

# VGP

## OPERATION MANUAL

PLEASE READ THIS MANUAL VERY CAREFULLY BEFORE OPERATING

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## 1. BEFORE USE FOR THE FIRST TIME

- Thank you for purchasing an UWE product, please read this instruction carefully before start using. You shall find the following items inside the box:

VGP/VOP scale x 1

Switching power adaptor x 1

Operation manual x 1

If you don't find all the items as described above, please contact your dealer for further assistance.

- Place the scale in a stable environment and adjust the adjustable feet to a level position by referring to the bubble level
- The scale is equipped with rechargeable battery, please charge it until the charging indicator turns green to ensure the best battery performance
- Always use factory supplied power adaptor for charging purpose, an unapproved power adaptor may shorten the battery life and further damages the electronic components
- Warm up the scale for 15 minutes before use for the first time
- Make sure the capacity and division setup on the display when switching on is the same as the data plate
- Avoid to use the scale when the environment is with strong wind, vibration and strong magnetic field
- Use it within the recommended temperature range and avoid wet environment
- Recharge the battery immediately when battery status indicator starts flashing
- Use damp cloth to clean the scale if necessary, excessive moisture is prohibited
- When not using, switch off the power and keep the scale in a dry and cool place

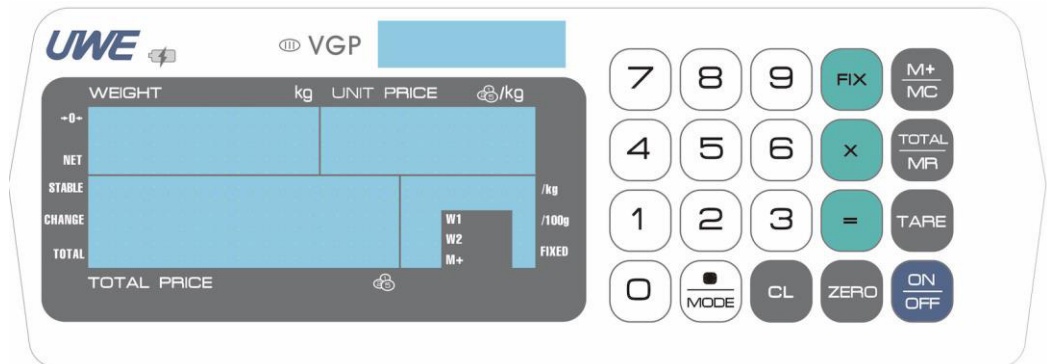
## 2. INTRODUCTION

### 2.1 SPECIFICATION

Model No.	Capacity (Max) W1/W2	Division (e) e1/e2
VGP/VOP-3	1.5kg/3kg	0.0005kg/0.001kg
VGP/VOP-6	3kg/6kg	0.001kg/0.002kg
VGP/VOP-15	6kg/15kg	0.002kg/0.005kg
VGP/VOP-30	15kg/30kg	0.005kg/0.01kg
LCD Digits	VGP: Weight, Unit Price– 5 digits, Total Price – 6 digits VOP: Weight, Unit Price, Total Price – 6 digits	
Power-on Zero Range	±10% of Max	
Zero Range	±2% of Max	
Tare Range	Full Range Tare	
Platter Size	VGP: 230 x 250mm with Stainless Steel Insert VOP: 225 x 320mm with Stainless Steel Insert	
Power Source	External AC Adaptor: AC100~240V, DC9V/0.6A Built-in Rechargeable Battery: 6V/4Ah	
Operating Temperature	-10°C / 40 °C (14 °F / 104 °F) Non-condensed. R.H. ≤85%	

## 3 PANEL AND KEYBOARD

### 3.1 PANEL



#### 1. ZERO INDICATOR

It appears when scale is at zero weight status

#### 2. NEGATIVE INDICATOR

It appears when weighing result is below true zero

#### 3. NET INDICATOR

It appears when tare function is engaged and weight shown is the net weight

#### 4. W1 INDICATOR

This indicates the scale is set with dual range, and the weight is within the first range  $Max1/e1$

#### 5. W2 INDICATOR

This indicates the scale is set with dual range, and the weight is within the second range  $Max2/e2$

#### 6. M+ INDICATOR

This indicates memory contains data

7. TOTAL INDICATOR

This indicator appears when value shown on the display is the total saved value

8. BATTERY STATUS

This indicates the power level of the rechargeable battery, and should be charged immediately when the sign starts flashing to prolong the time of rechargeable battery

