

500 RANGE



TEST AND ADJUSTMENTS MANUAL



CONTENTS

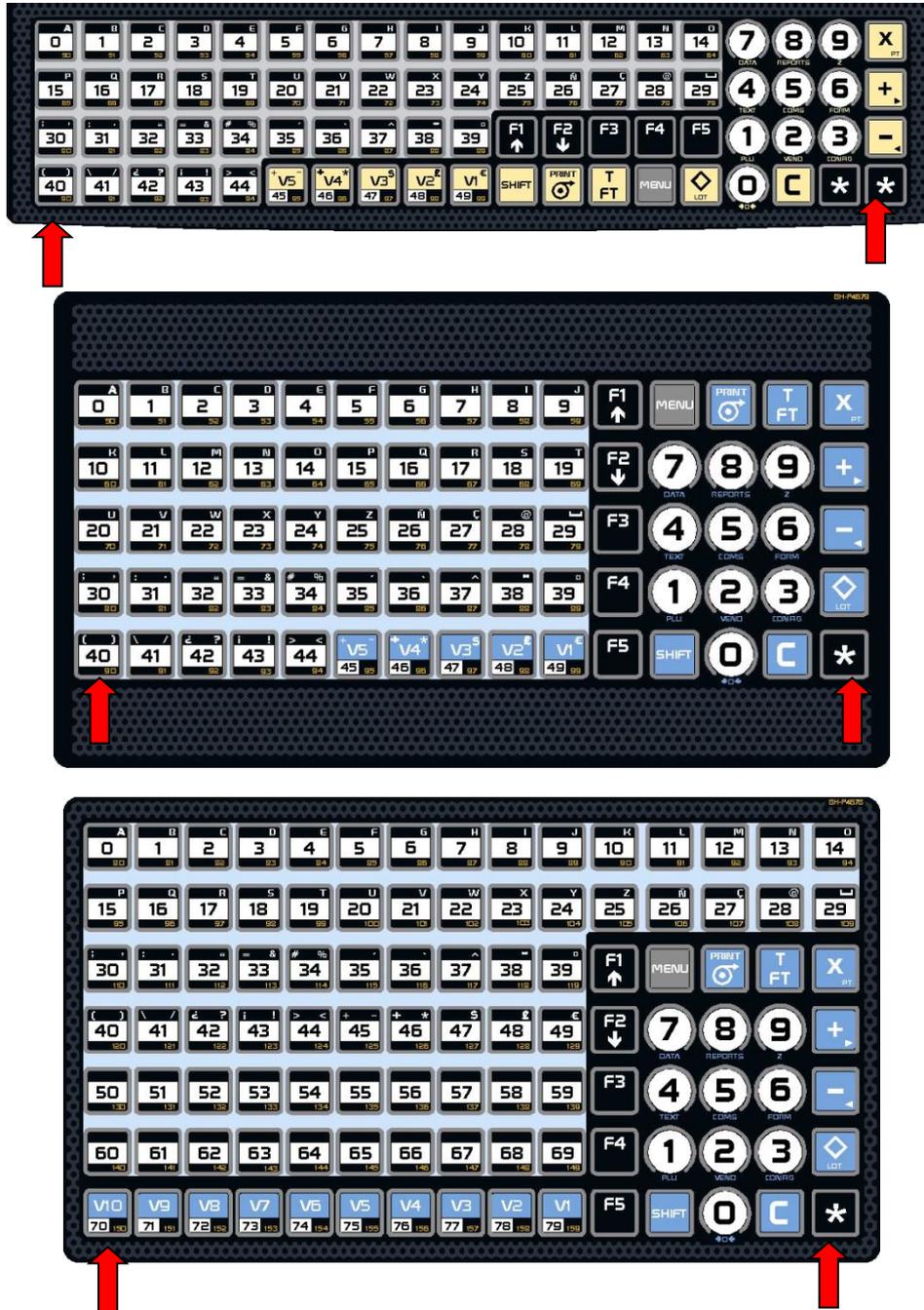
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1 ACCESS TO TEST MODE

The scale has a special working mode, called Test mode.

To enter in test mode, remove all the weights placed on the plate, switch the scale on and wait until the countdown starts.



Press simultaneously the keys situated in the lower right corner and the lower left corner before the scale ends the countdown.

When the keys are released, the scale makes several weight readings, shows hyphens, shows the weight in grams and the number of internal readings for zero and weight. This will be the initial situation for all the other tests to be carried out in the scale.

! To leave Test Mode it is necessary to **switch off the scale**.

2 INTERNAL DIVISIONS OF THE CONVERTER

In the current situation, you can read the readings of the analog / digital converter that resides in the balance, and translated into gram divisions.

- It is possible to see the readings of the weight placed on the plate in internal divisions.
- The scale shows the readings of the value of zero
- The weight placed on the plate in grams.

3 DISPLAY TEST

From the initial test situation, press **F1**, the scale will make a display test. Press any key to finish the test

4 PAPER ADVANCE

To verify the functioning of the printer motors, for both the labeller-movement motor and the paper collection motor, press the keys **SHIFT** and . The paper will advance while this sequence is pressing.

5 READINGS OF THE ANALOG/DIGITAL CONVERTER

From the initial test situation, press the key **C**, the scale will show the internal weight adjustment parameters. By pressing the key **C**, the scale will show all the values: Weight Adjust, zero adjust and autotare.

Press **MENU** to exit.

6 PRINTER PARAMETERS

This menu allows to program the printing parameters.

To enter in the programming press the key **PRINT**.

The menu of ticket and label parameters will be shown. Use the keys **F2** (move down) and **F1** (move up) to navigate in the menus.

Press the key ***** to confirm the value entered.

6.1 LABEL PARAMETERS

Here the parameters used for printing the labels are established. The label parameters are:

6.1.1 LABEL CONTRAST

The value of this parameter (from 0 to 9) is in direct proportion to the contrast with which the labels will be printed.

Enter the value of the contrast as a number between 0 and 9 (default value 5).

Press ***** y **F2** to move on to the next parameter or press **MENU** to quit the programming menu.

6.1.2 RECEIPT CONTRAST

The value of this parameter (from 0 to 9) is in direct proportion to the contrast with which the receipts will be printed.

Enter the value of the contrast as a number between 0 and 9 (default value 5).

Press ***** y **F2** to move on to the next parameter or press **MENU** to quit the programming menu.

6.1.3 LABEL WAY OUT

With this parameter you can adjust the way out of the label so that on printing, it does not

remain inside the printer and can be easily removed. To change the value of this parameter:
Enter the printout distance as a number between 0 and 255 (in general, 80 is an acceptable value).

Press ***□** and **F2** to move on to the next parameter or press **MENU** to quit the programming menu.

6.1.4 DISTANCE OPTO-THERMAL HEAD

By modifying the value of this parameter you can centre the printing fields of the labels in a vertical sense both upwards and downwards.

Enter a value between 0 and 99 (by default 32). To do so:
Enter the required value between 0 and 99.

Press ***□□** and **F2** to move on to the next parameter or press **MENU** to quit the programming menu.

6.1.5 CENTRE LABEL

With the value of this parameter (from 0 to 40) you can adjust the centre of label.

Enter the value of the centre label as a number between 0 and 40 (default value 0).

Press ***□□** and **F2** to move on to the next parameter or press **MENU** to quit the programming menu.

6.1.6 CENTRE TICKET

With the value of this parameter (from 0 to 40) you can adjust the centre of ticket.

Enter the value of the centre ticket as a number between 0 and 40 (default value 0).

Press ***□□** and **F2** to move on to the next parameter or press **MENU** to quit the programming menu.

6.1.7 BACKING PAPER REWINDER

This parameter allows to enable the functioning of the backing paper rewinder. The possible values are:

'YES' –Rewinder Motor Enabled

'NO' –Rewinder Motor Disabled

Press ***□□** and **F2** to move on to the next parameter or press **MENU** to quit the programming menu.

6.1.8 HEADING

This parameter affects the printing mode of both the labels and the receipts, and can have a value of between 0 and 1 with the meanings:

'0' - It leaves the header blank.

'1' - It backspaces and prints the header.

Enter the required value as a number from 0 to 1.

Press ***□□** and **F2** to move on to the next parameter or press **MENU** to quit the programming menu.

6.1.9 PAPER TYPE

With this parameter, you choose the type of paper with which the label printer is going to work, that is:

'0' - Self-adhesive label paper.

'1' - Continuous paper without collector.

'2' - Continuous paper with collector.

