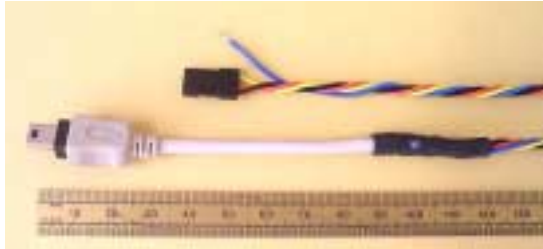




CHDK Manual

USB shutter controller for CHDK



This device allows Canon cameras with the CHDK enhancement to be remotely triggered by a RC receiver. If your camera doesn't already have this enhancement then more information and scripts are

available at <http://www.gentles.ltd.uk/gentled/chdk.htm>

Servo Operation

1. Connect the 3pin connector to a standard RC Receiver Servo output: +ve to Red, -ve to Black, servo to Yellow/white.
2. Connect the USB connector to the Camera USB port.
3. Enable the CHDK script on the camera.

Movement of the RC Transmitter stick from one extreme to the other will trigger the camera (see section on joy-switch on the following page). After each activation there is a 1 second wait before operation continues. If the stick is held in the *on* position photos will be taken every 5 seconds.

Blue wire Operation

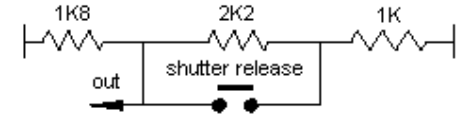
An alternate operating mode can be achieved if the blue wire is connected to black or battery -ve. In this mode the input to the USB is maintained as long as the joystick is held in the on position.

The mode can be changed during operation, there is no need to cycle the power.

This mode is more useful for experienced users who are writing their own scripts and may want to use the external input for operations other than simply triggering the shutter.

Joy-switch

RC systems vary widely so for maximum reliability it is suggested 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. Alternately an "auxiliary" channel on the transmitter could be used that has a switch rather than joystick.

Some modern RC transmitters can program the switches and joy-sticks – off should be as low as possible (around 1mS), on should be as high as possible (around 2mS).

Specification

Supply Voltage	3 to 5.5V. Operation is not guaranteed <3V). (absolute maximum voltage, 6.5V)
Supply Current	Average 1mA
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.
Weight	9 grams including 250mm wires & connectors.

Diagnostics

Make sure that the camera is a Canon, it has been enhanced with CHDK, see <http://www.gentles.ltd.uk/gentled/chdk.htm>

Use the joy-switch, or a switch on your RC transmitter rather than a joystick to maximise the servo operation and decrease its susceptibility to noise.