

# Create Your Own Training Guides and Videos



Robert Green

Robert Green Consulting

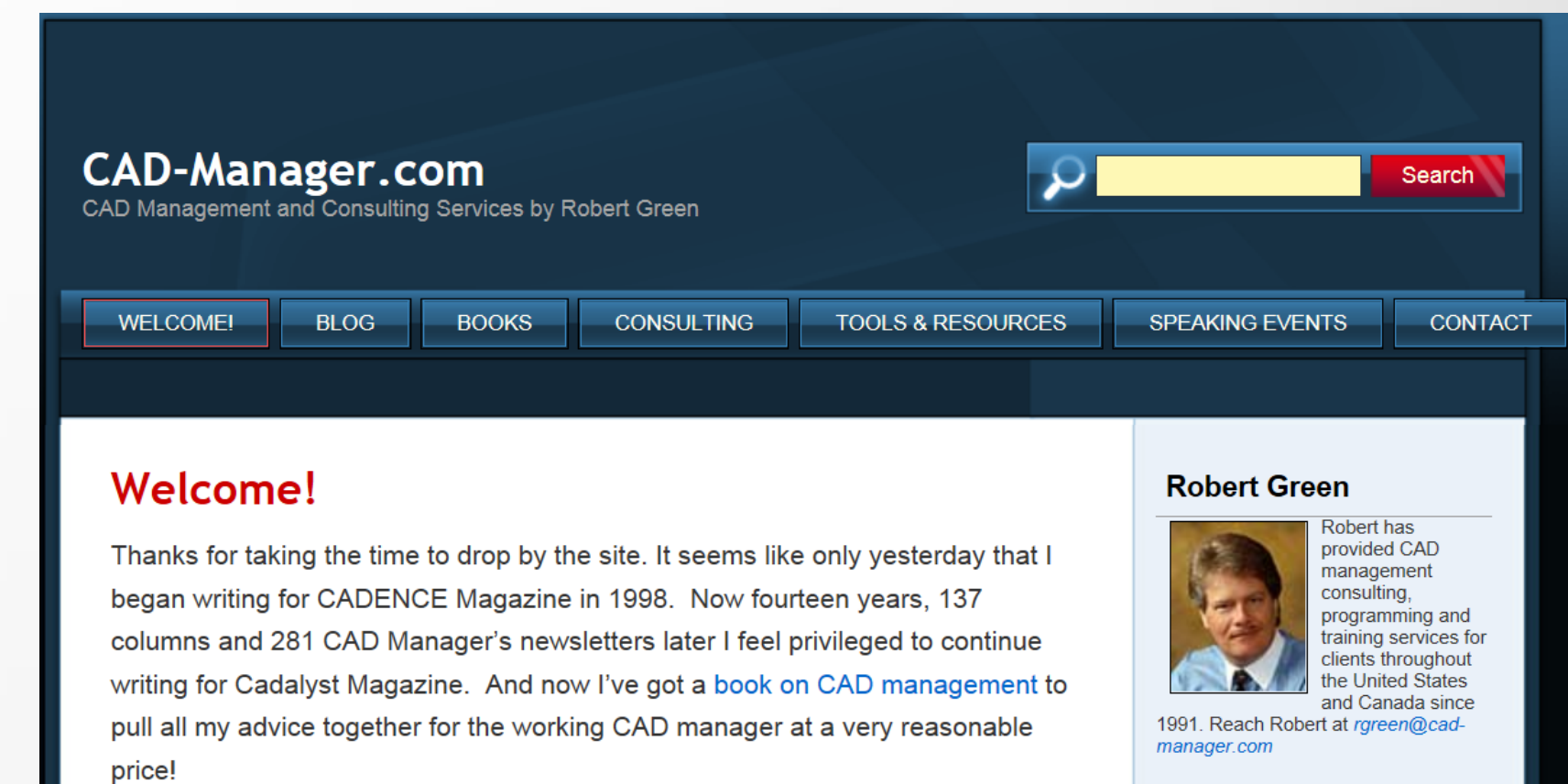
[RGreen@GreenConsulting.com](mailto:RGreen@GreenConsulting.com)



