Squelch circuit schematic

Squelch is a circuit that acts to suppress the audio (or video) output of a receiver in the absence of a sufficiently strong desired input signal. This squelch circuit is simple and has an amplification for sufficiently large to be incorporated into an assembly of automatically control from a wide range of radio receivers. The input signal derived from the RAA circuit from a receiver is tempered by the network R1-R2-P1.

The signal from the mouse's P1 is picked frm the entry of inverses operational amplifier A1, connected as comparator. At the non-inverted entrance is applied a voltage reference of 200 mV, through voltage divider R9-R10.

The output signal of A1 is applied to a Schmitt trigger circuit, A2, through low-pass network C2-R2. This fiter is required because we dont want weak signals as noise and other interference to affect the proper functioning of squelch circuit. Capacitor C3 removes the sharp zone of signal from A2 exit, making that the effect of amplification control to be more hearing agreeable. Then, the signal output of A2 is applied in the transistor T1 base through voltage divider R7-R8.

The exit with empty collector of the squelch circuit can be used for suppress AF signal output of the receiver. The current consumption is small, less than 10 mA, so it can easily be incorporated in almost any receiver whose source of power can cover this consumption.

