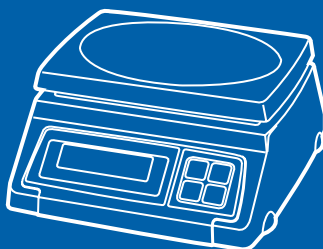


TOTAL WEIGHING SOLUTION™

SW1S/1C/1W

RETAIL WEIGHING SOLUTION™



CAS

www.globalcas.com

OWNER'S MANUAL

CONTENTS

PRECAUTIONS	4
PREFACE	6
NAMES AND FUNCTIONS	6
OPERATIONS	9
1. Simple Weighing Mode	9
2. Weighing with Tare	9
3. Changing Unit of Weight	10
4. Hold Function (SW-1S , SW-1W).....	10
5. Comparator Function (SW-1C only).....	11
6. Counting Function (SW-1C only)	12
7. How to Use Print(Optional).....	14
8. How to Set Auto Power Off	20
BATTERY MAINTENANCE	21
ERROR MESSAGE	21
SPECIFICATIONS	22

PRECAUTIONS

Warning

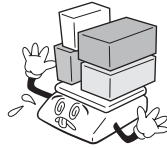
Precautions when installing the scale. To ensure that you get the most from your scale, please follow these instruction.

Do not disassemble the scale.

When any damage or defect occurs, contact your CAS authorized dealer immediately for proper repair.



Do not overload beyond the maximum weight limit.



Scale must be grounded to minimize electricity static.

This will minimize defect or electric shock.

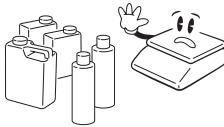


Do not pull the plug by its cord when unplugging.

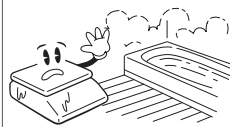
Damaged cord could cause electric shock or fire.



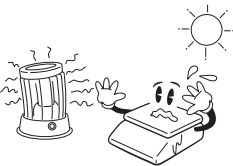
To prevent from fire occurring, Do not place or use the scale near flammable or corrosive gas.



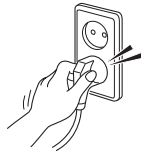
To reduce electric shock or incorrect reading, Do not spill water on the scale or place it in humid condition.



Avoid placing the scale near heater or in direct sunlight.

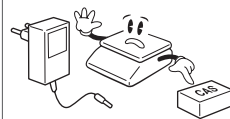


Insert plug firmly to wall outlet to prevent electric shock.



Use proper Adapter.

Incorrect adapter could damage the scale.

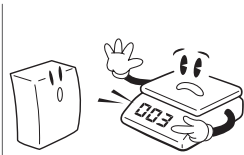


PRECAUTIONS

Attention

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

For consistent and accurate reading, maintain periodical check by your CAS authorized dealer.



Avoid sudden shock to the scale.

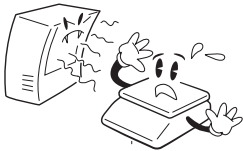


Grab on the bottom of the scale when moving.



Keep the scale away from other electromagnetic engering devices.

This may interfere with accurate reading.



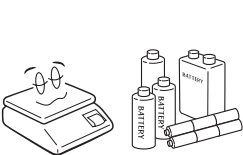
Place the scale on firm and temperature consistent environment.



By adjusting 4 corners of the scale, set the scale even using the built in scale leveling indicator.



Take the battery out when scale is not in use for long time. Leakage from the batteries is hazardous.



PREFACE

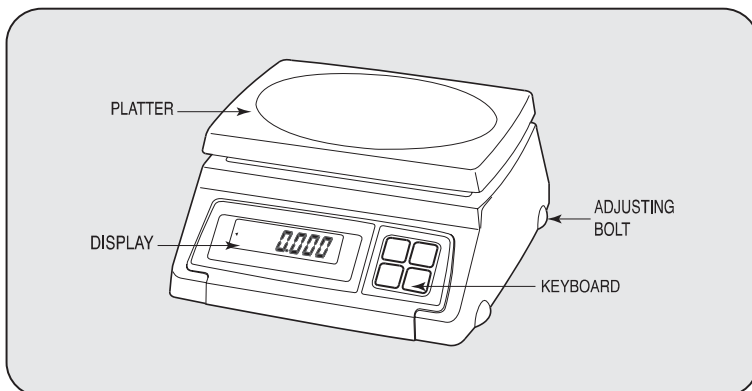
Thank you for purchasing CAS SW-1S/1C / 1W Series.

