

GC & HF Series
Weighing indicator
User's Guide

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

May 2013

Specifications subject to change without prior notice

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1. INSTALLATION

Because of metrological legislation, installation/some metrological parameter settings are limited to be done by authorized personnel only. Do not attempt to change any of the built-in metrological parameters. Contact your dealer for more information and technical assistance.

To ensure performance accuracy, do not use the instrument in where or when the environment condition falls beyond as those listed on **SPECIFICATIONS**.

Do not attempt to open the instrument, no user serviceable parts inside.

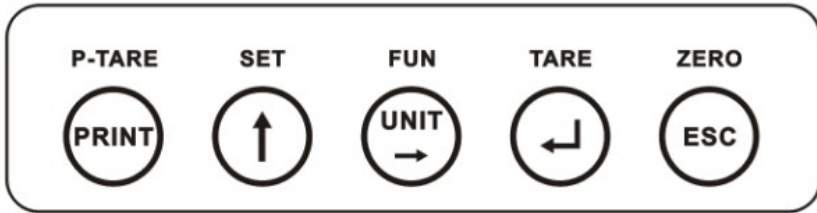
2. SPECIFICATIONS

2.1 GENERAL SPECIFICATIONS

Maximum Capacity	Single Range Mode:- <ul style="list-style-type: none"> ● Max = 1 ~ 999,999 (kg or lb) Dual Range Mode: - <ul style="list-style-type: none"> ● Max₁ = 1 ~ 999,998 (kg or lb) ● Max₂ = 2 ~ 999,999 (kg or lb)
External Resolution	Single Range Mode:- <ul style="list-style-type: none"> ● Recommend = 15,000 ~ 30,000 ● High = 30,000 ~ 60,000 Dual Range Mode: - <ul style="list-style-type: none"> ● Recommend (Max₂ / d₁) = 15,000 ~ 30,000 ● High (Max₂ / d₁) = 30,000 ~ 60,000
Weight Units	Metric (kg) and Imperial (lb),g,oz
Min. Internal Count/d	15 Count
Offset Range	≥0.2mv (10000 Count)
Tare Range	- Max (Subtractive Tare)
Max. Measuring Range	15 mV
A/D Sampling Speed	15 times/ second
Power Voltage Requirements	Built-in Rechargeable Battery = 6V DC External Power Adaptor = 12V DC, 800mA
Load Cell Excitation Voltage	5 VDC
Minimum/Maximum Load Cell Impedance	350Ω/1000Ω
Load Cell Connection	Supports 4-wire and 6-wire Load Cell Connections
Maximum Load Cell Connection	8 x 350Ω Load Cells, or 16 x 700Ω Load Cells
Operation Environment	-10 ~ 40°C. Non-condensed. R.H. ≤ 85%

Specifications subject to change prior to notice

3. KEYS, DISPLAY AND CONNECTIONS



1. ZERO KEY

Press this key to set weight displayed to zero when an empty scale has drifted away from a true zero reading.

Cancel or quit from the operations

2. TARE KEY

Press this key to tare off the weight of a container.

Press this key to enter parameter setting when self-checking after power on

Press this key to confirm the parameter option

3. UNIT/FUN KEY

Press this key to shift among various weight units.

Press this key as previous parameter when setting

Press this key to increase the active digit when value input

Press this key for 2 seconds and then release , will enter selection of weighing ,counting, percentage and animal weighing function

4. SET KEY

Press this key as next parameter when setting

Press this key to move to next digit when value input

Press this key for 2 seconds and the release , will enter quick setting parameter

5. PRINT KEY

Press this key to print the results to a computer or a printer through the RS-232 output. according to the parameter setting whether accumulate or not when printing

Press this key for 2 seconds and the release , will enter preset-tare function

13.ON/OFF Power on /off the indicator

◆LCD VERSION (GC-L,HF-L) AS BELOW



14. CHECK SYMBOLS

- HI = Weight reading is higher than the HI limit entered,
- OK = Weight reading is in between than the low and HI limits entered,
- LO = Weight reading is lower than the LO limit entered.

