



500 Spruce Tree Centre
1600 University Avenue West
St. Paul, Minnesota 55104-3825 USA
651.603.7700 Fax: 651.603.7795
www.imagesensing.com

NEWS RELEASE

**Contacts: Art Bourgeois, Chief Financial Officer
Image Sensing Systems, Inc. Phone: 651.603.7700**

FOR IMMEDIATE RELEASE

Image Sensing Systems Announces New CEO

Saint Paul, Minn., December 21, 2006 - Image Sensing Systems, Inc. ("ISS") (NASDAQ: ISNS) announced today that its board of directors has named Ken Aubrey to serve initially as the company's president with a transition to the position of president and CEO as of June 1, 2007.

Aubrey has over 20 years of experience as a multi-faceted executive/general manager & major project manager in diverse settings, globally. He has had long-term assignments in Hong Kong, Australia, England, Germany and the US with extended periods in Singapore, Taiwan and Seoul.

Aubrey, 57, has served since 1995 in various positions with Siemens, most recently as a business unit vice president of Siemens' ITS (Intelligent Transportation Systems) Division, Industrial Solutions & Services Group. He concurrently managed Strategic Projects for the ITS Division. Immediately prior to his current position Aubrey served as a vice president of Strategic Projects for Siemens' Information and Communication Networks Group in which he focused on Merger & Acquisition projects.

"Ken has executive level experience in the ITS area that ISS serves, along with a strong global background that we are looking for in our new CEO," said Jim Murdakes, chairman and current president and CEO. "Ken will initially serve as president of Image Sensing Systems, Inc. with primary responsibility for developing and advancing the company's international strategy," said Murdakes. "I will continue to focus on and manage other domestic business activities."

"We are very fortunate that Ken has accepted the appointment as we believe ISS has matured to a point where we need an executive with a technical background (Ken graduated with a Physics and Math major and has an MBA) but who also has executive management and international experience," said Panos Michalopoulos, the company's founder and current member of the company's board of directors. Michalopoulos continued, "Ken was one of several candidates for the CEO/president position that had outstanding credentials, but he impressed us most with his

technology background in our space and his enthusiastic response to the prospects that lie ahead for ISS.”

Aubrey said, “ISS, with its Autoscope machine vision system for traffic management, has been and will continue to be the leader in the industry. I know ISS has many of the top engineers in the ITS space along with international managing directors who are knowledgeable in their individual markets. I’m looking forward to joining and leading the ISS team of engineers, sales and support staff and working closely with ISS partners, building on its global leadership position.”

Aubrey is expected to begin his duties with ISS on or about February 1, 2007, while continuing to live in Germany where he can be closer to the company’s international operations and key distributors in Europe and Asia. He plans to move to Minnesota on or about April 1, 2007 to begin the transition to CEO which should be complete by June 1, 2007. Once he becomes CEO, Aubrey will be asked to join the board of directors while Murdakes will continue on as chairman.

Headquartered in St. Paul, Minnesota, ISS combines expertise in image processing, hardware and software engineering, and communications to develop video vehicle detection systems for traffic management and control applications. The Autoscope vehicle detection system is the world leader in video detection for advanced traffic management systems for highways, tunnel incident detection, intersection control, and traffic data collection. The Autoscope system provides traffic managers the means to reduce roadway congestion, improve roadway planning, and improve cost efficiencies.

Safe Harbor Statement: Statements made in this release concerning the Company's or management's intentions, expectations, or predictions about future results or events are "forward-looking statements" within the meaning of the Private Securities Litigation Reform Act of 1995. Such statements reflect management's current expectations or beliefs, and are subject to risks and uncertainties that could cause actual results or events to vary from stated expectations, which variations could be material and adverse. Factors that could produce such a variation include, but are not limited to, the following: the inherent unreliability of earnings, revenue and cash flow predictions due to numerous factors, many of which are beyond the Company's control; developments in the demand for the Company's products and services; relationships with the Company's major customers and suppliers; unanticipated delays, costs and expenses inherent in the development and marketing of new products and services; the impact of governmental laws and regulations; and competitive factors. Our forward-looking statements speak only as of the time made, and we assume no obligation to publicly update any such statements. Additional information concerning these and other factors that could cause actual results and events to differ materially from the Company's current expectations are contained in the Company's Form 10-KSB for the year ended December 31, 2005.

###