


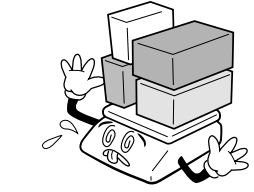

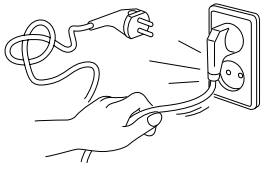
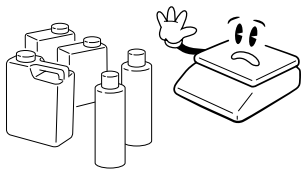
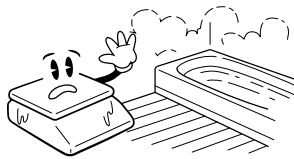
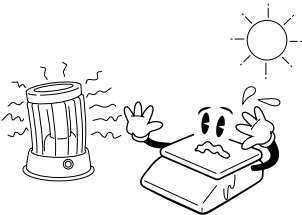
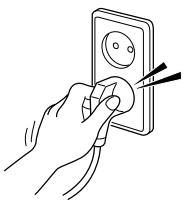
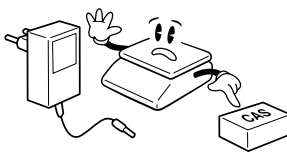


## CONTENTS

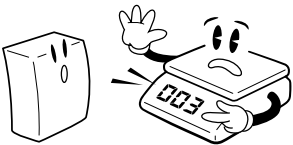
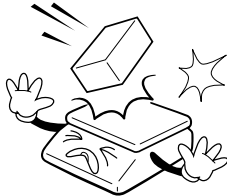

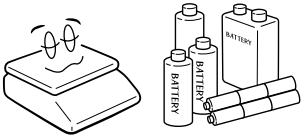



PRECAUTIONS .....	4
PREFACE .....	6
NAMES AND FUNCTIONS .....	6
OPERATIONS .....	7
1. General Weighing .....	7
2. Weighing with Tare .....	8
3. How to Convert the Unit of Weight .....	8
4. How to Set Auto Power Off .....	9
BATTERY SYSTEM .....	9
ERROR MESSAGE .....	10
SPECIFICATIONS .....	10

## 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>To reduce electric shock or incorrect reading, Do not spill water on the scale or place it in humid condition.</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> 	<p>Use proper Adapter. Incorrect adapter could damage the scale.</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.**

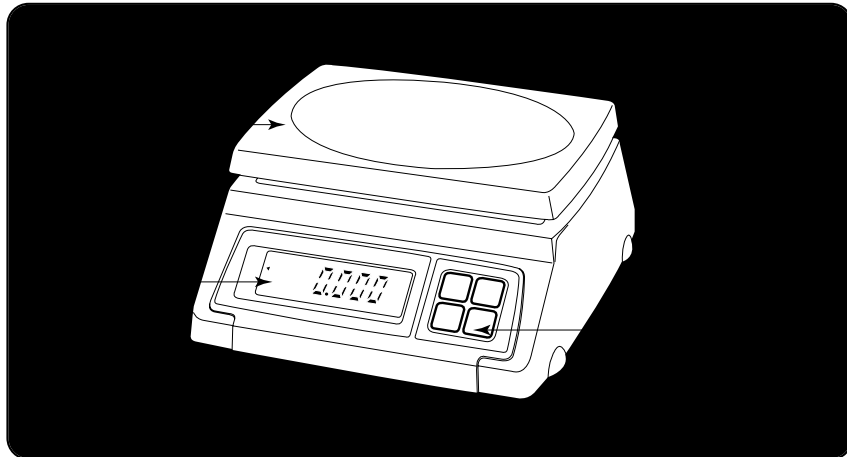
⚠ Attention		
<p>For consistent and accurate reading, maintain periodical check by your CAS authorized dealer.</p> 	<p>Avoid sudden shock to the scale. Internal mechanism could be damaged.</p> 	<p>Grab on the bottom of the scale when moving. Do not hold by the platter.</p> 
<p>Take the battery out when scale is not in use for long time. Leakage from the batteries is hazardous.</p> 	<p>Place the scale on firm and temperature consistent environment.</p> 	<p>By adjusting 4 corners of the scale, set the scale even using the built in scale leveling indicator.</p> 
<p>Keep the scale away from other electromagnetic generating devices. This may interfere with accurate reading.</p> 		

