# FTS-H and FTS-HC

## USER MANUAL

Revision 1.0 EN

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# Indice

## Table of Contents

# IMPORTANT! READ CAREFULLY!

## Electrical safety

This machine is powered with mains power and it is dangerous to the user if the AC network to which it is connected is not earthed properly and is not made according to the existing laws.

## Calibration

This machine is a weighing device and needs to be calibrated at least every 6 months to guarantee a correct readout. Refer to the instructions given in this manual to know how to calibrate the machine

## Disposal of this machine

This is an electronic equipment and needs to be disposed according to the existing laws. You can return it to us for disposal at no cost.

## Contacts

If anything is not clear or in case you may need additional information or inform us about a mistake, please contact us using the details on last page of this manual

# POWER AND OTHER DETAILS
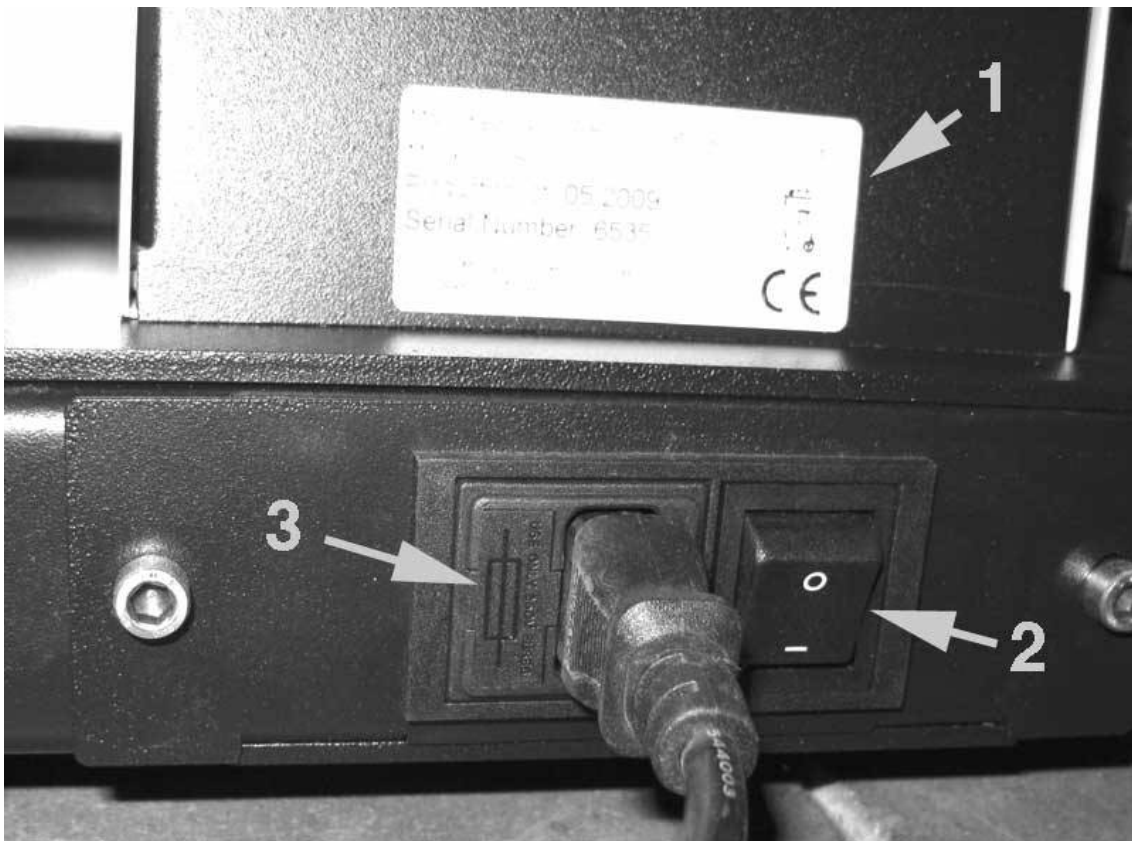


As it is visible in the picture, in the back of the scale you will find the following:

- 1) Machine label
- 2) POWER Switch
- 3) Fuse holder

If you change the fuse, replace it with one of the same rating.

