

SURGICAL SYSTEMS INTEGRATION

Supporting the OR Workflow





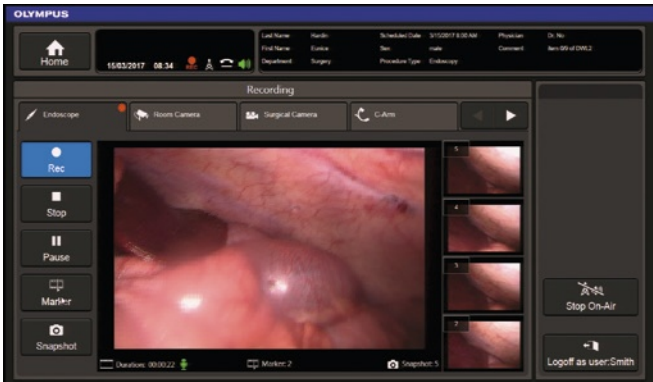
ENDOALPHA integrates all surgical equipment and support systems to create the ideal OR environment for efficient, comfortable surgery. The workspace is custom-designed with all equipment on boom arms in perfect ergonomic locations. Control of all aspects of the OR is centralized using convenient touchscreen, providing advanced external communication and access to all information, whether images or patient data, at the touch of a button.

Olympus Systems Integration specialists and qualified PMI project managers work with the hospital to create a customized solution, which is then installed to the highest standards to ensure a long life span and top-notch maintenance.

ENDOALPHA SYSTEMS INTEGRATION

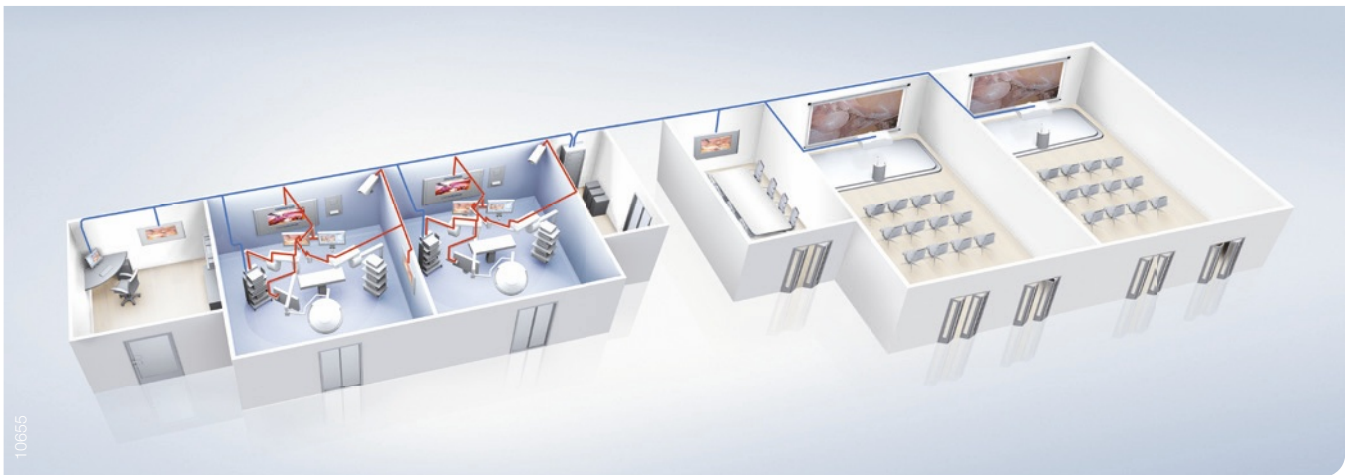
Documentation

The integrated documentation system captures all information relevant to endoscopy in a centralized database of patient data, procedure data, images, and videos, which are readily available anywhere in the hospital. The automatic exchange of information between new and existing systems (PACS, HIS) eliminates the inefficiency of double entries and increases accuracy. Traceability is dramatically improved with automatic scope recognition and capture of re-processing information. Also stand alone recoding solutions are available to record detailed 2D/3D/4K images and videos with absolutely no degradation in image quality. The ability to access and edit the data right after recording and the ability to record 3D and 2D images simultaneously on separate channels leads to a high degree of flexibility and efficiency in documentation.