'3' – Linerless paper.

Press ***□□** and **F2** to move on to the next parameter or press **MENU** to quit the programming menu.

6.1.10 END LINE TICKET

With the value of this parameter (from 0 to 9) you can adjust the end line of ticket.

Enter the value of end line ticket as a number between 0 and 9 (default value 4).
Press **MENU** to quit the programming menu.

7 PRINTER TEST

It is possible to make a printer test to verify the functioning of the printer, when it is working in label mode or in receipt mode.

Receipt mode printer test. Press the key **+**
Label mode printer test. Press the key **-**



8 KEYBOARD TEST

It is possible to make a keyboard test, to verify the functioning of all the keys of the keyboard.
To start keyboard test press **F2**.

When a key is pressed, it is shown its description on the display. Press ***** twice to start the keyboard test and press the keys requested on the display until you end the test.

9 DATE AND TIME ADJUSTMENT

This parameter allows to program the date and time in the scale.
Press the key **F3**.

Program the date using the numeric keyboard. Use the keys **X** or ***** to select the different digits.

Once all data have been programmed, press **X** or ***** to save the information
Press **MENU** to quit the programming menu.

10 SET OPTOS (DETECTION OF PAPER)

10.1 MANUAL MODE

With this option is possible to calibrate the paper detector in ticket and label printers.

Press the key **F4**

The scale shows the menu of paper detection and thermal head temperature.

OPTO LAB	240
LIMIT	190
TEMP	154 +27C

The follow operations must be done:

1. Peel a label from the backing paper.
2. Place the base paper on the opto.
3. Write down the reading value.
4. Advance the paper until the label is on the opto.
5. Write down the new lecture value.
6. Calculate the mean value and type it on the field LIMIT.
7. Press key *****

Press again to access to configuration:

OPTO LAB	240
LIMIT	190
TEMP	154 +27C

Once the values are updated, press the key ***** to save information.

Press **MENU** to leave the test mode.

10.2 AUTOMATIC MODE

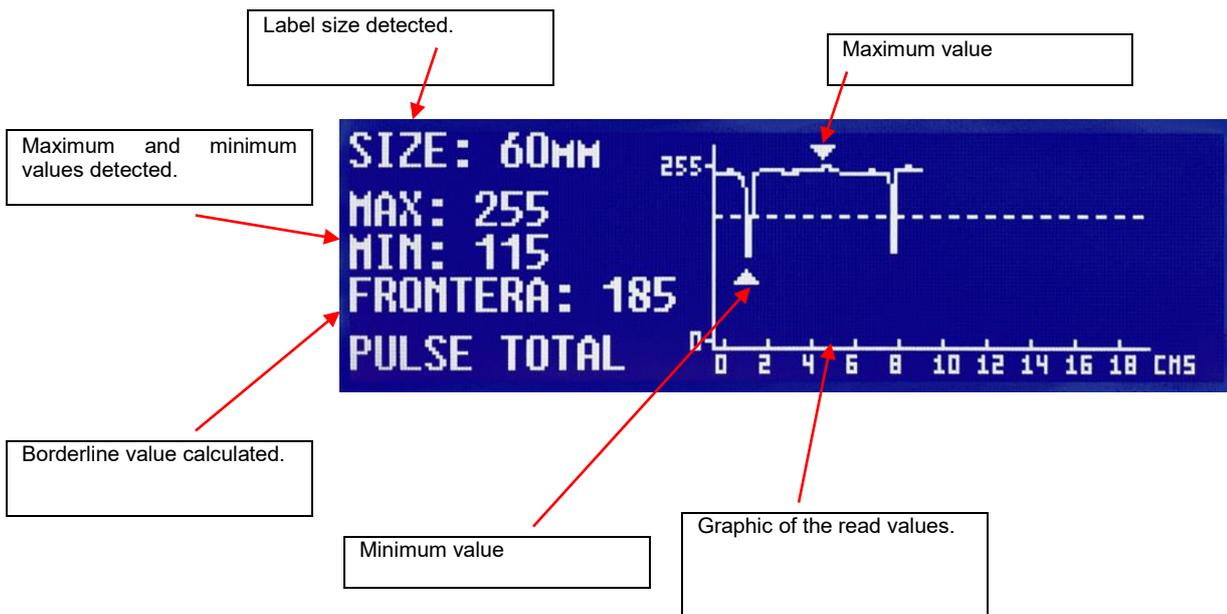
From the opto adjustment screen of the LABELLER (F4 in Test and Adjustments), you will enter to the auto-adjustment operative by pressing SUBTOTAL.

In normal working mode, It is also possible to enter to the opto adjustment screen from the new menu 7.4.3 (LABEL OPTO CALIBRATION).

The labeller will start to advance the paper and it will read the opto values. After few seconds, it will calculate the optimal value of the borderline and it will place the label in his starting position.

If a loss of paper is detected during the process, or the difference between the maximum and minimal value is very small, the process will be aborted.

In graphical machines there will appear a graphic of the whole process:



11 BATTERY (JUST FOR BATTERY MODELS)

This operation is used to check the level of battery.

Should be done with the balance working in battery mode.

To enter in the test battery, press key **F5**.

The scale will show:

```
BATTERY TEST
V=11,8v 100% 187
```

V= Battery voltage

100%= Charge percentage

187 converter internal readings

If the scale is connected to the electric grid will not show the percentage of charge, will show:

```
BATTERY TEST
V=14,7v ---% 232
```

11.1 BATTERY CALIBRATION PROCESS

The calibration process must be done in test mode. To enter to the calibration screen press **SHIFT F5**.

The scale will show:

```
BATTERY TEST
V-BAT 0.00
DIVISIONS: 171
```

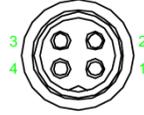
The reading of the converter will be the value in divisions (between 0 and 255).

Once on this screen and depending on the kind of the scale chosen, the calibration will be done.

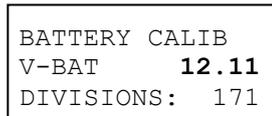
11.1.1 INTERNAL BATTERY SCALE CALIBRATION

The machine must be disconnected from the electric grid and the external battery, only feed by the internal battery.

Connect a polymeeter (voltmeter) to the pins 4 (charger +) and 3 (charger -) of the 4 pin DIN connector of the machine, which is used to connect the machine to external battery and external charger.



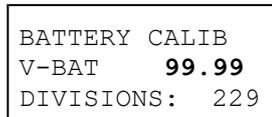
Read the value displayed on the voltmeter and enter it in the calibration screen using the numeric keypad. Press ***** to save the value and carry out the calibration.



The values allowed to be modified in V-BAT value must be between 8.00 and 17.00. If a value out of this range is entered, the saved value will be 0.00 (Non calibration indicator). Furthermore if the divisions reading value is out of the range 150 and 200, the calibration won't be allowed and 0.00 saved value will be shown.

11.1.2 SCALE WITHOUT INTERNAL BATTERY CALIBRATION

Enter the value 99.99 in the calibration screen, using the numeric keypad. Press ***** to save the value and carry out the calibration.



Press ***** to exit the screen.

11.1.3 CALIBRATION OF A SCALE WITH ANTI-BLACKOUT BATTERY

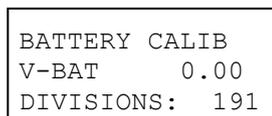
The scale detects automatically if it is feed by a battery power supply or an anti-blackout charger board, but it is not able to distinguish between the two cases.

As everything related to printing and to battery charge levels is different in both cases, it is necessary to make a calibration (adjustment) of the scale to indicate to it that it is an anti-blackout scale.

To make the calibration the scale must be connected to the electric grid.

The calibration process is done with the scale in test mode. To enter to the calibration screen press **SHIFT F5**.

The scale will show:



The reading will be the value in divisions (between 0 and 255).

Enter the value 77.77 on the calibration screen using the numeric keyboard. Press ***** to save the value and make the calibration.

```
BATTERY CALIB
V-BAT      77.77
DIVISIONS: 191
```

Press ***** to exit the screen.

We must turn off and on the scale in order to changes to take effect.

11.2 CALIBRATION AND BATTERY CHARGE CHECKING

There is a screen to check the value of the charge and its reading calibration. In test mode, press **F5**.

If the machine is not calibrated, a message will be shown on the second line of the screen:

```
BATTERY TEST
NON CALIBR
V=12.3v 60% 169
```

In case of being calibrated, the line will be empty.

