

# DIGITAL CLOCK FLIGHT TIME RECORDER ELAPSED TIME METER



**ALL**



**THREE**



**IN ONE**

**Model 811B  
Actual Size**



427 HILLCREST WAY  
REDWOOD CITY, CA 94062

# 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 set 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 closed, the Flight Time recorder will start to run, recording Flight Time. Any time 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-startup checklist 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 set the clock for the proper time zone when it leaves the factory. Although the clock is easily changed in one hour increments with the one hour up date switch, this does not effect minutes or seconds.

The time accuracy should be adjusted only when an accurate time check has been made and an error noted.

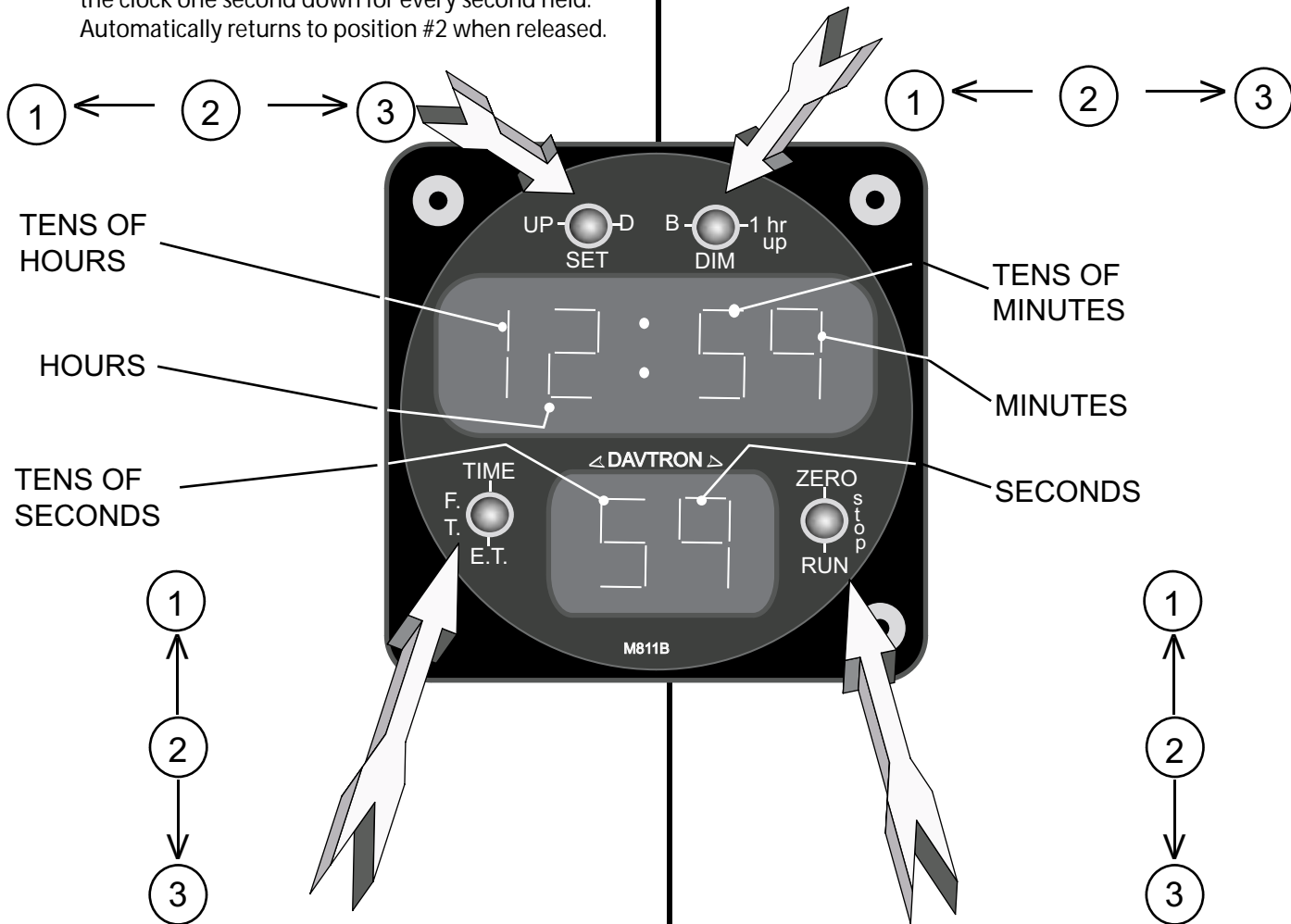
The switch marked Set if for minor time corrections. Holding this switch in the set up position runs the clock at a rate of one second fast for every second it is held. In the set down position, the clock is stopped or loses one second for every second held. For example, if a ten second error is noted in the clock and the clock is ten seconds fast, hold the Set position switch in the set down position for 10 seconds. If the clock is ten seconds slow, hold the Set switch in the set up position for ten seconds. During the time the clock is being set up or down, the Elapse Time and Flight Time still continue to operate normally. The pilot may use the Elapsed Time meter to time the holding of the Set switch. The Set switch is a momentary switch and automatically returns to the center position.

