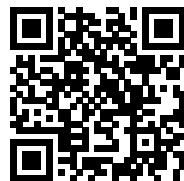


User Manual



Slide Kamera HKR-4 camera crane is a professional equipment that allows to take smooth rise up and fall down crane shots, and to film from the places previously inaccessible for the operator. It allows to present the scene from multiple perspectives while maintaining perfect smoothness of motion. Telescopic design of HKR-4 camera crane allows to adjust length of the arm freely meeting the needs of the filmmaker.

Slide Kamera HKR-4 Camera Crane Set



Pdf version of the manual available for download: www.slidekamera.eu



made in **POLAND**

Before you start your work with Slide Kamera HKR-4 camera crane we strongly recommend to read the manual carefully. Please note that using the device in a manner inconsistent with the instructions, unauthorized repair attempts or any kind of modification of the device can cause a damage the manufacturer is not responsible for.

In case of damage during transport you are required to submit:

- ☒ proof of purchase
- ☒ protective styrofoam inserts/ fillers included in the set in case of new product delivery

If you fail to comply with the abovementioned conditions, the manufacturer reserves the right to refuse the complaint.

Photos of products may slightly differ from the actual product due to constant modifications and improvements introduced by the manufacturer.

Slide Kamera®

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1.2. Additional accessories:

Camera crane sockets:

Slide Kamera HCZ-75/100mm socket (Manfrotto system) [1]

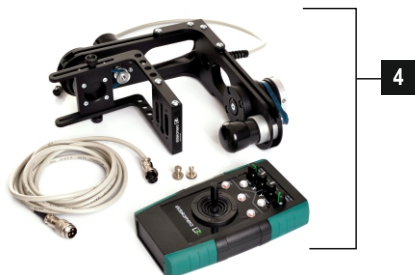
Slide Kamera HCZ-75/100mm socket (Miller system) [2]

Slide Kamera HCZ-75/100mm socket (Sachtler system) [3]



Remote controlled head 2D:

Slide Kamera HGN-4 2D remote controlled head [4]



Adapters:

Slide Kamera AF-18 leveling adapter [5]



Half ball leveler:

Manfrotto MN520BALL 75mm [6]

Manfrotto MN500BALL 100mm [7]



Power supply:

Slide Kamera AF-7 power pack with AF-7-K1 power lead [8]



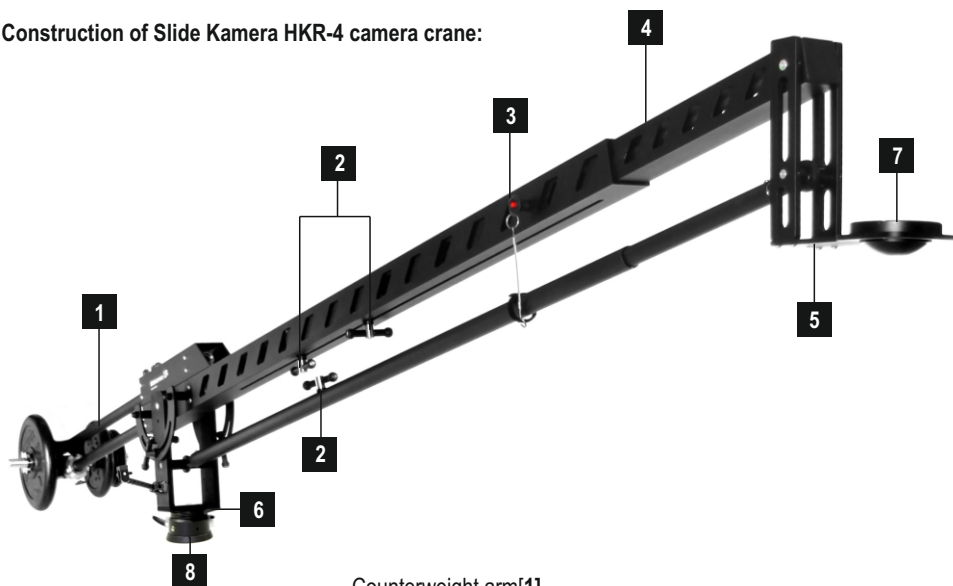
2. Elements and construction of Slide Kamera HKR-4 crane

Once the shipment is received please make sure that all the elements of Slide Kamera HKR-4 crane are inside.

