

SLIDEKAMERA

NEXT LEVEL OF FILMMAKING



MONO™ HEAD

REMOTE CONTROLLED 1D HEAD

User Manual

pdf version of the manual available for download: www.slidekamera.com



6/2017

TIP

On the margins you will find information, which complement the contents of the manual. They are not essential for the correct operation of the device, but you might find them useful.

Before you start your work with the **MONO HEAD** adapter we strongly recommend to read the manual carefully.

Please note that using the adapter in a manner inconsistent with the instructions, any unauthorized repair attempts or any kind of modification of the device can cause a damage the manufacturer is not responsible for.

Table of contents

1. Technical specification	2
2. Content of the set	3
3. Construction	3
4. Power supply	4
5. Mounting	4
6. Connections.....	5
7. AION IQ controller	6
7.1. Auto tracking feature - Smart Eye	6
7.2. AION IQ modes.....	7
8. Maintenance and operation	8
9. Terms of warranty	8

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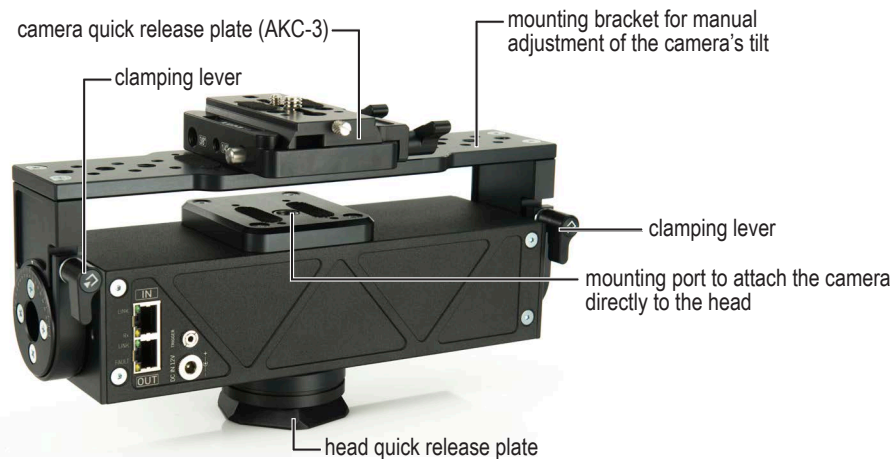
1. Technical specification

Application:	precise rotation of the camera in one axis
Weight:	2.9kg
Head dimensions:	267mm x 80mm x 132mm
Head load capacity:	8kg
Range of head rotation angles:	N x 360°
Maximum rotation speed:	73°/s (360°/4,9s)
Maximum acceleration:	264°/s ²
Supply voltage:	10..17V DC min 25W
Battery working time:	12V 7Ah min. 3h
Operating temperature range:	0 to +40°C
Recommended relative humidity:	< 90%

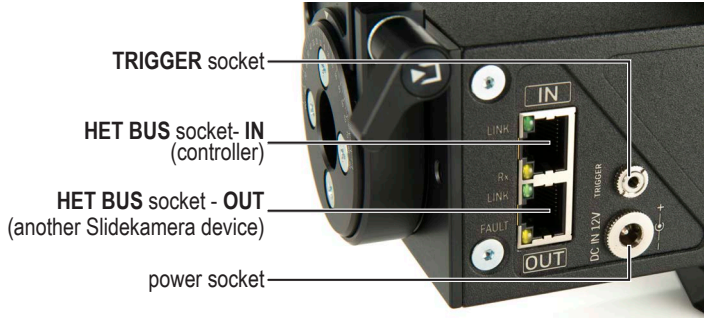
2. Content of the set



3. Construction



MONO HEAD is equipped with a **TRIGGER** socket to connect the device with a photo camera using a proper shutter release cable, thus allowing for interval shots synchronized with a slow movement of the head.



Driving motor markings:

LINK	Green light indicates, that controller cable is properly connected.
Rx	When orange light flashes slowly the user is informed, that the driving motor is powered, but is not receiving any command from the controller. When orange light starts flashing rapidly this indicates that the driving motor received a command from the controller.
FAULT	Flashing light indicates existing error.

4. Power supply

MONO HEAD can be powered by many 10-17V DC power sources (min. 25W power output), such as:

- AC power adapter;
- external 12V battery - e.g. **Slidekamera AF-7** power pack;
- V-lock or BP-U battery with D-Tap connector (additional adapter is required);
- BP-U battery with **SLIDEKAMERA BP-U Adapter** with magnetic holder.

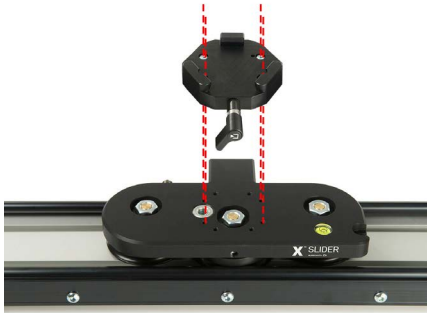
5. Mounting

MONO HEAD is designed to be mounted on tripods and sliders by a quick release plate, which is included in the set.

