

ON-BOARD UNIT

USER MANUAL

Toll Collect GmbH, On-Board Unit User Manual, V 4.2, GB – as at 10/2018



Notes on setting the weight classes on the On-Board Unit

From 1 January 2019, the toll rate will be made up of three partial toll rates:

- Infrastructure costs according to the weight class of the vehicles or vehicle combinations subject to toll. From a gross vehicle weight of over 18 tonnes, an additional distinction is made based on the number of axles (up to 3 axles and 4 or more axles),
- the air pollution costs caused, depending on the emission class and
- a partial rate for the noise pollution caused

A new change is that it is now binding and absolutely necessary for users to enter the weight class. If the weight class is not entered, it will lead to punishment and collection of the toll amount due.

i **For vehicles and vehicle combinations with a gross vehicle weight of more than 18 tonnes, the number of axles must also be given. However, for lower gross vehicle weights, the number of axles can also be declared on a voluntary basis.**

Another new change affects the determination of the gross vehicle weight of vehicle combinations. Contrary to the German Road Traffic Registration Regulations, the gross vehicle weights of the individual vehicles are added together. Support and fifth-wheel loads are not included.

Up-to-date information is always available at www.toll-collect.de

In accordance with Item 29 of the General Standard Terms and Conditions of Toll Collect GmbH, users of the automatic toll collection system are obliged to operate the On-Board Units properly. In particular, before each use of roads subject to toll, users are obliged to check that the On-Board Unit is ready to collect data and that the information on the current vehicle status is correct. Toll Collect GmbH notes that the On-Board Units save the start-up of the On-Board Units, which occurs when the truck ignition is activated, in a time-indexed manner; similarly, all settings changes made to the On-Board Unit by drivers are also time-logged, as are malfunctions in the On-Board Unit's readiness to collect data.

Within the scope of toll enforcement, officers of the Federal Office for Goods Transport (BAG) can query this information from any On-Board Unit and evaluate it in a time-indexed manner with regard to each customer's compliance with their duties.

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1 General information

! Please familiarise yourself with the functions of your On-Board Unit before beginning your first journey. The controls of the On-Board Unit must not be operated during the journey.

- The driver is responsible for properly entering the vehicle weight and number of axles before driving on roads subject to toll in Germany.
- A** ■ Before driving on roads subject to toll in Austria, the correct number of axles (category) must also be declared per the “Toll Regulations for the Motorways and Trunk Roads of Austria”. You can always view the currently applicable version of the Tolling Regulations at www.asfinag.at.
- In the event of On-Board Unit malfunction in Germany, you are obliged to manually log onto the route section subject to toll using the Toll Collect app, at a toll terminal or via online log-on.
- A** ■ In the event of On-Board Unit malfunction in Austria, you are obliged to subsequently pay the toll at a GO sales point in accordance with the Tolling Regulations. You can always obtain a GO Box at the GO sales point if your On-Board Unit has permanently failed.
- The On-Board Unit must be installed and sealed in your vehicle by a service partner authorised by Toll Collect, as required by law.
- Please do not attempt to open or modify the On-Board Unit or the supply lines connected to it, and do not alter the installation location.
- Do not use sharp-edged or pointed objects to press the buttons on the On-Board Unit.
- Do not use abrasive cleaning agents or solvents such as paint thinner or petrol to clean the On-Board Unit. Simply clean the On-Board Unit with a slightly moistened cloth.
- In order to ensure that the On-Board Unit functions correctly, there must be no objects blocking the space between the windscreen and DSRC module. Similarly, with the Continental dashboard-mounted OBU, no objects must be placed next to, on top of or above the On-Board Unit.

2 The automatic toll collection system

Dear customer,

The On-Board Unit acts as the basis for automatic toll collection on toll roads within Germany, and also for toll collection on toll roads in Austria for optional toll collection.

In Germany, the On-Board Unit performs the following tasks:

- Continuous determination of vehicle position using satellite technology.
- Transfer of journey data and vehicle characteristics to the data centre.
- Reporting disruptive influences (visually and acoustically) that prevent automatic toll collection.
- Displaying the vehicle declaration and the toll service used on the screen.

