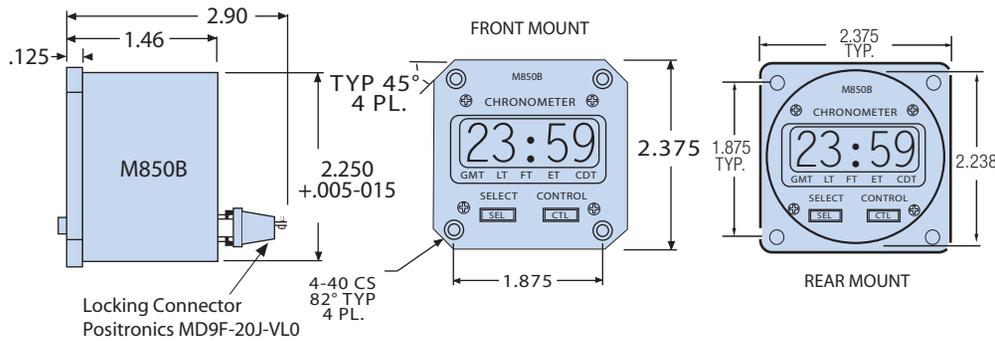
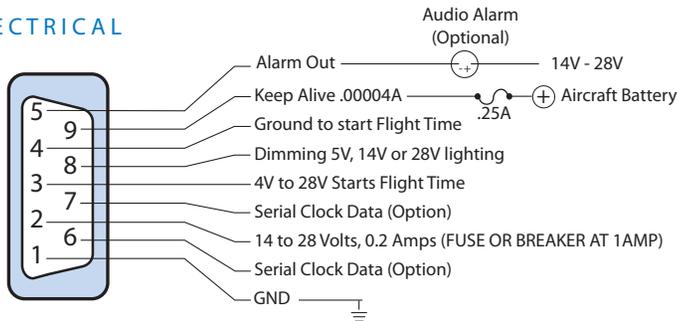


MECHANICAL



ELECTRICAL



NOTE: Keep alive (Pin 9) is only required if CR2032 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 or 24 hour format.
- Flight Time: records in 99:59 standard, 99:99 hour option
- Flight Time Alarm: Full set range flight time.
- Elapsed Time Count Up: Starts in minutes, seconds, then hours, minutes up to 99:59 hrs.
- Count Down Time: Settable from one second to 59 minutes, 59 seconds.
- Count Down Time Alarm: Activates at zero when counting down.
- LED Displays: Sunlight readable.
- Automatic Dimming.
- Battery Type: CR2032.
- Polarizing Filter.
- Keep Alive Current: .00004 Amps.
- Input Current: .2 Amps.
- Input Voltage: 14 to 28 Volts
- Backlight: 5V, 14V, or 28V - user selectable.
- Weight: 5 ounces MAX.
- Warranty: 1 year.

DIGITAL CLOCK

GREENWICH MEAN TIME
LOCAL TIME
FLIGHT TIME - Flight Time Alarm
ELAPSED TIME - Count Up, *Countdown, Alarm
COUNT DOWN TIME - Countdown, Alarm

M850B
LED Display



FEATURES

- Two button control system is natural and error-free. Setting operations are identical for both alarm and time setting. Patent Pending.
- Bright sunlight readable LED displays.
- Illuminated buttons and annunciators for night viewing.
- Flight Time recorded in hours and minutes or in hours, tenths, and hundreds.
- Serial time data option
- Flight time alarm with external output.
- Elapsed time with countdown timer with alarm.
- Count Down Time with alarm
- Crystal precision time reference.

M850B LSI Aircraft Time Management System

CLOCK OPERATION

Normal Operation

The select, SEL, button selects what is to be displayed in the four digit window and the Control, CTL, button controls what is being displayed. Pressing SEL sequentially selects GMT, Local Time, Flight Time, Elapsed Time, Count Down Time, and back to GMT. The CTL button starts, stops and resets Elapsed Time when momentarily pushed. Normal operation of the 850B cannot accidentally reset time.

Setting GMT

Select GMT for display in the four digit window 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 the mode. The lighted annunciator will resume its normal flashing, indicating the GMT 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 GMT, except that minutes are already synchronized with the GMT clock. Minutes can be changed in 15 minute increments for special time zones.

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 GMT setting. When the Flight Time equals the alarm the display will flash and the alarm output is 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. 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 or 99:99 appear on the display; Flight Time will be zeroed upon the release of the CTL button. The digits that appear (99:59 or 99:99) depend on how the clock is programmed - in hours and minutes or in hours, tenths, and hundredths.

Elapsed Time

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 stops ET, another press resets ET. ET has a countdown timer function, repeat steps for CDT in ET mode.

Count Down Time

Select CDT for display and enter set mode by pressing both buttons. The Count Down timer can now be set. Entering the time is identical to GMT time setting. When the time is entered and the last digit is no longer flashing the clock is ready to start the countdown. Momentarily pressing the CTL button starts the countdown. When count reaches zero the displays flash and the external alarm is activated. Pressing either SEL or CTL will deactivate the alarm. CDT continues counting up. Next press on CTL button to stop counting. Second press resets CDT to previous set time.

Test Mode

In GMT mode, Hold the SEL button down for three seconds and the display will indicate 88:88 and activate all five annunciators.

FIELD OPTION CHANGES

When changes are made the connector of the clock must be grounded to the soldering iron or warranty may void.

Local Time: To change from 12 hour to 24 hour format, hold SEL in LT mode for 5 seconds until 12 HR (hour) or 24 HR (hour) flashes, then push CTL for desired format. Push SEL to exit set mode.

Flight Time: To change from recording in hours, minutes to recording in hours, tenths, and hundredths, remove case and jumper OPT-99.

Battery: is a CR2032 coin cell. The recommended change interval is 5 years. The battery may be removed permanently if the aircraft battery is connected to the Keep Alive input (Pin 9). ***Recommend to remove CR2032 battery if pin 9 is used.

Backlighting SET-UP: Press and hold down the SEL button on power up to verify backlighting configuration. Pressing CTL will provide sequence options 5(Volt), 14(Volt), 28(Volt), and A (Automatic Sensing). Select backlighting voltage and press SEL button to confirm. A (Automatic Sensing) will provide automatic backlighting for input voltage 14 and 28 Volt.



Greenwich Mean Time



Local Time



Flight Time



Elapsed Time



Count Down Time