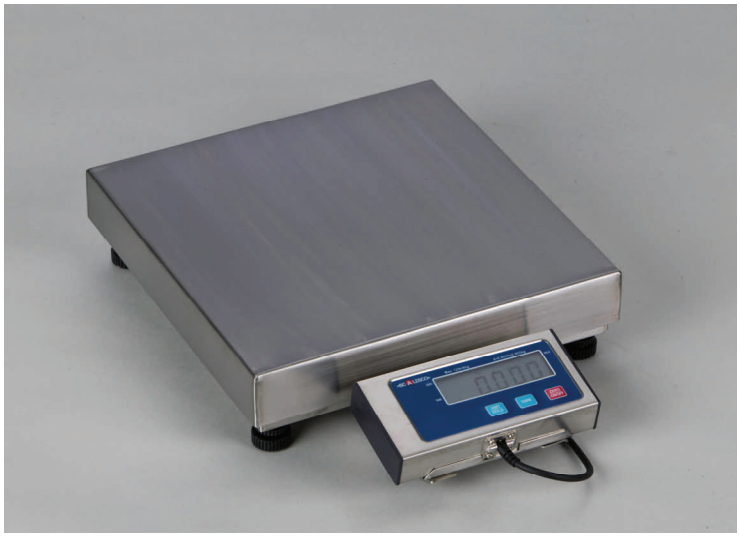
SMT-278

Bench Scale 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

Website: www.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'emet 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.

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. AC adapter
2. Scale with attached display assembly and stainless steel weight platter
3. Weight Display Assembly mounting stand attached
4. 4 “AAA” Batteries

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. 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.

3. Connect the AC adapter’s power plug to the scale, then plug the AC adapter into a appropriate outlet, properly grounded.

4. Turn the unit on for **15 minutes**, to allow the electronics and load cell to warm up to room temperature.

5. 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!

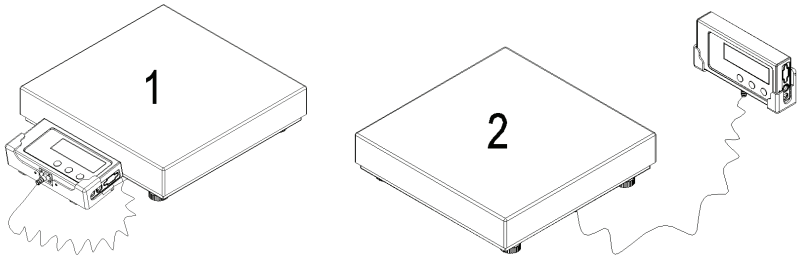
“If your scale is not weighing accurately upon installation, go to the calibration instructions found in this manual to perform a new calibration. Your scale may have become out of tolerance due to a large change in the altitude from initial factory calibration or a mechanical shift during the shipment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

DISPLAY INSTALLATION

The SMT 278 bench scales comes equipped with the integrated or attached display to the scale base.

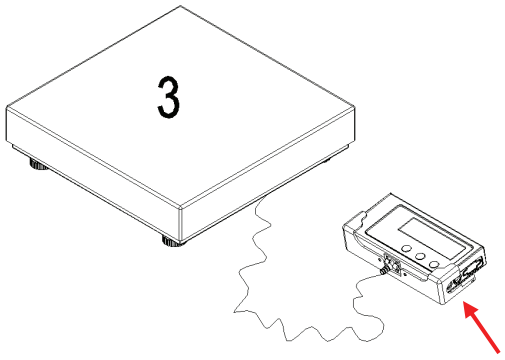
If using this scale in a wet environment, disconnect the display from the base, it is not watertight and water may enter the housing damaging the electronics as shown below.

An optional wall mount bracket is available from scales-co. Contact us at 1-866-587-9773.



Remote Tare Foot Switch

There is an optional plastic remote tare foot switch available for this unit.



Connect the foot switch into the appropriate jack below the AC adapter input.

Installing the Batteries

Your model of scale operates on a four (4) “AAA” alkaline batteries . The expected life of the batteries is 20 hours of continuous use with the backlight turned off.

When the battery is becoming low the weight display segments or digits will begin to flash to indicate you need to replace the batteries soon.

Once the batteries have reached below 4.7V, the indicator will display “Lo.Bat” indicating it is time to replace the batteries immediately to continue operation of the scale.

