

**100466 Multi Diagnost Eleva**

**System Type:** New  
**Freight Terms:** FOB Destination  
**Warranty Terms:** Part numbers beginning with two (2) asterisks (\*\*) are covered by a Per Contract. All other part numbers are third (3rd) party items.  
**Special Notations:** Contingencies must be removed 120 days before scheduled shipment to assure delivery on specified date.  
Any rigging costs are the responsibility of the Purchaser.  
**Additional Terms:**

Line #	Part #	Description	Qty
1	**NNAH474	MultiDiagnost Eleva II-MX	1
	NRCA239	MultiDiagnost Eleva I.I.	

The MultiDiagnost Eleva is a multi-purpose C-arm based digital X-ray system for routine R/F examinations, dedicated vascular and non-vascular diagnostics and interventional procedures. With it's customizable Eleva concept the MultiDiagnost Eleva increases productivity by adapting the system to the way you work. The system can be easily integrated in todays' hospital and departmental workflow requirements.

Comprising:

- Tilt-C arm stand
- Image Intensifier 38 cm (15") multi mode
- TV-chain with 1k x 1k CCD camera (1024 x 1024 matrix)
- Eleva control
- User Interface
- Accessories

Tilt C-arm stand

The tilting table with integrated C-arm facilitates compound beam projections, and allows versatile patient positioning.

The stand features:

- Philips' unique scanning concept of a moving C-arm and a fixed tabletop
- No patient movement
- Increases patient safety
- Increases patient comfort
- Sterile design, e.g. under-the-table C-arm ensures sterility in lateral projections both in AP and PA setting
- BodyGuard anti-collision system automatically senses patient body position and size in order to take safely advantage of the system's projection flexibility
- Cradle movement

Stand specifications:

- Single side suspended tabletop at the right or left side of the system
- Carbon fiber table top with dimensions of 227 x 56 cm (89 x 22") and a maximum patient load of 200 kg (441 lbs)
- Tabletop height adjustment with a step up height of 60 cm (23")
- Longitudinal table tilting from +90 to -20 degrees Trendelenburg

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- Lateral tabletop tilting from -20 to +20 degrees
- C-arm that can be positioned in PA (II over table) or AP (II under table) projection
- Longitudinal C-arm scanning range of 160 cm (63") for full body coverage (patient coverage 198 cm (78"))
- Lateral C-arm scanning range of 40 cm (15.7")
- Isocentric C-arm rotation of 90 degrees LAO to 90 degrees RAO
- C-arm angulation of 45 degrees cranial to 45 degrees caudal
- SID range of 95-125 cm (37-49")
- Image intensifier / table top clearance of max. 81 cm (32") for optimal patient access

### Image Intensifier/Television Subsystem

Image Intensifier:

- 38 cm multi mode: 38/31/25/20/17 cm (15/12.2/9.8/7.8/6.7")
- Titanium input screen, for high spatial resolution, high DQE and low dose
- Fiber optic output screen, for high light transfer efficiency and high contrast

### Television Subsystem:

- TV-chain with 1k x 1k CCD camera (1024x1024 matrix)
- Horizontal and vertical scan reversal
- Average automatic dose rate control (ADC) and automatic gain control (AGC)
- Variable measuring fields

Collimation of the X-Ray beam can be performed on the Last Image Hold image to adjust the position of the shutters without X-Ray radiation.

### Eleva concept

The customizable Eleva concept increases productivity by adapting the system to the way you work: the system performs to the users specification from pre-exam to archive. To support varying workflow patterns (from high throughput exams to time consuming procedures) and increase overall efficiencies, the Eleva concept features:

- Customizable system pre-sets like SpectraBeam RF filter selection (option), default collimator settings and pre-defined print formats
- Bi-directional RIS coupling (option) automatically activating the appropriate Eleva system pre-sets to increase exam efficiency even more
- Revolutionary User Interface Concept, including several modules:
  - Eleva Examination Control (control room)
  - Keyboard & Mouse (control room)
  - Handswitch (control room)
  - Eleva Nearby Stand Control on pedestal (examination room)
  - Eleva Footswitch (examination room)

### Eleva Examination Control (touch screen):

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The Eleva Examination Control (incl. keyboard) integrates all functions for patient administration, selection of acquisition and fluoroscopy parameters as well as all controls for operating the different subsystems in one desk. The easy to use touch screen provides convenient, logical and ergonomic arrangement of controls and displays. It supports the philosophy that only those controls and related displays are active that are required for a certain type of examination.

The system user interface offers facilities for:

- Patient and examination administration

### Preparation:

- Manual entry of patient data
- Import of RIS worklist (DICOM) (optional)
- Display of user-defined help text for room preparation and procedure

### Examination:

- Automatic selection of system settings according to scheduled examination from RIS
- Automatic adaptation of X-ray parameters depending on patient age, size and weight retrieved from RIS
- Display of dose-information and current actual dose rate, accumulated during course of examination and per exposure run (option)

### Reporting:

- Printouts of dose report (optional)
- Support of DICOM MPPS (optional)

Selection of acquisition parameters, like:

- Auxiliary selection and indication
- Selection and display of exposure parameters
- Selection of parameters for special examinations like bolus chasing, total legs and full spine scan, etc. (optional)
- Selection of predefined acquisition programs
- Selection of different Fluoroscopy Flavors for pulsed fluoroscopy & Grid Controlled Fluoroscopy (optional)
- Selection of spectral filters for fluoroscopy and exposure (optional)
- Eleva Nearby Stand Control (incl. pedestal)

To operate the system at the table side, either mounted on the pedestal or anywhere on the tabletop of the system.

