

# ANDITORK FIRST

## User's Manual

**Risk of electrical shock. Do not remove cover. No user serviceable parts inside. Refer servicing to qualified service personnel.**

**ANDILOG reserves the right to change specifications at any time.**

### **CAUTION EUROPEAN COUNTRIES**

#### **WARNING**

**This is a Class A product. In a domestic environment this product may cause radio interference in which the user may be required to take adequate measures.**

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# Introduction

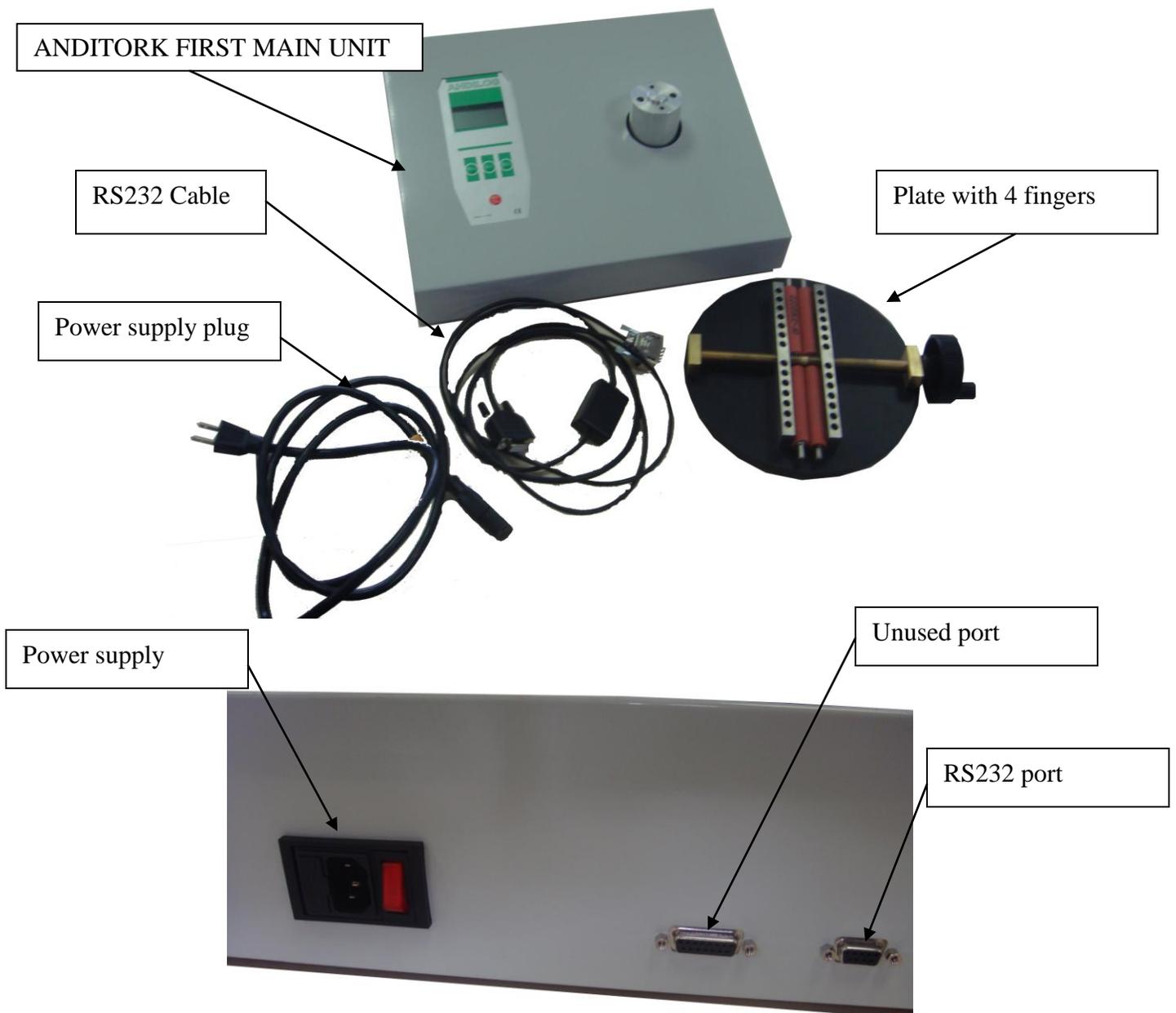
Thank you for choosing the ANDITORK FIRST instrument. With correct use and regular re-calibration it will give many years of accurate and reliable service.