Use the **Zero ON/OFF** key to turn the scale off, or adjust the auto off settings to extend the life of the battery.

The batteries are housed in a compartment located on the left side of the indicator. Push the slot towards the back of the of the indicator, install the 4 “AAA” batteries provided, making sure you place the batteries in the correct positive (+) and negative (-) orientation. Then replace the battery cover.

Technical Specification

(Part #)	**278-012**	**278-030**
Capacity and Resolution	12 x 0.005 lb / 6 x 0.002 kg	30 x 0.01 lb / 15 x 0.005 kg
Selectable Capacity and Resolution	12 lb x 0.1oz	30 lb x 0.2oz
Accuracy	+/- 0.005 lb / 0.002 kg	+/- 0.01 lb / 0.005 kg
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)	
Overload	102% of scale capacity	
Stabilization	Up-to 2 seconds to stable weight reading	

Features and Operator Keypad

The Model SMT-278 Bench Scale is an affordable solution for many applications. Perfect for use in most general purpose weighing applications. The stainless steel construction of the weight platter, load bridge and base plate can be washed down using a mild detergent.

It provides LCD display for in well lite conditions and outdoors. Design for use within stable environments where fluctuation of temperature, humidity and vibration are limited. The optional foot switch allows you to tare out the weight of items

Features include a Weight Hold which will hold the weight value on the display even after you remove the weighed item, RS-232 interface for connecting to PC's to transmit weight, and units switching between LB and KG or Lb/oz if configured.

1) Turn on or off the scale

2) While scale is on, quick press to return display to zero weight.

Used to perform Tare, to remove weight on container used. A icon next to TARE will indicate you are displaying net weight.

1) Change displayed weight from lbs to kilogram or other configured settings.

2) If configured, for use to hold last stable weight reading on display even after item has been removed.

LCD Indications

An arrow will light in the display next to the each function to indicate the operating function of the scale.

Zero—Indicates the scale is at a stable zero weight

Hold - Indicates weight hold function is in effect, flashing indicates weight is not stable.

Tare —The tare key has been enabled and the display is showing net weight.

Operating Instructions

Standard Weighing

1.Turn on the scale, using the **On/Off Zero** key.

2. Press the **On/Off Zero** key to zero the scale if display is not showing “0.0” weight.

3. Place your item on the weight platter. The “kg” or “lb” or “lb oz” will light to indicate the unit of measure the weight display is showing. The unit of measure will flash indicating the weight is not stable.

Note: The selection of units of measure will remain in the scales memory until you power off the unit using the power switch. This means if you have selected “lb” initially as a units of measure, you will not have to change the units of measure even after powering on and off your scale.

4. Press the UNIT/HOLD **key to scroll between your active units of measure.**

Operating Instructions

Tare Weighing

The use of tare allows you to identify the net weight of an item within a container. The weight of the container is removed from the gross weighing calculation. Gross-tare=Net weight.

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.

The Tare icon in the display will light to indicate your tare in in effect.

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

Potion Control Weighing

The use of tare keys allows you to build up weight on the scale, return the scale to 0.00 net weight and place another item on the scale. Plug in the optional Tare foot switch on the side of the indicator to eliminate the use of the keyboard.

After each new item is placed on the scale, continuously use the **TARE** key to return the scale to zero weight.

The Tare icon in the display will light to indicate your tare in in effect.

Upon completion of your portion control weighing, after removing all the items display will show a negative weight. Press the **TARE** key to return the scale to zero weight.

Note: Using the zero key in portion weighing is not recommended. The zero key by default is set-up to zero the display at 5% of the scales capacity. This can be adjusted up-to 50%.

Operating Instructions

Weight Hold

The default factory setting has the Hold key functions disabled. To perform the Hold function, quick press the **UNIT/HOLD** key to activate the weight hold function. You can configure the use of the **Hold** key for a single quick hold or auto release hold. See the **User Configuration** sections in this manual for set-up. Below are the instructions for each setting.

Alternate Configuration Settings and Operation

The weight hold function can be configured for operating in three different methods:

Function P2.00 : Off

Function P2.01 or Single Use :

Upon removal of item at a stable , the display will hold the highest weight reading on scale.

