

# **SLIDE** MLINK

WI-FI WIRELESS ADAPTER



# **User Manual**

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

#### 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 **SLIDE LINK** 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.

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# 1. Description of the wireless adapter Wi-Fi SLIDE LINK

The **SLIDE LINK** Wi-Fi adapter enables the remote control of the devices of the **SLIDEKAMERA** system via the **Slideye PRO** application (available for iOS and Android tablets) and **SLIDEKAMERA** drivers, equipped with Wi-Fi connection.

A single **SLIDE LINK** is sufficient for controlling the whole system, regardless of the number of devices. In order to increase the freedom of movement of the system it is possible to use a bigger number of adapters.

# 2. Structure of the SLIDE LINK adapter

#### Sockets:

- [1] HET-BUS socket for connecting the SLIDEKAMERA device
- [2] antenna socket

#### LEDS:

- [3] TX it signals the transfer of data to device, connected to the HET-BUS socket
- [4] RX it signals the receipt of data from device, connected to HET-BUS socket
- [5] **POWER** it signals the power supply of **SLIDE LINK** adapter
- [6] STA steady light signals operation in wireless network client mode (STA) and blinking light – connecting to this network; in access point mode (AP) the LED is off.
- [7] **SERVICE** it signals that the **SLIDE LINK** adapter is in service mode; it should not occur during normal operation
- [8] AUX service diagnostics LED, without informative function for the User.

#### Keys:

- [9] **RESET** pressing restarts the adapter
- [10] **CONFIG** holding down for more than 30 s activates configuration mode

# Mechanical fixings:

- [11] Mounting holes with 1/4" thread for adapter mounting
- [12] Mounting holes for screwing the V-mount adapter
- [13] Magnets, enabling magnetic mounting





# 3. Operation modes of SLIDE LINK adapters

The **SLIDE LINK** adapter can operate in one of two modes: Acces Point mode (Access Point - **AP**) or Network Client mode (Station - **STA**).

#### 3.1. Access Point Mode (AP)

There is no need for Wi-Fi network in the **SLIDEKAMERA** device work area when choosing this mode. The **SLIDE LINK** adapter establishes such a network and other devices connect to it: tablets with **Slideye PRO** control application and other **SLIDE LINK** adapters.

The established network is designed exclusively for the **SLIDEKAMERA** system and is not meant for use by other devices. It minimizes the load on the network and ensures a bigger reliability of communication and operation of the **SLIDEKAMERA** system devices.

#### 3.2. Network Client Mode (STA)

In this mode the **SLIDE LINK** adapter does not establish its own network but connects to the already existing network, e.g. the existing local network or the second **SLIDE LINK** adapter, which works in the **AP** mode.

Immediately after connecting to the power supply the **SLIDE LINK** adapter will start connecting to the network it was configured to work with. It will be signaled by blue blinking **STA LED**. The connection with this network will be signaled with a steady light of the **STA LED**.

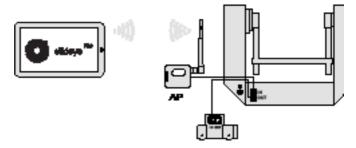
From this point the adapter is ready for work.

# 4. Usage scenarios

# 4.1. Single SLIDE LINK adapter

If only one **SLIDE LINK** adapter is available, an Access Point mode (**AP**) configuration is recommended. It is a default setting and the **SLIDE LINK** is factory configured to operate in this mode.

The adapter in the **AP** mode establishes a default network named "Slidekamera" with an access password, provided on the bottom of the device. These settings may be changed on the configuration tab of the device.



#### TIP

You will find information on how to configure the device in the STA mode in section 6.

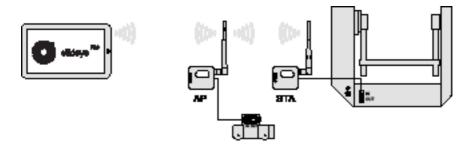


#### 4.2. Several SLIDE LINK adapters

When connecting a number of **SLIDE LINK** adapters together you can eliminate cable connections of the elements with relative movement, achieve a freer motion and avoid an accidental damage of the cable, e.g. between the slider and head.

Multiple **SLIDEKAMERA** devices, located in large distances from each other, can be combined together into one system by connecting to several **SLIDE LINK** adapters.

In case of using several **SLIDE LINK** adapters, which are not working in the existing Wi-Fi network, one of them has to operate in the **AP** mode and the rest in the STA mode. Only one **SLIDE LINK** adapter in the **AP** mode can work in the network. Otherwise the **SLIDE LINK** adapters in the **AP** mode will not communicate with each other.



