


# 7 COMBUSTION ANALYSIS

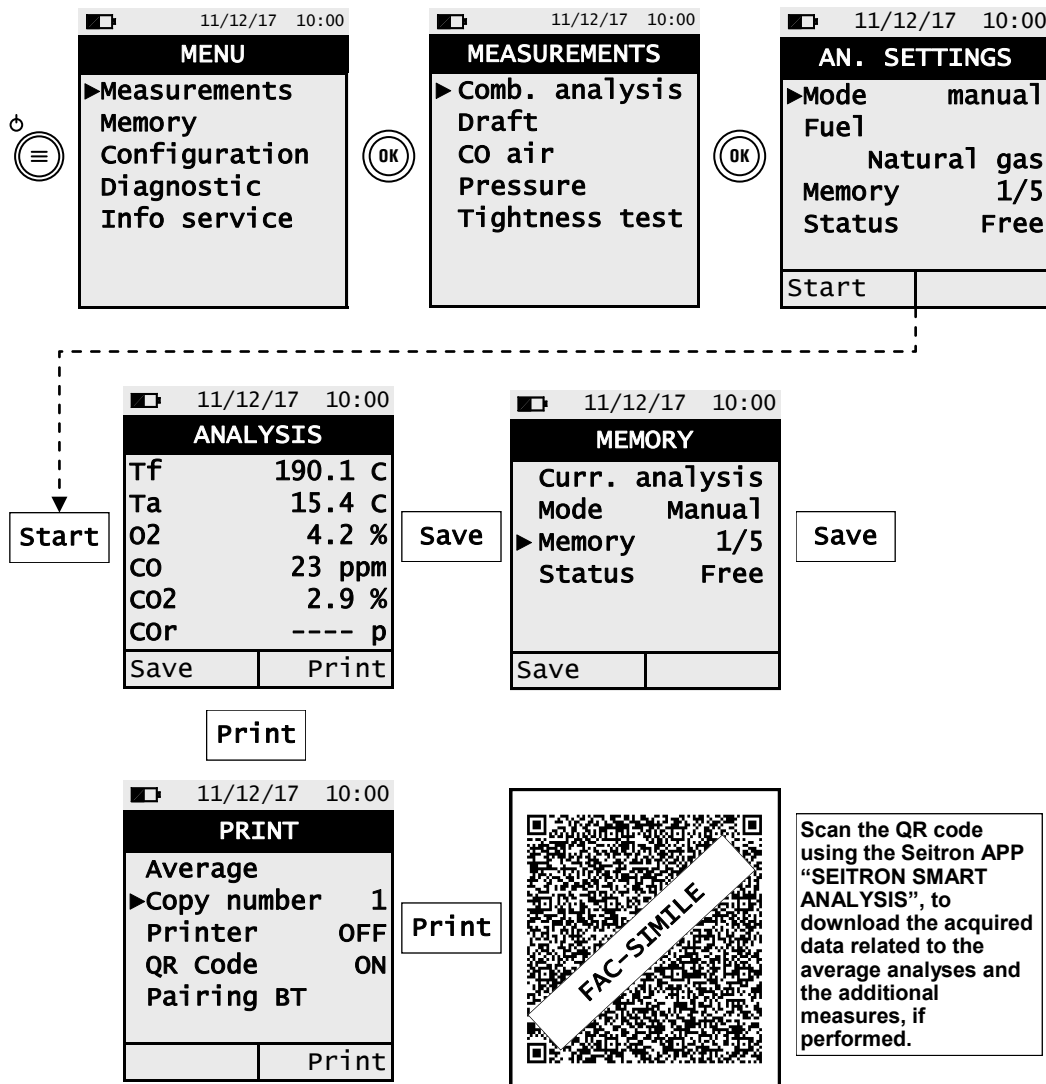
# S500 QUICK GUIDE



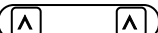



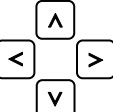
## FEATURES

- Combustion analysis in Auto or Manual Mode
- Calculation of stack heat loss and efficiency
- Ambient CO monitor
- Measuring differential pressure
- Draft measurement
- Pressure measurement
- Generation and display of a QR Code for downloading the data of the analyses
- Possibility to print on ticket the analyses and the performed measures with a Bluetooth® printer (optional)





 The magnets in the back of the instrument can damage to 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.
	Turns on and off the instrument. - If pressed briefly, accesses the instrument menu. - If pressed for at least 2 seconds, turns off the instrument.
	Exits the current screen.
	Confirm settings.
	Select and/or Modify.

## CONTEXT KEYS

CONTEXT KEY	FUNCTION
	Saves the data in the instrument memory.
	Display the printing options screen and consequently execute it.
	Proceed with the combustion analysis.
	Repeat the autozero phase.

