T SCALE

ATP/ASP/QTP/QSP

Series

Price Computing Scales
User's guide

Contents

SECTION 1 INTRODUCTION

1. 1 FIGURES

◆ Large LCD display
◆ AC / Rechargeable battery
◆ Selectable weighing unit
◆ Accumulate operation
◆ Account function, do memory recall, give change and memory clear one time
◆ Selectable reading resolution
◆ Auto backlight

1. 2 SPECIFICATIONS

Model	Capacity	Division
ATP/ASP/QTP/QSP -6	6kg	2g/1g
ATP/ASP/QTP/QSP -15	15kg	5g/2g
ATP/ASP/QTP/QSP -30	30kg	10g/5g

1. 3 DIMENSION
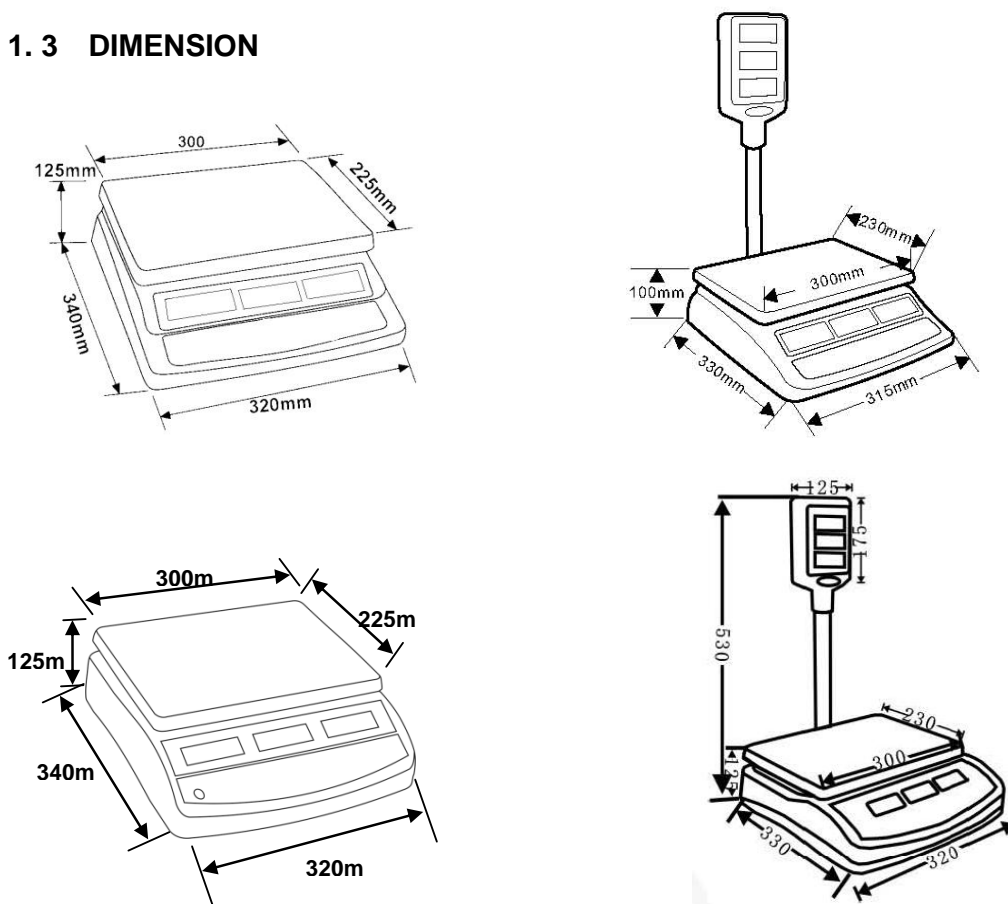
1.4   INSTALL

Keep the scale dry. Precipitation, humidity and all types of liquids or moisture can contain minerals that will corrode electronic circuits.

This scale is not waterproof designed (IP44), avoid high humidity that might cause condensation. Avoid direct contact with water. Do not spray or immerse the scales in water. If scale meet water, reading data will be unstable, or scale will can't work correctly, please turn off the power immediately, warm the scale, or call your dealer.
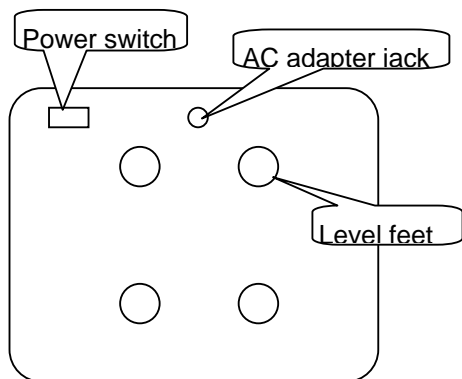
Attach the main cable to the connector on the bottom of the scale. The power switch is located on the base near the front of the scale.

