LW MEASUREMENTS, LLC

Professional Weighing Equipment

SCT SERIES Small Counting Scales

SMALL COUNTING SCALE
WITH CHECK-WEIGHING FUNCTION

Operation Manual

SCT 600g

SCT 1200g

Table of Contents

Declaration of Conformity

Declaration of conformity for apparatus with CE mark

We hereby declare that the product to which this declaration refers conforms to the following standards.

Electronic scale:SCT Small Counting Scales

Available Models

SCT 600g

SCT 1200g

Mark applied	EU Directive	Standards
CE	2004/108/EC	EN 61326-1: 2006

Signature:

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Date: 14. 11. 2012

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Introduction

What you should know about this Operation Manual:

Tree® Professional Weighing Equipment products are simple to operate.

Nevertheless, you should read through these operating instructions in their entirety, so that you can make optimum use of the full potential of the weighing scale in your daily work activities.

These operating instructions contain guidance in the form of pictograms and keyboard diagrams, which should help in finding the required information:

For the labeling of potential hazards, please refer to the Safety proportion of this operation manual.

Safety

Representations & Symbols

Note: Important instructions, which involve safety, are highlighted with the appropriate mark:

⚠ DANGER

Safety recommendations

When using the weighing equipment in surroundings with increased safety requirements, the corresponding regulations must be observed.

The weighing scale may only be used with the power adapter supplied.

Before connecting the power adapter to the scale, the user must ensure that the operating voltage stated on the power adapter is compliant with the mains voltage.

If not, please contact Customer Service at the address above.

If the power adapter or its cable is damaged, the weighing scale must immediately be disconnected from the electricity supply (pull out the power adapter).

If there should be any reason to believe that it is no longer safe to operate the scale, it should be immediately unplugged from the electricity supply (pull out power adapter) and secured against inadvertent operation.

In carrying out maintenance work, it is essential to follow the recommendations set out in maintenance and servicing.

The weighing scale must not be operated in an area subject to explosion risks.

Care must be taken when weighing liquids to ensure that no liquid is spilled into the inside of the scale or into connections on the rear of the equipment or the power adapter. If liquid is spilled on the scale, it must immediately be unplugged from the main electricity supply (pull out power adapter).

The weighing scale may be operated after it has first been inspected by a service technician.

These operating instructions must be read by each user and should be easily accessible at the workplace at all times.

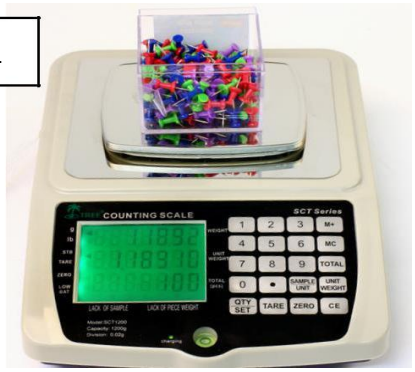
Weight Scale

Construction & Functions

The weighing scale consists of the following parts;

- The Scale body (1)
- The Scale pan (1)
- The Adapter (2)
- Operation manual

1



2

Functions

The LCT Series are high-quality electronic precision weight scales designed to function as counting scales and check-weights with the following specifications.

- Turn off the weighing machine using the hard switch located on the bottom of the weighing machine.
- Press and hold UNIT WEIGHT key and then turn on the weighing machine. The display will show"------"and then "b = XX" (beeper), on the first line, A-XX (auto off) on the second line and L = XX (backlight) on the third line.
- Press the QTY/SET key to toggle between activating the beeper on or off.
- Press the TARE key to select auto off time.
- Press the ZERO key to toggle between activating the backlight On, Off, Auto (Au). To save your settings, and begin weighing, turn the machine off and then back on again.
- When there is no weight on the platter, press the SAMPLE/UNIT key to select the weighing unit (g or lb).

Technical Data

Model Number	**Capacity**	**Division**	**Weighing pan Size**
SCT-600	600g		
SCT-1200	1200g		
Package Standard Carton	15 x11 x 7 in^3		
Package Master Carton	4 Units in one box: 21 x 14 x 15 in^3		
Shipping Weight	7 lbs./single unit 30 lbs./master carton		
Operating Temperature	32-104 ºF		
Power Source	Rechargeable batteries or AC/DC Adapter 10V DC 500mA		

Features

- Auto zero tracking
- Low battery indication
- Large LCD
- Stability indication
- Auto calibration
- Auto back light
- Unit switching g or lb
- Variable g or lb reference weight calibration software
- Pieces counting
- 1.3 million internal resolution
- 60,000 display resolution
- 24 bit A/D processor
- Highest quality sensor used
- Bottom sensor support and steel thread footing

Application & Conformity

The Following are instructions of how to correctly use the weight scale:

The weighing scale may only be used for the weighing of solid-materials and of liquids filled into secure containers.