Video Management

ENDOALPHA features a powerful video management system that allows 4K/3D and HD video over IP routing, full HD streaming, and network recording. Live or stored videos can be readily viewed everywhere within and beyond the hospital, creating an ideal environment for teaching, mentoring, and collaboration.



Control

Medical control allows centralized control of medical equipment produced by Olympus and other leading manufacturers, including endoscopic equipment, surgical lamps, video management equipment, room lights, and tables, from sterile and/or non-sterile touch screens. Settings for equipment can be easily stored and recovered for each stage of the procedure.

Controlling the medical equipment from central touch screens or by voice enhances the workflow and ergonomics in the OR. This control can improve the autonomy of all surgical team members and thereby reduce the time between requests and action. Since the non-medical equipment and information flow can also be controlled from the same touch screen, all equipment and activity supporting the surgical team is managed more efficiently and smoothly. The ability to easily save and recover the settings of all medical equipment for specific operations and for the stages of each operation by using the SceneSelection function speeds up setup and operating time and eliminates the possibility of incorrect configuration.

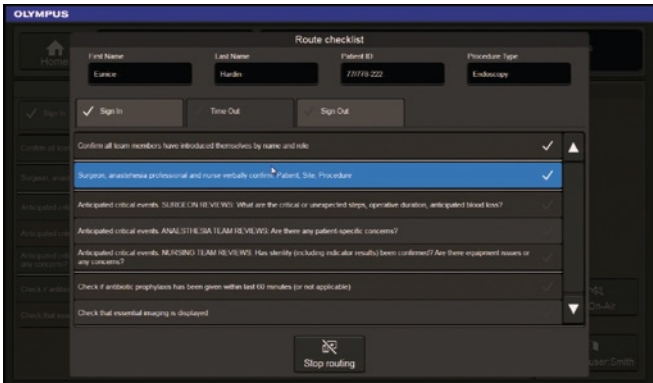


SUPPORTING THE OR WORKFLOW

During Patient Preparation

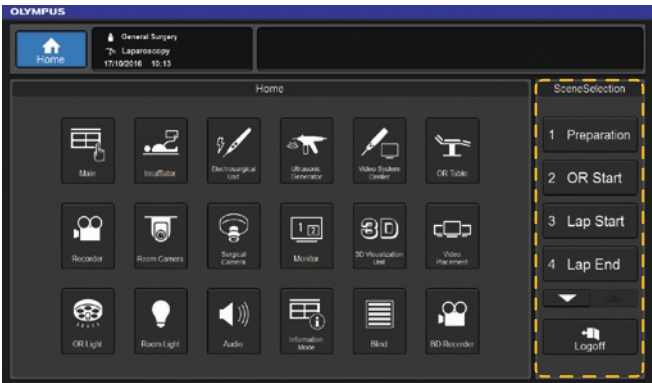
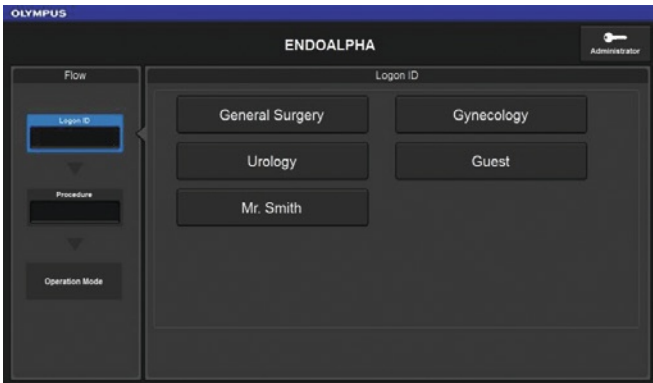
Documentation

During setup, patient and procedure data can be retrieved automatically via DICOM worklist for increased efficiency and accuracy. Automatic import of patient/procedure data can help to avoid potential user errors. For a safer procedure the customizable surgical checklist can be used during setup time and can be routed to every monitor for full visualization for the complete team. The checklist and all data captured during the procedure can become part of the electronic patient record later on.



Control

With the medical control unit, default settings of all ancillary equipment can be registered on a per-procedure basis and recalled with a one-touch operation right after log-in for setting the ancillary equipment to the required settings at the same time.