By using this adapter mounting of the head is fast, safe and reliable. With the adapter you can unmount the head and mount it again at the same angle. That enables you to reassemble your set in identical configuration and reuse previous configuration settings and recorded camera trajectories.

PLEASE NOTE
The set does not include any power sources or adapters required to power **MONO HEAD**.

To mount **MONO HEAD** on a tripod or slider:



- mount the base of the quick release plate to the slider or tripod with Allen screws included in the set;
- mount the head on the adapter;
- tighten the clamping lever on the base of the adapter.

6. Connections

MONO HEAD can be controlled by a wide range of devices equipped in the **HET BUS** socket (RJ45), such as **AION** controllers or **SLIDE LINK** wireless adapter.

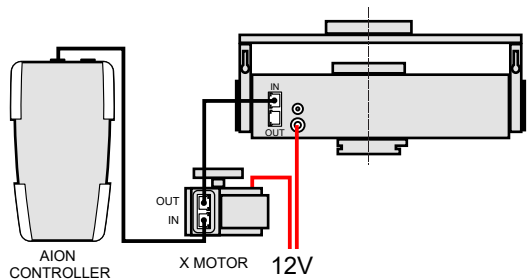
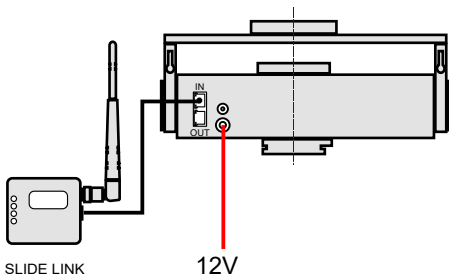
This allows the head to work with other elements of the motion control system, such as slider motors.

Many devices can be connected to one controller and the order of the devices is not important.

Connecting cables:

- connect controller (e.g. **AION IQ**, **SLIDE LINK**) to the first device of your choice, to its **IN** socket using steering cable;
- further device (if there is any) connect by connecting its **IN** socket with **OUT** socket of the previous device;
- connect power supply to devices, that requires external power source for their motors (heads, sliders, etc.);
- controlling devices may include own batteries or be powered by a steering cable.

Examples of connecting **MONO HEAD** with other devices:



7. AION IQ controller

TIP

SLIDEKAMERA offers sets, that includes **X MOTOR** drive, **AION IQ** controller and **MONO HEAD** remote head.

MONO HEAD is delivered without dedicated controller. It can be controlled with any steering device equipped in **HET BUS** socket (RJ45). The most common controller of this type is **AION IQ**, included in the set with **X MOTOR** drives.



After connecting to the **MONO HEAD** the **AION IQ** controller offers additional features, that are available only during operation with the head.

Options mentioned below apply only to operation with **MONO HEAD** - for instructions regarding other usage of the **AION IQ** controller please refer to the corresponding user manual.

PLEASE NOTE

To use **Smart Eye** feature, you need a remote head (e.g. **MONO HEAD**), slider with **X MOTOR** drive and a controller, that supports this feature!

7.1. Auto tracking feature - Smart Eye

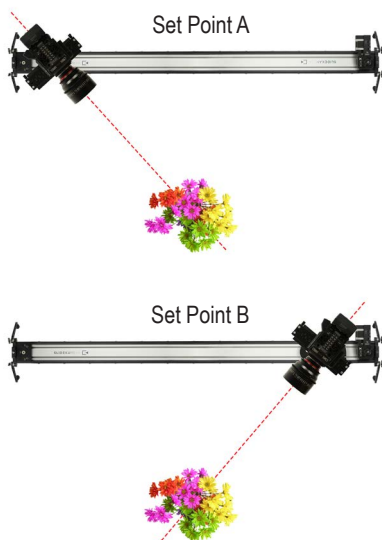
AION IQ controller is equipped in auto tracking feature - **Smart Eye**. It is designed to keep correct angle of the camera during motion of the slider and to eliminate the parallax effect. That enables the camera to hold the subject in the frame and to keep correct composition of the image.

TIP

The **Smart Eye** feature can be reconfigured in the **AION IQ** settings menu.

Smart Eye feature has to be configured and calibrated to work properly. By default after powering up the **AION IQ** controller calibrates slider's drive and enters the **Smart Eye** settings.

