



# Making the difference with Philips Live Image Guidance

BV Vectra mobile surgical C-arm system

**PHILIPS**



# Making the difference with Philips Live Image Guidance in orthopedic injuries and disorders

Together we make the difference in orthopedic injuries and disorders to improve patient outcomes and save lives. With our Live Image Guidance we aim to remove barriers to safer, effective and reproducible minimally invasive treatments, delivering relevant clinical value where it's needed most – at the point of patient treatment.

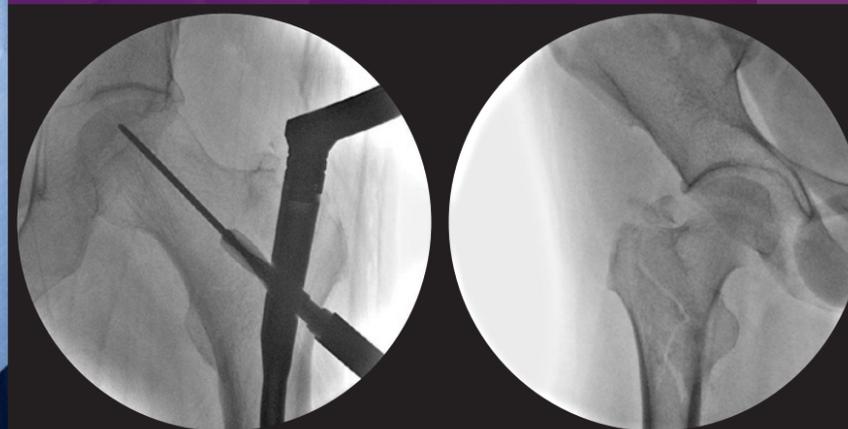
Reliance on fast, quality imaging for fracture repair is a given in your daily routine. Ease of use, ease of positioning and the power to penetrate large patients are key requirements. Our X-ray systems are intuitive to operate. You simply point and shoot. They enable you to provide high quality care by delivering the image quality you need.

The BV Vectra system is dedicated to orthopedic surgical procedures, including trauma, spine, and pain management. This compact system is perfect for visualizing difficult spiral or comminuted fractures to support the treatment of virtually everything from simple to challenging fractures.

Take advantage of clear visualization of dense and complex anatomy, quick positioning, and solid performance in a surgical environment to provide fast and accurate diagnosis and treatment. Their versatility helps you efficiently manage the total cost of ownership.

Together, we drive growth and open doors to new procedures and techniques that truly make a difference in people's lives.

Get excellent image quality at low dose to perform challenging fracture repairs.



## Contents

<b>Better user experience to promote consistency and efficiency</b>	<b>4</b>
Controls are designed to help all users operate the system, quickly and intuitively, even with limited training	
<b>Greater insight and confidence in finding and treating the problem</b>	<b>6</b>
Clear visualization of dense and complex anatomy supports fast and accurate diagnosis and treatment	
<b>Lower barriers for minimally invasive interventions</b>	<b>8</b>
Manage radiation exposure and increase awareness with our comprehensive DoseWise program	
<b>Increased economic value</b>	<b>10</b>
Robust design and service support enhance operational performance and provide a strong return on investment	



Easily position the system to get clear, detailed views of the pedicles during spine procedures. The system can be operated quickly using the intuitive user interface.



The controls are laid out in a logical fashion. With a minimum of functions and menus, so you can easily get the right image. And the flat display panels make it easier to clean between exams, too.

**Work efficiently**

Consistent imaging of dense and complex anatomy is much easier with BV Vectra thanks to our Digital Exposure and High Definition Fluoroscopy modes. Just press the foot or hand switch to quickly switch between these X-ray modes and efficiently treat patients.

# Better user experience to promote consistency and efficiency

Your mobile X-ray system gets intensive use, from many different people working in crowded situations. You know that every minute counts in the OR, so the easier a system works, the better. Our controls are designed to help all users operate the system, quickly and intuitively, even with limited training. Clear icons and step-by-step menus provide extra guidance, allowing efficient procedures.

**Time saving extras**

To quickly check a position without using excessive X-ray dose during an orthopedic or pain management procedure, you can acquire images by just quickly tapping the foot or hand switch.

Save additional time using our unique BodySmart feature. It allows you to acquire fast and consistent images even at the edge of the image intensifier, which further improves the workflow in high pressure operating environments.

