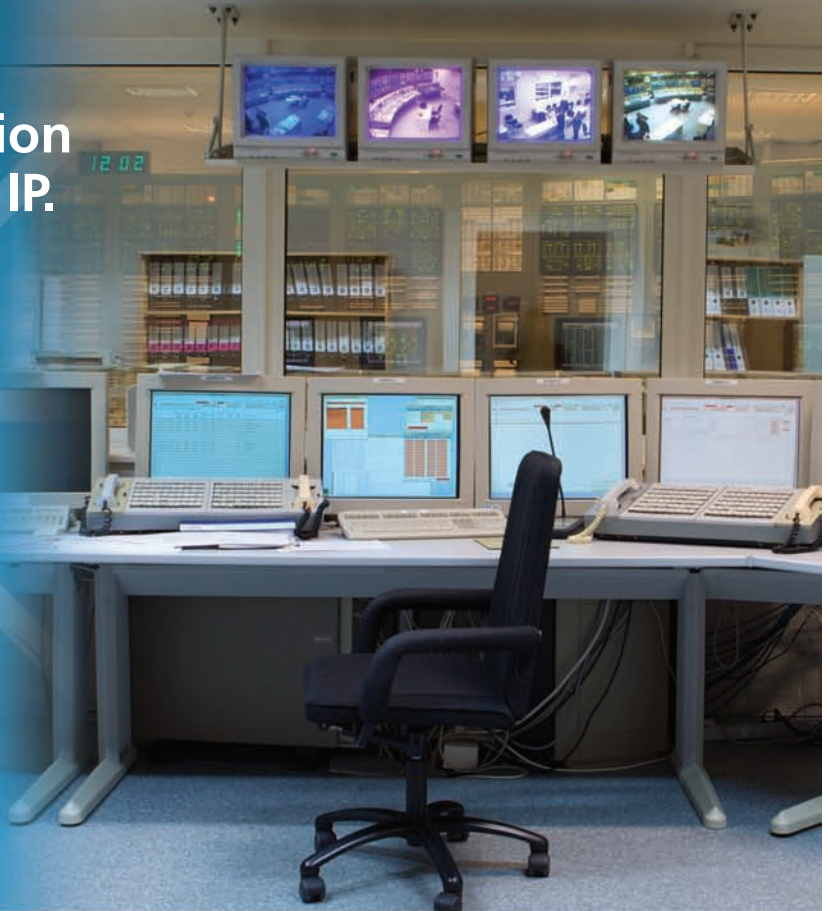




ServSwitch™ Agility

## Digital KVM extension and switching over IP.

Leverage new or existing  
IP networks to extend or  
switch KVM, HD video,  
USB, and audio signals.



# Go farther, do more with digital KVM extension and switching over IP.



*ServSwitch Agility Single-Head DVI (ACR1000A-T)*



*ServSwitch Agility Dual-Head DVI Transmitter (ACR1002A-T)*



*ServSwitch Agility Controller (ACR1000A-CTL)*

## Features

- Scalable system that will grow with your network as needed.
- Flexible topology for HD video, audio, USB, and KVM extension and switching.
- Delivers perfect digital video over single-head or dual-head transmitters and receivers, with resolutions up to 2560 x 1600.
- No-loss compression minimizes bandwidth use while maximizing the user experience. Great for command and control applications.
- Fast switching times—less than one second.
- Configure your network to suit your needs: point-to-point extension, KVM switching, single-target sharing, or multicasting.
- Enables selective switching of DVI, USB, and audio channels.
- Features keyboard/mouse emulation and virtual transparency for other standard human interface devices (HIDs), such as touchscreens or flash drives.
- Fanless design ensures silent operation.

ServSwitch Agility with DVI, USB, and Audio over IP Extenders enable you to do more and go farther with perfect digital video over nearly unlimited distances.

Standard CATx cabling delivers IP traffic up to 328 feet (100 m). For longer distances, add network switches.