Set includes:

- ☑ Slide Kamera HKR-4 camera crane
- ☑ counterweight: counterweight neck and weights (2x10kg, 2x5kg, 2x2kg, 2x1kg)
- ☑ Slide Kamera AF-17 articulated arm
- ☑ Slide Kamera HGO-3 rotational fluid head
- ☑ three M5x25 screws
- ☑ 4mm Allen key L type
- ☑ 5mm Allen key L type

Construction of Slide Kamera HKR-4 camera crane:



Counterweight arm[1]

Arm slide clamping knobs [2]

Safety pin [3] (when working arm of the crane is in a raised position safety pin protects against uncontrolled sliding of the crane)

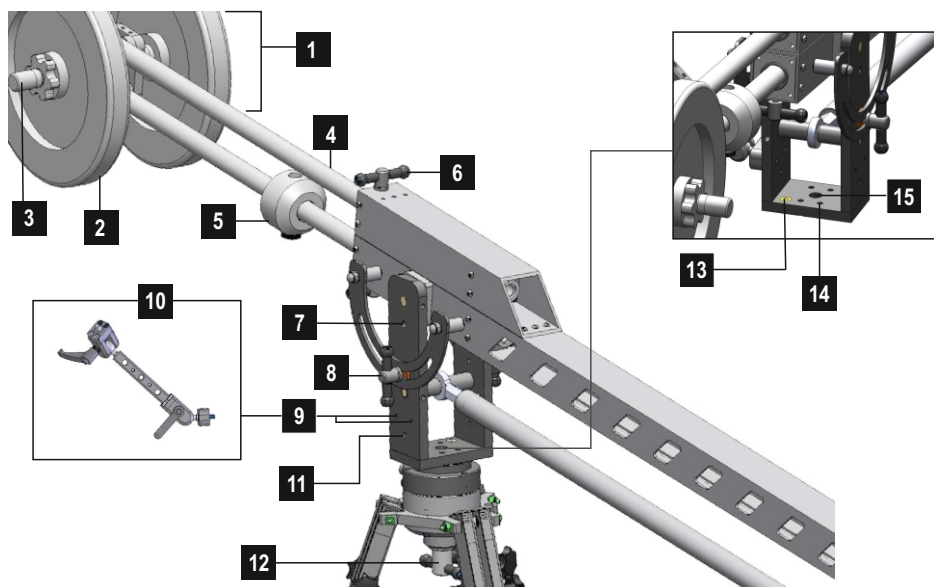
Working arm of the crane [4]

Crane mounting plate [5]

Camera crane base [6]

Slide Kamera HCZ 75mm or 100mm socket [7]

Slide Kamera HGO-3 rotational fluid head [8]



Counterweight **[1]** consisting of counterweight neck **[2]** and weights **[3]**

Counterweight arm **[4]**

Sliding weight **[5]**

Clamping knob that locks counterweight arm slide **[6]**

3/8" threaded hole **[7]**

Clamping knob for tilt adjustment **[8]**

Two M6 holes for mounting AF-17 articulated arm grip **[9]**

Slide Kamera AF-17 articulated arm **[10]**

1/4" hole **[11]**

Slide Kamera AF-16 adapter for quick mounting of the crane **[12]**

Bubble level **[13]**

Four M4 holes in camera crane base **[14]**

Central 3/8" hole in camera crane base **[15]**

3. Specification

Application: for lifting and rotating the camera or photo camera together with the accessories, allows to take smooth rise up and fall down crane shots, and to film from the places previously inaccessible for the operator

Arm length range: 2100mm do 3170mm (working arm length)

Total vertical movement: 4700mm (working arm maximally spread)

Mounting holes: Two 3/8" holes

Two 1/4" holes

Four M6 holes for mounting AF-17 articulated arm grip

Central 3/8" hole in camera crane base

Four M4 holes in camera crane base (Manfrotto spacing)

Material: aluminium

Bubble level: on camera crane base

Color: black

Safety payload: 10 kg for 37 kg of counterweight

Weight without weights: 33kg

Weights of a total weight: 36kg

Extended arm: available

Arm tilt: available

Rotation: available

Table presenting Slide Kamera HKR-4 crane steering possibilities:

