

Simple Weighing Scale

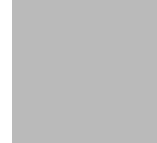
SW Series

OWNER'S MANUAL



9002-SW3-0033-0

2006.05


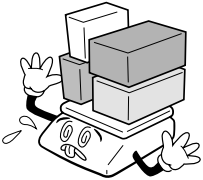

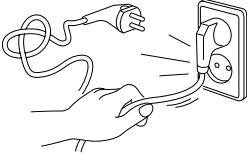

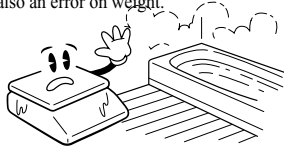
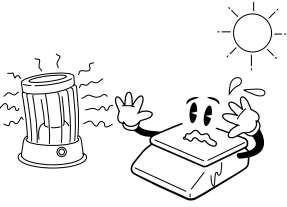
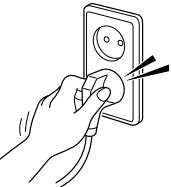


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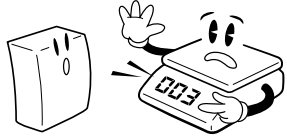
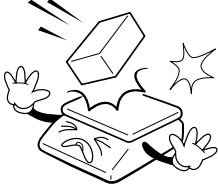
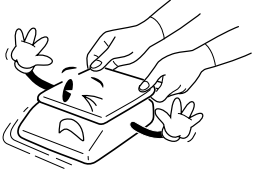



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PRECAUTIONS

Precautions when installing the scale. To ensure that you get the most from your scale, please follow these instruction.

⚠ Warning		
<p>Do not disassemble the scale. When any damage or defect occurs, contact your CAS authorized dealer immediately for proper repair.</p> 	<p>Do not overload beyond the maximum weight limit.</p> 	<p>Scale must be grounded to minimize electricity static. This will minimize defect or electric shock.</p> 
<p>Do not pull the plug by its cord when unplugging. Damaged cord could cause electric shock or fire.</p> 	<p>To prevent from fire occurring, Do not place or use the scale near flammable or corrosive gas.</p> 	<p>Besides waterproof product, please do not spray water or use in humid area. Due to the deterioration of electronic part, it may cause an electric shock, fire and also an error on weight.</p> 
<p>Avoid placing the scale near heater or in direct sunlight.</p> 	<p>Insert plug firmly to wall outlet to prevent electric shock.</p> 	

Make sure to plug your scale into the proper power outlet. For maximum performance, plug into a power outlet 30 minutes before the usage for warm up.

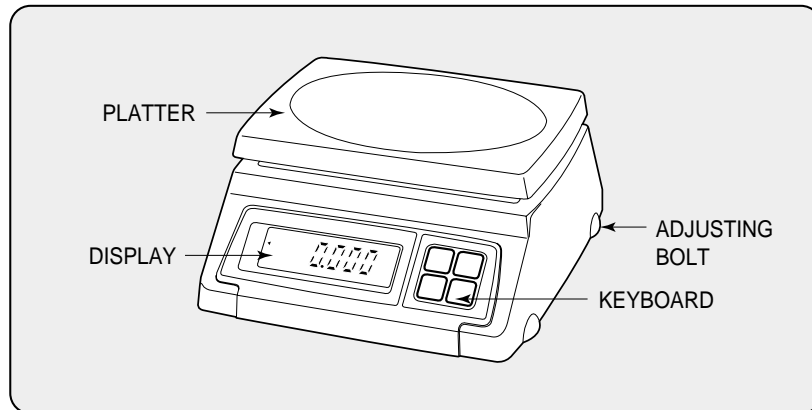
⚠ Attention		
<p>For consistent and accurate reading, maintain periodical check by your CAS authorized dealer.</p> 	<p>Avoid sudden shock to the scale. Internal mechanism could be damaged.</p> 	<p>Grab the bottom of the scale when moving. Do not hold by the platter.</p> 
<p>Place the scale on firm and temperature consistent environment.</p> 	<p>If the scale is not properly level, please adjust the 4 legs at the bottom of the scale (turn legs clockwise or counterclockwise) so as to center the bubble of the leveling gauge inside the indicated circle.</p> 	
<p>Keep the scale away from other electromagnetic generating devices. This may interfere with accurate reading.</p> 		

PREFACE

Thank you for purchasing CAS SW-1S/1C / 1W Series. These series have been designed with CAS reliability, under rigid quality control and with outstanding performance. Your specialty departments can enjoy these high quality reliable CAS products. We believe that your needs will be satisfied and you will have proper reliability. This manual will help you with proper operation and care of the SW-1S/1C Series. Please keep it handy for future reference.