# Quick bio ...

- Mechanical engineer turned CAD manager
- Private consultant since 1991
- Focusing on CAD customization, management and training
- Cadalyst Magazine contributing editor
- 21 year AU speaker
- Facebook Group: **CAD Managers Unite!**
- Web site: **www.CAD-Manager.com**

**RGreen@GreenConsulting.com**





# **First Things First**

**Technology delivers the message but  
the message is entirely up to you!**





# Videos are great for ...

- Delivering “show me” software instruction
  - Facilitating self paced training
  - Allowing users to repeat training
  - Eliminating repeated training sessions
- 
- **HOWEVER:**
  - You need to create compelling content
  - Good content means good training – video or not ...



# **Pre-planning**

## **Picking the right first project**



# Your first video project

- **Short and simple**
- **Something you feel confident instructing**
- **Something your users need**
- **Something suited to “show and tell” learning**
- **Your first recording should be a success ...**



# Suggestions

- **Standards usage tutorials**
- **Project startup orientations**
- **Plotting/printing tutorials**
- **In short – something people would want to watch ...**



# Get your technology setup and ready

- **Consider hardware requirements**
- **Identify software**
- **Setup accessories**
- **Get things configured**
- **Consider output formats**
- **Plan more now so you'll rework less later ...**







# The Computer

## General guidelines



# Hardware general rules

- A high performance CAD machine will usually do
- If your CAD runs well:
  - You'll be able to support video recording
  - Though you will notice a slight slow down
- If your CAD doesn't run well:
  - You'll still be able to record video
  - You'll notice a perceivable slow down
- Over spec your RAM/cores if you can ...



# However ...

- I've run recording software on the following platforms:
  - 2 Gig RAM XP laptops
  - 4 Gig RAM Vista laptops
  - 8 Gig RAM Win7 64 bit laptops
  - 4 Gig RAM Win8 notebooks
- In cases of low end hardware you can:
  - Pre-load files
  - Reboot and disable all programs you can
  - Turn off wireless adapter (if you can)
  - Disable email client ...





# Operating System

## Does it really matter?





# Sometimes no, but be aware

- For recording – not really
- Let your CAD programs dictate the OS
- Video recording will run in either 32/64 bit modes
- Win7 works well, Win8 OK, Win10 is driver dependent
- Drivers for audio/video devices make the decision
- However ...



# Sometimes yes

- For production and compiling – yes
- Win7 Pro works best for now
- Mac/iOS can be problematic
- 64 bit with lots of RAM really speeds operations
- SSD's make a BIG difference in speed as well
- So:
  - You can record with older hardware/OS and 32 bit
  - Produce and render with 64 bit OS
  - Faster hardware = faster production and rendering ...



