1   **DigitalDiagnost 4.0 HiPer**   **1**

DigitalDiagnost is a premium direct digital radiography system with flat detector technology, based on modular components to allow for customization for all radiographic applications and workload requirements. It benefits from years of developmental experience and suggestions from satisfied customers all over the world who have had conventional and digital Philips Bucky systems.

The system combines all the advantages of a digital radiography unit with the latest Philips advanced features for easy and ergonomic workflow. Please note that depending on the particular room setup chosen, some options might not be available or already be included in the setup.

Main benefits at a glance

- Flexible component-based geometry to fit specific needs
- High efficiency and high patient throughput due to powerful automated features
- Uncompromising ergonomics due to complete system integration and special design
- Integrated one, two or three Cesium Iodide (CsI) digital flat panel detector(s), depending on setup
- Ample detector area for full diagnostic information even with large patients processing for comparable image impression
- Dose reduction due to high detector quantum efficiency
- Various generators and tubes, depending on setup
- Ceiling suspension with handy handle, control buttons, and release brake, as well as convenient color-coding of movements
- Wide 16.5 cm (6.5") LCD display on tube head for clear information and statuses
- Integrated centering laser in the tube head for easy positioning
- Very high image quality due to state-of-the-art detector technology and exclusive UNIQUE image processing
- Decrease in the number of repeat exposures due to the reduction of overexposed and underexposed images
- Total radiation dose monitoring by an integrated area dose calculator
- Customizable Eleva touch screen user interface
- Flexibility for integrating into hospital network infrastructure

The ceiling suspension carrying the X-ray tube allows the freedom for a wide range of longitudinal and transverse movements in the room, allowing performing table and vertical stand examinations, as well as lateral projections and free exposures using the wireless portable detector or PCR cassettes. Thanks to a four-part telescopic column and an award-winning control handle, the system can be operated with only one hand and easily positioned close to the patient. The clear and wide LCD information display and controls on the tube head, combined with the Eleva alternative workflow concept, automatic tube tracking, detector alignment and move to position functions, provide high projection flexibility plus quick and easy handling. A convenient room height adjustment at installation allows the system to fit almost any room height, to achieve

the necessary source-image distance above the table, and to go down to the floor for lower extremity work.

The innovative Eleva workspot of DigitalDiagnost lets you experience simplicity like never before. Designed with input from customers, it provides a clear and intuitive touch screen user interface. It is easy to learn and use, and is highly configurable to adapt to particular needs and specific workflows, resulting in high room efficiency.

The high workflow automation possible through the Advanced Eleva concept allows concentrating on patients instead of on the system. The touch screen user interface, the integrated generator controls, and the automatic setting of exposure parameters based on patient and examination information coming from the RIS, provide quick and easy access to all functions a busy technologist needs to achieve an efficient workflow. In addition, the Eleva alternative workflow concept provides the flexibility to adapt to particular situations and change the planned examination protocol without readjusting any exposure settings.

The Philips Eleva Workflow plus package provides smart tools for an improved and fast workflow and is complementary to the Advanced Eleva functionality standardly provided with the X-ray system. Especially designed for high throughput environments, the Eleva Workflow plus package helps the user to focus on the patient and the examination instead of on system handling and workflow. Automatic markers are generated, displayed and stored/ printed automatically for CR and DR images. The intuitive RIS- code learning feature allows for "on-the-fly" configuration of new or changed RIS codes directly within the worklist environment. The RIS can be filtered on a detailed level for improved schedule planning and fast access to specific patient information. The "Generator only" mode allows additionally for free exposures on e.g. CR cassettes or film cassettes without the need to schedule the patient in the system worklist. Furthermore, the Eleva Workflow Plus package allows access to Eleva's "advanced user" environment for individual customization and configuration of the user interface, such as tool bar configuration, user management, analyzing system statistics and adaptation of the anatomical data base and image processing.

The Philips Eleva Review plus package was developed for workflows, where intense image review plays an important role. Dedicated tools help to manipulate, compare, measure and prepare images before being archived in a PACS or being printed on film. The full screen mode allows for improved clinical review and quality management of images. Thanks to the multiple image display (display 1, 2 or 4 images), previous images can be directly compared to newly acquired images. Additional zoom and pan functions, dedicated zoom settings to the point of interest, size calibration and extended measurement functions like distance and angle are required for precise quantitative image analysis. Semi-automatic rotation and free image rotation in 0.5 degree steps provide fast image correction in the case of angulated or oblique projections. Annotations such as free text or pre-defined markers (e.g. L/R) can be customized and freely placed within images.

The simple ranger tool allows for dedicated image processing of an anatomically relevant image area for optimal display of challenging structures, e.g. metal implants or small foreign particles.

Thanks to Philips outstanding UNIQUE (UNified Image QUality Enhancement) advanced multi-resolution image processing, images are always displayed fully processed. UNIQUE provides an optimal contrast harmonization with enhanced details, while the overall impression remains natural. When used in combination with Philips integrated CR, it provides a comparable image impression for all CR and DR images.

The Eleva Advanced Dose Reporting allows printing of the individual patient dose report as well as the cumulative daily dose reports via network connection on a paper printer in PostScript format (not part of this package) for easy dose management.

DigitalDiagnost provides built-in privacy according to HIPAA recommendations, and security and interoperability standards. It integrates seamlessly into the hospital network and provides embedded antivirus software as well as restricted access to prevent the system from unauthorized use. It supports connection to a Radiology Information System (RIS), to DICOM-compatible diagnostic units and archives and to DICOM imagers, according to the relevant IHE profiles.

