

VAMC SHREVEPORT, LA
PO# 667-B39015

TRADE IN:

Trade In equipment General
Electric CT Scanning System EE#
23670, Trade In Value \$1,000.00

Serial # 287365CN1, Replacement
Date Apr 15, 2002. Model #
2281177-2. Contract #
V797P-6033B.

**ONE-640-
SERIES.000**

**AQUILION ONE 640 SERIES DYNAMIC VOLUME CT
SCANNER WITH AIDR 3D**

Aquilion ONE 640 Series is a multi-functional Dynamic Volume CT scanner with Adaptive Iterative Dose Reduction 3-D (AIDR 3D). It is the first CT to not only perform routine multi-slice imaging, but cover entire organs dynamically with lower radiation and less contrast dose.

The whole organ coverage of Aquilion ONE 640 Series offers a completely new way to image critical organs, such as the head or heart, without the need to move the patient during helical scan mode as the entire organ can be acquired in one rotation. This 16 cm coverage gives outstanding image quality with significantly less contrast and lower radiation dose.

Because of the lower dose, new applications such as dynamic motion, vascular flow studies and perfusion imaging are routinely performed with one scan and just a single contrast injection. In addition, the Aquilion ONE 640 Series is the most flexible scanner offering true 160 slice conventional helical and step-and-shoot modes.

The Aquilion ONE 640 Series CT scanner includes Aquilion's best-in-class, 0.5 mm detector elements with a new 320 channel quantum detector covering of up to 16 cm of anatomy every rotation.

Aquilion ONE 640 Series is capable of reconstructing 640 unique slices with every rotation of the gantry. This is accomplished by integrating Toshiba's proprietary coneXact algorithm. Aquilion ONE 640 Series also achieves consistently superior image quality with industry-leading, low-contrast resolution of 2 mm at 0.3% and spatial resolution of 0.35 mm.

The speed and clinical accuracy of this technology offers significant benefits to patients – especially trauma, pediatric and critically ill patients. This technology enables physicians to more clearly visualize internal injuries and disease in less time.

COMPONENTS:

- eVolution gantry with iStation
- eVolution 660 lb couch with custom table pad and positioning accessories
- Dual consoles with ergonomic operator controls
- High speed reconstruction hardware
- MegaCool™ V X-ray tube
- Quantum V detector and DAS
- Operator manuals and quality assurance phantoms

DOSE REDUCTION FEATURES

Aquilion ONE 640 Series ensures delivery of the best possible image quality at the lowest possible dose, reinforcing Toshiba's guiding principle of ALARA for every patient. To achieve this, Aquilion ONE 640 Series has an array of adaptive and integrated dose-reduction strategies that are implemented at every stage, from patient registration to image reconstruction. In addition, patient dose reduction is integrated into the console software, so it activates prior to turning on the x-ray beam.

Adaptive Iterative Dose Reduction 3-D

Adaptive Iterative Dose Reduction 3-D (AIDR 3D) is the latest evolution of iterative reconstruction technology that has been fully integrated into the imaging chain to ensure automatic dose reduction for all your CT examinations. AIDR 3D works to reduce image noise while maintaining spatial resolution. In clinical settings significant dose reduction is achieved routinely as AIDR 3D is integrated into the automatic exposure control software.

Truly groundbreaking dose reduction technology must be fast enough to fit into busy workflow schedules. AIDR 3D reconstruction has therefore been systematically optimized to minimize the impact on patient throughput. As a result, advanced iterative reconstruction with AIDR 3D adds mere seconds to the total reconstruction time.

The Aquilion ONE 640 Series includes AIDR 3D, in each Aquilion ONE 640 Series CT Scanner at no additional charge.

Quantum Denoising Software (QDS) – Adaptive Noise Reduction

Toshiba's Quantum Denoising Software is an adaptive noise reduction algorithm that works in the image data space by preferentially smoothing areas of uniform density while preserving the edge information of the image.

QDS works in both two and three dimensions and can drastically reduce image noise, allowing a corresponding savings in patient dose. Most importantly, QDS works in conjunction with the ^{SURE}Exposure3D software to adjust the mAs based on the expected noise reduction from QDS. In this way, patient dose reduction is totally integrated in the Aquilion console software prior to turning on the x-ray beam.

