USER MANUAL

ATEQ CDP6000

Version 1.0

www.ateq.com

Reference: UM-36700A-U

REVISIONS OF THE ATEQ CDP6000 USER MANUAL

Due to continuing improvements, the information contained in this user manual, the features and design of this device are subject to be changed without prior notice.

Edition/Revision	**Reference**	**Date** Week/Year	**Chapters up dating**
First edition	UM-36700A-U	48/2013	-----

DECLARATION OF CE CONFORMITY 00

We the undersigned, **ATEQ**, manufacturers of the **ATEQ CDP6000** REF : **367.00** declare that it complies with the requirements of :

- LOW VOLTAGE Directive 73/23/CEE partially modified by Directive 93/68/CEE.

  - standard EN 61 010-1 « Safety requirements for electrical equipment for measurement, control and laboratory use »,

- EMC Directive 89/336/CEE partially modified by EMC Directive 92/31/CEE regarding :

  - standard EN 61 326-1 « Electrical equipment for measurement, control and laboratory – EMC requirements »,
    - ✓ standard EN 61 000-4-2 « Electrostatic discharge immunity tests »,
    - ✓ standard EN 61 000-4-3 « Radiated, radio-frequency, electromagnetic fields immunity tests »,
    - ✓ standard EN 61000-4-6 « Immunity to conducted disturbances, induced by radio-frequency fields »,
  - standard EN 55 011 « Industrial, scientific and medica radio-frequency equipment - limits et methods of measurements ».
    - ✓ standard EN 55 022 « Information technology equipment - limits and methods of measurements »,

This enables **ATEQ** to guarantee that this instrument may be used in complete safety under the following environmental conditions :

- indoor use,
- altitude up to 3000 metres,
- ambient operating temperature from 0°C to 50°C,
- 95 % maximum relative humidity without condensation,
- degree of pollution 2 as in CEI 664 (only non-conductive pollution, however a temporary conductivity caused by condensation may occasionally be expected).

Chairman and Managing Director.

Mr. Jacques MOUCHET

ATEQ

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Recommendations for leak testing instruments

Precautions for the test environment

- Keep the test area as clean as possible.

Precautions for the operators

- **ATEQ** recommends that the operators using the instruments should have a suitable qualification and training with respect to the work bench requirements.

General precautions

- Read the user manual before using the instrument,
- all electrical connections to the instrument must be equipped with a safety system (fuse, circuit breaker…) appropriate to its needs and complying with the standards,
- to avoid electromagnetic interference, the cable connections to the instrument should be less than two meters in length,
- it is essential that the electrical main is earthed,
- disconnect the electrical connections to the equipment before maintenance,
- cut the air supply for any kinds of operation on the pneumatic assembly,
- do not open the instrument when it is powered up,
- avoid water spillage near of the instrument,
- **ATEQ** is at your disposal for any further information concerning the use of the instrument under maximum safety conditions.

We would like to bring to your attention that ATEQ will not be held responsible for any accident connected to the improper use of the instrument, to the work bench or to the lack of compliance with safety rules.

ATEQ Company is free from any responsibility for any adjustment of its instrument which would not have been done by its own technicians.

The ATEQ cannot be held responsible if the instrument (program, mechanics or electronics) has been modified without prior written consent.

ATEQ, THE ASSURANCE OF A COMPETENT AFTER SALES SERVICE

■ THE ATEQ AFTER SALES SERVICE IS :

- a team of qualified technicians,
- a permanent telephone assistance,
- agencies close to you for faster reaction,
- a stock of spare parts available immediately,
- a car fleet for rapid intervention,
- a commitment to quality ...

■ THE OVERHAUL

ATEQ carries out the overhaul of your instruments at interesting prices.
The overhaul corresponds to the maintenance of the instrument (checking, cleaning, replacing of used parts) as part of preventive maintenance.
Preventive maintenance is the best way to guarantee reliability and efficiency. It allows the maintenance of a group of instruments in good operational order and prevent eventual break-downs.

■ MAINTENANCE KITS

The ATEQ After Sales Service proposes, two kits destined for the preventive maintenance of the pneumatic circuits of instruments.

■ CALIBRATION

This may be carried out on site or in our offices.
ATEQ is attached to the COFRAC and delivers a certificate following a calibration.

■ TRAINING COURSES

In the framework of partnership with our customers, ATEQ offers two types of training in order to optimise the usage and knowledge of our instruments. They are aimed at different levels of technician:

- method / control training,
- maintenance / upkeep training.

■ A TARGETED TECHNICAL DOCUMENTATION

A number of technical documents are at your disposal to allow you to intervene rapidly in the event minor breakdowns:

- problem sheets describing and offering solutions to the main pneumatic and electronic problems,
- several maintenance manuals.

■ A QUALITY GUARANTEE

The instruments are guaranteed for parts and labour in our offices:

- 2 years for leak detection equipment,
- 1 year for electrical tests to norms instruments,
- 1 year for the accessories.

Our After Sales Service is capable of rapidly answering all your needs and queries.

We strongly recommend to send the instrument back to ATEQ once a year for re-calibration

PREFACE

Dear Customer,

You have just purchased an **ATEQ** instrument, we thank you for the trust you have placed on our brand. This instrument has been designed to ensure a long and unparalleled life expectancy, and we are convinced that it will give you complete satisfaction during many long years of operation.

In order to maximise the life expectancy and reliability of your **ATEQ** instrument, we recommend that you install this instrument on a secured workbench and advise you to consult this manual in order to familiarise yourself with the functions and capabilities of the instrument.