**Easy to use with minimal training**

Everyone can easily operate the BV Vectra thanks to its ergonomic design and smooth maneuverability. This fully counterbalanced C-arm has an excellent C-depth of 660 cm, allowing it to be easily positioned around large and obese patients for a variety of orthopedic applications. It can be angulated up to 125 degrees to provide better accessibility for steeper projections. The conveniently placed handles and rear-wheel steering assist you in quickly positioning and re-positioning the system during procedures.



The intuitive design of the user interface on the C-arm stand has a minimum of controls and provides clear guidance to support smooth and efficient orthopedic workflow.

# Greater insight and confidence in finding and treating the problem

When you're treating a difficult comminuted fracture or other challenging procedures, you don't want to lose time on adjusting a blurred image. The BV Vectra quickly gives you the best fluoroscopic images available, the first time. And our real pulsed fluoro mode provides excellent quality images at half the dose of normal fluoroscopy.

## Get superb images, time after time

With its dense and complex nature, orthopedic anatomy presents unique challenges for imaging systems. The BV Vectra features 1k x 1k, high-resolution digital imaging chain with an array of powerful image processing functions. Philips harmonization, advanced noise reduction and 2D edge enhancement provide you with high quality images to reveal the intricacies of orthopedic injuries and disorders. It supports you in quickly visualizing complex bone structures to aid in the precise positioning of implants.

## Consistent imaging even when metal is present in FOV

Artifacts from metal objects such as orthopedic implants, can be problematic during X-ray imaging because of the dark bands or streaks across the images caused by the effects of the metal on X-rays. These metal artifacts can hide anatomical structures and pathology, hindering visualization and reducing diagnostic confidence. The BV Vectra includes our MetalSmart feature which automatically adjusts the contrast and brightness of images to improve image quality when metal objects are present in the field of view, without impacting the X-ray dose.

## More imaging power

Our highly efficient X-ray componentry gives you the power to go the distance in longer studies without overheating. Thanks to our exceptional heat management capabilities. The result is fewer delays and longer performance, exam after exam. Plus, our advanced automatic high penetration mode gives you full contrast for the steepest projections, like lateral hip exams.

## Fast, consistent imaging

High quality images are available fast thanks to Philips unique BodySmart software, which delivers consistently superb image contrast. It tracks and precisely defines the field of view to anatomy – no matter where it is on the image intensifier. Consistent imaging of dense and complex anatomy is much easier with BV Vectra thanks to our Digital Exposure and High Definition Fluoroscopy modes.



The BV Vectra's high quality fluoroscopic images take the strain off your eyes, too, making it easy to see even the finest details when positioning needles or orthopedic implants.

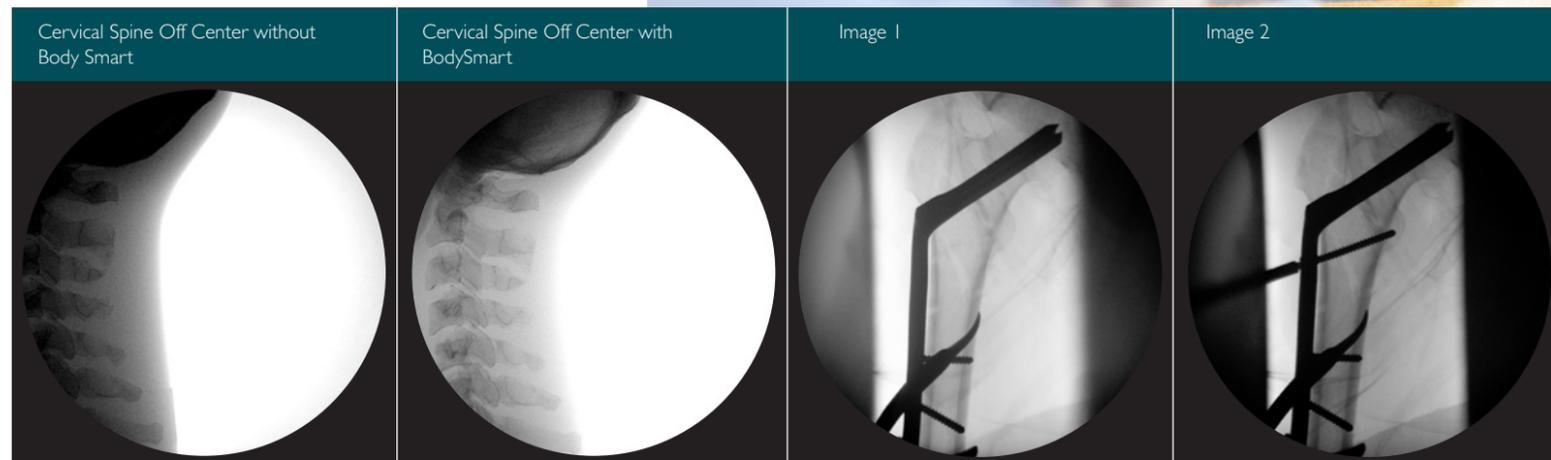


Image 2 was taken with MetalSmart feature and shows the anatomy with excellent clarity compared to image 1 captured without MetalSmart feature.



