MECHANICAL

2.10
1.375

2.375 TYP.

1.875 TYP.

2.22

Alkaline "AA" Battery

M803

Locking Connector
Positronics MD9F-20J-VL

Mounting Hardware 4-40x³/₈

1.675

.080   2.83

ELECTRICAL

Audio Alarm

- +

Alarm Out

Keep Alive .00004A

.25A   (+) Battery

5
9   Ground to start Flight Time
4
8   Dimming 5V (240ma), 14V (240ma) or 28V (100ma) lighting
3
7   4V to 28V Starts Flight Time
2   Temperature Sensor (White)
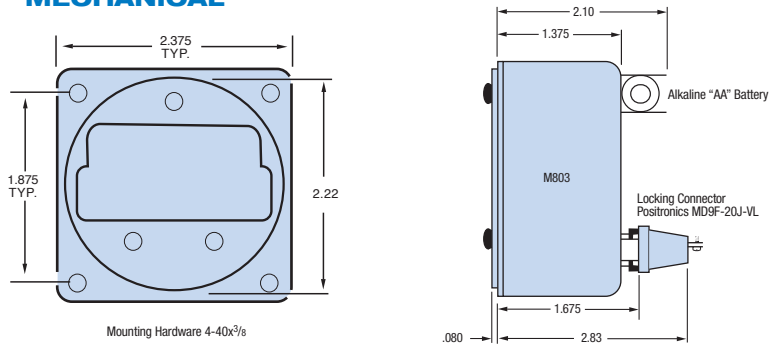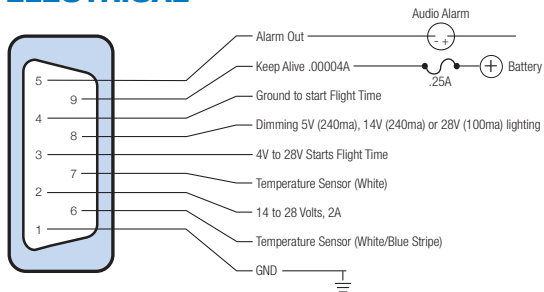6   14 to 28 Volts, 2A
1   Temperature Sensor (White/Blue Stripe)

GND

*NOTE: Keep Alive (Pin 9) is only required if alkaline AA size battery is removed. Flight Time starts with **either** Pin 3 **or** Pin 4 – use only one pin.*

SPECIFICATIONS

- **Greenwich Mean Time**: 24 hour format.
- **Local Time**: 12 hour format.
- **Flight Time**: Records in 99:59 standard.
- **Flight Time Alarm**: Full set range flight time.
- **Elapsed Time Count Up**: Starts in minutes, seconds, then hours, minutes up to 99:59 hrs.
- **Elapsed Time Count Down**: Settable from one second to 59 minutes, 59 seconds.
- **Elapsed Time Alarm**: Activates at zero when counting down.

- **LCD Display**
- **Battery Type**: AA size alkaline.
- **Keep Alive Current**: .00004 Amps.
- **Input Current**: .2 Amps.
- **Input Voltage**: 11 to 28 volts.
- **Voltage Range**: 8 volts to 32 volts ±.2 volts Typ. -55°C to +100°C ±2°C Typ.
- **Temperature Range**: -67°F to +212°F.
- **Crystal Reference**: -40C to + 60C .001%.
- **Weight**: 5.02 ounces.
- **Warranty**: 1 year.

DIGITAL CLOCK

GREENWICH MEAN TIME
LOCAL TIME
FLIGHT TIME - Flight Time Alarm
ELAPSED TIME - Count Up, Count Down, Alarm

M803

LCD Display

O.A.T.   VOLTS

14.3E

UT LT
FT ET   03:43

SELECT   CONTROL

DAVTRON

FEATURES - O.A.T. / VOLTS

- ONE button control steps sequentially through E, F, C:

  E - Voltage
  F - O.A.T. Fahrenheit
  C - O.A.T. Centigrade

- Always selects to read voltage on power up for battery status check.

- Input voltage - 11 to 28 volts.
- Internal lighting 5v,14v or 28v specify when ordering.
- 2.25" standard mount - wt. 5.02 oz.

MODEL 803
CLOCK OPERATION

Normal 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 Universal Time

Select UT for display with the SEL button. Simultaneously press both the SEL and CTL buttons to enter the 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 hour 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 exits set mode. The lighted annunciator will resume its normal flashing, indicting the UT clock is running.

Setting Local Time

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 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 button turns off the alarm and zeroes the alarm time. 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.

Elapsed Time 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 countdown from any time, a maximum 59 minutes, and 59 seconds, can be set. The time is entered the same as UT setting. Once the last digit is set, pressing the SEL button exits the set mode and the clock is ready to start the countdown. Pressing the CTL button starts the countdown. The alarm becomes active at zero, flashes the displays, 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 three seconds and the display will indicate 88:88 and activate all four annunciators.

Model 803
O.A.T & Volts Operation

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

Universal Time

Local Time

Flight Time

Elapsed Time

Temperature Fahrenheit

Temperature Centigrade