Movement	Setting	Locking the movement
Vertical movement	Slide Kamera HGO-3 rotational fluid head	Lock the clamping lever of Slide Kamera HGO-3 rotational fluid head
Horizontal movement	Unlock two clamping knobs for tilt adjustment	Lock two clamping knobs for tilt adjustment and set the crane in a desired position
Arm slide	Unlock three arm slide clamping knobs and remove the safety pin	Lock three arm slide clamping knobs and insert the safety pin to lock the arm in a desired position
Angular position of the crane mounting plate	Unlocking three arm slide clamping knobs and removing the safety pin enables to control and set the arms of the crane, making it possible to set a desired angular position of the crane mounting plate	Lock three arm slide clamping knobs and insert the safety pin to lock angular position of the crane mounting plate

4. Product description

Slide Kamera HKR-4 camera crane is equipment that offers great possibilities of creating images allowing to achieve excellent results during film realisations.

It allows to take smooth rise up and fall down crane shots, and to film from the places previously inaccessible for the operator. It allows to present the scene from multiple perspectives while maintaining perfect smoothness of motion. Telescopic design of HKR-4 crane allows to adjust length of the arm freely fitting the needs of the filmmaker.

Slide Kamera HKR-4 crane consists of the camera crane, counterweight (counterweight neck, weights and safety nuts), Slide Kamera AF-17 articulated arm and Slide Kamera HGO-3 rotational fluid head. Arm of the crane is made of resistant building profiles that ensure high rigidity and durability of the device. Profiles have also anticorrosive protection against weather conditions. Additionally, the crane is equipped with various knobs and levers that allow you to lock the arm in any desirable position. All moving parts of the crane are bearinged, what ensures extreme smoothness of motion. Number of mounting holes allowing to attach additional accessories provide great universality of our device. Slide Kamera AF-17 articulated arm that comes with the crane allows to mount the accessories in various positions. There is a possibility to mount remote controlled head, Slide Kamera HGN-1 2D or HGN-4 2D on crane mounting plate, that allows to control the movements of the camera both vertically and horizontally.

5. Preparing Slide Kamera HKR-4 crane to work

5.1. Setting up working arm of the crane

Unlock arm slide clamping knobs (three knobs) and remove the safety pin. Extend the arm of the crane and secure it with the safety pin (the pin is attached to a cable and is equipped with a button that releases the spikes enabling to slide the pin in and out). Lock the arm by tightening three clamping knobs.

There is also a possibility to set the angular position of the crane mounting plate by controlling the extend of the crane arms.

PLEASE NOTE:

Disassemble any photo-video equipment from the camera crane mounting plate if you intend to change arm length. Failure to do so may result in uncontrolled spreading of the arm and can cause damage to the equipment.



5.2. Setting up counterweight arm of the crane

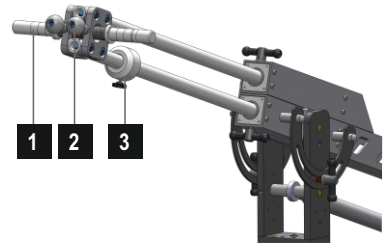
Unlock counterweight clamping knobs and slide out the counterweight arm, then lock the arm by tightening the clamping knobs.



5.3. Mounting the counterweight and balancing the crane

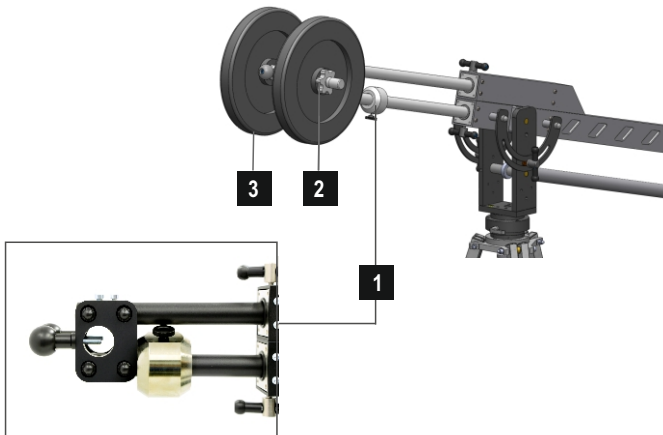
Place the counterweight neck in the holes and lock it using two clamping knobs.

