

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





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

RTrans

Install IRTrans hardware

0

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Are







Install ired.pl script











Setup and Name your buttons

	🖲 iRed	
Play	Details	Templates
Pause Stop	Play	
	Special Chars 🔻	
DVD Controls	Learn IR-Code	Empty row
Enter	Inspector	Text row
Top Menu		
0		
	One row	
	Move Up 🛦	
	Move Down V	
Use	Delete	More Templates





Select a button



iRed Templates Details Play Play Pause Stop 44 ** (→|← ‡) (f)144 *** Special Chars -**DVD** Controls Learn IR-Code ... v Empty row Enter Inspector Text row • ► Top Menu 0 One row... Move Up 🛦 Move Down More Templates... Use Delete





Name the "Remote Control"

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

000	Learn	IR Code	
	Learning an I After clicking "Le the code. Hold th infrared module once. If the learned co please try "raw c	nfrared Code earn" you have 5 second the remote control toward and press the respective de does not work when t ode" and use a shorter d	? ds to send ls the button esting, istance.
Remote Co	ontrol: Panason	icDVD	
Descri	ption: Play		
Frequ	iency: 39 KHz (d	commonly used)	;
Learn raw	code: 📃	Learn code sec	juence: 📃
Test Learn		Save	New Close



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 "Actons(s)" or "Triggers"

Just passing IR Code



Slide ||

			1	ł.		
000		iRed – In	spector			
Delete AppleScript	(Code	Test	Test all	Show	To Actions	To Triggers
Button Title: Play Comment: Button sends rep Infrared Remote Tri No trigger set Action(s) Panasonic	Triggers beatedly gger: DVD / Play		Archi	we of Action: Remote Daewood En Pa Pa Pi En Pi En Pi En En Pi En Foreign	s e Controls DVD nter ause ay cop b b l l l l l l l l l l l l l	
Selected Action:		^				
Remote Control:	DaewooDVI)				
Description:	>> 1					
AppleScript Name:	SkipFwd					
Code:	500000000	11 250 n Archive	15 🛊	39 KHz (co	ommonly use	d) 🛟 Test

Save!!!

- Completed remote
- Launch .iredrc on startup

Enable TCP Sockets in "Preferences"

• port 8765



Enable personal web sharing



•) iRe	d	
	Play		
Pause	DC	Stop	
••	DC	**	
144	00	>> 1	
		rols	
	Cont	►►I rols	
	p Cont	rols V	
	p Me	►►I Tols T	







• Quixel Video - www.quixelvideo.com

Create Interface

Create Movie Track

rtsp://yourserver.com/yoursdp.sdb





- 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



Export your LiveStage Pro as QuickTime .mov

Embed into a website or launch QuickTime

MOVIE



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Video Hardware

• Canopus ADVC 55





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

Preview: None 🗘		Audio Video	Network
		☑ Enable Audio S	tream
	Preset:	Custom	*
	Source:	DV Audio - First	2 channe 🔹
		Play-through s	peaker
Broadcasting	Gain:		100
Stop Record to disk	Compression:		100
Broadcast:	Compressor:	MPEG-4 Audio	+ Options
Audio Data Rate: 0.0 kbits/s Video Data Rate: 0.0 kbits/s	Rate:	48.000 + kH	z
Frame Rate: 0.0 fps CPU Load: 31%	Size:	🔘 8 bit	Use: 💿 Mono
# Users: 0		 16 bit 	🔘 Stereo
Total Data Rate: 0.0 kbits/s Time: 000:10:28:07		Packetizer	
Location:		Facketizer	
, A - 5476, V - 5478			

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Video Tab

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

eview: None	·	Audio	Video	Netwo	ork }	
		✓ Enable	e Video Str	ream		
	Preset:	Custom			*	
	Source:	ADVC-5	5		Å T	Options
	Compression	:				
Broadcasting	Width:	320	Height:	240		
Stop Record to disk	Compressor:	MPEG-4	Video		A Ŧ	Options
	Depth:	Color			A T	
odocast: dio Data Rate: 0.0 kbits/s ideo Data Rate: 0.0 kbits/s Frame Rate: 0.0 kbrs/s	Quality:	Least Low	/ Medium	High	Best	t
CPU Load: 6%		Frames pe	er second:	15	-	
# Users: 0 otal Data Rate: 0.0 kbits/s		🗹 Key fra	ame every	45		frames
Time: 000:10:28:34		🗹 Limit d	data rate t	o 1750		kbits/sec
, A - 5476, V - 5478	_	🗌 Frame	Reorderir	ng		
		Packeti	zer			

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Network Tab

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

🖻 qt_broadcaster_set
•
Preset:
Transmission
Address
Audio Port
Audio Port.
Video Port:
Buffer Delay:
Annotations:
Title:
Author
Copyright

, A - 5476, V - 5478



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Hide Details



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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..





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 Buffer

• 0-? seconds

Teview. None		Audio Video Network
	Preset:	Custom +
	Transmission:	(Manual Unicast
	Address:	
Broadcasting	Audio Port:	5476
Stop Record to disk	Video Port:	5478
Broadcast:	Buffer Delay:	
Audio Data Rate: 0.5 kbits/s Video Data Rate: 0.5 kbits/s	Annotations:	
CPU Load: 31%	Title:	12-DVD Player, User Controllable
Total Data Rate: 0.9 kbits/s	Author:	Student Computing Labs
Location:	Copyright:	University of Utah, Marriott Library
, A - 5476, V - 5478	Info:	Marriott Library Multimedia Center

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QT Configuration

Client QuickTime Buffering

- Quicktime Preferences
- Streaming tab
 - Internet/Lan
 - Toggle "Enable Instant-On"
 - Modify and test for your environment



	QuickTim	ne		
Show All			Q	
Register Bro	owser Update	Streaming	Advanced	
Streaming Speed:	Intranet/LAN		•	
Si Q	elect the connection s JuickTime uses this se	peed supported tting when strea	by your hardware. ming internet media	a.
	Enable Instant-C	Dn		
In bi C	nstant–On starts playi ut network congestio choose a longer delay	ng streamed mee n may reduce the if you experience	dia without delay, e quality of playback e problems.	C.
PI	lay:	,	i i hort Delay	?





Special Thanks To:

Robert Fischer

- tin:b Software
- Outstanding level of support



Anyone else I borrowed pictures and Information from





Questions & Answers Any questions or answers?

