

VIDEOCONFERENCING FOR DUMMIES

**Video Conferencing Etiquette,
Terminology, Tips, Tricks and
Recommended Trouble Shooting
Techniques**

Part 1 Etiquette

Be familiar with the controls of your video conferencing equipment. If you are the VTC coordinator make sure your participants are briefed and familiar with the operation of the equipment. There is not normally time during a conference to explain how to work something or to wait for a technician to show up. As a minimum the participants should know

1. How to mute and un-mute the microphone and know how to tell if the microphone is muted or not.
2. How to operate the camera controls
3. How to show/hide the pip window. Some participants are very self-conscious if they have to see themselves so they should know how to hide the local (pip) display. Most systems are capable of this
4. How to display document cameras or other auxiliary cameras/equipment
5. How to reboot the system
6. How to make a call to the site/bridge
7. How to get local assistance and how to get assistance from the video bridge technicians

Microphones Different video conferencing units have different microphones. Some are better than

others but all share many of the same characteristics. **Whether you are in a point-to-point call or a multi-point bridged call it is important to keep your microphone muted unless you are speaking.** Open (un-muted) microphones pick up unwanted and annoying noise from outside sources (shuffling of papers, people speaking, drumming of fingers on the table etc), which seriously detract from the audio quality of the conference. They also are a source of feed back from the videoconference sets speakers picking up the far end and feeding it back into the system causing a very annoying echo effect. In a voice activated video conference (the most common type) a site with an open (unmuted) microphone can not only degrade audio quality but can disrupt the conference by causing the camera to switch to that site needlessly due to the noise emanating from that location. **Not keeping the microphone muted when your site is not speaking is probably the most abused violation of video conferencing etiquette and the cause of most problems with videoconferences.**

Dial in time the video bridge is normally up at least 30 minutes early for all conferences and usually an hour early for large conferences. This is done so that any connection problems can be worked out and everyone can get a check of their audio and video prior to conference start. Dial ins at the last minute or even worse, after the conference has

started, cause many unnecessary problems and often distract or interrupt an on going conference. If you can't dial in till conference start time or after the conference has already started **make sure your microphone is muted and remains muted.**

Camera Control Video conferencing is about **video** so your camera needs to be set so that the **participants** are visible. If the participants don't want to be seen then they should probably be audio adds because it is distracting to the rest of the conference to see an empty chair or a sign or corner of the room when someone is speaking from that location. This is especially true for CME or distance learning type lectures where the lecturer is looking for feedback from the participants as to whether he/she is going too deep for the audience or are going to fast/slow etc. – basic visual feedback. This is another reason why the participants need to know how to operate the camera: side to side, up-down movement and zoom in/out, and as was stated above, how to hide/unhide the local or pip window.

Auto Tracking Cameras Some systems are equipped with auto tracking cameras that will automatically zoom in on the speaker. These systems work pretty well but are not perfect. They will zoom in on noise also, so if someone is making noise outside the room the camera may go to that noise instead of the speaker. Participants should know how to operate the camera in either auto or

manual mode and how to switch between the modes. They need to also be advised that the auto mode takes some time to actually move so some patience is required. The camera has to triangulate where the speaker is and then switch to that position which requires several seconds.

Act as if you are on camera all the time As was covered earlier, in some types of conferences the site, which is being viewed, by other sites can be randomly selected so that all sites are polled over a given period of time. Additionally after your site has spoken it will be the site seen by the next speaker even though all other sites will be viewing the current speaker. Additionally, if you have an unmated microphone your site may be on camera with out your knowledge. Be cautious and act as if you are always on camera to avoid any possible embarrassment.

Part 2 Tips, Tricks and Recommended Trouble Shooting Techniques

Video conferencing is still an emerging technology and although simple when things all work it can be very frustrating when things go wrong. Although the procedure is similar to placing a regular phone call it is a lot different. A 2x64 call, for instance,

uses both channels of an ISDN line making it, in effect, two separate calls to the same location. A bonded call uses multiples of lines and if the call experiences circuit congestion some place along the route, several of the channels may be routed differently. If they don't arrive at the called terminal within a prescribed period of time, the far side unit will be unable to bond the call properly and the call will fail. Unlike a telephone however, you will normally receive no indication of why your call failed. A phone would at least indicate that, the line was busy or instrument out of service, etc.

Making the call If you are making a call to another site and you don't immediately connect it is a good idea to call that site and make sure their equipment is on, ready and not already in a call. Unfortunately most video conferencing equipment gives you no idea why it doesn't connect (Busy Signal, no dial tone, etc.) so it is best to call the contact at the other end to verify the condition of the far end equipment. If the far end advises their equipment is on and ready for a call check your equipment as follows:

1. Make sure the set is on and is ready to make or receive a call
2. Make sure the ISDN line(s) is/are connected and that there is a green light indicating that the ISDN line is good on the termination box on the wall.

