

C125 & C127 QUICK START GUIDE

Thank you for purchasing the UEi Eagle combustion analyzer. We have designed this service tool to be extremely functional and easy to use. Remember the UEi Eagle analyzers should be used on any combustion appliance to ensure safe, reliable and efficient operation regardless of the fuel in use.

CO/COMBUSTION ANALYSIS



Turn Power on in area of fresh air and allow to countdown



Rotate selector to Fuel. Press UP or DOWN to scroll to select desired fuel. Top line is selected fuel.



Connect flue probe thermocouple connector to T1, and connect flue probe to water trap. Use optional probe with T2 for inlet temperature.



Rotate selector to "Flue Test" and begin testing.



Flue Test Pg. 1 - O2, CO, Draft (P) and TF.



Press and Hold* the UP button to toggle screen between page 1 and 2. Flue Test Pg 2 CO2, Efficiency and Excess Air. (NOx available on Eagle 3 C127)

Footnote: Purge fresh air after use.

D*i***ferential Temperature Test**

This test is useful for quick checks of temperature rise, or other differential tests



Rotate selector to Temp



Connect flue probe thermocouple or accessory thermocouple connector to T1. Connect accessory thermocouple probe to T2. Compatable with any K-Type thermocouple.



Place thermocouples in test locations to start testing.

Charge Indicator



Red charge light indicates AC power adapter is connected.

Status Page



The status page provides a quick overview of the remaining battery life, currently set date and time, and the number of days remaining until the recommended calibration schedule.

AUX SETTING



The display on the AUX setting can be customized to any four parameters you choose. These are selected on the MENU selector, scroll to SCREEN, scroll to AUX then select Line 1 through 4 and choose the desired measurements. Note: CO Air Free is only available on the AUX screen.

MANOMETER DRAFT & STATIC PRESSURE TEST



Rotate selector to Prs (Pressure)



Press and hold DOWN button to zero pressure sensor.

Connect draft probe to P1. Use P2 for Differential. Place probe tip in flue to measure draft.

PRINTING AND STORING RESULTS

Combustion Flue Testing, Pressure (Draft) Differential or Temperature Testing selector positions



Press "SEND" briefly to start the printout of results.



Press again during print to cancel.



Press and hold "SEND" to log the current readings for Combustion Flue Testing, Pressure (draft) Differential, and Temperature selector positions.

CO ROOM TEST





Disconnect all probe connections Press the PUMP button to start the from the C125 and place handset test. The CO reading will be logged in the area to be tested. Rotate selector to Room CO

every 2 minute for 30 minutes and store a summary that can be printed.



View or print or delete reports from the "MENU", "REPORTS" section



Select "Room CO" for the reports menu.

Heat Exchanger Test –

There are many methods to test heat exchanger integrity One of these is to observe the Excess Air, O2 and CO readings both before and after the blower turns on. If the heat exchanger is sealed then your O2 and CO readings should remain fairly stable. A breach (opening) in the heat exchanger may allow fresh air to be forced into the flue after the blower turns on due to a pressure increase in the plenum. The result could be a rise in the measured O2 in the stack gas and an increase in the Excess Air calculated. In some sealed systems the fresh air drawn in through the breach may reduce the combustion air available and lead to an increase in the CO reading. If either of these occurs it is best to perform additional testing and inspection to determine the possible cause.

Note: Many cracks are invisible to bore scopes or the naked eye, and only open or separate when the heat exchange reaches operating temperature.



Rotate selector to Exch Test. Call for heat on the furnace. Observe the levels for O2 and CO.



Prior to the blower turning on, and when the O2 readings have stabilized press the SEND button.

After the blower turns on press PUMP to start the countdown.



The meter will wait 30 seconds and then record the values for CO. O2 and Excess Air. Test results will automatically be stored and include the values before the blower turns on, the values after and any variance. View or print these values from the Report menu..

