**Head Stage construction:**

**Materials**

- 3 13-pin right angle SAMTEC connectors, long pin
- 7 13-pin M-F straight SAMTEC connectors, short pin
- Dental acrylic
- Teflon spray
- Small piece of fiberboard or cardboard

Remove pins from one 13-pin straight SAMTEC. Place two right-angle SAMTEC pieces parallel to each other with the fiberboard between them, and glue in place. The board needs to be at least half the thickness of the SAMTEC pieces to allow the chips to both slide on the pins comfortably. Be sure that neither the board or the glue gets above the level of the bottom of the pins, as it will compromise the connection of the chips onto the pins.

Arrange the SAMTEC with the pins removed perpendicularly between them and the third right angle SAMTEC and glue in place. Again, be sure not to let the spacer or the glue get above the level of the bottom of the pins.

Spray Teflon spray into a small beaker. Spread onto all pins of all 3 right angle connectors with a cotton swab dipped in the Teflon. Slide M-F straight SAMTEC connectors over all six sets of pins to protect them from the acrylic. The Teflon spray will allow them to be removed afterwards.

Turn over, mix up dental acrylic, and spread on bottom. Try not to get too much on the protective connectors. A little can be removed, but too much is a pain.

Turn back to pins pointing up when dry, and spread a thin layer of acrylic on the top of the spacers. Again, not too thick so as not to block access to the pins.

When dry, break off excess acrylic with diagonal cutters and exacto knife, then remove protective straight SAMTEC pieces with large black pliers. Should slip straight off – careful not to bend the pins, especially on the top where the preamp chips go.

Of course, the best guide is to look over the completed example head stage at the front of the workshop.