15. SPARE

W1/W2 , if assigned , the scale are in dual range capacity status
Blank, no function assigned.

16. BATTERY POWER / LEVEL INDICATOR

Visible to show:-

- This instrument is being powered by the built-in rechargeable battery,
- Remaining battery level.

17. HOLD INDICATOR

(When under animal mode) Visible when weight reading being displayed is a frozen value.

18. AUTO INDICATOR

Visible when the instrument is in animal weighing function.

19. NET INDICATOR

Visible when the tare function is in effect. Weight reading shown is net value.

20. GROSS INDICATOR

Visible when gross weight reading is displayed.

21. STABLE INDICATOR

Visible when weight reading is stable.

22. ZERO INDICATOR

Visible when instrument is at true zero weight status.

23. CAPACITY TRACK BAR

The ratio (increment = 10%) of applied & remaining weighing capacities are shown here.

24. WEIGHT UNITS AND FUNCTIONS

- % = Percentage (when in Percentage Mode in function),
- kg = kilogram,
- PCS = Pieces (Piece Count Mode in function),
- kg/PCS and g/PCS = Weight per piece (when Piece Count Mode in function),
- lb = pound.

◆LED VERSION(GC-S,HF-S) AS BELOW

14. CHECK SYMBOLS

- HI = Weight reading is higher than the HI limit entered,
- OK = Weight reading is in between than the low and HI limits entered,
- LO = Weight reading is lower than the LO limit entered.
-

15. TARE INDICATOR

Visible when the tare function is in effect. Weight reading shown is net value

16. STABLE INDICATOR

Visible when weight reading is stable.

17. ZERO INDICATOR

Visible when instrument is at true zero weight status.

18. WEIGHT UNIT

LED indication as below:

kg ="kg" on, lb = "lb" on

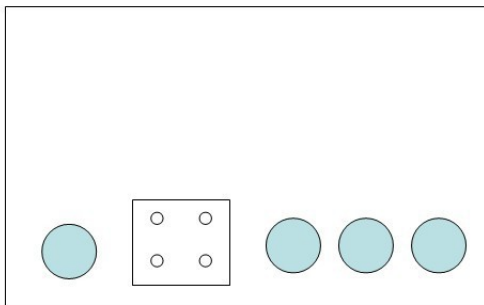
oz = both "kg" and "lb" on; g= neither "kg" nor "lb" on

19. CHARGE INDICATION

Flicker when charging ; invisible when full of charge

BACKSIDE INSTRUCTION

HF Series :



The recommend (from left to right):

1) power plug

2) Load cell

LOAD CELL CONNECTOR PIN #	ASSIGNMENT
1	EXCITATION +ve
2	SENSE +ve
3	EXCITATION -ve
4	SENSE -ve
5	SIGNAL +ve
6	SIGNAL -ve
7	GROUND

