

# Barco surgical displays

High-accuracy visualization solutions for surgery and endoscopy



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## Near-patient surgical displays

The complexity of general and minimally invasive surgery places high demands on technology and medical staff. Surgical teams increasingly rely on modern imaging technology that delivers real-time views of patient anatomy as well as quick access to archived radiology images. With the MDSC family, Barco brings exceptional image quality, stability, and reliability to the operating theater. The 19 and 24-inch displays offer a versatile visualization solution for endoscopic cameras, room and boom cameras, ultrasound, PACS and patient information.

## The power of High Definition

High Definition technology is rapidly finding its way to the surgery suite. Surgeons agree that it offers more image detail, improves color accuracy and enhances their depth perception. Also, it allows them to see MIS instrumentation more clearly, tie knots easier and provide better patient care overall. Moreover, HD quality reduces the time needed for diagnosis, response, treatment and surgery, all enhancing surgical outcomes.

To experience the true power of HD, all elements of the imaging chain must be fully HD compatible, from camera to monitor. Therefore, Barco is offering a full line of HD surgical displays, including a 24-inch and a 42-inch model.

## MDSC at a glance

### High-grade image quality

Thanks to their advanced image processing algorithms, the MDSC displays ensure extremely fast image renditions. As a result, users are presented with artifact- and lag-free pictures at all times, allowing for better hand-view coordination. Optimized for High Definition endoscopy, the MDSC displays also contribute to the improved depth perception and enhanced recognition of anatomical landmarks resulting from HD cameras.

### Optimum viewing comfort

High-bright LCD technology guarantees excellent performance under high ambient light conditions. Moreover, the very wide viewing angle ensures bright and color accurate images, even when the surgeon is not directly in front of the display. Individual user preferences can be configured and stored to create a streamlined and comfortable way of working.

### Flexible, multi-source imaging

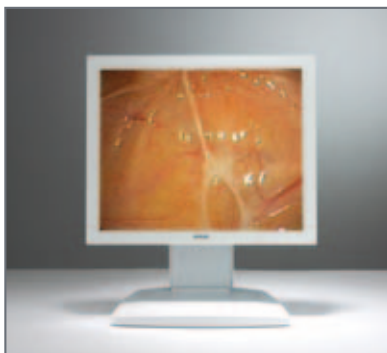
A multitude of analog and digital connectivity options (DVI, HDSI, RGBS, DVI optical,...) brings broad flexibility to the OR. Multiple sources can even be displayed simultaneously (Picture-In-Picture, Picture-And-Picture), to allow for ultimate freedom in viewing. Even radiology images can be displayed with pinpoint accuracy, thanks to the display's integrated DICOM Look-Up-Table.

### Easy cleaning and disinfection

Increasing concerns about healthcare-associated infections such as MSRA ask for firm sterility and contamination control policies. For this reason, the MDSC displays have been designed with a sealed, aluminum housing which offers protection against ingress of liquid, dust and other substances and makes them easy to clean and disinfect. The fan-less design avoids the spread of contaminants in the sterile field, while the anti-reflective front cover protects the valuable LCD against damage from intensive use.

## Available models

MDSC-1119



MDSC-2124



### Designed for the digital operating room

Thanks to their compatibility with the VESA standard, the MDSC displays are easy to install onto surgical carts or booms. Their built-in cable compartment hides and protects the cables. An RS232 communication function allows for remote control and easy integration in turnkey systems.



## Large-screen OR displays

In today's equipment-packed operating theaters, surgical teams are faced with a growing need for imaging solutions that centralize all critical information on one screen and make it visible for everyone in the room. Barco's MD-4221 display responds to this demand by providing large-screen, high-resolution flat panel technology for the surgical suite.

The MD-4221 provides nurses, surgeons and anesthesiologists with smooth, artifact-free images that allow for better, more informed decisions and more efficient procedures. Typical applications include endoscopic video, radiology images, room and boom camera video, surgery information and patient records.

# MD-4221 at a glance

## Large-screen images in High Definition

With a native resolution of 1920 x 1080 pixels, the MD-4221 presents patient information, pathology images and endoscopic video with pinpoint precision on a 42-inch screen. The large-screen (16:9) display delivers bright and crisp pictures that do full justice to surgery images in the bright OR environment. Their wide viewing angle ensures bright and color accurate images, even when the surgeon is not directly in front of the display. High Definition video sources (HD endoscopy cameras, HD surgical light cameras,...) can be connected through DVI and HD-SDI input

## Bringing PACS to the OR

Thanks to its integrated DICOM Look-Up-Table, the MD-4221 display also offers an ideal solution for PACS imaging in the OR. Installed against the wall as a large-screen digital lightbox, it can present life-size, DICOM-compliant images of the body parts that need treatment.

