Attention

- Regardless of whether the unit is ON or OFF, don't exceed the capacity of the gauge. At 110% of the rated capacity, the display flashes to warn. Never exceeds 150% of the rated capacity, or the load cell will be damaged.
- Measure in line tension and compression forces only. Don't attempt to measure forces at an angle to the measuring shaft, damage to load cell and/or shaft may result.
- Don't tear, repair and change this gauge by yourself, because these actions may result in permanent fault of apparatus.
- Please use and store at the range of stated temperature and humidity, or it may result in apparatus failure.

Description

1. Structure:

   ![Diagram of Structure]

1. Measuring Shaft: Measure tension or compression forces.
2. USB Port: Recharge the internal Ni-MH battery or connect to PC.
3. Multi-function port: connect the printer.

2. LCD screen:

   ![Diagram of LCD Screen]

1. Test mode icon: Track, Peak, Preset
2. Battery icon: Indicating the battery level or charging status, " " flashes when gauge needs to be recharged.
3. Preset Mode Test status marks:
   - Measuring value between the upper limit and lower limit.
   - Measuring value between the lower limit and 75% of the lower limit.
   - The measured value higher than the upper limit.
4. Test units: N, kgf, ozf, and lbf are selectable.
5. The system time.
6. Data transmission icon.
7. Data storage icon.
8. Analogue bar.
9. The current measured value.
10. Force direction Indicator: tension: " "*, compression: " "*.
Key functions:
- ON/OFF: Touch about two seconds the gauge will Power ON or OFF.
- Under the measure interface: Storage data, depending on the key default settings. Under the menu Interface: Back or quit.
- Under the measure interface: Enter the menu interface. Under the menu interface: Enter or confirmation.
- Under the measure interface: Zero the value. Under the menu interface: Shifted up the selection or adjust the value.
- Under the measure interface: Change the test mode, Track, Peak or Preset. Under the menu interface: Shifted down the selection or adjust the value.

Menu Operations

The Force Gage has multi-level menu interface. Under the measure interface, press “ ” can enter the main menu interface.

Measurement item contains the unit and test mode.

- Unit: The measuring unit can be selected under this menu. Press “ ” or “ ” keys to shift to the next position, touch “ ” to abort, and touch “ ” to confirm and back.
- Test mode have Track, Peak and Preset. If the Preset is selected, you can set the Upper limit and Lower limit. Press “ ” to adjust the number and press “ ” to move the next digit.

Memory item contains three submenus: Browse, Print, Delete all. You can browse or print, and delete some (in browse) or the all of data in memory.

- Enter Browse, the data in memory can be reviewed in the order saved. Press “ ” or “ ” to move and select. Press “”, a small window will pop out. Here you can select Delete or Print. Press “ ” or press “ ” to exit.
You can print the data in memory with a mini-printer (optional). Enter Print, select Selected or All. If Selected is chosen, enter the range of number will be needed. If All is selected, a confirm window will appear to ask you confirm.

<table>
<thead>
<tr>
<th>Print</th>
<th>Print Selected</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Selected</td>
<td>Range: 000~225</td>
</tr>
<tr>
<td>2. All</td>
<td>Select: 000~100</td>
</tr>
</tbody>
</table>

Delete All: All data can be deleted at one time to empty the memory. A confirm window will appear to ask you confirm. Delete a individual data can be done in Browse.

Memory
- Browse
- Print
- Delete All

Delete All
- Confirm Delete?
- YES
- NO

3. Under system settings menu, the display, auto power, backlight, key sound and so on can be set.

System
- Display
- Auto Power
- Backlight
- Key Sound
- Date/Time

Auto Power: This series force gauge has automatic power off function. Turn on the Auto power, when no any operation is performed within 5 minutes it will power off automatically.

Display: There are two display modes: Obverse, Reverse. According to actual needs, select the appropriate display mode.

Backlight: The backlight can be set to turn on or off. Close the backlight will reduce the consumption of the battery.

Key Sound: Key sound can be turn on or turn off by this setting.
Date/time: You can adjust system date and time under this menu. Press “ ” to adjust the number and press “ ” to move the next digit.

Calibration:
Because of the sensor material performance or the influence of external factors, there may be errors in a certain range after a period of time use. Should send the force gauge to a specialized testing organization for calibration. If you have some standard force weights or the other standard load and some test stand, you may calibrate it also.

Mount the force gauge.
Remove the tare by use of the key .
Enter Calibration interface and the calibration interface is shown as following.

Load a standard force. Now the value in standard input area is just equal to the current measured value. Wait a moment for the force stability.

Press “ ” and “ ” to input the standard force value.
Press “ ” to enter the next calibration. Press “ ” to can interrupt the calibration.
When the 3 times calibration had been finished or be interrupted, a confirm window will pop up for asking your “Save and Exit”(YES) or not save and exit(NO). If “YES” is selected, “Calibrate complete!” is displayed.

Default: With this function, the force gauge can be restored back to the factory settings. Should perform this function under the guidance of professionals usually.

Language: The force gauge can display with multi-language, set the language desired.

Info: You can find out some information about force gauge such as model, version and serial number.

Maintenance

After use, please keep the instrument body clean, do not let oil and other substances are persistent in the body and the screen so as not to damage the instrument.
Please do not forget remove the load after the measurement. Applying a load for a long time may affect the accuracy of the instrument.
Unless there is a special need, please do not turn off the Auto Power, cause it can reduce the consumption of the battery and extend batteries life.
When the battery are low, the icon “ ” will be displayed. The batteries should be charged immediately. It takes about 3~4 hours for fully charging.