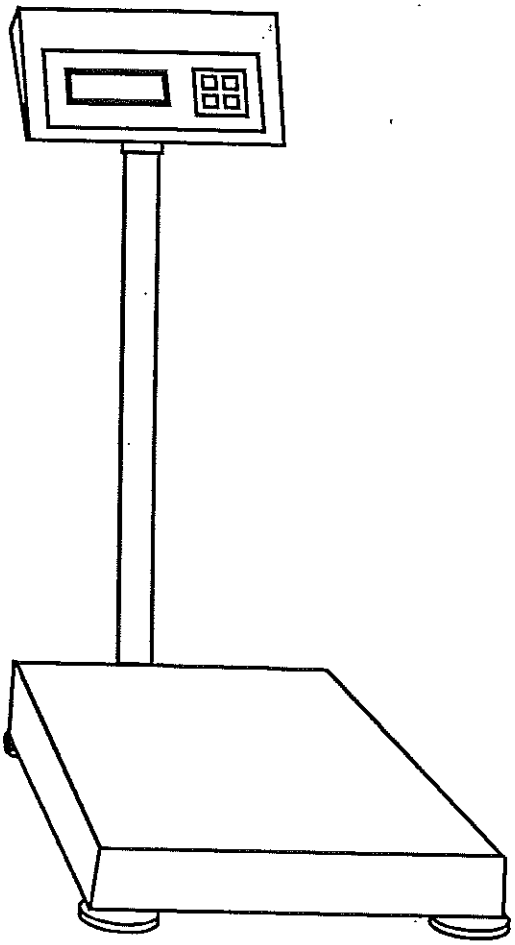
OPERATING MANUAL



TCS ELECTRONIC PLATFORM SCALES

1.General:

TCS series electronic platform scales are all electronic measuring devices with multifunction. They are composed of load sensors with high precision and general intellectual load instrument with processors . TCS series electronic platform scales have features of speedy and accurate weighing and pricing stable and reliable performance and perfect multifunction. They are widely used for industrial & mining enterprise, wharf, station, warehouse, commercial and trading company, etc.

2. Main Technical Performance

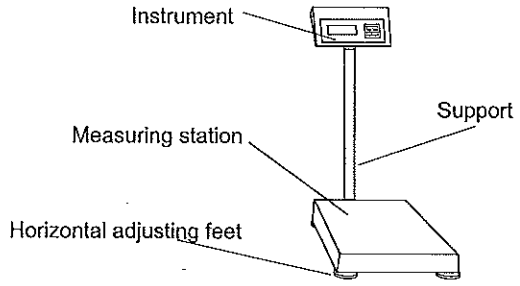
2.1 Accuracy: (III)
2.2 Power supply: 6 size 2 batteries of 1.5V or AC/DC adapter DC9V, 300mA.
2.3 Power consumption: 0.1VA.
2.4 Display: large 6digit LCD display, letter height 22mm.
2.5 Operating temperature: -10 ~ 40℃
2.6 Relative humidity: ≤ 85%

3. Main Functions

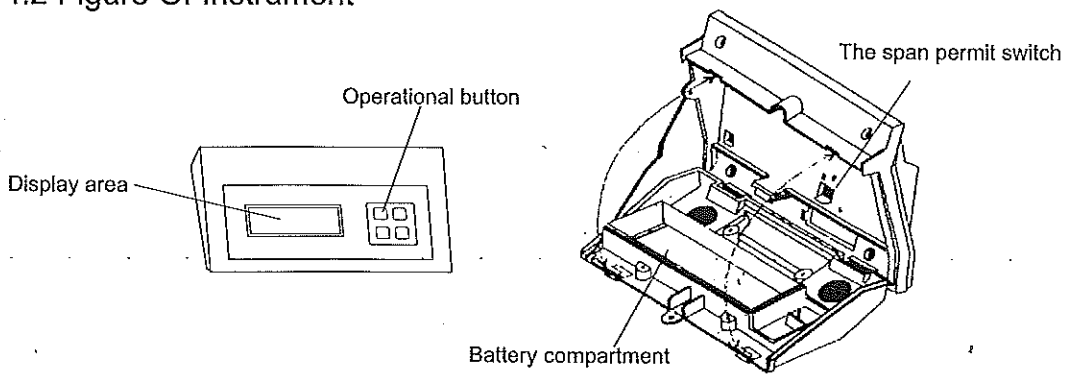
3.1 Auto calibration by keyboard.
3.2 Auto cutoff of power in preset time (3 ~ 30 minutes).
3.3 Indication of signal errors.
3.4 Indication of undervoltage.
3.5 Operated with either AC/DC adapter or batteries.