3. Call the other site/bridge and verify the dial-in number is correct. (Ask for a different number if possible)
4. Have the other site attempt to call you.
5. Call another site that you have successfully called into before. If that works it is probably a problem with the site you are attempting to connect with and not your equipment.
6. Reboot your system and retry the call and if that fails ask the other site to reboot their system and/or attempt another call to you.
7. If making a bonded call (i.e. 256 Kbps or 384 Kbps) arrange with the other site to do a 2x64 call instead or if doing a 2x64, and you and the other site are capable of a bonded call, ask to do a bonded call. This routes the call differently internally in your set and sometimes externally as well.

Problems in the conference

- **Connection problems** If you drop out of the conference (loose connection) re-dial back in. If this doesn't clear the problem or you keep dropping out, after checking

that your ISDN lines are secure, reboot your system and dial back in.

- **Audio problems**
 - If you can't hear the other site make sure your speakers are connected and the volume is up
 - If the other site can't hear you make sure your microphone is close and connected
 - If neither of these steps clear the problem, drop out of the connection/conference and dial back in.
 - If you are experiencing echo or other noise ensure your microphone is located a distance from your speakers and is muted if appropriate, ask the other sites to make sure their microphones are muted. If this does not resolve the problem drop out of the call and dial back in.
- **Video problems**
 - If you can't see the other site ask them to check their equipment and make sure that your monitor is on (you can

- see yourself in the pip window).
- If the other site can't see you make sure your main camera is on and selected. Make sure it is connected to the VTC set.
- If neither of these steps clear the problem, drop out of the connection/conference and dial back in.

Technical Support Numbers

If you have tried all the above and cannot resolve your problems first call your local video conferencing support person. If the problem involves a LRMC bridge conference call the following numbers for LRMC technical support.

Duty Hours

DSN 486-7899/6125/6126/7778

Com +49 (0) 6371 86 787899/6125/6126/7778

Non Duty Hours

Call the LRMC AOD DSN 486 6307/8106 Com:

+49 (0) 6371 86 6307/8106

Advise them you are have Video Conferencing problem and need to talk to one of the video conferencing staff. They have a call roster with our home phones listed.

Part 3 Terminology

Teleconference – normally refers to a telephone conference.

Video Conference or **Video Teleconference (VTC)** refers to a conference in which most if not all participants are connected with video conferencing sets. These conferences may, on occasion, include participants who are connected via telephone.

Audio Add The term referring to a video teleconference participant who is only connected to a videoconference via telephone (audio only).

Point-to-point When only two locations are involved and one site calls the other.

Conferenced or **Bridged** Calls involving a Multi-Conference Unit (MCU) commonly referred to as a video bridge, such as the LRMC or USAMISSA bridge, connecting or providing dial in numbers to multiple sites so they can participate in a multi-site videoconference.

Dial-in A number assigned to the site to call into another site or to the video bridge.

2x64 a term referring to the conference speed or bandwidth of a call. A 2x64 call involves both “B” channels (64Kbps each) of a single Integrated Services Digital Network (ISDN) line.

Bonded call a call where more than one ISDN line is “bonded” together to enable a higher speed/increased bandwidth for a videoconference. Normally the more lines, which are, bonded together the better the audio and video quality of the call. It takes a 384 Kbps call (3 bonded ISDN lines) to achieve 30 frames per second (FPS) which provides real motion video. Normally these bonded calls are referred to as: **128 Kbps** (bonding of both B channels of a single ISDN line) **256 Kbps** (2 bonded lines or 4 “B” channels) or **384 Kbps** (3 bonded lines or 6 “B” channels), although other speeds are also capable.

IMUX unit An external device or internal card that bonds multiple ISDN lines together to achieve higher bandwidth calls.

Video switching This is the standard and most common method of setting up a videoconference. In a voice-switched conference the site that is talking (or talking the loudest) is the site that everyone in the conference will see on his or her screens. The talking site will normally see the last site that was talking (previous site).

Continuous Presence This is a conference in which multiple sites can be seen on the screen at one time. (Similar to the Hollywood Squares TV show).

Lecture Mode A conference set up with lecture mode enabled, allows the principle (lecture) site to view all participants one at a time while all the participating sites will always view the lecture site. The bridge controller can set the options as to which sites will be viewed by the lecture site.

Transcoded A transcoded conference allows the mixing of sites that are working at different speeds into one conference. For instance if the main conference is being conducted at 384 Kbps and some sites are only capable of 2x64, they can be joined into one transcoded conference.