## PREFACE

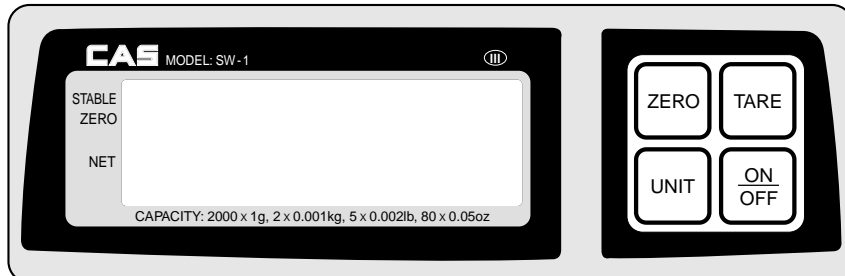
Thank you for purchasing our CAS SW Series. This scale has been designed with CAS reliability, under rigid quality control and with outstanding performance. Your specialty departments can enjoy these high quality reliable CAS products. We believe that your needs will be satisfied and you will have excellent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

## NAMES AND FUNCTIONS





### OVERALL VIEW



### DISPLAY & KEYBOARD



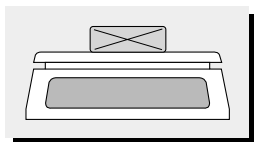
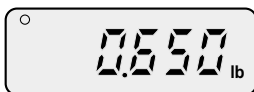
■ FUNCTION

KEYS	FUNCTIONS
	Used to set the zero point.
	Used to enter a tare weight and used to cancel a tare weight.
	Used to convert the unit of weight.
	Turn on and off the display.

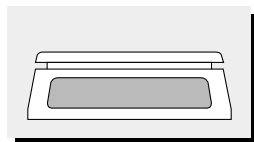
## OPERATIONS

- Turn on the display by pressing ON/OFF key.  
Then the display will show all the segments and count up "0" to "9".  
(If you want to stop it, press the ZERO key.)  
When you turn on the display, make sure that platter is empty.  
Otherwise, display will show the "Err 1". (Refer to ERROR MESSAGE)
- The display indicates if the scale is at ZERO or if there is a TARE Entered into the scale by way of a ZERO and NET lamps.
- When the weight of commodity is stable, display will show the ○(STABLE) lamp.
- When the display is not zero though there is nothing on the platter, press the ZERO key.

### 1. General Weighing



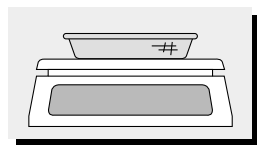
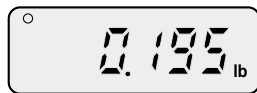
① Place a commodity on the platter.



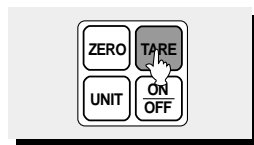
② Remove the commodity from the platter.

## 2. Weighing with Tare

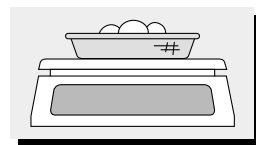
- Tare is the weight of container being used for a commodity.
- The TARE key subtracts the weight of the container.



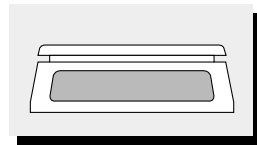
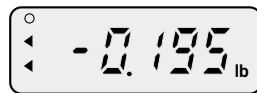
① Place a container on the platter.



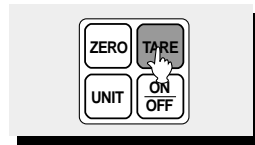
② Press the TARE key.



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



① Remove the container and commodity, then the display will show the weight of the container with "-" sign.



② Press the TARE key, then display will show the "0.000".

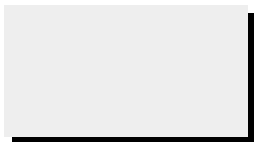
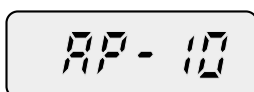
## 3. How to Convert the Unit of Weight

- Press the UNIT key, then the display will show the "UnIt" for a second.
- Press the UNIT key until the display shows the unit that you wish to take.

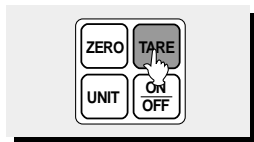
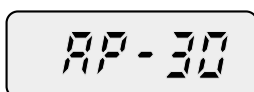
► NOTE: Unit of measure is g, kg, lb, and oz selectable by pressing UNIT key.

## 4. How to Set Auto Power Off

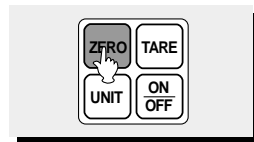
Auto-Power off makes the battery's life longer.  
When you don't operate the scale, this function makes the power OFF automatically.  
Before setting the Auto Power Off, make sure that the power is OFF.



① While you press the ZERO key, press the ON/OFF key, then you will see the AP-10. (If you have set this before, display will show previous value.)



