ODYSSEY HF SERIES ULTRA High Frequency X-Ray Technology







Precision • Performance • Power

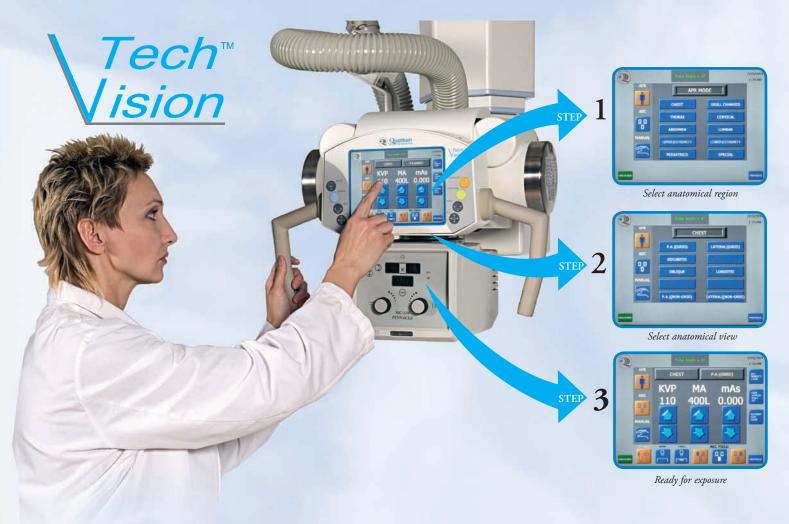
KVP MA SEC 90 600L 0.002 ODYSSEY HF SERIES

• EXPOSE



D Quantum

Innovations in Digital Imaging.



TECHVISION": A QUANTUM EXCLUSIVE

Quantum's TechVision is truly an innovation for the Technologist. Technologists can easily view and set up all technique parameters, as well as access set-up functions right at tube-side.

TechVision eliminates going back-and-forth from the generator Operator's Control Panel to the patient, in order to prepare for patient exams. The operator has complete control to adjust exposure parameters right at the tube-side, just as if they were at the generator's Operator Control Panel. This synchronized generator solution greatly streamlines the imaging process and decreases overall examination time, while allowing the technologist to remain close to the patient, for increased patient care.

TechVision Features:

- Multi-Color (16 Bit; 800 x 600 Pixel; 8.4" display) Touch screen
- Technologist controls generator technique selection at tube-side
- Full APR, AEC and Manual technique control
- Improved patient care, as technologist remains close to the patient during exam set-up procedure
- · Improved patient through-put, by reducing steps taken by the technologist
- Digital Imaging Ready Provides actual digital image "PREVIEW" and study review (with select DR solutions)



TechVision, with Quantum Q-Rad Digital systems, provides "DIGITAL IMAGE PREVIEW*" and "Study Review" at tube/tableside.

All Quantum ODYSSEY HF and Q-Rad Systems <u>generators are available for upg</u>rade to TechVision.

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The ODYSSEY HF's sophisticated operator control panel utilizes a high resolution LCD window. This menu-driven display is simple to use, and allows the operator to focus on patient needs. In addition, time and date are always displayed for operator convenience.

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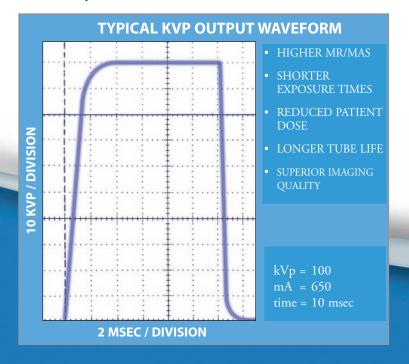
MANUAL MO

MA

The ODYSSEY HF Series[™]

The ODYSSEY HF Series[™] integrates revolutionary design with superb functionality, resulting in the most advanced radiographic generator ever developed.

Designed for both digital and conventional imaging and operating at a near-constant potential of up to 120 kHz, the ODYSSEY HF provides ULTRA High Frequency imaging for highly efficient X-ray production. Radiographic imaging is optimized through the ODYSSEY HF's simple programmability, which permits a wide variety of routine, specialized and custom procedures.



ULTRA HIGH FREQUENCY TECHNOLOGY...120 kHz

Through the integration of the ODYSSEY HF's sophisticated proprietary technology, hospitals and high-volume radiology facilities can meet the traditional objectives of imaging. The ODYSSEY HF maximizes operating efficiency and enhances patient throughput.

Utilization of advanced transformer design technology has enabled the emergence of ULTRA-High Frequency power. Precise voltage control and extremely efficient high voltage switching come together to provide superb accuracy, repeatability, and system reliability. With a near-constant potential output of up to 120 kHz of power, the ODYSSEY HF delivers highly refined images and provides the shortest exposure times, while minimizing patient dose.