The ANDITORK FIRST uses the latest integrated circuit technology. It can measure screwing and unscrewing torque accurately, while being simple to use by the operator. ANDILOG offers a full range of force and torque measurement products to complement your force gauge, including manual and motorized test stands and a large assortment of grips and attachments. Ask your ANDILOG distributor for additional information.

## Before Use

Upon receiving the unit please check that no physical damage has occurred to the packaging material, plastic case or the instrument itself. If any damage is evident please notify ANDILOG immediately.

What is included with your ANDITORK FIRST:



## Operation Overview

The most commonly used features (such as displaying torque, peak hold, zero and changing of displayed units) can all be done by pressing a green single dedicated key identified on the front panel with white text – see the *Basic Functions* section

The ANDITORK FIRST is supplied with a set of NiMh rechargeable batteries.

During transportation the batteries can be discharged. To obtain maximum battery life we recommend that you charge the product with the charger/adaptor supplied for at least 4-6 hours when you first receive the ANDITORK FIRST.

**Important!**

*Charge the ANDITORK FIRST for 4-6 hours before use.*

### Charging the Batteries

Connect the AC charger to the ANDITORK FIRST charger socket located at the right hand side of the gauge next to the display and charge the batteries for 14-16 hours. Only use the adaptor/charger supplied.

