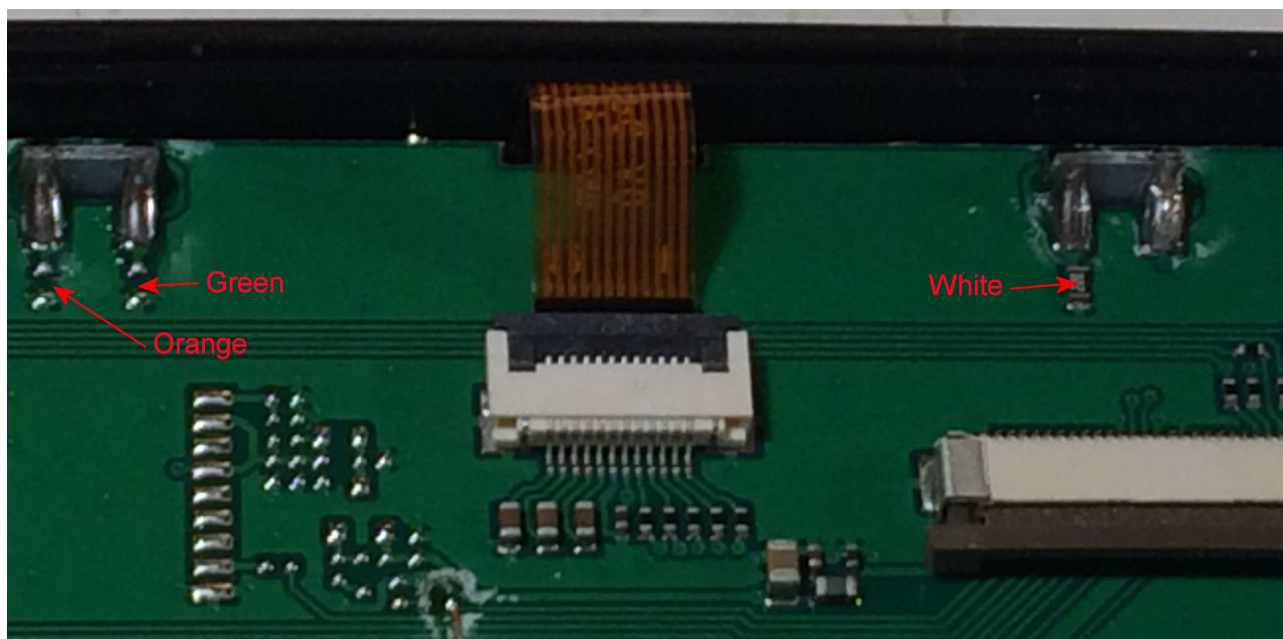## MD-9600 Screen Backlight Modifications.

The standard screen backlight on the MD-9600 is white in colour and very bright. Several people have commented that this makes the radio too bright when fitted in a vehicle at night.

Whilst TYT are proposing to modify future radios to improve this there remain a few things that can be done to existing radios. This does involve changing resistors on the front panel PCB and will need skills in surface mount soldering. As with all such modification you do this at your own risk.

The LCD screen fitted to the radio actually already has three different colour LEDs fitted. White, Green and Orange. The standard radio has a 22 ohm resistor fitted for the white LED but the Green and Orange LEDS have no resistors fitted. All LEDS are fed from a common supply which is controlled by the backlight timer in the radio settings.