^{SURE}Exposure3D (x, y, z automated mA modulation software)

Toshiba's ^{SURE}Exposure3D software automatically adjusts the mAs rapidly during the scan to adapt to and compensate for changes in attenuation level produced by the non-uniformity of the anatomy being imaged. Therefore, as the scan moves from the shoulders to the lung, the mAs goes down, and as the tube rotates around the patient, less mAs is used anterior-posterior than laterally. For the same image quality level, compared to non-modulated scanning, ^{SURE}Exposure3D can reduce the dose to patients.

Boost3D

Boost3D is an adaptive, three-dimensional algorithm that virtually eliminates degradation of image quality due to highly attenuating anatomical structures, such as the pelvis or shoulders. Without dose reduction algorithms, like Boost3D, these highly attenuating areas require increased mAs and kVp to overcome the low photon count. Instead, Boost3D seeks out portions of the raw-projection data where there is a disproportionate loss in x-ray signal and applies a three-dimensional algorithm locally to reduce the image noise and streak artifacts.

NEMA XR-25 Dose Check

Aquilion ONE 640 Series includes the National Electrical Manufacturers Association (NEMA) XR-25 dose check software, which includes dose alert and dose notification.

DICOM IHE SR

Aquilion ONE 640 Series also integrates with DICOM IHE SR software to allow patient-dose tracking.

KEY FEATURES

coneXact Image Quality Breakthrough with Double Slice Technology

Toshiba's unique cone-beam reconstruction algorithm is designed for 16 cm coverage. This breakthrough algorithm eliminates the artifacts typical when off-the-shelf cone-beam algorithms are applied to wide-area detectors.

New coneXact and VolumeXact algorithms:

- Reconstruct diagnostic images with more coverage area per rotation than any other scanner
- Adapt images between two wide volume scans.
- Overcome the inherent challenges associated with wide beam geometry by:
 - Adeptly incorporating the wide cone angle into the image reconstruction
 - Reducing geometrically-imposed data truncation.

Double Slice Technology:

Using Toshiba's coneXact algorithm, the Aquilion ONE 640 Series reconstructs 640 unique images per axial scan enabling volume reconstruction in double density, effectively creating 0.5mm slices at every 0.25mm.

The Aquilion ONE 640 Series achieves this by first reconstructing data sets as a volume, and then using information from oblique, cone-angle projections to extract distinct axial slices in between detector planes without resorting to interpolation or upsampling.

SURETechnologies

Improve workflow with a comprehensive toolset ensuring the fastest data to diagnosis span at the lowest possible dose with the best image quality. The following SURETechnologies are standard on the Aquilion ONE 640 Series:

SUREExposure 3D

Automated dose modulation tools including 3-D and ECG modulation as well as adaptive collimation for clear images at lower doses.

SUREStart

Real-time contrast detection for perfect vascular timing of the volumes. With SUREStart there is no need to perform a timing bolus, saving up to 30 cc's of contrast.

SUREConnect

Fastest data-to-diagnosis from data acquisition to review at the workstation.

CLINICAL SERVICE LINE FEATURES

Pediatric

Aquilion ONE 640 Series offers the ability to scan smaller pediatric patients in a single rotation, dramatically reducing radiation exposure and minimizing the need for sedation. The scanner offers an estimated dose for each exam protocol prior to scanning to assist technologists with setup. Reducing sedation helps utilize resources more efficiently, limit staffing, and reduce the amount of time for the study. Aquilion ONE 640 Series also offers the ability to scan at 80 kV and perform volume imaging on small body parts with a single rotation, at a lower dose.

In addition Aquilion ONE 640 Series has a 12-inch LCD screen iStation on the scanner which uses video and voice prompts to ensure patient compliance during scanning. The iStation video of a small child tells patients when to raise their arms, when to hold their breath, and so on--child-friendly instructions, coming from a child, helps assure patient compliance.

For pediatric radiologists Aquilion ONE 640 Series can minimize the dosage, the drugs, and the trauma that a child experiences. Pediatric specific protocols include presets for ^{SURE}Exposure pediatric neck scans and dedicated pediatric ^{SURE}Cardio parameters for hearts which minimize exposure and produce excellent images for diagnosis.

EQUIPMENT COMPONENTS

eVolution

The philosophy behind eVolution is to design and build medical imaging equipment with less energy and more recycled materials leading to a much more environmentally 'green' platform.

eVolution Gantry

The eVolution gantry is the world's most eco-friendly gantry design built using 30% less energy than standard, multi-slice CT's.

- Hybrid slip-ring technology conserves unused electricity
- Self cleaning system reduces the frequency of preventive maintenance visits and associated scheduling issues
- Gantry tilt
- Large aperture
- Five scan fields of view
- Wide range of scan times provides greater flexibility for optimal image quality

Couch

The eVolution couch is patient friendly for the largest or smallest of patients with easy access and comfort.