11.2.1 BATTERY CHARGE CHECKING OF SCALES WITH INTERNAL BATTERY

If the machine is connected to the grid:

```
BATTERY TEST
V=15.6v NETW 221
```

V= Charge translated voltage (internal use).
221 Converter internal readings.

If the machine is not connected to the grid (it is using battery), the display shows:

```
BATTERY TEST
V=12.0v 50% 169
```

V= Battery voltage
50% = Charge percentage
169 Converter internal readings.

11.2.2 BATTERY CHARGE CHECKING OF SCALES WITHOUT INTERNAL BATTERY

If the machine is connected to the grid,

```
BATTERY TEST
V=16.2v NETW 229
```

At the starting up, the machine was connected to the external battery.

```
BATTERY TEST
V= 9.4v NETW 130
```

At the starting up, the machine was NOT connected to the external battery.

V= Charge translated voltage (internal use).
229 Converter internal readings.

If the machine is connected to the grid (it is using the external battery), the screen will show:

```
BATTERY TEST
BATTERY 164
```

164 Converter internal readings.

11.2.3 BATTERY CHARGE CHECKING OF SCALES WITH ANTI-BLACKOUT BATTERY

We have a screen to check if the scale is calibrated and to see the value obtained from the reading of the battery or grid. With the scale in test mode, press **F5**.

If the machine is not calibrated a message will be shown in the second line of the screen.

```
BATTERY TEST
NON CALIBR
V=13.1v GRID 191
```

If the scale is calibrated as an anti-blackout machine, the screen will show::

```
BATTERY TEST
ANTI BLACKOUT
GRID 191
```

If in that moment we disconnect the scale from the grid the screen will show:

```
BATTERY TEST
ANTI BLACKOUT
BATTERY 168
```

The value that is on the right bottom corner represents inner reading values of the converter.

12 SCALE TESTS MENU

To gain access to the Scale Tests Menu, press the key **MENU** for longer than 2 seconds.

Use the keys **F2** (move down) and **F1** (move up) to navigate in the menus.

Press the key **MENU** to exit.

12.1 MEMORY TEST

This test allows making a test of the memory devices of the scale.
The different options are:

12.1.1 TEST RAM

This function allows making a test of the RAM memory. Press ***** and the scale will start testing all the RAM memory positions.

Press the key **MENU** to finish the test and the scale will show the status of the test carried out.

12.1.2 TEST EEPROM

This function allows making a test of the EEPROM memory. Press ***** and the scale will start testing all the EEPROM memory positions.

Press the key **MENU** to finish the test and the scale will show the status of the test carried out.

12.1.3 TEST NANDFLASH

This menu allows making a test of the NANDFLASH memory and the formatting and verification of this memory.

Access to these options is protected with a password.

The possible options are:

- Format NandFlash.
- Total Writing.
- Partial Writing.
- NF Test Speed.
- Status.
- Integrity

 The use of the options of this menu can cause the lost of the data programmed on the scale.
Never use for non qualified personnel.

Press **MENU** to exit.

12.1.4 VIEWER

 For exclusive use of Technical Service

Press **MENU** to exit.

12.1.5 ASSERTS VIEWER

 For exclusive use of Technical Service

Press **MENU** to exit.

12.2 RTC (REAL TIME CLOCK)

This parameter allows to program the date and time in the scale.

Program the date using the numeric keyboard. Use the keys **X** to select the different digits.
Once all data have been programmed, press the key ***** to save the information.

Press **MENU** to exit.

12.3 KEYBOARD TEST

It is possible to make a keyboard test, to verify the functioning of all the keys of the keyboard.
When a key is pressed, it is shown its description on the display.

To start keyboard test press ***** twice.

When a key is pressed, its description is shown on the display.

To exit the keyboard test do not press any key for some seconds.

Press **MENU** to exit.

12.4 UART

This menu allows making a test of the RS-232 port.

Once the test has been carried out, the scale will show a message indicating the result of the test. It is necessary to make a junction between the TX and RX pins of the connector (pins 2 and 3 of the DB9 connector).

Press **MENU** to exit.

12.5 ETHERNET

This menu allows to make a test of the Ethernet communication.

Once the test has been carried out, the scale will show a message indicating the result of the test.

It is necessary to join the following pins:

Pin2 to pin6.

Pin1 to pin3.

Press ***** until exit to main menu.

12.6 DISPLAY

The scale will make a display test.

Press ***** until exit to main menu.

12.7 MCU

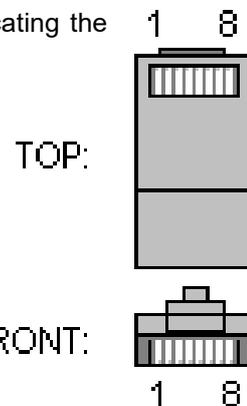
 For exclusive use of Technical Service

Press **MENU** to exit.

12.8 FONTS

 For exclusive use of Technical Service

Press **MENU** to exit.



12.9 CASH DRAWER

This option allows to make a test of the cash drawer opening signal.
Press **MENU** to exit.

12.10 TEXTS

 For exclusive use of Technical Service

Press **MENU** to exit.

12.11 CONTROL DISPLAY

 For exclusive use of Technical Service

Press **MENU** to exit.

12.12 LABEL

This option allows printing a test label.
The options are:

- **Simple:** it prints only one ticket or a label.
- **Continuous:** it prints a series of tickets or labels until you press C key.
- **Mixed:** it prints an alternating series of ticket and label until you press C key.

In label test, it will use the parameters, **type of paper** and **rewinder**, configured by the user. It will ignore others parameters.

Press **MENU** to exit.

12.13 TICKET

This option allows to print a test receipt.
The options are (Press **C** to change them):

- **Simple:** it prints only one ticket or a label.
- **Continuous:** it prints a series of tickets or labels until you press C key.
- **Mixed:** it prints an alternating series of ticket and label until you press C key.

For tickets that are printed on labeller, it will use the parameter **type of paper** configured by the user, except if its value is 0. In this case, it will assume type of paper =1.

Press **MENU** to exit.

12.14 TEST RESULTS

Displays the results of tested during the manufacture of the electronic board.

 For exclusive use of Technical Service.

12.15 WEIGHING

Displays the refresh time and the sampling frequency used for weighing.

 For exclusive use of Technical Service.

12.16 POWER CONTROL

This option allows to activate or deactivate (using key **C**) 5VDC power in the RS-232 and USB connector.
Normally it is always on.

 For exclusive use of Technical Service.

12.17 USB

In test mode press MENU and select the test number 17 to access. This menu has 2 options:

12.17.1 USB TEST OPTION

When the test is launched it displays the following information:

- If it's not possible to establish communication with the USB board: "USB ERROR".
- If communication is established, then it displays the version of the firmware loaded in the USB board. (v.SW USB 1.00A)
- In the top lines, it indicates if a device is connected and its type: MSD (Massive Storage) or HID (Human Interface). Keyboard, mouse are some example of HID devices.

The software version of the USB board it is also shown on label test and receipt test next to MCU version.

12.17.2 USB FW UPDATE

- This option is for updating the firmware of the USB board.

12.18 PIC*

You are able to test some parameters of the scale controller in this menu. There are 5 sections in this menu.

12.18.1 FONTS

This option makes a test of available fonts on scale. When the process finished, you will have to press any key to return to last menu.

12.18.2 LOGOS

It makes a test of available logos.

12.18.3 TOUCH SCREEN

Not available

12.18.4 VERSIONES

The scale will display the information of the controller, such as the version or the state of logos and fonts.

12.18.5 NANDFLASH

You can format or view the state of the nandflash in this menu.

The options are:

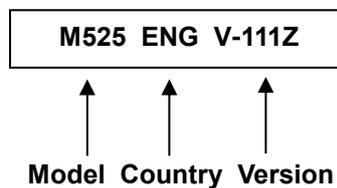
- Format NandFlash.
- Total writing.
- Partial writing.
- Speed test.
- State.
- Integrity.

 The use of the options before can remove the user information. Only for use of technical service.

 * Only available on Star colour.

13 MODEL AND VERSION

When the scale is in test mode, it shows at the bottom side of the display the model, country and software version.



14 SHOWING OF WEIGHING PARAMETERS

This option allows to show the data programmed when the weight adjust was performed.

Press the keys **SHIFT** **1**.

The scale shows the message WEIGHING PARAMETERS and it is possible to see all the parameters by pressing the key *****. The parameters shown are:

Weighing version: It shows the version of the weighing software.

Latitude: Value of latitude (in °) programmed.