9. FIXED INDICATOR

This indicator appears when the fix unit price function is engaged, meaning the unit price enter can only be cancelled manually

10. PAID INDICATOR

This indicator appears when pay & change function is engaged and as a reminder for user to enter the amount receives from customer

11. CHANGE INDICATOR

This indicator appears when pay & change function is engaged and as a reminder for user the amount shown in the UNIT PRICE window is the amount to give to customer

12. CHARGING STATUS

Red light indicates AC power is supplied and charging is in process.  
Green light indicates charging completed

### 3.2 KEYBOARD

<b>ON/OFF</b>	Press this key to turn on the scale, or press and hold this key to turn off the scale
<b>ZERO</b>	1. Press this key to manually set the display value to zero, please refer to specification for manual zero range 2. Press this key to increase the value under internal setup mode
<b>TARE</b>	1. Press this key to tare the weight off from the platter 2. Press and hold this key to enter Pre-Tare setup
<b>CL</b>	Press this key to clear the unit price entered wrongly, or to escape and returning to weighing mode
<b>M+/MC</b>	1. Press this key to save the weighing result to memory 2. Press this key when TOTAL indicator is on to clear data saved in memory
<b>TOTAL/MR</b>	Press this key to recall the accumulated weighing results from memory by individual transaction and also total amount
<b>FIX</b>	Press this key to fix the unit price without being erased after weight is removed, and press again to unfix unit price
<b>X</b>	Press this key to calculate the price of non-weighed item
<b>=</b>	Press this key at the end of transaction to engage the change function when customer wishes to pay

<b>0 ~ 9</b>	Use these numerical keys to key in price and quantity
<b>· /MODE</b>	<ol style="list-style-type: none"> <li>1. Press this key for decimal point</li> <li>2. Press and hold this key to switch weighing unit between /kg or /100g</li> </ol>

#### 4 INTERNAL FUNCTION

Because of metrological legislation, accessing to some internal functions is limited to authorized person only when this unit is set to legal for trade. DO NOT try to open the scale or manipulate with the hardware seal when the unit is metrological approved. Please contact your dealer for more information. Below table defines all the internal function, and kindly note some functions are for dealer only.

<b>DISPLAY</b>	<b>FUNCTION SETTING</b>	<b>ACCESS CONDITION</b>
F0	Zero tracking speed	Dealer only when LOCKED
F1	<ol style="list-style-type: none"> <li>1. Analog to digital offset value</li> <li>2. Function key test</li> </ol>	Open
F2	<ol style="list-style-type: none"> <li>1. LCD segment check and software version information</li> <li>2. Adjusting backlight brightness</li> </ol>	Open
F3	Scale configuration setup	Dealer only when LOCKED
F4	Auto power off	Open
F5	Transmission Protocol	Open
F7	Transmission Mode	Open



F8	Printer selection	Open
F9	Automatic/Continuous tare	Open
F16	Turning on/off real time clock	Open
F17	Time and date setup	Open
F18	Buzzer sound	Open
F19	High resolution verification mode	Dealer only when LOCKED
F20	Manufacturing site gravity value setup	Dealer only when LOCKED
F21	Final destination gravity value setup	Dealer only when LOCKED
F38	Backlight timing	Open
F100	Reset to factory default	Dealer only when LOCKED
MODE+ON	Linearity calibration	Dealer only when LOCKED

#### 4.1 FUNCTION DEFINITION AND SETUP

- Press and hold **TARE** and press ON/OFF, display shows **F1**
- Use **TARE** (next) to scroll through the internal setting menu, and press **ZERO** to enter the setting.
- Use **MR/TOTAL** in sub-setting menu to scroll through available options. Press **ZERO** key to confirm and exit.
- Press **M+/MC** and display will show **SAVE**. If setting was changed, user can either press **ZERO** for yes to save the changes made or press **CL** for not to save the changes.

**CAUTION: BEFORE LEAVING THE INTERNAL SETTING, ALL CHANGES MUST BE SAVED OTHERWISE THE SCALE WILL STILL FUNCTION UNDER THE OLD SETTING.**

### **Offset Value & Function Key Test (F1)**

Under this function scale will show the offset value and be able to check the function of each key.

### **LCD Segment Check and Backlight Adjustment (F2)**

Under this function all segments and indicators will be in flashing mode as well as backlight for user to check if function properly. Backlight brightness also has 5 level selections for optimal viewing.

