translogik

TRANSLOGIK

TLGX TYRE INSPECTION AND DATA CAPTURE TOOL

USER MANUAL

TABLE OF CONTENTS

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CARE GUIDANCE

Designed for demanding industrial use, the Translogik tyre inspection and data capture tool will maintain its accuracy and usability for longer with careful handling.

Follow these care guidelines for the best user results:

Read the user manual before operating the equipment.

Charge fully before the first use (max 8 hours). Charging will stop automatically.

If the tool is not being used, ensure it's charged at least once every month to maintain the battery function.

The ideal temperature range for charging is: 0 to +45 °C the TLGX must not be charged if the temperature is outside these limits. Be aware that the interior of a vehicle, or reflections from windows, etc., can increase the temperature of the tool. Charge the tool in a cool, shaded place.

Keep your TLGX tool clean and dry, especially around the hose attachment, tread depth needle and charge port

Never use the tread depth needle as a pry bar or lever

While this tool is designed to function within a temperature range of -20°C to +60°C, for optimal performance, operate it between 0°C and +45°C. Always consult the operating manual for your phone or tablet to ensure optimum operation with third-party devices across all temperatures.

Store the inspection tool between +5 to +20°C. The optimal storage temperature is +15°C. For longer-term storage, the recommended charge level is around 30-50% of their capacity. This helps to minimise self-discharge and prolong the lifespan.

The TLGX should be handled carefully and not dropped or knocked into hard surfaces; however, should the TLGX be dropped or impacted, the calibration of the depth measurement probe can be affected, this should be re-calibrated if the device suffers an impact. [see later information on calibration - Page 10]

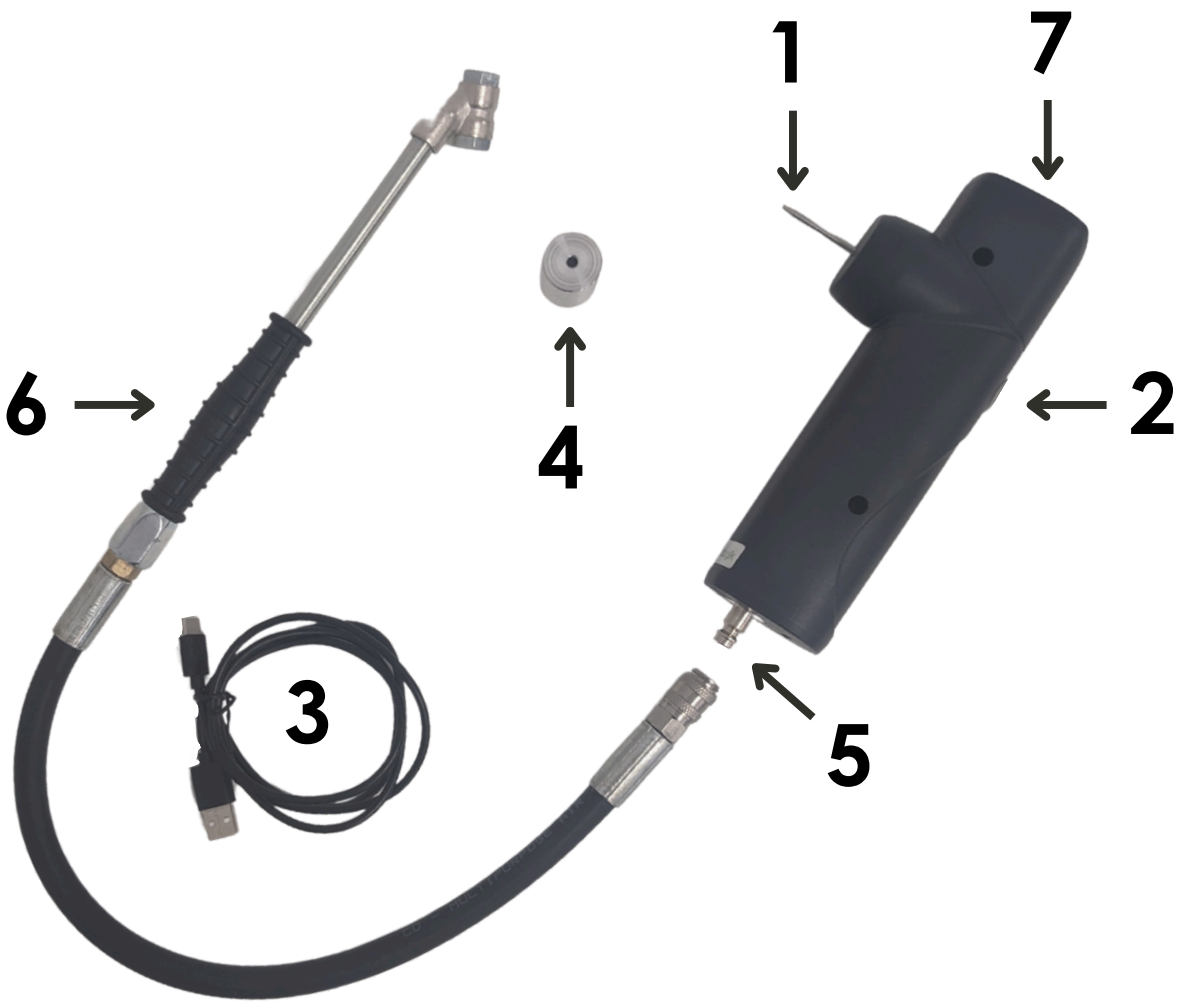
The tool is not designed to withstand being crushed or driven over by any sort of vehicle. take care when working to ensure the tool is used carefully.