Power switch is at the right side of bottom cover, AC adapter jack also near the power switch, see attached drawing.

Power switch

AC adapter jack

Level feet

SECTION 2   KEY DESCRIPTION

Each of the keys are shown and described for you.

ZERO   The **ZERO** key zeroes the scale.

TARE   The **TARE** key subtracts tare values and changes the **ATP/ASP/QTP/QSP** from gross mode (no tare) to net mode.

SAVE   The SAVE key used to disable or enable   the price and tare auto-clear Function

B/L   The B/L key used to set the backlight mode (ON/OFF/AUTO)

ACCOUNT The ACCOUNT key is used to do memory recall, give change and memory clear in one time

M+   The **M+** key adds data to the accumulators. The second function print the weight data

UNIT   The **UNIT** key is used change unit.

PLU   The PLU key used to store unit price memory and recall unit price from memory

C   The **C** key is used for canceling the memorized data.

0~9   The **NUMERIC** key (0~9) is used for setting unit price data.

•   **DECIMAL POINT** key is used for set the decimal position of unit price

SECTION 3   OPERATION

3. 1 GENERAL INSTRUCTION

1．When battery goes low, the 🔋 light will be turned on automatically.   It is the time to charge the battery with the AC power.   If **ATP/ASP/QTP/QSP** goes on being used without proper charging, the display window will show "BAT LO" every 10 minutes, and **ATP/ASP/QTP/QSP** would be shut down automatically after 50 minutes of warning in order to protect the battery.   Please charge the battery immediately, or **ATP/ASP/QTP/QSP** cannot be used.

2．The display window will show color of orange when battery is being charged, and it will turn to color green when battery is fully charged.

3．Before starting using **ATP/ASP/QTP/QSP**, please check if the bubble is in the middle of the level ; if not, please make appropriate adjustment.

3. 2 BASIC OPERATION

3. 2. 1 Zero the scale

When there is no item on the scale but reading is not zero, press the →0← key to turn on **ZERO** indicator.   When the weight goes over 20 % of the full capacity, "read zero" function is obsolete.

3. 2. 2 Tare

Put container on the platter, once the weight reading is stable, press the ◆T◆ key, the **TARE** indicator will be on and the container's weight will be deducted. When it is time to clear the **TARE**, take off the container, and press ◆T◆ key again.

3. 2. 3 Overload Warning

Please do not add item that is over the maximum capacity.   When reading "—OL—" and hear beeping sound, remove the item on the platter to avoid damage to the load cell.

3. 2. 4 Unit price setting

To trade with your **ATP/ASP/QTP/QSP** scale, it is necessary to setting a unit price of the goods, ATP/ASP/QTP/QSP then uses this unit price to determine

how much that goods are on the platter.

When **ATP/ASP/QTP/QSP** scale displaying the weight of the goods placed on the scale, set the unit price through numeric keys. Set unit price is showed in **UNIT PRICE** window display, **TOTAL PRICE** window display shows the total price of the goods. To cancel the previous unit price, press **CANCEL** key .

3. 2. 5 Change unit

You can use the **UNIT** key to change unit. Press **UNIT** key will change the weighing unit circularly, and the pertinent indicator will on.

3. 3 ACCUMULATOR OPERATION

3. 3. 1 Prepare to accumulate

Each time before accumulate , please make sure the platter is empty, the current accumulator values is reset to zero, and the weight reading is stable.

3. 3. 2 Accumulative operation

Put the weighing item on platter ,wait for the weight reading to be stable, press the **M+** key ,the window will show **ACC n** ,n being the number of times a count operation had been performed.

3. 3. 3 Account operation

After do accumulate operate, you can press Account key, WEIGHT window will show the summed price, key in paid money by keyboard, this will show on Unit Price window, and the Total Price window will show the return value.

Press Tare key to return normal weighing mode and clear memory, if you don't want clear memory, press Zero key to return normal weighing mode.

Note: if you haven't do accumulate operation, you also can use Account function, the summed price is current total price.

3. 4 UNIT PRICE MEMORY

ATP/ASP/QTP/QSP can store 10 sets unit price.

3. 4. 1 Save the unit price

Hold the PLU key for 3 seconds after you key in the unit price, it will show "PS 0~9" , press numeric key 0~9 to select which memory location you want to use. After you do, the unit price is stored in the **ATP/ASP/QTP/QSP**.

3. 4. 2 Load the unit price

If you want to use the unit price stored in the **ATP/ASP/QTP/QSP**, press PLU key, **ATP/ASP/QTP/QSP** will shows "**PL 0~9**", press numeric key 0~9 to select which memory location's price you want to use, current unit price will change to the value stored in the memory.

3. 5 Other function

3.5.1 Backlight

ATP/ASP/QTP/QSP have three backlight mode: on, off and auto.

