



# ResearchChannel

## Lights, Camera, Action

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# Overview

- **HD**
- **Equipment**
- **Production (studio and location)**
  - **Do's and Don'ts of video production**
  - **Staging**
  - **Lighting**
  - **Sound**
- **Post production editing**
  - **What not to do with Final Cut Pro**

# Equipment

- **HD on a budget**
  - **HDV**
- **The essentials**
  - **Camera**
  - **Tripod with fluid head**
  - **Lights**
  - **Microphones**
  - **Post production editing**



# Production

## ■ Studio production

- **Point to Point**
  - **Delivering a talking head**
  - **Making it two way**
- **Audio**
- **Multi studio events**
  - **Super Computing 04**
  - **Lessons learned**

## ■ Location production

- **Shooting it live**



# Production - Studio

## ■ Format

- Talking head
- Panel discussion
- Live cross from studio

## ■ Studio design

## ■ Lighting

## ■ Sound

## ■ Talent

## ■ Production



# Production - Location

- Format
- To Storyboard or shoot what's available ?
- Lighting
- Sound
- The talent
- Dealing with the unexpected
- How much to material should I shoot ?

# Audio Echo management



- Local echo
- Remote echo

# HD Production – Tips for success

- Camera
- Place Camera next to remote site monitor
- Frame speaker in a Head & Shoulder shot
- Use remote control or camera operator for groups or panels
- Use document camera
- Use scan converter or conference software for computers and slides
- Avoid busy or distracting backgrounds





# HD Production – Tips for success

- Lighting
  - Don't place subject in front of windows or bright background
  - Don't depend on overhead or florescent lighting
  - Place lights in front and to the side (45 degree angle) of subject
  - Use broad or fill lights, especially for groups
  - Back lights help separate speaker from back ground



# HD Production – Tips for success

## ■ **Microphones**

- Use cancellation microphones to avoid feedback
- Put new batteries in each microphone
- Use microphones with a mute button
- Table microphones, at least one for every two people
- Noise such as tapping, paper shuffling and talking can open microphones
- Speak into the microphone
- Lavalier microphones should be worn on the chest

# HD Production – Tips for success

## ■ Organisation

- Designate a discussion or video conference leader
- Have someone in charge of each location
- Be prepared for your part
- Make sure graphics and visuals are TV ready
- Rehearse if possible and test the equipment
- Setup a secondary communications channel for production

## ■ Do

- Place Camera next to remote site monitor
- Frame speaker in a Head & Shoulder shot
- Use remote control or camera operator for groups or panels
- Use document camera
- Use scan converter or conference software for computers and slides
- Watch video levels
- Avoid busy or distracting backgrounds
- White Balance

## ■ Don't

- Place camera at side or back of room
- Frame on a wide shot
- Have people speaking off camera
- Use unreadable graphics
- Shoot in a busy location

# Lighting



## ■ Do

- Place lights in front and to the side (45 degree angle) of subject
- Use broad or fill lights, especially for groups
- Back lights help separate speaker from back ground
- Install permanent lighting
- Try for "cool" lighting fixtures

## ■ Don't

- Place subject in front of windows or bright background
- Depend on overhead or florescent lighting
- Place lights too close to speaker

## ■ Do

- Use cancellation microphones to avoid feedback
- But new batteries in each microphone
- Use microphones with a mute button
- Use least one microphone for every two people
- Speak into the microphone
- Lavalier microphones should be worn on the chest

## ■ Don't

- Tap table, shuffle paper or whisper around microphone
- Use one microphone for large group
- Speak with out a microphone
- Cover lavalier microphones

## ■ Do

- Designate a video conference leader
- Have someone in charge of each location
- Be prepared for your part
- Make sure graphics and visuals are TV ready
- Setup a secondary communications channel

## ■ Don't

- Assume everything will be ready
- Assume everyone understands "Time Zones"
- Use graphics and visuals that are not TV ready

## ■ Do

- Assume your site is always visible to other sites
- Remember that signal processing introduces latency between sites – quick back-and-forth conversations can get bogged down
- Remember that if you wish to make eye contact with the other sites, look at the camera not the monitor

## ■ Don't

- Leave your site's microphone open when another site is making a presentation
- Spend a lot of time doing sound checks once the conference is under way
- Assume the remote sites can see everything you can see, ie, gesturing at a projected slide with a laser pointer



# Questions ?

