- **Setting the clock**

  Having entered the PIN code correctly, the current date and time can be set. For this purpose, the four buttons located under the screen must be used

  Screen:
  Blinking letter T means the initial position of the cursor.
  In the first line: letter T, TIME
  In the second line: date and time to be set

  Buttons:

  SELECT: moving from the screen intended for setting the device identification number. The button remains inactive as the cursor is not set for initial position by the ENTER button.

  MINUS: Lowering the value of the number to be entered.

  PLUS: Increasing the value of the number to be entered.

  ENTER: moving the blinking cursor to the space where the value is to be changed.

  ATTENTION: in the WORK mode the local time may be corrected automatically to the GSM network operator time. The correction shall occur when the discrepancy between the local time and the operator's time exceeds ± 1 h 5 min

- **Setting up the device identification number**

  Setting up the scales identification number remains a subsequent step. The identification number is set up by a user in order to mark the scales at their discretion. The identification number is texted in a message in order to distinguish between the scales in case many of them are used at the same time.

  Screen:
  Blinking letter D means the cursor initial position.
  The first line: letter D, SCALES ID
  The second line: the identification number in the form XXXXXX

  Buttons:

  SELECT: moving to the screen for setting a user's telephone number. The button remains inactive, as the cursor is not set to the initial position by the ENTER button.

  MINUS: lowering the value of the digit to be entered.

  PLUS: increasing the value of the digit to be entered.

  ENTER: moving a blinking cursor to the space where the value is currently being changed.

- **Setting the number for SMS**

Subsequently, the user's telephone number must be provided. Messages on the device status shall be texted to it.

Screen:
Blinking letter S indicates the initial position of the cursor.
The first line: letter S, text message (SMS) number
Second line: telephone number in the form +XX XXX XXX XXX , 00XX XXX XXX XXX
The underlined beginning of the number is the country code.
Buttons:

SELECT: moving from the screen to set up the PIN code. The button remains inactive as the cursor is not set at the initial position by the ENTER button.

MINUS: lowering the value of the digit to be entered.

PLUS: increasing the value of the digit to be entered.

ENTER: moving a blinking cursor to the space where a value is currently being changed.

- **Settings for PIN number**

Correct PIN number activates the access to SIM card. When the number is not entered, instead of the digits the displays shows : – – – –

Screen:
Blinking letter P indicates the initial position for the cursor

The first line: letter P , PIN NUMBER
Second line: PIN number in the form XXXX

Buttons:

SELECT: finishing the configuration and moving to the information screen. The button is inactive as the cursor is not set to initial position by the ENTER button

MINUS: lowering the value of the digit to be entered.

PLUS: increasing the value of the digit to be entered.

ENTER: moving the blinking cursor to the space where a value is currently being changed

3. Information screen

- **Screen 1: information**

Screen:
First line: the screen number: 1, current weight
Second line: GSM operator name, signal strength, battery status

Buttons:

SELECT: deleting the messages.

MINUS: moving to screen 2: SMS TEST

PLUS: moving to screen 2: SMS TEST

ENTER: pressing for a longer time resets the weight (TARA). Tare weight value is stored in non-volatile memory.

- **Screen 2: SMS TEST**

Screen:
the first line: the screen number: 2, SMS TEST
the second line: Press ENTER

Buttons:

SELECT: deleting the messages / moving to the information screen

MINUS: moving to screen 1 : Information

PLUS: moving to screen 1: Information

ENTER: sending the test text message (SMS) with the current device status.

In the SET mode, while displaying the information screen , after 5 seconds of inactivity the message “Switch to work mode!” is displayed, which reminds about the necessity to switch the scales in the WORK mode in order to achieve the device proper operation. Failure to perform the said steps shall result in switching to stand-by mode after approximately 2 minutes of inactivity (the display is switched off, red diode blinks and an alarm signal is heard). In order to stop the stand-by , press the SELECT button or change the SET/WORK switch to WORK position and again to SET position. In both cases it will be necessary to go through the configuration menu in line with point 2 of the following manual.

ATTENTION: Once the configuration has finished, the scales must be switched into the WORK mode by means of the SET/WORK switch located in the lower bottom corner of the board. In the WORK mode, the display is switched off, a red diode next to the switch does not light.

In order to complete the configuration or read the scales status on the display, the switch must be changed into the SET position and act in line with point 2 of the following manual. If the configuration has been completed correctly, each switch from the SET mode into the WORK mode shall bring about an attempt to send a test text message (SMS) with the information on the signal strength, battery status and the current weight. If a recipient receives such a text message, it means that the device functions properly.

