

Sinarback eVolution75 H / 86 H

Operating Instructions



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Scope of Delivery:

- 1X Cardbox
- 1X Sinarback eVolution75 H or eVolution86 H
- 1X White Shading Diffusor 100 (551.43.097)
- 1X FireWire Cable 1394 B Cable 4.5 m (551.63.055)
- 1X Set of Cleaning Cloths with Cleaning Liquids (551.33.090)
- 1X CD with Capture Software
- 1X CD with CCD Reference File
- 1X Gray Card

2. General

2.1. Fundamentals

The CaptureShop Software provides access to the camera and is responsible for data management. With CaptureShop you open, view and process the images in order to file them or to export them to an image manipulation program (such as Photoshop).

This software is included free of charge with the product. Upgrades can also be downloaded free of charge from the Sinar homepage (www.sinar.ch).

Power Supply

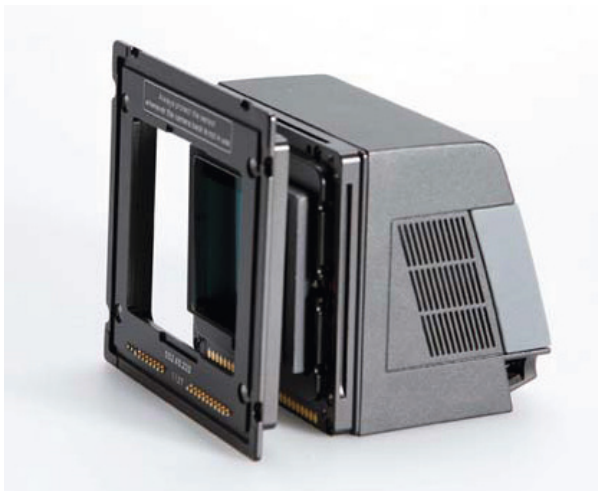
The supply of power to the Sinarback eVolution75 H / 86 H takes place via the FireWire interface.

3. Adaptions

3.1. Attaching the Sinar m / Medium-Format Camera Adapter

The Adapter Plate is attached to the Sinarback by means of four recessed screws that are supplied within the Adapterkit. Care should be taken not to tighten each screw all the way in one step, but to tighten each one a little at a time, going around several times, so as to avoid skewing the adapter frame.

- A. Remove the protective CCD cover from the Sinar Digital Back.
- B. Attach the Sinar Adapter Plate to the Sinarback by first inserting all four screws lightly and then gradually tightening them a little at a time, alternating working on each screw diagonally from each other until all of them are fastened securely.
- C. When the Sinarback is to be stored after being used, please use the protective CCD cover that is supplied with the Sinarback.
- D. Attach the Sinarback to the camera.

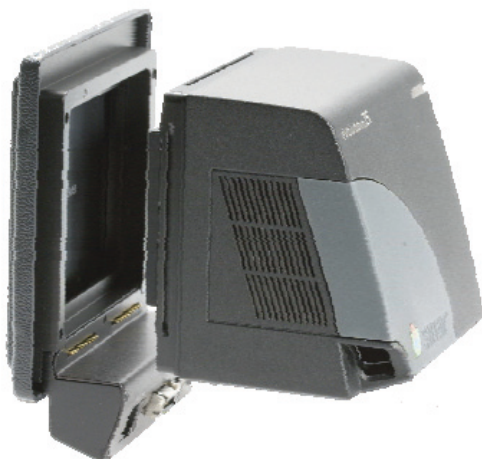


3.2 Sinar p3 View Camera

Assembly

The Adapter Plate is attached to the Sinarback by means of four recessed screws that are supplied with it. In no case should the three red-sealed screws on the Sinarback be turned. When these seals are broken, all Sinar Photography AG warranties become void.

