

Line #	Description	Qty
1	Allura Xper FD10/10 Rel. 8.1	1

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
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- 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.

The Allura Xper FD10/10 includes a Maximus ROTALIX Ceramic tube assembly MRC-GS 05 08 and cooling unit CU 3101 for cardio-vascular systems for each plane.

- The X-ray tube assembly comprising:
 - 0.5/0.8 mm nominal focal spot values maximal 45 and 85 kW short time load grid switching at pulsed fluoroscopy continuous loadability: 3400 W
 - SpectraBeam dose management
 - Tube housing ROT 1001 for oil-cooled X-ray tube with thermal safety switch cooling unit CU 3000 heat exchanger for use in oil-cooled X-ray tube systems high voltage cables

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 4, 6 or 8, 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

- 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.

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 (NCVA587)

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.

Radiation Dose Structured Report

Collection of dose relevant parameters and settings and export to a DICOM database (e.g. PACS, RIS), according IEC60601-2-43, 2nd Edition.

The reported data can be used for, for example:

- Quality improvement: evaluating trends in X-ray dose performance per facility, system and operator.
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- RDSR enables analysis of average dose levels & variance for routinely performed exams and procedures.
- Typical system usage can be extracted from the data.

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

EchoNavigator R1

1

Structural heart procedures often rely on X-ray imaging to visualize the devices, while simultaneously relying on TEE Echo imaging of soft tissue and anatomical structures. EchoNavigator is a real time imaging product that supports the procedure by combining both X-ray and xPlane and 3D Echo in an interactive, intuitive and procedurally relevant way. The EchoNavigator is based on a real time platform that combines the 3D TEE Echo and X-ray. It provides two visual outputs, one for the control room and one for the examination room. A mouse and mouse tablet (with attachment to table) is included to operate the EchoNavigator functionality from the table side. A dedicated color 24" wide screen LCD display for the control room is included. A FlexVision XL display solution is required for the examination room. EchoNavigator includes an Interventional Echo Link. The Interventional Echo Link provides a high speed 2D and Live 3D digital connection based on high bandwidth Ethernet network adapter with PCI express bus interface.

Features EchoNavigator:

To facilitate the interpretation of Echo images, EchoNavigator allows for multiple user-defined live

views (renderings) of Echo data, showing relevant anatomical structures from different angles simultaneously in real time.

The image orientation of a selected Echo view can be automatically synchronized with the X-ray image, which defines in absolute terms the spatial relation between X-ray and Echo images. This spatial relation remains intact with 3D Follow C-arc. Follow C-arc synchronizes the Echo image orientation with the X-ray projection, automatically adjusting the viewpoint as the gantry is repositioned. 3D follow C-arc for EchoNavigator is included.

To further help the understanding of the two different images, EchoNavigator projects the ultrasound field of view (Ultrasound cone) as an outline into the X-ray view.

Multiple markings can be placed soft tissue anatomical structures in the Echo image and these marking points automatically appear in the X-ray to provide context and help guidance.

To support the workflow and the communication between the X-ray and Echo-operator, the user can interrogate the relevant anatomical structures in the Echo data from table side.

Requires:

- EchoNavigator compatible Echo system, probes, and licenses/software
- EchoNavigator compatible Allura system, hardware, and licenses/software
- FlexVision XL display solution

IXR EchoNavigator Imaging Systems OnSite Education:

Philips Imaging Systems Clinical Education Specialist will provide eight (8) hours of education for up to four (4) students, selected by customer, including technologists from weekend/night shifts as necessary. CEU credits are not available for this portion of training. 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.

Education expires one (1) year from equipment installation date (or purchase date if sold separately). Ref #819-20121213

2 DAY USCE ENT L3D TEE w/trav

2 Day Purchased TEE University with Travel - A variety of Live 3D TEE University course offerings are available to meet your educational needs. Live 3D TEE provides cardiologists, anesthesiologists, and cardiac surgeons novel and exiting realistic views to aid in patient care. The 2 Day PUR TEE University Tuition includes both the tuition and the corresponding travel package.

Due to travel and scheduling requirements, a twenty-one (21) day notification of cancellation is required or training / education entitlements will be forfeited. Curriculum is subject to change without notice.

Travel & Accommodations for one (1) registered attendee. Includes one (1) participant's airfare from a North American customer location to a Philips North America Ultrasound Clinical Education training location with modest lodging, ground transportation and meal expenses for up to 3 days. Breakfast/dinner are provided by the hotel and lunch/breaks are catered by Philips Healthcare. All other expenses will be the responsibility of the attendee (ie. Baggage fees, meals while traveling,

transportation to and from customer's home airport). Details are provided during the scheduling process.

1 DAY USCE ENT CES ONSITE

1 Day On-Site CES – Ultrasound training designed specifically to meet the customers' needs; one business day (up to 8 consecutive hours) with one of our Philips Clinical Education Specialists. Education is provided Monday-Friday during normal business hours.

*Note: Philips Healthcare personnel are not responsible for actual patient contact or operation of equipment during education sessions except to demonstrate proper equipment operation. The training sessions should be attended by Ultrasound Sonographers as identified by the department director. Site must be patient-ready.

2 DAY USCE ENT 400lvl w/trav

2 Day 400 Level Tuition Only - Use only for a two-day level 400 Ultrasound Clinical Education course. Travel and lodging included. NOTE: A twenty-one (21) day notification of cancellation is required or education will be forfeited. Curriculum is subject to change without notice.

3

EP Workmate on Xper module

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This option integrates the EpMed systems Workmate application in the Allura Xper system. Workflow enhancement relate to patient demographics transfer and table side control. This option allows patient demographics to be transferred automatically to the WorkMate system, once the Allura Xper system is ready for acquisition. Thereafter, it additionally allows operation of the Workmate system with the Xper module during an examination. Following Workmate functions are available on the Xper module:

1. Start/stop recording EP signals from the moment the function is initiated,
2. Start/stop recording EP signals from the moment the function is initiated,
3. Save fluoro image (in Workmate's examination) ,
4. Add map point to examination log (and mapping system),
5. Mark event (to insert a basic entry in the Workmate's examination log with timp stamp),
6. Events (up to ten predefined event descriptions in examination log of the Workmate),
7. Signal display adjustments,
8. Timer (on/off, reset) .
9. Print (a predefined WorkMate report).

4

HeartNavigator R1

1

Performing a structural heart procedure can be a breath-taking and tense intervention. HeartNavigator Release 1 provides support in planning of the procedure and additional live image guidance during the procedure. Previously acquired DICOM cardiac CT-datasets can be used as input. The CT-dataset can be presented in 3D and overlaid with the live-fluoroscopy to provide 3D real time insight during the procedure.

Planning:

DICOM Cardiac CT dataset can be used for the determination of the optimal intervention strategy. Optimal view planes for the X-ray device can be programmed with CT data. Furthermore, HeartNavigator Rel.1 is able to automatically segment anatomical structures, landmarks and

planes out of DICOM cardiac CT-datasets. Different tools are available to help the user with the planning:

- Different anatomical visualization tools can be selected to visualize the desired anatomical structures
- Different anatomical landmark points are available to help the user to better understand the orientation and positioning of devices
- Different sizes of virtual devices which can be selected and projected on the CT data to give a reference on how the device would fit the patient

Image Acquisition en Procedure Execution:

During live image guidance HeartNavigator can be fully operated from table side using the XperModule. The user can overlay the acquired images on the 3D reconstruction of HeartNavigator.