# Lower barriers for minimally invasive interventions

Many medical imaging manufacturers talk about dose protection, but we build it into our systems – from the ground up. With every new system, we look at how we can further reduce X-ray dose while increasing image quality. That means before you even put on a lead apron, we have done our utmost to protect you and your patients from unnecessary dose.

## Low dose imaging

The real pulsed fluoroscopy mode cuts the dose of normal fluoroscopy in half, while providing excellent quality images. Our unique beam filters reduce the patient skin dose by 40% over conventional filters. The fully automatic MetalSmart feature excludes the metal artifacts without affecting the contrast of the image and also the X-ray dose.

## More dose awareness

Another important way Philips can help protect your patients from dose is by helping clinicians become better informed about actual X-ray dose levels during exams. Philips mobile C-arms provide real-time feedback on the actual dose usage and the effects of collimation and field of view on X-ray dose.

The system alerts staff when they exceed a pre-defined procedure X-ray dose level. So you can quickly take appropriate measures to adjust the amount of dose. This all contributes to an increased X-ray dose awareness in the OR.

## Less is more with Philips DoseWise

DoseWise is a set of techniques, programs, and practices that allows excellent image quality, while protecting people in X-ray environments. It is based on the ALARA (As Low As Reasonably Achievable) principle, but is so much more. It is a philosophy that is active at every level of new product design and development. This integrated, system-wide approach makes DoseWise a powerful example of the Philips mission to improve the quality of healthcare.



# Increased economic value

When you partner with Philips, you are partnering with a leading global brand known for the quality and reliability of its imaging systems, services, and support. You can depend on our full support throughout the whole lifecycle to help reduce your operational costs and extend the useful life of your system. Thanks to our ongoing commitment to developing technology, your BV Vectra system can stay up-to-date throughout its lifecycle, embracing new applicational demands and technical advances as they arise.

## Built to last

All components are manufactured of robust materials and reliable systems that are designed to provide longlasting performance. Our hardware components and system geometry undergo rigorous tests to ensure that they will withstand intensive use for 10 years and longer. This is confirmed by the proven track record that our components and technologies have for reliability and a low rate of service calls.

## Your needs, your support

As your healthcare business changes, we are changing right alongside you. Today's healthcare providers are looking for more flexibility in the support they receive from their imaging partners. Just as our BV Vectra is the result of a close collaborative process, our Service Agreements have been designed from the ground up based on extensive input from healthcare providers to meet their service challenges and business priorities.

Whether you want to reduce your operational risk and equipment downtime, leverage your in-house service capabilities, or use your system more effectively. You choose the support that is the right fit for your facility. Our flexible portfolio of Service Agreements offers a range of coverage – from premium service plans to an à la carte solution for customers with in-house engineering teams – that align with your budget and

in-house resources. We can also tailor a service offer as needed. And of course, as your needs change, our support is flexible enough to change with you. We are here to support you in moving forward.

## Safeguard uptime with our global service network

Your system's uptime and productivity is backed by our extensive global resources. Over 6,000 highly experienced service technicians provide professional support to customers in every corner of the world, 24/7. For instance, Philips Remote Services, can identify, diagnose, and troubleshoot system errors online with minimal on-site visits to save you time, money, and lower your total cost of ownership.



## A long-term dependable partner

When you invest in the BV Vectra you invest in the future. Philips was the first company to market the mobile C-arm. That means every time you step on the pedal you are supported by over 60 years of Philips experience in developing and servicing mobile C-arms. When it comes to delivering reliable performance in high stakes surgical environments all over the world, we know all about providing consistent, high quality imaging support, regardless of the procedure or patient.

Together, we drive growth and open doors to new procedures and techniques that truly make a difference in people's lives while reducing the cost of care.

This material is not for distribution in the USA. Availability in other countries subject to local approvals, please contact your local representative.  
[www.philips.com/BVVectra](http://www.philips.com/BVVectra)

---



© 2014 Koninklijke Philips (Royal Philips) N.V.

All rights are reserved. Philips Healthcare reserves the right to make changes in specifications and/or to discontinue any product at any time without notice or obligation and will not be liable for any consequences resulting from the use of this publication.

Printed in The Netherlands. 4522 962 99801 \* APR 2014