

FLUIKA™ Miniature Pneumatic Control Kit

Driver Installation Guide

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IMPORTANT

Due to constant development of our devices, upgraded firm- and software, your actual device or software behavior may differ from that in this documentation. Therefore it is important to obtain latest documentation from our web site (www.fluika.com). All documents are indexed and named FD followed by three digit document number and eventually version number (eg. "FD001-v1.pdf"). Also source codes, project examples and tutorial videos can be found on our web site.

CONTENT

This document provides step-by-step, guide how to install software drivers for FLUIKA[™] Miniature Pneumatic Control Kit ("FLUIKA Kit") and test connectivity with computer. Detailed description is based on installation on Windows[®] 7 and will be slightly different on other versions of Windows[®]. Example on Mac OS X is based on version 10.9 This information is universally valid for all components of FLUIKA Kit, describing:

- Installation
- Testing
- On Windows
- On Mac OSX

For Windows you need to install Fluika driver only once per computer. All components in this kit use same driver!



INSTALLATION ON WINDOWS

Requirements:

- Hardware: computer with USB 2.0 port(s) and Fluika component(s)
- Software: Windows[®] XP/Vista/7

Before starting, obtain driver file from our web site:

Filename: **FluikaDriver.zip**, which contains two folders Driver_32bit and Driver_64bit, both contain file **FluikaDriver.inf**, which is actual driver definition. Extract files!



Thereafter connect the Fluika component into USB port of your computer.

Computer recognizes the device and tries to install driver



But will not succeed, as suitable driver is not found



Open **Device Manager** (Start Menu \rightarrow Control Panel \rightarrow Device Manager). You can find Fluika Device listed under **Other Devices**. Right click on **Fluika Device** and choose **Update Driver Software**.





Then Windows will ask about driver installation. Choose Browse my computer for driver software.



Choose folder (either 32- or 64-bit version depending on your operating system), where you saved driver file and click Next

I Update Driver Software - Fluika Device	×
Browse for driver software on your computer	
Search for driver software in this location:	
C:\Documents\Fluika\Driver Browse]
☑ Include subfolders	
Let me pick from a list of device drivers on my computer This list will show installed driver software compatible with the device, and all driver software in the same category as the device.	
Next	Cancel

Since the driver is not digitally signed, Windows[®] will display warning. Choose **Install this software anyway**.





Now Windows[®] shall complete installation.



If you return to Device Manager, you should find **Fluika Device** in section **Ports (COM & LPT).** This indicates that the device has been successfully installed. Notice the com port name/number (eg. COM14 on the image below)



TESTING ON WINDOWS

You can download graphical application software to test and operate our components from our web site. These programs are described in their respective user guides.

Since Fluika Devices appear as COM ports, fastest testing can be done using terminal program, such as Putty (Open Source program available <u>www.putty.org</u>) or HyperTerminal on Windows XP.

In order to open Fluika Device in Putty, choose **Connection Type: Serial**. Type COM port number into serial line (eg. COM10). Click **Open**. As it is virtual COM port other hardware parameters such as speed, handshakes etc. are irrelevant in case of Fluika Device. In terminal you can use command line syntax of the Fluika device. (eg. type "ls", in order to get listing of available commands)

RuTTY Configuration		×
Category:		
Session	Basic options for your PuTTY se	ssion
Logging	Specify the destination you want to conne	ct to
Keyboard	Serial line	Speed
Bell	COM10	9600
Features ⊡ Window	Connection type: Raw Telnet Rlogin SSI	H 💿 Serial
 Appearance Behaviour Translation Selection Colours Connection Data Proxy Teinet Rlogin SSH Serial 	Load, save or delete a stored session Saved Sessions com 10 Default Settings com 10 Com 11 com 12 com 12 com 13 com 14 com 4	Load Save Delete
	Close window on exit: Always Never Only on clean exit	
About	Open	Cancel

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MAC OS X

Fluika device have been tested only on Mac OS X version 10.9

On Mac OS X Fluika devices <u>do not required driver installation</u>. Device is recognized automatically as COM port/modem.

Connect Fluika device to your Mac.

Check device by choosing main menu (Apple) → About This Mac → More Info ... → System Report.





Then choose from the tree Hardware \rightarrow USB \rightarrow Fluika Device

$\bigcirc \bigcirc \bigcirc$	MacBook Pro	
▼ Hardware	USB Device Tree	
ATA	▼ USB 3.0 Hi-Speed Bus	
Audio	USB Receiver	
Bluetooth	USB 3.0 SuperSpeed Bus	
Camera	▼ USB Hi-Speed Bus	
Card Reader	▼ Hub	
Diagnostics	FaceTime HD Camera (Built-in)	
Disc Burning	▼ USB Hi-Speed Bus	
Ethernet Cards	T Hub	
Fibre Channel	USB 2.0 Hub	
FireWire	VISB 2.0 Hub	
Graphics/Displays	Fluika Device	
Hardware RAID	▼ Hub	
Memory	Microsoft® Digital Media Keyboard	
PCI Cards	▼ Hub	
Parallel SCSI	Apple Internal Keyboard / Trackpad	
Power	BRCM20702 Hub	
Printers	Bluetooth USB Host Controller	
SAS		
SATA/SATA Express	e Eluika Davisar	
SPI	Fluika Device.	
Storage	Product ID: 0xf882	
Thunderbolt	Vendor ID: 0x04d8 (Microchip Technology Inc.)	
USB	Version: 1.00	
▼ Network	Annufacturer: Eluika OU	
Firewall	Location ID: 0x1d114200 / 6	
Locations	Current Available (mA): 500	1
Volumes	Current Required (mA): 500	
WWAN		
Wi-Fi		-
	Hardware ▷ USB ▷ USB Hi-Speed Bus ▷ Hub ▷ USB 2.0 Hub ▷ USB 2.0 Hub ▷ Fluika Device	

It is possible to see Product ID and other information.

To test device open **<u>Terminal</u>** and go to <u>/dev/</u> folder by typing <u>cd /dev</u>

Look devices by typing: <u>Is</u>

	dev — bash — 80×24	T
bpf1	rdisk0	8
bpf2	rdisk0s1	Т
bpf3	rdisk0s2	
console	rdisk0s3	1
cu.Bluetooth-Incoming-Port	sdt	1
cu.Bluetooth-Modem	stderr	II.
cu.usbmodem1d11421	stdin	1
disk0 🤍	stdout	
disk0s1	systrace	
disk0s2	tty	
disk0s3	tty.Bluetooth-Incoming-Port	
dtrace	tty.Bluetooth-Modem	
dtracehelper	tty.usbmodem1d11421	
fbt	ttyp0	
fd	ttyp1	
fsevents	ttyp2	
io8log	ttyp3	
io8logmt	ttyp4	
io8logtemp	ttyp5	
klog	ttyp6	
lockstat	ttyp7	
machtrace	ttyp8	
null	ttyp9	
pf	ttypa	

Device should be named al.a. cu.usbmodem...

To connect to the device type screen /dev/ and device name. For example:

ptyw5	vn2	
ptyw6	vn3	11
ptyw7	zero	11
93(60)	\$ screen /dev/cu.usbmodem1d11421	

Once screen opens type some commands for Fluika device, for example: Is or dev.



-[FLUIKA DEVICE. SN:0	10002]	
 For list of command 	is type: ls	
>ls		
ls		
sn		
dev		
setp		
getp		
geta		
smrt		
gmax		
gmin		
conf		
stp		
hys		
>dev		
(DEV:PG500)		
>sn		
(SN:010002)		
>geta		
(A:2707)		
>		