

DPOS400 SERIE



DIBAL

TEST AND ADJUSTMENT S MANUAL

INDEX

1. TEST	1
1.1 ENTERING TEST MODE	1 1.2
DISPLAY TEST	2 1.3
KEYBOARD TEST	2 1.4
EURO PHASE	3
2 CALIBRATION	4
2.1 COUNTRY	4 2.2
IML PROGRAMMING	5 2.3
CAPACITY PROGRAMMING	5 2.4
ADJUSTMENT	5
2.4.1 LATITUDE ADJUSTMENT	5 2.4.2
ALTITUDE ADJUSTMENT	6 2.4.3
ZERO WEIGHT ADJUSTMENT	7
2.4.4 WEIGHT ADJUSTMENT	7
3 COMMUNICATIONS	8
3.1 COMMUNICATION PARAMETERS	9
3.2 PROTOCOL SELECTION	10
3.3 POINT/COMA CONFIGURATION	11
4 PROTOCOLS TYPE	12
SAMSUNG PORTUGAL CASH REGISTER PROTOCOL	20 4.12



II

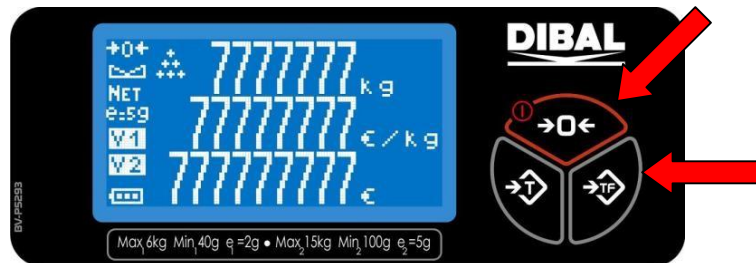
1. TEST

The test functions permit the user to check all of the important elements of the scale in order to assure that they function correctly; or in the case of a malfunction, find the faulty element quickly. The scale must be turned off to leave test mode.

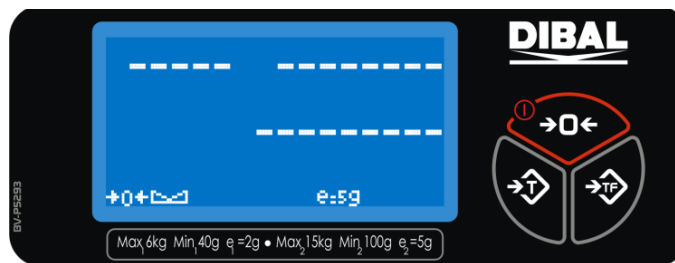
Test y Ajustes

1.1 ENTERING TEST MODE

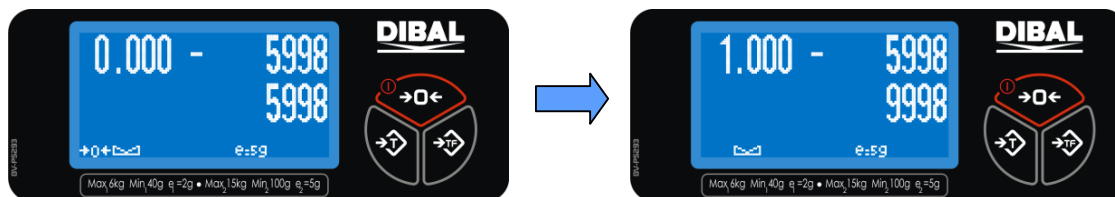
When the scale is turned on, a segment test is run showing a count down from 9 to 0. **In order to enter test mode**, press the two outside keys on the bottom row of the keyboard:  and , before the countdown reaches 0. Backlighting is on while the equipment is in mode test



The scale will show hyphens in all the display's digits, followed by the following information.



1. The weight value in grams is shown in the weight display.
2. The zero weight value in internal divisions is shown in the price per kilogram display. This value is accompanied by a hyphen, which is in the center segment if the value is in the limits set when the scale was adjusted or in the upper or lower segments if the value is greater or lesser than the limits respectively.
3. The weight value in internal divisions is shown in the amount display.



This will be referred to as test ready, and is the beginning point for all the tests to be done.