**This switch makes minor time corrections**

1. Position #1 (up) is a momentary position and sets the clock one second up for every second held. Automatically returns to position #2 when released.
2. Position #2 is the normal position.
3. Position #3(D) is a momentary position and sets the clock one second down for every second held. Automatically returns to position #2 when released.

**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.

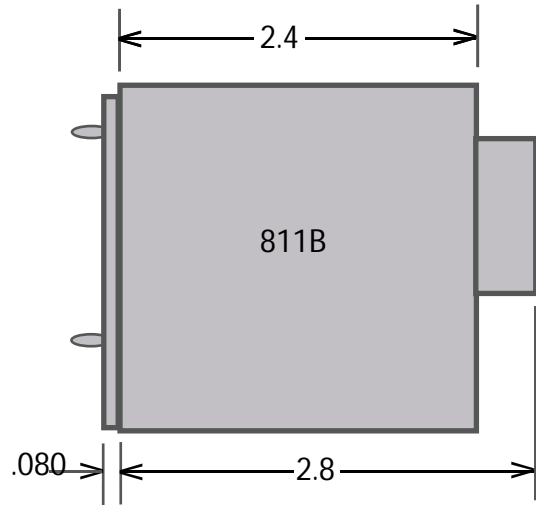
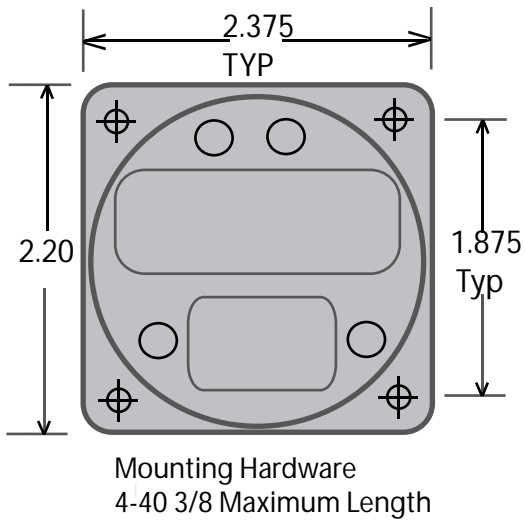
**This switch controls the Elapsed Time meter**

1. Position #1 (Zero) is a momentary position and sets the Elapsed Time meter to zero. The switch returns to position #2 when released.