Press **MR/TOTAL** to adjust the backlight brightness. There are five settings, press **ZERO** to confirm setting.

### **Auto Power Off (F4)**

Under this function, user can select auto power off timing among 5 minutes, 10 minutes, 15 minutes and 20 minutes or disable the function. There are 5 settings, the numerical digit means the minutes to power off when scale idles. **ALL.on** means the Scale will never automatically turn off unless manual intervention.

**5.oFF -> 10.oFF -> 15.oFF -> 15.oFF -> ALL.on**

### **Transmission Protocol (F5)**

Under this function, user can select the transmission interface, speed, mode and format for RS-232 and also the communication protocol.

When display shows <b>F5</b> , press <b>MODE</b> to enter the function
First level selection: nonE / rS232
Second level selection: bAUd / ProtL
Selection under <b>bAud</b> : 2400 / 4800 / 9600 / 19200 / 38400 / 115200bps
Selection under <b>ProtL</b> : n.8.1 / E.7.1 / o.7.1 / E.8.1
use <b>MR/TOTAL</b> key to select, <b>M+/MC</b> to change, <b>ZERO</b> key to confirm

### **Terminology:**

**nonE:** no data output

**bAud:** baud rate

**rS232:** data output through RS-232 only

**ProtL:** transmission protocol

### Sample of print data:

<u>Ser</u>	<u>kg</u>	<u>Unit Price</u>	<u>Subt.</u>	
1.	0.200	25.64/kg	5.13	<b>(a)</b>
2.	0.215	56.00/100g	1.20	
3.	1.200	10.00/kg	12.00	
1.	---	---	-5.13	<b>(b)</b>
4.	+++		150.00	<b>(c)</b>
<hr/>				
4/		TOTAL:	163.20	<b>(d)</b>
		PAY:	200.00	<b>(e)</b>
		CHANGE:	36.80	

- (a) Each transaction entry is recorded by its serial number, weight, unit price and subtotal value
- (b) The delete line means the corresponding entry is erased from memory
- (c) The plus line means this entry is for non-weighed item been added to memory
- (d) This entry represent the total amount and total number of transitions when **MC** or = is pressed
- (e) This pay and change information is provided when = key is pressed. PAY is the amount receive from customer and CHANGE is the amount to be given

### Printer Selection (F8)

Under this function, user can select the peripheral which the scale will be connected to.

**PC** for computer -> **tEC** for Toshiba TEC printer -> **ArGoX** for Argox printer -> **tSC** for TSC printer -> **SH-24** for 24 columns Dot Matrix printer

### **Turning On/Off Real Time Clock (F16 Optional)**

Under this function, user can turn on or off real time clock function.

**rtC.on -> rtC.oF**

### **Time and Date Setup (F17)**

Use this function to setup year, month and date as well as time in 24 hours format.

- a. display shows **Y=XX**
- b. Press **ZERO** for increasing and **TARE** to change flashing digit, and press **MODE** to confirm and entering the next setting
- c. Display shows **M=XX**, press **ZERO** for increasing and **TARE** to change flashing digit, and press **MODE** to confirm and entering the next setting
- d. Display shows **d=XX**, press **ZERO** for increasing and **TARE** to change flashing digit, and press **MODE** to confirm and entering the next setting
- e. Display shows **H=XX**, press **ZERO** for increasing and **TARE** to change flashing digit, and press **MODE** to confirm and entering the next setting
- f. Display show **M=XX**, press **ZERO** for increasing and **TARE** to change flashing digit
- g. Press **MODE** to confirm to complete the setting

### **Buzzer Sound (F18)**

Under this function, user can select buzzer sound on or off.

**Sd.on -> Sd.oFF**

### **Backlight Timing (F38)**

Under this function, user can select when to turn off backlight.

There are 5 settings, **bL.on** for always on, **bL.oFF** for always off and **bL.X** means the backlight will automatically turn off after **X** seconds when scale idles.

**bL.5 -> bL.10 -> bL.15 -> bL.on -> bL.oFF**

## 5 INSTRUCTION TO USE

The price computing scale VGP/VOP is easy to use and user friendly. Everyone can start using the scale by following the below steps:

- a. The scale is placed on a solid surface
- b. Use adjustable feet and referring to the bubble level to make sure scale is in a level position
- c. Power on the scale and wait for the counting down
- d. Scale is in zero weight status and display showing zero indicator
- e. If zero indicator is not on, press **ZERO** to set the display to zero
- f. If zero weight status cannot be obtained, change the location and try again

### 5.1 WEIGHING

The standard procedure of a successful weighing is by placing the item on platter first and use the numeric keypad to enter the unit price. The gross weight of the item is displayed in the **WEIGHT** window and price entered is displayed in the **UNIT PRICE** window.

