ADW-E

OPERATION MANUAL

PLEASE READ THIS MANUAL VERY CAREFULLY BEFORE OPERATING

CONTENTS

CAUTIONS

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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 **TROUBLE SHOOTING.** No user serviceable parts inside.

4. Do not submerge scale into water.

5. Do not use pressurized water nozzle for cleaning.

6. Do not use this scale for chemical substances or in any environments that contains chemical vapor.

7. Precision measuring instrument, handle with care.

8. Always apply the battery cap when not in charging.

9. Check desiccant underneath the scale periodically. Should any part of the desiccant turns to pink color, contact your dealer for scale inspection.

1. INSTALLATION

1.1 Check and make sure that the following accessories
    are included:
    This operation manual
    Scale x 1
    Plastic platter x 1
    Stainless steel cover x 1
    Screw x 1
    Rubber cap x 1
    Power adaptor x 1
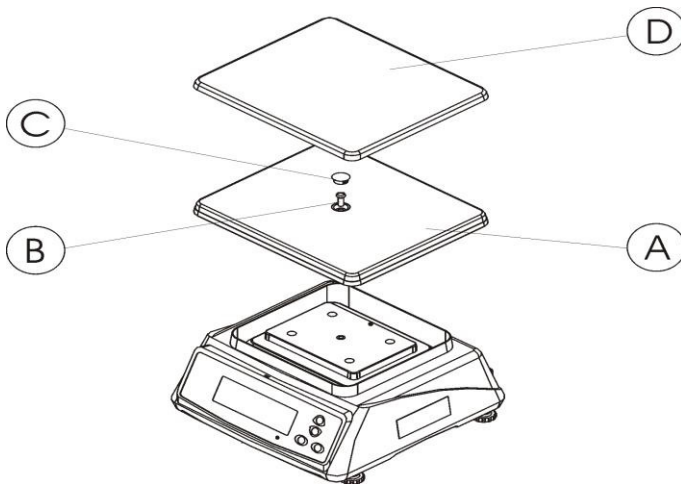
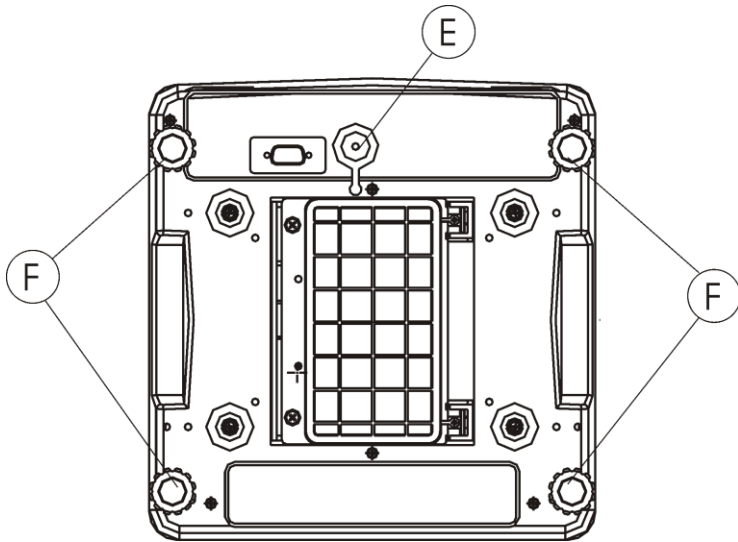Contact your dealer if any item is missing.

FIG 1

FIG 2

1.2 Locks the plastic platter (**FIG 1 A**) to the platter
    holder, with the screw (**FIG 1 B**) included, and then
    apply the screw rubber cap (**FIG 1 C**).

1.3 Place the stainless steel platter (**FIG 1 D**) onto
    the plastic platter.

1.4 Power on the scale

    a. 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.

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

c. After battery is fully charged, remove adaptor from scale. Apply the battery cap (**FIG 2 E**) to seal the DC input jack of scale.

2. SPECIFICATIONS

Model No.	Capacity (Max)	Division (e)	
		OIML	Non-OIML
ADW-1500E	1500g	0.5g	NIL
ADW-3000E	3000g	1g	0.5g
ADW-6000E	6000g	2g	1g
ADW-15KE	15kg	0.005kg	0.002kg
ADW-30KE	30kg	0.01kg	0.005kg
Tare Range	Full Tare Range		
Power-on Zero Range	±10% Max		
Zero Range	±2% Max		
Min. Load	20e*		
Display	LED Display		
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