For nearby operation of:

- All stand movements, store / recall positions, AP/PA change, etc.
- Operation of main imaging functions, fluoroflavour selection, I.I. field size selection, collimator control

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- Eleva Footswitch (examination room)
- For exposure and fluoroscopy control.
- Eleva Handswitch (control room)
- Ergonomic handswitch for exposure control.

Accessories

Many accessories are available as option to support the systems' multifunctional capabilities.

### NRCA138 MSHIELD

Philips mShield is part of an overall strategy to safeguard the data integrity of medical information systems. It protects Philips fluoroscopy modalities 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 to spread viruses, 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'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.

mShield comprises:

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

### NRCA494 EDI MD II-MX

The Extended Digital Imaging System of the Eleva family offers high performance digital image acquisition for fluorographic and fluoroscopic applications. All image-processing parameters are set instantly, so within a split-second the Eleva System is ready to acquire and display high quality digital images. As a result of the brilliant quality the user can diagnose and report directly from the monitor, during or immediately after the examination.

Images can be acquired in 1024 or 512 matrix sizes, with a maximum speed of 8 images/sec. and optional with a maximum speed of 30 frames/sec.

Live fluoroscopy images can be captured as single images or as complete runs. Any run of images can be displayed in a loop with adjustable speed and direction.

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In addition it offers automatic on-line digital image processing and reviewing with the integrated ViewForum software.

Extended Digital Imaging offers printing facilities by preset layout, a number of preset layouts for specific examinations are available.

The printing functionality can be extended with tailor-made printing protocols according to personal settings with the optional Print protocol editor.

Printing can be done by the touch of a button utilizing print protocol, which have been pre-programmed for the examination, making the workflow more efficient.

Extended Digital Imaging is, in combination with the optional Subtracted acquisition and vascular postprocessing able to support vascular procedures.

Main features of Extended Digital Imaging:

### Acquisition

- Digital image acquisition (12 bit)
- Single and multiple shot exposures
- Acquisition speed up to max. 8 images/sec.
- Acquisition matrix 1024 x 1024 or 512 x 512
- Acquisition memory of 1 GByte

### Fluoro grab

- Grabbing of single fluoroscopic images
- Dynamic fluoro grab: grabbing of runs of fluoroscopic images
- AutoStore of images into the ViewForum database on the hard disk

### Viewing

- Easy navigation through examinations, runs and images
- Viewing memory of 1 GByte
- On-line (re)viewing of high quality images
- Automatic, adaptive image processing
- Automatic electronic shutters
- Last image hold
- Run cycle: display of images in a loop with adjustable speed and direction
- Flexible image overview
- Excellent image quality by using optimized harmonization algorithms
- Direct Mouse manipulation
- User log-on
- Default Display protocols
- Flexible screen layouts

Post processing

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Contrast, brightness, edge enhancement and grayscale inversion

Zoom

Measurements

Predefined annotations

Multiple free text annotation with adjustable font size

Copy annotation strings within a run

Image processing (16 bit)

Automatic and manual asymmetric rectangular and circular electronic shutters

Rotate, flip

Zoom/Pan

Magnification

Printing

- One touch printing according to personal settings or preset layouts
- Manual printing with free style layout
- Multi tasking: background printing
- Paper printing
- DICOM print

Storage

- Local storage on hard disk (minimal 72 GByte)
- AutoStore (to the hard disk) in the background
- Archiving to e.g. PACS in the background with optional DICOM export package

CD/DVD recording optional

Movie export to \*.avi

Comprising:

- Cabinet with 12 bit analog to digital converter, digital image processor
- Acquisition memory of 1 Gbyte
- C.P.U. Intel Pentium IV processor (minimal 2.8 GHz)
- Alpha numeric keyboard
- Quick review module
- ViewForum keyboard with mouse for image processing
- Infrared viewpad for reviewing
- 1 GByte viewing memory

### 989801292151 XR Handover OnSite Educ 32h

Clinical Education Program for Radiography Systems

Handover OnSite Education: Philips Education Specialists will provide thirty-two (32)\* hours of education for up to four (4) students, selected by customer, including technologists from night/weekend shifts if necessary. Students should attend all 32 hours, and must include any

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OffSite education attendees. CEUs are not available in all cases. Please read Guidelines for more information which will be provided by Philips during the scheduling process. Education Hours: Mon – Fri 8:00am to 5:00pm, except Monday and Friday are half-days to allow for trainer’s travel. Note: 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. Education expires one (1) year from equipment delivery date.

\* Except when multiple systems are installed within the same facility and on the same order, in which case the first system will receive thirty-two (32) hours, and each additional system will receive sixteen (16) hours, to include fine-tuning of equipment and staff performance. Ref# 151-060217

2	<b>**NRCA372</b>	<b>Universal clinical pack. II</b>	<b>1</b>
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3	<b>**NRCA010</b>	<b>Extension tilt movement to -90 degr. tilt</b>	<b>1</b>
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Extended tilt movement to -90 degrees (Trendelenburg) for applications such as myelograms and flexible room layout requirements.