The ODYSSEY HF Series of generators provide power levels of 80 kW through 32 kW and outputs of up to 150 kVp, meeting the needs of any imaging environment.



OPERATING MODES

The ODYSSEY HF Series provides a wide selection of operating modes (3 point, 2 point or 1 point) providing different levels of user intervention. Technologists may assign their own custom selected techniques or may choose varying levels of automated control (APR) for precise imaging parameters.

In all operating modes, the user always has the capability to override any technique parameter individually, providing uncompromised flexibility and control.

> In addition, the MAS/ TIME button enables you to toggle between viewing either MAS or SEC (time).

ANATOMICAL PROGRAMMED RADIOGRAPHY (APR)

The APR mode allows the operator to simply select the desired examination from any of the 100 exam views, covering the 10 anatomical regions. APR mode will automatically select and set the typical technique factors including: kVp, mA, time (mAs), focal spot, film speed, SID and imaging receptor, while allowing the operator

complete control to modify any parameter prior to exam. The operator may also input the actual patient thickness (in individual cm's), thus providing the optimal selection of technique parameters for that exam. Each individual exam provides up to 50 different technique selections, for up to 5000 unique anatomical program settings.

APR/AEC MODE

When used in conjunction with AEC (Automatic Exposure Control), the APR mode enhances uniformity of images, virtually eliminating the need for retakes. It automatically selects the required AEC chamber field format, sets a back-up time and terminates the exposure at the precise interval required for a perfect image.

APR/PATIENT TYPE MODE

When APR is used without AEC, the system allows the operator to quickly modify the mAs (time) to accommodate for various patient densities. This mode provides quick automatic adjustment of mAs in increments of +/- 25% and +/- 50%, from the average patient type.

AUTOMATIC EXPOSURE CONTROL (AEC) MODE



WALL

The AEC mode provides exceptional uniformity and image consistency. AEC automatically terminates the exposure at the precise mAs required. To allow the operator full control, there is an 11step selection of AEC density (in 15% increments). The system also provides a selection of up to seven different film speed settings.

VP MA SEC 90 600L 0.002

MANUAL MODE

Manual mode allows the operator to easily select all technique parameters (mA, kVp, mAs/time).



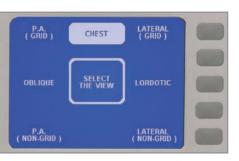
UPPER EXTREMITIES APR MODE





Quantum's advanced software technology allows for custom modification of your APR menu either from the control panel or using a laptop computer (Q-WARETM). In addition, the display screen can be viewed in various international languages, as required.

gion.



Select anatomical view.

MAR 30,01 3:10 PM PA. (GRID) MAS/ TME Type t Avg%, 110 650L 5.0 Film Size 32CM 72" WALL

Ready for exposure.

GENERATOR OPTIONS:

- Automatic Exposure Control (AEC) Electronics: (QG-AEC)
- High (Dual) Speed Starter: (Q-HSS); internal design
- Universal AEC/Tomo interface; (QG-AEC-U/QG-Tomo)
- TechVision synchronized operator control on handgrip (QS-TVC)
- Pedestal Mount for Operator Control Console: (QG-PDL)
- Wall Mount for Operator Control Console: (QG-WM)
- Remote Exposure Hand Switch: (R80-HS)
- Digital Imaging Interface: (QG-DIG); consult factory

*All generators standard with Q-WARE^{\rm TM} Utility Software

STORED ENERGY (SE) GENERATORS

Quantum's advanced STORED ENERGY (SE) technology permits powerful operation using only a standard "low amperage" wall outlet or alternate power source. The SE's power cells are virtually maintenance-free and provide years of usage. These units are ideal in facilities where incoming power is unavailable and for mobile imaging applications.

TECHNOLOGICALLY SUPERIOR BY DESIGN...

The ODYSSEY HF series of generators incorporate the latest in advanced electronic design and software architecture, including:

- Self-Testing/Self-Diagnostic
- X-Ray Tube Protection Circuit
- Exposure Counter/X-Ray Tube Counter
- Anode Heat Unit Calculator/Monitor
- Error Messaging
- Multiple Security Code Feature
 Automatic Line Voltage Compensation
- APR Technigue and Text Editing
- International Language Ability
- Auto Calibrate Function
- Extensive Memory for History Details
- RS-232 Connection Port
- Automatic shut-off timer (variable time settings)
- Connect to Techvision remote control

Q-WARE[™] UTILITY SOFTWARE

Q-WARETM is a laptop-based service support tool that provides an advanced level of APR text and technique editing, simplified calibration as well as other set-up functions.

SELF-DIAGNOSTICS

The ODYSSEY HF's integrated self-diagnostics and calibration program surveys system performance at the rate of 500 times per second. This specialized quality control program is designed to detect operator and system errors for enhanced operation.



