

EYE ON AMERICA

PIONEER WAS THE FIRST COMPANY TO LAUNCH A GPS-ENABLED AFTER-MARKET VEHICLE NAVIGATION SYSTEM IN JAPAN IN 1990. AS A COMPANY FOUNDED ON AUDIO ENTERTAINMENT, WHAT INSPIRED THE LEAP INTO NAVIGATION?

JOHNSTON: Our decision to incorporate navigation into the car was probably 90 percent research and development, 10 percent inspiration. Computerized navigation had already made its way into other modes of transport and yet up until that time the auto industry was only flirting with the notion of introducing full-blown navigation into the car. We were among the first to realize the need as well as the vast potential of vehicle navigation.

PROFILES: If navigation as a technology had been around for some time, why did it take so long to make its way into the car?

JOHNSTON: The automotive industry goes to extraordinary lengths to ensure that automotive environment is as safe and reliable as possible. Computers in general and navigation in particular were not until the early 90's mature enough for the automotive environment. The first few generations of navigation were more on the order of luxury entertainment. Systems like our new AVIC are just now proving themselves to be highly reliable tools with very real potential to enhance safety.

PROFILES: Pioneer has a strong navigation market in its native Japan, as well as in Europe, where you have already launched your new AVIC unit in Benelux and Germany. What are the prospects for navigation in the United States?



Russ Johnston
Vice President, Marketing
Pioneer U.S.A.

JOHNSTON: Excellent. The Japanese and European markets are still ahead, but the market is starting to see real momentum in North America, where we are launching the AVIC system later this year. The potential of navigation as a market is directly related to the number of cars on the road. In that sense, there's little doubt that the U.S. will emerge as one of the most powerful engines of the navigation market. Speed and flexibility are critical to staking out young markets. We used the NAVTECH database for North America and Europe to speed AVIC development.

PROFILES: What has to happen for the navigation market to grow more rapidly?

JOHNSTON: The industry needs a standard in place to make map CDs compatible among systems. The

absence of a standard is a problem not only because each system needs its own special CD to operate, but because each manufacturer spends more time and money to develop proprietary map compilation software. It's a wasteful effort that makes the systems themselves more expensive and consumers less willing to buy them.

PROFILES: Is there a foreseeable solution to map media compatibility?

JOHNSTON: Several have been proposed, but we believe Navigation Technologies' SDAL Format delivers what's needed, and that's compatible, code-free map media. We are among the first companies to employ SDAL, but its stature will increase as it continues to prove itself commercially.