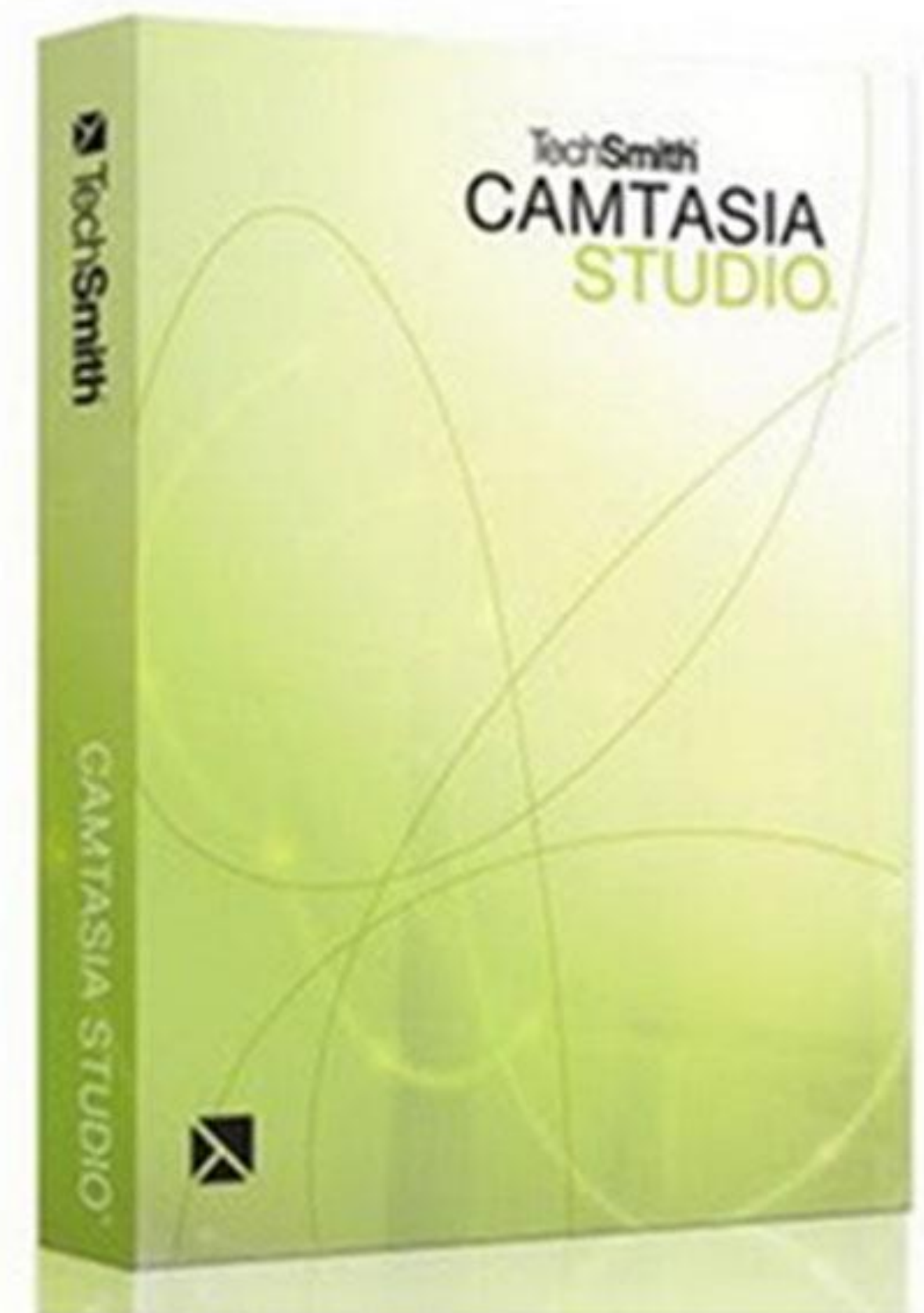


# Software



# Camtasia by TechSmith

- Requires no special graphics cards
- Tons of formatting, editing and publishing options
- Extensive asset and effects libraries
- Single format for Windows and Mac
- Very powerful for the \$199 price
- [www.techsmith.com/camtasia](http://www.techsmith.com/camtasia) ...





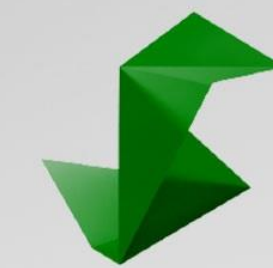
# Jing by TechSmith

- Requires no special graphics cards
- Very limited duration and formatting
- Free
- [www.techsmith.com/jing](http://www.techsmith.com/jing) ...



# Screencast by Autodesk

- Runs on your CAD workstation
- Integrated with Autodesk software
- Captures command input/clicks on timeline
- Limited editing and formatting options
- [screencast.autodesk.com](https://screencast.autodesk.com) ...