A In Austria, the On-Board Unit performs the following tasks:

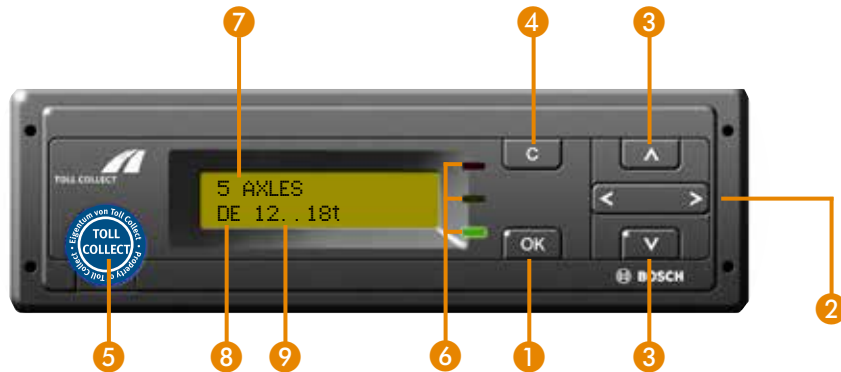
- Charging vehicles non-position-based toll at toll gantries installed along the road-side using microwave (DSRC) technology.
- Signalling successful toll collection using acoustic signals only.
- Reporting disruptive influences (visually and acoustically) that prevent automatic toll collection.

Please read through this user manual carefully and familiarise yourself with how the On-Board Unit works. Retain all documents supplied along with the OBU.

We wish you a safe and pleasant journey.
Toll Collect GmbH

3 Controls

3.1 BOSCH and BOSCH 2 On-Board Units



i To bring up the menu screen, press the **OK** key once; then use the **▼** key to scroll through the menu entries.

The graphic layout of the menu navigation system in the BOSCH On-Board Unit is different to that of the On-Board Units made by Continental; however, the procedures and operation are identical.

As an example, the difference is illustrated in the following figure:

BOSCH ↓	Continental ↓
MENU NUMBER OF AXLES	MENU NUMBER OF AXLES
NUMBER OF AXLES 2	NUMBER OF AXLES 2

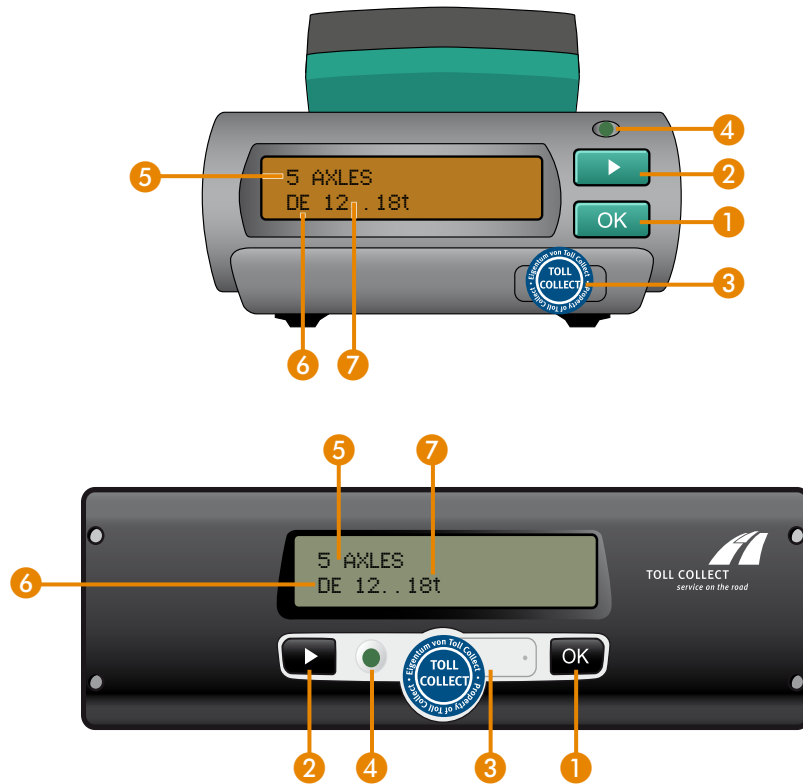
- Keys**
- 1 OK key:**
Open the menu, confirm menu options and messages
 - 2 Left and right arrow keys:**
Select and set functions
 - 3 Up and down arrow keys:**
Move forwards and backwards in the menu
 - 4 Clear key:**
Cancel an entry;
Switch to a higher menu level
 - 5 Service interface:**
For service purposes only
(please do not damage seal)

- LED**
- 6 Green:**
On-Board Unit ready for operation; all requirements for automatic toll collection are met
 - Red:**
The On-Board Unit is not participating in automatic log-on in Germany since the On-Board Unit is not subject to toll (according to the declaration) or is not ready for operation (according to the displayed message).

- Display**
- 7** Number of axles currently set
 - 8** Service (DE = Germany)
 - 9** Current weight declaration

i The controls on the second-generation BOSCH On-Board Unit do not differ from those on the first generation. The old units still have two service interfaces.