ON: backlight will turn on however current weight is zero or not Zero

OFF: backlight will turn off however current weight is zero or not zero

AUTO: backlight will turn on when current weight is not zero and it will turn off if current weight is zero

You can press B/L key to set backlight mode, display will show current backlight mode, press SAVE key to select backlight mode (ON/OFF/AUTO), after you select, press TARE key to sure.

3.5.2 Automatic unit price clear

ATP/ASP/QTP/QSP can set automatic unit price clear, when return to zero, ATP/ASP/QTP/QSP will clear the unit price automatically.

Press SAVE key will turn on / off automatic unit price clear function, when SAVE indicator on, automatic unit price clear disable, when SAVE indicator off, automatic unit price clear enable.

3.5.3 Auto power off

ATP/ASP/QTP/QSP scale have auto shut off function, you can set this parameter.

Press **ACCOUNT** key during self-checking, display shows "sleep mode", press Speed 4 key to select 0/1/5/30 (not use auto power off / turn off power after scale leisure for 1 minutes / turn off power after scale leisure for 5 minutes / turn off power after scale leisure for 30 minutes), press Tare key to sure

3.5.4 View audit operate

Press SAVE key during self-checking, display shows AUDIT OPT AA CAL BB, press ZERO key to escape.

SECTIOIN 4   SETTING OF PARAMETERS

4. 1 ENTER SETTING MODE

To set the parameters it is necessary to enter a secure menu.   This is done by entering a password number when requested.

To enter the parameter menus press the **TARE** key during the initial counting of the display after power turned on.   The Weight Display will show "P n   " requesting the password number to be entered.

Press the "**O**" key four times.   The display will show "Pn- - - -", Press the **TARE** key.

The Parameter menu has 18 functions that can be accessed using the PLU key to cycle through the choices.   The Weight Display will show the name of the functions. Also you can press 0 to select F0, and key 2 to select F2…… To enter a function press the **TARE** key. At any time press the **ZERO** key to return to weighing.

4. 2 PARAMETER SETTING TABLE

Weight Display	Description
F0 CAL	When the parameter menu show "F0" press the **TARE** key. The display will then show "unLoAd" to request all weight be removed from the platform. After STABLE indicator on, press the **TARE** key to set the zero point. The display will then show the calibration weight requested, press the **TARE** key to accept it. The display will show "LOAd". place the calibration weight on the scale. After STABLE indicator on, press the **TARE** key. The scale will calibrate.
F1 RES	Set external resolution, press SAVE key to change (3000/60000/duag range), press ZERO key to sure.
F2 UNIT	Set weighing unit, press SAVE key to change (KILOS/POUNDS/HJ/HL/100), press ZERO key to sure.
F3 CAPA	Set capacity, Press SAVE key to select, press ZERO key to sure..
F4 POINT	Set weighing decimal point, press SAVE key to select, press ZERO key to sure.
F5 POINT	Set price decimal point, press SAVE key to select, press ZERO key to sure.
F6 INIT ZERO	Set initialization zero range (auto zero range), press SAVE key to select, press ZERO key to sure.
F7 RE ZERO	Set re zero range (manual zero range), press SAVE key to select, press ZERO key to sure.

`F8 SCSIUE TARE`	Set whether use re tare function, if this parameter is on, you can do tare operation continuously, if this parameter is off, you only can do tare operation one time, press ZERO key to select, press ZERO key to sure.
`F9  A-D COUNTS`	Displays the A/D counts.
`F10  SPEED`	Set speed of ADC, press SAVE key to change (7.5/15/30/60), press ZERO key to sure.
`F11  BAUD`	Set Baud rate, press SAVE key to change (2400/4800/9600/19200), press ZERO key to sure.

SECTION 5 RS-232 OUTPUT

The ATP/ASP/QTP/QSP Series of scales can be ordered with an optional RS-232 output.

Specifications:

　　　　RS-232 output of weighing data

　　　　ASCII code

　　　　8 data bits

　　　　No Parity

Connector:　　9 pin d-subminiature socket

　　Pin 2:　Output

　　Pin 3:　Input, not used at this time

　　Pin 5:　Signal Ground

Data format: ASCII code, 10 bits per frame data, bit 1: start bit, bit2~bit8: data bits, bit 9: verify bit (even)

STX	±						k	g	p	CR	LF

　　　　　| 　　　- WEIGHT DATA-　　　　| 　| -WEIGHT UNIT-　| ||　　　|

　p=01x1x2x3x4x5x6.

　stable:　x6=1,　　unstable:　　x6=0.

　Over :　　x5=1,　　ontherwise: x5=0.

