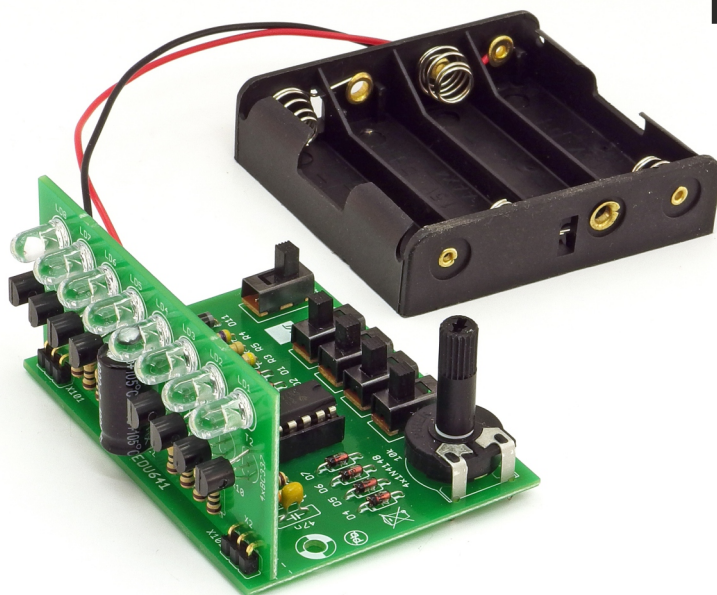




AVT EDU641



Driven by our love of the craziness of the carnival and our passion for soldering, we propose the installation of one of several 'light' kits - the Disco Strobe. It will work well not only during the winter ball period, but also at any good party.

The unit produces strong flashes of light at a rhythm set by the user. Original lighting effect was achieved by using high-brightness white LEDs. The circuit is very simple to mount and will not require any start-up procedures. Sequences of the flashes generated are determined by a set of switches. Four of them allow up to sixteen light combinations.

Specifications

- light source - super-bright white LEDs
- infinitely adjustable flash rate
- 16 light combinations
- long operation on batteries
- supply: 6 VDC [4×AA] - batteries not included
- board sizes: 32×69 mm and 61×69 mm



Caution!

Device produces very strong flashes of light. Although they are not laser diodes, looking at the diodes from a short distance should be avoided, as this can cause visual fatigue (known as glare in front of the eyes), nausea, epileptic attacks and, in extreme cases, even visual damage.

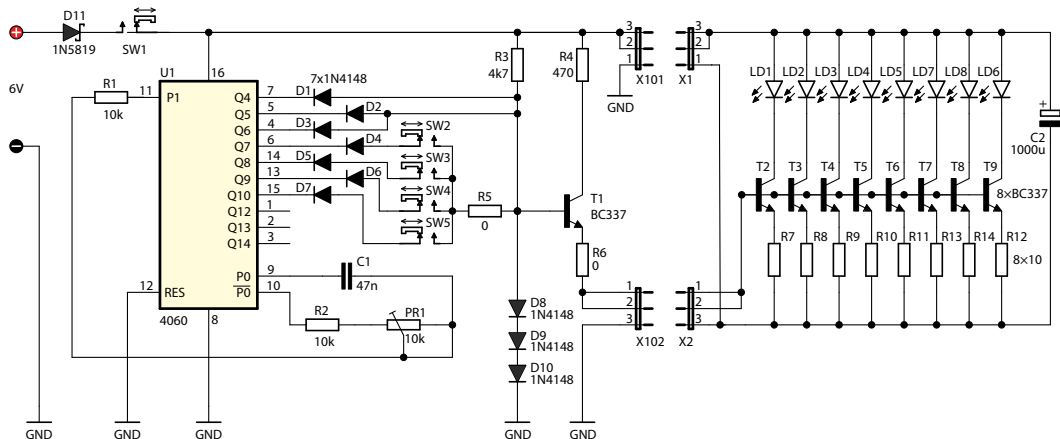


Figure 1. Schematic diagram

Mounting and start-up

Figure 2 shows the arrangement of the components on the PCB.

First, separate the boards by splitting or cutting. Protruding fragments can be grounded or trimmed to the board edge.

Solder the components sequentially onto the board, starting with the smallest ones. Once the circuit has been mounted, check it carefully for correct mounting. Check that the components have not been soldered in the wrong direction or in the wrong

places and that no soldering points have been short-circuited during soldering. The strobe rate and rhythm can be set as desired using the PR1 potentiometer and SW2-SW5 switches. It is recommended to check all 16 combinations of the switch settings.