- Widest metal-free couch top
- Controls from gantry or console
- Large patient capability (660lbs)
- 2000 mm scan range (1,500 mm for short couch version)
- Customizable additional foot pedal placement (option)

Console – Scan and Display

Two powerful, ergonomic console computers: one for scanning and reconstruction, one for display and reconstruction. Both offer display, image feed, filming, and transfer of multi-planar reconstructions with the same interface used for axial images.

- Capable of true simultaneous scanning, retrieving, reconstruction, archiving and filming without interruption – genuine multi-tasking system for multi-slice and volumes
- Two powerful reconstruction towers with 4 CPUs and 25 hard drives with RAID 5 controllers
- Includes user-friendly keyboards, mouse, monitors, CPU cabinet and reconstruction enclosures

MegaCool™ V X-ray Tube

This compact, high-performance tube is designed to minimize tube-cooling delays with heavy patient loads at all scan times. It was built on the proven, anode-grounded, MegaCool tube technology used on every Aquilion multi-slice CT.

Other features include:

- Dual focal spots
- Anode capacity of 7.5 MHU
- Dissipation rate of 1,386 kHU per minute maximum

Quantum V Detectors and DAS

- Unique Toshiba ceramic, solid-state detector array and DAS
- Covers organs in 16 cm rotations, including brain or heart, in a single rotation without any table motion
- ^{SURE}Connect DAS – Ultra-fast DAS to acquire large volume data of detectorImage Management

IMAGE MANAGEMENT

Aquilion ONE 640 Series images can be stored on hard disk or DVD and transferred via high performance gigabit Ethernet connection using DICOM 3.0 standards.

DICOM 3.0 Modality Worklist Management

- Enter patient information at the time of exam manually or import it via a Modality Worklist Management query.
- On-line patient appointment file management.

DICOM 3.0 Performed Procedure Step SCU

Works in tandem with Modality Worklist Management to provide exam information to an RIS that supports DICOM MPPS (SCP).

DICOM 3.0 Query/Retrieve Service Class Provider (SCP)

Allows a Storage Class User (SCU) to query the SCP device to retrieve patient, study, series and/or image information in conformance with the DICOM 3.0 standard.

DICOM 3.0 (Storage SCU)

Allows the CT scanner to export images onto a network.

- Consists of software only
- Utilizes pre-existing Ethernet ports on the CT scanner to connect to a coax-Ethernet-based network running TCP-IP communication protocols
- The protocols in the system can be set to automatically transfer images to the network after an exam is complete

Enhanced DICOM

Provides the fastest transfer of Aquilion ONE 640 Series images to the workstations and storage of 60 frames per second using the new enhanced multi-frame DICOM standard.

Storage and Archiving

- Can be automated with each eXam plan
- Raw data and image data can be protected to prevent deletion from console

Filming

- Auto filming can be set as part of the eXam plan
- Images are displayed in 512x512 or 1024x1024

CUSTOMER CARE SERVICES

Developed with customer input, Toshiba's innovative support programs have resulted in increased customer satisfaction. These include the following:

InTouch Center®

This centralized service facility provides applications and service support for customers 24 hours a day, seven days a week.

InnerVision™ Plus

Remote system diagnostics are available around-the-clock to help identify problems and provide potential solutions before care is interrupted or an engineer can arrive.

InTouch Agreements

Based on customer needs, InTouch customer agreements can range from an a-la-carte approach to full-security agreements that provide complete system protection.

Technical Assistance

Customer support specialists are available 24/7 to help resolve technical issues in real time. Application support specialists are also available to assist staff with protocol and image-quality issues.

Local Customer Teams

A single call mobilizes a local team of Toshiba customer engineers. With an average of 10 years of Toshiba experience and 105 hours of specialized training, they can resolve almost any performance issue.

Parts Support

A complete inventory of product parts is ready for shipment when and where they are needed, any time of day or night.

Image Maker Express

The Image Maker Express is a marketing support online resource designed exclusively for Toshiba customers that helps you create outreach programs to generate awareness about your imaging services.

- Includes positioning and messaging guides to help you strategize your communications efforts and tactics
- Contains product information, ready-to-use collaterals, and ideas for creating custom materials to promote your new imaging capabilities

Image Maker Express gives you access to:

- Product images
- Clinical images
- PowerPoint presentations
- Sample brochures
- Sample press releases
- Marketing strategy tutorials
- Updates at www.imagemaker.toshiba.com/express

**Offerings may vary per product*

APPLICATION TRAINING

Each system includes three phases of education including three weeks of on-site training using a customized approach for dynamic volume imaging.

