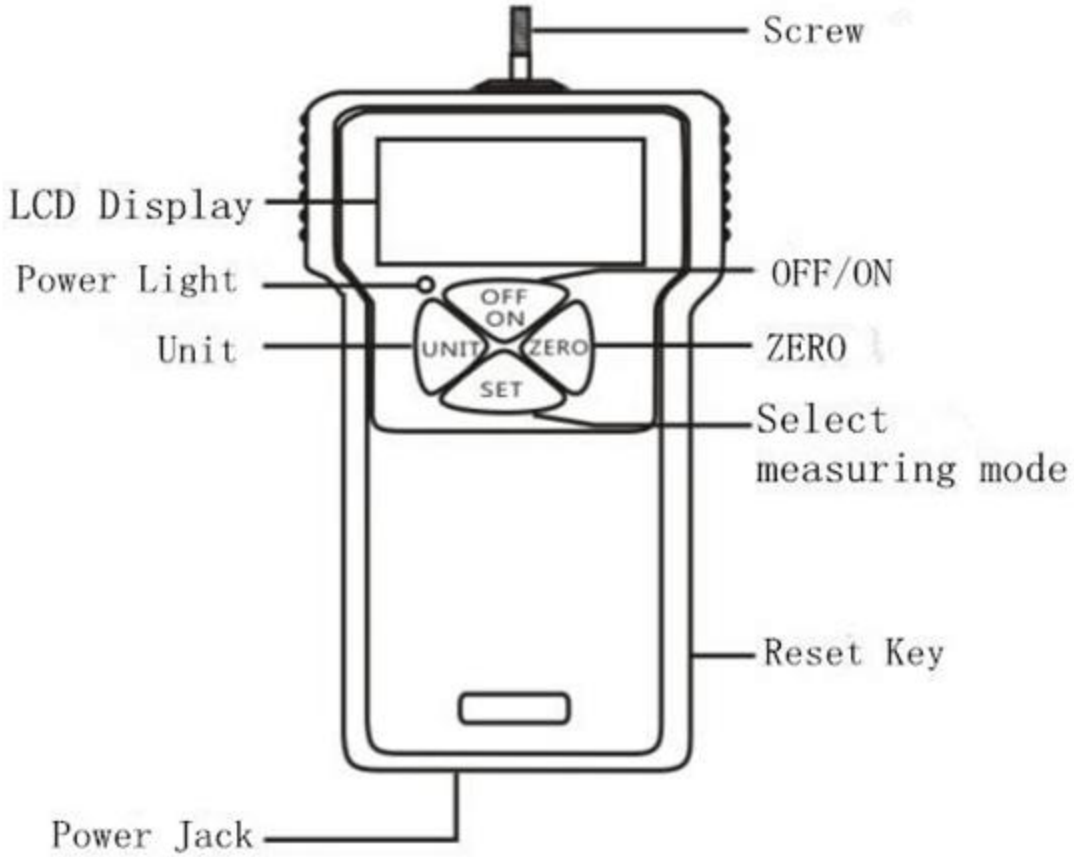
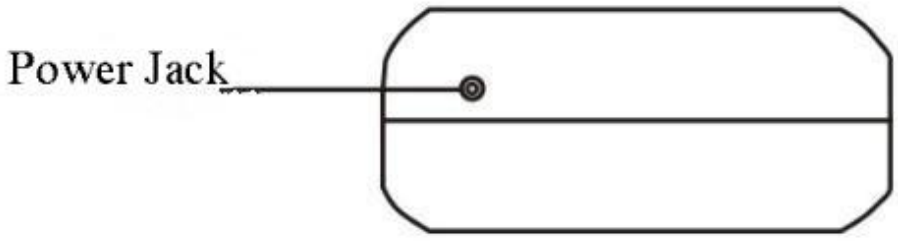
⚠ Warning:This product is a precision instrument ,please handled with care when used with the test stand.

