

Fitting DNM In-Cable HFTN's

- 1) A stack of three pcb's make up the in-cable HFTN, the central component carrying pcb, the component cover pcb and the cable clamp pcb.
- 2) The in-cable HFTN is marked at one end (on the component cover pcb) with arrows and the words "to plug", this end of the HFTN must face the plug.
- 3) The centre pcb (with components) has imprinted into the copper a +ve symbol at both ends. This identifies the pathway through the HFTN that must be connected to the positive (red/hot) conductor of the cable.
- 4) There are two versions of the In-Cable HFTN, balanced and unbalanced. The component cover pcb identifies the type.
- 5) The balanced HFTN has filter components in both signal paths, the line marked +ve is the positive signal line and the other unmarked line is the return line. The ground lines within the balanced signal cable should be made to bypass the HFTN. In this way only 2 HFTN pcb's are needed for each balanced cable, one at each end.

Soldering

The DNM In-Cable HFTN is supplied in this form. The components cover cover pcb and the component carrying pcb are supplied permanently fixed together. A separate single layer pcb clamps the cable providing strain relief. Two M4 nylon screws and nuts hold the cable clamp to the centre pcb.



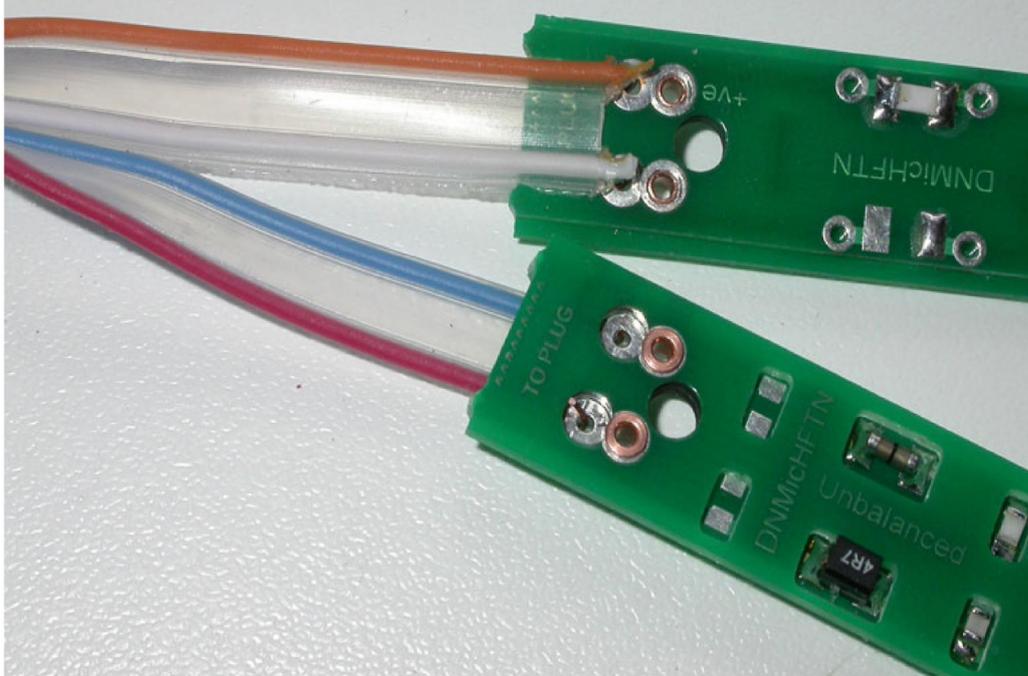
Undo the two nylon screws/nuts to separate the cable clamp pcb as shown.



