

# Servicing the GE Digital Portables (Super-Bee) Family: Optima XR200/XR220/XR240 and Brivo XR285

RADIOLOGICAL SERVICE TRAINING INSTITUTE

## Introduction

The GE Digital Portable (Super-Bee) Family training course cover GE's latest Portable DR (Digital Radiography) systems and DR ready systems.

The Optima Family course is a skills development course designed to provide the experienced service professional with the skills necessary to fully service and calibrate these portable systems. Systems that will be covered in this course include:

- Optima XR200
- Optima XR220
- Optima XR240
- Brivo XR285

## Prerequisites

To attend this course, the service professional must possess fundamental knowledge and understanding of the principles of X-ray and basic electronics.

## Objectives

- Understand the similarities & difference between the Optima family products.
- Describe how factors are optimized to produce the highest quality digital images
- Describe the function of the basic components of each GE Optima family portable digital radiographic units
- Perform the necessary digital performance monitoring and

quality assurance procedures utilizing the GE Optima System

- Perform all system calibrations and adjustments to maintain the highest quality images
- Evaluate circuit functions to facilitate troubleshooting
- Perform a complete and thorough preventive maintenance inspection on the unit

## Course Outline

### DAY 1

- GE Digital Portable Family - Systems Introduction
- Systems Overview
- System Components
  - o Djinn
  - o Locust
  - o Hornet
  - o Firefly
  - o Caterpillar
  - o Spyder
  - o Cricket
  - o Mantis Power Supply
  - o LVLE2
  - o AUX Module
- Specifications
- Terms & Acronyms
- Documentation
- GE digital detector technology & overview
- Operations
- Lab Activities
- Basic system operation
  - o AWS acquisition software
  - o Image acquisition
  - o Image viewer
  - o Screen considerations

- o Technologist digital QC

### DAY 2

- Covers & Panels
  - o Battery change
- Power Supplies & Check
- Lab Activities
  - o Covers and Panels
  - o Component Identification
  - o Tube Change
  - o Power Supply checks
  - o Battery Change

### DAY 3

- Configuration
  - o Site
  - o Network & DICOM
- System Cal's & Service
- Lab Activities
  - o Site Configuration
  - o Network/DICOM Configuration
  - o Detector Install/Calibration
  - o Generator Calibration

### DAY 4

- Computer Maintenance
- System Diagrams & Schematics
- Troubleshooting & Diagnostics
- Lab Activities
  - o Backup/restore
  - o Load From Cold
  - o Troubleshooting/Diagnostics

### DAY 5

- Preventive maintenance
- Course review
- Course evaluation
- Final exam