When item is placed on platter and unit price is entered, scale will show the price of such item on **TOTAL PRICE** window.

To start the next weighing, remove the item from platter and put on the next item. Use the numeric keypad to enter the unit price and price will be shown in the **TOTAL PRICE** window.

**NOTE:** Unit price will return to zero when item is removed from platter according to the legislation. Press **FIX** to use the same unit price for all subsequent weighing if needed. A **FIX** indicator will appear to remind the user of the current setting

### 5.2 HOW TO USE TARE FUNCTION

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

- a. Platter is empty and **ZERO** indicator is on
- b. Put the container on platter first and press **TARE**

After **TARE** is pressed, the **NET** indicator will appear.

### 5.3 HOW TO CLEAR TARE FUNCTION

- a. Remove everything from platter
- b. Press **TARE** again and **NET** indicator should turn off and **ZERO** indicator should appear as scale has returned to zero weight condition

**NOTE:**

It is regulated by OIML R76 that in dual range application, tare value will be cancelled automatically when returning from W2 to W1.

#### **5.4 HOW TO CHANGE UNIT PRICE MODE**

When purchasing an item with a higher unit price, the scale supports to calculate unit price per kg or unit price per 100g, and be able to put them on the same receipt. Before enable this switching, make sure the platter is empty and zero indicator is on.

- a. Press and hold the **MODE** key
- b. Use **M+/MC** key and refer to the weigh unit indicator to select between **/kg** or **/100g**
- c. Press **ZERO** to confirm and return to normal weighing mode
- d. If no decision is made or confirm executed, scale will return to normal after 10 seconds

#### **5.5 HOW TO FIX A UNIT PRICE**

It is restricted by the legislation that unit price entered must be automatically cancelled when loads are removed. So if the same unit price will be used for subsequent transactions, user can activate this function without enter repeatedly.

- a. Use numeric keypad to enter the unit price
- b. Press **FIX** and **Fixed Unit Price** indicator is on
- c. The same unit price will remain on unless it is cancelled manually
- d. To cancel, press **FIX** again and **Fixed Unit Price** indicator will be off. The price entered will be cancelled automatically when loads are removed from platter.

#### **5.6 HOW TO CALCULATE A NON-WEIGHED ITEM**

This scale not only calculates weighable item but also no-weighed item, and able to calculate the total price.

- a. Use numeric keypad to enter the unit price
- b. Press **X** and "**n.\_000**" will appear in the **WEIGHT** window for quantity to be entered

- c. Use the keypad again to enter the quantity which will reflect in the **WEIGHT** window
- d. The calculate result is shown in the **TOTAL PRICE** window
- e. Press **CL** if either unit price or quantity is entered wrongly

## **5.7 MEMORY FUNCTION**

### **5.7.1 To Save To Memory**

This scale comes with memory function when equips with RS232 interface. A printer or POS terminal must be connected with the scale for the memory function to work.

- a. Obtain the total price by either regular weighing or non-weighed item
- b. Press **M+/MC**
- c. **WEIGHT** window shows "**P.P. XX**", for "**XX**" is the number of transactions saved in memory, while the **TOTAL PRICE** window will show the accumulated result with **TOTAL** indicator on. Both information will remain on display for 1 second and return to normal weighing
- d. **M+** indicator is switched on meaning there are data saved in memory
- e. Remove item from platter and repeat the above steps to save the next transaction

### **5.7.2 To Recall From Memory**

- a. Obtain the total price by either regular weighing or non-weighed item
- b. Press **TOTAL/MR** once to recall the total amount of transactions saved in memory, **WEIGHT** window shows "**P.P. XX**", for "**XX**" is the number of transactions saved in memory, while the **TOTAL PRICE** window will show the accumulated result with **TOTAL** indicator on.
- c. Press **TOTAL/MR** again to start review the transaction from the first entry, **WEIGHT** window shows "**P. 01**" and the **TOTAL PRICE** window will show the amount of the first entry
- d. Continue to press **TOTAL/MR** and the cycle will start all over again
- e. To quit, simply press **CL** to escape

### **5.7.3 To Delete From Memory**

#### **5.7.3.1 To delete single transaction**

- a. Follow 5.7.2 to recall the transaction from memory
- b. Press **M+/MC** when the entry is found, information shown in **UNIT PRICE** and **TOTAL PRICE** window will return to zero

- c. Transaction is deleted and scale will be in memory recall mode to wait for further instruction. Press **TOTAL/MR** to search another transaction or press **CL** to escape.

