



ALPS APPLICATION NOTE

Microphone Processing

with PodBlaster or ALPS Levellers.

Many confuse the centrepiece in your studio to be the complex, impressive looking mixing desk - they are sorely mistaken as it is in fact the humble microphone. Mixers can come and go and the audience would not notice, but microphones each have a unique and clearly audible quality and character. It is also the instrument connecting your vocal talent with the end listener. What goes into that microphone is likely to play a large role in making your product sound distinctive. The microphone will also be dealing with a dynamic range of -120dB which is probably greater than any other source in your studio, so making sure that it sounds the best it can (and stays sounding that way for good!) should be considered mission critical in any project.

Choosing the correct microphones for various applications in (and out of) the studio is often one of the more difficult decisions - budget and performance being high up the list as well as environmental considerations such as acoustic treatment, unavoidable noises or rumbles will influence your decision making process. Most radio and production studios use the classic cardioid mics for obvious reasons, although discussion of the virtues condenser vs dynamic still go on in some circles, the goal is always the same piece of common sense - choose the one that sounds the best within the budget.

Once you have chosen your mic, the next priority should be how to constrain those huge dynamics which will otherwise cause havoc down the programme chain through distortion caused by lack of headroom or unpleasant 'modulation' of downstream processing. A lack of compression can also cause the talent to sound 'thin', sibilant or distant or even lost in the mix completely. It is crucial to avoid the temptation to throw in a cheap compressor/limiter or a 'O.T.T' mic processor without thinking about it carefully. The former is likely to 'cheapen' the best efforts of your fine microphone and your talent, while expensive over-complicated processors are rarely used to best effect as the complex settings often sound incompatible with different voices, and in reality they are rarely adjusted optimally for each individual. Finally, accessible controls will always attract unwanted attention from curious or recalcitrant fingers with the result that the unit can be detrimental to your sound instead of the constructive.

The Audessence PodBlaster is an excellent solution for the side-chain/insert point of the mixer microphone channels. It is low cost, tamper-proof, exhibits superb action on all voices coupled with a clean, high specification signal path. The unit is highly configurable via the USB port with intuitive software featuring an 'easy mode' enabling you to get the results you need - simply and speedily. The flexibility of PodBlaster makes it ideal for microphone processing in any environment, from Outside Broadcasts or live PA, TV and sound recording studios, and unattended talks rooms.

Each PodBlaster can process two microphone channels perfectly as a 'hideaway' unit or four in just 1RU (two units - rack ears optional). This solution levels and carries out compression/limiting and offers two selectable de-emphasis slopes for removing sibilance (de-essing). A USB interface allows configuration with the easy to use software interface.

ALPS-1 has a tamper-proof front panel and attractive price, yet retains fully professional specifications and features, including failsafe relay-bypass in case of power failure. Processing of up to two microphones in 1RU. Computer control via either USB (front panel) or RS-232.



ALPS-1 Audio Level Processing System