

USER MANUAL

CT 110

Tachometer

Description of the device

1. OK key
2. Backlight key
3. Select key
4. On/Off/Esc key
5. Hold/min/max key



General features

Measuring elements	Optical tachometry: optical detection (Phototransistor sighting distance max. 40 cm) Contact tachometry: ETC adaptator for optical tachometry probe
Display	4 lines, LCD technology. Dimensions: 50 x 36 mm 2 lines of 5 digits with 7 segments (value) 2 lines of 5 digits with 16 segments (unit)
Connector	Coiled, 0.45 m length, extension: 2.4 m
Housing	ABS, protection IP54
Keypad	5 keys
European directives	2014/30/EU EMC; 2014/35/EU Low Voltage; 2011/65/EU RoHS II; 2012/19/EU WEEE
Power supply	4 batteries AAA LR03 1.5 V
Ambience	Neutral gas
Conditions of use (°C, %RH, m)	From 0 to +50 °C. In non condensing conditions. From 0 to 2000 m.
Storage temperature	From -20 to +80 °C
Auto shut-off	Adjustable from 0 to 120 min
Weight	190 g

Technical specifications

Parameters	Measuring units	Accuracy ⁽¹⁾	Measuring range	Resolution
Optical tachometer	rpm	From 60 to 10 000 rpm: ±0.3% of reading ±1 rpm From 10 001 to 60 000 rpm: ±30 tr/min	From 60 to 60 000 rpm	1 rpm
Contact tachometer	rpm, m/min, ft/min, in/min, m/s	From 30 to 3000 rpm: ±1% of reading ±1 rpm	From 30 to 3000 rpm	1 rpm

⁽¹⁾ All the accuracies indicated in this technical datasheet were stated in laboratory conditions, and can be guaranteed for measurements carried out in the same conditions, or carried out with calibration compensation.

Perform a measurement

- Turn on the device by pressing on "On/Off/Esc".
The device displays its name "CT110".
- Put the probe to the required location.
The device displays the measured velocity.



If the type of selected probe is the contact probe, put the contact tip on the probe.

Freeze the measurement

During a measurement :

- Press on "Hold/min/max" to freeze the measurement.
"Hold" displays on screen and the measurements are frozen.
- Press on "On/Off/Esc" to exit the hold function.
The device returns to the measurements display.

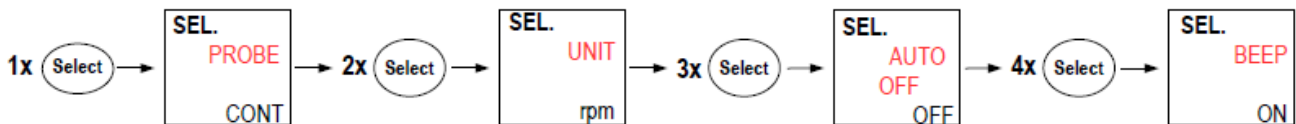
Display the minimum and the maximum

Once the measurements are frozen :

- Press again on "Hold/min/max".
The device displays the maximum value of velocity measured since the last questioning at the top of the screen and the minimum value of velocity measured since the last questioning at the bottom of the screen.
- Press again on "On/Off/Esc" to return to the measurement display.

Adjust the device

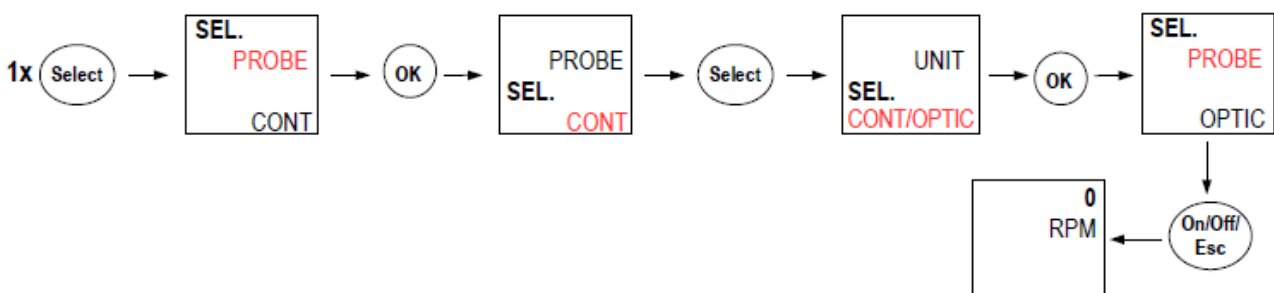
Device drop-down menu



Select the probe type

It is possible to select the probe type: optic probe or contact probe.

