



AIONTM2D

CONTROLLER



User Manual

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

Before you start your work with the controller AION™ 2D we strongly recommend to read the manual carefully.

Please note that using the controller 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.

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1. AION™ 2D controller



Joystick and the knobs are located on the front panel of the controller. Electric connectors sockets and the power switch are located on the top wall of the controller housing.

Front panel:

- [1] joystick
- [2] MEM keys
- [3] INVERT keys
- [4] DAMPING knobs
- [5] SPEED knobs

Top wall of the housing:

- [6] power switch
- [7] steering output socket

Back panel:

[8] 1/4" mounting hole

2.Basic functions of the AION™ 2D controller

2.1. Live mode

- · accurate and intuitive control thanks to precise joystick
- smooth change of maximum speed (1-100% of the motor's top speed)
- precise control of soft start / stop (from 0.1 to 5 seconds)
- quick reverse of the movement direction of any axis (by one click)
- greater precision of control thanks to the ability to change joystick characteristics (LIN <-> LOG)
- · separate disable for every axis

2.2. Record / playback

- 3 banks of non-volatile memory for motion recording and playing back
- playback always starts from the same point (exactly where the recording has begun)
- smooth control over the playback speed (by SPEED knob of the X axis)
- · ability to loop playback

2.3. Calibration and settings

- · easy and fast calibration (setting range of the movement) of every axis
- memory of a user settings (reverse of the movement direction of any axis, joystick characteristics) and saved trajectories

2.4. Controlling the motion

Precision and ergonomics of the controlling device is provided by analog joystick. Deflection of it's stick dynamically changes the speed of the head's rotation. There are two modes to choose: **LIN** (joystick's position translates linearly to the speed of the rotation) and **LOG** (this mode gives more precise control in low rotation's speed).

SPEED knobs allows to change the top speed of a particular axis. Turning the knob clockwise increases the speed, that corresponds to the extreme position of the joystick. Turning the knob counter-clockwise lowers the speed and eventually turns the axis off (**INVERT** key backlight will turn off).

RAMP knobs allows to change soft start and stop of a particular axis. Turning the knob clockwise will increase the time of fluid acceleration. Smooth deceleration occurs when the joystick returns to center (neutral) position. **PLEASE NOTE:** If the joystick is pushed rapidly in opposite direction, the head will stop immediately (without smooth deceleration) and will start to rotate in the opposite direction.

INVERT switches allows to:

- change direction of a particular axis (by one click)
- change joystick's characteristics (LIN<->LOG) of a particular axis by holding the key (>0.7s). Backlight
 color indicates chosen characteristics (LIN green, LOG red).

2.5. Record and playback

AION 2D controller has 3 banks of non-volatile memory (recorded motion is saved even if the controller is turned off and power supply is disconnected). In every bank there can be recorded one trajectory. Maximum duration of the recording is 200s for **MEM 1** and 100s for **MEM 2** and **MEM 3**.

2.5.1. Record

To start recording, hold chosen **MEM** key (backlight of the button will start flashing). Use controler as normal. Motion will be recorded. You can use **SPEED** and **DAMPING** knobs the same way, as in Live mode. To stop recording, press **MEM** key. Recording will stop automatically when it reaches time limit.

2.5.2. Playback

To play back recorded movement trajectory press corresponding **MEM** key (the backlight of the button will turn on). To stop playing back press **MEM** key once again.

During playing back you can adjust the speed of the motion with the SPEED knob of the X axis.

To enable LOOP mode (playing back in loop) start playback by pressing MEM key twice ("double-click").



2.5.3. Going to the start position

Playback always starts from exactly the same position, from which record has been started. The head has to reach this point before playing back recorded trajectory. During this motion **INVERT** key is flashing. By using **DAMPING** knobs before playing back, you can ease reaching the starting point and reduce unwanted vibrations. Speed and acceleration of the head's return to the start position can be controlled by **SPEED** and **DAMP** knobs.

3. Callibration

AION 2D has a calibration feature - memory of extreme positions, that will never be exceeded. This prevents breaking off cables or damaging the camera.

Each axis is calibrated separately.

To calibrate particular axis, press and hold (>5s) its **INVERT** button. Backlight of the **INVERT** button will start flashing red and green, in the same time backlight of the **MEM 1** button will start flashing.

Go to the first extreme position of the axis, that is being calibrated and press **MEM 1** to save it. Backlight of **MEM 1** button will turn off, the **MEM 3** button will start flashing. Set the head in second extreme position and press the **MEM 3** to save it. The calibration of the first axis is finished. If necessary, repeat above steps for second axis.

BULL HEAD will store calibration in it's memory, even if the power supply is disconnected. If the working conditions haven't been changed, the head is ready to work immediately after turning it on.

4. Terms of warranty

All Slidekamera 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. Hovewer, 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 and 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. You can download the complaint from: 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.