The maximum capacity load of the weighing scale must never be exceeded, otherwise the weighing scale may be damaged.

In using the weighing scale in combination with other devices as well as with devices produced by other manufacturers, the appropriate regulations for the safe use of the relevant attachments and their application in accordance with instructions must be observed.

The weighing scale has been manufactured and tested in accordance with the standards and recommendations set out in the declaration of conformity.

The power adapter supplied for the weighing scale complies with the appropriate electrical protection class.
The following applies to all SCT series weighing scales
Power supply:
Input: 110 or 230V AC (+/-15-20%); 50 to 60Hz
Output: 10v DC 500mA
Allowable ambient conditions
Temperature: 32 - 104ºF 0°C - 40°C
Relative humidity: 25% - 85%, non-condensing

Getting Started

The scale is packaged in an environmentally-friendly carton, which provides optimum protection for the balance during transportation.

We suggest that you keep the original packaging in order to avoid damage if you are shipping or transporting the scale to a different location. It is also the best way to keep it in the best conditions if it will not be used for an extended period of time.

In order to avoid damage, please follow the instructions provided below, when unpacking the scale:

- Unpack the scale carefully.
- When outside temperatures are very low, the scale should be stored for a couple hours and kept in its box in a dry room at normal temperature, so that no condensation settles on the unit when opening the box.
- Check the scale immediately after unpacking for any external visual damage. If there is any damage on scale, contact customer service immediately.
- If the scale is not to be used immediately after purchase, it should be stored in a dry place where fluctuations in temperature are low. (Reference pg.).
- Read through these operating instruction, before you work with the unit and pay attention to the Safety recommendations (reference Safety pg. 6).

Delivery

Inspect delivery for completeness immediately upon unpacking all components.

Checklist for complete delivery

	Component delivered present yes / no
Weighing unit body	
Weighing pan	
Power adapter	
Operating manual	

Assembly & Installation

The weighing scale is delivered in a partly dismantled condition. Assemble the individual components in the following sequence:

- Place your machine on a level, clean, and dry surface to obtain accurate readings.
- Place the plastic platter on top of the scale, flat side facing up so the platter sits firmly on the machine with the four “legs” inserted into the corresponding four receptacles.
- Place the stainless steel platter on top of the plastic platter with the flat side facing up.
- Unwrap and place the clear plastic bowl, open side facing up, on top of the stainless platter.

Connecting the AC Adapter

The following Safety recommendations must be observed when connecting the balance:

⚠ DANGER

The Scale should only be connected to the mains voltage socket with the power adapter supplied. Check before connecting the power adapter to the mains socket, that the operating voltage stated on the power adapter complies with the local mains voltage.

If the operating voltage is not the same as the mains voltage, the power adapter must not be connected to the mains socket and contact customer service.

Placement of Scale

The location in which the scale is placed is very important in order for the scale to work to its full potential. Certain conditions can affect the capabilities of the scale, conditions like: the presence of air flow, variations in temperature, and direct sunlight. Please follow the recommendations given below in choosing a location to place your scale.

- Place the scale on a solid, firm and preferably vibration-proof, horizontal base
- Make sure that the weighing machine cannot be shaken or knocked over
- Protect from direct solar radiation
- Avoid drafts and excessive temperature fluctuations
- Avoid placing the scale near or on any magnetic surfaces.

The balance is fitted with one bubble level, and adjustable feet for level-control that allow for small height differences or any unevenness in the surface on which the balance is placed.

The screw feet must be adjusted so that the air bubble is precisely in the center of the sight glass of the bubble level (see Fig. 3.2)

Place the scale horizontally and keep the bubble inside the bubble level aligned with the circle (Fig.3.2). In order to get exact measurements, the balance must be carefully leveled after each re-location.