Specifications

- BuckyDiagnost CS III Ceiling Suspension
  - Four-part aluminium telescopic column with spring counter balanced holder for X-ray tube assembly, adaptable to individual room heights
  - Ceiling height at source-image distance 110 cm (44"): 2.65 m to 3.20 m (8' 8.3" to 10' 5.9")
  - Minimum ceiling source distance: 87.1 cm (34.3")
  - Possible room height adjustment: 37.5 cm (14.8")
  - Lowest tube position: 30 cm (11.8") measured from center of beam to the floor
  - Length of rails: base rails 4.3 m (14' 1.3"), optional rails extension 2.7 m (8' 10.3")
  - Longitudinal travel: 3.44 m (11' 3.4"), 6.14 m (20' 1.7") with rails extension option
  - Transverse travel: 1.50 m (4' 11") with short transverse rails, 3.22 m (10' 6.7") with long transverse rails
  - Vertical travel: 1.65 m (5' 5.2")
  - Rotation of focal spot around vertical axis of column: 360° (±180°), with rotation stop +180°/-165° and lock position every 45°
  - Angulations of focal spot around horizontal axis: ±125°, lock positions 0° and ±90°
- Control handle
  - Centering device in longitudinal and transversal directions
  - Brake/locking controls and central three-axis brake-release at lowest position of handle
  - Wide 16.5cm (6.5") LCD information display and control buttons
- Collimator
  - Motorized automatic collimation, manual overrule possible, with light field indicator
  - Angle of aperture and rotation: 2 x 15°, ±45°, depending on the collimator (see type number plate)
  - Timer switch: up to 30 s
  - Inherent filter value: <0.3 mm at 100 kV, depending on the collimator
  - Added filters: 2 mm Al or 1 mm Al + 0.1 mm Cu or 1 mm Al + 0.2 mm Cu
  - Source-image distance measurement tape
- Eleva workspot computer
  - Processor: Intel® Core2 Duo SP 9300 (2.26 GHz, 6 MB L2 Cache) or better
  - Hard disk: 250 GB SATA, 4 GB used for operating system and application software
  - Image storage: 200 GB for typically 4000 images
  - 4 GB memory or better
  - CD drive
  - Ethernet 10/100/1000 Base-T Gigabit
  - Geometry interface
  - Detector interface
  - Integrated generator control
  - Memory stick support for quality control
  - Keyboard and mouse

Comprising

- BuckyDiagnost CS III Ceiling suspension
  - Four-part telescopic column
  - X-ray tube assembly with collimator
  - Control handle with buttons and LCD screen
  - Rail system
  - Installation cables and high voltage cables
  - Set of marker for preferred source-image distance
- Eleva workspot
  - Eleva workspot computer, keyboard and mouse, cables
  - Eleva application and examination database software and licenses
  - Eleva Workflow Plus license
  - Eleva Review Plus license
  - Eleva Advanced Dose Reporting license
  - Windows 7 system software and licenses
  - UNIQUE advanced multi-resolution image processing
  - Dynamic reconstruction image processing software
  - Shutter and Image Verification tool
  - Antivirus software and license
  - Instruction for use
  - Quick reference guide
  - User documentation

Eleva Exam. Control Advanced

The Eleva examination Control Advanced combines brilliant image display and excellent ergonomics.

Main benefits at a glance

- Takes full advantage of Eleva advanced user interface and ease of use
- Optimizes space in the control room, workflow and efficiency
- Touch technology compatible with rubber gloves
- Wide screen size
- Wide viewing angle
- Calibrated according to DICOM GSDF standard for better image fidelity
- Qualified for second reviewing
- Clear to read & easy to clean glass surface

Its smart design combines two consoles in one, allowing space saving in the control room and a more efficient workflow: the flat 19" LCD color display provides touch screen technology for intuitive and efficient use and the sturdy hardware buttons on the frame offer integrated control of the generator to modify the most frequently adjusted exposure parameters.

For more convenience during particular procedures like trauma, the microwave touch screen technology allows touch use also with rubber gloves. The glass plate in front of the screen ensures clear display and ease of cleaning.

Specifications

- 19" flat panel color TFT LCD display
- Resolution 1280 x 1024 pixels
- Luminance 220 cd/m²
- Hardware buttons commands: on/off, default examination, help, adjust kV, adjust mA, adjust mS, last used values

Comprising

- Active Matrix TFT LCD display with anti-reflex touch front, hard coated top sheet
- Integrated hardware buttons for control of exposure parameters
- Integrated hardware buttons for system power on/off and help
- Software licenses
- User documentation

CS Base Rails 4,3 m (14' 1.3")

Set of rails for BuckyDiagnost Ceiling Suspension

Fixed at the ceiling for:

- Longitudinal carriages of BuckyDiagnost CS
- Monitor ceiling suspension
- Auxiliary ceiling suspension; length: 4,3 m (14 feet)

Comprising:

- 2 rails
- Adjustable end / stops
- Spacer strips
- Fixing parts
- Brake rails

CABINET BOX

Cable Carrier CS

Additional carrier for suspension of cable hose from CS 2/4 or TV- monitor.

Comprising:

- Carriage for CS- ceiling rail with adapter for different cable hoses

Uninterruptible Power Supply (UPS) for the Eleva workspot computer and monitor.

The device provides emergency power to the Eleva workspot in case of electrical network power failure, allowing to bridge time to safely store images and complete the last tasks.

It provides instantaneous protection from input power interruptions by means of an integrated battery and electronic circuitry, allowing to continue working for approximately 60 minutes.

Specifications

- Allows using the Eleva workspot for approximately 60 minutes after main power interruption
- Typical charging time: approximately 4 hours
- Typical heat emission: 4 W (5 W max) in standby, 86 W (99 W max) in operation
- Dimensions: depth 48.3 cm (19"), width 21 cm (8.3"), height 43.2 cm (17")
- Weight: 25 kg (55 lbs)

Comprising

- UPS device including holder for vertical positioning, power cable
- Clinical Education Program for Radiography Systems

Handover OnSite Education: Philips Education Specialists will provide twenty-eight (28) hours of education for up to four (4) students, selected by customer, including technologists from night/weekend shifts if necessary. Students should attend all 28 hours, and must include any OffSite education attendees if applicable. CEU credits may be available if the participant meets the guidelines provided by Philips. Depending on your system configuration, the first four (4) hours onsite may be spent configuring new equipment for specific clinical needs, as well as reviewing important safety features and quality procedures. Please read guidelines for more information. Site must be patient-ready. Philips personnel are not responsible for actual patient contact or operation of equipment during education sessions except to demonstrate proper equipment operation.

Recommendations: In order to enhance customer satisfaction with image quality over the first year, we highly recommend that part# 989801292145, XR Add OnSite Clin Educ 16h is purchased. This training will assist the customer in maximizing the unique image quality pre-sets to suit their facilities needs. Clinical Education highly suggests the imag e quality visit occur two to four weeks post initial handover.

