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****NNAE373**

Allura Xper FD10/10 Rel. 7.6

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The Allura Xper FD10/10 biplane cardiovascular system is comprised of a floor-mounted G-arm stand, a ceiling-mounted lateral ARC, and digital imaging X-ray system for cardiovascular diagnostic and interventional procedures.

The Allura Xper FD10/10 system is an integrated single-host concept. The system comprises five functional building blocks: Geometry, X-ray Generation, User Interface, Image Detection, and Viewing. Each functional building block is explained in further detail.

GEOMETRY

The Allura Frontal Stand

The floor-mounted geometry segment is comprised of the following features:

- A motorized dedicated cardiovascular floor-mounted Poly-Diagnost G-stand with a rotatable base that allows for a clear area around the patient table. The stand is capable of manual or motorized movement.
- All stand movements are motorized. The manual and motorized parking movement consists of floor-mounted rotation. The counterbalanced Dynamic Flat Detector can be positioning can be manually or motorized. Angulation and rotation of the Poly-Diagnost G-arm is also motorized at high speeds.
- The Poly-Diagnost G-stand can be parked either manually or motorized. The G-stand has electronic auto stop positions. The motorized parking feature provides motorized base rotation at 12 degrees per second from +105 to -105 degrees.
- The projection angles for the Poly-Diagnost G-arm are:
 - Rotation 120 degrees LAO to 120 degrees RAO
 - Angulation 45 degrees cranial to 45 degrees caudal
- Motorized stand movements are variable speed with a configurable maximum speed, allowing:
 - Rotation speed up to 25 degrees/s
 - Angulation speed up to 18 degrees/s
- The depth of the Poly-Diagnost G arm is 105 cm.
- The stand features BodyGuard capacitive sensing collision avoidance for patient protection.
- The variable source image distance range between the x-ray tube foci and the Dynamic Flat Detector input screen is 86.5 to 123 cm.

The Allura Lateral Stand

The ceiling-mounted geometry segment is comprised of the following features:

- A motorized lateral ceiling suspended double C-arc stand.
- Longitudinal manual and motorized movement on ceiling rails for convenient parking. The lateral C-arc stand is capable of manual or motorized parking over the full range of the rails with electronic auto-stop positions.

- Motorized movement makes positioning in the iso-center easy and accurate. It also features comfortable, single operator control of stand parking. The motorized longitudinal movement is max 12 cm per second over max 315cm.
- Collision protection is provided on X-ray tube, Flat Detector and inside the double C-arc.
- The double C-arc allows these angulations at any rotation:
 - Motor-driven rotation from frontal to left oblique projections of maximum 90 degrees
 - Motor-driven angulation in the cranial or caudal direction of maximum 45 degrees
- Manual or motor driven axial movement of the Flat Detector assembly for adjusting the patient/detector input distance.
- The variable source image distance range between the X-ray tube foci and the Dynamic Flat Detector input screen is 87.5-130.3 cm.
- The speed of the motorized angulation/rotation movement is 8 degrees/sec whenever the double C-arc is out of its parking position.

Patient Support

Xper Table

- Patient support provided with a flat carbon fiber tabletop
- Tabletop length of 319 cm and tabletop width of 50 cm
- Floating tabletop movement of 120 cm longitudinal and 36 cm transverse
- Motorized height adjustment from 79 to 107 cm
- Maximum patient weight 250 kg plus 500 N for CPR (or 225 kg plus 1000 N) in any longitudinal position of the table top

Patient Support Accessories

- Three rail accessory clamps
- Mattress pad
- Translucent catheterization armrest
- IV Pole
- Set of Cable Holders
- Set of Arm Supports (FCV0248)
- Patient straps
- Table mounted radiation shield
- Antifatigue Mat with Philips logo

X-RAY GENERATION

The Allura Xper FD10/10 comprises an integrated dedicated X-ray system, micro-processor controlled 100kW generator, based on high frequency converter technology. The user interface control of this X-ray Generator is incorporated into the Xper module, Xper Desktop Console and the Xper on-screen displays.

For each plane, the Velara CFD generator comprises:

- Voltage range: 40 - 125 kV
- Maximum current: 1250 mA at 80 kV
- Maximum continuous power for fluoroscopy: 2 kW for 8 hours, 2.4 kW for 0.5 hour
- Program selection

- Acquisition frame rates 3.75, 7.5, 15, 30 frames per second
- Pulsed fluoroscopy frame rates 3.75, 7.5, 15, 30 frames per second
- Minimum exposure time of 1 ms
- Automatic kV and mA control for optimal image quality prior to run to safe dose
- An X-ray collimator with single semi-transparent wedged filter with manual and automatic positioning
- SpectraBeam filtering of low energy radiation to optimize image quality and dose efficiency with the MRC-GS 0508 X-ray tube
- Xper Beam Shaping so that both shutters and wedges can be positioned on the Last image Hold without the need for X-ray radiation

Fluoroscopy

- Three programmable fluoroscopy modes can be selected from the Xper Imaging T.S.O. Each mode has a different composition of dose rate, pulse speed, filter setting, and image processing (noise reduction, adaptive contour enhancement, adaptive harmonization).
- Xper Fluoro Storage, a grab function allows storage and archiving of a single fluoro frame or the last 20 seconds of fluoroscopy. These images or runs can be archived as a regular run.

IMAGE DETECTION

The Allura Xper FD10/10 has the following image detection chain for each plane:

- A 25 cm (10 in.) diagonal triple mode Dynamic Flat Detector. It comprises a 6"/8"/10" triple mode Dynamic Flat Detector
- The outer detector box is 37 cm diagonal square
- The digital output of the Flat Detector is a 1024 x 1024 matrix at 14 bit depth and the detector pixel pitch is 184 micron by 184 micron
- The DQE(0) is 75% providing high conversion of X-ray into a digital image, while maintaining a high MTF

VIEWING

The Allura Xper FD10/10 comprises the following components in order to display the clinical images in the control and examination rooms.

Displays

Examination Room

Four 18-inch monochrome LCD monitors

- 18-inch monochrome TFT-LCD display
- Native format 1280x1024 SXGA
- 10-bit gray-scale resolution with gray-scale correction

These monitors are not delivered when FlexVision XL, EP Cockpit or EP Cockpit XL is selected.

The monitor ceiling suspension in the exam room can be configured to accommodate either 4 or 6, 18-inch LCD monitors and includes motorized height adjustment. The height-adjust feature is dependent on the room ceiling height. When FlexVision XL, EP Cockpit or EP Cockpit XL is selected the monitor ceiling suspension is configured for one of those options.

