R/C Receiver

The **R/C receiver** module (only in SCROV-10 R/C Snap Rover) contains a radio receiver circuit, a specialized radio decoder integrated circuit (W55RFS27R3C or equivalent), and other supporting components. Its actual schematic is complex and looks like this:

![R/C Receiver Schematic]

Its Snap Circuits connections are like this:

**R/C Receiver:**
- (+) - power from batteries
- (−) - power return to batteries
- LBUT - left button function (active low)
- RBUT - right button function (active low)
- BYP1 - low frequency bypass
- BYP2 - high frequency bypass
- LF - left forward output (active high)
- LB - left backward output (active high)
- RF - right forward output (active high)
- RB - right backward output (active high)
- ABC switch - selects radio channel

Motor Control IC

The **Motor Control IC** module (only in SCROV-10 R/C Snap Rover) contains 16 transistors and resistors that are usually needed to control the motors. Its schematic looks like this:

![Motor Control IC Schematic]

Its Snap Circuits connections are like this:

**Motor Control:**
- (+) - power from batteries
- (−) - power return to batteries
- LF - left forward control input
- LB - left backward control input
- RF - right forward control input
- RB - right backward control input
- L+ - left forward motor drive
- L− - left backward motor drive
- R+ - right forward motor drive
- R− - right backward motor drive

This module is needed because the R/C receiver module cannot provide enough power to operate the motors directly. The transistors inside also control the direction the motors spin.

R/C Transmitter

The **Remote Control Unit** (in all Snap Rover models) contains a radio transmitter circuit, a specialized radio encoder integrated circuit (W55RFS27T3B or equivalent), and other supporting components. Its actual schematic is complex and looks like this:

![R/C Transmitter Schematic]