Application:
In just a few short hours, your analog portable can be converted to all of the great benefits of Fujifilm DR. The FDR D-EVO Portable Upgrade System is an integrated design, to seamlessly convert existing analog portables to digital, breathing the new life of the FDR D-EVO wireless detector. This system interchanges the original cassette storage bin with a sleek fitting upgrade enclosure, which houses all of the supporting components to go digital. The system operates as a separate modular device, independent of the portable it’s mounted on. The only connection to the portable is to the hand switch to synchronize exposure with detector activation. The system provides a compact, all-in-one retrofit, integrated with a full-featured technologist workstation and compatible with all of Fujifilm’s latest lightweight wireless digital detectors. The Portable Upgrade System employs the unmistakable convenience of Fujifilm’s latest FDR D-EVO detectors, immediate bedside image review and advanced image processing to provide the most efficient and flexible solution in portable imaging. With its versatile and rugged design, this is an excellent cost effective scalable digital solution for patient bedside exams, Emergency, Intensive Care, Neonatal and OR departments.

Features:
The system features the immediate image previews, dose savings and image quality associated with Fujifilm FDR D-EVO detectors complemented with Fujifilm’s latest FDX Console, full-featured technologist workstation. Since the detector system and workstation are incorporated on the portable system, images are available immediately, allowing the technologist to confirm the exam before leaving the patient bedside, optimizing image quality while minimizing repeat exams and return trips. Network connectivity to RIS/HIS & PACS using DICOM protocols is available through wireless or hard-wired Ethernet connection, for remote updates to the patient worklist from the RIS/HIS and transmission of completed exams directly to PACS for faster interpretation.

Perfect Fit to Upgrade your Portable to Digital
The portable upgrade system provides a seamless integrated fit to AMX 4 and 4 plus analog portable models. The upgrade system’s cabinet replaces the original cassette storage bin and houses all of the electronics needed for detector and workstation communication along with its own battery power and charging system. The cabinet is mounted nicely into the original storage bin area of the host portable and has an integrated tablet computer mounted on top. The only wired connection to the portable is through the standard exposure hand switch to activate the detector’s capture simultaneously with the portable’s exposure.

Image Intelligence™ and Dynamic Visualization
The wide latitude and high resolution of Fujifilm’s advanced FDR D-EVO detectors with patented ISS circuitry design, combined with Fujifilm’s sophisticated image processing automatically optimizes the diagnos-
tic quality of every image, compensating for dose and anatomic characteristics to provide the best first-up images. The FDX console features Dynamic Visualization, Fujifilm’s latest advancement in image processing, which dynamically extends visibility, maximizing recognition of contrast levels throughout the entire exposure field, providing higher visibility and wider window and leveling through the entire image. Other Fujifilm advanced image processing software included standard are: GPR (grid pattern removal), FNC (flexible noise control), MFP (multi-frequency processing) and more. All are optimally applied to reduce grid artifact, remove noise and intelligently enhance image display from variations in exposure conditions.

**FDR D-EVO detectors with ISS**

System can be optionally configured with any wireless FDR D-EVO detector. All FDR D-EVO detectors feature Fujifilm’s Patented ISS, Irradiated Side Sampling which exclusively focuses its capture electronics where signals are sharpest and strongest, designed to improve visualization of bone detail and dose efficiency compared to CR and conventional detector designs. Combining this design with our latest advanced image processing provides for ultra-sharp images and optimal dose efficiency.

**Any wireless FDR D-EVO detector 14x17, 17x17, G or C & beyond…**

- **Patented ISS** dose and image quality advancements
- **Swap & share** detectors with other portables or room systems to maximize utility
- **Multiple Detectors** add the convenience of larger or smaller detectors
- **Safe fitted storage** for detector, grid, even a CR cassette
- **DR to Analog switch** allows CR use on demand

**FDX Console Technologist Workstation**

The integrated FDX Console workstation is ideally configured for the x-ray technologist. The workstation is built on a robust, medical grade tablet computer which provides extended battery life, with excellent vibration and wipe-down resistance. Performs patient ID, worklist updates, immediate image preview, processing, QA and image transmission. The FDX Console simplifies image quality with automated and advanced image processing functions. It features Fujifilm’s intuitive and customizable touchscreen user interface and provides for complete patient processing in as few as three (3) easy steps.

**Standard System Configuration and Components**

The FDR D-EVO Portable Upgrade System is compatible with GE AMX 4 and 4plus models only. The standard configuration includes an integrated FDX Console, an FDR D-EVO wireless detector, 1 primary and 1 spare detector battery, system cabinet within integrated detector control electronics, internal battery power and charging system, a storage bin area for holding the detector, and grid and charging cord.