- The first reference channel is for the display of reference images or runs, controlled by infra-red remote-control Xper Viewpad.
- The On-Screen Display provides status information on stand rotation, angulation, display of system messages, X-ray tube load status, selected fluoroscopy mode, selected detector Field of View, and both the rate and accumulation of the dose area product and skin dose.

Control Room

One 19-inch color LCD monitor

- 19-inch color TFT-LCD display

Two 18-inch monochrome LCD monitors

- 18-inch monochrome TFT-LCD display
- Native format 1280x1024 SXGA
- 10-bit gray-scale resolution with gray-scale correction

These control room monitors are not delivered when EP Cockpit or EP Cockpit XL is selected.

Acquisition

The acquisition segment coordinates the parameters for automatic exposure control. The program is selected via the Xper module or Xper Desktop Console.

This Allura offers a storage capacity of:

- 100,000 images per plane at matrix size of 1024 x 1024, 10-bit
- Maximum number of examinations is 999, with no limit to the maximum number of images per examination

Xres Image Processing and SPIRIT

- Xres is a multi-resolution spatial temporal noise reduction and edge enhancement filter. It takes advantage of the full benefits of the digital detector to enhance sharpness and contrast and to reduce noise in the clinical images. The settings for both Xres and SPIRIT can be customized with regard to the image quality.
- SPIRIT harmonizes the background of clinical image to provide excellent visualization of coronary arteries projected in complex projections, such as arteries projected over the diaphragm or spine.

USER INTERFACE

Xper is comprised of three elements: 1) Xper Settings, to customize the system to each user's preferred settings, 2) Xper User Interface, and, 3) Xper Integration, making advanced integration functionality available, such as DICOM Query / Retrieve, background archiving, and Xper Fluoro Storage.

The Xper User Interface comprises a range of User Interface modules in the Examination Room, including On-Screen Display.

On-Screen Display

- X-ray indicator and X-ray tube temperature condition
- Gantry position in rotation and angulation and Source Image Distance
- Detector field size display
- Selected Frame speed
- Fluoroscopy mode
- Integrated fluoroscopy time
- Stopwatch and Time
- Skin Dose: dose rate with X-ray, cumulated dose with no X-ray
- Dose Area Product: dose rate with X-ray, cumulated dose with no X-ray
- Graphical bars for indication of Body Zone specific dose-rate and accumulated skin dose levels, related to the 2 Gy level

Remote Intercom

A separate intercom is provided, which is connected independently from the system that allows separate placement of the intercom at the preferred working position in the control room and examination room.

Xper ViewPads

The Xper ViewPad contains the preprogrammed function settings. The system is provided with two Xper ViewPads. The following functions are provided:

- Run and image selection
- File and run cycle
- File overview
- Store to reference image file
- Copy image to photo file
- Digital (fixed) zoom and panning
- Recall reference images, which means switching control of Xper ViewPad function from life to reference monitor
- Laser pointer, intended to point at regions of interest on the imaging monitors
- LED indication of laser pointer on/off and battery low

Tablesides Modules

One Xper Module is provided for use at either tableside or in the control room. This module has a touch-screen, which can be operated when draped with sterile covers. The Xper Module contains the following functionality:

- Acquisition settings
- Selection of Xper Setting allows the user to set frame rates and X-ray generation settings applicable for the type of the preferred intervention
- Automatic positioning recall to allow the stand position to match the reference image
- Image Processing

The Xper Biplane Geometry T.S.O. module can be positioned at three sides of the patient table, while keeping the button operation intuitive. The Xper Geometry T.S.O. provides the following functionality:

- Tabletop float
- Table height position
- Source Image Distance selection per plane

- Gantry positioning per plane
- Biplane rotation of the two gantries
- Frontal gantry rotation in an axis perpendicular to the floor and longitudinal movement of the lateral gantry
- Store and recall of two scratch gantry positions including SID
- Emergency stop button

The Xper Biplane Imaging T.S.O. module can also be positioned at three sides of the patient table, while keeping the button operation intuitive. The Xper Imaging T.S.O. provides the following functionality:

- Fluoroscopy Flavor selection defined per Xper Setting
- Shutter and wedge positioning
- Manual or automatic semi-transparent wedge filter
- Xper Fluoro Storage and Grab
- Selection of the Detector field size
- Shutter positioning
- Reset of the fluoroscopy buzzer
- Channel selection for the shutter and wedge control

Pan Handle

The Pan Handle is an extension of the control facility for floating movements of the table

Control Room

The control room comprises an Xper Review Module, Xper Viewing Console, a keyboard, and a mouse. The Xper Review Module offers the following functionality:

- Power on/off
- Tagarno wheel to control the review of a patient file
- File and run cycle
- Contrast, Brightness, and Edge enhancement settings
- File, Run, Image stepping and run and file overview
- Delete run
- Image invert and digital zoom
- Reset fluoroscopy timer and enable/disable X-ray

The workflow is divided into scheduling, preparation, acquisition, review, report, and archive. System information is displayed on the bottom of the data monitor:

Scheduling

The patients can be added, listed and selected per date, physician, or intervention type. Previous DICOM patient studies can be uploaded with the DICOM Query Retrieve function.

Patient management protocols are flexible and allow for multiple studies to be selected under one patient identification number so that new studies can be appended to an earlier patient file. Each study can contain multiple examinations to allow for split administrative purposes. Each examination contains multiple files, i.e. acquisition file, reference file, and QA results file.

Preparation

The preparation page provides the information of the room and patient preparation of each individual physician. The preparation page is customizable per Xper Setting and allows each physician to provide his or her own room protocols

Acquisition

The acquisition page contains information on the current selected patient.

Review

The review page allows for reviewing of patients:

- Previous examination cases
- Review of other DICOM XA or DICOM SC studies.

Archive

Biplane Continuous Autopush

Continuous Autopush is an archive accelerator, which ensures that background archiving continues with minimal disruptions.

Clinical studies can be archived to a CD or a PACS. The archive process can be completely automated and customized with Xper Settings. Parameters like multiple destinations and archive formats are programmable based on user requirements.

The Xper DICOM Image Interface enables the export of clinical images to PACS. The export formats are based on DICOM 3.0 protocols. The system exports clinical studies in Cardiac DICOM XA Multi-Frame or DICOM Secondary Capture formats.