Our **ATEQ** After Sales Service centre can give you recommendations based on your specific operation requirements.

ATEQ

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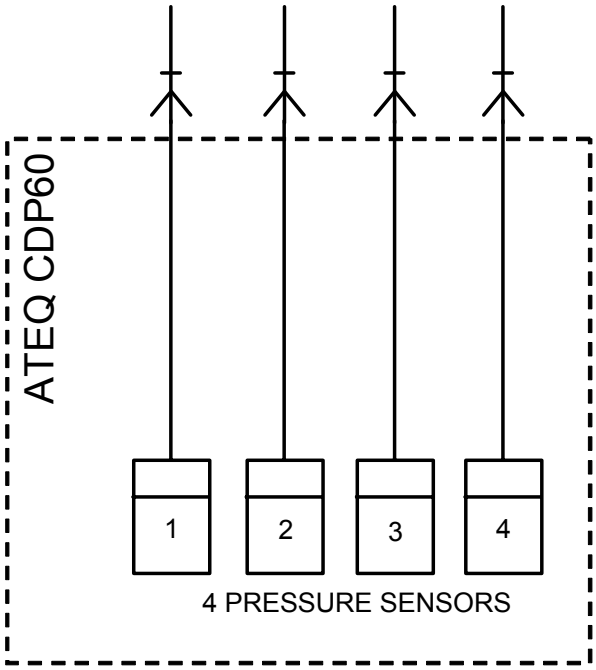
Preamble

MEASUREMENT PRINCIPLE

1. DEFINITION

The **CDP6000** is a master used to adjust or calibrate all kinds of instruments measuring air pressure.



Following option from 2 to 4 pressure sensors with different ranges can be built in the instrument.

2. MEASUREMENT CHARACTERISTICS

	Pressure ranges	Accuracy No linearity + Hysteresis + Repeatability (extended uncertainty)	Maximum pressure	Long time drift (1 year)	T° drift (ref 25°C)	Max resolution
Low pressure sensor	**+/- 1000 Pa**	0,05% FS (Typ) 0,25% FS (Max)	2500 Pa	0,5% FS	-25 to 85 °C 1% FS	0,1 Pa
Standard pressure sensor	**2 bar absolute**	0,04% FS	2 x FS	0,05% FS (Typical) 0,1% FS (Max)	-10 to 50 °C 0,5% FS	1 Pa
	5 bar relative		4 x FS			
	20 bar relative		4 x FS			
High precision sensor	**1,5 bar absolute**	0,01% FS Drift time included	2 x FS	0,01% FS	-10 to 50 °C 0% (integrated)	1 Pa
	3,5 bar absolute		2 x FS			

FS = Full Scale.

** Specifications in option (adjusted in our metrology laboratory with COFRAC agreement).*

Chapter 1
INSTRUMENT INSTALLATION

1. APPEARANCE

The **ATEQ CDP6000** case is made with two anodized aluminum parts assuring durability and lightness. The case is surrounded by two rubbers to protects the device from falls and avoid marking the shocked part.

2. INSTRUMENT INSTALLATION

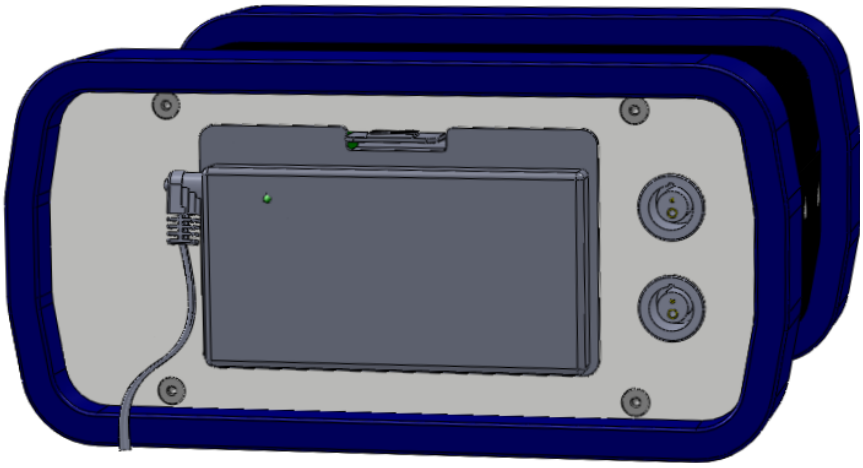
2.1. BATTERY BLOCK / SUPPLY

The **ATEQ CDP6000** is running with a 12 V DC battery pack.

The battery pack has a LED light for charge state:

- ✓ **Red**: The battery is charging.
- ✓ **Green**: battery full.

The battery pack is fully charge when the light is green.

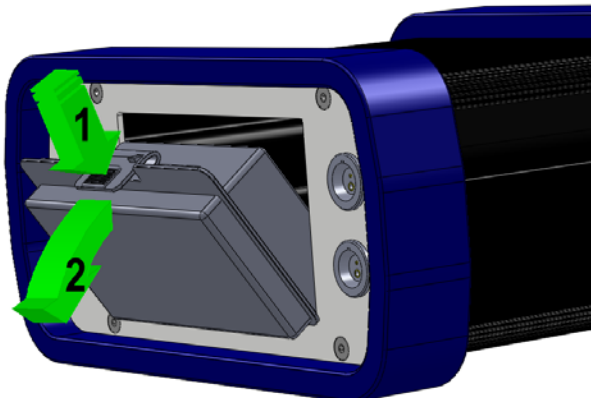


To remove the battery from the device, proceed as follows:

1) Press the burst above to unlock.

