

PALLET TRUCK SCALE

TA-B6 SERIES



USER MANUAL

TA-B6 series

INDEX

INTRODUCTION.....	page 3
-------------------	--------

PALLET TRUCK SCALE

WARNINGS.....	page 4
1 TECHNICAL SPECIFICATIONS.....	page 5
2 DIMENSIONS.....	page 6
3 OPERATING INSTRUCTIONS.....	page 7
4 REFERENCE DRAWINGS.....	page 9
5 POWER SUPPLY & START UP.....	page 10

WEIGHT INDICATOR

I 、 MainSpecification.....	page 12
II 、 keypadfunction.....	page 12
III、 Connectingloadcellstoindicator.....	page 12

IV、 Indicatoroperatinginstruction	page 13
---	---------

Turn on.....	Page13
--------------	--------

Tare.....	Page13
-----------	--------

Zero.....	Page13
-----------	--------

Animal weighing function.....	Page13
-------------------------------	--------

Accumulating function.....	Page14
----------------------------	--------

RS232 communication format.....	Page14
---------------------------------	--------

Parameter setting.....	Page14-16
------------------------	-----------

Error indicator and solution.....	Page17
-----------------------------------	--------

INTRODUCTION

This manual contains all the instructions for use and all information necessary for the correct operation of the weighing system.

In thanking you for the acquisition of this weight system, we want to call to your attention some aspects of this manual:

- This booklet supplies useful instructions for the correct operation and maintenance of the weighing system to which it refers; it is therefore necessary to pay the utmost attention to all the paragraphs which illustrate the most simple and secure way to operate;
- This booklet must be considered an integral part of the weighing system and must be included with the deed of sale;
- Neither this publication, nor part of it, can be reproduced without written authorization on the part of the manufacturing firm;
- All of the information reported herein is based on data available at the moment of printing; the manufacturing firm reserves the right to carry out modifications to its own products at any moment, without notice and without any sanction. It is therefore suggested to always verify possible updates.
- Some functions written in the sections regarding the weight indicator might not be available, because these depend on the type of weighing system that has been purchased.

PS: The person responsible for the use of the weight indicator must make sure that all of the safety rules in force in the country of its use should be applied, to guarantee that the equipment is used in conformity with the use for which it is destined and avoid any dangerous situation for the user.

The manufacturing firm declines any responsibility derivable from possible errors of weighing.

RECYCLING INSTRUCTION



The crossed-out wheeled bin on the product means that at the product end of life, it must be taken to separate collection or to the reseller when a new equivalent type of equipment is purchased. The adequate differentiated refuse collection in having the product recycled, helps to avoid possible negative effects on the environment and health and supports the recycling of the materials of which the equipment is made. The unlawful disposal of the product by the user will entail fines foreseen by the current regulations.

NOTE FOR THE USER:

Please take note that when the "TECH.MAN.REF." is mentioned, means that an advanced function is being described (therefore for the technical personnel) which will be further explained in the corresponding technical manual.