It should not be used to measure air pressure if the tyre air hose is damaged or leaking.

Warning: Compressed air systems under pressure can cause serious injury or death. Only suitably qualified and experienced people should use and operate compressed air equipment and inflate vehicle tyres.

Version 1: July 2025

PRODUCT OVERVIEW



1. Tread depth probe

2. Power/function button and status lights

3. USB lead, charge and data

4. Calibration block

5. Air pressure input (TLGX 2 and above)

6. Tyre air hose (TLGX 2 and above)

7. RFID antenna (TLGX 3 and above)

SPECIFICATIONS

LED LIGHTS ON THE TYRE INSPECTION TOOL POWER/FUNCTION BUTTON

Green indicator - Power status

Blue indicator - Bluetooth link

Orange indicator - RFID or TPMS active

GENERAL - MODEL OPTIONS:

TLGX1 = TREAD DEPTH ONLY
TLGX2 = TREAD DEPTH AND PRESSURE
TLGX3 = TREAD DEPTH, PRESSURE AND RFID
TLGX4 = TREAD DEPTH, PRESSURE, RFID AND TPMS

Weight: 250g (without hose)
Battery run time: 24 hours typically
Battery: Built-in Li-ion 3.6V 2600mAh Charge via USB C socket (0.5A)
Storage temperature: +5°C to +20°C
Operating temperature: 0°C to +45°C
Alerts: Audible tone and vibration
Communication: Bluetooth v5.0 Low Energy. iOS, Android and Windows compatible or cable USB type C connector (USB 2 / 3 / 3.1).
Bluetooth range: 20m in free air
Tread depth measurement modes: Millimetres and inches

RFID
Frequency Range: 859 – 930MHz
Read range: Up to 50cm

TPMS
Frequency: 433 MHz (315 MHz optional)
LF Initiator: 125 KHz
Read range: Up to 60cm depending on protocol

TYRE TREAD DEPTH INSPECTION TOOL
Measurement range: 0 – 30mm
Accuracy: +/- 0.1mm

TYRE PRESSURE PORT
Measurement range: 0 – 150 psi / 0 – 10 bar
Accuracy: +/- 0.25%

BASIC OPERATION

1

START UP

Press the power/function button once. The tyre inspection tool will vibrate twice and the power button will flash red and then illuminate blue and orange while it is starting up.

The button will turn green if the battery has plenty of charge or red if the charge is low (See Battery charging section).

SHUT DOWN

Press and hold the button for about three seconds until the tyre inspection tool vibrates once and the LED in the power button turns off.

2

TREAD DEPTH READING

To take a tread depth reading, push the depth probe into the recess to be measured until the face of the tyre inspection tool makes contact.

As soon as the probe tip has been still for a moment, the depth value will be transmitted via the Bluetooth data link. (See Bluetooth Connection page 9)

3

TYRE PRESSURE READINGS

To measure tyre pressure using the tyre inspection tool's internal sensor, push the tyre hose attachment onto the valve. As soon as the pressure has stabilised, the pressure value will be transmitted via the Bluetooth data link.