These series have been designed with CAS reliability, under rigid quality control and with outstanding performance. Your special 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/1W Series. Please keep it handy for future reference.

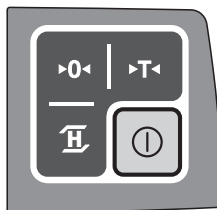
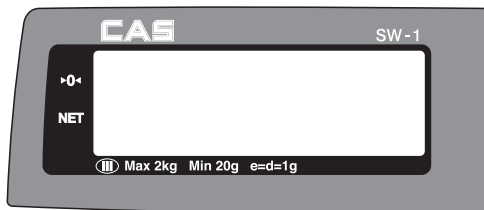
NAMES AND FUNCTIONS

OVERALL VIEW







DISPLAY & KEYBOARD

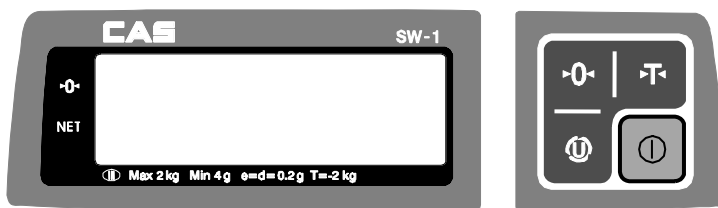
■ SW-1S, SW-1W (HOLD Version)







■ 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.

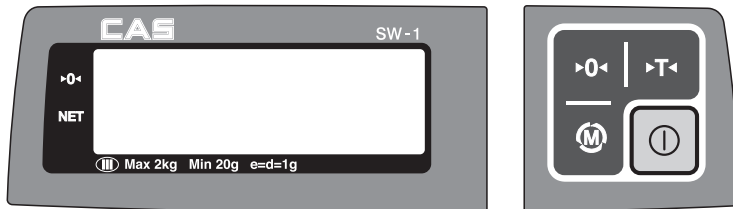
■ SW-1S, SW-1W (Unit Version, Option)







■ KEY FUNCTIONS

KEYS	FUNCTIONS
	Used to set the zero point.
	Used to input or cancel the weight of tare.
	Used to convert the unit of weight.
	Used to turn on and off the scale.

■ SW-1C



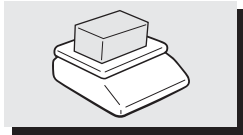
■ KEY FUNCTIONS

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.

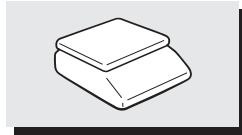
OPERATIONS

- Turn on the scale by pressing ⓪ key. Then, the display will show all the segments and count up "0" to "9". You may stop this automatic counting by pressing the $\bullet\text{0}\bullet$ key.
- When you turn on the display, make sure that platter is empty. Otherwise, display will show "Err 1", an error of initial zero range. Please refer to "ERROR MESSAGE" section for more information on page21.
- When the weight becomes stable the display shows the stable sign (\circ) on.
- You may need to make it "0.000" by pressing $\bullet\text{0}\bullet$ key unless the display indicate "0.000" under the empty platter.

1. Simple Weighing Mode



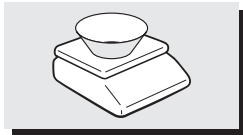
① Place a commodity on the platter.



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.



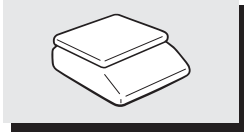
① Place a container on the platter.



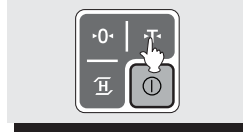
② Press the $\bullet\text{T}\bullet$ key.



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 **T** key, then display will show the "0.000".

3. Changing Unit of Weight (SW-1S,SW-1W,Unit ver. only)

- Press the **U** key in the simple weighing mode.
You may select kg, lb, or oz as the unit of weight.

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



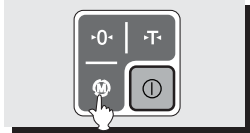
② "HOLD" will be displayed twice



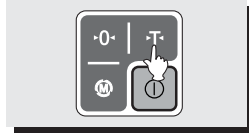
③ Then average value will be show twice And the "HOLD" function will be removed automatically

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

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



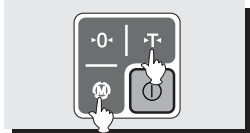
① Press the **M** key until the display shows "WL OFF". "WL OFF" means that comparator function is not activated.



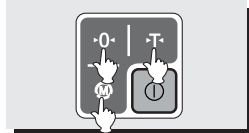
② Press **T** key to activate this function. The display shows "WL ON".