## 4.3. System based on an existing Wi-Fi network

All **SLIDE LINK** adapters operating in the **SLIDEKAMERA** system may use the local Wi-Fi network. In order to set up such a configuration all the **SLIDE LINK** adapters have to be configured in the **STA** mode.

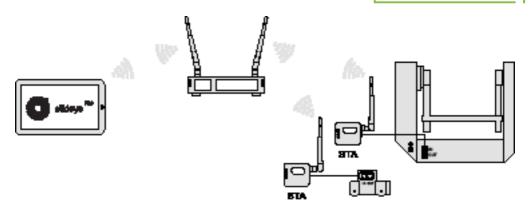
The communication of all the devices in the system will be enabled only if all the **SLIDE LINK** adapters are connected to one and the same Wi-Fi network. It can be any network, which is working in the area where the **SLIDEKAMERA** system is supposed to work.



TIP

Such a configuration can be used when the system's devices are located within large distance from each other and the existing network provides a strong signal in the whole area where the SLIDEKAMERA system's devices are located.

It is advised to use the existing Wi-Fi network, when the system contains a large number of **SLIDEKA-MERA** devices (over 8).



#### TIP

The **SLIDE LINK** adapter is ready for work immediately after unpacking.

#### TIP

In the AP mode the SLIDE LINK adapter establishes a default network called "Slidekamera" with an access password, provided on the bottom of the device. These settings may be changed in the configuration tab of the device.

# 5. Starting work with SLIDE LINK adapter

In order to start work of the **SLIDE LINK** adapter with the **SLIDEKAMERA** device system it is necessary:

- To connect the SLIDE LINK adapter with the provided cable to the IN input of the any chosen device,
- To connect the next device (it there is any) by connecting its IN input with the OUT input of the previous device.
- To connect the devices to the power supply: connect them to a battery
  or power supply unit; the SLIDE LINK adapter does not require separate
  power supply it is powered by the device to which it is connected.
- To connect the tablet with the Wi-Fi network:

SLIDE LINK in the AP mode	Connection based on an existing Wi-Fi network
Connect the tablet with the network, established by the <b>SLIDE LINK</b> adapter	Connect the tablet with the network to which the <b>SLIDE LINK</b> adapter is connected.

- Launch the Slideye PRO control application on the tablet. Press the "DETECT DEVICES" key on the main screen; the connected devices will be detected.
- In the Slideye PRO application press the key "MODES" and select the desired mode.

From that moment you can control the device or the whole system, to which the **SLIDE LINK** adapter was connected, with the **Slideye PRO** application.

If instead of the tablet with the **Slideye PRO** application you are using the **SLIDEKAMERA** hardware controller equipped in Wi-Fi connection, you need to connect it accordingly to the included instruction manual.

# 6. EasyConfig - configuration of the SLIDE LINK adapter

The **SLIDE LINK** adapter can be configured by the integrated **EasyConfig** site. It enables to change the operation mode of the adapter, the name of the network and the password, as well as the advanced settings. With the **EasyConfig** site you can also acquire information on the present software version and the serial number of the device.

The website can be accessed in two ways: via the device's configuration mode or without it. For the second way you will need the **SLIDE LINK** adapter's IP address.

# 6.1. Opening the EasyConfig site – configuration mode

- Press and hold for more than 30 s the CONFIG button on the SLIDE LINK adapter,
- Using a tablet, smartphone or a computer find the EasySlidekameraConfig network and connect to it. This network does not require a password.
- Open an Internet browser and go to http://10.0.0.1
- · The browser will display the EasyConfig site.

#### TIP

Subjectively perceived lapse of time can differ from the actual – it is worth to use a stopwatch for measuring 30 s





#### 6.2. Opening the EasyConfig site without the configuration mode

In order to enter the **EasyConfig** configuration site you do not have to switch the adapter to configuration mode.

To open it you just have to enter the IP address of the **SLIDE LINK** adapter into the Internet browser of the tablet, smartphone or computer, connected to the same Wi-Fi network.

If the adapter is in the **AP** mode, its IP is 10.0.0.2. In the **STA** mode the IP address may be various.

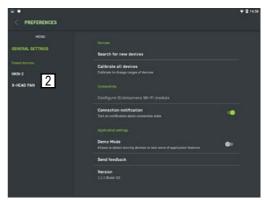
It can be determined in the **Slideye PRO** application on a tablet, connected to the **SLIDE LINK** adapter. On the main screen ("DASHBOARD") you need to press the settings key [1].