Phase I: A one-week intensive course on the operation of the scanner

- Conducted at the Toshiba Education Center in Irvine, California
- Two attendance vouchers good for course and travel expenses provided with each system
- Intensive training for two technologists
- One technologist must attend prior to system installation
- The second voucher is valid for six months following installation
- Accredited for continuing education by the ASRT Education Foundation
- Additional vouchers available

Phase II: 64 hours (two weeks) of training that builds on the Phase I training

- On-site at client facility that follows a proven education guideline
- Training for up to four technologists
- Technologist who attends the Phase I course must attend Phase II

Phase III: 32 hours (one week) of follow-up training

- On-site at client facility
- Approximately 8-10 weeks after Phase II training
- Toshiba recommends follow-up training within 6 months of installation for maximum benefit

Performance Pro:

“Performance Pro” is a custom program created to offer a unique approach to Education and focuses specifically on achieving technical proficiency and optimal productivity. The program includes the following:

- A Planning meeting at your facility with Toshiba’s CT Applications Manager. The objective of the meeting is to discuss the objectives and timing and explain Toshiba’s custom approach. During the meeting the manager will also ensure the following takes place:
 - A Review of Toshiba’s New Customer Education Guide (what to expect and how to plan and prepare).
 - Introduce the Toshiba Three Phase education program and the role of the Toshiba Education Center.
 - Co-develop a custom training program based on the facility’s specific needs and ensure it is well documented for execution.
- A specially trained Apps Specialist will be assigned as owner of the education experience for the facility. They will perform the following duties:
 - Be part of the planning meetings with the project team to ensure training issues are addressed in a pro-active fashion.
 - Communicate with the facility prior to the turnover date to ensure everything is on track and all questions or concerns are addressed.
 - Ensure all materials (training manuals and learning aids) are on site at the time of the go live date.
- A Quality Installation Checklist developed by TAMS service and physicists will be used to ensure all system requirements have been met and the scanner is working properly and yielding good image quality.

- A Clinical Evaluation will be conducted prior to the turnover to ensure the system is ready for go live date.
- Consistent on site service support during the turnover.
- The Toshiba Education Center will properly train and prepare the “core trainers” to perform their role with the most advanced education approach in the industry.
- The Toshiba application specialist will work with technologists to educate them on the proper operation of the equipment. In addition, the applications specialist will work with the physicians to achieve the desired image quality.
- At the start of the turnover, Toshiba will begin with a presentation for the staff and referring physicians to highlight system capabilities and generate excitement.
- Performance Pro is a blended learning approach and includes pre-requisites and additional accredited CE courses for the clinical staff.
- A special visit will be conducted by National Clinical Support Specialist 4 to 6 weeks after turnover to check protocols, dose and image quality. They will make themselves available to meet with physicians and technologists to answer all questions.

Performance Pro Guarantee:

If for any reason the customer is not satisfied with any portion of the training, Toshiba will conduct the portion of the training again at no charge to the customer.

Applications support is available by phone on the toll-free ASSIST line.

COMPONENT SUMMARY:

AQUILION ONE HIGH CAPACITY EXTENDED COUCH

CT SCANNER AQUILION ONE WITH HIGH CAPACITY EXTENDED COUCH

ACCESSORY KIT FOR HIGH CAPACITY COUCH

Includes each of the following items:

- Rolled Edge Foot Extension Pad
- Wide & Medium Security Straps
- Chin and Forehead Straps
- Adult Head Rest Pads (Medium and Large)
- Tilt Wedge
- Knee Support Wedge
- Coronal Head Support
- Table Pad
- Protective Table Covers (Box of Four)
- Detachable Rail 77"

DICOM MODALITY WORKLIST MANAGEMENT (MWM) SERVICE CLASS USER (SCU) SYSTEM

Allows the CT system to receive patient demographic data from an HIS/RIS system in conformance with the DICOM 3.0 standard.

Note: This option does not include a DICOM gateway for the HIS/RIS system.

DICOM 3 PERFORMED PROCEDURE STEP SCU

COT-33D (MPPS) is to be used in combination with COT-32D (MWM). MPPS provides examination information back to a RIS that supports DICOM MPPS (SCP). This information consists of notification of the start and end of the examination. Also examination record and patient information can be sent to the RIS.