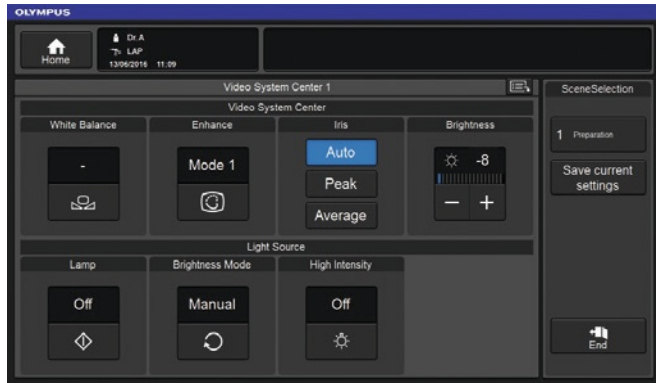
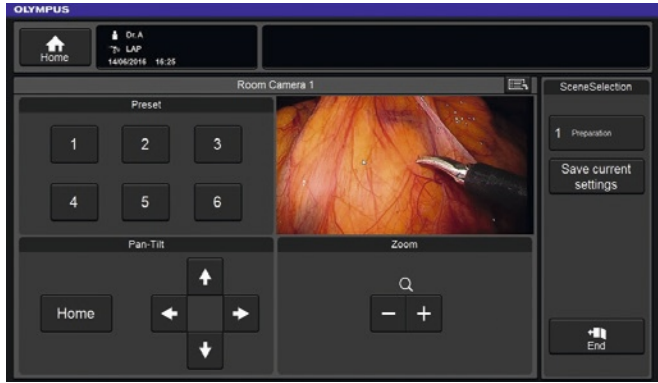


Starting the Operation

Control

The central sterile or non-sterile touch screen with the intuitive smartphone-like navigation can be used during the operation to control medical devices like surgical lights, the insufflator, or the light source.

Also, the non-medical equipment can be controlled by the same touch screen. For example, room lighting can be adjusted and the signals coming from the imaging device can be routed in HD/4K quality to any display destination. Controlling the medical equipment from central touch screens improves the workflow and ergonomics in the OR.



SUPPORTING THE OR WORKFLOW

During Laparoscopy

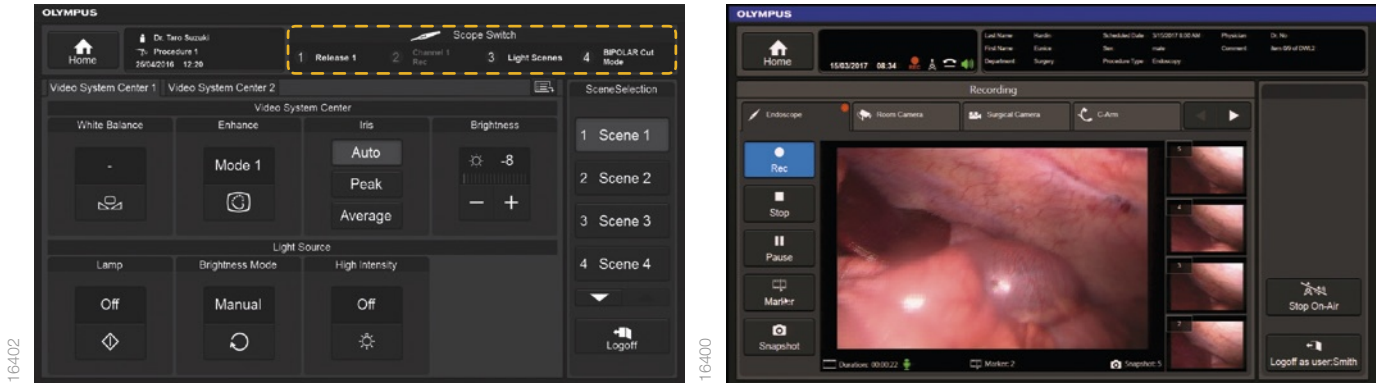
Control

During this stage of the operation, multiple device and video routing settings have to be changed simultaneously. To simplify the workflow, the system also offers the ability to easily save and recover the settings of medical and non-medical equipment for specific operations as well as for different stages of each operation by using the SceneSelection function. All device settings that are necessary for changing from minimally invasive surgery to open surgery mode can be set by pressing one single button. The ability to start and stop recording can also be integrated into the SceneSelection function to ensure documentation. See the section on SceneSelection for more information.