1. Quick press the **UNIT/Hold** key , an arrow next to “hold” is lite to indicate weight hold is active

2. Place your item on the scale, remove the item. The largest weight setting will remain on the display until the Hold key is pressed again to return the scale to Zero weight.

Conditions of Single Use Weight Hold -

Holds largest stable Weight Reading:

1.Upon return to Zero, scale will change weight reading if any new weight is applied that is greater than 5 divisions of current held weight.

2. At weight hold stable state, weight will change if the scale recognizes a new weight greater than or equal to 0.6 lbs or 0.3 kg of current displayed weight.

Do not use Zero key in this mode, it may give you an inaccurate weight.

Operating Instructions

Function P2.02 Auto Release Hold

1. 1. Quick press the **UNIT/Hold** key , an arrow next to “hold” is lite to indicate weight hold is active

2. Place your load on the scale, wait for the arrow next **LB** and **Hold** stop flashing to achieve a stable weight reading, remove load.

3. The weight is held on the display

4. Press **Zero** key to remove held weight or Load a new item on the scale.

Conditions of P2.02 Weight Hold:

Holds largest stable Weight Reading:

1.Upon return to Zero, scale will change weight reading if any new weight is applied.

2. At weight hold stable state, weight will change if the scale recognizes a new weight greater than or equal to 0.4 lbs or 0.2 kg of current displayed weight.

Weight Hold Function P2.03 –50

Operates the same as Function P2.02. The function allows you to increase the weight that the scale will not recognize when you have achieved a stable weight hold reading. For use with animals that have a hard time being sitting still.

You can increase the setting from 3 divisions (0.6 lb or 0.3 kg) to 50 divisions (10 lb or 5 kg).

Example Setting “P3-10”: Capacity and Resolution of scale is 550 lb x 0.2 lb.(10 x 0.2 lb = 2lb.) Auto Hold will not change if weight is + 2 lb of previous held weight or a new weight will be held is greater than 2 lb difference..

Conditions of P3.3-50 Weight Hold:

Holds largest stable Weight Reading:

1.Upon return to Zero, scale will change weight reading if any new weight is applied.

2. At weight hold stable state, weight will change if the scale recognizes a new weight greater than or equal to the setting of 3-50d ((0.6 lb—10 lb or 0.3 kg-5 kg) of current displayed weight.

Features & Functions

THE SMT 278 bench scale allows you to configure the indicator to allow you to modify the operation of the unit to perform certain functions. The following is an explanation on the setting that are most commonly changed.

P1: Auto shutdown

Allows you to configure the scale to automatically turn off after 1-15 minutes of non-use. Recommended for use when using battery operation to extend battery life.

P2: Unit/Hold Key Function Functionality

Configure the key to operate as: Units switching only, Units Switching/ Weight Hold. When both are turned on, long press for changing units of measure and quick press to activate weight hold feature. Configure the Weight Hold Function to operate as: Inactive; Single push button weight hold; auto release weight hold.

P10: Units Switching

The default factory setting is switching between LB and KG. You can adjust this setting to include LB/oz as a unit of measure or disable the alternate units of measure to eliminate weight reading errors.

P15: Auto Zero Tracking

The default setting is +/- 2d (0.01lbs or 0.02lbs). This setting is used to return the scale to zero weight, if the displayed weight is within 0-0.01 lbs or 0.02lbs. If you place your scale in an unstable environment where there is vibration around you or the scale is having a hard returning to zero, This means your scale will not recognize a weight applied that is less than 0.01 or 0.02 lbs. Increase the setting to +/- 3d, +/- 4d, +/- 5d if you scale is having a difficult time returning to zero weight.

P16: Data Filter Intensity

The data filter controls the speed of the display and the time it takes to achieve a stable weight. The default factory setting is medium, Decreasing the filter to weak or slow will increase the speed that the display changes weight and returns to zero, but has a lesser chance to an accurate stable weight.

User Configuration Menu

The following are items that can be modified by in-house scale technicians. These settings do not effect the weighing or accuracy of the unit. Prior to making any changes please make sure you understand each of the settings prior to entering into the menu structure or call our service department at 1-866-587-9773 for support.

Important Note: Modifying any items other than these shown below will effect the weighing performance, and may require non-warranty service support to correct. Both User and Service setting are accessible by entering the configuration menu.