Press ***** to pass to the next parameter.

Altitude: Value of altitude (in m) programmed.

Press ***** to pass to the next parameter.

Range: It is shown the scale range

Press ***** to pass to the next parameter.

If we have chosen a multi-range or a multi interval range, the next parameter will be shown:

Type of loadcell:

- MR Multi interval
- MI Multi-range

Press ***** to pass to the next parameter.

Minimum weight: Value of the parameter Minimum Weight.

Press ***** to pass to next parameter.

Type of scale:

- Desktop.
- Hanging.

Press ***** to pass to the next parameter.

Price/ 100g

Press **MENU** to exit.

15 BASIC CONFIGURATION OF THE SCALE

This option allows to configure some operative parameters of the scale, not available to the normal user.

To program the scale configuration, put the scale in test mode and press the keys **0 7 9 0**

Once on this point enters in programming the functions of the keys are:

Key	Function
C	Change the values (YES/NO)
*	Pass to the next parameter
0...3	Select the value of the field
MENU	Exit basic configuration.

1. Vendors Deletion. Use the C key to indicate whether or not employees should be dropped when the end of day message is received from the computer.

Sales assistant removed = YES

When a sale assistant is removed from the labellers, his/her name and code are deleted, but NOT accounting details. Therefore, in list "SALES PER EMPLOYEE", the sales assistant's accumulated totals will still be printed.

When a new sales assistant is added on top of the removed sales assistant's memory, the latter's accountancy is then deleted.

Sales assistant removed = NO

A sales assistant's name and code is still maintained, even when removed. This information is maintained, but the employee is NOT active.

When the sales assistant is removed, the accountancy IS deleted, and then in list, SALES PER EMPLOYEE, his/her accumulated totals are NOT printed.

The CODE is printed on the list, even if the accumulated total has been cancelled.

2. Weight window, this parameter allows to program one weight window between 0 and 99g. Press the key ***** to pass to the next parameter and press **MENU** to exit.

3. Comma or dot, this parameter indicates if used point or point-comma to separate the decimal digits.

4. Labeller drawer, range LP 500 labellers may be equipped with a sensor that detects whether the labeller drawer is open or closed. To activate this operation mode, this function detects when the labeller drawer is open, and if a print out is required, the labellers will be blocked, and operation cannot continue until the drawer is closed. To indicate whether the labeller drawer control option is enabled or disabled:

NO: Inactive

YES: Active

5. Cash Drawer Opening Detection. This parameter allows to program the logic for the detection of cash drawer opening. Press the key **C** to switch between the options:

Normal Logic

Inverted Logic

6. Cash Drawer Input Control. This parameter allows to enable or disable the control of the inputs of the cash drawer. Press the key **C** to switch between the options.

7. **Fiscal mode** offers a list of all receipts issued by the labeller

NO: Receipts are saved in the memory after being sent to the PC.

YES-COPIES: All receipts are saved and a copy of each receipt is printed in list 17.

YES-SUMMARY: All receipts are saved and a summary of each receipt is printed in list 17.

8. **Scanner Sale**, Not available.

9. **Battery control**, configure the parameters of the battery. The possible values are:

0: Battery saving mode off.

1: Battery saving mode on.

2: Maximum battery saving mode.

10. **Self Service Mode**, This parameter allows to enable or disable the working in Self-Service Mode. With **C** key changes between the 2 options.

Press key ***** to safe and pass to the next parameter.

11. **Web server**, it consists of an embedded web server in the labeller, allowing communication with the labeller over an Ethernet connection.

The Web Server allows you to read and modify the labeller's technical parameters and data and consult business data in lists of sales.

12. **Web server port**, port of the router to communicate with the labeller.

13. **Beeps**, it allows to configure the beeps of the labeller.

14. **Only vendor**, in case of being just one vendor.

15. **Checkweigher**, it checks the weight. It detects all the weights out of the minimum and maximum values (previously configured)

16. **Label counter**, it helps to set up reminder alarms to check the maintenance of the labeller. It can be set up by number of labels, meters or hours working.

17. **Date format**, you can change the date format.

18. **Section PLUs**, this parameter allows us to assign a PLU to a section instead of an article.

19. **Article name long**, if this parameter is active the length of name 1 and name 2 will be 30 characters instead of 20. This involves that the name 3 cannot be used.

20. **Section Prefix**, the article code will start by its section number.

21. **Cash opening**, not applicable.

22. **Price without VAT**, This parameter allows selling articles without VAT.

23. **PLU with one key**, if this parameter is activated you cannot accumulate taps. You only call to PLU associated to pressed key.

24. **Avoid reception of direct keys from communications**, this parameter not allows changing the key assigned to an article if it was programmed on the scale.

25. **Pass through zero**, you have pass through 0 (non weight) before doing the next sale.

26. **More keys by PLU**, this parameter allows us to assign more than one key to an article.

- 27. Oblige to close tickets**, if this option is activated you must close the receipts.
- 28. Barcode item tickets**, checking this option will print a barcode per article if we are working in ticket mode.
- 29. Temporal label subtotal**. Not available.
- 30. Wifi**. If this parameter is activated the scale periodically communicates with the wifi module so it will not go into standby.
- 31. Not repeat text G on label 2**. Check this option to not repeat the G text in the second label if it is completely printed in the first label.
- 32. Reset receipt number**. The ticket number will be restarted when we make a Z deletion if this parameter is activated.
- 33. Plus access without shift**. If you activate this parameter when we press one key we call to the secondary PLU instead to the primary PLU. To call the primary PLU you have to press shift + PLU key.
- 34. Batch number article**. Not available.
- 35. Label scale**. Not available.
- 36. Label control**. Activating this parameter you will activate "*label counter*" menu (menu 7.4.4). On that menu you can control the number of printed labels and remaining labels.

16 ITEM CONFIGURATION

This option allows to configure some operative parameters of the scale, related to the articles information.

To program the scale configuration, put the scale in test mode and press the keys **0 7 9 1**

With **C** key changes between the 2 options.

Press key ***** to save and pass to the next parameter.

Once on this point enters in programming the functions of the keys are:

1. Item description 2. This parameter disables or enables the Item Description 2 in the article programming

2. Item description 3. This parameter disables or enables the Item Description 3 in the article programming

3. Item Type. This parameter controls the possibility of working with weighed and non-weighed articles or only with weighed articles. It enables or disables the Type of Article in the article programming.

4. Item Section This parameter disables or enables the Section in the article programming

5. Item Label Format This parameter disables or enables the Label Format in the article programming.

6. Item Ean13 Format. This parameter disables or enables the Item EAN13 Format in the article programming.

7. Item VAT This parameter disables or enables the Item VAT in the article programming.

8. Item Smiley Code, This parameter disables or enables the Profitability Code (Smiley Code) in the article programming.

9. Item Offer. This parameter disables or enables the special offers (Price by Segment of Weight or Quantity Free) in the article programming.

10. Item Offer Price. This parameter disables or enables the Offer Price in the article programming.

11. Item Cost Price. This parameter disables or enables the Cost Price in the article programming.

12. Item Best Before Date. This parameter disables or enables the Best Before Date in the article programming.

13. Item Extra Date. This parameter disables or enables the Extra Date in the article programming.

14. Item Freezing Date. This parameter disables or enables the Freezing Date in the article programming.

15. Item Tare. This parameter disables or enables the Tare in the article programming.

16. Item tare percentage, this parameter disables or enables the item tare percentage in the article programming.

-
17. **Item Texts** This parameter disables or enables the Texts in the article programming.
 18. **Item Text1**, This parameter disables or enables the Text 1 in the article programming.
 19. **Item Text2**, This parameter disables or enables the Text 2 in the article programming.
 20. **Item Text3**, This parameter disables or enables the Text 3 in the article programming.
 21. **Item Text4**, This parameter disables or enables the Text 4 in the article programming.
 22. **Item Text5**, This parameter disables or enables the Text 5 in the article programming.
 23. **Item Text6**, This parameter disables or enables the Text 6 in the article programming.
 24. **Item Text7**, This parameter disables or enables the Text 7 in the article programming.
 25. **Item Text8**, This parameter disables or enables the Text 8 in the article programming.
 26. **Item Text9**, This parameter disables or enables the Text 9 in the article programming.
 27. **Item Text10**, This parameter disables or enables the Text 10 in the article programming.
 28. **Item Text11**, This parameter disables or enables the Text 11 in the article programming.
 29. **Item Text12**, This parameter disables or enables the Text 12 in the article programming.
 30. **Item Text13**, This parameter disables or enables the Text 13 in the article programming.
 31. **Item Text14**, This parameter disables or enables the Text 14 in the article programming.
 32. **Item Text15**, This parameter disables or enables the Text 15 in the article programming.
 33. **Item Text16**, This parameter disables or enables the Text 16 in the article programming.
 34. **Item Text17**, This parameter disables or enables the Text 17 in the article programming.
 35. **Item Text18**, This parameter disables or enables the Text 18 in the article programming.
 36. **Item Text19**, This parameter disables or enables the Text 19 in the article programming.
 37. **Item Text20**, This parameter disables or enables the Text 20 in the article programming.
 38. **Item Text G**, This parameter disables or enables the Text General in the article programming.