The flexible topology of the ServSwitch Agility gives you extension option applications including point-to-point extension, a matrix switching network, multicasting, and single target sharing.

Because it is a useful tool for multicasting video over an IP network, it is ideal for banking, healthcare, education, and corporate applications where you need to share video content with distant users.

## Configurations

- Point-to-point: Use Agility as a point-to-point KVM extender over CATx cable. Extends DVI video, audio, and USB, as well as KVM signals, 330 feet (100 m). With Ethernet switches, users can go longer distances.
- Use the scalability to create a matrix switching network, adding users by adding the number of receivers connected to the network.

- With single-target sharing, multiple users can share a single remote computers. Users connect in view-only mode, share mode, or exclusive mode.
- Agility enables multicasting, sending audio and video content over an IP network from one computer to several receivers. With an IGMP snooping-enabled network switch, the network will not be slowed down because the video will only be broadcast to the appropriate ports.
- Dual-head and dual-link video options are supported. With dual-link Agility, supported DVI resolutions are 2560 x 1600.
- All the Agility units deliver a high-performance user experience. Built-in video encoding technology delivers the best picture available and minimizes bandwidth usage to process full-screen moving video in real time.
- The Agility with VNC Server (ACR1012A) even enables remote out-of-band access over the Internet through a VNC port. This unit also supports redundant link and/or bandwidth aggregation.
- Control room setups and similar applications require multiple graphics heads to be switched simultaneously. The Agility enables synchronous channel switching of multiple video sources.

## Management System

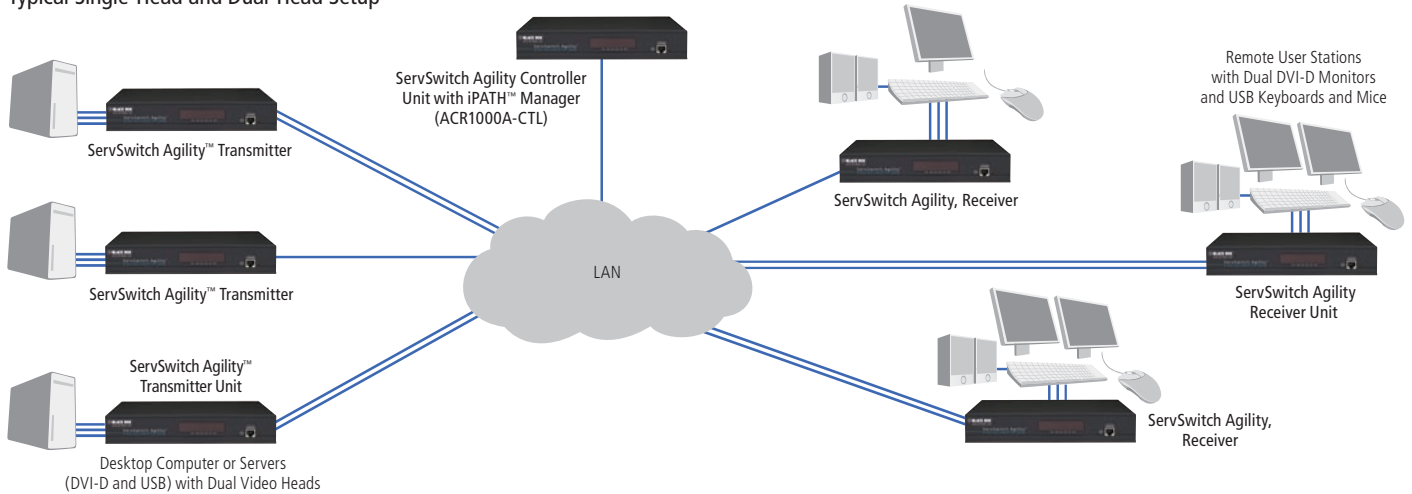
The ServSwitch Agility Controller (ACR1000A-CTL) offers a plug-and-play, single box management suite, iPATH™. It enables remote, secure configuration of all the transmitter and receiver units via a standard Web browser. Define new content channels, restrict and enable access privileges, disable specific USB device classes, and so on whenever you decide to configure a ServSwitch Agility switching system (ACR1000A-CTL is not needed for point-to-point extensions). The iPATH interface features a useful on-screen dashboard that gives you a current overview of the system. It is continually refreshed so you always have the most up-to-date system information. The configuration of the various channels becomes incredibly simple.

