

# Clarity and confidence

Raising the bar in diagnostic imaging with Barco radiology and mammography displays



**BARCO**

Visibly yours

# Breaking new ground in healthcare imaging



**1986**

Barco's first medical display for ultrasound, MCD-10



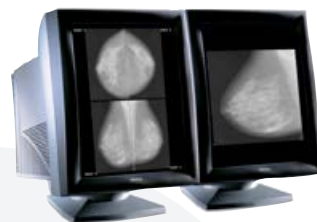
**1993**

Barco's first primary diagnostic display system, MGD-521



**2001**

introducing the I-Guard front-of-screen precision photometer



**2002**

the first 5MP mammography display, MGD-521M



**2004**

introducing unique and patented Per Pixel Uniformity (PPU) technology



**2006**

1st automated QA and calibration system (MediCal QAWeb)



**2007**

1st 30-inch 6MP  
diagnostic color display  
(Coronis Fusion 6MP)



**2011**

1st system for breast  
tomosynthesis (Mammo  
Tomosynthesis 5MP)



**2014**

1st system for unified  
workflow for PACS and  
breast imaging (Coronis  
Uniti®)



*Frost & Sullivan  
Best Practices Award  
for diagnostic display line*

**"** A radiologist's success relies on using the most advanced display technologies available. Barco display systems present the brightest, most precise images and smoothest reading capabilities."

László Tabár, MD, FACR (Hon) Course Director Professor Emeritus of  
Radiology and president of Mammography Education, Inc.

## 30 years of innovation

Leading innovation and smart technology breakthroughs to deliver incredible image quality and spur productivity for the entire healthcare enterprise has been our mission for more than 30 years. The result is a beautiful portfolio of display systems for radiology, mammography, surgery, dentistry, and modality imaging, along with clinical displays for healthcare specialists and digital OR systems.

# Caring with confidence



Diagnostic imaging fueled huge progress in healthcare delivery, resulting in better health outcomes and life expectancies. Screening exams save lives through early detection, making most exploratory surgeries virtually a thing of the past. A hospital's commitment to diagnostic imaging promotes exceptional healthcare that benefits both patients and medical specialists.

Image quality and consistency are paramount to achieving a confident diagnosis, and ultimately, a successful course of treatment. Barco technologies that go beyond pixels and lumens enhance even the subtlest details to aid in precise detection at the earliest possible stage. Meticulously designed for faster image loading, creating a more streamlined workspace, and delivering crystal-clear images that are easy on the eyes, Barco display systems help radiologists diagnose confidently and efficiently to read more studies per day.

## Challenges of a new era

A survey amongst 200 radiologists in Europe and North America gathered their thoughts on the challenges in radiology. The key findings?

### ...About image quality

**91%** believe image quality is the most important display aspect that impacts reading performance.

**80%** of radiologists believe higher spatial resolution will improve the reading experience.

### ...About productivity

**77%** believe efficient workflow impacts reading sessions.

**74%** think increasing image volumes affect productivity.

### ...About ergonomics

**87%** of radiologists experience physical discomfort when reading images.

Almost **70%** of respondents say that display ergonomics are very important.

# Everything you need. And more.

## Attention to detail

Barco display systems deliver unrivaled brightness, better contrast, more accurate colors, and a wider viewing angle than other medical displays, resulting in microscope-like image clarity and accuracy. The result is impeccable quality in grayscale, color, moving, and static images from a multitude of modalities.

## Peak performance

Barco monitors are a truly all-in-one display system, comprising a high-quality display, an ultra-fast display controller for fast image loading and manipulation, and an automated QA solution to ensure peak performance and uptime.

## Easy on the eyes

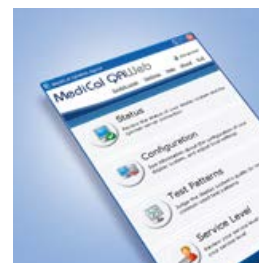
Growing study volumes result in greater pressures and longer reading days for radiologists. Ergonomic features that minimize stressors, anti-reflective screens, enhanced display form factors, and motion-saving tools increase focus to enhance productivity without discomfort.