Documentation

With a touch of the scope button, foot switch, or touch screen, still images can be captured or video recording can be started and stopped. All imaging and ultrasound devices using accepted video standards are fully supported. The scope button settings can be displayed on the touch screen for quick orientation.



During Laparoscopy

Video Management

If mentoring or a live broadcast for teaching and workshops is needed, the video management system can be used. The video management software allows video streaming throughout the network from one source to any number of destinations. It also offers bidirectional communication via the network plus recording of a combined audio/video stream.

All necessary data, like X-rays or other information, can be placed on any monitor in the OR to ensure that all necessary information is available during the procedure.

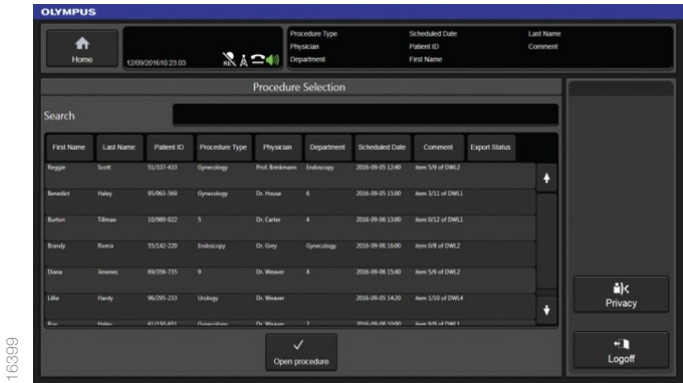


SUPPORTING THE OR WORKFLOW

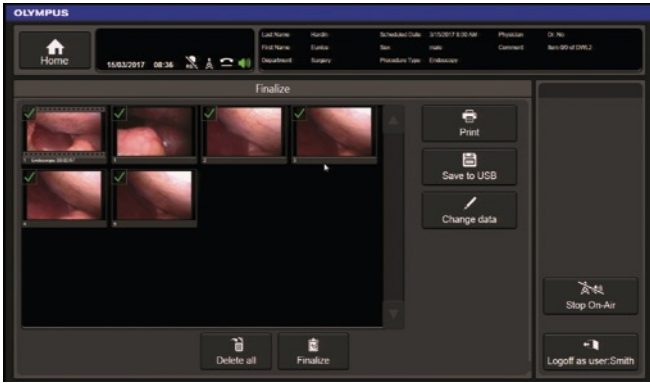
Finalizing the Operation

Documentation

Before storing the recorded data, images, and videos can be reviewed, comments can be added, and images can be printed. For more efficient access to patient data, images can be stored in the PACS system via DICOM C-Store. Storing data on a VNA is also possible and procedure statuses can be sent via DICOM MPPS to the scheduling system. After finalization all data is available inside the patient history and can easily be replayed/reviewed later on.



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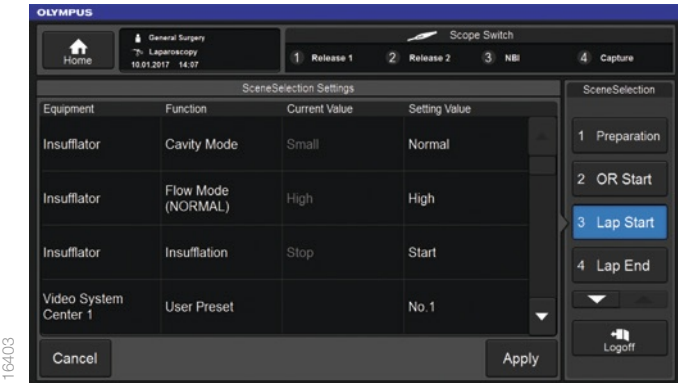
Video Management

Thanks to the streaming function, surgical team members can monitor intervention progress from outside the OR and can therefore start to plan the new operation.

SCENESELECTION FOR ENHANCED WORKFLOW

With a Single Click, SceneSelection Allows Users to Simultaneously Control Multiple Device Settings Following the Procedure Workflow

Rather than moving from device to device to navigate procedures, all settings for each procedure phase are preprogrammed and accessible with a single click.



