

# Switched Digital Video Tuning Adapter FAQ

## **What is switched digital video (SDV) technology and why is it necessary?**

SDV technology expands the range of a cable operator's services by enabling a cable operator to deliver a single TV channel to an individual subscriber as needed, rather than transmitting all channels all the time. This new technology will enable cable operators to add a virtually unlimited number of new services, including video services for niche audiences. These services will include both HD and SD programming. SDV technology enables the cable operator to offer subscribers the widest selection of programming available.

## **Will the Subscriber Need Additional Equipment to Receive Switched Digital?**

Subscribers with a set-top box provided by the cable operator or with <tru2way><sup>TM</sup> products purchased at retail will need nothing new, because those products can already support SDV. Subscribers with unidirectional digital cable products (UDCPs) or OpenCable Unidirectional Receivers (OCURs) will need a tuning adaptor to access SDV services.

The SDV service by its very nature requires bidirectional communication with the subscriber. The SDV server needs to receive channel requests by the subscriber and fulfill those requests on an as needed basis. This requires a two-way transmitter/receiver in the home.

UDCPs and OCURs were by definition designed to be unidirectional – lacking the necessary circuitry to transmit back into the cable system. Therefore, an external adaptor is needed to add the necessary two-way circuitry to those products.

The other option for retail products, available to all consumer electronics manufacturers is to build a fully capable <tru2way> device. Devices built with <tru2way> will ensure subscribers can receive today's SDV cable services as well as other innovative interactive services. More information can be found here: <http://www.opencable.com/>

## **How many cable subscribers may need a Tuning Adapter?**

Subscribers with a set-top box provided by the cable operator or with <tru2way> products purchased at retail will not need a tuning adaptor. The Tuning Adapter is designed only for the limited number of subscribers who are using CableCARDS in UDCPs or OCURs in areas where switched digital technology is being used. As of March 19, 2008, there were only 347,000 CableCARDS in use with UDCPs or OCURs out of a total of more than 64 million cable subscribers. Source: <http://www.ncta.com/DocumentBinary.aspx?id=717>

## **How does a subscriber know if a Tuning Adapter is needed? The subscriber should ask two questions:**

- Is he or she using or planning to use a unidirectional digital cable product with a CableCARD?
- Has the brand/model of the UDCP or OCUR been identified [here](#) as tested for compliance with the Tuning Adapter specifications?

If you answer yes to both questions above, the subscriber should contact his or her local cable operator to learn if Tuning Adapters are necessary in the area. Tuning Adapters are only necessary in areas where switched digital technology is deployed. Please note that a Tuning Adapter is designed to receive SDV services, but does not work for other interactive services like Video on Demand. These are tuned with cable operator supplied set-top boxes or <tru2way> products purchased at retail.

### **Where can a cable subscriber get a Tuning Adapter?**

Tuning Adapters are provided by your cable service provider. They are designed to work specifically with the cable plant architecture of a single system in a particular area and are not available at retail. The Tuning Adapter works in conjunction with specially designed UDCPs that communicate with the Tuning Adapter.

### **When will Tuning Adapters be available in particular areas?**

Tuning adapters and UDCPs will be tested at CableLabs for compliance with the specifications and for interoperability. Once particular UDCPs have passed verification testing, operators will make adapters available on request to customers using those UDCPs.

### **How much will the Tuning Adapter cost?**

Each local cable operator will determine any installation costs or monthly fees associated with the Tuning Adapter.

### **If the CableCARDS are already two-way capable, why is the Tuning Adapter required?**

It is only possible for a CableCARD to provide two-way services when plugged into a two-way capable product. STBs provided by a cable operator and <tru2way> products sold at retail are already two-way capable. UDCPs do not include the reverse transmitters needed for two-way functionality, therefore they need an external adapter even when the same CableCARD is used.

### **What current digital cable ready products are compatible with the Tuning Adapter?**

CableLabs will maintain a list of all UDCPs that have been tested for compliance with the TRIF extension specifications. That list will be available here:

[http://www.cablelabs.com/udcp/downloads/OC\\_PNP.pdf](http://www.cablelabs.com/udcp/downloads/OC_PNP.pdf)

### **What are products called that implement the Tuning Resolver Interface (TRIF) specification?**

There are two types of products that implement the interface specification:

1. The external module provided by the cable operator is called a "Tuning Adapter"
2. Unidirectional Digital Cable Products that are enabled to support the Tuning Adapter are simply called Unidirectional Digital Cable Products (UDCPs). CableLabs will post a list of models that are compliant with the optional TRIF extension [here](#).

### **Does the Tuning Adapter work with any unidirectional digital cable ready product (UDCP)?**

No. The support for the TRIF specification and the Tuning Adapters is strictly optional for UDCP manufacturers. The Tuning Adapter only works with products from manufacturers who have implemented the TRIF extension specification in their

product design and have passed verification testing by CableLabs. Products that meet those requirements will be identified [here](#).

**Can existing DTVs, STBs or OCURs be upgraded to support the Tuning Adapter?**

Existing one-way products that already include an USB port may be able to be upgraded by the manufacturer to support the Tuning Adapter. Some manufacturers have announced plans for such upgrades. For more information, check with the manufacturer of your unidirectional digital cable product.

**When will digital cable ready products be available that support the Tuning Adapter?**

New products may be designed to work with the Tuning Adaptor or existing products that can support the USB interface and some form of firmware update may be provided to support the Tuning Adaptor. Each manufacturer will determine its own delivery and product availability schedules.

**Are two Tuning Adapters needed when using a dual-tuner DVR?**

No. One Tuning Adapter is designed to work with at least two tuners simultaneously, provided the dual-tuner DVR meets the UDCP requirements and supports the TRIF specifications and is listed [here](#).

**Will the Tuning Adapter work with a Vista PC that is equipped with a digital cable tuner?**

The TRIF specification is designed so that it can also work with a Vista PC that is equipped with a digital cable tuner (see also CableLabs OCUR Specification for enabling digital cable services on Vista class PCs). However timing for the development, availability and support of compatible products depends upon the PC and OCUR manufacturer schedules, as well as necessary upgrades provided by Microsoft.

**Where can a list of products that are compatible with the Tuning Adapter be found?**

[http://www.cablelabs.com/udcp/downloads/OC\\_PNP.pdf](http://www.cablelabs.com/udcp/downloads/OC_PNP.pdf)