Counterweight neck [1]
Counterweight clamping knobs [2]
Sliding weight [3]



After mounting the accessories on the mounting plate of the crane balance the crane by mounting the weights on the neck. **Please remember that maximum permissible counterweight is 37kg for 10 kg of payload on the crane mounting plate.** Once you balance the crane properly tighten the safety nuts on the neck. The counterweight arm is also equipped with a sliding weight to make balancing more precise.

Sliding weight [1]
Safety nut [2]
Weight [3]



6. Mounting accessories to HKR-4 crane

6.1. Mounting Slide Kamera HGN-1 2D or HGN-4 2D remote controlled head

Accessories such as cameras, photo cameras or remote controlled heads are mounted on a socket attached to the mounting plate of the working arm of the crane. The socket is equipped with 75 mm bowl (alternatively 100mm) for 75mm or 100mm leveling ball. Mount remote controlled head using a half ball leveler. There is a possibility to change the position of the plate (either upper or bottom position on the brackets mounting the plate) thus providing the versatility of mounting and improving balance of the arm.

Half balls that can be mounted on the sockets, respectively:

Slide Kamera HCZ-75mm socket: Manfrotto 520 BALL/BALLSH half ball

Slide Kamera HCZ-100mm socket : Manfrotto 500 BALL/BALLSH half ball

Unscrew the half ball handle and place the half ball on the socket. Screw the handle form the underside of the socket.

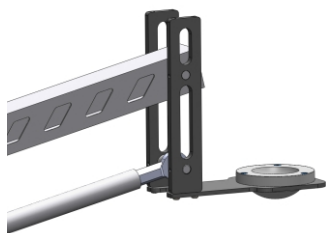


Socket mounted on the mounting plate

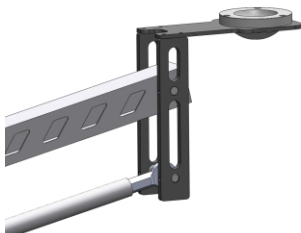


Socket reversed

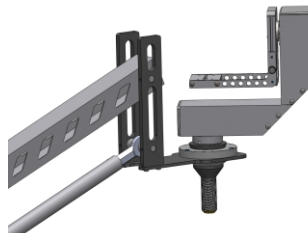
Examples of mounting remote controlled head HGN-1 2D:



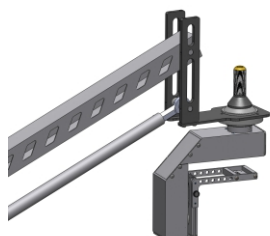
Bottom position of the plate



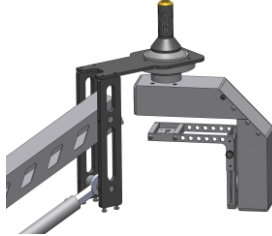
Upper position of the plate



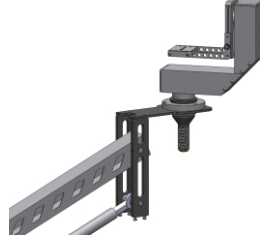
Bottom position of the plate
head on the top



Bottom position of the plate
head reversed



Upper position of the plate
head reversed



Upper position of the plate
head on the top

Cables that run between the remote controlled head and the controller as well as all the other cables (for example HDMI cable) can be attached to the arm with velcro straps included in the set.

6.2. Mounting Slide Kamera AF-17 articulated arm

Slide Kamera HKR-4 camera crane comes with already mounted articulated arm grip [1] and the ball head [2]. In order to mount the arm on the crane, loosen the clamping knob and attach the device to the ball head, then lock the lever. In case you want to mount AF-17 articulated arm on the other side of the crane, use 5mm Allen key to unscrew two M6x20 screws. Attach the grip on the other side (two M6 holes). Once you attach Slide Kamera AF-17 articulated arm to the crane you can mount HGN-ST controller to the device. The controller is equipped with 1/4" threaded hole. Connect the controller with the articulated arm using Slide Kamera AF-11LG reduction 1/4"-3/8" thread.