 39. **Item EAN13** This parameter disables or enables the EAN13 in the article programming.

 40. **Item Class**. This parameter disables or enables the Traceability Class in the article programming.

 41. **Item Receipt Number**, This parameter disables or enables the Receipt Number in the article programming.

 42. **Item Logo Number**, This parameter disables or enables the Logo Number in the article programming.

 43. **Item Change Price**, This parameter disables or enables the Change of Price in the article programming.

 44. **Item Nutritional text**, this option indicates if the nutritional text is shown or not.

 45. **Item Piece weight**, this option indicates if the piece weight field is shown or not.

 46. **Item label format 2**, this option indicates if the format label 2 is shown or not.

17 DEFAULT EEPROM

This configuration leaves all the parameters in EEPROM memory programmed to their default values.

To access to those parameters, put the scale in test mode, and press the next key sequence: **0**
7 **9** **3** and press 7 times the key *****.

After a default EEPROM, the default values in the menu **0** **7** **9** **0** are:

Menu	Option
1. Vendors deletion	YES
2. Weight window	0
3. Comma or Dot	Comma
4. Label print drawer	NO
5. Drawer logic	Normal
6. Drawer openings control	NO
7. Fiscal mode	NO
8. Scanner sale	0
9. Battery control	
10. Mode self-service	NO
11. Web Server	NO
12. Web Server port	80
13. Beeps	All beeps ON
14. Only vendor	NO
15. Checkweigher	NO
16. Label counter	
17. Date format	DDMMAAAA
18. Section PLUs	NO
19. Article name long	NO
20. Section prefix	NO
21. Cash opening	NO
22. Price without vat	NO
23. PLU with one key	NO
24. Avoid reception of direct keys from comms	NO
25. Pass through zero	-
26. More keys by PLU	NO
27. Oblige to close tickets	NO
28. Barcode item tickets	NO
29. Temp label subtotal	NO
30. Wifi	-
31. Not repeat text F on label 2	NO
32. Reset receipt number	NO
33. PLUs Access without shift	NO
34. Batch number article	-
35. Label scale	NO
36. Label control	NO

Press the key **MENU**.

18 DEFAULT EEPROM AND DATA RESET

This configuration leaves all the parameters in EEPROM memory programmed to their default values and makes a reset balance data (articles, vendors, formats. Headers...)

To access to those parameters, the balance have to be in mode test, and press the next key sequence: **0 7 9 5** and press 7 times the key *****.

Press the key **MENU**.

19 COMPONENTS IDENTIFICATION LIST

In order to allow the identification of the different elements: hardware, software and mechanics of the scale, DIBAL has implemented a system of consultation and printing of the components installed in the scale.

This new function will only be available for scales of the 500 Range with serial number over 31300000 or 51300000.

The information can also be consulted from the Technical Menu of the Webserver.

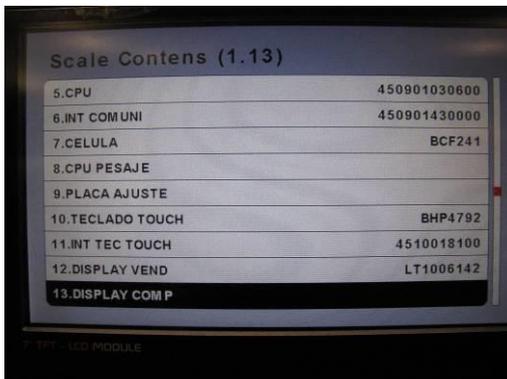
The area of the memory that contains the identification data cannot be erased standard operatives (total deletion, etc.).

1. To enter to them it is necessary to place in test mode and type "1975" in the numerical key.
2. Press *****
3. Press direct key **24**; the scale will print a list of the components.
4. Press MENU to exit.

```
DIBAL SA - SN: 51306860
M-525 V-107T ESP
2013/03/19 19:07:57
--- SV versions ---
FIRMWARE:65535 MCU:104
4Mb Integrate Weight V:100
No USB
-----
Display: [SUPERLUK]
Tnt D.:0.171 Fix Font:0.01
Prn Txt:0.82 Prs Font:0.14
Web Txt:0.09
-----
MAC: 00.08.EF.10.21.48
IP BAL = 192.168.001.102
IP PC = 192.168.001.101
MASK = 255.255.000.000
GATEWAY = 000.000.000.000
RX PORT:3000, TX PORT:3001
Web Lic: 19.0 SEG
-----
No Battery
-----
NANDFLASH: 16bits-32Mb-88101
08% Ocup.
--- HW versions ---
PWR SUPPLY: 4509016601
CPU: 450901030802
INT COMMs: 450901430000
LOAD CELL: BCF241
TOUCH KEYBRD: 450100810200
VEND DISPLAY: CM1441A
CUSTMR DISPLAY: CM1441A
LABEL INTRF: 450901130000
```

It is also possible to view the information on the display.

5. To enter to them it is necessary to place in test mode and type "1975" in the numerical key.
6. Press *
7. Press F1 and F2 to go up and down in the MENU and consult the components.
8. Press MENU to exit.



TFT Display



Blue Graphic Display



Superlux Display



19.1 HW INFORMATION

The area of the memory that contains the identification data cannot be erased standard operatives (total deletion, etc.).

Each line is a component according to the next list.

NUMBER OF COMPONENT IN THE MENU	COMPONENT	OBSERVACIONES
01	XL Display	If it is a XL display: 1value if not 0 value.
02	Power source	ALL
03	Antiblackout Charger	ABO ONLY
04	Battery	N/A
05	CPU	ALL
06	Communications board	ALL
07	Load Cell	ALL Dibal Code Example: BCFxxx
08	Weighing plate	For separated Weighing
09	Adjust board	N/A
10	keyboard/Touch screen	ALL
11	Interface keyboard/Interface touch	Only for self-service models.
12	Vendor display /TFT vendor	Manufacturer Reference
13	Customer Display/Customer TFT	Manufacturer Reference
14	Interface display	Only for display color
15	CPU TFT	N/A (For future applications)
16	Labeller Interface	Only label models
17	Printer Interface	Only ticket models
18	Labeller whole	Complete Reference Example: BCES0126A00
19	Printer whole	Reference plus revision Example: 491757A
20	Mec 1 whole	N/A (For future applications)
21	Mec 2 whole	N/A (For future applications)
22	User 1	WI-FI or Homeplug
23	User 2	N/A (For future applications)

19.2 SW INFORMATION

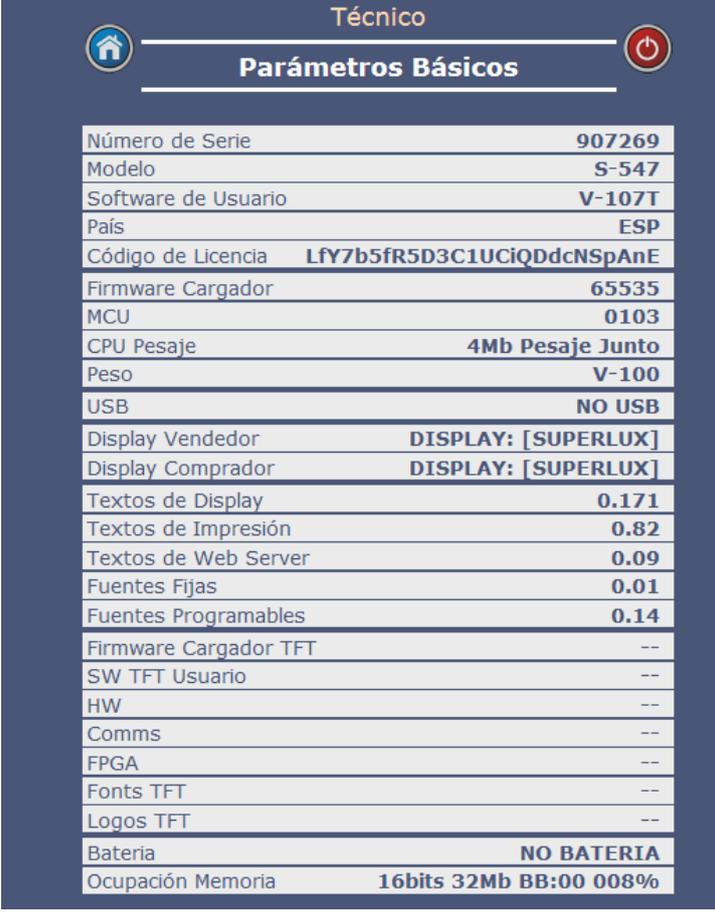
The SW components information are: serial number, model, brand, user's SW versions of the programmable CPU devices, weighing plate and interface color, and printing and display texts and font versions.