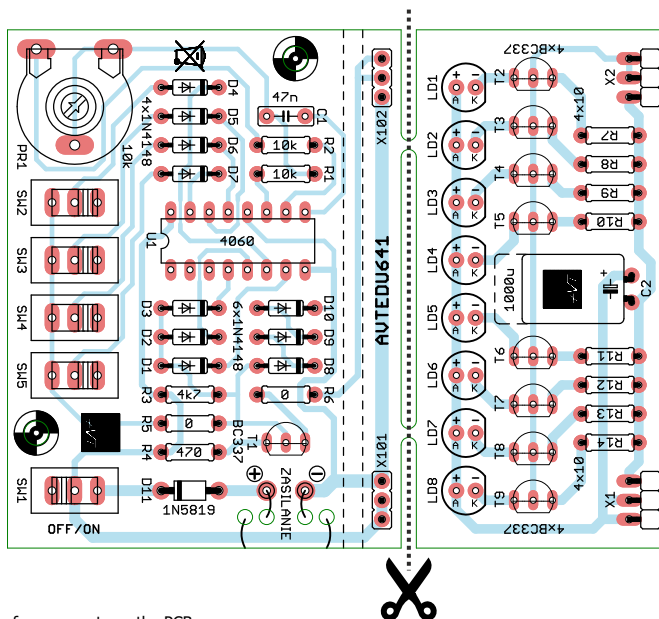


Figure 2. Arrangement of components on the PCB

Recommended mounting order:

CONTROL BOARD

- R1, R2:.....10 kΩ (brown-black-orange-gold)
- R3:.....4.7 kΩ (yellow-blue-red-gold)
- R4:.....470 Ω (yellow-blue-brown-gold)
- R5, R6:.....0 Ω (black)
- D1-D10:.....1N4148 !
- D11:.....1N5819 !
- U1:.....74HC4060 chip + base !
- C1:.....47 μF (may be marked as 473)
- T1:.....BC337 or BC338 !
- SW1-SW5:switch
- PR1:potentiometer 10 kΩ + adjustment shaft
- Battery cage 4×AA red , black ⊖

LED BOARD

- R7-R14:.....10 Ω (brown-black-black-gold)
- X1, X2:.....goldpin1x3 angle pins for boards connection
- T2-T9:.....BC337 or BC338 !
- C2:.....1000 μF ! (mounted horizontally)
- LD-LD8:LED

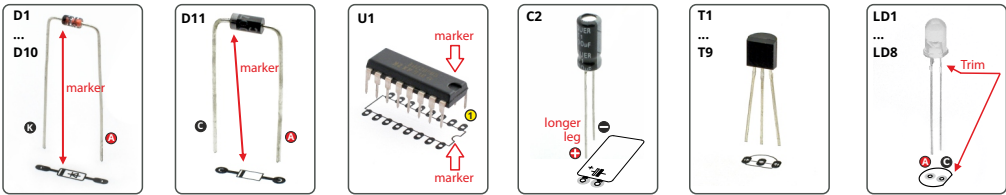



Start assembly by soldering the components into the board, in the order of size, from the smallest to the largest. When assembling components marked with an exclamation mark, pay attention to their polarity.

To access high-resolution images, download the PDF.