AUTODESK®  
SCREENCAST



# Conclusions ...

- **The recording format you choose will lock you in!**
- **Carefully consider current and future needs**
- **If CAD tips is all you want to do, Screencast is indicated**
- **Technologies will change, will the software keep up?**
- **You will wind up editing more than you think**
- **The more you edit, the more Camtasia is indicated ...**





# Audio Gear

## Don't go cheap!





# Audio accessories

- **Minimum:**

  - Headset USB microphone (voice recording)**

  - Headphones (monitoring)**

- **Better:**

  - Good USB desktop microphone**

  - Windscreen/pop filter**

  - Good USB desktop speakers**

  - High performance ear buds**

- Nice to have:**

  - Wireless microphone for live recording ...**



# Recommended audio accessories

- Blue Yeti USB desktop microphone
- Skull Candy in ear buds
- Auralex isolation pads and MudGuard
- Sennheiser HD280 headphones
- Sennheiser SR450 wireless microphone
- CAD U2 USB headset mic
- Get these from a MUSIC store ...





# Setting Up Your Rig

**A comfortable environment is key**



# **Your recording “studio” setup**

- **On your desk:**

- Mouse pads/Auralex for speakers (vibration dampening)**

- Mouse pad/Auralex for microphone (vibration dampening)**

- Windscreen/pop filter (between microphone and you)**

- Headphones (monitoring)**

- Copy clip or stand (to hold scripts)**

- **Environment:**

- Relatively quiet**

- Non-echoic (don't record in lunch room!)**

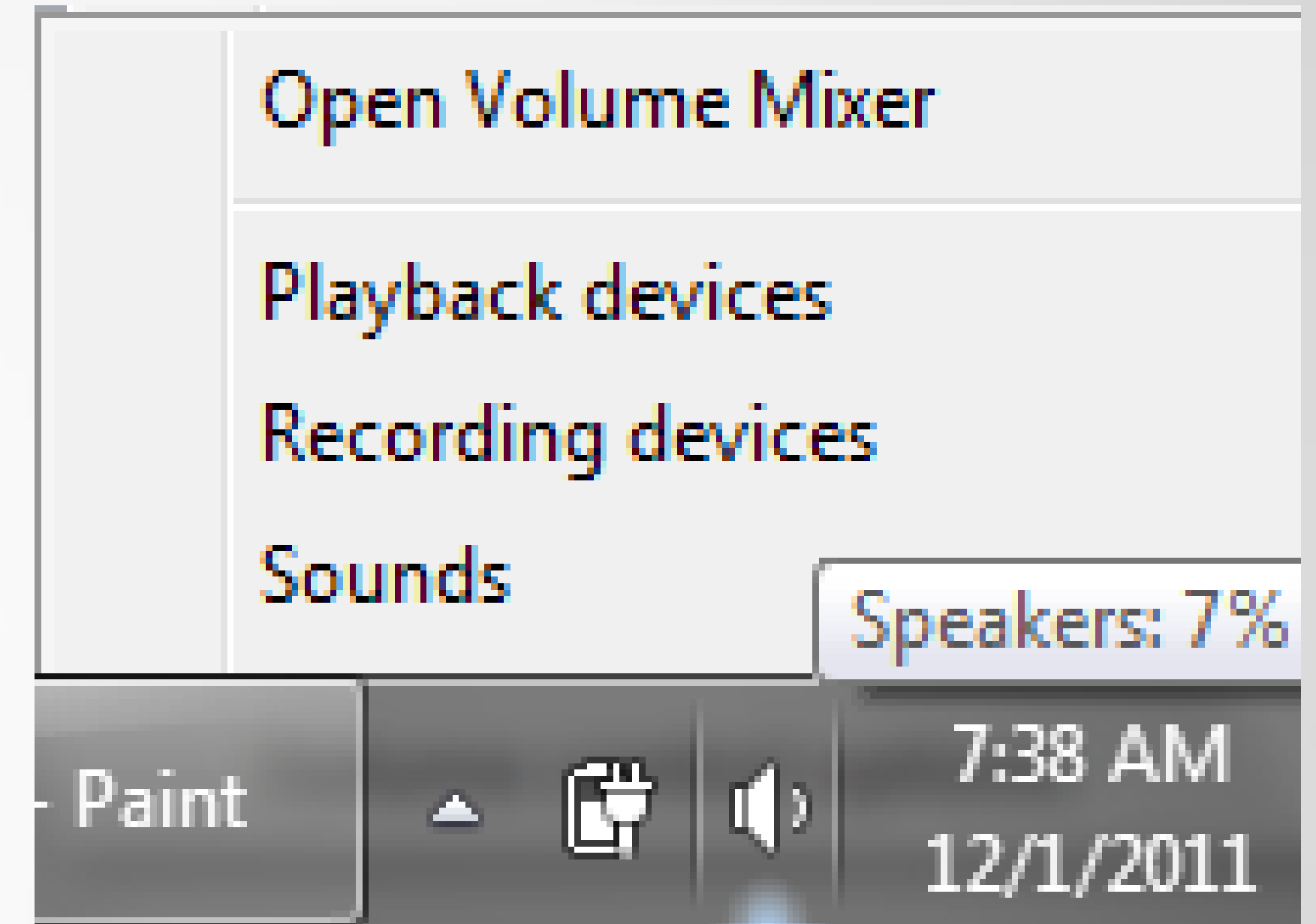
- Comfortable, non-squeaky chair ...**





# Plug everything in and reboot (to test)

- **Make sure:**
  - USB microphones are “found”**
  - USB speakers are “found**
- **Verify that:**
  - All devices are set to default**
  - That audio “plays back”**
- **Reboot and verify:**
  - No conflicts**
  - Audio still plays**
  - Microphone still records ...**





