This universal twin switcher can be used as a twin latching switcher; one latching and one non-latching, or twin non-latching switcher. Use latching function for circuits which will remain on e.g. lights, smoke generator; and non-latching for units such as horns, whistles and hooters which will only be switched on briefly. The drawing shows examples of both types of circuit. Each relay output will handle up to 3A, and you may use different voltage batteries for each relay, if needed. It requires a standard 1 to $\mathbf{2}$ millisecond positive input. Note that this unit will NOT operate from a channel which is controlled by a two-way ON/OFF toggle switch on the transmitter (often labelled "Retract" or "Flaps").

MICROCOMPUTER \& MOSFET DESIGN

| Number of switch functions | $\mathbf{2}$ |
| :--- | :--- |
| Radio control channels required | $\mathbf{1}$ |
| Latching or non latching selection | PCB switches |
| Switching points | Fixed, no adjustment |
| Maximum receiver voltage | $\mathbf{1 2}$ volts |
| Minimum receiver voltage | $\mathbf{3 . 7}$ volts |
| Maximum load current (each relay) | $\mathbf{3}$ amps |
| Output connections | Screw connectors |

 SWITCH $2=$ ON (NON-LATCHING)

Mk3 (New for 2019)
This universal twin switcher can be used as a twin latching switcher; one latching and one non-latching, or twin nonlatching switcher. Each relay output will handle up to 3 amps. It requires a standard 1 to 2 millisecond positive input and a channel operated by either a spring-centred stick, a rotary knob or a 3-way (On/Off/On) switch. It will not work with a simple 2-way (On/Off) switched channel.
Number of switch functions
2
Radio control channels required Latching or non latching selection Switching points
Receiver voltage
1
PCB switches

Maximum load current (each relay)
3.7 v to 12 volts

Unlike earlier versions of the $\mathbf{P 4 4}$, this can now be used on high voltage receiver systems, 7.4 V etc, in fact anything up to 12 V

## CONNECTION/OPERATION

Two loads with the same battery


Two loads with different batteries
 latching

The P44 has a custom 3D printed box, the cover of which is simply clipped into place and so can easily be removed. The setting of the two internal switches will depend on the type of load and the use. Example of the types of load are shown on the diagrams. Generally, any item that you wish to run for a long period (e.g. lights) should be set on latching, while any momentary function (e.g. whistle/ horn) should be set on nonlatching. The 'ON' position of each of the switches gives non-

1. Plug lead into a spare r/c channel (i.e. not steering or speed)
2. Switch on transmitter then receiver in that order.
3. Moving the stick up and down (or left and right); you will hear the relays clicking.
4. Switch off receiver and transmitter.
5. Connect to whatever load you wish to drive.

## RECOVERY SERVICE

A recovery or repairs service ensures that you will not be left with a dead unit for any reason. The service charge for this kit is $£ 13.00$ including parts (including return shipping cost in UK).

All returns should include Full Credit Card details (Name and Address of cardholder, Card Number, Expiry date and 3-digit Card Security Number)

## ACTion R/C Electronics, 1 Llwyn Bleddyn, Llanllechid, Bangor LL57 3EF United Kingdom

Driving one motor in both directions


Sound units are polarity-critical! Take care to connect the battery correctly!

[^0]
[^0]:    The small print......
    ACTion R/C Electronics guarantee all products to be free from manufacturing defects for 12 months from date of purchase. This does not cover suitability for specific applications; components worn or damaged by use, tampering or incorrect connection; alteration to original components; damage to batteries or other equipment through use; misuse, or shipping damage. Where goods are found to be faulty, the customer shall return them to ACTion R/C Electronics in their original condition and with their original instructions, packaging etc. Our liability is limited to repairing or replacing goods to their original specification and will not exceed the cost of the goods. By using the product the user accepts all liability. Where a fixed repair charge is applicable, ACTion R/C Electronics shall undertake repairs to the extent that they are judged economically viable. Where such is not the case then the customer will be offered the option of crediting the repair charge towards the cost of a new unit or having the faulty unit returned and the charge refunded (less the cost of return carriage). We reserve the right to modify this guarantee without notice.

