

The Evolution4K™ Recorder

4K UHD Medical Video Recorder Solution

The Med X Change, Inc. Evolution4K offers the latest in 4K UHD video recording in a compact device all while delivering brilliant 4K UHD video quality designed for both Apple and Windows editing. The Evolution4K provides the user with two available video inputs and pass-throughs via HDMI 2.0 and HD 3G-SDI. The HDMI 2.0 input will accept a 1080p signal when a 4K camera is not connected.



4K
HD

As an embedded Linux device, the Evolution4K allows the users to enter patient data, capture 4K UHD video and 4K still images, playback 4K video, auto print to medical grade printers and record to dual USB 3.0 external hard drives or flash drives. The device functions with medical foot pedals (RS-232), 4K surgical microscope cameras and 4K endoscope cameras (video outputs and camera head triggers buttons via 2x 3.5mm triggers).

The device can be controlled via an integrated 12.7cm capacitive multi-touch screen that uses swipe and pinch and zoom gestures similar to the latest mobile devices.

MEDICAL CERTIFICATIONS

IEC 60601-1:2012 (Ed 3.1)

IEC 60601-1-2:2014 (Ed 4.0)

No. U8 18 05 74193 030

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RECORDING FEATURES

4K UHD & HD VIDEO/STILL IMAGE RECORDING

- 4K UHD 60Hz input: **HDMI 2.0**
- HD 1080p 50/60Hz output: **3G-SDI**
- 4096x2160p or 3840x2160p 50/60Hz
- 4K UHD recorded/captured files: H.264, .mp4, .jpeg, .bmp

INTEGRATED 12.7CM TOUCH LCD SCREEN

- Control entire software from integrated touch screen
- Multi-touch/swipe interface

PATIENT DATA ENTRY/WORKFLOW

- Enter patient data, filter patients and start cases
- Sort by fields (*Name, Case date, Patient ID*)
- Append to completed cases

DICOM INTEGRATION

- Automatic DICOM c-store (*PACS storage*) & c-find (*MWL*)
- DICOM Storage Commit & MPPS (*Modality performed procedure step*)

ONE TOUCH RECORDING

- Record 4K UHD Video and capture still images simultaneously with integrated 12.7cm touch screen, endoscopy camera head buttons, microscope triggers, foot pedal, etc.
- Record to internal hard drive and 2 USB 3.0 locations simultaneously

LIVE VIDEO STREAMING OVER IP

Live stream camera video over IP via RTSP protocol

PRINTING/PLAYBACK/COPY/REVIEW

- Review completed cases
- Playback video/stills and copy to external USB/Network
- Auto print to Sony UP-DR80MD medical grade printer

STORAGE, SETTINGS, OTHER

- 1TB Internal storage (*Approx. 20 Hours 4K UHD video*)
- Networking, media and printing settings
- Simple USB software updates
- Embedded Linux OS

EXTERNAL TOUCH MONITOR SUPPORT

- HID Touch Screens are supported via USB
- Duplicate the internal 12.7cm Touch Screens to a external Touch monitor via the Secondary Display Ports (*DP++, HDMI or VGA*)



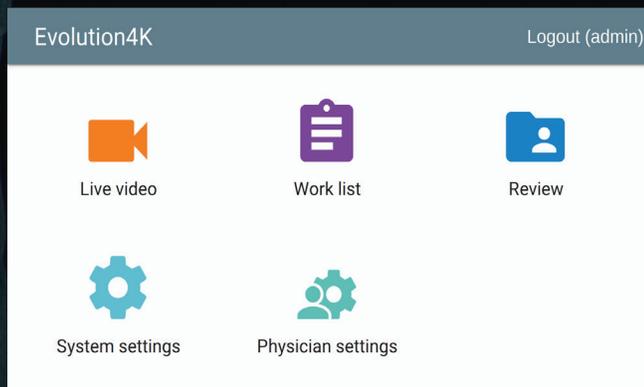
LIVE VIDEO



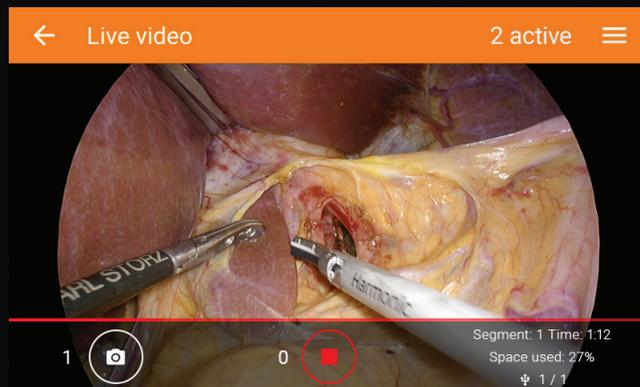
WORK LIST



REVIEW



Home screen



Live video screen

TYPICAL SUPPORTED CAMERA/VIDEO RESOLUTIONS

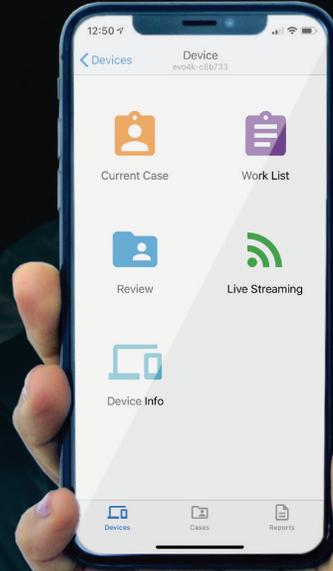
- 4K & 4K UHD: 4096x2160p & 3840x2160p
- HD: 1080p, 1080i, 720p
- 4K & 4K UHD Hz: 60, 59.94, 50
- 1080p Hz: 60, 59.94, 50
- 1080i Hz: 60, 59.94, 50
- 720p Hz: 60, 59.94, 50

