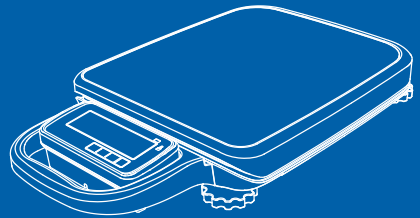


PB

Bench Scale



CAS

CONTENTS

PRECAUTIONS	4
PREFACE	6
NAMES AND FUNCTIONS	6
ASSEMBLY & SETTING	7
OPERATIONS	8
1. Simple Weighing Mode	8
2. Weighing with Tare	9
3. Hold Function	9
4. Setup Mode	10
5. How to use print(Optional).....	11
BATTERY MAINTENANCE	14
ERROR MESSAGE	14
SPECIFICATIONS	15

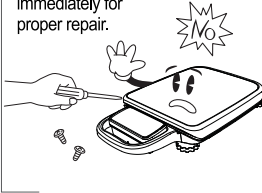
PRECAUTIONS

Warning

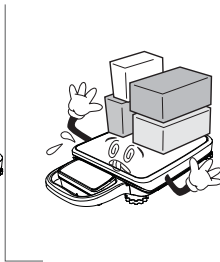
Precautions when installing the scale. To ensure that you get the most from your scale, please follow these instruction.

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.

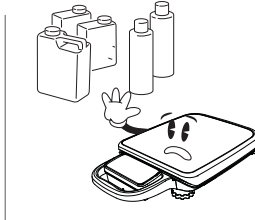


Do not pull the plug by its cord when unplugging.

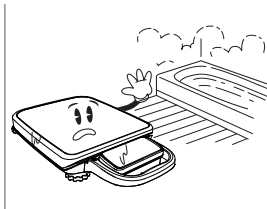
Damaged cord could cause electric shock or fire.



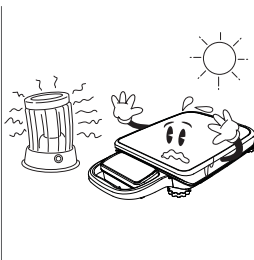
To prevent from fire occurring, Do not place or use the scale near flammable or corrosive gas.



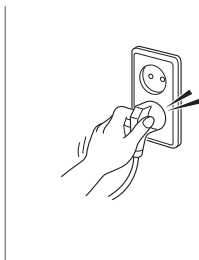
To reduce electric shock or incorrect reading, Do not spill water on the scale or place it in humid condition.



Avoid placing the scale near heater or in direct sunlight.

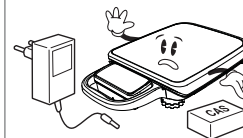


Insert plug firmly to wall outlet to prevent electric shock.



Use proper Adapter.

Incorrect adapter could damage the scale.

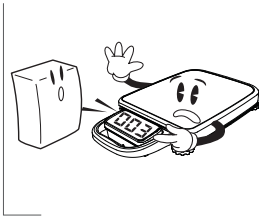


PRECAUTIONS

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.

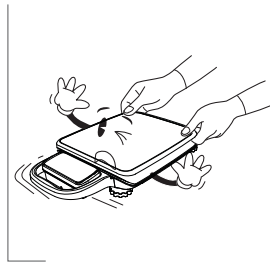
For consistent and accurate reading, maintain periodical check by your CAS authorized dealer.



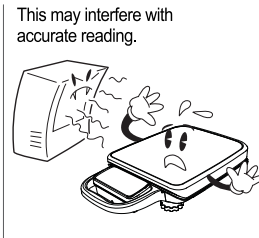
Avoid sudden shock to the scale.



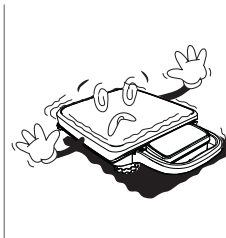
Grab on the bottom of the scale when moving.



