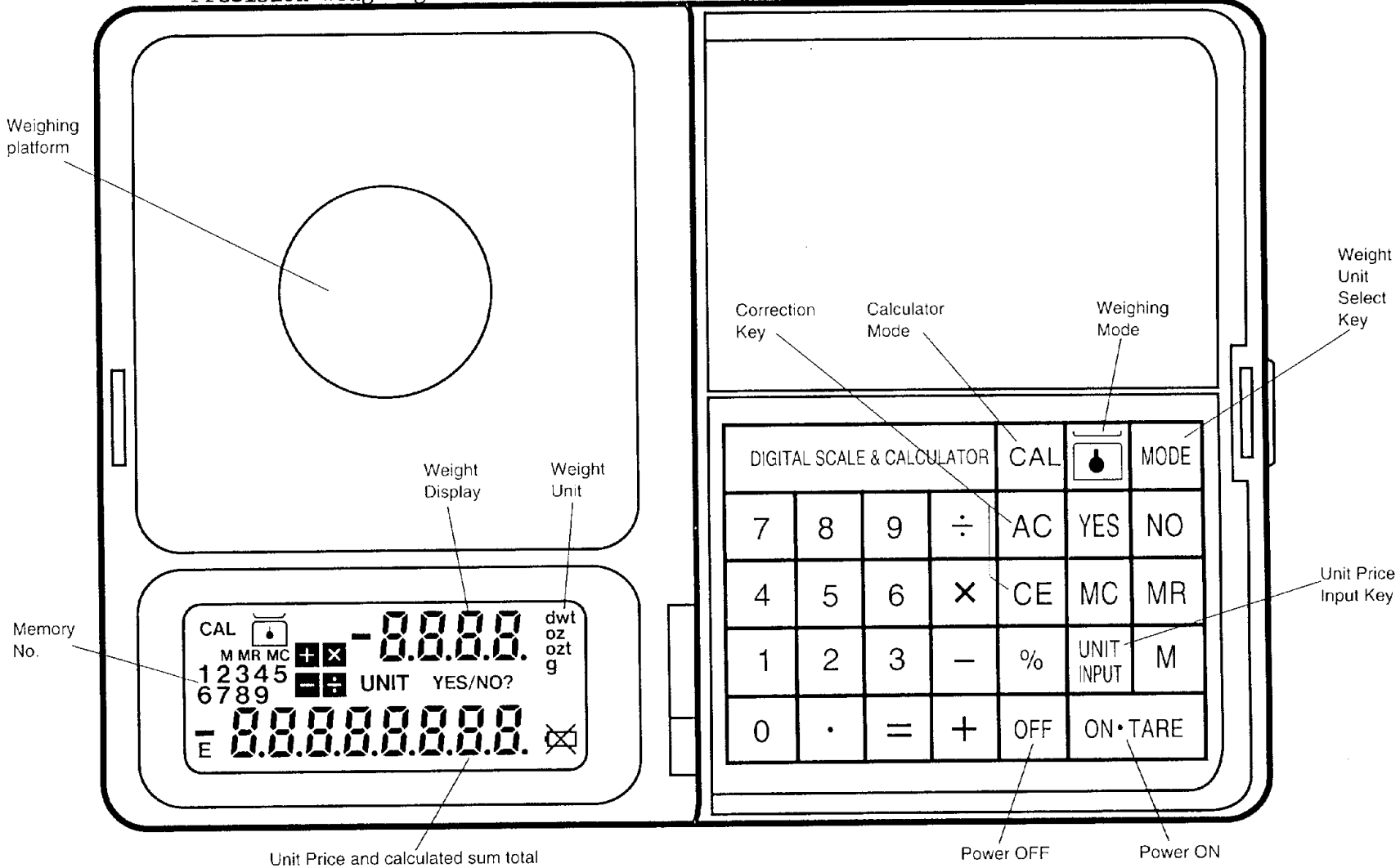


Name of Parts


Precision Weighing Balances 10 Peabody Street Bradford, MA 01835-



Specification

g	Version	0 ~ 50g	by 0.1g,	50 ~ 100g	by 0.2g
ozt	Version	0 ~ 1.6ozt	by 0.005ozt,	1.6 ~ 3.2ozt	by 0.01ozt
oz	Version	0 ~ 1.6oz	by 0.005oz,	1.6 ~ 3.5oz	by 0.01oz
dwt	Version	0 ~ 32dwt	by 0.1dwt,	32 ~ 64dwt	by 0.2dwt

