Ground glass retaining spring

- 2. **Installing Fresnel:** The two sides of the Fresnel are different. One side is composed of concentric circular lines. The other side is flat. You should place the side that has the concentric circular lines, facing up, or your face. Therefore, the flat side is towards the lens. Now, place the Fresnel at the bottom of the part.
- 3. **Installing ground glass:** The two sides of the ground glass are different. One side is matte and the other side is glossy. You have to put the side that is

matte to the bottom side (Towards Fresnel or lens). Now, place the ground glass at the upper edge of the ground glass part.

4. Install two ground glass springs with 4 screws. The image below helps you to identify the position of ground glass and Fresnel and lens.



Lens, ground glass and Fresnel position

# Calibrate the helical focus mount for Panoral 810, 57, 45, 617, 612 and 679

You need to calibrate the helical focus mount after installing the lens on it.

1. **Mount the lens on the helical focus mount:** You have to remove the rear element of the lens. Remove the screw shown in the photo below from the shutter. It causes the lens axis not to align with the helical focus mount axis.



Remove the screw shown from the back of the shutter 0/1

2. Mount the shutter with the help of exchange tool wrench. Then mount the rear element on the shutter.



Exchange tool wrench for lens retaining rings 0/1 shutter

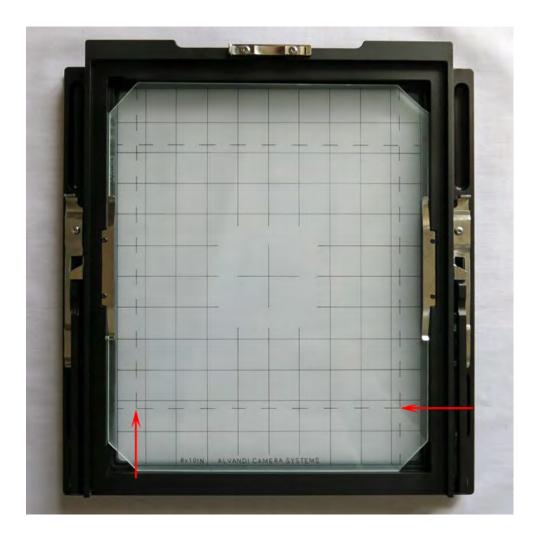
- 3. Focus the lens to infinity with the help of a magnifer on ground glass.
- 4. Now you need to calibrate the metering ring. The metering ring has 3 set screws.



- 5. Loosen the screws. Rotate metering ring and place the infinite sign on the marker line without changing the focus.
- 6. Then tighten the 3 screws evenly and simultaneously. Now you need to check the settings by focusing and defocusing the lens to infinity. Repeat the settings if necessary.

#### How to use tilt in the Panoral 810, 57, 45, 679 camera

The tilt system in these cameras is asymmetric. The tilt axis is displayed on the ground glass by the dashed line. The dashed line is seen as a square.



#### Use this method to do tilt

Imagine you want to shoot a scene that includes an infinite horizon. The image on the ground glass is upside down.

- 1. Place the horizon line at infinity on the dashed line drawn at the bottom of the ground glass.
- 2. Focus horizon infinite on the bottom dashed line.
- 3. Loosen the tilt screw knob.

- 4. Then focus on nearby areas with the help of tilt. Note, do not change the helical focus mount. You should focus on close areas only with Tilt.
- 5. Tighten the tilt screw knob.
- 6. When you have done the tilt, the lens axis changes with the image axis. You have to do fall shift the lens. Because the light at the edge of the image circle is always less. The fall shift prevents of underexposure at the top of the image.
- 7. The amount of tilt angle and fall shift for each lens is constant. You can write it down, and use it in the future without resetting.