4. Parts Title

4.1 Figure Of Scale



4.2 Figure Of Instrument



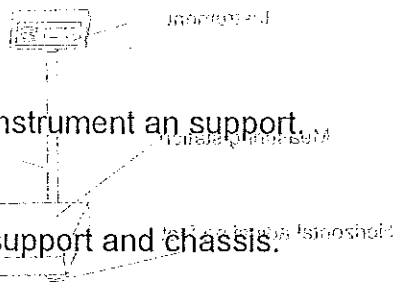
4.3 Functions of button

Key	Function
On/Off	For on/off of power.
F	For preset operation.
Zero	For clearing zero display of instrument.
Tare	For clearing the present weight as tare.

4.4 Indication symbols of the instrument

Symbol	Code Name	Name	Meaning
	Batt.	Battery	Lights in case of under-voltage
○	Stable	Stable	Lights when weighing value are stable
	G.W.	Gross weight	Lights when tare value are zero.
	N.W.	Net weight	Lights in case of tare.
TR	Tare	Tare	Lights when tare is deducted.
→0←	Zero	Zero	Lights when weighing value is zero.
	—	Negative	Displayed in case of negative weighing value.

5. Assembly

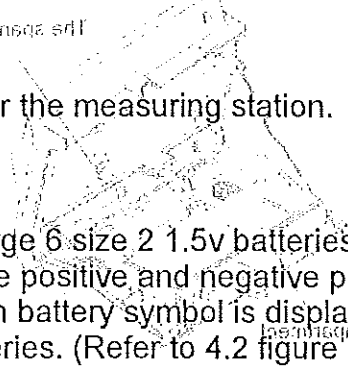


❶ Connect the instrument an support.

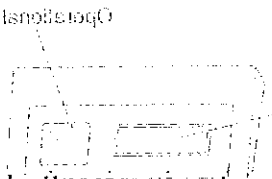
❷ Connect the support and chassis.

❸

❹ Wind the excessive cord under the chassis.

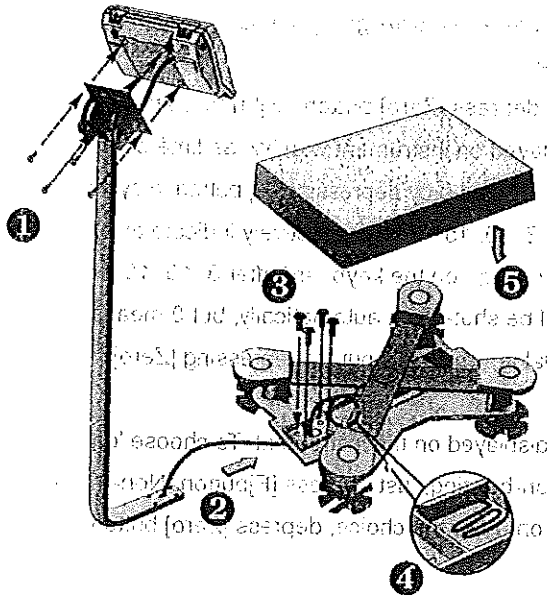


❺ Cover the measuring station.