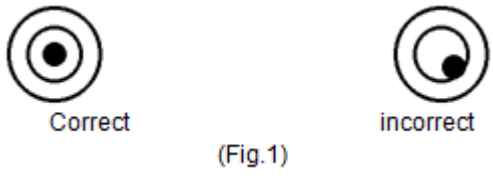


Fig. 3.2 correct leveling with the aid of the bubble level

Application Menu

Display messages & Key functions

Display messages:

- Weight display indicates the gross or net (when the tare function is activated) weight on the platter.
- Unit weight display indicates the average or set unit piece weight.
- Total display is the accumulated total pieces on the platter.
- Zero indicator turns on when the machine is in the Zero position.
- Tare indicator turns on when the Tare function is used.
- Low sample weight indicator turns on when the sample number is not enough for accurate weighing. The weighing machine will start counting but the error may be high. Press the CE key to clear and start over.

- Low unit value indicator turns on when the sample unit is not heavy enough for accurate counting. Operator may still use the weighing machine if this indicator is on, but counting error might occur

Key functions

- Numeric (0-9) key is used for setting numeric data for sample number, sample weight or to limit the HI/LO settings.
- Decimal point (.) key is used to set the decimal position of the sample weight
- Zero key sets or re-adjusts the machine into the correct zero position.
  - Zero Range: 0-10% of full capacity
- Tare key subtracts the gross weight on the platter (box or container, etc) to the tare weight.
  - Tare Range: 10-100% of full capacity. Multiple TARE allowed within capacity**.**
- Sample unit key is used when setting the counted sample numbers on the platter into memory.
- Unit key is used when setting the known unit weight data on the machine during normal
- CE Key is used for cancelling the numeric setting data or to cancel the previous unit weight data.
- Qty. /Set key is used to alternate between normal counting and quantity check operation.
- [M+] Memory key is used to store the count data, and can store up to 99 data sets.

Clearing the total weight

- Press the TOTAL key to show the total pieces on the third line of the display.
- Press the MC Key to show the unit that will be cleared.
- Press the CE key to confirm clear.

Operation

Clearing tare weight

- Place an empty container on the platter. Press the TARE key. The WEIGHT display shows 0.000.
- When the container is removed from the platter, the WEIGHT display will show a minus (-) value which is the weight of the container.

Clearing previous tare value

- Remove the weight from the platter then press the TARE key so that the TARE indicator will turn off and the WEIGHT display returns to Zero.

Sample setting methods

Number setting: (when counting any unknown weight)

- Place the pre-counted “X” number of samples on the platter. The total weight will be displayed. Set the “X” number of samples by using the numeric keys and then press the SAMPLE/UNIT key.
- Unit weight on the display shows the average piece weight of the sample.
- Total (pcs) on display will show the number of pieces included in the sample, place more pieces on the platter to be added to the total sample count.

Unit weight setting: (when unit weight is known)

- Place samples on the platter. Using the numeric keypad, key in the average piece weight. Press the unit weight key on the keypad.
- Total (pcs) on the display will show the total number of pieces. Add on more pieces to be counted.

Clearing previous Sample setting

- Press CE key to clear previous setting.
- Press [CE] again to cancel the previous unit weight and sample setting.

Alarm function

- To avoid counting errors, this weighing machine has a useful alarm function to inform the operator of counting errors in the event of low sample size or low sample weight.

Unit Weight Enhancement

- The weighing machine will automatically adjust and calculate a new average unit weight when more samples are slowly placed on the scale. This ensures higher accuracy as samples are now based on a larger population size.

Hi / LO check-weighing with counting

- The SCT series has a useful check function to inform the operator if the total pieces counted has reached the desired lower limit and/or the upper limit. *(EXAMPLE: If the operator wishes to count 1,000 pieces for every package, he/she can set the lower limit and the upper limit as 1,000 pieces by following the steps below.)*
- Press the Qty/Set key to enter the quantity alarm menu.
- Press the Zero key to turn on the check weighing. Display will show CH=ON. Press the Zero key if the display shows CH=OFF. The Zero key will toggle between having the quantity alarm on or off.
- To set the lower and upper count limit, press the Tare key to select the Hi/Lo limits. For example; “L = 990,” press 990 on the numeric keypad, then Tare to switch over to: H = 1010,” press 1010 on the numeric keypad.
- Press the QTY/SET key to confirm and return to counting mode. The alarm will beep at below 990 pieces and at a different tone for more than 1010 pieces.

