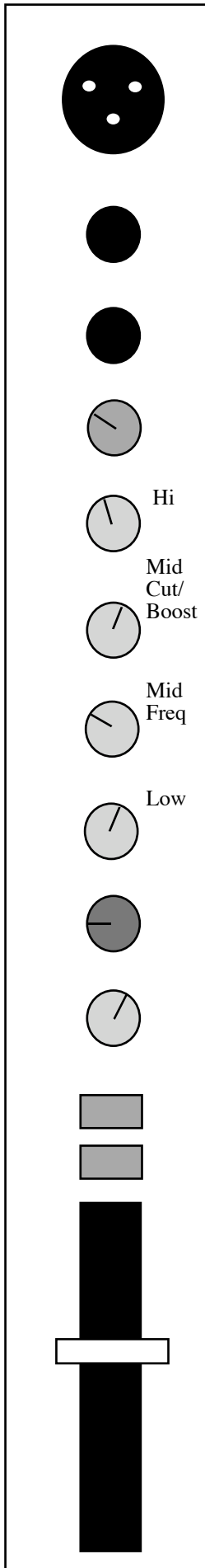


A channel on a small mixer



Microphone XLR input. This is where you connect your mic. Some models such as condensers require phantom power. Most mixers have this. This is a balanced connection that helps to minimise noise and hum.

Jack input. Connect keyboards, guitars etc here. These connections usually accept balanced or unbalanced connections.

Insert. Using an insert cable, connect processors here eg compressors, noise gates and de-essers. The cable is typically a stereo jack split to two mono jacks.

Gain. Used in conjunction with the PFL switch (see below), this sets the level of the incoming signal. Your aim is to obtain the best **signal to noise ratio** and to avoid **clipping**.

EQ. This shapes the tone of the signal and may be **fixed** or **swept**. The fixed hi and low on this mixer would be similar in function to the treble and bass on a hi fi.

Our example has a swept mid. Notice there are two dials. The lower control selects the frequency that you wish to alter whilst the top dial cuts or boosts that frequency.

This is a highly useful function for shaping, say, a snare drum sound or for softening a vocal part.

Practice is the key. Try routing different sounds to the mixer and seeing how the EQ affects their character and tone.

Auxiliary (Aux). If you have an effects unit such as a reverb or delay connected to the **sends and returns** of your desk, then the auxilliary controls the amount of that effect that is applied to the channel. You may, for example, want lots of reverb on a vocal and just a little on a snare. Mixers usually have several auxiliaries.

Pan. This places the signal within the stereo field. If turned hard left, the signal would only be heard in the left speaker. When mixing, pan is vital for giving each sound its own space in the mix leading to greater clarity and detail.

Mute. This silences the channel.

Solo. This allows you to listen to the channel in isolation but with all of your eq and other settings applied. Solo is highly useful for identifying problems with individual sounds ... pops, clicks, hum etc.

Pre fade listen (PFL). This is often on the same button as solo. PFL allows you to listen to the signal before the fader or any other control ie the raw unaffected sound. Used in conjunction with the gain control, PFL is vital for setting the optimum level for the incoming signal. Care should be taken to achieve a strong signal whilst avoiding clipping (distortion). The master section of the mixer will have a control that lets you select solo or pfl for this button.

Fader. This sets the volume of the channel in relation to the other channels.