The bidirectional link between the X-ray system and HeartNavigator allows the user to select the optimal stand position for the procedure in two ways. 3D Automatic Position Control allows the gantry to automatically move to the projection shown on the HeartNavigator monitor. 3D Follow C-arc allows the overlay to remain in sync with the 2D projection, automatically adjusting the viewpoint as the gantry is repositioned. Different visualization options are available like 3D volume and vessel outline to select as overlay.

Clinical Education for Heart Navigator:

iXR Heart Navigator OnSite Education: Philips Education specialist will provide sixteen (16) hours of education for up to (4) students selected by the customer . The Physicians performing the procedures are required to be part of the training session. CEU credits may be available for each participant that meet 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 the equipment during the educations sessions except to demonstrate proper equipment operation.

iXR Heart Navigator OnSite Live Case Follow Up Education: Philips Education Specialist will provide twenty -four (24) hours of education for Physicians and staff for live case use of the Heart Navigator software. This will be a follow up visit to the initial training of the Heart Navigator software. It is required that Live Valve implantation studies be performed during this education session. No CEU credits will be available for this session. 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 the equipment during the educations sessions except to demonstrate proper equipment operation.

Education expires one (1) year from equipment installation date (or purchase date if sold separately). Ref # 694698-20110915

5	Integr EPcockpit XL and EPnav	1
	This extension enables the use of EP navigator (NCVB180) inside the integrated EP cockpit platform. There is no need for additional hardware on top of this extension.	
6	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
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- 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.

7

3D-RA R.6

1

Allura 3D-RA assists physicians in decision making for treatment strategy in endovascular procedures, neuro or vascular surgery or even radiotherapy.

Allura 3D-RA reduces the number of DSA acquisitions and fluoroscopy time needed to perform an examination. This means less X-Ray dose for the patient and the medical staff and a reduced quantity of dye, leading to reduced procedure costs.

Allura 3D-RA provides a unique assessment after treatment due to the use of non-subtracted images that allows to show devices stents, coils, clips and provide the optimal stand projection for endovascular treatment.

Allura 3D-RA provides a wide range of communication facilities to export 3D images.

1 Image Acquisition

Image acquisition is performed with the Rotational Angiography feature of the Allura Xper FD series with the flexibility to position the C-arm in either head or side position.

C-arm in Head position: the Rotational Angiography run is performed over a scan range of 240 degrees with a rotation speed up to 55 degrees/sec.

C-arm in Side position: the Rotational Angiography run is performed over a scan range of 180 degrees with a rotation speed up to 30 degrees/sec.

2 3D Vessel Reconstruction

The rotational run is automatically transferred and displayed as a 3D vessel model: with the Real-Time digital link (option) 120 images are reconstructed into a 3 dimensional model within seconds. Additional reconstructions, using the Reconstructive Zooming Technique, can be performed as well.

3 Workflow:

Allura 3D-RA in combination with the Allura Xper FD series will provide an optimal workflow via the following workflow enhancers:

Complete automated 3D-RA process from 3D acquisition to 3D Viewing: no user interaction needed.

3D at Xper Module (option); With the Xper module the physician has all required 3D functionality at tableside. At the touch screen module functionality like rotating, panning, zooming, AVA, virtual stenting, 3D-APC and 3D Follow C-arc can be performed. With the mouse tablet all other functions can be performed so that there is no need for the Physician to leave the examination room.

3D Automatic Position Control (3D-APC); When the optimal working position has been chosen via the Allura 3D-RA interventional tool, the C-arc will automatically steer to this position.

3D Follow C-arc; When the position of the C-arc (not using any X-ray) is changed, the 3D volume will automatically follow the position of the C-arc. This means the position of the C-arc (and therefore the 2D projection) and the 3D volume are always aligned. As last seen; when the user leaves the patient in the model and later selects that patient again, the Allura 3D-RA interventional tool will return to the image last used by the user.

Mouse over: When moving the mouse cursor over a button the mouse over text will show up to explain the function of that specific button.

4 Calibration

Allura 3D-RA calibrations are performed by Philips Healthcare Customer Support. Allura 3D-RA calibration data are stable over at least 6 months time.

5 Viewing

A Real Time user interface is available with 3D-RA, providing 3D object viewing in any space direction. A graphical display of (C-arm) stand position including angulation/rotation for any projection.

Philips' CRM (Contrast Resolution Management) Technology for a considerable increase in contrast resolution in all volumes.

Various Image Rendering possibilities: Volume/Surface Rendering, MIP, Endoscopy, SUM (pseudo x-ray image) Gradient rendering; the possibility to display the vessel structure transparently.

Cut-plane function to get a precise insight of the shape of the pathology

Orthoviewer providing a multi-planar visualization of objects using the different Image Rendering possibilities.

MPR (Multi-Planar Reformatting): enables visualization of the volume in all three standard projections (coronal, sagittal and axial) Especially useful for optimal viewing of spine procedures (e.g. Vertebroplasty)

SpineView: special acquisition protocol for optimal viewing of the spine, especially osteoporotic vertebrae

CalciView: allows visualization of Hyper dense plaque in 3D, separately or in relation to the lumen. 5 different distance measurements calculated in the same volume, including "Quick measurement" feature

Volume calculation

Automated Vessel Analysis (AVA), provides information on vessel segment diameter, area and length with only three mouse-clicks. Endoscopic and cross sectional views are available.

Computer Assisted Aneurysm Analysis (CAAA), providing information on Aneurysms, like volume, neck size etc..

Catheter tip shape simulation, providing information on how to shape the catheter tip.

Virtual stenting; Ability to simulate a stent placement in a selected vessel segment for proper stent sizing. All relevant data of the simulated stent are displayed

Annotation: text can be added to a volume to capture comments.

Interpolative Zoom

Reconstructive Zooming Technique, 2 additional user defined reconstructions focused on the Volume Of Interest (VOI) using different cube size and voxel resolution.

Subtraction of reconstructed volumes, allowing to visualize vessels without embolization devices (stents, coils, clips,...) to assess the outcomes of treatment

Automatic Voxelshift: compensates for movement when rendering subtracted or superimposed volumes

Set the grey values WW/WL

Store/Recall of user defined projections.

6 Archiving

Transfer to:

Optional Hard Copy unit (DICOM Print)

Any optional DICOM compatible device (e.g. PACS/ViewForum/Xcelera), supported are DICOM XA, DICOM SC, DICOM CT and DICOM 3D

Any PC in a standard PC compatible format (JPEG,AVI)

One or multiple DVD's, CD-ROM(s) for easy archiving

Store a subset of exportable objects (snapshots and AVI Movies) to a USB removable memory device.

Clinical Education Specialists will provide sixteen (16) hours of tailored CV 3DRA OnSite Education for up to four (4) students, selected by customer, including technologists from night/weekend shifts if necessary. CEUs are not available in all cases. Please read Guidelines for more information, which will be provided to you 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: 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 (or purchase date if not sold with equipment).

8 Aut Pos Contr Xper sys & table 1

This Automatic Position Controller (APC) combines APC for Allura Xper FD10 and FD20 systems with table APC.

System APC provides two modes of operation:

Preset Position Sequence: the sequence of projections is determined through personalized 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 C-arm rotation angulation Flat detector image format and SID.

Table APC

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.

