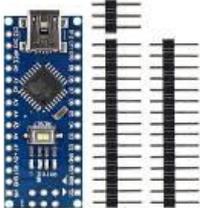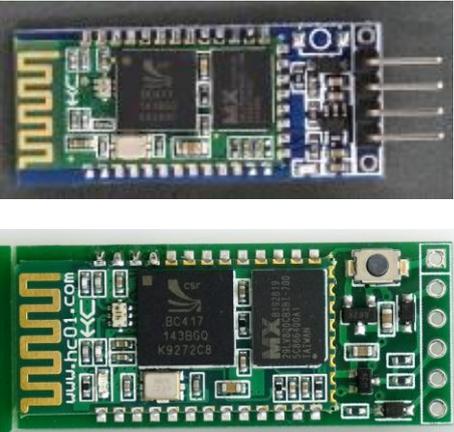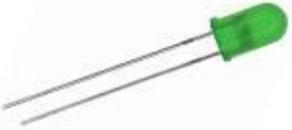# dropControllerV3 Parts List

Here is the BOM or parts list for the dropControllerV3. The list only includes the electronic components.

If you are making a perf-board version add the perf-board and some wire. Single core wire wrap wire is good for perf board prototypes. Use a thicker wire for the 12/24v VCC and 12/24v ground connections.

	1 x Arduino Nano I prefer to buy boards that do not have the pins pre-soldered and then not connect the programming pins.
  	1 x HC-06 Bluetooth module Try to get the official HC version – has the HC logo screen printed on the board and a blue LED at the top left. If you prefer to lay the HC-06 flat, get the modules without pins.
	1 x DC to DC step down power supply; either a variable (top) output or a fixed output (bottom). Variable - Output should be set to 8v to 9v. Fixed – I use 9v output convertors. The buck convertor should be able to handle 24v in. Slightly higher is always better. The two opposite top can handle 36v in.
	4 X 1 pin 2.54 male header (used to attached the buck converter and may or may not be required) Pins can be separated/removed from strips.

	2 x 15 pin 2.54 single row female headers. Used to hold the Arduino Nano. You can use the 40 pin version and cut to the required size. This means one end will be jagged though.
	1 x 4 pin 2.54 single row female header Used for the HC-06. If you have a regular HC-06 with verticle pins already attached, the pins on the header can be bent 90 degrees allowing the header to be attached flat. Not pretty but works OK.
	1 x 5mm Yellow LED (3mm also OK)
	1 x 5mm Green LED (3mm also OK)
	1 x Barrel jack power socket Type A: 5.5 mm OD, 2.1 mm ID I prefer the basic DC-05 barrel jacks.
	6 x RCA-RCJ-04x - RCA/phone socket I started using red, yellow, and white but have been moving to using black.
	4 x PJ-307 - 3.5mm stereo socket. If you are building your own version of the dropController then any 3.5mm socket will be suitable.
	5 x 4N25 (or 4N35) optocoupler
	5 x 6 PIN DIP Socket (for the optocouplers).

	6 x IRL540N or IRLZ44N mosfet
	7 x 1N4007 diode
	7 x 330 Ohm resister 6 x 220 Ohm resister 6 x 10K Ohm resister 1 x 1K Ohm resistor 1 x 2K Ohm resister ¼ Watt is fine.