



Vidyo[™]
Personal Telepresence

TECHNICAL NOTE

Integrating Video Devices with the VidyoRoom[™] HD-100

www.vidyo.com
1.866.99.VIDYO

© 2009 Vidyo, Inc. All rights reserved. Vidyo, VidyoTechnology, VidyoConferencing, VidyoRouter, VidyoPortal, VidyoGateway, VidyoRoom, VidyoDesktop and VidyoProxy are trademarks of Vidyo, Inc. All other trademarks are the property of their respective owners. All specifications subject to change without notice, system specifics may vary.

TN_0109_SCALER_US

Integrating Video Devices with VidyoRoom

Enhancing VidyoRoom conferences with multiple media sources

You know the value of high quality, real-time visual communication to your organization. Being able to increase face time with co-workers, customers and vendors without the expense and inconvenience of travel is huge. That's why you've chosen Vidyo's personal telepresence solution in the first place. But did you know that you can easily extend your visual communication beyond your room system conferencing camera, and integrate a variety of additional visual and audio media devices directly into your Vidyo Conferencing system? Whether you are teaching a class, making an important sales presentation, or having a brain-storming session with team members, your Vidyo conference can be much more effective when supported by the use of various media to attract and retain the attention of your participants. This technical note provides the information you'll need to achieve this integration and significantly enhance your Vidyo conferences using your VidyoRoom system.

Making the connection

Leveraging its widely adopted HDMI standard input port, the HD-100 supports a wide variety of video devices, such as laptops, DVD players, LCD projectors and interactive white boards, high-end HD video cameras, DVRs and more, through the use of a simple device called a Video Scaler.

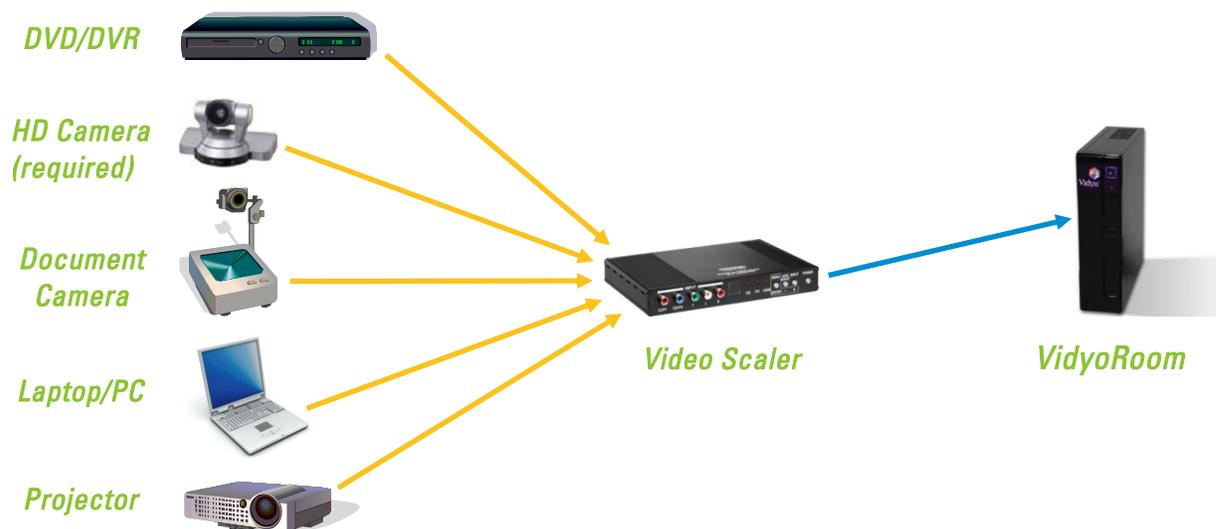


Illustration of the VidyoRoom HD-100 using a Video Scaler

Video Scaler Basics

There are several Video Scaler devices available in the market today, each supporting some set of audio and video input and output connections. The following provides a list of potential video inputs to a Video Scaler along with their common applications.

Video Scaler Input	Physical Connection	Typical Source Application
YUV and YPbPr Component	3 RCA Coaxial ports	Analog signaling output from DVD and home theater components
VGA (RGB)	1 HD-15 port	Analog signaling output from computers & LCD projectors
HDMI	1 HDMI port	Digital high definition signaling output from newer AV devices
DVI	1 DVI-I port	Digital standard definition signaling output from legacy AV devices
S-Video Composite Video	1 S-Video port 1 RCA Coaxial port	Analog signaling output from legacy and low end AV devices

Note that it is important to make sure that the unit not only has the physical connection you are looking for, but that the scaling engine also supports the signaling you need to connect your video devices, since the same physical connection may be used to support more than one signaling type, and at various resolutions. Keep in mind that your Video Scaler must have at least one HDMI input to support the HD camera that comes with your VidyoRoom system. In general, the more input ports and options available, the more flexibility you will have in terms of devices you can add and switch between during your conferences.

Note that any Video Scaler you choose will require output support for HDMI at 720P, as this will be your connection to the HDMI port on the back of the HD-100. In addition to the video inputs, many Video Scalers will also have some audio input connections. It is important to note that the audio and video paths for the VidyoRoom system must be maintained separately. In other words, if the Video Scaler combines the audio and video into a single HDMI output, the Scaler will only be useful for the video stream, while a separate audio switch will be required to switch between the in-room microphone and DVD player, for example. Having the audio and video on separate paths enables you to have a non-audio transmitting application, like a presentation, as the active video while you are able to maintain the audio path for your microphone so that the participants are able to hear you talk through your ideas.

Make sure that the Video Scaler provides the capability to switch between the various inputs in real time so that you can move from one media source to the next during your conference quickly and easily. Some units include infrared remote control support, in which case you will want to be sure that the Scaler box is visible from where you will be conducting your conference, or that the unit comes with an IR replicator.

The boxes are typically small and unobtrusive and may be mounted inside (or on top) of the cabinet housing the HD-100.

Finding the right fit

Once you have identified the devices that you would like to be able to integrate into your Vidyo Conferencing system, take a moment to investigate the video outputs of each device and make a list. Now it's just a matter of finding the Video Scaler that meets your requirements. While any commercially available Video Scaler supporting the HDMI standard at 720P should work with the VidyoRoom system, the following is a list of devices we have successfully used in our labs.

	TV OneTask IT-AVPC-HDMI	Cypress CP-255I	Atlona AT-LINE-EX
VIDEO INPUTS			
HDMI	1	1	2
VGA	1	1	2
Component	1	1	2
S-Video	NA	1	2
Composite	NA	1	2
VIDEO OUTPUTS			
HDMI	1	1	1
EXTERNAL CONTROL			
RS-232	NA	1	NA
InfraRed - remote	Yes	Yes	Yes
PRICE			
Typical Retail Pricing	\$500.00	\$695.00	\$430.00

Conclusion

We hope that this information will help you unleash your VidyoRoom system's full potential by integrating the video source devices you rely on most – easily and cost effectively. For more information or additional ideas on how to get the most out of your VidyoRoom system, please contact your local Vidyo sales engineer.

For more information: www.vidyo.com/1.866.99.VIDYO