- The export format is configurable in 512x512 or 1024x1024 matrix.
- The examination can be sent to multiple destinations for archiving and reviewing purposes.
- The Xper DICOM Image Interface provides DICOM Storage and DICOM Storage Commitment Services.
- The DICOM Query/Retrieve function allows older DICOM XA MF and DICOM SC studies to be uploaded in the system. Furthermore, additional information can be appended to a study, while keeping the patient identification the same.

Clinical Education Program for Allura Systems

Essentials OffSite Education: Philips will provide up to two (2) Cardiovascular Technologists, Registered Technologists Registered Nurses, or other system operator as selected by customer, with in-depth didactic, tutorial, and hands-on training covering basic functionality and work-flow of the cardiovascular imaging system. In order to provide trainees with the ability to apply all fundamental functioning on their system, and to achieve maximum effectiveness, this class should be attended no earlier than two weeks prior to system installation.

In the event that an EP Navigator workstation has also been ordered, the offsite training course will be tailored to focus on the electrophysiology functionality of the FD system and the EPN workstation.

In the event that your main FD system will be dedicated to Cardiac applications your offsite training course will be tailored to focus on the Cardiac functionality.

This twenty-eight (28) hour class is located in Cleveland, Ohio, and is scheduled based on your equipment configuration and availability. Due to program updates, the number of class hours is

subject to change without notice. Customer will be notified of current, total class hours at the time of registration. This class is a prerequisite to your equipment handover OnSite Education. CEU credits may be available for each participant that meets the guidelines provided by Philips. Please refer to guidelines for more information. Travel and lodging are not included, but may be purchased through Philips. It is highly recommended that 989801292102 (CV Full Travel Pkg OffSite) is purchased with all OffSite courses.

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 the two OffSite education attendees. CEU credits may be available for each participant that meets the guidelines provided by Philips. Please refer to guidelines for more information. 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. **It is highly recommended for systems that are fully loaded or for customers with a large number of staff members to also purchase 989801292099 (CV Add OnSite Clin Educ 24h).** Education expires one (1) year from equipment installation date (or purchase date if sold separately). Ref# 106107-110915

2 **NCVA013 MRC-GS 05/08 X-Ray Tube 1

Featuring:

- SpectraBeam pre-filter
- SyncraPulse Pulsed Progressive Fluoroscopy
- 2.4 MHU anode heat storage capacity
- 900 kHU/min heat dissipation

Comprising:

- Maximus ROTALIX Ceramic tube (MRC-GS 05/08 with Grid Switch for pulsed fluoroscopy)
- Tube Housing (ROT1001)
- Cooling Unit (CU3000)
- MRC Rotor Control
- High Voltage Cables

3 **NCVA019 MRC-GS 05/08 X-Ray Tube 1

Featuring:

- SpectraBeam pre-filter
- SyncraPulse Pulsed Progressive Fluoroscopy
- 2.4 MHU anode heat storage capacity
- 900 kHU/min heat dissipation

Comprising:

- Maximus ROTALIX Ceramic tube (MRC-GS 05/08 with Grid Switch for pulsed fluoroscopy)
- Tube Housing (ROT1001)
- Cooling Unit (CU3000)
- MRC Rotor Control
- High Voltage Cables

4 **NCVA798 MultiVision 4x 1 1

MultiVision is the integrated video switch for high quality Progressive Display video sources. It can switch either B&W (RGB based) or color signals, with up to 4 inputs to one output.

MultiVision allows to share a Reference Display- or extra color monitor in the ceiling suspension in the exam room between the Xray system and other sources, such as a Xcelera viewstation, an Ultrasound system, a Interventional Tools station (like StentBoost, 3D CA) etc. These sources can be

allocated in the exam room or in the control room of the cath lab.

The switch is controlled by a button on the Xper Module. MultiVision provides a black image when a not operational input is selected.

Each external video source requires a Wall Connection box (not included in the MultiVision package) for the connection to a MultiVision input: only the Xper 2nd Ref Display as possible source does not require such box. The wall connection box also provides 230 V Power Supply for the connected video sources; however, in total maximum 1400 W can be supplied to the sources all together.

Comprising:

- video switch unit with cabling for max 4 B&W- or Color sources
- soft key button implemented on the Xper Module

Compatible with:

- Allura Xper series Rel 3 (monoplane versions) resp Rel2 (biplane versions) onwards.
- external video sources that comply with following requirements:
 - qualified medical electrical equipment [IEC 60601-1], or IEC 950 equipment combined with a multiple socket outlet [IEC 60601-1]
 - can be connected to the same earth as the Philips Protective Conductor Bar (PPCB).
 - provide video-output that matches the display range of the XB monitor or Colour

Monitor that is used for display

- provide a slave monitor output

Power requirements: refer to system configuration

5 **FCV0588 Isolated Wall Connection Box 4

Isolated Wall Connection Box

This Isolated Wall connection Box facilitates connection of the video source via standard DVI cable/connector and lossless transfer of the video signal over the approximate 30 m cable distance.

. It can be mounted in the exam room or in the control room, depending on the location of the video source.

The quantity of the VWCB's has to be calculated as follows:

For each video signal via MultiVision: 1 VWCB (max = 4)

For each video signal to FlexVision XL on Cardio System: 1 VWCB (max = 9)

For each video signal to FlexVision XL on Vascular System: 1 VWCB (max = 8)

For each 3rd party video signal directly connected to an LCD in the MCS: 1x VWCB.

Note:

No VWCB is required in case a video signal is connected directly to a dedicated LCD from the following sources:

- 1) Xper Live/ref Slaving
- 2) Interventional HW (XtraVision), ViewForum, Xcelera (only if workstations are powered by Allura Xper)
- 3) Xper IM

6 **FCV0589 Legacy Video Convertor 4

Legacy Video Convertor

The Legacy Video Convertor enables conversion from VGA towards DVI.

The Legacy Video Convertor enables conversion from VGA towards DVI for supported input resolutions,

as listed in the table below.

Signal type Native resolution Image Aspect Ratio

VGA 640x480 4:3

SVGA 800x600 4:3

XGA 1024x768 4:3

SXGA 1280x1024 5:4

SXGA+ 1400x1050 4:3

UXGA 1600x1200 4:3

WXGA 1280x800 16:10 (8:5)

WSXGA 1440x900 16:10 (8:5)

WSXGA+ 1680x1050 16:10 (8:5)

WUXGA 1920x1200 16:10 (8:5)

2K 2048x1080 19:10

TV1080I/P 1920x1080 16:9

TV 480I 720x480 4:3

TV 480P 704x480 4:3

TV 576I 720x576 4:3

TV 576P 704x576 4:3

TV 720P 1280x720 16:9

7 **NCVA089 RIS / CIS DICOM interface 1

This package allows communication of the Allura Xper system with a local information system (CIS or RIS). The interface uses the DICOM Worklist Management (DICOM WLM) and Modality Performed Procedure Step (DICOM MPPS) standards.