Education expires one (1) year from equipment installation date (or purchase date if sold separately). Ref # 522-100614

| 2 | Digital TH table with tray for SkyPlate | 1 |

Philips height-adjustable TH digital table has a proven and smart design that makes no compromise on robustness, quality and work efficiency, even with challenging patients and difficult examination conditions. It allows a variety of routine skeletal table examinations.

Main benefits at a glance

- X-ray from head to toe, for all radiographic applications
- Easy fine positioning through an eight-way floating tabletop with wide movement range
- Two tabletop widths available, 75 cm (29.5") or 85 cm (33.5")
- Tray to place a 35 x 43 cm (14 x17") Philips SkyPlate
- Easy-to-operate tray, allowing the positioning of SkyPlate in portrait or landscape orientation
- SkyPlate can be taken out of the table at any time for free exposures
- Motorized height adjustment

- Easy horizontal and vertical patient positioning with large movement range
- Extremely robust with maximum patient load of 375 kg (820 lbs)
- Hands-free operation via large footswitches
- Footswitches lock button to avoid accidental movements and ensure patient safety
- Optional hand switch controlling all movements, which can be clamped at any place on both tabletop sides
- Three-field automatic exposure control chamber for optimal image quality and dose
- Automatic tube height adjustment depending on table height (tracking)
- Automatic collimation for X-ray beam limitation to digital flat detector, according to pre-programmed examination parameters
- Removable grid for optimal image quality and dose
- Convenient grid storage within the detector unit for immediate and safe storage
- Electromagnetic brakes for a high level of patient security

The floating tabletop provides significantly more coverage due to a wide travel range, allowing quick and effortless positioning. Thus the patient can be better examined and not moved during the examination, which is particularly important for emergency and trauma. The high weight capacity enables examination of bariatric patients.

The motorized height adjustment gives a total lift of 40 cm (15.7") to adjust to a comfortable and safe working height. The lowest position allows loading a patient who is in a wheelchair. All motorized height movements and floating tabletop are activated with wide and easy-to-use footswitches. The footswitches can be locked for more safety during examination.

An integrated three-field automatic exposure control chamber ensures optimum image quality at the lowest possible dose even for difficult projections. The removable grid can be conveniently and safely stored directly in the detector unit.

The integrated tray allows placing a Philips SkyPlate in portrait or landscape orientation, to offer full diagnostic information even with large patients. At any time, the detector can be taken out of the table tray to perform free exposures in the room with high flexibility, even for the most challenging projections. This feature is particularly useful to perform laterals, oblique, weight bearing feet or examinations in bed or wheelchair.

Specifications

- Maximum patient weight: 375 kg (820 lbs) in static center position, 318 kg (700 lbs) in center with all movements, 210 kg (460 lbs) off center with all movements
- Motorized height adjustment from 51.5 to 91.5 cm (20.3" to 36")
- Floating tabletop of sandwich design with Getalit overlay
- Tabletop size: 240 x75 cm (7' 10.5" x 29.5"), optional wide tabletop 240 x 85 cm (7' 10.5" x 33.5")
- Tabletop travel: longitudinal ±60 cm (±23.6"), transverse ±13 cm (±5.1") or ±18 cm (±7.1") with optional wide tabletop
- Tabletop attenuation equivalent: = 0.75 mm Al (at 100 kV)
- Tabletop edge section: flat locking rails for attaching Philips accessories
- Tray where a Philips SkyPlate can be placed in portrait or landscape orientation
- Footswitches functions: table height adjustment up/down, disengagement of tabletop brakes in longitudinal and transverse directions, ability to switch on cross light in the collimator (all footswitches), footswitch interlock

- Optional hand switch: all footswitch functions for manual operation at the backside of the table
- Detector horizontal travel range: ±22.7 cm (±8.9")
- Removable grid 40/12/110: 40 lines/cm (100 lines/inch), ratio 12, focus 110 cm (44") for use with source-image distance from 90 to 150 cm (36" to 59")

Comprising

- Digital BuckyDiagnost TH height-adjustable table base and tabletop
- Tray for SkyPlate
- Default grid 40/12/110: 40 lines/cm (100 lines/inch), ratio 12, focus 110 cm (44"). A different default grid can be chosen in order questionnaire. Additional grids are available in accessories.
- Software licenses
- Documentation

3   **Digital VS vertical stand ext.**   **1**
                          with fix detector

Philips height-adjustable VS vertical stand has a proven and smart design that makes no compromise on robustness, quality and work efficiency, even with challenging patients and difficult examination conditions. It is optimal for X-ray departments specializing in thorax examinations. The motorized tilting option extends possible application range to extremities, skeletal examinations, and even under-table examinations using a trolley.

Main benefits at a glance

- Vertical stand mounted on the floor, optimal for chest X-ray and all wall Bucky applications
- Wide size 43 x 43 cm (17 x 17") integrated digital flat detector
- Motorized height adjustment from 30 to 180 cm (11.8" to 5' 11") with two different speeds plus manual operation for precise positioning
- Customizable pre-defined positions (move-to-position) and numerous other well-planned features significantly reduce the physical demands placed on the technologist
- Easy patient positioning with counterbalanced large vertical movement range
- Large and ergonomic patient grips on both left and right sides of the detector for safe and comfortable patient positioning
- Optional rotatable patient stretch grip on top left or right side of the detector
- Convenient user interfaces on both left and right sides of the detector, for quick and easy adjustment of movements, collimation, field alignment and orientation, selection of automatic exposure control chambers, and tracking mode
- Wireless remote control providing all commands of the side user interfaces
- Five-field automatic exposure control chamber for optimal image quality and dose, as well as positioning flexibility
- Automatic tube height adjustment to detector height (tracking)
- Automatic collimation for X-ray beam limitation to digital flat detector, according to pre-programmed examination parameters
- Optional motorized detector tilting (-20° to +90°) to support examination of patients on a stretcher, plus straightforward exams of extremities for seated or standing patients
- Optional display on vertical stand column, for patient data in the examination room
- Removable oscillating grid for optimal image quality and dose
- Convenient storage for two grids within the detector unit for immediate and safe storage
  The motorized height adjustment from 30 to 180 cm (11.8" to 5' 11") measured at center of

detector above the floor, gives a total lift of 150 cm (4' 11.1") to adjust to a comfortable and safe working height with a choice of two different speeds.