ADDITIONAL NOTES

Activate the Backliaht and Worklight by briefly pressing



MAIN MENU NAVIGATION -

MAIN MENU	SUR MENU	OPTIONS / COMMENTS			
	CET TIME				
	OFT DATE				
					Colort tomporture coole in SE or SC
					Select temperature scale in "F or "C
	EXII				
PRESSURE	SMUUTH				UFF = normal response. UFA = slower (damped) response
					Always defaults to normal response on start-up
	RESULVE				LUM = normal. HILDH = displays to an extra decimal place
	DO UNITO				Always defaults to low resolution on start-up
	PS UNITS				mBar, MMH2U, Pa, KPa, PSI,
					MMH9, NPA, and INH2U
					C125/C12/ detaults to 1 THE2U on start-up
	EXIT	_			Returns to MAIN MENU
REPORT	COMB'N	Press	Up 📥	to select line 1 value	Stored combustion tests, VIEW or DEL ALL
		Press	Down 🔽	to select line 2 value	
		Press and HOLD	Down 🔽	to select next record	
		Press	Enter	to print record	
		Press and HOLD	Up 📥	to exit to Sub Menu	
	PRESSURE	Press	Up 📥	or Down 🔽 buttons to select next record	Stored pressure tests, VIEW or DEL ALL
		Press	Enter	to print record	
		Press and Hold	Up 📥	button to exit to Sub Menu	
	EXCH	Press	Up 📥	or Down 🖝 buttons to select next record	Stored Exch tests, VIEW or DEL ALL
		Press	Enter	to print record	
		Press and Hold	Up 📥	to exit to Sub Menu	
	TEMP	Press	Up 📥	or Down 🕶 buttons to select next record	Stored differential temperature tests, VIEW or DEL ALL
			Un	button to exit to Sub Menu	·
	ROOM CO	Press	Un	or Down T buttons to select next record	Stored room CO tests. VIEW or DEL ALL
		Press	Enter	briefly to scroll through the measured values	
		Press and Hold	Enter	hutton to print record	
		Press and Hold		hutton to evit to Sub Menu	
	FXIT	1 1000 unu riolu	- 40		Returns to MATN MENU
SCREEN	CONTRACT	Prose	lln 📥	or Down The buttons to select settings 00 - 20	Factory softing is M
		Proce		or Down The scroll through Line 1 - Line 4 and EVIT	Final a security is a security in the parameters on the AIIX display.
	1 iori	Drose		on the line you want to shange	
		Droce	Line T	or Drue available	
		F TESS		uben the value year want is visible	
		LIESS	Enter	Denest for the other lines	
		Duran		Repeat for the other lines	
		Press		or Down V to scroll to EXII	
		Press	Enter	to return to the Sub Menu	
	HEADER	Press	Up	or Down T to scroll through HEADER 1, HEADER2 and EXIL	Sets printout header, 2lines, 2U characters per line
		Press	Enter	on the line you want to change	
		Press	Up 📥	or Down V to change text characters	
		Press	Enter	select the next text position	
				Repeat for all lines needed	
		Press	Enter	to return to the Sub Menu	
	EXIT				Returns to MAIN MENU

DISPLAY GLOSSARY & ADDITIONAL NOTES -

- CO2 Carbon Dioxide
- ☐T Differential Temperature
- Eff: Efficiency
- 🛛 Excess Air
- 02 Oxygen
- CO Carbon Monoxide
- Ptr- Pressure Draft
- P2 Pressure Differential Port
- Nitric Oxide

- Measured gases will display $-\Box \Box -$ with the **pump is off**
- Calculated values will display $-\Box \ge -$ with the **O2 level is greater than 18**% (values are calculated on fuel choice and O2 reading
- Temperature values will display CIC— if the probe is not connected or open Press and hold **PUMP** to zero the pressure sensor in selector positions that display measured and calculated values (**AUX & Flue Test**)
- Press and hold the UP button to select "Flue Test Pg. 1 or Pg. 2"

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