VETEK

Manual TCS-H-RS series of

ELECTRONIC PLATFORM SCALES

1. Introduction

The ACS series of electronic price scale are equipped with high precision load cell as primary instrument, the secondary instrument designed by using new technology and new materials such as 8951 single-chip microprocessor as main chip and A/D converted with three-integral.

The ACS series of electronic price scale are good products with reasonable prices. It has the functions of accumulation up to 99 times, overload and under-voltage alarms, auto and continuous AC/DC shift, power supply identification, auto temperature compensation, auto power-saving mode without goods for 20 seconds and unit price storage (8 different prices can be saved only for scale with 24 keys). Particularly, it can protect the saved data to ensure accurate weighing.

2. Measuring Performance

2.1 Accuracy
2.1.1 Grade: Ⅲ
2.1.2 Precision: 1/3000F.S
2.2 Other parameters

Parameters of division number (n) display, verified division value, maximum capacity, minimum capacity, zero setting range, tare range, zero tracking range and limit display (overload alarm) are shown in the following table:

Table 1

Specification	60kg	150kg	300kg	500kg
Division number(n)	3000	3000	3000	2500
verified division value (e)	20g	30g	100g	200g
Max capacity	60kg	150kg	300kg	500kg
Min capacity	400g	1000g	2000g	4000g
Zero setting range	0~12000g	0~3000g	0~6000g	0~12000g
Tare range	0~60kg	0~150kg	0~300kg	0~500kg
Zero racking range	0~10g	0~25g	0~50g	0~100g

Limit display	60.18kg	150.45kg	300.9kg	501.8kg

Note: e=d

2.3 Error range

Table 2

weight (described as e)	Error range	
	Outgoing or after repair inspection	Inspection in use
0≤m≤500e	±0.5e	±1.0e
500e<m≤2000e	±1.0e	±2.0e
2000e<m≤3000e	±1.5e	±3.0e

Note: e is verified division value

3. Electrical Characteristics

3.1 Alternating currents characteristics

3.1.1 Working voltage: 220V(+10%~-15%);50±2%Hz

3.1.2 Power consumption:

Not larger than 8VA, normal power consumption lower than 4.5VA

3.2 Direct currents characteristics:

3.2.1 Storage battery capacity: 3.2Ah (5Ah optional)

3.2.2 Rated voltage: DC6V

3.2.3 Backup power nonstop service time: Not shorter than 20 hours after full charge.

3.3 power off: auto turn off when voltage is lower than DC5.2V

4. Display Characteristics

4.1 Display: 16-bit red LED, normal work under -10℃~40℃

Weight window: 5 digits

Unit price window: 5 digits

Amount window: 6 digits

4.2 Symbol and auxiliary display

4.2.1 Weight window

4.2.1.1 Apart from displaying weight, it also has functions as shown in the table 3.

4.2.1.2 Zero position indicator lamp: at the right bottom of the weight window. It lights up to indicate that the scale is at the zero position.

4.2.1.3 Tare indicator lamp: at the left bottom of the weight window. It lights up to indicate that the tare weight is cleared away.

4.2.2 Unit price window:

4.2.2.1 Under adding mode (the weight displays "Add"), the unit price window will display the adding times. For example, it displays "01" for the first time of adding operation and so on.

4.2.2.2 AC indicator lamp light: it lights up to indicate that AC is applied (commercial power). If it doesn't light up when using AC, it indicates that power supply is not well connected. Please check power cord, socket and fuse.

4.2.3 Amount window

Adding indicator lamp: at the bottom of the amount window. It lights up to indicate that the scale has entered into adding mode.

Table 3

Display	meaning	description
--------- (Mid transverse line)	A long period display, the zero position is unstable	windy or get damp
--------- (upper transverse line)	The zero position is too high	Send for repair
--------- (lower transverse line)	The zero position is too low	Send for repair
Add	Under adding mode	Normal, see clause 6.5
—Lb— (alarm sound）	Voltage is lower than 5.4± 0.1V	Charge immediately
—OL— （alarm sound）	overload	remove goods immediately
—NO— （alarming sound）	Circuit integrator doesn't work	Send for repair

5. Installation

5.1 Take out the down-lead of load cell from the post of support.

5.2 then insert the pole into the trestle and fasten the screw

5.3 Take out the indicator corresponding to production number at the base; connect the down-lead with the indicator through socket, and then fix the indicator to the post and fasten the nut.

6. Operation

6.1 Preparation before use

    6.1.1 Put the scale on a solid and smooth platform. The scale should avoid vibration, violent air current, direct sunshine and high temperature.

    6.1.2 Adjust four level legs to make the spirit bubble in the level gage is located in the center of the inner circle, and make sure that four level legs are supported on the platform reliably.

    6.1.3 After connecting with AC power, please check whether the AC indicator lamp lights up, if not, check relevant parts (refer to clause 4.2.2.2).

    6.1.4 After power on, the scale will do self-check, during which you can find whether display and zero position is normal.

    6.1.5 The first thirty minutes after power on is for pre-heating, please don't weigh anything during that time.

   6.2 Weighing:

    After pre-heat and the weight window displays zero, the scale is ready for weighing.

