# ${\bf Evolution 4K}^{\rm M}_{\it Recorder}$

**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

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



# **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
- Duplicate the internal 12.7cm touch screen to any HID touch monitor via VGA

## PATIENT DATA ENTRY/WORKFLOW

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

#### 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

## **DICOM INTEGRATION**

Automatic DICOM c-store (PACS storage) & c-find (MWL)

## **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
- · Adjustable printer enhancements settings

## 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**

- Multiple 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)



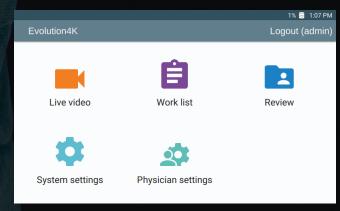




**LIVE VIDEO** 

**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

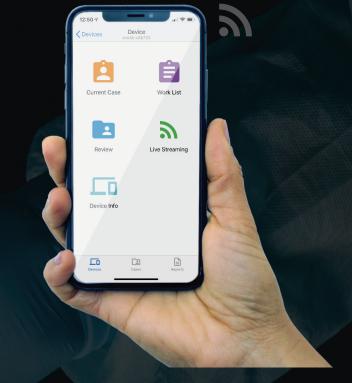
- Audit logging/controls
- · Individual user accounts
- Admin role
- User account management
- ePHI is encrypted at rest and in transit using AES-256
- · Session timeout
- HIPAA Compliance encryption, auditing, logs, user/admin roles







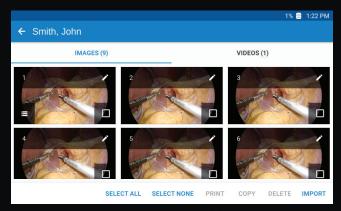
**PHYSICIAN SETTINGS** 



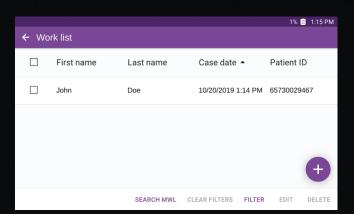


# **MEDXSTREAMPLUS IOS APP**

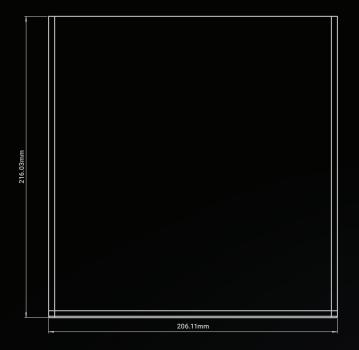
- Wirelessly control some recorder functions
- Encrypted WiFi connection
- Wireless/wired (lightning cable) transmission of still images/videos

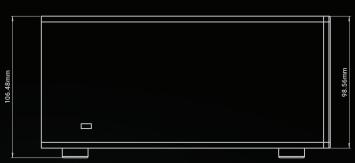


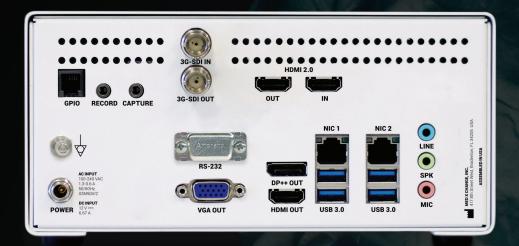
Review screen



Work list screen







## **ACCESSORY PACK CONTENTS**

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



MEDXCHANGE.COM sales@medxchange.com +1 941.794.9977

ISO 13485 Certified