

SMT-202

Postal Scale

User Manual



Scalesco Measurement Technology Inc.

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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. One "9V" battery, installed
2. 202 scale

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 effect the weighing accuracy or the stability of the displayed weight.
2. Carefully install, do not force, the weight platter on top of the mounting posts. Make sure the weight platter does not touch any adjacent surfaces, make sure the power cords, remote display cables are 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.
5. Turn the unit on for **5 minutes**, to allow the electronics and load cell to warm up to room temperature.
6. Place a known weight 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 bench scale operates on one (1) "9V" battery. The expected life of the batteries is 60 hours of use.

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 #	SMT-202
(Part #)	(202-035)
Capacity and Resolution -- Dual Range	0-2 x 0.005 lb/ 2-35 x 0.01 lb 0-32 x 0.1 oz / 32-560 x 0.2 ounce 0-1 x 0.002 kg / 1-16 x 0.005 kg 0-1,000 x 2 g / 1- 16,000 x 5 gram
Accuracy	+/- 1 divisions (division = resolution)
Operating Temp	5° - 35° C / 41° - 95° F
Tare Range	Up to 100% of max. capacity, subtractive (subtract tare weight from max capacity = new max capacity)
Stabilization	Up-to 2 seconds to stable weight reading

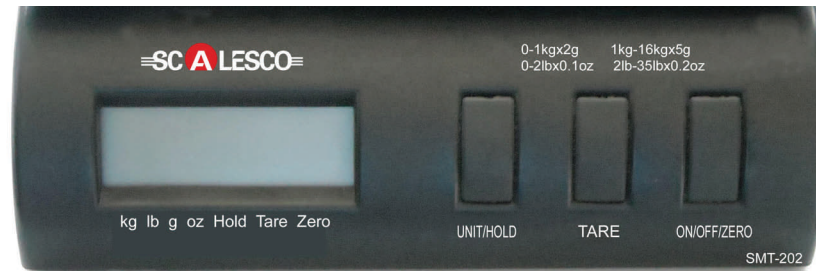
Features

The Model SMT-202 Postal Scale is an affordable solution for many applications. Perfect for use in the office or home to weigh letters and small packages.

Designed for use within stable environments where fluctuation of temperature, humidity and vibration are limited. The 202 scales feature a weight hold function allowing you to view the weight of an item that is too large and obstructs the weight display. The 202 also includes a units switching function allowing you to weight items in LB, KG, OZ, or Grams.

Use the flip tray to weigh large envelopes or hold tubes/packages in place on the weight tray.

Operator Keypad and Display



- Unit Hold**
- 1) Quick press to activate weight hold. An arrow above "Hold" on the display will light. Place your item on the scale, allow two seconds for a stable weight reading. Once you remove the item, the weight will be held in the display until you quickly press hold again.
 - 2) Press and hold for 3 seconds to activate the **Unit** switching feature. Continuously hold to the units of measure (kg, g, lb, oz) you require. An icon above the kg, g, lb, oz will light.
- Zero/ On Off**
- 1) With the scale turned off and no weight on the scale, quickly press to power **On** scale. Zero point is = to 10% of capacity.
 - 2) To turn **Off**, press and hold for more than 3 seconds.
 - 3) To **Zero** the scale, press and hold for less than 2 seconds to return the scale to zero weight. Zero point is = 2% of capacity.
- Tare**
- Quick press to perform a **Tare** Function. An arrow above tare on the display will light. 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.
- Lo. B**
- Indicates the batteries are low, unit with power off in 1 minute.

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 **ZERO** key if display is not showing "00.00" weight.
3. Place your item on the weight platter, it may take up to 2 seconds for the weight to stabilize.

Changing Units of Measure

1. Press and hold the **UNITS** key for more than 3 to activate the units of measure feature. Continuously press the **UNITS key** change the units of measure from kg to, grams, lb, ounce.

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, quick press the **TARE** key for less than 2 seconds. The display should show "0.000" weight, and an arrow will light above tare in the display window, indicating the tare feature is active. 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. Quick press the **TARE** for less than 2 seconds to return the scale to zero gross weight.*

Auto Power-Off

To conserve battery life and electricity, the SMT 202 scale will automatically power off after 5 minutes of no use or no change in weight. Simply press the **ON** key to turn the scale back on.

Operating Instructions

Weight Hold

The weight hold feature allows you to weigh letters or packages larger than the weight platter that would cause the size of the item to block the weight display window.

The weight hold features allow you to lock a stable weight on the display after removing your item.