9 Standard Line Rate Video Output 1

This interface provides image output to standard line rate video peripherals, such as VCRs or paper printers. This option also comprises automatic start and stop of a VCR, synchronous to the generation of X-ray (fluoroscopy and exposures).

10 3D-CA Rel. 3 1

Allura 3D-CA is a unique interventional tool that deals with the misrepresentation of reality of 2 dimensional projection images. Improved insight in the coronary lumen has its main benefits in lesion length assessment and determination of the optimal working angles on lesions and bifurcations. As Allura 3D-CA is tightly integrated with the Allura Xper series this tool provides support in improved diagnosis, intervention preparation and intervention execution.

1. Image Acquisition:

The 3D model is based on 2 images out of one of a pre-calibrated, pre-configured cardiac rotational or XperSwing scans, in either side or head position.

2. 3D Modeling

Based on the ECG signal, the system automatically shows all images out of the cardiac rotational in the same cardiac phase and one can select 2 images at an optimal angle to generate the 3D model. The Allura 3D-CA algorithm is so unique and advanced that it allows adding as many lesions, enabling for the construction of a full cardiac tree. This ensures creating not only the

optimal views on lesions, but also on the bifurcations in the model. In order to make a (partial or sub-total) coronary tree the clinical user can add other segments.

3. Workflow and viewing:

Allura 3D-CA in combination with Allura Xper series provide workflow enhancers via:

- Auto image transfer; images are automatically transferred from the Allura Xper to the Allura 3D-CA system,
- TrueLentgh; determine the exact lesion length by adapting the slide rules to the required position,
- TrueView; determine the optimal working angles, on the lesion or bifurcation, based on the Philips Unique intuitive view map,
- 3D Automatic Position Control (3D-APC); When the optimal working position has been chosen via the Allura 3D-CA system, the C-arc will automatically steer to this position,
- 3D Follow C-arc; When the position of the C-arc (not using any X-ray) is changed, the 3D model will automatically follow the position of the C-arc.
- Adaptation of Contrast and brightness of the 2D images
- Default views contain AP, PA, Lateral Left, Lateral Right, Cranial and Caudal, enable visualization of the model in all standard projections. The ability to see the 2D and 3D images in one view to understand viewing directions.
 - With the (optional) Xper module, all 3D functionality needed is available at tableside. At the touch screen module functionality like selection of the optimal view angle in the "True View" map, determining of the exact length of the lesion, rotating, panning, zooming, 3D-APC and 3D Follow C-arc can be performed. No need for the Physician to leave the patient unattended.

4. Archiving

Transfer to:

Optional Hard Copy unit (DICOM Print)

Any optional DICOM compatible device (e.g. PACS/ViewForum/Xcelera), supported are DICOM XA, DICOM SC, DICOM CT and DICOM 3D

Any PC in a standard PC compatible format (JPEG,AVI)

One or multiple DVD's, CD-ROM(s) for easy archiving

Export in VRML format

Store a subset of exportable objects (snapshots and AVI Movies) to a USB removable memory device.

11

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°

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.

12

Set of 2 additional 21in. LCDs

1

Two 21 inch additional displays are located on top of the monitor ceiling suspension frame which carry the 56 inch large screen color LCD display.

These 2 additional LCD's can be used to display additional video sources or used as display back up for Hemo and Xray Live images. These LCD's have a fixed content.

Main characteristics of back-up displays are:

- 21.3 inch, 2 Megapixel color LCD display
- Max. resolution: 1600x1200
- Brightness: 450 Cd/m²
- Contrast ratio : 550:1
- Wide viewing angle (approx. 170 degrees)
- Constant brightness stabilization control
- Independently selectable brightness settings for monochrome and color images
- Independently selectable lookup table for gray-scale, color and DICOM transfer function

FCV0587, "XPer Live/Ref Slaving" required when displaying X-Ray Live as back-up.

13

CT Trueview Rel2

1

CT TrueView uses 3D CT segmented dataset for a more robust anatomical roadmap providing the additional perspective on the coronary vessel morphology. It helps to determine the length of the obstructive lesion, view all side branches, get the optimal projection to view a lesion or bifurcation and fit the proper stent without the use of additional X-ray dose or contrast. This allows evaluation and planning to be done prior to the start of the procedure.

The 3D model is based on a segmented coronary dataset from the Philips Extended Brilliance Workspace (R 3.5 and onwards).

Allura CT TrueView Rel 2 functionality includes, but is not limited to:

- TrueView; define the optimal working projections, of the lesion or bifurcation, based on the Philips exclusive intuitive view map.
- TrueLength; view the exact lesion length
- Unique CTO Navigator provides an overlay of a 2D exposure run over the previous acquired segmented cardiac CT data. The images are matched manually or automatically for images in the same cardiac phase.
- 3D Automatic Position Control (3D-APC); When the optimal working projection has been chosen with CT TrueView, the C-arc will automatically reach this position,

The Xper Module control to provides the physician has all CT TrueView functionality needed at tableside

- Switch image views to View Model, True View map and True Length graph
- Selection of the optimal view angle
- Select vessel lesion or bifurcation
- Vessel navigation
- Select volume rendering mode
- Show/Hide Curved MPR reformat
- Image rotation, panning and zoom
- Snapshot
- Store/recall views
- Select 3D APC / Follow stand mode, 3D Automatic Position Control (3D-APC); When the optimal working position has been chosen via the Allura 3D-CA system, the C-arc will automatically steer to this position, 3D Follow C-arc; When the position of the C-arc (not using any X-ray) is changed, the 3D model will automatically follow the position of the C-arc.

Allura CT TrueView includes the following export functionality:

- Image transfer to any DICOM compatible device (e.g. PACS/Printer), supported are DICOM XA, DICOM SC, DICOM CT and DICOM 3D.
- Support archive on one or multiple DVD's, CD-ROM(s)
- Image transfer to a standard PC compatible format (JPEG,AVI)
- Store a subset of exportable objects (snapshots and AVI Movies) to a USB removable memory

device.

- Image transfer to any DICOM compatible device (e.g. PACS/Printer), supported are DICOM XA, DICOM SC, DICOM CT and DICOM 3D
- Image transfer to any PC in a standard PC compatible format (JPEG,AVI)

Clinical Education Program for CT Trueview R2 (CTO Navigator)

CT Trueview R2 Handover Onsite Education: Philips Education Specialist will provide sixteen (16) hours of education for up to four (4) students selected by the customer , including technologists from night/weekend shifts if necessary. 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. Education expires one (1) year from equipment installation date (or purchase date if sold separately). Ref #494-100615

14

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 degr/sec). XperSwing is possible in the side position (ceiling mounted systems) and in the head position

XperSwing functionality includes, but is not limited to

- 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.

15

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).

16

CT Trueview MultiVendor

1

CT TrueView multivendor prepares DICOM compatible cardiac CT scans for CT TrueView. With CT TrueView multivendor the original acquired CT scans can be segmented automatically and provides a complete cardiac evaluation package allowing simplified workflow and minimal user interaction as available on the Philips Brilliance Extended WorkSpace. It helps to visualize coronary trees, segment the heart, perform detailed coronary artery evaluations and analyze the ventricular function.