　Negative:x4=1,　　pluse:　　　x4=0;

　Zero:　　x3=1,　　ontherwise: x3=0;

　Net Zero:x2=1,　　ontherwise: x2=0;

　Tare:　　x1=1;　　ontherwise: x1=0;

Baud rate: 9600bps

If you connect TPUP printer, it will print the format as follows:

NO.   1

NET   WEIGHT:

       0. 650kg

UNIT PRICE   :

       5/kg

TOTAL PRICE:

       3.25

       If the weight is loss than 20d, and the scale has unit price. press **M+** key, it will print accumulator value:

       TOTAL

       NO.   1

       TOTAL   PRICE:

                   3.25

       ###############

SECTION 6 BATTERY OPERATION

The scales can be operated from the battery if desired. The battery life is approximately 100 hours.

When the battery needs charging the arrow above the low battery symbol under the weight display will turn on. The battery should be charged as soon as the arrow above the symbol is on. The scale will still operate for about 10 hours after which it will automatically switch off to protect the battery.

To charge the battery simply plug into the mains power. The scale does not need to be turned on.

The battery should be charged for 12 hours for full capacity.

Just under the quantity display is an LED to indicate the status of battery charging. When the scale is plugged into the mains power the internal battery will be charged. If the LED is green the battery has a full charge. If it is Red the battery is nearly discharged and yellow indicates the battery is being charged.

As the battery is used it may fail to hold a full charge. If the battery life becomes unacceptable then contact your distributor or Adam Equipment.

Note: new batteries are shipped partially charged. Before you can use your scale, you need to install and charge the battery, as indicated by the following instructions. Some batteries perform best after several full charge/discharge cycles.

Battery performance depends on many factors, including your backlight setting and operate.

Never use any charger or battery which is damaged. Do not short-circuit the battery. Accidental short-circuiting can occur when a metallic object (coin, clip or pen) causes direct connection of the + and - terminals of the battery (metal strips on the battery) for example when

you carry a spare battery in your pocket. Short-circuiting the terminals may damage the battery or the connecting object.

Do not dispose of batteries in a fire

Dispose of batteries according to local regulations (e.g. recycling). Do not dispose as household waste.

Avoid charging under airless conditions

To maximize your battery's performance:

• Always use TSCALE Original batteries and AC adapter. The scale warranty does not cover damage caused from using non-TSCALE batteries and/or battery chargers.

• The rating of AC adapter output is 9V, but normal output range will be 11V~15V

• New batteries or batteries that have been stored for long periods of time may require a longer charge time.

• Maintain the battery at or near room temperature when charging.

• Do not expose batteries to temperatures below -10°C (14°F) or above 45°C (113°F).

• Over extended periods of time, batteries gradually wear down and require longer charging times.

This is normal. If you charge your battery regularly and notice a decrease in operate time or an increase in charging time, then it is probably time to purchase a new battery.

ERROR CODES

Error Codes	Meaning
ERR 4	Current weight exceed set zero limit , thus cannot reset to zero
ERR 5	Keyboard error
ERR 6	Load cell not connected or Load cell damaged

TAIWAN SCALE is a international supplier with more than 30 years experience in the production and sale of electronic weighing equipment.

Products are supplied and serviced from our company locations in the CHINA, TAIWAN and distributed through a world wide dealer network, also we make OEM/ODM products for world wide customer.

TAIWAN SCALE's products are predominantly designed for the laboratory, medical, business and industrial markets.

The product range can be summarised as follows:

− Counting scales for general industrial and warehouse applications
− Digital weighing/check-weighing scales
− High performance platform scales with extensive software facilities including parts counting, percent weighing etc.
− Digital electronic scales for medical use
− Retail price computing scales
− Floor scales
− Truck scale
− Crane scales
− Weighing indicator for platform scales, floor scales and truck scales
− Hand push and pull gauge
− Customize auto weighing systems

TAIWAN SCALE and their distributors offer a full range of technical services such as on site and workshop repair, preventative maintenance and calibration facilities.

TAIWAN SCALE operates an approved quality management system and is certified to ISO9001:2000.

Visit our Website at: **www.taiwanscale.com**

Taiwan Scale Mfg. Co., Ltd.	**W & P Scales Mfg. (Kunshan) Co., Ltd.**
282, Sec.3, Hoping W. Rd. Taipei, Taiwan TEL:886-02-23068203 FAX:886-02-23044354 e-mail: tscale@giga.net.tw	No. 756 Kuntai Road Kunshan Hi-tech industry park Kunshan, Jiangsu China TEL:86-520-7797088 FAX:86-520-7797399 e-mail: sales@taiwanscale.com

Taiwan Scale reserves the right to make changes to the technology, features, specifications and design of the equipment without notice.

All information contained within this publication was to the best of our knowledge timely, complete and accurate when issued.   However, we are not responsible for misimpressions which may result form the reading of this material.

The latest version of this publication can be found on our Website.