



## *Hakuto Co., Ltd. Signs Sales Distributor Agreement with Waves*

*Leading Japanese Distributor supports MaxxBass in Automotive and Consumer Audio*

**TOKYO, JAPAN  
AUGUST 20, 2002**

WAVES LTD., a leading supplier of psycho-acoustic audio signal processing solutions for the professional, broadcast and consumer electronics audio markets, has announced today that it has signed an exclusive distribution agreement Hakuto, a major Japanese electronics distributor, to support Waves MaxxBass ASIC in Japan and to Japanese firms worldwide. Waves MaxxBass extends the bass frequency range of any loudspeaker system using its patented psycho-acoustic technology and its MX3000AS MaxxBass ASIC allows this patented functionality to be integrated into low-cost consumer electronics.

“Waves MaxxBass dramatically improves sound quality in a wide range of audio products,” stated Norimichi Hada, Vice President Electronic Devices & Components Business Division. “Hakuto believes that MaxxBass will emerge as a new standard function in a wide range of automotive and consumer audio products. This agreement commits Hakuto in Japan and Worldwide to jointly develop these markets with Waves.”

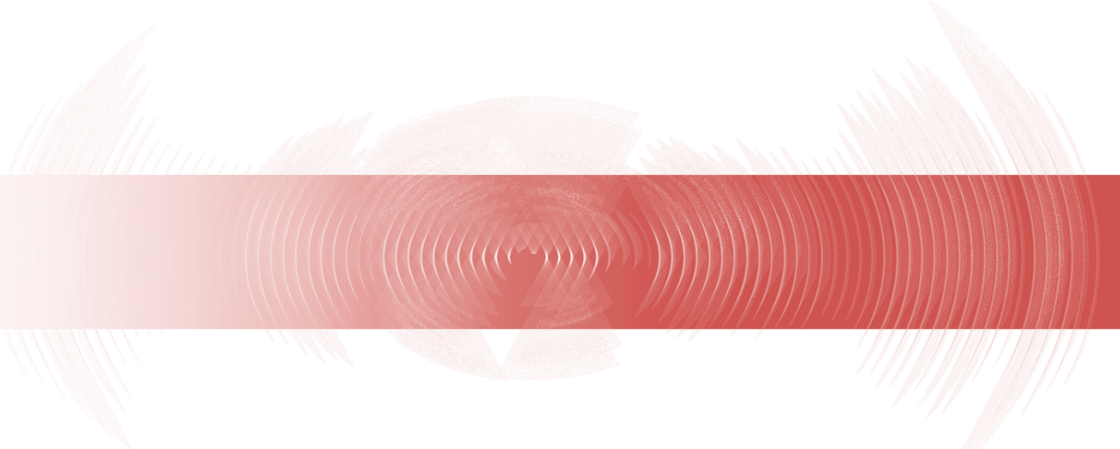
“Waves is pleased to partner with Hakuto in developing the market for MaxxBass by focusing on technology leading Japanese firms.” stated Gilad Keren, Waves President and CEO. “In addition to the distribution of the MaxxBass ASIC we are also working with Hakuto on MaxxBass software licensing and other products.”

Waves is the leader in computer based audio signal processing tools in the professional market, and its tools such as limiters, equalizers, compressors and effect processors are used on practically every top album and movie soundtrack. Ten years of leadership experience with this very quality conscious market has allowed Waves to develop a rich expertise to psycho-acoustics, including the patented MaxxBass technology. MaxxBass is a bass frequency extension technology that extends the perceived low frequency response by up to one and one half octaves below the physical low frequency cut off of a loudspeaker system. MaxxBass utilizes the psycho-acoustic Phenomenon of the Missing Fundamental. The MaxxBass software “plug-in” tool is commonly used today in mastering much of the world’s most popular music to improve mix compatibility on smaller loudspeaker systems; however using MaxxBass in loudspeaker systems is even more powerful, since it can be optimized to extend the bass response of the specific loudspeaker system.

Waves recently introduced the MX3000AS, a low cost ASIC (Application Specific Integrated Circuit) for MaxxBass making this technology cost-effective for consumer electronic

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products. This ASIC integrates high quality analog, sigma delta A/D/A and a custom DSP into a 16-pin SOIC package. Free downloadable demonstration programs, datasheets and other technical information is available at [www.maxx.com](http://www.maxx.com).

### **About Hakuto CO., Ltd.**

Hakuto was established in 1953 and is a leading distributor of electronic products in Japan. Hakuto is based in Tokyo Japan and has electronic components, equipment and instruments sales groups throughout Japan, Asia and worldwide. Hakuto is listed on the Tokyo Stock Exchange and more information can be found at [www.hakuto.co.jp](http://www.hakuto.co.jp).

### **About Waves Ltd.**

Waves is a leading provider of audio DSP solutions for professional, broadcast, and consumer electronics audio markets. Waves has ten years of expertise in the development of psycho-acoustic signal processing algorithms that leverage knowledge on the human perception of hearing to radically improve perceived sound quality. Waves award-winning processors are utilized to improve sound quality in the creation of the world's most popular music, movie sound tracks and multimedia titles. Waves offers computer software solutions and hardware plus software solutions for the professional and broadcast markets. Waves also offers semiconductor with embedded software solutions under the Maxx brand for the consumer electronics audio applications. Waves' Maxx technology dramatically enhances audio performance in consumer applications and has been licensed to several leading companies, including Motorola and Microsoft. For more information, visit Waves Web site at <http://www.waves.com>

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