EZGH Rope Tension Meter User Manual

◆ Summary

1.1 Main usage and scope of application

EZGH-A rope tension meter is an equipment which is testing wire rope ,wire and cable,optical fiber and cable.It is mainly suitable for high-speed rail industry,power industry,communication industry,transportation industry,construction industry,

Playground,amusement park and other occasions.It also applies to the major research institutions,testing institutions and other occasions.

1.2 Characteristic

1.2.1 On-line measuring：The rope can be measured without dis-assembly, the rope which has tension force can be measured online ,can load the rope tension force in real time ,can observe the tension force in real time.

1.2.2 Portable：The equipment has strong strength structure with aluminum material,light weight ,small size and easy portable, it can finish operation by only one person.

1.2.3 Easy operation：The equipment loading mechanism adopt the leverage structure,only need to push the handle to the end can correctly measure the tension force of the rope.

1.2.4 The equipment is stable with high precision ,when the measured rope specifications are same as the rope number which storage in the tension meter,the testing precision can reach 5%.

1.2.5 It has 5 rope number in the instrument, choose the correct rope number you need when measuring .

1.2.6 Digital display，the equipment adopt LCD screen ,more easy for reading.

1.2.7 Many units can be switched in to each other: the instrument can be switch into N,Kgf ,Lbf and other force .

1.2.8 The equipment can store 400 sets of measuring data, the data can be exported by computer.

1.3 Varieties and specifications

1.3.1 test wire rope (elevator special)

EZGH-A rope tension meter is specialized in testing the tension force of the wire rope ,：Its built-in

specifications are as follows:

Number	Diameter(mm)	Full range(N)
EZGH-5000A	Φ7.5	5000
EZGH-5000B	Φ9	5000
EZGH-5000C	Φ10.5	5000

Note：The data inside is standard data,clients can confirm the full measuring range as their requirements,when measuring break-force,should be custom made.
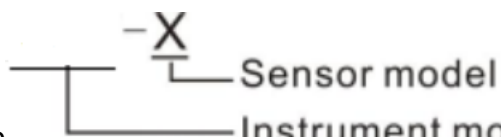
1.4 Product technical parameter