Calibration

Using an External Calibration Weight:

Note: Calibration may be required when the weighing machine is initially installed or if it has been moved a substantial distance. The weighing machine should be allowed to warm up for 10 minutes before calibration.

Single segment calibration (recommended)

- Press and hold the ZERO key, and then press the ON/OFF key to turn the weighing machine on. The display will show SCALE on the first line, CAL-0 (flashing) on the second line and the AD value on the third line.
- Press the SAMPLE/UNIT key to select the calibration unit to be used as either g or lb.
- When the AD value is stable, press the ZERO key to calibrate ZERO. After 2-3 seconds, the second line will show 0.
- Set the calibration weight by using the numeric key pad (0-9) and then place the calibration weight on the platter. Once the stable indicator light is displayed, press the ZERO key. The second line of display will show 00000. Calibration is now complete.
- Turn off the power, then turn it back on again. Place a weight on the platter to ensure weighing is correct. If not, repeat the above steps.

Linearity Calibration

- Turn off the Scale.
- Press and hold the “Tare” key and then turn on the scale. The display will show line on the first row, CAL-) (flashing) on the second row and AD value on the third row.
- When the AD value is stable, press the “Zero” to calibrate. After 2 or 3 seconds, the second line on the display will show 200 for SCT600 or 400 for SCT 1200.
- Place a 200g weight for SCT600 (400g for SCT1200) on the platter and press the Zero when the stable AD value is displayed. After 2 or 3 seconds, the display will show 400 for SCT600 (800 for SCT1200).
- Place a 400g weight on the SCT 600 (800g for SCT1200) platter and press Zero, when the stable AD value is displayed. After 2 or 3 seconds the display will show 600 for SCT600 (1200 for SCT1200).
- Place a 600g weight for SCT600 (1200g for SCT 1200) on the platter and press Zero when the stable AD value is displayed. After 2 or 3 seconds, the display will show 00000. Calibration is now complete.
- Press the power key twice. Then place a weight on the platter to verify weighing is correct. If, not repeat the above steps.

Maintenance & Service

⚠ DANGER

For maintenance-work, the balance must be disconnected from the power supply (remove power adapter plug from socket). Also ensure that the balance cannot be connected to the power supply during the work by a third party.

Make sure that no liquid spills into the scale while performing maintenance work. If liquid is spilled on the scale, it must be inspected by a service technician.

Regularly perform maintenance to the weighing pan and the weighing pan holder by removing any dirt or dust from under the weighing pan and on the weighing scale housing. Use a soft brush or a soft, lint-free cloth, moistened with a mild soap solution

⚠ CAUTION

Never use solvents, acids, alkalis, paint thinners, scouring powders or other aggressive or corrosive chemicals for cleaning; these substances can cause damage to the surfaces of the scale housing.

Transportation & Storage

Your weighing machine is a precision instrument, treat it carefully. Avoid shaking, severe impacts and vibration during the transportation. Make sure that there are no marked temperature fluctuations during the transportation and that the weighing machine does not become damp (condensation).

If you would like to take the weighing machine out of service for an extended period, disconnect it from the electricity supply, clean it thoroughly (refer to Maintenance & Service) and store it in a place which meets the following conditions:

- No violent shaking, no vibrations
- Minimum temperature fluctuations
- No direct solar radiation
- Minimum moisture

Warranty

The products are under warranty against factory defects for a period of two (2) years from the date of shipment.

For Customers within the lower 48 states of the continental United States. LW Measurements will pay for fright both ways for the first 30 days after purchase. After 30 days expire the customer is responsible for shipping the product back to us. After the product is received we will inspect it and as necessary we will repair or replace and will ship the product back to the customer at our expense.

Any new scales returned for warranty must be properly packaged in the original box. If they are not properly packed an in the original box, the customer pays for shipping cost. If we determine there is a factory defect, we will pay for the shipping back. If we determine that it is not a factory defect, the customer will pay shipping.

For Customers outside the lower 48 States, including Mexico, Canada, Puerto Rico, Hawaii, Alaska and all other countries, customers must pay for shipping.

Our warranty does not cover misuse or neglect including but not limited to battery or water damage, overloading, and chewed or cut wires. If the product is found to have been misused or damaged by the customer, LW measurements is not responsible for the cost of return.

For warranty claims please go online to lwmeasurements.com and fill out the warranty submission form or call your customer service representative