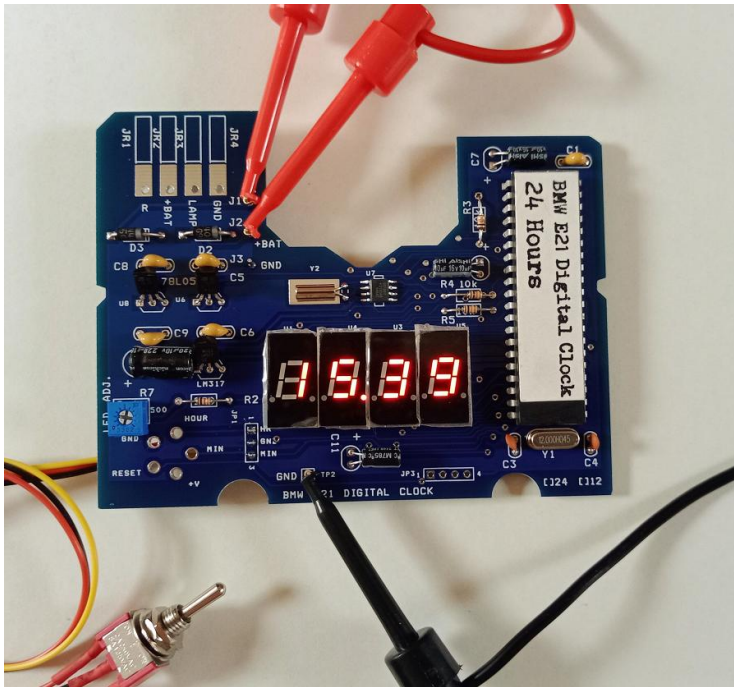


BMW E21 Digital Clock Replacement Kit

The replacement kit for BMW E21 digital clock is new design using the 8-bit microcontroller and the real time clock chip. Kit includes the toggle switch for time settings. The display is classic look and the display brightness is adjustable. Kit is available for 24 or 12 time format.

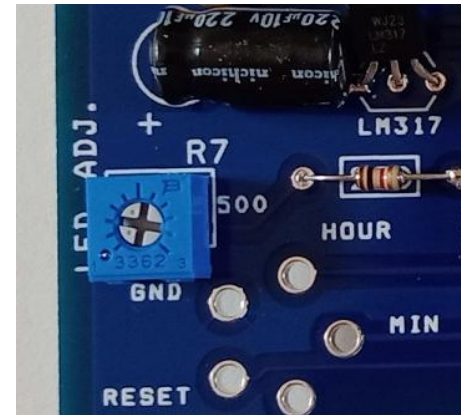


Quick test

The kit will need +12V DC power supply. Pin R and +BAT will be supplied with +12VDC. Power on reset will show E21 for three seconds. Then the clock display will show 0.00.

Display brightness adjustment

The display brightness can be adjusted by R7, blue trimmer.



Time settings

The kit includes toggle switch for time setting. Cable length is 20cm.

We can insert the 4-pin header to the on-board socket on the bottom layer.

Switch can be set in three positions.

Left-hand adjusts HOUR, and right-hand adjusts MINUTE.

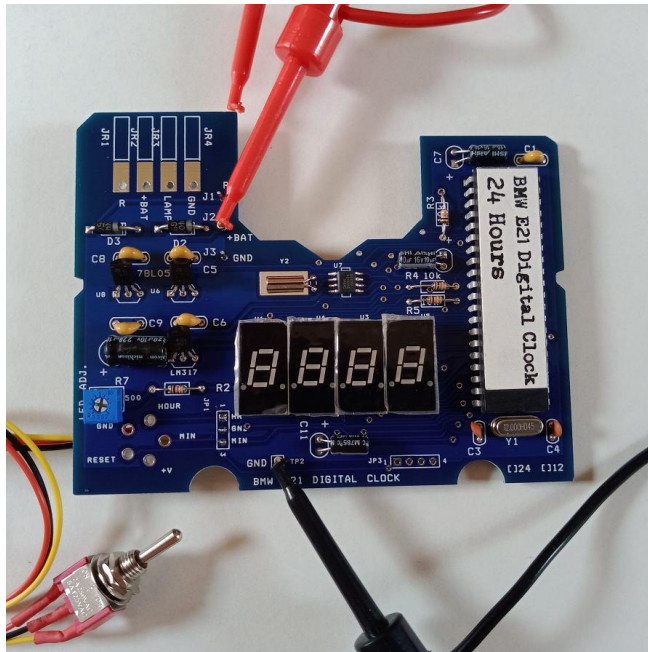
Center position is normal clock running.