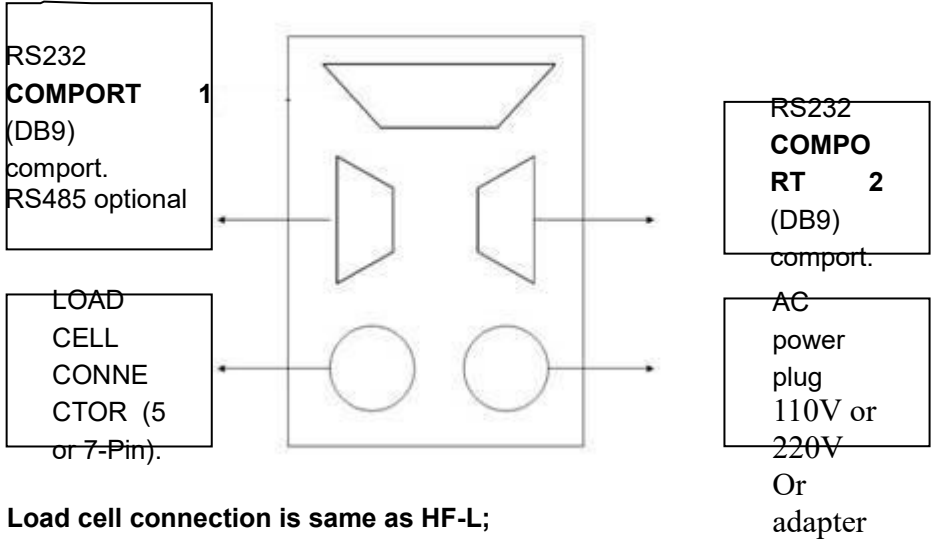
3) Com1 RS232 4) Com2 RS232

RS232 COMPORT ON INSTRUMENT
1 = GND
2 = TXD
3 = RXD

BACKSIDE INSTRUCTION

GC Series:

TTL (low-active) is transmitted here(optional). The DB-25 connector of the external relay board (if ordered) should be plugged in



Load cell connection is same as HF-L;

RS232 connection is :

RS232 COMPORT ON INSTRUMENT
2 = RXD
3 = TXD
5= GND

4. GETTING STARTED

In order to obtain an accurate weighing result, the weighing platform,

(hereinafter referred as platform) must be placed on a strong and level surface. Avoid using the platform and this instrument (**hereinafter collectively referred as scale**) in environment where excessive wind flow, vibration and extreme temperature change exist

General Warning: -

- **The instrument is not an explosion proof device.**
- **Do not open the instrument, no user serviceable parts inside. Always contact your dealer for service.**
- **The instrument not to be subject to shock, excessive vibration or extremes of temperature (before or after installation).**

4.1 BUILT-IN RECHARGEABLE BATTERY

The instrument is equipped with a built-in rechargeable battery. Before first time use, recharge it for at least 8 hours to ensure the best battery performance.

4.2 POWER ADAPTOR

Before plugging in the power adaptor, check and make sure the input voltage of the adaptor matches with output voltage of the electricity outlet. If not, contact your dealer immediately.

4.3 CONNECTING OTHER DEVICES¹

4.3.1 Connection with Weighing Platform (Load Cell)

Connect this instrument with a weighing platform (load cell) through load cell connector located at the back according to the assignment table.

4.3.2. Connecting RS232 to computer, printer

5. INITIAL SETUP

5.1 INTERNAL SETTINGS

Application parameters can be checked and set through internal functions.

5.4 INTERNAK FUNCTION TABLE													
<p><TARE>=enter parameter or exit with save; <ZERO>=exit parameter without save; <SET>= go to next parameter ; Move the cursor to change the digit when setting parameters <FUN>=go to previous parameter ;inc rease the active digit when setting value for parameters</p>													
FUNCTION SHOWN	TO CHECK AND SET												
	PARAMETERS/NOTE DEFAULT=**												
	<table border="1"> <thead> <tr> <th>Port 1 RS232 (RS485 optional)</th> <th colspan="2">below parameter is same of port 1 and 2</th> <th>Port 2 RS232</th> </tr> </thead> <tbody> <tr> <td>Serial Mode (Set Output Mode)</td> <td>**P C (Computer) (NOTE A)</td> <td>m manual (Printer) (NOTE B)</td> <td>AUTO1 (NOTE C) AUTO2 (NOTE D) CMD (NOTE E)</td> </tr> <tr> <td>Baud(Set Baud Rate)</td> <td>1200 38400</td> <td>2400 57600</td> <td>**9600 19200</td> </tr> </tbody> </table>	Port 1 RS232 (RS485 optional)	below parameter is same of port 1 and 2		Port 2 RS232	Serial Mode (Set Output Mode)	**P C (Computer) (NOTE A)	m manual (Printer) (NOTE B)	AUTO1 (NOTE C) AUTO2 (NOTE D) CMD (NOTE E)	Baud(Set Baud Rate)	1200 38400	2400 57600	**9600 19200
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Baud(Set Baud Rate)	1200 38400	2400 57600	**9600 19200										
	<p>NOTE A:-If PC(output to computer) is selected,set also → protocol→int</p> <table border="1"> <thead> <tr> <th>protocol</th> <th>**1</th> <th>2</th> <th>3</th> <th>4</th> </tr> </thead> <tbody> <tr> <td>→int=time delay interval between each data transmission.4 parameters are available for selection 0=maximum transmission speed **0.5=0.5 second time delay interval between each transmission 1.0=1.0second time delay interval between each transmission 2.0=2second time delay interval between each transmission</td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>	protocol	**1	2	3	4	→int=time delay interval between each data transmission.4 parameters are available for selection 0=maximum transmission speed **0.5=0.5 second time delay interval between each transmission 1.0=1.0second time delay interval between each transmission 2.0=2second time delay interval between each transmission						
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	<p>NOTE B:-If Manual(output to printer),set also →AC →Stab Cont →Print From →label →Copy</p> <p>→Copy=number of copy to be printed.8 parameter are available Copy 1=Send 1 copy **Copy 2=2 copies ... Copy 8=Send 8 copies</p> <p>→Stab Cont=Stable Control</p> <p>OFF (data is sent to printer when <print> is pressed) **ON(O output to printer is sent only when weight is stable)</p>												