If a hospital has an Allura Xper system and an information system it can receive patient and examination request information from the information system and report examination results in order to:

- Eliminate the need for retyping patient information on the Allura Xper
- Prevent errors in typing patient names and registration numbers (ensuring consistency with IS information to prevent problems in archive clusters or to search for a name in case of later retrieval)
- Inform the IS about the acquired images and radiation dose

Upon request from the Allura Xper system the complete worklist with all relevant patient and examination data is returned from the IS to the Allura Xper system. For each patient the following information will be shown on the Allura Xper after it has been retrieved from the IS:

Patient Identification:

- Patient name
- Patient ID
- Birth date
- Sex

Examination/Request Information:

- Accession number
- Scheduled procedure step start time
- Scheduled performing physician's name

It is possible at all times to enter patient demographics information manually within the Allura Xper system in case of an emergency or in case the local Information System connection is down.

On request of the clinical user the Allura Xper will report the following information about the selected patient to the IS:

Patient Identification:

- Patient name
- Patient ID
- Birth date
- Sex

Examination/Request Information:

- Accession number
- Performed procedure step status start/end date and time
- Performing physician's name
- Referenced image sequence

Radiation dose:

- Total time of fluoroscopy
- Accumulated fluoroscopy dose
- Accumulated exposure dose
- Total dose
- Total number of exposures
- Total number of frames

Further detailed information can be found in the Allura Xper DICOM Conformance Statement.

The interface requires an EasyLink (hardware and software) if the IS is not compliant with DICOM Work List Management and Modality Performed Procedure Step.

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| 8 | **NCVA092 | Lab Reporting | 1 |
| | Lab Reporting allows the user to generate and print simple reports in modality stand-alone situations. The user is able to incorporate free text and clinical images. The reporting functionality is suited for local printing and email. Part of the report is generated automatically from administrative data (e.g. patient/exam data hospital name) and required data (e.g. run-log dose information and event-log). | | |
| 9 | **NCVA801 | Table APC | 1 |

The Automatic Position Controller (APC) for the table provides two modes of operation:

- Auto positioning. The tabletop position and table height will be adjusted automatically to the pre-defined default point of interest. This to save time and x-ray dose at the start of an exam or for setting up the system for rotation scans.
- Store/recall of a position of the table top. This includes the height-, longitudinal- and lateral position of the table top.

10 **NCVA121 FULL AUTOCAL 1

The AutoCal option is a software package to be used in conjunction with quantitative analysis software packages. It provides an auto calibration procedure for an object to be analyzed that is placed in the iso-center. When the object to be analyzed (e.g. Left Ventricle Vessel Segment) is placed in the iso-center AutoCal avoids the need to:

- acquire an additional image series containing a sphere or grid for calibration purposes
- calibrate manually on a calibration object (e.g. catheter) displayed in the image or image series to be analyzed

11 **NCVA793 Right ventricular quantification 1
software package

Software package for assessment of ejection fraction and right ventricular volumes. This package allows right Ventricular analysis from a single plane or a biplane run: the calculations can be executed from single plane or biplane projections.

The package is especially intended for Pediatric Cardio applications, focussing on easy and efficient wall contour detection.

Comprising:

- Calibration routines
- Various RV-volumes
- Ejection Fraction
- Cardiac Output
- Centerline Wall Motion
- Slager Wall Motion
- Regional Wall Motion
- biplane Ejection Fraction automatic
- biplane Ejection Fraction manual

In addition the package allows manual measurements of line lengths (absolute and ratio's) and angulations. Multiple measurements in one image are possible.

12 **NCVA814 Bipl left ventricular Analysis 1

Software package for assessment of ejection fraction and left ventricular volumes. This package combines the single plane and the biplane Left Ventricular analysis software: the calculations can be executed from single plane or biplane projections.

Comprising:

- Calibration routines
- Various LV-volumes
- Ejection Fraction
- Cardiac Output
- Centerline Wall Motion
- Slager Wall Motion

- Regional Wall Motion
- biplane Ejection Fraction automatic
- biplane Ejection Fraction manual

In addition the package allows manual measurements of line lengths (absolute and ratio's) and angulations. Multiple measurements in one image are possible.

13 **NCVA785 Coronary Quant.Sw pkg(Xper) 1

Functions:

- diameter measurement along the selected segment
- cross sectional area
- %-stenosis
- pressure gradient values
- stenotic flow reserve
- calibration routines

In addition the package allows manual measurements of line lengths (absolute and ratio's) and angulations. Multiple measurements in one image are possible.

Comprising:

- software license

Compatible with:

- . Allura Xper FD 10 Rel 3 and FD10/10 Rel 2 onwards
- . Allura Xper FD20 Rel 2, FD20/10 Rel 2 onwards

14 **NCVA778 2nd Xper Module pr 1

The second Xper Module is equal to the standard Xper Module and provides touch screen control of displayed functionality.

The following functions can be made available providing the relevant commercial options have been selected:

- Acquisition settings
- Image processing controls
- Automatic position control (optional)
- Channel selection for MultiVision
- Quantitative Analysis controls (optional)
- Xcelera and ViewForum viewing (optional)
- Interventional tool controls (optional)
- Allura 3D-RA, Dynamic 3D Roadmap
- StentBoost, Allura 3D-CA
- XperCT, XperGuide
- XIM physiomonitring controls (optional)

Comprising:

- Xper Module with Cabling
- Mounting materials

- Software

Connectivity:

A maximum of 3 Xper modules can be connected to the Allura Xper system:

- one Xper module can on the XperTable
- one Xper module in the control room
- one Xper module on the Xper Pedestal

Compatible with:

Allura Xper FD20 Rel.3

Allura Xper FD20/10 Rel.2

Allura Xper FD20/20 Rel.1

Power requirements: refer to system configuration.

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| 15 | **NCVA783 Pivot for table base. 1 For angiographic- and interventional procedures of the upper peripherals. Provides improved table access for patient transfer. Allows pivoting of the table base around its vertical axes. Pivot range from -90 degrees to + 180 degrees (or -180 to +90 degrees) with locked positions on 0, -13/+13 (facilitating arm-angiography) and -90/+90 and 180 degrees. |
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Comprising:

- pivot device with graduated scale to be mounted on the universal floor plate of the table.