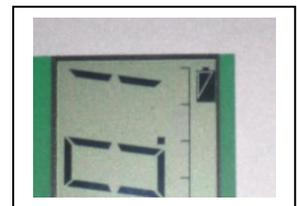


### Low Battery Warning

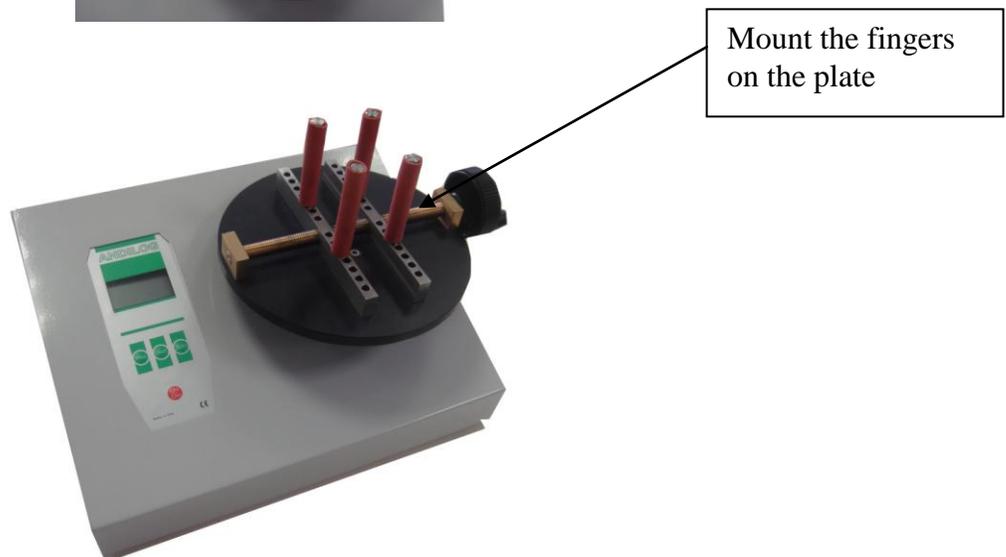
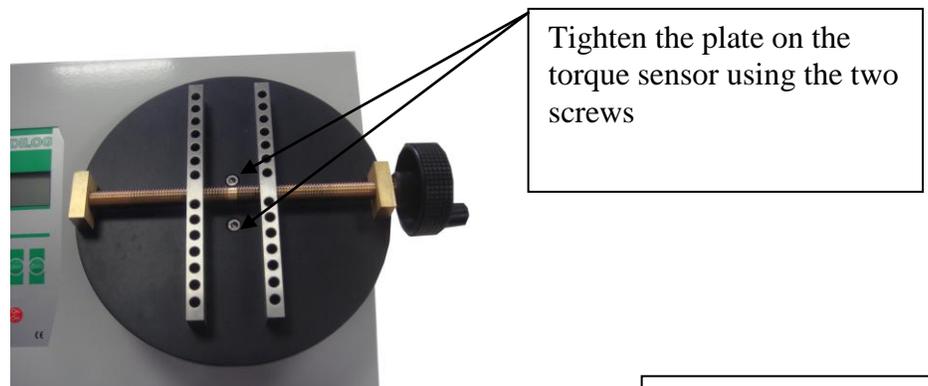
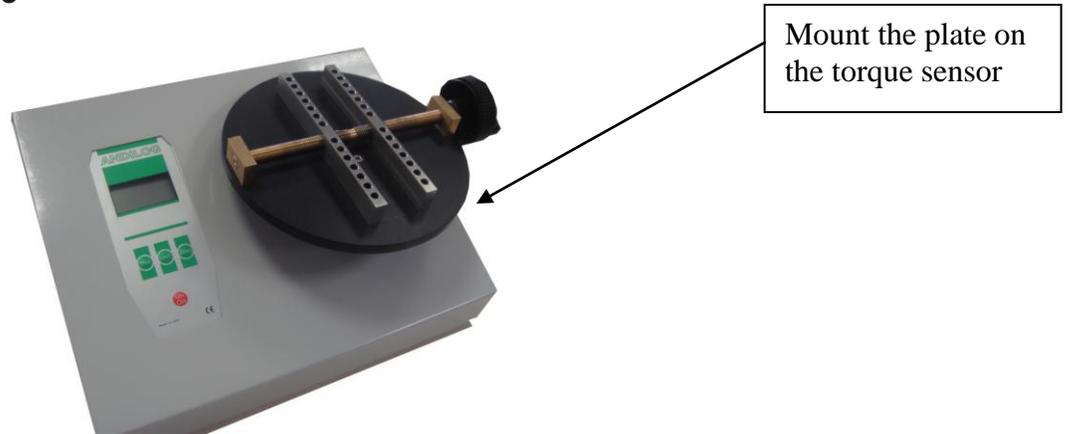
A low battery symbol will blink in the display approximately two minutes before the gauge powers down automatically.

The ANDITORK FIRST can also be powered directly from the AC adapter/charger.

*Only use the adaptor/charger supplied*



## Mounting the plate



**Note: When transporting your ANDITORK device, always remove the platen from the torque sensor.**

# Using the ANDITORK FIRST

## Powering up

Please note that ANDITORK FIRST is measuring very low torque may not show zero if it is moved during the self test routine. Once it is properly mounted and zeroed the reading will be stable.  
As shown in Figure 1 the control panel has four keys.



Figure 1 ANDITORK FIRST control panel

To power up the gauge press the red On/OFF key .: A short self test runs at power on



Then the display will show the model and capacity in Newton.meter



After the self test, providing no load has been applied to the instrument, the display will show all zeroes.  
This is because the gauge rezeroes itself during the self test routine.  
If a torque is applied via the torque sensor, the reading on the display will register the applied torque.



If a torque of more than 20% of the maximum capacity is applied via the plate, the display will show 'OVERLOAD'



*All the current settings are saved when the gauge is turned off and the gauge will function in the same mode when powered up again.*

## Basic Functions

### Display of Screwing/unscrewing torque

Screwing torque is displayed on the ANDITORK FIRST and recognized by the symbol ▲  
Unscrewing torque is displayed on the ANDITORK FIRST and recognised by the symbol ▼