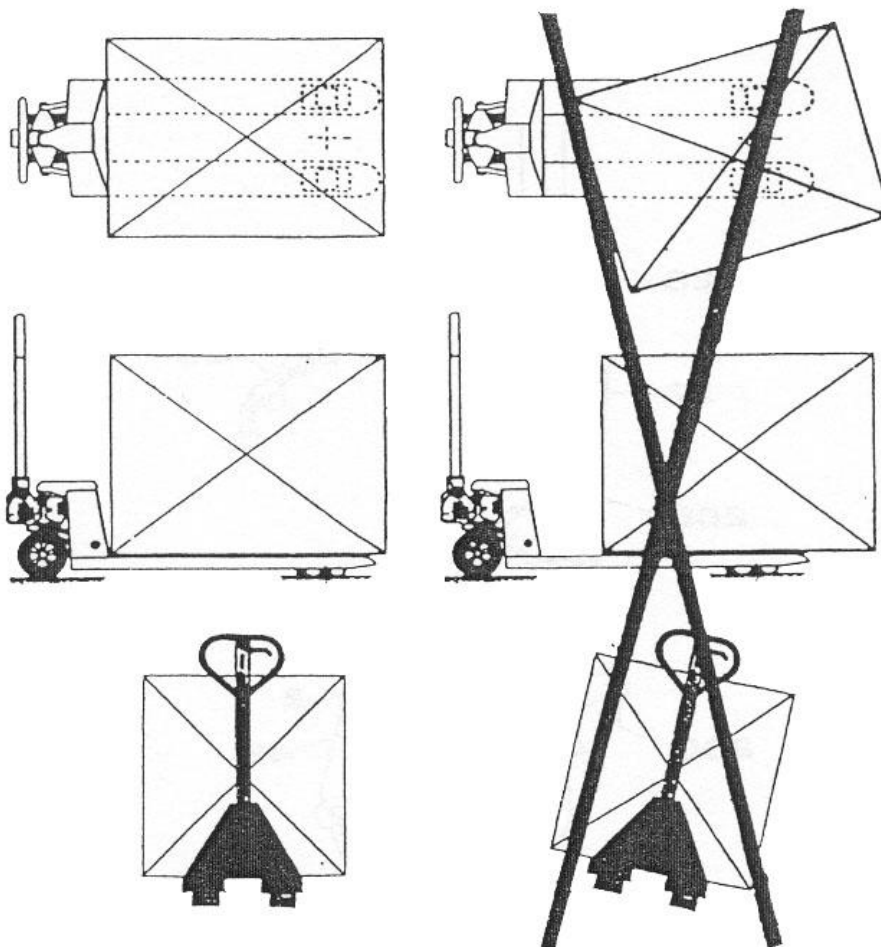
PALLET TRUCK SCALE

!! WARNING !!

THIS PALLET TRUCK SCALE HAS BEEN DESIGNED TO ONLY WEIGH ON
PALLETS

1. Never exceed maximum load, see the weight indicator's label.
2. Do not use in an environment with any risk of explosion
3. Load only when forks are in the lowest position.
4. Check that the pallet truck scale is in good operating conditions.
5. !! CAUTION !! To get the best weighing results, lift up the forks about 5-10 cm.
6. Do not expose the weighing indicator to atmospheric agents (rain, sun, etc.).
7. Read and understand all instructions.

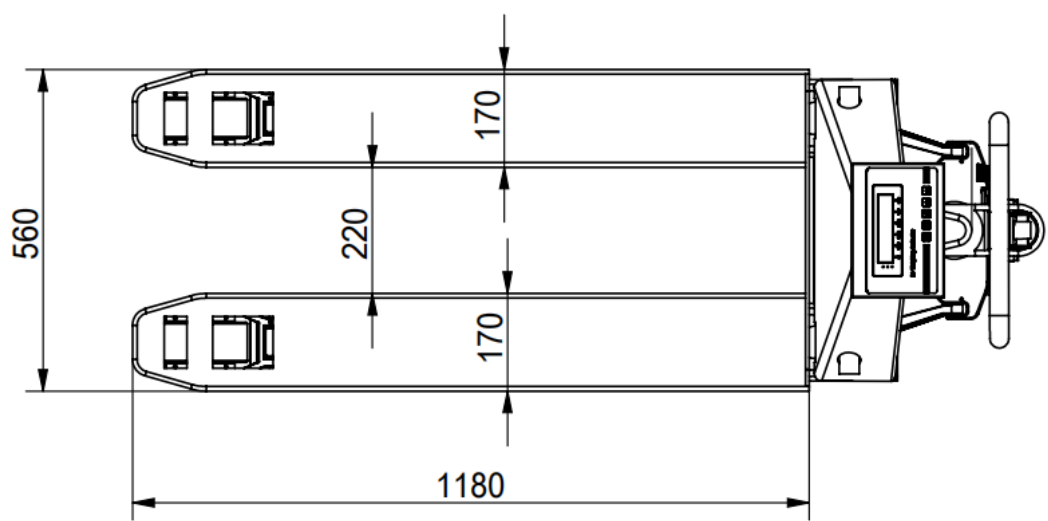
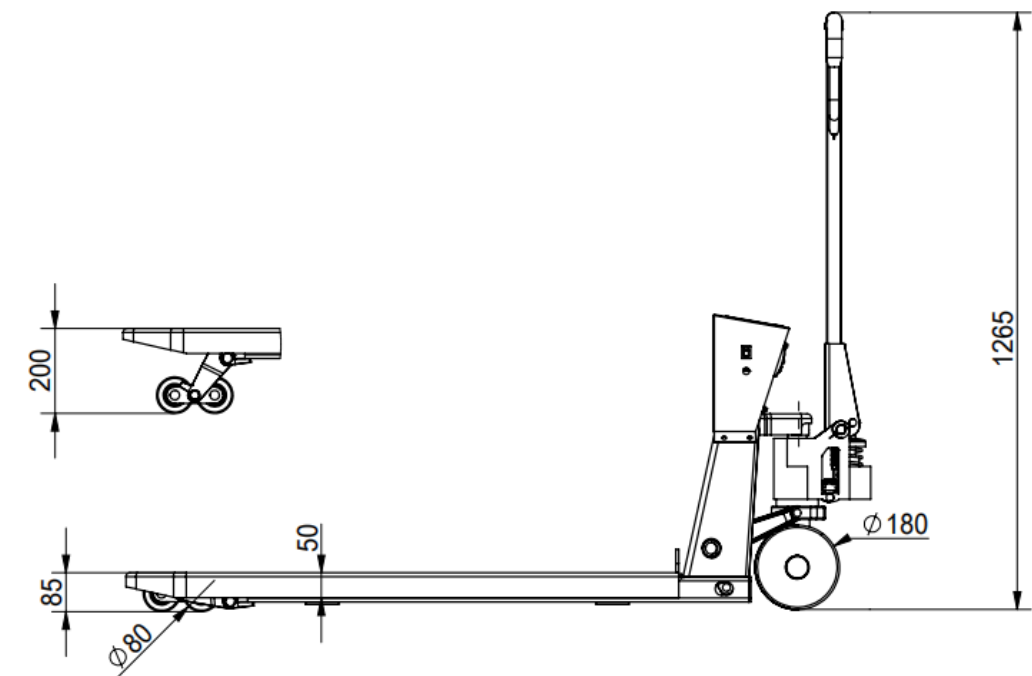
FIX THE LOAD ON THE PALLET, AS SHOWN IN THE DRAWING



