



**AGS**  
**Digital Weighing Scale**  
**Operation Manual**

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## CAUTIONS

1. This unit is legal for trade only when it is sealed (and/or stamped) and bearing a serial number. Do not attempt to break the seal (or stamp) affixed to this scale or remove the serial number. Contact your dealer for more information and after sales service.
2. For most accurate weighing result, do not use this scale in where or when the environment condition falls beyond as those listed on SPECIFICATIONS.
3. Do not attempt to open this unit or conduct any trouble shootings other than those listed on TROUBLESHOOTING.
4. Do not use this scale for chemical substances or in any environment that contains chemical vapor.
5. Precision measuring instrument, handle with care.
6. Do not open scale. No user serviceable parts inside.

## 1. INSTALLATION

- a. Check and make sure that the following accessories are included:

Operation Manual x 1

Scale x 1

Stainless steel platter x 1

Power adaptor x 1

Dust Cover x 1

Contact your dealer if any item is missing.

- b. Place the stainless steel platter on the scale.

- c. Power on the scale

- d. Before charging the scale or power on with the adaptor supplied. Please make sure the input voltage listed on the back of the adaptor matches with the local voltage. If not, do not use it and contact your dealer immediately.

- e. Before first time use, charge the scale for at least 8 hours to ensure the best performance.

## 2. SPECIFICATIONS

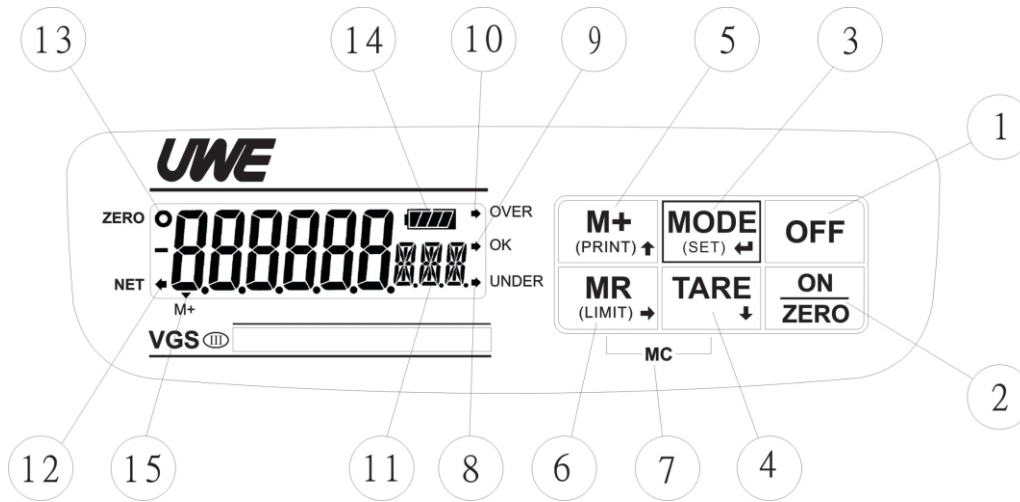
Model No.	Capacity (Max)	Division	
		NTEP (e)	
AGS-300	150/300 g	0.05 / 0.1 g	
AGS-600	300/600 g	0.1 / 0.2 g	
AGS-1500	600/1500 g	0.2 / 0.5 g	
AGS-3000	3000 g	0.5 g	
AGS-6000	6000 g	1 g	
AGS-15K	15 kg	2 g	
AGS-30K	30 kg	5 g	
Tare Range	Full Tare Range		
Power-on Zero Range	±10% Max		
Zero Range	±2% Max		
Min. Load	20e*		
Power Source	By Built-in Rechargeable Battery or AD/DC Power Adaptor		
Operating Environment	0°~40°C (32°~104°F), Non-condensed. R.H.≤85%		

\*Specifications subject to change without notice

**NOTE:**

NTEP = Legal for trade (6000e)