Compatible with Xper Table

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| 16 | **FCV0510 Long mattress cardio 1 Patient mattress, thickness 70 mm, length 3165 mm, width 500 mm |
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| 17 | **NCVA055 Bracket for Rad Shield Ceiling Mount 1 |
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Comprising:

- Bracket with mounting spigot.

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| 18 | **FCV0017 CABLE CARRIER CS 4 Additional carrier for suspension of cable hose from X-ray tube assembly or TV monitor. |
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| 19 | **FCV4894 Add.op-rail with cable ext.kit 1 |
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The content of the additional OP-Rail kit is:

- [A] One additional OP-Rail (mechanical)
- [B] Cable Extension for OP-Rail
 - One Extension cable for Geo Module
 - One Extension cable for Imaging Module
 - One connection box (wherein the extension cables are coupled with the UI-Module cables.

[A]

- An extension for the table op-rail (30cm).
- The additional op-rail can be mounted at the both sides of the tabletop part where no op-rails are mounted.
- The additional op-rail is compatible with AD5 and XperTable (cardio and neuro) patient-tabletops.
- The op-rail has the same profile /dimensions as the current standard op-rail
- The maximum load (downwards) on the additional op-Rail is 100 N (F=100N)
 - (this is limited by the tabletop of the Patient Table)
- The maximum mechanical moment on the additional op-Rail is 40Nm downwards and 20Nm upwards
 - (this is limited by the tabletop of the Patient Table)

[B]

- The cable extension consists out of two cables with a length of 1.3 m; one for the Geo and one for the Imaging module, and an interface box were the coupling to the
- Geo and Imaging module cables can be made.

20 ****NCVB614 Equipment Rack DVI 1**

The Equipment Rack for EP cockpit allows users of the Philips Allura Xper system to organize all the equipment used in an EP Lab on one moveable rack and also allows for cables to be out of the way. This provides a much “cleaner” organized look for the busy EP Lab.

The ceiling-mounted Equipment Rack, which is located in the Exam Room, can support 3rd party equipment. Cabling for this equipment is guided up through the ceiling mounted suspension. It can be moved by swiveling the ceiling mounted boom. The Equipment Rack can be positioned within a circular range of 1.6 meters.

The Equipment Rack consists of:

- 5 shelves and 1 drawer with flexible mounting position and can support 225kg of equipment weight.
- An infusion extension rod
- An extension arm with a standard VESA mounting plate, on which different types of equipment can be mounted
- A Wall Connection Box (1 of the standard EP cockpit Wall Connection Boxes) with Power (230V, 50Hz), Grounding, Network (RJ45), Keyboard/mouse (USB) and Video (DVI) connections
- Cabling and connectors for EPMedSystems EPWorkmate, and Biosense Webster Carto equipment
- 10 country-specific power connectors
- 4 Ethernet network connectors
- Ergonomically operating handles with pneumatic brakes
- Standard gas outlets for O2, NO2, and Vacuum

Notes:

- Life-supporting equipment can not be connected to the Equipment Rack.
- Medical equipment with dedicated keyboards or displays should not be connected without consent of the manufacturer. Please contact your 3rd party equipment vendor for information and clearance.
- Only EP cockpit-compatible configurations of Carto and EPWorkmate should be connected. Customers are requested to contact their local Biosense Webster or EPMedSystems representative for further information on compatability.
- The Wall Connection Box can be used to connect 3rd party equipment that complies with the following requirements:
 - Qualified medical electrical equipment [IEC 60601-1]

- IEC 950 only if connected to an EP cockpit Wall Connection Box mains (230V) connection in the Control Room or otherwise isolated from hospital mains according IEC60601-1.
- Connected to the same earth as the Philips Protective Conductor Bar (PPCB).
- Can be operated with a standard AT 101-key US English keyboard connected through a USB connection.
- Provide video-output that matches the display range of the Color monitor that is used for display. Most display formats up to 1600x1200 are supported.

| | | | |
|----|-----------------------|---|----------|
| 21 | **NCVA892 | Flat Panel Display CR | 1 |
| | | 19" SXGA LCD color monitor | |
| 22 | **FCV0453 | 19" Color LCD monitor in Exam Room | 2 |
| | | 19" Color LCD monitor in Exam Room | |
| | | 19" flat panel color monitor. This LCD monitor is intended for viewing in the examination room and is designed for medical applications. | |
| | | The main characteristics are: | |
| | | - 19 inch Color TFT-LCD display | |
| | | - Native format 1280x1024 SXGA | |
| | | - Wide viewing angle (approx 170 degr) | |
| | | - operated Brightness level 200 Cd/m2 | |
| | | - On Screen Display of control functions operated via touch buttons on front | |
| | | - Internal power supply (90-264 VAC) | |
| | | Compatible with: | |
| | | Standard PC format (RGBHV) | |
| | | DVI interface standard | |
| | | UL60601-1 | |
| | | Allura Cardio/Vascular systems | |
| | | Mains connection: 110 - 240 V | |
| | | Dimensions : 425(W)x375(H)x97(D) mm | |
| | | Weight: 7 kg. | |
| | | Colour: mushroom, front ultra dark grey | |
| 23 | **NCVB248 | Two rows of 3, + 2 on top (8M) | 1 |
| 24 | **989600207421 | Equipment rack Predelivery set | 1 |
| | | Pre-delivery for Equipment Rack. | |
| 25 | **989801292099 | CV Add OnSite Clin Educ 24h | 2 |
| | | Clinical Education Specialists will provide twenty-four (24) hours of CV OnSite Education for up to four (4) students, selected by customer, including technologists from night/weekend shifts if necessary. CEU credits may be available for each participant that meets the guidelines provided by Philips. Note: 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 the earlier of equipment delivery date or purchase date. | |
| 26 | **989801292102 | CV Full Travel Pkg OffSite | 2 |

Includes one (1) participant's airfare from North American customer location to Cleveland, Ohio, with lodging, ground transportation, and meal expenses. Breakfast/dinner provided by the hotel, and lunch/breaks are catered by Philips. All other expenses will be the responsibility of the attendee. Details are provided during the scheduling process. Note: Cancellation/rescheduling policy strictly enforced.

Education expires one (1) year from equipment installation date (or purchase date if sold separately).

27 **989801299678 Airfare to Cleveland for 1
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.

28 **989801299679 Food Transpt Lodging for 1
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.