The tilt movement has a variable speed of 2-4.5 degrees/sec. The tilting speed is automatically reduced to zero in horizontal (can be programmed application depended) and at the end position. Operation is possible from the remote or nearby control desk.

With the suspended side up the center of the X-ray source the minimum distance of the centre beam to the floor is 46 cm.

Compatible with:

. Initial deliveries of the MultiDiagnost Eleva systems combined with the Universal Clinical Package

4	<b>**NRCA017</b>	<b>Right side suspended table top</b>	<b>1</b>
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Right Side Suspended Table top.

The optional right side suspended table top facilitates optimization of the system for:

- Applicational requirements
- Room layout requirements

Comprising:

- Right side table top suspension

Compatible with:initial deliveries of Eleva systems

5	<b>**NRCA295</b>	<b>80KW generator with IQX</b>	<b>1</b>
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The 80 kW power pack is a microprocessor controlled X-ray generator with sophisticated high frequency inverter technology.  
The generator is designed for a wide range of Fluoroscopy and Radiography applications.  
The unique dose management system supports features like Grid Controlled Fluoroscopy, Pulsed Fluoroscopy and IQX.  
The generator is engineered for long-term reliability and minimum space requirement.

### Specification:

. Automatic and manual exposure techniques. The generator supports the IQX system which regulates the exposure settings during the exposure pulse (in-pulse controlled).

#### - Exposure output power:

kV 40 - 150 kV

mA 1 - 1100 mA

ms 1 ms - 4 s with AEC

(Automatic Exposure Control)

1 ms - 16 s without AEC

Manual: Two factor technique (kV - mAs)

Three factor technique (kV - mA - s)

Automatic: One factor falling load (kV)

Two factor constant load (kV/mA)

IQX Intelligent exposure

#### - Fluoroscopy techniques:

For enhanced image quality and dose management, the generator supports for MD Eleva with Flat detector Grid Controlled Fluoroscopy technique. For other systems continuous fluoroscopy, Grid Controlled Fluoroscopy (option) and Pulsed Fluoroscopy (option) techniques.

#### - Fluoroscopy (continuous) output power:

kV 40 - 110 kV

mA 0.2 - 6 mA

#### - Access times:

From fluoro standby to fluoro: < 0.3 sec

From fluoroscopy to radiography: 0.4 - 0.8 sec (dep. on tube)

From radiography to fluoroscopy: 0.4 sec

- Up to two double focus tubes can be operated by a dual speed rotor control Philips compatible tubes: RO, SRO, SRM

- Automatic mains adaptation

Mains voltage: 50/60 Hz, 380 / 480 V +/- 10 %

### IQX features:

- Short exposure times eliminates motion blur

Exposure times are kept within an application dependent customizable time range. This ensures that

every single image is correctly exposed and free from motion blur, even with rapidly changing density.

- Automatic kV-optimization

IQX automatically adjusts the settings, relative to the standard kV-value recommended for a particular

organ type. Thus the settings are optimized for the actual object density.

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- Fast, in-pulse adaptation to (changes in) density  
This kV-adjustment takes place within the first millisecond of the exposure, enabling adaptation to sudden changes in object density (e.g. during dynamic studies).

Tube voltage: 55 - 125 kV

Controlling range: customizable, relative to a defined start value

Compatible with:

- . initial deliveries MultiDiagnost Eleva with Flat Detector systems
- . Grid-switched X-ray tube SRM 06 08

6	<b>**NRCA031</b>	<b>Dose Calculation</b>	<b>1</b>
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Dose Calculation

The dose to the patient can be calculated from the area dose product. The dose levels are calculated based on the system parameters (e.g. kV and mAs collimator positions etc.). The dose levels are displayed on the Eleva Examination Control and on the reference monitor (only in combination with reference monitor option).

The generator is supported with the necessary data to calculate:

- Area dose product
- Dose
- Dose rate

Comprising:

- Dose calculation software

7	<b>**NRCA025</b>	<b>PULSED FLUO + SRO 33 100</b>	<b>1</b>
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Pulsed fluoro with SRO 33 100 X-ray tube.

Pulsed Controlled Fluoroscopy (PCF) is defined as a full automatic in-pulse regulation which can be handled with a standard Super Rotalix X-ray tube. PCF stands for high dose reduction with no compromise on image quality. It is achieved by a unique integrated control system which handles the dose parameters kV mA and time within a single pulse.

Major features of PCF are:

- Magnificent fluoro image quality due to in-pulse control
- Low frequencies and low ms-values for high dose reduction
- The short pulse duration makes PCF ideal for fast moving organs and objects

Comprising:

- Pulsed controlled fluoroscopy (PCF):
  - Pulse time 20 ms
- Pulse frequency 0.5

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- 30 fr/s
- SRO 33 100 Super ROTALIX tube for 150 kV with nominal focal spot values 0.6/1.2 and maximal 30 and 85 kW ( based on 250 W ) short time load.
- Tube voltage 40-150 kV
- Tube current 0
- 150 mA
- Nominal focal spot values 0.6 / 1.2 (IEC 336/93)
- Anode target angle: 13 degrees
- Anode heat dissipation: 1.3 kW (105 kHU/min)
- Anode heat storage capacity: 220 kJ (300 kHU)
- Anode speed: 3000 rpm / 9000 rpm
- Acceleration time: 1.0 sec
- ROT 351 water cooled ROTALIX housing with thermal safety switch.

