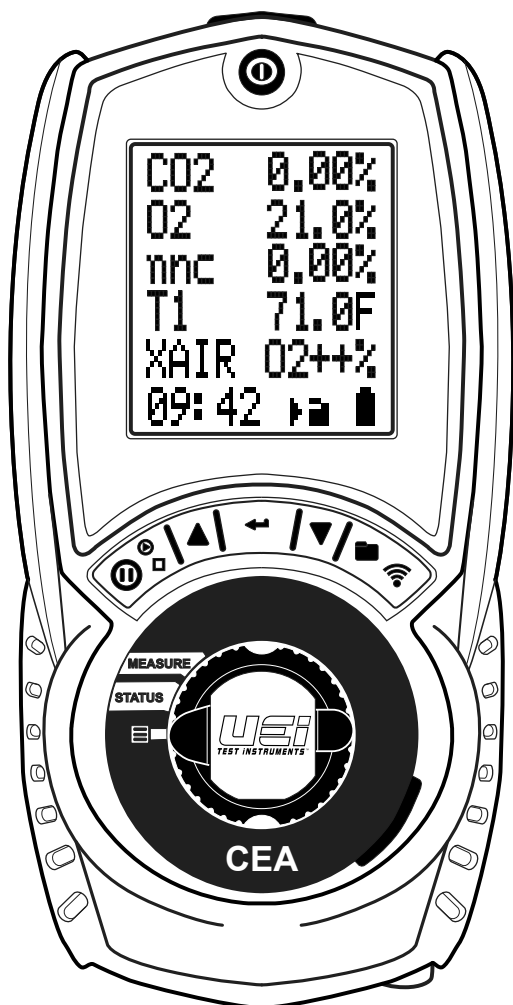


Combustion Efficiency Tester



BACKED BY

UEi
SERVICE+

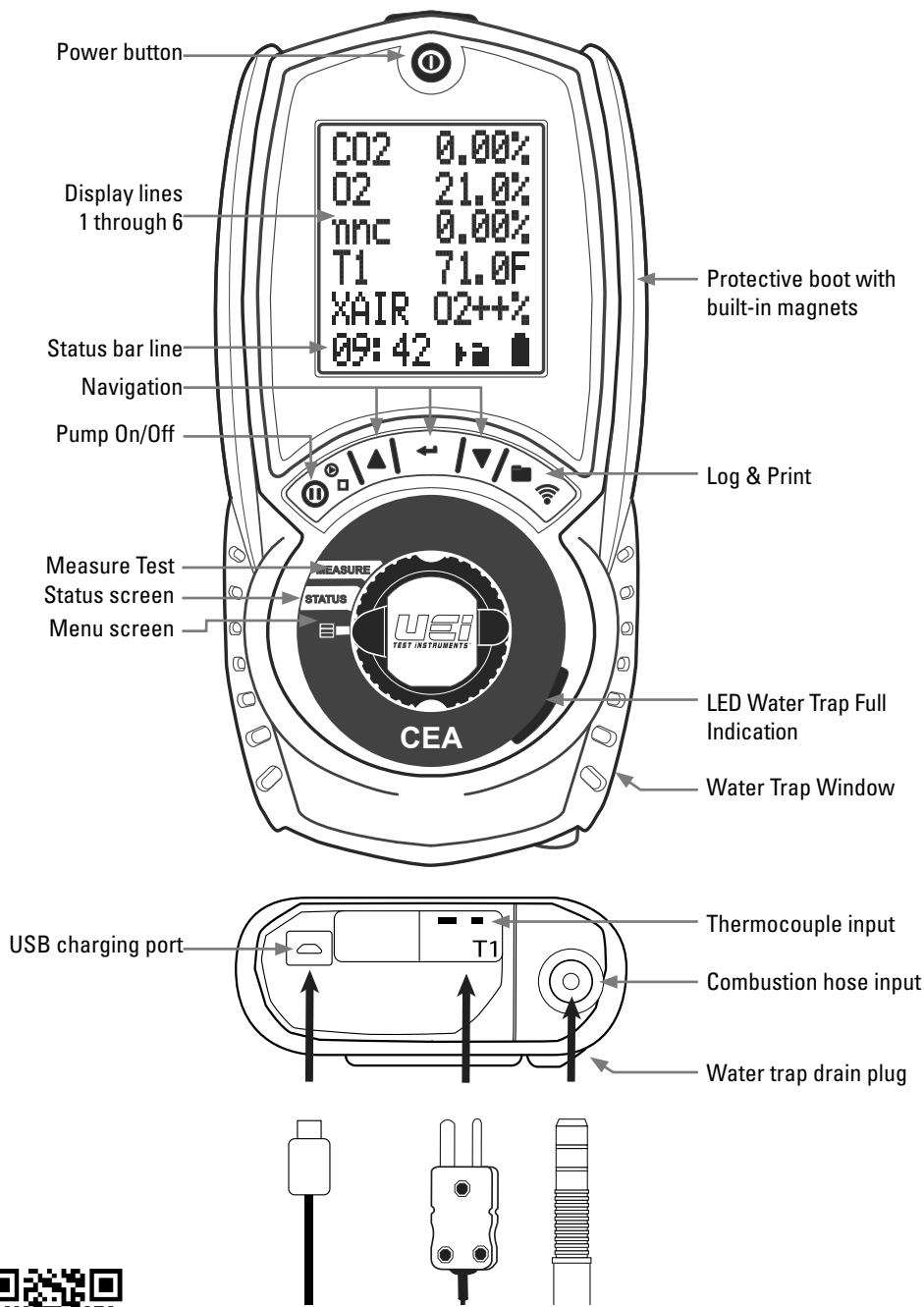
10
YEAR
WARRANTY



1-800-547-5740 • www.ueitest.com


Email: info@ueitest.com

CEA OVERVIEW



Download the full Owners Manual at UEiTEST.COM or SCAN THIS CODE for full analyzer specifications and instructions.


MENU SCREEN - CEA START UP

Press  "Power" Button for 2 seconds. The analyzer will perform a 60 second purge. This should be done in fresh air.

Rotate Selector Dial to **MENU** to set up or customize your settings.

Selected parameter are centered, highlighted with arrow icons on either side.

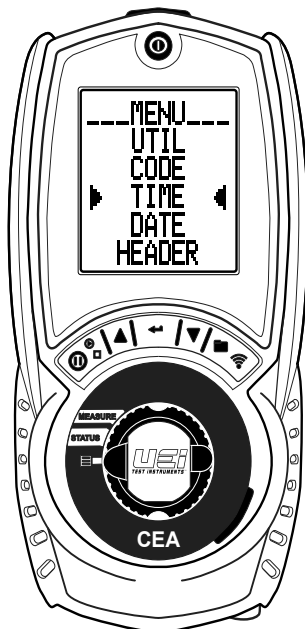
Use  and  buttons to scroll menu options.

Press  to select and edit a parameter.

Press  and  buttons to change contents of a field.

Press  button to scroll fields.

Press  to enter content and move to next field.



STATUS SCREEN

Rotate Selector Dial to **STATUS** to view parameters.



Selected Fuel

Ta = Ambient Temperature

