GS SERIES

ALL STAINLESS STEEL DIGITAL WEIGHING SCALE

OPERATION MANUAL

PLEASE READ THIS MANUAL VERY CAREFULLY BEFORE
ATTEMPT TO OPERATE THE SCALE

AUGUST 1999 REV 2

Specifications subject to change without prior notice

CONTENTS

1. INSTALLATION

1.1 CHECK and make sure that the following
 items are included:
   a. This operation manual
   b. Scale x 1
   c. Stainless steel platter x 1
   d. Power adaptor x 1 (if purchased)
   e. Built-in rechargeable (if purchased)
Contact your dealer if any items are missed.

1.2 INSERT the platter into the scale very
 carefully. No excessive force is required.

1.3 POWER THE SCALE

1.3.1 For Dry Battery Version

a. Insert 4 size D/UM 1 batteries into the
   battery pack underneath the scale, or
b. Apply the power adaptor.
   Before plugging the power adaptor into
   electricity outlet, check and make sure that
   the input voltage of power adaptor matches
   with the output voltage of the outlet. If
   not, do not plug in the adaptor, contact
   your dealer immediately.

CAUTION:

*When the power adaptor is being used, take
out all the batteries from the battery pack.
Fail to do so may cause battery leak/
explosion or damages to the scale.*

*Do not use any rechargeable batteries, the
scale does not recharge these batteries.*

**1.3.2 For Built-in Rechargeable Battery
        Version**

Before first time use, plug the main adaptor
into the wall outlet and charge the scale
for at least 8 hours.

1.4 RETAIN the packing materials for future
 transportation purposes.

CAUTION:

In most cases, this unit is legal for trade
only when it is sealed and bearing a serial
number. Do not break or remove the seal or the
serial number. Contact your dealer for more
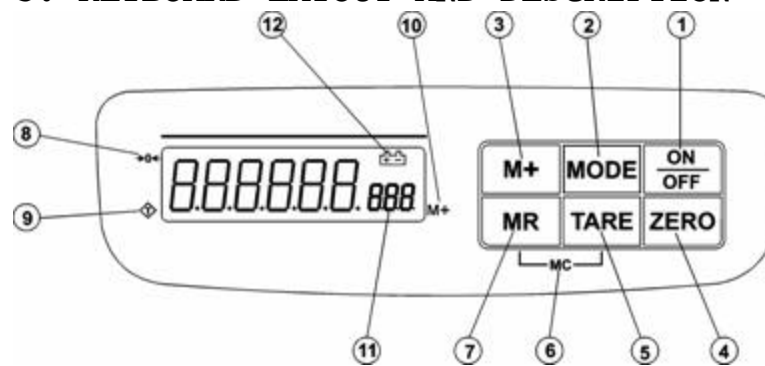information or after sales service.

2. SPECIFICATIONS

Model No.	Capacity	Division	EXTERNAL RESOLUTION
GS-1500	1500g	0.5g	1/3000
GS-3000	3000g	1g	1/3000
GS-6000	6000g	2g	1/3000
GS-15K	15kg	0.005kg	1/3000
GS-1200	1200g	0.2g	1/6000
GS-3000	3000g	0.5g	1/6000
GS-6000	6000g	1g	1/6000
GS-12K	12kg	0.002kg	1/6000
Power Source	**Dry battery version:** 4 x size D/UM 1 batteries, or Power adaptor (optional) **Built-in rechargeable version:** Built-in rechargeable battery or, Power adaptor		
Max. Tare range	Up to 100% of rated capacity		
Max. Zero range	Up to 2% rated capacity		
Weight Units (**NOTE A**)	Metric, decimal pound, and pound/ounce		
Operation Environment	$0°\sim40°C$ ($32°\sim104°F$), Non-condensed. R.H.? 85%		

Specifications subject to change without notice.

NOTE A:

To comply with the law of certain countries, the avoirdupois weight units may be disabled. Contact your dealer for more information.

3. KEYBOARD LAYOUT AND DESCRIPTION

1. **ON/OFF KEY**

   Press this key to turn scale on or off.

2. **MODE KEY**

   Press this key to switch among metric and avoirdupois weight units with or without backlight (optional).

3. **M+ KEY**

   Press this key to accumulate present weight value to memory.

4. **ZERO KEY**

   Press this key to reset weight displayed to zero when unloaded.

5. TARE KEY

Press this key to tare off the weight of a container and get the net weighing result.

6. MC KEY

Press the MR and TARE key simultaneously to clear all data stored in memory.

7. MR KEY

Press this key to recall the accumulated weight value in memory.

8. ZERO INDICATOR

A circle will appear next to this sign to indicate a zero weight status.