To enter into the User Configuration Mode:

Press and hold the 

and the 

key for 5 seconds.

"SETUP" is displayed

Once is Configuration Mode, use the:

Key to save setting and/or move next selection, P1>P2>...P18. or

Key to move flashing digit to next digit for modification. Use to move from "1" 2 to 1 "2" ("_") indicates flashing digit

Key to increment flashing digit from 0-9.

Key to save & exit configuration set-up mode and return to normal weighing

Example: Change Auto shutdown timer from 5 to 12 minutes

1. While at zero weight, Press and hold **Zero[ON/OFF} and UNIT/HOLD** key for 5 seconds.
2. Press **UNIT** key once to change to 1
3. Press **TARE** Key to one to change the flashing digit from the 1 to the 5.
4. "5" Flashes. Press the **UNIT/HOLD** key until 2 is displayed.
5. Press **TARE** to accept, P2.0 is displayed. Continue pressing **TARE** key to your next selection and repeat above steps or press the **ZERO[ON/OFF]** key to save setting and return to normal weighing mode.

Parameter	Setting	Definition
Auto Shutdown Timer	P1.00 P1.01- P15	Auto shutdown -Off Auto shutdown –1 to 15 minutes of no activity. **P.05** is the default for 5 minutes.
Weight Hold Functionality	P2.00 P2.01 **P3.02**-50	Weight Hold Inactive Push Button Weight Hold and release Push button weight hold activate, auto release of held weight upon new weight applied, Ignore stable weight increase from **0.4 lb** to 10 lb.
Units Key Functionality	P10.0 P10.1 P10.2 P10.3 P10.4 P10.5 P10.6	Displays KG only, units key disabled Displays LB only, units key disabled Displays LB/oz only, units key disabled **Units key active—KG or LB** **Units key active—KG or LB/oz** **Units key active—LB or LB/oz** **Units key active—LB or KG or LB/oz**
Auto Zero Tracking	P15.0 P15.1 P15.2 P15.3 P15.4 P15.5 P15.6 - .8	0 d = +/- 0.5d +/- 1d +/- 1.5d +/- 2d +/- 3d +/- 4d +/- 5d, 6d, 7d, 8d
Data Filter Intensity	P17.0 P17.1 **P17.2** P17.3	Slow Weak **Medium** Strong

Weighing Tolerances & Calibration

Model # **(Part #)**	**278** **278-012**	278 278-030
Max Capacity	12 x 0.005 lb / 6 x 0.002 kg	30 x 0.01 lb / 15 x 0.005 kg
Resolution	+/- 0.005 lb / 0.002 kg	+/- 0.01 lb / 0.005 kg
Weighing Tolerance	+/- 0.005 lb / 0.002 kg	+/- 0.01 lb / 0.005 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).

Since the SMT-278 is a electronic scale, either shipping or large shifts in altitude (gravity) can effect the weighing accuracy from the original point of calibration, Fairmont, MN. Products received not within calibration are not considered damaged under the Scalesco Warranty Policy.

The SMT-278 allows you to configure the capacity and resolution of your scale in other settings than as defined by the service manual. Please use the setting provided in this manual.

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.

If you require assistance in calibrating your scale, you can find a local scale dealer using the yellow pages for a minimal fee.

Calibration

Calibrating your scale requires two calibration weights and correct entry of configuration setting P6, P7, P8, P9, and P10,

The SMT 278 requires four point calibration; zero, half capacity, full capacity, and final zero.

When calibrating at half capacity, you are required to use 12.5% to 80% of the scales capacity. When calibrating the third stage or full capacity, you are required to use 25% to 100% of the scales full capacity rating as a calibration weight. See the table below for the recommended calibration weights. You can use weights other than shown below.

Important Note: The weight used for full capacity or 3rd stage of calibration must be greater than the half capacity or 2nd stage of calibration.