**3. KEYBOARD LAYOUT AND DESCRIPTION**



1	<b>OFF</b>	Press this key to turn scale off
2	<b>ON/ZERO</b>	<ol style="list-style-type: none"> <li>1. Press this key to turn scale on or set weight to zero</li> <li>2. Press and hold this key to turn backlight on/off</li> </ol>
3	<b>MODE ←</b>	Press this key to switch weighing unit from metric to imperial (when this unit is enabled) and to piece counting
4	<b>TARE →</b>	Press this key to tare off the weight of a container
5	<b>M+ ↑</b>	Press this key to save the weighing result to memory
6	<b>MR ←</b>	<ol style="list-style-type: none"> <li>1. Press this key to recall total accumulated weighing result from memory</li> <li>2. Press this key in piece counting mode for sampling</li> </ol>
7	<b>MC</b>	Press MR and Tare keys together to clear total accumulated weighing result from memory.
8	<b>OVER INDICATOR</b>	These indicators notify the user the weighing range of the loads which is being placed on the platter.
9	<b>OK INDICATOR</b>	
10	<b>UNDER INDICATOR</b>	

11	<b>Weight unit</b>	It indicates the weight unit which the scale is currently measuring.
12	<b>NET INDICATOR</b>	This indicator appears to indicate the tare function is in operation and weight displayed is net weight
13	<b>ZERO INDICATOR</b>	This indicator appears to indicate a zero weight status
14	<b>BATTERY LEVEL INDICATOR</b>	This indicator shows the battery level or charging status
15	<b>M+ INDICATOR</b>	This indicator appears when weight accumulation is operational

## 4. INITIAL SETUP

### 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 the scale to obtain a level position. Refer to the bubble indicator for leveling condition.

### INTERNAL SETTING

- Press and hold TARE and press ON/OFF, display shows F1
- Use TARE (next) or M+ (previous) to scroll through the internal setting menu, and press MODE to enter the setting.
- Use MODE in sub-setting menu to scroll through available options. Press TARE key to confirm and exit.
- Press ZERO in the function selection screen to SAVE and restart.

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

### F0. Auto zero tracking

This function helps remove unwanted display output within a defined division range when returning to zero. (Auto Zero Tracking Range =  $X * 0.5d$ )

Zero 0 -> Zero 1 -> Zero 2 -> Zero 3 -> Zero 4

## **F2. Display Segment Check**

User can enter this function to check to see if the display and backlight (if purchased) are functioning properly.

## **F4. Select Auto Power Off Setting**

The scale is equipped with Auto Power Off Function. The scale will power off automatically if it is not used for 4 minutes. (Default)

0oFF -> 5oFF -> 10oFF -> 20oFF -> 30oFF

## **F5. Transmission Protocol**

Under this function, user can select RS-232 baud rate.

4800 -> 9600 -> 19200 -> 38400 bps

## **F6. Digital Motion Filter**

Under this function, user can enable digital motion filtering function if the weighing environment is unstable. The scale is equipped with 8 filter speeds:

Filt 0 -> Filt 1 -> Filt 2 -> Filt 3 -> Filt 4 -> Filt 5 -> Filt 6 -> Filt 7

## **F7. RS-232 Transmission Mode**

There are four selectable transmission modes to choose according to end user preference.

Conti - continuous transmission when weight is stabilized

Auto - sends data upon stable weight reading

P out - sends data when press M+

CMD - sends data upon computer's request

Conti -> Auto -> P out -> CMD

## **F8. Enable/disable UTP printer mode**

Use this function to enable / disable UTP printer protocol.

UTP -> UTP OF

## **F9. Select Auto Tare Function**

This scale is equipped with auto tare function which tares off the initial weight automatically when

this function is engaged. The tare weight is automatically cleared when everything is removed from platter.

tr oFF -> tr on

### **F10. Original Calibrated Zero Function**

This scale is equipped with original calibrated zero function that enables user to select if the original calibrated zero is required to utilize as the weighing base for initial power-on status.

AC ON - enable original calibrated zero function.

