

EK020 – Latching relay

Kit description:

EK020 is a kit with a relay that will toggle its contact when the button is pushed or a pulse is received on the toggle input. Every time the button is pushed the relay will activate or deactivate alternating. The relay can also be controlled using external pulses (L: 0-5V / H: 6-12V). The available inputs are toggle, set and reset. EK020 can be used for starting and stopping a device with a small momentary push button.



- * Supply voltage: 12VDC
- * Current draw: 40mA max. (vid 12V)
- * Switching frequency: max 2Hz
- * Contact rating: 10A / 250VAC, 30VDC
- * Dimensions: 45.7 x 35.6mm
- * Mounting holes: c-c 40.6 x 30.5mm, \varnothing 2.5mm

Assembly guide:

Before you begin mounting components, make sure the board is free from damage and scratches. Make sure all the components are included and are of correct value. Compare with the component list!

Begin mounting the lowest components and work your way up to the largest. IC sockets, resistors, ceramic capacitors and diodes go first. Electrolytic capacitors, connectors and potentiometers go last. Some components are polarized and must be mounted in the right way. Please observe the markings on the board!

Component list:

RefDes	Value	Qty.	Part.no.
CON1	5mm 1x3p	1	41016291
IN	2.54mm 1x5p	1	41001167
R1, R4, R5, R6	100 kohm	4	40811510
R2	1 kohm	1	40811310
C1	10 uF	1	40520003
C2, C3	100 nF	2	41003038
C4	4.7 uF	1	41013577
D1	BAT42	1	40311042
K1	SRD 12V	1	40230002
SW1	6x6x5mm	1	41001412
LED1	3mm	1	41004448
T1	2N7000	1	40327000
U1	CD4013B	1	40360030
U1	DIP-14	1	40410014

Schematic:

