

CITEC user manual

The CITEC is a hand held dynamometer that facilitates a quick, objective and reliable measurement of the quantitative muscle strength. This light and ergonomically designed tool can be used with nearly all clinically relevant muscle groups.

Using the CITEC

On the CITEC, you find only one button: the [on/reset]-button. Press this button once to turn on the CITEC. In the display the base level is shown.

First use of the CITEC: setting the base level

The first time you use the CITEC, the base level needs to be adjusted to zero. Start by pressing the [on/reset] button. The display shows the base level. Do not put pressure on the installed applicator.

At the right side of the CITEC you'll find the adjustment wheel.

Adjust the base level by carefully and slowly turning the adjustment wheel with a little, sharp object (such as the point of a pen).



Normal use of the CITEC

Press the [on/reset]-button to turn on the CITEC; the display lightens.

Your CITEC now is ready to measure.

Press the installed applicator. In the display, the measured strength (peak force) is shown. Force is shown in Newton; 1 kilogramme is ca. 10 Newton (9.80665 Newton). After 15 seconds, the CITEC shuts off automatically; during this period, the peak force remains visible in the display.

To start a new measurement rightaway, please press the [on/reset] button for min. 1,5 seconds. The CITEC will reset and is ready for a new measurement.

Changing applicators

An applicator can be removed by simply pulling them off the CITEC. Another applicator is installed the other way around: press to adjust the applicator.

Fist grip applicator (optional)

Installing the fist grip applicator is slightly different.

First, remove the applicator installed.

Then, screw off the round handle by turning it to the left.

Slide the fist grip applicator over the battery. Adjust the applicator by turning it to the right.

The fist grip applicator passes on the measured strength in a 1:2 ratio. Therefore, the displayed strength needs to be multiplied by 2 (as indicated on the applicator).

Changing batteries

The CITEC uses two 544 6.2 volt batteries, obtainable at photographic dealers, etc.. As battery power weakens, the [low battery]-indication will show. You can keep using the CITEC by adjusting the base level.

Once the [low battery] indication is shown constantly it is necessary to replace **both** batteries.

The lifetime of the batteries is subject to usage. For most users, the batteries will last for about 6 months.

To replace the batteries, remove the applicator installed.
Screw off the button at the bottom of the CITEC by turning it to the left.
Remove the old batteries and place the new ones. Please note the instructions at the back of the CITEC as to how to place the batteries.

We advice to remove batteries if the CITEC is not used for more than 30 days. This will reduce possible damage as a result of leakage and corrosion of the batteries.

Maintenance

The CITEC does not require any special treatment.
For cleaning the CITEC you can use a soft cloth with eventually a non aggressive detergent. Avoid liquid seeping into the interior of the CITEC.

Ordering accessories

Accessories, e.g. applicators, battery button, etc., can be ordered at C.I.T. Technics.



C.I.T. Technics
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Important

*The CITEC measures up to 500 Newton.
Do not exceed this range: this can cause damage to the load cell.
Avoid heavy shocks, extreme low or high temperatures, moist and aggressive detergents.*

Technical specifications

Measurement scale	0 – 500 Newton
Accuracy load cell	0,1% (maximum)
Accuracy display	0,1% (full scale)
Power	2 pieces 544 6.2 volt batteries
Operation	One button (on/reset) auto shut-off after 15 seconds
Display	4-digit display with low battery-indication
Dimensions	Ca 150 x 85 x 85 mm
Weight	250 grs
Delivered applicators	- finger applicator (to be used for little surfaces) - 'arm' applicator (to be used for larger surfaces) - flat applicator (to measure flat surfaces)
Available applicators	- fist grip applicator - pinch grip applicator - pain pressure applicator