1.4.1 Division value：1N

1.4.2 Precision：±3%

1.4.3 Power：7.2V Ni-MH battery group

1.4.4 Charger：Input AC220V/AC110V 50Hz Output：DC 12V 500mA

1.4.5 Sampling rate：2000Hz
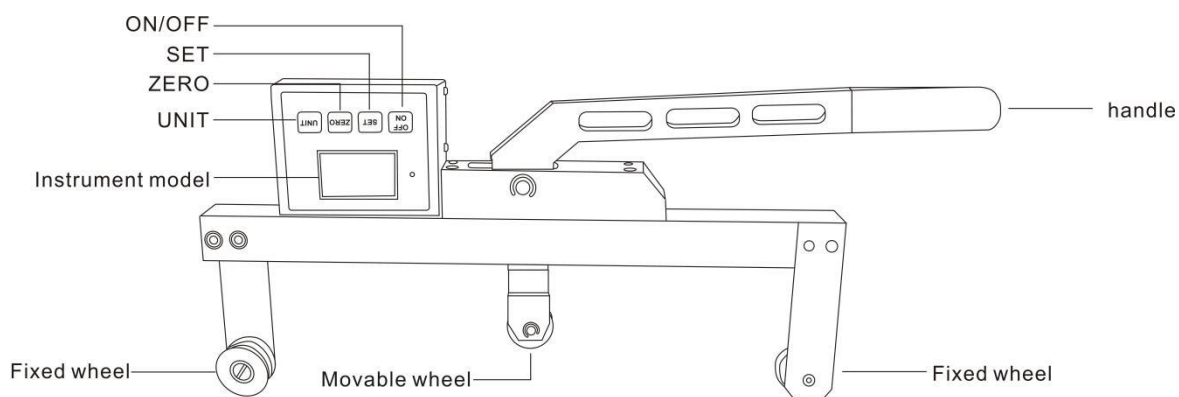
1.5 Model composition and its significance

Type ：A is for measuring wire rope ,B is measuring copper stranded wire, C is measuring copper stranded wire and wire rope
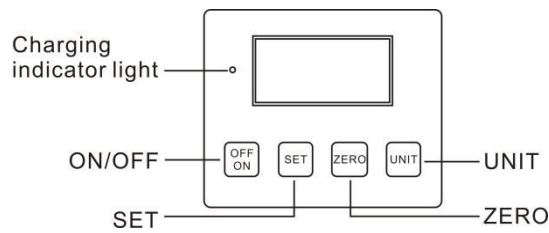
Model：model means for rope tension meter

◆ The whole structure of the product

2.1 Outline structure

2.2 The digital display function

Charging indicator light

ON/OFF ——— OFF/ON SET ZERO UNIT ——— UNIT

SET ——————————— ZERO

2.2.1 ON/OFF ：Press this key to turn on or turn off.

2.2.2 SET ：When in measuring interface ,press this key to enter into the setting menu ,and save data when setting data.

2.2.3 ZERO：Press this key to clear the data when in measurement interface.

2.2.4 UNIT：When enter intro "setting" interface ,it can move up.

2.2.5 Charger indicator light ：The red light indicates power low ,green light shows that full of power.
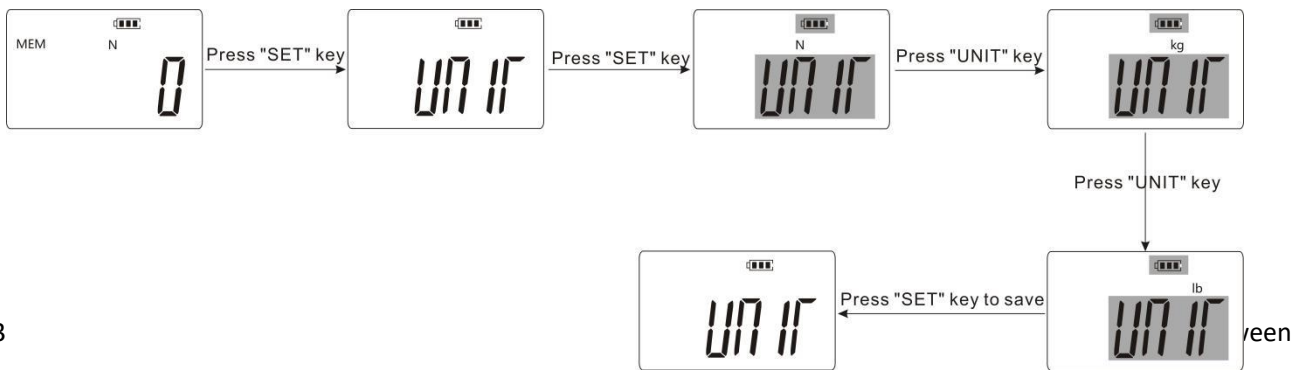
◆ Usage and operation

3.1 Arrange and check before using

3.1.1 If the power is insufficient,it need to charge until full of power.
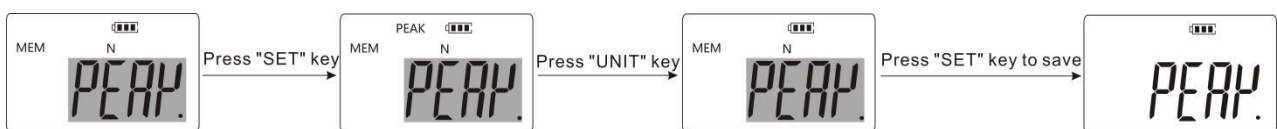
3.2 The operation and instructions in use