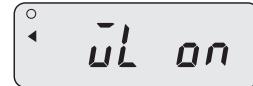
③ Press **0** key once to set up the low limit. The display shows "0.000" and the first number flashes.



④ Press the **M** key to have number increase. To move flash to next digit, press the **T** key.

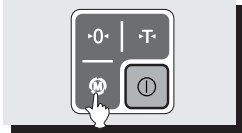


⑤ Press **0** key to set up HIGH limit. The display shows "0.000" and you can change these numbers by pressing **M** key. If you want to move to next digit you can go by pressing **T** key.



⑥ If you set up HIGH limit you can go out by pressing **0** key, and "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.



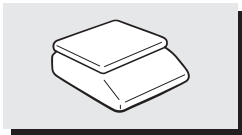
⑧ If you want to go back to the simple weighing mode just press **M** key twice.



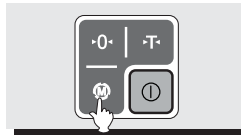
⑨ Suppose that the HIGH limit and LOW limit are set up as 2.990kg and 1,990kg respectively.
If the weight loaded is 2kg between HIGH and LOW limit the display shows "OK" and the scale continues to beep slowly.
If the weight loaded is above 2.990kg, HIGH limit, the scale continues to beep rapidly.

6. Counting Function (SW-1C only)

■ Counting without Tare



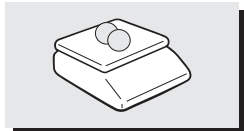
① Initial display as above.



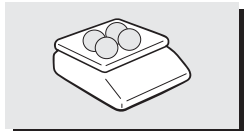
② Press **M** key twice to go to sample unit selection mode.



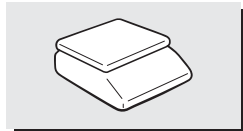
③ Press **0.0** key to select the number of sample unit. You can select 10, 20, 30, 40, 50, 60, 70, 80, 90, 100, 200, 300, 400, or 500 as a sample unit.



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

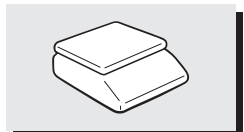


⑤ Put all of commodities you wish to count, and then check the number of pieces on display.

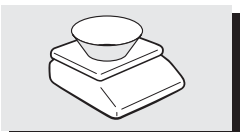


⑥ Remove all of commodities from the scale.

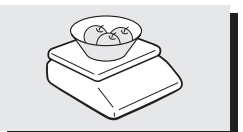
■ Counting with Tare



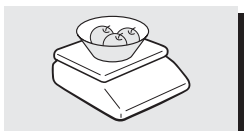
① Press **(M)** key twice to go to sample unit selection mode. "PCS" is shown on the display, then press **▶0◀** key to select the number of sample unit.



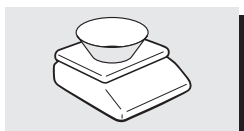
② Put the container on the scale and press **▶T◀** key to set weight of tare. You can select 10, 20, 30, 40, 50, 60, 70, 80, 90, 100, 200, 300, 400, or 500 as a sample unit, by pressing **▶0◀** key.



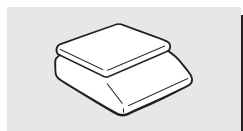
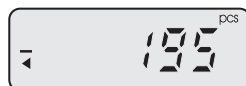
③ If the number of selected sample unit is 20, please put 20 sample units on the scale. Then press **▶T◀** key to set unit weight.



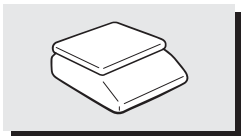
④ Put all of commodities you wish to count, and then count the number on display.



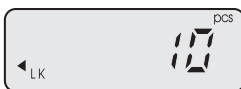
⑤ Remove all of commodities from the scale.



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 Use Print(Optional)

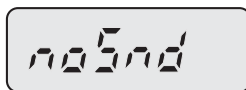
7-1. Mode Change

You can use print out function. Print Out Mode has total 5 stage.

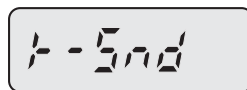
Each Stage is "NOSEND, K-SEND, S-SEND, U-SEND, C-SEND"



① When the scale is turned off press ① key, holding $\bullet 0 \bullet$ key. Then you will see the "U SET".



② If you press the $\bullet 0 \bullet$ key one more time, You will see the "noSnd" or before state ("noSnd" mean 'No Send' and This stage cannot print out.)

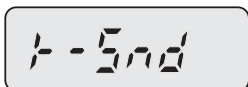


③ Press the $\bullet T \bullet$ key, You can change the print mode. Mode order is NoSnd ->K-Snd->S-Snd->U-Snd->C-Snd.

