

# MB800 Digital Clock

FOR THE BEECHCRAFT BONANZA

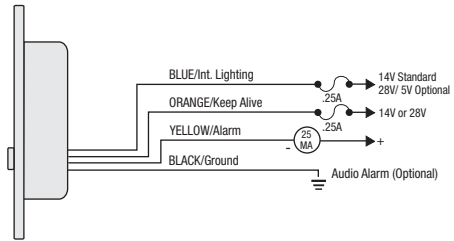
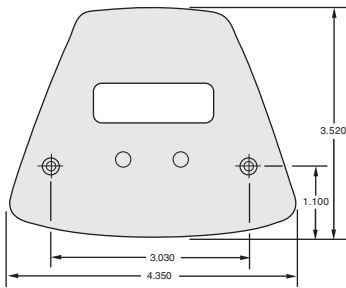


- UNIVERSAL TIME
- LOCAL TIME
- ELAPSED TIME - Count Up
- ELAPSED TIME - Count Down with Alarm

## FEATURES

- Two button control system is natural and error free. Setting operations are identical for both alarm and time setting (US patent #4,486,077).
- Universal Time is in 24 hour format.
- Local time in 12 hour format, 24 hour option when ordering
- Elapsed Time counter is from one second to 99 hours, 59 minutes.
- Elapsed Time countdown timer is from one second to one hour.
- Elapsed Time alarm is activated when countdown reaches zero.
- Alarm flashes display and has external output for optional audio alarm.
- Liquid Crystal Display has high contrast in bright sunlight and uniform night illumination. The display has an ultraviolet filter to prevent sunlight damage.





## MB800 OPERATION

The SELECT button selects what is to be displayed on the four digit window and the CONTROL button controls what is being displayed. Pressing SELECT sequentially selects UT, Local Time, Elapsed Time and back to UT. The CONTROL button starts, stops, and resets Elapsed Time when momentarily pushed. Normal operation of the MB800 cannot accidentally reset time.

### Setting UT (Universal Time)

Select UT for display in the four digit window with the SELECT button. Simultaneously press both the SELECT and CONTROL buttons to enter the set mode. The tens of hours digit will start flashing. The CONTROL button has full control of the flashing digit and each button push increments the digit. Once the tens of hours is set, the SELECT button selects the next digit to be set. After the last digit has been selected and set with the CONTROL button, a final push of the SELECT button exits the mode. The lighted annunciator will resume its normal flashing, indicating the UT clock is running.

### Setting LT (Local Time)

Select Local Time, LT, using the SELECT button. Simultaneously push the SELECT and CONTROL 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 can only be incremented by 15 minutes. LT may be switched from 12 to 24 hour format by pressing SELECT for 5 seconds while in LT mode. The display will show current hour format. Press CONTROL button to change hour format then press SELECT to exit.

## SPECIFICATIONS

- **Universal Time:** 24 hour format.
- **Local Time:** 12 hour format, 24 hour option.
- **Elapsed Time Count Up:** Starts in minutes, seconds, then hours, minutes up to 99:59 hours.
- **Elapsed Time Alarm:** Activates at zero when counting down.
- **Internal Lighting:** 230 mA at 5V, 120mA at 14V, 50mA at 28V (Specify voltage when ordering).
- **Keep Alive Current:** .004 Amps. 14V to 24V.
- **Voltage:** 12V to 30V (Specify voltage when ordering).
- **Crystal Reference:** -40C to +60C .001%
- **Warranty:** 1 year.
- **Option:** AA Memory Battery.

### Test Mode

In UT mode, hold the SELECT button down for five seconds and the display will indicate 88:88 and activate all three annunciators.

### Elapsed Time Count Up

Select ET for display. Pressing the CONTROL 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 CONTROL button again stops ET. Another press resets ET to zero.

### Elapsed Time Count Down

Select ET for display and enter set mode by pressing both buttons. The countdown timer can now be set. Entering the time is identical to UT 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 CONTROL button starts the countdown. When the count reaches zero the displays flash and the external alarm is activated. Pressing either SELECT or CONTROL will deactivate the alarm. ET continues counting up. Pressing CONTROL again will stop counting. Another press will reset to zero.