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SceneSelection allows the fast implementation of medical device settings, video management settings, and room environment settings. Therefore, a change from minimally invasive to open surgery can be carried out very quickly and easily even though a lot of device settings need to be changed. Let SceneSelection work for you by recalling settings at the touch of a button. It helps to standardize procedures, increases safety, and ensures recording, which allows you to focus on the patient's needs and the challenges of the operation.

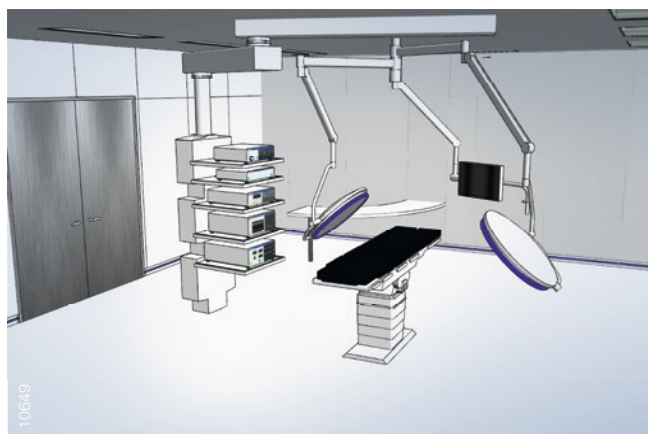
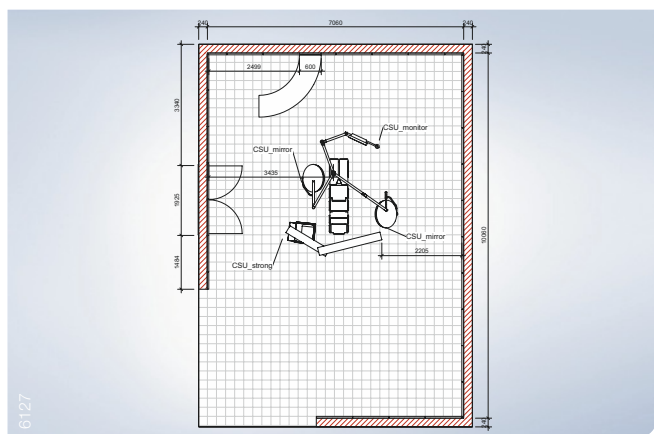
Features

- Applicable across multiple surgical specialties
- Supports switching easily between minimally invasive and open surgery
- Customizable settings for medical equipment, room light settings, starting/stopping recording, and video management for each procedure step
- Rapidly save and recall settings with a single touch
- Presets can be easily adjusted and manually changed at any time
- Display of useful comments following the procedure steps – for example time-out, checklist, or OR setup
- Highly effective procedure support by combining ENDOALPHA Control and Video Management solutions

SURGICAL SYSTEMS INTEGRATION

Workspace Design

- Systems Integration experts and qualified PMI project managers work with the hospital and all major infrastructure manufacturers to design optimal ergonomics and workflows for any type of surgery and the medical team in the OR.
- Working with you to understand your current workflow, Olympus will analyze your staff mix, procedure patterns, and current processes in designing a more pleasant workspace. It will be rendered during the planning phase with a 3D software tool to ensure that all requirements will be met. The use of boom arms does away with the need for troublesome cords piling up throughout the room. Glass walls and the right room light can create a pleasant working atmosphere. Our approach is a simple one: focus on staff satisfaction, a safe environment, and improved patient care.



Service Marketing – Designed to Meet Your Needs

Did you know that Olympus also offers comprehensive support when it comes to service and even creates design concepts to achieve the optimal solution to maximize departmental efficiency? Contact your local sales representative for more information!



- Our modular services provide you with a number of advantages compared to standard service contracts
- Together with your Olympus partner, it is easy to pick the most suitable modules from our flexible service offer to increase efficiency, reduce costs, and make medical workflows more reliable
- Find out more about our variety of combinable service modules and discover the advantages of the Olympus Modular Service Concept

Service Solutions
Secure your investment

Specifications, design, and accessories are subject to change without any notice or obligation on the part of the manufacturer.

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