



UNIVERSITY OF UTAH

STUDENT COMPUTING LABS

Remotely Controlling Analog Streaming

by Brandon Turner



What is iRed & IRTrans?

● iRed & IRTrans

“In combination with iRed and the infrared hardware IRTrans the Mac is capable of not only receiving but also sending infrared signals. In fact, the Mac becomes a universal remote control.”

- Robert Fischer

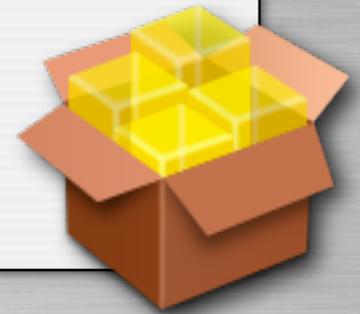


UNIVERSITY OF UTAH

STUDENT COMPUTING LABS

The Setup

IRTrans USB



- IRTrans hardware
 - <http://www.irtrans.de/>
- Connects to Mac via USB port
- Latest IRTrans USB drivers
 - <http://www.filewell.com/iRed/>
 - Included in the iRed Download



IRTrans USB



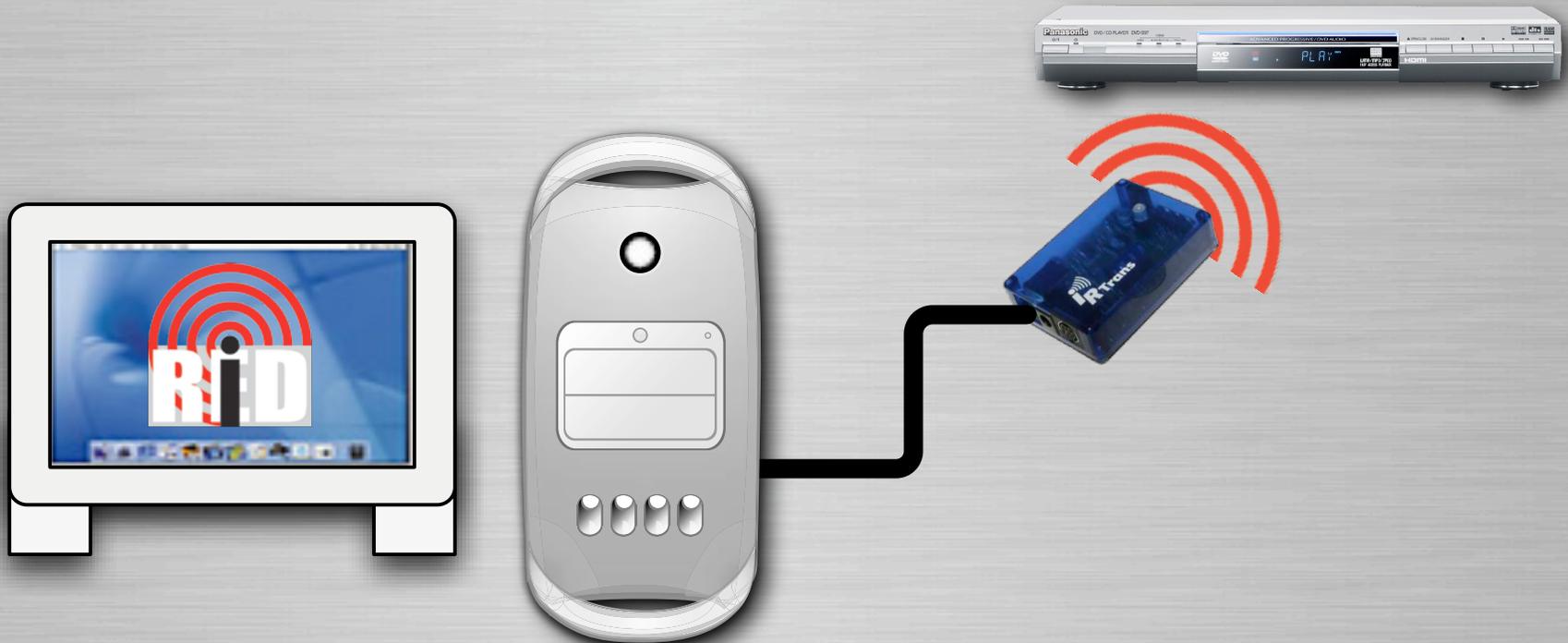
- Install IRTrans hardware



iRed



- Install iRed software



iRed Setup



- Install ired.pl script
- chmod 755



Library



WebServer

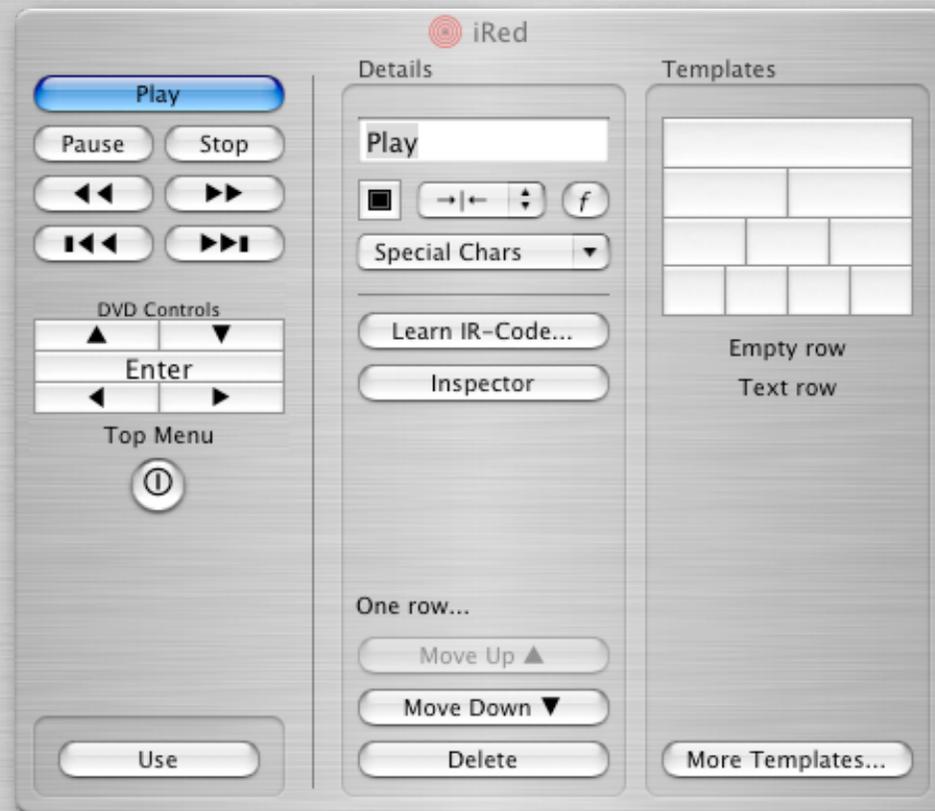


CGI-Executables

iRed Setup



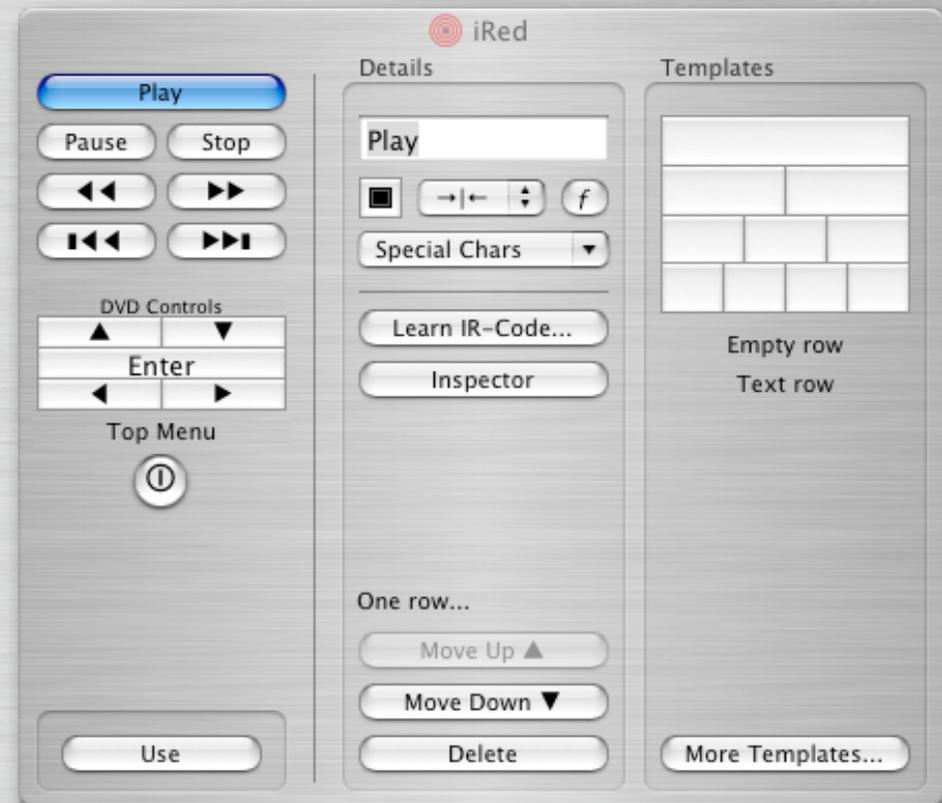
- Setup and Name your buttons



iRed Setup



- Select a button
- Click Learn IR-Code



iRed Setup



- Name the "Remote Control"
