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**The New IE-33 From
Ivie Technologies**

BY

JOHN F. ALLEN

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The New IE-33 From Ivie Technologies

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A 1990 survey of sound contractors conducted by SOUND and COMMUNICATIONS magazine, found that the Ivie Technologies' model IE-30A Real-Time-Analyzer was their favorite and most used tool. To those of us who have owned and used one over the years, this comes as no surprise. First introduced in 1978, this analyzer has become something of a gold standard among technicians. Twenty-five years after it first appeared, the IE-30A is still the most accurate, easiest to use and most sought-after of all portable analyzers.

Ivie Technologies was founded in 1965 by A. Ray Ivie. The company changed hands twice in the decades that followed before it was bought by its employees, headed by Craig Berry, in 1990. Today Craig remains president of a company that has become something of a small jewel in the industry, with a staff that is highly respected for their friendly customer service. Though Ivie offers a line of some rather novel audio products, they are most famous for instrumentation -- especially the IE-30A.

The IE-30A is an entirely analog Real-Time-Analyzer. Open one up and one sees an instrument jam-packed with circuit boards and tiny parts that fill almost every cubic centimeter of its small hand held case. To add features required the addition of an accessory unit, or a much larger and heavier unit. Indeed, Ivie did offer such things as time went on.

Building such units proved expensive. At over \$4,000.00 the IE-30A remained out of reach for many technicians servicing movie theatres. Not able to have the most desirable in analyzers, far too many theatre technicians have been using analyzers of lesser quality and accuracy. Some of these units are not able to provide a stable display, while others are so slow that the display hardly changes at all. Neither of these conditions is ideal for performing projector soundhead alignments. Unfortunately, the number of technicians with less than ideal tools has led to a large number of poorly aligned motion picture sound systems.

Continued production of the IE-30A is becoming impossible. The company that provided the display no longer makes it. Other vendors that Ivie has depended on have gone out of business. Stocking up on parts before they disappeared was only a temporary solution. Without a new product, Ivie would be out of the analyzer business entirely. Fortunately, the introduction of the pocket PC hand held computer provided an opportunity for a completely new device that could be everything the IE-30A has been, as well as a great deal more -- all for a much lower cost.

Last fall, after an extended period of research and development, Ivie introduced the long awaited successor to the IE-30A, the IE-33. By constructing an add-on unit to an iPAQ pocket PC, for signal and microphone connections, the IE-33 becomes a software based tool that can be easily upgraded and will prove far more useful to sound technicians. During its initial development period, Ivie engineers did a great deal of research into the specific needs of those who use Real-Time-Analyzers and other sound analyzers. One of the most important markets they wished to address was the cinema industry. One weekend last summer, Ivie sent IE-33 chief engineer, Larry Driskill to Champaign, Illinois, where I was doing an installation. As Larry watched the work progress, he made numerous notes about how to make the IE-33 as useful and efficient as it could be when used in movie theatres. In the months that followed, it was a long wait full of curiosity and anticipation until a new IE-33 arrived for me to try.

While used as a Real-Time-Analyzer, the IE-33 is first and foremost a computer. Those familiar with hand held computers will find it a breeze to get used to. If one has never used a pocket PC, it will take a few hours to explore all the controls in order to become proficient in its use. However, once the initial user break in period has passed, one immediately sees that Ivie has produced a new lightweight tool of extraordinary quality -- ideal for cinema work. Like the original IE-30A, the IE-33 simultaneously displays both a 1/3rd octave frequency response and the total Sound Pressure Level (SPL). In addition, the IE-33 allows one to store nine different measurements and to also perform noise floor measurements instantly. Some of the other features include signal generation, polarity checking and even a 1/6th octave frequency response.

As with the original IE-30A, the new IE-33's display is steady enough for soundhead alignments while still being fast enough to respond to adjustments the technician is making. This assures technicians an accurate "A" chain alignment with a maximum ease of use. One entirely new feature with the IE-33 is the dual trace oscilloscope function. This feature will help make service calls much easier, especially as new functionality is added in the future.

Since the iPAQ operating system is Microsoft's Pocket PC, measurement data in storage

registers can easily be downloaded to a PC by using the included Microsoft ActiveSync software. Files are stored in tab-delimited format and may easily be viewed using the included IvieXLS graphic software (for use with Microsoft Excel) or any other compatible means.



As it stands today, the IE-33 is a solid replacement for the IE-30A. At less than half the price, it is a high quality and far more affordable tool for technicians servicing motion picture theatres. For best results, the company recommends that technicians use Ivie's

model 2P-1134 microphone, originally designed for the IE-30A, instead of the much smaller microphone that comes with the IE-33. This will add cost, but one still ends up with a less expensive and more functional package than was available before.

Since its introduction, Ivie has shipped literally hundreds of units. Already there have been upgrades. One such upgrade dramatically improves the noise floor of the unit. This requires that the IE-33 be returned to the factory for the free upgrade. Software upgrades are available on Ivies's web site, www.ivie.com. Owners will also be notified by E-mail when software upgrades are posted.

For those who already own a pocket PC, there's no need to buy another. Ivie will sell you only the things you need as separate items. One suggestion I have is to spend a little extra and ask for a pocket PC with user replaceable batteries. This saves time and expense in the future when the batteries require replacement.

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*John F. Allen is the founder and president of High Performance Stereo in Newton, Mass. In addition, he serves as the sound director of the Boston Ballet. 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. Mr. Allen's 24 year series of articles written for **BOXOFFICE** are available for download at <http://www.hps4000.com>.*

Since the original publication of this article in 2004, Ivie has replaced the IE-33 real-time analyzer with the IE-35 and added the IE-45. See ivie.com for further details.