9. TARE INDICATOR

An arrow will appear and point at this sign when the tare function is being employed.

10. M+ INDICATOR

An arrow will appear and point at this sign when the memory is containing data.

11. WEIGHT UNIT INDICATOR

"kg" indicates the metric unit is being employed.
"lb" indicates the avoirdupois unit is being employed.

12. LO-BAT INDICATOR

When this indicator appears:

a. **For dry battery version**: Replace the batteries with new ones, or apply the power adaptor immediately.

CAUTION:

When the power adaptor is being used, take out all the batteries from the battery pack. Fail to do so may cause battery leak/explosion or damages to the scale.

b. **For built-in rechargeable battery version:** Apply the power adaptor and recharge the scale immediately. Fail to do so may cause unrecoverable damages to the rechargeable battery inside scale.

4. INITIAL SETUP

4.1 PLACING THE SCALE

In order to obtain an accurate weighing result, the scale must be placed on a strong and level surface.

If required, adjust the adjustable feet underneath scale to obtain a level position. Refer to the bubble indicator (optional) for leveling condition.

4.2 INTERNAL SETTING

4.2.1 Select Weight Unit

The scale is equipped with metric and avoirdupois weight units. Follow the below steps to enable/disable the avoirdupois units.

a. Turn scale off
b. Press and hold **TARE**, then press **ON/OFF**
c. Scale displays **F.1**
d. Press **TARE** twice
e. Scale display **F.3**
f. Press and hold **MODE** until the kg or lb sign

appears.
g. Press **MODE** to shift between kg and lb sign.
h. To enable the avoirdupois units, press **ZERO** when the lb sign appears.
i. To disable the avoirdupois units, press **ZERO** when the kg sign appears.
j. After **ZERO** is pressed, the scale will return to normal operation status.

4.2.2 Select AUTO POWER OFF FUNCTION Setting

The scale is equipped with **AUTO POWER OFF FUNCTION**. Under this function, the scale would be turned off automatically if it is not used for 4 minutes. Follow the below steps to enable/disable this function.

a. Turn scale off
b. Press and hold **TARE**, then press **ON/OFF**
c. Scale displays **F.1**
d. Press **TARE** three times
e. Scale display **F.4**
f. Press **MODE** to shift between **0._OFF** and **4._OFF**.
g. To enable the **AUTO POWER OFF FUNCTION**, press **ZERO** when **4._OFF** appears.
h. To disable the **AUTO POWER OFF FUNCTION**,

press **ZERO** when **0._OFF** appears.

i. After **ZERO** is pressed, the scale will
    return to normal operation status.

5. INSTRUCTION FOR USE

5.1 BEFORE WEIGHING

Make sure that:

a. The platter is inserted correctly into the
    scale.

b. The scale is placed on a level and strong
    surface.

c. The scale is turned on.

d. The **ZERO INDICATOR** is on. If not, press **ZERO**
    to set display to zero. Refer to
    SPECIFICATIONS for maximum zero range.

5.2 WEIGHING

a. Always place a load onto the platter gently.
    Excessive force or shock may cause damages
    to the sensor inside scale.

b. The weight of the load would be displayed
    automatically.

c. It is a good practice to remove all loads
    from platter after weighing. It would
    prolong the lifetime of sensor inside scale.

5.3 SELECT WEIGHT UNIT

Press **MODE** to shift among kg → decimal lb→ lb/oz. → kg weight units. Refer to **4.2.1** for internal setting procedures.

The weight unit employed before power off would be employed when the scale is turned on again.

5.4 TURN BACKLIGHT (OPTIONAL) ON/OFF

Press **MODE** to shift among various weight units with backlight or without backlight.

Even though the backlight function is employed, backlight will be turned off:
a. When a zero weight is detected and remains stable for 4 seconds, or
b. When a weight remains stable for 20 seconds.

Backlight will be automatically turned on again when a new weight is detected or a key is pressed.

5.5 SET DISPLAYED VALUE TO ZERO WHEN UNLOADED

Press **ZERO** to eliminate a positive or negative value. After **ZERO** is pressed, the **ZERO INDICATOR** would appear.

Refer to **SPECIFICATIONS** for maximum zero range.

5.6 TARE OFF THE WEIGHT OF A CONTAINER

When a container is used, follow the below steps to tare off the weight of it and get a net weight result.
a. Remove all loads away from platter
b. Make sure that the **ZERO INDICATOR** is on.
c. Place the container on the platter.
d. Press **TARE**.

After **TARE** is pressed, the **TARE INDICATOR** would appear.

Refer to **5.2** for weighing procedures. Weight displayed is the net weight of the subject matter. Refer to **SPECIFICATIONS** for maximum tare range.

