

## **Richard & Clare's Nissan X-Trail - Stereo Upgrades**

### **Tweeters...**

Friday 12th November - Did some tinkering with the stereo (finally)... and installed an old pair of Pioneer TS-T22 tweeters (which I've had lying around for more years than I can remember) into the location where they come standard on the Ti model (corners of the dash). Not sure if the Ti has custom brackets under the grilles to mount the tweeters, but a bit of double-sided tape works wonders...



Step 1 - remove grille by pulling towards self and up slightly. Don't panic as the panel is designed to flex abit to be removed easily.

Once you've got the front hooks out, pull towards yourself some more until the lower clips become free.



Here you can see the two lower clips, and the hooks at the front.

This is one of the lower clips which is helpful to know the location of



Step 2 - If you look down the hole into the dash, you'll see the factory wiring loom with the tweeter plug and some silver tape holding it in place so it doesn't rattle around under the dash...



(Same as last image, but viewed from abit further away)



You need to cut to silver tape carefully with a sharp knife so there's abit more cable to play with when you strip the wires. You also need to trim off abit of the black shroud over the two wires so they can be spliced into.

Note that this is the left-hand-side location, with wire colours blue (positive), and black with white stripe (negative).



Step 3 - Turn the radio off if you haven't already done so.  
You can either chop the plug off (not recommended) or strip back  
some of the insulation  
(as you can see, there's not much room to work in, so it'll be as  
close to the plug as possible).  
All the extra stuff in there is the components for a crossover I had  
already made years ago...



Solder and tape or heat-shrink over the connection  
(you'll need to feed the heatshrink on before you join the wires  
together, of course!).  
Step 4 - Repeat Steps 1 to 3 for the right-hand-side tweeter



(This photo is the same as previous, but was taken through the windscreen glass)



The colours for the right-hand-side are orange with silver dots (positive), and black with red stripe and silver dots (negative).

Final step is to put the grilles back - there is no image for this as it's just the reverse to removing them - put grille back into position, sitting level but slightly backwards of it's original location, then slide it forwards towards the windscreen...

After installing Jalal's tweeters, I can confirm that Series 1 X-Trail's also have the same wiring loom, colours, but was taped up in a slightly different location to my Series 2... And the grille covers come off a lot easier, too!

There are many brands of speakers out there, and the best recommendation would be to listen to some different brands in stereo shops to see what type of sound you're after - there's a lot of difference between different brands and different models!

A crossover blocks out low frequencies from getting to the tweeter. Crossovers are probably not essential in low-powered situations where the tweeters are powered from a head-unit, but highly recommended if powered from an outboard amplifier. Instructions on how to build a crossover can be found in the back of Jaycar/Dick Smith Electronics catalogues, or search the net.... The use of a crossover actually makes the tweeters quieter than if no crossover was used at all. The crossover I made allows frequencies above about 5kHz through - a bit on the high side, but more relaxing to listen to, and also more protection for the tweeters. Changing the value of the components changes the crossover frequency. From memory, components for both tweeters cost less than about \$30. If you're really stuck with crossovers.