The communication parameters, and the type and occupation of the memory Nandflash are also shown.

19.3 CONSULTING THE INFORMATION USING WEBSERVER

It is possible to consult the scale's components information using a remote PC connected to the scale through the technical menu of the Webserver.

The only requirement is that the scale has the version 1.07T or higher (1.08T if it is a Star Color) and has activated the Webserver license.



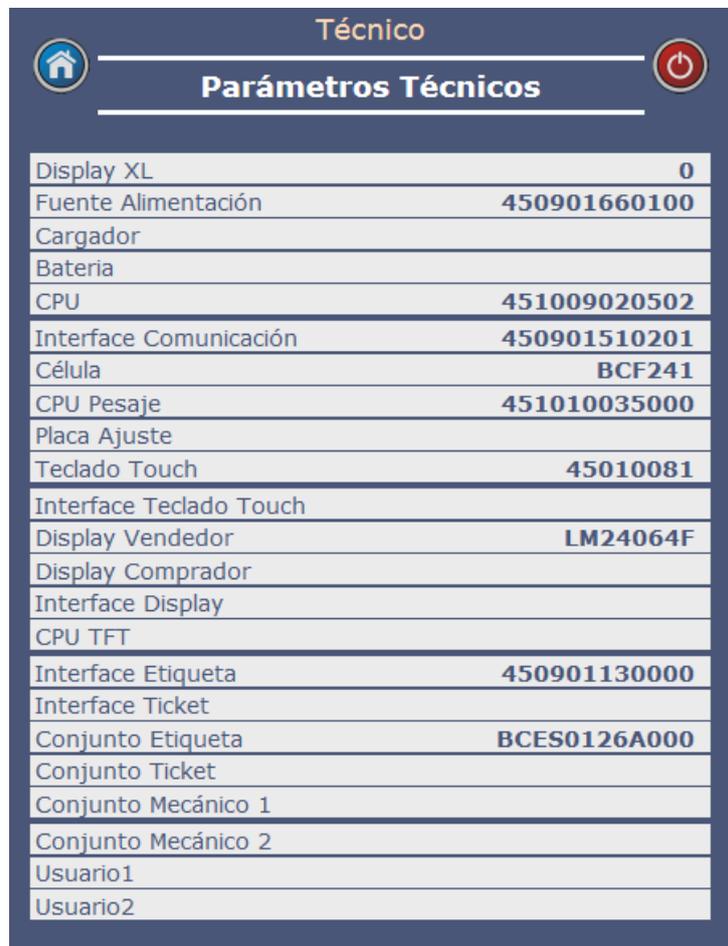
Técnico	
Parámetros Básicos	
Número de Serie	907269
Modelo	S-547
Software de Usuario	V-107T
País	ESP
Código de Licencia	LfY7b5fR5D3C1UCiQDdcNSpAnE
Firmware Cargador	65535
MCU	0103
CPU Pesaje	4Mb Pesaje Junto
Peso	V-100
USB	NO USB
Display Vendedor	DISPLAY: [SUPERLUX]
Display Comprador	DISPLAY: [SUPERLUX]
Textos de Display	0.171
Textos de Impresión	0.82
Textos de Web Server	0.09
Fuentes Fijas	0.01
Fuentes Programables	0.14
Firmware Cargador TFT	--
SW TFT Usuario	--
HW	--
Comms	--
FPGA	--
Fonts TFT	--
Logos TFT	--
Batería	NO BATERIA
Ocupación Memoria	16bits 32Mb BB:00 008%

Note:

Firmware charger 65535: The appearance of this message indicates that the loader's version of the CPU is not qualified to deliver this information.

Battery: In the case of a scale with battery, it would indicate the level of load of the same one.

All the blanks " - - " are information of SW of the TFT.



Técnico	
Parámetros Técnicos	
Display XL	0
Fuente Alimentación	450901660100
Cargador	
Bateria	
CPU	451009020502
Interface Comunicación	450901510201
Célula	BCF241
CPU Pesaje	451010035000
Placa Ajuste	
Teclado Touch	45010081
Interface Teclado Touch	
Display Vendedor	LM24064F
Display Comprador	
Interface Display	
CPU TFT	
Interface Etiqueta	450901130000
Interface Ticket	
Conjunto Etiqueta	BCES0126A000
Conjunto Ticket	
Conjunto Mecánico 1	
Conjunto Mecánico 2	
Usuario1	
Usuario2	

20 TICKET RESET

This menu will only be operative when the scale is not working in tax mode and we are not working with simplified invoice. To enter to this menu you have to press the code “2000” on the main screen of test mode.

The operating mode is different between the countries with VAT regulation and without VAT regulation.

- **Countries without VAT regulation.**

These countries have two options in this menu.

1 – With date: checking this option the numeration will reset to the number one every day at 00:00.

2 – First ticket: When you do a “end of day” the ticket numbers will restart by the number typed in this parameter.

- **Countries with VAT regulation**

These countries cannot select the option of “First ticket”.

1 – With date: checking this option the numeration will reset to the number one every day at 00:00.

21 SELECT LANGUAGE

To access to the menu to change the scale’s languages we have to type the code “2003”. The scale will show a new display in which you can change the language of display, print and webserver.



We only may select the languages of the same codepage.

22 VAT REGULATION

To access to this menu you must have tax mode deactivated and be working with simplified invoice. Being in the main screen of test and adjustment you have to type the code “2004” to enter to VAT regulation menu.

In this new screen you have two parameters to modify.

- **First ticket**, is the ticket number by it will start.
- **First report**, is the report number by it will start.

These values will only be effective when an end of day it is made.

23 DATE FORMAT LABEL

Being in the main screen of test and adjustment you have to type the code “2005”. In the screen that it will appear you can select the label date format and the date separator.

24 PROGRAM TELECHARGE

In the 500 Range scale software update is made only by Ethernet.

<p>F5 ON</p>	<p>----- ----- ----- -----loader h- .5XX</p>	<p>Switch the balance pressing key F5.</p>
<p>*</p>	<p><i>PRESS TOTAL</i> <i>H5XX W100 V004</i></p>	<p>Press key * and then the keys showed on the display.</p>
<p>MENU 2 s</p>	<p><i>Prog 1</i> <i> 1.2</i> <i>communications</i></p>	<p>Press V1 if the scale requests it to identify the keyboard</p> <p>To program Ethernet communication parameters, press the MENU key for 2 seconds.</p>
<p>*</p>	<p>192168001025</p>	<p>Press key *.</p>
<p>X</p>	<p><i>Prog 1.1.1</i> <i>192168001025</i> SCALE IP ADDRESS</p>	<p>Enter the IP address in the scale 3 by 3 digits and pressing X after each group of 3.</p>
<p>*</p>	<p><i>Prog 1.1.2</i> <i>192168001025</i> PC IP ADDRESS</p>	<p>Press key * to save and press F2 to past to the next parameter (IP of PC). Enter the IP address 3 by 3 digits and press X alter each group of 3.</p>
<p>* 3001 F2</p>	<p><i>Prog 1.1.3</i> <i> 3001</i> TCP TX PORT</p>	<p>Press key * to save and press key F2 to pass to the next parameter (Port TX TCP). 3001.</p>
<p>* 3000</p>	<p><i>Prog 1.1.4</i> <i> 3000</i> TCP RX PORT</p>	<p>Press key * to save and press key F2 to pass to the next parameter (Puerto RX TCP). 3000</p>
<p>F5</p>	<p>LOADING ETHERNET</p>	<p>Press key F5</p>

In PC

Select the scale model:



Select communication type and press :



Select the file to load in the scale, it is a zip file.