AC OFF - disable original calibrated zero function.

Note:

1. This function is prohibited under NTEP setting.
2. VGS will perform Initial Zero Setting when AC OFF is selected.

AC ON -> AC OFF

### **F11. Accumulation Function for M+**

This scale is equipped with accumulation function enabled/disabled when pressing M+. When accumulation function is engaged, press M+ will simultaneously print out RS-232/printer data and perform accumulation function.

Ad on -> Ad OFF

### **F13. Number of printout copy**

9 parameters (copy 1 to copy 9) are available. Select the required number of printout copy here.

COPY 1 -> COPY 2 -> COPY 3 -> COPY 4 -> COPY 5 -> COPY 6 -> COPY 7 -> COPY 8 -> COPY 9

\*This function will not appear in the menu if F8. UTP printer mode is disabled.

### **F14. Total print (Accumulation result) printout**

This scale is equipped with total print enabled/disabled when performing memory-clear function. When total print is disabled, pressing MR and TARE for memory clear will only clear the stored transaction results, it won't print out data of total.

tt on -> tt oFF

\*This function will not appear in the menu if F8. UTP printer mode is disabled.



### **F15. Setting UTP date and time data**

This function allows user to set date and time information for UTP printout.

Under this function:

Use MR for value increase

Use M+ for shifting digit

Use Mode for confirming the setting

Parameter info:

y=xx set last 2 digits of year

m=xx set month

d=xx set date

H=xx set hour

m=xx set minute

### **F16. Check weighing buzzer output**

This function allows user to select various check weighing buzzer output.

<b>Display</b>	<b>Description</b>
bp oFF	No alarm for any weighing result
bp ok	Alarm activates when weighing result falls within the range
bp H.L	Alarm activates when weighing result falls outside the range
bp H	Alarm activates when weighing result is greater than target weighing range
bb-Lo	Alarm activates when weighing result is less than the target weighing range

**\*F19 ~ F21 functions are reserved for verification use.**

## **5. OPERATION INSTRUCTION**

Please follow the steps below before starting.

- 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

### **WEIGHING UNIT SELECTION**

Press MODE to switch between metric and imperial weighing units.

### **TARE FUNCTION SETTING**

This scale equips with auto tare and manual tare. (please refer to F9 of internal setting)

- a. If auto tare function is enabled, the first weight being placed on platter will be automatically tared
- b. If manual tare is needed, place the load container on the platter first and press TARE to tare off the weight. After weight is tared, NET indicator will appear indicating the weight showing on display is net weight

### **HOW TO CLEAR TARE FUNCTION**

- a. To clear auto tare, remove the initial weight/load from the platter and NET indicator will turn off. Press ZERO to return to zero weight status if ZERO indicator does not appear.
- b. To clear manual tare, remove everything from platter and press TARE, the NET indicator will turn off. Press ZERO to return to zero weight status if ZERO indicator does not appear.

## **MEMORY FUNCTION**

### **How To Save A Weighing Result To Memory**

- a. Place a load on the scale and result will show on the display
- b. Wait the Stable signal appears then press M+
- c. Scale displays "P. X", which indicated the total number of transactions accumulated in memory.
- d. Weight result is now saved to memory and M+ indicator appears indicating memory contains data
- e. Remove the load and scale will return to zero weight status
- f. Put on another weight and press M+ to save the next weight

### **HOW TO RECALL A WEIGHING RESULT FROM MEMORY**

- a. Press MR at any time to recall the total result saved in memory, MR indicator appears indicating the value shown on display is total result.
- b. Result will remain on display for a short while before return to the previous screen

### **HOW TO CLEAR WEIGHING RESULT FROM MEMORY**

Follow the below steps to clear saved data from memory after all transactions are completed.

- a. Press MR first to recall the total saved result from memory, the MR indicator will appear
- b. Press MR and TARE keys simultaneously (MC) to clear the memory and M+ indicator will turn off indicating there is no data in the memory.