Compatible with:

- MultiDiagnost Eleva and
- 65 kW generator (MRC 3111) or
- 80 kW generator (MRC 3121)

<b>8</b>	<b>**NRCA033</b>	<b>Collimator Light</b>	<b>1</b>
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Collimator with light.

Automatic X-ray beam limiting device for MultiDiagnost Eleva with light. In AP projections the light can be used for patient positioning without radiation.

Comprising:

- Collimator with rectangular shutters
- Light for simulation of X-ray beam
- Circular collimation

Compatible with:

- MultiDiagnost Eleva systems

<b>9</b>	<b>**NRCA051</b>	<b>Print Protocol Editor</b>	<b>1</b>
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Print Protocol Editor.

The ViewForum Print Protocol Editor provides the possibility to produce additional print protocols. The Extended Digital Imaging system provides a number of standard print protocols for routine use.

The Print Protocol Editor is needed in order to specify and permanently save additional print protocols specifically adjusted to customer's requirements.

Comprising:

- Print Protocol Editor license and software

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10	**NRCA058	<b>DICOM Export/Storage Comm.</b> DICOM Export / Storage commit.	1
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The DICOM Export provides exporting capabilities for images from the Extended Digital Imaging System to other DICOM workspots workstations and PACS systems.

The DICOM Export packages includes the following capabilities:

- DICOM Export (DICOM Store (SCU))
- allowing the export of images in DICOM format
- DICOM Storage Commit (SCU)

All DICOM SOP-classes as described in the DICOM Conformance of Extended Digital Imaging are supported.

Comprising:

- DICOM Export license and software

Compatible with:

- MultiDiagnost Eleva with Extended Digital Imaging

11	**NRCA060	<b>Dicom Work List Management</b> DICOM Worklist Management.	1
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The DICOM Worklist Management provides a bi-directional connection to a RIS (Radiology Information System) in order to query and receive patient and examination information (scheduled worklist).

With the DICOM Worklist Management package the Extended Digital Imaging System acts like a DICOM WLM (SCU) with these capabilities:

- Query RIS for current scheduled worklist automatically
- Query RIS for current scheduled worklist on demand
- Customize RIS Query

All DICOM SOP-classes as described in the DICOM Conformance of Extended Digital Imaging are supported.

Comprising:

- DICOM WLM license and software

12	**NRCA069	<b>LCD view monitor 18"</b>	1
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LCD View monitor. Monochrome LCD display for use in the control room as desktop version.

Comprising:

- 18" monochrome display

Main characteristics:

- Native format 1280 x 1024 SXGA .
- Wide viewing angle .
- High brightness with brightness control (500 Cd/m2) .
- Internal selectable lookup table for grayscale transfer function .
- Internal power supply (110-240 VAC) .
- Weight 10 kg (3.9 lbs) .
- Size 39.6 (W) x 31.8 (H) x 7.5 (D) cm (16.3 x 12.3 x 2.9")
- PMS PD format (RGsB) via BNC connector Standard PC format (RGBHV) DVI interface standard UL2601

<b>13</b>	<b>**NRCA071</b>	<b>LCD examination room Monitor 18"</b>	<b>1</b>
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Monochrome LCD Examination monitor 18" Monochrome LCD display for use in examination room as life monitor.

Comprising:

- 18" monochrome display

Main characteristics:

- Native format 1280 x 1024 SXGA .
- Wide viewing angle .
- High brightness with brightness control (500 Cd/m2) .
- Internal selectable lookup table for grayscale transfer function .
- Internal power supply (110-240 VAC) .
- Weight 10 kg (3.9 lbs) .
- Size 39.6 (W) x 31.8 (H) x 7.5 (D) cm (16.3 x 12.3 x 2.9")

<b>14</b>	<b>**NRCA161</b>	<b>Yes</b>	<b>1</b>
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Yes Injector Interface Present

<b>15</b>	<b>**NRCA100</b>	<b>1 monitor ceil. susp. LCD</b>	<b>1</b>
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Single monitor ceiling suspension for LCD monitor Height adjustable monitor ceiling suspension for one monitor. This device allows the user a flexible position of the monitor in the examination room depending on the application and the preferred working position. The counterbalanced arm holds the monitor in any wished height and gives free space on the floor. The design allows easy movements and a one-hand use.

Specification:

- The height adjustable swivel arm has a:
- 430 cm (172 inch) longitudinal travel