Do not open this file with a decompression program.



Begin the telecharge process by pressing :



Choose the model of the scale to telecharge and press accept to start telecharging process.

Warning:

If we select a model to telecharge the scale different from the model of the scale, the scale will not run once telecharge process has finished.

If the loader is version 009 or superior, the program will not ask to select a model.



First, the memory flash is deleted (except the protected area):



Before, the program starts to load:



Once the program is loaded the display shows the message "Waiting for checksum" and then show Scale is restarting... Please wait.





Then it start sending texts:



Once the charge is complete, the display shows the message “Scale 1 Complete program loaded OK”.



The scale will show the message:

PRESS TOTAL

Press the key ***** to finish telecharge process.

25 TELECHARGING 7" COLOUR DISPLAY SCALES

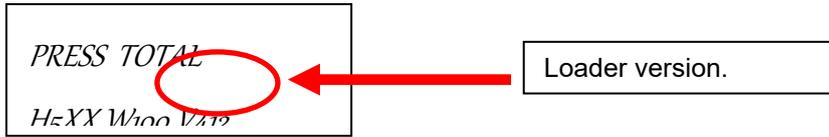
25.1 SCALES WITH LOADER ≤415

Use telecharge software version lower than 13.00A
 The software updating of 500 series scales must be done by Ethernet.
 To get it, follow the process:

25.1.1 IN THE SCALE

<p>5^F ON</p>	<p>----- ----- ----- -----</p>	<p>Switch on the scale keep on pressing 5^F key.</p>
<p>*</p>	<p>PRESS TOTAL</p>	<p>Press * key.</p>
<p>MENU 2 s</p>	<p>Prog 1 Communications</p>	<p>To program Ethernet communication parameters, press MENU key for 2 seconds.</p>
<p>*</p>	<p>Prog 1 Communica 1.2 ETHERNET PARAMETERS</p>	<p>Press * key.</p>
<p>*</p>	<p>Prog 1.1.1 192168001025 SCALE IP ADDRESS</p>	<p>Enter the scale's IP address digits three by three and press X after each group of 3.</p>
<p>*</p>	<p>Prog 1.1.2 192168001025 PC IP ADDRESS</p>	<p>Press * to save and press F2 to continue with the next parameter (PC IP). Enter PC's IP address digits three by three and press X after each group of 3.</p>
<p>* 3001</p>	<p>Prog 1.1.3 3001 TCP TX PORT</p>	<p>Press * to save and press F2 to continue with the next parameter. (Port TX TCP). 3001.</p>
<p>* 3000</p>	<p>Prog 1.1.4 3000 TCP RX PORT</p>	<p>Press * to save and press F2 to continue with the next parameter (Port RX TCP). 3000</p>
<p>F5</p>	<p>LOADING ETHERNET</p>	<p>Press F5 key.</p>

If the scale loader is lower than 4.15 you will have to use a telecharger software version lower than 13.00A.

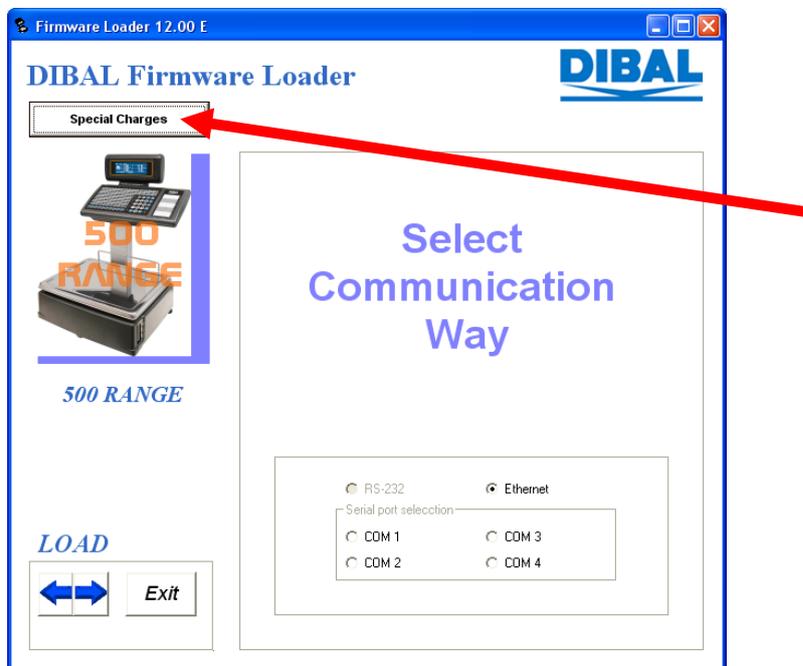


There are 3 steps to telecharge 7" colour display scales:

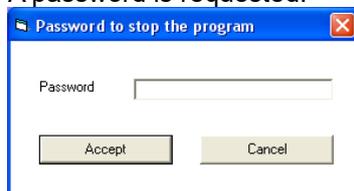
- 1.- Display control board Firmware telecharge
- 2.- Scale program telecharge
- 3.- Display fonts and logos telecharge

DISPLAY TELECHARGE

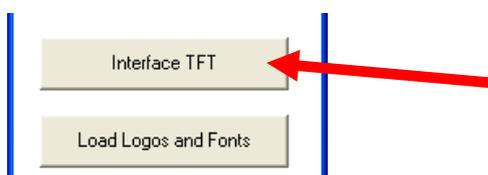
Click On Special Charges



A password is requested:



Type STAR
Click on **Accept**
Select Interface TFT



Select the file to load (f.ex. Dolphin100_100B.hex)



Click on the blue arrow 



Select the number of scales to load, expand the selection in Scale. Type the scale's IP address and press Enter. Then press the arrow . The telecharge process will start.

Telecharge working on Ethernet

DIBAL Firmware Loader



500 RANGE

500 RANGE

LOAD

Exit

Processing File ...

Number Of Scales to Load:

Scale:

ADSL

Scale	IP Address
1	10.1.8.113

Save Config

Telecharge working on Ethernet

DIBAL Firmware Loader



500 RANGE

500 RANGE

LOAD

Exit

Starting ...

Number Of Scales to Load:

Scale:

ADSL

Scale	IP Address
1	10.1.8.113

Save Config

Telecharge working on Ethernet

DIBAL Firmware Loader



500 RANGE

Sending Program ... Message: 71

Number Of Scales to Load:

Scale:

Scale	IP Address
1	10.1.8.113

ADSL

LOAD

Progress bar: [|||||]

Telecharge working on Ethernet

DIBAL Firmware Loader



500 RANGE

Scale 1 program loaded OK

Number Of Scales to Load:

Scale:

Scale	IP Address
✓ 1	10.1.8.113

ADSL

Production Way

Switch off the scale, switch it on again and go into Telecharge to load the program.

CPU FIRMWARE TELECHARGE

Select the model of the scale.



Select the type of communication and press .



Select the file to load in the scale, it is a .zip file, and then press .

 **Never open this file using an unzipping program.**



Enter the IP address of the scale to telecharge and press Enter.
To start the telecharge process, press .



Select the model of the scale to telecharge and press Accept to start the telecharge process.

⚠ Caution:

If a different scale model is chosen, it will not work after finishing the telecharge process.
If the loader of the scale is v.009 or higher, we do not have to select the model of the scale.



First, the Flash memory will be deleted (except the protected area).



Then, the program will start loading.



Once the program has been loaded, the message “Waiting for checksum” will be displayed and after that “Scale is restarting... Please wait”.





Now, it starts sending texts.



Once finished the load, the message “Scale 1 Complete program loaded OK” will be displayed.



We can see on the scale's display

PRESS TOTAL

Press * and the scale will restart.

DISPLAY FONTS AND LOGOS TELECHARGE

With the scale working on regular mode, run Telecharge program.



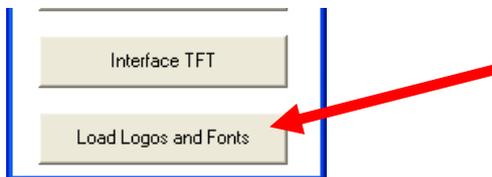
A password is requested:



Type STAR

Click on **Accept**

Select Load Logos and Fonts.



Select the file to load (i.e. RegsTFT.txt)



Select scale IP as it has been done previously.



Click on the blue arrow 



Fonts and texts will be sent.
Once the process has finished, switch off the scale and switch it on again.