 - The same for all buttons
- Description of button
- Click "Learn..."
- Click button on remote
- Close

Learn IR Code

 **Learning an Infrared Code** ?

After clicking "Learn..." you have 5 seconds to send the code. Hold the remote control towards the infrared module and press the respective button once.
If the learned code does not work when testing, please try "raw code" and use a shorter distance.

Remote Control:

Description:

Frequency:

Learn raw code: Learn code sequence:



iRed Setup



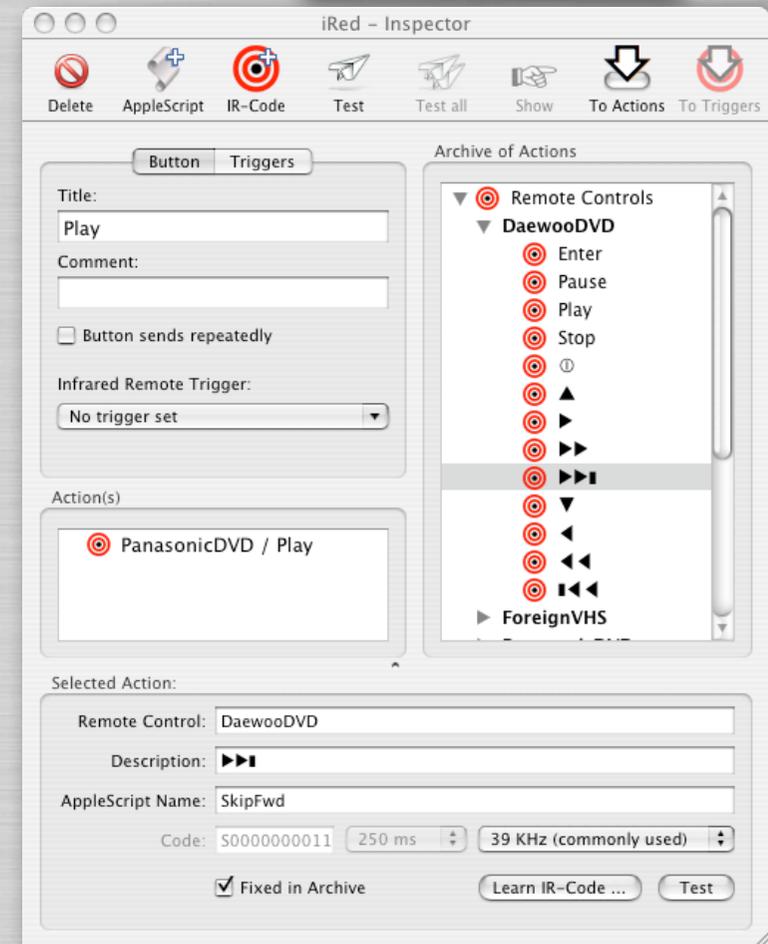
Click “Inspector”