5.7 CLEAR THE TARE FUNCTION

Remove all loads from platter then press **TARE**. After **TARE** is pressed, the **TARE INDICATOR** would disappear.

5.8 Memory Functions

5.8.1 To Save/Accumulate a Weight to Memory

When weight display is stable, press **M+** to save the weight into memory. Scale displays **P.?** and the **M+ INDICATOR** appears. **?** donates the total number of entries accumulated to memory.

CAUTION

All data stored in memory will be erased when:
a. The scale is turned off, or
b. The weight unit is changed.

5.8.2 Recall the Accumulated Weight from Memory

Press **MR**, then the scale will display the total number of entries and the total accumulated weight of all entries.

5.8.3 Clear Data Stored in Memory

Press **MR** and **TARE** simultaneously to clear all data stored in memory. Scale will display **P.0** to indicate all data in memory has been erased.

5.9 WHEN LO-BAT INDICATOR APPEARS

When the **LO-BAT INDICATOR** appears

5.9.1 For Dry Battery Version

Replace the batteries with new ones, or apply the power adaptor immediately.

CAUTION:
When the power adaptor is being used, take out all the batteries from the battery pack. Fail to do so may cause battery leak/ explosion or damages to the scale.

5.9.2 For Built-in Rechargeable Battery Version

Apply the power adaptor and recharge the scale immediately. Fail to do so may cause unrecoverable damages to the rechargeable battery inside scale.

The scale can remain in operation when being recharged.

6. TROUBLE SHOOTING

Syndrome   Scale cannot be turned on

Check: Is the scale powered or batteries faded out?

Action: **For dry battery version**: Replace the batteries with new ones if needed or apply the power adaptor.
For built-in rechargeable battery version: Recharge the scale for at least 8 hours before first time use or plug in the power adaptor before turning the scale on.

Check   Is the power adaptor inserted properly into both the electricity outlet and the DC inlet of scale.

Action: Secure both ends of the power adaptor and try again.

Syndrome   Scale displays ^{00000}

Check   Is the load applied to platter excess the rated capacity of scale?

Action   Remove all loads from platter and try again.

Syndrome   Scale displays $\underline{^{00000}}$

Check   Is the platter inserted to the scale correctly?

Action   Insert the platter to scale correctly.

Syndrome   Scale turned off automatically

Check   Is the **AUTO POWER OFF FUNCTION** employed?

Action   Refer to **4.2.2** to disable the **AUTO POWER OFF FUNCTION**.

Check   Is the **LO-BAT INDICATOR** on?

Action   **For dry battery version**: replace the batteries with new ones, or apply the power adaptor immediately.
CAUTION: *When the power adaptor is being used, take out all the batteries from the battery pack. Fail to do so may cause battery leak/explosion or damages to the scale.*

For built-in rechargeable battery Version: Apply the power adaptor and recharge the scale immediately.

Syndrome   Rated capacity cannot be reached

Check	Is the **TARE INDICATOR** on?
Action:	Turn the scale off. Remove all loads from platter and turn on again.
Check	Anything obstructing the platter?
Action	Remove all obstacles.

Check	Is the scale affect by air flow, vibration or RF?
Action	Place scale away from all disturbances.

Syndrome Weighing result is not accurate

Check	Is the scale placed in a level condition?
Action	Adjust the adjustable feet to obtain a level condition.
Check	Is the scale affected by airflow, vibration or RFI?
Action:	Place the scale away from all disturbances.
Check	Is the scale calibrated correctly?
Action	Contact your dealer.
Check	Is the correct weight unit employed?
Action	Refer to **4.2.1** and **5.3** for weight unit setting and usage.

Syndrome SCALE TURNED ON BUT ZERO WEIGHT CANNOT BE ATTAINED

Check	Is the platter placed correctly?
Action	Insert the platter again.
Check	Is anything load applied to platter.
Action	Remove all loads from platter?

7. DAILY CARE AND MAINTENANCE

7.1   Clean the scale with a soft and damp cloth. If necessary, apply a mild detergent. Do not pour water onto the scale.

7.2   Do not use any harsh, abrasive material, acetone, volatile solvent, thinner or alcohol for cleaning.

7.3   Verify the accuracy of scale periodically. Re-calibrate the scale if necessary.
       NOTE: In some countries, calibration is restricted to be done by an authorized/qualified agent only. Contact your dealer for more information.

7.4   The scale must be placed horizontally during transportation or long time storage.

7.5   Remove platter from scale before transportation or long time storage.

7.6   Store scale in a dry and clean place.

7.7   (For dry battery version) Before long time storage, remove all batteries from battery pack.