7-2. K-Send

■ Mode Setting

This Print Mode is 'Command Mode'. First of all, You must scale's mode setting.



① If you see "K-Snd" on display, Press the **0** key, You can save this mode and you will see the Auto Power mode("AP-oF").

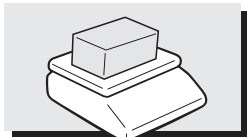
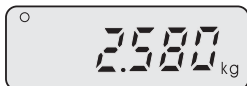


② If you see "AP-XX" on display, Press the **0** key one more time, you can save Auto Power's current state.

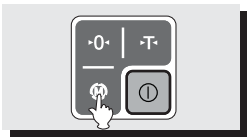


③ You will see the firmware version and all the segments and count up "0" to "9".

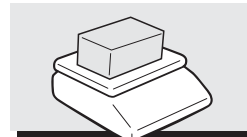
■ Print Operation



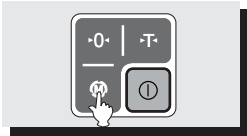
① Place a commodity on the platter, then the display will show the weight of the commodity.



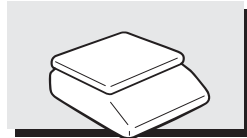
② If you press the **M** key, You can see the "SUM" message and Current weight and then you can send the weight to the printer.



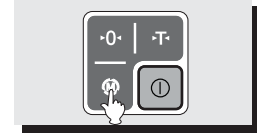
③ Place a another commodity on the platter.



④ Press the **M** key, you can send the another weight to the printer.



⑤ Remove container and commodity, then display will show the "0.000".



⑥ Press the **M** key, Total weight is send a printer.

■ Print Out

K-send MODE	
=>Command Mode	
Count Weights/kg	
1	2.580
2	1.950

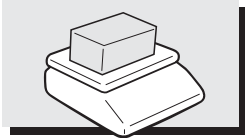
Sum Total	4.530

7-3. S-Send

■ Mode Setting


This Print Mode is 'Stable Mode'. Please refer to the page 14.

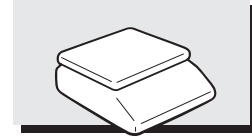
■ Print Operation



① Place a commodity on the platter, then the display will show the weight of the commodity.

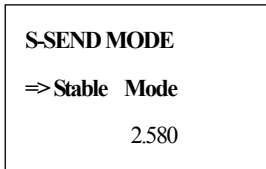


② If weight is stable state, You will see  on display and then you listen to the buzzer sound one time.



③ Remove container and commodity, then You can print another commodity weight.

■ Print Out

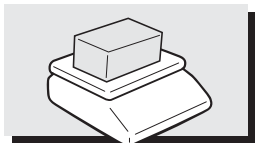
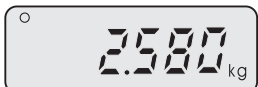


7-4. U-Send

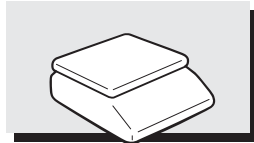
■ Mode Setting

This Print Mode is 'Continue Mode'. Please refer to the page 14.

■ Print Operation

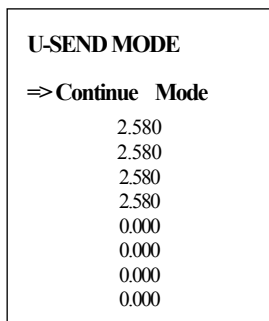


① Place a commodity on the platter, then the display will show the weight of the commodity. The weight is send to the printer continually.



② Remove container and commodity, then display will show the"0.000".

■ Print Out

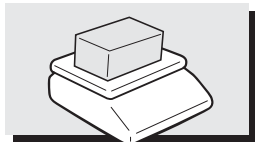


7-5. C-Send

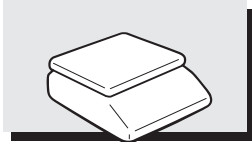
■ Mode Setting

This Print Mode is 'Change weight Mode'. Please refer to the page 14.

■ Print Operation



① Place a commodity on the platter, then the display will show the weight of the commodity.



