

Limited Warranty Policy

Scalesco Measurement Technology Inc (hereafter referred to as "SMTI") products are warranted against defects in material and workmanship for a period of one (1) year from the date of shipment.

During the warranty period SMTI will repair, or at its option, replace at no charge any component(s) determined defective by a authorized SMTI representative, provided the equipment is returned freight prepaid, to Scalesco Measurement Technology Inc.

The warranty will not apply to products that:

1. Have had repairs or modifications not authorized by SMTI.
2. Have been subject to damage by accident, misuse, careless handling, inappropriate installation, fire, water submersion or act of God.
3. Have been exposed to corrosive material
4. Have foreign material penetrating or within the product.
5. Have been determined to weigh accurately after calibrating according instructions within the user manual.

SMTI's liability is confined to the factory repair, product or parts replacement, and does not extend coverage to labor, material or service charges involved in removal of the equipment to return to the factory or from on-site repair.

SMTI is not responsible for any direct expenses or consequential damage due to errors in weighing or failure of a Scalesco brand product to perform properly.

SMTI reserves the right to incorporate changes in material, operation and design of the products without notice and is not obliged to incorporate the same changes in equipment previously or currently manufactured.

This warranty is limited exclusively to defective Scalesco brand products. The SMTI warranty is limited to initial the installing customer and is not intended to insure the benefit of a secondary owner in the event of resale after use. This warranty is in lieu of all other warranties, expressed or implied.

Return Policy

See our website for the up-to-date return policy at <http://www.scales-co.com>.

Repair Policy

The SMT-348 has no serviceable parts, if your scale is damaged and it has been determined that you do not meet the warranty conditions, you can purchase a refurbished or new scale, at the discretion of Scalesco Measurement Technology Inc, directly from us at a 60% discount from the current list price as shown on our website.

Scalesco Measurement Technology Inc.

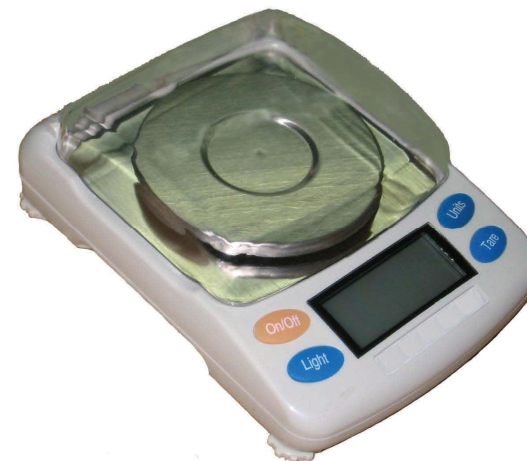
1200 Indus Street Suite A, Fairmont MN 56031 USA

Toll Free: 1-866-587-9773 Fax: 1-507-238-5447 E-Mail: sales@scales-co.com

SMT-138

Compact Balance

User Manual



Scalesco Measurement Technology Inc.

1200 Indus Street Suite A, Fairmont MN 56031 USA

Toll Free: 1-866-587-9773 Fax: 1-507-238-5447 E-Mail: sales@scales-co.com

Version 1.0 - January 2009

UNITED STATES

This equipment has been tested and found to comply with the limits for Class A digital device, pursuant to Part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. His equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

CANADA

This digital apparatus does not exceed the Class A limits for radion noise emissions from digital apparatus set out in the Radio Interference Regulations of the Canadian Department of Communications.

Le present appareil numerique n'emmet pas de bruits radioelectroniques depassant les limites applicable aux appareils numeriques de la Class A prescrites dans le Reglement sur le brouillage radioelectrique que edicte par le minister des Communications du Canada.



Risk of Electrical shock. Do not remove cover.

No user serviceable parts inside.

Refer servicing to qualified Scalesco service personnel.

Scalesco Measurement Technology reserves the right to change specifications at any time.

Calibration

4. Press the **TARE** key to accept and the scale will enter into calibration mode

The scale will briefly display "0.0000" then flash "10.000"

5. Place the 10 gram weight on the scale,

in a few seconds the "20.000 or 30.000" will flash

6. Place a additional 10 or 20 gram weight onto the scale, the scale will finish calibration and return to normal weighing mode.

Care and Maintenance

Cleaning—Use a damp cloth with mild detergent to clean your scale.

Handle with Care—Precision scales include sensitive load cells. Dropping the unit or placing weights on the scale that are heavier then the rated capacity of your scale may cause damage to the load cell.