29 **989801299729 XD3970ALLURAFD7.6PART1 1

Course Number: XD3970

System Codes: 722010, 722011, 722012, 722013

Course Title: Allura Xper Rel 7.6 Part 1

Course Length: 10 days

Delivery Method(s): Instructor-Led

Modality: iXR

Location: PHC, SLC

Target Audience: Service Engineers.

DESCRIPTION:

Part 1 trains the Customer Support engineer to a technical level which will enable him/her to perform Planned Maintenance (PM) and basic Corrective Maintenance (CM) on Allura Xper systems, according to the Customer Support philosophy. He / She will also be able to assist during a system installation.

Part 1 can be followed up by part 2, intended for dedicated Cardio Vascular modality Engineers.

Part 2 focuses on setting to work (configuration) and extended Corrective Maintenance.

The following Allura Xper systems are covered:

FD10 release 7.6

FD10/10 release 7.6

FD20 release 7.6

FD20/10 release 7.6

FD20/20 release 7.6

PREREQUISITES:

CS9020 BASIC NETWORKING

XC3002 X-RAY SYSTEMS BASIC PART 2

COURSE OBJECTIVES:

The engineer will learn how to:

- Operate the system, as far as required to perform service tasks.

- Make use of the service documentation.
- Make use of basic functionality of the service tools.
- Perform Planned Maintenance:
 - Safety checks
 - Performance checks
 - Adjustments
 (Not included: Mechanical checks)
- Create a backup of the system.
- Perform a restore of the system.
- Perform basic CM with help of the service documentation and service tools.
 - Faultfinding using the System Manual Corrective Maintenance.
 - Focus on replacement of parts with a high exchange rate.
 - Retrieve the log file from the system to escalate a problem.
- Customize positions for Automatic Position Control in the EPX-database.

MAJOR TOPICS:

Introduction Allura Xper systems

Operating

Service documentation

Service tools

Planned Maintenance

Corrective Maintenance

System Architecture

X-ray generation

Geometry

Operator controls

Power supply

Imaging

System control

Radiation safety

Image quality

Customization

Software

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

| | | | |
|---|-----------------------|--|----------|
| 30 | **980306640009 | Blue Anti-Fatigue Floor Mat w/ Logo Blue Anti-Fatigue Floor Mat w/ Logo | 1 |
| 31 | **980406041009 | Rad Shield w/ Arm (Contoured) 61X76 Contoured Rad Shield with Arm rest. 61X76 | 1 |
| 32 | **980406190009 | PIVOTING TABLE-MOUNTED RADIATION SHIELD Table-mounted radiation shield for additional protection of physician and staff against scatter radiation. The shield consists of two protective parts: a lower shield and an upper shield. The shield is specially designed for use with the AD5 patient table. | 1 |
| The table mounted radiation shield provides the following features: | | | |
| <ul style="list-style-type: none"> • Mounting to either the right or left table accessory rails; • Pivoting into the required working position; • Pivoting into the parking underneath the tabletop facilitating patient preparation; • The upper shield can be positioned upright providing optimal protection or can be folded down for free access to the patient. | | | |
| The table mounted radiation shield includes: | | | |
| <ul style="list-style-type: none"> • Lower shield measuring 70 cm high 80 cm wide 0.5 mm Pb equivalence; • Upper shield measuring 40 cm high 50 cm wide 0.5 mm Pb equivalence; • Mounting clamp; Docking device for wall mounting. | | | |
| 33 | **989801220012 | Cable Spooler | 1 |
| 34 | **989801220065 | Medrad Xper Cable Pedestal | 1 |
| 35 | **989801220076 | Exam Lamp 220v Spring arm mounted examination light for cardiovascular applications | 1 |
| 36 | **989801220077 | Medrad Provis Pedestal MARK V PLUS INJECTOR PEDESTAL (BASIC) with Integris interface Power injector for use in Angiographic procedures | 1 |

Includes:

- Mark V Plus Pedestal 110V/60 HZ. Suitable for two
- 150 ml syringes. (SYS 500-P1DPH1)
- Injector head with 6 ft. fixed cable length (IHC 520P)
- Integrated start switch for the pedestal version (KMA 550)
- Two disposable syringes 150 ml (KMP 777) (2)

- Two pressure jackets (150 ml) for disposable syringes.
- (150-FT-Q) (2)
- A dual turret (150 ml) (KMA 150P)
- Operation Manual (KMP 805P)
- Service Manual (KMP 826-S)
- A interface cable (14.8 ft) for Integris systems (XMC926)

| | | | |
|-----------|-------------------------|---|----------|
| 37 | **989801220080 | Portegra 2 360 Ceiling Column | 1 |
| | | Portegra 2 360 Column w/ trolley and ceiling track | |
| 38 | **989801220081 | Mach 3 Dual Focus Lamp 220v | 1 |
| | | The Mach 3 DuoFocus exam lamp brings daylight quality lighting to the interventional suite. The lamp provides a color rendering index Ra of 96.5. The focusable light field size is 8 – 35 cm with a working distance of 60 – 150 cm. | |
| 39 | SP059B | Universal Power Supply | 1 |
| | | Universal Power Supply | |
| 40 | Third Party Item | Cerebral enhancement audio for patient comfort, ALMO distributor | 1 |
| | | Cerebral enhancement audio for patient comfort, ALMO distributor | |

OPTIONS

| | | | |
|---|------------------|---|---|
| 1 | **NCVA080 | Automatic Position Control (APC) | 1 |
|---|------------------|---|---|

The Automatic Position Controller (APC) for Integrator Allura Flat Detector systems provides two modes of operation:

- Preset Position Sequence; the sequence of projections is determined per Xper Settings. Each set contains a maximum of 10 positions. Positions can be recalled in sequence or directly. The projection sequence comprises rotation, angulation, and SID settings, related to the selected reference image.
- Reference driven positioning. The projections on the reference monitors can be recalled with the push of a button. The reference driven positioning recollects the rotation, angulation, and SID.

2 **NCVA086 Rotational Scan 1

Rotational Scan provides real-time 3D impressions of complex vasculature and the coronary artery tree. It acquires multiple projections with just one contrast injection.

Rotational Scan can be used during screening procedures to quickly determine the optimal projection for the study as the angle (rotation/angulation) of the projection is indicated on each image.

Compared with traditional angiography Rotational Scan can save considerable time dose and contrast while providing image detail required for diagnostic and therapeutic decisions.

Rotational Scan is possible with the Allura Xper systems in the side position (ceiling mounted systems) and in the head position which provides the flexibility to perform procedures virtually from head to toe.

