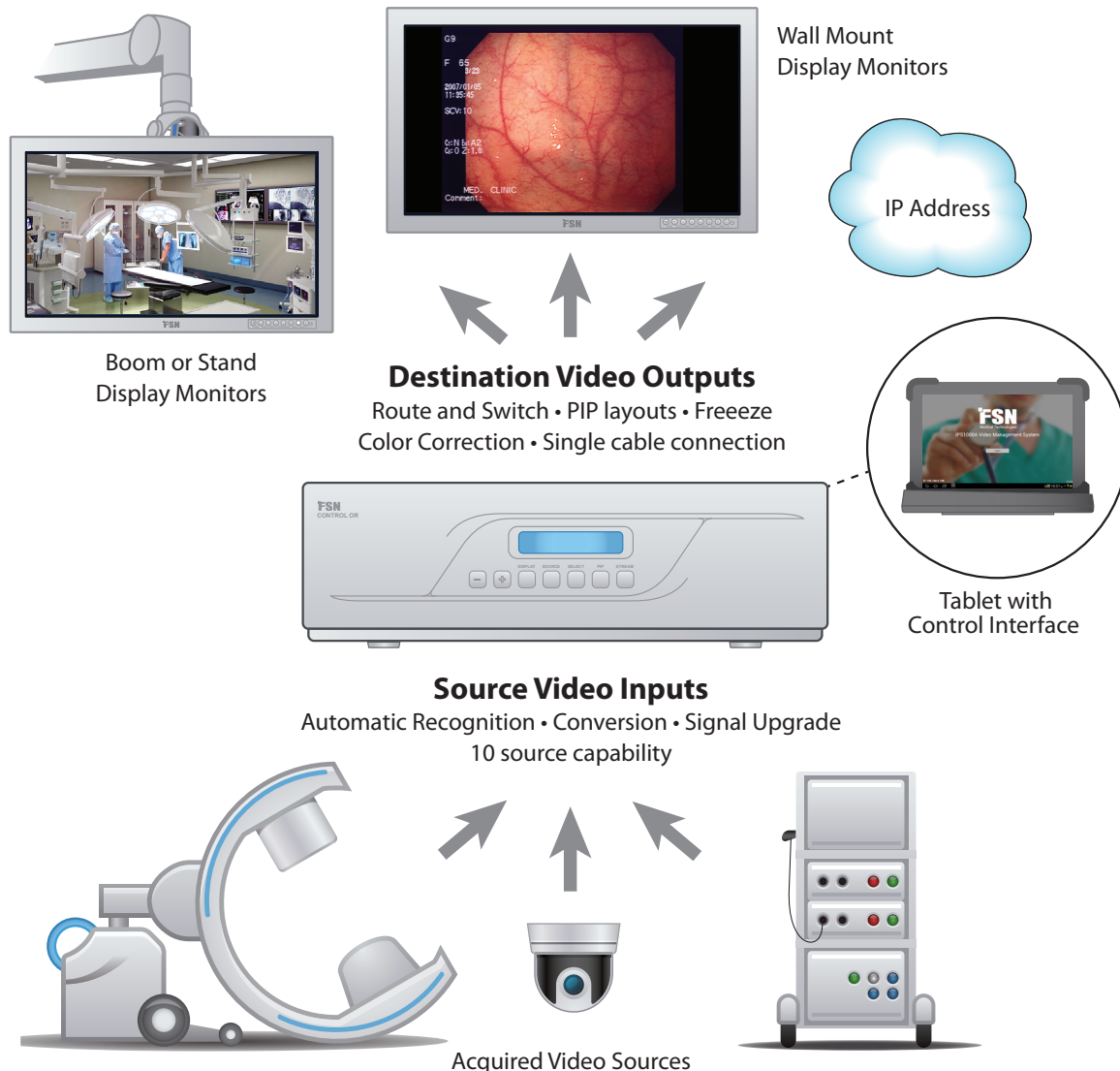## Medical Image Processing

Take control of the variety of imaging equipment that is present in today's medical environment. The ability to standardize and control video signals is essential, especially with the need to share a common video display system. Control OR can scale, format, and split video signals based upon what is needed. The system features 10 input and 5 output capability.