To switch-on the machine you simply need to put the POWER SWITCH into the 1 position

# COIN ACCEPTOR AND CASH BOX

This chapter applies to FTS-HC. You may skip it if you have an FTS-H



In this picture you can see:
* 1) the coin acceptor Switch
* 2) The cash box

It may happen that the coin acceptor switch breaks if somebody pulls its wire in a weird way. The steel wire that senses the coin is usually bent at about 90 degrees. If the angle is bigger (less bent) the coin could pass without being noticed by the switch. If this is the case, bend the wire upwards (bring the angle back to 90 degrees). Make sure the cash box is not too full (i.e. empty it)  or money may go out.

## MACHINE MAIN FUNCTIONS

This scale will weigh persons up to 180 Kg in steps of 100g.
It can be programmed to do it once or to function for a programmable number of seconds (5-95) with a programmable number of coins (1-4).
It can also work in free weight.

This machine can weigh in
1) Kg
2) Lb and Oz
3) St Lb and Oz

## MACHINE INDICATORS AND COMMANDS
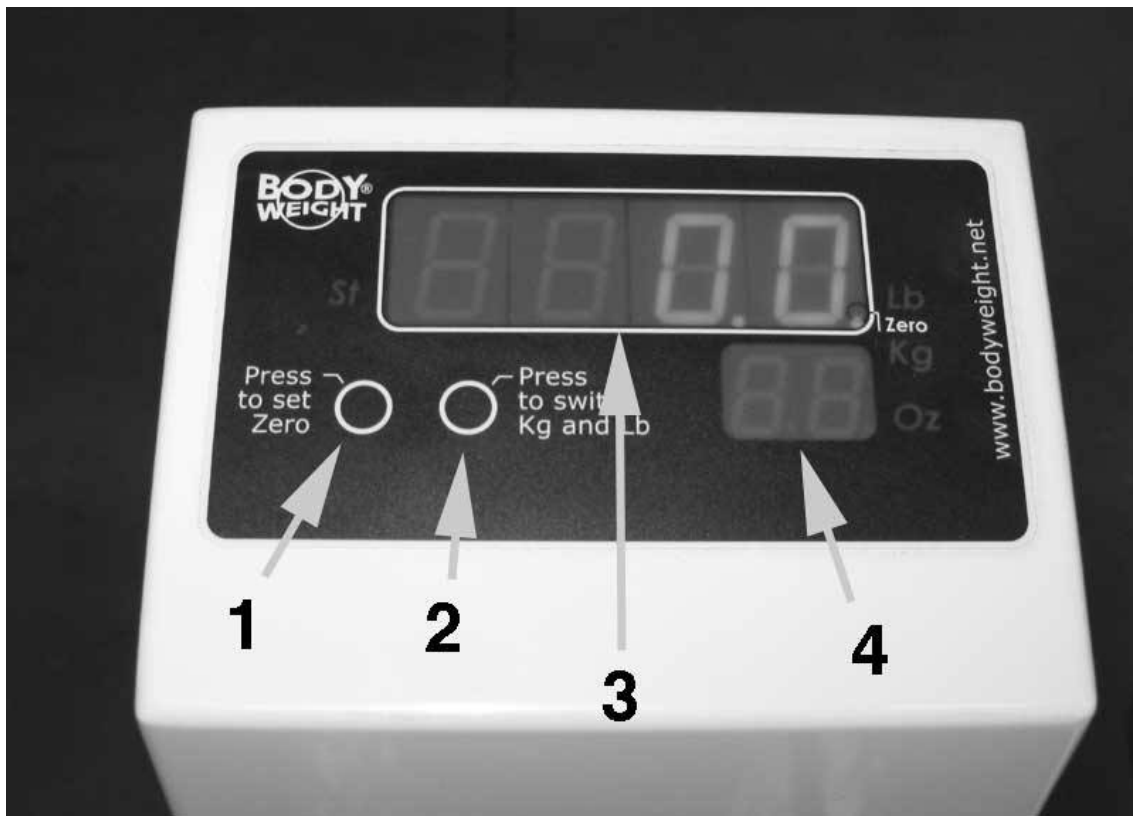


- The machine indicates weight in the big display 3
- The small display 4 is used only to show Ounces in the Imperial weighing system

- Switch 1 is used only in test and has no other function in the FTS-L
- Switch 2 is used to switch between S1 and S2 weighing systems (as programmed in the MAIN MENU).

