

# Servicing the Philips BV-Pulsera C-Arms



RADIOLOGICAL SERVICE TRAINING INSTITUTE

## Introduction

This course is designed to provide the advanced service professional with the skills and knowledge to maintain the Philips BV-Pulsera at the highest state of readiness. All adjustments will be discussed to establish optimum performance criteria. Theory and hands on sessions will develop the skills necessary to troubleshoot system failures and restore it to operation.

## Prerequisites

To attend this course, the service professional must have good fundamental knowledge and understanding of the principles gained through attendance at our Phase I, Phase II, and Phase III X-ray courses or equivalent field experience.

## Objectives

At the completion of this course participants will be able to:

- Operate the Philips BV-Pulsera
- Identify all systems, subsystems and components of the Philips BV-Pulsera
- Verify power supplies for accuracy and function
- Service and calibrate system batteries and charger circuits
- Utilize all communication interfaces to calibrate and evaluate the systems
- Evaluate the performance of the X-ray generator, imaging and workstation sections of each system

- Calibrate and adjust all components of the X-ray generator, imaging chain and workstation
- Utilize all diagnostic indicators to troubleshoot system failures
- Restore the system to proper functional state following a system failure
- Evaluate and repair mechanical systems

## Course Outline

### Day 1

- Introduction to the BV family
- Setup and request BV-Scope License
- Simplified system block diagram
- Detailed block diagram
  - o X-ray control
  - o High voltage converter
  - o Filament supply
- Lab Activities
  - o System layout
  - o Sub component location
  - o Operation/knobology
  - o Checkout procedure
  - o Performance measurements

### Day 2

- Generator operation
- kV/mAs control
- Filament supply
- Mains control
- Lab Activities
  - o kV calibration

- o mA calibration
- o General x-ray calibration

### Day 3

- video system
- Automatic brightness control
- Lab Activities
  - o Video system calibration
  - o MSP checkout

### Day 4

- BV-Pulsera general operation
  - o kV control
  - o ma/mAs control
  - o Midas Board
- XTV CCD camera system
- Lab Activities
  - o X-ray system check out
  - o TV system check out

### Day 5

- Review
- System calibration
- Troubleshooting