Allura CT TrueView Rel MultiVendor functionality includes, but is not limited to:

- A no-click total cardiac segmentation for all phases selected with complete cage removal.
- Globe View (Globe, 3D Map and 2D Map).
- Unique "IVUS-like" view for the central cross-sectional cut.
- Stenosis calculations.
- Volume rendering visualization with coronary tree extraction and complete vessel visualization including its origin from the aorta for ostial morphology assessment.
- Slab tools (including cut planes) on Volume Rendered image in cine.
- LV Functional Assessment, including bulls-eye presentation.
- Continuous identification of C-arm angles.

Clinical Education Program for CT Trueview Multivendor

CT Trueview Multivendor Handover Onsite Education: Philips Education Specialist will provide eight (8) hours of education for up to four (4) students selected by the customer, including technologists from night/weekend shifts if necessary. 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. Education expires one (1) year from equipment installation date (or purchase date if sold separately). Ref # 495-100615

17

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 removes cable clutter through a cable conduit. This provides a much "cleaner" organized look for the busy EP Lab.

The ceiling-mounted Equipment Rack, 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
 - 10 country-specific power connectors
- Note: For USA/Canada 16 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 cannot 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.
- Please contact 3rd party equipment vendor for information and clearance in case of cable routing through equipment rack.
- 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.

18 Equipment rack Predelivery 1
set

Pre-delivery for Equipment Rack.

19 Physio Viewing 1

Physio Viewing allows for the acquisition, storage and display of up to four channels of physiological data, in parallel with X-ray acquisition. The user can select one of the recorded physio signals for display, together with the acquired image.

20 Dicom Print compose 1

Dicom Print provides the possibility to interface to any DICOM Printer. This is an automated printing protocol. The option provides Print Manual Overrides, Print Job submission, and Print Job management.

21 Digital subtracted Angio 1

The DSA-option allows to extend the application functions with additional vascular studies. DSA features real-time digital subtraction at low frame speeds of 0.5, 1, 2, 3, or 6 frames per second. The DSA programs can be selected per Xper Settings.

It offers exposure technique for uncompromised image quality of subtracted images.

In addition, this option also allows subtraction on run basis (run-subtract), which can be applied in the Rotational Scan and Bolus Chase Subtract options

This function will comprise following functionality:

- Fluoro-Trace
- Fluoro-Subtract
- Exposure subtract on individual image or run basis
- Mask selection
- Landmarking
- Pixel shift

Compatible with:

- . Allura Xper FD10 Rel 3 onwards
- . Allura Xper FD10/10 Rel 2 onwards

The StentBoost Subtract improves the visualization of devices in the coronary arteries during interventions. Before and after the deployment of the devices such balloons and stents the position can be checked and stent expansion can be confirmed in the coronary lumen lumen and clear relation of the stent placement to the vessel walls. The StentBoost package enables physician to take any corrective action required immediately, while the catheter is still in place. StentBoost automatically detects the stent delivery markers image after image. In each image StentBoost aligns the markers with the markers of the previous image.

StentBoost can be used with and without contrast. Without contrast the images are acquired with only a short cine run of 1 to 2 sec (recommended with 40 frames out) to show all radiopaque material in the close proximity of the markers will be enhanced resulting in enhanced stent visualization.

With contrast the images are acquired with a tcine run of 5 to 6 sec. Contrast media is required only for the last 3 to 5 sec (typical recommendation of total 100 frames which of 100 frames cine run of which last 60 frames are with contrast) to show all radiopaque material in the close proximity of the markers will be enhanced resulting in enhanced stent visualization.

StentBoost automatically detects the stent delivery markers image after image. In each image StentBoost aligns the markers with the markers of the previous image. By doing this all radiopaque material in the close proximity of the markers will be enhanced resulting in enhanced stent visualization. A contrast enhanced image run results in a dynamic representation of the enhanced stent in relation with the vessel wall.

The Stentboost package functionality includes, but is not limited to:

- Pre-defined Region of Interest to indicate the location of the stent/balloon markers.
- Real time link for immediate data transfer.
- Manual correction possibility for marker identification
- Review of StentBoost runs, before and after processing
- Measurements to supports decision-making in determining the percentage of remaining in the stent.
- Store image snapshot.
- Automatic pre-defined Region of Interest to indicate the location of the stent/balloon markers.
- Fading in/out of contrast vessel and StentBoost image.
- Viewing selection of StentBoost with and without contrast,
- Manual image contrast and brightness adjustment of the boost and contrast image
- Manual correction possibility for marker, boost and contrast identification.
- Create and store as movie.

StentBoost includes the following export functionality:

- Image transfer to any DICOM compatible device (e.g. PACS/Printer), supported are DICOM XA, DICOM SC.
- Support archive on one or multiple DVD's, CD-ROM(s)
- Image transfer to a standard PC compatible format (JPEG,AVI)
- Store a subset of exportable objects (snapshots and AVI Movies) to a USB removable memory device.
- Image transfer to any DICOM compatible device (e.g. PACS/Printer), supported are DICOM XA, DICOM SC, DICOM CT and DICOM 3D
- Image transfer to any PC in a standard PC compatible format (JPEG,AVI)
- Image transfer to any DICOM compatible device (e.g. PACS/Printer), supported are DICOM XA, DICOM SC, DICOM CT and DICOM 3D
- Image transfer to any PC in a standard PC compatible format (JPEG,AVI)

23	Subtracted Bolus Chase	1
	<p>For visualization of vessel structures when the blood flow is difficult to estimate, in particular in the lower peripherals.</p> <p>Bolus Chase solves the problem of cumbersome step movements, the mismatch between blood flow and selected program, and lack of real-time image information.</p> <p>During digital acquisition in non-subtracted mode with uninterrupted real-time image display, the contrast bolus is followed (chased) interactively by a motorized table scan movement using a hand-hold speedcontroller to adapt the speed of the table scan to the contrast flow. The framespeed can be adapted as well.</p> <p>The bolus run is followed with a mask run while using the same speedcurve and framespeed as generated during the bolus run. Viewing is possible in the subtracted and non-subtracted mode. If subtracted viewing is not required, the mask run can be skipped.</p> <p>Subtracted Bolus Chase gives fast, accurate results for increased patient throughput and improved patient management. Automated exposure control and precise speed control assure a high quality images and excellent subtraction studies.</p> <p>Comprising:</p> <ul style="list-style-type: none"> • automatic exposure control • tabletop motordrive and hand-held speed controller (tableside) • technique selection using Xper module, available both tableside and in control room (Xper FD20, FD20/10) 	
24	Biplane FD Dual Fluoro	1
	<p>The Biplane Dual Fluoroscopy mode allows monoplane or biplane digitally processed fluoroscopy in parallel with trace subtract fluoroscopy, providing a non subtracted reference fluoro image for complex interventions.</p> <p>This option provides an additional biplane fluoro channel in parallel to the default biplane fluoro channel.</p> <p>The subtracted fluoro image will be displayed on the live monitor, the non-subtracted image is displayed on the reference monitor.</p> <p>Comprising:</p> <ul style="list-style-type: none"> • Hardware and software 	
25	Second Table-side Geometry Module	1
	<p>Extension of geometry control at tableside with a second geometry module connected in a master/slave configuration. Any action at the master module will deactivate the slave module at once. Includes table-side operation module for geometry with cable and connector identical to the standard geometry module.</p>	
26	Second Table-side Imaging Module	1
	<p>Extension of imaging control at table side with a second imaging module connected in a parallel master/slave configuration. Includes table-side operation module for imaging with cable and connector identical to the standard imaging module.</p>	
27	Ceiling Rail extension set lateral	1

Extension of ceiling rail at headside of the table, to enlarge the parking distance of the lateral ceiling mounted stand. Maximum extension is 1.5 meters. Movement of the lateral ceiling mounted stand is motorized over the full length of the rail.