3.2.1 Unit setting：turn on the machine and enter into the measurement interface, and press"SET" key to enter into setting interface , press"SET" key again to enter into unit setting,press "UNIT"to choose unit , save the unit you need ,and then press "SET" key for save and return back to setting interface. As the picture below shows:
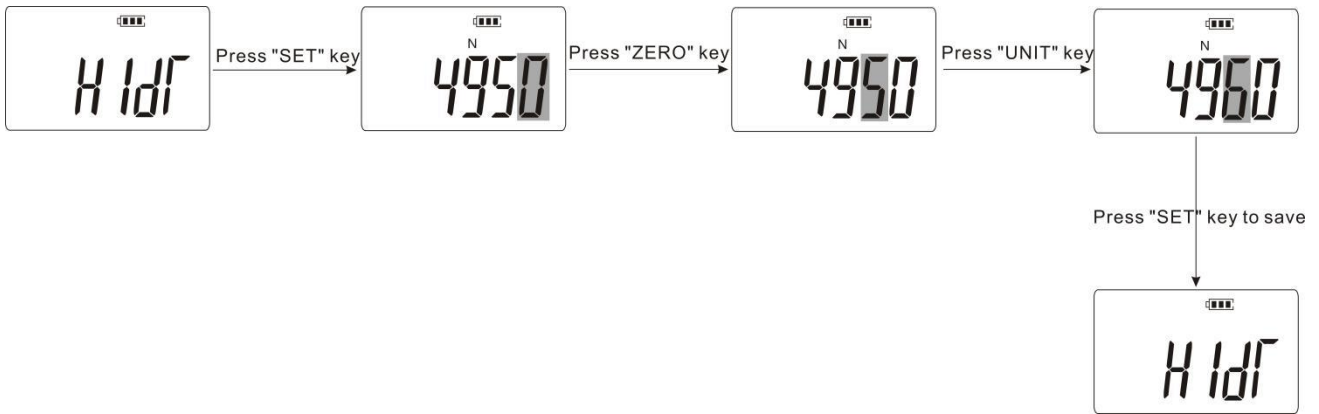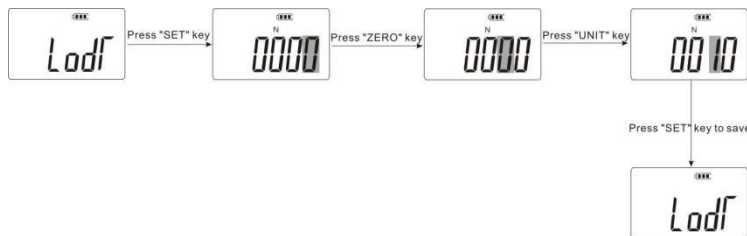

3 /een "Peak" mode and "Real-time load value mode"(no words shows) ， and then press"SET" key for save and enter into next function setting ,show as the picture below:

3.2.3 Upper limit value setting：press"SET" key to enter into upper limit value setting ,press "ZERO" key and "UNIT" key to adjust number, choose the value you need and then press "SET" key to enter into next function setting ,show as the picture below:

3.2.4 Lower limit value setting：Press "SET" key to enter into lover limit value setting , press" ZERO" key and "UNIT" key to adjust number，choose the value you need ,and then press "SET" key to enter into next function,show as the picture below:

3.2.5 Min. Peak Value Save：in the peak mode ,when the current value less than the value ,the value can not be stored.Press"SET" key to enter into min. Peak value setting, press"ZERO"key and"UNIT" key to adjust number ,choose the number you need , and then press"SET" key for save and enter into next function setting .

3.2.6 Auto-shut down time setting：Automatic shut down time can be setting from 1 to 9999 minutes, also can set"0000"for not shut down.The default time setting is 10 minutes. Press " SET" key to enter into auto shut down time setting , press"ZERO" key and"UNIT"key to adjust the number you need ,and then press "SET" for save and enter into next function .

3.2.7 Number optional：Press"SET"key to enter into "number selection"setting ,press "UNIT"key to choose the number you need , press "SET" key for save , the equipment automatically shut down , then start on the machine .