Version 1: July 2025

BASIC OPERATION

4 PRESSURE AND TEMPERATURE READINGS FROM A TPMS SENSOR (TLGX 4 ONLY)

Initiate a TPMS sensor read using whichever method is used on your system set up. This may be by tapping a button on the screen of a PDA or tablet or by a single or double press of the tool function button

Hold the probe close to the tyre and wait for the sensor to respond.
While the TPMS search is active, an **orange LED** in the inspection tool function button is lit.

You may have to move the probe around the tyre to pick up the sensor. If no sensor is found within ten seconds, the search will time out.

When the sensor has been read, the readings will be transmitted to your system via the Bluetooth data link.

If the options are set, the tyre inspection tool can give an audible tone and/or vibration when the sensor has been successfully read.

5 RFID TAG READING/WRITING (TLGX 3&4 ONLY)

Initiate an RFID tag read or write using whichever method is used on your system set-up.

This may be by tapping a button on the screen of a PDA or tablet, or by a single or double press of the function button.

Hold the probe close to the tyre and wait for the tag to respond.
While the RFID tag search is active, **an orange indicator LED** in the button will light.

You may have to move the probe around the tyre to pick up the tag.
If no tag is found within the chosen timeout period (default = ten seconds), the search will stop.

When the tag has been read, the readings will be transmitted to your system via the Bluetooth data link.

If the options are set, the tyre inspection tool will give an audible tone and/or vibration when the tag has been successfully read.

Version 1: July 2025 Document: G 13658 B,

BATTERY CHARGING

CHECKING THE BATTERY STATUS

To check the battery charge, turn the tyre inspection tool on and check the LED light colour, after powering up (Orange and Blue LEDs on).

It will be Green for battery OK or Flashing Red for battery low.

Faster Flashing Red indicates a critically low battery level. In this state, some high current tyre inspection tool functions will be disabled and it should be put on charge as soon as possible. The inspection tool will shut down automatically if there is no remaining charge.

POWER STATUS INDICATOR LED MEANINGS

ON BATTERY POWER	
	Battery GOOD
	Battery LOW
	Battery VERY LOW Some functions disabled, shut down imminent

ON USB POWER	
	Battery charging
	Battery fully charged
No LEDs on	Inspection tool has been at full charge for longer than the idle timeout period

Version 1: July 2025

BLUETOOTH CONNECTION

HOW TO CONNECT YOUR INSPECTION TOOL VIA BLUETOOTH

The TLGX tyre inspection tool uses a standard Bluetooth v5.0 wireless connection to communicate with your Bluetooth-enabled device. When searching for the device, it will typically appear with the name "TLGX#- XXXXXXX" (e.g., TLGX2- 2551050), where "XXXXXXX" is the serial number of your inspection tool.

If you are using our QuickCal demonstrator app:
Please refer to the specific Bluetooth connection instructions provided within the QuickCal app's documentation.

For all other software applications:
The specific steps for establishing a connection are typically handled by your software. Therefore, for detailed instructions on connecting your TLGX with your particular software, please refer to the Bluetooth connection guidance provided by your software provider. Their documentation will outline the precise steps and interface prompts you will encounter during the connection process.

USB CONNECTION & CALIBRATION

THE USB C CONNECTOR PROBE IS FOR:

Charging the built-in battery from any USB charger or port capable of delivering 0.5A.

Data communications instead of using the Bluetooth link. Compatible with USB 2 , 3 and 3.1.

Serial port Connection Settings:

Baud Rate	115200 bps
Data bits	8
Parity	None
Stop Bits	1
Start Bits	1

CALIBRATION

Tread depth calibration is recommended to be completed regularly.

It is done using the calibration block included with the inspection tool and the free QuickCal App. A video guide and links to download the iOS or Android App can be found on our website. www.transense.co.uk/quickcal

It can also be done using the calibration function in a 3rd party software that you are using (if available).

Pressure calibration is **not possible** by the user, and if a difference is noted between a calibrated source and the tool, it requires repair. Contact our service team for more information.

Version 1: July 2025

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technologies plc

CONTACT US

1 Landscape Close, Weston On The Green,
Bicester, Oxfordshire. OX25 3SX
+44 (0) 1869 238380 | www.transense.com

sales@trans-logik.com
support@trans-logik.com