

AUDISON PRIMA

TAKES CENTRE STAGE

Compulsive industry innovators have done it again!



Brand new products from the Audison stable are not uncommon. A burgeoning list of patented firsts sees them sit at the top of the car audio tree for innovative products leading the car audio world through rapid evolution.

This year at the Consumer Electronics Show in Las Vegas, Audison continued its recent onslaught on the premium car audio market with the launch of its Prima concept. Ahead of its time once again, Prima is the name chosen to bind together a collection of speakers, processors and amplifiers designed to offer car audio installers near plug and play solutions to customers suffering from poor factory fitted sound systems.

A recent surge in interest in better sound from consumers led to a three-year development programme resulting in a range of vehicle specific speakers and plug and play audio electronics to help the discerning listener. Named "Sound Packs", the Audison design team has focussed on the inherent issues with factory fitted equipment and how to nullify these and upgrade the sound. A thorough investigation of many vehicles showed a whopping 20% average total harmonic distortion figure at 90dB (not very

loud in motoring terms) due mainly to on-board amplifiers having too little power to properly drive the speakers. Many new vehicles have integrated "infotainment" systems fitted that cannot be easily removed without drivers giving up some functions as well as the original look of the vehicle. They discovered that many of these impose strange audio response curves on their outputs designed to mask the inadequacies of very cheap speakers used as standard.

Much work had been carried out during the development of the Audison Bit family that helped with the development of Prima amplifiers. These are extremely compact in size despite providing meaningful power output and Bit Drive technology built in. Bit Drive is the name given to Bit technology and Prima takes this already extremely powerful signal-processing concept to new levels of sophistication. As well as being able to access up to seven presets and adjust the sound curves emanating from on board systems via a PC, Prima is able to output these settings that can then be shared with other owners of the same equipment. This exciting development could lead to consumers sharing settings created by "golden-eared" installers around the world. This may sound completely unnecessary but to the audio enthusiast this offers incredibly exciting possibilities.



Meet the STARS

The Prima amplifier line contains three models featuring a nine-channel DSP, all channels independently adjustable via PC software. The differences relate to the number and power of amplified channels:

AP8.9 bit:

35 W x 8 @ 4 Ω

AP5.9 bit:

20 W x 2; 50 W x 2; 140 W x 1 @ 4 Ω

AP4.9 bit:

70 W x 4 @ 4 Ω.

In addition to the Bit-equipped models, there are two non-DSP models to provide greater power if needed:

AP4 D:

70 W x 4 @ 4 Ω

AP1 D:

520 W x 1 @ 2 Ω

Due to the compact size and thermal stability up to three amplifiers can be stacked on top of each other. Channels can be bridged and configured by your installer to create the perfect system for your needs.

“Consumer interest led to a three-year development programme”

New ground has been broken in the design of Prima upgrade speakers with the development of embedded tweeters that enable bass and treble frequencies to be output from a single speaker position. The new speakers are slim as can be but also manage to include V-cone® technology for cone stability at high levels.

Elettromedia explain; “Different solutions have been introduced to achieve comprehensive OEM Integration into often restrictive mounting positions chosen by vehicle manufacturers and achieve a result capable of satisfying the Audison quality criteria.

Designers focused their attention on those speakers dedicated to reproducing the whole audio range, the coaxial, as these are the most critical in reconstructing a sound stage and creating a “live” effect in a Car Audio system. By using advanced technologies

such as Finite Element Method (FEM) computer modelling, as well as an extensive “Voicing” phase, consisting of in-car listening sessions, a concentric tweeter built within the woofer was decided upon, providing one single point of emission. This ensures that the musical signal is reproduced with high acoustic phase linearity; therefore the listener perceives it as being disarmingly natural.

In order to control dispersion of the high frequency range, the concentric tweeter features an acoustic lens specifically designed to ensure an extremely linear frequency response when installed in a door. The combination of these design features achieves performance and sound quality comparable to a two-way system for those vehicles without a separate tweeter mounting position.”

Two and three-way systems will also be available which come with unfeasibly compact crossover networks designed to fit securely in small spaces. A number of discreet speakers will be available outside of the system packages.

I am yet to hear Prima in all its glory, but I relish the opportunity and as product is shipping as I write, I hope to bring Driving Sounds Club members the results very soon. If you would like to join, simply visit the Club page at www.drivingsounds.co.uk □