## **PIECE COUNTING FUNCTION**

AGS is equipped with simple piece counting function, please follow the below procedure to enable the function and sampling method.

- a. AGS is on and both Zero indicator and Stable indicator are on
- b. Press MODE until display shows PCS as weighing unit on the display
- c. Press and hold MODE and display shows S= 10, this means count 10pcs of the same item to put on platter for sampling the average unit piece weight
- d. If 10pcs is not the prefer sampling quantity, continue to press M+ and display will show S=20, S=50, S=100, S=200, S=500. When the ideal quantity is reached, press MODE to confirm and put the sample quantity on platter.
- e. Scale will begin the sampling process to calculate the unit piece weight, when the sampling is done scale will show the sampled quantity on display
- f. Remove the load and put new batch, display will show the batch quantity.
- g. If display shows a value while platter is empty, press ZERO to zero off the weight.
- h. If a new sampling is needed, press and hold MR to start new sampling by following step c to d.

## PERCENTAGE WEIGHING

AGS is equipped with percentage weighing function, please follow the below procedure to enable the function and sampling method.

- a. AGS is on and both Zero indicator and Stable indicator are on
- b. Press MODE until display shows PCT as weighing unit on the display
- c. Place the sample load that represents 100% of the value for percentage weighing on the platter
- d. Press and hold MODE, and the display shows "S=100"
- e. The scale is now ready for percentage weighing. Put an object on the platter and the display will record a percentage of the original sample.

## CHECK WEIGHING OPERATION

AGS is equipped with check weighing function. Users can use this function to set high and low limits to quickly check if the weight, PCS, or percentage is within the defined range.

### SETTING HIGH AND LOW LIMITS

- a. AGS is on and both Zero indicator and Stable indicator are on.
- b. Use MODE to select appropriate weighing unit : metric units(g/kg), imperial unit (lb), PCS and PCT (%)
- c. Press and hold MR until display shows "CHKECY on" or "CHKECY off" , then continue holding MR until it displays "Hi".
- d. Enter value for low limit
  - Use M+ for value increase
  - Use TARE for value decrease
  - Use MR for shifting digits
  - Press MODE to confirm and proceed to low limit setting.
- e. Display shows "LoW".
- f. Enter value for low limit
  - Use M+ for value increase
  - Use TARE for value decrease
  - Use MR for shifting digits
  - Press MODE to save and exit.

## ENABLING/DISABLING CHECK WEIGHING OPERATION

- a. Check Weighing operation is engaged after completing high and low value setting.
- b. To disable check weighing operation, press and hold MR until AGS displays "CHKECY off"

## 6. TROUBLESHOOTING

Syndrome	Scale cannot be turned on
Action	Recharge the scale for at least 8 hours before first time use or plug in the power adaptor before power on the scale. Secure both ends of the power adaptor and try again.
Syndrome	Scale turned off automatically
Action	Refer to F4. Select Auto Power Off Setting to disable auto power off setting. If the Lo-BAT indicator is on, apply the power adaptor.
Syndrome	Rated capacity cannot be reached
Action	Make sure nothing is obstructing the weighing platter and scale body. Remove everything from weighing plate and restart the scale again.
Syndrome	Weighing result is not accurate
Action	Adjust the adjustable feet to a level condition. Place the scale away from all disturbances, such as airflow, vibration or RFI. Contact your dealer if the above steps fail to correct the problem.

## 7. DAILY CARE AND MAINTENANCE

- Clean the scale with a soft and damp cloth. If necessary, apply a mild detergent.
- Do not use any harsh, abrasive material, acetone, volatile solvent, thinner or alcohol for cleaning.
- Verify the accuracy of scale periodically. Re-calibrate the scale if necessary.

NOTE: In some countries, calibration requires authorized/qualified agent. Contact your dealer for more information.

- It is a good practice to apply the dust cover when operating the scale.
- The scale must be placed horizontally during transportation or long time storage.
- Remove platter from scale before transportation or long time storage.
- Store scale in a dry and clean place.