Key Features

- Simultaneous distribution of signal sources to one or more displays
- Input/output connections using analog, digital and fiber standards
- Picture-in-picture, picture-by-picture, picture-on-picture capabilities
- Configure video distribution via touch screen tablet interface
- Upgrades and maintains signal integrity

Harness the power of Control OR, wirelessly, throughout the operating room, by using the intuitive interface on FSN's touch screen tablet. A secure docking station is available to hold and charge the tablet.

Wall Mount
Display Monitors

IP Address

Boom or Stand
Display Monitors

Destination Video Outputs
Route and Switch • PIP layouts • Freeeze
Color Correction • Single cable connection

Tablet with
Control Interface

Source Video Inputs
Automatic Recognition • Conversion • Signal Upgrade
10 source capability

Acquired Video Sources

WIS1001

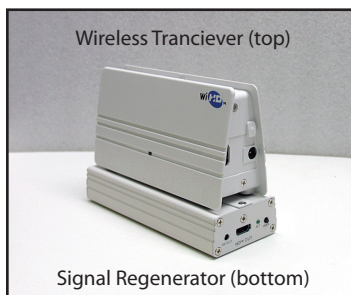## Signal Conditioner and Scaler for Wireless Transmission

The WIS1001 is a signal conditioner and scaler for single link DVI to HDMI conversion. It shapes and synchronizes a video signal, up or down, in order to make the signal compatible with wireless transmission. The WIS1001 is designed primarily to be used with FSN's WIS1000 wireless transceiver system.

In applications where there are mismatched resolutions, it helps establish a solid wireless connection between endoscopic cameras or other medical video equipment, and medical display monitors. WIS1001 can automatically establish a common resolution between different video sources and displays. This is especially useful when multiple components and signal types are used as sources in a wireless video setup.

- Scales a video signal, up or down, for optimum wireless transmission
- Mounts as a base to WIS1000 wireless transceivers
- Supports high quality 1080p video
- Optional VESA mount bracket

Wireless Tranciever (top)

Signal Regenerator (bottom)

The WIS1001 is designed to be used with, and easily connected to, FSN's wireless WIS1000 product.

Conditions and standardizes video signals for wireless communication!

