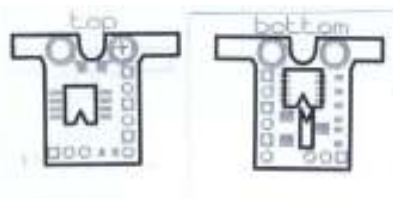
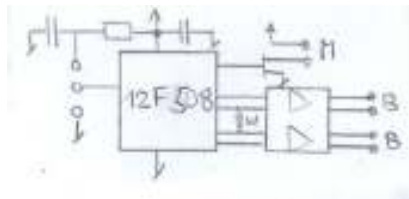


## Didel Ur3x - 3 outputs IR receiver for less than 5 grams planes

The **Ur3x** is a 0.22 gram controller with 3 pins for connecting a radio or IR receiver. **Ir3x** versions include an Infrared receiver module and weight 0.36g. The controller has two buffered bidirectional outputs and one power transistor for the propeller motor. It is perfectly suited for 1-5 gram planes.

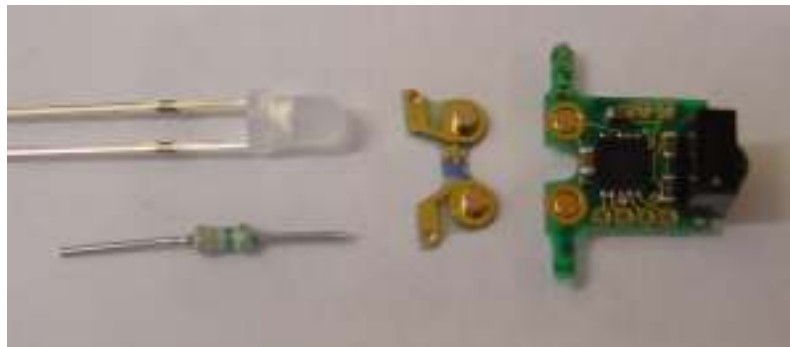
1mm pitch connectors can be soldered and add 0.10g to the weight (plus 0.08g for the male part), see <http://www.didel.com/lr/ConnKit.pdf>.



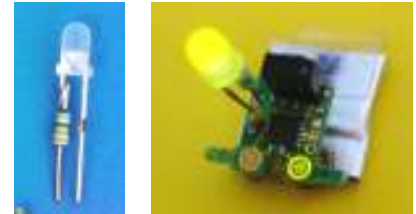
Power from 5mm Bahoma lipo or remove the magnets and put wires (save 0.05g but may add more from the wires).

Front and side view next to a 30mAh Lipo

The controller is delivered with a bicolor LED that helps testing. If no signal is received at power-up, a test procedure activates the outputs.



Solder the resistor and cut the wires at the same length. Insert in the pcb holes to test one channel at a time.



### Specifications

Module size 10x8mm, 14x8mm with the wings  
Weight 0.33g without connectors (add 0.22g for 2 connector pairs)  
Voltage: 2.5 to 5.5 Volts. Current (inactive outputs) 0.2mA  
Propeller transistor: IRLML2502,  $R_{dsOn}$  0.2Ohm @ 3V, <0.1 Ohm @5V 0.5A max.  
Actuator bridge: A3901,  $R_{dsOn}$  < 3 Ohm. 0.2A recommended max.  
Reception distance: 5 to 20 meters depending on transmitter field of view and reflections.

### Software

**Iz2** compatible with PicooZ transmitter <http://www.didel.com/lr/Iz2.pdf>

**Ur3** compatible with Ir transmitter (Didel, Tanaka) or any base radio receiver, see <http://www.didel.com/lr/UrSoft.pdf>

The Ir6x (0.45g), see <http://www.didel.com/lr/Ir6x.pdf>, supports up to 6 channels, and is good for special ultralight designs requiring up to 4 bidirectional channels and two bidirectionals. A patched version allows for 4 unidirectionals and 2 bidirectionals channels.