# PROGRAMMING MENU



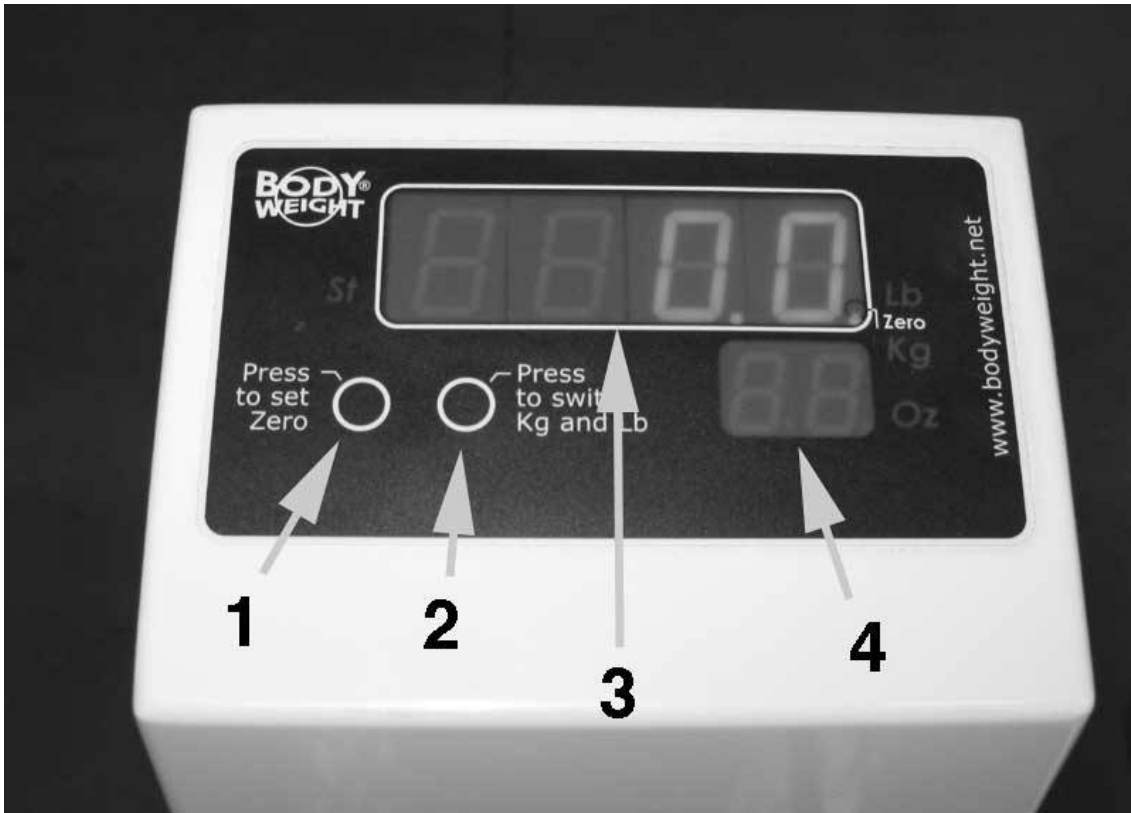To access and use the programming menu, it is necessary to use the SET and SELECT buttons that are shown in the picture, with number 1 and 2.

Press SELECT (2) to enter the programming menu and the press SET (1) to move through the various options.

## ENTERING THE PROGRAMMING MENU
To enter the programming menu, switch on the machine and while the display shows FTS and the program version, press SELECT.

The main display (3) will show 3 zeroes, leftmost blinking.
Press set to change the number it shows. Press SELECT to confirm and pass to the second digit, that will start blinking.

Acting as above, insert the code
- 369 to enter the MAIN MENU
- 999 to enter the CALIBRATION MENU

Once in the menus, the lower display (4) will show what option (P1,P2 etc) you are in. The big display will show the details.

