

# Basic Installation Guide

(Rev.1.04)

USB adaptor for cash drawers Virtuos / EKN9001

## • Warnings and Cautions

⊘	<ol style="list-style-type: none"> <li>Avoid metal contact with device connectors</li> <li>Use the device outside the environment with flammable gases</li> </ol>
⚠	<p>If the following situations occur, immediately shut down the host computer, unplug the device, and consult your nearest dealer.</p> <ol style="list-style-type: none"> <li>Smoke, unusual odor or sounds coming from the device</li> <li>Dropping the device with visible damage to the cover</li> </ol> <p>Never do the following:</p> <ol style="list-style-type: none"> <li>Do not use the device in extremely humid places, or expose it to excessive temperature changes.</li> <li>Do not use the device in extremely humid places, or expose it to excessive temperature changes.</li> <li>Do not place the device in an oily or steamy environment such as kitchen, etc.</li> <li>Do not leave the device without adequate ventilation, under the cloth, in any cover or package.</li> <li>Do not insert foreign objects or pour water into the device openings.</li> </ol>
⊘	<ol style="list-style-type: none"> <li>Do not touch or carry this device with your hands wet.</li> <li>Do not use anti-slip gloves containing plasticizers when working with this device.</li> <li>Never use organic solvents such as gasoline, thinners, insecticides, etc. for cleaning. This could result in fire or electric shock.</li> <li>Do not pull or unnecessarily bend the connecting cables or place heavy objects on them.</li> <li>Do not look into the light sources of the device and do not point the light source at the eyes of others. This may cause irreversible eye damage.</li> </ol>
⊘	<p>Do not leave the device in unstable locations where there is a risk of falling and consequent danger of injuring people.</p>
⚠	<p>Once damage to the power cord is detected, such as damage to the insulation, stop using the device immediately and contact your dealer. Fire or electric shock could occur.</p>

## • Specification

Interface	USB 2.0 and higher
Power supply	Directly from USB 5V, max. 200 mA
Dimensions	68 (W) × 25 (H) × 44 (D) mm
Weight	8 g (including the cable)
Color	Black
Cash drawer connection	Connector RJ12, 6p6c; 24V; repeating opening max. 1x per 5 s (capacitor charge)
Interface/chipset	Prolific PL2303TA
Environment	Working temperature: 0-55°C Storage temperature: 10-55°C Relative humidity: 10-90%

## • Package Content



1,2 m USB cable

Adapter itself

Basic Instal. Guide

The package contents adapter itself and connection cable USB type A-B, length 1,2 m for connecting to POS system (terminal), computer, tablet (OTG mode...).

## • Basic Information

This guide provides a brief overview of the information necessary to install the product. More detailed information about the product can be found at [www.virtuos.cz/download](http://www.virtuos.cz/download).

## • Features

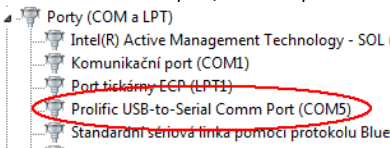
- Compact simple design
- Controlling the cash drawer via USB using virtual RS-232 serial port
- Possibility of opening and monitoring cash drawer state
- Opening of 24V cash drawers
- Power supplying directly from USB port, does not need additional adapter

## • Optional Accessories

- Cable RJ12 24V (10P10C-6P6C) for cash drawer, black (EKA0518)
- OTG cable micro USB connection the tablet (version with or without power supply)
- For another connection and extension cable, please, check current offer at [www.virtuos.cz](http://www.virtuos.cz)

## • Connection

1. Select the cable for cash drawer connection – in case you use cash drawer VIRTUOS the cable RJ12 24V (code EKA0518) is highly recommended.
2. Insert the RJ12 connector (6P6C) into the side opening of the adapter labeled **DRAWER** on the underside, make sure that connector positioning is right - with the lock facing down.
3. Plug the **USB** cable to the second side opening marked on the bottom of USB adapter.
4. Plug the other side of USB cable into the computer or another POS system and wait until automatic driver installation is done (this information is valid for newer OS Windows). In "Device Manager" of the computer (**START/Control Panel/System and Security/System/Device Manager**) will show the Prolific USB-to-Serial Comm Port, in the bracket is number or virtual serial port, for example: COM5.



5. If the driver has not been installed successfully, please, search for detailed help at [www.virtuos.cz/download](http://www.virtuos.cz/download).

## • Description of adapter connectors



Side view: USB connector – **USB**



Side view: RJ12 connector (6P6C) – **DRAWER**



Bottom view: adapter with description **USB/DRAWER**

## USB connector

The adapter is connected to the computer via USB cable type A-B, which is included in the package.

After connecting adapter to PC the operating system itself detects new hardware – **Prolific USB-to-Serial Comm Port**. When the driver installation is complete, the system provides a virtual serial port through which communication with the adapter (i.e. cash drawer) takes place.

The adapter uses for communication these preset parameters – RS232 interface (virtual serial port) - 9,600 bd, 8 data bits, none parity, 1 stop bit. This setting is recommended.

## RJ12 connector (6P6C) for cash drawer connection

The cash drawer is connected via this connector. Due to the versatility of the adapter and the variety of connectors among the cash drawers, the connecting cable is not included. The cable must be purchased for a specific type of drawer, if it is not already included.

## • Programming\* – opening the drawer

The drawer is opened after sending any ASCII character to the appropriate virtual COM port.

Example of opening from the Windows OS Command Line:

1. Start Command Line – **with right mouse button - Start > Command line**.

2. Set the serial port connected to the adapter (for example: COM5 – for finding exact number of the port see "Connection" part of this Guide) by this command:

**mode com5 9600,n,8,1**

3. Open the drawer by sending a character to the port with a simple command: **echo>com5\*\***.

4. The drawer should open now. If not, please, check the cable connections.

## • Programming\* – status detection

Detection of cash drawer status is indicated by state of the signal **Data Carrier Detect – DCD**, sometimes is called just **CD** or **RLSD**. Logical one means switch turned on (in case of Virtuos drawers = closed), and vice versa – zero means disconnected (Virtuos = opened drawer).

\* More about programming, plugging in, etc. in **Programming and Construction Guide** at [www.virtuos.cz](http://www.virtuos.cz)

\*\* ATTENTION: for DOS window in Windows it is necessary to call ports higher than 9 by so-called "whole" path, i.e. when using COM18, this command must be written as **echo>\\.\com18 !**