3.2 Continental On-Board Units



Keys 1 **OK key:**
Confirm menu options and messages

2 **Select key:**
Select and set functions;
Move ahead in the menu

3 **Service interface:**
For service purposes only
(please do not damage seal)

LED 4 **Green:**
On-Board Unit ready for operation; all requirements for automatic toll collection are met

Red:
The On-Board Unit is not participating in automatic log-on in Germany since the On-Board Unit is not subject to toll (according to the declaration) or is not ready for operation (according to the displayed message).

Display 5 Number of axles currently set
6 Service (DE = Germany)
7 Current weight declaration

4 Operation

The truck toll is calculated based on its emission class, weight class and, for vehicles or vehicle combinations with a gross vehicle weight greater than 18 tonnes, based on axle class as well. Noise pollution costs are also charged in addition to this. Choose one of the following weight classes:



All vehicles and vehicle combinations with a gross vehicle weight of 7.5 tonnes or above are subject to toll. The gross vehicle weight specified by the keeper at the time the vehicle was registered is usually saved permanently in the On-Board Unit. If the gross vehicle weight changes due to a trailer being attached/detached, the gross vehicle weight must be adjusted on the On-Board Unit before starting a journey. This applies to all vehicles with a gross vehicle weight up to and including 18 tonnes. For weights greater than 18 tonnes, the number of axles must also be specified in addition to this (≤ 3 axles or ≥ 4 axles).

Weight classes	Weight declaration *	Axle declaration **
No toll requirement <7.5 t	<7.5 t (display „<7.5t“)	–
≥7.5 t to <12 t	7.5 t – 9 t – 10.5 t (display „7.5t .. 11.99t“)	–
≥12 t to ≤18 t	12 t – 13.5 t – 15 t – 16.5 t – 18 t (display “12t .. 18t”)	–
>18 t	>18 t no weight declaration required (display „>18t“)	≤ 3 axles or ≥ 4 axles (enter the precise number of axles)

* in 1.5 t increments

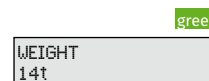
** Up to and including a weight of 18 t, the number of axles can be specified voluntarily, but has no bearing on the toll charges.

For vehicles and vehicle combinations weighing 7.5 tonnes or more, the weight is declared in increments of 1.5 tonnes. It is not possible to set a weight class that is less than the weight saved in the On-Board Unit. From 1 January 2019, the gross vehicle weight of vehicle combinations will be determined by adding together the gross vehicle weight of the individual vehicles; this is contrary to the German Road Traffic Registration Regulations. Support and fifth wheel loads do not need to be included.

4.1 Entering customer information

After ignition but before beginning your journey, you will be automatically prompted to enter your customer information by the On-Board Unit.

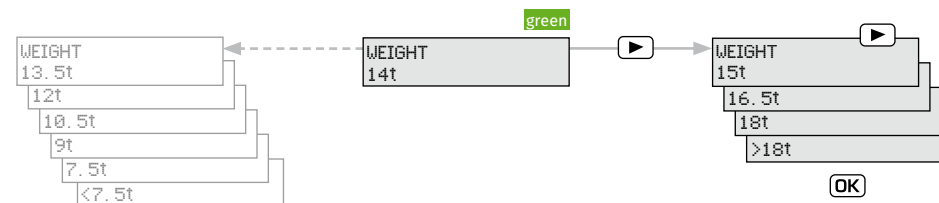
Weight



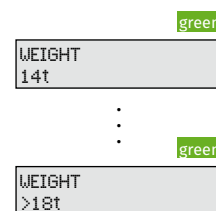
After ignition, the weight that was set for the last journey is displayed. This can be the weight that is permanently saved on the On-Board Unit or a weight that has been actively selected by the driver.



Please note that you cannot enter a weight class below the personalised weight saved in the On-Board Unit.



BOSCH ↓



Use the arrow keys ◀ ▶ to select the correct weight. Confirm the correct weight with **OK**.

Continental ↓

Use the **▶** key to select the correct weight. Confirm the correct weight with **OK**.



In Austria, toll is paid irrespective of the weight setting; however, the number of axles must be specified correctly. You can change the number of axles at any time by using the “NUMBER OF AXLES” menu item.



Please consult the valid version of the “Toll Regulations for the Motorways and Trunk Roads in Austria” for information on how to correctly determine the number of axles in Austria (vehicle category declaration); these regulations can be viewed at any time at www.asfinag.at.