Articulated arm grip [1]

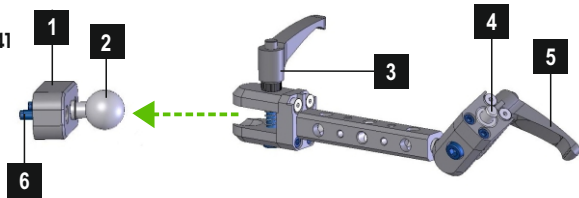
Ball head [2]

Clamping lever [3]

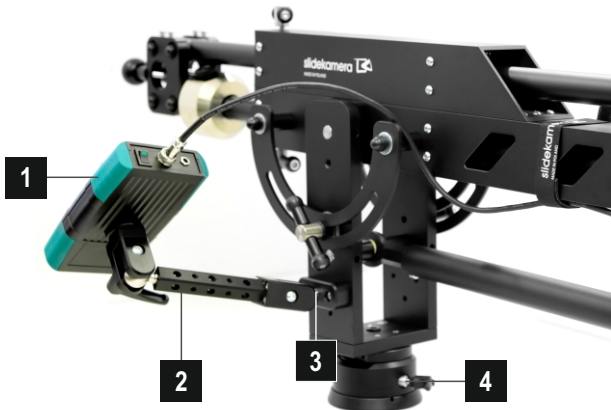
AF-11LG reduction 1/4"-3/8" thread [4]

Clamping lever [5]

Two M6x20 screws [6]



Properly attached HGN-ST controller on Slide Kamera AF-17 articulated arm.



Slide Kamera HGN-1 2D remote controlled head controller [1]

Slide Kamera AF-17 articulated arm [2]

Articulated arm grip [3]

Slide Kamera HGO-3 rotational fluid head [4]

7. Mounting individual elements of Slide Kamera HKR-4 camera crane set

7.1. Mounting Slide Kamera AF-16 adapter base to HST-2 tripod

Begin mounting the adapter by attaching adapter base to the tripod socket. Mount the base from the underside of the tripod using three M6x20 screws (with 5mm Allen key Z type attached).

PLEASE NOTE:

It is forbidden connect HKR-4 crane with the tripod using Slide Kamera HSZ-2 quick mountint screw. Weight of the crane exceeds safety payload of the screw. Using the screw can cause damage to the device. If you choose to use Slide Kamera HSZ-2 screw instead of AF-16 adapter, **you do it on your own risk, the manufacturer cannot be held responsible for the damage caused to the equipment.**

Slide Kamera HST-2 tripod [1]

Tripod socket [2]

AF-16 adapter base [3]

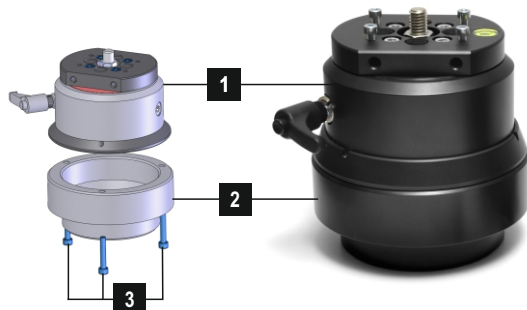
Clamping screw [4]



7.2. Mounting Slide Kamera HGO-3 rotational fluid head to AF-16 adapter mounting socket

Place Slide Kamera HGO-3 rotational fluid head on adapter mounting socket in a way so that mounting holes overlap. Use three M5x30 screws to mount HGO-3 rotational fluid head. Remember to insert the screws from the underside of adapter mounting socket.

In case you you have a crane with already assembled head there is no need to disassemble it, simply mount the set (crane with head) on AF-16 adapter socket.