1.2 DISPLAY TEST

cash register protocol

This allows the user to assure that there are no problems with the display. Being in test mode, press time, the scale will



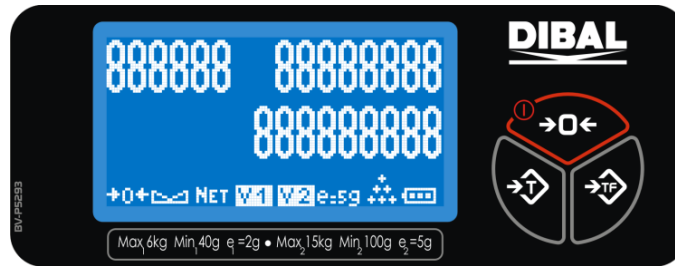
and then hold the key



. Be careful, if you hold the key



user to assure problems with main screen of the key a lot of shut down.



Press 3 times the key to return to the main screen.

1.3 KEYBOARD TEST

To verify the correct operation of keys is enough to press the different buttons and see if it beeps.

Filter

This adjustment allows choosing the working mode of the scale, only weight or price, weight amount. The adjustment can take two different values, as is shows follow:

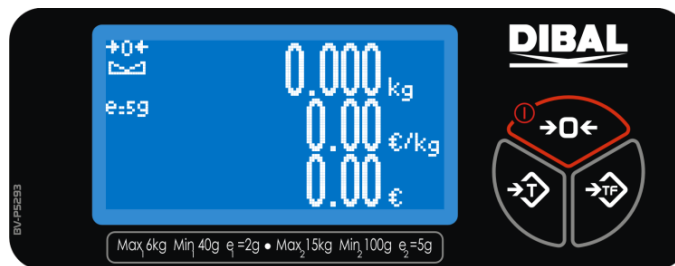
Filter = 0

Only weight



Filter = 1

Price, weight and amount



Press the to enter to this menu. The value can be changed pressing the key key .

Press 3 to return to the main screen.

times the key

1.4 Euro

phase




This adjustment indicates the phase of the Euro. To change the phase you have to enter the corresponding code from attached table.


Test y Ajustes



From	To	Code
Phase 0	Phase 1	0781
Phase 1	Phase 2	6022
Phase 2	Phase 3	9808
Return to initial phase		2149

Press 2 times the key  to enter to this menu.

To introduce the code you have to press again the key . Then press the key  to change the first number. Use the key  select the following number.

Press the key  to apply the changes (if the code is incorrect the scale does not do anything) and return to the main screen.

2 CALIBRATION

These functions allow the user to program, adjust and calibrate the scale.

The scale must be turned on for at least two hours before being adjusted. It must also be perfectly level and the temperature and humidity must be stable. The user must have a calibrated weight relative to the scale capacity.

The keys have the following functions:

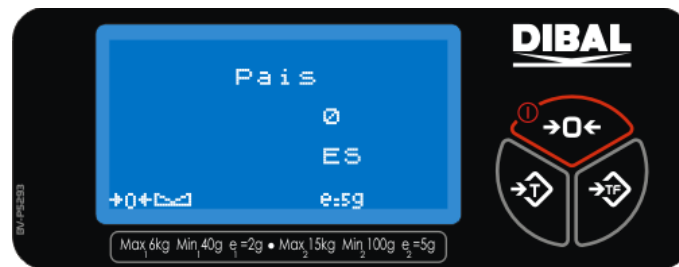
Key	Function
	Increase the programming value.
	Decrease the programming value.
	Accept the value and move on to the next.

Turn the scale on, and while it is counting down from 9 to 0, press the two keys together, and . The scale will enter test ready. Next, press the adjustment key found on the CPU. This may be accessed by removing the sealed screw and inserting a pointed object in the opening.

This should only be done by authorized personnel.

2.1 COUNTRY

Select the country code. The language of message and the rounding will modified according to the country.



To change the country press the key or . Press the key to program the next field.