Selected Actions:

- Fill in each button
 - Write down.. (*Use later in CGI*)
 - Remote Control: name the same
 - AppleScript Name: play, etc..

I didn't use “Actions(s)” or “Triggers”

- Just passing IR Code



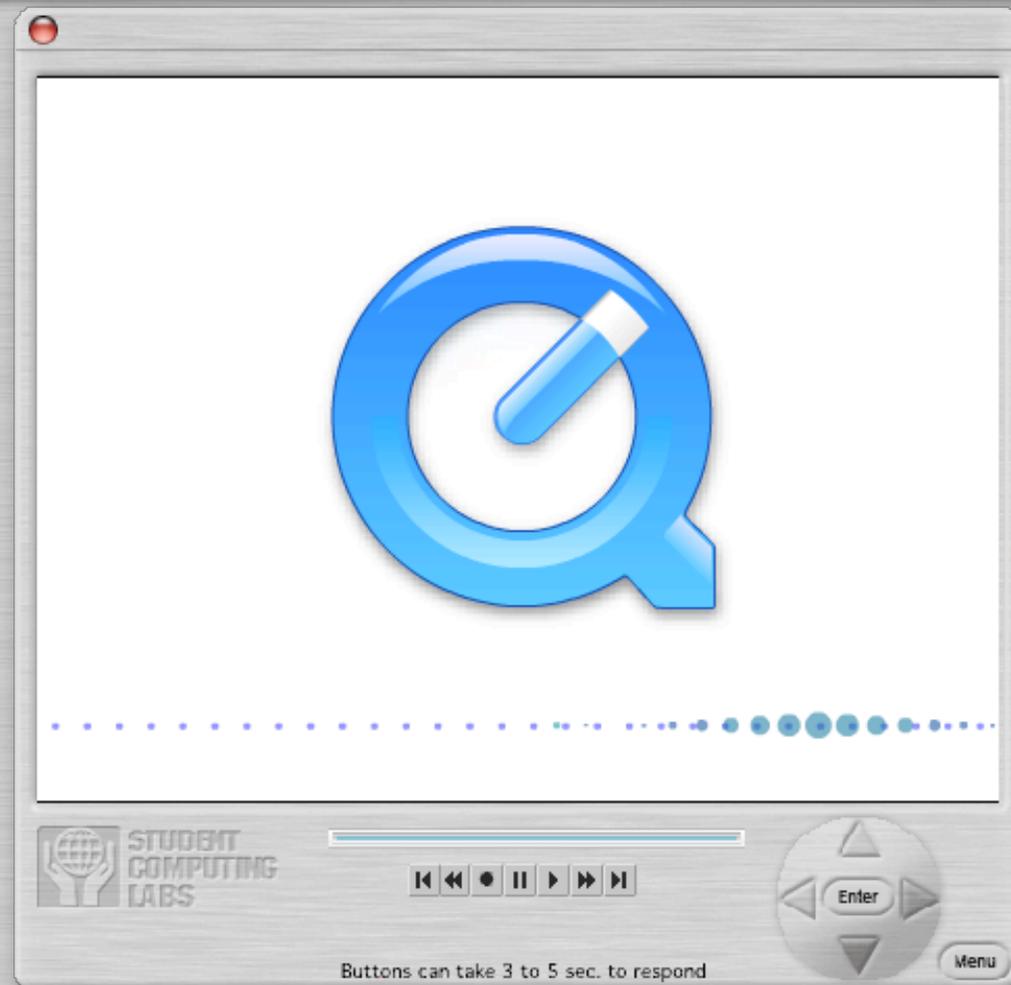
iRed Setup



- Save!!!
- Completed remote
 - Launch .iredrc on startup
- Enable TCP Sockets in "Preferences"
 - port 8765
- Enable personal web sharing
- Configure firewall if needed