- A. Remove the CCD protective cover from the Sinarback Digital Back.
- B. Attach the Sinarback eVolution to the Adapter Plate by first starting the four screws loosely and only then tightening them gradually in several steps, alternating these steps diagonally.
- C. Before storing the Sinarback away, attach the CCD protective cover that is supplied with it.
- D. Couple the Sinarback eVolution 75H to your Sinar p3 view camera, by:
 - a) aligning the bottom edge of the Adapter Plate with the corresponding ledge of the camera,
 - b) then press the Adapter Plate to the camera until it engages.
 - c) By grasping it, make sure that the Adapter Plate is engaged securely, so that the Sinar back cannot fall off.
- E. Attach the desired lens to the front standard of the camera and verify that the bellows has been assembled correctly, so that the image data can be transmitted properly from the Sinarback to the software.



Flash connection

The X-sync cable for controlling the flash generator has to be attached to the X-contact of your camera.

Handling

Because this adaptation can only be used in the slave mode, exposures cannot be triggered by means of the shutter release button on the camera. Exposures can be triggered in the following manner:

- a) via the computer, either by using the user interface or by using the keyboard.
- b) by means of Manual Cable Release 493.03.060 attached to the respective connector.

By pressing the shutter release that is located on the Adapter Plate for Sinar p3. This shutter release has two pressure points: The first pressure point activates the exposure metering on the camera. The second pressure point triggers the exposure.

Storage

When the Sinarback is not mounted on the camera, we strongly recommend that the CCD Protective Cover is always be attached to the Sinarback to protect it and the CCD sensor from dirt and physical damage.

4. Sinarback eVolution Connections

FireWire IEEE 1394B Connection

You can connect the Sinarback eVolution directly to the computer. In this operating mode, the image data files are stored directly on the hard disk of your computer. The Sinarback eVolution is equipped with a FireWire interface, which is located on the left bottom of the back. Use the FireWire cable supplied with it to connect the Sinarback eVolution to your computer.



FireWire IEEE 1394B Connection

5. Starting the Capturing Software

This section describes the first activation of the software. The following steps will only be necessary when you use your Sinarback eVolution for the first time with the software and when the reference file is not transmitted directly from the internal memory of the digital back to the computer.

Place the CD-ROM with the camera data (CCD files) supplied with the Sinarback in the CDROM drive. This CD contains the camera-specific data that is needed for the first activation of the software. Start the Sinar CaptureShop software 6.0 or higher by double-clicking on the program icon. Depending on the Firmware installed in the Sinarback eVolution, an information window will appear on the screen after a few seconds and the respective data on the CD in the drive will be copied automatically. The installation will be completed in another few seconds, after which the CD will no longer be needed, so that it can be removed and stored away.

ATTENTION: Please store this CD in a safe place, because it constitutes the original Reference Data CD.

6. Cleaning the sensor

For cleaning the sensor, Sinar recommends the Digital Cleaning Set 551.33.090 that is supplied with the Sinarback eVolution. This set consists of high-grade, lint-free microfiber cleaning cloths from the clean room, plus a cloth holder and two vials with cleaning fluids.-Agent Blue (the blue cleaning fluid) is suitable for preliminary cleaning of stubborn, greasy blemishes. It can also be used as a cleaning fluid wherever a wet surface is accessible so that it can be gently wiped dry. In addition, the fluid can be used when there is no danger of electronic components being damaged by electric discharges. At the beginning of the drying procedure, the anti-static additive leaves wiping marks, which disappear as the wiping progresses.

Dust particles adhere less stubbornly to the cleaned surfaces, so that they are easier to remove.

ATTENTION: CCD glasses must not be cleaned with Agent Blue! Colorless, highly purified Ethanol is recommended for cleaning surfaces after they have been pre-cleaned with Agent Blue. Ethanol is generally appropriate for use on surfaces that are not accessible for being wiped dry or where wiping is not permitted because of the danger of electrostatic discharges. The cleaning cloth must always be adequately wetted, otherwise striations may appear after the spontaneous evaporation of the ethanol. If the cleaning cloth is soaked excessively, residues will form at the ends of the wiping strokes.

