TomTom LINK 105 eco Installation Guide



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Before the installation

Welcome

With the TomTom LINK 105 eco[™] you can retrieve fuel consumption data over the OBD-II connector in your vehicle and see this in WEBFLEET in real time. TomTom LINK 105 eco works together with the TomTom LINK 5xx/4xx via Bluetooth and therefore requires minimal installation effort. This document shows how to set up your LINK 105 eco.

If you need to use your vehicle's OBD-II connector for something else, for example, for maintenance purposes, simply remove your LINK 105 eco from the connector and reconnect it afterwards.

Important: To remove the LINK 105 eco from the OBD-II connector, pull on the handle of the LINK 105 eco and not the device itself as this may cause damage.

Components

The following figure shows the different parts of the LINK 105 eco.



- 1. Handle
- 2. Reset button
- 3. Bluetooth LED (Blue)
- 4. Power LED (Green)
- 5. Body
- 6. Bluetooth address
- 7. OBD-ll plug

Requirements

Before installing your LINK 105 eco make sure you fullfil the following requirements:

- Your vehicle is fitted with a LINK 5xx/4xx.
- The LINK 5xx/4xx must be activated in WEBFLEET.
- Your vehicle has an OBD-II connector.

 To use the Activation Tool for your LINK 5xx/4xx, you need a laptop with the Activation Tool installed, the Mini USB cable and the activation code, which you can find in your WEBFLEET contract confirmation.

Download the latest version of the Activation Tool from the Reseller section on <u>busi-ness.tomtom.com</u> under **Software download**.

Installing your LINK 105 eco

There are two steps to setting up your LINK 105 eco:

- Configure a Bluetooth connection between your LINK 105 eco and your LINK 5xx/4xx. There are two ways to establish a Bluetooth connection between your LINK 105 eco and your LINK 5xx/4xx:
 - By configuring a Bluetooth connection with WEBFLEET
 - By configuring a Bluetooth connection with the Activation Tool

Make sure you have properly noted and entered the Bluetooth address of your LINK 105 eco, which you can find on the label on the OBD-II plug.

2. Install your LINK 105 eco in your vehicle.

Important: If the LINK 105 eco has been used in another vehicle before, you need to <u>reset the</u> <u>device</u> before you start the engine of your vehicle, otherwise the calculation of the fuel consumption may be incorrect.

Configuring a Bluetooth connection with WEBFLEET

This section describes how to pair your LINK 105 eco with the LINK 5xx/4xx installed in your vehicle using WEBFLEET. You can also <u>configure a Bluetooth connection using the Activation Tool</u> instead.

Note: Make sure your vehicle is properly fitted with a LINK 5xx/4xx according to the <u>requirements for the installation</u>.

- 1. Log in to WEBFLEET here <u>business.tomtom.com/login</u>.
- 2. Click Vehicles.



3. Select your vehicle from the list.



4. In the details panel on the right, click **Contract/Device**.

Contract / Device

5. Click Configure.



6. Select the Accessory tab.

008 - 9	Service J-564			
asic settings	Status messages	Order messages	Inputs / Outputs	Accessories
Remote LINK	(Bluetooth remote cor	itrol)		
Remoti Bluet	e LINK status: Not connect ooth address:(e.g. 01:58	3:47:0F:A2:00)		
TomTom OBD	II-device 05 eco jine size in cc: 1596 F	ower (kW): 75,0	✓ Notify me Notification typ	when the vehide diagnostic system reports an incident
Bluet	ooth address: 00:21:3E: (e.g. 0B:00	1B:F3:55:CB):16:A4:00:20:82)		

- 7. In the TomTom OBDII-device section, select TomTom LINK 105 eco from the list.
- 8. Enter for TomTom LINK 105 eco the size (in cc) and the power (in kW) of the engine of your vehicle.

Important: Make sure you have entered the correct engine size and power, as this information is the basis for the calculation of the fuel consumption of your vehicle.

9. Enter the Bluetooth address indicated on the OBD-II connector of the LINK 105 eco you want to install in that specific vehicle.