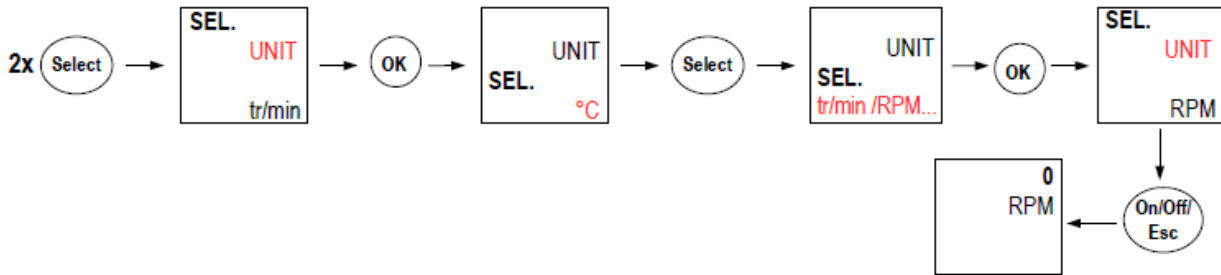
- Press on "Select".
"PROBE" blinks on screen.
- Press on "OK".
The probe type currently used blinks on the screen.
- Press on "Select" to select "OPTIC" for the optic probe or "CONT" for the contact probe.
- Press on "OK" to validate.
"PROBE" blinks on screen.
- Press on "On/Off/Esc" to return to the measurement display.



Select the measuring unit

The device is on and displays the measurement.

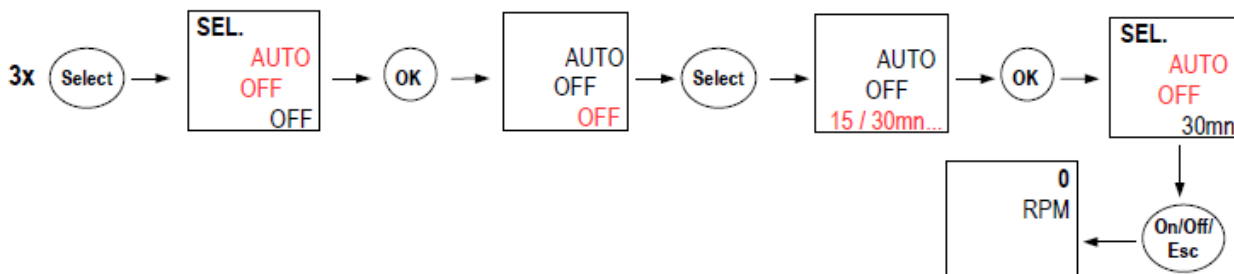
- Press on "Select" until "UNIT" blinks on screen.
- Press on "OK", the unit currently used blinks on screen.
- **For the contact probe:** press on "Select" until the required unit appears: tr/min, rpm, m/min, in/min, ft/min or m/s.
- **For the optic probe:** press on "Select" until the required unit appears: tr/min or rpm.
- Press on "OK" to validate the unit selection.
"UNIT" blinks on screen.
- Press on "On/Off/Esc" to return to the measurement display.



Adjust the auto shut-off

The device is on and displays the measurement.

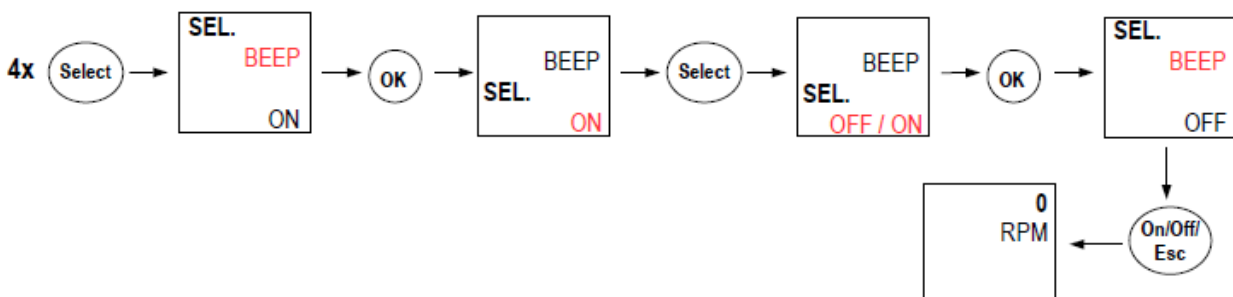
- Press on "Select" until "AUTO OFF" blinks on screen.
- Press on "OK".
The time before device auto shut-off blinks at the bottom of the screen.
- Press on "Select" to select the time before device auto shut-off: 15, 30, 45, 60, 75, 90, 105, 120 or OFF.
- Press on "OK" to validate.
- Press on "On/Off/Esc" to return to the measurement display.



Activate or deactivate the keys beep

The device is on and displays the measurement.

- Press on "Select" until "BEEP" blinks on screen.
- Press on "OK".
"OFF" or "ON" blinks on screen.
- Press on "Select" to activate the keys beep "ON" or deactivate the keys beep "OFF".
- Press on "OK" to validate.
"BEEP" blinks on screen.
- Press on "On/Off/Esc" to return to the measurement display.



Activate the backlight

The device is on and displays the measurements.

- Press on "Backlight" to activate the backlight.
- To deactivate it press again on "Backlight".



Change the batteries

- Remove the front part at the back of the device.
- Change the old batteries by AAA LR03 1.5V batteries.
- Replace the front part.