Introduction To Monarch UHD DR

When you need ultimate clarity and detailed images, reliable image acquisition coupled with the ruggedness required for digital mobile x-ray system, Meridian’s Monarch UHD is your system of choice. The Meridian Monarch UHD features our exclusive 20-inch mobile tablet “operators console”. The Monarch UHD 20” acquisition console offers an impressive 3840 x 2560 display resolution which is a factor of four over that of typical acquisition stations. And, with its advanced software; it displays images at speeds twice as fast as most other workstations. Add to this, the latest flat panel technology that includes “Quad Cell Technology” and “Surefire” automatic exposure detection (AED), and you get the most flexible, highest performing DR System available.

In An Emergency, You Need To Be Certain

Featuring a display of nearly 10 million pixels for a truer representation of radiographic images, the Monarch UHD digital control station is a tool radiology imaging professionals can’t afford to be without. Though not intended for diagnostic reading, images are displayed at resolution typically seen only on high-resolution diagnostic workstations. This insures the operator acquires the information needed for the exam and views all the information coming from the DR panel.

Low Dose starts with Quad Cell Technology

The Meridian Monarch UHD is designed to produce the highest quality images at the lowest dose possible. All Meridian Monarch imaging panels feature our “Quad Cell” technology design which includes direct CsI vapor deposit to increase both contrast and resolution, a reflective layer coating that increases sensitivity by 1.8 times, moisture proof sealing for reliability and long life. Taken together, Meridian provides an overall design that insures the lowest dose possible. Meridian’s flat panel imaging panels use cutting edge “Surefire” automatic exposure detection (AED). You no longer need to trigger the panel with a wired connection to the generator. Monarch UHD senses the x-ray and automatically acquires the image. This enables the Monarch UHD to be used on any new or existing x-ray capable system.
Highly Advanced Technological Design

The Monarch UHD Digital Radiology System offers a highly advanced computer workstation. The Monarch UHD 20’ mobile tablet is built for medical applications and as such meets the stringent requirements of toughness, reliability, exposure, and performance. The waterproof design of the Monarch UHD 20” mobile tablet enables it to withstand the near-constant wipe downs required to maintain 100% sanitation compliance. A little over five pounds in weight and less than an inch thick, the Magnesium Alloy Chassis and GFRP rear case protects for everyday use and meets the tough demands of today’s mobile digital requirements.

Flexibility For All Of Your DR Applications

Attach the Meridian Monarch UDH to any analog mobile x-ray system and that system becomes digital immediately. No wires, no physical changes, no interference with the existing design. It’s simply an add-on device that acquires the image when x-ray is sensed at the imaging panel. If you need to remove it from the system, a quick release allows you to remove the 20” mobile tablet control console. Take your mobile imaging panel and your tablet control console to any other x-ray producing equipment and it converts that system to a digital radiographic system immediately. The 20” mobile tablet control console can drive up to three imaging panel detectors. Use any combination of panels in any room. The detectors are film cassette sized and can be used anywhere a CR or film cassette is used. This makes all your installed x-ray equipment of any make, model or age, “digital ready”. Monarch DR Imaging Panels are available in 10x12, 14x17, and 17x17 sizes. All panels feature “Quad Cell Technology” with Automatic Exposure Detection (AED).

Purchase your Meridian Monarch UHD DR with confidence. The most comprehensive warranty program available backs the Meridian UHD DR system. This includes a full 3-year warranty against manufacturing defects on the Control Console Tablet and a 2-year full replacement warranty on the imaging panel. You can also upgrade your support program to a full 5-year protection plan that includes drop, fire, theft, and warranty service on all components.
Monarch UHD Specifications

CONTROL STATION & SOFTWARE
Windows 8.1 Pro
Intel® Core™ i5-3437 GHz vPro™ Processor - 1.9GHz with Turbo Boost up to 2.9GHz, NVIDIA GeForce GT 745M, 2GB dedicated VRAM, 256GB SSD, 8GB RAM, HD 720p

DURABILITY
2.5-foot drop rating (bottom side), 1-foot drop rating (26 drops), Magnesium alloy chassis and GFRP rear case

DISPLAY
20” 4k 3840 x 2560 LCD with LED backlighting, 10-point capacitive multi touch with optional optical pen, IPS alpha display, Ambient light, magnetic, gyro and acceleration sensors, Automatic screen rotation, 15:10 aspect ratio

INTERFACE & EXPANSION
USB 3.0, SD card (SDXC)

WIRELESS
Wi-Fi and Bluetooth®

DIMENSIONS AND WEIGHT
18.7”(L) x 13.1”(W) x 0.5”(D), 5.3 lbs.

SECURITY
Built-in Smart Card reader, Security Cable Loop

PANEL & SOFTWARE
FDX3543 Cesium Iodide (CsI) scintillator + Amorphous Silicon (a-Si) Photodiode

Effective Field of View
Horizontal: 345mm
Vertical: 426mm

Pixel Quantity
Horizontal: 2466
Vertical: 3040

Pixel Pitch:
140um

Weight:
3.1kg

Battery Capacity
3400ma hrs.

MTF:
33% at 2 lp/mm

DQE
>70%

Resolution:
3.4Lp/mm

Manufactured by:
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