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**DATASAT EVOLVES:
INTRODUCING THE AP-25
CINEMA SOUND PROCESSOR**

BY

JOHN F. ALLEN

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FIRST IN DIGITAL STEREO

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In 1993, Steven Spielberg's JURASSIC PARK opened worldwide in close to 1,000 theaters with sound recorded and played in a new high quality digital format with six discrete channels. The format was called DTS Digital Sound, and was invented by Digital Theatre Systems.

Prior to that in 1984 and again in 1985, I had actually introduced digital sound to commercial movie theatres with presentations in both Los Angeles and Washington, D.C. As there was no other way to do it, we utilized a double system with the sound played from a separate player that was synchronized with the picture. Using a double system also assured that we were delivering the highest quality sound possible.

Within the next few years several companies came forth with various different formats for playing movies in theatres with digital sound. Founded in 1991 by Terry Beard, DTS Digital Sound was the first to be widely adopted. Encouraged by our earlier double system success, Beard designed the DTS system as double system. Quality was the goal and only a double system could provide a higher quality digital recording than could be stored on a 35 MM release print. Over the next 15 years, DTS installations worldwide surpassed 30,000.

The original DTS players were followed up with a full digital cinema sound player and processor, the DTS-6AD, as well as the CSS Cinema Subtitling System for hearing impaired and foreign language audiences.

In 2008, DTS sold its cinema business to the Datasat Group. DTS was then known as Datasat Digital Entertainment. Within just one year in 2009, Datasat launched the all new AP-20 professional cinema audio processor. This processor introduced some important new features. It was the first processor to allow different equalization

memories for different formats as well as four HDMI inputs. With so many innovations being introduced all at once, I admit that I was initially skeptical. Then Datasat staff spent three days with me in my reference theatre. A very thorough series of tests proved what the AP-20 could do. In listening to my reference materials, it became obvious that the sound quality of the AP-20 was superior. Since those early days the Datasat AP-20 has become highly respected as well as the only cinema sound processor approved for new HPS-4000® sound systems.

With the technical success of the AP-20, requests for home theatre products began to come in. Datasat then turned its attention to the larger consumer market and offered the RS20i, the first home theatre solution based on professional technology. This was followed by the introduction of a new series of fully balanced differential amplifier products especially built for Datasat by Amplifier Technologies, Inc., of Montebello, California. Datasat also produced an additional audio processor, the Datasat LS10.

As one might expect, these consumer products quickly became popular and soon outsold the AP-20 cinema processor. This also meant that Datasat became more focused on the high end consumer products. While software upgrades continued on a regular basis, some of the updates to the AP-20 that would have been desirable at the time were put on hold.

By 2016 Datasat's owner had decided to concentrate on his UK based Satellite company and was considering selling Datasat Digital Entertainment. Morris Kessler had expressed interest in acquiring Datasat and Datasat's EVP, Robert McKinley knew that moving Datasat over to Morris Kessler's Amplifier Technologies would provide an ideal combination. As I have known of Kessler's products for many years as well as his commitment to the highest quality, I couldn't agree more.

After a period of negotiations, the deal was completed in July of 2017. There were tremendous synergies between the two companies. The ability to join engineering and manufacturing under one roof would improve efficiencies to bring product improvements and engineering changes to market faster. This became a top priority.

Kessler and his team immediately began a complete review of the AP-20 and created a list of updates that would make the unit both more flexible to use and easier to manufacture. Even after so many years, it was clear that the exceptional design of the AP-20 was indeed unmistakable.

The result of this product review is now being introduced as the new AP-25. Obviously retaining all the sound quality and features of the AP-20, the AP-25 also includes the

following:

- **A new improved power supply that utilizes the latest technology for improved quality and quiet performance.**
- **Double the memory settings from 20 to 40 to allow for additional EQ and routing settings for alternative content and expanded listening environments.**
- **AES 67 Send capabilities are now an option that will allow for amplifier placement behind the screen or in remote locations via CAT 5/6 cabling. This lowers the cost of cabling and reduces the potential for noise introduction**
- **HDMI 2.0 and HDCP 2.2 on one input and one output allows for connectivity to HDMI 2.0 sources.**

The AP-25 promises to build on the solid reputation of the AP-20 and provide a new generation of high quality and flexible cinema sound processing.

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John F. Allen is the founder and president of High Performance Stereo (hps4000.com) in Las Vegas, Nevada. In addition, he has served as the sound director of the Boston Ballet and has mixed live concerts of the Boston Symphony, the Boston Pops orchestras, military bands, jazz ensembles as well as other orchestras. He is also the inventor of the HPS-4000® motion picture sound system and in 1984 was the first to bring digital sound to the cinema. John Allen can be reached by E-mail at johnfallen@hps4000.com.