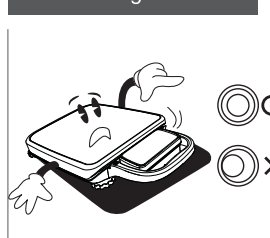
Keep the scale away from other electromagnetic generating devices.



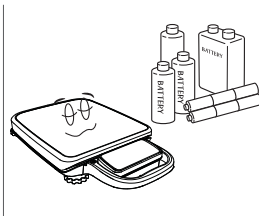
Place the scale on firm and temperature consistent environment.



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 PB(Portable Bench).

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.

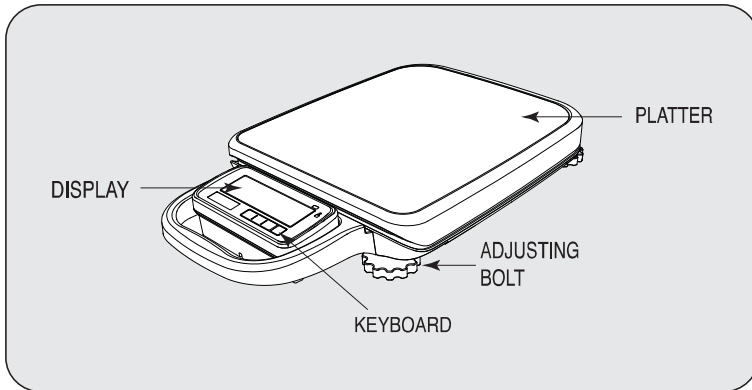
We believe that your needs will be satisfied and you will have proper reliability.

This manual will help you with proper operation and care of the PB(Portable Bench).

Please keep it handy for future reference.

NAMES AND FUNCTIONS

OVERALL VIEW







DISPLAY & KEYBOARD

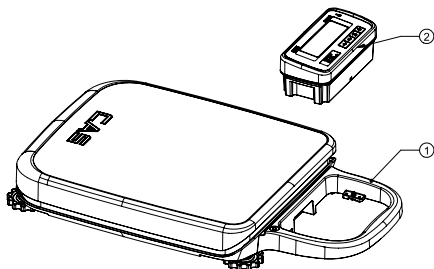
■PB(LCD)



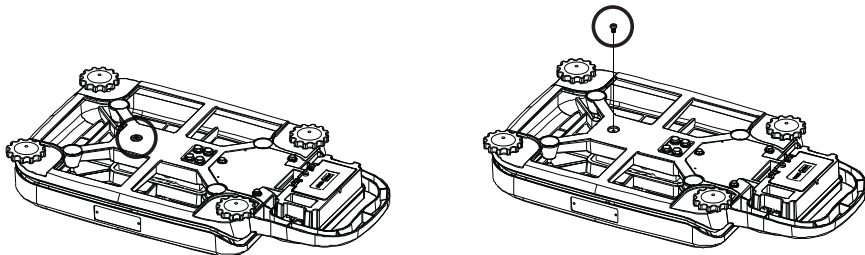
■ KEY FUNCTIONS

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/off the scale or backlight. (If you press the button long time, Power is turned off)

ASSEMBLY & SETTING



- If you unscrew a bolt at Bracket handle(①), you can separate the indicator(②).

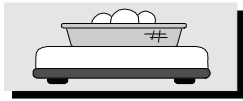


- Please Unscrew a limit bolt(M6 X 10), before Use a scale.

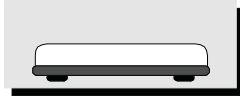
OPERATIONS

- 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 $\blacktriangleright 0 \blacktriangleleft$ 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 page 14
- When the weight becomes stable the display shows the stable sign (\circ) on.
- You may need to make it "0.00" by pressing $\blacktriangleright 0 \blacktriangleleft$ key unless the display indicate "0.00" under the empty platter.

1. Simple Weighing Mode



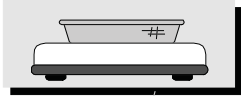
① Place a commodity on the platter.



② Remove the commodity from the platter.