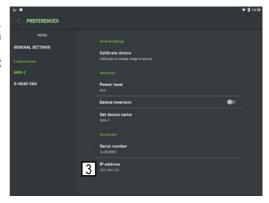
Then you need to choose any device connected to the **SLIDE LINK** adapter [2].

A site with its technical parameters will open, including the **SLIDE LINK** adapter' IP address, to which the device is connected [3].

You just need to click it in order to open the Internet browser's window with the configuration website.







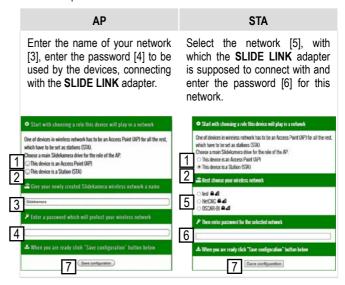
If a tablet with the **Slideye PRO** application is not used for controlling the **SLIDEKAMERA** system, but a hardware controller with Wi-Fi connection, then it is necessary to check in the instruction manual of the controller whether it will help to determine the IP address of the connected devices.



### 6.3. Configuration of the SLIDE LINK adapter by EasyConfig site

You may configure the **SLIDE LINK** adapter with the EasyConfig site as a Access Point (**AP**) or Network Client (**STA**):

- Choose the desired operational mode, checking the appropriate box: AP [1] or STA [2],
- Provide the parameters of the Wi-Fi network:



- Save the configuration by pressing the "Save configuration" button [7],
- The SLIDE LINK adapter will restart in the new configuration.

# 7. EasyConfig – advanced settings

To go to advanced settings you have to go to the SLIDE LINK adapter's configuration site, entering the address http://<adres\_IP>/advanced.htm, e.g. http://10.0.0.2/advanced.htm.

# 7.1. Changing the Wi-Fi channel of an adapter in AP mode

There are places where there are many Wi-Fi networks available. Sometimes on the same channel there can be several other networks operating and they will disturb the operation of the **SLIDE LINK** adapter. In such case it is worth checking which Wi-Fi are the least burdened by other networks and manually choose the best channel.

In order to check this you may use any third party application for mobile phones.

#### TIP

The information on AP and STA modes can be found in section 4, p. 4.

#### TIP

If for some reason the configuration is not proper or you made a mistake while making the settings – repeat the configuration.

#### TIP

The knowledge of the advanced possibilities is not necessary to use the options, given by the **SLIDE LINK** adapter. In some cases, though, it may be helpful.

#### TIP

Changing the Wi-Fi channel makes sense only when the **SLIDE LINK** adapter works in **AP** mode.

In the STA mode the adapter must work on a channel set by the network, to which the adapter is connected. For that reason manual change of the Wi-Fi channel in STA mode is impossible.



On the website http://<adres\_IP>/advanced.htm choose from a drop-down list [1] the desired Wi-Fi channel by clicking the key "Save changes" [2].

The **SLIDE LINK** adapter will restart and take up work on a new channel.



#### 7.2. SLIDE LINK adapter software update

**SLIDEKAMERA** cares for the quality of its products and the comfort if their usage, that is why it is sometimes necessary to update the **SLIDE LINK** software.

The software update may introduce functional improvement and correct the discovered errors. Therefore it is worth checking the software versions of the used **SLIDE LINK** adapter and get acquainted with the description of the changes in the newest version (available with the software) and update the software, if necessary.

The **SLIDE LINK** adapter allows for an independent update of the firmware and the **EasyConfig** configuration site. The version numbers of the currently installed firmware and the **EasyConfig** website are provided on the bottom of this page. You will also find there the device's serial number, which may be useful in case, when the **SLIDEKA-MERA** technical support helps the User with solving problems with the SLIDE LINK adapter.

## 7.3. Checking the software version

When you need to check the software version of the **SLIDE LINK** adapter, just open the **EasyConfig** configuration site. At the bottom, in consecutive lines, you will find numbers of the version of the integrated software, the **EasyConfig** site/page and the device's serial number.

# 7.4. The software updating procedure

Download the proper update file:

EasyConfig	firmware
File with IMG extension (e.g. website-skec54.img)	File with IMZ extension (e.g. i2128d811d04BCOM.IMZ)

- Initiate the configuration mode of SLIDE LINK adapter,
- Open the http://10.0.0.1/update.htm website in the browser of your tablet/computer (if you know the address of the SLIDE LINK adapter's IP, you may open the website http://<adres\_IP>/update.htm without proceeding to the configuration mode).