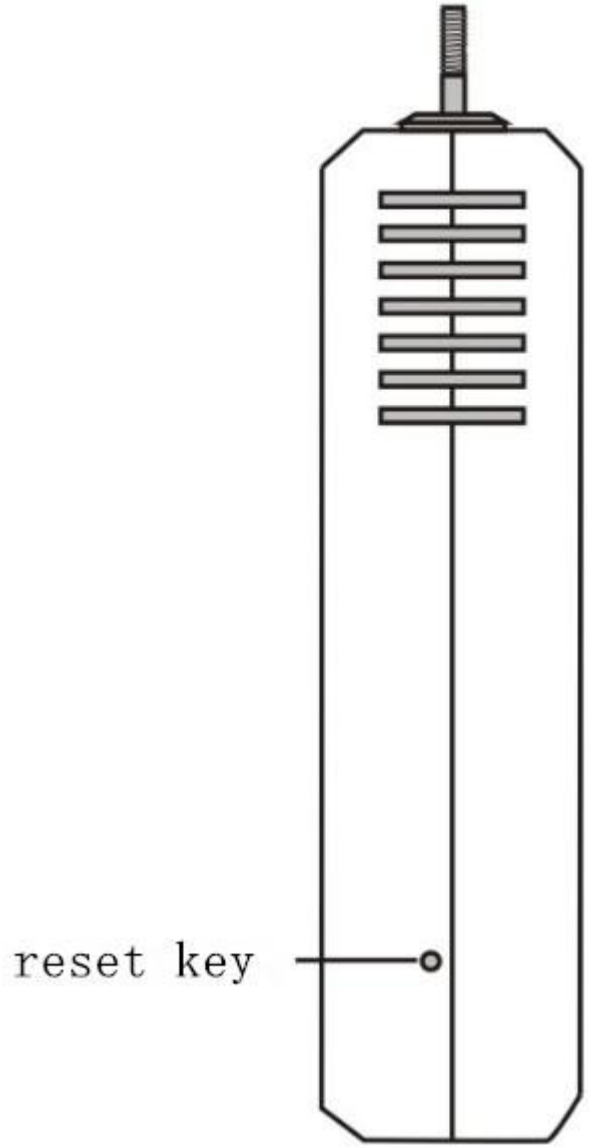
Please charge the gauge once each three months at least!

DIGITAL FORCE GAUGE

Manual


Screw
LCD Display
Power Light
Unit
OFF/ON
ZERO
Select
measuring mode
Reset Key
Power Jack
OFF
ON
UNIT
ZERO
SET


Power Jack



One: Using

This product is a simple push pull force gauge with high performance.

Two: Characteristics

1.Digital display,easy reading;

2.In light weight,small size,easy to carry;

3.Unit display:Lb,Kg,N

4.The battery has over-load protection in case of short circuit and leakage of electricity .It also can tell you when the battery is running low.It adopt the 3.7V lithium battery and auto shut off with no operation in 10 minutes at the same time.

Three:Main technical parameters

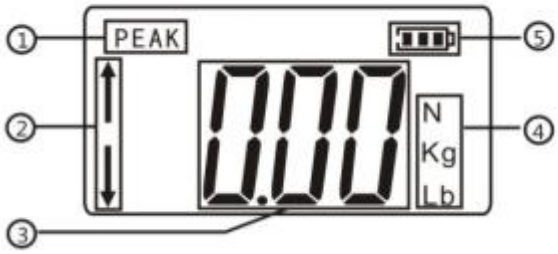
The max. Load value	10N	20N	30N	50N	100N	200N	300N	500N
	1kg	2kg	3kg	5kg	10kg	20kg	30kg	50kg
	2.2Lb	4.5Lb	6.5Lb	11Lb	22Lb	45Lb	65Lb	110Lb
Load Value	0.01N				0.1N			
	0.001KG				0.01KG			
	0.001Lb				0.01Lb			
The sensor	Sensor inside							
Precision	±0.5%							
Power	3.7V lithium battery							
Charging time	4~6 hours							
Continuous usage time of battery	About 15 hours							
Battery life	≥ 300 times							
Charger	Input: AC100- 240V 50-60Hz Output: DC 5V 1000mA							
Working temperature	5 ℃ ~35 ℃							
Transportation temperature	-10 ℃~60℃							
Relative humidity	15%~80%RH							
Work environment	No focus ,Non-corrosive in surroundings							

⚠ WARNING

- In case of damaged, please make sure the max. rated load of the product before using;
- During testing, do not force too large or too fast, apply force banlanced can protect the product from damaging.

