# ESW Series Digital Scale

# **Operation Manual**

Revision 1.1 June 27, 2000

Transcell Technology inc.



Use only the AC adapter which comes with the scale. Other adapters may cause damage. (AC adapter is optional).

Internal service to this product should be performed by a qualified person only. There are no user serviceable parts inside.



Avoid installing the scale in areas of direct sunlight and high humidity. Also avoid drafts, vibrations and dusty conditions.

Do not mix the type of batteries. Replace all batteries at the same time.

If the scale is not to be used for a long period of time, remove all batteries from the battery compartment to avoid leakage which may cause damage to the instrument.

To extend the life of your digital scale, do not drop items to be weighed onto the platform or over-load the scale beyond its rated capacity. Shock-loading and overloading may damage the load cell and void the warranty.

#### NOTICE:

This equipment has been tested and found to comply with the limits for a 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. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions 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/her own expense.



This device corresponds to requirements stipulated in 73/23/EEC and features radio interference suppression in compliance with valid EC Regulation 89/336/EEC. Note: The displayed value may be adversely affected under extreme electromagnetic influences, e.g. when using a radio unit in the immediate vicinity of the device. Once the interference has been rectified, the product can once again be used for its intended purpose.

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Contents subject to change without notice.

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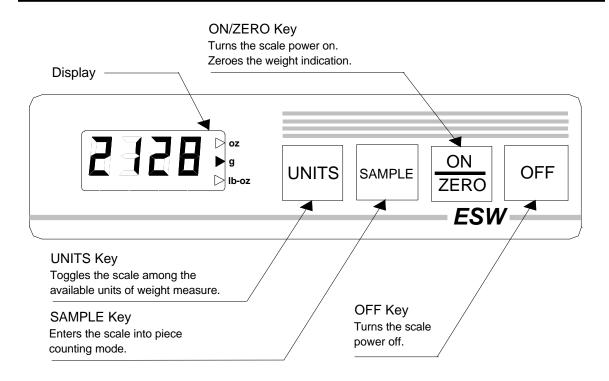
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# **Getting Started**

- 1. Plug the optional AC Adapter into the scale first, then into an AC outlet. For portable operation, install 6-AA size alkaline batteries in the battery compartment located underneath the scale.
- 2. Place the scale on a stable and firm table.
- 3. Press the ON/ZERO key. All segments will briefly appear, followed by the version code and finally an indication of zero weight. The scale is now ready for use.

# Keyboard and Display Description



MODEL	CAPACITY / GRADUATION	MODEL	CAPACITY / GRADUATION
ESW-5	5 lb x 0.1 oz	ESW-2M	2000 g x 1 g
ESW-10	10 lb x 0.1 oz	ESW-5M	5000 g x 1 g

ESW Series Product Matrix

# Operation

#### How to obtain the weight of an item:

- 1. Before weighing an item, make sure the scale shows a zero weight indication. If it does not, remove all items from the platter and press the **ON/ZERO** key.
- 2. Place the item on the center of the scale's platter and allow the weight indication to stabilize.
- 3. Select the desired unit of measure by pressing the **UNITS** key.

#### Sample operation:

- 1. At any time, press the **SAMPLE** key. The scale displays the message "10 0". This is the sample size.
- 2. Add ten identical pieces. The scale shows "10 -".
- 3. Press the **SAMPLE** key again. If the items are heavy enough, the scale is in pieces mode and displays ten pieces with no annunciator. If there is a sampling error, the scale briefly shows "Add" then updates the sample size first to 25 pieces then to 50 pieces. If the operation fails for 50 pieces, then the parts are too light for the scale to process at all.