Trouble Shooting and Error Codes

Symptom	Possible Cause	Remedy
Cannot turn on	<ul style="list-style-type: none"> • No power to scale • Incorrectly installed battery 	<ul style="list-style-type: none"> • Replace batteries, check polarity
Poor weighing accuracy	<ul style="list-style-type: none"> • Improper calibration • Unstable environment • Scale was not zeroed prior to use • Tare function is activate • Displaying incorrect weight 	<ul style="list-style-type: none"> • Perform calibration • Move scale to stable location • Press the ZERO key to zero the scale prior to use • Press Tare key to remove tare weight held in memory • Ensure correct unit of measure is active

Service Information

If you experience any difficulty, the Scalesco team is available to help you between the hours of 8:00 AM and 5:00 PM CST, M-F, toll free 1-866-587-9773 or 507-238-9773. For after hours support, e-mail us at sales@scales-co.com.

Calibration

WARNING!

Calibrating your scale with inaccurate or the incorrect weights as defined in the Weighing Tolerances and Calibration Section will cause your scale to weigh incorrectly.

The SMT-138 provides two methods of calibration. The standard or "SCALE" method uses your included 10 gram weight. while the Linear or "LINE" method requires an additional calibration weight. equal to full capacity of the scale, 10 or 20 grams to calibrate the scale.

Calibrating your scale using the SCALE mode

1. Make sure there is no weight on the scale. Press the **Tare** key to zero the scale
2. Press and hold the **Light** key until "SCALE" is displayed, then release.
3. Press the **TARE** key to accept and the scale will enter into calibration mode.
4. The scale will display 10.000. Press the **TARE** key to perform a zero calibration.
6. Wait for the scale to display 0000. The scale will then flash 10.000, indicating the scale ready for you to apply your calibration weight.
7. Place your 10 gram calibration weight on the scale. The scale will automatically perform calibration and return to normal weighing mode.

Note: If **CAL.Er** appears, this indicates an error in calibration. Repeat steps 1-7. If **CAL.Er** continues to appear you may have a damaged load cell or electronics.

Calibrating your scale using the LINE mode

Linear calibration provides the best performance, however in order to perform this calibration you will require an additional 10 gram-(138-002) or 20 gram (138-003) weight depending on the capacity of your scale.

1. Make sure there is no weight on the scale. Press the **Tare** key to zero the scale
2. Press and hold the **Light** key until "SCALE" is displayed, then release.
3. Press the **Unit** key to "LINE".

UNPACKING AND INSTALLING THE SCALE

Unpacking the scale

Check packaging for any obvious evidence of damage. Inspect the unit for shipping damage. Immediately report shipping damage to Scalesco at 1-866-587-9773.

Remove contents from packaging, your product should include:

1. Four (4) "AAA" batteries
2. Scale with Stainless Steel weight platter and wind cover
3. Mini plastic weight tray
4. 10 gram calibration weight

If you are missing an item please contact Scales-co for immediate replacement at no charge, shipped via UPS ground.

Installing the scale

1. Mount the scale on a stable, level surface that is free from air currents, rapid temperature changes and vibration. This may affect the weighing accuracy or the stability of the displayed weight.
2. Carefully install, do not force, the weight platter on top of the mounting surface. Make sure the weight platter does not touch any adjacent surfaces, make sure the power cords is not touching the live weighing surface.
3. Be sure all feet are in contact with the counter, use the leveling feet and level bubble, if applicable to your model, to make a firm contact.
4. Install the four "AAA" batteries.
5. Turn the unit on for **15 minutes**, to allow the electronics and load cell to warm up to room temperature.
6. Place the included 10 gram on the scale to test the weighing accuracy. Your scale should display within the weighing tolerance shown within the Weighing Tolerances section of this manual.

Trouble Shooting Tip! If your scale is not weighing accurately upon installation, go to the calibration instructions found in this manual to perform a new calibration. Your scale may have become out of tolerance due to a large change in the altitude from initial factory calibration or a mechanical shift during the shipment of the product."

Battery Installation

Your model of compact balance operates on four (4) "AA" Batteries. The expected life of the batteries is 30 hours of use. with the backlight turned off.

Remove the battery cover on the bottom of the scale, insert the batteries into the appropriate location, making sure you align the batteries into the correct positive (+) and negative (-) orientation.