## MAIN MENU

The available options are listed below. You can move from one to the next using the SET button. Press the SELECT button to change the value

### P1- COUNTER
This options shows the number of coins that entered in the machine

### P2- COIN PER CREDIT
The big display show the number of coins needed to use the machine.
0 means free weight. Coin per credit range from 1 to 4.
Press SELECT to change it. Digit will blink, SET will increment.
Press SELECT again to confirm.

### P3- TIME TO WEIGH
This is the amount of time given to the customer is he/she inserts the correct amount of coins as in Coin per Credit.
This time can go from 0 to 95 seconds.
0 means that the customer will be able to see only 1 weight, that will be frozen in the display for 10 more seconds.
If you want the customer to be able to weigh more time, give him/her more time using this option.
Press SELECT to change it (digit will blink) and SET to increment in steps of 5 seconds. Once you have found the correct value, press SELECT again to confirm.

### S1- Main weighing system
This is the system used when customer inserts coin.
It can be chosen between 1 (kg), 2 (Lb) ,3 (St & Lb)
As usual, press SELECT to change, then SET to increment and SELECT to confirm.

### S2- Secondary weighing system
This is the system used when customer presses the button 2.
If the button is pressed again, machine returns to main weighing system, and so on. It can be chosen between 1 (kg), 2 (Lb) ,3 (St & Lb)
As usual, press SELECT to change, then SET to increment and SELECT to confirm.

### P9- END
To exit the programming menu, press SELECT once in this option.

## CALIBRATION MENU

The available options are listed below. You can move from one to the next using the SET button. Press the SELECT button to change the value Calibrate the machine after it has been switched-on for at least 5 minutes.

To calibrate the machine you need to do 2 things:

1- calibrate ZERO with nothing on platform
2- calibrate the machine with a reference weight.
You can choose among the following reference weights: 10,20,40,80 Kg
Even if you use the machine with imperial as the main weighing system, still you need to calibrate it in Kg.

80 Kg is a good reference weight for a scale that weighs people and being about in the middle of the range 0-180, it assures a good calibration for the entire range. Anyway even if you use 10Kg or 20 Kg you can still get a reasonable accuracy, though it will be worse for higher weights.

These are the available options.

### C0 – ZERO
To set the zero value of the machine, make sure there is nothing on the platform and then press SELECT. You can repeat this as many times as you like.

### C1- 10
To calibrate with 10 Kg, once you are in this option, put 10 Kg on the platform and press SELECT.

### C2- 20
To calibrate with 20 Kg, once you are in this option, put 10 Kg on the platform and press SELECT.

### C3- 40
To calibrate with 40 Kg, once you are in this option, put 10 Kg on the platform and press SELECT.
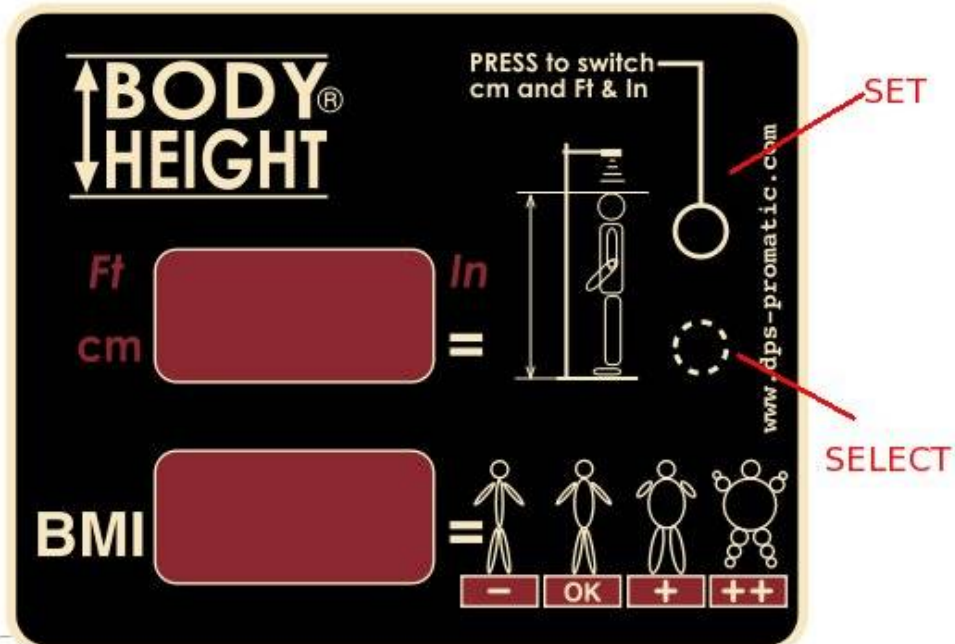
### C4- 80
To calibrate with 80 Kg, once you are in this option, put 10 Kg on the platform and press SELECT.