Message	Explanation	
"0 0 0 0"	Indicates that the weighing capacity of the scale has been exceeded.	
bAtt	Indicates that the batteries need to be replaced.	
Add	Indicates that there is not enough internal resolution to cal- culate the unit weight of an item. This means that the items you are counting are too light for the scale to process at all.	
Lo	Indicates that the unit weight of the items you are sampling is too light for the scale to process accurately.	
Err 2	The scale's calibration information has been lost. Recalibrate scale.	
··_ ··	Indicates that the negative number is beyond the display's capability (-99.9 or –15.9).	
OL	Indicates that the lb-oz display is greater than 9 lb 15.9 oz	

Possible Scale Operation Error Messages

## **Specifications**

**Construction:** 

Housing: Gray ABS Sub-Platform: Metal Platter: Gray ABS

Feet: Non-skid Hard Rubber

Display:

4 Character, 7-Segment LCD

7 Annunciators

Keypad:

4-key Tactile Dome Type

**Over Capacity Annunciation:** 

103% of Full Scale Capacity

Main Power Source:

6-AA size alkaline batteries

**Optional Power Source:** 

North America: AC Adapter, 9 VDC, 100 mA Europe: AC Adapter, 9 VDC, 200 mA

Auto Power Off Period:

Fixed at two minutes

**Optional Serial Port:** 

Full Duplex RS-232, DSUB9F

Weight:

Net Weight: 2.0 lb (0.9 kg) Shipping Weight: 2.5 lb (1.1 kg)

#### Calibration

Your ESW Series scale is ready to use right out of the box. There is no need to calibrate the scale unless you feel that the scale has become inaccurate. It is a good idea to check the calibration of your scale from time to time with a precision test weight. Transcell recommends that you perform a new calibration on your digital scale at least once a year. The ESW must be calibrated with a precision test weight equal to the capacity of the scale. See Page 2 for the product matrix list.

#### To calibrate the scale:

- 1. Remove all items from the platter and turn the scale OFF. Press and hold the **SAMPLE** key while turning the scale back ON.
- 2. The scale shows "CAL" briefly then "ZERO".
- 3. Press the **ZERO** key. The scale then shows "ADD".
- 4. Place the appropriate test weight on the platter and wait for scale to show "SAVE".
- 5. Press the **MODE** key to save the test weight calibration value.
- 6. Once the test weight calibration value has been saved, the scale shows an "End" message.
- 7. You must now turn the scale OFF and then turn it back ON without pressing any keys. Your ESW is now calibrated and ready for use.

MESSAGE	MEANING / POSSIBLE SOLUTION	
Shows "Err" Continuously	The scale is unstable. Make sure you are not violating one of the "Caution" items. Otherwise, the scale may require service.	
Shows "Add" Continuously	The scale is not detecting weight internally. Possible damage to the load cell. Scale requires service.	

Possible Calibration Error Messages

## Warranty and Service Information

Seller warrants that the ESW Series Digital Scale will conform to written specifications, drawings, and other descriptions made by the manufacturer, including any modifications thereof. The Seller warrants the goods against faulty workmanship and defective materials. If any goods fail to conform to these warranties, Seller will, as its sole and exclusive liability hereunder, repair or replace such goods if they are returned within the following warranty period:

#### Ninety (90) days from date of shipment from manufacturer.

These warranties are made upon the express condition that:

- 1) Transcell Technology, Inc. is given prompt written notice upon discovery by Buyer of such non-conformity, with a detailed explanation of the alleged deficiencies;
- 2) Such goods are returned to the Seller at the expense of the Buyer;
- Examination of such goods by Seller discloses that the nonconformity actually exists and was not caused by accident, misuse, neglect, alteration, improper installation improper or unauthorized repair, or improper testing, and
- 4) Such goods have not been modified, altered, or changed by any person other than the Seller or its duly authorized repair agents.
- 5) Transcell Technology, Inc. will have a reasonable time to repair or replace such goods.

THESE WARRANTIES EXCLUDE ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, ORAL OR WRITTEN, INCLUDING WITHOUT LIMITATION WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. SELLER WILL NOT IN ANY EVENT BE LIABLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES.

IN ACCEPTING THIS WARRANTY, THE PURCHASER OR BUYER AGREES TO WAIVE ANY AND ALL OTHER CLAIMS FOR RIGHT TO WARRANTY FROM TRANSCELL TECHNOLOGY, INC. SHOULD THE SELLER BE OTHER THAN TRANSCELL TECHNOLOGY, INC., THE BUYER AGREES TO LOOK ONLY TO THE SELLER FOR WARRANTY CLAIM OR CLAIMS.

No terms, conditions, understanding, or agreements purporting to modify the terms of this warranty shall have any legal effect unless made in writing and signed by a corporate officer of the Seller.