	<p>**ON(Output to printer is sent only when weight is stable)</p> <p>→Printer Form=Minimum weight to be printed.21 parameters are available: 0d(Minimum weight to be printed disabled 1d(no printout if weight is below 1d) ... 20d(no printout if weight is below 20d) Refer to SPECIFICATIONS for d value or contact your dealer for more information.</p> <p>→Label lab 1=print in Horizontal format lab 2=print in Vertical format **off</p>	
	→ACC MODE	on off= Accumulate and print at the same time . off= only print without accumulate
		NOTE C:if AUTO1 is selected, send out signal once automatically when weight is put on scale NOTE D:if AUTO2 is selected, send out signal once automatically when weight is moved away from scale NOTE E:if CMD is selected, allow PC to send out command to indl
		If two ports set to manual(printer),only port 1 will work
ADCnt	Internal Code	Press<TARE> to zero the offset value and to observe the span value of exact load added
TIME	Time	HH/MM/SS
DATE	Date Format & Date Value	To change time,enter a new time through numeric keys then press <TARE> ** DD/MM/YY YY/MM/DD MM/DDYY
BK	backlight Mode	To change date,enter a new value through numeric keys then press <TARE> select 1 to 9 (9 is most brightness)
POWER	Auto Power Off Time(Minutes)	**OFF 1 / 2 / 5 / 10 / 15
Key BP	Keypad Buzzer	Instrument remains powered on when powered by extem power adapter **in OFF **ON check buzzer mode out
CHK BP		in=buzzer when weighing value is within range out=buzzer when weighing value is out of range off=buzzer disable
UNIT	kg	g Lb oz
		Press <TARE> to shift every unit ON or OFF when weighing status

Filter	filter speed	select 1 to 6(1 for bad working environment where vibration,wind flow, 6 for good working environment where wind and vibration have no affect)		
CAL	calibration parameter setting	restricted functions which may request a password or hardware key to access. These functions are usually for dealer and authorized personnel only and all settings these functions are monitored and recorded. Do not change any setting of these functions to		

To access below function, either: 1) short circuit the enable pins of the ADJ located on main board with a jumper, or 2) enter a correct password when "P" appears				
C-Unit	Calibration Weight Unit	**kg	lb	
After changing calibration weight unit, Re-calibration after changing weight unit				
DESC	Decimal point	0	0.0	0.000 0.0000
CAPA1	Capacity1	Set max1 capacity of scale NOTE:Single range mode=enter capacity(Max) here; Dual range mode=enter Max1 here;		
Inc1	division1	Set scale division1 NOTE:Single range mode=enter division(d) here; Dual range mode=enter d1 here;		
CAPA2	Capacity2	Set max2 capacity of scale NOTE:Max1<Max2 capacity Dual range mode=enter Max2 here;		
Inc2	division2	Set scale division2 NOTE: Dual range mode=enter d2 here;		
Auto-Z	Auto zero tracking speed	0.25 / **0.5 / 1 / 1.5 / 2 / 2.5 / 3.0 / off (d/sec)		
P-Zero	initial Zero Range(%)	1 / 2 / 5 / **10 / 20 / 50 / 100 / off		
K-Zero	Manual Zero Range(%)	1 / **2 / 4 / 5 / 10 / 20		
Filter	filter speed	select 1 to 6(1 for bad working environment where vibration,wind flow, 6 for good working environment where wind and vibration have no affect)		
G1	Gravity Factor of Calibration Place	**g, 7940	● For advance dealers only	