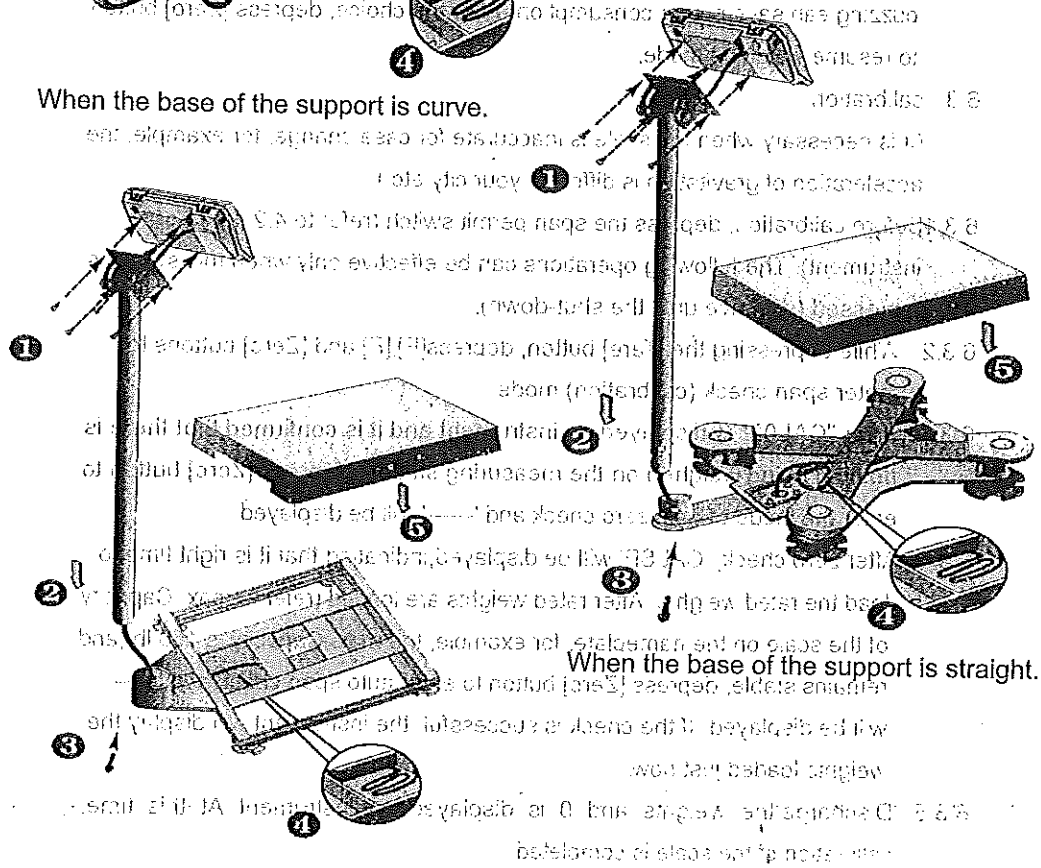


❻ Charge 6 size 2 1.5v batteries into the battery compartment according to the positive and negative polarities. After a period of operation, when battery symbol is displayed on instrument, please replace new batteries. (Refer to 4.2 figure of instrument.)

Figure Of Assembly



When the base of the support is curve.



When the base of the support is straight.

When the max. weighing span is 300kg or 600kg.

6. Descriptions of Operation

6.1 depress [On/Off] button.When this button is depressed,"HUAPU"is displayed for 2 seconds and then goes out for 2 seconds. After it is clearly displayed for 2 seconds, that means the instrument has entered weighing status.

6.2 Preset of auto shut-down and buzzer.

While depressing [Tare]button,depress [Zero] button, [F]button, and [Zero] Button, then 'OFF xx' is displayed on instrument with 'xx' as time of shut-down respectively for 3, 10, 15, 30 and 0 by depressing [F] button in cycle to select the specific figure. Figures 3, 10, 15, or 30 respectively indicate that if no change of weighing value or no change on the keyboard after 3, 10, 15, or 30 minutes, then the instrument will be shut-down automatically, but 0 means auto shut-down function is not available, which is input by depressing [Zero] button.

At this time 'dp on' or 'dp of' is displayed on the instrument. To choose 'on' or 'of' for indication of buzzing or non-buzzing, just depress [F]button. Non-buzzing can save power consumption. After the choice, depress [Zero] button to resume weighing mode.

6.3 calibration

(It is necessary when the scale is inaccurate for case change, for example, the acceleration of gravitation is differ on your city etc.)

6.3.1Before calibration, depress the span permit switch (refer to 4.2 figure of instrument). The following operations can be effective only when this switch is depressed (effective until the shut-down).

6.3.2 While depressing the [Tare] button, depress[F],[F] and [Zero] buttons to enter span check (calibration) mode.

6.3.3 After "CAL00" is displayed on instrument and it is confirmed that there is nothing being weighed on the measuring station, depress [Zero] button to enter the mode of auto zero check and '------' will be displayed.