2. Weighing with Tare

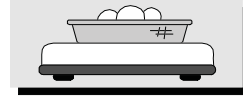
- TARE means the weight of container being used for a commodity.
- TARE key function is to subtract the weight of the container from full weight loaded.



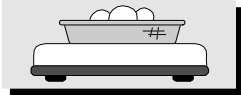
① Place a container on the platter.



② Press the **T** key, then display will show the "0.00".



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 "0.00".

3. Hold Function



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

② "HOLD" will be displayed twice

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

4.SETUP MODE

4-1. How to Go to Setup Mode

Make sure that power is OFF. While pressing the ZERO key, press the \odot key. The display shows “U SEt”. You can select each menu by pressing the ZERO key and change the setting by pressing the TARE key. If you press ZERO key, you can save current setting and go next mode.

4-2. Set up Mode Table

MENU	DISPLAY	DESCRIPTIONS
Printer	<i>“noSnd”</i>	Do not use printer. (No Send Mode)
	“K-Snd”	Push the key , Print out. (Command Mode)
	“S-Snd”	Weight is Stable, Print out. (Stable Mode)
Auto Power Off	<i>“ AP oFF ”</i>	Do not use Auto Power Off function.
	“ AP 10 ”	Power turns to be off automatically when the scale is not in operation over for 10 minutes.
	“ AP 30 ”	Power turns to be off automatically when the scale is not in operation over for 30 minutes.
	“ AP 60 ”	Power turns to be off automatically when the scale is not in operation over for 60 minutes.
Backlight	“ bL on ”	Use back-light.
	“ bL 10 ”	Back-light is on 10 seconds.
	“ bL 30 ”	Back-light is on 30 seconds.
	<i>“ bL oFF ”</i>	Do not use back-light.
Tare Clear	<i>“ tC oFF ”</i>	If tare is removed, Maintain tare.
	“ tC on ”	If tare is removed, Clear tare.
Brightness	“ 1 ~7 ”	You can set backlight brightness. (Default : 3)

※ *Italic Bold* : Default Setting

5. How to Use Print (Option)

5-1. Mode Change

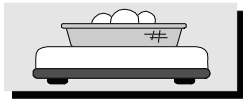
You can use print out function. Print Out Mode has total 3 stage.
Each Stage is "NOSEND, K-SEND, S-SEND"

5-2. K-Send

1) Mode Setting

- This Print Mode is 'Command Mode'. First of all, You must scale's mode setting.
Please refer to the page 10.

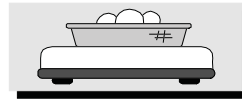
2) Print Operation



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



② If you press the **H** 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 **H** key, You can send the another weight to the printer.



⑤ Remove container and commodity, then display will show the "0.00".



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

3)Print Out

K-send MODE	
=>Command Mode	
Count Weights/kg	
1	25.80
2	19.50

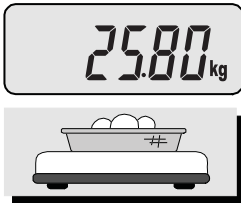
Sum Total	45.30

5-3. S-Send

1)Mode Setting


- This Print Mode is 'Stable Mode'. Please refer to the page 10.

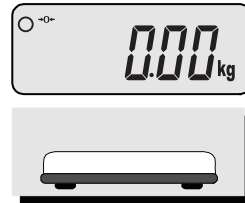
2)Print Opreation



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.



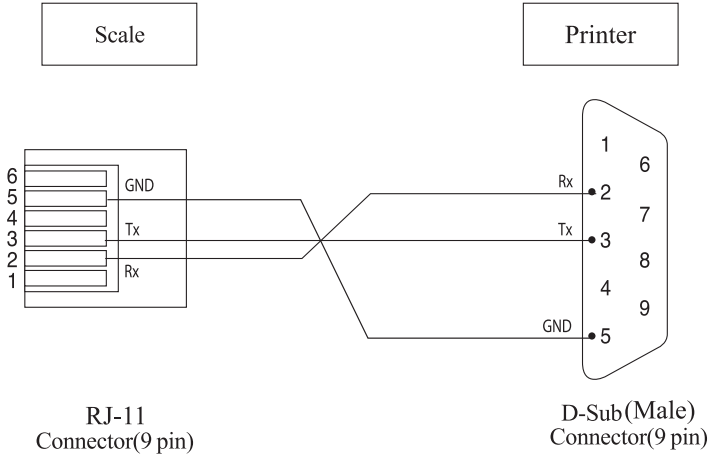
③ Remove container and commodity, then You can print another commodity weight.