1 TECHNICAL SPECIFICATIONS

POWER SUPPLY	With 6V/ 4 Ah maintenance-free rechargeable battery
OPERATING TEMPERATURE	From 0 to +40 °C
DISPLAY	6bits LED,9 status indicating signals
KEYBOARD	Waterproof and functional keypad.
TARE FUNCTION	Available on entire range
MAXIMUM LOAD	2000kg
STRUCTURE	Extra thick sheet-steel and oven fire painted interior construction.
LOAD CELLS	4 1000-Ohm shear beam aluminium load cells.
LOAD CELL POWER SUPPLY	5Vdc $\pm$ 5%, 120mA protection from short circuit.
LOAD CELL CONNECTIONS	4 wires (EXC+, EXC -, S+, S-).
STEERING WHEELS	Ø 180 mm vulkolan made
FORK'S ROLLS	Ø 80 mm vulkolan made, double.

2 DIMENSIONS (mm)



3 OPERATING INSTRUCTIONS

A pallet truck scale is an electronic weighing system directly installed on a pallet truck.

Must be used on even solid surfaces and driven always in the normal position. Before loading, check the maximum load allowed by the pallet truck scale in use, refer to instruction plate on the side of the pallet truck.

The rudder has a double function, direction control and hydraulic lifting.

N.B. Lift up or pull down ONLY when the pallet truck scale is in a standing still position.

CONTROLS

The lever on the right side of the rudder can be put in 3 positions, like it shows on the plate "Y" in figure B.

POS. 1 – centre = TRANSPORT The rudder is completely free to allow driving control.

POS. 2 – down = LIFT UP By moving the lever downward the lifting mechanism is activated. Pushing down the rudder will cause the load to lift up.

POS. 3 – up = PULL DOWN By moving the lever upward the load will descend. When the lever is quickly moved upward, a special valve controls the descending speed of the load.

MAINTENANCE WARNINGS

Before you perform any service, make sure the pallet truck is in a condition of safety.

Never discharge any residue without taking the necessary environmental precautions.

Only perform the service described in this manual. Maintenance and repair jobs not included in this manual must be performed by authorised personnel only.

Serious injury could result from service or maintenance performed by unqualified personnel.

Never alter the safety level of the machine. Always use identical replacement parts.

Never remove or hide in anyway instruction plates and stickers.

The more intricate maintenance and/or the repair must be carried out by specialized personnel.

Do not modify the pallet truck.

Do not use inflammable cleaners. Do not use direct jets of water. Do not pour liquids on the indicator.