First learn all the steps of the procedure and don't start updating any software if you have any doubts. An incorrectly carried out software update can lead to the incorrect operation of the device or its damage.



TIP

You will find more information on the device's configuration and proceeding to the configuration mode in section 6, p. 6.







· Click on the "Choose file" key in the proper box:

EasyConfig	firmware
Use box "Website to upload" [1]	Use box "Firmware imz file to upload" [2]

- Indicate a correct update file
- · Click on "Open", then "Submit" in proper box
- · The update will commence
- Wait until the software updates and the adapter restart.

# 8. Troubleshooting

# The SLIDE LINK adapter is not operating and none of the LEDS are not flashing (including POWER)

If the POWER LED or any other LED on the **SLIDE LINK** module is not flashing – the device is not powered.

Perform the following steps in order to eliminate errors:

- Check if the SLIDE LINK adapter is connected to the SLIDEKAMERA device, which is powered,
- · Check if the supply cable is not damaged,
- · Try using another Ethernet cable.

If despite of these steps the device is not working, the very **SLIDE LINK** adapter may be damaged. You need to contact the **SIDEKAMERA's** technical support.

# There's no connection with SLIDE LINK, SERVICE LED is flashing.

The **SLIDE LINK** adapter is in service mode, where normal operation is not possible. It is necessary to switch it to operation mode. To solve this problem you need to perform another configuration of SLIDE LINK adapter.

You will find a detailed description of the device's configuration in section 7, p. 6.

# The Slideye PRO application does not detect the devices connected to the SLIDE LINK adapter.

Immediately after clicking the "DETECT DEVICES" key in the **Slideye PRO** application both TX and RX LEDS by the HET-BUS socket (to which the cable, linking the **SLIDE LINK** adapter with the **SLIDEKAMERA** devices is connected) should blink simultaneously for a while. If not, a problem has occurred.





It needs to be noted which of the LEDS is not flashing:

- If none (TX and RX), it might mean that the tablet with the Slideye PRO
  application is connected to a different Wi-Fi network than the SLIDE LINK
  adapter. Check the problem and connect the tablet to the same network as
  the SLIDE LINK adapter, if necessary.
- If the RX LED is not flashing and the TX is blinking, it means that the device, connected to the SLIDE LINK adapter is in the process of answering the questions, sent by the Slideye PRO control application. In this case end operation of Slideye PRO application, re-connect with the same Wi-Fi network, in which the adapter is working and restart the application. Then re-attempt detection of devices, clicking on "DETECT DEVICES" key on its main screen.



TIP

You can check the name of the network to which the tablet is connected in the tablet's settings or in the Slideye PRO application, on the main screen. The name of the Wi- Finetwork, to which the tablet is connected, is displayed there.

#### A momentary lack of movement fluidity/motion fluidity

If moments occur when the fluidity of movement is upset, it means that the wireless transmission was disrupted.

A wireless transmission, as opposed to wired transmission, is subject to disruptions by other devices, working in the same range of frequency, like e.g. other wireless networks, devices, which use Bluetooth and others, operating in 2.4GHz frequency.

In order to eliminate the problem you need to try one of the following ways:

- Move away the tablet from the SLIDE LINK adapters for a distance not smaller than 0.5 m,
- Check, if the Wi-Fi network in which the SLIDE LINK adapters are working, is not disrupted by other networks, working in the same or close channel; if necessary, change the SLIDE LINK adapter's channel in the AP mode. A detailed description of the advanced configuration can be found in section 8, p. 8

The wireless transmission (which is quite natural) is subject to disruptions from transmitters of strange devices, working in the same frequency. Such disruptions may have a negative influence on its stability and result in momentary losses of motion fluidity of the **SLIDEKAMERA** system.

In cases where the risk of losing the motion fluidity is unacceptable you need to consider using a wired connection.



TIP

In case of tablets with Android system it is possible to use a wired adapter to connect the Slideye PRO application with the SLIDEKAMERA devices.

# 9. Technical specification

Weight:	0,7 kg
Supply voltage:	9-17V
Power consumption	max. 180mA with 9V power supply and broadcasting in 802.11b mode
Antenna socket:	RP-SMA
Wi-Fi standards:	802.11b/g/n (2,4GHz)
Wi-Fi modes:	AP, STA
Compatibility:	SLIDEKAMERA products based on the HET-BUS protocol

# 10. 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.

#### **PLEASE NOTE**

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

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