

3157v3: Rolling Code 2-Channel Relay Board with RESET

This product is a 2-channel version of Kit 3180, our 4-channel UHF Remote Control kit. We simply removed two of the 4 channels from Kit 3180 and used a 2-button Transmitter unit. It is assembled. **You the buyer** has to **electronically** connect the Tx unit with the Rx board by the procedure outlined in the following paragraph.

Also we have added a Reset to each channel when in **TOGgle** mode. Thus, for example, a garage door motor could be started when the **TOGgle** relay is activated then it will automatically cut off when the door has travelled its full movement and it hits a switch which resets / turns off the corresponding relay. The user does not have to stand watching the door then press the button on the transmitter unit again when he thinks it has open 'enough'.

Up to 15 Transmitter units can be connected to/learnt by one Rx unit. Connect power to the receiver board. Press the **LEARN** tact switch on the main board and then simultaneously press button 1 (the small button) of the Tx unit. You only have to do this briefly for under a second. But note it takes about **15 seconds** for the two units – the TX and the RX - to connect electronically and recognize each other. (During this 15 seconds it seems that one and only one keypress of the Tx unit will be recognised. Just disregard this. Wait the full 15 seconds until the two units have connected. Do not press the LEARN button again. Just wait 15 seconds.) Note the **VALID DATA** LED comes on when you press the tact switch.

Tx units attached to any Rx unit can be electronically **unattached** by pressing the LEARN button continuously for 8 seconds. The **VALID DATA** LED is on during these 8 seconds. As soon as the LED goes off then you know that all Tx units previously recognized by the Rx unit have now been unattached electronically from the Rx unit.

For the full details about the circuit, and a full explanation of rolling code 3180.pdf from <http://www.quasarelectronics.com/pdf.htm>. Remember this kit is 'half' of 3180. Two of the 4 relay positions in kit 3180 are removed.

Check Operation.

If working properly when you depress the small button 5V will appear at pin 6 counting from the top (non-earth end) of the PCB. Pressing the big button causes an output of 5V at pin 8. When you release the buttons the voltage goes back to zero. This 5V is used by the 4013 for latching and momentary operation. You can trace this thru on the schematic.

If you want more details about the Microchip technology behind these Tx & Rx's then go to: <http://www.quasarelectronics.com/ds.htm> and download files AN662.PDF and AN665.PDF

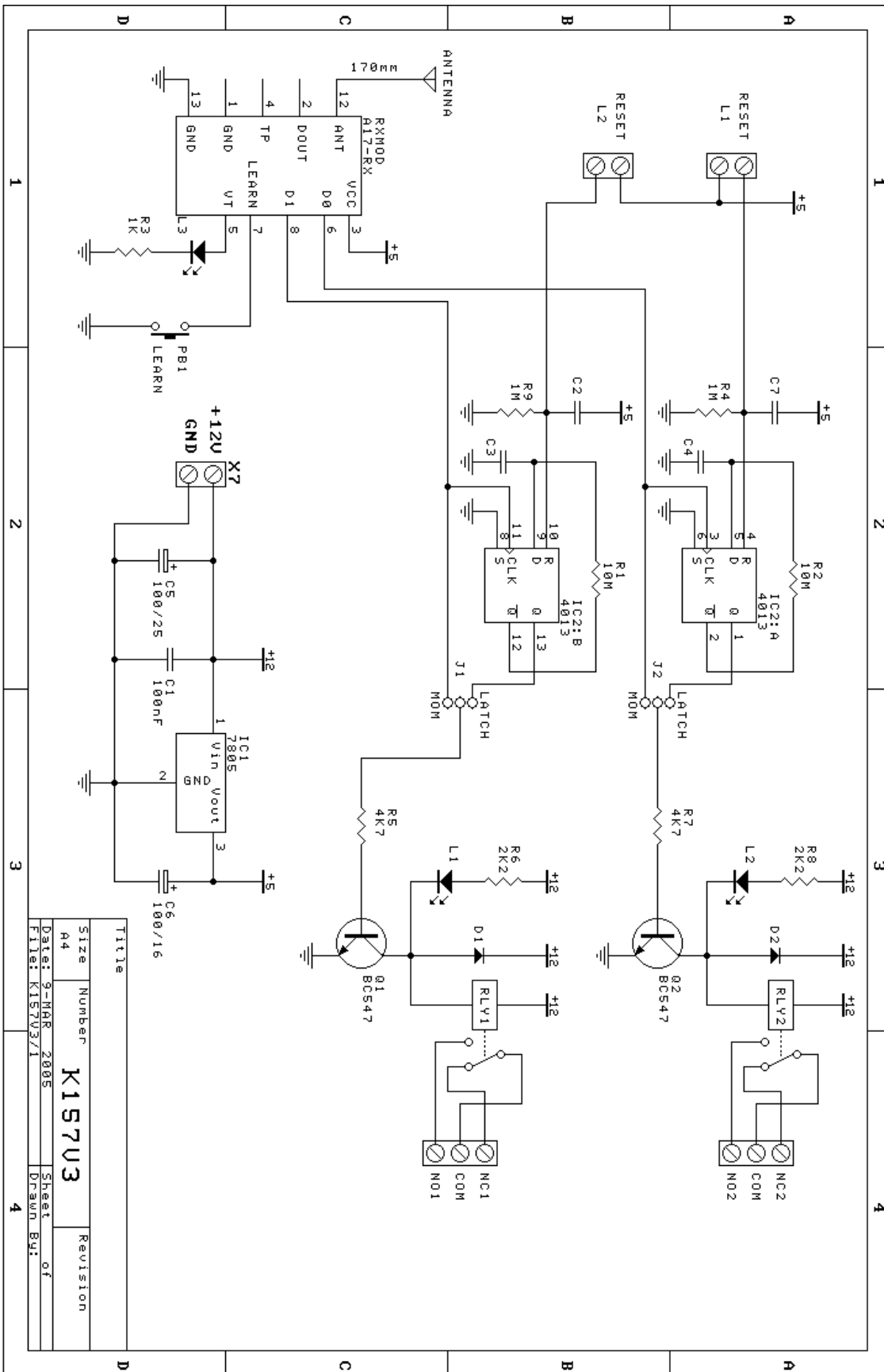
Technical details about the Automicro devices can be found on this page (file AUTOMICRO.PDF) <http://www.kitsrus.com/pdf/automicro.pdf>

We sell Tx unit (TX-3316RS) and Rx unit (RX-3302D2-15) separately as 30A17-Tx and 30A17-Rx.

Although these relays are rated 12A/250Vac the PCB tracks will not carry that current. Please do not put more than 2A through these tracks. If you want to switch higher current loads then you must jumper some wire between the terminal block pins and the relay pins.

mailto: support@quasarelectronics.com if you have any problems. Telephone Technical Support is available on 08717 177168 (please note that calls are charged at £0.75 per minute)
Also see our 10-channel UHF Rolling Code Remote Control, Kit 1381 . See the documentation at <http://www.quasarelectronics.com/3181.htm>

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