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		<ul style="list-style-type: none"> <li>·340 degrees rotation</li> <li>·105 cm (42 inch) vertical range</li> <li>·length of 120 cm (48 inch)</li> </ul> Comprising: <ul style="list-style-type: none"> <li>·monitor ceiling cart</li> <li>·counterbalanced swivel arm</li> <li>·monitor carriage</li> </ul>	
16	**989600141193	<b>Floor plate MD-Eleva</b> Floor plate for MultiDiagnost Eleva	1
17	**NRCA374	<b>Indirect, via cross reference</b>	1
18	**989801299678	<b>Airfare to Cleveland for Biomed Training</b> 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.	1
19	**989801299679	<b>Food Transpt Lodging for Cleveland Biomed Training</b> 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.	14
20	**989801299685	<b>CS9020 Biomed Training Basic Networking eLearning</b> This computer-based training (CBT) provides fundamental information on Basic Networking. It covers the lower four layers (1-4) from the OSI model and important TCP/IP commands. This course is completely self-directed and ends with an online test, which has to be taken in order to attend other courses in the training path. This e-course does not include virtual classrooms. For best results, study time should be planned as follows: 2 hours per day on 4 consecutive days. After an engineer is enrolled for this CBT, he will receive detailed instructions about 3-4 weeks before his selected learning period. Prerequisites include: To study this CBT the participant must be in possession of a personal HW key or Smartcard with training level 0 or higher and a license for the PMS Sec Reader. Accreditation: None. Location: eLearning/at home. Class Length: 8 study hours. Materials: Customer Services Software & Data CDs.	1

\* PHILIPS PROPRIETARY MATERIALS SUCH AS DIAGNOSTIC SOFTWARE AND SERVICE DOCUMENTATION ARE NOT INCLUDED IN THE TRAINING AND WILL NOT BE AVAILABLE FOR USE OUTSIDE OF THE TRAINING ENVIRONMENT. THE TRAINEE MUST RETURN ALL PROPRIETARY MATERIALS RECEIVED DURING THE TRAINING AT THE END OF THE TRAINING. CUSTOMER ACKNOWLEDGES AND AGREES THAT NEITHER CUSTOMER NOR TRAINEE WILL RECEIVE A LICENSE TO SUCH PROPRIETARY MATERIALS AND THAT THE TRAINEE MAY NOT BE ABLE TO FULLY UTILIZE THE TRAINING WITHOUT THE USE OF SUCH PROPRIETARY MATERIALS. (CERTAIN LICENSES MAY BE OBTAINED THROUGH PURCHASE OF A PHILIPS RIGHTFIT SERVICE AGREEMENT.) Course dates and location to be finalized by Philips. Philips shall attempt to accommodate Customer requested dates.

IMPORTANT Notes Regarding Admission to Philips Customer Engineer Training Courses:

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1. Trainee must meet all prerequisites
2. Course expires one (1) year from equipment installation date (or purchase date if sold separately)
3. Customer must sign Philips Nondisclosure statement
4. Trainee must sign Philips Nondisclosure statement
5. Customer must sign Philips terms and conditions of training

Education entitlements expire one (1) year from equipment delivery date.

<b>21</b>	<b>**989801299686</b>	<b>CS9021 Biomed Training Dicom Unix eLearning</b>	<b>1</b>
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This computer-based training (CBT) provides fundamental information on Basic DICOM and Unix . It explains the DICOM protocol and important Unix commands. Together with CS9020 Basic Networking, this CBT is prerequisite for all Medical IT courses. Although there is no final test, it is important to study the CBT because without DICOM knowledge it is impossible to follow the EasyVision Basic course successfully. Please note that this course does not include virtual classrooms. After enrollment, the participants receives detailed Learners Instructions. Prerequisites include: To study this CBT the participant must be in possession of a personal HW key or Smartcard with training level 0 or higher and a license for the PMS Sec Reader. Accreditation: None. Location: eLearning/at home. Class Length: 6 study hours. Materials: Customer Services Software & Data CDs.

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<b>22</b>	<b>**989801299708</b>	<b>XD3848C Bio ELEVA- EASY/MULTI SYS.R2 CTC14+</b>	<b>1</b>
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Class Length: 14 days

Delivery Method: Lecture/Lab

Location: Cleveland

Accreditation: N/A

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DESCRIPTION:

The Biomed is trained to a technical level, which will enable him to do the setting to work, calibration, and corrective maintenance on the Windows NT and Windows XP MultiDiagnost Eleva II/TV, and the EasyDiagnost Eleva systems according to the service philosophy.

Prior to attending the course, the student must take XD9016, URF Eleva Basics eLearning and XD9026- URF Eleva Operating eLearning. Both XD9016 & XD9026 are part of this course and there will be no extra cost to obtain these classes.

Description of XD9016:

Class Length: 8 hours

Delivery Method: CBT

This CBT is intended for those who have finished their basic training as X-ray CS field engineer. After some months of field experience this course will be the entrance to the Eleva Platform systems. The CBT provides fundamental information on fluoroscopy and imaging aspects belonging to the Eleva systems as preparatory training for the course XD3853 URF Eleva Platform.

Description of XD9026:

Class Length: 3 hours

Delivery Method: CBT

This CBT training will train the Field Service Engineer to a basic level of understanding the Eleva products structure, the Eleva workflow and how to Operate the Eleva Examination console. He is also trained on the basics of operating a ViewForum connected to an Eleva system.