DICOM 3 QUERY/RETRIEVE SCU AQ/MP

The Q/R Service Class User (SCU) option allows a device to initiate a request for Patient, Study, Series and/or Image information from the Provider device in accordance with the DICOM 3.0 standard.

DICOM 3 STORAGE COMMITMENT SCU SOFTWARE

DICOM Storage SCU function is used for the transfer of images reconstructed by the CT system and its function is to inform the CT system of the results of images storage verification at the server after the image transfer.

- Allows operator to determine if data is stored correctly at the PACS server, avoiding unintentional image deletion
- Improves efficiency of image management operations
- Provides fail-safe method to prevent image data from being deleted unintentionally even in the event of a communication failure (during image transfer or during a storage verification response)

Prerequisite: V3 Software

PGP STUDY SPLIT

Presentation of Grouped Procedures (PGP) and Exam Hard Split

PGP provides preset and automatic transfer solutions for multiple exams from a single CT acquisition. Ideal for facilitating the clinical viewing of images and reporting of individual requested procedures.

PGP is an Integrated Health Enterprise (IHE) standard designed specifically with multiple examination orders (Request Procedures) that can be performed in a single CT acquisition. The PGP feature can be used with PACS systems that are IHE PGP compliant. For PACS systems that are not yet IHE PGP compliant, the Hard Split option can be used to physically split images into separate multiple examinations

Prerequisites: V3 Software.

ACCESSORY KIT FOR HIGH CAPACITY COUCH

Includes each of the following items:

- Rolled Edge Foot Extension Pad
- Wide & Medium Security Straps
- Chin and Forehead Straps
- Adult Head Rest Pads (Medium and Large)
- Tilt Wedge
- Knee Support Wedge
- Coronal Head Support
- Table Pad
- Protective Table Covers (Box of Four)
- Detachable Rail 77"

CT PHANTOM

Measures image quality to ensure compliance to Toshiba standards for:

- High-contrast resolution
- Low-contrast resolution
- Slice thickness
- Noise
- Contrast scale

CHAIR WITH ADJUSTABLE ARMS AND BACK (Qty 2)

MEDIA FOR DVD-RAM DRIVE (9.4 GB) (Qty 5)

9.4 GB Removable Cartridge Media for DVD-RAM Drive.

- Type 4, Double-sided
- 3x Speed

CONSOLE DESK 65" X 36" X 30"

Measures 65" x 36" x 30"

SERVICE MODEM CABLE (Qty 2)

FLOOR LEVELING EPOXY KIT

ULTRA HELICAL 160 DETECTOR ROW SCAN KIT

Ultra Helical 160-detector row helical scanning can image the entire chest, abdomen and pelvis in less than five seconds, which is 2.5 times faster than standard 64-detector row CT imaging. This imaging mode is ideal for routine body imaging and for patients who have difficulty staying still during exams, such as trauma patients and pediatrics. It produces significantly less motion artifact and provides clinicians with high-quality images for accurate diagnosis.

UPS/TIC/VBR.100

SYSTEM UPS 480 VOLT INPUT / 480 VOLT OUTPUT

VRDU 480 V Input / 480 V Output with UPS functionality -includes Battery Cabinet and Remote Alarm Status Panel

The VRDU is engineered to address the vast majority of common power problems found in the hospital environment, thus providing clean power and good grounding for optimal reliability and performance of CT systems.

Toshiba's UPS Functionality provides true on-line dual-conversion systems, providing the highest quality conditioned and uninterrupted power to critical loads and to any equipment sensitive to variations in the utility power supply. Provides 16 minutes of battery backup at full load.

The Remote Status Alarm Panel (RSAP) is used to monitor the alarm condition and state of any UPS remotely. The RSAP is wall-mounted and can be located up to 1,000 feet from the UPS. The panel shows the current input status, the output that is being used and UPS faults conditions. The RSAP also has an audible alarm to warn of UPS fault conditions.

NOTE: Frontline must make arrangements 14 days prior to installation for TIC on-site startup.

VRDU 480 V INPUT / 480 V OUTPUT

The VRDU is engineered to address the vast majority of common power problems found in the hospital environment, thus providing clean power and good grounding for optimal reliability and performance of CT systems.

NOTE: Frontline must make arrangements 14 days prior to installation for TIC on-site startup.

BATTERY CABINET FOR ANY TIC VRDU

REMOTE STATUS ALARM PANEL

Wall-mount shell with 120-VAC power supply adapter with battery back-up with internal batteries. Hard-wire with internal power supply.