# ServSwitch Agility

## Applications:

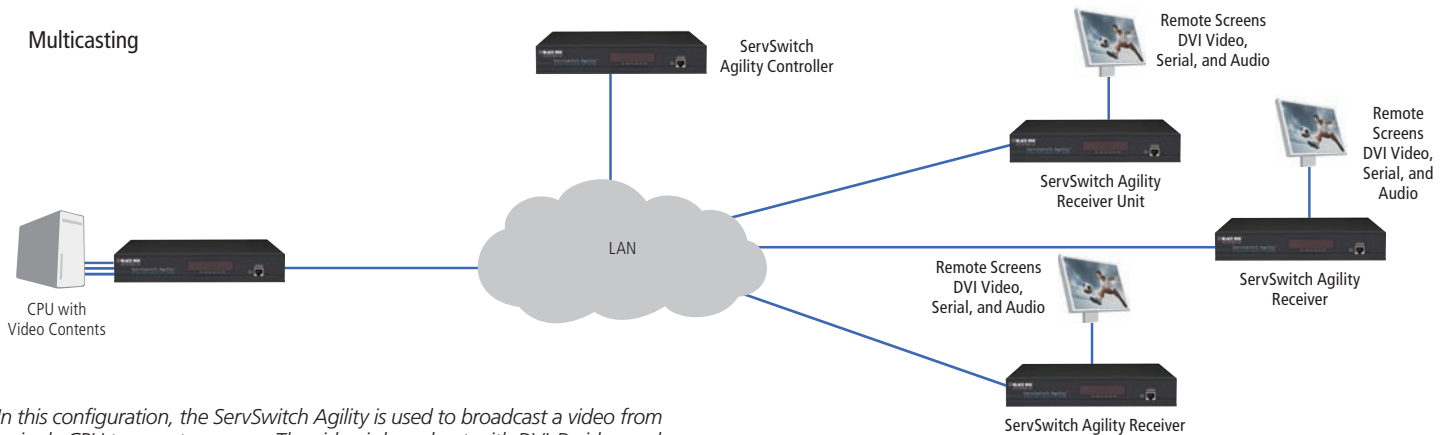
- Distribute high-quality medical images to staff across large medical facilities. ServSwitch Agility uses standard Ethernet equipment, so the networking hardware doesn't need to be updated.
- In command and control room setups, multicast video and data to receiver units between LCD display walls.
- Media post-production suites become collaborative. Machine rooms store the media assets and hardware, and can distribute them throughout a post-production facility.
- Get real flexibility for your digital signage network. All you need is an IP network in the installation, and you can easily deliver content from one playout device via DVI.
- Also for digital signage, use the ServSwitch Agility to switch between multiple video sources.
- Deliver rich media experiences in public spaces, such as museums or libraries. The flexibility of the system makes reconfiguring your implementation a snap.

### Typical Single-Head and Dual-Head Setup



In this setup, the ServSwitch Agility works like a KVM-over-IP switch and enables users to access the network over the local area network (LAN).

### Multicasting



In this configuration, the ServSwitch Agility is used to broadcast a video from a single CPU to remote screens. The video is broadcast with DVI-D video and audio, and it shows how the ServSwitch Agility works in a digital signage setup.