ATTENTION: CCD glasses should ONLY be cleaned with ethanol!

Important tips

- Clean hands and pure cleaning fluids are essential for a successful cleaning process. Hand perspiration, hand cream and other residues on the cleaning cloth are transferred to the surfaces to be cleansed, thus making the job more difficult.
- The surfaces of optical elements should never be touched with bare fingers. Fingerprints are very difficult to remove and they may leave lasting blemishes behind.
- The combination of dust and humidity results in a sticky film of dirt that clouds the surfaces. The air we breathe out always contains humidity.
- If dust is removed by blowing on it, the humidity of the warm breath condenses on the cooler surfaces in the form of miniscule droplets. If a surface is accidentally breathed upon, it should be wiped clean very carefully while it is still humid.
- Wiping a dry surface intensively with a dry cleaning cloth will cause electrostatic charges to build up, whose discharge may destroy sensitive electronic components.

Very special care must therefore be exercised when cleaning the IR-blocking filter and the CCD glass. Furthermore, electrostatically charged surfaces attract dust particles from their surroundings.

- Only use the materials included in the Sinar cleaning set. These materials were tested thoroughly by Sinar to ensure their suitability and compatibility. The user will be responsible for damages caused by the use of other cleaning materials.
- Meticulously careful use of the tip of a very fine brush or the tip of a tiny sponge can be employed for removing individual dust particles from a surface. When there is more than just a little dust, short brush strokes must be applied from the center towards the outside. The brush should be applied to the surface very lightly.
- Care must be used when blowing away dust particles with compressed air from a can. Condensation may cause the accumulation of liquid inside the can. Therefore a basic precaution before an application is to check whether the air from the spray can is truly dry. To that end, before blowing on the surface to be cleaned, always first spray air from an appropriate distance towards the floor in order to clear the nozzle of any accumulated liquid. Sinar recommends „Ultrajet Duster System Refill Cans“ from Chemtronics.
- It is very important to carefully remove any loose dust particles before wiping a surface.
- Never use a dry cleaning cloth to wipe a dusty, uncleaned surface, because the dirt particles being rubbed into the surface may create scratches on those surfaces. The wiping movement should be performed without pressure and it should always be in one direction only (not back and forth).
- A visible difference between a cleaned and an untreated area after a partial cleaning of a surface indicates the presence of a large soiled area that will require an overall cleaning of the complete surface. In such cases, the entire surface should be wiped in only one direction (not back and forth), and in uninterrupted, continuous strokes across the whole surface. The cleaning cloth should be folded after each wiping procedure in such a way that the used portion will not be in use.
- Wiping motions across protruding or sharp edges, which would occur when the area to be cleaned is framed by a raised edge, must be avoided at all times. In that situation, first wipe the surface along the edge and then wipe it just to the edge, but not across it.

- Never let the cleaning fluid drip directly on the surface to be cleaned, always apply it to the cleaning cloth first.
- After the wet-cleaning with a non-volatile (slowly-drying) cleaning fluid and a clean, dry cleaning cloth, carefully wipe the surface dry from the center to the edges (not back and forth) in order to avoid residual drying marks.
- If drying residues are still visible after the first cleaning procedure, the procedure should be repeated carefully with a fresh cleaning cloth. If repeated cleaning efforts do not yield the desired results, the cleanliness of the cleaning cloths and the cleaning fluids should be examined.