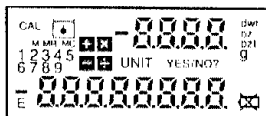
Functions

1. If the unit price is entered and the object is put on the platform, the calculation is performed thus displaying its weight on the upper stage and the calculation results on the lower stage of the display box.
2. A weight unit can be selected with a single touch to the MODE key g, ozt, oz and dwt.
3. Can perform four basic arithmetical operations and percentage calculation.
4. Can store up to 9 different unit prices in the memory to be recalled later when necessary.
5. The weighing scale is equipped with the tare weighing function that can be used with a single touch to deduct the weight of a container. With this scale, it is also possible to make further adding measurements of the objects.
6. If the maximum measurement is exceeded by $\pm 103\%$, EEEE is displayed to inform that the scale is overloaded.
7. The scale is designed for power saving that, if the display is stable for about 3 minutes, the power is turned off automatically.
8. If the voltage is lowered down to 3.6 ± 0.3 V, the  mark for battery replacement is shown in the screen. Please replace batteries as soon as possible.

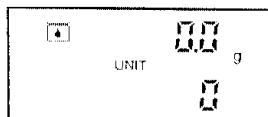
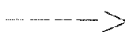
How To Use

I. How to Weight an Item

- ① If the ON/TARE key is pressed, the whole display shows up, then, after about 2 seconds, changed to the display of 0. (The initial weighing unit is the g-mode.)



after about
2 secs




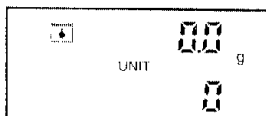
- ② After making sure of the display of 0, the object to be weighed is placed on the weighing platform, the weight appears on the upper stage of the display box.
- ③ In case of measuring the weight with a container (such as a tray), the weight of the container can be deducted (tare weighing function).

If the container is placed on the scale after confirming the 0 display, the weight of the container is displayed. If the ON/TARE key is pressed once again with the container placed on the scale, the display is changed to the 0 display. If the object to be weighed is placed in the container after this, the net weight of the object is displayed. Further addition to the measurement can be also made by repeating this same manipulation. At the time of tare weighing function, the weight can be measured up to the weighing capacity (100 g, 3.2 ozt, 64 dwt, 3.5 oz) including the weight of the container.

- If the maximum measure (100 g, 3.2 ozt, 64 dwt, 3.5 oz) is exceeded, EEEE is displayed thus disabling the weighing.
- This scale is equipped with a function preventing the wasteful consumption of batteries caused by forgetting to turn off the power. If the same display continues for 3 minutes or longer, the power is automatically turned off.
- If the scale does not show a correct display, or if unrelated figures are displayed, press the OFF key to start the whole procedure again. If even this ends in failure, reset the scale. For details of resetting, please turn to page 12.

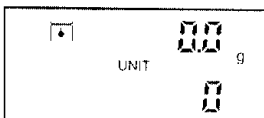
II. How to Select g, ozt, oz, and dwt weight

- ① Press the ON/TARE key to set the machine to the weighing mode. Make sure that the () mark turns up.

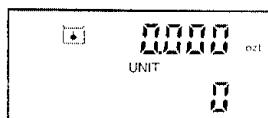


- The initial status (after resetting) is the g-mode.

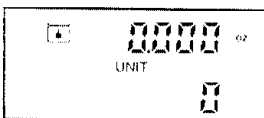
- ② In this state, press the MODE key. Each time the key is pressed, the mode is changed in the sequence shown below.



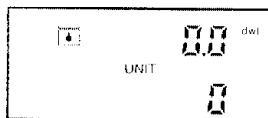
- g (gram) mode



- ozt (troy ounce) mode



- oz (ounce) mode



- dwt (penny weight) mode

- ③ Even if the power is turned off after setting the mode, the previous mode turns up when the machine is turned back on (retention of the mode status). However, if the RESET is pressed, the machine is placed in the initial status (g-mode).

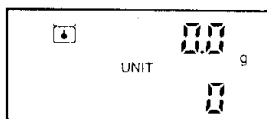
III. Input of Unit Price Data for Multiplication with its Weight

Make sure that the (UNIT) mark turns up on the display.

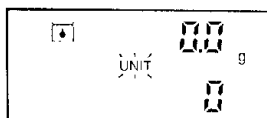
In the case of g-mode:

(Even in other modes, the method is the same except that the weight unit is different.)