After calibrating slider's drive **AION IQ** will ask to select the Smart Eye Mode:

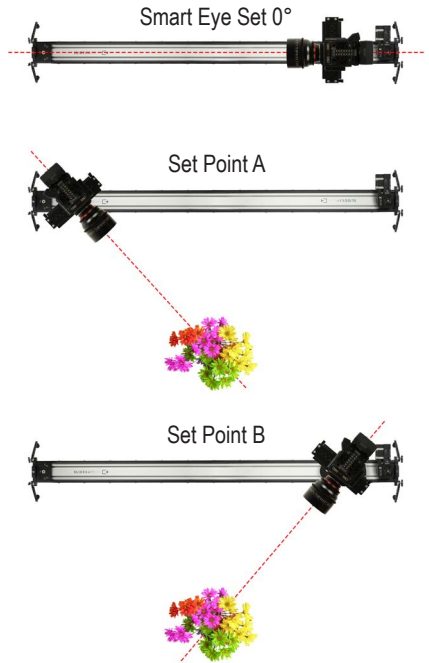


SIMPLE - basic mode, that calculates the angle of the camera in a simplified manner. It works best in situations where the camera has to be set up quickly. Configuration of the controller in **SIMPLE** mode consist of setting two positions on the slider, that are used to calculate approximate angle of the camera.

- after selecting **SIMPLE** mode the controller will ask to „Set point A“;
- push the joystick sideways to set first position on the slider;
- push the joystick up and down to rotate the head - aim the camera at the filmed object and set correct composition of the frame;
- confirm by pressing the joystick;
- the controller will ask to „Set point B“;
- similarly set the slider and the head in the opposite position;
- confirm by pressing the joystick;
- the device is ready to work.

PRECISE - advanced mode, that calculates exact position of the filmed object. It works best when the camera has to work precisely, on long focal length, at short distance to the object or at high angle. Configuration of the controller in the **PRECISE** mode consist of setting base position (0°) and two opposite positions, similar to **SIMPLE** mode.

- after selecting the **PRECISE** mode the controller will ask to set "Smart Eye 0°" - hit **YES** to set the base position; if you have configured the device before, and now you're only changing the angle of the filmed object, you can skip setting base position;
- to set the base position (0°), by pushing the joystick up and down rotate the head to align the lens axis parallel to the slider; you can use the viewfinder of the camera to set a point on the axis of the slider (e.g. 1/4" mounting thread) in the middle of a frame;
- confirm by pressing the joystick;
- the controller will ask to „Set point A“;
- push the joystick sideways to set first position;
- push the joystick up and down to rotate the head - aim the camera at the filmed object and set correct composition of the frame;
- confirm by pressing the joystick;
- the controller will ask to „Set point B“;
- similarly set the slider and the head in the opposite position;
- confirm by pressing the joystick;
- the device is ready to work.



OFF - the head remains inactive during operation of the slider.

MANUAL - the head will be controlled manually by using joystick. Slider can be used in manual and automatic modes, regardless of the operation of the head. This enables you to set automated movement of the slider and operate the head manually in real time.

7.2. AION IQ modes

The **MONO HEAD** remote head can operate in all modes of the **AION IQ** controller and **SLIDEKAMERA** drives.

LIVE - mode used to record footage in real time. **MONO HEAD** can be set to work automatically (**Smart Eye** feature), or to be controlled manually by the operator. All settings of the **LIVE** mode are available: **FREERIDE**, **RECORDING**, **PLAYBACK** and **VideoLoop**.

TIMELAPSE and **ANIMATION** - modes used to record stop motion footage. The **MONO HEAD** can operate in automated modes of the **Smart Eye** feature (**SIMPLE** lub **PRECISE**).

PLEASE NOTE

During calibration of the slider note, that the **MONO HEAD** is not symmetrical and during operation it extends significantly beyond the trolley of the slider. Keep the distance between the **MONO HEAD** and other parts of your equipment (e.g. **X MOTOR** drive)!

TIP

For details regarding **LIVE**, **TIMELAPSE** and **ANIMATION** modes, or configuration of the device please refer to the user manual of the **AION IQ** controller.

8. Maintenance and operation

BULL HEAD remote controlled head does not need any additional service or lubrication of the components.

Maintenance procedures are reduced to keeping the equipment clean.

9. Terms of warranty

All **SLIDEKAMERA** products are covered by the manufacturer's warranty for a period of 12 months from the date of sale. Warranty covers production faults and material defects, which resulted in the product malfunctioning. 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 as scratches, dents, pits, dirt, etc.
- flooding, moisture

To obtain warranty service the purchaser should deliver the damaged product together with a proof of purchase or proof of payment (invoice, cash register receipt). The product will be accepted for warranty service on condition, that it is delivered with correctly filled in complaint form and properly protected during transport.

The complaint form is available for download at: www.slidekamera.com

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.

IMPORTANT INFORMATION FOR CORRECT DISPOSAL OF THE PRODUCT IN ACCORDANCE WITH EC DIRECTIVE 2002/96/EC



At the end of its working life, the product must not be disposed of as urban waste. It must be taken to a special local authority differentiated waste collection centre or to a dealer providing this service. Disposing of electronic equipment separately avoids possible negative consequences for the environment and health deriving from inappropriate disposal and enables the constituent materials to be recovered to obtain significant savings in energy and resources. As a reminder of the obligation to dispose of electronic equipment separately, the product is marked with a crossed-out wheeled dustbin.