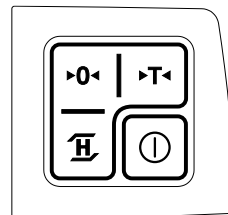
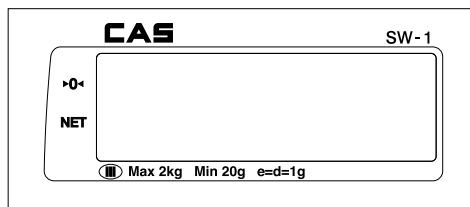
NAMES AND FUNCTIONS

OVERALL VIEW



DISPLAY & KEYBOARD

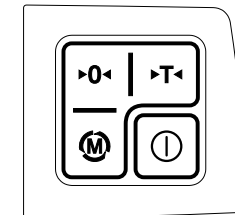
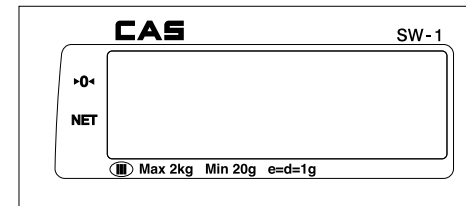
■ SW-1S, SW-1W



■ KEY FUNCTIONS

KEYS	FUNCTIONS
	Used to set the zero point.
	Used to input or cancel the weight of tare.
	Used to make the weight of commodity stable. This weight is average value.
	Used to turn on and off the scale.

■ SW-1C



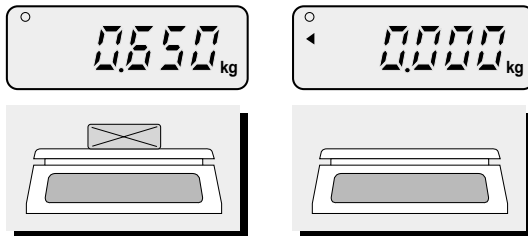
■ KEY FUNCTIONS

KEYS	FUNCTIONS
	Used to set the zero point.
	Used to input or cancel the weight of tare.
	Used to change the unit of weight, and shown as following sequence on the display. [Kg] → [WL on or off] → [PCS] → [Kg]
	Used to turn on and off the scale.

OPERATIONS

- Turn on the display by pressing \odot key. Then, the display will show all the segments and count up "0" to "9". You may stop this automatic counting by pressing the $\bullet 0 \bullet$ key.
- When you turn on the display, make sure that platter is empty. Otherwise, display will show "Err", an error of initial zero range. Please refer to "ERROR MESSAGE" section for more information on page 14.
- When the weight becomes stable the display shows the stable sign (\circ) on.
- You may need to make it "0.000" by pressing $\bullet 0 \bullet$ key unless the display indicate "0.000" under the empty platter.

1. Simple Weighing Mode

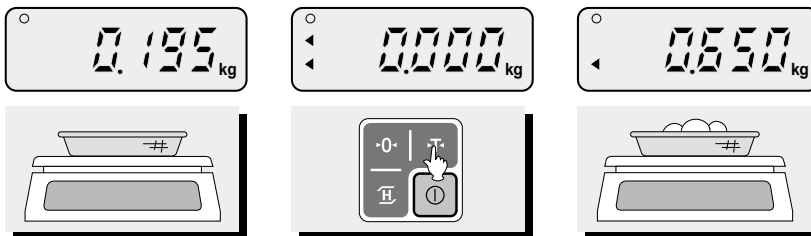


① Place a commodity on the platter.

② Remove the commodity from the platter.

2. Weighing with Tare

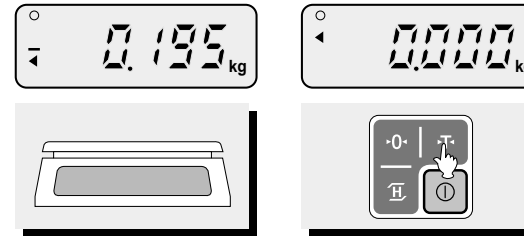
- TARE means the weight of container being used for a commodity.
- TARE key function is to subtract the weight of the container from full weight loaded.