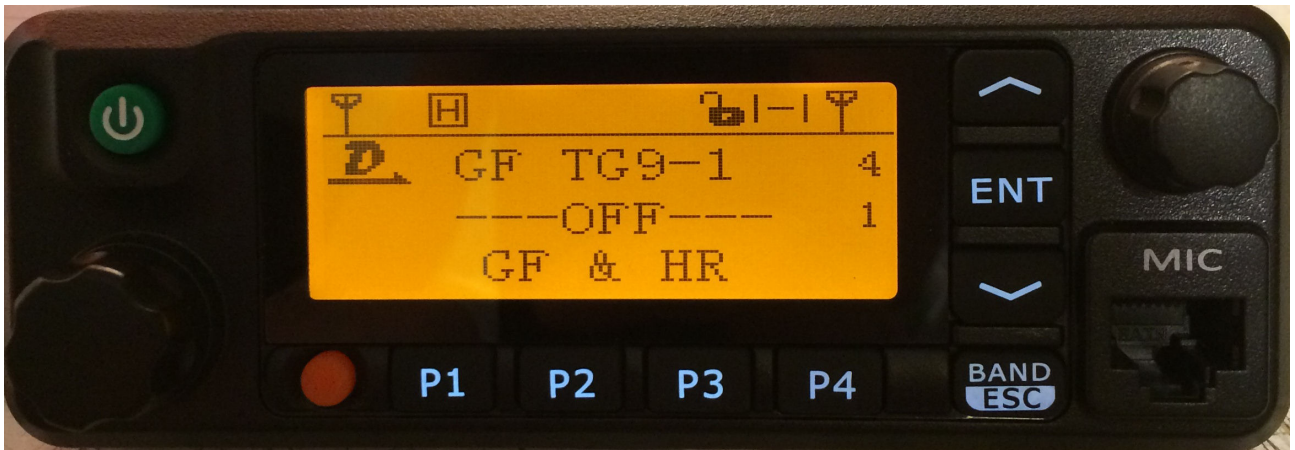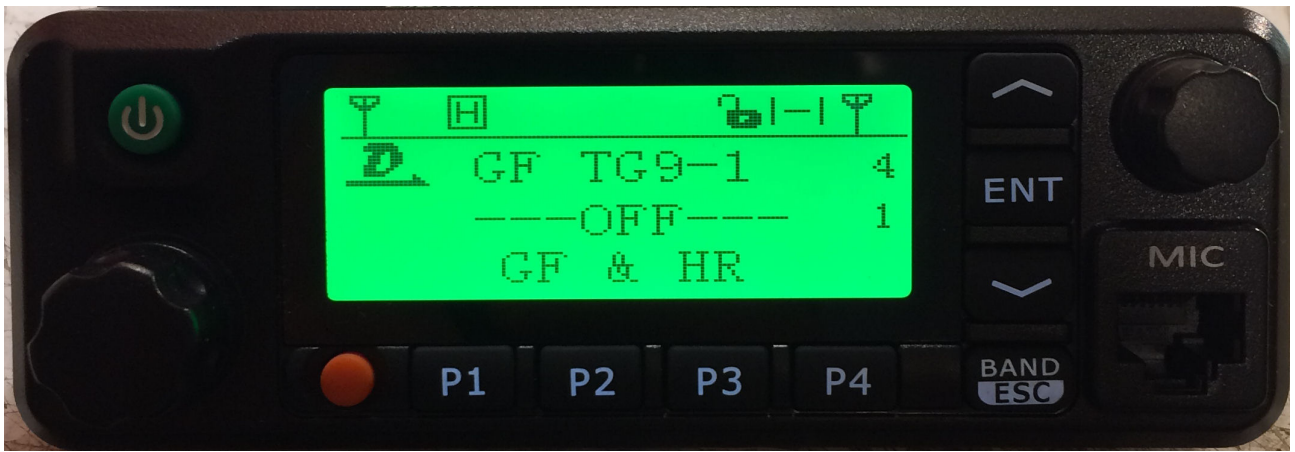So there are several options...

1. Reduce the brightness of the white LED.

The standard resistor fitted is 22 ohms. Changing this to 120 ohms reduces the brightness of the white LED. The fitted resistor is a surface mount size 0402 which is very small. There is enough room to fit a larger 0804 size or even a small wire ended resistor.

2. Change the backlight colour. By disconnecting the original resistor fitted to the White LED and installing a resistor for the Green or Orange LEDs the backlight colour can be permanently changed. A 120 ohm resistor gives a reasonable brightness display.
The resistor for the white LED can be disconnected by making a small cut in the track next to the resistor. This allows it to be reconnected in the future with a blob of solder.

The current rating of the LEDs is unknown so you should avoid using resistors of too low a value. 120 ohms gives a reasonable brightness, you could go higher in value to reduce it more or lower in value to make it brighter. I would suggest not going below 68 Ohms for the green and orange LEDs to be on the safe side.

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