RUDDER ASSEMBLY (figure D)

1. Lock rudder (228) to hydraulic pump (200) with screws (27) that you can find in the box.
2. Lock chain (208) to lift down pedal (50). Rotate pedal to simplify the connection.

DESCENDING SPEED REGULATION (figure D)

1. Lift up forks to maximum height.
2. Set right lever to POS. 1 (centre).
3. Make sure the rudder (228) is in a vertical position.
4. Unscrew bolt (2) and turn clockwise the adjustable screw (48) until the forks start to descend.
5. Turn adjustable screw 1 ½ turn counter clockwise, then screw bolt (2).
6. You should be able to obtain a descending movement from every position of the rudder.

OIL LEVEL (figure C)

Check oil level every 6 months. Only use hydraulic oil. No engine oil or brake oil.

Oil viscosity 30 Cst at 40°C . Quantity 0.3 lt.

With the fork in the lower position follow these steps:

1. Remove cover (204), o-ring (11) and cap (202).
2. If necessary add oil. Maximum filling level is 200mm below top of tank.
3. Turn on the pump to get air out of the hydraulic circuit.
4. Put cap (202), o-ring (11) and cover (204) back.

DAILY MAINTENANCE

To keep the pallet truck scale in good operating condition, the operator must perform daily these checkpoints:

- Check overall conditions.
- Check weighing scale.
- Check printer (if installed).
- Check pump.
- Check rollers and wheels.

SCHEDULED MAINTENANCE

Maintenance performed by qualified personnel only.

Make sure to put the pallet truck scale on a flat and solid surface.

- Check that nothing is blocking the rollers.
- Grease rollers and wheels bearings.
- Grease control lever on rudder.
- Check oil every six months. Fill up if necessary with IP46 hydraulic oil.

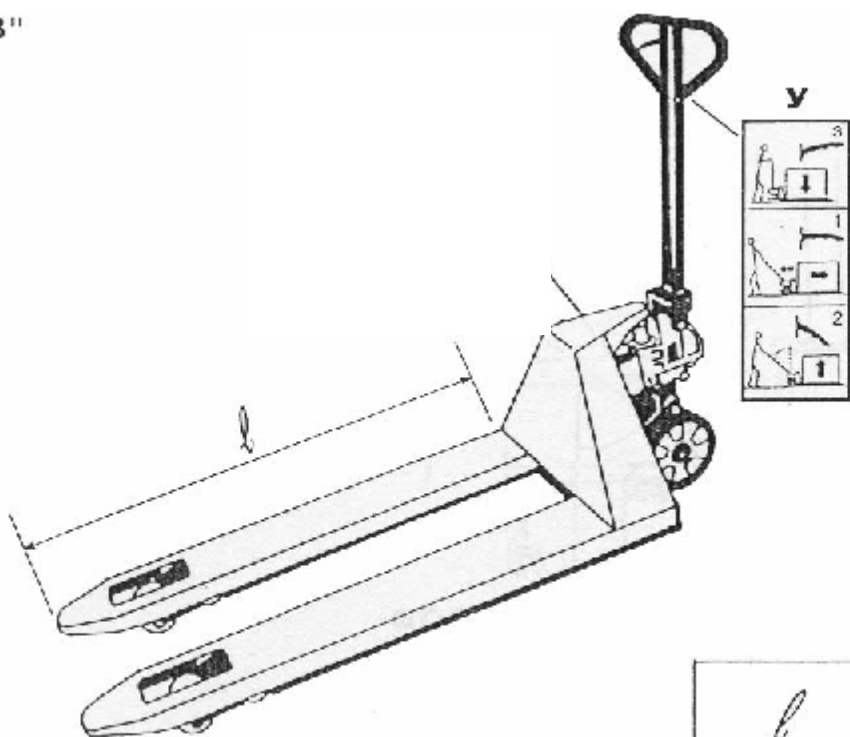
N.B. If oil needs to be replaced, follow the necessary precaution and law requirements for the disposal of the exhausted oil.

- Replace rollers and wheels when necessary.

For any questions or problems check with an Authorised service Centre.