6.3.4 After zero check, 'CALSP' will be displayed,indicating that it is right time to load the rated weights. After rated weights are loaded (refer to max. Capacity of the scale on the nameplate, for example, the max. Capacity is 150 lb.)and remains stable, depress [Zero] button to enter auto span check and '------' will be displayed. If the check is successful, the instrument will display the weights loaded just now.

6.3.5 Discharge the weights and 0 is displayed on instrument. At this time, calibration of the scale is completed.

6.3.6 If "Error" is displayed during the calibration, that means calibration can not be performed normally. Shut-down and return to weighing mode.

7. Cautions:

7.1 This instrument applies either AC or DC power supply. When using AC/DC adapter, please be careful with polarities. When not using the adapter, please disconnect it from the power supply.

7.2 When under-voltage indicatino of batteries is displayed on instrument, new batteries should be replaced lest measuring accuracy be affected.

7.3 In order to ensure clear display of figured the working life of instrument, do not locate this instrument in place where there are direct sunlight or serious vibration.

7.4 Never let water go into the instrument, otherwise damages of electronic components will occur and affect the performance of instrument.

8. Troubleshooting:

Troubles	Causes	Solutions
No display when on/off switch is depressed.	Adapter not connected to 220v power supply yet, or no batteries in.	Connect to 220v power supply or charge the batteries.
Nothing is shown up on instrument when on/off switch is depressed.	Malcontent of soft touch switch.	Replace a new soft touch switch.
Nothing is shown up when other buttons are depressed.	Malcontent of soft touch switch.	Replace a new soft touch switch.
Incomplete words are shown up when self-check of instrument is done.	Malcontent or false weld or damages from impact on pins of LCD chips.	Replace a new LCD display.
Inaccurate weight value is displayed on instrument.	Badly-welded cord of load cells. Fatigue of load cells from overload operation for a long time.	Check the cord and the welded plug. Calibrate as shown by the manual.

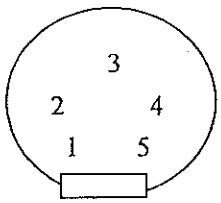
No reaction from the buzzer when any button is depressed.	The preset buzzer does not sound, or the buzzer is damaged.	Preset the buzzer again, or replace a new buzzer.
Readings are not stable when no load is on the scale platform.	Alien objects beneath the platform or the 4 feet of scale are not even on the ground, or serious vibration, or load cell cords spring up and touch the platform.	Open the platform, check and clean it but do not use any water.
Calibration can not be done.	Span permit switch is not depressed yet.	Depress the switch before performing calibration.
The display of weight value does not agree with the weights after calibration.	The weights loaded do not agree with the max. Weighing range.	Place on weights within the max. weighing range as indicated on the nameplate.
The word ERROR is shown up during calibration.	Incorrect welding of load cell cords, mistakes in analog calibration.	Check the cords. Place on weights within the max. weighing range.
The instrument does not resume to zero at the and of calibration.	Heavy objects are loaded on platform during the calibration.	Clear off the heavy objects and calibrate again.
Readings are not accurate after the operation for a period of time.	Under-voltage of batteries. The symbol of batteries is displayed.	Replace new batteries.

Suppiementary remarks:

1. Built-in charged battery is provided in this instrument. While the adaptor of power supply is being applied, the battery is also being charged. (No matter whether this instrument is being used or not, the battery is still in charging status.)
2. When poweris supplied by the charged battery, if the sign "  "(BATTERY LOW) is displayed on the screen, charging operation should be started immediately. The charging time should be at least not less than 8 hors.
3. In case of any leakage from the battery, clean it away and replace a new battery, otherwise the instrument would be corroded.
4. When the new instrument is just unpacked or stays idle for a long time, it is necessary to use a adaptor(transformer)to supply power for over 8 hours.The charged battery can work by itself continuously for about 100 hours.
5. No other charged battery is allowed to be applied in this insturment, otherwise damages by manual mal-operation willbe caused.

NOTE:Connection wiring of 5-pin round plug to XK3119 and XK3118 is shown as below:

1. GREEN (+IN GRN)
2. YELLOW (-IN YEL)
3. BLUE (Shield QIH)
4. RED (Positive Excitation RED)
5. BLACK (Negative Excitation BLK)



※Specifications and designs are subject to change without notice for further improvement.