The wide size 43 x 43 cm (17 x 17") integrated detector covers all relevant anatomy and offers full diagnostic information. Its Cesium Iodide (CsI) technology provides excellent quantum efficiency (DQE) and helps to reduce the required patient dose.

An integrated five-field automatic exposure control chamber ensures optimum image quality at the lowest possible dose even for difficult projections, and provides positioning flexibility for various examinations without moving the patient. The removable oscillating grid can be stored conveniently and safely directly in the detector unit.

Specifications

- VS vertical stand
    - Counterbalanced rugged column for motorized and manual vertical movement of the detector
    - Vertical movement range: 30 to 180 cm (11.8" to 5' 11"), measured at center of detector
    - Installation: floor and wall attachment, or floor only (optional)
    - Detector unit: 59.6 x 57.5 cm (23.5 x 22.6")
    - Optional tilting: -20° to +90° motorized
    - Automatic exposure control (AEC): 5 AEC measuring fields
    - Operating: two user interfaces (left and right)and wireless remote control
    - Removable oscillating grid 40/8/140: 40 lines/cm (100 lines/inch), ratio 8, focus 140 cm (56") for use with source-image distance from 110 to 180 cm (44" to 71")
    - Grid storage: for up to two grids within the detector unit

- Detector
    - Wide size 43 x 43 cm (17 x 17") integrated digital flat detector with Cesium Iodide (CsI) technology
    - Active detector area 42.0 x 42.5 cm (16.5 x 16.7")
    - Resolution 8.2 megapixel (2840 x 2874 pixels)
    - Pixel pitch 0.148 mm
    - Pixel depth 16 bits
    - Image resolution: up to 3.4 line pairs per mm

Comprising

- Digital BuckyDiagnost VS vertical stand
- Digital flat detector 43 x 43 cm (17 x 17")
- Default oscillating grid 40/8/140: 40 lines/cm (100 lines/inch), ratio 8, focus 140 cm (56"). A different default grid can be chosen in order questionnaire. Additional grids are available in accessories.
- Software licenses
- Documentation

Generator featuring modern architecture based on a modular design using high performance components to enable a customer specific solution.

Main benefits at a glance

- Modern architecture based on a modular design using high performance components
- Tube overload protection
- Automatic mains voltage compensation
- Automatic Exposure Control (AEC)
- Fully compatible with VarioFocus (optional)
- Small footprint

The tube overload protection monitors temperature conditions in order to protect tube and housing parts from being damaged or destroyed by overstress. The automatic exposure control sets the exposure time according to exposure voltage and object characteristics in order to automatically obtain the correct exposure.

Specifications

- Computer controlled converter X-ray generator
- Converter generator generates high voltage equivalent to DC voltage
- Nominal power (IEC): 80 kW
- Power: 80 kW
- Three phases, 400 - 480 VAC, 50/60 Hz
- Low or dual speed rotor control, depending on tube
- Max voltage: 150 kV
- Max current (at 80 kV): 1000 mA
- mAs product: 0.5 to 850 mAs
- Exposure time: 1 ms to s
- Maximum mains resistance at 400V: 0.2 Ohm
- Maximum mains current at 400V: 160 A

Comprising

- Generator 80 kW in cabinet

Compatible with

- DigitalDiagnost 3.0 and above
- VarioFocus option
- Philips tube SRO 33100

This Philips dual-focal rotating anode high power X-ray tube can be used for all general radiography applications. It is particularly adapted for examinations requiring high power. The anode target angle allows a 43 x 43 cm (17 x 17") X-ray field at minimum source-image distance of 100 cm (39.4").

Main benefits at a glance

- All radiography applications including bariatric
- High load capacity
- Fast speed-up (1 second)
- Fully compatible with Philips VarioFocus option
- Superimposed dual focal spots
- Fast rotating anode (up to 10,800 revolutions per minute)
- Housing with 90° horn angle position with free air convection cooling

To increase continuous power and minimize downtime for more demanding applications, the tube assembly can be equipped with an additional blower.

Specifications

- Two focal spots: 0.6 and 1.2
- Maximum power: 33 kW with focal spot 0.6, 100 kW with focal spot 1.2
- Anode angle: 13°
- Maximum tube voltage: 150 kV
- Anode heat storage capacity: 220 kJ (300 kHU)
- Assembly heat capacity: 1,247 kJ (1,700 kHU)
- Minimum anode speed: between 8,000 and 10,000 revolutions per minute
- Build in filter 2 mm Al (5/64")
- Total filtration minimum: 2.6 mm Al (105/1024")
- Double tube overload protection
- Total weight: 23 kg

Comprising

- Philips X- ray tube SRO 33100
- X-ray housing ROT 360
- Standard clamp fitting
- Two thermal safety switches (tube housing temperature)

6 **System Motorization** **1**

Additional motorization in combination with the auto-stitching option for fully automatic image acquisition of long leg and spine images.

The additional ceiling suspension motorization allows for major workflow enhancements. In combination with the auto-stitching option long leg and spine images can be acquired fully automatic, including tube rotation and detector movement.

Please, note that the body coverage is depending on achieving an SID of 8.5 ft (2.6m).

This option enables also extended move-to-position functionality and detector alignment for the vertical multi-purpose stand.

The DigitalDiagnost dual detector system with horizontal alignment controls the table detector unit. On user request the unit will be aligned with the tube position.

| 7 | SkyPlate Infrastructure Kit | 1 |

The SkyPlate Infrastructure Kit is comprised of a wireless access point, a battery charger and a back-up cable.

Main benefits

- All-in-one kit to set the customer up with the necessary parts for working with the Skyplate
- State-of-the art components

The access point enables the wireless transmission of clinical images from the SkyPlate to the access point. The access point is hard wired to the radiography system and images are sent from there to the Eleva work station for review, editing and further distribution. The battery charger is designed to charge up to three batteries simultaneously. The back- up cable enables the transmission of clinical images in the case that there is no wireless transmission between the SkyPlate and the wireless access point possible.