3)Print Out

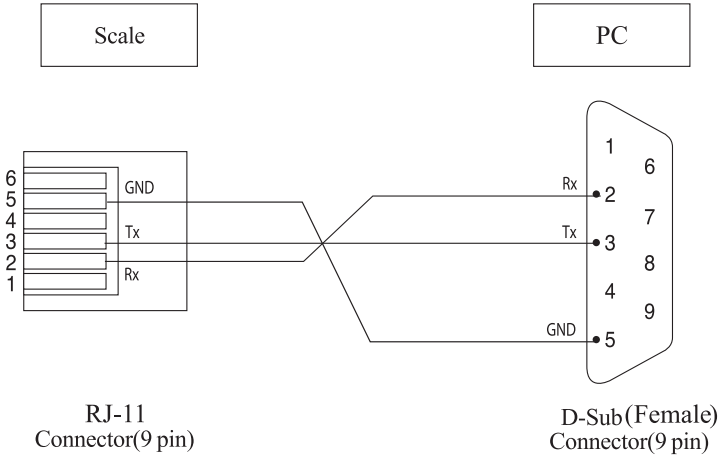
S-SEND MODE	
=>Stable Mode	
	25.80

5-4. How to Connect RS-232C Wire

- SERIAL INTERFACE(Scale <-> Printer)




- SERIAL INTERFACE(Scale <-> PC)



BATTERY MAINTENANCE

LOW BATTERY WARNING

When the battery is low the display shows the “” 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 tray.

SPECIFICATIONS

MODEL	PB(LCD)			
	<u>Dual Interval</u>	<u>Dual Interval</u>	<u>Dual Interval</u>	<u>Dual Interval</u>
Capacity / e	Max15/30kg e=5/10g	Max 30/60kg e=10/20g	Max 60/150kg e=20/50g	Max 100/200kg e=50/100g
Internal Resolution	1/60000	1/60000	1/60000	1/60000
External Resolution	1/3000	1/3000	1/3000	1/2000
MAX Tare	-14.995kg	-29.99kg	-59.98kg	-99.95kg
Display	134 x 48.6[mm]/52.7" x 19.1" 6digit LCD			
Symbols	STABLE, ZERO, TARE, g, kg, lb, oz, Low Battery			
Keys	ZERO, TARE, HOLD, POWER			
Functions	Weighing Hold Function Backlight ON/OFF(Bright) Control Function Auto Power Off Function Print out Function			
Dimensions	355(W) x 611(D) x 65(H)[mm] / 140(W) x 241(D) x 256(H)[inch]			
Platter size	355(W) x 443(D)[mm] / 140(W) x 174(D)[inch]			
Weight	6.0kg			
Power	1.5V x 4 units (C size Battery)			
Operation Time	Approx. 140hours (Manganese battery)/ 300hours (Alkaline at 20°C /68°F)			
Operating Temperature	-10°C ~ +40°C / 14°F ~ 104°F			
Minimum Voltage Level of The Battery	About 4.2V(Recharge Battery: 5.6V)			
Option	12V Adaptor 1.5A RS-232C(RJ-11 TO D-SUB) Wire (Add Serial Interface) DEP-50 Printer (Add Serial Interface) Recharge battery(Pb:6V, 1.3Ah, 20HR) (Add Recharge Interface)			

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

MEMO



CAS BLDG., # 440-1, SUNGNAE-DONG,
GANGDONG-GU, SEOUL, KOREA
TEL_ 82 2 2225 3500
FAX_ 82 2 475 4668
www.globalcas.com