PREREQUISITES:

Completion the following courses:

XD3002 - X-ray Systems, Basic Part 2 (bundled with: XD9015-X-ray Systems, Basic Part1) or other basic X-ray course, or prior X-ray modality service training/experience

AND-

1 of the following:

XD9016 – URF Eleva Basics

AND-

XD9026- URF Eleva Operating

Additional courses that are recommended:

XD3671(C) - Bucky Diagnost Part 2 (bundled with XD9022-Bucky Part1)

CS9027 - Dicom

CS9020 - Basic Networking

## 100466 Multi Diagnost Eleva

Line #	Part #	Description	Qty
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### COURSE AIMS:

During this course the engineer will be provided with information on:

- Configuration and product structure of the URF Eleva Systems.
- (Pre) installation and setting to work
- Safety aspects
- Simplified Block and System diagrams
- Corrective Maintenance (CM)
- mShield (firewall)
- Remote Services (RSN)

The Engineer will learn how to:

- Install the system with the help of the SMI
- Work with the Field Service Framework service tool.
- Work with EVA service tool and perform basic EPX parameter adjustments.
- Set up the Velara generator using the Agent service tool and/or FSF.
- Perform mechanical and imaging adjustments
- Perform corrective maintenance at the FRU-level
- Configure and perform basic operation of the ViewForum Workstation
- Handle service software programs
- Connect the system to a local hospital network (RIS, printer and PACS)

\* PHILIPS PROPRIETARY MATERIALS SUCH AS DIAGNOSTIC SOFTWARE AND SERVICE DOCUMENTATION ARE NOT INCLUDED IN THE TRAINING AND WILL NOT BE AVAILABLE FOR USE OUTSIDE OF THE TRAINING ENVIRONMENT. THE TRAINEE MUST RETURN ALL PROPRIETARY MATERIALS RECEIVED DURING THE TRAINING AT THE END OF THE TRAINING. CUSTOMER ACKNOWLEDGES AND AGREES THAT NEITHER CUSTOMER NOR TRAINEE WILL RECEIVE A LICENSE TO SUCH PROPRIETARY MATERIALS AND THAT THE TRAINEE MAY NOT BE ABLE TO FULLY UTILIZE THE TRAINING WITHOUT THE USE OF SUCH PROPRIETARY MATERIALS. (CERTAIN LICENSES MAY BE OBTAINED THROUGH PURCHASE OF A PHILIPS RIGHTFIT SERVICE AGREEMENT.) Course dates and location to be finalized by Philips. Philips shall attempt to accommodate Customer requested dates and training location. The price quoted includes course tuition. Travel and living expenses are not included, but may be purchased separately through Philips.

**100466 Multi Diagnost Eleva**

<b>Line #</b>	<b>Part #</b>	<b>Description</b>	<b>Qty</b>
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IMPORTANT Notes Regarding Admission to Philips Customer Engineer Training Courses:

- 1. Trainee must meet all prerequisites
- 2. Course expires one (1) year from equipment installation date (or purchase date if sold separately)
- 3. Customer must sign Philips Nondisclosure statement
- 4. Trainee must sign Philips Nondisclosure statement
- 5. Customer must sign Philips terms and conditions of training

<b>23</b>	<b>SP006</b>	<b>Turnkey Operation</b>	<b>1</b>
Turnkey Contracting Proposal - Project Budget and Scope of Work. See proposal and Scope of Work for detailed information regarding this service.			

**PHILIPS**

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# **Turnkey Contracting Proposal**

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## **Project Budget & Scope of Work**

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### **Multi Diagnost Eleva-Flat Detector Room 1D110 Renovations**

Submitted By:

Philips Healthcare North America Company, a division of Philips  
Electronics North America Corporation ("Philips")

For:

**VAMC Martinsburg  
Martinsburg WV**

March 15, 2011

## Turnkey Proposal

### Summary

The purpose of this scope of work ("SOW") is to define the extent of the Turnkey engineering, procurement and contracting work required to complete the project described above. Anything not specifically included by mention in this description is excluded from the agreed upon SOW. In the event of a conflict between the work described in the SOW definition set forth below, and the supplemental documents attached to this Turnkey Contracting Proposal, the SOW shall govern. The SOW should be thoroughly reviewed by all involved parties to ensure that all areas of concern are addressed, as the items described therein shall govern execution of the project described herein ("Project"). Additional items not addressed in this proposal may be included in the Project, but are subject to negotiation.

This proposal references **site drawing number: N-EAS110113**

This Turnkey Contracting Proposal (the "Turnkey Contracting Proposal") is the property of Philips and is only applicable to and may only be used on the Project described herein. This Turnkey Contracting Proposal shall not be copied or used in whole or in part without written permission of an authorized representative of Philips. ©Koninklijke Philips Electronics N.V. 2009 all rights are reserved. Reproduction in whole or in part is prohibited without the prior written consent of the copyright holder.

### Project Description:

**Replace existing Easy Diagnost 90/45 with Multi Diagnost Eleva-Flat Detector, including: systems upgrades to accommodate new equipment and finishes upgrades to meet VA Martinsburg's requirements. Adjacent toilet room will also be refinished.**

### Scope of Work

#### **DESIGN:**

All architectural and engineering work necessary to complete the project described above, including:

- Any further preliminary/schematic design and design development work.
- Customer meetings.
- All required survey and testing work. **– No testing unless specifically requested by Owner or Philips.**
- Construction document production (drawings & specs).
- Copies of the construction documents as required by all parties and other miscellaneous printing costs including read-only CADD files.
- **Design and work does not include bringing up area to meet ADA standards**
- Any redesign work required by review and approval authorities.
- Any pre-construction meetings.

- Shop drawing and submittal review.
- All necessary construction progress inspections, including punchlist and occupancy inspections.
- As-built drawings and specifications showing all changes made during construction.
- Travel costs and all other miscellaneous expenses.