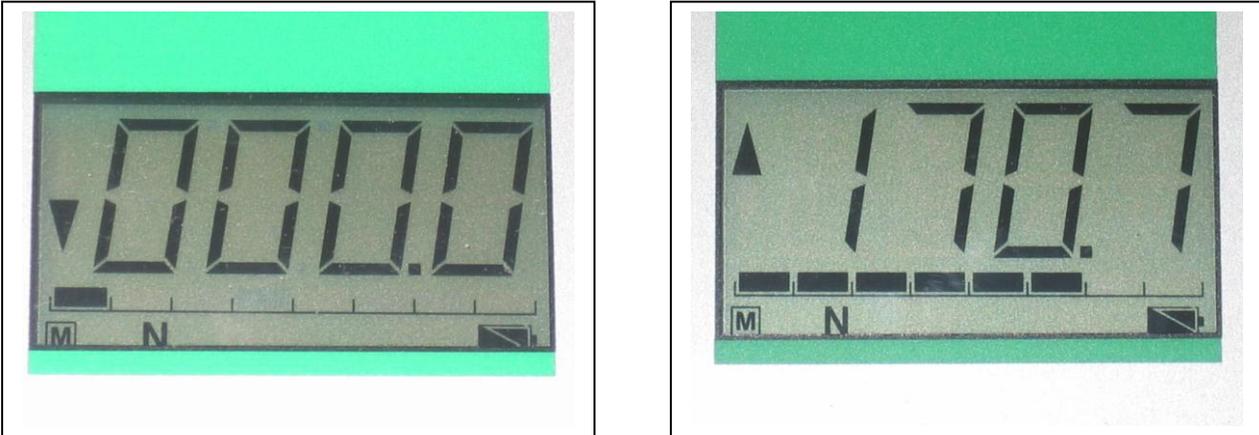


Figure 2 Screwing and unscrewing displays

A load indicator bar alerts the operator to how much load has been applied to the load sensor. As the load approaches the maximum rating of the load sensor, the indicator bar changes appearance when above approx. 80% of the rated capacity. This warns you that steps should be taken to prevent excessive load being applied 2.

### Zeroing the Gauge

During the operation of the gauge it is often necessary to zero the display – e.g. when you wish to tare out the weight of a grip, so it does not become part of the measured reading. Press and release the **ZERO** key. The display will blink momentarily as the zero operation is carried out.



### Changing the Unit of Measure

You can choose from the following units of measure depending on the capacity of your gauge : Newton.meter, kilogram.meter, or pound.inch. To change the display unit press and release the key. Each successive key press will select the next available unit until the gauge returns to its original setting. The ANDITORK FIRST automatically converts readings as new units of measure are selected.

A N , Kg, Lb will appear in the screen.

## Max (peak) Readings / “Max” Mode

The gauge detects and stores maximum (peak) torque in both screwing and unscrewing directions.

Press the **MAX** key. The display will show the letter *M* together with the highest screwing force detected during the test.

Press the **MAX** key again. The display will show the letter *M* together with the highest unscrewing force detected during the test.

The current load being applied to the load sensor can also be displayed pressing again the key MAX



Figure 3a Max screwing

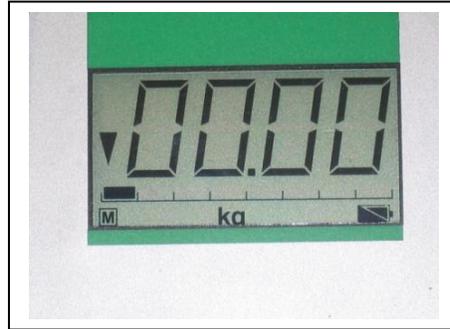


Figure 3b Max unscrewing

## Auto-off

An Auto-off feature conserves battery power , the gauge powers down after 15 minutes since the last key press.

To power down the gauge press the red key.

## WARNING

*If the ANDITORK FIRST has suffered a serious overload condition, the load indicator bar will be partially displayed even when no load is present. This is a warning that the torque cell is damaged and you should immediately contact your supplier to arrange repair.*

- **Do not overload** the load sensor. This will cause irreparable damage
- . Forces greater than 100% of fullscale will produce an blinking display until load is released.
- . Forces greater than 120% of fullscale will produce the word OVERLOAD display until load is released.
- The sensor will support 200% of fullscale without damage. In case of a permanent OVERLOAD is displayed, consult your supplier to arrange repair.

## Optionnal Setting

### Invert Display

The display may be inverted or “reversed”, so that the operator can read it more comfortably. Press and hold the ZERO and UNIT keys This feature is remembered after power down Pressing again ZERO and UNIT key will place the display in original position.