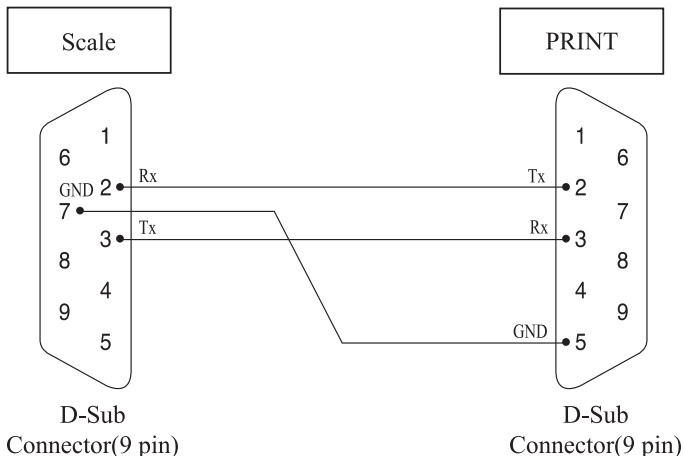
② Remove container and commodity, then display will show the "0.000". While weight is change, The weight is send to the printer.

■ Print Out

C-SEND MODE	
=> Change weight	Mode
0.000	
7.325	
1.625	
2.580	
1.995	
9.920	
3.150	
0.000	

7-6. How to Connect RS-232C Wire

- SERIAL INTERFACE



8. 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.

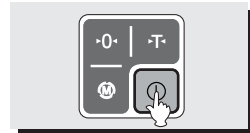
The following is the setting procedure of Auto-power off.



① When the scale is turned off press ① key, holding-0 key. Then press the 0 key, one more time. You will see the "AP-XX". (If you have set this before, display will show previous value.)



② Press the T key until the display shows the "AP-X0" that you wish to take. (Refer to TABLE 1.)



③ Press the ① key twice, and then the scale saves what you programmed and shows all the segments, counting up "0" to "9".

TABLE 1.

DISPLAY	FUNCTION
AP-oF	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-30	This function does automatically power off when the scale is not in use for 30 minutes.
AP-60	This function does automatically power off when the scale is not in use for 60 minutes.

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

Please refer to "SPECIFICATION" on page 22. 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 "BATT" 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.



※ Low Battery status.



※ Battery cut off display.

ERROR MESSAGE

Error Message on Display	Description	Solution
"Err 0"	The "Err 0" occurs when scale is not stable.	Remove unstable facts.
"Err 1"	The "Err 1" occurs when a current zero point has shifted from the last span calibration.	Please call your CAS dealer.
"Err 3"	The "Err 3" is an overload error.	Please remove the weight.
"Err 9"	The "Err 9" is no weight error. When scale is in counting mode, you must load the weight. If you have no weight on your scale, you can see this error message.	Please load the weight on your platter.

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

MODEL	SW-1S/1C/1W				
Approval	Max 1/2kg e=0.5/1g	Max 2.5 /5kg e=1/2g	Max 4/10kg e=2/5g	Max 10/20kg e=5/10g	Max 15/30kg e=5/10g
External Resolution	1/2000	1/2500	1/2000	1/2000	1/3000
Internal Resolution	1/60000	1/60000	1/60000	1/60000	1/60000
MAX Tare	-0.9995kg	-2.499kg	-3.998kg	-9.995kg	-14.995kg
Display	110 x 35[mm]/43" x 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(Hold Ver.), UNIT(Unit Ver.), MODE(SW1C), POWER				
Functions	Weighing, WaterProof level IP66(SW-1W only) Hold(Hold Ver.), Unit Conversion(Unit Ver.), Counting-Counting SampleRange : 10~100,200,300,400,500 (SW-1C only) Weight Comparison Function : hi, ok, low(SW-1C only) Sleep Mode Function				
Dimensions	260(W) x 287(D) x 137(H)[mm] / 102(W) x 113(D) x 54(H)[inch] 278(W) x 317(D) x 141(H)[mm] / 109(W) x 125(D) x 56(H)[inch] (SW-1W : WaterProof Type)				
Platter size	230(W) x 190(D)[mm] / 90.55(W) x 74.80(D)[inch] 247(W) x 195(D)[mm] / 97.24(W) x 76.77(D)[inch] (SW-1W : WaterProof Type)				
Weight	2.8kg 3.7kg(SW-1W : WaterProof Type)				
Power	1.5V x 6 units (D size Battery) or 9V Adapter				
Operation Time	Approx. 500hours (Manganese battery)/ 1000hours (Alkaline at 20°C /68°F)				
Operating Temperature	-10°C ~ +40°C / 14°F ~ 104°F				
Minimum Voltage Level of The Battery	About 5.5V				
Option	9V Adapter 300mA, Rear Display, Stainless Tray (SW-1S, SW-1C)				

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



SW 1S/1C/1W

Simple Weighing Scale



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