Number of axles

In Germany, the number of axles has no bearing on toll costs for vehicles in Weight Class II or below. The number of axles on the vehicle must be entered on the On-Board Unit for vehicles or vehicle combinations with a gross vehicle weight of 18 tonnes or more. The toll amount is different for ≤ 3 axles and ≥ 4 axles.

A

In Austria, the precise number of axles must always be provided.




BOSCH ↓



Continental ↓

NUMBER OF AXLES
2

:

NUMBER OF AXLES
8

Use the arrow keys   to select between a minimum of 2 and maximum of 8 axles. Confirm the correct number of axles with .

Use the  key to select between a minimum of 2 and maximum of 8 axles. Confirm the correct number of axles with .

i

Please note that you cannot enter a number of axles that is less than the number of axles registered on your On-Board Unit.

Cost center

You can specify a cost center for your journey.






BOSCH ↓








Continental ↓

COST CENTER

:

COST CENTER
12345678

Use the  or  key to enter the first digit of your cost center. Use the  key to move to the next digit. Repeat these steps to enter additional digits. To correct entries, use the  key to move back to the previously entered digits. Confirm the desired cost center with .

Use the  key to enter the first digit of your cost center. Use the  key to move to the next digit. Repeat these steps to enter additional digits. To correct the previous digit, use the  key to select the  function, then confirm with . Once you have done this, use the  key to correct the previous digit. Confirm the desired cost center with .

i

A maximum of 8 digits may be entered for a cost center.



Customer data queries are no longer displayed once the vehicle begins to move (for Continental OBUs: once in motion for longer than three seconds). The display screen automatically switches to operating mode and the set number of axles and the weight of the previous journey are adopted.

4.2 Services for toll collection in Germany and Austria

- A** If your On-Board Unit is registered for toll collection in Germany and Austria, its operating mode will automatically switch over to the service provider in the country where you are located when you cross the border. Consult the “SERVICES” menu for information on service status:

BOSCH ↓

```
MENU
SERVICES
```

```
DE
ACTIVE
```

```
AT
ACTIVE
```

Use the **OK** key to select the menu of the On-Board Unit. Use the **▲** or **▼** key to scroll through the various menu functions until “SERVICES” is displayed. Use **OK** to switch to the “SERVICES” menu. In the “SERVICES” menu you will be shown the current operating mode: “DE ACTIVE” for Germany or “AT ACTIVE” for Austria.

Use the **C** key to return from the open submenu to the main menu. Use the **C** key to return from the main menu to the operating display.

Continental ↓

To view the menu, in the operating display mode, press the **▶** key repeatedly until **MENU** is shown on the display. Confirm **MENU** with **OK**. The On-Board Unit automatically switches to the main menu. In the menu, scroll with the **▶** key until “SERVICES” is displayed. Use **OK** to switch to the “SERVICES” menu. In the “SERVICES” menu you will be shown the current operating mode: “DE ACTIVE” for Germany or “AT ACTIVE” for Austria. Press **OK** to return the On-Board Unit to the main menu.

To exit the menu, press the **▶** key repeatedly until “MENU BACK” appears. Confirm “MENU BACK” with **OK**. The Continental On-Board Unit automatically switches back to the operating display.

4.3 Operating displays

4.3.1 Operating displays on route sections within Germany

With a gross vehicle weight less than 7.5 tonnes

1 red Vehicle with 3 axles
Toll free < 7.5 tonnes

```
3 AXLES
DE <7.5t
```

2 **3**

During the journey in a truck subject to toll

green Vehicle with 5 axles
Weight of 9 tonnes

```
5 AXLES
DE 7.5..11.99t
```

4

green Vehicle with 5 axles
Weight of 16.5 tonnes

```
5 AXLES
DE 12..18t
```

5

green Vehicle with 5 axles
Weight > 18 tonnes

```
5 AXLES
DE >18t
```

6

- 1** Number of axles currently set
- 2** Service (DE = Germany)
- 3** Current weight declaration (toll-free)
- 4** Current weight declaration (Weight class I)
- 5** Current weight declaration (Weight class II)
- 6** Current weight declaration (Weight class III)

Automatic collection inactive

red

```
DE: AUTOMATIC
COLLECT INACTIVE
```

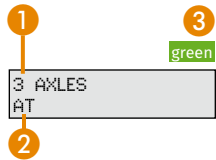
If the “COLLECT MODE MANUAL” function is selected in the menu, the On-Board Unit will not collect any toll. Journeys on roads subject to toll must be logged on manually using the Toll Collect app, at a toll terminal or via online log-on.