Code	Country	Code	Country
0	Spain	20	-
1	Deutschland	21	Denmark
2	Austria	22	Ukraine
3	Belgium Flemish	23	Poland
4	Belgium French	24	Ireland
5	Costa Rica	25	Holland
6	Estonia	26	Brazil
7	France	27	Argentina

Code	Country	Code	Country
40	Romania	60	Bahrain
41	-	61	Australia
42	Bulgaria	62	USA
43	-	63	India
44	South Africa	64	Emirates Arabs
45	Pakistan	65	Mexico
46	Thailand	66	Indonesia
47	Panama	67	Oman

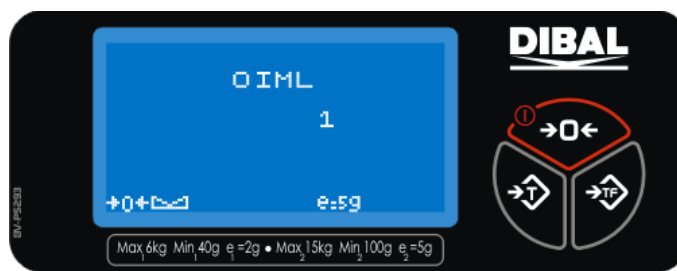
Test y Ajustes


8	Greece	28	Tunis
9	-	29	Serbia
10	UK	30	Morocco
11	Italy	31	Bosnia
12	Peru	32	Slovakia
13	Dominican Rep.	33	Croatia
14	Czech Republic	34	Colombia
15	Sweden	35	-
16	Switzerland	36	Slovenia
17	Venezuela	37	Latvia
18	Portugal	38	Hungary
19	Finland	39	Latvia

48	Guatemala	68	Iran
49	Philippines	69	Egypt
50	-	70	French Polynesia
51	Cyprus	71	Switzerland (French)
52	Algeria	72	Russia
53	Saudi Arabia	73	New Caledonia
54	Iceland	74	Jordan
55	Singapore	75	Malt
56	Lebanon	76	
57	Vietnam	77	
58	Kenya	78	
59	Turkey	79	

2.2 IML PROGRAMMING

This allows the user to set a series of parameters as recommended by the OIML. This parameter cannot be modified.




Press the  key to program the next field.

2.3 CAPACITY PROGRAMMING


This allows the scale capacity to be selected according to the following table.



Code	Capacity
1	6 kg
2	15 kg
16	6/15 MR

Press the key  to increase the programming value

Press the key  to decrease the programming value

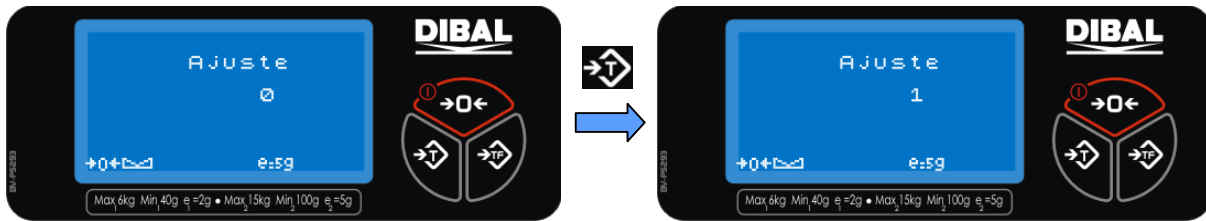
Press the key  to program the next field.

2.4 ADJUSTMENT

This allows an adjustment to be done. The default value of 0 will always be shown. Change the

cash register protocol

value pressing the key  and then press the key  to program the next field. **Do not enter this option if you are not qualified or if you do not have the calibrated weights.**






 **This should only be done by authorized personnel.**

The following sections will only be visible when this parameter will set to 1.

2.4.1 LATITUDE ADJUSTMENT

This allows the adjustment to be modified according to the latitude at which the scale is to operate without carrying out a complete adjustment with calibrated weights. Program a value between 0 and 90.






Press the  key to increase the programming value
 Press the key to decrease the programming value
 Press the key

to program the next field.


2.4.2 ALTITUDE ADJUSTMENT

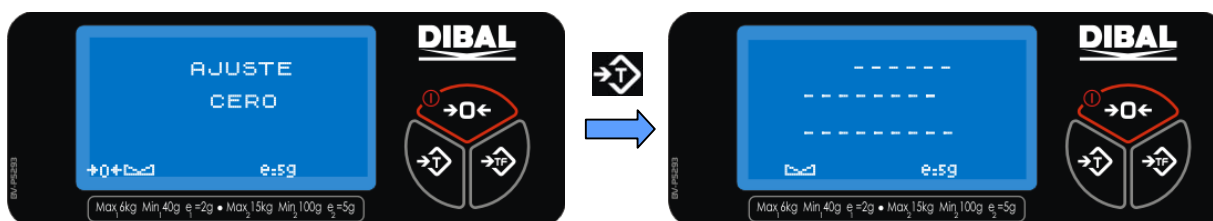
This allows the adjustment to be modified according to the altitude at which the scale is to operate without carrying out a complete adjustment with calibrated weights. Program a value between 0 and 9999 corresponding to meters above sea level.