2) Turn the battery outwards.

To reinstall the battery, do the same operation in the reversal way.



2.2. ELECTRICS CONNECTORS

2.2.1. USB Connector (front face)

Allows the connection to a PC. Allows the supervision with the **Winateq300** software:

- ✓ Configuring (save / restore the parameters in a PC).
- ✓ Duplicate an instrument.
- ✓ Up dating the device.
- ✓ Results recovery for archiving and statistic analysis with spreadsheet software's.

See the **Winateq300** software manual.

2.2.2. RS232 Connector (rear face)

Allows the connection between the **CDP6000** and **ATEQ** devices (consult us for further precision).

2.3. PNEUMATICS CONNECTORS

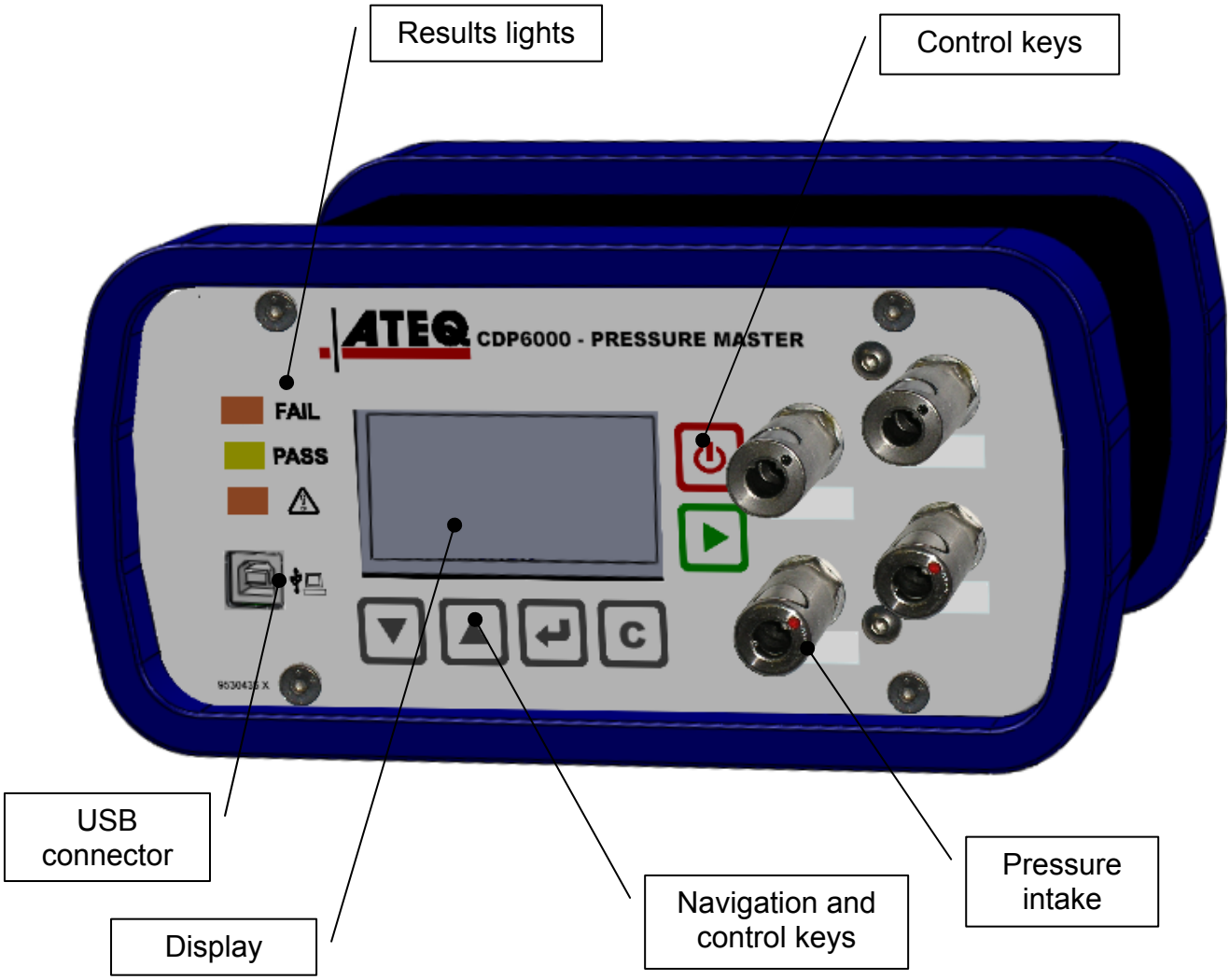
To measure the pressures, each quick connector is in regards with one pressure range. Plug to the sensor range close to the pressure to measure.

The quick connectors are male or female types and can be fitted with key following the pressure range; this is to avoid any plug error.

- ➢ **Male connector:** Low pressure sensor.
- ➢ **Female connector without key:** Standard pressure sensor.
- ➢ **Female keyed connector:** High precision sensor.

Chapter 2
USER INTERFACES

1. PRESENTATION



2. KEYBOARD PRESENTATION

2.1. ON / OFF KEY

KEY	FUNCTION
	**Device off**: this key switch on the device. **Device on**: Switches off the device by long pressing (more than 3 seconds).