- ① Press the ON/TARE key to set the display of the scale to 0.

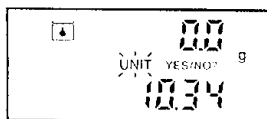


- ② Press the UNIT INPUT key. Then, the UNIT mark will blink placing the scale in the status of waiting for the input. If the scale contains the previously input value, this previous value is displayed.

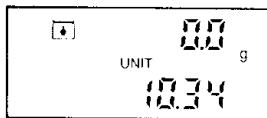


Example: Unit price 10.34

- ③ Input the unit price with the numeric keys. Up to four digits can be used for the unit price. When the unit price is inputted, the YES/NO? mark blinks. If incorrect data have been inputted, press the CE or AC key and then perform the inputting work again.



- ④ If the unit price is correct, press the YES key. The blinking of the UNIT disappear together with the YES/NO? mark, thus registering the unit price.

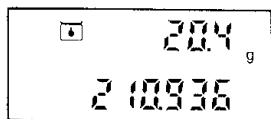


- When the weight is 0, the unit price is displayed on the lower stage of the display.

- ⑤ If the object to be weighed is placed on the platform, the weight is displayed on the upper stage, and the calculated sum total is displayed on the lower stage of the display. The relationship among the weight, the unit price and the calculation result is as follows:

$$(\text{Weight}) \times (\text{Unit Price}) = (\text{Sum Total})$$

Example: $20.4 \times 10.34 = 210.936$



- ⑥ If the objects to be measured are based on the same unit price, they can be placed one after another on the weighing platform to obtain the desired sum total in the same manner.
- If the NO key is pressed while the YES/NO? mark is on the display, the scale is returned to the status of an ordinary weighing machine.
 - Even if the scale is turn back on after turning off the power, the previous unit price is displayed. However, the unit price is returned to 0 if the machine is reset.
 - The max number of digits for displaying the results of the arithmetic calculation in the [] mode are as follows:
(Max number of digits for weight) + (max number of digits for unit price) = (Valid number of digits for results of arithmetic calculation).

IV. Memory Function (Records the unit price.)

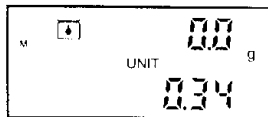
Make sure that the (M) mark is on display.

- The memory consists of 9 items from Nos.1 to 9.

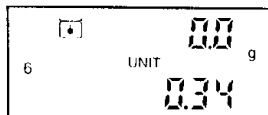
Example: Unit price 10.34 is stored in memory No.6.

1) How to register in the memory

- ① When registering the inputted unit price in the memory, press the M-key first of all. At this time, the M-mark blinks displaying the present unit price.



- ② Use the numeric keys to specify the number of the memory to store the unit price in. The content of the memory of the specified number is thus updated. The number of the memory in which the unit price is stored blinks.

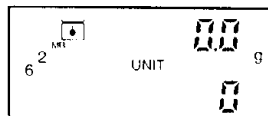


- Once a unit price is stored in the memory, this unit price is used; therefore, the number of the memory in which this unit price is stored blinks.

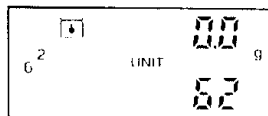
2) Recall the memory (To recall and use the unit price registered in the memory)

Example: Recall the unit price (62) stored in memory No.2

- ① Press the MR key. At this time, the MR mark blinks.
- ② Specify the number of the memory to be recalled with the numeric keys.



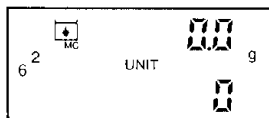
- ③ The unit price in the memory is recalled thus showing the unit price on the display box and blinking the recalled number.



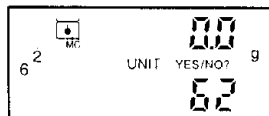
3) Eliminating the memory (To eliminate the unit price registered in the memory)

Example: Eliminate the unit price (62) stored in memory No.2

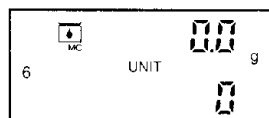
- ① Press the MC key. At this time, the MC mark blinks.




- ② Specify the number of the memory to be eliminated. The specified number blinks, the unit price stored in the memory is displayed and the YES/ NO? mark is lit. If the specified number has been incorrect, go over this procedure again to specify the correct number.



- ③ If everything is correct, press the YES key. Then, the stored unit price is eliminated together with its number.