START UP 100KVA

SURECARDONES.100

SURECARDIO WITH PHASEXACT FOR AQUILION ONE

Provides a comprehensive package of hardware and software for advanced cardiac imaging, including phaseXact and prospective/retrospective ECG gating for ultra-low-dose coronary imaging.

SURECardio Prospective

SURECardio Prospective™ is a unique application that dramatically lowers patient dose during coronary CTA exams. This advanced software provides enhanced workflow with automatic pitch selection and exposure window setting based on patient's heart rate and employs the use of the helical acquisition and an x-ray on/off modulation technique.

SURECardio with phaseXact

Eliminates the need for unnecessary multiple reconstructions by automatically selecting the cardiac phase with the least motion. With the 350 msec rotation time, SURECardio with phaseXact allows single a heartbeat CTA at higher heart rates and a low dose.

In addition:

- The reconstructed images for specific (cardiac) phases are generated (by raw data processing) from the Aquilion ONE scan data and acquired simultaneously by the ECG-gated scan system.
- Real-time beat control monitors R-R interval to assure diagnostic cardiac images even with challenging patients.

SURECardio's Automated Feature Set****

Simplifies cardiac protocol setup and improves workflow.

ECG GATING SCANNING SYSTEM

ECG MONITOR, R-WAVE TRIGGER

- Compact ECG monitor with fast gated trigger output for R-wave synchronization applications
- 6.5" Color LCD Display (TFT Active Matrix)
- Integrated ECG simulator to test the integrity of the patient cables, lead wires, and electronic circuitry.

MCT-SCT-222

MEDRAD STELLANT® D OCS DUAL FLOW INJECTOR

Ceiling mounted Stellant D CT injector is a full-featured, dual syringe injection system that enables clinicians to perform the most critical contrast enhanced CT exams.

Stellant D CT injector

Key features:

- Dual-syringe design for the most complicated protocols such as CTA and cardiac CT
- Effective contrast utilization
- Saline test injection for more precise control of contrast delivery
- Saline flush, following the injection, chases contrast from peripheral veins directly into the heart

Dual Flow Injection

Key features:

- Designed with CTA exams and Cardiac CT
- Effective contrast utilization
- Inject contrast and saline at a measured ratio through simultaneous plunger motion.
- This means a more uniform enhancement of both the right and left sides of the heart with reduced artifacts.

T/ASSIST-SLIDE.100

TECH ASSIST LATERAL TABLE SLIDE FOR AQUILION

Toshiba's exclusive Tech Assist Lateral Table Slide, improves technologist safety by automating the adjustment of patients on the table. In addition, it improves access for interventional procedures and accommodates precise off-center imaging. It provides the ability to move the table an infinitely variable 8.4 cm from side to side. This exclusive lateral movement of 8.4 mm improves image quality, minimizes patient dose and provides better access for interventions and emergency patients.

With the Aquilion CT Systems, ergonomics and patient access have evolved to an unprecedented degree with the eVolution couch and gantry. Offering greater comfort and convenience, they increase operator efficiency for faster throughput while improving patient compliance to ensure higher quality exams.

Note: Available only on High-Capacity Couch for Aquilion ONE, Aquilion ONE ViSION Edition, Premium, PRIME 80 and PRIME 160.

LATERAL COUCH MOVEMENT KIT

Exclusive lateral couch movement option. Lateral movement of 8.4 cm minimizes patient dose and provides better access for interventions.

CHVH-001A/1B

VARIABLE HELICAL PITCH FOR AQUILION ONE, PREMIUM, 32 AND 64

vHP improves your workflow with its advanced CT scanning mode, enabling a change of pitch during the acquisition with two different scan parameters, while completing the scan in one single examination.

Ideal for cardio vascular applications by combining CTA (ECG gated using a cardiac CTA pitch) and a CTA of the aorta (non gated use of a standard CTA pitch) scan into one single scan.

Perfect for trauma applications by combining a brain scan (Detailed pitch) and body scan (Standard Pitch) in one continuous scan.