G2	Gravity Factor of operation Place	**g, 7940	● Voided if recalibrated	
Linear	Linearity Compensation On/Off	**ON	OFF	ON=Enable(Recommended) OFF=Disable
U-CAL	User Calibration	Suggested Calibration load > 50% of Max		
L-CAL	linearity Calibration	It is used to create new Linearity compensation co-efficient . Before calibration,Set Linear=ON , and then complete all calibration steps for zero, LD1 and LD2. Suggested Calibration Load: LD1=1/3 of Max LD2=Max		
Mtare	repeated tare	Mode 1	Mode 1=repeated tare unavailable	
		**Mode 2	Mode 2=repeated tare available	
Count	calibration parameter setting way	count	will increase count number when power on indicator	
		jump	need jumper to set calibration parameter	
APPRO	select the approval setting	OIML	NTEP	NONE
		NOTE: When set OIML and NTEP , the maximum resolution is 1/6000 If the parameter settings are not legal for selected approval, indicator will ask for setting again		
PASS	password setting	Enter new password for calibration parameter setting		
Reset	reset parameters	Reset all parameter to initial		

6. INSTRUCTION FOR USE

6.1 POWER ON

Powered on this instrument, it will: -

- a. Display software number and revision (if any)
- b. Display all display segments,
- c. Display the calibration count value,
- d. Display the parameter set count value,
- e. This instrument is now ready for operation.

6.2 START WEIGHING

- a. If zero weight cannot be obtained when unloaded, press **[ZERO]**. After **[ZERO]** is pressed, the **ZERO INDICATOR** will appear. Refer to **SPECIFICATIONS** for maximum zero range,
- b. Always place an object onto platform gently. Excessive force applied to platform may cause damage to the weight sensor,
- c. The weight of the object is displayed on this unit automatically,
- d. It is a good practice to remove all loads from platform after weighing. It will prolong the life of the weight sensor.

6.3 ABOUT WEIGH UNIT CONVERSION

Depends on the internal settings, this instrument supports kg , g, lb and oz
And can convert when weighing status by the setting of **UNIT(on)**

When a 3 or 4 place (0.000 or 0.0000) decimal place is selected, reading in g is possible during normal operation by the setting of **UNIT(on)**

The weight unit employed before power off will be employed when this instrument is turned on again.

6.4 TARE OFF THE WEIGHT OF A CONTAINER

Tare function is used to temporarily set the scale to zero (such as cancelling the weight of a box or a container) in order to get the net weight result

6.4.1 Manual Tare

When a container is used, follow the below steps to tare the weight of the container off to get a net weight result.

- a. Remove all loads from platform,
- b. Make sure that the **ZERO INDICATOR** is on. If not, press **[ZERO]**,
- c. Place container on platform,
- d. Press **[TARE]** ,
- e. **NET INDICATOR** appears to indicator tare is in effect and weight displayed display is net result. To cancel tare effect, remove all loads from platform and press **[TARE]** ,
- f. **NET INDICATOR** disappears. **GROSS INDICATOR** appears to indicator tare effect has been removed and weight displayed display is gross result.

6.4.2 Repeated Tare

When M-tare is set to Mode 1, this instrument does not permit multiple tare operation. Tare effect can only be cancelled when container is removed and gross weight = zero.