28 Xper Live/Ref Slaving 3

Xper Live/Ref Slaving

The Xper Live/Ref Slaving will enable the option to slave the Live or Ref video source from the Allura Xper. The total amount of Xper Live/Ref Slaving that can be selected is max 4.

Xper Live/Ref Slaving is possible:

- In Control Room icw FCV0011(B/W monitor in Control Room)
- In Philips MCS (additional monitor excluded from this option)
- icw FCV0519 1 or 2 MCS from Skytron/Steris

29 Biplane FD SmartMask 1

SmartMask simplifies roadmapping procedures by overlaying a selected reference image with fluoroscopy on the live monitor fluoroscopy in the exam room. Smartmask can be applied to both the frontal and lateral channel simultaneously.

The reference image can be faded in/out with variable intensity, controlled from tableside. SmartMask uses the reference image displayed on the reference monitor. Any previously acquired image can be used as reference.

SmartMask facilitates pre- and post- intervention comparisons to assess treatment results.

30 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

31 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.

32	Coronary Quant.Sw pkg(Xper)	1
Functions:		
<ul style="list-style-type: none"> • 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:		
<ul style="list-style-type: none"> • 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		
33	Vascular Quant.Sw pkg(Xper)	1
Functions:		
<ul style="list-style-type: none"> • vessel diameter / stenotic index • automated vessel analysis • 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.		
Compatible with:		
<ul style="list-style-type: none"> • Allura Xper FD10 Rel 3 and FD10/10 Rel 2 onwards • Allura Xper FD20 Rel 2 and FD20/10 Rel 2 onwards • Allura CV20 R1 onwards 		
34	CX50 Video and UI coupling	1
The CX50 Integrated Ultrasound feature has been designed to easily and efficiently integrate ultrasound into the interventional suite.		
Patient data:		
Allura Xper patient information automatically transfers to the CX50 X-Ray and ultrasound patient studies may be configured with unique or identical study IDs to easily store and locate studies in DICOM		
Image display:		
The CX50 video output displays on the exam room LCD monitor		

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

39

Cradle extension

1

This extension provides the possibility to cradle the table top.

This allows optimal positioning of the patient for f.i. more invasive (surgical) or guided puncture procedures.

Functionality:

- . isocentric cradle with maximum cradle range: -15 degrees to +15 degrees for the full tilt range
- cradle speed: 3 degrees/sec
- . automatic safeguarding system with manual override
- . easy to use controls

40

Add.op-rail with cable ext.kit

1

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.

41 **Interventional Hardw.(RT prep)** 1

The interventional hardware is a special platform designed for the Philips interventional software Integris 3D-RA, StentBoost and/or Allura 3D-CA

The Interventional Hardware comprises at least:

- Dell Workstation
- 2048 MB memory
- Primary hard disk for the Operating system
- Secondary 72 GB hard disk for application data
- Internal CD-ROM
- External DVD writer
- Operating Software
- Microsoft Windows XP Professional UK Operating System

Conditionally:

- Integris 3D-RA Calibration Tool Kit
- Grids for pincushion distortion and focus shift calibration
- Phantom for geometry calibration
- Phantom for user validation
- Allura 3D-CA
- Phantom for geometry calibration
- StentBoost
- Phantom for user validation

Compatible with:

- Integris series with connectivity release
- Allura Xper series

42 **Real time image link** 1

Real Time digital image link to an off-line Allura Interventional Hardware station. This applies on the applications 3D-RA, StentBoost and 3D-CA on the Interventional Hardware. This dedicated digital link sends raw or processed image data (depending on the application) real time during monoplane exposures to the connected Interventional 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.

43 **3D RA Control for Xper Module** 1

Table Side Module functionality for Allura Xper FD20 used with Integris 3D-RA Release 4.2.

For further improvement of interventional procedures efficiency the following workflow enhancers are made available in the examination room: With the Xper touchscreen module the physician has all 3D functionality needed at tableside. Functionality like rotating panning zooming AVA Virtual stinting 3 and 3D Follow C-arc can be performed. No need for the Physician to leave the examination room. 3D Automatic Position Control (3D-APC); when the optimal working position has been chosen via the Integris 3D-RA interventional tool the C-arc will automatically steer to this position. 3D Follow C-arc: When the position of the C-arc (not using any X-ray) is changed the 3D volume will automatically follow the position of the C-arc. This means the position of the C-arc (and therefore the 2D projection) and the 3D volume are always aligned.

44

3DCA on Xper Mod.

1

This option integrates the Allura 3D-CA application in the Allura Xper system exam room. It allows operation of 3D-CA with the Xper module in the examination room during an examination without leaving the patient unattended.

Display of 3D-CA imaging in the examination room has to be arranged for the monitor ceiling suspension with an additional monitor or with MultiVision (sharing an existing monitor).

Following 3D-CA functions are available on the Xper module:

- Switch image views between first or second 2D image, View Model, True View map, True Length graph
- Image rotation
- Start and End probe adaptation
- Snapshot
- 3D zoom control
- Store/recall views
- Select 3D APC / Follow stand mode

Compatible with:

- Allura Xper FD10 Rel2
- Allura Xper FD10/10 Rel 1
- Allura 3D-CA Rel 1.0 onwards

45

StentBoost Control for Xper Module

1

Table Side Module functionality for Allura Xper FD20 used with StentBoost Release 1.0

For further improvement of interventional procedures efficiency, the physician has all StentBoost functionality needed at tableside available on the Xper module.

46

EP Cockpit XL (Biplane)

1

EP cockpit XL for Allura Xper bi-plane system with large 56-inch high resolution color LCD screen in the Exam Room.

EP cockpit XL is an integrated EP lab solution supporting an efficient working environment, integrated workflow and enabler for complex procedures.

The EP cockpit XL provides the ability to:

- Reduce the amount of cables, keyboards and displays in the Exam Room and Control Room
- Display information from up to 8 sources simultaneously (incl. third party systems) on the Philips large 56-inch high resolution color LCD screen in the Exam Room.
- Resize & enlarge information at any stage during the case on the Philips large 56-inch high resolution color LCD screen in the Exam Room.

- Select, customize & save viewing lay-outs of the Philips large 56-inch high resolution color LCD screen via the Allura Xper table-side module
- Display information (incl. third party systems) on any of the Philips ultra high-brightness 21-inch color LCD displays in the Control Room.
- Operate connected equipment (incl. third party systems) via the Allura Xper module in the Control Room.
- Select a predefined display setup and keyboard/mouse configuration, or save a custom configuration as a new preset configuration.
- Store any image on any screen and/or all images on all screens as a DICOM Secondary Capture image.

The EP cockpit XL consists of:

Omniswitch

The Omniswitch is a 15 channel video-switch and 8 channel keyboard/mouse switch, operated from the Allura Xper Module in the Control Room and/or from the Allura Xper table-side module. The Omniswitch allows the user to direct the video output of all connected medical equipment to the Philips large 56-inch high resolution color LCD screen in the Exam Room (up to 8 sources simultaneously) and to the Philips ultra high-brightness 21-inch color LCD displays in the Control Room (6 or 7 displays).