### 5.7.3.2 To delete entire transaction

- a. Follow 5.7.2 to recall the total accumulated result from memory. Display will show "**P.P. XX**" for "XX" is the number of transactions saved
- b. Press **M+/MC**, and all transactions will be deleted. Display will return to normal weighing followed by a long beep and **M+** indicator is off

## 5.8 TO PAY AND CHANGE

At the end of transaction, use this function when customer wishes to pay.

- a. Press **=** to start the pay and change process
- b. **WEIGHT** window will show "**P.P. XX**" for "XX" is the number of transactions saved and amount shown in **TOTAL PRICE** is the total amount to be paid with **TOTAL** indicator on
- c. Use numeric keypad to enter the amount receive from customer while **UNIT PRICE** window shows "**PAid**" and **PAID** indicator on
- d. When the amount enter exceeds the amount to be paid, **UNIT PRICE** window will show the change to be given to customer while **CHANGE** indicator is on
- e. If the amount enter is wrong, press **CL** to clear and re-enter the amount receive from customer, **UNIT PRICE** window will show "**PAid**" and **PAID** indicator on as reminder
- f. Press **=** to complete the transaction and scale will return to normal weighing with all indicators off

## 5.8 HOW TO CONNECT RS-232 (D-sub 9 pin female connector)

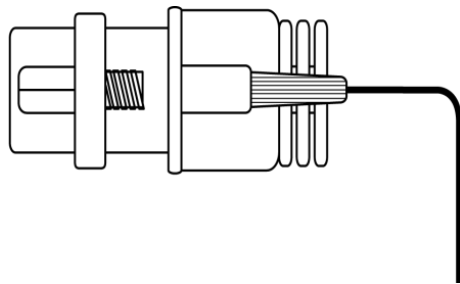
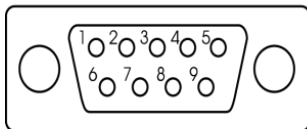
- a. Refer to 4.1.6 to set the transmission protocol
- b. Data code: ASCII

Pin Assignment (PC end)

Pin	Assignment
1	DCD
2	RXD

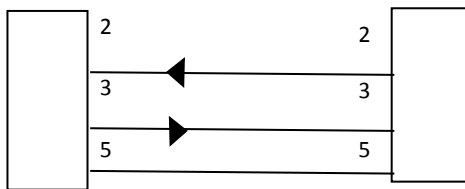


3	TXD
4	DTR
5	GND
6	DSR
7	RTS
8	CTS
9	NC



PC end

Scale end



Only need to connect Pin2, 3 and 5

## 6. DAILY CARE AND MAINTENANCE

-Do not attempt to open the scale or try to repair except authorized technicians only

-Always aware of the operating environment to avoid excessive moisture and extreme temperature

- Use original factory supplied switching adaptor for charging only
- Recharge the battery immediately when the battery level indicator starts flashing to avoid permanent damage to the rechargeable battery
- Do not put anything on the platter after weighing completes to avoid causing damage to the load cell
- If cleaning is needed, use damp cloth to clean the scale body. Stainless steel platter can be removed for cleaning purpose
- If cleaning agent is needed, please use mild detergent and avoid excessive water. Do not use any chemical or alcohol for cleaning purpose
- If you are uncertain about how to properly maintaining your scale to the optimal condition, please contact your dealer for further assistance

**APPENDIX:  
ERROR CODES**

ERROR CODE	DESCRIPTION	SOLUTION
Err 0	Flash memory accessing error	Change MCU, contact dealer for assistance
Err 1	A/D accessing error	Check A/D, contact dealer for assistance
-----	No load cell signal/load cell reading error	Check load cell and connection
Err 2	Load cell wiring error	Check load cell wiring pin assignment
Err 3	Offset value too low/too high	

**DISPLAY SEGMENT DEFINITION**

A	B	C	D	E	F	G	H	I	J	K	L	M
N	O	P	Q	R	S	T	U	V	W	X	Y	Z
0	1	2	3	4	5	6	7	8	9			