

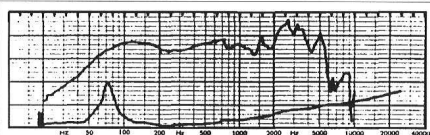


For 40 years playing guitar through the PA or direct to tape has sounded trash... well, that's no longer true!

AWARD DESIGN have invested a great deal in developing this technique and the results are now as good as any decent mic' can give.

Guitar 'Speaker Simulation' Explained

Speaker simulation, or emulation as some call it, is an electronic 'filter' or group of filters that can immitated the frequency response of a guitar speaker. Guitar speakers have a unique characteristic sound that we all rely upon to get the sounds we know and enjoy. This is, simply, because guitar speakers cannot reproduce frequencies much above 1 to 2kHz due to 'economic' engineering limitations. To compensate for this, speaker manufacturers introduce an effect known as 'cone breakup modes', which is a kind of deliberate distortion more by the cone itself to add treble and excitement to the original guitar sound. This



Frequency response of a typical 12" guitar speaker. Note: the more 'jaggy' the curve... the more cone break-up distortion the speaker adds!

artificially extends a guitar speakers frequency range to 3 or 4 kHz. This distortion, which is not present in the original guitar signal, is fine for clean guitar sounds, but in studio or domestic environments an edgy sort of fizz is distinctly noticable when overdriven guitar is played. This is because the two distortions are actually competing and produce discordant odd harmonics. Popularly refered to as a 'the transistor sound', but is actually nothing to do with transistors at all! However, the effect is more pronounced on cheap solid state amps simply because inferior speakers are used to meet price limitations... hence the reputation of 'tranny' amps.

On the other hand, a good 12" PA speaker, like the Electrovoice EVM12L used by many expensive guitar amps, can handle up to 5kHz without adding distortion, because of their superior engineering tolerances (which is what you pay for). Therefore, the high frequencies you hear are what the guitar and amp make, so the overdriven sounds are more natural and much sweeter.

Based on these facts, the Award guitar speaker simulation circuitry has been developed to emulate a response similar to that shown in the graph above, but importantly, without adding the cone break-up distortions described. The results are the bright exciting traditional tone everyone expects, but with the clean distortion free qualities of the well engineered PA speakers.

Some speaker simulators have different settings for 'off axis, centre cone, back mic'ing, etc. simulations... but these are nothing more than just different pre-set EQ options which can be achieved easily with the EQ controls on your PA or mixer, or the EQ controls on our speaker simulators.

"Can I plug it into my PA or 4 Track?"

Asked the customer. "Well, it's got a DI socket!" replied the salesman... which as we all have learnt, means nothing. The customer still had no conception of how realistic the sound coming out of the DI socket might be. Was the salesmans answer too risky to rely on? We wouldn't!

AWARD's G12T and 15L Speaker Simulator Systems remove that risk. Only AWARD assures dependable performance.

Certainly, much damage has been done to the image of direct injecting guitar over the years due to inadequate design. Resultantly, most guitarists treat DI sockets with total contempt. Never-the-less, now Personal Studios are so common and that bar/cabaret performers strive to lighten their equipment load, the pressure for new standards of performance from the neglected DI socket is too great to ignore.

G12T & 15L - Realistic and Accurate Speaker Simulators.

Just so as you know what to expect for your money, AWARD have given their speaker simulator systems names that express an idea of the sound that will emanate from their DI sockets. The G12T and 15L SIMULATORS establish a standard. As DOLBY has to noise reduction.

How? Well, the G12T "sound" is modelled on the 12 inch guitar speaker fitted in the worlds most popular 4 x 12" speaker cabinet. We all know the one! That speaker and cabinet probably has the most widely known tone and has enjoyed years of successful production with little or no change.

The 15L "sound" is popular with many up-market bass and pedal steel amp manufacturers and players, so this reference was the obvious standard to simulate.

The G12T simulator is used in all guitar versions of SESSIONMASTER Direct Recording PreAmps and the MATCHBOX Guitar DirectBoxes, and the 15L simulator in the bass guitar and pedal steel versions.

AWARD sets high standards to cope with our changing times and needs. After experiencing G12T and 15L... the rest are just DI sockets.

"Just so as you know what to expect for your money..."

Stewart Ward

Design Director

G12T Speaker Simulation

So maybe you can't beat a mic, but sometimes you just have to accept that playing your 100 watt stack at full tilt in an average semi might not be the most neighbour friendly way of recording your music. You could be getting really good results very quickly by using an excellent electronic box which costs about the same as a decent microphone.

Our JD10 will plug into any computer soundcard if you have a suitable connecting cable. If you do not, we can supply them. Most recording software, like Cubasis for example, have built in reverb, echo and chorus, so you don't really need to spend a fortune on effects units.

"You know, the document on the left was written by me over twelve years ago and still there is a significant proportion of musicians who do not know what 'Speaker Simulation' is all about, or are prejudiced against the idea without ever trying it.

Prejudice and folklore are the two biggest inhibitors of great new products and ideas in the musical instrument world. By default, this thinking promotes mediocrity. Funny really, when rock 'n' roll was born from the need for change." - Stewart.