Single Weight Hold

For use to weigh a single item that is larger than the weight platter blocking the view of the displayed weight

1. With the scale on and at zero weight, quick press the **Unit/Hold** key. An arrow will light above "Hold" to indicate weight hold is in effect.
2. Place your item on the scale, allow two seconds for the weight to stabilize, a beep will indicate the weight is stable. The weight of the item will be held on the display.
3. Quick press the **Unit/Hold** key again to return the scale to normal weighing mode.

Weighing Tolerances & Calibration

Model #	SMT-202	WARNING! <i>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.</i>
(Part #)	(202-035)	
Max Capacity	35 lb / 15 kg	
Resolution	0.005 lb / 0.01 lb 0.002 kg / 0.005 kg	
Weighing Tolerance	0.005 lb / 0.01 lb 0.002 kg / 0.005 kg	
Calibration Weight	35 lb / 15 kg	

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-202 allows you to calibrate the scale using LB or KG weights

Calibration

Calibrating your scale using LB weights

1. Make sure there is no weight on the scale, and the scale is OFF.
2. Press and hold the **TARE** key, then press the **Unit/Hold and Zero/On(Off)** key until the display shows "15.000" and release keys.
3. Press the **UNIT/HOLD** key to calibrate the scale using a LB weight "35.000" is displayed
4. Press the **Tare** key to accept, the scale will display the internal counts "9000—11000".
5. Press the **Tare** key to accept and perform zero calibration, "0.000" will display then the internal counts again.
6. Place your 35 lb weight on the scale, press the **Tare** key to perform calibration.
7. The scale will display "35.000", then return to normal weighing mode and "Err 2" will display.
8. Remove the weight from the scale, the scale will show "0.000" weight

Calibrating your scale using KG weights

1. Make sure there is no weight on the scale, and the scale is OFF.
2. Press and hold the **TARE** key, then press the **Unit/Hold and Zero/On(Off)** key until the display shows "15.000" and release keys.
3. Press the **Tare** key to accept, the scale will display the internal counts "9000—11000".
4. Press the **Tare** key to accept and perform zero calibration, "0.000" will display then the internal counts again.
5. Place your 15 kg weight on the scale, press the **Tare** key to perform calibration.
6. The scale will display "15.000", then return to normal weighing mode and "Err 2" will display.
7. Remove the weight from the scale, the scale, press the **ZERO** key "0.000" weight will display.

Note: If **CAL.Er** appears, this indicates an error in calibration. Repeat steps 1-7.

USB Interface

The Model 202 postal scale includes a USB virtual com port interface that is compatible with Windows 98 and XP only. Development of the Windows Vista version is in process.

Download and install the USB driver from our website: [www.scales-co.com/User manuals/brochures](http://www.scales-co.com/User%20manuals/brochures). Connect the USB interface cable to the scale and PC, Windows will recognize new hardware found.

Once your driver is downloaded and the new hardware found your scale will operate without using the 9 volt battery installed.

The 202 postal scale continuously sends the data through the com port in the format found below. Configure your com port for 9600 Baud, 8 data bits, no parity, 1 stop bit. Make sure you do not use the DTR and CTR.

Model 202 Interface Format

The 202 postal scale continuously sends the following format 3 times per second.

<LF><POL>X₁ X₂ X₃ X₄ X₅ X₆ X₇ X₈<U₁ U₂

Definition of formats:

<LF> = Line feed character (hex 0AH)

<POL> = Polarity character. ("-" + space) for negative displayed weight format or (" ") space for positive weight.

X₁ X₂ X₃ X₄ X₅ X₆ X₇ X₈ = Displayed weight including decimal point. Position of decimal point may change depending on units of measure and weight applied

<G or N> = Gross weight or Net weight

<S or M> = Stable weight or transmitted weight is in Motion

<CR> = Carriage Return character (hex 0DH)

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 than the rated capacity of your scale may cause damage to the load cell.

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.

Trouble Shooting and Error Codes

Symptom	Possible Cause	Remedy
Cannot turn on	<ul style="list-style-type: none"> • Batteries are low • 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
CAL. Er	<ul style="list-style-type: none"> • Unstable environment • Incorrect calibration weight used 	<ul style="list-style-type: none"> • Move scale to suitable location • Use correct calibration weight
Err2	<ul style="list-style-type: none"> • Overload Zero Error • Normal Calibration condition 	<ul style="list-style-type: none"> • Excess weight applied to scale upon zero or power on, remove weight • Remove weight
Err1	<ul style="list-style-type: none"> • Under load Zero Error 	<ul style="list-style-type: none"> • Verify weight platter is installed correctly, power off then on • Perform Calibration
-----	<ul style="list-style-type: none"> • Overload Condition 	<ul style="list-style-type: none"> • Excess weight applied to scale, remove weight

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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>.

Scalesco Measurement Technology Inc.

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