

Below are links for downloading/viewing kit manuals which contain the assembly instructions, diagrams, and a testing and using section. Each manual also includes a design analysis.

This general Kit Assembly Tips page includes details which will help to ensure the successful completion of a kit:

Kit Assembly Tips

<http://www.paia.com/manuals/docs/KitAssemblyTips.pdf>

P9700S Overview

<http://paia.com/manuals/docs/PTman-doc/P9700Soverview.pdf>

Manuals:

9700 MIDI2CV8

<http://www.paia.com/talk/viewtopic.php?f=6&t=67&start=0>

MIDI2CV8 v3.0

<http://paia.com/talk/viewtopic.php?f=6&t=626>

9710 VCA

<http://www.paia.com/talk/viewtopic.php?f=6&t=64>

9720 VCO

<http://www.paia.com/talk/viewtopic.php?f=6&t=65>

9730 VCF

<http://www.paia.com/talk/viewtopic.php?f=6&t=66>

About the changes you'd like to make...

VCO LFO rate decrease – no known changes here, but it has been observed that resistances affecting the rate and the lower end of the same can be such that it ceases to fluctuate, or, will not go lower without changes beyond the cv determining resistance.

VCF Fc control range increase – resistor connecting with this potentiometer can be decreased for more control range; however, the design intent was for this control working to center or bias the control inputs and modulation section influence. Patching the modulator output back to the Gate-trigger input will latch it at a high level and the Modulation Amount (as VCF Fc cv) will then work as a wide-range Fc adjuster.

This PT post describes the addition of a resistor in each filter section which works to keep signal levels through the sections below critical points, which when exceeded can result in a feedback condition. <http://paia.com/talk/viewtopic.php?f=22&t=687>

The potentiometers which are parts of the time determining RC networks are 5M. Greater valued ones aren't so common, but it is the lower resistance settings that affect fast times. To change the 'feel' of the changes at near ccw minimum settings, the simplest change (retaining the cw long times) would be to substitute a smaller "charge" capacitor, perhaps with a switch selection.