LiveStage Pro Interface



LiveStage Pro Interface



- Watch “Essential LiveStage Pro” training
 - Quixel Video - www.quixelvideo.com
- Create Interface
- Create Movie Track
 - <rtsp://yourserver.com/yourmdp.sdb>



LiveStage Pro Interface



- Program each button on your interface
 - Sends code to ired.pl to control device
 - On “mouse click”:
 - `querylistserver(http://yourserver.com/cgi-bin/ired.pl?cmd=PanasonicDVD%2BPlay", "", "", "")`
- NOTE: PanasonicDVD & Play
 - Wrote these down earlier in iRed setup
 - %2B - Must keep this for it to function

LiveStage Pro Interface



- Export your LiveStage Pro as QuickTime .mov
- Embed into a website or launch QuickTime



UNIVERSITY OF UTAH
STUDENT COMPUTING LABS

QT Broadcaster



Video Hardware

- Canopus ADVC 55



QT Broadcaster

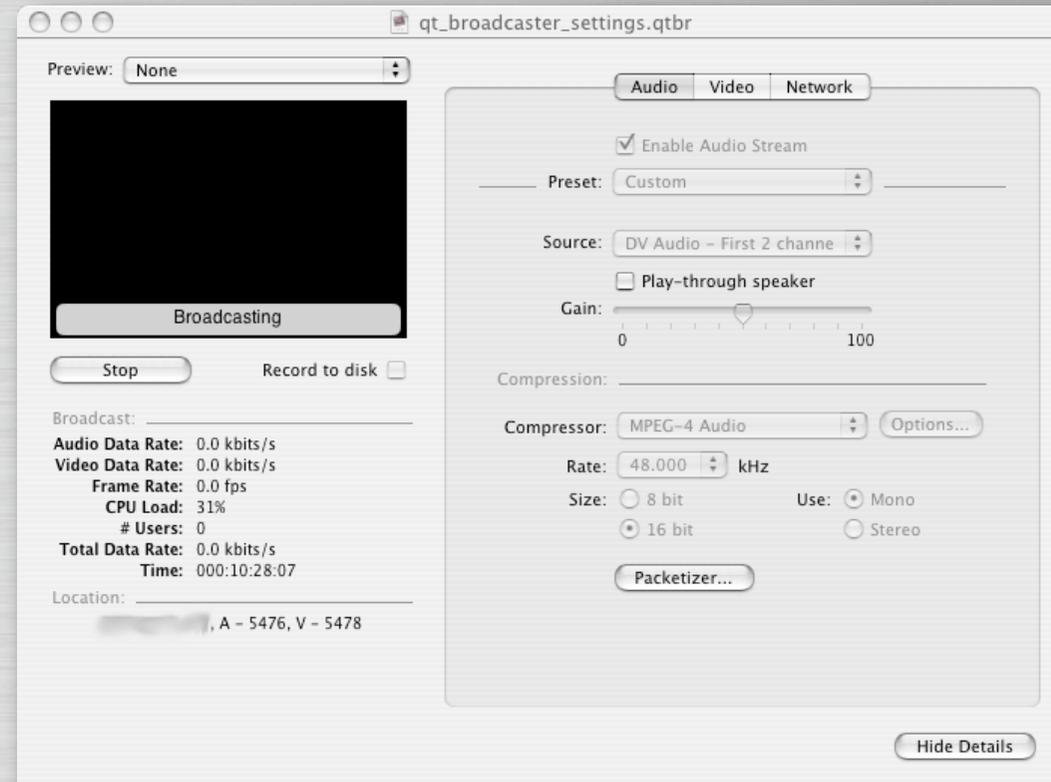


Configuring for Performance

- Note: If you have multiple QT streaming stations you need to increase the Audio and Video ports by 2.