- **Swivel and Tilting Display +/- 180° rotation, 0-90° tilt** allows optimal positioning for easy technologist viewing during the exam
- **Tube Lock Down Post Extension** raises/re-positions lockdown height for secure and safe clearance of tube and workstation display park locations.
- **Tube-Collision Safety** self-closing protection shield. Shield smartly closes over screen and folds down the console as the tube comes into contact with it.
- **Patient Data Shielding** display shield locks out visibility and access to the workstation if the computer is left on while the tube is locked down into park for charging.
- **Robust wireless** worklist & PACS transmission
- **Ethernet** port for wired connectivity to the hospital network
- **External USB** ports
- **Flat panel detector and grid storage bin**

**FDX Console technologist workstation – Standard Features**

Includes all of the latest advanced functionality of a standard FDX Console. Feature highlights include:

- **Double-click full screen magnification**
- **Dynamic Visualization Processing**
- **Density and Gradation Processing**
- **Spatial Frequency Processing**
- **Edge enhancement toggle**
- **Programmable Auto Login and Logout**
- **Free Text Annotation**
- **Grid Pattern Removal Software**
- **Shutter**
- **Retake Analysis**
- **Detector Sharing, fast, easy switching to share with other uses**
- **Open PACS or RIS from a web browser without closing application**
- **See datasheet for FDX Console for additional specifications**
PC Hardware  Medical Grade Tablet
PC, Intel Core I7 Processor, Windows 7 Pro (32 bit), 4Gb RAM, Solid State 128GB HD (retains up to 8,000 images). 12.1" anti-glare color LCD touchscreen display. OS integrated on-screen keyboard for text input. Optional barcode reader (or other devices for servicing) can be connected via external USB ports. Utilizes finger-tip or stylus touchscreen interface, tethered stylus with storage slot

Independent Self Powered System
- **System Power**: 4-6 hours operation typical on a full charge. Charges in 5.5 hours or less
- **Detector**: Up to 450 images or 3 hours per battery typical (depending on model)
- **Power Cord**: Retractable power cord 110VAC Medical Grade
- **Indicators**: 17 LED’s display remaining charge status.
- Additional status LEDs for low battery level, charging, AC, DC and Auto Shutdown
- Programmable audible low battery threshold alarm
- **Integrated Spare battery charging slot with LED charge indicators**, charge time 3 hours
- **Integrated Detector Charging via storage bin cord**, trickle charge time 3-6 hours
- **Full use while plugged in**: system can be charged without shutting down
- **Charge Cord Safety**: prevents travel and exposure if plugged in

Battery Power Includes two 12 volt sealed lead acid batteries (12VDC). Typical system use will provide up to 6 hours on a single charge. Rate of discharge will vary based on number of exposures, model of detector and use of on-board detector charging. For optimal battery life, charging power cord should be plugged in whenever system is not in use. Charge time from empty is 4-5.5 hours.

Battery Requirements Optimal performance is based on specified batteries only. It is recommended that both batteries are changed at the same time and from the same manufacturing batch/lot. Batteries must be installed by Fujifilm trained Service Personnel only. Customer is responsible for purchase of replacements and proper disposal of old batteries in accordance with local regulations. For optimum performance the system batteries should be replaced annually.

Charging Built-in 9ft retractable power cord. Standard 3-prong AC outlet required, Input: 110-240VAC +/-10%, single phase: 50/60 Hz, 6.46A max. Output Load: 10.5-15VDC, battery 3.0-15VDC, 20A Max, 300W Max. System allows for connecting the portable’s cord to a receptacle on the back of the device to simplify plug in for charge to one power cord for both.

Options
- FDR D-EVO wireless detectors - optional models and sizes
- Larger Storage Bin for 17x17 detector
- Snap-on detector grids with and without handle, 103 lines/inch, standard ratios and focal distances.
- USB Wired Barcode Scanner
- Phantom QC Packages

Warranty
1 Year Full System Warranty with the exception of consumables, such as system batteries.

Safety and Electrical Certifications

Wireless Detector Communication: Utilizes Wireless-N, 802.11n, 5.2 GHz band. Wireless Access Point (WAP) connects detector to MP, isolated from hospital network. Wireless is limited as an in room (33ft range) closed network. Transmits raw image data and system signals only. No patient information is transmitted. WPA2-PSK encryption with AEP and MAC (unique IP address) protocols ensure secure connection, confirmation of transmission completion and data integrity, pairing handshake with registered detectors only.

Hospital Networking
- Wireless or Wired connectivity to RIS/HIS & PACS using DICOM protocols
- Wireless LAN 802.11b/g/n G or N recommended
- Wired Ethernet 10/100/1000 with external RJ-45 connection port
**Environment Conditions**
- Heat Output (max): 1.05MJ/h or lower
- Noise (max): Operating: less than 55db, Standby: < 40db

**Operating Conditions** *(Non-Operating/Storage)*
- Temperature: 50-104°F (-13-185°F)
- Humidity: 30-80% RH (10-90%) no dew condensation
- Atmospheric pressure: 750Pa-1060hPa (same)

**Dimensions**
- Inner Cabinet: 15”w x 7”d x 9.25”h
- Outer Cabinet: 16.6”w x 5.25”d x 27.6”h
- System Weight: 79 lbs

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