4.3.2 Operating displays on route sections within Austria

A Toll collection with the On-Board Unit on roads subject to toll in Austria is indicated exclusively by means of auditory signals. The tone signals cannot be switched off. The On-Board Unit's LED and display screens do not show any information on toll collection on these route sections.

The On-Board Unit emits a tone signal each time the toll is successfully paid as the vehicle passes a toll gantry. If the On-Board Unit is blocked, four sequential tone signals will be heard. If there is no signal when you pass by a toll gantry in Austria, it is likely that the toll was not paid. Pay the outstanding toll amounts subsequently at a GO sales point. You can always obtain a GO Box at the GO sales point if your On-Board Unit has permanently failed.

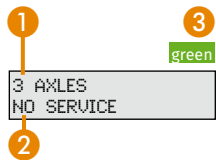
A Austria service region – with TOLL2GO activated (AT service)



You are located in the Austria service region and have registered your Toll Collect On-Board Unit for toll collection in Austria.

- 1** Number of axles currently set
- 2** Service (AT = Austria)
- 3** LED green (no meaning)

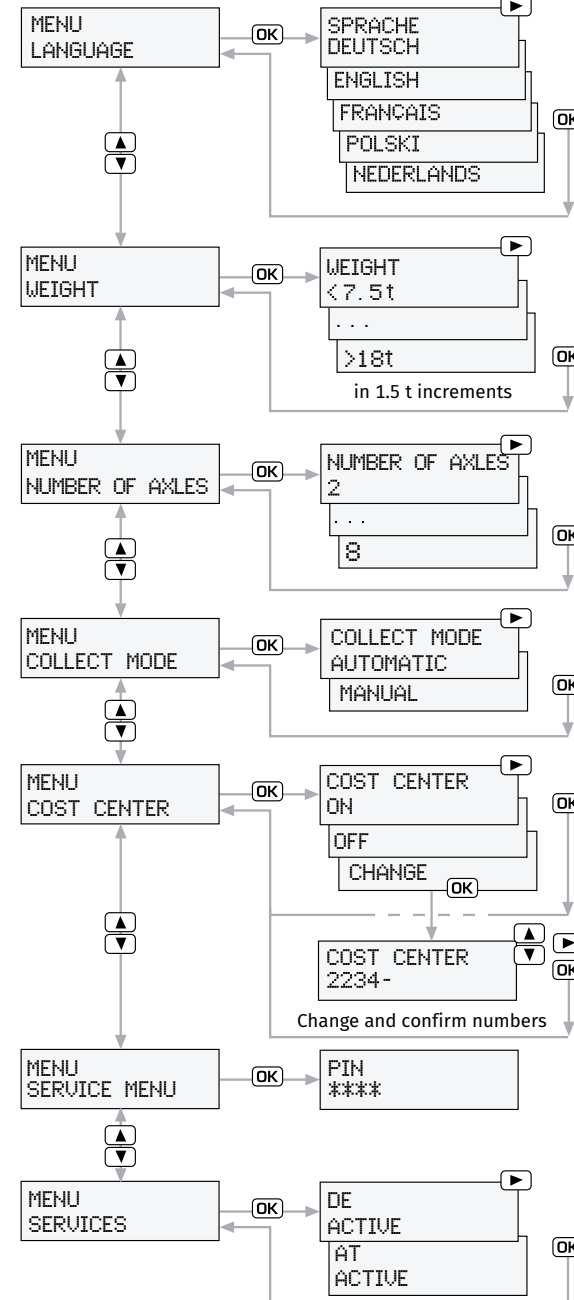
A Service region Austria – without TOLL2GO (AT service) and in other countries outside Germany



You are located in the Austria service region, but you have not registered your Toll Collect On-Board Unit for toll collection in Austria or other countries.

- 1** Number of axles currently set
- 2** No toll is collected with the On-Board Unit
- 3** LED green (no meaning)

4.4 Menu settings



Continental
The Continental On-Board Unit additionally outputs a confirmation message after a setting is changed.

i The way the messages are displayed can vary slightly depending on your hardware type and software version.

i The "SERVICE"/"SERVICE MENU" menu is only needed for service purposes in the workshop.

When your On-Board Unit is ready for operation, you have the option of configuring various settings according to your wishes.



The menu can only be operated when the vehicle is not in motion.

BOSCH ↓

Continental ↓

Opening the main menu

Use the **OK** key to select the main menu.

To view the main menu, in the operating display mode, press the **▶** key repeatedly until **MENU** is shown on the display. Confirm **MENU** with **OK**.