Specifications

- Wi-Fi access point
  - according to regional requirements for Wi-Fi transmissions

- SkyPlate battery charger
  - It offers a 4 bar charge status color indication per battery: 0-25%, 25-50%, 50-75%, 75-100%.
  - IP41 compliant (IEC60529).
  - Dimensions 172 x 322 x 48 mm
  - SkyPlate back- up cable

Compatible with

- SkyPlate large 35 x 43 cm (14 x 17")
- SkyPlate small 24 x 30cm (10 x 12")

| 8 | SkyPlate Large (35 x 43 cm, 14 x 17 inch) | 1 |

Philips SkyPlate is the next generation of wireless portable detectors. It is an integrated part of the Eleva platform and defines a new dimension of flexibility and freedom within the radiography room.

Main benefits at a glance

- DR speed and excellent image quality with the positioning flexibility of CR
- ISO compliant cassette size format (35 x 43 cm, 14 x 17 inch) to fit into standard operating room tables
- Reduced patient infection risk and easy handling thanks to the detector's cable-free design

- Easy handling for free exposures
- Extremely lightweight: 2.8 kg /6.2 lbs (incl. battery)
- Flexible positioning for lateral or oblique projections
- Instant image display
- State-of-the-art CsI detector technology and UNIQUE image processing for optimal image quality at the lowest dose
- Robust shell of the detector to protect it from water drops and dust
- Easy, precise and safe positioning around the patient, even for difficult projections, provided by a rich set of dedicated accessories
- SkyPlate sharing license, to use the wireless detector on another compatible Philips X-ray system

The SkyPlate large covers all relevant anatomy with its large detector area of 35 x 43 cm (14 x 17 inch). Depending on anatomy, it can be positioned in different orientations and offers full diagnostic information even with large patients. Combined with Philips advanced UNIQUE image processing, grid-line removal algorithm and state-of-the-art Cesium Iodide (CsI) technology, it has an excellent detective quantum efficiency (DQE) and helps to reduce the required patient dose. It provides instant image display with superb image quality on the Eleva workspot for increased diagnostic confidence.

Thanks to its cable-free design, the SkyPlate allows quick and efficient procedures with high hygienic standards. Its robust design and a rich set of optional dedicated accessories (mobile holder, bed holder, attachable grids and hygienic bags) offer easy, safe and quick positioning throughout the hospital. Special projections like laterals can easily be performed without moving the patient. Its slim design is optimized for critical environments and minimizes the risk of interfering with life supporting equipment, cables, tubes and catheters.

The detector features advanced low-power WiFi connection technology and is designed according to IEC 60601-1-2. It is compliant with life supporting devices designed according to IEC 60601-1-2 and with pacemakers designed according to IEC (EN) 45502-2-1 when keeping indicated distances. The SkyPlate battery can be removed and recharged in the battery charging station. Once a battery is empty, a new one can be inserted to immediately continue working with the SkyPlate.

SkyPlate sharing allows taking the SkyPlate from the system and using it with other compatible Philips MobileDiagnost wDR, DigitalDiagnost or ProGrade systems. Thereby, SkyPlates can be used efficiently wherever needed and help driving down investment costs. Compatible systems need to carry the SkyPlate Sharing license to participate in SkyPlate sharing.

Specifications

- Size: 35 x 43 cm (14 x 17 inch) SkyPlate large wireless digital flat detector with Cesium Iodide (CsI) technology,active detector area 34.48 x 42.12 cm (13.6 x 16.6 inch) (2330 x 2846 pixels), pixel pitch 0.148 mm
- Image resolution: up to 3.38 line pairs per mm
- Typical weight: 2.8 kg (6.2 lbs) including battery
- Maximum patient weight: 100 kg (220 lbs) for weight-bearing examinations
- WLAN network standard: IEEE802.11 a, b, g or n (configurable)
- Encryption: default WPA2
- Optional attachable grids
  - Portrait orientation: 44/8/130: 44 lines/cm (112 lines/inch), ratio 8, focus 130 cm (51 inch)

- Landscape orientation: 40/8/130: 40 lines/cm (100 lines/inch), ratio 8, focus 130 cm (51 inch)

Comprising

- SkyPlate large 35 x 43 cm (14 x 17 inch)
- Two exchangeable batteries
- Set of 100 hygienic bags
- Software licenses
- SkyPlate sharing license
- Documentation

Compatible with

- DigitalDiagnost Release 4.x, MobileDiagnost wDR Release 2.x, ProGrade 1.x
- Attachable grids for SkyPlate 35 x 43 cm (14 x 17 inch) in portrait and landscape orientation

| 9 | * | **Wide tabletop for BuckyDiagnost TH table** | 1 |

Completely flat, wide carbon fiber tabletop with plain surface, with convenient aluminum rails on both long sides for fixing accessories.

Specifications

- Type: X-ray transparent floating tabletop
- Material: carbon fiber
- Dimensions: 240 x 85 cm (7' 10.5" x 33.5")
- Tabletop travel: longitudinal ±60 cm (±23.6"), transverse ±18 cm (±7.1")
- Attenuation equivalent: less or equal to 0.75 mm (0.03") Al at 100 kV

Comprising

- Wide tabletop
- This option replaces the standard 240 x 75 cm (7' 10.5" x 29.5") tabletop

Remark

With DigitalDiagnost, the wide tabletop must be selected to allow the combination with an additional VM vertical stand.

| 10 | **Motor. Tilting f. VS** | 1 |

Prerequisite: BuckyDiagnost VS (advanced package)
Bucky unit motorized tilt able from - 20° via vertical (0°) position
to horizontal (+90°) position.
"Move to position" function: motorized movements of image receptor (dead man)
or automatically (move to next position -20° / 0° / +90°).
Bucky unit vertical: movement range 30 cm - 180 cm (centre of cassette above floor)
Bucky unit horizontal: movement range 55 cm - 205 cm (front plate above floor)
User interface on both sides of image receptor housing for motorized movements, collimation and
5- field measuring chamber.

Compatible with:

- Motorized vertically movement for BuckyDiagnost VS (advanced package)
- Spacer for BuckyDiagnost VS (advanced package)
- BABIX holder for VS
- Stretch grip for BuckyDiagnost VS (advanced package)

11   **Spacer VS**   **1**

Spacer for BuckyDiagnost VS

Distance piece between column and Bucky unit / tilting unit; helpful for exposures in seated position.