The Omniswitch allows the user to switch keyboard/mouse control for the connected medical equipment.

The Omniswitch can be connected to up to 8 medical equipment systems.

These systems can be selected and controlled with 1 or 2 keyboard/mouse combinations in the Control Room.

Medical grade, large screen high resolution color LCD display in the Exam Room

This display support the image quality requirements for monochrome X-ray images, color EP signals as well as other images and replace all displays normally delivered with an Allura Xper system for the Exam Room.

Main characteristics are:

56 inch, 8 Megapixel color LCD display

Native resolution: 3840x2160

Brightness: max 450 Cd/m² (typical)

Contrast ratio : 1200:1 (typical)

Wide viewing angle (approx. 176 degrees)

Constant brightness stabilization control

Lookup tables for gray-scale, color and DICOM transfer function

Full protective screen

Ingress Protection: IP-21

Large 56-inch color LCD screen control

Resize & enlarge information at any stage during the case via the Allura Xper table-side module in the Exam Room and/or the Allura Xper module in the Control Room.

Select, customize & save viewing lay-outs via the Allura Xper table-side module in the Exam Room

Select, customize & save viewing lay-outs via Allura Xper module in the Control Room

Ultra high-brightness, medical grade, color LCD displays

A total of 6 x ultra high-brightness, medical grade, color LCD displays are provided with EP cockpit XL for use in the Control Room.

These displays support the image quality requirements for monochrome X-ray images, color EP

signals as well as other images and replace all displays normally delivered with an Allura Xper system.

Main characteristics are:

21.3 inch, 2 Megapixel color LCD display

Display resolution (up to) : 1600x1200

Input resolution (up to) : 1920x1200

Brightness: 550 Cd/m²

Contrast ratio : 800:1

Wide viewing angle (approx. 170 degrees)

Constant brightness stabilization control

Independently selectable brightness settings for monochrome and color images

Independently selectable lookup table for gray-scale, color and DICOM transfer function

Monitor ceiling suspension

A Monitor ceiling suspension for use in the Exam Room carry the large 56-inch color LCD screen, providing highly flexible viewing capabilities.

The monitor ceiling suspension is height-adjustable and moveable along ceiling rails. It can be positioned on both sides of the table and replaces the Allura monitor ceiling suspension.

Note: Two 21" additional displays (same as used in Control Room) are optional and located on top of the monitor ceiling suspension frame which carry the large 56-inch color LCD screen.

Control Room set-up

The 6 x ultra high-brightness color LCD displays, the 2x keyboard/mouse combination and Allura Xper module are designed to support an efficient workflow within the Control Room.

Equipment connected to EP cockpit XL can be operated via the Allura Xper module.

Display information (incl. third party systems) on any of the Philips ultra high-brightness 21-inch color LCD displays in the Control Room.

Note: The Allura Xper module is delivered with EP cockpit XL (EP cockpit)

Snapshot functionality

The snapshot function allows the user to store/save a screen-capture of any image on any EP cockpit display as a DICOM Secondary Capture image to a connected PACS.

The snapshot-all function allows the user to store/save a screen-capture for each displayed image in the Exam Room / Control Room as separate DICOM Secondary Capture images

Wall Connection Boxes

A total of 8 x Wall Connection Boxes are provided with EP cockpit XL.

Through Wall Connection Boxes a wide range of 3rd party equipment can be connected to the EP cockpit XL Omniswitch.

The Wall Connection Boxes provides galvanically isolated connections: Video (DVI), Network (RJ45) and Keyboard/mouse (USB) .

The Wall Connection Boxes can be located in the Technical Room, Control Room and/or Exam Room.

In case of an Equipment Rack: 1 x Wall Connection Box is permanently placed on the Equipment Rack.

Notes:

Life-supporting equipment can not be connected to the Wall Connection Boxes
 EP cockpit XL displays are not powered by an Uninterruptible Power Supply. Equipment that requires a (fail-safe) power connection (UPS) for the video output need an additional display connected to that equipment's UPS.
 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.
 Compatibility
 EP cockpit XL is compatible with:
 Allura Xper FD10/10 series from Release 7.6 onwards
 Allura Xper FD20/10 series from Release 7.6 onwards
 Allura Xper FD20/20 series from Release 7.6 onwards

47 **Addl. EP Cockpit CR display** **1**
 – 7 optional Control Room Display for EP cockpit configurations

This is an additional EP cockpit Control Room display for either Allura Xper mono-plane or bi-plane systems.

The ultra high-brightness, medical grade, color LCD display offers additional viewing capabilities within the Control Room.

The display support the image quality requirements for monochrome X-ray images, color EP signals, as well as other images.

Main characteristics are:

- 21.3 inch, 2 Megapixel color LCD display
- Display resolution (up to) : 1600x1200
- Input resolution (up to) : 1920x1200
- Brightness : 550 Cd/m2
- Contrast ratio : 800:1
- Wide viewing angle (approx. 170 degrees)
- Constant brightness stabilization control
- Independently selectable brightness settings for monochrome and color images
- Independently selectable lookup table for gray-scale, color and DICOM transfer function

Compatibility
 The display is compatible with EP cockpit R1.x

48 **EP Navigator R4** **1**

EP navigator facilitates catheter navigation in ablation procedures, by providing a three-dimensional (3D) overlay of the real patient anatomy onto live fluoroscopic images. The 3D anatomy is registered to the fluoroscopy and shows the position of all catheters in relation to the anatomy. EP navigator follows the rotation of the C-arc and the movement of the table.

The 3D anatomy is obtained using an intra-procedural 3D rotational scan or a pre-procedural cardiac CT or MR scan, from which the cardiac structures (left atrium, right atrium, left ventricle, right ventricle, aorta, coronary sinus, and trachea) are segmented. Automatic segmentation is provided for the left atrium and trachea. User-aided segmentation is possible for other anatomic structures.

In addition to the overlay functionality onto live fluoroscopic images, the segmented 3D rotational scan, CT or MR anatomy from EP navigator can be seamlessly transferred to a compatible mapping system. This allows navigating catheters on images with real 3D anatomical detail without using X-ray.

Using the Endo View function, the endocardial surface can be visualized, providing a view of important anatomical structures such as, in the left atrium, the pulmonary veins and the ridge to the left atrial appendage. The Point Tagging function allows the placement of tag markers on the surface of the anatomy, to mark sites of interest such as ablation lesions. Using the snapshot functionality, a screen image of the live screen can be made, perfectly suitable for reporting or teaching purposes.

Clinical Education Program for EP Navigator

CV EP Navigator OnSite Education: Clinical Education Specialists will provide sixteen (16) hours of CV EP Navigator 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. Please refer to guidelines for more information. 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 equipment installation date (or purchase date if sold separately). Ref# 230-100615

49

3D EP Rotational Scan

1

3D EP rotational scan reconstructs three-dimensional (3D) cardiac anatomy from a rotational angiography. It provides real-time and 3D anatomic detail during the intervention, in the EP lab itself.

When used as an overlay onto live fluoroscopic images, this 3D anatomy is used in EP navigator as a roadmap to guide catheter navigation. Alternatively, the segmented 3D anatomy can be transferred to a compatible mapping system to navigate catheters on images with real 3D anatomical detail without using X-ray.

The 3D EP rotational scan features a unique reduced angular rotation range in head and nurse position to simplify the workflow, e.g. not interfere with anesthesia logistics. All EP navigator functions, such as Endo View and Point Tagging, are available when using 3D EP rotational scan.

