

# DIGITAL CLOCK

Universal Time

Local Time

Flight Time - Flight Time Alarm

Elapsed Time - Count Up/Count Down Alarm

O.A.T.  
Outside Air Temperature  
Fahrenheit & Centigrade

&

VOLTMETER  
Aircraft Voltage  
D.C. Volts & Tenths

## M803

Actual Size



LCD Display

## Clock Features

- Two button control system in natural and error free. Setting operations are IDENTICAL for both alarm and time setting (U.S. Patent #4,486,077)
- Sunlight readable display
- Display annunciations for UT,LT,FT and ET
- Flight time recorded in hours and minutes
- Flight time alarm with external output
- Elapsed time count down alarm with external output
- A 4 Megahertz crystal precision time reference.

## Features O.A.T./Volts

- One button control steps sequentially through E,F,C:
  - E- Voltage (EMF)
  - F- O.A.T. Fahrenheit
  - C- O.A.T. Centigrade
- Always selects to read voltage on power up for battery status check.
- Input Voltage - 14 or 28 Volts.
- Internal Lighting 5v-14v or 28v specify when ordering
- 2.25" standard mount - wt. 5.4 oz.
- Two year battery backup standard.



427 HILLCREST WAY  
REDWOOD CITY, CA 94062

## Operation

The SEL button selects what is to be displayed and the CTL button controls what is being displayed.. Pressing SEL sequentially selects Local Time, Flight Time, Elapsed Time, and back to UT. The CTL button resets Flight Time, FT, back to zero when held down for 3 seconds. The CTL button also starts and resets Elapsed Time when momentarily pushed. Normal operation of the 803 cannot accidentally reset time.

## Setting UT

Select UT for display with the SEL button. Press simultaneously both the SEL and CTL buttons to enter set mode. The tens of hours digit will start flashing. The CTL button has full control of the flashing digit, and each button push increments the digit. Once the tens of hours is set the SEL button selects the next digit to be set. After the last digit has been selected and set with the CTL button, a final push of the SEL button will resume its normal flashing indicating the UT clock is running.

## Setting LT

Select Local Time, LT, using the SEL button. Simultaneously push the SEL and CTL buttons to enter set mode. The tens of hours digit will start flashing. The set operation is the same as for UT, except that the minutes are already synchronized with the UT clock and cannot be set in Local Time.

## Control/Select Disable

When there is no aircraft power applied to the clock the CTL and SEL buttons are disabled.

## Setting Flight Time Alarm

When Flight Time, FT, is displayed enter the set mode by pressing both buttons simultaneously. The alarm time is entered identically to UT setting. When the Flight Time equals the alarm time the display will flash and the alarm output activated. If FT was not being displayed at the time the alarm becomes active, the clock automatically selects FT for display. Pressing either the SEL or CTL buttons turns off the alarm. Flight Time is unchanged and continues counting.

## Flight Time Reset

FT must be displayed when resetting. Hold CTL down for 3 seconds, or until 99:59 appears on the display. Flight Time will be zeroed upon release of the CTL button.

## ET Count Up

Select ET for display. Pressing the CTL button will start ET counting. Elapsed Time counts up to 59 minutes, 59 seconds, and then switches to hours and minutes. It continues counting up to 99 hours and 59 minutes. Pressing the CTL button again resets ET to zero.

## Elapsed Time Count Down

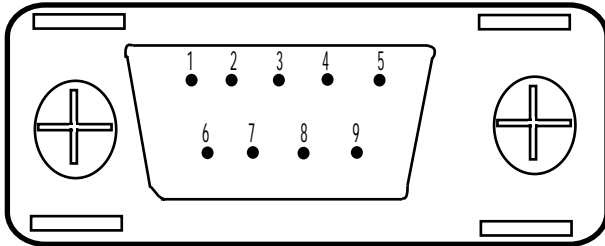
Select ET for display and enter set mode by pressing both buttons simultaneously. A count down from any time, a maximum 59 minutes and 59 seconds, can be set. The time is entered the same as UT setting. Once the set mode and the clock is ready to start the countdown. Pressing the CTL button now will start the countdown. The alarm becomes active at zero, flashes the display and enables the external alarm. Pressing either button, SEL or CTL, will reset the alarm. After reaching zero the ET counter will count up.

## Test Mode

Hold the SEL button down for 3 seconds and the display will indicate 88:88 and activate all 4 annunciators.

## Model 803 O.A.T. & Volts Operation

The one red button control steps through E, F and C and then repeats. The initial power up will always select voltage. One press and release select Outside Air Temp in Fahrenheit. The next button operation selects Outside Air Temp in Centigrade.



### Connector Pins

1. Power Ground
2. +12V or +28V
3. Plus voltage starts FT
4. Ground starts FT
5. Alarm output (open collector)
6. Temperature sensor (white/blue stripe)
7. Temperature sensor (white)
8. Internal Lighting: 5, 12, 24 Volt
9. +14V or +28V Keep alive power

## Price

M803 \$550.00 (U.S.)



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