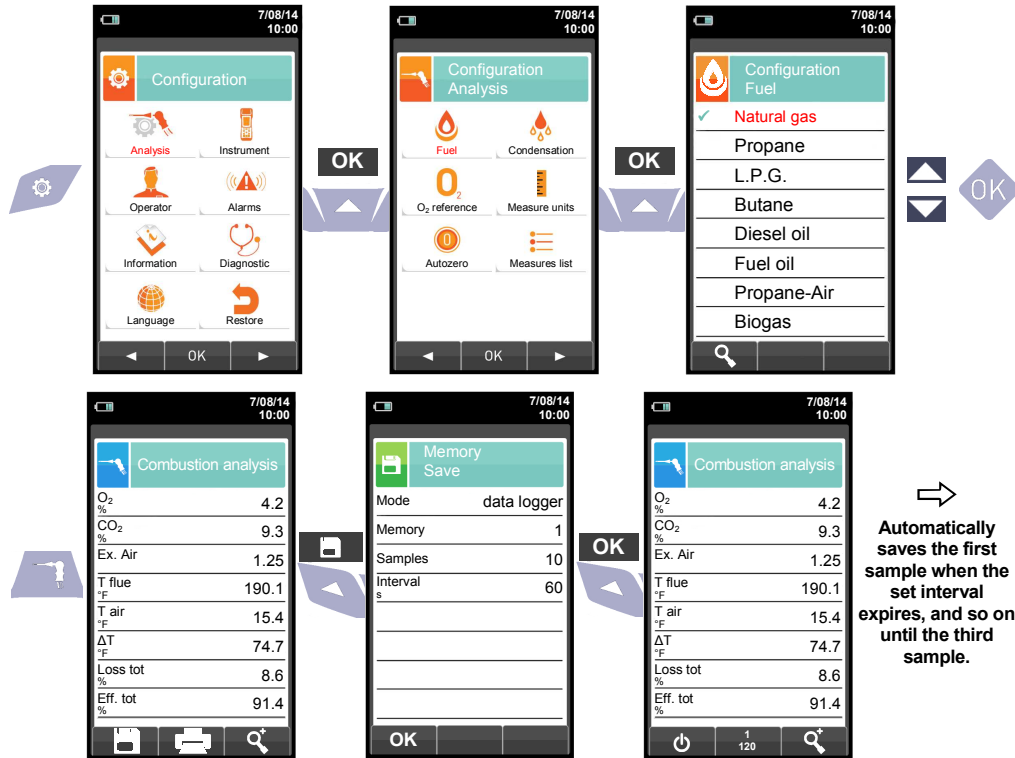# 6 COMBUSTION ANALYSIS & SAVING

WARNING! - Before proceeding with the combustion analysis remember to set the proper fuel.

Automatically saves the first sample when the set interval expires, and so on until the third sample.

In case the automatic print mode is set then the average analysis printing start automatically.
Conversely, after the sampling of the third analysis, the average analysis is shown, so that it can be sent to the printer as explained in the following.
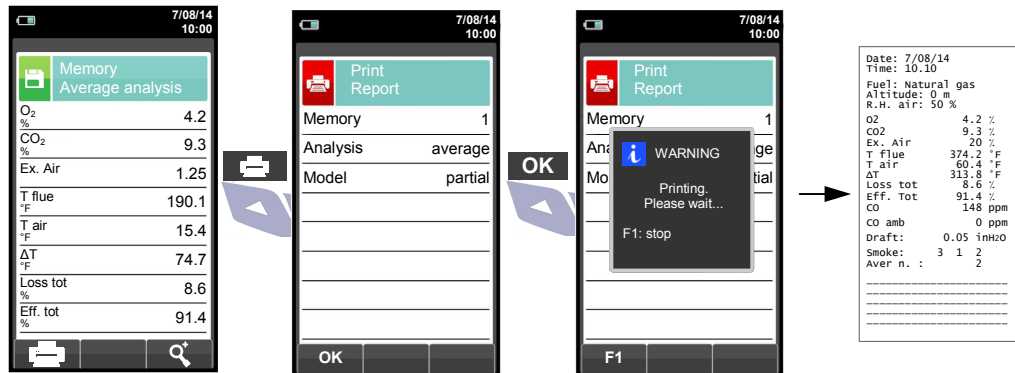
- To view different test measurements, use ' 🔍 ' key to scroll through the various test measurement screens.

Xair = Excess Air **Tg** = Flue Gas Stack Temperature **Ta** = Ambient or Incoming Air Temperature
ΔT = Differential Temperature (NET Temperature) **Eff. tot** = Total Combustion Efficiency **Loss tot** = Stack Losses

1500 QUICK GUIDE CE

Compliant with: EN 50379-1, EN 50379-2

Features
- Combustion, Flue gas & Emissions analysis
- Calculating of stack heat loss and efficiency
- CO environment measurement
- Measuring differential pressure
- Draft measurement
- Pressure measurement in the gas supply pipe
- Store Smoke values, calculating mean value

⚠️ The magnets in the back of the instrument can damage credit cards, hard drives, mechanical watches, pacemakers, defibrillators and other devices proven sensitive to magnetic fields.
It is recommended to keep the instrument at a distance of at least 10" away from any of these devices.