ATM = Atmospheric Pressure (measured in mbar)

CAL = Days remaining until calibration

Serial # = 9-digit serial number

Press  and  buttons to scroll Status Bar options.


Time, Pump Status, Battery Level

Fuel Type

Date

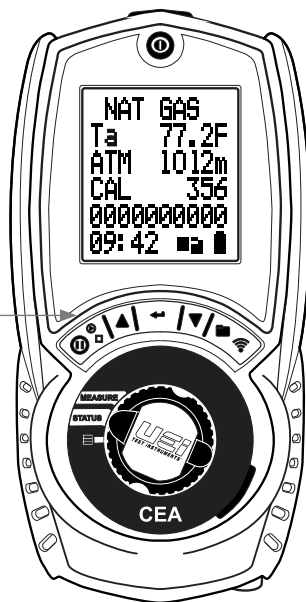
Change Fuel Type in STATUS SCREEN

Press  and  buttons to the currently selected fuel.

Press and Hold  button until arrows indicate fuel edit mode is activated.

The  and  to scroll fuel types.

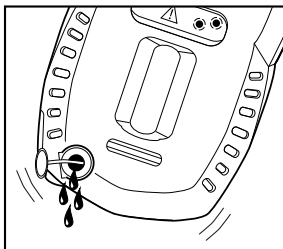
Press  to select desired fuel.



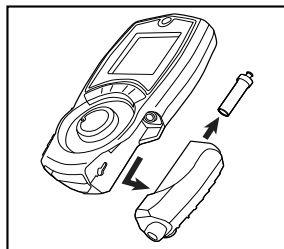
BEFORE TESTING

CHECKLIST CHECKLIST

- ☐ Clean particle filter
- ☐ Water trap and probe line are free of water
- ☐ All hose and thermocouple connections are properly secured
- ☐ Water trap is fitted correctly
- ☐ Power on and zero in fresh air *without flue probe inserted*

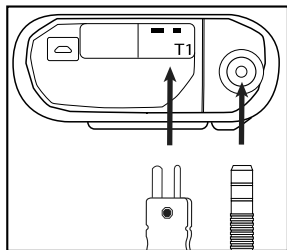


Remove the rubber boot and red drain plug. Allow the water to drain out. Re-insert the rubber plug and replace boot cover.