4. Operation of the scales

The scales operates properly after the correct configuration and once it has been switched into the WORK mode. In this mode, the display is switched off and the red diode next to the SET/WORK switch dies not light.

If the configuration has been completed properly and the switch has been changed into the WORK mode, a special text message (SMS) with the information on the signal strength, battery status and the current weight

shall be sent once the main supply has been activated with the switch located on the scales casing. If a recipient has received such a text message it means that the device functions properly.

The device periodically checks the weight status at 6:00 am, 1:00 pm and 8:30 pm and sends an informative text message at 8:30 pm. The cycle repeats every 24 hours. The battery status and the weight measurement are performed every 15 minutes. If the battery level decreases critically or there is a sudden loss of weight, a text message shall be sent with information on the incident – see point 7 of the following manual.

The scales takes up 3 attempts to deliver the text message (SMS). Sending the message is repeated in case of GSM error brought about by the lack of network reception.

5. Starting sequence

After switching the scales into the SET mode and having entered the code, the controller checks the device status. When there are any irregularities, the following messages may appear on the display:

MEMORY ERROR – means that the local memory is damaged. This is a serious error and scales operation is stopped.

WARNING: BATTERY LOW – warning on a low battery status, when the battery level drops below 10% of its capacity. Additionally, any report sent by a text message is accompanied by the low battery status information The battery shall be replaced promptly in order for the scales to operate properly. The warning does not block the device operation but is displayed every 15 seconds. Its display may be stopped by pressing the ENTER button.

6. GSM messages presented on the display

- **GSM connecting** – a message displayed every time when GSM connection is tested
- **Sending SMS...** – information on sending a text message (SMS).
- **PIN is required but is not set** – information that the SIM card requires a PIN number but it is not set. Move to Settings of the PIN number and enter the PIN number. NOTE**:** make sure that the PIN number is correct as wrong number may block the access to SIM card.
- **SIM CARD ERROR: SIM not found! –** information when the SIM card is missing. Check whether the SIM card is in the slot and whether is has been placed correctly.
- **SIM CARD ERROR: PIN is incorrect** – information on wrong PIN number having been entered**.** Move to Settings of the PIN number and enter the correct PIN number. NOTE: make sure that the PIN number is correct as wrong number may block the access to SIM card.
- **SIM CARD ERROR: PIN test error –** message that appears when erroneous communication with the SIM card occurs or the SIM card is damaged.
- **SIM CARD ERROR: Card locked** – message on the blocked access to the SIM card. Unblock the SIM card at an external device, e.g. a mobile.
- **Error: GSM issue** – information that a serious hardware problem has occurred with a GSM device. GSM device is disconnected than and connecting it is impossible.

7. Text messages (SMS)

Information message sent to a recipient consists of the following spaces:

Bee scale report	headline
ID: XXXXXX	ID number granted by a user during the configuration – **see point 2 of the following manual: Setting up the**

	device ID number.
C: XX-XX-XXXX XX:XX	Data and time when the report has been produced
W06.00: XX.XX kg	Weight measurement taken at 6:00 am
W13.00: XX.XX kg	Weight measurement taken at 1:00 pm
W20.30: XX.XX kg	Weight measurement taken at 8:30 pm
D: +XX.XX kg	Weight difference between the last measurement taken on the current date and the last measurement taken n the previous day. + means the weight gain – means the weight loss
B: XX%	Battery charging level
S:	Scales status. OK–everything all right Battery Low! – battery should be replaced or charged Mass Loss! – weight loss has occurred

Test text message sent to a recipient consists of the following spaces:

Bee scale TEST	headline
ID: XXXXXX	ID number granted by a user during the configuration – **see point 2 of the following manual: Setting up the device ID number.**
Date: XX-XX-XXXX XX:XX	Date and time when the test has occurred
Weight: XX.XX kg	Current weight status
Signal: XX%	GSM signal strength value
Battery: XX%	Current battery charging level

Alarming text message sent to a recipient consists of the following spaces:

ALARM! Bee scale report	headline
ID: XXXXXX	ID number granted by a user during the configuration – **see point 2 of the following manual: Setting up the device ID number.**
Date: XX-XX-XXXX XX:XX	Data and time when the alarm has been triggered
MASS LOSS!	In case of a sudden weight loss
BATTERY LOW!	In case when the battery charging level drops below 10%

NOTE!!!
The first sms alarm message will not arrive until after one of the three hours of mass measurement (6:30 / 13:00 / 20:30). This is equivalent to the start of GSM messaging.
NOTE!!!
After start-up, sms alarm messages will not be sent until one of the three hours of mass measurement execution (6:30 / 13:00 / 20:30).