Key features:

- Enhances automated workflow
- Excellent management of contrast media
- Dramatically reducing x-ray dose
- Provides seamless reconstruction of the images
- Reproducible results every time

Package includes:

- vHP Software disk
- ROM's for gantry/couch control
- Manuals

Prerequisites:

Version V3.3 software and ^{SURE}Cardio ECG gating

CSNP-002A/1B

4-D NEURO PERFUSION PACKAGE INCLUDING SURESUBTRACTION FOR CONSOLE

INCLUDES:

- 4D Brain Perfusion with 16 cm coverage (Aquilion ONE) per rotation and 8cm coverage (Aquilion Premium) per rotation.
- SURESubtraction automatic bone removal
- SUREPerfusion automated perfusion maps
- 4D DSA Whole Brain temporally uniform Digital Subtraction Angiography

Dynamic 4-D Brain Perfusion

CT perfusion is a fast brain imaging modality for use in the management of patients with various neurological disorders, ranging from acute stroke to subarachnoid hemorrhage. Provides excellent image quality with surface shaded-renderings and volume-rendered 4-D images. Provides zooming and panning over the 4-D surface and performs distance measurements.

Aquilion ONE Neuro includes SUREPerfusion and SURESubtraction. Now acquire, reconstruct, and review whole brain volumes including the arteriogram, venogram, and whole brain perfusion using this totally flexible, comprehensive toolkit.

SURESubtraction automatically removes bone and other highly attenuating objects from the image resulting in superb images, including even vessels adjacent to or surrounded by bone. SUREPerfusion adds the unique benefit of whole brain perfusion imaging, something no conventional multi-slice CT offers.

All these examinations can be obtained with a single dynamic acquisition and a single injection of contrast material making Aquilion ONE fast, accurate, and simple to use. Beyond the enhanced clinical diagnosis that can be realized by a perfectly timed arteriogram and venogram, the data can also be displayed for the first time as a whole brain CT digital subtraction angiography data set and a temporally uniform whole-brain perfusion study.

SURESubtraction - neurovascular CT digital subtraction angiography (CT DSA) software enhances diagnostic accuracy through greater image clarity and improves workflow. The software automates digital subtraction of the intra- and extra-cranial vessels from bone, providing superior clinical images in a fraction of the time of manual subtraction.

Enhanced Diagnostics

- Subtraction volume is completely free of bone, providing unsurpassed subtraction CTA studies of the brain
- Automatic detection of superior sagittal sinus
- More easily achieves arterial and venous segmentation
- In just seconds, creates 3DVR and MIP images with 360° left-to-right and head-over-heels tumble views

Enhanced Workflow

- Less than 5 minutes to load, process and display images
- Automated on-console imaging of cerebral blood flow, cerebral blood volume, and time-to-peak or mean transit time.
- Subtracted dataset is still in DICOM format
- Maximize productivity with programmable features
- Streamline patient throughput with a simple 3-step process

CT-TRAINING-301**ADVANCED AQUILION ONE / PREMIUM CARDIAC CT COURSE FOR TECHNOLOGISTS**

A three-day intensive course providing the foundation of cardiac anatomy and physiology, as well as ^{SURE}Cardio with PhaseXact scanning and reconstruction on Aquilion ONE/Premium. Practical cardiac scanning, case processing and image quality assessment are included in a hands-on customer-focused environment.

- Conducted at Toshiba's Institute of Advanced Imaging in Irvine, California
- Accredited for continuing education by the ASRT Education Foundation
- Tuition cost includes airfare, lodging and meals for one student

TRAINING-ONE-IR**ADDITIONAL AQUILION ONE APPLICATIONS TRAINING, IRVINE, CA**

Toshiba America Medical Systems offers additional Aquilion ONE clinical applications training held at our Education Center in Irvine, California. The Education Center's full complement of classrooms and labs are equipped with advanced products.

TRAINING-ONE-NR

UNIVERSITY OF FLORIDA AQUILION ONE ACUTE STROKE MANAGEMENT NEURORADIOLOGY IMAGING COURSE (Qty 3)

This course is an option for those customers who have purchased an Aquilion ONE Dynamic Volume CT Scanner. The Neuroradiology Imaging Course, Management of Acute Stroke will be held by University of Florida & Shands Hospital in Gainesville, FL. It requires 3 days on-site to complete the course.

Coursework includes:

- Neurovascular anatomy, clinical indications, image review and workflow on the Vitrea fX workstation
- A comprehensive hands-on workshop-type program with focus on whole brain CT perfusion acquisition, interpretation, image processing, and case reporting.
- Includes ^{SURE}Subtraction, ^{SURE}Perfusion and the unique Aquilion ONE Neuro 4-D Whole brain perfusion imaging
- Define the standard of care for the acute stroke patient and identify the requirements for stroke center accreditation.
- Attendees: Radiologists, Neuroradiologists, Neurologists and Neurosurgeons.
- CME certification from the University of Florida College of Medicine

The following expense is included:

- Tuition only for Neuroradiology Imaging Course, Management of Acute Stroke

Prerequisites: Familiarity with the Aquilion ONE Dynamic Volume CT scanner, scanner recommended to be installed at least six weeks prior to course attendance and basic Vitrea fX training.