- The items above are used with the scale mark of ().

Remarks:

The CAL-Q-SCALE, with its memory system is designed to recall the last unit input even though the main power was turned off. At TANITA, we engineered it to make it easier for most individuals, because they weigh the same types of items for the same unit prices.

In order to change the unit price or would like to have a zero figure, you would need to input the new numeral or zero into the memory system.

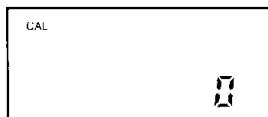
For example: Press the input key, then press a new numeral or zero, and respond by the yes key to confirm the new input figure.

V. When Using as a Calculator

By pressing the CAL key after turning on the power with the ON/TARE key, this apparatus can be used as a simple calculator performing the four arithmetic calculation and percentage calculation.

1) Four arithmetic calculation

- ① Press the CAL key after turning on the power with the ON/TARE key. Then, the CAL mark is lit thus enabling the scale to be used as a calculator.



- ② For example:
To calculate " $(4 + 8) \times 2 = 24$ "
enter " $4 + 8 \times 2 =$."



Then, "24" will be displayed.

2) Percentage calculation

- ① Press the CAL key after turning on the power with the ON/TARE key. Then, the CAL mark is lit thus enabling the scale to be used as a calculator.
- ② If the % key is pressed at the end of the arithmetic operation, the percentage is displayed.

For example:

5% of 3 is:



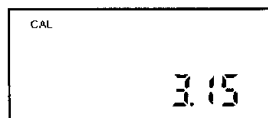
If 3 is 5% of a certain number, this (original) number is:

$$3 \div 5 \%$$



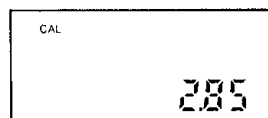
Increasing by 5% to 3 results in:


$$3 + 5 \%$$



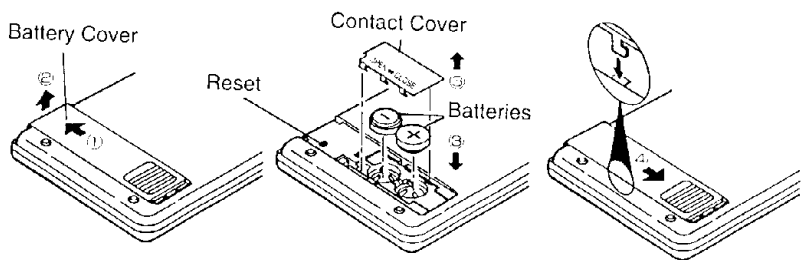
Deducting by 5% from 3 results in:

$$3 - 5 \%$$



- No memory operation can be made in the CAL mode.
- When using the machine above as a scale, press the  key to return to the weighing mode.
- The results of the arithmetic operation are displayed in absolute values; they are not displayed in minus values.
- Only the unit price can be stored in the memory; the results of the arithmetic calculation cannot be stored.

Battery Replacement



1. Turn the scale over. Remove the battery cover in the arrow directions ① and ②.
 2. Remove the contact cover in the direction of ③.
 3. Insert the batteries (two CR2032) in accordance with the inscribed marks of (+) and (-).
 4. Insert the contact cover and then slide in the battery cover in the direction of ④.
- Press the RESET button with a thin bar when the display is incorrect or when unrelated figures are on display. Then, the scale is placed in the initial status (g-mode).
 - All the data in the memory are eliminated placing the apparatus in its initial status by replacing the batteries or pressing the RESET button.

Care and Instruction

1. Ensure to place the scale horizontally on a hard and flat surface.
2. Never dismantle the scale.
3. Ensure not to cause excessive impact or vibration to the scale by dropping or hitting it. Ensure not to leave objects on the weighing tray for a prolonged period of time.
4. Ensure not to place the scale in a location directly exposed to the sunshine or near scales generating high-heat (such as heater, cooking range, oven, etc.).
5. When the scale has been moved to a location differing in temperature from the previous location by 20°C or more, leave the scale in the newly-moved location for at least two hours before using it.
6. Ensure not to place water or liquid on the scale. Water or liquid that leaks into the scale can cause a failure of the machine.
7. If the scale has been stained, remove the stain with a cloth slightly soaked in the neutral detergent. Then, lightly rub off the surface with a dry sponge or soft cloth.
8. When you are not using the scale for a long period of time, remove the batteries and store it in a place free from humidity, dust and vibration.