RS232 Integration with Weight Indicator “MIDL MI VDA/12Ya”

User Manual

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Necessary Tools, Equipment and Materials

To connect weight indicator «MIDL MI VDA/12Ya» to Galileosky tracking device (hereinafter – tracking device), you should have:

1. Electrical-installation tools.
2. A set of connecting wire.
3. A computer with Windows-based operating system and an installed configuration program for Galileosky tracking devices – «Configurator 4.0» or a more advanced version. It is recommended to install the last version from the site https://galileosky.com/podderzhka/programmyi.html
General Information

Weight indicator «MIDL MI VDA/12YA» (Pic. 1) is intended to measure and convert a signal from strain gage weight sensor(s), output of measuring data to a built-in indicator field and transmit data to another equipment (remote information display, PC, printer, etc.).

This device is a component of scales, weight devices and measuring equipment of different types. The device provides solutions to managing technical processes in manufacturing, agricultural and transport industries.

The tracking device performs a function of transmitting weight indications.

**ATTENTION!** Such functionality is implemented in the tracking devices by means of Easy Logic technology ([https://galileosky.com/products/easylogic.html](https://galileosky.com/products/easylogic.html)). It is needed to use tracking devices supported with this technology. You can find out whether the tracking device supports Easy Logic technology or not in the following ways:

- in tracking device’s specification there should be abbreviation (AI) or sticker on the back of the device should have abbreviation (2) near IMEI (Pic. 2).
- send Hardversion command to the tracking device, if you receive numbers different from zero after comma in response, working with Easy Logic is possible (example of reply: HARDVERSION=21,8243)
Connecting Weight Indicator “MIDL MI VDA/12Ya” via RS232 Interface

Parameters of connection by RS232 protocol:

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>RS232 port of the tracking device</td>
<td>0</td>
</tr>
<tr>
<td>Speed</td>
<td>9600 bit/s</td>
</tr>
<tr>
<td>Start bit</td>
<td>1</td>
</tr>
<tr>
<td>Data bit</td>
<td>8</td>
</tr>
<tr>
<td>Stop bit</td>
<td>1</td>
</tr>
<tr>
<td>Parity control</td>
<td>No</td>
</tr>
</tbody>
</table>

Parameters and settings of device:

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Version of software</td>
<td>2.01</td>
</tr>
<tr>
<td>Unit measure</td>
<td>Kg</td>
</tr>
<tr>
<td>Transmission mode by RS232 port</td>
<td>Command</td>
</tr>
<tr>
<td>Operating mode of device</td>
<td>Weighing</td>
</tr>
<tr>
<td>Number of signs after comma</td>
<td>0</td>
</tr>
</tbody>
</table>

Connecting weight indicator to the tracking device can be carried out in accordance with the scheme in Picture 3.
ATTENTION! Grounds (GND) of the tracking device and weight indicator must be connected; power to the devices is provided separately. RS232 contacts must be connected strictly according to the scheme – RX of the indicator to TX0 (TX1) of the tracking device and TX of the indicator to RX0 (RX1) of the tracking device.

Tracking device setting for weight indicator connection is carried out via Configurator:

1. connect weight indicator to the tracking device;
2. connect the tracking device to PC;
3. run Configurator program on your PC;
4. go to “Setting” page, tab “Track”, select dynamic structure of archive storage (Pic.4);

ATTENTION! For tracking devices Galileosky Base Block and 7.0 versions the setting of dynamic structure mode is not needed.

5. go to tab “Protocol” in Configurator, set the main packet for data transmission to the server, for this tick parameter “UserTag 0” (Pic. 5);
6. go to tab “Digital inputs” in Configurator, select “Nothing” for parameter “RS232[0] peripheral type” (or “RS232[1] peripheral type”) (Pic. 6);

7. click “Apply” button;
8. go to tab “Commands” in Configurator and run «script galileosky/midlmi» command (Pic. 7);

**ATTENTION!** Algorithm is downloaded from the server, that is why the tracking device should have an activated SIM-card with GPRS support.
9. Make sure the script has been downloaded by the tracking device, for this go to tab Device and check the Easy Logic status (Pic. 8);

10. To check algorithm operating go to tab “Troubleshooting” in Configurator, tick “Algorithm and script diagnostics” parameter and check troubleshooting messages (Pic. 9);

In case of correct data transmission with device, you will receive weight value «MidlMI: weight is <weight>», in other cases – a message with an error.
Monitoring Software Setting

After tracking device’s setting there is setting of monitoring software. If your software doesn’t support receiving information from “MIDL MI VDA/12Ya” weight indicator through Galileosky tracking device, you should individually develop and install software to the monitoring server, processing data in accordance with the protocol of exchange between the tracking device and server.

Description of Exchange Protocol is provided in our site, you can find it in the following link https://galileosky.com/assets/files/docs/manuals_en/server-exchange-protocol-description-(400176-v12).pdf

Weight value will be transmitted in tag “User Tag 0”. In case of problems in connection between the tracking device and the device, a number with value 0xFFFFFFFF will be transmitted.

Connecting “MIDL MI VDA/12Ya” weight indicator to Galileosky tracking device is completed, the tracking device is ready for use.

RSA “Galileosky”, LLC produces satellite monitoring equipment for GPS and GLONASS real time vehicles monitoring. The tracking devices determine the mobile object location recording the time and route as points with geographical coordinates and send the data to the server to be further processed and sent to the traffic controller panel.

In addition, a number of other vehicle parameters are recorded: the state of analog and discrete inputs of the tracking device and the state of digital interfaces.

The tracking devices can be used in any vehicle.