CT-TRAINING-95T

JOHNS HOPKINS LEVEL 2 CARDIAC CT CERTIFICATION COURSE - BALTIMORE

This course is an option for those customers who have purchased an Aquilion CFX system. It is held at Johns Hopkins University, Bayview Medical Center in Baltimore, Maryland. The faculty has a long experience in both interpretation of cardiac CTA and in teaching the 'tricks of the trade' to newcomers. This course requires 5 days on-site and is followed by access to further material to create a rich, blended learning experience.

Coursework includes:

- CME certification from the Johns Hopkins University
- Basic cardiac anatomy, patient selection for most diagnostic quality studies, image review and workflow from acquisition to post processing on the Vitrea workstation.
- The major focus of the course will be in reading various Cardiac CT case studies. This course strictly adheres to Level 2 requirements as outlined by the ACC
- Five days of on-site coursework will include didactic sessions, guided review of at least 100 cases and continuous participation in scanning.
- Following on-site course work additional cases will be provided for review and supervised interpretation to achieve a minimum of 150 case interpretations.
- All physicians eligible, but designed for cardiologists seeking Level 2 requirements

The following expense is included:

- Tuition only for Cardiac CT Level 2 Certification

Prerequisites: Familiarity with CT scanner, scanner recommended to be installed at least six weeks prior to course attendance, basic Vitrea training, and technologists fully trained on cardiac scanning.

ACCRUED PHYSICIAN TRAINING (Qty 4)

CT OPTIONS

VIT-ONE/2.100

VITREA FX WORKSTATION DESIGNED FOR AQUILION ONE WITH AQUILION ONE APPLICATIONS PACKAGE INCLUDING CARDIAC, NEURO AND COLON

Vitreia fX is a high-performance 2-D, 3-D and 4-D workstation designed specifically for Aquilion ONE. Vitrea fX provides extreme performance with real-time navigation, required for Aquilion ONE datasets. Includes Dual Quad-Core Intel® Xeon powered computer and 30 inch LCD display with the following capabilities:

Cardiac & CFA Software

The CT Cardiac option allows clinicians to non-invasively survey a patient's coronary arteries to determine the presence and extent of obstructive disease. It also includes the ability to perform Cardiac Functional Analysis including Polar Map Display.

Endovascular Stent Planning

A vascular tool for automation of segmentation of the aorta and accessory vessels for the planning of Abdominal Aortic Aneurysm device placements. This tool can also be used for the stent planning of Thoracic Aortic Aneurysms.

Vitreia Vessel Software

A vascular analysis tool to visualize and analyze stenosis in contrast enhanced CT and MR studies.

Diameter of the vessels must lie in the range of 0.5 - 18.0 mm

Vitreia VScore Software

For coronary artery calcium scoring

Vitreia ^{SURE}Plaque Application for Aquilion

Soft plaque detection, quantification and characterization.

^{SURE}Colon Vitrea Software

For analyzing CT colon studies

Aquilion ONE 4D Neuro Comprehensive Neurology Software

Automated imaging of cerebral blood flow, cerebral blood volume, and time-to-peak or mean transit time. Acquire, reconstruct, and review whole brain volumes including the arteriogram, venogram, and whole brain perfusion using this totally flexible, comprehensive toolkit.

Includes ^{SURE}Perfusion – CT cerebral perfusion analysis and Vitrea bone subtraction software.

Vital U Education

Eight units are included with each Vitrea fX workstation.

VITREA WORKSTATION, TOSHIBA US FX PKG

VITREA WORKSTATION, FX HARDWARE

VITREAADVANCED, FX MONITOR HARDWARE

CT290C-TTL

**BIOMED TRAINING - TUITION, TRAVEL
AND LODGING - AQ ONE/PREMIUM (10
CLASS DAYS) (Qty 2):**

The Bio Med training course must be completed twelve (12) months from equipment installation date (or purchase date if sold separately). If training is not completed within the applicable time period then the obligation to provide this course will expire without refund unless funds are used for additional operator training within this time frame.

TRADE-IN

GE 4 SLICE CT SYSTEM TRADE-IN

**CURRENT GOVERNMENT CONTRACT
PRICE (*):**

(* Additional discount may apply based on further multi-unit or multi-modality negotiations at the VISN and/or VANAC.