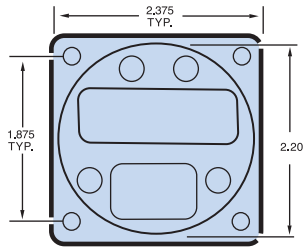
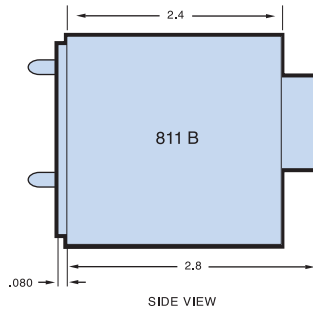


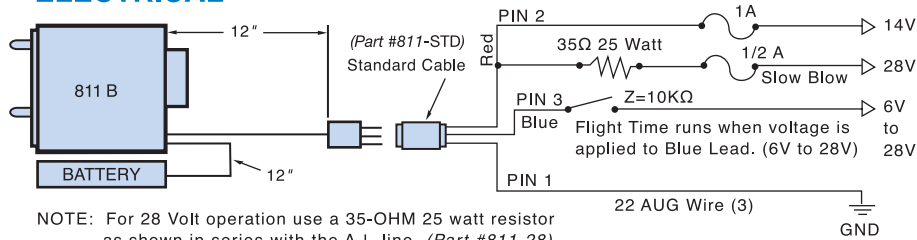
## MECHANICAL



Mounting Hardware  
4-40 3/4 Maximum Length



## ELECTRICAL



NOTE: For 28 Volt operation use a 35-OHM 25 watt resistor as shown in series with the A+ line. (Part #811-28)

## INVERTING CABLE



When using the inverting cable (Part #811-INV) the Flight Time runs when the Blue Lead is grounded.

## SPECIFICATIONS

- Six-digit display on all three functions
- Time function with 12- or 24-hour clock.
- Flight time recorder: 24 hour
- Elapsed time meter: 24 hour
- Battery supplied with a typical two year operating life. 6 volts—1 amp hr.
- Polaroid filter.
- FAA - PMA Approved
- Input voltage: 14 Volts
- Input current: .4 AMPS
- Maximum depth from mounting surface: 2.8"
- Weight: 7.5 oz.
- Crystal Reference: .0001% —40°C to +50° C
- Warranty: 1 year

# DIGITAL CLOCK FLIGHT TIME RECORDER ELAPSED TIME METER



ALL



THREE



IN ONE

Model 811B

Actual Size



## MODEL 811 OPERATION

Davtron attaches a welded tab-type battery to the 811 clock before it leaves the factory. All three functions of the clock are activated and working. At this time, Davtron sets the clock function to accurate time (W.W.V.). The Clock, the Flight Time, and the Elapse Time will work approximately two years without any additional power. *No aircraft keep-alive voltage necessary.* Aircraft power is required to light the display only.

### DISPLAY SELECT

The switch marked Time/F.T./E.T. is a three position switch that selects the function to be displayed. All three functions operate normally no matter what function has been selected for display.

### TIME

When the time function is selected, the proper time will read in hours, minutes, and seconds. The time channel may be set to local time or G.M.T. time.

### FLIGHT TIME RECORDER

When the Flight Time channel is selected, the actual time in flight will be displayed in hours, minutes, and seconds. The Flight Time channel is controlled by applying a voltage to the Blue Control Lead of the clock. This is recommended to be operated from an air switch. When the aircraft starts its take-off run and the airswitch closes, the Flight Time recorder will start to run, recording Flight Time. Anytime during flight the pilot may check total time in flight. When the aircraft has landed, the pilot can record total Flight Time. *The Flight Time can be zeroed only by having aircraft power off and moving the switch on the front panel to the zero position.*★ The pilot can have total flight time on a trip with a number of stops if he avoids returning the Flight Time recorder to zero. The Flight Time recorder will total time up to 24 hours. Normally it is recommended that the Flight Time recorder be zeroed on the pre start up check list of the aircraft.

### ELAPSED TIME METER

When the Elapsed Time channel is selected the Elapsed Time meter will read in hours, minutes, and

seconds. This recorder is fully controlled by the pilot from the front panel. It may be started, stopped, and returned to zero for elapsed time, approach, time, etc. It continues to operate when aircraft power is off. Totals time up to 24 hours.

### DIM POSITION FOR DISPLAY

For night operation a Dim position is provided. Normal position is B or bright.

### SETTING TO ACCURATE TIME

Davtron sets the clock to the correct GMT time when it leaves the factory. To change hour, push Dim/Bright switch to 1hr up position. Each press or just holding it in the 1hr up position will increase time by one hour. This setting does not effect the minutes or seconds.