Compatible with:

- BuckyDiagnost VS

12   **Adapt. Transf. 415-480 V**   **1**

Comprising:

- three-phase transformer for mains supply voltage adaptation of 415/440/460/480 V to 400 Vand for 380/400 V for mains supply without
  N (neutral) to be built into the base of generator.

Compatible with:

- Generator OPTIMS 50, 1tube
- second tube connection
- extension to 65 kW
- extension to 80 kW

13   **Extension for the longitudinal**   **1**
                   rails of CS

This mechanical extension of the longitudinal rails allows extending the longitudinal travel of the ceiling suspension. In combination with the long transverse rails (see questionnaire), this longitudinal rail extension makes possible to cover a large area of the room.

Specifications

- Extension size: 2.7 m (106.3")
- Maximal longitudinal travel with extension: approximately 6 m (19' 8.2")

Comprising

- Set of ceiling suspension extension rails
- Mounting and connection hardware

Compatible with

- BuckyDiagnost ceiling suspension CS2/4
- BuckyDiagnost ceiling suspension CSIII (only available for DigitalDiagnost)

Remark

If necessary, it is also possible to adapt the rails extension length to the exact room requirement by requesting the option "Rails separation CS".

| 14 | **Automatic Image Stitching** | 1 |

Optional patient stand for better patient positioning

The Automatic Image Stitching software is an advanced orthopedic feature to perform long lengths imaging fully automatically. After the automatic acquisition of the image set (up to three images depending on the requested body part), a composite image is created instantly on the DigitalDiagnost Eleva workspot.
Depending on the examination, images can be acquired in upright position at the vertical stand as well as horizontally on the table.

Due to the precise rotation of the tube around a defined center point, image acquisition is performed with a single focus instead of multiple foci resulting in more accurate image overlaps and minimized image distortion.
UNIQUE image processing is applied automatically to the completed composite image to ensure a harmonized image contrast and image impression. The automatic image stitching package includes tools to measure Cobb's angle, femoral head difference and vertical alignment of the vertical spine.

When combined with PCR integration (DigitalDiagnost R2.x or above), this software also allows performing automatic image stitching with long view PCR cassettes. From DigitalDiagnost R4.1 onwards also automatic image stitching with SkyPlate is supported.

Main benefits at a glance

- Simple to use for the technologist by only defining the collimation on the patient
- System automatically acquires the number of necessary images based on the defined collimation
- Automatic tube and detector movements during acquisition
- Acquisition of two or three images depending on collimation
- Single-focus tube rotation to minimize image distortions
- Automatic software stitching images together in one composite image
- Stitching procedures vertically as well as horizontally
- Support of CR and DR stitching (fixed detectors as well as with SkyPlate)
- Dedicated orthopedic measurements included
- Stitching software algorithm based on anatomical structures and lead ruler

Specifications with fixed detector

- Number of acquired images: up to 3
- Patient coverage: up to 120 cm (47") with minimum source-image distance 260 cm (102")
- Patient coverage on TH table: up to 90 cm (35.4")
- Overlap area between images: 4.5 cm (1.8")

Specifications with SkyPlate

- Number of acquired images: up to 3
- Patient coverage at vertical stand
- Portrait orientation: 117,3 cm (46.2")
- Landscape orientation: 94,5 cm (37.2")
- Patient coverage at the table
- Portrait and landscape orientation: 90 cm (35.5")
- Overlap area between images: 4.5 cm (1.8")

Comprising

- Automatic Image Stitching software and license
- Removable stitching oscillating grid:
    - For DigitalDiagnost release 3 and above: grid 40/8/180: 40 lines/cm (100 lines/inch), ratio 8, focus 180 cm (71") for use with source-image distance from 126 to 315 cm (50" to 124")
    - For other DigitalDiagnost versions: grid 36/8/180: 36 lines/cm (90 lines/inch), ratio 8, focus 180 cm (71") for use with source-image distance from 126 to 315 cm (50" to 124")
- Lead ruler
- Stitching Application Guide

Compatible with

- high speed rotor control only
- X-Rax Tube SRO0951, SRO2550, SRO33100
- DigitalDiagnost software release 1.5 and above
- Requires System Motorization (optional)
- VS and VM vertical stands
- Not for systems with VE or VT vertical stand or 2nd ceiling suspension
- Horizontal stitching with VM vertical stand in a single detector configuration (e.g. Flex Room) requires the TH-S table

Remark: Ceiling suspension with long transverse rails is recommended to easily reach the necessary source-image distance of 3 m (118")

| 15 | **Package incl. Print, Image Export, WLM, MPPS,Media** | 1 |

This package provides all DICOM communication features available with the Eleva platform:

- DICOM Worklist Management
- DICOM MPPS
- DICOM Image Export (including Storage Commitment)
- DICOM Print
- DICOM Media

For further details, please refer to the DICOM Conformance Statement.
Buying this feature once for a system will make the functionality available on all Eleva workspots that have been purchased for this system.

DICOM Worklist Management

Interface to Radiology Information System (RIS).
Worklist handling via a DICOM Basic Worklist Management (BWLM).

The DICOM connection allows the Eleva workspot to automatically load the acquisition modality's worklist from a RIS server. The worklist query can be performed broad (generic) or specific (patient oriented) and both interactively (on operator request) and automatically (in the background).

DICOM MPPS

DICOM Modality Performed Procedure Step (MPPS)
DICOM service for notifying the RIS server about start and end of performed procedure steps. The messages contain references to the originating worklist items (patient and procedure data), a list of exported DICOM images and post exposure data.

MPPS requires that the DICOM Worklist Management feature is enabled.
Note: for Essenta DR, Essenta DR Compact and PCR Eleva systems, generator data will not be reported automatically.

DICOM Image Export

DICOM Storage and DICOM Storage Commitment
The DICOM Image Export feature provides the DICOM Storage service to send images to PACS, archive or any other DICOM destination in DICOM format.

The Eleva workspot supports DICOM Greyscale Display Standard. Calibration of Eleva workspot and the receiving DICOM node will result in consistently same high image quality. DICOM Image Export also includes the DICOM Storage Commitment service, allowing the Eleva workspot to be informed by storage destination if images have been securely stored. This trigger is used by the Eleva workspot to allow related images to be deleted locally.