Press the  key to increase the programming value
Press the key  to decrease the programming value
Press the key  to program the next field.


2.4.3 ZERO WEIGHT ADJUSTMENT

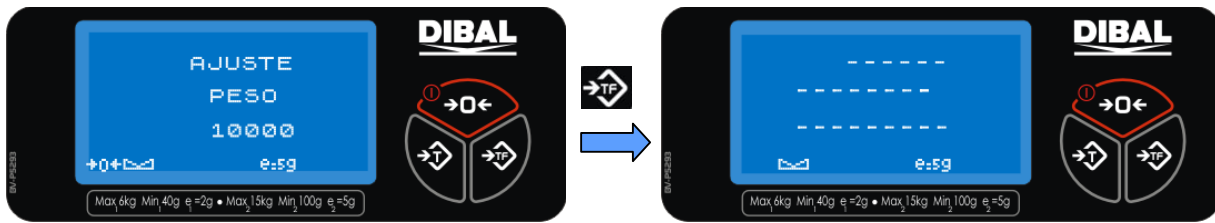
This will carry out a non-reversible calibration process with the scale. To do this adjustment, the user must have the corresponding calibrated weights according to the maximum scale capacity. If the adjustment is to be done, remove all of the weight from the plate and press the  key to begin the zero weight adjustment. During the adjustment process, the display will show hyphens. This process lasts various seconds.




Press the key  to increase the programming value
Press the key  to decrease the programming value
Press the key  to program the next field.

2.4.4 WEIGHT ADJUSTMENT

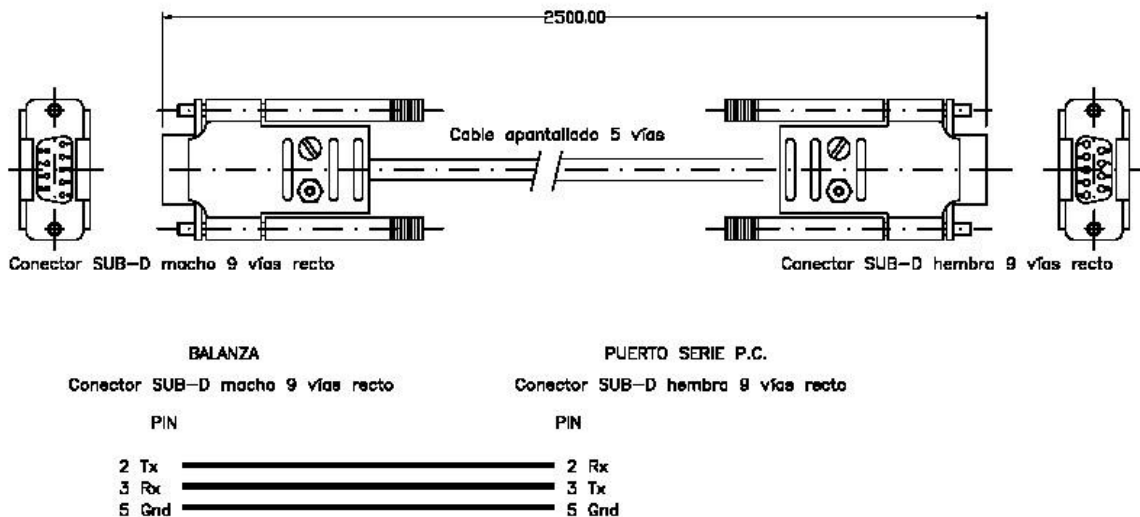
Once the zero weight adjustment is made, the display will show a default weight, relative to the scale capacity, to be used in the weight adjustment. This adjustment weight may be modified by using the keyboard. Place a calibrated weight matching exactly the weight shown in the display on the weighing platform and wait a few seconds for the weight to stabilize. Press the  key to begin the weight adjustment. The display will show lines of hyphens while the adjustment is being done. This process will last for a few seconds.



Once the adjustment process has been completed correctly, the scale will return to test ready automatically. If an error occurs during the adjustment, the scale will show a message "Error". Press the  key to return to test ready and retry the adjustment process.