When M-tare is set to Mode 2, this instrument will permit multiple tare operations provided that both of the below requirements are met: -

- a. The tare operation does not permit a reduction of the value of the tare;
- b. The tare effect can only be cancelled when there is no load on the platform.

6.4.3 Preset Tare

A pre-determined tare weight can be entered via keyboard.

During weighing status, press **[PTARE]** and hold on for 2seconds ,after release , will display "000000"

enter the pre-determined tare weight ,then press **[TARE]**to confirm. This pre-determined tare value will be deducted.

"PT " indication will be shown on

To cancel the preset tare effect, remove all loads from platform then press **[ZERO]**.

NOTE: -

- 1 The pre-determined tare weight entered must be equal to the

multiple of d. While this multiple factor must be an integer. Thus, in case the exact tare weight is not equal to the multiplied value, maximum possible error of the preset tare function is $\pm 0.5d$.

- 2 Manual tare is possible when preset tare is in function.
- 3 Preset Tare is also governed by Repeated Tare

4

6.5 MEMORY ACCUMULATION FUNCTION

6.5.1 To Accumulate a Transaction to Memory

- a. Press **[Print]** to save and accumulate data of current transaction to memory,
- b. This instrument returns to normal display status after 2 seconds,
- c. Repeat **a** to **c** for subsequent transactions

NOTE: -

1. Unstable weight will not be accumulated to memory. If **Print** is pressed when weight is unstable, this instrument will reject this command and response with beeps.

6.5.2 Memory Recall and Clearance

- a. Press **[SET]** to recall total accumulated weight from memory,
- b. After **[SET]** is pressed, This instrument displays "**≡ n**" (**n** means the number of transactions accumulated) follow by the total accumulated weight stored in memory,
- c. At this point: -
 - Press **[ZERO]** to quit, or
 - Press **[ZERO]** followed by **[FUN]** to clear memory and return operation.

6.6 FUNCTION MODES

Press **[FUN/UNIT]** key and hold on for 2 seconds , then release , will enter selection of weighing ,counting, percentage and animal weighing function

6.7 PIECE COUNT FUNCTION

Follow the below steps to enter **Piece Count Function: -**

- a. Select FUN=2, Press **[TARE]** to confirm
- b. select the desired weight unit,
- c. If a container will be used, place this container to platform and press

[TARE] to tare off the weight of it,

- d. Press **[SET]** ,display will show for entering sample quantity
- e. Place samples (with same quantity) on platform then press **[Tare]**,
- f. Now the indicator display the sample quantity
- g. Place the goods which desired to counting

Shift among Quantity, Average Piece Weight and Weight Info

- a. Press **[FUN/UNIT]** to shift among quantity, average piece weight and weight info,
- b. Quantity Display format = numeric numbers & PCS (e.g **1000 PCS**) ,
- c. Average piece weight display format = numeric numbers & weight unit & / (slash) & PCS (e.g. **499.960g/PCS**) ,
- d. Weight display format (when Piece Count Function is in effect) = numeric numbers & weight unit & PCS (e.g. **500 kg PCS**).

6.8 PERCENTAGE FUNCTION

Follow the below steps to enter **Percentage Function**: -

- a. Select FUN=3,Press **[TARE]** to confirm
- b. select the desired weight unit,
- c. If a container will be used, place this container to platform and press **[TARE]** to tare off the weight of it,
- d. If a reference mass (as the 100%) is available, apply it on platform.
NOTE: - If reference mass is not available or the reference mass will be entered through keys, Press **[SET]** and display will show for entering the reference weight
- e. Press **[TARE]** to enter,
- f. This instrument is now ready for percentage calculation. Any other weight applied to the platform will be displayed as a percentage of the reference mass.

6.9 ANIMAL WEIGHING FUNCTION

Follow the below steps to enter **Animal Weighing Function**: -

- a. If a container will be used, place this container to platform and press **[TARE]** to tare off the weight of it.
- b. Select FUN=4,Press **[TARE]** to confirm
- c. **Animal Weighing Function (Ani)** appears,
- d. Now is ready to weighing animal

Set the Animal weighing parameter .