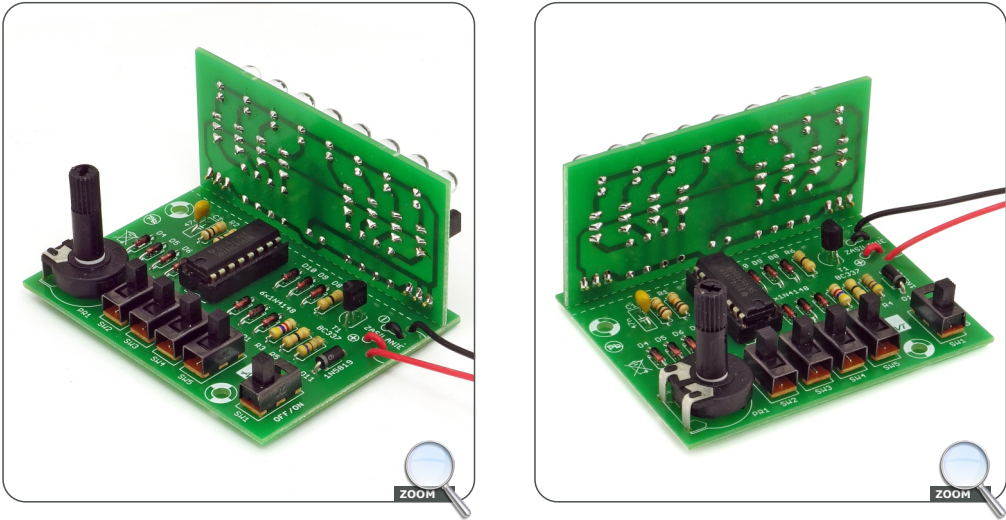


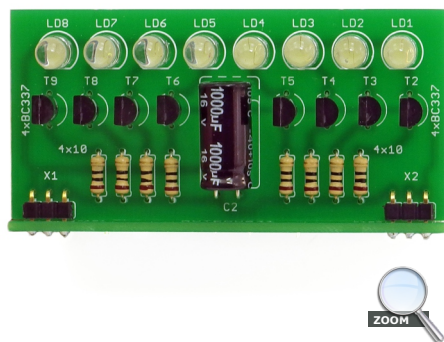
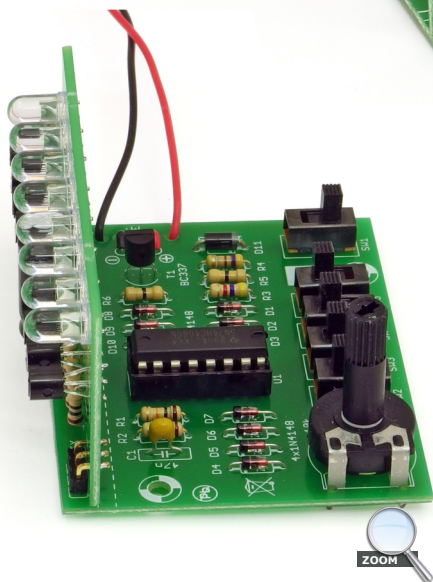
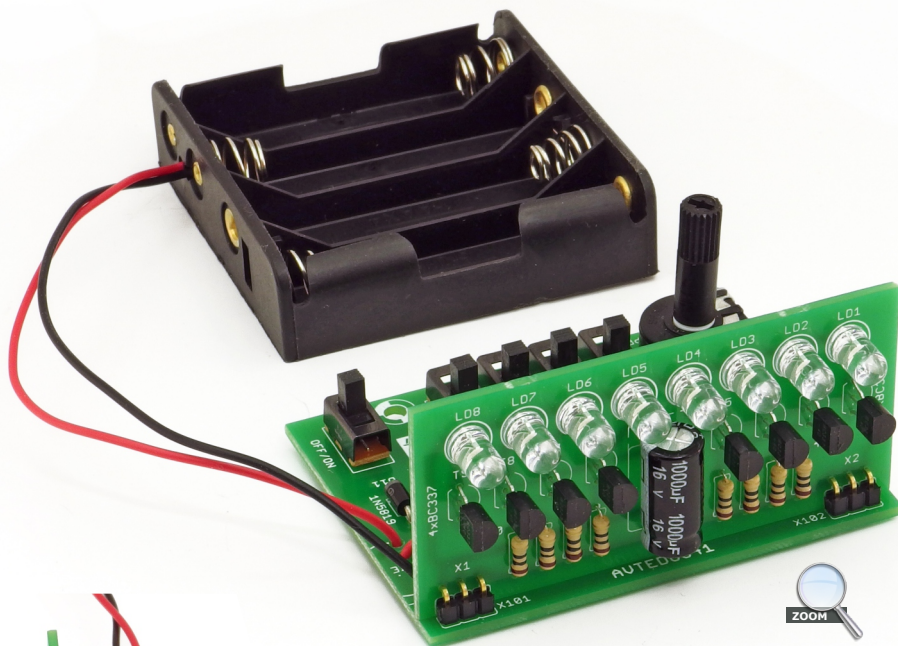
Pobierz PDF





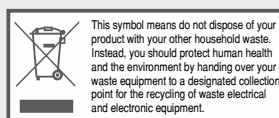
Components received in the kit may differ in appearance from those shown in the photograph. Despite this, they have the same parameters, and their appearance will not affect their operation in the circuit.





AVT SPV Sp. z o.o.

Leszczynowa 11 Street,
03-197 Warsaw, Poland
<https://sklep.avt.pl/>



AVT SPV reserves the right to make changes without prior notice. Installation and connection of the appliance not in accordance with the instructions, unauthorised modification of components and any structural alterations may cause damage to the appliance and endanger persons using it. In such a case, the manufacturer and its authorised representatives shall not be liable for any damage arising directly or indirectly from the use or malfunction of the product. The self-assembly kits are intended for educational and demonstration purposes only. They are not intended for use in commercial applications. If they are used in such applications, the purchaser assumes all responsibility for ensuring compliance with all regulations