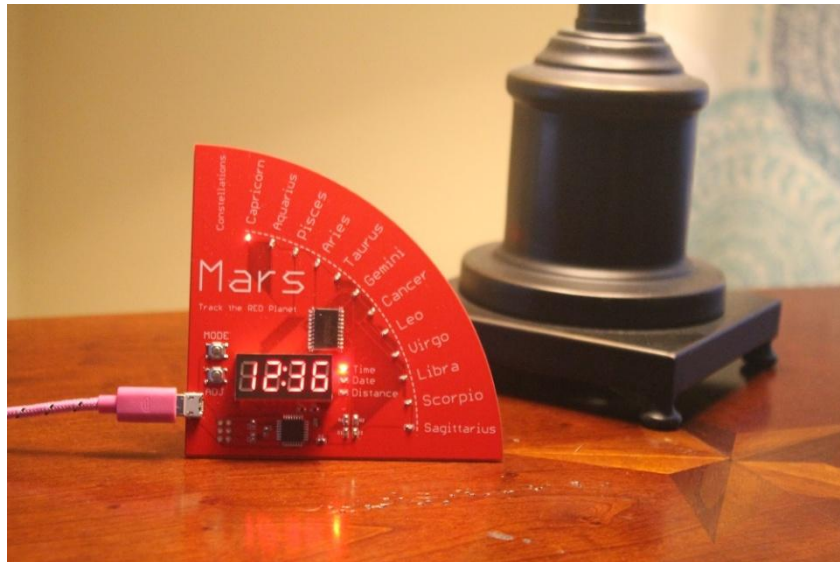


Mars Clock



Keep close eyes on your neighbor! If you are fascinated with Mars, or just want to be in the know about our solar system neighbor, this clock is for you.

In addition to telling the time and keeping track of the date, this clock will calculate the approximate position and distance of Mars and display them to you.

The distance reads out on the clock display in millions of kilometers and the position of Mars is tracked through the zodiac and displayed on the led chart.

You can set the time, and date (including year). Your clock can be set to display just the time, date, or Mars distance, or cycle between each.

To set the clock:

Press the ADJ button once. This puts you in set mode. From here, ADJ changes the current digit and MODE moves to the next digit.

First, you will set the time as a 4 digit, 24-hour time. Use ADJ to set each digit value and MODE to move to the next digit.

For example, to set 9:45 PM (2145 in 24-hour format):

- 1) Press the ADJ button to enter set mode. The TIME LED will light.
- 2) Use ADJ to set the first digit to 2. Then press MODE to move to the next digit.

- 3) Use ADJ to set the second digit to 1. Then press MODE to move to the next digit. Use ADJ to set the second digit to 4. Then press MODE to move to the next digit.
- 4) Use ADJ to set the second digit to 5. Then press MODE to move to the set the date. The DATE LED will light.
- 5) Then set the date as a 2-digit month (01-12) and day (01-31) using the same method as setting the time. Press MODE to set the year. The TIME and DATE LEDs will light.
- 6) Finally, set the 4-digit year as you have before (ADJ changes the digit, MODE moves to the next digit). Press MODE after you are done with the last digit to exit set mode.

That completes the setup.

Now the clock will show the current time and the LED (or LEDs) will be lit in the constellation that you can find Mars.

The position is approximate but quite accurate. The algorithm does not take in to account the effect of the other planets on the position on Mars (primarily Jupiter and Saturn), but this is a small effect on position. Since the transition from one constellation to another is not always well defined, there is a 10% overlap of when the constellations LEDs are lit. When you see two adjacent LEDs lit, you know that Mars is about to transit from one to the other.

While operating, pressing the MODE button cycles through the following modes:

TIME: Only the current time is displayed.

DATE: Only the current date is displayed.

DIST: Only the distance to Mars (in million kilometers) is displayed.

CYCLE: When you enter cycle mode, the TIME, DATE, and DIST LEDs will light briefly, and then the clock will cycle through each one of the above modes for about 5 seconds each. At each value, the associated TIME, DATE, DIST LED will be lit.

The clock can be powered by any phone charger or USB port using a standard phone charging USB cord (not included).

As we lean more and more toward sending manned missions to Mars, this clock will keep you connected to where our neighbor is in the universe.