Navigating the submenu

Use the **▲** **▼** keys to scroll through the various menu functions. Use **OK** to switch to the desired submenu.

When the menu is open, scroll through the various menu functions with the **▶** key. Use **OK** to switch to the desired submenu. Use the **▶** key to configure the desired function. Confirm the desired function with **OK**. Repeat these steps to configure additional settings.

Exiting the main menu

Use the **⏪** key to return from the open submenu to the main menu. Use the **⏪** key to return from the main menu to the operating display.

To exit the menu, press the **▶** key repeatedly until "MENU BACK" appears. Confirm "MENU BACK" with **OK**. The Continental On-Board Unit automatically switches back to the operating display.



The On-Board Unit automatically switches to the operating display screen if a key is not pressed within 10 seconds of opening the menu, or if the vehicle begins to move while the menu is open.

Language menu

BOSCH ↓

Continental ↓

MENU
LANGUAGE

SPRACHE
DEUTSCH

⋮

TAAL
NEDERLANDS

In the "LANGUAGE" menu, use the **◀** or **▶** key to select between "DEUTSCH, ENGLISH, FRANÇAIS, POLSKI or NEDERLANDS". Confirm the desired language with **OK**.

In the "LANGUAGE" menu, use the **▶** key to select between "DEUTSCH, ENGLISH, FRANÇAIS, POLSKI or NEDERLANDS". Confirm the desired language with **OK**. "LANGUAGE CHANGED" appears on the display and the On-Board Unit automatically goes back to the main menu.

Weight menu

BOSCH ↓

Continental ↓

MENU
WEIGHT

WEIGHT
<7.5t

⋮

WEIGHT
>18t

In the "WEIGHT" menu, use the arrow keys **◀** **▶** to select the correct weight in 1.5 tonne increments. Confirm the correct weight with **OK**.

In the "WEIGHT" menu, use the **▶** key to select the correct weight in 1.5 tonne increments. Confirm the correct weight with **OK**. "WEIGHT CHANGED" appears on the display and the On-Board Unit automatically goes back to the main menu.



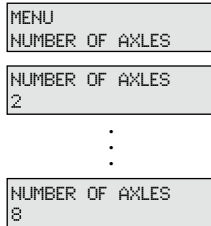
Vehicles or vehicle combinations in the weight class **<7.5t** (less than 7.5 tonnes) are not charged toll on toll roads in Germany. The red LED lights up.



Please note that you cannot enter a weight class below the personalised weight saved in the On-Board Unit.

Number of axles menu

The “NUMBER OF AXLES” menu allows you to change the number of axles entered by the customer.



BOSCH ↓

To change the number of axles, use the **◀** or **▶** key to select between a minimum of 2 and maximum of 8 axles. Confirm the correct number of axles with **OK**.

Continental ↓

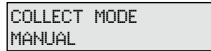
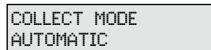
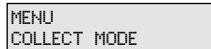
Use the **▶** key to select between a minimum of 2 and maximum of 8 axles. Confirm the correct number of axles with **OK**. “NUMBER OF AXLES CHANGED” appears on the display and the On-Board Unit automatically goes back to the main menu.



Please note that you cannot enter a number of axles that is less than the number of axles registered on your On-Board Unit.

Collect mode menu

Automatic toll collection with the On-Board Unit can be switched off for the German road network, if necessary. In Austria, toll collection by the On-Board Unit always remains active, provided the On-Board Unit is registered for the Austrian toll service.



BOSCH ↓

In the “COLLECT MODE” menu, use the **◀** or **▶** key to select between the automatic or manual toll collection procedures. Confirm the desired toll collection procedure with **OK**. When the “COLLECT MODE MANUAL” setting is activated, the message

Continental ↓

In the “COLLECT MODE” menu, use the **▶** key to select between the automatic or manual toll collection procedures. Confirm the desired toll collection procedure with **OK**. “COLLECT MODE CHANGED” appears on the display and the

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(Continued)

BOSCH ↓

“DE: AUTOMATIC COLLECT INACTIVE” appears on the display and the red LED lights up.

Continental ↓

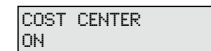
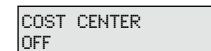
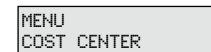
On-Board Unit automatically goes back to the main menu. When the “COLLECT MODE MANUAL” setting is activated, the message “DE: AUTOMATIC COLLECT INACTIVE” appears on the display and the LED lights up in red.



In Germany, manual toll log-on is conducted via online log-on, the Toll Collect app or at a toll terminal.