### ServSwitch Agility

Single-Head Kit	<a href="#">ACR1000A</a>
Single-Head Transmitter	<a href="#">ACR1000A-T</a>
Single-Head Receiver	<a href="#">ACR1000A-R</a>
Dual-Head Transmitter	<a href="#">ACR1002A-T</a>
Dual-Head Receiver	<a href="#">ACR1002A-R</a>
ServSwitch Agility Controller Unit	<a href="#">ACR1000A-CTL</a>

For full features and specs, go to [blackbox.com](http://blackbox.com).  
For pricing details, call 724-746-5500

# ServSwitch Agility

## Broadcasting

Media post-production suites become collaborative with the Agility. Machine rooms store the media assets and hardware, and can distribute them throughout a post-production facility. Multiple producers can instantly communicate with animators and colorists.



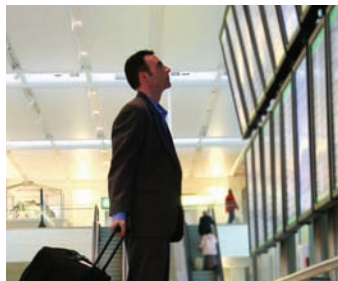
**Case Study:** A large TV broadcaster was looking for a switching solution to optimize its playout process.

All source computers are housed in a central computer room. Fifty users (directors and assistants) in multiple control rooms need to access about 80 computers. Special attention had to be put on making sure switching between the computers is very fast. Plus, the work requires a high degree of concentration, so the solution needed to work very quietly.

The customer chose the ServSwitch Agility because of its outstanding, fast switching times. Using a TCP/IP network, the Agility units connect the users within the various control rooms to the remote computers without loss in video quality. The Agility system has the flexibility to be adapted to future changes. The customer was particularly pleased as the Agility system turned out to be a very cost-effective solution in comparison to other systems.

## Digital Signage

Deliver rich media experiences in public spaces, such as museums or libraries, and get real flexibility for a digital signage network. With an IP network running through the installation, users can easily deliver content from one playout device via DVI to any number of screens. Or, use the Agility to switch between multiple video sources.



**Case Study:** A well-known advertising agency required a method of moving live video from a server in a data cabinet to a 103" screen in a large train station. The screen resolution was full high definition (1920 x 1080p), and the videos were advertisements that needed to be displayed clearly and concisely, and without interference.

The Black Box Agility was chosen as the reliable method for transporting high-resolution video across the train station to the large screen. The Agility didn't introduce any loss and transported the original video faithfully. Even on the large display, there were no signs of artifacts or anomalies.

## Courtrooms

In a multiple-building application, the ServSwitch Agility can broadcast images in real time, as well as provide the images for recording. This helps in a setting where information needs to be available for review on short notice.



**Case Study:** A court in a Florida city was looking for a control solution for its court session recording system. Data from five courthouses within a 22-mile (36-km) radius needed to be documented and recorded on DVR systems mounted in several cabinets within the control room.

The court chose the Agility system to connect the remote courtrooms to the central recording system. In all, 45 Agility transmitters send video, audio, and microphone signals back to the control room. Ten supervisors have Agility receivers being fed into a ServSwitch 4site and ServSwitch Freedom. This equipment ensures not only a detailed documentation of the court sessions, but also enables each supervisor to easily navigate to each incoming audio and video feed simply by moving a mouse, and each supervisor can hear the audio from the currently selected channel.

## Healthcare

Distribute high-quality medical images to doctors and staff across large medical facilities. Agility uses standard Ethernet equipment, so networking infrastructure doesn't need to be updated.



**Case Study:** A large medical center had an urgent need for its surgeons and practitioners to be able to view high-resolution images of x-rays, photographs, and medical charts from its servers—as well as conform to patient confidentiality and data protection laws—while maintaining a completely sterile environment. But power supply fans inside PCs or servers take in air to cool down the processor, which means they are unsuitable for such an environment, as germs and dust can easily gather.

Black Box provided the solution by enabling the servers to be placed down the corridor in a secure environment, and used an Agility unit to extend the keyboard, monitor, and mouse into operating theaters, and x-ray and consulting rooms. Cleaning was now not an issue as the keyboards, displays, and mice complied with medical standards, ensuring they could be disinfected directly.