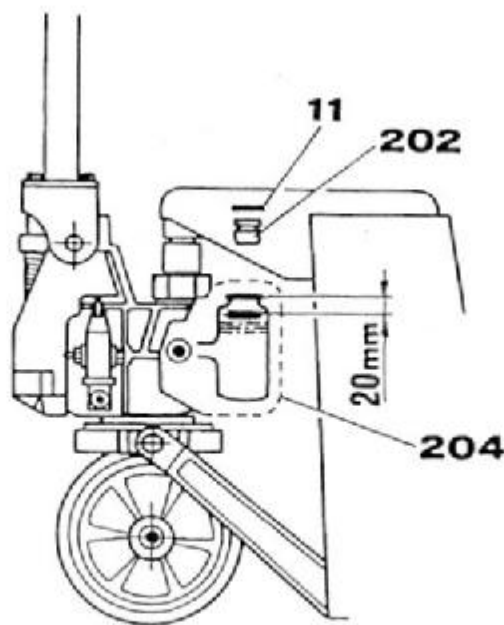
4 REFERENCE DRAWINGS

B''

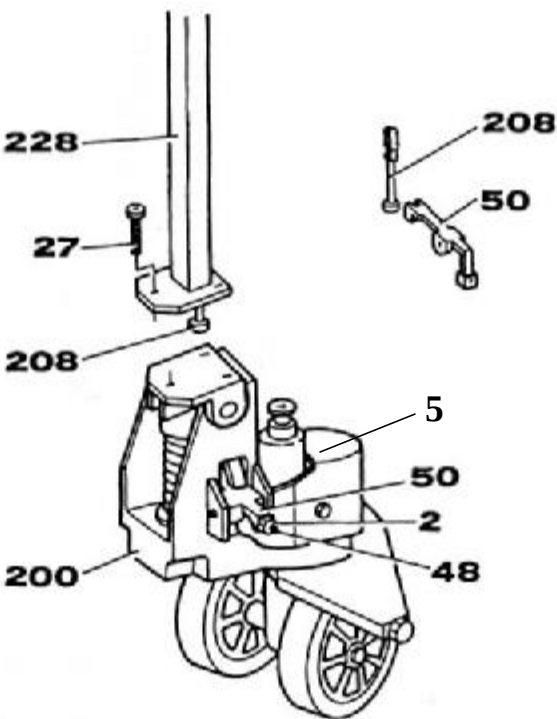


	1170
	120

C''



D''



5 POWER SUPPLY & START UP

The instruments are powered with 6V/ 4 Ah maintenance-free rechargeable battery.

TO TURN ON the instrument press the ON/OFF key until the turning on and release.

The display shows in sequence:

The indicator has an "auto zero at start-up" function: in other words it means that if at start-up a weight within +/- 10% of the capacity is detected, it will be zeroed; if the weight is not within this tolerance, with a non approved instrument the display shows the present weight after a few instants, while with an approved instrument "Z - LoW" (weigh too low) or "Z - hiG" (weigh too high) is shown continuously on the display, until the weight does not re-enter within this tolerance; the auto zero function at start-up may be disabled through the PC Tool (TECH.MAN.REF.).

TO TURN OFF the instrument keep the ON/OFF key pressed until the "- OFF -" message appears on the display and release the key.