Cost center menu

You can choose to activate or deactivate a ‘cost center prompt’ option that requests the user to input a cost center, and you can also change an existing cost center. You can enter a maximum of 8 digits for a cost center.

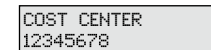
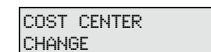


BOSCH ↓

In the “COST CENTER” menu, use the **◀** or **▶** key to select between “ON”, “CHANGE” and “OFF”. Confirm the desired setting with **OK**.

Continental ↓

In the “COST CENTER” menu, use the **▶** key to select between “ON”, “CHANGE” and “OFF”. Confirm the desired setting with **OK**. When “ON” or “OFF” is set, “COST CENTER CHANGED” appears on the display and the On-Board Unit automatically goes back to the main menu.





To change a cost center, proceed as follows: Use the **▲** or **▼** key to enter the first digit of your cost center. Use the **▶** key to move to the next digit.

To change a cost center, proceed as follows: Use the **▶** key to enter the first digit of your cost center. Use the **OK** key to move to the next digit. Repeat these steps






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(Continued)

BOSCH ↓

Repeat these steps to enter additional digits. To correct numbers, use the  key to move back to the previously entered digits. Confirm the desired cost center with .

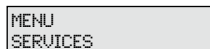
Continental ↓




to enter additional digits. To go to the previous digit, use the  key to select function , then confirm with . Once you have done this, use the  key to correct the previous digit. After entering the desired cost center, confirm your input with . "COST CENTER ADOPTED" appears on the display and the On-Board Unit automatically goes back to the main menu.

Services menu


If your On-Board Unit is registered for toll collection in Germany and Austria, its operating mode will automatically switch over to the service provider in the country where you are located when you cross the border. To view the available services on your On-Board Unit, go to the "SERVICES" menu:

A








Use the  key to select the menu of the On-Board Unit. Use the  or  key to scroll through the various menu functions until "SERVICES" is displayed.



Use  to switch to the "SERVICES" submenu. In the "SERVICES" menu you will be shown the current operating mode: "DE ACTIVE" for Germany


Continental ↓



To view the menu, in the operating display mode, press the  key repeatedly until  is shown on the display. Confirm  with .


The On-Board Unit automatically switches to the main menu. In the menu, scroll with the  key until "SERVICES" is displayed.

(Continued →)


(Continued)



BOSCH ↓

or "AT ACTIVE" for Austria. Use the  key to return from the open submenu to the main menu. Use the  key to return from the main menu to the operating display.

If you are in the submenus, the  key will bring you back to the main menu and, if pressed again, will bring you to the operating display.

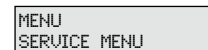
Continental ↓

In the "SERVICES" menu you will be shown the current operating mode: "DE ACTIVE" for Germany or "AT ACTIVE" for Austria. Press  to return the On-Board Unit to the main menu.

To exit the menu, press the  key repeatedly until "MENU BACK" appears. Confirm "MENU BACK" with . The Continental On-Board Unit automatically switches back to the operating display.

**Service statuses**

You can see the respective status of a service in the "SERVICES" menu. "ACTIVE" service means that you can use the service. "INACTIVE" service means that the service is not registered (currently only affects AT service). "DEFECTIVE" service indicates a malfunction of the On-Board Unit; please contact your service partner. In the event the On-Board Unit is blocked by Toll Collect, the display shows "BLOCKED DE" or "BLOCKED AT". The status in the Services menu is shown as "BLOCKED". In this case, please contact Toll Collect customer service.

Service menu



The Service menu ("SERVICE MENU" for BOSCH) is protected by a PIN query. Access is reserved exclusively for Toll Collect service partners.

4.5 Warning and error messages

The On-Board Unit automatically verifies certain technical requirements that are necessary in order for toll collection to work properly in Germany and Austria. If one or more of these requirements is at risk or is no longer met:

- An auditory signal is heard (error tone)
- An error message appears on the display (with error code in certain cases)
- The LED lights up red (only relevant for toll collection in Germany)



For more precise troubleshooting, some error messages are displayed with an error code in brackets following the display message. The error code will assist your service partner in resolving the error. Please record this number and give it to the service partner along with precise details of the message that was displayed. Details on error messages and their significance for the respective service region are provided below in this document.

Potential warning and error messages are either:

1. Messages that relate to a technical defect in the On-Board Unit and its installation (in this case, contact your Toll Collect service partner)
2. Or messages that relate to the toll collection service and its management (in this case, contact Toll Collect Customer Service).