The ODYSSEY HF's control panel can be positioned on a custom pedestal, fastened to a wall for space saving, desktop mounted, or positioned on top of the generator cabinet.

ODYSSEY HF SERIES Generator Specifications STORED ENERGY (SE) GENERATORS

						STORED ENERGY (SE) GENERATORS			
Catalog # Model #	QG-8000 QG-80	QG-6500 QG-65	QG-5000 QG-50	QG-4000 QG-40 (-2, -3, -5)	QG-3200 QG-32 (-2, -3 -5)	QG-5000-SE QG-50-SE	QG-4000-SE QG-40-SE	QG-3200-SE QG-32-SE	
Power Rating (kW):DIN	80 kW	65 kW	50 kW	40 kW	32 kW	50 kW	40 kW	32 kW	
ULTRA High Frequency	120 kHz PLUS	120 kHz PLUS	120 kHz PLUS	120 kHz PLUS	120 kHz PLUS	120 kHz PLUS	120 kHz PLUS	120 kHz PLUS	
kVp Range (1 kVp steps	40-150 kVp	40-150 kVp	40-125 kVp	40-125 kVp	40-125 kVp	40-125 kVp	40-125 kVp	40-125 kVp	
150 kVp output	standard	standard	option	option	option	N/A	N/A	N/A	
mA Range	25 - 800 mA	25 - 800 mA	25 - 650 mA	25 - 500 mA	25 - 500 mA	25 - 600 mA	25 - 500 mA	25 - 400 mA	
Timer Range (seconds)	.001-6.3 sec.	.001-6.3 sec.	.001-6.3 sec.	001-6.3 sec.	.001-6.3 sec.	.001-6.3 sec.	.001-6.3 sec.	.001-6.3 sec.	
mAs Range	0.025-800 mAs	0.025-800 mAs	0.025-800 mAs	0.025-600 mAs	0.025-600 mAs	0.025-500 mAs	0.025-500 mAs	0.025-400 mAs	
High (Dual) Speed Starter	standard	standard	option	option	n/a	n/a	n/a	n/a	
APR Programs (Pre-programmed and Custor	100 APR Views າງ(5000 Techniques)	100 APR Views (5000 Techniques)	100 APR Views (5000 Techniques)	100 APR Views (5000 Techniques)	100 APR Views (5000 Techniques)	100 APR Views (5000 Techniques)	100 APR Views (5000 Techniques)	100 APR Views (5000 Techniques)	
Operational Modes	1. kVp/mA/time 2. kVp/mAs 3. kVp with AEC (option) 4. APR/Patient Type	1. kVp/mA/time 2. kVp/mAs 3. kVp with AEC (option) 4. APR/Patient Type	1. kVp/mA/time 2. kVp/mAs 3. kVp with AEC(option) 4. APR/Patient Type	1. kVp/mA/time 2. kVp/mAs 3. kVp with AEC (option) 4. APR/Patient Type	1. kVp/mA/time 2. kVp/mAs 3. kVp with AEC (option) 4. APR/Patient Type	1. kVp/mA/time 2. kVp/mAs 3. kVp with AEC (option) 4. APR/Patient Type	1. kVp/mA/time 2. kVp/mAs 3. kVp with AEC (option) 4. APR/Patient Type	1. kVp/mA/time 2. kVp/mAs 3. kVp with AEC (option) 4. APR/Patient Type	
Input Line (50/60 Hz):						All STORED ENERGY (SE) GENERATORS require a standard power input (50/60 Hz) of either: 105-130 VAC, 10 Amp +/- 10% or 220-240 VAC, 10 Amp +/- 10%			
Single Phase Line: 208-260 VAC; +/- 5%	n/a	n/a	n/a	standard	standard				
Single Phase Line: 380-480 VAC; +/- 10%	n/a	n/a	n/a	option	option				
Three Phase Line: 380-480 VAC; +/-5%	standard	standard	standard	option	option				
Three Phase Line: 208 VAC; +/- 5%	n/a	n/a	option	option	option				

Above ranges may be limited by tube selection/AEC limits/incoming power line.

Specifications subject to change without prior notice.

CORPORATE OVERVIEW

Quantum Medical Imaging is a highly innovative designer and manufacturer of high quality Medical Radiographic systems for hospitals and imaging centers around the world. Utilizing the most advanced ULTRA High Frequency X-ray technology, Quantum systems are designed for both conventional and direct Digital imaging, providing a secure investment far into the future.

QUANTUM'S GOLD STAR NETWORK



Our worldwide dealer network provides factory-authorized sales and service for all Quantum Medical Imaging systems. As members of Quantum's GOLD STAR NETWORK, these dealers are recognized for their excellence in technical support and customer service.





Innovations in Digital Imaging.

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