Dynamometer

User's Guide

Content

Rev.A

1. Introduction

Notice

Before you use this dynamometer, please read this manual through carefully, and keep it properly for future use.

Safety Guide

For good performance and precise measurement, be careful with daily operation and maintenance. Note the following instructions:

- Do NOT overload dynamometer. This will damage loadcell and void warranty.
- Do NOT leave weight loaded on dynamometer for long. This will decrease dynamometer's accuracy and shorten loadcell's life.
- When dynamometer runs out of power, replace the battery with full ones.
- Do NOT use dynamometer under thunder or rain.

➲ Do NOT attempt to repair dynamometer yourself. Contact your local representative.

2. Specifications

Features

This dynamometer is a combination of the sound and proven mechanical design, with today's most advanced electronics to provide a superb feature set. It is versatile, reliable, accurate and easy to operate.

Superb Quality	Strictly in accordance with Chinese GB/T11883-2002 national standards, and European CE directives.
Great Safety	Quality aluminum or steel case for better safety.
Newest Design	2-line digits FSTN LCD display, with optional shackle and hook.
Leading Technology	SMT technology, quality integrated circuit and dedicated weighing loadcell, ensures long

	time stability.
Smart Power-saving	3*AA battery with low power consumption design.
Portable	Compact structure, easy to carry.

Specifications

Accuracy	≤±0.1%F.S.
Tare Range	100% F.S.
Overload Alarm	>F.S.+9e
Max. Safety Load	120% F.S.
Ultimate Load	400% F.S.
Battery	3*AA 1.5V battery
Battery Life	＞30hours
Temp. (Op.)	- 10℃ ~ + 40℃
Display	43mm(16.92inch) screen 22mm(8.663inch) character

3. Display&Keys

Scale Keys

Key	Name	Function
	On/Off	Short pressing: Cancel & return to weighing mode Long pressing: Power-on / off
	Tare	Short pressing: Tare in/out; Increase digit Long pressing: Zero; Move digit
	Peak	Short pressing: to lock peak hold function; Pressing again to unlock peak hold
	Hold	Short pressing: Lock/unlock; Confirm & next Long pressing: Unit Switch; Input / cancel decimal point

Indicators

LED	Name	Note
	Stable	shown when weight is stable
	Zero	shown when weight is at zero
	Tared	shown when scale is tared
	Hold	shown when scale is locked
	Peak Hold	Shown when weight in peak mode. If weigh value is higher than the previous one, automatically display higher one & locked again
	lb	shown when unit is lb
	kg	shown when unit is kg
	UN	shown when unit is User Unit

Message

Message	Stand for	Note
- - - -		detect weight

SEtUP	SETUP	User Setup Menu
bAt99	BATTERY	battery life percentage
End	END	save and exit
oFF	OFF	power off
ouEr	OVERload	overloading
Err	ERRor	invalid operation

4. Operations

Power On/Off

- Simultaneously press 

for 1s to power-on scale. Scale perform initialization and power-on test, 88888. shows twice, then capacity 1000 shows, battery life percentage bAt99 shows, weight detection ----- shows and then auto zero.

For information about Auto-Zero, refer to Scale Configuration in Technical Manual.

- Simultaneously press 

for 1s to

power-off scale. Battery life percentage bAt 99 shows, off message oFF shows, and then cut off power.

When 3 batteries voltage is lower than 3.2V, scale will auto power-off itself and display bAt 0. Please replace the dead batteries with new ones.

Zero

Simultaneously press  for 1s to zero. 0 shows.

If load is in motion, or tared, or out of Manual-Zero Range, Err shows.

For information about Manual-Zero Range, refer to Scale Configuration in Technical Manual.

Tare In/Out

In gross mode, press  to tare in. T shows.

If load is in motion, or negative, or out of Tare

Range, Err shows.

- Tare will reduce the apparent overload range of scale. For example, if a 500*0.2kg scale has a 100kg container as its tare, the scale will overload at a new weight of 401.8kg (500 – 100 + additional 9 divisions).
- In net weight mode, press 

to tare out. T disappears.

Lock/Unlock

- Press 

to lock screen. H shows.
- Press 

to unlock screen. H disappears.

Unit Switch

- Simultaneously press 

for 1s to switch unit in between kg, lb, and User Unit.
- When unit is kg, KG shows. When unit is lb, LB shows. When unit is User unit, UN shows.

For more information about User Unit, refer to Scale Configuration in Technical Manual.

Peak Hold

In weight mode, press 

to peak hold function,"P" shows.

Press 

again to exit peak mode,  disappears.

In peak mode, weigh will be locked,
When the weigh is higher than the previous one, automatically display higher one and locked again.

Remark： Press twice 

also could unlock PEAK Function.

5. User Setup

Press 

and 

at the same time for 1s to

enter User Setup menu. SEtUP shows.

Auto-Off Timing

- Press 

to enter Auto-Off Timing. oFF-- shows.
- Press 

to change timing value.

Auto-Off Timing can be set to: 0 (disabled), 5 (5min), 10 (10min), 15 (15min), 30 (30min), 60 (60min). It is disabled by default.

- Auto-Off function maximizes scale's battery life against people's carelessness not to power off scale when it's not working.
- Auto-Off starts countdown timer when there's no action or load is stable. Any key pressing or motion in load restarts countdown timer.

Backlight Brightness

- Press 

to enter Backlight Brightness.

- br - shows.
- Press  to change brightness value.

- Backlight Brightness can be set to: oFF (disabled), 1 (dim), 2 (normal), 3 (bright).
- Dim backlight brightness saves battery power dramatically.

Idle Mode Timing

- Press  to enter Idle Mode Timing.

idL -- shows.

- Press  to change timing value.

- Idle Mode Timing can be set to: 0 (disabled), 5 (5sec), 10 (10sec), 15 (15sec), 30 (30sec), 60 (60sec). It is 30sec by default.

- To maximize battery life, scale automatically enters Idle Mode, when there's no action or the load is stable.

- In Idle Mode, scale works in low-power consumption status. Any key pressing or motion in load wakes up scale from Idle Mode.

- Press 

to exit User Setup.

6. Trouble-shoot

Simple problems can be resolved as below listed solution. If problems still exist, please contact your local representative.

Symptom	Possible Cause	Suggested Solution
not power-on after  is pressed	discharged / defective battery	check battery and replace
	defective On/Off key	press harder and keep pressing for 2s
	defective power	open front panel, check
	defective	contact representative

	mainboard	
backlight flashes	discharged battery	replace battery
no action taken after key pressed	scale is disturbed	re-plug power cable
	defective key	contact representative
weight reading not stable	load in motion	keep load stable
	weak Anti-Motion	change Anti-Motion level
	damped loadcell or mainboard	dry loadcell or mainboard
	defective mainboard	contact representative
weight reading not zero when no load	discharged battery	replace battery
	load-cell stressed too long	hang scale in storage
	loadcell drifts	contact representative
large error in weight	scale not zeroed before applying	Manual Zero scale before loading

reading	load	
	wrong unit	switch to correct unit
	scale requires calibration	calibrate scale
	defective loadcell or mainboard	contact representative