*The minimum load of 15kg for Non-OIML application is 25e
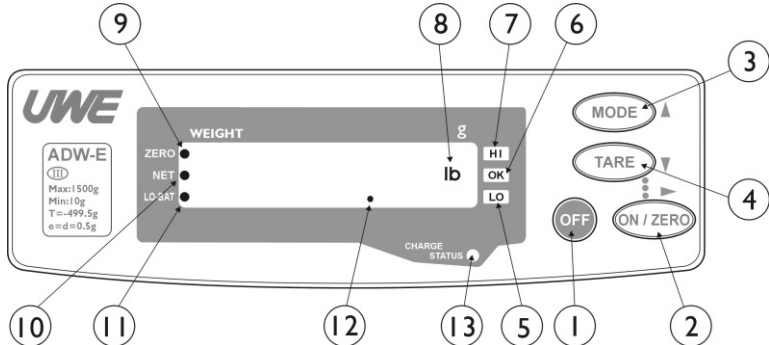
NOTE 1:

OIML = Legal for trade (1/3000)

Non-OIML = Not legal for trade (1/6000~1/7500)

NOTE 2:

Display resolution of avoirdupois weight units (lb/lb and lb/oz) always = 1/3000

3. KEYBOARD LAYOUT AND DESCRIPTION

1. OFF KEY

Press this key to turn scale off

2. ON/ZERO KEY

Press this key to: (a) turn scale on or reset display value to zero; (b) move cursor to the right in function setup

3. MODE KEY

Press this key to: (a) shift among different weight units; (b) increase value in function setup

4. TARE KEY

Press this key to: (a) tare off the weight of a container;

(b) decrease value in function setup

5. LO INDICATOR

This indicator appears to indicate the weight detected below the low limit set (Weight check function)

6. OK INDICATOR

This indicator appears to indicate the weight detected within the high and low limit range (Weight check function)

7. HI INDICATOR

This indicator appears to indicate the weight detected above the high limit set (Weight check function)

8. AVOIRDUPOIS WEIGHT UNITS INDICATOR

This indicator appears to indicate the weight being is avoirdupois weight units (lb). Two avoirdupois weight units are available, i.e. decimal pound (e.g. 5.62 means 5.62 lb) and pound/ounce (e.g. 2.15.01 means 2 lb and 15.1 ounce).

9. ZERO INDICATOR

This indicator appears to indicate a zero weight status

10. NET INDICATOR

This indicator appears to indicate the tare function is in operation and weight displayed is net weight

11. LO-BAT INDICATOR

When this indicator appears, recharge the scale immediately. Failure to do so may cause unrecoverable damage to the rechargeable battery inside scale

12. STANDBY INDICATOR

This indicator appears to indicate scale is in standby mode (power saving function)

13. IN-CHARGE INDICATOR

Red color: Recharging battery
Green color: Charging completed

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 (**FIG 2 F**) underneath scale to obtain a level position. Refer to the bubble indicator for leveling condition.

4.2 INTERNAL SETTING

4.2.1 Display Segment Check

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

a. Scale is off

b. Press and hold **TARE,** then press **ON/ZERO**

c. Scale displays **F.1**

d. Press **TARE** once

e. Scale displays **F.2**

f. Press **MODE** and all segments will light up to allow user to check the condition of display

g. Press **TARE** for next function setup or **ON/ZERO** to restart the scale

4.2.2 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. Follow the below steps to enable/disable **Auto Power Off Function.**

a. Scale is off

b. Press and hold **TARE**, then press **ON/ZERO**

c. Scale displays **F.1**

d. Press **TARE** three times

e. Scale displays **F.4**

f. Press **MODE** to shift between **0._OFF** and **4._OFF**

   -To enable **Auto Power Off Function,** press **TARE** when **4._OFF** appears

   -To disable **Auto Power Off Function,** press **TARE** when **0._OFF** appears

g. Press **ON/ZERO** to restart the scale or **TARE** for next function setup

4.2.3 Select RS-232 Baud Rate & Protocol

This scale is equipped with 4 RS232C output baud rate and 2 transmission protocol settings for user to select.

a. Scale is off

b. Press and hold **TARE**, then press **ON/ZERO**

c. Scale displays **F.1**

d. Press **TARE** four times

e. Scale displays **F.5**

f. Press **MODE** to select baud rate of 4800, 9600, 19200, 38400

g. Press and hold **MODE** for 2 seconds to enter transmission protocol setup

h. Press **MODE** to select protocol of N81 or E71

i. When the preferred transmission protocol shows on display, press **ON/ZERO** to confirm and restart the scale or **TARE** for next function setup

NOTE:

The default data output format of the scale is

Baud Rate = 9600

Data Bit = 8

Stop Bit = 1

Parity = None

4.2.4 Select Data Transmission Mode

This scale provides 2 types of transmission mode depending on the requirement and environment.

a. Scale is off

b. Press and hold **TARE**, then press **ON/ZERO**

c. Scale displays **F.1**

d. Press **TARE** five times

e. Scale displays **F.7**

f. Press **MODE** to select transmission mode "trAn1" or "trAn2"

g. When the preferred data transmission mode shows on display, press **ON/ZERO** to confirm and restart the scale or **TARE** for next function setup

NOTE:

"**trAn1**" is to transmit data continuously after reading is stabled

"**trAn2**" is to transmit single data only after reading is stabled. However, scale will not send any data if weight detected is less than the minimum load.