## Sensory consistency

Built-in stabilization and patented front-of-screen sensors guarantee consistent image brightness and clarity throughout the entire display lifespan and on every display connected to the enterprise network. Colleagues in different locations see identical images, facilitating accurate remote collaboration.

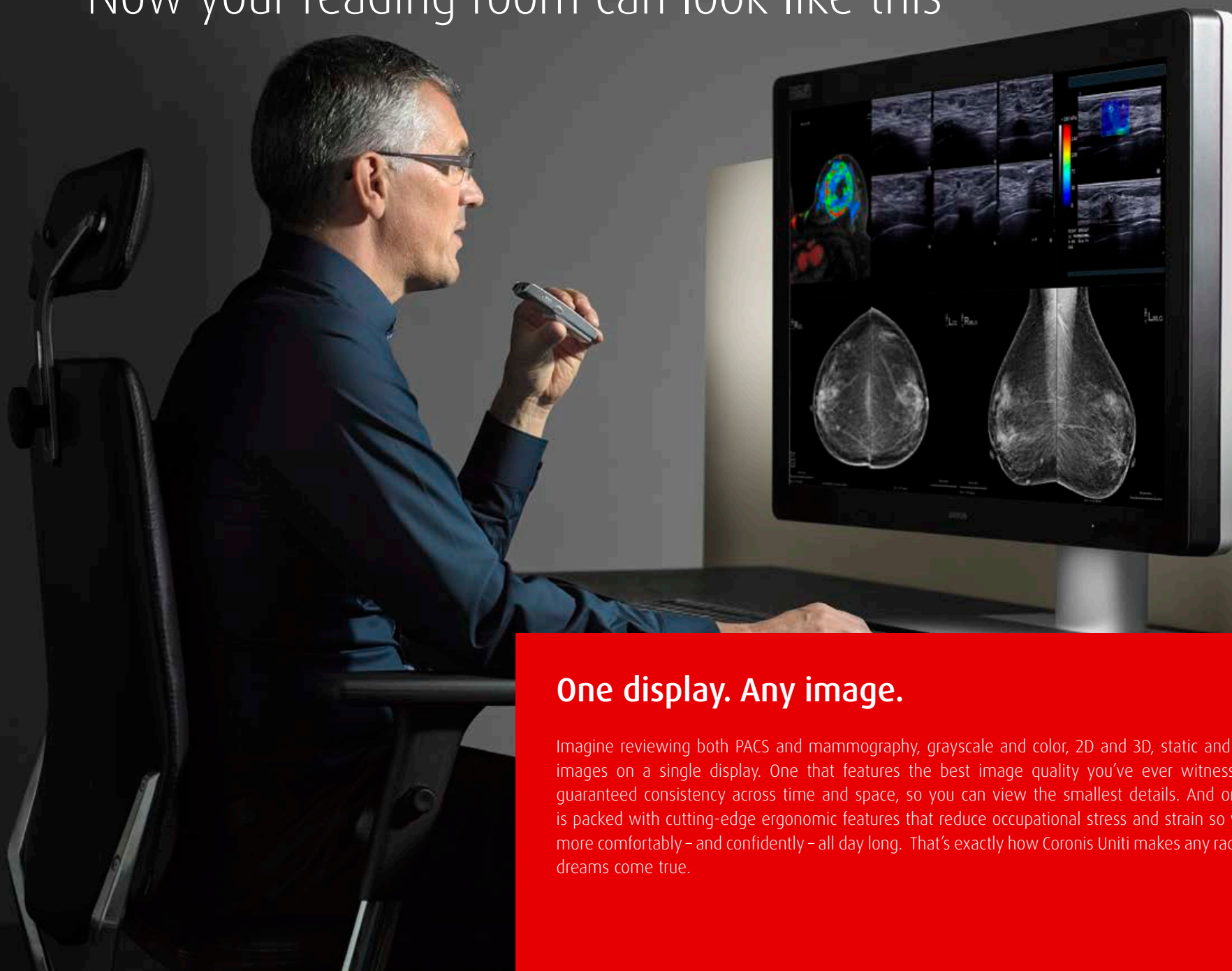
## Ultimate peace of mind

No distortions and no distractions thanks to MediCal QAWeb, a cloud-based service for automated Quality Assurance and calibration. And the standard 5-year warranty on Barco radiology displays is the best in the industry.