10. Click Save.

The Bluetooth address of your LINK 105 eco is now assigned to the LINK 5xx/4xx in the vehicle you selected. Now you should <u>install your LINK 105 eco in your vehicle</u>.

Configuring a Bluetooth connection with the Activation Tool

This section describes how to pair your LINK 105 eco with your LINK 5xx/4xx using the Activation Tool. You can also <u>configure a Bluetooth connection with WEBFLEET</u> instead.

- 1. Download the latest version of the Activation Tool from the Reseller section on <u>busi-ness.tomtom.com</u> under **Software download**.
- Install the latest version of the Activation Tool to your Microsoft Windows[®] running PC. Use the Mini-USB cable from the LINK 5xx/4xx Service Set to connect your LINK 5xx/4xx to your computer. Alternatively, you can connect your LINK 5xx/4xx with your computer using Bluetooth.
- 2. To start the Activation Tool double click the icon.
- Select the COM port to which you have connected your LINK 5xx/4xx from the list. Make sure the green LED on the LINK 5xx/4xx is solid on before you continue with the next step.

PomTom LINK Activation 1.1
Serial Connect
LINK 5xx/4xx/3xx Remote LINK OBDII-Device
TomTom LINK activation status
Serial Select
Activate

- 4. Click Ok.
- 5. Select the **OBDII-device** tab.

PomTom LINK Activation 1.1
Serial Connect
LINK 5xx/4xx/3xx Remote LINK OBDII-Device
Connection status Connection s
Engine size (in cc) 1800
Engine power (in kW) Engine power (in kW) 120
Bluetooth Address Bluetooth Address
00:16:A4:00:06:4B:8B
(e.g. 00:16:A4:00:06:4B:8B)
Save Delete Exit
LINK OS 11.32.3680 AP 4.4.3755
COM2 ok SN LW2153N00023 HW 16.10 LD 1.50.2175 BT 00213E3262AB

- 6. In the Connection status section select LINK 105 eco.
- 7. Enter in the engine size of your vehicle in cc.

- 8. Enter the KW of your engine.
- 9. Enter the Bluetooth address indicated on the OBD-II connector of the LINK 105 eco you want to install in that specific vehicle.



10. Click Save.

You are prompted to enter the activation code for the LINK 5xx/4xx.

11. Enter the activation code.

You can find the activation code in your WEBFLEET contract confirmation.

12. Click Ok.

The entered details for engine size, engine power and Bluetooth address are now shown on the right.

🧼 TomTom	n LINK Activ	ation 1.	1			x
<u>S</u> erial Conn	ect					
LINK 5xx/4	4xx/3xx Re	mote LIN	K OBDII-De	vice		
Connec Connec	tion status K 105 eco	ecoPLUS	5	Connecte	d	
Engine si: 1800	ze (in cc)		En 1	gine size (in cc) 800		
Engine po 120	Engine power (in kW) 120			gine power (in kW 20	0	
Bluetooth Address 00:16:A4:00:06:4B:8B			Blu 8B 0	etooth Address 0:16:A4:00	:06:4B:8B	
(e.g. 00:	16:A4:00:06	:4B:8B)	,			
<u>S</u> a	Save Delete Exit					
LINK	OS 8.	41		AP 1.94	02	
COM5 ok	SN LA5209J00004 HW 12.11 LD 4.03 BT 00136C2AB4			0E		

13. Carry out the steps described above for each additional LINK 105 eco and LINK 5xx/4xx.

Installing LINK 105 eco in your vehicle

This section describes how to connect your LINK 105 eco to the vehicle and to the LINK 5xx/4xx.

1. Find the OBD-II connector in your vehicle.



Refer to the manual of your vehicle. In many vehicles you can find the OBD-II port in the footwell (A), close to the fuse box (B), beneath the dashboard (C), or in the centre console (D).

2. Turn off the engine of your vehicle.

Important: You can damage your vehicle and the TomTom LINK 105 eco when you continue the installation while the engine of your vehicle is running.

3. Insert the OBD-II plug of your LINK 105 eco into the OBD-II connector of your vehicle. Make sure the plug is fully inserted so it cannot drop off.



Both the green and the blue LED start flashing.

