WHY DO MIXER CONTROLS HAVE SUCH WEIRD NAMES? (part 4)
By Bruce Bartlett

For example, "pad". In normal use, a pad is a thick cloth or sponge that cushions a blow to prevent damage. In audio, a pad is a circuit that reduces a mic's signal level to prevent distortion. If a microphone is "hot" or has a high sensitivity, it can produce a voltage that is strong enough to cause distortion in a mic preamp built into a mixer. A flashing CLIP light in your mixer indicates distortion: a gritty sound.

Suppose you have miked an instrument and the musician is playing it loudly. If you see the CLIP light flashing in that mic's channel in your mixer, you could push in the PAD button. That will soften the mic signal so that the mic preamp doesn't distort, and the CLIP light goes out.

A better solution is to turn down the GAIN TRIM knob in that mic's channel. GAIN TRIM or GAIN is the amount of amplification in the mic preamp. Turn it down just until the CLIP LIGHT goes out. If you can't make the CLIP light turn off by turning down the GAIN TRIM, switch in the pad.

If you use a pad when it isn't needed, that can create a noisy signal.
Another type of pad is an inline attenuator. You connect it between a mic and an instrument amp input. If your mic signal is so hot that you can't turn up the amp volume very much, purchase a mic pad and plug it in. Here are two:

Whirlwind IMP Pad
Pearstone IMA-1030 adjustable mic pad

The Bartlett Bass Mic and Banjo Mic are especially hot or sensitive, so they would benefit from a mic pad plugged into your instrument amp.