Proprietary Signal Timing

Wireless Compatible Timing
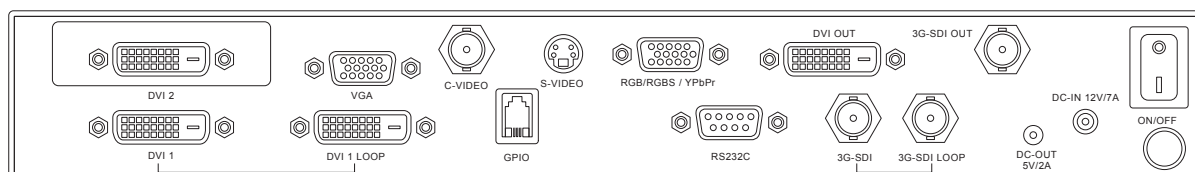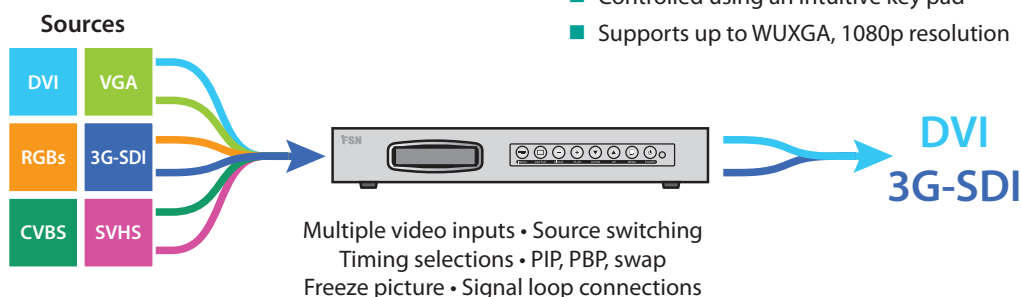
WIS1001 Signal Conditioner
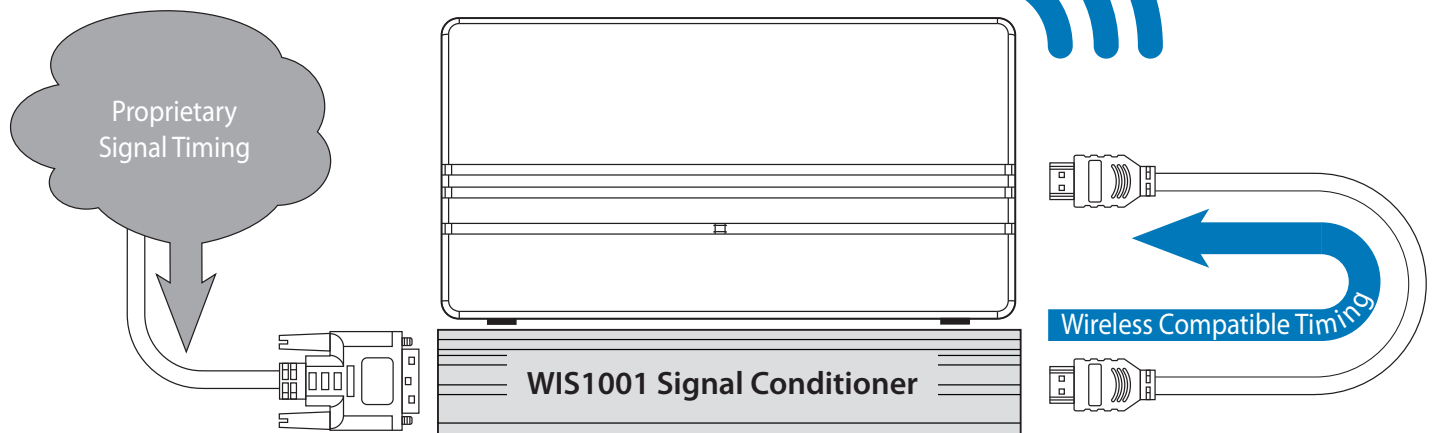
IPS500A

Universal Converter

Video Distribution and Control

IPS500A is an advanced video processor and converter. It is designed to handle source selection, advanced windowing features, picture-in-picture, and signal switching. IPS500A maintains video picture quality and standardizes the appearance of images across different display devices by calculating the inherent contrast resolution of different input signals. It also provides an RS-232C command interface for user access from PC.

- Input: 1 x DVI-D, 1 x DVI-D (Fiber DVI detachable), 2 x D-SUB(VGA, Component, RGBs), 1x BNC (3G-SDI), 1 x BNC (CVBS), 1 x DIN (SVHS)
- Output: 1 x DVI-D, 1 x BNC (3G-SDI)
- Controlled using an intuitive key pad
- Supports up to WUXGA, 1080p resolution

Sources

DVI VGA
RGBs 3G-SDI
CVBS SVHS

DVI
3G-SDI

Multiple video inputs • Source switching
Timing selections • PIP, PBP, swap
Freeze picture • Signal loop connections

DVI 2   VGA   C-VIDEO   S-VIDEO   RGB/RGBS / YPbPr   DVI OUT   3G-SDI OUT   DC-IN 12V/7A

DVI 1   DVI 1 LOOP   GPIO   RS232C   3G-SDI   3G-SDI LOOP   DC-OUT 5V/2A   ON/OFF

General Features

Item	Description
Input Signal	1 x DVI-D 1 x DVI-D (Fiber DVI detatchable) 2 x D-SUB (VGA, Component, RGBs) 1 x BNC (3G-SDI) 1 x BNC (CVBS) 1 x DIN (SVHS)
Output Signal	1 x DVI-D, 1 x BNC (3G-SDI)
Control Key	8 button (input, output, minus, plus, down, up, menu, power)
LCD Display Language	English
Power Supply In	AC/DC Adaptor (AC 100~240V, DC 12V 7A)
Power Out	DC 5V / 1A
External Control	RS-232C
Unit Dimension	305(W) x 51.3(H) x 250(D) mm 12(W) x 2.02(H) x 9.84(D) inch
GPIO port	3 Function: - Primary / Secondary Screen Swap - PIP / PBP1 / PBP2 Select, - Record indicator

