



videoREC Manual

IR remote controller for video cameras



videoZOOM (above) & videoREC (below)

Servo Operation

Connect the 3pin connector to a standard RC Receiver Servo output:

- +ve Red
- ve Black
- servo Yellow/white

Locate the LED close to the camcorder IR receiver, and enable the IR receiver on the camcorder (see the camera manual).

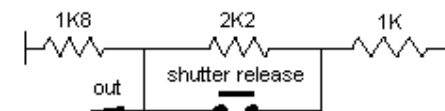
Movement of the RC Transmitter stick from one extreme to the other will trigger the camera to start or stop recording (see section on joy-switch on the following page). To prevent false triggers the stick must be held over for at least 200mS. We recommend the stick is returned to "off" after operation. Noise on the RC system can lead to false triggers, this is only a nuisance on stills cameras, but on Camcorders it could "stop" recording at a critical moment. So for this type of device "speed of operation" is made secondary to "security of operation".

Switch Operation

Alternately (or additionally – as both will work together) you can short the blue wire to the black wire on the servo connector to trigger the camera. In this mode the servo connector should be used to supply between 3 and 5.5V to the unit. The blue wire can thus be connected to the trigger source(s) of your choice.

Joy-switch

RC systems vary widely so for maximum reliability it is recommended that the joystick on the transmitter be replaced with the circuit shown.



This can be built or bought ready-made as an option to the **gentled**. If the shutter triggers when the button is released, rather than pressed, then simply reverse the connector.

Specification

Supply Voltage	3 to 5.5V. Range will reduce below 4V. (Absolute maximum voltage, 6.5V)
Supply Current	Maximum 30mA pulses when LED activated.
Operating Range	500mm, with unit facing camera receiver, range decreases if located obliquely to receiver.
Servo Pulses	Pulse threshold between 1.5 and 1.7mS, nominally 1.1mS is off, 1.9mS is on. Pulses should be less than Supply V + 0.7V.
Safe-trigger	Servo pulse must be long for >200mS to trigger
Weight	4 grams including 200mm wires & connector.

Diagnostics

Make sure that the camera IR is activated. This is often controlled via the shutter or timer control – read the camera manual.

Use a switch between the black and blue wires rather than the servo input, as this will distinguish between servo and IR problems. Use the joy-switch rather than a joy-stick to maximise the servo operation and decrease it's susceptibility to noise.

If all else fails, use a digital camera as an IR detector (yes, most digicams detect IR - check it with any remote control). The **gentled** will be visible (if a little fainter than the remote) through the camera LCD display.