⚠ WARNING

- Do not disassemble, these behaviours can cause machine permanent fault.



Four: Screen display

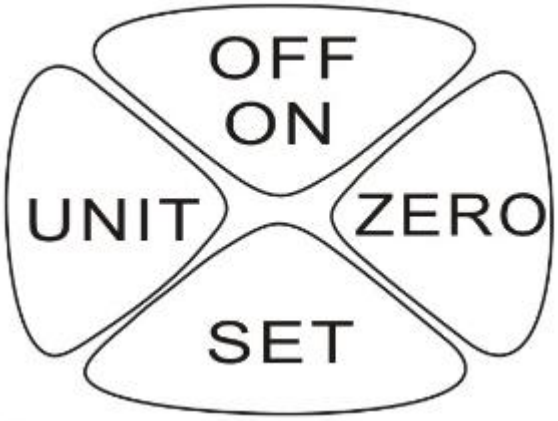
① Peak mode: After turn on,enter into the measuring interface,click "SET" button can enter into the peak mode directly,record the Max. force value during measuring.

② Push pull force shows:do not move the gauge,the above arrow shows the pull force,the below arrow shows the push force.

③ Measuring force value display.

④ Three units:N(newton),kg(kilogram),lb(pound) display respectively ,press "UNIT" button to switch .

⑤ Power display.



Five : The key introduction

-OFF/ON(start up ,shut down key):when press this key,turn on the power,appear measuring interface.Press this key again can shut down gauge.

-ZERO(zero key)The testing value on the screen can be zero when click this key.

-UNIT(switch unit key)It can switch three different unit s when click this key.

Six: Start up display

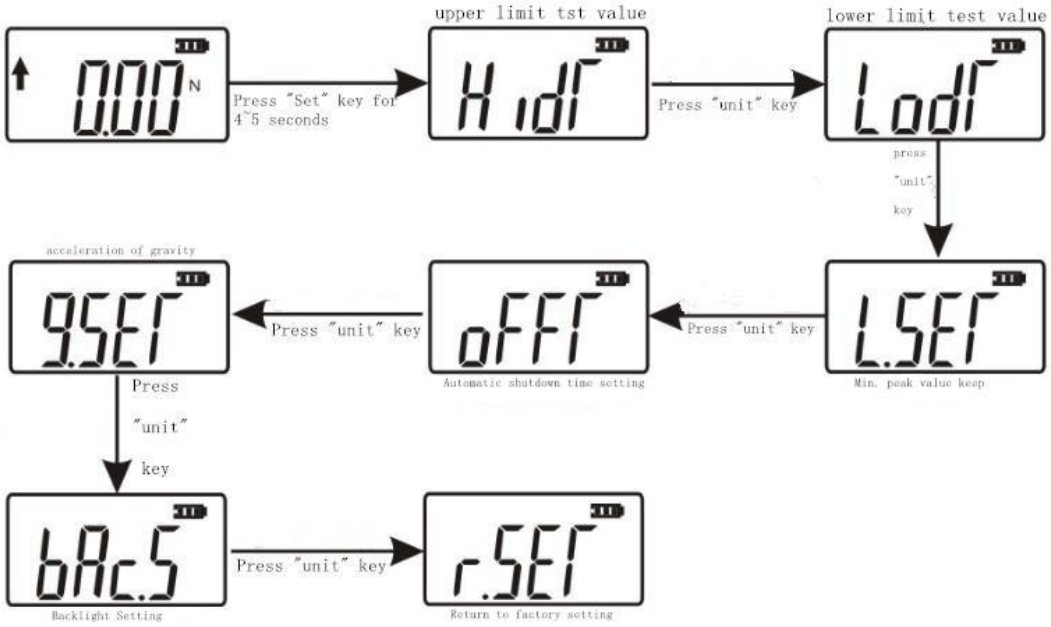
Seven: Function operation

☞ Start up settings:

Press "SET "key for 4-5 seconds after starting up,and then loosen,can enter into the setting interface, display"HIDT",and then continuous press "UNIT" key will appear other settings items :