3.2.8 Acceleration of gravity setting：The user can set the acceleration of gravity value according to the own area ,the default value is 9.800.

3.2.9 Backlight function setting:When in this setting ,press "UNIT" key for optional ,if you choose "YES" ,it means turn on the backlight function ,if choose"NO"means close backlight, and then press"SET"key for save and back to the setting interface.
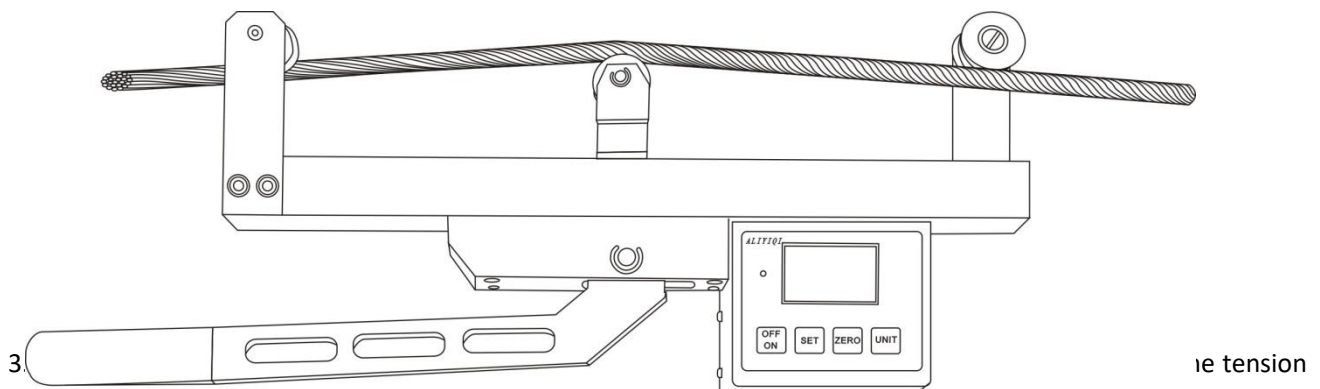
3.2.10　Restore factory setting function：when in this setting ,press"SET"key to restore factory setting ,the machine shut down .

3.3 Test

3.3.1　Turn on the switch

3.3.2　According to the tested diameter of the rope to choose the number .

3.3.3　Put the rope like the picture below shows,make sure the rope in touch with the two wheels,Press "SET" key to choose measuring mode.

3.　　ne tension force value .

3.4 Output the data

3.4.1　Data storage

　　　Press "UNIT" key,the data can be stored , there is no display on the screen . Press "UNIT" key for a long time to check the storage data, the "MEM" twinkle, first occur the save times ,after 2 seconds , it occurs save data. Press"ZERO"key to exit the save menu and directly enter into testing, these data also can be input the computer to analyze it . The machine can store 99 group data . When exceed 99 data, the next data can not be saved.

◆　Maintain and repair

4.1　Daily maintain and repair

➢　　　Please use the matching battery to charge, or will cause circuit fault, even fire. The AC charger should be inserted into socket fully, then to use, loose plug may cause short-circuit and cause shock or fire.

- ➢ Do not use the other power except the charger's rated voltage, or will cause electric shock or fire.

- ➢ Please don't use wet hand pull out or insert plug, or will cause electric shock.

- ➢ Please use the soft cloth to clean the machine, immerse the dry cloth into water with cleaner, wring out after the removal of dust and dirt. Do not use vaporific chemical substance, such as essential oil, thinner, alcohol etc.

- ➢ Handle with care during using and carrying process.

4.2 The maintain in use

- ➢ Do not use the machine exceed the max. Range(5000N), or the load will damage ,even cause accident .

- ➢ When the tested result exceed the range ,the machine will beeping ,please quickly lift the load or reduce the load.

4.3 Maintain and repair during long time shut down

Please put the equipment in a suitable temperature ,or will cause the equipment error.

- ◆ Accessories

Power line

USB data line