With Allura Xper FD20

C-arm in side position:

- Max. rotation speed: 30°
- Max. rotation angle: 180°

C-arm in head position:

- Max. rotation Speed: 55°
- Max. rotation Angle: 305°

With Allura Xper FD10:

Poly G in side position (ceiling version):

- Max. rotation Speed: 30°
- Max. rotation Angle: 90°

OPTIONS

Poly G in head position:

- Max. rotation Speed: 55°
- Max. rotation Angle: 240°

Maximum speeds are given by the framespeed specifications of the system configuration.

The speed and range of rotation are the highest available (see table). The very high speed allows using less contrast whereas the very wide rotation range provides a complete evaluation of the anatomy.

The stand is designed for very high mechanical stability. It offers precise positioning and high reproducibility assuring you of high quality images and excellent studies.

Operation of Rotational Scan is extremely easy. The procedure is selected set up and executed virtually within a matter of seconds supporting the highest patient throughput. A set of dedicated acquisition programs is available on the Xper Module and can be selected at the touch of a button. The rotation end and start positions are easily selected. The procedure is controlled from the exposure hand

- or foot-switch.

3

****NCVB209**

Xper Swing

1

XperSwing allows dual-axis rotational coronary angiography to gather more information in less time and with less X-ray and contrast dose. XperSwing acquires simultaneous RAO/LAO cranial-caudal views in just one acquisition run by moving the C-arm in a curved trajectory instead of multiple acquisitions. XperSwing can be used during screening procedures to quickly determine the optimal projection for the study as the angle (rotation/angulation) of the projection is indicated on each image, providing image detail required for diagnostic and therapeutic decisions and to obtain a real-time 3D impression of the coronary artery tree.

In total seven pre-programmed trajectories are available:

- Three for Left coronary imaging
- Two for Right Coronary imaging,
- Two generic trajectories.

The choice depends on size and weight of the patient. These trajectories are designed to fully cover all conventional projections for a diagnostic coronary angiography. Rotation and angulation movements are combined in one complete scan trajectory, using the maximum rotation and angulation speed of the Allura Xper system. (55 resp 30 deg/sec). XperSwing is possible in the side position (ceiling mounted systems) and in the head position

XperSwing functionality includes, but is not limited to

OPTIONS

- 15 frames per seconds acquisition to allows using of less contrast.
- Wide rotation range provides a complete evaluation of the anatomy.
- Precise positioning and high reproducibility, assuring you of high quality images and excellent subtraction studies.
- Set up and executed in a matter of seconds.
- Set of dedicated acquisition programs with the trajectories available on the Xper Module
- The rotation end- and start-positions can be selected.
- Acquisition procedure is controlled from the exposure hand or footswitch.

4

****NCVA791**

Xper Table Tilt

1

This innovating SyncraTilt enhances the accuracy and efficiency of gravity-oriented procedures. It is available as an option for the Xper table in Allura Xper series systems.

SyncraTilt is ideal for interventional, myelography, phlebography and head down procedures because it provides more precise imaging of contrast medium, blood, or objects in the body.

With SyncraTilt, the isocentre is automatically located at the isocentre of rotation and angulation of the stand. If the longitudinal position of the stand changes, the tilt isocentre is changed to match with the new stand position. As a result, the region of interest is always centred

As the table tilts, the X-ray beam automatically coordinates to the movement.

The table floats even when tilted, and the region of interest can be followed by panning the tabletop.

When combined with the Bolus Chase option, SyncraTilt enables phlebography to be performed with a head-up tilted patient.

The option provides:

- maximum tilt range:
 - 17 degrees (head down) to +17 degrees (head up).
 - tilt speed: 2 degrees/sec
 - automatic safeguarding system with manual override
 - panning range in tilted plane: equal to the standard
 - tabletop specifications (longitudinal 120cm, lateral 35cm)
 - easy to use controls
- Comprising:
- Tilt drive with user controls

Compatible with:

- . Xper table in Allura Xper FD series Rel 3 onwards (monoplane versions) and Rel 2 onwards (biplane versions)
- . Bolus Chase
- . Pivot for table base
- . swivel for table base

OPTIONS

5 ****FCV0604 DoseAware Bundle 1** **DoseAware Bundle**

DoseAware is a unique solution providing staff working in an X-Ray environment with direct, real time dose feedback, enabling them to optimize their behaviour and reduce exposure to scattered dose. The DoseAware bundle comprises:

- 1 BaseStation Package
- 10 PDMs
- DoseManager
- 2 PDM racks.

Base Station Package

The Base Station is the heart of the DoseAware system. It offers Online View, which displays real time dose rate and immediate dose data for any Personal Dose Meter (PDM) in range. The Walk-Up View enables easy access to personal dose history and PDM settings.

The Base Station has a touch screen interface and wireless communication with the PDM. The PDM dose information is stored within the Base Station and can be retrieved by the DoseAware Dose Manager software via a standard network interface to complete the DoseAware system with archiving and reporting functions.

The Base Station package includes also:

- a cradle and the DoseView software package that can be installed on a local PC (not included), which has Windows XP or Vista as operating system.
- Mounting material for the Base Station, facilitating mounting on a wall or on a Philips Monitor Ceiling Suspension or a Philips mobile C-arm system.

10 Personal Dose Meters

The Personal Dose Meter (PDM) is a small and easy to wear active X-ray dose meter intended to measure and store received X-ray dose of staff, present in an X-ray room during radiation. The PDM has build-in radio-frequency wireless communication (868.3 Mhz for Europe version, 915 Mhz for USA version) to connect to the DoseAware Base Station for real time dose-rate indication and has a long battery life for maintenance-free usage. In addition it can be personalized to increase interest and awareness. The PDM not only records warning level profiles every second for a total of 3600 sec (cyclic overwritten), but also stores accumulated dose data every hour for maximum 5 years. A clip and a lanyard holder are included to facilitate easy wearing.

The PDM can be configured via the cradle, DoseView, and Dose Manager Software.

Dose Manager Package

The Dose Manager is a software program that serves as archive and reporting facility for all dose data of the DoseAware system. It allows tracking of multiple PDM's at a location.

Core functionality is:

OPTIONS

- Store and manage dose history for multiple PDM's
- Collect all dose history from connected Base Stations via the network
- Browse dose history of PDM's as graph or table
- Export dose data for personal analysis with other software tools, like Windows Excel
- Create and print reports of dose history

6

****NCVA854**

EP Hardware rel. 1.1

1

The EP Hardware is the hardware platform for the EP navigator software.