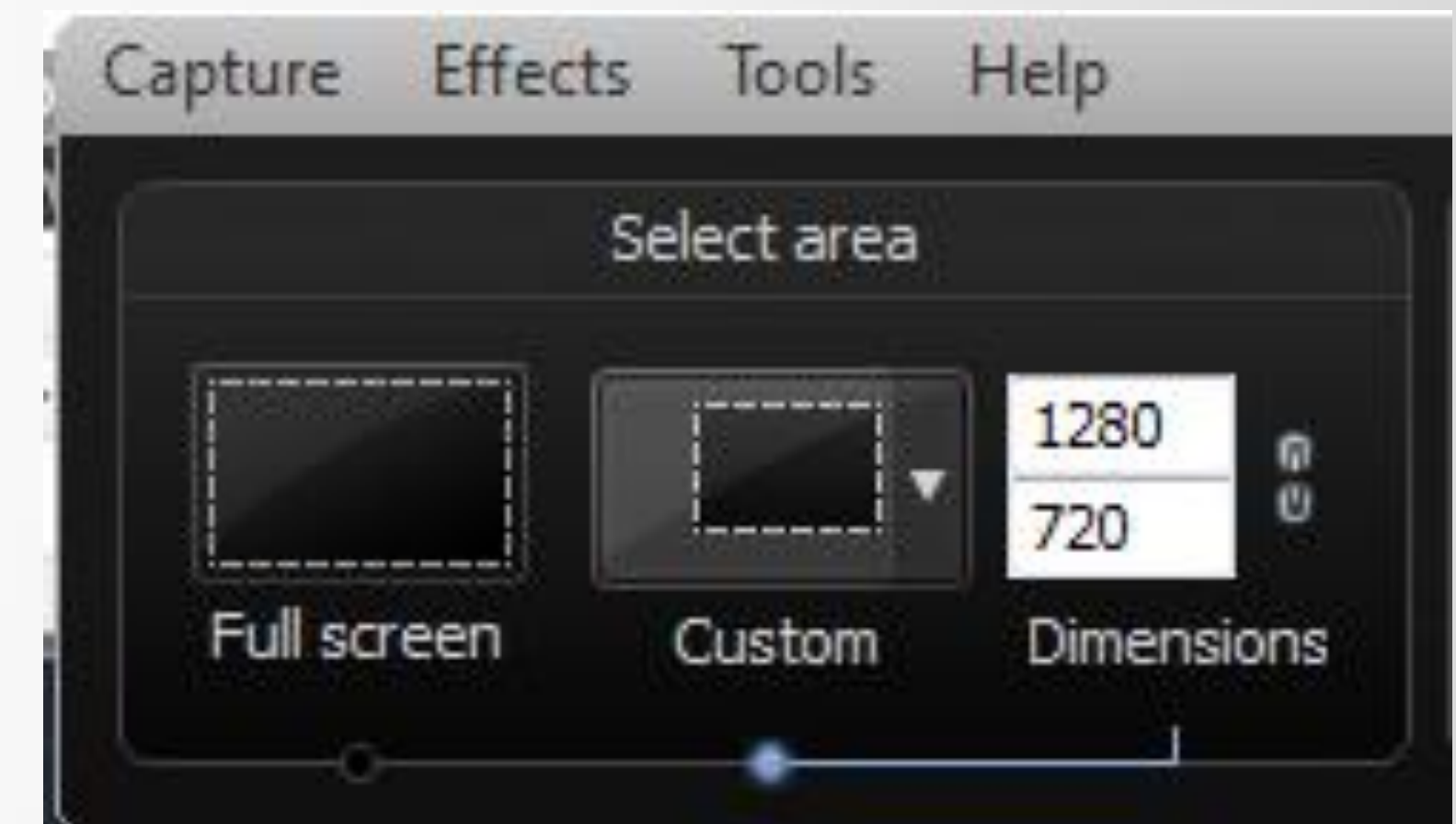
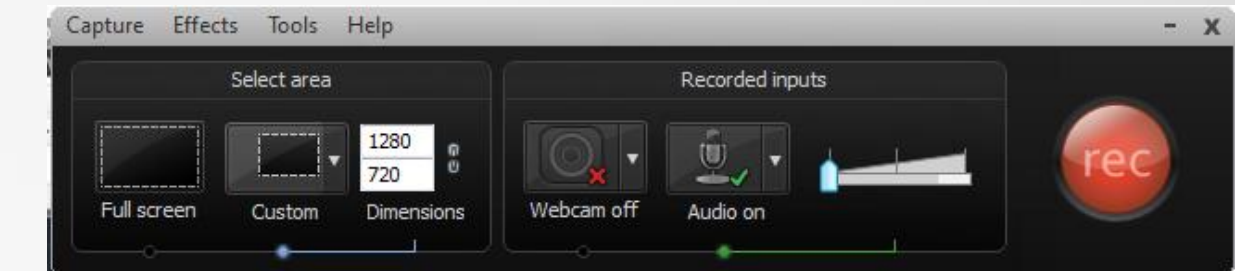
# Software Setup

