WIS1000 Wireless Imaging System

Setup Guide

Before connecting, operating or adjusting this product, please read this instruction booklet carefully and completely.
Introduction

The WIS1000 transmitter and receiver system sends a wireless high quality audio and video signal (up to 1080p/60hz) anywhere within a typical medical operating room. The transmitter is designed to be connected to a video source, such as an endoscopic camera, and the receiver is designed to be connected to a video display monitor.

A properly configured WIS1000 transmitter/receiver set forms a one to one bond with each other, eliminating crosstalk with other wireless devices. Up to six pairs of WIS1000 transmitters/receivers can be used simultaneously within the same room. Each pair will operate at a different frequency within the 60Ghz band. WIS1000 is designed to be unaffected by cell phones, RFID, wireless 802.11 b/g/n. The 60Ghz operating frequency cannot pass through walls and will perform within a 10m radius.

A properly operating wireless system
Package Contents

The transmitter and receiver units look very similar. See the product label to identify the Tx (transmitter) and Rx (receiver) units.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Standard Pack Qty</th>
<th>DC Splitter Pack Qty</th>
<th>WIS1001 Pack Qty</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Wireless HD transmitter (WIS1000 Tx) unit</td>
<td>1</td>
<td></td>
<td></td>
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<tr>
<td>2</td>
<td>Wireless HD receiver (WIS1000 Rx) unit</td>
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<td>3</td>
<td>User Guide</td>
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<tr>
<td>4</td>
<td>HDMI to DVI-D cables</td>
<td>2</td>
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</tr>
<tr>
<td>5</td>
<td>Medical grade power cord</td>
<td>2</td>
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<tr>
<td>6</td>
<td>Medical power adaptor (5V/2A)</td>
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<td></td>
</tr>
<tr>
<td>7</td>
<td>1x Bracket (Standard type for installing) and screw</td>
<td>1</td>
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<td></td>
</tr>
<tr>
<td>8</td>
<td>Bracket (Medical type for installing) and screw</td>
<td>1</td>
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<tr>
<td>9</td>
<td>DC splitter</td>
<td>1</td>
<td></td>
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<tr>
<td>10</td>
<td>DVI to HDMI signal converter/scaler (WIS1001)</td>
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<td>HDMI to HDMI cable</td>
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<td>12</td>
<td>Cable guides and extra screws</td>
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<td>13</td>
<td>Power cable for WIS1001</td>
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</tr>
</tbody>
</table>

1. Verify that you received all components of your respective package.
2. Inspect each component and verify that none of the components have been tampered with in any way.
Plan the Installation

Identify the signal source to wireless transmit (example A).

Determine the location of the WIS1000 transmitter (Tx) unit (example B).

Find a suitable power source for the transmitter.

Identify the destination to receive the wireless signal (example C).

Determine the location of the WIS1000 receiver (Rx) unit (example D).

Find a suitable power source for the receiver.

The transmitter and receiver units can stand alone on a flat surface, or use various brackets to mount onto other objects such as a display monitor. It is recommended to verify that the wireless system is operating properly before mounting the Tx or Rx units permanently. See the WIS1000 user guide for complete mounting instructions.

For best installation results:
- The Tx and Rx should face each other.
- The Tx and Rx should be no more than 10 meters (33 ft.) apart.
- The Tx and Rx should be between 1.8-3 meters (6-10 ft.) above the floor.
- The Tx and Rx should not be in a confined location.
Step 1: Connect the Source to the Transmitter Unit (Tx)

Connect a source output to the WIS1000 Tx (transmitter) using a DVI to HDMI cable. For non-standard source signals, use the WIS1001 scaler/converter between the source and the Tx.

Step 2: Add the WIS1001 Scaler/Converter to the Transmitter

Helps non-standard video signals become wireless compatible

Some medical device manufacturers prefer not to use the normal standardized video timings for HD image resolutions. If this is the case with your intended video source, then the WIS1000 system will be unable to successfully transmit a video signal. In this situation, the WIS1001 scaler/converter can be used to regulate the signal from the source into a standardized video signal that the WIS1000 system can understand.

The WIS1001 couples together and sits below a WIS1000 wireless Tx unit.
Use the patch cables (included) to bring power and the HDMI signal from WIS1001 to the wireless Tx unit.

After the complete system, including Rx and display monitor, is connected, press here to cycle through the output modes generated by WIS1001.

Connect a source's output to the DVI in port on WIS1001.

Connect the power cord into an available electrical outlet, and to the DC in port on WIS1001. As with the Rx and Tx units, the DC Splitter accessory can be used to obtain power from an FSN medical display monitor.

Pressing the mode button, and waiting approx. 8 seconds, will temporarily display the following dialog on the monitor:

- **Input signal type.**
- **Converted output signal type.** Pressing the mode button again will move to the next output type, and loop through all modes.

**Step 3: Connect the Receiver Unit (Rx) to a Destination**

Connect the WIS1000 Rx (receiver) to a destination using an HDMI to DVI cable.

Connect to destination DVI input.
Step 4: Powering the Transmitter and Receiver Units

Connect the power cord/adapter into an available electrical outlet, and connect the power cord to the DC in port on WIS1000 TX and Rx.

Optional Accessory: WIS1000 DC Splitter
An alternate power method for wireless RX or Tx units

There are times in the operating room when finding enough power outlets is an issue. In order to minimize the amount of power outlets used by the WIS1000 pair, the DC Splitter option can be used to draw power from the monitor cable and send it to the WIS1000 receiver. This DC Splitter will work only with FSN Medical Technologies display monitors, and has been tested to have no effect on the performance of either the display or the WIS1000 receiver.

Step 5: Sync and Begin Wireless Transmission

Turn on power to the source, Tx, Rx, and destination. The green indicator light on each WIS1000 unit will flash as syncing is taking place. When the green light is solid, the Tx and Rx have successfully paired and a signal should be transmitting. To re-sync a connection between Tx and Rx, push and holding down the “Pinhole Switch” button for 4-5 seconds or until the LED flashes. Be sure to select the appropriate DVI input mode on the destination display monitor.
Troubleshooting

Green indicator light - fast flashing . . . . . Searching to sync the Tx and Rx pair
Green indicator light - slow flashing . . . . . Idle - Tx and Rx are not synced or searching
Green indicator light - on continuous . . . . . Tx and Rx are synced together

If all connections are in place and still the system is not syncing, turn the Tx and Rx power off, wait 15 seconds, then turn both units on again. Also, refer to Step 2 and double check if the WIS1001 Scaler/Converter is outputting a mode that is compatible with your display monitor by pressing the mode button.