② Press the TARE key, until the display shows the "AP-x0" that you wish to take. (Refer to TABLE 1.)



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

TABLE 1.

DISPLAY	FUNCTION
AP-00	This function will keep scale on continuously.
AP-10	If you don't operate the scale for 10 minutes, this function will turn the power OFF.
AP-20	If you don't operate the scale for 20 minutes, this function will turn the power OFF.
AP-30	If you don't operate the scale for 30 minutes, this function will turn the power OFF.

## BATTERY SYSTEM

### LOW BATTERY

When the battery is low, display will show the "BAT" indication.  
A new battery is required. Battery compartment is located on the bottom of the scale.  
If you use the scale without replacing the battery, display will show "LObAt" and then scale will shut OFF.

## ERROR MESSAGE

ERROR	REASONS	SOLUTIONS
Err 1	An error of the initial zero range	Set the platter empty
O-L	An overload	Refer to specifications

## SPECIFICATIONS

MODEL	SW-2	SW-5	SW-10	SW-20
CAPACITY	5 × 0.002 lb 2 × 0.001 kg 80 × 0.05 oz	10 × 0.005 lb 5 × 0.002 kg 160 × 0.1 oz	20 × 0.01 lb 10 × 0.005 kg 400 × 0.2 oz	50 × 0.02 lb 20 × 0.01 kg 800 × 0.5 oz
DISPLAY	LCD (5 DIGIT)			
TEMPERATURE RANGE	-10°C ~ +40°C (14°F ~ 104°F)			
POWER SUPPLY	1.5V × 6 (D size Battery)			
POWER CONSUMPTION	APPROX. 0.25 W			
BATTERY OPERATING TIME	500 hours (Manganese battery), 1000 hours (Alkaline battery)			
PLATTER SIZE (inch/mm)	9.1(W) × 7.5(D) / 230(W) × 190(D)			
PRODUCT SIZE (inch/mm)	10.2(W) × 11.3(D) × 5.4(H) / 260(W) × 287(D) × 137(H)			
PRODUCT WEIGHT	6.2 lb / 2.8 kg			
OPTION	9V Adapter 300mA, Rear display			

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



## CALIBRATION MODE WEIGHT SETTINGS FOR SW1N OR Z SERIES

1. Make sure the scale is off. Remove the platter assembly (metal and/or plastic platform.)
2. On the right hand side you will find a hole and a screw at the bottom. This is the sealing screw. Remove the sealing screw and then turn the scale upside down to find the calibration screw and silver plate located on the right side of the bottom of the scale (if keyboard is facing you and you tilt the scale upwards by the front.)
3. Remove the calibration screw and the silver plate. Under the plate is the calibration switch.
4. Press and hold the switch while turning the scale on. The display will show “**ONE**” and then “**CAL 1**”. Release the calibration switch.
5. The “**TARE**” key advances through the cal settings whereas the “**UNIT**” goes down. The “**ZERO**” key enters the cal setting.
6. Press the “**UNIT**” key twice to go to “**CAL 10**”. Press the “**ZERO**” key to enter into the settings.
7. The display will flash “**UNIT**” and then a number. 0 is for calibrating in KG and 1 is for calibrating in LBS. Select the unit by using the “**UNIT**” key. that is being used for calibration and press the “**ZERO**” key.
8. When putting in the values you must adhere to the capacity and increment on the serial number plate and match the correct values according to that or else the scale will not be NTEP or “legal for trade” subject to being RED TAGGED and a fine by Weights And Measures.
9. The display will flash “**CAPA**” and then show the current capacity. The chart below shows the capacities to be set. Only use the capacity setting that is shown on the front of the scale. The “**UNIT**” key will increment the flashing digit while the “**TARE**” key selects the digit that will flash. If 1 was selected for the unit follow the settings listed under 1. If 0 was selected for the unit follow the settings under 0. You cannot make the scale different then what is on the spec plate or else the scale will not be NTEP and subject to a fine and being red tagged by Weights and Measures.

