JVCKENWOOD

News Release

JVCKENWOOD Corporation

November 12, 2019

JVCKENWOOD Exhibits at HOSPEX Japan 2019

OR imaging system solutions for achieving efficient operation, improving safety, and maintaining hygiene in operating rooms

JVCKENWOOD Corporation (JVCKENWOOD) will exhibit at HOSPEX Japan 2019, a comprehensive exhibition covering the medical and welfare fields, to be held at the Tokyo Big Sight from Wednesday, November 20 to Friday, November 22.

This year, the JVCKENWOOD booth will exhibit ORVS(Operating Room Visualization Solutions) for the unified management of imaging information (biological information, x-ray information, operation field/operating site images, endoscope images, and robotic operation images, etc.), used frequently in operating rooms and designed for achieving efficient surgery operations, improving safety, and maintaining hygiene in operating rooms. Through the connection to various advanced medical equipment and in-house information systems, etc., our visualization solutions can facilitate a smooth operation workflow and creation of safe and hygienic operating environment.

In addition, we will prepare a reference exhibit of a compact and high-mobility cart-type operation-related video recording system and a system capable of managing video signals from up to eight systems over the optical IP network.



<Conceptual Image of JVCKENWOOD Booth>

<Main Exhibits of JVCKENWOOD Booth at HOSPEX Japan 2019> (JVCKENWOOD Booth: 1J-34)

1. Operating Room Visualization Solutions

We will exhibit visualization solutions that provide customization with the assumption of use in operating room, according to users' needs. Our solutions can be linked to information stored in an in-hospital information system, including information on patients, operators, and operative procedures; support switching to video output to monitors in operating rooms according to operative procedures; and, deliver recordings of videos and still images, as well as live streaming of videos. Our solutions also offer consultation functions in which operative field images and biological information, etc. are shared with medical offices and conference rooms, or are utilized for training of medical practitioners, as well as simple editing functions after operations, in which recorded images and information are utilized for preparing reports and making presentations at academic conferences. In addition, our solutions support customization of GUI according to the operation management of hospitals and connection to various in-hospital information systems (PACS, anesthesia system, HIS, etc.). JVCKENWOOD's broad lineup of various operating room monitor displays adopt flat and wall-mounted designs for uncluttered and simple operating rooms, ease of preparation before operations and cleanup after operations, and securing working traffic lined during operations. Our solutions support efficient operation and improvements to the environments of operating rooms from before until after operations.

1) Software solution for unified management of visualization information inside and outside operating rooms

Our software solution enables smart and unified management of routing, encoding, archiving, and streaming of various visualization information needed for operations. Our software solution supports switching of images in operating rooms and enables the sharing of intraoperative images and the use of archived

images at conference rooms, medical offices, lecture rooms, etc. Furthermore, our software solution can be connected to systems specific to hospitals and provides flexible customization according to users' needs.

2) A lineup of wall-integrated monitor systems for operation and display that can be embedded flat into the walls of operating rooms

We will exhibit wall-integrated monitor systems for operation and display that can be embedded flat into the walls of operating rooms. Our monitor systems adopt a glass panel for the front surface for dust resistance and ease of cleaning. Our monitor systems come in a wide variety of lineups covering screen sizes from 21.5 inches to 75 inches, and we have a broad range of

mounting brackets available to suit various wall materials of operating rooms.

3) Surgical monitor systems for ceiling arms designed with attention to maintaining a clean environment

We will exhibit a ceiling-mounted surgical monitor with a glass-coated panel on the front surface and that pay attention to maintaining a clean environment by adopting drip-proof (IP54-compliant) specs and ventless and fanless





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designs. With a lineup of models with screen sizes ranging from 21.5 inches to 32 inches, our surgical monitor systems support various GIUs, such as DisplayPort, DVI, HDMI, VGA, and SDI.

4) Information display monitor systems that simultaneously display information on the operating room environment

We will exhibit information display monitor systems that can simultaneously display current time, stopwatch, and information on the operating room environment, such as

temperature and humidity, as well as "ON AIR" sign indicating that live streaming videos are on air. Types of information displayed can be customized according to the combination of information to be displayed.

5) The VANCS series network camera system ideal for operating site camera

The VANCS series network camera systems can deliver the visualization process from shooting to recording and storing of visualized images in H.264 and Full HD resolution. We will exhibit a broad lineup of network camera systems that meet the needs for operating site cameras, including

a model that comes with a high-speed rotating platform and a high-precision 10x zoom PTZ function, and a model that is equipped with extensive security function, such as present position registration, auto pan, and anomaly detection.

6) Bluetooth[®] foot switch that allows operators to recording videos and still images allowing operators to capture images without missing any key moments

2. ORVS (Operating Room Visualization Solution) cart system

Our solution is a compact and high-mobility cart-type archiving system for operation-related imaging information that support various video signals. The system can display image previews and operate video recording on a 21.5-inch display monitor. In addition, the system accommodates the addition of the video routing and streaming functions, as well as extension to connect with other systems.

3. Optical IP network system (reference exhibit)

We will prepare a reference exhibit of an optical IP network system that supports sophisticated visualization information in operating rooms. The solution is designed to manage video signals from up to eight units of various pieces of medical equipment (endoscope, microscope, artificial heart-lung apparatus, biomonitor, etc.) and imaging display systems brought into operating rooms over the optical IP network. Through the connection to the optical IP network, our solution supports distribution and long-distance transmission of 4K/8K high resolution images, as well as operation-related instruments that are advancing technologically at an accelerated pace.





<Outline of HOSPEX Japan 2019>

Exhibition period	:	November 20 (Wed.) to November 22 (Fri.), 2019; 10:00 - 17:00
Organized by	:	Healthcare Engineering Association of Japan
		Japan Management Association
Venue	:	Tokyo Big Sight (Tokyo International Exhibition Center) East Hall;
		3-11-1 Ariake, Koto-ku, Tokyo 135-0063
Official website	:	https://www.jma.or.jp/hospex/en/index.html

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Media Contact: Public & Investor Relations Group E-mail: prir@jvckenwood.com

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