GLONASS · GPS

INTERFACE
CONVERTER

DOCUMENT
VERSION
1.0

«TKLS-PROG-485»
INTERFACE CONVERTER

USER MANUAL

Table of content

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Introduction

This User Manual applies to the TKLS-Prog-485 USB-RS485 interface converter produced by TechnoKom Ltd. TKLS-Prog-485 allows connection of external devices equipped with RS-485 interface to USB and can be used for programming, data reading and configuring those devices.

In particular TKLS-Prog-485 is used for programming and configuring of TKLS fuel level sensors and AutoGRAPH-CardReader-Light device.

IMPORTANT

All information on functions, functional capabilities and other specifications related to TKLS-Prog-485 converter, as well as all information contained in this User Manual is based on current data (at time of writing) and is deemed to be valid as of the date of publication.

TechnoKom reserves the right to modify the information or specifications without prior notice or commitment.

Technical Specification

Description	Value
Connection to a PC	USB 2.0
Connection to an external device	RS-485
RS-485 Bus (TIA / EIA-485-A)	1
Type of power supply	USB
DC output (for external device)	12 ± 2 V, 200 mA
Operating temperature, °C	-40...+85
Cable length, mm	195
Weight, g	25
Average life time, years	10

Scope of supply

№	Description	Qty
1	USB-RS485 Converter «TKLS-Prog-485»	1
2	Adapter for connection to TKLS fuel level sensor	1
3	Adapter for connection to AutoGRAPH-CardReader-Light[1]	1
4	Set of operational documentation	1

[1] Optional, on request.

Interface Connectors

RS-485 connector of the USB-RS485 interface converter

№	Assignment
1	+Vin
2	-Vin
3	RS-485 (A)
4	RS-485 (B)

Connection to TKLS fuel level sensor

Use special adapter supplied with TKLS-Prog-485 converter in order to connect the converter to TKLS fuel level sensor.

To connect TKLS fuel level sensor to a PC:

• disconnect the sensor from power supply;
• connect the 4-pin connector of TKLS-Prog-485 converter to the 4-pin connector of the adaptor (see Fig.1, step 1);
• connect TKLS-Prog-485 to a PC (Fig.1, step 2);
• connect free end of the adaptor (Molex connector) to TKLS sensor (Fig.1, step 3);
• if the sensor drivers have been installed previously, connected device will be automatically recognized by system.

When TKLS fuel level sensor is connected to PC, it is possible to send new settings to the sensor or update its firmware. For more detailed information see document «TKLS fuel level sensor User Manual».
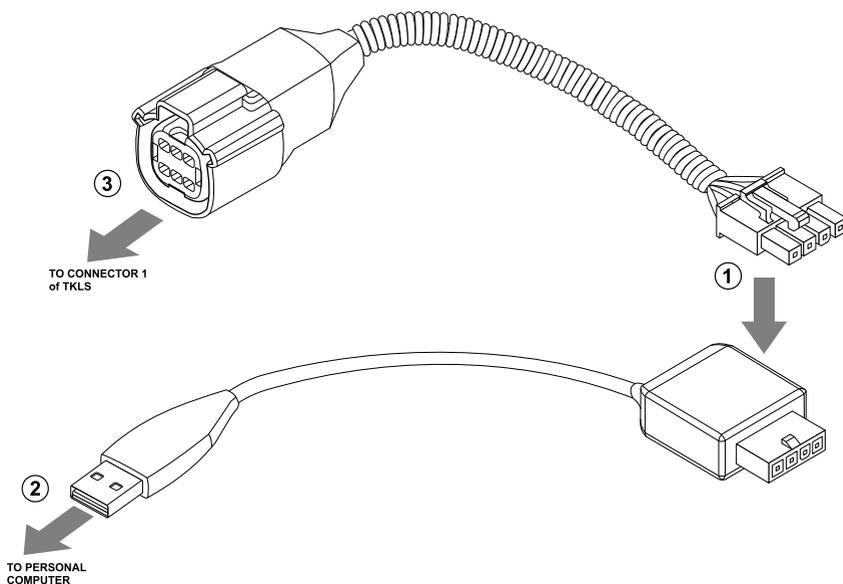
③

**TO CONNECTOR 1
of TKLS**

①

②

**TO PERSONAL
COMPUTER**

Fig.1. Connection to TKLS sensor.

Connection to AutoGRAPH-CardReader-Light

Use special adapter supplied with TKLS-Prog-485 converter in order to connect the converter to AutoGRAPH-CardReader-Light .

