ADM

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.**

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 environment that contains chemical vapor.

7. Precision measuring instrument, handle with care.

8. Always apply the rubber cap (**FIG 2 E**) when not in charging.

9. Do not attempt to open scale.

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 items are missed.

1.2 Lock the plastic platter (**FIG 1 A**) to the platter
    holder, with the screw (**FIG 1 B**) included and then
    apply the 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 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 and contact your dealer immediately.
   b. Before first time use, plug the adaptor into the
      wall outlet and charge the scale for at least 8
      hours.
   c. After battery is fully recharged, remove adaptor
      from scale. Apply the rubber cap (**FIG 2 E**) to seal
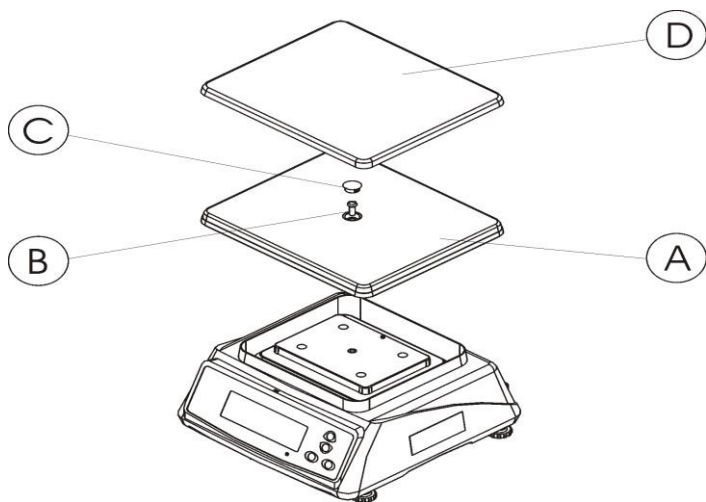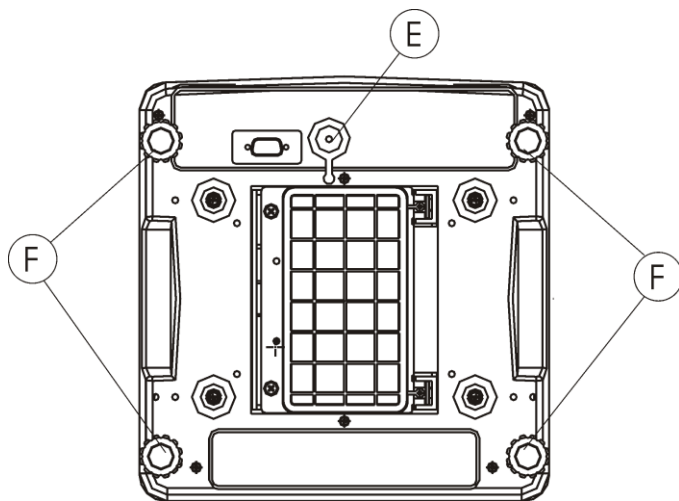   the DC input jack of scale.

FIG 1

FIG 2

2. SPECIFICATIONS

Model No.	Capacity (Max)	Division (e)	
		OIML	Non-OIML
ADM-1500	1500g	0.5g	NIL
ADM-3000	3000g	1g	0.5g
ADM-6000	6000g	2g	1g
ADM-15K	15kg	0.005kg	0.002kg
ADM-30K	30kg	0.01kg	0.005kg
Tare Range	Full tare range (Subtractive)		
Display	5 x 24mm LCD display		
Operation Environment	0°~40°C (32°~104°F), Non-condensed. R.H.≦85%		
Power source	By Built-in rechargeable battery or power adaptor		

Specifications subject to change without notice

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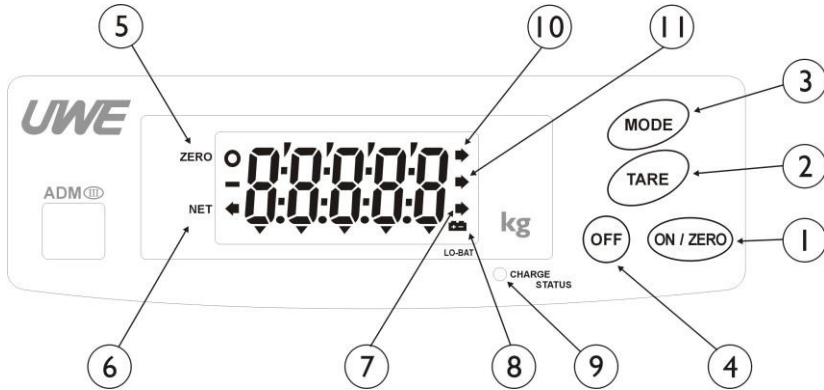
NOTE 1:

