

Toggle PTT

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To : TECH@WW

From: PA3BNX@PI8SHB.#NBO.NLD.EU (New Apr 06)
Hello All,
Subject: Handsfree ptt-switch for mobile use.

Using a vox is not nice in a car because it goes transmitting when it hears sounds.

Keeping a ptt switch pressed while driving & steering is also unsafe.

That's why I decided to make a large toggle switch on the dashboard with a Red 5mm flashing PTT led & a Mic gain control.

Construction of toggle switch

I made from double clad PCB about 3 x 6 cm & a microswitch as a nice toggle switch. I did solder a small hinge to the PCB & tinned box. And I mounted the microswitch in the metalbox & only the handle pin is pushed when the PCB piece is pushed. I did painted it red hi.
So I have a nice big easy to push PTT switch.

Circuit diagram

I have made a small metalbox with a large pushbutton (S1) on it.
And a big bright 5mm led.
The pushbutton is connected to a toggle circuit.
The output of the toggle circuit is connected to a watchdog circuit which drives a PTT transistor to switch the transceiver, & also the LED flasher circuit.
Use a 5 mm high bright led so you see it very easy flashing when transmitting without having to look at the transceiver.

So push S1 & PTT is on for maximal 3-5 minutes & the led flashes. After 3-5 minutes the watchdog switches off the mobile set from transmitting.
(use 100-220uF).

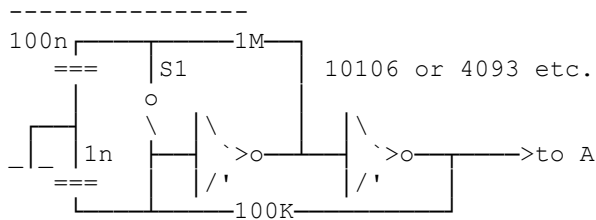
So if something happens your rig is not any more transmitting a carrier for hours.

Mount the small box some where on the dashboard next to the steering wheel so you can easy see the led & push the S1 Switch.

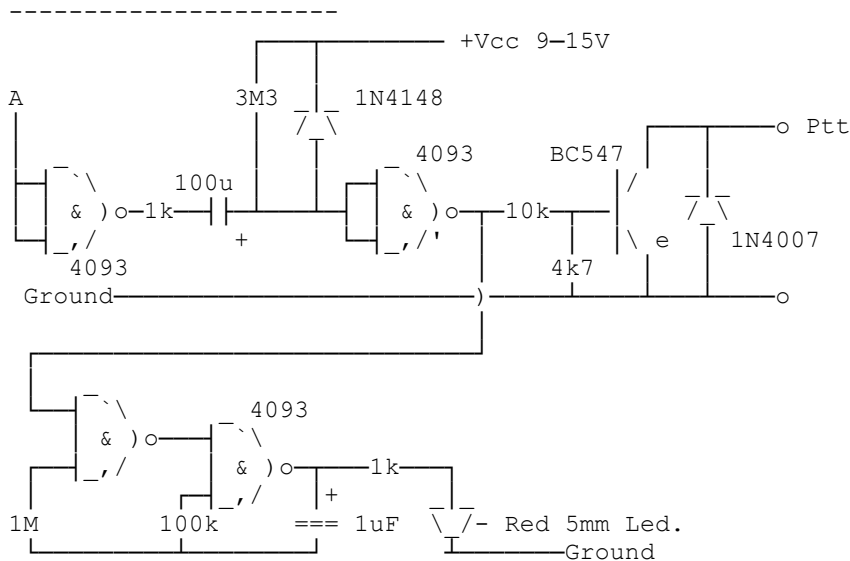
Further I mounted a small electret at the sunscreen for getting the sound.

I also mounted a small mic-preamp with a gain potentiometer in the ptt switchbox so I can adjust the audio level when driving.

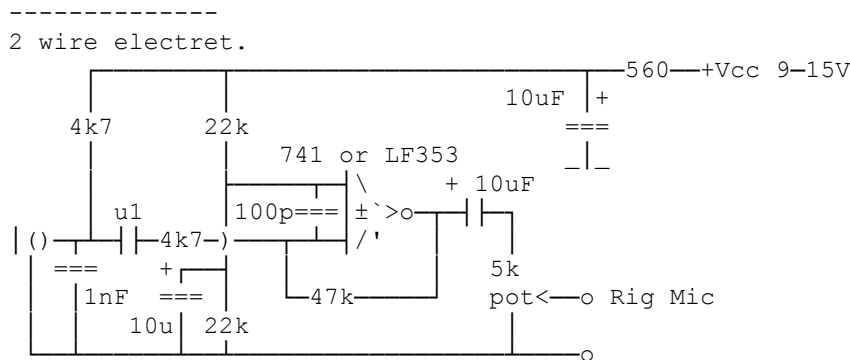
PTT toggleswitch



Watchdog & led flasher



Mic-amplifier



Gain = about 10x

I did not wrote the pin numbers of the ic's to it yet.

73's from PA3BNX@PI8SHB.

Y don't U send an interesting bul?

73 de G8MNY @ GB7CIP