B6/B6S Digital Weighing Indicator

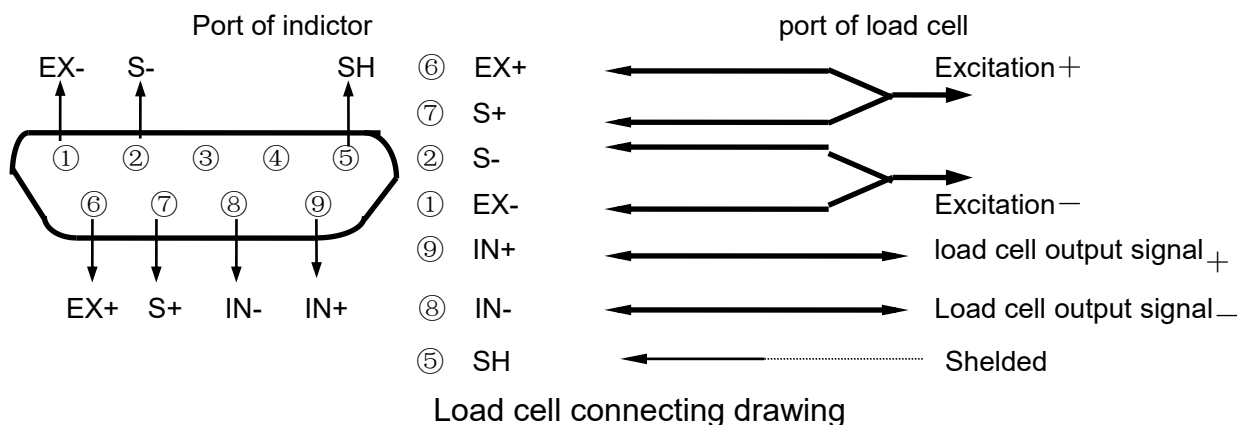
I 、 Main Specification

1. Model: B6 digital weighing indicator
2. Accuracy class: Grade III
3. Max Verified counts: $n=3000$
4. Sample rate: 10times/second
5. Loadcell sensitive: $1.5\sim 3\text{mV} / \text{V}$
6. Scale interval: $1/2/5/10/20/50$ optional
7. display: 6 bits LED, 9 status indicating signals
8. Power supplier: AC220V/50HZ
9. Operating temperature/humidity: $0\sim 40^{\circ}\text{C}$; $\leq 85\%\text{RH}$
10. Transporting temperature: $-25\sim 55^{\circ}\text{C}$

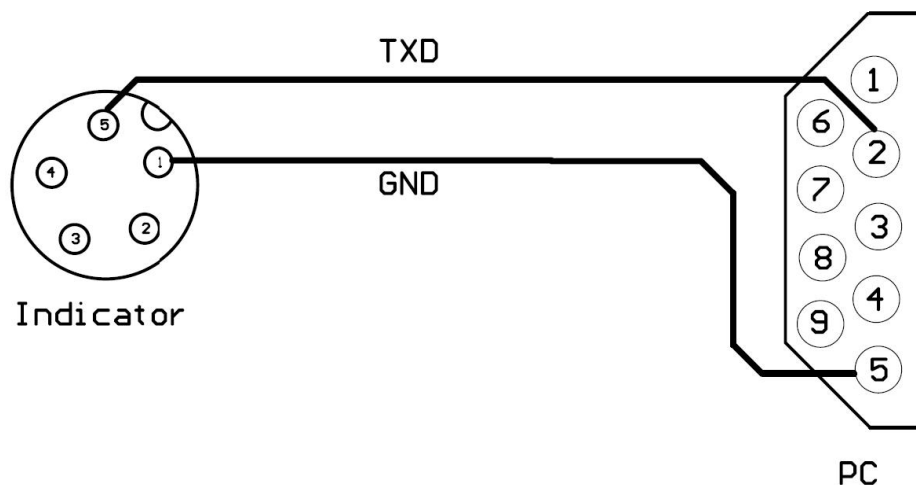
II 、 keypad function

Button name	function
【 ON/OFF 】	【ON/OFF】 Press this key for turning ON or OFF the indicator
【 * 】	【 function key 】 keep pressing this button for more than 5 seconds in weighing mode, it will enter user's parameter setting mode ;; keep pressing this button for less than 5 seconds,it will be animal weighing mode.
【 . . . 】	【accumulation key】 in weighing mode, press this button to accumulate the weight; in the self-checking status, press and hold this key, it will enter calibration mode; in the calibration process, press this button to switch parameter setting.
【→T←】	In weighing mode, press this button to tare; In parameter setting mode,press this button to change parameter value
【→0←】	In weighing mode, press this button to zero; In calibration process, press this button to change the value

III、 Connecting load cells to indicator



To ensure the reliability of data transmission, please use 2-core shielded cable connections



Drawing of connecting indicator to computer RS232

IV、Indicator operating instruction

Turn on

Press the Rocker switch to " - " on the back of the indicator, then press the "ON/OFF" key to turn on the indicator. Press the Rocker switch to "o" to turn off the indicator.

Tare

Put the weighing cargo on the scale platform, when the display digits is stable, press the button "【→T←】", the display show zero, and net weight indicating light turns on. take off the cargo, press the button "【→T←】" key again, in this way you can clean the tare weight, then the net weight indicating light turn off.

Zero

The display value deviates from zero point, but it is still in the range of zero setting, press "【→0←】" to zero, then the zero indicating light turn on.

Animal weighing function

In the parameter setting, set the "P14" value into "2" to start the animal weighing function. Set the "P14" value into "1" to shut off the animal weighing function. The "P13" function is Filtering strength. In the weighing mode, press "【 * 】" key, then it displays "--CT--", after

a while, the scale will lock the current weight automatically; press the “【 * 】” key again or zero the scale, the scale can turn to normal weighing mode.