## Smooth, artifact-free video images

Featuring an extremely fast response time, the MD-4221 reproduces moving surgery images with vivid accuracy. Moreover, the monitor automatically locks to the input frequency of the connected source, making all motion very smooth and without artifacts.

## User-definable screen layout

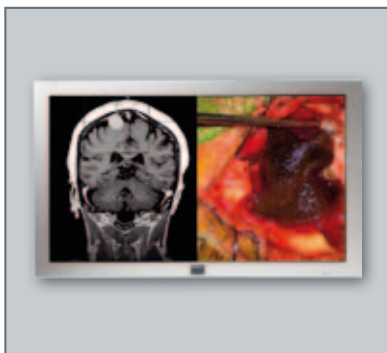
Users can easily configure their screen for Picture-In-Picture or Picture-And-Picture layouts. This allows for more dynamic presentations, while displaying more information on the same screen. Size and position of the Picture-In-Picture setup are easy to configure.

## Medically approved

The MD-4221 display is designed and certified for use in the digital operating room. The anti-reflective protective front glass allows the monitor to be cleaned and disinfected (IPX1 compliant), while its fan-less design avoids the spread of contaminants in the OR.

## Available models

### MD-4221







## MDRC at a glance

### DICOM images anywhere, anytime

Unlike conventional computer monitors, MDRC displays make use of professional-quality LCD technology, delivering bright and sharp images for a very long time. Moreover, the MDRCs have a built-in DICOM Part 14 Look-Up Table, ensuring accurate grayscale 'out-of-the-box'.

### Low cost of ownership

MDRC displays make qualitative clinical reviewing available at an exceptional price. The new MDRC also keeps cost of ownership very low. Its combination of high-quality components and the clever Backlight Output Stabilization system extend its operational lifetime and ensures dependable images for many years. Moreover, the low standby power consumption and smart power saving techniques lead to a minimal impact on the environment.

### Medically certified

Compliance with international medical standards, such as CE, UL, etc., qualifies the MDRC for the most diverse clinical applications and environments.

## Clinical review displays

The rise of digital imaging technology has quickly changed the way in which patient data is used and distributed within hospitals. Medical images, enriched with patient information, are being shared and reviewed beyond the radiology department, becoming available in every hospital department.

This hospital-wide network of Electronic Medical Records is the natural habitat of Barco's 'MDRC' clinical review displays: a new line of multi-purpose displays for hospital-wide viewing of clinical data and images. Building on Barco's long-standing experience in healthcare visualization, the MDRCs offer a DICOM-compliant yet budget-friendly solution for a myriad of healthcare applications.

## Available models



**MDRC-119 (optional touch screen)**



**MDRC-2120**



### A trusted partner in medical imaging

Nearly twenty years of experience and innovation have placed Barco in a unique position at the heart of the medical imaging landscape. Barco has established a strong reputation in the industry with its comprehensive range of solutions for diagnostic, clinical and surgical imaging. Its commitment to quality and service has earned the trust of customers and partners from all over the world.

### Committed to quality

Barco applies the most stringent quality standards throughout the development cycle of all its imaging products. This commitment to quality is your guarantee for long-term image quality and protection of your investment.

### First-rate support wherever you are

For optimum peace of mind, customers can benefit from a full palette of dedicated services that optimize their uptime and keep their expenses under control. Barco's worldwide network of support services is a guarantee for professional assistance, wherever you are, whenever you need it.



## About Barco Medical Imaging

Barco, a global market leader in visualization solutions for Picture Archiving and Communication Systems, has been developing visionary medical imaging solutions for almost twenty years. Driven by experience and innovation, Barco presents a full range of state-of-the-art solutions for radiological, surgical and clinical imaging. From acquisition to display, from image processing to quality assurance, Barco's hardware and software solutions deliver the perfection patients deserve.

Barco's commitment to quality has earned the trust of customers from all over the world, who partner with Barco to meet their most demanding imaging challenges. This partnership approach is also reflected in Barco's worldwide customer service network, ensuring professional support, wherever you are, whenever you need it.

## Request more information

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M00183-R01-0910-MB

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