

# Operating manual

## GNSS OBU-5310

EN



## Chapter 1: Bracket installation

Please refer to the provided Installation Manual.

**NOTE:** Please check the windshield characteristic in the documentation of your vehicle. The OBU cannot be used in vehicles with metalized windshields. The windshield must be non-metalized or contain areas without metallization wherein the OBU should be placed to ensure normal function.

## Chapter 2: Getting started

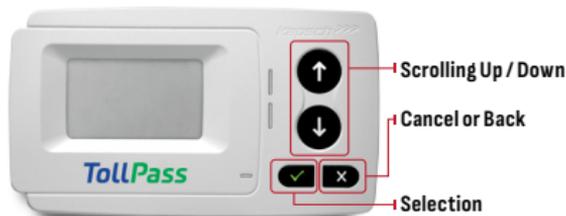
After completing the installation steps, the unit will start when the power cable is connected (see chapter 5).

**NOTE:** The OBU must be connected to the power source at all times, and the + sign displayed on the OBU screen.

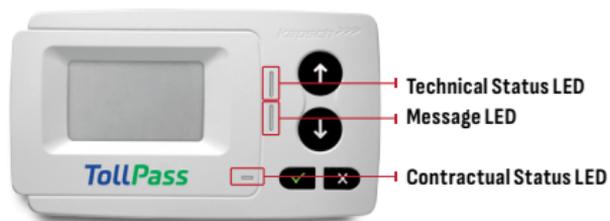
In case the message "Waiting for vehicle data" is shown on the display, please wait until the final configuration is downloaded. Once the download is complete, the message "Waiting for vehicle data" will disappear from the display.

If the "Waiting for vehicle data" message is not displayed, your unit is ready to confirm the vehicle data.

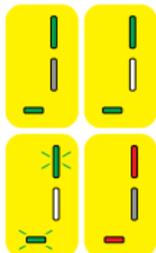
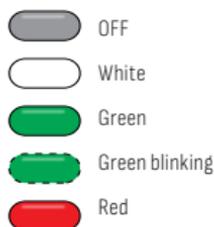
### 1. OBU-5310 CONTROL



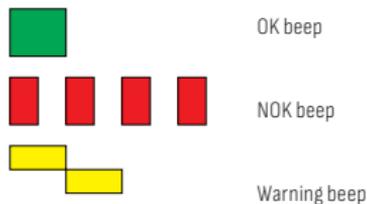
### 2. OBU-5310 LEDS



- The technical and contractual status LED lights can be either "OFF", green, blinking green, or red. These LED lights will be red until the activation sequence is finished.
- The Message LED can be white to indicate a message is received, or "OFF".
- The green color indicates a normal operational mode.
- The blinking green color indicates a warning. A message is displayed as an indication of what the problem might be. Please refer to the troubleshooting chapter (see chapter 6).
- The red color indicates an error. A message is displayed as an indication of what the problem might be. Please refer to the troubleshooting chapter (see chapter 6).
- No color (LED OFF) indicates that the OBU is either in a sleep mode or that the OBU startup procedure has not finished since the GNSS signal is needed to localize the OBU.



### 3. OBU-5310 SOUND INDICATIONS



### 4. OBU-5310 SYMBOLS

- BG Active toll zone (country code)
- XX Inactive toll zone
- GNSS coverage indicator

- The battery is fully charged
- The battery is depleted
- The battery needs to be charged
- GSM/GPRS coverage and signal strength indicator
- GNSS tracking is disabled (privacy mode enabled)
- New message indicator
- Indicates that the external power supply is connected

**NOTE:** For your safety, only interact with the unit when the vehicle is stopped. The buttons are non-operational at speeds above 10km/h.

## Chapter 3: Unit activation

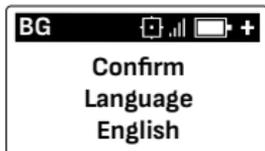
### 1. LICENSE PLATE NUMBER



- A. Make sure that the license plate number and country of registration of the vehicle/tractor match those shown on the display
- B. If the vehicle license plate number and country of registration match, press the Select button.

C. If it is incorrect, please call TollPass Contact Center (+359 884 00 55 00) for further instructions.

## 2. LANGUAGE



Choose your language using the Scrolling Up ↑ / Down ↓ buttons and confirm by pressing the **Selection button** ✓.