4.2.5 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.

a. Scale is off

b. Press and hold **TARE**, then press **ON/ZERO**

c. Scale displays **F.1**

d. Press **TARE** six times

e. Scale displays **F.9**

f. Press **MODE** to select between "Tr._on" or "Tr.oFF"

    -To enable **Auto Tare Function,** press **TARE** when **Tr._on** appears

    -To disable **Auto Tare Function,** press **TARE** when **Tr.oFF** appears

g. Press **ON/ZERO** to confirm and restart the scale or **TARE** for next function setup

5. INSTRUCTION FOR USE

5.1 BEFORE WEIGHING

Make sure that:

a. The plastic platter is screwed firmly and the stainless steel platter cover is placed on the plastic platter.

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 **ON/ZERO** to set display to zero.

5.2 WEIGHING

a. Always place an object onto the platter gently. Excessive force applied to platter may cause damages to sensor inside scale.

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

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

5.3 SELECT WEIGHT UNIT

Press **MODE** to shift between metric or avoirdupois weight units. The weight unit used before power off would be employed when the scale is turned on again.

NOTE:

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

5.4 SMART POWER SAVING FUNCTION

When this function is enable, the displays digits will be turned off when a stable weight is detected and remains stable for about 10 seconds. Standby indicator appears to indicate scale is now in standby mode.

Display will be automatically turned on again when a different weight is detected.

5.4.1 Select Power Saving Setting

The scale is equipped with smart **POWER SAVING FUNCTION**. Default setting = enable. Follow the below step to enable or disable this function.

a. Remove all loads from platter.

b. Turn scale on.

c. Scale displays zero weight; if not, press **ON/ZERO**.

d. Press and hold **ON/ZERO**. Scale displays:

   -L._oFF = Function enable

   -L1._on = Function disable.

5.5 SET DISPLAYED VALUE TO ZERO WHEN UNLOADED

Press **ON/ZERO** can eliminate a positive or negative value when scale is not at its zero. After **ON/ZERO** is pressed, the **ZERO INDICATOR** appears.

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

NOTE:

-When scale is set at OIML and application is legal for trade. User only needs to press **ON/ZERO** once when setting the value to zero. The re-zero function will take place when reading is stabled

-When scale is set at Non-OIML and application is not legal for trade. User can set the value to zero at anytime when pressing **ON/ZERO**

5.6 TARE OFF THE WEIGHT OF A CONTAINER

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

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 **NET INDICATOR** would appear.

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

NOTE:

- When scale is set at OIML and application is legal for trade. User only needs to press **TARE** once when tare off a weight. The tare function will take place when reading is stabled

- When scale is set at Non-OIML and application is not legal for trade. User can tare off the weight anytime when pressing **TARE**

5.7 CLEAR THE TARE FUNCTION

a. Remove all loads from platter

b. The tare effect will be cancelled:

-Automatically if automatic tare function is employed, or

-By pressing **TARE**

c. After **TARE** is pressed, the **NET INDICATOR** would disappear.

5.8 WEIGHT CHECK FUNCTION

This scale is equipped with Weight Check Function. An audio and video signal is generated to reflect the weight check result.

5.8.1 Setting the High, Low Weight Limits and Buzzer Warning

a. Remove all loads from platter

b. Turn scale on

c. Make sure that **ZERO INDICATOR** is on; if not, press **ON/ZERO**

d. Press and hold **ON/ZERO**, then press **TARE**

e. The **HI INDICATOR** appears and the cursor is flashing, scale is now in upper weight limit setup

f. Utilize **MODE, TARE** and **ON/ZERO** to set the required high weight limit

g. When the require high weight limit attained, press and hold **ON/ZERO,** then press **TARE**

h. The **LO INDICATOR** appears and the cursor is flashing, scale is now in lower weight limit setup

i. Utilize **MODE, TARE** and **ON/ZERO** to set the required low weight limit

j. When the require low weight limit attained, press and hold **ON/ZERO,** then press **TARE**

k. Scale displays buzzer warning parameter setup

l. Press **MODE** until the desired buzzer output parameter appears

NOTE:

-bb_L. = buzzer warning when weight detected below the low weight limit set.

-bb_no = no buzzer warning.

-bb_S. = buzzer warning when weight detected within the high and low weight limit set.

-bb_H.L. = buzzer warning when weight detected below/above the low/high weight limit set.