CALIBRATION WEIGHT VALUES (LB)			
Capacity	Zero Calibration—Stage 1 & 4-"CAL.PO"	12.5% Capacity—Step 2 "CAL.P1"	100% Capacity–Step 3 "CAL.P2"
12 x 0.005 lb 6 x 0.001 kg	0.00 lbs	2 lbs –10 lbs or 1—5 kg	5—12 lbs or 2—6 kg
30 x 0.01 lb 15 x 0.005 kg	0.00 lbs	2 lbs –10 lbs or 1—5 kg	5—12 lbs or 2—6 kg

Before calibrating the scale, you must ensure your setting in the configuration menu are correct for the P6, P7, P8, P9, and P10. The setting below are the only recommended setting to ensure correct weighing. Setting other than shown below will not allow you scale to weigh correctly and a calibration error will incur.

NOTE: Factory default setting.

Capacity and Resolution	P6	P7	P8	P9	P10
12 x 0.005 lb	**08**	**2**	**3**	**1**	**5**
30 x 0.01 lb	10	0	2	1	3

Calibration

You are not required to configure your capacity and resolution setting unless you need to reduce the accuracy or resolution from the factory default setting. To reduce the setting follow the instructions found in the service manual at www.scalesco.com

Calibrating your scale

To calibrate the scale

1. With no weight on the scale, simultaneously press and **TARE** and **ON/OFF/ ZERO** keys

"CAL –?" is displayed

2. Press the **TARE** key

"CAP –12.00" or "CAP-30.00" is displayed, 500 indicates the capacity setting

"d.005"(lb) or "d .01"(lb) is displayed indicating the resolution of your scale.

"CAL.PO" is briefly displayed, then "0.00" indicating Zero Weight calibration

5. Press the **TARE** key, with no weight on the scale, to perform Zero calibration

"CAL.P1" is displayed, then

"XX.XX" indicating 1/2 capacity or Stage 2 calibration

The display is showing a weight value ", 50% of the scales total capacity.

6. Place the default weight as on the scale **or** add a known weight between 12.5-80% of capacity, see page 17 for examples.

7. Enter the new calibration weight value being used by using the **UNTIS/HOLD and UNITS key**

Key to move flashing digit to next digit for modification. Use to move from "1" 2 to 1 "2" ("_") indicates flashing digit

Key to increment flashing digit from 0-9.

8. Verify the weight on the scale matches the display.

Calibration

9. Press the **TARE** key to begin Half capacity or Stage 2 calibration.

"CAL.P2." is displayed indicating full capacity or Stage 3 calibration

10 Place the default weight as on the scale **or** add a known weight between 25-100% of capacity, see page 17 for examples.

11. Enter the new calibration weight value being used by using the **UNIT/HOLD and TARE key**

12. Verify the weight on the scale matches the display.

13. Press the **TARE** key to begin Full capacity or Stage 3 calibration.

The Indicator will briefly display the weight value used, then "CAL.P0"

14. Remove all weight from platform

15. Press the **TARE** key to perform final "0" calibration

You calibration is now complete, the scale will automatically exit and return to normal weighing mode.

If "CAL.Er" is displayed at anytime during calibration, repeat calibration, and make sure your Stage 2 calibration weight is less than the Stage 3 calibration weight, make sure your scale is in a stable environment. Contact the Scalesco service department at 1-866-587-9773 is you need support.

RS-232 Communication

The SMT-278 includes a 9-pin RS-232 port for transmitting the weight to your host device, using a null modem cable (not supplied). You can purchase this cable from scales-co, PN# S100-001.

The SMT 278 can be configured to:

1. Turn Off RS-232 Interface (p3.0)

2. Continuously output displayed weight format

3. Continuously output Gross, Tare and Net weight format

4. Upon stable weight, transmit displayed weight format

5. Upon Stable weight Transmit Gross, Tare and Net Weight format

RS-232 Communication

NOTE: Bi-directional output available upon request and consultation of use. Contact Scales-co at 1-866-587-9773 for the Service manual for your Model 278 Bench Scale.

Configuration of RS-232 setting, baud rate, data bits and parity

Enter the configuration menu by following the instructions early described in this manual on page 14. The following is the configuration setting for

Parameter	Setting	Definition
RS-232 Mode	P3.0	RS-232 inactive
	P3.1	Continuous output, displayed weight
	P3.2	Continuous output G, T, N
	P3.3	Output displayed wt when stable, 5 sec
	P3.4	Output G,T,N when stable, 5 seconds
	P3.5	Bi-directional Format, see service manual (for use with UPS worldship)
Baud Rate	P4.0	1200 Baud
	P4.1	2400 Baud
	P4.2	4800 Baud
	P4.3	**9600 Baud**
	P4.4	19,200 Baud
Data Format	**P5.0 (8N1)**	**8 digits, None parity, 1 start, 1 stop**
	P5.1 (7O1	7 digits, odd parity 1 start, 1 stop
	P5.2 (7E1)	7 digits, even parity, 1 start, 1 stop

RS-232 Communication

The SMT-278 includes a 9-pin RS-232 port for transmitting the weight to your host device, using a straight pass-thru cable (not supplied). You can purchase this cable from scales-co, PN# S100-001.