- e. Press **[SET]**, Display **RS232** ,shift to **Animal**; Press **[TARE]** to enter
- f. Display last filter (**FLt**) value applied. Select the preferred filter value² by pressing **[CNT]** or **[UNIT]** key, 3 filter values are available: -
 - **FLt 1** = Fast
 - **FLt 2** = Normal (For human weighing, select this parameter),
 - **FLt 3** = Slow
- g. Display last weight release variation value (**rE**) applied. Under the animal weighing function, this instrument will hold a weight result until a pre-defined weight release variation value is achieved,
- h. Select the preferred weight release variation value by pressing **[CNT]** or **[UNIT]** key. 5 auto release range values are available: -
 - **rE 1** = auto release disabled,
 - **rE 2** = auto release when weight varies $\geq 2\%$ of rate capacity
 - **rE 3** = auto release when weight varies $\geq 5\%$ of rate capacity
 - **rE 4** = auto release when weight varies $\geq 10\%$ of rate capacity
 - **rE 5** = auto release when weight varies $\geq 20\%$ of rate capacity
 - Press **[TARE]** to enter,

Weighing Animal

- a. Get animal on platform,
- b. This instrument will calculate the mean weight of an animal or a group of animals. The result obtained will be displayed and sounds 2beeps
- c. Get other animals on platform in case more animals have to be weight in the same transaction,
- d. An updated weight will be calculated and displayed³ as above step **b**.

6.10 CHECKWEIGHING MODE

This instrument is equipped with check weighing mode. Check-weighing mode is used to compare the value obtained meets with the preset limits (high and LO limit) set to this instrument. The comparison result (HI, OK or LO) will then be displayed with or without buzzer

² It is a trade off between motion filtering and accuracy. The faster the filter, the shorter the amount of time over which the averaging is taken. The slower the filter, the longer averaging time will take before a reading is displayed. It is recommended that FLt 3 should be applied first. Should situation requires, change to a lower FLt number.

³ Provide that extra weight added fulfill the weight release variation value listed on **6.8** step **g**.

Follow the below steps to trigger check weighing mode: -

- a. During normal operation (of a function), **Press [SET]**, Display **RS232**, shift to **CHECK**; Press **[TARE]** to enter
- b. The current HI limit is displayed with the **Hi symbol** on, press **[TARE]** to confirm, or
- c. Enter a new HI limit through keys and then press **[TARE]**,
- d. Display current LO limit with the **Lo symbol** on, press **[TARE]** to confirm, or
- e. Enter a **new LO limit** through keys and then press **[TARE]**
- f. Check weighing function is now enabled. The check result is shown by one of the HI /LO symbols,

NOTE: -

1. For normal comparison, set both HI and LO limits,
 2. To check only if result is lower or equal to LO ($\text{result} \leq \text{LO}$), set HI limit = 0,
 3. To check only if result is higher or equal to HI ($\text{result} \geq \text{HI}$), set LO limit = 0,
 4. To check if result is equal to a specified value, set both HI limit and LO limit = the specified value
- To quit check weighing mode, set both HI and LO limits to zero.

6.11. Quick setting

Press [SET] and hold on for 2 seconds then release to get quick setting parameter, Press **[TARE]** to enter and **[SET]** and **[FUN/UNIT]** to shift : **PARA,CHECK,ANIMAL,RS232, and**

RECHARGE : To check the current voltage when charging(V)

Count : Display the calibration count value, and the parameter set count value, (press**[ZERO]**or **[TARE]** for 3secs to exit)

7. RS232 DATA OUTPUT MODE

7.1 AUTO WEIGHT FORMAT STRING

Data is transmitted in ASCII code. Data format is listed on below table.