2.2. NAVIGATION KEYS

KEY	FUNCTION
	Move up or increase the numeric values.
	Move down or decrease the numeric values.
	**Short press**: Enter in the special cycle's menu, parameter entering and parameter validation. **Long press (3 seconds)**: Enter in the parameters and configuration menu.
	"**C**" for **CANCEL** Return to the previous function or menu. Escape without parameter's modification.

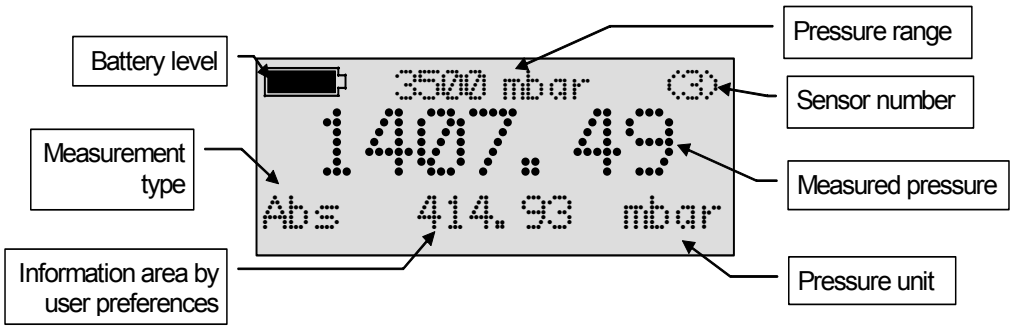
2.3. START CYCLE KEY

KEY	FUNCTION
	**START** key Starting a measurement cycle.

3. LCD DISPLAY

To display the measurement results and the parameters to adjust.

Display detail (depends of the selected test):



4. FUNCTIONS OF THE INDICATOR LIGHTS

The symbol represents an indicator which is lit.

		
Close to 95% of the Full Scale, this light is blinking.	This light is on when the pressure is over the Full Scale.	Not used.

5. BATTERY LEVEL

Full battery.

When the display indicates an almost empty battery level, it is better to recharge.

Empty battery, recharge it (flashing) the instrument will turn off.

***Note**: if the instrument doesn't turn on, before any service in the device, charge completely the battery or replace it with a full one.*

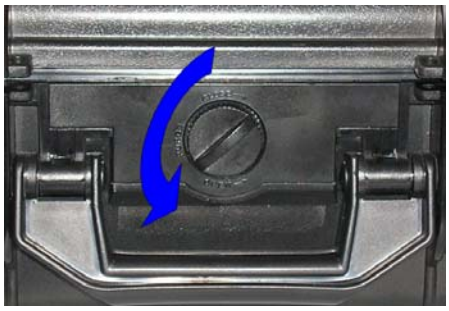
6. CARRYING CASE

***Note**: The color of the carrying case can change without notice.*

6.1. OPEN THE CARRYING CASE

Push the two buttons at the bottom of the locks. The locks will be released.	
Lift the two locks to release the cover.	
Then open the cover to access to the instrument.	

6.2. CLOSE THE CARRYING CASE

Before closing the housing box, open the purge button (left turn).	
Close the cover and lock the two locks.	
Then close the purge button (right turn) to complete the sealing.	

Chapter 3
STARTING UP AND ADJUSTMENTS

1. TURN ON THE DEVICE

The **CDP6000** is running with its integrated battery.

Switches on the instrument.	ATEQ CDP6000 V01.02b
Check the battery level.	
The device will waiting for a measurement start.	1: 12.5 mbar Change sensor Start measure

***Note**: if the device doesn't turn on, charge completely the battery or replace it with a full one.*

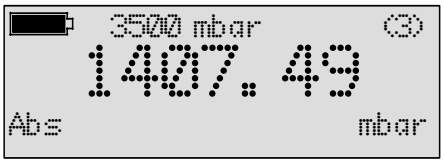
2. SENSOR SELECTION (RANGE)

To select the sensor, selection of the range, press the ▲ or ▼ keys.	1: 12.5 mbar Change sensor Start measure
The sensor number and its associate range are display.	2: 2 bar Changer capteur Départ mesure

3. RUN THE MEASURE

The measurement starts by pressing the  key on the front face.

During the measurement, the device displays the measured pressure.



4. TEST STOP

The measure stops by pressing the  key.

Chapter 4
FUNCTIONS OF THE INSTRUMENT

1. MENU STRUCTURE

1.1. MAIN MENU

To access to the main menu, press and hold the ENTER key (about 3 seconds) until the main menu appears.

***Note**: Following the device option, some menus may not appear.*

MAIN MENU		Under menu 1		Under menu 2	Under menu 3
System Adjust	>	Language	>	English	
		V		Français	
		V			
		Meas. Filter	>	0 > 10s	
		V			
		Display (+)	>	None	
		V		Barre	
		V		Count.	
		V		Other	
		V		Diff.	
		V			
		Display date	>	None	
		V		Hour	
		V		Date	
		V		D/T (Date/Time)	
		V			
		Transmis.	>	Off / On	
		V			
		Backlight	>	0 % to 100 % (step 1%)	
		V			
		Contrast	>	25 > 75	
		Buzzer	>	Off / On	
		V			
		Auto Off	>	No to 30 min	
		V			
		Date			
		V			
		Hour			

1.2. SPECIAL CYCLE MENU

To access to the special cycles menu, press briefly the ENTER (less than a second).

MAIN MENU		Under menu 1		Under menu 2
SPECIAL CYCLE	>	Pressure Unit	>	Pa > hPa > kPa > mbar > bar > PSI
		Auto-zero		
		Absolute / Relative		

These menus appear following the device sensor options.