Accumulating function

In the weighing mode, press “【  】” key, the indicator will accumulate all the current weight, and at the same time the “ACCUM” lights turns on. press the “【  】” key again, it will turn to normal weighing mode, and the “ACCUM” light turns off; press the “【  】” key under zero point, it can display current accumulated value; under the accumulation state, press “【   】” key to zero, press “【  】” key again it can turn to normal weighing mode again, and at the same time, the “ACCUM” lights turn off.

Note: the scale must zero before next accumulation operation. otherwise it can not perform the second time accumulating operation.

RS232 communication format

RS232 communication connector use RS232C. all the datas are all ASCII code. Each data consists of 10 digits. the first digit is starting bit, and the 10th digit is ending bit. The internal 8 digits are data bits, even parity.

Protocol format:

Under the normal displaying mode, each unit of data are transmitted by 15 characters. the first characters: 'w', the second characters: N mean of “net weight”. From 3th to 9th characters: 6 bits weight value including the Decimal point. if no Decimal point, the 9th character is blank.(0x20) weight is negative value, the 3th character is “-”(0x2d). the 10th and 11th character is unit like “k g” (0x6B, 0x67), the 12th character : verification high 4 bits. the 13th character: verification low 4 bits. The 14th character: 0x0d. The 15th character : 0x0a

Parameter setting

In weighing mode, long press “【 * 】” key to enter user setting mode. Press “【   】” key to change the value. press “【  0  】” key to enter the next parameter; after all parameter setting is finished, press “【 * 】” key to exit the user setting mode.

(1) kg & lb change

display	parameter	instruction
【P1 1】	1	Unit Kg
	2	Unit lb, the last decimal point turns bright

(2) Automatically power off

display	parameter	instruction
【P2 1】	1	No automatic shutdown function
	2	10 minutes
	3	20 minutes
	4	30 minutes

(3) Baud rate setting (no this function currently, fixed baud rate is 1200)

display	parameter	instruction
【P3 1】	1	9600
	2	4800
	3	2400
	4	1200

(4) RS232 output net weight, output gross weight (no this function currently, fixed output net weight)

display	parameter	instruction
【P4 1】	1	Output net weight
	2	Output gross weight
	3	Output tare weight

(5) RS232 output mode option (no this function currently, fixed continuous transmission)

display	parameter	instruction
【P5 1】	1	No transmission (RS232 stop)
	2	Continuous transmission
	3	Continuous transmission when stable

(6) B6C:backlight setting; B6 power-saving function setting (no this function currently)

display	parameter	instruction
【P6 1】	1	B6C: no backlight; B6: no power-saving junction
	2	B6C: automatic backlight; B6: have power-saving function
	3	B6C keep lighting; B6: /

(7) Zero tracking range

display	parameter	instruction
【P7 1】	1	0.5e
	2	1.0e
	3	1.5e
	4	2.0e
	5	2.5e
	6	3e
	7	5e

(8) zero range

display	parameter	instruction
【P8 1】	1	2FS%
	2	4FS%
	3	10FS%
	4	20FS%
	5	100FS%

(9) Turn on Zero range

display	parameter	instruction
【P9 1】	1	2FS%
	2	4FS%
	3	10FS%
	4	20FS%
	5	100FS%
	6	No turn on zero

(10) Digital filter time strength

display	parameter	instruction
【P10 1】	1	fast
	2	middle
	3	slow

(11) Stable time

display	parameter	instruction
【P11 1】	1	slow
	2	middle
	3	fast

(12) Stable range

display	parameter	instruction
【P12 1】	1	low
	2	middle
	3	high

(13) animal function strength

display	parameter	instruction
【P13 1】	1	low
	2	middle
	3	high
	4	higher

(14) animal weighing function on/off

display	parameter	instruction
【P14 1】	1	Turn off the animal function
	2	Turn on the animal function

Error indicator and solution

Fault	reason
Err1	The AD value is too small when calibrated or the load cell capacity is too large
Err2	The zero point is out of the range when calibrated
Err3	The zero point is out of range upon starting or there is heavy weights
Err5	There is no load weight in calibration mode
Err7	The load cell cable connection is wrong, please check the connection method again.
Err8	Load cell signal is not stable