## **CONSTRUCTION:**

### **Division 01 – General Requirements**

- Maintain a job site office area **within the work space.**
- Keep a current and up to date copy of the construction documents in the job site office, marked with red-lines for all changes that occur during the work.
- Provide all required shop drawings and submittals, and keep a copy of all approved shop drawings and submittals in the job site office. Turn over all approved files as well as all appropriate operation and maintenance manuals to the Owner upon completion of the project.
- Provide all necessary samples and test panels **as specifically required.**
- Maintain a full time job superintendent.
- Conduct weekly job progress meetings which include job site safety discussions. On a weekly basis, provide (2) copies of the following to Philips designees of: Job status report and action plan; job progress and safety meeting report; an updated job schedule showing actual vs. plan; job site progress pictures with location key; any other pertinent correspondence.
- Pay all applicable taxes on the work.
- **Provide Performance and Payment Bonds equal to the contract amount.**
- Provide all overtime labor as required to complete the project within the agreed upon schedule.
- Provide all airfreight costs and other expedited material delivery charges required to complete the project within the agreed upon schedule.
- Standard **8 hour** job site work hours are **6 AM to 4 PM (Monday through Friday).** Permission to work at the site during any periods other than standard work hours must be approved by **VA Representative** in advance, in writing.
- Noise restrictions at the job site are as follows:
  - **Noisy and disruptive work to be done off hours (approximately two (2) days required).**
- HEPA filters and infection control procedures as required by the facility. Maintain negative pressure in the construction area as required by the facility.
- Provide for daily broom cleaning of the job site and debris removal and appropriate disposal (including any Philips equipment containers and packing materials). Use of walk off mats as required by the facility. The entire job site shall be thoroughly cleaned upon completion of the work, prior to turnover to the customer.
- The storage, staging and delivery of materials to the job site shall be as follows:  
**All materials brought to the site will be stored within the work space or as designated by VA Representative.**
- Parking for construction workers is restricted to:  
**Onsite public parking.**
- Compliance with the Owner's security regulations and dress codes is required.
- Use of the Owners' facilities is limited to: **TBD**
- **The anticipated sequence of construction work would be as follows: The existing equipment will be disconnected and removed by others (Philips Healthcare). The Owner will remove any accessories to be kept, and tag any mounted accessories to be removed and reinstalled (after work completed). Infection control measures will be put**

**in place, and then construction can commence ; demo, structural improvements (if any), electrical and mechanical improvements, finishes, new millwork and sink. After construction is complete, the new equipment will be delivered and installed (Philips). See attached preliminary schedule dated 03/09/2011.**

#### **Division 02 – Existing Conditions**

- The installation of plywood and plastic shrouds and temporary partitions to secure areas, control dust, protect adjacent areas and equipment as required are included.
- The demolition and appropriate removal and disposal of all existing walls, floors, ceilings, finishes, foundations, roofing, structure, equipment and utilities as required to accommodate the new work. All items that are intended to be salvaged by the owner will be so noted and removed by the owner prior to the start of the demolition work.
- **This scope of work does not include the removal of any materials deemed hazardous by local authorities, the EPA, OSHA, or any other authority having jurisdiction over the work. If such materials are discovered at any time that the work is proceeding, the work will immediately cease, the owner will be notified, and the work will again proceed after the owner has removed all of the hazardous material from the job site.**

#### **Division 03 – Concrete - Existing to Remain**

- **Core drills as required for M.E.P. work.**
- **Install only Philips' "Multi Diagnost Eleva Floor Plate" flush with top of slab and grout.**
- **Patch holes left in existing floor and ceiling after equipment removal.**

#### **Division 04 – Masonry**

- **N/A**

#### **Division 05 – Metals**

- Unistrut (or equal) equipment support is required as follows:  
**to support two (2) monitors and rails for monitors.**

#### **Division 06 – Wood, Plastics and Composites**

- All cabinetry and counters are to be faced with plastic laminate at a minimum, all cabinetry and countertops must meet facility standards. Included in the work is 4 lineal feet of base cabinetry with counters, 4 lineal feet of wall cabinetry, and 3 lineal feet of counter (only).

#### **Division 07 – Thermal and Moisture Protection – N/A**

#### **Division 08 – Openings – N/A**

#### **Division 09 – Finishes**

- All existing drywall and/or plaster construction disturbed by the work shall be patched, repaired or replaced as required with materials and construction type compatible with the existing construction.
- All new construction shall have interior finishes as follows: All ceilings shall be 2' by 4' acoustical panels in a "T" grid system.
- All walls shall be primed coat painted, the walls shall be final coat painted in no more than two different colors as selected by the owner from samples submitted by the material supplier.
- All materials to be as selected by the owner from samples provided by the material supplier.
- Procedure room shall be medintech sheet vinyl with 4" integral base.
- Rooms with ceramic tile floor shall receive ceramic tile base and 48" wainscot compatible with the ceramic floor tile.
- All door frames shall be repainted, all doors shall be: **Resealed** to meet facility standards.
- All existing finishes disturbed by the work shall be patched, repaired or replaced as required with materials and construction type compatible with the existing construction.