4. Turn on the engine.

The LINK 5xx/4xx starts to establish a connection to your LINK 105 eco. This may take up to two minutes. If successful both LEDs should be solid.

You have now completed the installation of the LINK 105 eco and successfully established a Bluetooth connection between your LINK 105 eco and the LINK 5xx/4xx.

The LINK 105 eco automatically learns from the vehicle and the engine during operation. Therefore, the vehicle needs to be moved around for some time so the LINK 105 eco can be calibrated.

Diagnostics

Understanding your LINK 105 eco

our LINK 105 eco shows system states using the blue and the green LED individually and in combination.

The following system states of the LINK 105 eco are shown by both the blue and the green LED in combination.

Green and Blue LED	
ON	Fully operational
FLASHING simultaneously	Booting system
FLASHING alternating	Resetting system
OFF	Power save mode

The following tables explain how to understand the modes of the green individually.

Green LED	
ON	Vehicle communication is established
FLASHING	Establishing vehicle commuincation
OFF	No vehicle communication established

The following tables explain how to understand the modes of the blue individually.

Blue LED	
ON	Bluetooth connection to LINK 5xx/4xx is established
OFF	No Bluetooth connection established

Resetting your LINK 105 eco

If you have operated the LINK 105 eco in another vehicle before, if you encounter errors with your LINK 105 eco or your LINK 105 eco is not working as expected you need to reset the device.

1. Turn off the engine of your vehicle.

2. Press the reset button with a pointed object while it's connected to the OBD-II connector for approximately five seconds until both LEDs are flashing rapidly alternating.



After releasing the reset button the LEDs start flashing simultaneously. The system of your LINK 105 eco starts booting.

You have successfully reset your LINK 105 eco.

Technical data

Dimensions	48 x 27.5 x 25 mm
	1.9 x 1.1 x 1 inches
Weight	18 g
	0.63 ounces
Material	Injection moulded plastic
	Connector: PA
	Body: PC/ABS
Protection class	IP20
Supply voltage	12 V / 24 V (minimum 9V to maximum 30 V)
Current consump-	At 14 V: typically < 25 mA
tion (average values)	At 28 V: typically < 15 mA
	Standby: typically < 1 mA
Fuse protection	Internally fused with 1A, fuse is not resettable or replaceable, fuse must be replaced by TomTom Telematics
Temperature	Operation: -30 °F to +70 °C / -22 °F to 158 °F
	Storage: -40 °C to +80 °C / -40 °F to +176 °F
Bluetooth™	Integrated Bluetooth™ (class 2)
Interfaces	CAN compliant to ISO15765
	K-Line compliant to ISO9141
	K-Line compliant to ISO14230

Addendum

CE marking CE0681

The unit described in this document is in accordance with the official European directives. A copy of the declaration of conformity can be provided on request. This equipment complies with the essential requirements of EU Directive 99/5/EC. The GPRS-modem integrated in this product has been pre-certified separately and is marked with CE0168.

R&TTE directive

Hereby, TomTom declares that TomTom products and accessories are in compliance with the essential requirements and other relevant provisions of the EU Directive 1999/5/EC. The declaration of conformity can be found here: <u>tomtom.com/legal</u>.

WEEE directive

The wheelie bin symbol on the product or its packaging indicates that this product shall not be treated as household waste. In line with EU Directive 2002/96/EC for waste electrical and electronic equipment (WEEE), this electrical product must not be disposed of as unsorted municipal waste. Please dispose of this product by returning it to the point of sale or to your local municipal collection point for recycling. By doing this you will help conserve the environment.



FCC information for the user



THE DEVICE COMPLIES WITH PART 15 OF THE FCC RULES

Federal Communications Commission (FCC) Statement

This equipment radiates radio frequency energy and if not used properly - that is, in strict accordance with the instructions in this manual - may cause interference to radio communications and television reception.