DICOM Print

DICOM Print interface for manual and automatic printing.
DICOM Print allows for manual and automatic printing directly from the Eleva workspot. It enables the user to transfer images to a networked DICOM imager with the choice of different printing modes:

- Autoprint: automatic printing of images on predefined film layouts according to the examination
- Manual print: Manual image placement on predefined film layouts or image placement on free layout composing

Please note that only printing via DICOM protocol is possible.

DICOM Media

Write media in DICOM format.
This feature provides the possibility to write all Patient images, Studies and single images onto CDs or DVDs directly on the Eleva workspot.

The Eleva workspot will burn CDs or DVDs, which comply to the DICOM Media Interchange format.
Each CD or DVD will include a standalone Philips DICOM viewer.
Viewing the CD or DVD content will be possible on:

- Any workstation that supports the DICOM Media Interchange format
- Any standard PC with the help of the Philips DICOM viewer on the CD or DVD

Please note that viewing images from CD or DVD will not be possible on the Eleva workspot directly.

Comprising

- DICOM Worklist Management software license
- DICOM MPPS software license
- DICOM Image Export software license
- DICOM Print software license
- DICOM Media software license

Compatible with

- DigitalDiagnost 4.0 and above
- DuraDiagnost 2.0 and above
- MobileDiagnost wDR 2.0 and above
- ProGrade 1.0 and above
-

16	Clinical Quality Control software	1

This powerful image statistic tool provides the advanced user with functionality to analyze rejected images regarding operators and rejection reasons. It serves as well for monitoring and analyzing general parameters. The data files can be downloaded in standard format for further usage or archiving on a PC.

It perfectly supports the quality standards of the department and teaching situations.

Buying this feature once for a system will make the functionality available on all Eleva workspots that have been purchased for this system.

Note: for Essenta DR, Essenta DR Compact, EasyUpgrade DR and PCR Eleva systems, generator data will not be reported automatically.

Comprising

- Software license

Compatible with

- DigitalDiagnost 2.0 and above
- DuraDiagnost 1.0 and above
- Essenta DR 1.0 and above
- Essenta DR Compact 1.0 and above
- MobileDiagnost wDR
- EasyUpgrade DR 1.0 and above
- PCR Eleva 1.0 and above
- ProGrade Rel 1 and above

17   **mShield**   **1**

Philips mShield is part of an overall strategy to safeguard the data integrity of medical information systems. It protects PCR Eleva from potential malicious software attacks within the hospital network. It decouples the modality from the network and creates a secure environment. By restricting traffic to only authorized devices, mShield acts to prevent malicious activity directed from the modality to unrelated devices on your hospital network. Network communication can be restricted to DICOM communication and remote service only. Thereby channels, which hackers need for attacks or viruses need to spread become unavailable.

The total system uptime can be increased. The cycle time of required security upgrades (patches) can be elongated and synchronized with regularly maintenance activities. No valuable treatment time is lost through system downtime or staff dealing with network problems. Once installed it requires almost no maintenance or update.

Philips mShield is always recommended if the system becomes part of a hospital network.

Philips mShield's design is based on the latest recommendations of International industry standard bodies, such as NEMA,COCIR and JIRA, which recommend firewalls as an "effective and flexible tool" to safeguard the data integrity of medical information systems.

The mShield hardware is designed to fit into a professional medical environment with dedicated robustness against high temperature or high- voltage hazards. It is located between the modality and the department network.

Comprising:

- mShield hardware
- software license and documentation on CD
- dedicated modality rule types

18   **Stand for easy patient**   **1**
                         positioning

The patient support is a movable stand recommended to facilitate long length acquisitions like legs and spine stitching procedures with a vertical stand.

Main benefits at a glance

- Makes stitching examinations easy and reliable by having the patient standing comfortable, confident and still

- Comfortable and secure for the patient to stand on, thanks to a wide and stable footplate and large height adjustable handles to hold to
- Easy to step on, thanks to a low height profile step
- Four wheels allow easy placement in front of the vertical stand and storage
- Metal fasteners on the floor to place the wheels in and lockable wheels, for precise, stable and secure placement in front of the vertical stand

Specifications

- Height: 199 cm (78.3")
- Width: 111 cm (43.7")
- Length: 88.1 cm (34.7")
- Weight: 70 kg (154 lbs)
- Maximum patient weight: 225 kg (496 lbs)

Comprising

- Patient support for stitching
- Label for color blind user

Compatible with

- DigitalDiagnost vertical stands VE, VT, VS and VM
- DigitalDiagnost release 1.3.1 and above
- Automatic Image Stitching license is required to stitch the individual images together
- Ceiling suspension with long transverse rails is recommended to easily reach the necessary source-image distance of at least 3 m (118")

| 19 | **Set of two X-ray filters to optimize image quality** | **1** |

This set of two X-ray filters allows to optimize image quality during challenging stitching procedures.

Main benefits at a glance

- Reduce direct X-ray radiation on the detector
- Less ghosting artifacts
- More uniform and better image quality
- Recommended to be put in the skull/shoulder area during whole spine procedures

Specifications

- Each stitching filter is composed of an attenuation plate, a holding bar and a fixation mechanism
- Two adjustable joins allow precise positioning
- Filter is attached on side rails of the patient support for stitching

Comprising

- Two stitching filters

Compatible with

- DigitalDiagnost Patient Support for Stitching reference 9890 010 8743x
- Automatic Image Stitching license (NRDN250) is required to stitch the indivitual images together

| 20 | **Mobile holder for the wireless portable detector** | **1** |

The wireless detector mobile holder is designed to take full advantage of the wireless portable detector to perform free exposures in optimal conditions.

Main benefits at a glance

- Mounted on wheels for easy moving and positioning in the room
- Holds the wireless portable detector in a safe and precise position
- Very easy to put the detector in and to take it out
- High detector positioning flexibility
- Can hold the wireless portable detector with or without a grid on it
- Brakes on the wheels for fixed and safe positioning
- Also compatible with 35 x 43 cm (14 x 17") CR cassettes

The mobile holder provides outstanding positioning flexibility for the wireless portable detector. Mounted on wheels, it is easily positioned in the room and all around the patient. With or without a grid on it, the wireless portable detector can be held in various positions depending on projection requirements. The positioning is achieved quickly and easily, thanks to very intuitive use and self-locking joins. Featuring a height adjustable arm with swivel, the detector is safely held and can be lifted, tilted, swiveled or rotated to the best convenience.