Now your reading room can look like this



## One display. Any image.

Imagine reviewing both PACS and mammography, grayscale and color, 2D and 3D, static and dynamic images on a single display. One that features the best image quality you've ever witnessed, with guaranteed consistency across time and space, so you can view the smallest details. And one which is packed with cutting-edge ergonomic features that reduce occupational stress and strain so you work more comfortably – and confidently – all day long. That's exactly how Coronis Uniti makes any radiologist's dreams come true.

# Introducing Coronis **Uniti**®



## **Big and beautiful**

Featuring the largest form factor today, 12 million pixels of pinpoint precision, the brightest calibrated colors and superb grays, Coronis Uniti offers the best image quality on the market. Featuring a unique aspect ratio, the display has been designed to mirror a human's natural field of vision so radiologists can view images comfortably without extraneous eye, head, and neck movement.

Because of its 1:1 image presentation and Optical Glass technology, Coronis Uniti always presents the best image without the need for scaling, panning or zooming. Its feature-rich design – including exceptional light control options and high-speed cine imaging – make Coronis Uniti the display your reading room deserves.

As a truly “unified” display, it brings together color PACS and breast images from all modalities on a single screen, to enable a more thorough examination and confident diagnosis. For your radiology department, the result is a more efficient, cost-effective workstation built around a single display, which is simpler to manage and control.

No more boundaries

## Get the bigger picture

The field of multi-modality imaging has seen rapid progress in the last decade with reading rooms fast becoming one of the busiest departments in the healthcare enterprise. Its value has been demonstrated in numerous studies: combining computed tomography (CT) and MRI, for example, provides stunning structural detail. By fusing anatomical and functional imaging, radiologists get the full picture.



# Coronis Fusion



## Engineered for different modalities

The first-ever Fusion display on the market and already in its 5<sup>th</sup> generation. That's Coronis Fusion. This multi-modality diagnostic display system streamlines your workflow, combining multiple images or studies on a single display – so switching between workstations becomes a thing of the past!

Ingeniously designed, Coronis Fusion lets you configure your screen as a single, widescreen display or two bezel-free heads. Image-enhancing features reveal the smallest details with sharper grayscales than ever before and picture-perfect colors, all on the same display. The result is a faster, more accurate diagnosis.

## Boost your productivity

Researchers from the Montefiore Medical Center found that a 6MP diagnostic display increases productivity by up to **19%** and reduces eye strain compared to a dual-head 3MP setup. What's more, Coronis Fusion features the latest exclusive IPS-Pro LCD panel technology, the sharpest images, and the highest calibrated luminance in the 6MP display range today to make your reading sessions even more productive.

# Sometimes, innovation is just plain simple



Meet Nio and Coronis – two families of diagnostic displays that are ideal for high-quality imaging of diagnostic modalities. Available in color or grayscale. Starring 2 million or 5 million pixels – or anything in between. And packed with innovative features that make your image look the best it can. It's why Nio and Coronis are indispensable in any radiology department.



## FROM INDUSTRY-STANDARD TO BENCHMARK

### Nio



QAWeb

on-demand calibration and quality checks



FRONT SENSOR

front-of-screen sensor



ULT

uniform luminance (on pixel area level)

### Coronis



QAWeb

fully automated QA & calibration



MULTI-SENSOR

intelligent multi-sensor technology with patented I-Guard



PPU

per pixel uniformity correction (on pixel level)

## What **Nio** and **Coronis** have in common...



### **Engineered down to the smallest detail**

Their integrated front-of-screen sensors have been designed for perfect luminance and DICOM calibration. They have no moving parts, so the front sensors are less prone to dust and damage. This results in accurate pixel measurements year after year – even with intensive use. Barco's I-Guard and Nio front sensors work wonderfully well with MediCal QAWeb and are included in the 5-year warranty.

