

Frequently Asked Questions about Wireless USB Technology and Certified Wireless USB Products

### **Technology Specific**

### Q. What is Wireless USB?

Certified Wireless USB from the USB-IF is based on WiMedia's Ultra-Wideband (UWB) radio platform, enabling products from the PC, CE, and mobile industries to connect using a common interface at up to 480Mbps. This technology was created by the Wireless USB Promoter Group-Agere Systems; Hewlett Packard, Intel, Microsoft, NEC Electronics, Philips, and Samsung-aided by over 100 contributing companies. This new wireless extension of USB combines the speed and security of wired technology with the ease-of-use of wireless technology. Certified Wireless USB ensures consumers have an easy, secure way to connect their home, office and mobile devices without a cable-without sacrificing speed. –USB-IF.org

### Q. What is Ultra-Wideband (UWB) technology?

FCC defines UWB as a radio transmission with a spectrum that occupies more than 20 percent of the center frequency, or a minimum of 500 MHz while adhering to certain output power limits. UWB technology offers flexibility, robustness, and good ranging capabilities, making it well suited for applications that need a high data rate over a short transmission range.

### Q. How far can UWB signal be transmitted?

Because the goal of UWB is to transmit higher bandwidth signals at low power output, the range is not meant to surpass what is called a Wireless Personal Area Network (WPAN), and general maximum distance for transmission is 30 feet or 10 meters.

### Q. What is a WPAN?

Wireless Personal Area Network or WPAN can be defined as any area around you, typically within a range under 10 meters, where you plan on using personal devices and peripherals and have them communicate with one another, wirelessly. Such benefits include file transferring and streaming video without the needs of wires/cables.

# Q. Are there any signal interference of UWB and other wireless technologies?

UWB operates at a low power frequency range of 3.1GHz to 10.6 GHz. This is out of the range of all other wireless technologies (802.11g and 802.11g), and devices such as microwaves ovens and cordless phones that typically operate in the 2.4GHz range. One of the main goals of UWB is to allow streaming video wirelessly, and in order for that to be successful, it needs its own spectrum to operate and alleviate interference. If WPAN were to use a wireless technology that operated in the 2.4GHz range, there would be limited space to send signals without interference. There are no signal

interference challenges with using UWB technology which makes it a premier choice for WPANs.

#### Q. What is the maximum bandwidth that Wireless USB transmits?

Wireless USB product will transmit up to 480Mbps within a 10 foot range, which is the High Speed USB 2.0 data rate. After approximately 10 feet, the Wireless USB will transmit at 110Mbps.

#### Q. Will Wireless USB signal be able to go through walls?

No. Wireless USB sends out delicate information, and it is important that a clear line of sight is available for the signal to travel. Large objects and walls will interfere with the transmitted signal.

## Q. So, I don't have to use cables anywhere when using a wireless USB device?

There will be a need for USB cables when installing the hardware to a PC. Also, when using the devices such as the TruLink Wireless USB to VGA Kit, wires are needed to connect the Wireless VGA Device Adapter to a display or projector.

# Q. I saw the acronyms HWA and DWA in correlation to Wireless USB. What do they stand for?

If you see these two acronyms thrown around, they are references to the Wireless hardware. HWA stands for **Host Wireless Adapter**, which will be the Wireless USB Adapter that will connect to your laptop or PC to send the signal. DWA stands for **Device Wireless Adapter**. The Device Wireless Adapter can be the Wireless USB Hub Adapter or the Wireless VGA Device Adapter.

### **Product Specific**

## Q. How many users (hosts) can use a single Wireless VGA adapter or the Wireless USB Hub?

The Wireless VGA Device Adapter or Wireless USB Hub can accept up to six different hosts. If a seventh host tries to associate with the VGA adapter or USB Adapter, the first host will be replaced, and so on.

### Q. How can I tell what host number I am?

The host selection indicator is located on the Wireless VGA Adapter, and will let you know what host is selected.

Q. How many people can use a Wireless USB Device Adapter at one time? Only one person can use the Wireless USB Device Adapter at once. In order for a second user to utilize, the first user must first disconnect from the Wireless USB Device Adapter.

### Q. Do I have to associate the Wireless USB Host Adapter and Device Adapter (i.e. USB to VGA Kit or USB Hub Kit) out of the box?

No, the Wireless USB Host Adapter and VGA Device Adapter/USB Hub Adapter are pre-associated so all you need to do is install the software and you are ready to use.

# Q. Can I use the Wireless USB Hub and the Wireless USB to VGA at the same time?

Yes. The robustness of the technology allows you to be able to use the Wireless USB Hub and the Wireless VGA Adapter at the same time with one Wireless USB Host Adapter.

### Q. If I needed to, can I use the Wireless USB products with a cable?

Yes. Our Wireless USB products will come with a selection button feature that will allow you to either use the Wireless USB wirelessly or with a cable ("Wired Mode") if needed.