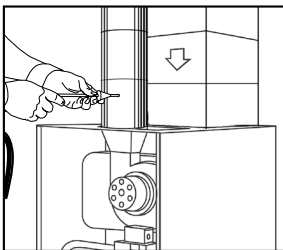


Remove protective rubber boot. Remove water trap from analyzer. Remove particle filter from spigot and replace with new one. Reattach trap and boot.

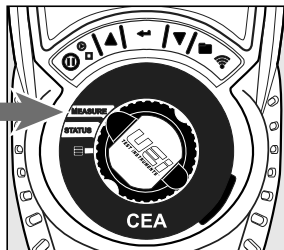
TESTING



After powering on and zeroing in fresh air *without flue inserted*, Insert flue probe into combustion input. Plug thermocouple into T1 port.



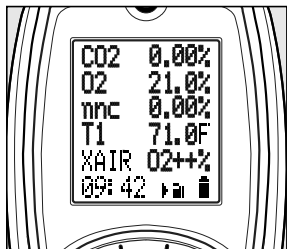
Insert flue probe into stack. Adjust cone so the probe tip is approximately at the center of the stack.



Rotate function rotary dial to MEASURE for Test parameters.

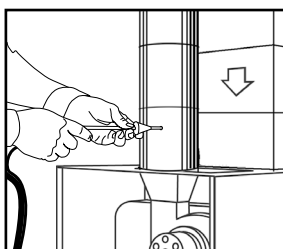
NOTE: If there is no hole, check with service and installation instructions of appliance for best testing method or check with your local authority on best practice

AFTER TESTING



MEASURE displays CO2 (%), O2 (%), Efficiency (%), Temperature and XAIR (Excess Air %).

Make any adjustments needed for proper Combustion and wait for analyzer to display changes. (Repeat as necessary).



Remove probe from flue allowing analyzer to purge in fresh air *with probe connected* to ensure no residual gases remain. O2 readings should return to 20.9%, and CO to Zero.

CAUTION: probe tip will be HOT.

POWERING OFF

When you power off the CEA, there is a 45 second purge.

⚠ CAUTION

Make sure you do not exceed the analyzer's operating specifications.

Do not exceed the flue probes maximum temperature (1112°F)

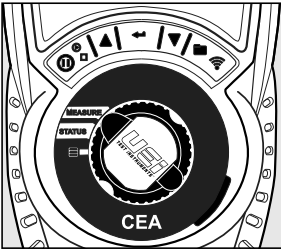
Do not exceed the analyzer's internal temperature range 112°F (50°C)

Do not put the analyzer on a hot surface

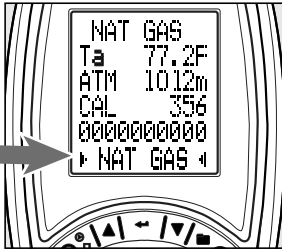
Do not exceed the water trap's level

Do not let the particle filter become dirty and blocked

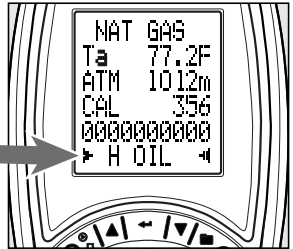
CHANGE FUEL TYPE



Rotate the dial to either MEASURE, STATUS setting.

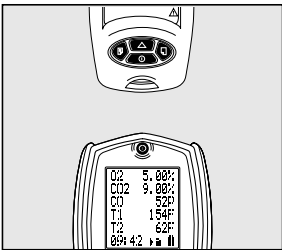


Press ▼ button until the Fuel Type displays on the Status Bar.
Press and Hold ◀ until two arrow icons display.

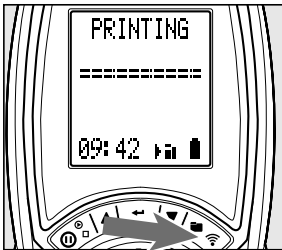



Press ▲ and ▼ buttons to scroll fuel selections.
Press ◀ to select fuel.

PRINTING

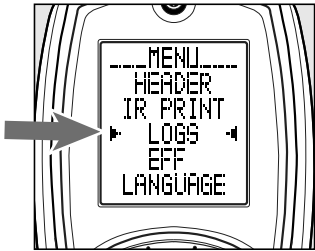


To Print: Align printer above CEA. Printer will not receive data if the printer ports are not aligned.

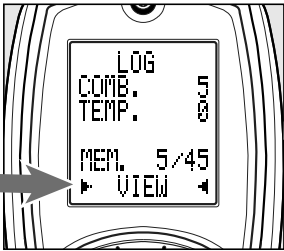


During MEASURE test, Press  to print results.
Press ◀ again to abort.
LOG is automatically saved.