Audio Tab

- MPEG-4 Audio

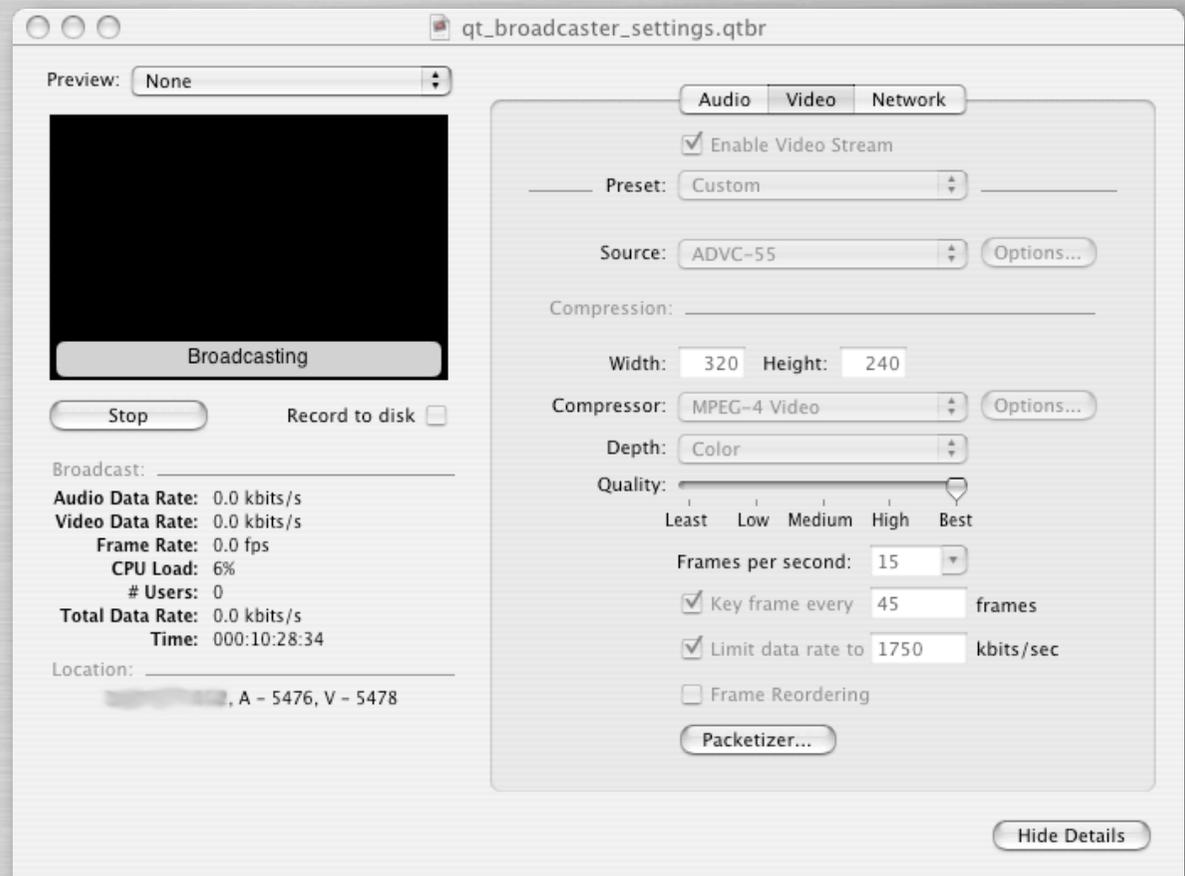


QT Broadcaster



Video Tab

- MPEG-4 Video
- 320 x 240
- Best Quality



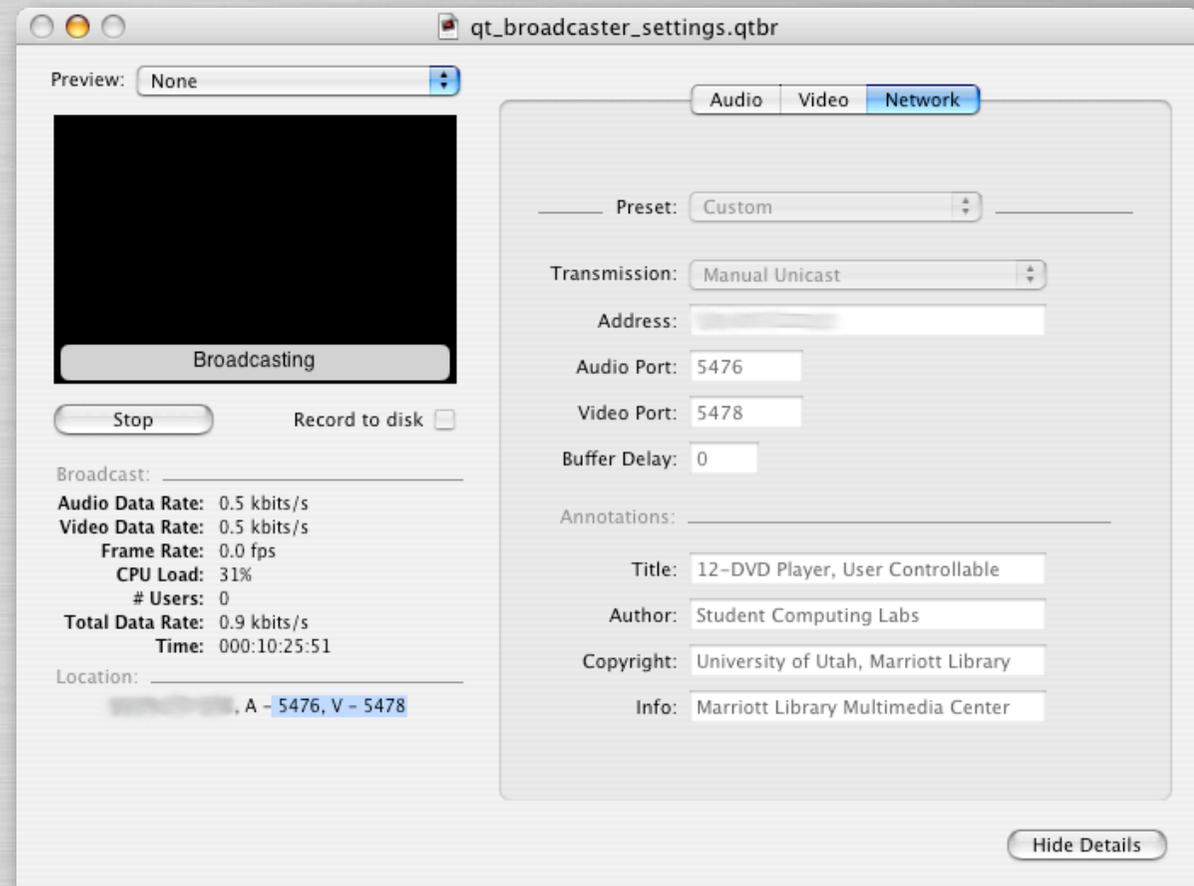
UNIVERSITY OF UTAH
STUDENT COMPUTING LABS

QT Broadcaster



Network Tab

- Custom Preset
- Audio/Video Ports
 - change here!
- Buffer (next slide)
- Other info



QT Broadcaster



- Configuring the Buffer!
 - QuickTime Broadcaster
 - QTSS
 - Client

Try to get good quality without huge delay

3-5 seconds is good when hitting pause, play, etc..