"LODT" ,"L.SET","OFFT","G.SET" ,"BAC.S" ,"R.SET"

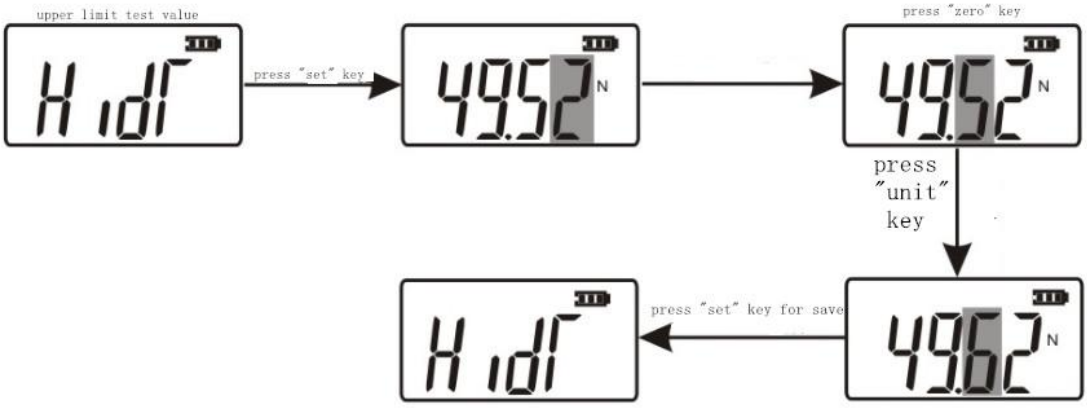
show as the picture below:



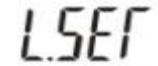
(HIDT) upper limit testing value setting:to set upper limit test value,the default state of the upper limit value is 99% of full range ,above upper limit is out of range and the instrument will buzzing.If you want to set the upper limit value again,please press "unit" key and "zero" key .

Press "SET" key to save and return to setting interface automatically.

Show as the picture below:



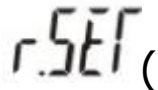
 (LODT) Lower limit testing value setting:to set lower limit test value ,it's default state is zero.
Below lower limit is out of range,the instrument will buzzing.If you want to set the lower limit value again,press "unit" key and "zero" key for setting.
Press "SET" key to save and return to setting interface automatically.

 (L.SET) Min. Save value of peak :the minimum peak value saved, when in peak mode,when the current value is smaller than it,the value will not be saved.

 (OFFT) Automatic shut down time setting:when in this mode,please press "UNIT" key and "ZERO" key for setting,it can set auto shut down from 1 to 9999 minutes,it can also set "00" for not auto shut down.
If you select not auto shut down,press "set' key to complete.Then return to option interface.The default setting of instrument is 10 minutes.

 (G.SET) Acceleration of gravity setting:the users can set acceleration of gravity according to their area.The default value is 9.800.

 (bAC.S) Back light function setting:when in this mode please press "UNIT" key for optional,if you select "yes" means open back light function,if you select"no" means close back light function, then press "SET" key for saving and return to setting interface.

 (R.SET)Return to factory setting,when in this mode,press "SET" key will return to factory setting,the instrument will show down.Turn on the instrument again for using.

