



## **Coating Thickness Gauge GL-2B Fe&Zn/Al Operation Manual**

**Before You start to use the device, please read this operation manual.**

### **1. Technical specifications**

Basic specifications of the device:

- measurement on steel, galvanized steel and aluminium;
- measurement resolution: 10 $\mu$ m;
- measurement range: from 0 $\mu$ m to 1100 $\mu$ m;
- zeroing function;
- LCD backlight;
- intuitive operation with 4-positions menu;
- automatic shut-off after longer idleness;
- measuring sensor diameter: 15 mm;
- powered by 9V alkaline battery (e.g. 6LR61) or corresponding accu;
- power consumption: ~50 mA.

### **Getting started**

Coating thickness gauge GL-6 is designed to measure the thickness of a steel, galvanized steel or aluminium sheet paint coating. It is also possible to make a measurement based on a defined reference point. The measurement resolution equals 10 $\mu$ m. The device is equipped with an internal EEPROM memory for 100 measurements which enables to check the results after the measurement is made. The memory doesn't get deleted after turning off the device, although it is possible to delete it from the menu. The device has a LCD backlight which makes measuring in places with insufficient light (e.g. garage) much easier.

Before You start to use the device, please place a new alkaline battery or a fully charged accu in the back side of the device's housing. In order to do it please take off the battery flap and place correctly the battery or accu by connecting it to the clips on the cable.

**WARNING!** The device is preset to galvanized steel and aluminium (Zn/Al)! Should the measurement be taken on older cars with non-galvanized steel bodywork, the „Steel” option shall be chosen.

### **Zeroing (calibration)**

Before You start to take measurements, please check whether the gauge is calibrated. To do it properly, please select the „ZERO” function from the main menu and put the sensor against the green side of the calibration sheet. If the display shows a 0 +/-10 $\mu$ m value, it means that the gauge is calibrated. Should the aberration be larger than 0 +/-10 $\mu$ m, please put the sensor once more against the green side of the calibration sheet, wait until the result stabilizes and press the red “OK” button while the sensor still touches the sheet. On the display will appear a „SAVE...” caption and the device will return automatically to the main

menu.

If the device is calibrated, You can cancel the “ZERO” function by pressing the red button. Please note not to press the red button before the “-----” caption appears in the second line of the display – otherwise the gauge will decalibrate!

**WARNING!** While zeroing, the calibration sheet should be placed on a flat, stable nonmetallic surface (e.g. do not place the sheet on the bodywork). Also, please avoid holding the sheet in Your hands as this may affect the operation.

Please note that zeroing is worth to be made when the measurement conditions are changing (e.g. the temperature or humidity rises or falls).

### **ATTENTION!**

- 1. Use only alkaline batteries as normal batteries provide insufficient power.**
- 2. Instead of a alkaline battery You can use a compatible, fully charged accu.**
- 3. If the device seems to work improperly it can be caused by an empty battery or accu.**

To take a measurement please put the device’s sensor against the examined surface. The sensor should adhere as flat as possible. The examined surface should be clean and smooth, otherwise the measurement may be incorrect. It is advised to hold the gauge with both hands and press gently towards the examined surface to eliminate vibration. Usually it takes 1-2 seconds to stabilize the measurement result.

### **Gauge manual**

The device is operated with 2 buttons:

- red button (OK / MENU): turns the device on, accepts the selected functions and returns to the main menu, when pressed during the measurement it memorizes the displayed value;
- yellow button (FUNCTION): switches between the functions in the main menu, switches between the stored measurement values.

To turn the gauge on please press the red button for about 1 second. After displaying the company’s logo and the device’s type, the device switches automatically to the main menu. In the first line You will see a „\*MEASUR” caption and in the second „SUBST” and the battery monitor. The „\*” symbol indicates the currently selected function. Please press the yellow button to switch between the following functions:

- MEASUR – measure function: takes measurements;
- SUBST – substance function: allows to choose the measured material;
- OFF – off function: switches the device off;
- ZERO – zeroing function: calibrates the gauge;

To select a function please press the red button.

### **Measure function**

After You select this function the display will show the currently selected material, e.g. “Zn/Al” and the battery indicator in the first line and „----um” in the second. The gauge is ready to take measurement.

After You put the sensor against the bodywork the result of the measurement will be shown on the display in the second line.

```
^ Zn/Al
----um
^ Zn/Al
140um
- 5 -
```

After You finish taking the measurements please return to the main menu with pressing the red button.

### **Substance function**

The substance function allows You to choose the material which will be measured. You have the following possible choices:

- galvanized steel / aluminium (Zn/Al);
- steel (Fe);

You can switch between the sheet materials with the yellow button, to accept the selection press the red button.

### **Off function**

After You accept this function with the red button the device turns off.

### **Zeroing function**

Use this function before You start to take measurements. After choosing this function put the sensor against the green side of the calibration sheet. If the display shows a  $0 \pm 10\mu\text{m}$  value, it means that the gauge is well calibrated. Should the aberration be larger than  $0 \pm 10\mu\text{m}$ , please put the sensor once more against the green side of the calibration sheet, wait until the result stabilizes and press the red button while the sensor still touches the sheet. On the display will appear a „SAVE...” caption and the device will return automatically to the main menu.

If the device is calibrated, You can cancel the “ZERO” function by pressing the red button. Please note not to press the red button before the “-----” caption appears in the second line of the display – otherwise the gauge will decalibrate!

**WARNING!** While zeroing, the calibration sheet should be placed on a flat, stable nonmetallic surface (e.g. do not place the sheet on the bodywork). Also, please avoid holding the sheet in Your hands as this may affect the operation.

Please note that zeroing is worth to be made when the measurement conditions are changing (e.g. the temperature or humidity rises or falls).

### **Notifications**

Attention! The device has a secured service menu. It is very difficult to enter this menu, nevertheless it may happen. In case this happens it is very important NOT TO PRESS ANY BUTTONS. You should immediately reconnect the battery to reset the device. Pressing any buttons in the service menu may decalibrate the device's default settings.

You will recognize the service menu by a „Rożn” caption shown on the display followed by a x-digit number. In this moment You should reconnect the battery!

### **ATTENTION!**

- 1. After decalibration of the device's default settings it is impossible to restore them!**
- 2. Restoring the device's default settings can be made only by the producer.**