Slide Kamera HGO-3 rotational fluid head [1]

Slide Kamera AF-16 adapter mounting socket [2]

Three M5x30 screws mounting HGO-3 head to AF-16 adapter socket [3]

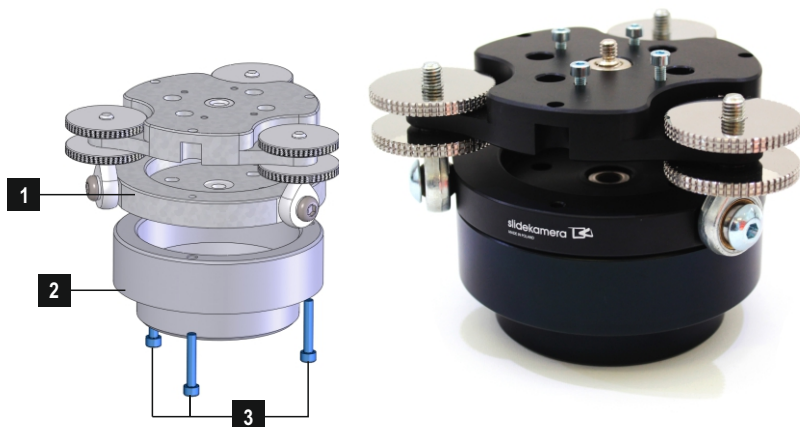
7.3. Mounting AF-18 leveling adapter to AF-16 adapter mounting socket

Place Slide Kamera AF-18 leveling adapter on AF-16 adapter mounting socket in a way so that mounting holes overlap. Use three M5x30 screws to mount AF-18 adapter. Remember to insert the screws from the underside of adapter mounting socket. In case you have a crane with already assembled head there is no need to disassemble it, simply mount the set (crane with head) on AF-16 adapter socket.

AF-18 leveling adapter [1]

AF-16 adapter mounting socket [2]

Three M5x30 screws mounting AF-18 adapter to AF-16 adapter socket [3]



7.4. Mounting Slide Kamera HGO-3 rotational fluid head to AF-18 leveling adapter mounting plate

Slide Kamera HGO-3 rotational fluid head is used for smooth regulation of the rotation as well as smooth change of the rotation resistance of HKR-1, HKR-4, HKR-6 camera cranes, Slide Kamera devices S and HSK series and other accessories. To mount HGO-3 head on Slide Kamera AF-18 leveling adapter disassemble adapter mounting plate and mount it to HGO-3 head base using three M5x20 screws.



After mounting AF-18 adapter mounting plate to the head connect the set with AF-18 adapter base.



When connecting, pay special attention so that you insert the upper steel knobs on the threaded bars when AF-18 mounting plate aligns with the bars. Safe inserting the upper knobs is possible only in this position.



After attaching the upper knobs, you can safely level the device.



7.5. Mounting AF-16 adapter socket to its base

After attaching adapters to the camera crane, mount AF-16 adapter socket on its base and thereby mount HKR-4 crane on HST-2 tripod. Place the camera crane with the head and adapter socket attached on adapter base (previously mounted on tripod socket). Connect everything with a clamping screw. Clamping screw allows to obtain strong and stable connection between Slide Kamera HKR- 4 crane and Slide Kamera HST-2 tripod.

Slide Kamera HKR-4 crane [1]

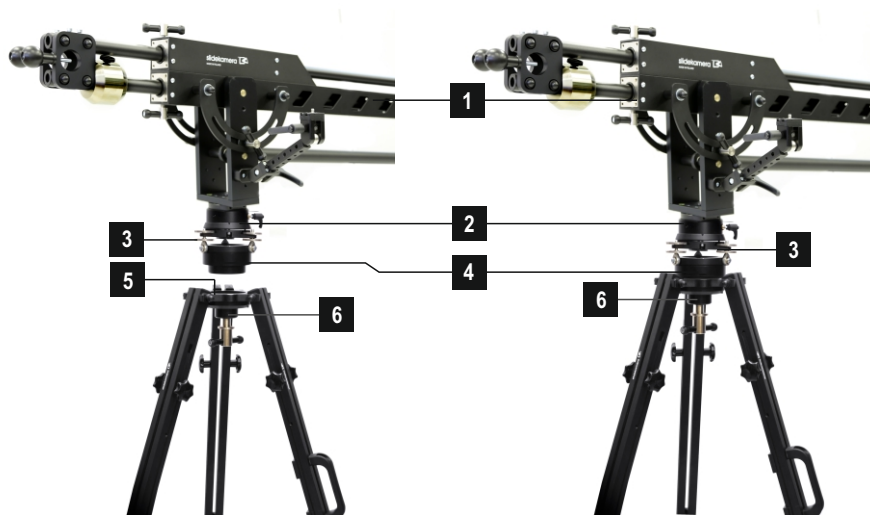
Slide Kamera HGO-3 rotational fluid head [2]