To connect AutoGRAPH-CardReader-Light to a PC:

• disconnect AutoGRAPH-CardReader-Light from power supply;
• connect the adapter to AutoGRAPH-CardReader-Light. To do it, connect RS-485 (A) and RS-485 (B) wires of the adapter to RS-485 (A) and RS-485 (B) wires of AutoGRAPH-CardReader-Light (Fig.2, step 1);
• connect the 4-pin interface connector of the adapter to the 4-pin connector of TKLS-Prog-485 converter (Fig.2, step 2);
• connect TKLS-Prog-485 converter to a PC (Fig.2, step 3);
• if drivers for the card reader have been installed previously, connected device will be automatically recognized by the system.
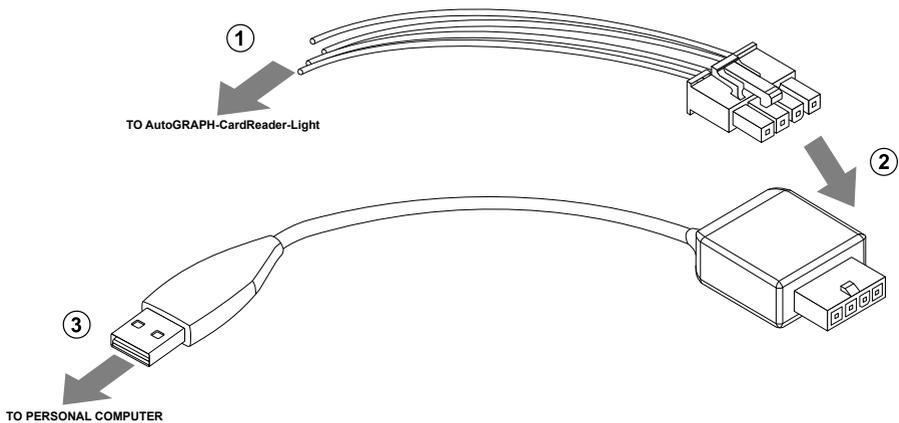

TO AutoGRAPH-CardReader-Light

TO PERSONAL COMPUTER

Fig.2. Connection to AutoGRAPH-CardReader-Light.

Wire assignment of the Adapter for connection to AutoGRAPH-CardReader-Light

№	Wire colour	Assignment
1	Red	+Vin
2	Black	-Vin
3	Orange with a white stripe	RS-485 (A)
4	Brown with a white stripe	RS-485 (B)

Drivers installation

This section covers an installation procedure of the driver for TKLS-Prog-485 converter.

For proper operation the AGUSB Driver must be installed before connecting the converter to a PC. This driver can be downloaded for free from the official website of TechnoKom. The AGUSB Driver is compatible with MS Windows 7, 8, Server 2003, Server 2008 (x86 и x64).

Given below is an example of the driver installation on MS Windows 7.

To install the driver:
• connect TKLS-Prog-485 to a PC;
• if automatic driver installation is enabled in the system settings and the Internet connection is available, TKLS-Prog-485 driver will be downloaded from Windows Update server and installed automatically;
• if Internet connection is not available, it is recommended to install the driver manually following the instruction given below;
• download the archived driver file from the official website of TechnoKom and extract it to a temporary directory on a hard driver;
• when connecting the converter to a PC, the system will automatically found new equipment (Fig.3);
• launch the driver update wizard and select "Browse my computer for driver software" to search for the driver manually. Select the folder where the driver files was extracted (Fig.4);
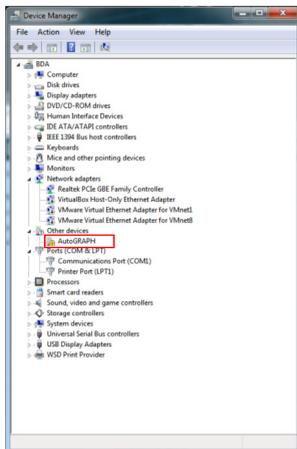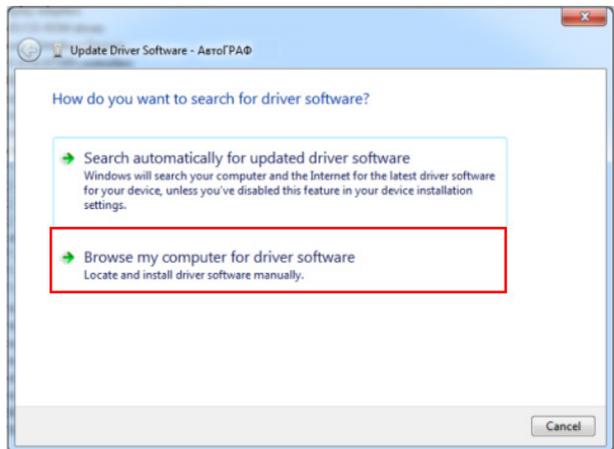

Fig.3. New equipment.

Fig.4. Browse for TKLS-Prog-485 driver.

• install the driver. After the installation the connected device will be recognized (Fig.5).
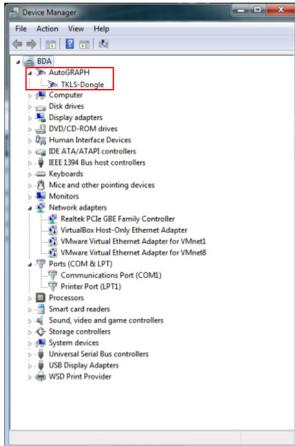
Fig.5. TKLS-Prog-485 is connected.