Perhaps the best way to go about this project is to build everything as far as possible in modular form using unbalanced inputs and outputs. The idea is to build all these units in one box with separate inputs and separate outputs and you decide how you want to connect them, whether in series or in parallel and you can also use your mixing desk to mix them. We could even consider to build an extra mixing section onto the unit itself if necessary.

Note that if you want me to use balanced inputs and outputs not only do they cost a lot more and take longer to build but in most cases are unnecessary unless you are using twenty foot or more cables between the unit and the patch-bay. Also, there is a school of thought that balanced lines are not good for sound.

1. INPUT STAGES AND REVERB DRIVER



* This preamp is not designed to produce extensive amounts of distortion, but a crunchy kind of sound with a gradual smooth overdrive edge to it.

2.PARAMETRIC BASS EQU - The person this EQU was first designed for was a dub/reggae engineer.

This is a very sharp band-pass filter/booster that gives an adjustable boost of a maximum of 26dBs in the range of frequencies from approx 40 - 400Hz. This circuit also creates phase shifts in very narrow bands of frequencies which (subjectively speaking) introduce an echo effect in certain frequency settings. Also, at lower frequency settings if the shift control is rotated whilst the unit is being driven by drum and bass loops, the result in sound will be as if the bass is moved from one side of the room to the other.



- 3. PARAMETRIC MIDRANGE very similar to 2. but for the midrange frequencies approx. 200Hz to 3000Hz.
- 4. PASSIVE 3 WAY EQU containing an extra gain/distortion stage.



This EQU is passive so it does not affect the sound coloration of the tube. There is some interaction between bass and midrange control also midrange and treble control, but no interaction between bass and treble control.

Note on distortion.

Basically there are two types of distortion – even and odd. Even is the more musical type, and odd is the more harsh and crunchy type that suits drums more. I have yet to decide how exactly we are going to mix these together so that you have the choice to choose what type of distortion you prefer.

5. A REVERB RETURN VALVE PREAMPLIFIER with a REVERB level control that will produce the reverberated signal to be fed onto a channel of your mixing desk.