 - Before starting the combustion analysis, select the utilized fuel.  
 - If it is desired to print the ticket of the average analyses and the additional measures enable the printer in the "PRINT" menu.  
 - If it is desired to print the complete analysis and the performed measures, it will be necessary to enter the memory menu "MEMORY", select the related memory number and push the "PRINT" interactive function button.  
 - To download the data of the single performed analyses, it's necessary to enter the "MEMORY" menu, select the memory number used to save the analyses and the measures and select one at a time the single rows.

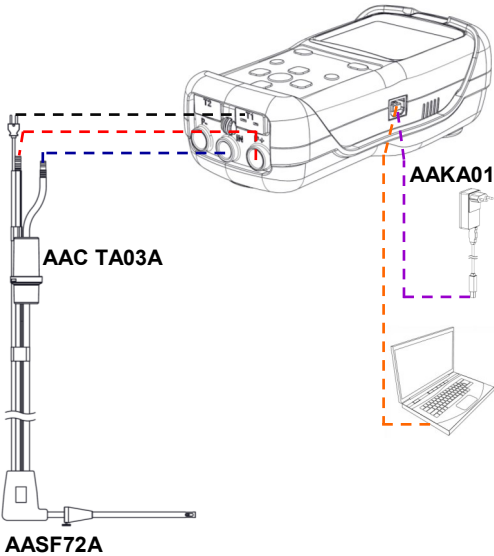
The complete manual for use and maintenance of S500 is available online at [www.seitronamericas.com](http://www.seitronamericas.com).  
 Seitron Americas respects the nature and the environment, therefore provides this quick user guide of the S500 analyzer. However, complete documentation is available online. Respect your environment: think before printing the full manual on paper.



Seitron Americas Inc.  
 4622 Street Rd, TREVOSE (PA) 19053 - USA  
 Tel.: (215) 660-9777 Email: [info@seitronamericas.com](mailto:info@seitronamericas.com) Website: [www.seitronamericas.com](http://www.seitronamericas.com)

# 1 USING THE FLUE GAS ANALYZER

- Be sure all connections are tight to assure accurate sampling.
- When conducting measurements, the water trap/filter assembly **MUST** be in a **VERTICAL** position to prevent damage from moisture & particles to sensors.
- When testing is completed, always drain the water trap with any condensation (after EACH test!).



# 2 ON / OFF

- Before switching on the instrument, insert the Tc-K connector of the smoke probe to the instrument for primary air acquisition.
- Perform the Zero phase of the instrument in fresh clean air.
- When the Zero phase is over, push the button related to the interactive function "Keep" to store the acquired temperature value.

Keep pressed for a few seconds

S500  
N.S.:0  
Fw:1.00-EVAL03

11/12/17 10:00  
**AUTOZERO**  
60  
Primary air acquisition

11/12/17 10:00  
**AUTOZERO**  
Primary air acquisition  
T: 21.5°C

Keep Repeat

# 3 MANUALLY SET PRIMARY AIR TEMP

Menu→Configuration→Analysis→Air temp

11/12/17 10:00

**AIR TEMP.**

T probe --- F

▶T air 32.0 F

T probe

Procedure to manually set the primary air temperature value. Press OK to enter T air edit mode.

OK

11/12/17 10:00

**AIR TEMP.**

T probe --- F

▶T air +0032.0 F

T probe

Press the arrows to select the digits you want to change and press OK when done.

OK

# 4 DRAFT MEASUREMENT

Menu→Measurements→Draft

- To measure the draft proceed as follows:
  - Connect the probe pressure input hose to the instrument P+ input.
  - Before ZEROing the Pressure/Draft sensor, please be sure to remove the gas probe from the stack first
  - Upon completion of the Zeroing of the Draft Sensor insert the probe in the stack to measure the Draft.

15/06/18 10:00

**DRAFT**

Inlet P+

Draft 0.01 h

▶Zero sensor

Save Print

OK

15/06/18 10:00

**AUTOZERO**

5

Zero sensor

→

15/06/18 10:00

**DRAFT**

Inlet P+

Draft 0.20 h

▶Zero sensor

Save Print

Save

15/06/18 10:00

**DRAFT**

Inlet P+

Draft 0.01 h

▶Zero sensor

Save Print

Print

# 5 AMBIENT CO

Menu→Measurements→CO air

11/12/17 10:00

**CO AIR**

CO 1412 P

CO Max 1413 P

Save Print

**WARNING**

It is compulsory to perform the Zero phase in clean air, so that the environment CO measurement results correct. It is advisable to turn on the instrument and wait for the Zero phase completion outside the area where the test is being performed.

# 6 PRINT

Menu→Configuration→Print

11/12/17 10:00

**PRINT**

▶Copy number 1

Printer IR

Mode fast

QR Code ON

Pairing BT

**Ticket print**  
Set the parameter "Copy number" for how many printouts  
Set the parameter "printer" on BT or IR  
**Only if the printer is set on IR:**  
Set the parameter "Mode" on fast or slow  
**Only if the printer is set on BT:**  
Link the instrument to the BT printer through the parameter Pairing BT (only for the first time)

**QR code generation**  
Set the parameter "QR code" on ON