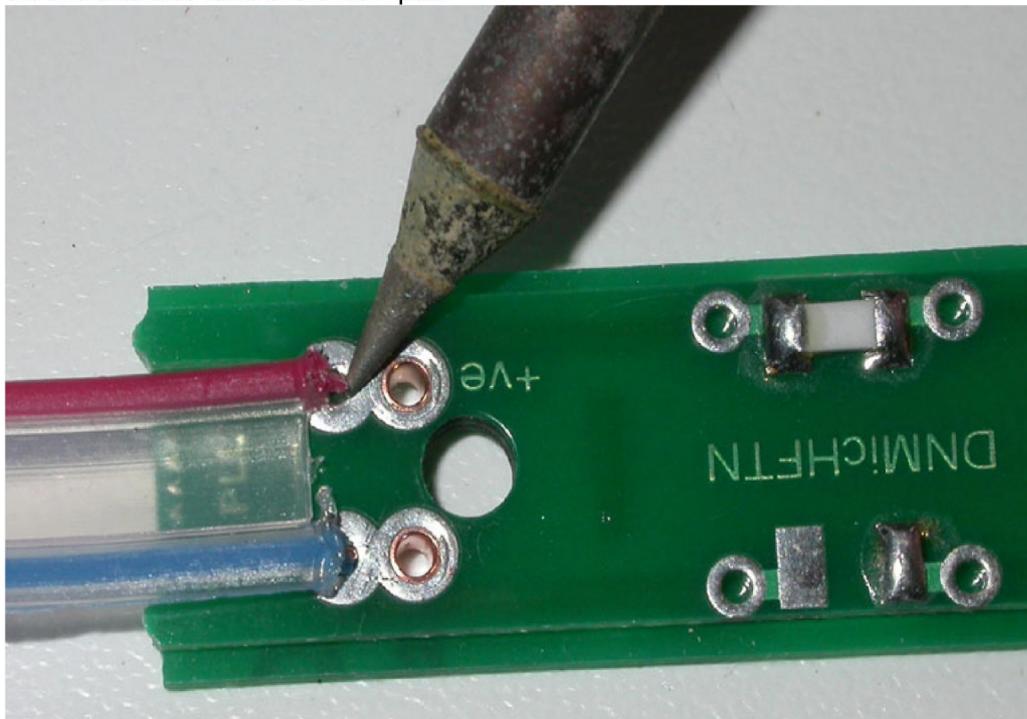
Note the position of the HFTN relative to the plugs. The end marked "to plug" must face the end of the cable where the plugs are fitted.

Cut the cable as shown in the Installation Details document (attached). Separate the cable's coloured insulation over a length of 5mm. Strip the insulation but do not use mechanical wire strippers. Use heated wire strippers or a soldering iron (set to 300 deg C) to soften and remove the insulation. Mechanical wire stripper stretch and damage the thin copper conductors.

Solder the conductors into the HFTN pads putting the ribbon into the gap in the main pcb as shown for the orange/white cable in the photograph below. Repeat the process for the red/blue ribbon with the HFTN turned over to allow engagement with the cable ribbon.

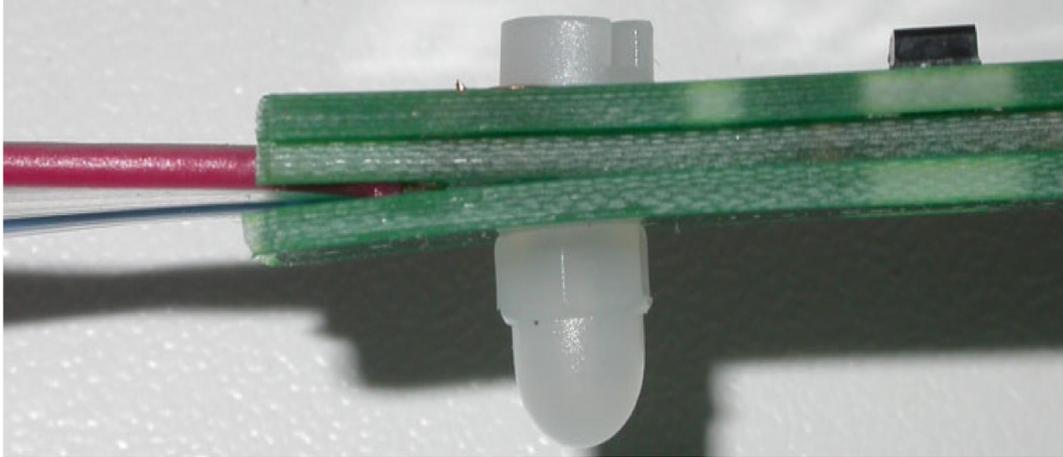


Solder each conductor to its corresponding end pad on the HFTN main pcb. The diameter of the conductor will lie on the surface of the pcb but the bulk of the insulation material will lie between the two extended forks of the main pcb.