Specifications

- Dimensions: length 68 cm (26.8"), width 67 cm (26.4"), height 150.7 cm (59.3")
- Vertical movement range of holder arm: 68 to 128 cm (26.8 to 50.4"), center of large portable detector
- Weight: 53.2 kg (117 lbs)

Comprising

- Mobile detector holder

Compatible with

- Wireless portable detector 35 x 43 cm (14 x 17") and CR cassettes 35 x 43 cm (14 x 17")

| 21 | **Grid 40/8/130 Landscap f SkyPlate 35x43 cm, 14x17"** | **1** |

Attachable, fixed grid in landscape orientation for SkyPlate large 35 x 43 cm (14 x 17").

Main benefits at a glance

- Easy to attach/detach to/from the SkyPlate, thanks to its click-on mechanism
- Convenient handle for safe and easy handling
- For examinations where SkyPlate is used in landscape orientation
- Can be used with source-image distance from 100 to 185 cm (39 to 73 inch)
- Fiber interspaces and carbon fiber cover plates ensure higher contrast and lower required dose than conventional aluminium interspaces grids
- Combined with Philips advanced UNIQUE image processing and grid-line correction algorithm, it provides optimal image quality for increased diagnostic confidence

Specifications

- Fixed grid 40/8/130: 40 lines/cm (100 lines/inch), ratio 8, focus 130 cm (51 inch), for source-image distance from 100 to 185 cm (39 to 73 inch)
- Fiber interspaces and carbon fiber cover plates
- Interspaces in landscape orientation
- Dimensions: 46.8 x 47.6 x 2.5 cm (18.4 x 18.8 x 1 inch), including handle
- Weight: 1.9 kg (4.2 lbs)

Comprising

- Attachable, fixed grid

Compatible with

- SkyPlate large 35 x 43 cm (14 x 17")

22   **Protector for SkyPlate   1**

The SkyPlate protector has been designed to be placed over the SkyPlate detector on the floor when performing an antero-posterior view during a weight bearing feet examination, allowing to exam patients up to 220 kg (485 lbs).

Main benefits at a glance

- Allows performing of weight bearing feet examinations with patients up to 220 kg (485 lbs)
- Easy positioning over the wireless portable detector on the floor
- Convenient handle for positioning and carrying
- Slim and stable design for secure patient examination
- Also compatible with 35 x 43 cm (14 x 17") CR cassettes

Specifications

- Attenuation equivalent: less than 1.1 mm (0.04") Al at 100 kV
- Maximum patient weight: 220 kg (485 lbs)
- Dimensions: 51 x 43 x 5 cm (20.1 x 19.9 x 2 inch)
- Weight: 2.9 kg (6.4 lbs)

Comprising

- SkyPlate protector

Compatible with

- SkyPlate large 35 x 43 cm (14 x 17") and CR cassettes 35 x 43 cm (14 x 17")

| 23 | | **Extension Set of Ceiling Rails;** **2.70 M Length** | **1** |

Comprising:

- 2 CS rails
- fixing parts
- connectors

| 24 | | **Stretch grip f. wall stands** | **1** |

To keep the patient's arm overhead or beside the Bucky unit
during exposure.
To be insert at the Bucky unit at right or left side.

Comprising:

- Arm rest, U- shaped for different grip height, tiltable from –90° to +90° for height and side position
- wall holder for parking

Compatible with:

- BuckyDiagnost VS (advanced package)
- BuckyDiagnost VS with digital detector and DigitalDiagnost VM

| 25 | ** | **Removable fixed grid 40/8/180** | **1** |

Removable fixed grid 40/8/180: 40 lines/cm (100 lines/inch), ratio 8, focus 180 cm (71") for use with source-image distance from 131 to 286 cm (52" to 112").
This removable grid features fiber interspaces and carbon fiber cover plates, leading to high contrast and low dose compared to conventional grids with aluminum interspaces and cover plates. The convenient hand grip and built-in metal frame ensure easy and safe handling. Color and labels on the hand grip allow clear identification for the user and an integrated transponder provides automatic detection by the system.

Specifications

- 40 lines/cm (100 lines/inch), ratio 8, focus 180 cm (71")
- Attenuation equivalent: = 2.4 mm Al
- Usable with a source-image distance from 131 to 286 cm (52 to 112")
- Dimensions 48.8 x 45.3 cm (19.2 x 17.8")

Comprising

- Removable fixed grid 40/8/180

Compatible with

- Wireless tray and fixed detector with DigitalDiagnost 3.0 and above

OPTIONS

1   **   **Airfare to Cleveland for**   **2**
                                    Biomed Training

Includes one (1) participant's airfare from North American customer location to the Cleveland Training Center (CTC) in Cleveland, Ohio. All other expenses will be the responsibility of the attendee. Details are provided during the scheduling process. Note: Cancellation/rescheduling policy strictly enforced. Expires one (1) year from the earlier of equipment delivery date or purchase date.

2   **   **Food Transpt Lodging for**
                                    Cleveland Biomed Training

Includes one (1) day of modest lodging, ground transportation, and meal expenses in Cleveland, Ohio for one (1) attendee. All other expenses will be the responsibility of the attendee. Details are provided during the scheduling process. Note: Cancellation/rescheduling policy strictly enforced. Although this part is only for one day, it is sold in multiple quantities to account for entire length of course. Expires one (1) year from the earlier of equipment delivery date or purchase date.

3   **   **XD3605DIGITALDIAGNOSTR2/**   **2**
                                    R3CTC9

DESCRIPTION:
This course provides the engineer with sufficient information and a structured insight in the DigitalDiagnost R2 and R3 to service DigitalDiagnost system.
The course includes both release 2 and release 3 systems; including the release 3 components CSIII, bucky unit portable and M cabinet CXA.

Engineers, who already attended a XD3681, XD3682 or XD8102 in the past, should not register for this course since it includes release 2!

COURSE OBJECTIVES:

After attending this course, the engineer will have knowledge of:

Technical application aspects (hardware and workstation software)
Configurations and product structure
Connectivity aspects
Performance requirements
Safety aspects
Faultfinding

The engineer will learn how to:

Operate the system
Handle test software
Configure the system
Calibrate the system
Check performance
Perform CM at PCB / Unit level