	Display Shows		Display Shows
Calibration Unit	1 is lb		0 is kg
Capacity		Capacity	
5LBS	00005	2KG	00002
10LBS	00010	5KG	00005
20LBS	00020	10KG	00010
50LBS	00050	20KG	00020
nId	Weight used in Cal 3 during calibration. This cannot	This is part of a three point calibration during cal	Weight used in Cal 3 during calibration. This cannot

	be set to 0.	3	be set to 0.
W-dP		W-dP	
5LBS	3	2KG	3
10LBS	3	5KG	3
20LBS	2	10KG	3
50LBS	2	20KG	2
Id		Id	
5LBS	0.002	2KG	0.001
10LBS	0.005	5KG	0.002
20LBS	0.01	10KG	0.005
50LBS	0.02	20KG	0.01

10. After the capacity is set press the “**ZERO**” key. The display will flash “**Id**” and show the middle up/down weight to be used in calibrating the scale. This can not be set to 0. Later versions a value of 0 can be entered. The value must be between 10% and 90% of the full capacity.
11. Press the “**ZERO**” key and the display will flash “**u-dP**” and display the weight decimal point. Use the W-dP from the above chart for the capacity of the scale. Press the “**ZERO**” key.
12. The display will flash “**Id**” and then show the increment. Use the Id from the above chart for the capacity of the scale. Press the “**ZERO**” key.
13. The display will flash “**dUAL**” and then show a number. 0 disables dual range while 1 enables dual range. Select 0 or 1 using the unit key. Press the “**ZERO**” key.
14. The scale will flash “**tArE**” and display a number. The “**UNIT**” key changes the number. Only 0 or 1 is allowed. 0 allows for full scale tare. Selecting “**1**” and then pressing the “**ZERO**” key allows limiting the tare from 0 to full scale. The display will show 5 digits. As an example on a 50LB scale if it is made to be 05000 the scale will only tare up to 4.99.
15. Press the “**ZERO**” key and the display will go back to “**CAL 10**”.
16. If all the calibration settings are done turn the scale off and then on. The display will show the version number, count up, and go to the weigh mode.

# SPAN CALIBRATION FOR SW1N-SERIES

## FULL CAPACITY CALIBRATION

1. Make sure the scale is off. Remove the platter assembly (metal and/or plastic platform.)
2. On the right hand side you will find a hole and a screw at the bottom. This is the sealing screw. Remove the sealing screw and then turn the scale upside down to find the calibration screw and silver plate located on the right side of the bottom of the scale (if keyboard is facing you and you tilt the scale upwards by the front.)
3. Remove the calibration screw and the silver plate. Under the plate is the calibration switch.
4. Press and hold the switch while turning the scale on. The display will show **“ONE”** and then **“CAL 1”** then release the calibration switch.
5. The **“TARE”** key advances through the cal settings whereas the **“UNIT”** goes down. The **“ZERO”** key enters the cal setting. If a per cent calibration is to be performed proceed to per cent calibration.
6. Before doing the calibration the middle up/down value has to be known. To do this go to **“CAL 10”** by pressing the **“UNIT”** key twice. Press the **“ZERO”** key to enter into the setting. First is **“UNIT”** then a number. The number represents the unit of calibration. 1 is for LBS and 0 is for KG.
7. Press the **“ZERO”** key and the display will show **“CAPA”** and then the scales capacity. Press the **“ZERO”** key and the display will show **“ $\bar{n}$ Id”**. This is the middle up/down weight to be used in the calibration. This value CANNOT be set to 0. It must be between 10-90% expressed as weight not a percentage. Input a value to use by using the **“TARE”** and **“UNIT”** keys. Make note of this value and keep pressing the **“ZERO”** key to get back to **“CAL 10”**.
8. Press the **“UNIT”** key until the display shows **“CAL 3”**. Press the **“ZERO”** key to enter into calibration.
9. The display will show **“2ErO”**. With the platter on the scale and nothing on the platter press the **“ZERO”** key. The display will show raw internal counts and then display **“ $\bar{n}$ IdUP”**. Place the weight on the platter that was noted in step 7.
10. Press the **“ZERO”** key. The display will show internal counts and then **“FULL”**. Either remove the weight and/or add weights so that the full capacity weight of the scale is on the platter and press the **“ZERO”** key.
11. The display will show internal counts and then display **“ $\bar{n}$ Iddn”**. Put the same weight used in step 9 on the platter. Press the **“ZERO”** key. The display will show internal counts and the go back to **“CAL 3”**. Remove the weight from the platter.
12. Turn the scale off and then back on. The scale will display the version, count up, and go into the weigh mode.

## PER CENT CALIBRATION

1. Press the **“TARE”** key until the display shows **“CAL 7”**. Press the **“ZERO”** key to enter into per cent calibration.

2. The display will show "**Per 10**". The "**UNIT**" key will increment the flashing digit and the "**TARE**" key will select which digit is flashing. When the per cent is set press the "**ZERO**" key.
3. The display will show "**2ErO**". With the platter on the scale and nothing on the platter press the "**ZERO**" key. The display will show internal counts and then display "**P5Pan**".
4. Put the per cent of weight on the platter that was specified in step 2. Press the "**ZERO**" key. The display will show internal counts and then go back to "**CAL 7**". Remove the weight from the platter. Turn the scale off and back on. The scale will display the version, count up, and go into the weigh mode.