Advanced EP Clinician Workshop

This physician taught workshop provides instruction and practice acquiring 3D images (3DATG) with your Allura system. It also covers details on sending that image to overlay on fluoro or send it to your mapping system. The 12 hour workshop is located at St Elizabeth's hospital in Boston, MA and is conducted on Friday and Saturday. This hands-on workshop will provide all the details of these procedures from an experienced practitioner who has performed over 250 procedures. More importantly, you will get hours of hands-on practice, working with your own workstation in a small group setting. By the end of the workshop, you will be confident in the protocols and procedures to acquire and use the real time 3D imaging on a X-ray system with confidence. You will have time to discuss best practices with other participants to gain new insights and avoid common pitfalls. This package includes tuition for one clinician to attend this workshop. Travel packages and additional attendee packages can be purchased separately.

50

CV Full Travel Pkg OffSite

10

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

54	CV EPN/3D ATG OffSite Educ 20h	2
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This 20 hour course is located in Cleveland, Ohio at the Cleveland Training Center. Due to program updates, the number of class hours is subject to change without notice. The customer will be notified of current total class hours at time of registration. CEU credits may be awarded if the participant meets Philips and the ASRT guidelines. **Travel and lodging are not included, but may be purchased through Philips. It is highly recommended that 989801292445 (CV Partial Week Travel Pkg Offsite) is purchased.**

55	iXR Addl Offsite One Day Workshop Pkg	3
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Education expires one (1) year from equipment installation date (or purchase date if sold separately).

56	Airfare to Cleveland for Biomed Training	10
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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.

57	Food Transpt Lodging for Cleveland Biomed Training	58
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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.

58 XD3908EPCOCKPITNAVFLEX4 2
D

Course Length: 4 days (excludes Saturdays, Sundays, and Philips holidays)

Delivery Method(s): ILT

Modality: iXR

Location: PHC, CTC

Target Audience: Service Engineers.

DESCRIPTION:

The EP Cockpit part trains the engineer to a technical and application level which will enable the engineer to do room preparation, mechanical and electrical installation, configuration and connectivity on the EP Cockpit parts of an Allura Xper FD system, following the System Manual Installation and Setting To Work.

The EP Navigator part trains the engineer to a technical and application level which will enable the engineer to do the Installation and the Setting To Work activities between the Allura Xper FD Cathlab, EP Navigator workstation and an Xcelera, following the Setting To Work.

The engineer will be able to connect an Allura Xper FD modality to the EP navigator who can retrieve the CT images of the patient from the Xcelera or 3D-ATG images from the Allura. The EP Navigator will match these reconstructed 3D images with the fluoroscopy images coming from the Cathlab.

The FlexVision part will train the engineer to a technical level which will enable the engineer to do the Installation, Setting To Work and Corrective Maintenance of the FlexVision option on an Allura Xper FD system according the Service Manuals.

All knowledge and skills for the configuration, connectivity and interoperability functions are practiced during the lab sessions.

PREREQUISITES:
XD3971 or XD9065

COURSE OBJECTIVES:

During this course the field service engineer will be provided with the needed competencies to install an Allura Xper EP Cockpit lab with an EP Navigator workstation & FlexVision 56" monitor.

The engineer will learn the following knowledge and skills:

Hardware Installation of the EP Navigator components
Installation of the EP Navigator Operating Software and Application Software
Configuration of an EP Navigator towards an Xcelera for query and import
Configuration of an Xcelera towards an EP Navigator for query and send
Configuration of a Real Time Output (RTO) link of a Cathlab towards the EP Navigator
Configuration of the Control network of a Cathlab towards the EP Navigator
Execution of the DICOM verification tests for Query and Import
Configuration of the Xper settings of the Cathlab for a correct automatic EP workflow with the Cathlab in application mode
Testing of the total workflow with all systems in Application mode
Mechanical /Electrical Installation Monitor Ceiling Suspension with FlexVision 56" monitor
Mechanical /Electrical Installation B-Cabinet
Configuration of the FlexVision 56" monitor

Adjustments of the FlexVision 56" monitor
Corrective Maintenance issues of the FlexVision 56" monitor

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 AN ALLIANCE CO; OP 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.

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

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XD3970ALLURAFD7.6PART1C 2
TC9

Course Number: XD3970

System Codes: 722010, 722011, 722012, 722013

Course Title: Allura Xper Rel 7.6 Part 1

Course Length: 9 days (exclude Saturday, Sunday, and Philips holiday)

Delivery Method(s): Instructor-Led

Modality: iXR

Location: PHC, SLC, CTC

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

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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

Course Number: XD3971
System Codes: 722010, 722011, 722012, 722013
Course Title: Allura Xper Rel 7.6 Part 2
Course Length: 8 days (exclude Saturday, Sunday, and Philips holiday)
Delivery Method(s): Instructor-Led
Modality: iXR
Location: PHC, SLC ,CTC
Target Audience: Service Engineers.

DESCRIPTION:

This course is a follow up on the Allura Xper Part 1 course and is intended for dedicated Cardio Vascular modality Engineers. Before attending this part 2, it is strongly recommended that the engineer has some field experience on Allura Xper systems, e.g. 1 installation and some pm- and cm visits.

Part 2 trains the Customer Support engineer to a technical level which will enable him/her to perform extended Corrective Maintenance and the Setting to Work on Allura Xper systems, according to the Customer Support philosophy.

Not covered are the Mechanical Installation and Cabling of the Allura Xper System. These topics are covered in the e-learning: Allura Xper Mechanical Installation.

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:

- XD3866 or XD3966 or XD3970

COURSE OBJECTIVES:

For Allura Xper systems, the engineer will learn how to:

- Perform the Setting To Work
- Perform extended Corrective Maintenance; with help of Analytical Trouble Shooting, service documentation, and service tools.
 - Distinguish technical problems from incorrect operating.
 - Focus on replacement of parts with a low exchange rate.
- Customize most common parameters of the Xper database.

MAJOR TOPICS:

Installation

- Installation aspects
- Setting to work
- Customization

Corrective Maintenance

- Operating
- System Architecture
- X-ray generation
- Geometry
- Movement
- Acquisition

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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 AN ALLIANCE CO; OP 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.

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

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XD3972 Interventional ToolsR8 2
CTC3

Course Number: XD3972

System Codes: 722010, 722011, 722012, 722013

Course Title: Interventional Tools R8

Course Length: 3 days (excludes Saturdays, Sundays, and Philips holidays)

Delivery Method(s): Instructor-Led

Modality: iXR

Location: PHC, SLC, CTC

Target Audience: Service Engineers.

DESCRIPTION:

This course is a follow up on the Allura Xper Part 2 course and is intended for dedicated Cardio Vascular modality Engineers.

This course trains the Customer Support engineer to a technical level which will enable him/her to perform complete Installation, Planned Maintenance and Corrective Maintenance on Interventional Tools.

The following Interventional Tools are covered:

3DRA rel.x / 3D Road mapping

Stent Boost rel x / Stent Boost subtract

3DCA

CT True View

XperCT / Xper Guide

Multi Modality Matching

PREREQUISITES:

XD3967 or XD3971 or XD3875 or XD3879

COURSE OBJECTIVES:

For Interventional Tools, the engineer will learn how to:

- Perform a complete installation, including setting to work
- Make use of the service documentation.
- Operate Interventional Tools as far as required to perform service tasks
- Perform Planned Maintenance.
- Perform Corrective Maintenance; with help of the service documentation and service tools.
 - Distinguish technical problems from incorrect operating.
 - Faultfinding using the System Manual Corrective Maintenance.
 - FRU replacement.