### C9- END
To exit the programming menu, press SELECT once in this option.

## HEIGHT METER

The height meter allows measuring of people height and calculation of BMI. The Height meters handles also the Serial Interface (optional) format.



To enter the Height Meter Menu, switch-on the scale and when the display shows the software version (i.e. 1.3, etc), press the SELECT button.
The upper display will show 000.
Using SET to increment and SELECT to confirm, enter 999
and press Select. You will enter the Programming menu.

Once entered, the lower display will show the currect function, the upper display will show the current value for that function. To modify that value, press SELECT, the value wil start blinking and you will be able to modify it with  SET and then confirm it with SELECT.
After each modification, the lower display will present you the END Option. Press SELECT to exit, if you want to.

New values will be stored in non-volatile memory.

Note: if you stay in the menu too long, the scale will reset automatically.

## CALIBRATION

Higher display:     **170** (or any height measured at the moment)
Lower display:      **CAL**

The calibration menu allows calibration of the height meter.
Once in this menu you can increase the reading with the upper button and decrease it with the lower button. Press both buttons to exit.

You can use this menu to calibrate the machine, using a reference height.

## BMI format

Higher display:     **b=0** (or the option currently selected))
Lower display:      **bmi**

You can use this menu to choose between Standard BMI and Asian BMI.

Though recent decisions from the World Health Organization tend to unify the BMI threshold, still there is some discussion about what is best. This is why we offer this option.

Choose 0 for standard BMI threshold.
Choose 1 for Asian BMI threshold.

These thresholds are the ones that select what status is shown by the leds with the man figure.

## SERIAL OUTPUT format

Higher display:     **f=0** (or the option currently selected))
Lower display:      **fmt**

With this option you can choose between new (0) or old (1) serial output format.

The new format is in ASCII,  human readable and is like the following:
Weight=80.0
Height=168
Bmi=28.3

Each line ends with Cr,Lf

The old format started with Esc and closed each string with $FF, and showed hexadecimal values, so it was not possible to read it with any standard terminal software. This is why we have changed many years ago, to make the scale easier to interface.

In both cases the interface runs at 9600 baud, 2 stop bits, no parity.
The connection is the standard in a 9 pin DSUB connector, that is pin 2,3 and 5 for GND. The connector, when the option is installed, is in the back part of the machine, above the power plug.

# Technical specifications

Power supply:                                          115 <u>or</u> 230V  50/60Hz
(Selection must be made in the factory before shipment. See machine label to
know how your one has been set).

Consumption:                                                    20 VA
Fuses                                                            1 x 1A

Weight range:                                          1-180 Kg in steps of 100 g
Accuracy:                                                      +/- 100g

Height range:                                          90-199 cm in steps of 1 cm
Accuracy:                                                      +/- 1 cm

# Declaration of conformity

C E

Manufacturer:          DPS-Promatic srl
                       via Edison 21
                       47122 Forlì Italy


                       declares that the following product


Product:               Weighing scale type FTS-H and FTS-HC



EMC:                   Directive 89/336/EEC

Low Voltage:           Directive 73/23




Forlì  20-04-2008


DPS-Promatic srl
Massimo Portolani

# Manual revision and contacts

This is revision 1.0 en
of user manual
FTS-H and FTS-HC weighing scale

Edited on 13/09/10

by the manufacturer

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This is an electronic device and must be disposed
according to the existing laws.
Do not throw it in the normal trash.