The hardware includes at least:

- Radisys workstation
- 4 gb memory
- Hard Drive
- DVD drive
- Real Time Digital Link

COMPATIBILITY

EP navigator is compatible with the following Allura systems:

- FD10 rel 2 and later releases
- FD10/10 rel 1 and later releases
- FD20 rel 2 and later releases (Xper System SW version 4.3.x onwards)
- FD 20/10 rel 1 and later releases (Xper System SW version 4.3.x onwards)

At least 1 color LCD display is required in the examination room. It is recommended to use a dedicated E.R. LCD display for EP. Please make sure if there is sufficient room in the monitor suspension system for a new LCD color display.

EP-Hardware includes Real Time Digital Link standard, as it is always required. This dedicated digital link sends raw or processed image data real time during monoplane exposures to the connected EP Hardware station, to allow instant results of the applicable reconstruction after the exposure run. In biplane systems, this digital link is available for the frontal channel only.

For Allura releases that only support 1 Real Time Digital Link (all releases before FD10 /FD20 rel 3 and FD10/10 / FD20/10 rel 2), 3D-RA related functionality (e.g. StentBoost) will be connected through a DICOM link.

Therefore, the following 3D-RA options can not be used in conjunction with Allura releases before rel 3:

- 3D Roadmapping (NCVA675)
 - 3D-RA R.5 Integrated (NCVA635)
 - Xper CT (NCVA634)
 - Xper CT Interventional Package (NCVA713)
-

OPTIONS

- 7 **NCVB180 EP navigator R2 1**
- EP navigator enables users to segment previously acquired 3D datasets into 3 dimensional volumes of the heart and overlay and register these 3D segmented data sets with live fluoro X-ray images of the same anatomy in order to support catheter/device navigation during specified procedures.
- EP navigator image processing algorithms are performed on the EP Hardware and can perform the following functions:
- Import DICOM CT data sets from PACS via DICOM Query Retrieve or CDROM, or
 - Segment previously acquired 3D image data,
 - Manually register the segmented 3D data with live fluoroscopic X-ray images obtained on a Philips Allura Xper FD system for specified procedures.
 - Superimpose the segmented 3D dataset on a live fluoroscopic X-ray image of the same anatomy, obtained on a Philips Allura Xper FD system,
- EP navigator software includes
- 3D data import
 - 3D segmentation software.
 - Real Time Digital Link with Allura Xper system
 - 3D – fluoro-matching algorithm.
 - Allura geometry link; follow stand + 3D APC.
- Compatibility
Compatible with EP Hardware and EP Cockit.
- The imported CT data needs to comply to the DICOM Conformance Statement. For the latest DICOM compatibility information please visit the Philips Interoperability Website at www.philips.com.
- EP navigator is compatible with the following Allura systems:
FD10 rel 2 and further
FD10/10 rel 1 and further
FD20 rel 2 and further
FD20/10 rel 1 and further
FD20/20 rel 1 and further
- 8 **NCVB183 3D ATG 1**
- 3D atriography (3D ATG) reconstructs three-dimensional (3D) cardiac anatomy from a rotational angiography scan, in the EP lab itself. This 3D anatomy is used in EP navigator as a roadmap to guide catheter navigation, when used as an overlay onto live fluoroscopic images.
- All EP navigator functions, such as Endo View and Point Tagging, are available when using 3D ATG. Automatic segmentation is provided as part of 3D ATG for the left atrium. User-aided segmentation is possible for other anatomic structures
- Handover OnSite Education: Philips Education Specialists will provide sixteen (16) hours of education for up to four (4) students, selected by customer, including technologists from

OPTIONS

night/weekend shifts if necessary. Students should attend all 16 hours, and must include any OffSite education attendees. CEU credits may be available if the participant meets the guidelines provided by Philips. 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 installation date (or purchase date if sold separately).

- | | | |
|----------|--|----------|
| 9 | Third Party Item Karrot intercom with 5 wireless head sets. | 1 |
| | Karrot intercom with 5 wireless head sets. | |

CATH LAB SITE PREP

(CONSTRUCTION)

PROJECT # 637-12-102

STATEMENT OF WORK

General: The scope of work for this project is to provide all labor, materials, equipment, and supervision to renovate approximately 1,100 gross square feet of existing space on the 2nd floor of the Ambulatory Care Addition (ACA) to prepare the space for a new Cath Lab. Work shall include, but is not limited to the following:

- A. Demolition – work shall include demolition and removal of existing walls, flooring, ceiling tile and grid, lighting, electrical power and special systems, HVAC systems, and fire alarm and sprinkler systems.
- B. Architectural Interior – work shall include providing and installing gypsum board and metal stud walls, wall protection, flooring, millwork, painting, acoustic ceiling tile and grid, gypsum board ceilings and framing, doors, frames, hardware, and radiation protection.
- C. Structural – work shall include providing and installing metal framing and supports for the Cath Lab equipment.
- D. Mechanical – work shall include providing and installing a Computer Room Air Conditioning system, Condensing Unit, Steam Humidifier, supply and return piping and connections, piping supports, ductwork and supports, variable and constant volume air terminal units, controls, and testing and balancing.
- E. Plumbing – work shall include providing and installing medical air, oxygen, and vacuum piping.
- F. Electrical – work shall include providing and installing lighting, electrical power, telecommunications and data, special systems, wiring, conduit, and supports for all systems.
- G. Fire Protection – work shall include providing and installing fire sprinkler piping and heads to adequately protect the revised layout.

Work shall be accomplished in phases as described in the drawings and specifications. All work that is required for this project shall comply with all established VA, NFPA, and NEC requirements. The Contractor shall utilize green building materials and energy star products where applicable. All work shall be in accordance with attached plans and specifications. The VA is negotiating for a “Turn-Key” procurement, which will include all work. The VA will not accept any offers that disclaim parts of the required work to make the project complete and ready for use.

Period of Performance: 340 days from the Notice to Proceed (NTP).

Construction Services: Perform work as described above and in accordance with the professionally developed Construction Drawings and Specifications.

Place of Performance: All work will be performed in the Ambulatory Care Addition (ACA) of the Charles George VA Medical Center in Asheville, NC. Work will be in and around an occupied healthcare facility in operation 24 hours a day.

Asbestos: Asbestos Containing Building Materials (ACBM) are present throughout the facilities. If Contractors find ACBM that have not been identified, or suspect finding ACBM, they shall immediately stop work and contact the Contracting Officer's Representative (COR).