2. SYSTEM SETTINGS

The **SYSTEM SETTINGS** menu allows configuring the instrument following the user preferences. At any time, to back to the main menu, hit the C key, one or several times.

In all cases, to access to the **SYSTEM SETTINGS** menu, Press and hold the ↵ key (three seconds).	MAIN MENU >Language : English Meas.Filter: 4 Display (+): None

2.1. LANGUAGE

This function allows choosing the language displayed. The resident languages in the device are: English and French.

In the **MAIN MENU**, select the **Language** function and validate with the ↵ key.	MAIN MENU >Language : English Meas.Filter: 0 Display (+): None
By using the ▲ and ▼ keys, select the language.	LANGUAGE LIST >Francais English
Validate with the ↵ key to confirm the new displayed language.	MENU PRINCIPAL >Langue : Français Filtre mes.: 0 Affich. (+) : Aucun

2.2. MEASURE FILTER

This function is to slow down or speed up the sampling rate, by calculate a mean on the configured time; this is to ease the measurement reading.

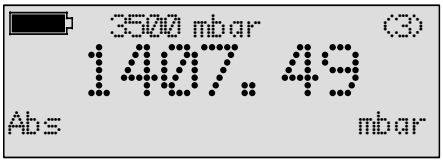
In the **MAIN MENU**, select the **Meas.Filter** function and validate with the ↵ key.	MAIN MENU Language : English >Meas.Filter: 0 Display (+): None
By using the ▲ and ▼ keys, set the sample time value.	MAIN MENU Language : English Meas.Filter: 0 < Display (+): None
Validate with the ↵ key to confirm the new sample time.	MAIN MENU Language : English >Meas.Filter: 2 Display (+): None

2.3. DISPLAY (+)

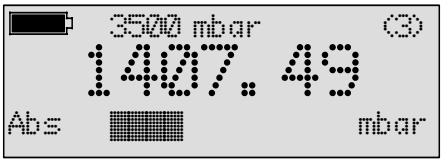
The **Display (+)** function allows selecting the information that will be displayed on the bottom of the measurement screen.

In the **MAIN MENU**, select the **Display(+)** function and validate with the key.	MAIN MENU Language : English Meas.Filter: 0 >Display (+): None
By using the and keys, select the information to display (see below).	MAIN MENU Language : English Meas.Filter: 0 Display (+): Barre<
The **Display(+)** function is set.	MAIN MENU Language : English Meas.Filter: 0 >Display (+): Barre

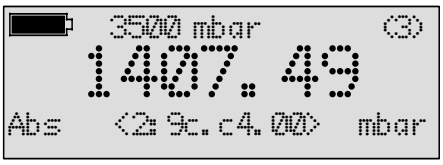
- **None**: no information displayed.



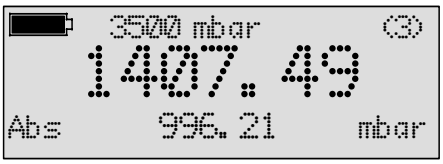
- **Barre**: display of the pressure with a bar graph, which the pressure is proportional relative to the full scale.



- **Count.**: display of hexadecimal data, used for the device service.



- **Other**: display of the pressure of the other sensor. Option available only on two built in sensors devices.



- **Diff.**: display of the pressure difference between the two sensors. Option available only on two built in sensors devices.

2.4. TRANSMISSION

The "**Transmission**" function allows the communication between the **CDP6000** device and an **ATEQ** device for the calibration of the latter.

In the **MAIN MENU**, select the **Transmis** function and validate with the ↵ key.	MAIN MENU >Transmit : Off Backlight : 50% Contrast : 40
By using the ▲ and ▼ keys, select the **On** or **Off**.	MAIN MENU Transmit : On < Backlight : 50% Contrast : 40
The **Transmit** function is set.	MAIN MENU >Transmit : On Backlight : 50% Contrast : 40

2.5. BACKLIGHT

The brightness of the backlighting can be set so as to suit the backlighting to the ambient lighting or your personal preferences. The screen backlighting is programmable and can be altered. This adjust is from 0% (backlight off) to 100% (maximum light).

Backlighting of low brightness will save battery power. Specify a setting that suits the way you use the instrument.

In the **MAIN MENU**, select the **Backlight** function and validate with the ↵ key.	MAIN MENU Transmit : Off >Backlight : 50% Contrast : 40
By using the ▲ and ▼ keys, select the backlight intensity from 0% (off) to 100% (maximum) by step of 1% then validate with the ↵ Key.	MAIN MENU Transmit : Off Backlight : 60% < Contrast : 40

***Note**: the backlight intensity is modified after the validation with the ↵ key.*

2.6. CONTRAST

The screen contrast can be adjusted to improve the reading. The contrast can be adjusted from 25 (dark screen) and 70 (clear screen).

In the **MAIN MENU**, select the **Contrast** function and validate with the key.	MAIN MENU Transmit : Off Backlight : 50% >Contrast : 40
By using the and keys, select the contrast setting from 25 (dark screen) to 70 (clear screen) by step of 1 then validate with the Key.	MAIN MENU Transmit : Off Backlight : 50% Contrast : 60 <

2.7. BUZZER

The **Buzzer** function allows ringing beeps. When the device detects a fail part or an alarm, a series of short beeps are ringing.

