The diagnosis is in the details

Next generation “gold standard” image processing that gives you greater diagnostic confidence
For decades, Agfa’s MUSICA software has been taking image processing to the next level, delivering digital radiography image processing software that automatically produces optimized images. A truly intelligent solution, MUSICA provides you with the consistently high image quality you need to support your diagnosis, while saving you both time and effort. That’s why we call it the “gold standard”.

And as imaging technology and acquisition systems have advanced, so has MUSICA. MUSICA 3 and MUSICA 3+ offer you new features and benefits that match your evolving needs. With MUSICA, you get more out of your images, with greater efficiency and the lowest possible radiation dose!

Exquisite image quality

From its beginnings, MUSICA has been state-of-the-art, offering an image quality our customers love and our competitors envy. And while nearly all CR and DR systems now include image processing software, the methodology and quality of this software play a very big role in determining the quality of the diagnostic image you see.

MUSICA uses a multi-scale, layered representation of an image to enable precise control over many aspects of your image’s “look”, improving the overall visibility of clinically relevant structures. And it isn’t affected by the presence of collimation or direct X-ray backgrounds in the image, so you get consistent, high-quality results. What’s more, it is focused on the enhancement of subtle contrasts, so that all clinically relevant structures with this subtle contrast, regardless of frequency content, are made more visible – revealing details that might otherwise be hidden from you.

Intelligence, independence and evolution

But MUSICA doesn’t just give you excellent image quality, it does it in a way that offers you maximum ease of use and optimum output of images every time, regardless of collimation, body part or patient position. MUSICA gets all of the parameters it needs directly from the input image itself, automatically analyzes the characteristics of each image, and then optimizes the processing parameters – so you don’t need to do a thing.

Thanks to MUSICA, your imaging workflow is smoother, your departmental productivity is enhanced, and your diagnostic confidence is improved. And automatically optimized images can help you get greater detail with a potentially lower dose.

Getting more out of your images

Our CR and DR solutions have evolved, to offer our customers a complete range from entry-level to top-of-the line solutions. But regardless of which CR or DR solution is right for you, you don’t have to accept any compromises in image quality! With MUSICA, you can achieve high image quality and high consistency on every one of our solutions, regardless of patient size, tube quality and exposure settings. This makes it ideal for a broad range of specialty applications, from pediatrics to mammography to fluoroscopy.

Special packages can enhance this flexibility, such as Neonatal Processing, which is optimized for examining premature and full-term new babies, and Catheter Processing, which enables the verification of the positioning of catheters.

And to make it even easier, MUSICA images require no window level adjustments or post processing. It will optimally render all relevant data in the image, adapted to the sensitivity of the eye, so you can see everything available in the image without adjusting the window level setting.

Improved performance for difficult image areas

The next generation MUSICA is all about getting the most out of your images, even in the difficult areas of your images. Greater lung detail, improved contrast for difficult chest areas and for extremities – including overlapping bone structures, a more homogenous presentation of all tissue, and more detailed and natural presentation of soft tissue. With all these enhancements, you will not only be able to see more, but also to read with greater comfort even for long periods, and enjoy higher diagnostic confidence in your images.
Next generation technology

**Fractional Multiscale Reconstruction (FMR):**
the new mathematical substructure of MUSICA, which further decomposes image components in microscopic fractions for separate processing. Detail is enhanced with pixel-level precision achieved by splitting the multi-scale filter kernels into smaller fractions and by involving all pair-wise pixel differences within the filter kernels. FMR results in a more accurate multi-scale enhancement model, a balanced participation of all filter kernel pixels in the enhancement process, and better preservation of low contrast details next to high contrast steps.

MUSICA goes Dynamic

MUSICA now processes moving images (such as fluoroscopy), as well as static images, with the same high quality and low dose features that have made it the ‘gold standard’ for imaging departments around the world. And it adds enhanced noise suppression, superb brightness and density stabilization to the benefits you can see.

Better viewing of difficult areas

- Balanced presentation of both bone and soft tissue
- Excellent rendering of overlapping bone structures
- Visualization of subtle details in the abdomen
- True representation of implants with clear bone interfaces
- High level of detail in the mediastinum
- Sharp trabecular and cortical bone