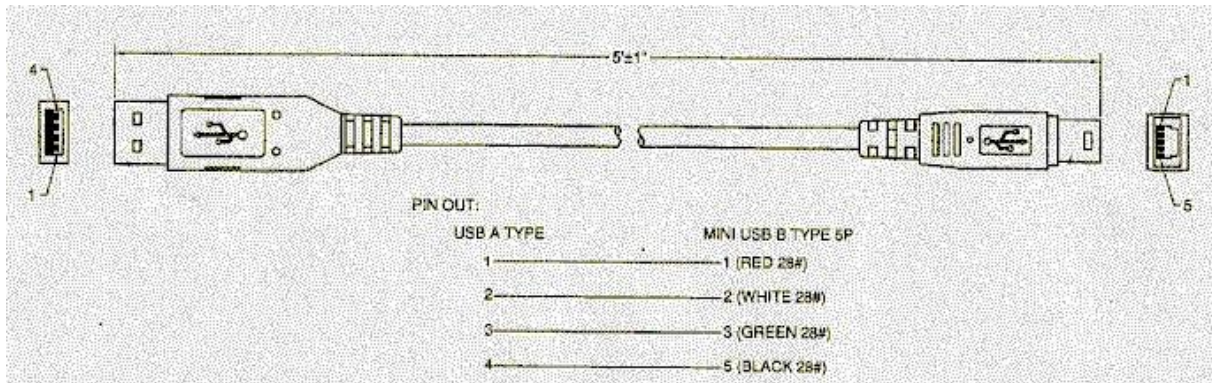
3 COMMUNICATIONS

Model **DPOS400** is capable of communicating with a computer.



The reference of the cable is BV-5858.

The scale DPOS400 is capable of communicating with a computer by USB. Is a standard cable with an A connector on one end and a mini-B connector on the other end.

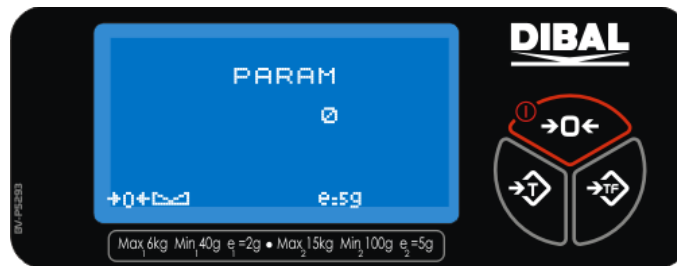


Never use a communications cable different to the one shown above.

3.1 COMMUNICATION PARAMETERS

The communications are going to be programmed in this menu. It is necessary select the parity, the data transfer rate, the bits numbers...

Hold the key **→0←** until the next screen will appear. If you keep pressed a lot of time this key, the scale will switch off.





Select the type of communication in accordance with the table below:

Type	Bauds	Data Bits	Stop Bits	Parity	Type	Bauds	Data Bits	Stop Bits	Parity
0	9600	8	1	No	20	4800	7	1	Even
1	9600	8	1	Even	21	4800	7	1	Odd
2	9600	8	1	Odd	22	4800	7	2	Even
3	9600	8	2	No	23	4800	7	2	Odd
4	9600	7	1	Even	24	2400	8	1	No
5	9600	7	1	Odd	25	2400	8	1	Even
6	9600	7	2	Even	26	2400	8	1	Odd
7	9600	7	2	Odd	27	2400	8	2	No
8	19200	8	1	No	28	2400	7	1	Even
9	19200	8	1	Even	29	2400	7	1	Odd
10	19200	8	1	Odd	30	2400	7	2	Even
11	19200	8	2	No	31	2400	7	2	Odd
12	19200	7	1	Even	32	1200	8	1	No
13	19200	7	1	Odd	33	1200	8	1	Even
14	19200	7	2	Even	34	1200	8	1	Odd

cash register protocol

15	19200	7	2	Odd	35	1200	8	2	No
16	4800	8	1	No	36	1200	7	1	Even
17	4800	8	1	Even	37	1200	7	1	Odd
18	4800	8	1	Odd	38	1200	7	2	Even
					39	1200	7	2	
19	4800	8	2	No					Odd

Press the  key to increase the programming value

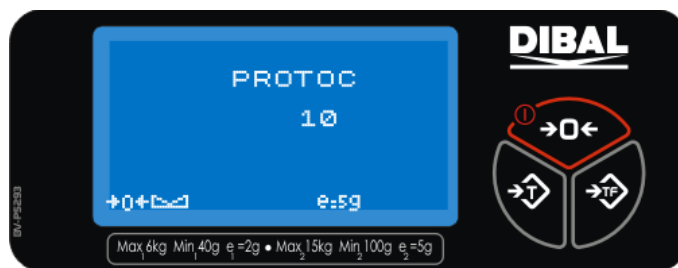
Press the  key to decrease the programming value

value 

Press the key  to program the next field.