In the **MAIN MENU** menu, select the **Buzzer** function and validate with the key.	MAIN MENU >Buzzer : Off Auto Off : No Date : 27/11/13
By using the and keys, select **On** or **Off** to validate or not the beep ringing and then confirm by using the key.	MAIN MENU Buzzer : Off < Auto Off : No Date : 27/11/13

2.8. AUTO OFF

This feature conserve battery life by automatically turning the instrument off after a user-defined period of time within there has been no key activity.

In the **MAIN MENU**, select the **Auto Off** function and validate with the key.	MAIN MENU Buzzer : Off >Auto Off : No Date : 27/11/13
By using the and keys, adjust the time before turn off from **No** (never turn off) to **30 minutes**. Validate with the key.	MAIN MENU Buzzer : Off Auto Off : 10min< Date : 27/11/13

2.9. DATE

The device gets a clock (hour, minutes) and an internal calendar (day, month, year) which allows dating the events and the archives.

In the **MAIN MENU**, select the **Date** function and validate with the ↵ key.	MAIN MENU Auto Off : No >Date : 24/10/13 Hour : 15:44
By using the ▲ and ▼ keys, adjust the day.	MAIN MENU Auto Off : No Date : 27/11/13 Hour : 15:44
Validate with the ↵ key to skip to the month adjust. By using the ▲ and ▼ keys, adjust the month.	MAIN MENU Auto Off : No Date : 27/11/13 Hour : 15:44
Validate with the ↵ key to skip to the year adjust. By using the ▲ and ▼ keys, adjust the year.	MAIN MENU Auto Off : No Date : 27/11/13 Hour : 15:44
To save the date, validate with the ↵ key.	MENU PRINCIPAL Arrêt Auto : 10min >Date : 16/10/13 Heure : 10:41

2.10. HOUR

Proceed in the same way as the date for setting the time.

In the **MAIN MENU**, select the **Hour** function and validate with the key.	MAIN MENU Auto Off : No Date : 24/10/13 >Hour : 15:44
By using the and keys, adjust the hour.	MAIN MENU Auto Off : No Date : 24/10/13 >Hour : 15:44
Validate with the key, to skip to the minutes adjust, by using the and keys, adjust the minutes.	MAIN MENU Auto Off : No Date : 24/10/13 >Hour : 15:44
To save the hour, validate with the key	MAIN MENU Auto Off : No Date : 24/10/13 >Hour : 15:44

2.11. PRESSURE UNIT

This function is to select the pressure unit of the measurement. This function is available in the special cycle menu.

Enter in the **SPECIAL CYCLES,** by a short press on the key, select the **Press.Unit** function and confirm with the key.	SPECIAL CYCLES >Press.Unit : Pa
The available units are displayed, select the unit by using the and keys, and then validate with the key.	PRESSURE UNIT LIST hPa >kPa mbar

3. SPECIAL CYCLES MENU

3.1. AVAILABLE SPECIAL CYCLES

The following list shows all the special cycles which are available in the instrument:

Special cycle	Function
✓ Auto-zero :	Cycle used to make a pressure sensor reset relative to the atmospheric pressure.

To start a special cycle, select it in the "**Special cycles**" menu and press on the key. The cycle stops automatically.

3.2. RUN SPECIALS CYCLES

3.2.1. Auto-zero

Cycle used to make a pressure sensor reset relative to the atmospheric pressure.

Warning!

We remind you to unplug all the pneumatics connectors to put all the sensors to the atmospheric pressure.

Enter in the **SPECIAL CYCLES,** by a short press on the key, select the **APress. UTOZERO** function, by using the and keys and confirm with the key.	SPECIAL CYCLES >AUTOZERO Press. Unit : Pa
The device prompt you to unplug all pressure sources connected and confirm with the key.	AUTOZERO Mise à l'atmosphère C Abort Confirm

***Note**: this cycle absorbs any offset link to the temperature, position, etc…*

3.2.2. Pressure unit

This function is to select the pressure unit of the measurement. This function is available in the special cycle menu.

Enter in the **SPECIAL CYCLES** menu**,** by a short press on the key, select the **AUTOZERO** function, by using the and keys and confirm with the key.	SPECIAL CYCLES >Press. Unit : Pa
The available units are displayed, select the unit by using the and keys, and then validate with the key.	PRESSURE UNIT LIST hPa >kPa mbar

Chapter 5
ACCESSORIES

1. ACCESSORIES FITTED

1.1. POWER SUPPLY

The **CDP6000** is fitted with a battery pack.

This pack must be charge with the power supply fitted with the device, connect the charger on the electric network (from 100 to 245V AC).

Moreover, this supply can be plugged on all types of electrical plugs using different removable pins.

The instrument is not designed to work during the battery charge.

1.2. BATTERY

The 12VDC 4400 mA/h battery with Lithium Polymer (Li-Po) technology is integrated into a case of our design.

The charge is doing with the power supply which is directly plugged on the battery with a 4 pins connector. The battery is fitted with a LED which indicates the charge state: **red:** in charge; **green:** charged.

The battery charge time is about 3 hours. The charge must be realized with the battery out of the device.

See the battery use conditions in the "Safety precautions" paragraph in the appendices.

2 batteries are supplied with the device.

1.3. USB CABLE

The USB cable (supplied with the device) allows the connection between the instrument and a personal computer.

1.4. SOFT CARRYING CASE

The soft carrying case allows the user to carry easier the device on the test area.

1.5. TRANSPORT CASE

Strong case with the dimensions: Large 520, Depth 440 and high 230 for the storage of the following components:

- ✓ 1 measurement device **CDP6000**,
- ✓ 1 second battery,
- ✓ 1 power supply for battery charging..