① Place a container on the platter.

② Press the $\cdot T \cdot$ key.

③ Place a commodity into the container, then the display will show only the weight of the commodity.



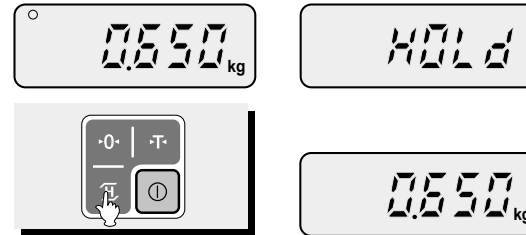
④ Remove container and commodity, then the display will show the weight of the container with "-" symbol.

⑤ Press the $\cdot T \cdot$ key, then display will show the "0.000".

3. Changing Unit of Weight (kg, lb, oz, g)

- Press the M key first. Holding it, press the $\cdot T \cdot$ key in the simple weighing mode. The display shows the "UnIt" shortly and then you may select kg, lb, or oz as the unit of weight.

4. Hold Function (SW-1S, SW-1W)

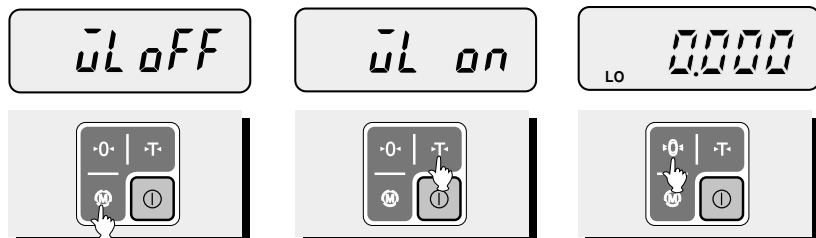


② "HOLD" will be displayed twice

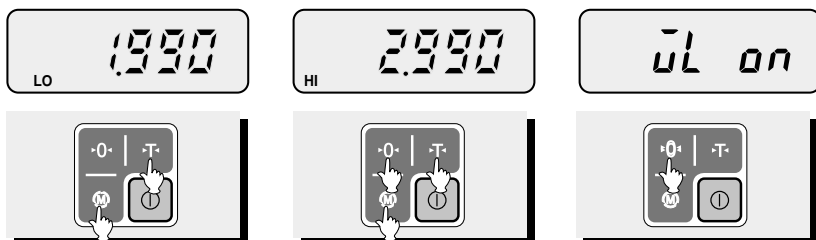
③ Then average value will be show twice And the "HOLD" function will be removed automatically

① When the weight is unstable, press the H key.

5. Comparator Function - HI / LOW Limit Setting (SW-1C only)

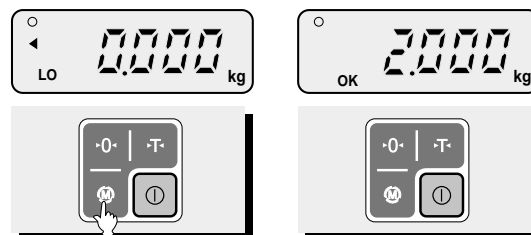


- ① Press the **M** key until the display shows "WL OFF". "WL OFF" means that comparator function is not activated.
- ② Press **-T-** key to activate this function. The display shows "WL ON".
- ③ Press **+0+** key once to set up the low limit. The display shows "0.000" and the first number flashes.



- ④ Press the **M** key to have number increase. To move flash to next digit, press the **-T-** key.
- ⑤ Press **+0+** key to set up HIGH limit. The display shows "0.000" and you can change these numbers by pressing **M** key. If you want to move to next digit you can go by pressing **-T-** key.
- ⑥ If you set up HIGH limit you can go out by pressing **+0+** key, and you can see "END" message shortly and "WL on" message on the display.

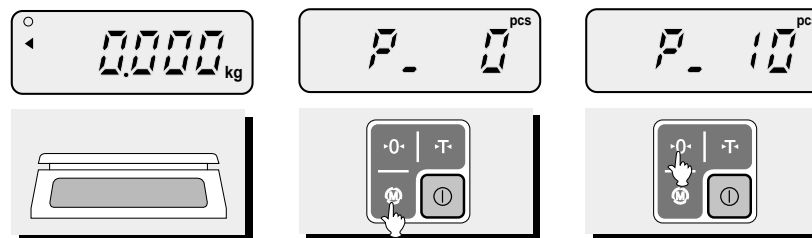
- ⑦ If you set up HIGH limit and LOW limit incorrectly, "Err" will be shown on the display. Then you may need to set it up again. For example, LOW LIMIT=2.990 kg and HIGH LIMIT=1.990 kg this is incorrect setting because HIGH limit is lower than the LOW limit. When HIGH and LOW limit are set as the same or above maximum capacity it still shows "Err" message.