Technical Specification

Model # (Part #)	SMT-138 (138-002)	SMT-138 (138-003)
Capacity and Resolution	20 x 0.001 gram 0.70 x 0.00005 oz 100 x 0.005 carats 308 x 0.02 grain 0.64 x .00005 troy ounce 12.86 x 0.001 dwt	30 x 0.002 gram 1.05 x 0.0001 oz 150 x 0.01 carats 463 x 0.05 grain .96 x .0001 troy ounce 19.29 x 0.002 dwt
Accuracy	+/- 3 divisions (division = resolution)	+/- 2 divisions (division = resolution)
Operating Temp	10° - 35° C / 50° - 95° F	
Tare Range	Up to 100% of max. capacity, subtractive (subtract tare weight from max capacity = new max capacity)	
Stabilization	Up-to 3 seconds to stable weight reading	

Configuring the Backlight

You can configure the function of the back light to meet your requirements.

1. Press the **Light** key twice.

The previous setting is displayed, default is F1

2. Press the **Unit** key to scroll between "F1", "F2", "F3".
3. Press the **Tare** key to accept your setting and return to normal weighing mode.

Available Settings

F1 - Backlight turns on automatically with more than 10 divisions (0.01 or 0.02) of weight is placed on the scale.

F2 - Backlight is always On

F3 - Backlight is always Off.

Weighing Tolerances & Calibration

Model # (Part #)	SMT-138 (138-002)	SMT-138 (138-003)
Max Capacity	20 grams	30 grams
Resolution	0.001 gram	0.002 grams
Weighing Tolerance	0.003 grams	0.004 grams
Calibration Weight	10 grams	10 grams

Form time to time, all scales may require calibration to provide an accurate weighing. When calibrating your scale, you are teaching the scale a zero weight reading, and a known accurate weight(s).

The SMT-138 allows you to calibrate the scale using calibration weight provided with your scale.

Operating Instructions

Standard Weighing

1. Turn on the scale, using the “On/Off” button. The scale perform a test sequence. If everything is OK, the display will show zero weight and the scale is ready for use.
2. Press the **TARE** key to Zero the scale if display is not showing “0.000” weight.
3. Place your item on the weight platter, it may take up to 3 seconds for the weight to stabilize.

Note: A stable weight reading is indicated when the units of measure icon is stable.

Changing Units of Measure

1. Press the **UNITS** key to activate the units of measure feature. Continuously press the **UNITS key** change the units of measure from grams to ounce (oz), troy ounce (ozt), pennyweight (dwt), grains (gn) and carats (ct).

The scale will retain the units of measure selected for all your weighing, until you re-activate the units feature, even after power off.

Using a tare container

1. If your are using a container to weigh objects and want to see the net weight, place the container on the scale, press the **TARE** key. The display should show “0.000” weight. Place your items in the container, to determine the net weight.

*Note: Upon completion of your tare weighing, after removing your container the display will show a negative weight. Press the **TARE** to return the scale to zero gross weight.*

Auto Power-Off

To conserve battery life the SMT 138 scale will automatically power off after 9 minutes (540 seconds) of non use. Simply press the **ON** key to turn the scale back on. To configure the auto power off :

1. Press the **Light** key 3 times

The current setting is displayed, default is OFF

2. Press the **Unit** key to your desired selection 60-540 seconds
3. Press the **Tare** key, ot accept your desired setting.

Features and Operator Keypad

The Model SMT-138 Compact Precision Scale is an affordable solution for weighing gems, pearls, jewelry, diamonds, gold, gun powder, bullets, smokeless powders and arrows parts.

It provides an big backlite LCD display for great visibility when used indoors and outdoors. Design for use within stable environments where fluctuation of temperature, humidity and vibration are limited.

Features include a units switching function allowing you to weight items in grams, carats, ounce, grains, troy ounces or penny weight providing a versatile use for very small items. The wind shield cover and stainless steel shroud allow you to weigh items to provide an accurate reading..

Tare	1) Press to perform Tare or Zero Function. Tare removes the weight of a container from the display and returns the scale to zero weight. Once you remove your tare container, press again to return the scale to normal weighing. 2) Return the scale to Zero weight.
Units	Press activate the Unit switching feature. Continuously press to the units of measure (g, oz, ozt, dwt, gn ct) you require. An icon will indicate which unit of measure you are weighing.
On/off	Applies power to the scale or turns the scale off
Light	Set-up of back light operating mode. Default is set for backlight to turn on after more than 10 divisions of weight is placed on the scale.