Chapter 6
ERROR MESSAGES

The **ATEQ CDP6000** can display error messages if there are operational problems.

PROBLEM	LIGHTS	DISPLAYED MESSAGES
ALARM 16 Pressure over the sensor full scale. **Action**: down the pressure. ***Warning!** A too high pressure applied to the sensor can result is serious damage to the sensor.*		
SYSTEM ERROR A fatal internal system error occurs. **Action**: try to switch of and restrat the instrument, if the problem persists, contact **ATEQ** after sales services.		SYSTEM ERROR
CONFIGURATION ERROR A fatal internal configuration error occurs. **Action**: try to switch of and restart the instrument, if the problem persists, contact **ATEQ** after sales services.		CONFIGURATION ERROR
PARAMETERS ERROR One or several parameters in the test parameters or in the system settings or not compatible. **Action**: try to make a reset of the system and restart the instrument, if the problem persists, contact **ATEQ** after sales services.		PARAMETERS ERROR
MEMORY ERROR The internal memory is full. The device can run, but the parameters change can't be saved. **Action**: dump the memory.		MEMORY ERROR

Chapter 7
OPERATIONAL PROBLEMS

1. PROBABLES FAILURES

If a failure with the device appears, see the following list (left column) to identify the fault, make checks or actions steps (right column) in the same order.

Identified failure	Remedial action
1 – The device doesn't turn on.	**1)** Charge fully the battery. **2)** Change the battery by a new one. **3)** Check the electrics contacts between the battery and the device. **4)** Contact the **ATEQ** after sales service.
2 – Wrong or false measures.	**1)** Check the battery charge. **2)** Contact the **ATEQ** after sales service.
3 – Erroneous or erratic measures.	**1)** Check the battery charge. **2)** Check the device calibration, if it fails send back the device to the **ATEQ** after sales service. **3)** Contact the **ATEQ** after sales service.

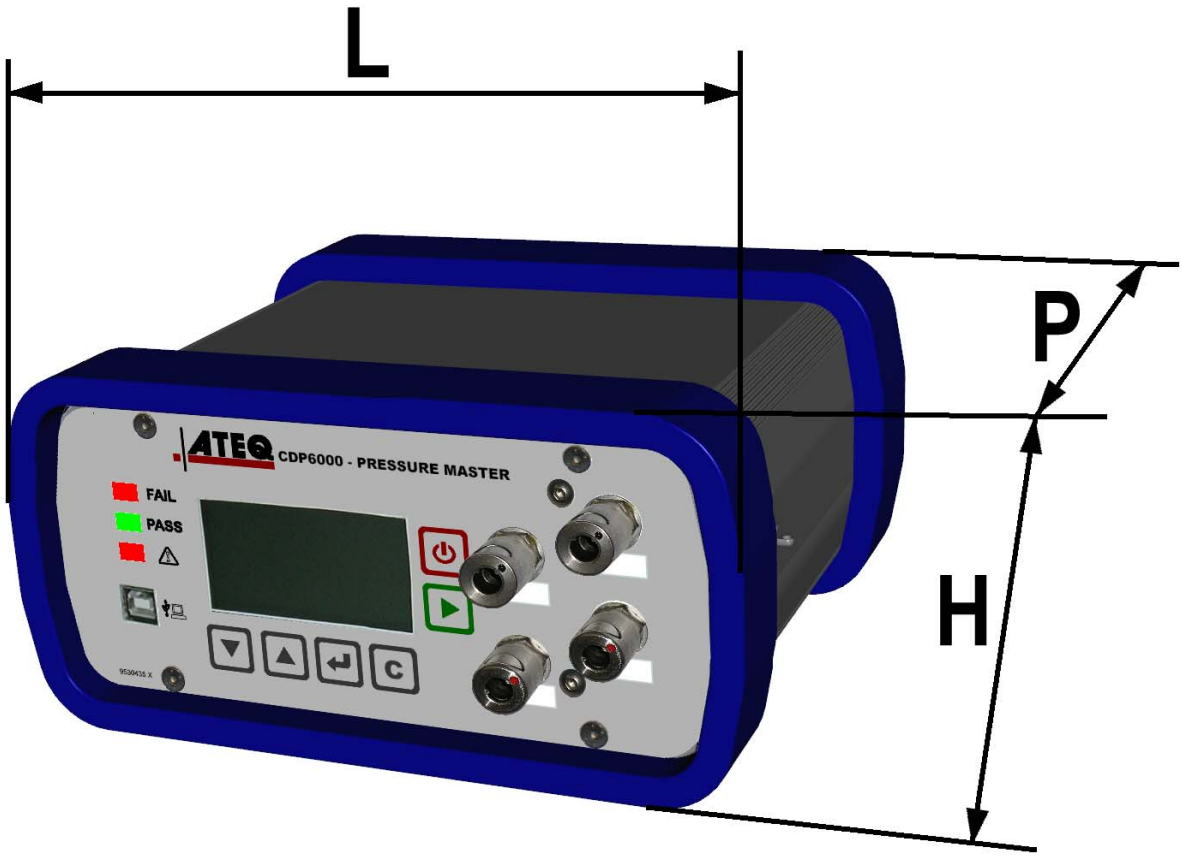
The **ATEQ** Company disclaims any responsibility if the instruments calibration and adjustment would not be performed by its services.