7. Technical data for the Sinarback eVolution75 H

- Digital Camera Back for 1- and 4-Shot exposures with all types of light
- Type of CCD Sensor: Dalsa FTF 5066 C, RGB Mosaic Filter, Full-Frame technology
- Active sensor size: 48.0 x 36.0 mm
- Resolution: 6668 x 4992 pixels (33 million)
- CCD pixel size: 7.2 x 7.2 µm
- Format proportion: 4:3
- File size: RAW/DNG (16 bit): 1-shot 68 MB; 4-shot 190 MB (RGB)
- File size at 48 bit TIFF: 190 MB
- File size at 24 bit TIFF: 95 MB
- Exposure sequences: Up to 24 exposures per minute
- Live image viewfinder mode: Yes
- Shutter speeds: 1/4000 to 32 seconds
- Dynamic range (contrast): 12 f stops
- Digitalization: 48 bit (16 bit per color channel)
- Cooling: Peltier and ventilation
- Nominal sensitivity: ISO 50 (adjustable from ISO 50 to ISO 400)
- Interfaces: IEEE 1394B FireWire (800 Mbps)
- Position sensor: Yes
- Power supply: Choice of Firewire or external 12 Volt source
- Exposure software: Sinar CaptureShop™ Version 5.6.0 or higher
- Dimensions: 90 x 85 x 73 mm (3 9/16 x 3 3/8 x 2 7/8 inches)
- Weight: 500 grams (less than 18 ounces)

- Camera adaptations:
 - Sinar p3/p2/p/x view cameras, Sinar Hy6, Sinar m, Sinarcam 2
 - Contax 645 AF, Fuji GX 680 I, II, III / Hasselblad V, H1, H2 / Mamiya RZ 67/Pro II, RB 67, 645 AFD, AFD II, 645 Super, Pro, Pro TL / Rolleiflex 6001, 6003, 6008, 6008 Integral, 6008 Integral 2, 6008 AF / Non-Sinar 4x5" view cameras via Graflock Adapter

- Computer requirements:
 - Apple Macintosh G5 or Core Duo with ffl.8 GHz, OS 10.6.4 or higher, 2GB RAM,
 - IEEE 1394b interface

7. Technical data for the Sinarback eVolution86 H

- Digital Camera Back for 1- and 4-Shot exposures with all types of light
 - Type of CCD Sensor: Dalsa FTF 6080C - RGB Mosaikfilter, Full Frame Technologie
 - Active sensor size: 48.0 x 36.0 mm
 - Resolution: 8082 x 6042 pixels (48,8 million)
 - CCD pixel size: 6,0 x 6,0 µm
 - Format proportion: 4:3
 - File size: RAW/DNG (16 bit): 1-shot 105 MB; 4-shot 290 MB (RGB)
 - File size at 48 bit TIFF: 288 MB
 - File size at 24 bit TIFF: 144 MB
 - Exposure sequences: Up to 13 exposures per minute
 - Live image viewfinder mode: Yes
 - Shutter speeds: 1/10000 to 32 seconds
 - Dynamic range (contrast): 12 aperture stops
 - Digitalization: 48 bit (16 bit per color channel)
 - Cooling: Peltier and ventilation
 - Nominal sensitivity: ISO 50 (adjustable from ISO 50 to ISO 800)
 - Interfaces: IEEE 1394B FireWire (800 Mbps)
 - Position sensor: Yes
 - Power supply: Choice of Firewire or external 12 Volt source
 - Exposure software: Sinar CaptureShop™ Version 6.0.0 or higher
 - Dimensions: 90 x 85 x 73 mm (3 9/16 x 3 3/8 x 2 7/8 inches)
 - Weight: 500 grams (less than 18 ounces)
- Camera adaptations:
 - Sinar p3/p2/p/x view cameras, Sinar Hy6, Sinar m, Sinarcam 2
 - Contax 645 AF, Fuji GX 680 I, II, III / Hasselblad V, H1, H2 / Mamiya RZ 67/Pro II, RB 67, 645 AFD, AFD II, 645 Super, Pro, Pro TL / Rolleiflex 6001, 6003, 6008, 6008 Integral, 6008 Integral 2, 6008 AF / Non-Sinar 4x5" view cameras via Graflock Adapter
- Computer requirements:
 - Apple Macintosh G5 or Core Duo with ffl.8 GHz, OS 10.6.4 or higher, 2GB RAM,
 - IEEE 1394b interface