-bb_H. = buzzer warning when weight detected above the high weight limit set.

m. When the require buzzer warning setting is selected, press and hold **ON/ZERO,** then press **TARE** to return to normal operation status

NOTE:

Weight Check Function will not valid when the weight unit engaged (e.g. lb) is different from the original weight unit programmed under (e.g. gram).

Weight Check Function will not valid when the weight is less than minimum load. Please refer to **SPECIFICATION** for minimum load of each capacity.

Weight Check Function will not valid when high and low weight limits are not logical (e.g. value of high weight limit is less than the value of the weight limit set). To disable Weight Check Function, simply set the high weight limit to zero or set the buzzer warning to **bb_no.** to turn off the warning.

5.8.2 Weight Check Transaction

Place a subject matter onto the platter. The Weight Check result is displayed on the display.

a. The **HI INDICATOR** will appear when weight detected over the high weight limit preset.

b. The **OK INDICATOR** will appear when weight detected within the high upper and low weight limit.

c. The **LO INDICATOR** will appear when weight detected under the low weight limit preset.

5.9 EXTENDED DISPLAY

This scale is equipped with extended display function
for reference purpose only. To activate the function,
press and hold **MODE** for 2 seconds and display will flash
the extended digit for 5 seconds before return to normal.

5.11 RECHARGE THE SCALE

The scale is equipped with a built-in rechargeable
battery. When the **LO-BAT INDICATOR** appears, recharge
the scale immediately. Failure to do so may cause
unrecoverable damage to the rechargeable battery.
Charging is completed when the color of the **IN-CHARGE
INDICATOR** turns green.

6. TROUBLE SHOOTING

Syndrome   **Scale cannot be turned on**

Check: Is the scale charged?

Action: Recharge the scale for at least 8 hours before first time use or plug in the power adaptor before power on the scale.

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 turned off automatically**

Check   Is **Auto Power Off Function** employed?

Action   Refer to **4.2.2** to disable **Auto Power Off Function.**

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

Action   Apply the power adaptor.

Syndrome   **Rated capacity cannot be reached**

Check   Is the **NET INDICATOR** on?

Action: Turn the scale off. Remove all loads from platter and turn on again.

Check   Is there anything obstructing the platter?

Action   Remove all obstacles.

Syndrome   **Weighing result is not accurate**

Check   Is the scale placed in a level condition?

Action   Adjust the adjustable feet to 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 **5.3** for weight unit setting and usage.

Syndrome   **Display shows 00000 after counting down**

Check   Is the scale overloaded?

Action   Remove some loads from platter.

Check   Is the stainless steel platter cover placed on the platter?

Action   Place the stainless steel platter cover onto the platter.

7. DAILY CARE AND MAINTENANCE

7.1   Clean the scale with a soft and damp cloth. If necessary, apply a mild detergent.

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   It is a good practice to apply the dust cover when operating the scale.

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

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

7.7   Store scale in a dry and clean place.

KONFORMITÄTSERKLÄRUNG
Declaration of conformity
Déclaration de conformité

CE

Die ichtselbsttätigen Waage

(III)

The non-automatic weighing instrument

L'instrument de pesage à fonctionnement non automatique

Hersteller: *Manufacturer*: Fabricant	Universal Weight Enterprise Co., Ltd.
Typ/Modell: *Type/Model*: Type/modèle:	ADW-E
Nr. der EG-Bauartzulassung (gegebenen falls): *No of the EC type-approval certificate (where applicable):* Nº du certificat d'approbation CE de type (le cas écheant):	T6160

entspricht dem in der Bescheinigung über die Bauartzulassung beschriebenen Baumuster, sowie den Anforderungen der EG-Richtlinie 90/384/EWG in der jeweils geltenden Fassung und den Anforderungen folgender EG-Richtlinien:
corresponds to the production model described in the EC type-approval certificate and to the requirements of the Council Directive 90/384/EEC as amended and to the requirements of the following EC directives:
correspond au modèle décrit dans le certificat d'approbation CE de type, aux exigences de la directive 90/384/CEE modifiée et aux exigences des directives CE suivantes:

*Diese Erklärung gilt nur in Verbindung mit einer Konformitätsbescheinigung einer benanten Stelle.
This Declaration of conformity is only valid with a certificate of conformity issued by a notified body
*Cette dèclaration est valide seulement avac une aattestation de conformitè d´un organisme notlflè.

Anmerkung 1:   Der mit * gekennzeichnete Satz entfäilt, wenn die nichtselbsttätige Waage vom Hersteller geeicht wurde.
*Note 1:   The sentence marked with * does not apply, if the non-automatic weighing instrument was verified by the manufacturer.*
Note 1:   La phrasa marquie avac * ne s´applique pas au cas où linstrument de passage à fonctionnement non automatique a éié vàifié par ie fabricant.

Unterschrift *Signature* Signature	Datum *Date* Date Apr. 23. 2003