Power backup testing

While the clock is running, we can remove power from R pin, (turn off the engine). The display will be OFF.

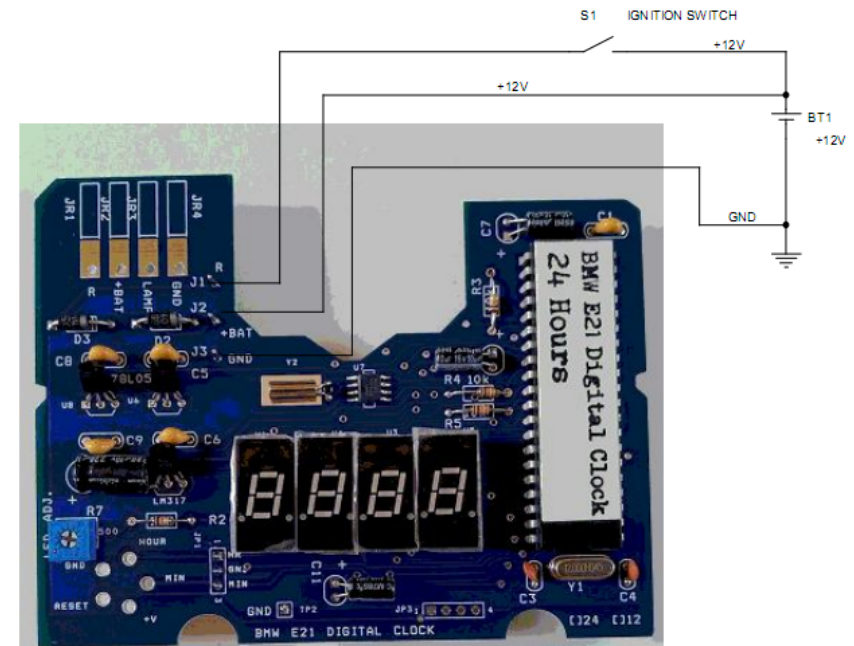
The main chip will turn off, while the clock chip will be running by +BAT power pin.

When pin R is powered again, after power on reset text, E21, the current time will be displayed.



J2 is tied to the battery. Power from J2 pin will supply to the clock chip without power interrupt. The clock chip will always running.

J3 is GND terminal.



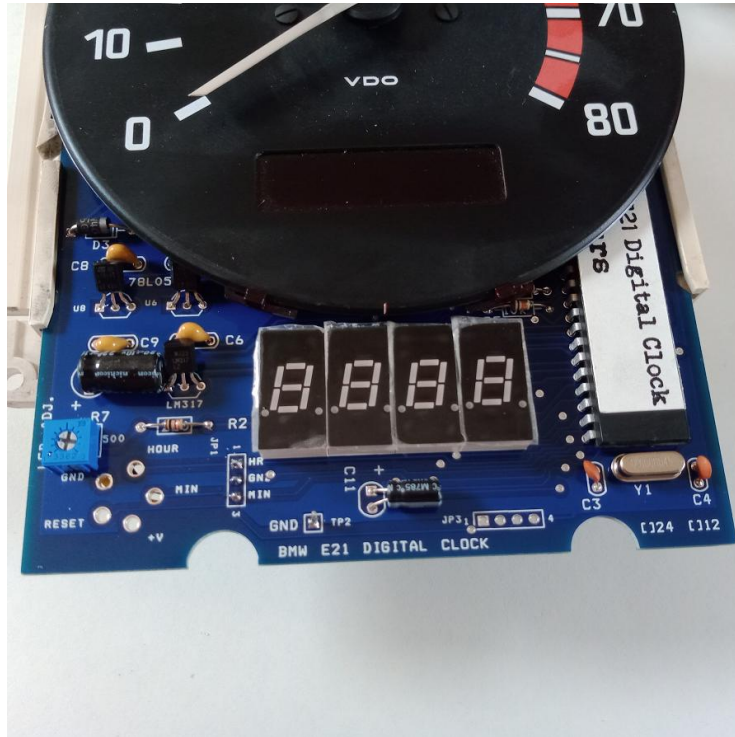
Wiring diagram

J1, J2 and J3 are optional power supply terminals.

J1 is the power from ignition switch. When car is turned off, no power for this pin.

Installation

The kit can be inserted to the RPM meter directly. The locking slot on the left and right sides provide snap lock easily.



The power supply pins R, +BAT and GND pins must be connected beforehand.

More information, please contact

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Hardware Schematic, <https://www.kswichit.net/E21/E21.htm>