3.2 PROTOCOL SELECTION


In this menu you select one of the available protocols. Using this protocol the scale is able to communicate with a POS or a cash register.




The following protocols are available:

Código	Protocolo	Código	Protocolo
1	ANKER	26	-----
2	TPV CASIO	27	DATECS
3	RIVA / UNIWELL	28	TPV CASIO NUEVO
4	TISA	29	-----
5	EAN a PC ICL	30	DIALOG 06 sin atender al peso mínimo
6	SANYO	31	ELZAB
7	APOLLO/SAMSUNG POLONIA	32	TOWA
8	DELTA	33	SHARP UP-700-2
9	ALFA	34	QT-6000
10	DOLAR/SAMSUNG ESPAÑA	35	OLIVETTI
11	SAMSUNG PORTUGAL	36	TF-1000
12	UNIPROX (BMC PS-2000)	37	SHARP UP-800
13	UNIPROX con checksum	38	IBM
14	SHARP UP-700	39	DIALOG 06 sin atender a la tara recibida
15	KABEL (ITALIA)	40	DIALOG 06 sin atender a peso mínimo ni a la tara recibida
16	NCI	41	-----
17	ECR-POSNET	42	DIBAL Terminal

18	TISA con envío en peso estable	43	IBM/HUGIN "SERD" para cajas CHD 3010
19	VD TISA	44	ANKER con envío de peso cero
20	VD SEUR	45	COM (DATECS 2)
21	UNIPROX con 6 dígitos de precio	46	SAMSUNG CHINA
22	STAR (con envío en peso estable)	47	HUNAN WEIBOSHI
23	-----	48	METTLER (PRECIA)
24	Checkout_Dialog06	49	CARREFOUR
25	EUROSTAR 2000T ALPHA	50	DIALOG 02/04

Press the  key to increase the programming value



Press the  key to decrease the programming

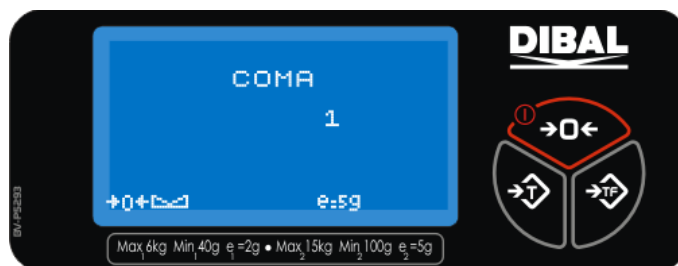
value



Press the key to program the next field.

3.3 POINT/COMA CONFIGURATION

In this menu you can switch the decimal point that separates the whole number and decimal part of price, weight and amount. The default value is 0, which represents the decimal point as a point. Press the key  or  to modify this value.



On the following pictures you can view the different representations.



Pulse la tecla  para volver a la pantalla principal.

4 PROTOCOLS TYPE

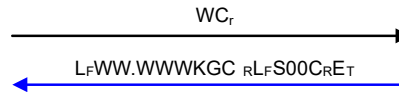
In this section the protocols are going to be described. To select one of them, go to section 3.2 Protocol selection.

4.11 SAMSUNG PORTUGAL cash register protocol

Protocol

Cash Register

Scale



Where:

W: 0X57H, weight request.
C_R: 0x0Dh
L_F: 0x0Ah
WWWWW: 5 characters for weight.
.: 0x2E decimal point.
S: 0x53h Weight status.
00: 0x30h, 0x30h If weight status is correct.

This parameter can take different values:

00: Stable within range [0 - 15.045]

11: Unstable weight, overload or negative weight.

If the weight is unstable, **WW.WWW** takes the momentary weight.

If the weight is negative or higher than the max (+ 9e), the **WW.WWW** value will be 00,000.

KG: 0x4Bh y 0x47h

E_{TX}: 0x03h

NOTE:

- With negative weight or out of range the scale always responds 00.000kg.
- If the scale has a tare weight, it sends the net weight in the field **WWWWW**.