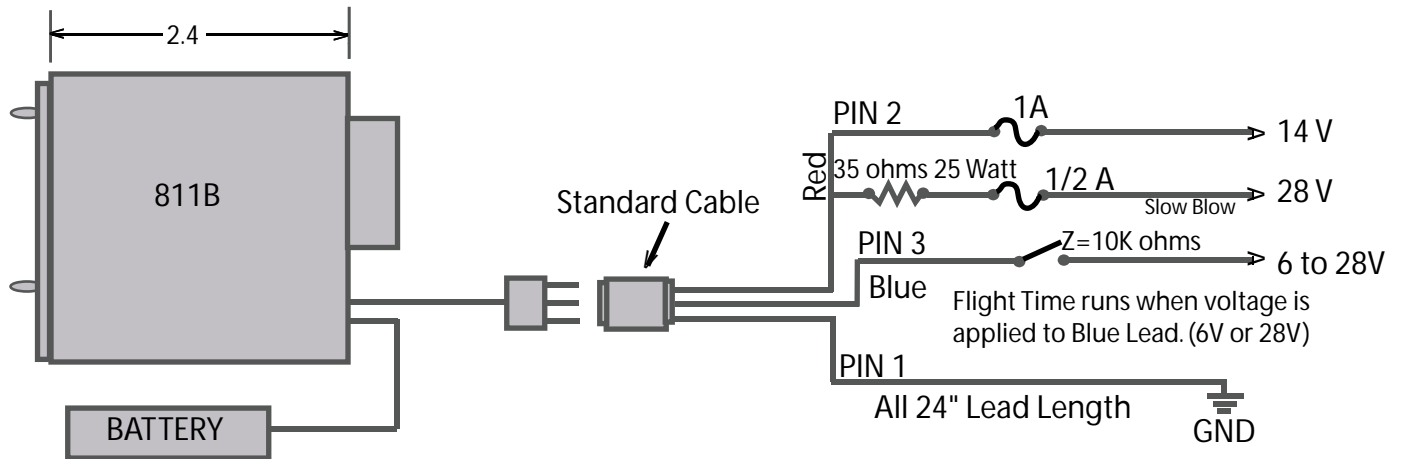
*NOTE: Position #1 will zero Flight Time only if power to the clock is off.*

2. Position #2 (Stop) will stop the Elapsed Time meter.
3. Position #3 (Run) starts the Elapsed Time meter.

## MECHANICAL

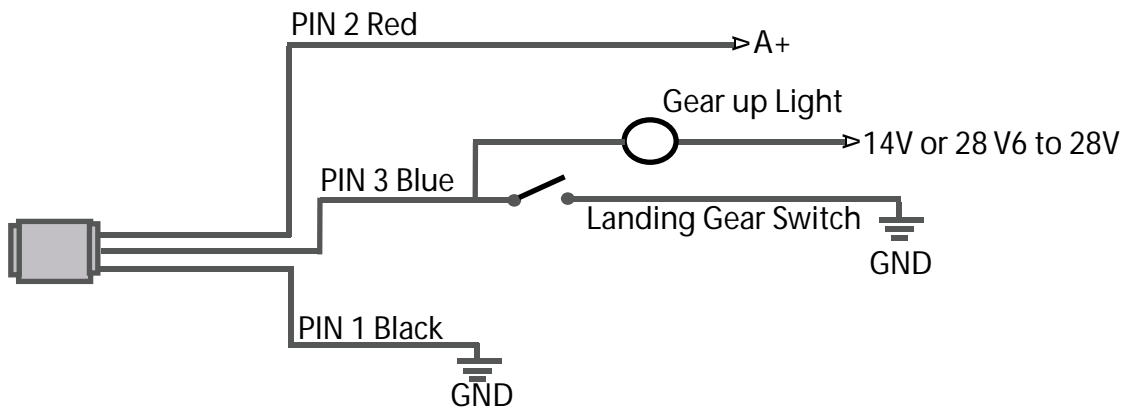


## ELECTRICAL



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

## INVERTING CABLE



## SPECIFICATIONS

- Six-digit display on all three functions
- Time function with 12- or 24-hour clock.  
Specify when ordering.
- Flight time records: 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: .001% - 40°C to +50°C
- Warranty: 1 year

## PRICE

811-B \$490.00



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