The switch marked Set is for changing minutes or seconds. When you hold set switch in UP mode, minutes will count one per second until 5 seconds elapse, then minutes speed up to 5 minutes per second. When you hold set switch in the D, down position, the seconds reset to zero. During the time the clock is being set up or down, the Elapsed Time and Flight Time still continue to operate normally. The Set switch is a momentary switch and automatically returns to the center position.

### CHANGING CLOCK FROM 24 TO 12 HR

With unit off, hold Bright/Dim switch in 1hr up position, turn on unit. Unit is now 12HR. Repeat steps to switch back.

### CHANGING FROM NON-FTR TO FTR

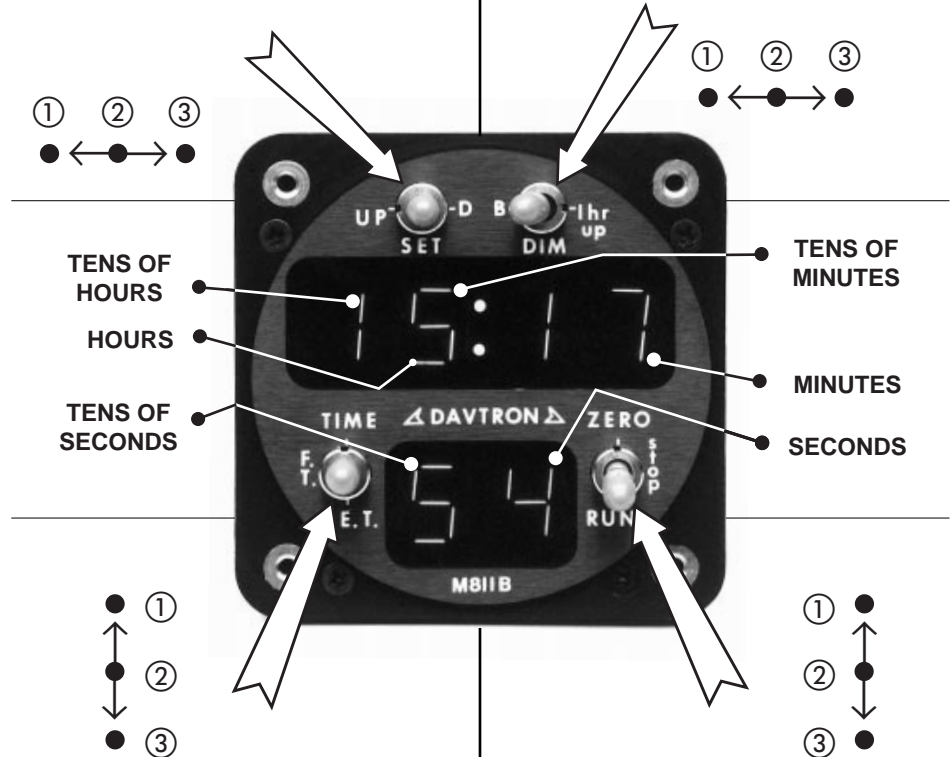
★ If you want to be able to zero flight time without turning off clock follow these steps. 1. With power off, put clock in FT mode, hold Stop/Zero switch in Zero position while powering up unit. You can now reset FT with clock powered up in FT mode. Same steps will switch it back.

### This switch makes minor time corrections

- ① Position #1 (up) is a momentary position and sets the clock one minute forward for every second held in the up position. After 5 seconds, minutes speed up to 5 per second.
- ② Position #2 is the normal position.
- ③ Position #3 (D) is a momentary position and resets seconds to zero when selected or held.

### This switch sets Bright/Dim, and makes one hour changes

- ① Position #1 (B) is the Bright position of the display for daytime use.
- ② Position #2 (Dim) is for night time use.
- ③ Position #3 (1 hr. up) is a momentary position and sets the clock 1 hour ahead for every time the switch is moved to this position and released.



### This switch selects which channel is to be displayed

- ① Position #1 (Time) selects real time. This channel may be set to G.M.T. time or local time. Reads in hours, minutes and seconds.
- ② Position #2 (F.T.) selects Flight Time, reads in hours, minutes and seconds of actual flight.
- ③ Position #3 (E.T.) selects Elapsed Time, reads in hours, minutes and seconds.

### This switch controls the Elapsed Time meter

- ① Position #1 (Zero) is a momentary position and sets the Elapsed Time meter to zero. The switch returns to position #2 when released. NOTE: Position #1 will zero Flight Time only if power to the clock is off. (Standard Setting)
- ② Position #2 (Stop) will stop the Elapsed Time meter.
- ③ Position #3 (Run) starts the Elapsed Time meter.