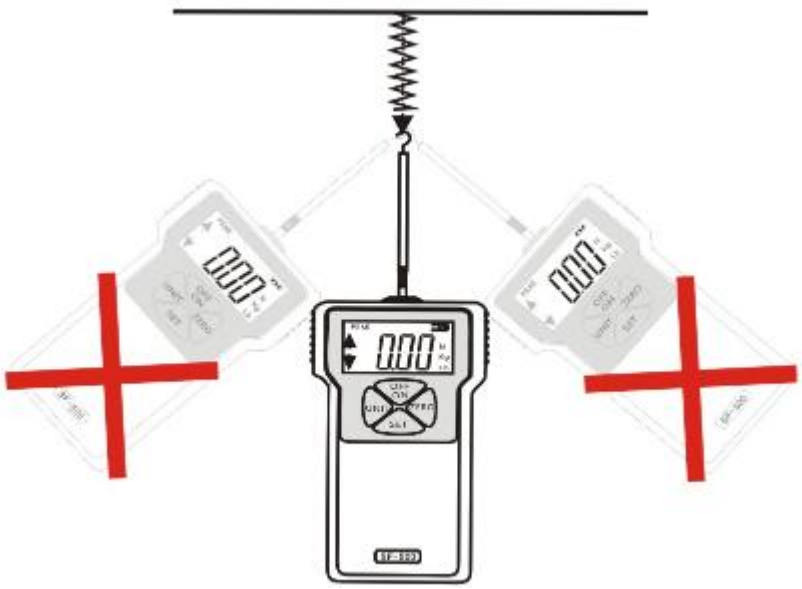
Eight: Test

Press”On” key to turn on the power,use factory default setting value to make measurement directly or choose measuring mode for testing.

1.Select suitable clamp to fix on the push pull force gauge(The clamp which made by yourself need refer to related data of gauge outline and installation dimensions .)

2.Please hold the force gauge firmly or put the force gauge onto the suitable test stand to make testing. Mare sure the tested force and push-pull rod in a straight line when measuring so that we can get the accurate testing value.

3.After finishing the test,discharge the load,remove clamp,clear all things and put them back in the tool box ready for next using.



Correct use method

Nine: Safety caution

1.When the power is running low ,it need to charge 4~6 hours can be normal using.

2.Any error operation may damage the instrument or cause serious accident.This manual indicates important matters about how to prevent accidents and the usage of instrument,please read this instructions carefully before using,keep it securely in preparation for reading again.

3.If you test impact load,please choose the gauge type which the max. load is twice than the impact load value.

Ten: Customer service considerations(confirmation project before repairing the push pull force gauge)

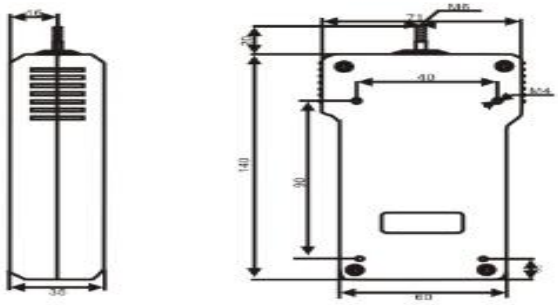
Power	Symptom	Reason or phenomenon	Treatment
	No display when shut up	No power	Charge again
Test value	Value inaccurate	Large error	Return to the factory for calibration
Other	Died unexpectedly	No action press any key	Press the reset button with a needle

Eleven: Appendix of the instrument

①one charge ②four clamp③one extension tube

④four mounting screws⑤one manual

Twelve: Outline and installation of dimensions :



⚠ WARNING

- In destructive testing,you should put on protective mask and gloves in prevent from splash matter hurt your body during testing.
- Don not use damaged clamps or serious bent clamps ,clamps made by yourself please refer to related data by this instructions(Our company has all kinds of clamps,customers can purchase as needed)
- Do not use this instrument out of the max. range, or will cause sensor damaged even accident.
- When the tested value exceed 100% of the full range ,the buzzer will buzzing continuously,please quickly unload the load or reduce load,when the tested value exceed 120% of the full range,the instrument will damaged.
- To solve the crash state:when the instrument crash by accident ,press the "reset" key which on the right side of the instrument by hard round rod for resetting.

Safety items:

Please use the matching charger,or it will cause electrical fault,even cause fire .

Do not use the power which exceed the rated voltage of the charge,or it will cause electric shock or fire.

Do not unplug or insert the power with wet hand,or it will cause an electric shock.

Do not pull off the plug by pulling power line of the charge in order to avoid electric shock .

Please clean the instrument with soft cloth,put the cloth into the cleaner water,wring the cloth out and then clear dust and dirt.Attention:Do not use the highly volatile chemicals to clean the instrument(such as propellant ,thinner,alcohol)

Do not operate the instrument in the following environments:

①humid conditions ②dusty environment ③ the places of oil and chemicals ④ epicentre surroundings

Please use and store in required temperature and humidity,or it will cause failure.

Need to pay attention to other production safety matters.