KEYBOARD FUNCTIONS

KEYS	FUNCTION
	Activate the context keys shown on the display
💾	Enters the Memory menu
🖨	Enters the Print menu
	Previes the combustion analysis
	Enters the measurements menu
⏻	Turns the instrument on/off
ESC	Quits the current screen
	Selects and/or modifies
OK	Confirms data

CONTEXT KEYS

CONTEXT KEY	FUNCTION
◎	ZERO the pressure sensor
↻	Updates the measure
📷	Saves the current measurement or analysis in the memory location selected from the 'Select Memory' menu
🖨	Starts the report ticket
💾	Enters the Print menu
⏻	Stops the flue gas analysis
✎	Enters the modify mode for the selected parameter
OK	Confirms the settings
Esc	Cancels the change/operation and returns to the previous screen
🔍⁺	Zooms the screen
🔍	Shows the details for the selected parameter
🔍	'Find' function; starts a quick search for the analysis to recall

E Instruments respects the nature and the environment, therefore provides this quick user guide to avoid any unwanted waste of paper.
However the complete manual for use and maintenance of the instrument is already available in the USB stick (included),.
Respect your environment: think before printing the full manual on paper.

402 Middletown Blvd, Suite 216, Langhorne, PA 19047 USA
Tel: (215) 750-1212; Fax: (215) 750-1399
info@E-Inst.com - www.E-Inst.com

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1 USING THE FLUE GAS ANALYSER

AAC KP01
AA SA08
AA SF--A
AAC SO01
AA AL05
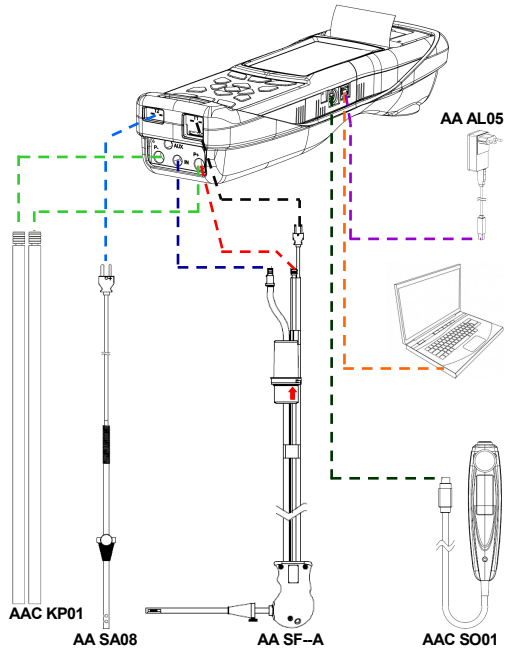
WARNING!
- Be sure all connections are tight to assure accurate sampling.
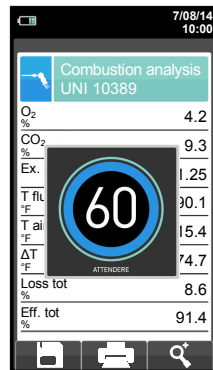- It is important that water trap & filter be installed vertically to prevent damage from moisture & particles to sensors.
- When conducting measurements, the water trap/filter assembly MUST be in a VERTICAL position.
- When testing is completed, always drain the water trap with any condensation (after EVERY test!).

2 ON / OFF

WARNING!
During autozero **DO NOT** insert the gas probe in the chimney.

KEEP PRESSED FOR 2 SECONDS UNTIL IT BEEPS

Combustion analysis UNI 10389	7/08/14 10:00
O2 %	4.2
CO2 %	9.3
Ex.	1.25
T flu °F	90.1
T ai °F	15.4
ΔT °F	74.7
Loss tot %	8.6
Eff. tot %	91.4

(60 ATTENDERE)

3 MEMORY

Memory	7/08/14 10:00
Save	Average
Select	Data logger
Delete	Usage %

◄ OK ►

Select — OK

Data logger — OK

Memory Select	7/08/14 10:00
Memory	1
Customer	E Instruments
Address	402 Middletown
	Ste 216
	Langhorne, PA 19047
Phone	215-750-1212
Boiler	xxxx
Date	7/08/14

In "Select" can be inserted all the customer data.

Memory Data logger	7/08/14 10:00
Mode	Data logger
Samples	10
Interval ppm	60
Print	auto
Memory	auto

In "Data logger", the user can define the analysis, memory selection and printing modes.

4 MEASURE OF THE DRAFT

Draft

Measurements Draft	7/08/14 10:00
P diff	
	0.001
inH2O	

Before zeroing the pressure it is mandatory to **REMOVE** the probe from the chimney.

ZERO Draft Sensor

Measurements Draft	7/08/14 10:00
P diff	
	0.000
inH2O	

Once the pressure zeroing is completed insert the probe in the chimney and measure the draft.

Measurements Draft	7/08/14 10:00
P diff	
	- 0.020
inH2O	

View & Save the DRAFT measurement.

5 MEASURE AMBIENT CO

⚠ It is mandatory to perform the instrument autozero in fresh, clean outdoor air.

Ambient CO

Measurements Ambient CO	7/08/14 10:00
CO	
	0
ppm	
CO max	
	0
ppm	

Connect the gas probe to the instrument and perform the measurement. **Wait 5 minutes.**

Save the measurement

Measurements Ambient CO	7/08/14 10:00
CO	
	0
ppm	
CO max	
	0
ppm	