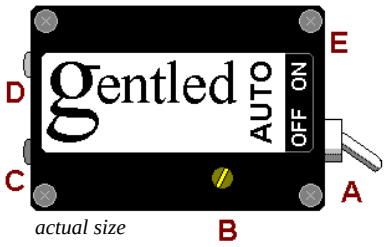
AUTO Manual

IR timer for stills cameras



actual size

gentLED-AUTO is an intervalometer or timer (40x28x18mm) for IR cameras and the PHOTO on Camcorders. It is ideal for simple remote operation and triggers the camera from every 1secs to 30minutes.

A: OFF/ON switch, **B:** Variable timer adjustment, **C:** IR LED to trigger camera, **D:** red LED to check operation, **E**: timing link – Range 1, 2,and 3, accessed by removing top cover.
A Velcro pad is included as a way of attaching the unit when in use.

Connecting the battery

Remove the cover (that says **gentLED-AUTO**) by levering it up at **A**. Remove the protective paper insulator. To replace an exhausted battery, carefully slide the battery out of the holder, then carefully insert the new cell, **+ve side UP**, in the holder. Replace the lid (making sure **B** is visible) & secure with the 4 screws supplied.

Operation

Move the OFF/ON toggle to ON. Red LED **D** will flash a *code* (described later) indicating that the shutter signal has been transmitted from IR LED **C**. Then red LED **D** flashes once every time the shutter signal is sent.

To change the repeat rate, adjust the screw-set at **B**. This is a 22 turn adjustment with a slipping clutch at the end. The time between triggers varies from 1 to 35 seconds as turned clockwise, about 0.7 turn / sec.

For longer timings up to 30 minutes you need to change the link inside the unit, located beside the OFF/ON switch and marked *link* (**E**).

Remove the cover (as per the instructions in *Connecting the battery*), and identify the *link*. It is stored with only one pin connected (range 1), move it so the two pins closest to the OFF/ON switch are shorted for 5seconds to 5.5 minutes (range 2), and the two pins furthest from the OFF/ON switch for 0.5 to 30 minutes (range 3). In this final mode devices for Cameras (not Camcorders) send two triggers, 2 seconds apart, this wakes some cameras up if in *sleep* mode, and allows bulb photography for astronomy, by repeated periods of exposure set by the intervalometer time delay.

To help adjust these longer timings, first experiment and measure without the *link* then the two longer modes are 10x and 60x longer respectively.
The very first red flash after switching on sends a 3 part code as follows:
a: 1, 2, or 3 short flashes indicating what range the link is set to.
b: 0, 1, 2, or 3 long flashes indicating tens of seconds delay on range 1.
c: 0 to 9 short flashes indicating units of seconds delay on range 1.
e.g. 1 short, 2 long, 3 short is Range 1 with adjustment set to 23seconds.

Specification

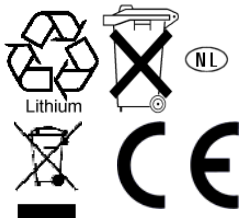
Supply Voltage	CR2032, life is ~200hours at 10 second interval, DON'T DISPOSE OF IN HOUSEHOLD WASTE
Supply Current	Maximum 20mA pulses when LED activated.
Operating Range	500mm, with unit facing camera receiver, range decreases if located obliquely to receiver
Timer Operation	1 second to 30 minutes, variable, in 3 ranges.
Weight	18 grams, 0.6oz, including battery.

Diagnostics

Is the red LED flashing? Check the battery is correctly inserted and not exhausted. Make sure that the camera IR is activated. This is often controlled via the drive or timer control – read the camera manual. Use the lowest delay time to make fault diagnosis easier. Remember some cameras may take several seconds to take another picture, and thus only registering every other trigger from the **gentLED-AUTO.**
If all else fails, use a digital camera as an IR detector. **gentLED-AUTO** is visible (if a little fainter than a standard remote control) through the display.

Regulatory

This product has been thoroughly assessed and tested for safety and EMC emissions.



At the end of the products life, you have the right to return it (freight at your expense) for disposal according to the WEEE Directive.

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