Signal Processor Routing

Each SL 611G module contains three separate signal processing devices:

- The four band Parametric Equaliser
- The High and Low Pass Filters
- The Dynamics section which comprises a compressor/limiter and expander/gate.

These processors can be used in the Channel or the Monitor signal paths. Seven buttons are used to determine where each processor will be placed in the signal chain. The following diagrams show the various possible combinations.
The first two examples show that the Equaliser and Filters are normally treated as a single unit, which may be switched into either the Channel or Monitor path. All these diagrams show input and fader selections for the MIX status. Note that the Channel Input Section always feeds the Channel signal path and the Monitor Input Section always feeds the Monitor signal path.
Note that the Filters follow the Equaliser.
The SPLIT Button always splits the Filters away from the Equaliser and places them directly after the input section. This allows the Equaliser to be placed in the Monitor path and the Filters in the Channel path.
The Dynamics section can also be switched to either the Channel or Monitor path.
The Equaliser may be placed in the Channel path and the Dynamics in the Monitor path.
The Dynamics section may be placed pre or post the Equaliser in the Channel using the CH IN or CH OUT buttons.
Using the SPLIT button, the Filters may be placed pre-Dynamics and the Equaliser positioned post-Dynamics in the Channel.

It is also possible, using the SPLIT button, to place the Filters in the Channel path while the Equaliser and Dynamics sections are in the Monitor path, although this is not shown. Note that the Dynamics section always follows the Equaliser when they are both placed in the Monitor path.
Access is also provided to the level sensing sidechain of the Dynamics section. The Filters may be placed in the sidechain with the Dynamics section in either the Channel or Monitor path. Frequency dependent effects such as stressing or de-essing are thus easily achieved. This is also useful for filtering out unwanted signals when gating. For example, when gating drums, the cymbal frequencies can be filtered out of the sidechain signal to prevent the gates on the drums from opening when the cymbals are played.
The Equaliser may be placed in the Channel, the Dynamics in the Monitor and the Filters switched to the sidechain input.
The Dynamics section can be 'keyed' from an external signal by selecting either CH IN and MON or CH OUT and MON. The key signal is taken from the Monitor Input pre-fader, so patching into the Group Monitor Input or Tape Monitor Input will access the sidechain. As the Monitor Input can pick up the module's Group Output (i.e. Module 21 can monitor Group Output 21) signals can be routed to the module's Group via the Routing Matrix and be selected to the sidechain input with the READY GROUP button. This application, where a module's Dynamics section is keyed from another module, is covered in more detail in the applications guide.