## 3. AXLES SETTING



The number of axles needs to be selected using the Scrolling Up ↑ / Down ↓ buttons

**NOTE: Changes in values are made via UP and DOWN buttons. Each change is confirmed via the Selection button ✓. Return to a previous step by pressing the Back button X.**

A. The number of the truck/tractor/bus axles were preset by your service provider (TollPass) according to the registration documents and cannot be changed.

B. When you are driving without a trailer, set the Trailer Axles value to 0.

C. When you are driving with a trailer, select the number of axles of the trailer. Enter the number of axles of the trailer as per the information in the Vehicle Registration Certificate.

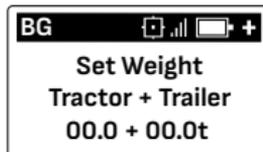
D. Confirm your selection and move to the next step by pressing the **Selection button** ✓.

**NOTE: If you realize that the wrong number of axles of the trailer has been set, you can return to the Axles Setting menu by pressing the Back button X.**

## 4. WEIGHT SETTING

The weight of the truck/tractor/bus cannot be changed as it is pre set by your service provider (TollPass) in accordance with the registration documents.

A. Skip this step and continue by pressing the **Selection button** ✓.



**The unit is active with an OK beep confirmation.**

**Before using it on the paid road network, please wait for the Technical and Contractual status LED to be green.**

## Chapter 4: Operation of device

### 1. MAIN INTERFACE

The following view is the main screen:



There are two sub-menus, „Settings“ and „Info“, that are accessible by pressing the **Selection button** ✓.

Pressing the **Selection button** ✓ from the main screen is a shortcut to the Settings menu.

### SUB-MENUS:

#### GNSS TRACKING

- Enter GNSS Tracking menu via the Settings menu.

- Use the Scrolling Up ↑ / Down ↓ buttons to choose either “Enabled” or “Disabled”.

“Enabled” means that you allow the OBU to send position data even if you are outside Bulgaria.

“Disabled” means that you do not want the OBU to send position data when you are outside Bulgaria.

**NOTE: In Bulgaria, the on-board unit will send position data regardless of the GNSS tracking setting. When driving outside Bulgaria, we recommend to keep this function is deactivated.**

#### DISPLAY BRIGHTNESS

- Enter the “Set display brightness” menu via the Settings menu.
- Use the Scrolling Up ↑ / Down ↓ buttons to adjust the display brightness to a value between 0-100% in steps of 5%.
- Set by pressing the **Selection button** ✓.

#### LED BRIGHTNESS

- Enter the “Set LED brightness” menu via the Settings menu.
- Use the Scrolling Up ↑ / Down ↓ buttons to adjust the LED brightness to a value between 10-100% in steps of 5%.
- Set by pressing the **Selection button** ✓.

**NOTE: If a message, such as a warning, is shown on the display, the main screen will be displayed again by pressing the Back button X.**

### 2. POWER MODES

The device is operational as long as it is connected to the power source and/or the battery is charged. For easy and optimum usability, the device does not rely on an

“OFF” button but manages its power states automatically. Therefore, the device turns “OFF” automatically after 5 to 15 minutes of being stationary and turns “ON” as soon as you start driving.

### 3. RESTARTING OBU

The device can be restarted by the user following these steps:

- Enter the “Restart” menu via the Settings menu.
- Confirm by pressing the **Selection button** ✓.



**NOTE: The Device and the screen will remain unresponsive for 10 seconds during the restart**

### 4. SETTING AXLES

The number of the trailer axles set in the device shall at all times match the configuration of the trailer. Enter the number of axles of the trailer as per the information in the Vehicle Registration Certificate.

**NOTE: The truck/tractor/bus axles are not subject to change as they are preset by your service provider (TollPass) according to the registration documents.**

#### STEPS:

- Enter the “Trailer axles” menu via the Settings menu
- The number of axles on the truck/tractor/bus are preset by your service provider

(TollPass) and cannot be changed

- When you are driving without a trailer, set the Trailer Axles value to 0.
- When you are driving with a trailer, select the number of axles of the trailer. Enter the number of axles of the trailer as per the information in the Vehicle Registration Certificate.
- Confirm your selection by pressing the **Selection button** ✓.

**NOTE: Changes in values are made via UP and DOWN buttons. Each change is confirmed via the Selection button ✓. Return to a previous step by pressing the Back button X.**

The total number of axles of the tractor and trailer is displayed on the main screen.