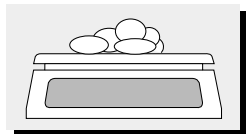
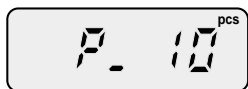
- ⑧ If you want to go back to the simple weighing mode just press **M** key twice.
- ⑨ Suppose that the HIGH limit and LOW limit are set up as 2.990kg and 1,990kg respectively. If the weight loaded is 2kg between HIGH and LOW limit the display shows "OK" and the scale continues to beep slowly. If the weight loaded is above 2.990kg, HIGH limit, the scale continues to beep rapidly.

6. Counting Function (SW-1C only)

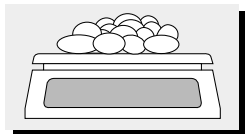
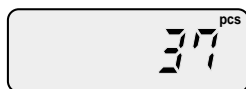
■ Counting without Tare



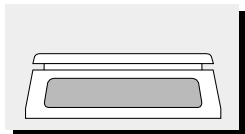
- ① Initial display as above.
- ② Press **M** key twice to go to sample unit selection mode.
- ③ Press **+0+** key to select the number of sample unit. You can select 10, 20, 30, 40, 50, 60, 70, 80, 90, 100, 200, 300, 400, or 500 as a sample unit.



④ If you select "P_10" as a sample unit, then please put 10 sample units on the scale. Then press $\cdot T \cdot$ key to set sample units.

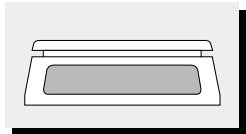


⑤ Put all of commodities you wish to count, and then check the number of pieces on display.

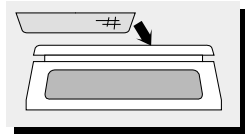
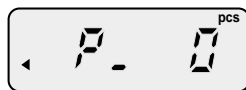


⑥ Remove all of commodities from the scale.

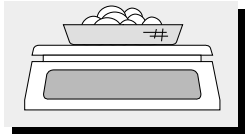
■ Counting with Tare



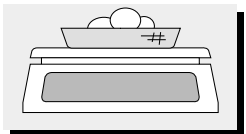
① Press \odot key twice to go to sample unit selection mode. "PCS" is shown on the display, then press $\cdot 0 \cdot$ key to select the number of sample unit.



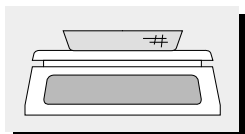
② Put the container on the scale and press $\cdot T \cdot$ key to set weight of tare. You can select 10, 20, 30, 40, 50, 60, 70, 80, 90, 100, 200, 300, 400, or 500 as a sample unit, by pressing $\cdot 0 \cdot$ key.



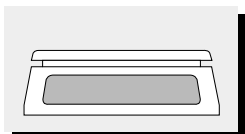
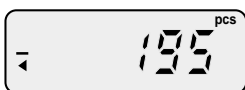
③ If the number of selected sample unit is 20, please put 20 sample units on the scale. Then press $\cdot T \cdot$ key to set unit weight.



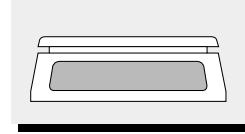
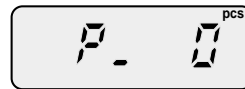
④ Put all of commodities you wish to count, and then count the number on display.



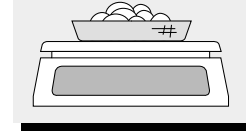
⑤ Remove all of commodities from the scale.



⑥ Remove the tare from the platter.



⑦ Press "Tare" key to exit from tare function.

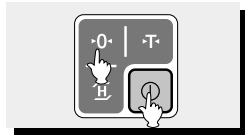


⑧ When you try to set the number of sample unit at the ③ stage the display may show "LACK" message shortly. The result of counting may be incorrect in the following cases.

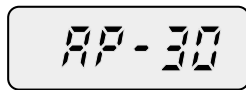
- a. unit weight $\leq 1/2 e^*$
- b. weight loaded $\leq 2\%$ of maximum weighing capacity.