DATA BIT	DESCRIPTION
1~2	MOTION STATUS US = UNSTABLE ST = STABLE
3	COMMA SEPARATION
4~5	NET/GROSS NT = NET WEIGHT GS = GROSS WEIGHT
6	SIGN (Sign of weight reading) Positive = space. Negative = minus (-)
7~13	WEIGHT VALUE 7-character string containing the current weight including location of decimal point. If there is no decimal point, then the first character is a space.
14	COMMA SEPARATION
15~16	UNIT kg = kilogram lb = pound oz= ounce g=gram
17	Cr
18	LF

7.2 STANDARD PRINT OUTPUT FORMAT

When the manual print or automatic print is triggered, depends on the setting, the standard or the pre-defined custom output print format will be transmitted.

7.2.1 Standard Output Print Format

7.2.1.1 Weighing function

7 lines will be transmitted as below: -

TIME	15:21:00
DATE	14.04.2009
NO.	1 (First transaction added to memory)
NET	500.0kg
TARE	0.0kg
GROSS	500.0kg
TOTAL	500.0kg (Total accumulated net weight)

7.2.1.2 Piece count function

TIME	15:30:44
DATE	14.04.2009
NET	300.0kg
UNIT.W	599.949 g
COUNT	500PCS

7.2.1.3 Percentage function

TIME	15:39:13
DATE	14.04.2009
NET	699.0kg
REF %	200.0kg
PERCENT	350.00%

7.2.1.4 Animal weighing function

TIME	16:33:42
DATE	14.04.2009
HOLD.W	496.0kg

7.2.2 Standard Output Print Format of Check weighing Mode⁴

7.2.2.1 Weighing function with check weighing

TIME	17:39:05
------	----------

⁴ Standard output print format of check weighing mode does not support animal weighing function.

DATE 14.04.2009
NO. 5
NET 200.0kg
TARE 0.0kg
GROSS 200.0kg
TOTAL 3799.0kg

HIGH 2000.0kg
LOW 500.0kg
LOWER THAN LIMIT

TIME 17:39:15
DATE 14.04.2009
NO. 6
NET 500.0kg
TARE 0.0kg
GROSS 500.0kg
TOTAL 4299.0kg

HIGH 2000.0kg
LOW 500.0kg
ACCEPT

TIME 17:39:34
DATE 14.04.2009
NO. 7
NET 2500.0kg
TARE 200.0kg
GROSS 2700.0kg
TOTAL 6799.0kg

HIGH 2000.0kg
LOW 500.0kg
HIGHER THAN LIMIT

7.2.2.2 Piece count function with check weighing

TIME 17:48:07
DATE 14.04.2009
NET 500.0kg
UNIT.W 1001.04 g
COUNT 499PCS

HIGH 1000PCS
LOW 500PSS
LOWER THAN LIMIT

7.2.2.3 Percentage function with checkweighing

TIME 17:51:09
DATE 14.04.2009
NET 500.0kg
REF % 200.0kg
PERCENT 250.00kg

HIGH 1500.0 %
LOW 750.0 %
HIGHER THAN LIMIT

8. ERROR CODES

Error Code No.	Description
Err 1	Time value error
Err 2	Date value error
Err 3	Logic error. LO limit is higher than HI limit (and HI is not = 0)
Err 4	Not sense the loadcell signal
Err 5	Exceed maximum power on zero range
Err 6	Exceed maximum manual zero range
Err 7	Tare operation error
Err 8	Offset out of range / unstable during power on
Err 9	ERROR IN PERCENTAGE FUNCTION. INPUT VALUE = 0 or less than 50e
--oL--	Overload (Gross weight is more than Max plus 9d)
UndEr	Under load (Gross weight is less than minus 20d)

9. DAILY CARE AND MAINTENANCE

- Clean this unit with a soft, damp cloth. If necessary, use a mild detergent in water,
- Do not use any harsh, abrasive material, acetone, volatile solvent, thinner or alcohol for cleaning,
- Verify the accuracy of this unit periodically. Re-calibrate this unit if necessary. In some countries, calibration requires authorized / qualified agent. Contact your dealer for more information,
- Store this unit in a dry and clean place,
- Recharge battery before and every 2 months during long time storage.