I/O Characteristics

Signal	Type	SignalName	Supported Resolution	Application
Signal Input	VIDEO (BNC, DIN)	CVBS x 1	NTSC / PAL/SECAM	
		SVHS(Y/C) x 1		
	VGA, RGB (DSUB15)	VGA	Up to 1920 x 1200 / 60Hz	
		Analog RGBHV	-	
		Analog RGBs	-	
		Component (Y,Pb,Pr)	Up to 1920 x 1080 / 60Hz	
	DIGITAL 1,2 (DVI-D)	Digital DVI-D x 1	Up to 1920 x 1200 / 60Hz	
		Digital DVI-D(Fiber DVI detachable) x 1	-	
	3G-SDI (BNC)	3G SDI x 1	1080p	SMPTE-424M
			720p / 1080i	SMPTE-292M
			480i / 576i	SMPTE-259M
Signal Output	DIGITAL (DVI-D)	Digital DVI-D x 2	Up to 1920 x 1200 / 60Hz	
	3G-SDI (BNC)	3G SDI x 1 SDI BYPASS	1080p	SMPTE-424M
			720p / 1080i	SMPTE-292M
			480i / 576i	SMPTE-259M

IPS700A

HD Medical Video Recording System

The IPS700A is easy to operate, is HIPAA compliant, and supports several methods for storing video content for later playback.

Image Capture
- Captures images in full HD
- Auto-formats to the input source resolution
- Utilizes uncompressed BMP, lossless JPEG or DICOM format
- Capture is triggered by the source device or a foot pedal switch

Recording
- Records video in full HD
- Advanced video coding / H.264 compression
- Pulse code modulated audio
- Recording is triggered by the source device or a foot pedal switch

Storage and Backup
- 1 terabyte internal HDD receives recorded/captured image files
- Backup files can be copied to CD, DVD, Blu-ray, USB memory stick, or FTP server

Input Connections
- DVI, RGB, SVHS and composite inputs are available
- Features a mini stereo jack for audio input

Output: Monitor and Playback
- Monitor out connection displays real-time recording and capture images
- DVI, RGB, SVHS and composite outputs are available
- View playback of images that have been recorded/captured to the HDD

Setup and Controls
- Configure through RS232C or LAN
- Optional equipment: Configure via a tablet interface using Wi-Fi or USB (Android Open Accessory) connection

Input Sources
- VGA
- DVI-D,
- CVBS
- S-Video
- Audio

Output to Playback Monitor
- VGA
- DVI-D
- CVBS
- Audio

Output to Backup Devices
- CD
- DVD
- Blu-ray
- USB
- FTP Server

Setup and Recording Control
- PC
- Tablet

Recording Control
- Source
- Foot Pedal

Wireless Transmitter and Reciever

Hard-wired video connections in the OR may not be best for all applications. With FSN's wireless system, video carts or stands can be completely mobile, allowing for flexible equipment layouts. Fewer wires on the OR floor can help eliminate tripping hazards. Without the need to connect and disconnect wires from equipment, turn-around time in the OR is fast and efficient.
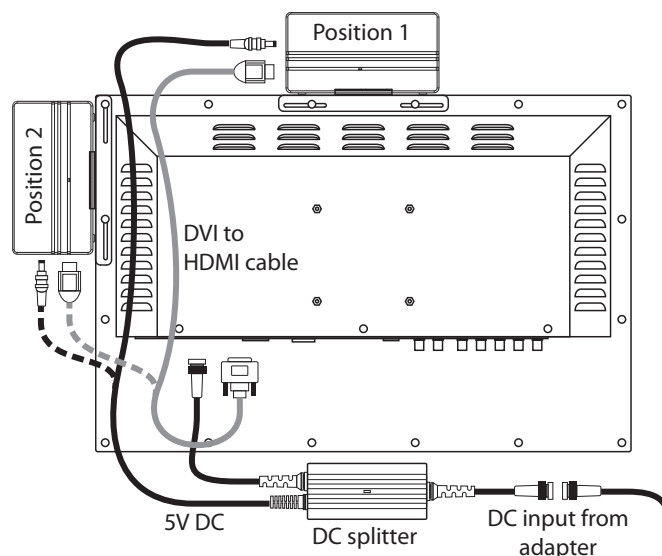
Key Features