Displayed Weight Format:

<LF><reading, minus, decimal point, weight unit><CR><EXT>

Example: “xxxxx12.2lb” (positive wt) or “xxxx-12.2lb” (negative wt)

Gross, Tare, Net Format:

LF><**Gross**: reading, minus, decimal point, weight unit><CR><EXT>
<LF><**Tare**: reading, decimal point, weight unit><CR><EXT>
<LF><**Net**: reading, minus, decimal point, weight unit><CR><EXT>

Example:

“Gross:xxxxx12.02lb”
“Tare: :xxxxx2.02lb”
“Net:xxxxx10.00lb”

Trouble Shooting Tip -

Use Windows HyperTerminal or similar program to test communication.

CABLE PIN-OUT SPECIFICATIONS

PIN	Scale	Host	PIN
1	EMPTY		1
2	TXD (Out)	RXD (In)	2
3	RXD (In)	TXD (Out)	3
4			4
5	Ground	Ground	5
6,7,8,9			6,7,8,9

UPS Worldship Compatible

The SMT 278 is compatible to operate with UPS Worldship when using a special "ini" file loaded onto your PC. Contact Scalesco Measurement at 1-866-587-9773 for the configuration file.

Special Notes:

Once you have loaded the "ini" file. You will need to configure the scale as follows:

Configuration Menu	P3	P4	P5
Parameter Setting	5	3	2

RS-232 Interface

If using an available RS-232 port on your PC, configure your COM Port 1-4 for 9600 Baud rate, 7 data bits, Even Parity, I stop Bit (CONTROL PANEL/ SYSTEM/HARDWARE/DEVICE MANAGER/PORTS (COM & LPT).

Within the UPS Worldship program, select Tool/System Preferences Editor/ Hardware/Scale Port (COM 1-4)/Scale Type (LPS 150/400). Press test scale to confirm correct interface settings.

Using USB to Serial Converter

If using an available USB port on your PC, configure the USB converter to COM Port 1-4 for 9600 Baud rate, 7 data bits, Even Parity, I stop Bit (CONTROL PANEL/SYSTEM/HARDWARE/DEVICE MANAGER/PORTS (COM & LPT).

Within the UPS Worldship program, select Tool/System Preferences Editor/ Hardware/Scale Port (COM 1-4)/Scale Type (LPS 150/400). Press test scale to confirm correct interface settings.

Care and Maintenance

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

Calibration Schedule—In order to maintain the highest accuracy, you should implement a monthly, quarterly or yearly calibration schedule.

Handle with Care—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
_____	• Under Zero Range • Mechanical obstruction	• Remove all weight, zero the scale
0 - - - - - 0 _ _ _ _	• Weight range above or below calibrated zero point • Zero key setting , does not allow you to zero this much weight	• Use Tare Key • Remove weight, zero scale • Perform calibration, a zero shift error has occurred
_ _ _ _	• Weight exceeded scale capacity	• Remove load
CAL - Er	• Error while performing calibration	• Perform new calibration
Lo.bAt	• Low battery condition	• Replace Batteries
EEP.EO	• Electronic Failure	• Replace Indicator
EEP.E1 EEP.E2	• Configuration setting were changed and not stored • P7-P9 setting incorrect	• Calibrate scale to store settings • Configure setting to manual

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.

The SMT-278 has replacement parts available. They are:

- Display indicator with quick disconnect (pre-calibrated)
- AC power Supply
- Load cell

If your scale is damaged and it has been determined that you do not meet the warranty conditions, you can purchase a parts, refurbished or new scales, at the discretion of Scaleco Measurement Technology Inc, directly from us at a 60% discount from the current list price as shown on our website.

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 Scaleco 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.