    Note:

   6.2.1 Do not weigh goods over the max capacity. Once overload (weight window displays OL), and the buzzer gives consecutive sound, please remove the goods immediately to avoid unexpected damage.

   6.2.2 Do not weigh goods lighter than min capacity.

   6.3 Entering the unit price:

   6.3.1 Input the unit price with ten number keys from 0 to 9 before or after loading.

6.3.2 The interval between one number and the next of the same unit price should not more than about six seconds (if over six seconds, the system will clear the previous value automatically)

6.3.3 If the weight window displays negative value (eg. Negative tare weight), the amount window will display "-------------", which indicates no amount.

6.3.4 If the amount window displays"--------------", it indicates that the accumulation sum is over 9999.99 (USD)

6.4. Tare:

When weighing bulk goods, put the container on the scale pan, then press key [TARE] and wait for the weight window displays "000.00", indicating that the scale is ready for weighing. Put the goods into the container, and the weight window will display the net weight value.

Note: tare weight + net weight <max capacity

6.6 Adding:

When a customer buys many goods with different prices, this scale can add amount one by one and get the total amount.

For example:

Goods A, 15.00kg, USD5.00/kg; Goods B, 7.00kg, USD8.00/kg;
Please operate as follows:

1). Put the goods A on the scale pan, the weight window will display "15.00" (kg). Input the unit price "5.00" (USD/kg), the amount window will display "75.00" (USD);

2). Press key [ADD], the adding indicator lamp will light up to indicate the scale is under adding mode. The weight window will display "Add" while the unit window displays "01"and the amount window displays "75.00" (USD).

3). Remove the goods A and wait for that the scale returns back to the weighing mode (wait for 2 seconds or press [ADD]);

4). Put the goods B on the scale pan, the weight window will display "7.00" (kg), then input the unit price "8.00" (USD/kg), the amount window will display "56.00" (USD);

5). Press key [ADD], the adding indicator lamp will light up to indicate the scale is under adding mode. The weight window will display "Add", the unit price window will display "02", and the amount window will display"131.00" (USD).You can continue the adding operation as the above steps up to 99 times.

Note: under adding mode, press [ADD] and the scale will return back to weighing mode. Press [CE] to clear away the total amount, and

6.6 Clearing:

6.6.1Under the adding mode, press key [CE], and the adding indicator lamp will be out which indicates that the scale is not in adding status, and you can operate adding next time.

6.6.2 Under non-adding mode, if you input the wrong unit price, press key [CE] and input the correct unit price;

6.7 Zero:

The weight window does not display "0.000" when unloaded (within the zero range), please press key [ZERO].

6.8 Turning off the scale:

Please press key [ON/OFF] and then pull power plug out.

7. Environment temperature:

Transportation and storage: -25℃~ +50 ℃

Work: 0℃ ~ + 40℃

8. Environment humidity:

Transportation and storage: <70% R H (Non-dew)

Work: <90% R H (Non-dew)

9. Size

Platform size: 520 X 420

Product size: 660 X 420 X 145 mm

Packing size: 665 X 440 X 185 mm

10. Weight

27.8kg (including storage battery 6V 3.2Ah)

11. Attention:

11.1 Never put the electronic scale in the rain, flush it with water. Particularly the inner parts of the scale should not touch water.

11.2 It is forbidden to put the scale in the place with high temperature or humidity.

11.3 Avoid any strong shock or heavy weight. Don't put any article or give pressure over maximum capacity on the scale pan even the scale is in operation.

11.4 Please charge the storage battery in time after using it to avoid damage. The charge time should be at least 1.2hours for using one hour. If the scale will be not used for a long time, please do not forget to charge the scale for consecutive 24 hours every 2 or 3 months to avoid damage caused by self-discharge of storage battery.(when the scale is connected to AC power, the system will charge the storage battery automatically whether the scale is turned on or off. It is advised to charge the electronic scale after it is turned off).

11.5 Please use regulated power supply.

11.6 While the scale doesn't work normally, please send it to our company's maintenance point or post it to the head office of our company. Don't open the scale by yourself to avoid further destruction.

11.7 Please use the original package and pay the postage while sending product back to our company for repair.

11.8 Each scale has one guarantee card, please keep it safe. The guarantee card and invoice can't be provided again when missing and the obliterated one are invalid.

12. Maintenance

12.1 Please send the duplicate guarantee card back to the company within three weeks from invoice date.

12.2 If non-artificial trouble about the scale occurs under correct installation and use, after confirmation by our quality department, the user can get free repair for the scale with its guarantee card within the valid period.

12.3 The following situations are not in the line of free repair:

12.3.1 After the product is sold out, the guarantee card without the seller's seal and sale date or not registered before the regulated date.

12.3.2 Obliteration of the guarantee card.

12.3.3 After product is sold out, damage or obstacles caused by user's improper transportation or storage or not using it according to the operation instruction or voltage over the specified range.

12.3.4 User opens the product's leaden seal by himself.

12.4 The scale is granted for one-year free repair since the invoice date and lifetime service.

12.5 Please check whether the battery is good while you are buying because it is not granted the free repair guarantee.