7. How to Set Auto Power Off

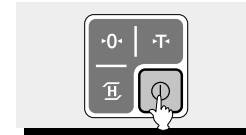
Auto-Power off function is to automatically power off as time is set. This function is helpful to save battery, which is not in use. The following is the setting procedure of Auto-power off.



① When the scale is turned off press \odot key, holding $\cdot 0 \cdot$ key. Then you will see the "AP-10". (If you have set this before, display will show previous value.)



② Press the $\cdot T \cdot$ key until the display shows the "AP-x0" that you wish to take. (Refer to TABLE 1.)



③ Press the \odot key, and then the scale saves what you programmed and shows all the segments, counting up "0" to "9".

TABLE 1.

DISPLAY	FUNCTION
AP-00	This function does not automatically power off.
AP-10	This function does automatically power off when the scale is not in use for 10 minutes.
AP-20	This function does automatically power off when the scale is not in use for 20 minutes.
AP-30	This function does automatically power off when the scale is not in use for 30 minutes.

*"e" value may be various on capacity of product model.

Please refer to "SPECIFICATION" on page 15. For example, a product model which capacity is 2.000kg has 1g as "e" value

BATTERY MAINTENANCE

LOW BATTERY WARNING

When the battery is low the display shows the "BAT" sign.

You can replace the battery new one.

If you still use the scale without replacing the battery the scale may provide incorrect result on measurement.

ERROR MESSAGE

ERROR	REASONS	SOLUTIONS
Err	An error of the initial zero range	Set the platter empty.
Init	Problems on Analog Module	Try to turn OFF and ON the scale. Call your CAS dealer if still problems.
OFL	Overload on the platter	Remove it from the platter Do not put something exceeding maximum capacity on the platter
UNStA	Unstable conditions of scale	Make the scale stable conditions

SPECIFICATIONS (SW-1S/1C/1W)

MODEL	SW1S /1C-02	SW1S/1C /1W-05	SW1S/1C /1W-10	SW1S/1C /1W-20	
Capacity / e	Low	2kg/0.001kg	5kg /0.002kg	10kg/0.005kg	20kg/0.01kg
	Middle	2kg/0.0005kg	5kg /0.001kg	10kg/0.002kg	20kg/0.005kg
	High	2kg/0.0002kg	5kg /0.0005kg	10kg/0.001kg	20kg/0.002kg
External Resolution	Low	1/2,000	1/2,500	1/2,000	1/2,000
	Middle	1/4,000	1/5,000	1/5,000	1/4,000
	High	1/10,000	1/10,000	1/10,000	1/10,000
Max. Tare	Full Tare				
Display	110 × 35[mm]/43" × 13.8" 5 digit LCD				
Symbols	STABLE, ZERO, TARE, g, kg, lb, oz, Low Battery HI/OK/LO & PCS (SW-1C only)				
Keys	ZERO, TARE, HOLD(SW-1S, SW-1W), MODE(SW-1C only), ON/OFF				
Functions	Weighing Hold Function (SW-1S, SW-1W) WaterProof level IP66(SW-1W only) Counting-Counting Sample Range : 10-100,200,300,400,500 (SW-1C only) Weight Comparison Function : hi, ok, low(SW-1C only) Weight Unit Conversion Function : kg, lb, oz				
Dimensions	260(W) × 287(D) × 137(H)[mm]/102(W) × 113(D) × 54(H)[inch] 278(W) × 317(D) × 141(H)[mm]/109(W) × 125(D) × 56(H)[inch] (SW-1W : WaterProof Type)				
Platter size	230(W) × 190(D)[mm]/90.55(W) × 74.80(D)[inch] 247(W) × 195(D)[mm]/97.24(W) × 76.77(D)[inch] (SW-1W : WaterProof Type)				
Weight	2.8kg 3.7kg(SW-1W : WaterProof Type)				
Power	1.5V × 6 units (D size Battery) or 9V Adapter				
MINIMUM VOLTAGE OF THE BATTERY	About 5.8V				
Battery Life	Approx. 800 hours (Manganese battery)/ 1600 hours (Alkaline at 20°C/68°F)				
Operating Temperature	-10°C ~ +40°C / 14°F ~ 104°F				
Option	9V Adapter 300mA, Rear Display, Stainless Tray (SW-1S, SW-1C)				

► Notice: Specifications are subject to change for improvement without notice.

MEMO