Slide kamera AF-18 leveling adapter [3]

Slide Kamera AF-16 mounting socket [4]

Slide Kamera HST-2 tripod socket [5]

Slide Kamera AF-16 adapter base [6]



7.6. Mounting HKR-4 crane directly to Slide Kamera HST-2 tripod

There is also a possibility to mount HKR-4 crane directly to HST-2 tripod without using AF-16 adapter. However, **the manufacturer does not recommend this option**. Connecting the crane with the tripod directly through Slide Kamera HGO-3 head is less reliable, stable and handy.

Warning: frequent mounting and dismounting HGO-3 rotational fluid head may result in damaging the threads in both, the head and the tripod.

Place the crane with HGO-3 rotational fluid head on the tripod in a way so that mounting holes overlap. Use three M5x25 screws to mount HGO-3 rotational fluid head. **Remember to insert the screws from the underside of tripod.**

8. Safety measures

When working with the crane of 3000mm long working arm and maximum acceptable weight including counterweights and mounted accessories up to 79kg it is extremely important to pay special attention to the safety when using the device. Because of the weight and length of the arm any impact caused by either the arm or any device mounted on the crane may result in serious injuries or equipment damage. All clamping knobs and safety pins should be operated as instructed.

It is important to pay special attention to the fact that the arm and counterweight clamping knobs are securely tightened to prevent the telescopic elements of the crane from moving.

Please remember:

- ☑ It is compulsory that the pins and nuts securing the counterweight are placed properly
- ☑ Legs of the tripod should be widely spaced to ensure stability of the device
- ☑ The crane should be tightly attached to the tripod. It is not allowed to operate the crane in a way causing danger to the people in the proximity of the device
- ☑ In case of any impact weight of the crane combined with high inertia of the arm present a hazard to human body and may cause damage of the equipment
- ☑ Weight of the crane combined with high inertia of the arm, in the event of an impact, can cause damage to the human body and the equipment itself
- ☑ Exercise extreme caution while mounting weights on the counterweight neck. Falling weight can cause serious injury
- ☑ Exercise extreme caution while during the transport of the crane. Any impact can damage the equipment

9. Maintenance

The crane does not need any additional service or lubrication of the components. Maintenance procedures are reduced to keeping the equipment clean.

10. Transport

During transport the camera crane is packed in protective styrofoam inserts for better stabilization of the device. All knobs and levers are tightened. Crane mounting plate is mounted in reverse position. After unpacking the product remove the plate and mount it in any desired position.

In order to ensure safe transport following conditions must be met:

- ☑ assemble the operating arm of the crane
- ☑ tighten all the clamping knobs to avoid the accidental spreading of the arms of the crane

The neck and counterweights are the elements transported separately.

11. Terms of warranty

All Slide Kamera products are covered manufacturer's warranty for a period of 12 months from the date of sale. Warranty covers any design faults or of the material of the product which resulted in the product malfunctioning. The warranty covers the repair, or, if the repair proves impossible, replacement of the product with a new one. However, the cost of repair of the product cannot overrun the catalogue value of the product. The warranty does not cover damage and / or product defects resulting from the improper usage, as well as not following product maintenance specifications.

The warranty excludes:

- ☒ unauthorized attempts to repair or modify
- ☒ mechanical damage caused during transport and operation of such features, scratches, dents, pits, dirt, etc ...
- ☒ flooding, moisture

To obtain warranty service the purchaser should deliver the damaged product together with a proof of purchase and proof of payment (invoice, cash register receipt). The product will be accepted for warranty service on condition that

it will be delivered with correctly filled in complaint form and properly protected during transport. You can download the complaint form from: www.slidekamera.pl / www.slidekamera.eu.

After the warranty period is exceeded any spare parts can be purchased directly from the manufacturer or in any selected points of sale.

PLEASE NOTE: Any package sent at the expense of HET-CNC s.c., 80-175 Gdańsk, Ul. Kartuska 386 will not be received.

