Precision Weighing Scale

OPERATION MANUAL

KD-TAC/E-en V5.0-2010

CONTENTS

Data (8bytes)

2D(HEX)=" -" (minus) 2B(HEX)= "+" (plus)

2E(HEX)= "." (decimal) 20(HEX)=" " (space)

Unit (2bytes)

g = 20(HEX); 67(HEX);

kg = 6B(HEX); 67(HEX);

lb = 6C(HEX); 62(HEX);

oz = 6F(HEX); 7A(HEX);

CR = OD(HEX); OA(HEX)

EXAMPLE: (Stable net +16.8g)

Status 1,	Status 2,	DATA	UNIT	CR
ST,	**NT,**	**+16.8**	**g**	**OD,OA**

When the voltage of power is low, the Power-LOW indicator " + - " will be shown or Power-LOW LED will lighten. Please turn the scale off and reuse it after charge it for 12 hours. The charge indicator (LED) is yellow when charging and it will turn red when fully charged. To ensure the power is in full, we recommend charging an extra 3-4 hours.

1) **Setting of communication**

Turn the scale on; press and hold 2 key until the end of self-test to enter the select of baud rate parameters. There are four classes to be selected —**1200bps, 2400bps**, **4800bps**, **9600bps**; the display of screen is **bAud 12**,**bAud 24**, **bAud 48**, **bAud 96**. Press key to select and key to confirm. Then enter the setting of the mode of data transmission. There are three classes to be selected — **St** (output once when the reading is stable), Pr (press to output)

14. **Instructions Of charge**

Co (continue output). Press key to select and key to confirm.

2) **Instructions of data format**

Status 1	,	Status 2	,	Data	Unit	Newline
1 2	3	4 5	6	7 8 9 10 11 12 13 14	15 16	17 18

Status 1(2bytes)

OL – Overload

GS – Gross weight mode

ST – Stable

Status 2(2bytes)

NT – Net weight mode

US – Unstable

I. Overview

The TA series electronic weighing scale uses high precision sensors and the latest microchip technology. It is specially designed and manufactured for accurate weighing functions.

The TA series electronic weighing scales have following two models:

1) KD-TAC: LCD display
2) KD-TAE : LED display

II. Precautions Before Using The Scale

1. Do not let the scale get wet and do not place it in an environment with extreme temperature or humidity.
2. Do not shock the scale and do not exceed the capacity. *Permanent damage can occur*
3. If you use DC power, you should recharge it timely. Please turn the scale off after used. If the power is low or the scale automatically power off, please charge the battery for a full 12 hours before use. Incomplete charging can damage the battery.
4. Before using the scale, place it on a stable platform and adjust its feet to make the scale level.
5. Working conditions:

1) The operating temperature should be: 0℃~40℃

2) Power supply: AC220V±10% or DC4V4A.h storage battery

III. Keypad Functions

0 ~ 9 : Numeric keys used for the entry of weight limits.

• : Decimal point key.

→0← : Zero key. Press this key will reset Zero.

T : Tare key. Press this key will subtract the weight of containers.

M+ : This key is used for weight accumulation.

: Unit conversion key.

: Use this key to eliminate weight limit entries.

: For low limit entry confirmation.

: For high limit entry confirmation.

M+ : This key to clear the total accumulates weight in ACCUMULATION mode.

Press and hold 1 through the end of the self-test, the display will show "AUTO" (AUTO backlight) or "OFF" (Disable backlight) or "ON" (Backlight is ever lighting). Press T key to alternate; press →0← to confirm.

12. **External Calibration**

When the scale does not read accurately, you may calibrate it with weight. Turn the scale on; press and hold →0← until the end of self-test. It will show "**CAL**". Press →0← key to show " 0" ; place a weight (2/3 of the Max. Capacity is recommended) on the tray; input the value of the weight via numeric keys. The unit is kg. (Ex. The Max. Capacity is 3kg; the weight should be 2kg; then enter 2. Press →0← after reading is stable.

The calibration now is complete. (External calibration will not work when the error is outside the range of ±10% of Max. Capacity).

13. **Instructions of serial communication (**optional**)**

Press [T] key again to change. Press the key [→0←] to confirm (∩**bX** represents a class of filter parameters and the larger "X" is, the faster respond speed is.).

9. **Zero tracking range and Zero display range**

1) **Selection of Zero tracking range.** Press and hold [0] through the end of the self-test, "0.0d" or "0.5d", "1.0d", "1.5d", "2.0d", "3.0d" will be displayed. Press [T] to change, press [→0←] to confirm (The following settings use the same function keys as current setting).

2) **Selection of Zero display range.** There are two classes to be selected — **Zero-S** (invalid) and **Zero-L** (when the weight within the range of ±3d, the display is "0").

10. **Division Selection**

Turn the scale ON; press and hold [•] key, the display will show the current setting. Press [T] key to change and press [→0←] to confirm.

11. **Setting backlight (**only for LCD display**)**

[C] : Use this key to clear the readings entered

IV. Operations

1. **Turn the scale ON**

Remove all the objects on the tray; push the power switch to "ON" position. The scale will self-test and zero, then turn to weighing mode.

2. **Turn the scale OFF**

Push the power switch to "OFF" position to turn the scale OFF.

3. **Zero function**

During using the scale, the weight displayed isn't "0", but there is nothing on the tray. Please press [→0←] key to re-Zero and show the zero indicator. When the weight displayed is outside the range of ±5% of Max. Capacity or the scale is in tare mode, pressing the key is invalid.

4. **Tare function**

In weighing with container instance, please operate as following steps to get the net weight: place the container to the tray; press the key [T] , then the weight displayed is "0", and the tare indicator is shown; place the objects needed to weigh on the tray, then the net weight of the

objects is shown; take both container and objects off, the weight displayed is negative. Press key again to cancel the tare mode.

5. **Accumulate**

In weighing mode, press key to accumulate weight after the display is stable. Then the accumulation indicator is lighted up. The display in the screen is the accumulated times, then the total accumulated weight, and then returns to the weight of the objects on the tray currently. The maximum accumulated times is 99.

Press key to clear all the accumulated weight at accumulate mode.

6. **Preset weight check range**

Setting upper limit: Input the value of upper limit via the numeric keys, and then press key, the indicator will appear.

Setting lower limit: Input the value of Lower limit via the

numeric keys, and then press key, the indicator will appear.

After correct setting, when the weight within the range preset, the scale will beep out a warning.

Eliminating weight limit alarm: When the alarm isn't needed any more, press the key to eliminate.

Note: The unit of the number inputted as weight limit is kg.

7. **Unit conversion**

Press key to revolve units of measure in weighing mode, then the corresponding symbol will be shown.

8. **Selection of Filter parameter**

While the scale is used in a different location, changing the response speed could be desired. You can change the STABLE time and the stability of the scale by setting the filter parameter.

Turn the scale ON and let it self-test. Press and hold key, now the display will show the current filter parameter.