- HD video transmission without compression
- Zero latency, video image does not lag or stall
- Signal is encrypted and bonds 1-to-1, no crosstalk
- Range is designed to stay within one room
- FDA 510k clearance

Eliminate cumbersome cross-room cables or wires!

Wireless A/V Signal

Transmitter

Receiver

Signal Source

Display Destination
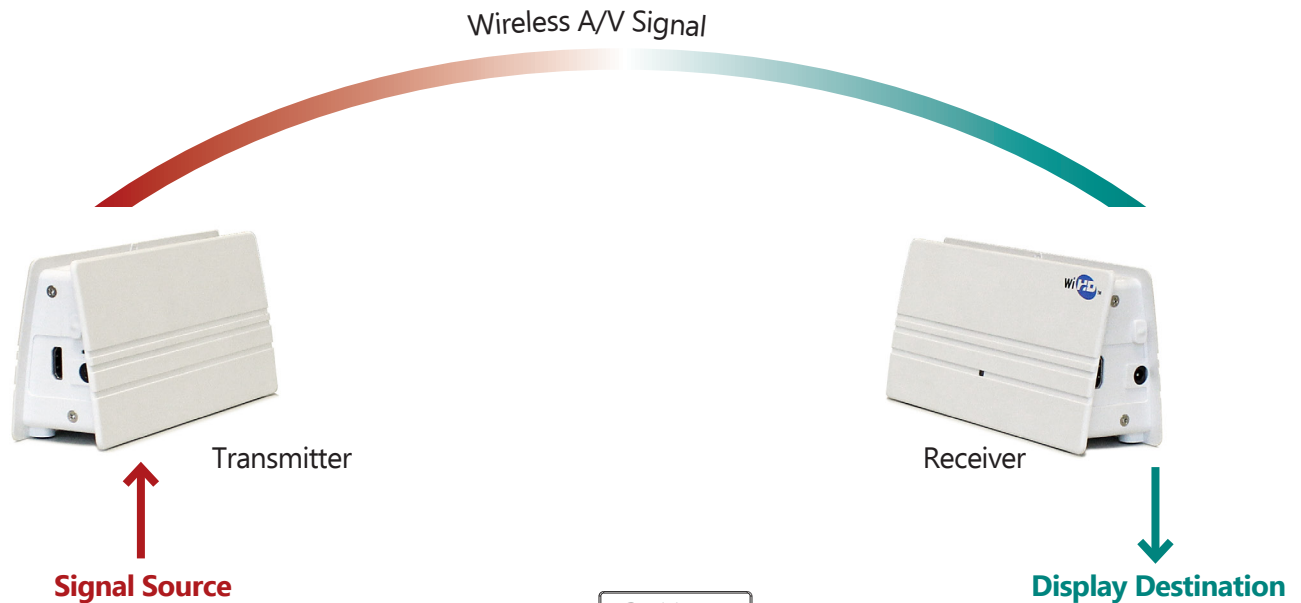
Units can mount to the top or sides of a display monitor.

Position 2

Position 1

DVI to HDMI cable

5V DC

DC splitter

DC input from adapter

Use Power from the Display

The DC Splitter is a convenient way to further reduce cords and wires from a video display system. It uses power from a monitor's cord and connects to the WIS1000 wireless unit.