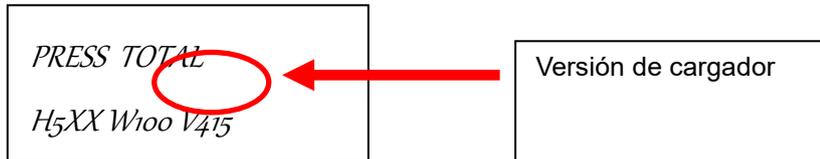
25.2 SCALES WITH LOADER \geq 415

Use telecharge software version equal or superior to 13.00A
 The software updating of 500 series scales must be done by Ethernet.
 To get it, follow the process:

25.2.1 IN THE SCALE

5^F ON	-----	Switch on the scale keep on pressing 5^F key.
*	PRESS TOTAL	Press * key. Press V1 key.
MENU 2 s	Prog 1 1.2	To program Ethernet communication parameters, press MENU key for 2 seconds.
*	Prog 1 Communica 1.2	Press * key.
*	PC IP ADDRESS n.....	Enter the scale's IP address digits three by three and press X after each group of 3.
*	Prog 1.1.2	Press * to save and press F2 to continue with the next parameter (PC IP). Enter PC's IP address digits three by three and press X after each group of 3.
* 3001	Prog 1.1.3 3001	Press * to save and press F2 to continue with the next parameter. (Port TX TCP). 3001.
* 3000	Prog 1.1.4 3000	Press * to save and press F2 to continue with the next parameter (Port RX TCP). 3000
F5	LOADING ETHERNET	Press F5 key.

To telecharge a Star colour scale with telecharge 13.00B or superior, the scale must have a loader version equal o superior to 415-.
If the scale loader is lower than 4.15 you will have to use a telecharger software version lower than 13.00A.



Follow the following steps
Open the telecharge program



Select the model of the scale, in this case a 500 Range.



Select the type of communication and press .

 **Never open this file using an unzipping program.**



Enter the IP address of the scale to telecharge and press Enter.

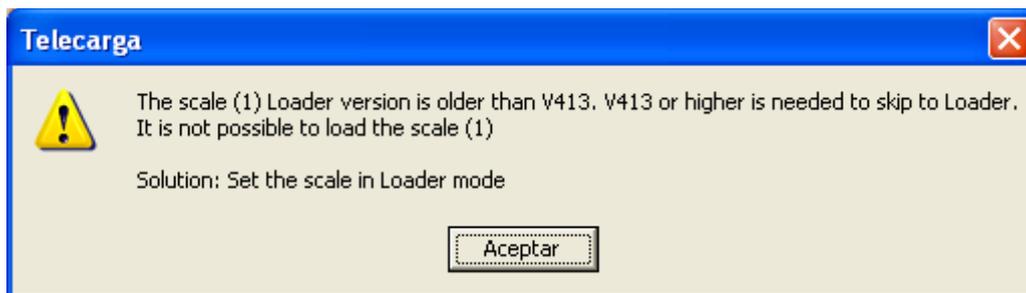
If you select the mode "Remote Mode" you not have to put the scale in telecharge mode. It do itself.



Press  to continue.



If the loader version is lower than version 415, the program will display the following message asking to put the scale in loader mode.



You must put the scale in Loader mode and repeat the process.

If the version is equal or superior to 415 the scale will start loading.



The will ask if the scale have a TFT display, click in yes and the process will continue.



When the scale finished the process the program will show the next screen.



Now we have our scale updated.

26 TELECHARGE BY USB

To telecharge the scale by USB the loader of the scale must be updated to version 0.10 (or 4.10). Indeed, the user's program to telecharge must be version 1.06A or superior. In the USB board the firmware of the USB board must be version 100B or superior.

You have to prepare an USB drive with the files resulted from the decompression of H5XX.ZIP provided by Dibal: H5XX.HEX y REGS.TXT, both located in the root folder.

To initialize telecharge by USB press F4 in the principal screen. If there is already an USB properly connected it will ask for confirmation, if not it will indicate the user to connect one.

Once confirmed the use of this unit, it verifies that the files mentioned above exists, and if both exists telecharge process begins erasing the flash of the program.

27 WEIGHT ADJUSTMENT

In test mode, to begin weight adjustment for the instrument, press the weight adjustment switch, which is at the bottom of the scale. To gain access to this switch, the sealed screw must be removed from the bottom of the base of the scale

Place a fine-pointed element into the hole where the screw was in position. Press with the point, and the scales will beep, indicating that they are ready to commence the adjustment process.

In the display will be shown the indication **Country**. This value defines the language and other parameters metrological relevant the currency.

To change the value press **C** and ***** to save.

The scale will show the message **Latitude** and it must be entered the latitude in degrees. Enter the latitude and press the key *****

The scale will show the message **Altitude** and it must be entered the altitude in meters. Enter the altitude and press the key *****

The scale will show the message **RANGE**. The range must be entered according to the following table:

500 RANGE

Number	Range	Divisions	Weight decimals	Grams per stage	
0	3 kg	3000 divisions	3	1	
1	6 kg	3000 divisions	3	2	
2	15 kg	3000 divisions	3	5	
3	30 kg	3000 divisions	3	10	
4	3 - 6 kg	3000 divisions	3	1	2
5	6 - 15 kg	3000 divisions	3	2	5
6	15 - 30 kg	3000 divisions	3	5	10
7	12 kg	2400 divisions	3	5	
8	30 kg	6000 divisions	3	5	
9	12 kg	6000 divisions	3	2	
10	60 kg	3000 divisions	3	20	
11	30 - 60 kg	3000 divisions	3	10	20
12	150 kg	3000 divisions	2	50	
13	60- 150 kg	3000 divisions	2	20	50
14	300 kg	3000 divisions	2	100	
15	150-300 kg	3000 divisions	2	50	100
16	600 kg	3000 divisions	2	200	
17	300-600 kg	3000 divisions	2	100	200
18	1500 kg	3000 divisions	1	500	
19	33 kg	3000 divisions	3	10	
20	30 Lb	3000 divisions	2	1	
21	60 Lb	3000 divisions	2	2	
22	30-60 Lb	3000 divisions	2	1	2

Press ***** once the value has been entered.

The scale will show a message **Type of Loadcell** in case of multi-step and multirange scales. The possible values are:

- Mi- for multi-interval scales
- Mr- for multi-range scales.

Press ***** once to continue.

The scale will show a message **Minimum Weight**, to enable or disable the minimum weight and the pass through zero. According to the following data:

VALUE	FUNCTION
Ticket allowed	Memorization under minimum weight allowed in receipt mode, but not in label mode. *
Disallowed	Memorization under minimum weight disallowed for receipt and label mode. *
Always allowed	Memorization under minimum weight allowed for both modes (receipt and label). *

* Weight variation between consecutive weighings =20e.

Use the key **C** to change the value. Press ***** to pass to the next parameter.

The scale will show a message **Type of Scale**, to select the type of scale:

- Desktop
- Hanging

Price /100g

Press **MENU** to exit

Use the key **C** to change the value. Press ***** to pass to the next parameter.

The scale will show the message “**Zero Adjustment**”. Press the ***** key without having any weight on the plate. The surface of balance must be vibration free and should not be any air flow on the area where the balance lies.

Once the conditions are solved, press the key ***** to start the zero adjust. This adjust is that the weighing instrument performs 100 scans, and then takes the arithmetic average of 100 readings. The displays will show hyphens while it takes 100 readings in order to set the zero reading.

Once this is accomplished the display will show the message ----- and the weight value, which should be used to adjust the scale. This weight is a default weight corresponding to the capacity of the scale.

After this process, the balance shows on the display that it is in the process of adjustment. Request to be deposited on the plate weight for **weight setting**. The value of this weight is directly related with weighing range, equivalent to 2/ 3 of the scope of the scale. These masses must be carefully and gently place on the weigh platform, trying to stay focused on the surface.

If another weight value is to be used, Press the **C** key, and insert it using the numerical keyboard.

Place the weight on the weighing platform and press the ***** key. The displays will once more show hyphens while 100 readings are being taken to adjust the weight.

Once these readings are done, the equipment will return to test ready.

To finish the adjust, switch the balance off and on again.

REF.: 49T500XEN19 REV.:19 – V.112A 02/10/2018

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DIBAL

The logo for DIBAL features the word "DIBAL" in a bold, sans-serif font. Below the text is a stylized graphic element consisting of a thick horizontal line that tapers to a point in the center, resembling a wide, shallow V-shape or a stylized wing.