MAJOR TOPICS:

- Operating

Installation aspects
Service tools
Corrective Maintenance
System Architecture
User Interface
System control
Interoperability
Customization
Software

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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)
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4. Trainee must sign Philips Nondisclosure statement
5. Customer must sign Philips terms and conditions of training

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XD3007XRaySystemsBasicPart 2
2CTC5D

Course Number: XD3007

Course Title: X-Ray Systems, Basic part 2

Course Length: 5 days

Delivery Method(s): ILT

Modality: DXRLocation: Best

Target Audience: Field Service Engineers

System codes:

DESCRIPTION:

The ILT provides fundamental information on the generation and application of X-rays for diagnostic imaging.

PREREQUISITES:

English Language,
XD9115, X-Ray Systems, Basic part 1

COURSE OBJECTIVES:

After successful completion of this eLearning, the learner will have knowledge on the basics of:

- Medical application
- The physics of X-rays
- Radiation protection
- The building blocks of X-ray systems
- X-ray tubes
- Generators
- Image performance parameters
- The documentation systems of X-ray systems
- Planned Maintenance
- Installation

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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

63	Blue Anti-Fatigue Floor Mat w/ Logo	1
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Blue Anti-Fatigue Floor Mat w/ Logo

64	Rad Shield w/ Arm (Contoured) 61X76	2
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Contoured Rad Shield with Arm rest. 61X76

65	PIVOTING TABLE-MOUNTED RADIATION SHIELD	1
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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.

The table mounted radiation shield provides the following features:

- 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:

- 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.

66	Horizon SF Medical Imager	1
The Horizon SF Multi-Media Dry Imager is an intelligent, desktop sized, grayscale and color output device that produces diagnostic quality medical hardcopy of film and medical paper in small formats (8"x10" and 8.5"x11"). Any three media types may be printed to simultaneously. The imager accepts many industry standard file formats including DICOM and incorporates networking, high-speed image processing and spooling capabilities.		
67	Spectre Encrypted Wireless Footswitch	1
Spectre Series Wireless Encrypted Footswitch system for Biplane Philips H5000, V5000, Allura, FD Series Equipment consisting of the following:		
<ul style="list-style-type: none"> • 6 pedal footswitch with auto-connect • Receiver system with Philips interface • Wall mounted footswitch rack with charger • Instruction manual 		
68	Exam Lamp 220v	1
Spring arm mounted examination light for cardiovascular applications		
69	ACIST CVi Contrast Del Syst	1
CVI Contrast Delivery System - System includes injector head, touch screen monitor, transducer back plate, power supply floor mount, adjustable arm kit, utility tray kit, table mounting brackets, User/Training Manual, and one year warranty).		
70	Portegra 2 360 Ceiling Column	2
Portegra 2 360 Column w/ trolley and ceiling track		
71	Volcano Control Console	1
A full-size control console that can be used in the patient room. While one control console is found in the s5i core bundle, some accounts wish to add a second control console to their system. This can be mounted on the bedrails. Connects directly to the CPU via USB or in the patient room via the USB extender. Note: if mounting on bedrails, requires the ordering of "Control Console Rail Bracket Kit"		
72	Volc Cont Console Rail Brkt Kit	1
Used in conjunction with the full-size control console to allow the console to be mounted to the patient bedrails.		
73	Volcano Joystick Option Kit	1

A compact joystick that comes with a clamp to be mounted on the patient bedrails. Some physicians prefer to control the IVUS system via a joystick, and this option provides this functionality. Can be operated under the sterile drape.

74	Volcano Print Kit	1	A compact color thermal printer that is used to print IVUS images for physician reference, the patient file, or to provide to the patient. Connects directly to the CPU in the control room via USB.
75	Volcano IVUS s5i	1	<p>The base components required to operate a Volcano IVUS s5i system, including: the system CPU; a control console for the control room; a bedside touchpad controller; a patient interface module (PIM); an isolation transformer through which power is supplied to the CPU; a USB extension kit which transmits data and power between the CPU and patient bedside-mounted peripherals; a 19" LCD monitor for the control room. The core bundle also includes installation of components, excluding pulling cables, which will be done by Philips.</p> <p>Cables required to operate the Volcano IVUS s5i system. The kit includes a patient interface module (PIM) cable, a shielded CAT5 Ethernet cable, an ECG cable, and a grounding cable. These cables need to be laid in the dedicated pipe connecting the patient table area to the control room. All cables in this kit are 30 meters in length.</p> <p>Patient interface module (Pimmett) for FFR wires and all hardware required for the Fractional Flow Reserve</p> <p>Fractional Flow Reserve for IVUS system. FFR measures pressure changes in the vessel to assess lesion significance. System is compatible with Volcano's PrimeWire™ product. Includes FFR PIM and FFR cable.</p>
76	HP Color Laserjet 2550 N Post Script Printer	1	<ul style="list-style-type: none"> • Not approved for diagnostic purposes • Mounting and/or installation is the customer's responsibility • Philips does not warrant such items but will make best efforts to pass manufacturer warranties directly to the customer
77	Universal Power Supply	1	25kVA UPS
78	CFI Table Widener	1	CFI Table Widener
79	Trade in Allowance	1	<p>Customer represents and warrants that (i) Customer has, and shall have when title passes, good and marketable title to the equipment being traded in and (ii) has the authority to effect such trade in.</p> <p>Product: 722003 Allura Xper FD10 Serial Number: 538744 Manufacturer: PHILIPS HEALTHCARE</p>

Trade-In authorization number: 29878

De-install Date: Not later than 180 days after receipt of Order

Customer will be trading-in equipment that is described on the attached System Disclosure Form (the "Trade-In"), which Trade-In the parties agree (i) will be removed on the De-install Date and (ii) is currently in the condition as represented on the System Disclosure Form. In addition, the parties agree as follows:

1. Customer represents and warrants that Customer has good and marketable title to the Trade-In as of the date of this Quotation and will have good and marketable title when Philips removes the Trade-In from Customer's site (the "Removal Date");
2. Title to the Trade-In shall pass from Customer to Philips on the Removal Date, unless otherwise agreed by Philips and the Customer;
3. Notwithstanding anything to the contrary in any Business Associate Addendum, Customer represents and warrants that as of the Removal Date all Protected Health Information will have been de-identified or removed from the Trade-In;
4. Philips may test and inspect the Trade-In prior to de-installation. If the condition of the Trade-In is not substantially the same on the Removal Date (ordinary wear and tear excepted) as it is identified on the System Disclosure Form, then Philips may reduce the price quoted for the Trade-In;
5. If the removal date is delayed until after the De-Install Date, unless Philips causes the delay, then Philips may reduce the price quoted for the Trade-In by six percent (6%) per month.
6. Philips is responsible for normal de-installation costs of the Trade-In.
7. The trade-in value will not include costs associated for any facility modifications and/or rigging required for de-installation and must be accounted for separately.
8. Customer is responsible for all plumbing necessary to properly drain coolant from chiller system and cap the lines.
9. Prior to the Removal Date, Customer shall remove from the room all equipment that is not being de-installed.