STILL IMAGE CAPTURE

- 4K: 4096 pixels (H) x 2160 pixels (V) = 9MP
- UHD: 3840 pixels (H) x 2160 pixels (V) = 8MP
- HD: 1920 pixels (H) x 1080 pixels (V) = 2MP

CYBERSECURITY COMPLIANCE

- Audit logging/controls
- Individual user accounts
- Admin role
- User account management
- ePHI is encrypted at rest and in transit using AES-256
- Session timeout
- HIPAA Compliance encryption, auditing, logs, user/admin roles



SYSTEM SETTINGS

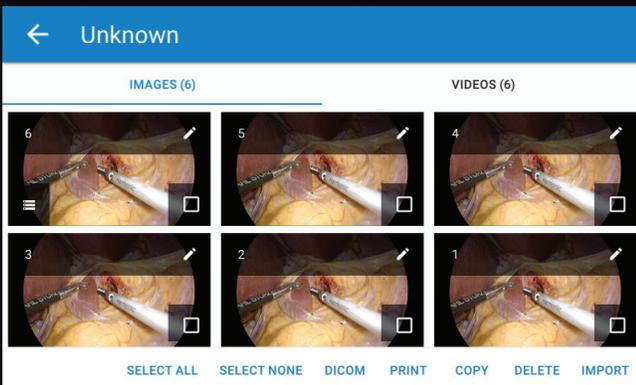


PHYSICIAN SETTINGS

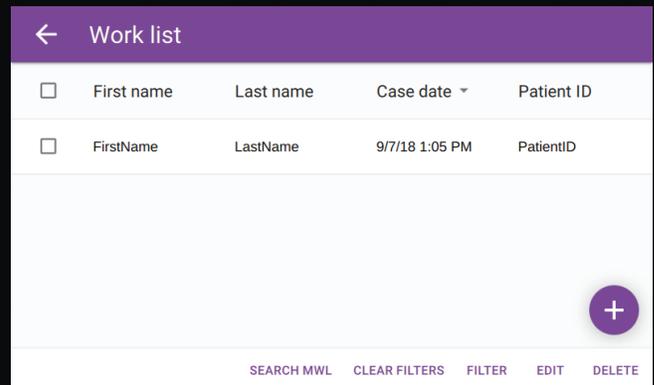


MEDXSTREAMPLUS iOS APP

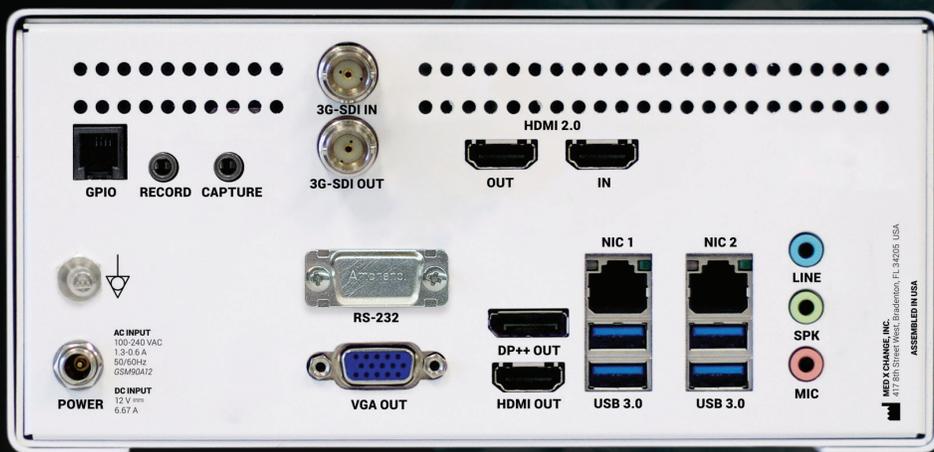
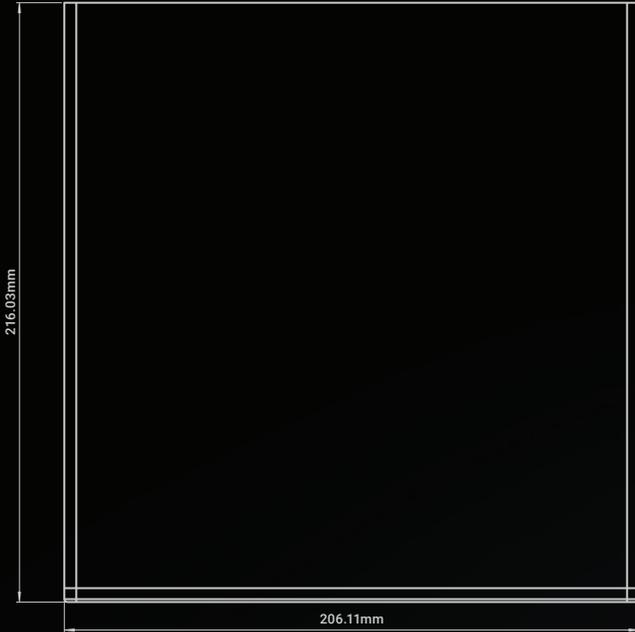
- Wirelessly control some recorder functions
- Encrypted WiFi connection
- Wireless/wired (*lightning cable*) transmission of still images/videos



Review screen



Work list screen



ACCESSORY PACK CONTENTS

- 1 – User manual download card
- 1 – AC/DC converter
- 1 – Medical grade power cable
- 1 – SDI cable
- 1 – HDMI cable
- 2 – 3.5mm trigger cables
- 1 – USB keyboard

MEDXCHANGE

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ISO 13485 Certified

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