**NOTE: You are liable for a fine if the axles are not correctly set.**

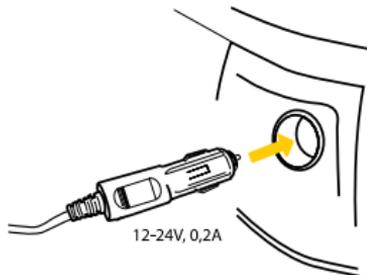
## Chapter 5: Power connection

### 1. CIGARETTE LIGHTER PLUG INSTRUCTIONS

Connect the supplied power cable to the vehicle cigarette lighter socket and make sure:

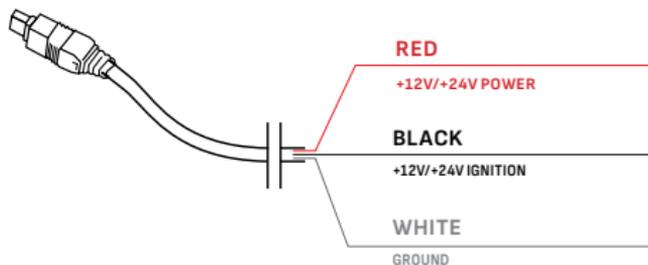
- The power adapter is plugged in properly into the cigarette lighter socket.
- The adapter is securely connected to the OBU and the OBU is receiving electrical power
- The cable will not get in the driver's way.
- The external power indication + sign is displayed on the OBU screen

**NOTE: Following this installation procedure is mandatory. The manufacturer (Kapsch) or the service provider (TollPass) does not take any responsibility for the correct functioning of the device in case of an incorrect power connection.**



## 2. FIXED CABLE INSTRUCTIONS (IF SUPPORTED BY THE DEVICE)

- A.** Use the power cable supplied. Make sure the cable is long enough, then remove the cigarette lighter plug and any excess cable.
- B.** Locate the connection points in the vehicle.
- C.** The black ignition signal wire shall be connected to the vehicle ignition.
- D.** Before connecting the cables to the vehicle, install a 5 amp time-delay fuse in series with the power wires (red and black wires). If the vehicle's power supply is already protected, this step is not necessary.
- E.** Finally, connect each wire to the connection points you have identified (vehicle power, ignition and ground).

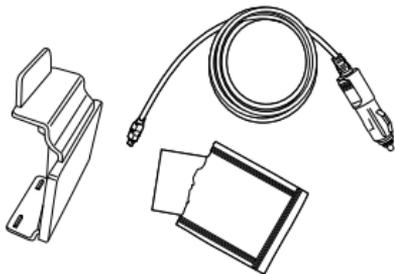
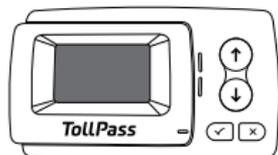


**This installation shall be carried out by an authorized service point. Please check the contractual General Terms and Conditions!**

## Chapter 6: Troubleshooting

PROBLEM DESCRIPTION	CAUSE	ACTION
<ul style="list-style-type: none"> <li>• Green blinking Technical and Contractual status LED</li> <li>• Message LED White</li> <li>• Warning beep</li> <li>• Message: "Connect to power supply immediately!"</li> </ul>	Power supply is not connected and battery charge is below 80%	<p>Make sure to plug the power cable into the unit and check that the cigarette lighter plug is well plugged into the vehicle cigarette lighter socket as described in chapter 5.</p> <p>Make sure the OBU displays + sign to indicate connection to external power supply</p>
<ul style="list-style-type: none"> <li>• Green blinking Technical and Contractual status LED</li> <li>• Warning beep</li> <li>• Message: "Connect to power supply"</li> </ul> 	The battery is low and the power supply is not connected.	<p>Make sure to plug the power cable into the unit and check that the cigarette lighter plug is well plugged into the vehicle cigarette lighter socket as described in chapter 5</p> <p>Make sure the OBU displays + sign to indicate connection to external power supply</p>

<ul style="list-style-type: none"> <li>• Red Technical and Contractual status LED</li> <li>• Not OK beep</li> <li>• Message for contract check is displayed</li> </ul>	The OBU is not transmitting data. You are driving in non-contractual conditions	Immediately contact your service provider (TollPass)
<ul style="list-style-type: none"> <li>• Red Technical and Contractual status LED</li> <li>• Not OK beep</li> <li>• Message is displayed</li> </ul>	The OBU is not transmitting data.	Immediately contact your service provider (TollPass)



# TollPass

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