Final Assembly

The photograph below shows how the clamp pcb will distort at each end when it is attached to the main pcb. This distortion can be eliminated by squeezing together the distorted ends whilst re-applying heat for about two seconds to each soldered joint. This will soften the cable insulation so that it forms to the shape of the fork in the pcb assembly which will allow the pcb's to lie flat together.



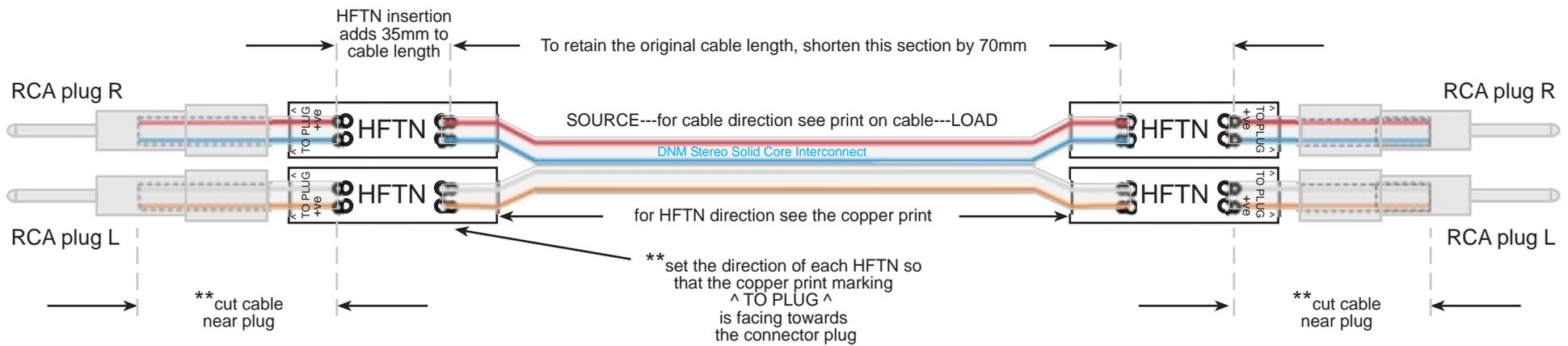
NEW-- the In-Cable HFTN by DNM Design

Installation details

A new In-Cable HFTN (high frequency termination network) is now available for use with DNM interconnect cable (new and old types). The In-Plug HFTN needs to be fitted by DNM Design, but any user able to solder can upgrade to the In-Cable HFTN themselves.

The DNM HFTN's (four for a stereo cable) are placed near each end of the cable, two at each end. The interconnect cable is cut near to each plug, the cable is prepared and the copper conductors are bared for a length of 5mm. The copper conductors are then inserted into the four available pads on each HFTN.

Each DNM HFTN must be inserted the right way round at both ends of each cable, close to the end - as shown below **

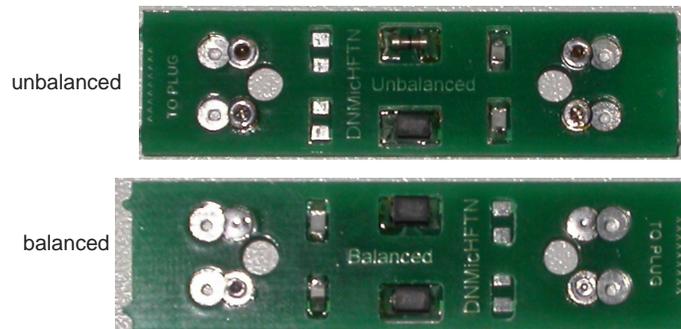


** Cutting the cable

** for RCA/phono plug cut the cable 35mm from its end (inside the plug)

** for DIN plug cut the cable 70mm from its end (inside the plug)

The in-cable HFTN is supplied as shown below.
The in-cable HFTN is available in balanced and unbalanced form



after the DNM interconnect cable has been soldered to each end of the HFTN, a cable clamp plate is fitted using the supplied screws and nuts to act as a strain relief.