4.5.1 Warning and error messages in the event of technical defects

GPS error

red

```
DE: GPS ERROR
SERVICE (X)
```

A

The “DE: GPS ERROR SERVICE” message and error code appear if the GPS (Global Positioning System) reception is interrupted. In this case, please contact your Toll Collect service partner. This message is only relevant for toll collection in Germany. In Austria, tolls can still be collected without any trouble despite this error message if the error message first appears after the system has detected that you have entered Austria.



Similarly, if GPS reception is interrupted while entering Germany from Austria, the On-Board Unit is not ready for operation with the automatic toll collection system in Germany. First, restart the On-Board Unit before crossing the border; if the problem then persists, log on manually via online log-on, the Toll Collect app or at a toll terminal.

Unit defective

red

```
OBU DEFECTIVE
SERVICE (X)
```



A

The “OBU DEFECTIVE SERVICE” message and error code appear if there is a technical fault in the On-Board Unit. In this case, please contact your Toll Collect service partner.

If defective, the On-Board Unit is not ready for operation with the automatic toll collection system. If such a situation occurs in Germany, you must therefore log on the toll manually via online log-on, the Toll Collect app or at a toll terminal. If such a situation occurs in Austria, you must obtain a GO Box.

GSM error

red

```
GSM ERROR
SERVICE (X)
```

A

The “GSM ERROR SERVICE” message and diagnostic code appear if the On-Board Unit has only limited or no access to the mobile communications network. In this case, please contact your Toll Collect service partner. In Austria, tolls can still be collected without any trouble despite this error message.



The On-Board Unit is not ready for operation. If such a situation occurs in Germany, you must therefore log on the toll manually via online log-on, the Toll Collect app or at a toll terminal.

Battery voltage



The „BATTERY VOLTAGE <25%” or “CHANGE BATTERY” message appears when the power of the built-in battery decreases. When this message first appears, you can confirm it by pressing OK and continue to use automatic log-on.



Please contact your Toll Collect service partner directly as soon as possible to have the battery changed.

4.5.2 Warning and error messages regarding the toll collection service

Unit blocked

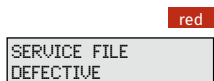


The “UNIT BLOCKED” message appears if the operator has arranged for the On-Board Unit to be blocked for all services in Germany and Austria. In this case, please contact Toll Collect customer service directly.



The On-Board Unit is not ready for operation. If such a situation occurs in Germany, you must therefore log on the toll manually via online log-on, the Toll Collect app or at a toll terminal. If such a situation occurs in Austria, you must obtain a GO Box.

Service file defective

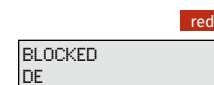


The “SERVICE FILE DEFECTIVE” message appears if there is a service defect as a result of inconsistencies in On-Board Unit data. In this case, please contact your Toll Collect service partner directly.



The On-Board Unit is not ready for operation. If such a situation occurs in Germany, you must therefore log on the toll manually via online log-on, the Toll Collect app or at a toll terminal. If such a situation occurs in Austria, you must obtain a GO Box.

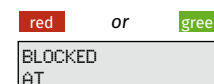
Blocked DE



The “BLOCKED DE” message appears if the operator has arranged for the On-Board Unit to be blocked for toll collection in Germany. In this case, please contact Toll Collect customer service directly.

The On-Board Unit is not ready for operation. If such a situation occurs in Germany, you must therefore log on the toll manually via online log-on, the Toll Collect app or at a toll terminal. In Austria, tolls can still be collected without any trouble despite this message.

Blocked AT

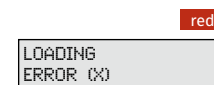


The “BLOCKED AT” message appears if the operator has arranged for the On-Board Unit to be blocked for toll collection in Austria for technical reasons. This warning message will be accompanied audibly by four signal tones. In this case, please contact your Toll Collect service partner directly.



The On-Board Unit is not ready for operation. If such a situation occurs in Austria, you must obtain a GO Box. In Germany, tolls can still be collected without any trouble despite this error message if the error message first appears after the system has detected that you have entered Germany.

Loading error



The “LOADING ERROR” message appears together with an error code if the system fails to fully load software onto the DSRC module. This error can generally be resolved by simply restarting the On-Board Unit (switch off ignition, wait until display goes dark, switch on ignition again). If the error message appears again, the On-Board Unit is defective.

If defective, the On-Board Unit is not ready for operation with the automatic toll collection system. If such a situation occurs in Germany, you must therefore log on the toll manually via online log-on, the Toll Collect app or at a toll terminal. If such a situation occurs in Austria, you must obtain a GO Box.