**Division 10 – Specialties – N/A**

**Division 11 – Equipment- N/A**

**Division 12 – Furnishings**

- The services of a professional interior designer are not included, nor are any furnishings, furniture, artwork, window treatments, miscellaneous accessories, etc.
- **Existing accessories to remain a part of the final product will be removed and reinstalled in designated locations.**

**Division 13 – Special Construction**

- FLOOR PLATES: Installation of the Philips supplied equipment base plate(s) is included
- RADIATION SHIELDING - X-RAY: **Existing shielding to remain. Repair/patch shielding damaged by construction or equipment removal. VAMC to confirm shielding requirements.**

**Division 14 – Conveying Equipment – N/A**

**Division 21 – Fire Suppression**

- All fire protection system alarms shall be tied-in to the existing alarm system at: **Existing to remain.**
- **Existing fire suppression system to remain.**

**Division 22 – Plumbing**

- **Existing plumbing (water and waste) rough-ins are to be reused. Furnish and install new work sink and faucet; replace existing toilet; replace existing toiletroom sink and faucet.**

- The tie-in points for all supply, waste water piping are as follows:  
**tie-in points to remain as is.**  
Tie-in timing restrictions for all plumbing work is as follows: **N/A**

MEDICAL GAS SYSTEMS:

- **Existing to remain**

**Division 23 – Heating Ventilating and Air Conditioning**

- **Furnish and install one (1) three-quarter (¾) ton split-system DX cooling unit to satisfy the additional equipment heat load. Location of condenser unit shall be no more than 75 feet away from indoor unit.**
- All existing areas affected by the new construction shall have the existing heating, ventilating and air conditioning system ductwork, dampers, grilles and diffusers relocated as required.
- All ductwork insulation disturbed by new construction shall be repaired or replaced.
- All necessary control system modifications required due to the relocation activity is included. **unless**
- All required fire and smoke dampers are included. **Existing to remain.**
- After completion of all HVAC work, a test and balance of the HVAC system(s) affected by the work shall be performed by a qualified independent testing agency certified for such work. Any rework required to bring the HVAC system (or portion of the system affected by the work) to within design specifications is included. 3 copies of all test reports are included.
- Tie-in timing restrictions for all HVAC system work is as follows: **TBD**
- Energy Management Systems, or connections to existing energy management systems is not included.

**Division 26 – Electrical**

- All power feeds, transformers, distribution panels and circuit breakers (with identification labels), conduit, wiring, junction boxes, backboxes, pull boxes, pull wire, raceways, cable trays, wall and floor duct, lighting fixtures and lamps, hospital grade receptacles and cover plates (ground fault interruptible circuit where required), switches and cover plates, connections, motors, disconnects, couplings, and other miscellaneous parts as required are included. All items must meet facility standards and local codes.
- The power feed shall connect to the existing: **disconnect** located at: **in the exam room** and must meet Philips imaging system requirements for power quality as specified in the Philips site planning documents.
- All required circuit breakers, taps, sub-panels, etc. as required are included.
- A shunt trip with connection to the fire alarm system shall be supplied and installed ahead of the Philips system PDU for equipment shutdown as required by local code.
- A power conditioner consisting of: **"PBK" – PDU 4000/UPS furnished and installed by Philips will be roughed-in by contractor**
- Installation of misc. Philips equipment related items as specified on the referenced Philips Site Planning Department documents is included
- Tie-in timing restrictions for all electrical system work is as follows: **normal hours.**

- **The existing isolated power or electrical panel as well as all duplex receptacles and other miscellaneous circuits to remain as is.**
- **Existing recessed incandescent downlights will be removed as required by the work, cleaned, and then reinstalled.**
- **Existing trough system to be reused wherever possible.**
- **Furnish and install power and disconnects as required by added three-quarter (¾) ton DX unit, one 208V, 35 amp, single phase circuit for each component, fed from an unknown power source no more than 100 feet away from unit location.**

#### **Division 27 – Communications**

- TELEPHONE SYSTEMS: Provide all conduit, junction boxes, backboxes, mounting boards, cover plates and pull boxes and pull strings for owners telephone system to meet facility standards (system and installation by others). Rough-ins for telephone outlets to be in the following rooms: **existing to remain.**
- COMPUTER NETWORK SYSTEMS: Provide all conduit, junction boxes, racks and/or mounting boards, and pull strings for owner's computer network system to meet facility standards (system and installation by others). Rough-ins for computer outlets to be in the following rooms: **existing to remain.**
- INTERCOM/PAGING/PUBLIC ADDRESS/NURSE CALL/MUSIC SYSTEMS: Provide the following systems to the following rooms: **N/A**

#### **Division 28 – Electronic Safety and Security – N/A**

#### **Division 31 – Earthwork – N/A**

#### **Division 32 – Exterior Improvements – N/A –**

#### **Division 33 – Utilities – N/A –**

#### **EXCLUSIONS**

- All items not included in the scope of work must be added to this section. Bold faced items cannot be excluded.
- **This scope of work does not include the removal of any materials deemed hazardous by local authorities, the EPA, OSHA, or any other authority having jurisdiction over the work. If such materials are discovered at any time that the work is proceeding, the work will immediately cease, the owner will be notified, and the work will again proceed after the owner has removed all of the hazardous material from the job site.**
- The services of a professional interior designer are not included, nor are any furnishings, furniture, artwork, window treatments, miscellaneous accessories, etc.