Appendices
ATEQ CDP6000

1. TECHNICALS CHARACTERISTICS

	CDP6000
Power supply:	24 V DC Concentric Jack
Battery:	Lithium Polymer (see safety information below)
Weight (kg)**:**	About 2,8
Display :	LCD 4 lines 60 mm x 32 mm
Temperatures:	
Use and battery charge:	0° C to +45°C (+32° F to +113° F)
Storage (battery conditions):	-10° C to +50° C (+14° F to +122° F) Charge 30% max.

2. DIMENSION DRAWING



L: 240 mm / **H:** 120 mm / **D:** 210 mm.

3. SAFETY INFORMATION

You must read and understand these safety instructions and warnings before using or charging your lithium polymer batteries.

Operating environment

Remember to follow any special current regulations any area, and always switch off your device when its use is prohibited or when it may cause interference or danger.

Use the device only in its normal operating positions.

Your device and its enhancements may contain small part. Keep them out of the reach of small children.

About Charging

Use only the charger supplied with your device. Use of another type of charger will result in malfunction and/or danger.

Use the specified battery in the equipment.

When the green LED turns off, the charge is complete.

About the Charger

Do not use the charger in a high moisture environment. Never touch the charger when your hands or feet are wet.

Allow ventilation around the charger when using it. Do not cover the charger with paper or other objects that will reduce cooling. Do not use the charger while it is inside a carrying case.

Connect the charger to a proper power source. The voltage requirements are found on the product case and/or packaging.

Do not use the charger if the wires become damaged. Do not attempt to service the unit. There are no serviceable parts inside. Replace the unit if it is damaged or exposed to excess moisture.

This charger is not a toy and should not be used by children or infirm persons without proper training or supervision.

Do not use it as a power source.

Unplug it before attempting to service or clean it.

About the Battery

***CAUTION**: This unit contains an internal Lithium Polymer battery. The battery can burst or explode, releasing hazardous chemicals. To reduce the risk of fire or burns, do not disassemble, crush, pierce or dispose of the battery or the instrument in fire or water, do not short circuit or short the contacts with a metal object.*

Use a specified charger approved by the **ATEQ** manufacturer and supplied with the device.

Safety for Lithium Polymer battery use

NEVER leave the battery unattended during the charging process. Remove the battery on a nonflammable surface. The battery must imperatively be placed on a non-flammable surface during charging (ceramic platter or metal box).

Charge the Lithium Polymer battery **ONLY** with the charger provided.

NEVER use a Ni-MH (Nickel Metal Hydride) type battery charger to charge a Lithium Polymer battery.

If the battery begins to overheat more than **60°C** (140° F), **STOP IMMEDIATELY** the charge. The battery should **NEVER** exceed **60°C** (140° F) during the charging process.

NEVER charge a battery pack immediately after use and while still hot. Leave it cool down to ambient temperature.

If you see some smoke or some liquid out of the battery, stop the charge immediately. Disconnect the battery from the charger and place it in an isolated area for at least 15 minutes. **DO NOT USE THE BATTERY AGAIN**, but replace it with new one.

Keep a fire extinguisher for electrical fires handy while charging the battery. In the unlikely event that the Lithium Polymer battery will ignite, **DO NOT** use water to extinguish the fire, take some sand or fire extinguisher described above.

Do not pierce, cut or **NEVER** compress the jacket of a Lithium Polymer battery. If the battery is swelling up or if the cover is damaged, **DO NOT USE AGAIN**. Replace with a new one.

It must neutralize the Lithium Polymer battery elements unusable. The neutralization process must be performed with very strict security fit. It is recommended that you contact a specialist in this type of battery to perform this task, which is responsible to collect the battery out of use and gives to a specialized recycler.

Do not dispose of Lithium Polymer batteries to the dustbin.

The Lithium Polymer battery is not suitable for children under 14 years. Do not let a Lithium Polymer battery reach of children

To prevent leakage or other hazards, do not store batteries above **60°C** (140°F). Never leave the battery inside a car (for example) where the temperature could be very high or in a place where temperatures could exceed **60°C** (140°F). Store the battery in a dry place to avoid contact with liquid, whatever the type. Store the battery only on a nonflammable surface, heat resistant, non conductive and away from all flammable materials or sources. Always store the battery out of reach of children.

A Lithium Polymer battery should be stored with a minimum charge of 30%. If you store completely discharged, it will quickly become unusable.

If you don't follow these safety precautions, you may cause serious personal injury and damage to property; you may even cause a fire!

The **ATEQ** Company disclaims any responsibility for damage sustained in case of non compliance with these safety instructions.

Using a Lithium Polymer battery has a high risk of fires and can cause serious damages to property and persons, the user agrees to accept the risk and responsibility.

The **ATEQ** Company couldn't control the proper use of the battery for each customer (charge, discharge, storage etc.), It can not be held responsible for damage to persons and property.

Important instructions (for service personnel only)

***CAUTION**: Risk of explosion if battery is replaced by an incorrect type. Dispose of used batteries according to the instructions.*

Replace only with the same or equivalent type recommended by the manufacturer **ATEQ**.

Use the battery only in the specified equipment.

The battery must be recycled or disposed of properly.

4. RECYCLING

Do not dispose of the rechargeable Lithium-Ion battery or the device to the dustbin.

These components must be collected and recycled.

The crossed-out wheeled dustbin means that within the EU the product must be taken to separate collection at the product end-of life. This applies to your tool but also to any enhancements marked with this symbol. Do not dispose of these products as unsorted municipal waste. For further information, please contact **ATEQ**.

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