### **Quick on the uptake**

The bright LED backlights guarantee a luminance ratio that exceeds ACR guidelines, rendering more DICOM JNDs (Just Noticeable Differences) to expose subtle details. Innovative uniformity enhancements (on pixel or pixel area level) show the smallest radiographic abnormalities – without windowing and leveling!

### **With room for change**

Angle the displays any way you like thanks to IPS WideView LCD technology. It prevents color and contrast shifts when viewing images off center. Built-in ambient light presets compensate for changing light conditions in the radiology reading room. And last but not least, the factory-fit front covers come with a proprietary, double-sided anti-reflective coating which reduces reflection to less than 0.5%.

# Caring for women's health



## Save lives

Breast cancer remains a top priority for healthcare organizations and society as a whole. According to the World Health Organization, it is the largest cause of cancer-related deaths for women worldwide, as at least 1 in 8 women will be diagnosed with breast cancer in their lifetime. On a more positive note, a reduction in breast cancer incidents has been reported, and death rates have been declining since the 1990s: the remarkable result of worldwide awareness campaigns, better treatment options, and early detection through improved screening. Facilitating detection of breast cancer in its earliest stage means investing in the newest screening methods and diagnostic technologies, which can literally save lives.



### Preferred by 80% of screening centers

4 out of 5 breast screening centers choose Barco mammography display systems. These 5MP display systems – whether Nio, Coronis or Coronis Uniti – are the perfect match for breast imaging, whether in

color or grayscale, in 2D or 3D, on a large, bezel-free widescreen or on a dual-head workstation, using the sports car of mammography displays or a respectable sedan. The choice is yours.



### Color: the future of mammography

Barco mammography displays have been designed for demanding radiology applications that require excellent grayscale rendition and detail, especially appreciated in mammography and breast tomosynthesis. To guarantee that color breast images

are rendered just as accurately, Barco developed SteadyColor technology: for sophisticated calibrated color, from display to display, that also improves gray images. Unique in the market!



# What's unique about us?

## **Brilliance on screen. And behind it.**

Innovative technologies that seamlessly integrate with your displays enrich your diagnostic imaging experience to boost their functionality and performance.

## **Call it collaboration**

Ideal for academic symposiums, clinical training and other group learning environments, Conference CloneView enables large-screen viewing of precise diagnostic images to facilitate collaboration.

## **Purpose-powered display boards**

Proprietary MXRT medical display controllers are your guarantee for leading-edge performance, flexibility as well as reliability and unmatched processing power for medical datasets. These boards are validated with the latest workstations and with all major PACS applications.

## **Enterprise-wide QA**

MediCal QAWeb is the industry's only online service for high-grade Quality Assurance and DICOM calibration. This all-inclusive secured system guarantees consistent image quality and uptime of all PACS display systems throughout the hospital enterprise. Additional features include remote control, display asset management, problem solving and reporting.



## **Need a worklist display?**

Barco Eonis displays are the perfect sidekick for radiologists. These clinical review displays offer exceptional image quality and high brightness levels. A look under the hood reveals a unique asset: a front consistency sensor that guarantees consistent images. Every time the display is switched on, image quality is aligned anew. In short; your PACS images, RIS data and image-enabled EMR have never looked better, and will continue to do so for many years to come.

Here's where you'll find us.



# Supporting healthcare professionals a billion times per year

Improving the quality and value of care are the leading priorities for healthcare professionals today. At a time when the amount of data is growing rapidly and there is more demand for mobility, healthcare systems struggle to work more efficiently, and to provide personalized care to a growing number of patients in an affordable way.

Focused on transforming the delivery of care, Barco connects healthcare professionals at every patient touch point, from the imaging room, to radiology, through specialist consultations and in the surgical suite. We offer a network of medical imaging solutions that deliver the complete picture to support more informed decisions, when and where it matters most.

It's why we are considered the gold standard for medical visualization and how we are there at every stage of the patients' journey. So healthcare professionals can focus on patients' needs and, in the end, achieve the best clinical outcome.