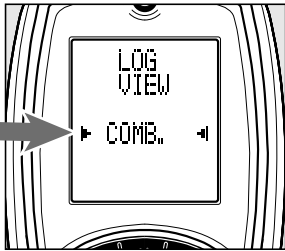
VIEW SAVED LOGS



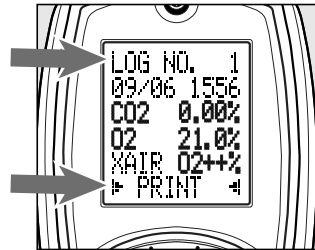
Rotate the dial to MENU.
Press ▲ button until the LOGS is selected between two arrow icons. Press ← to select.



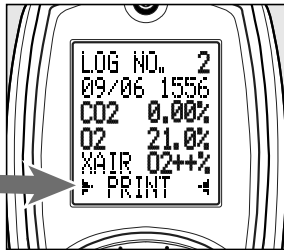
Screen displays all saved LOGS.
With VIEW selected in the Status Bar, Press ← to select.



Press ▲ and ▼ buttons to scroll Test Report categories.
Press ← to select a category.



Line 1 displays the LOG number on screen. To view another LOG, Press ▲ and ▼ buttons to NEXT. Press ← to advance to next log. Repeat until you reach desired LOG.



Press ← to PRINT this Log.
Press ▼ for NEXT screen
Press ▼ again for PREVIOUS screen
Press ▼ again to EXIT
Press ← to make selection

BATTERIES



WARNING

Do not recharge with Alkaline batteries fitted. Alkaline batteries are not rechargeable. Attempting to recharge alkaline batteries may result in product damage and create a fire risk.

Time and Date will need to be reset after changing batteries.

Always dispose batteries using approved disposal methods that protect the environment.

Do not leave batteries in unit for extended periods of non-use.

Always check operation immediately after battery replacement.

WARRANTY

The CEA combustion tester is warranted for one year including sensors. If within the warranty period your instrument should become inoperative from such defects, the unit will be repaired or replaced at UEi's option. This warranty covers normal use and does not cover damage which occurs in shipment or failure which results from alteration, tampering, accident, misuse, abuse, neglect or improper maintenance (calibration). Batteries and consequential damage resulting from failed batteries are not covered by warranty. Any implied warranties, including but not limited to implied warranties of merchantability and fitness for a particular purpose, are limited to the express warranty. UEi shall not be liable for loss of use of the instrument or other incidental or consequential damages, expenses, or economic loss, or for any claim or claims for such damage, expenses or economic loss. A purchase receipt or other proof of original purchase date will be required before warranty repairs will be rendered. Instruments out of warranty will be repaired (when repairable) for a service charge. Warranty only covers hardware and does not extend to software applications. Contact UEi for specific warranty and service information.

UEi Test Instruments • 1-800-547-5740 • info@ueitest.com

This warranty gives you specific legal rights. You may also have other rights which vary from state to state.

ANNUAL RECERTIFICATION SERVICES



An Award-Winning Promise To Never Let You Down

BACKED BY



UP TO
10
YEAR
WARRANTY



10 Year Warranty: All UEi combustion analyzers have a standard 1-year warranty. Each recertification extends the warranty for 1 more year for up to **10 years** from the date of purchase.

*Contractors who book recertification of a C160 series analyzer at **www.ueitest.com/service** within 12 months from either the date of purchase or the date of the last recertification will receive reduced service pricing¹ that lowers the cost of ownership and 2 additional benefits:*

Same Day Service: All qualifying analyzers received for recertification through UEi Service+ are returned on the same business day, **GUARANTEED.**²

Free Shipping: UEi Service+ offers free shipping both to and from our service center. When customers book their recertification, they receive a prepaid UPS Ground shipping label.

Register Online

Registering your analyzer online is quick and easy. Just log in or setup an account, it only takes a couple of minutes. Once logged in you can register your analyzer by providing some product information and uploading a proof-of-purchase.

When it's time to request recertification, just log into your account, select the analyzer, select the service and place your order.



UEi SERVICE+ GUARANTEE! won GOLD in 2024 Dealer Design Awards "Service & Software" category. The Dealer Design Awards recognize product design that assists contractors with the installation, maintenance, and service of HVACR Products and is the only industry award judged exclusively by HVACR contractors.

Available to US customers only. ¹Pricing subject to change without notice. ²Analyzers that include the additional NO (Nitric Oxide) sensor requires 48-hour turnaround.

WWW.UEITEST.COM

USA 1.800.547.5740