QT Broadcaster



Server Buffer

- 0-5 seconds
- /Library/QuickTimeStreaming/Config/streamingserver.xml
 - Find the property...

```
<PREF NAME="add_seconds_to_client_buffer_delay"  
TYPE="Float32" >5</PREF>
```

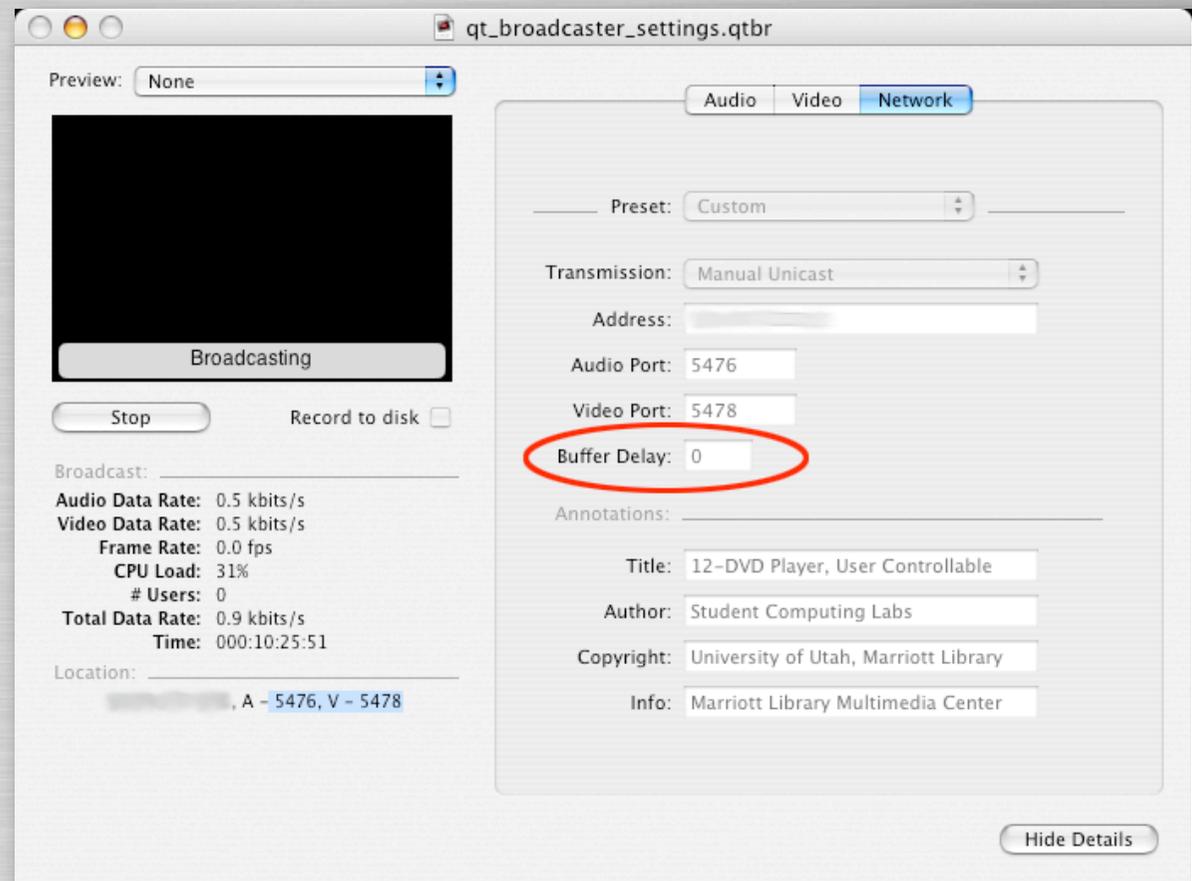
Change "5" to match your needs and network

QT Broadcaster



QT Broadcaster Buffer

- 0-? seconds



QT Configuration



- Client QuickTime Buffering
- Quicktime Preferences
 - Streaming tab
 - Internet/Lan
 - Toggle “Enable Instant-On”
 - Modify and test for your environment



DEMO



Special Thanks To:



Robert Fischer

- tin:b Software
- Outstanding level of support



Anyone else I borrowed pictures and Information from



UNIVERSITY OF UTAH

STUDENT COMPUTING LABS

Questions & Answers

Any questions or answers?