Operation is subject to the following two conditions: (1) this device may not cause harmful interference and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

This device has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Important

This equipment was tested for FCC compliance under conditions that included the use of shielded cables and connectors between it and the peripherals. It is important that you use shielded cable and connectors to reduce the possibility of causing radio and television interference. Shielded cables, suitable for the product range, can be obtained from an authorized dealer. If the user modifies the equipment or its peripherals in any way, and these modifications are not approved by TomTom, the FCC may withdraw the user's right to operate the equipment. For customers in the USA, the following booklet prepared by the Federal Communications Commission may be of help: "How to Identify and Resolve Radio-TV Interference Problems". This booklet is available from the US Government Printing Office, Washington, DC 20402. Stock No 004-000-00345-4.

FCC ID: S4LLINK0100

IC ID: 5767A-LINK0100

FCC RF Radiation Exposure Statement

The transmitters within this device must not be co-located or operating in conjunction with any other antenna or transmitter.

Exposure limits

This device complies with radiation exposure limits set forth for an uncontrolled environment. In order to avoid the possibility of exceeding the radio frequency exposure limits, human proximity to the antenna shall not be less than 20cm (8 inches) during normal operation.

Specific Absorption Rate (SAR) compliance

THIS WIRELESS DEVICE MODEL MEETS GOVERNMENT REQUIREMENTS FOR EXPOSURE TO RADIO WAVES WHEN USED AS DIRECTED IN THIS SECTION

This device is a radio transmitter and receiver. It is designed and manufactured not to exceed the emission limits for exposure to radio frequency (RF) energy set by the Council of the European Union and the Federal Communications Commission of the U.S. Government. These limits are part of comprehensive guidelines and establish permitted levels of RF energy for the general population.

The SAR limit set by Fthe CC/ IC is 1.6W/kg averaged over 1 gram of tissue for the body (4.0 W/kg averaged over 10 grams of tissue for the extremities - hands, wrists, ankles and feet). The SAR limit recommended by The Council of the European Union is 2.0W/kg averaged over 10 grams of tissue for the body (4.0 W/kg averaged over 10 grams of tissue for the extremities - hands, wrists, ankles and feet). Tests for SAR are conducted using standard operating positions specified by the FCC/IC/EU council with the device transmitting at its highest certified power level in all tested frequency bands.

Before a wireless device model is available for sale to the public, it must be tested and certified to the FCC, IC, and The Council of the European Union that it does not exceed the limit established by the government-adopted requirement for safe exposure under the recommendations of the International Commission on Non-Ionizing Radiation Protection (ICNIRP). The tests are performed in positions and locations as required by the FCC, IC, and The Council of the European Union for each model.

To maintain compliance with FCC, IC, and EU RF exposure guidelines, when you carry a TomTom device with an integrated mobile data module keep the device at least 20cm (8 inches) from your body when the device is transmitting. If you use an accessory not supplied by TomTom when you carry the device, verify that the accessory does not contain metal and keep the device at least 20cm (8 inches) from your body when the device is transmitting.

Responsible party in North America

TomTom, Inc., 24 New England Executive Park, Burlington, MA 01803

Tel: 866 486-6866 option 1 (1-866-4-TomTom)

Customer support contact

US: 1-866-459-3499

Emissions information for Canada

Operation is subject to the following two conditions:

- This device may not cause interference.
- This device must accept any interference, including interference that may cause undesired operation of the device.

Operation is subject to the condition that this device does not cause harmful interference.

This Class B digital apparatus complies with Canadian ICES-003. CAN ICES-3(B)/NMB-3(B).

IMPORTANT NOTE

IC Radiation Exposure Statement:

 This equipment complies with IC RSS-102 radiation exposure limits set forth for an uncontrolled environment.

- This device and its antenna(s) must not be co-located or operating in conjunction with any other antenna or transmitter.
- This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.

Pacemakers

Pacemaker manufacturers recommend that a minimum of 15cm / 6 inches be maintained between a handheld wireless device and a pacemaker to avoid potential interference with the pacemaker. These recommendations are consistent with independent research and recommendations by Wireless Technology Research.

Guidelines for people with pacemakers

- You should ALWAYS keep the device more than 15cm / 6 inches from your pacemaker.
- You should not carry the device in a breast pocket.

Other medical devices

Please consult your physician or the manufacturer of the medical device, to determine if the operation of your wireless product may interfere with the medical device.

Model names

L0100

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