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. **ON/ZERO KEY**
   Press this key to turn scale on, or reset displayed
   weight to zero when the scale is not loaded.

2. **TARE KEY**
   Press this key to tare off the weight of a container
   during normal operation.

3. **MODE KEY**
   Press this key to shift among different weight units
   and display parameters.

4. **OFF KEY**
   Press this key to turn scale off.

5. **ZERO INDICATOR**
   This indicator appears to indicate a zero weight status.

6. **NET INDICATOR**
   This indicator appears to indicate the tare function is in effect and weight displayed is net weight.

7. **METRIC UNIT INDICATOR**
   This indicator appears to indicate the weighing unit being selected is at metric (kilogram or gram).

8. **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.

9. **IN-CHARGE INDICATOR**
   Red color: Recharging battery
   Green color: Charging completed

10. **lb/lb UNIT INDICATOR**
    This indicator appears to indicate the weighing unit being selected. Two avoirdupois weight units are available and this indicator means the weighing unit is at decimal pound (e.g. 5.62 means 5.62 lb).

11. **lb/oz UNIT INDICATOR**
    This indicator appears to indicate the weighing unit being selected is at pound/ounce (e.g. 2.15.1 means 2 lb and 15.1 ounce).

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. Once **ON/ZERO** is pressed, this command will be memorized and activated as soon as the weight detected is stable.

5.2 WEIGHING

a. Before weighing, make sure that the **ZERO INDICATOR** is on. If not, press **ON/ZERO.**

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

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

d. 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 BACKLIGHT AND SMART POWER SAVING FUNCTION

5.4.1 Turn Backlight On and Off

Backlight can be turned on by either one of the following methods: -

- Press and hold **ON/ZERO**, or
- Press **MODE** as described in **5.3**

5.4.2 About Smart Power Saving Function

This unit is equipped with **Smart Power Saving Function**. When this function is employed, the backlight will be turned off when constant weight (zero weight) is detected and remains stable for about 10 (3) seconds. Backlight will be automatically turned on again when a weight is detected.

5.5 SET DISPLAYED VALUE TO ZERO WHEN UNLOADED

Should **ZERO INDICATOR** does not appear when unloaded, press **ON/ZERO** to set weight to zero before weighing. After **ON/ZERO** is pressed, **ZERO INDICATOR** appears to indicate the scale is at its zero status. 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 EFFECT

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 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 to 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   **After turn on, scale displays 00000 and after countdown then power off automatically**

Check: Is the platter is loaded when powered on?

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

Syndrome   **Scale displays 00000 but cannot obtain zero weight after power on countdown**

Check: Is the scale after by airflow or vibration?

Action: Turn scale off. Relocate the scale to where it is free from airflow and vibrations.

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.

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   **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   **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	**Blank weigh result is display**
Check:	Is the scale overloaded?
Action:	Remove part of the loads on platter and try again.

7. DAILY CARE AND MAINTENANCE

1. Clean the scale with a soft and damp cloth. If necessary, apply a mild detergent.
2. Do not use any harsh, abrasive material, acetone, volatile solvent, thinner or alcohol for cleaning.
3. Verify the accuracy of scale periodically. Re-calibrate the scale if necessary.
4. Note: In some countries, calibration is restricted to be done by an authorized/qualified agent only. Contact your dealer for more information.
5. It is a good practice to apply the dust cover when operating the scale.
6. The scale must be placed horizontally during transportation or long time storage.
7. Remove platter from scale before transportation or long time storage.
8. Store scale in a dry and clean place.

KONFORMITÄTSERKLÄRUNG
Declaration of conformity
Déclaration de conformité

C E

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:	ADM
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 oü linstrument de passage à fonctionnement non automatique a éié vàifié par ie fabricant.

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