## Recording audio and video optimally



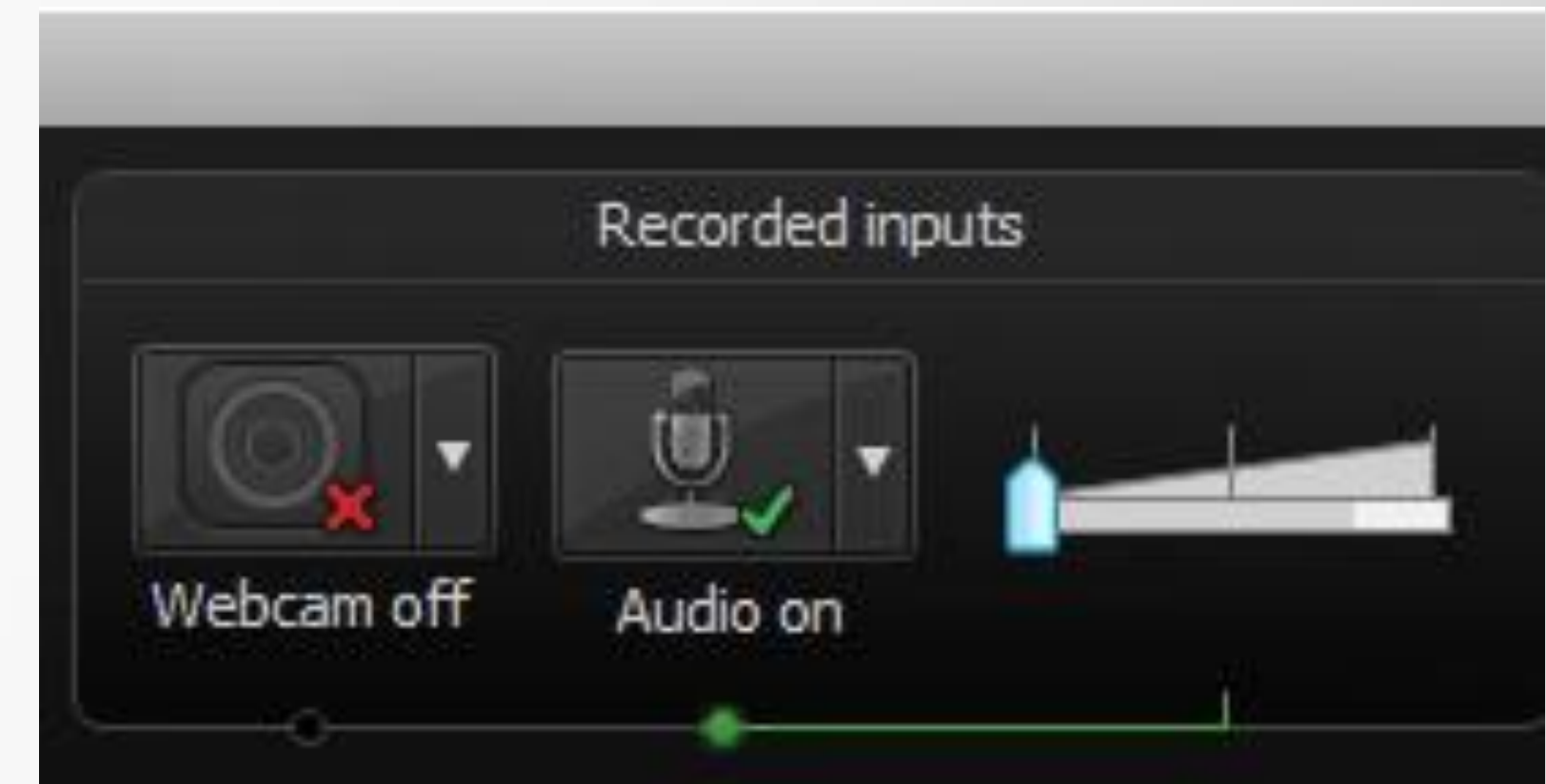
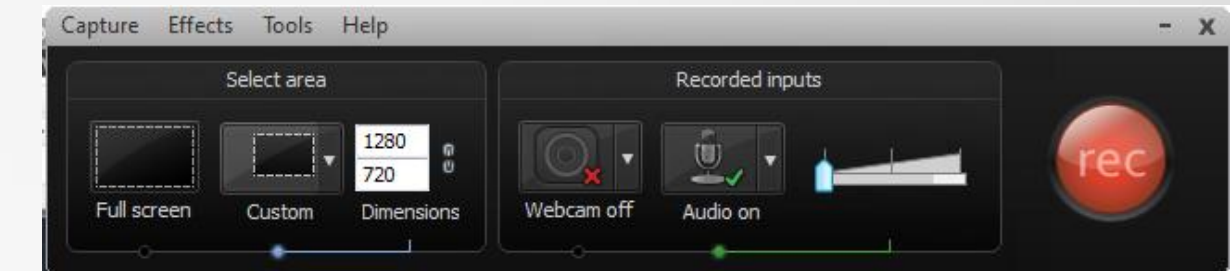
# Screen area

- **Set the right size:**
  - 1280x720 (720 HD)**
  - 1024x768 (older iPads)**
- **Size your CAD application:**
  - To match the resolution above**
- **The goal:**
  - To record in common resolutions**
  - To match output requirements ...**



# Audio parameters

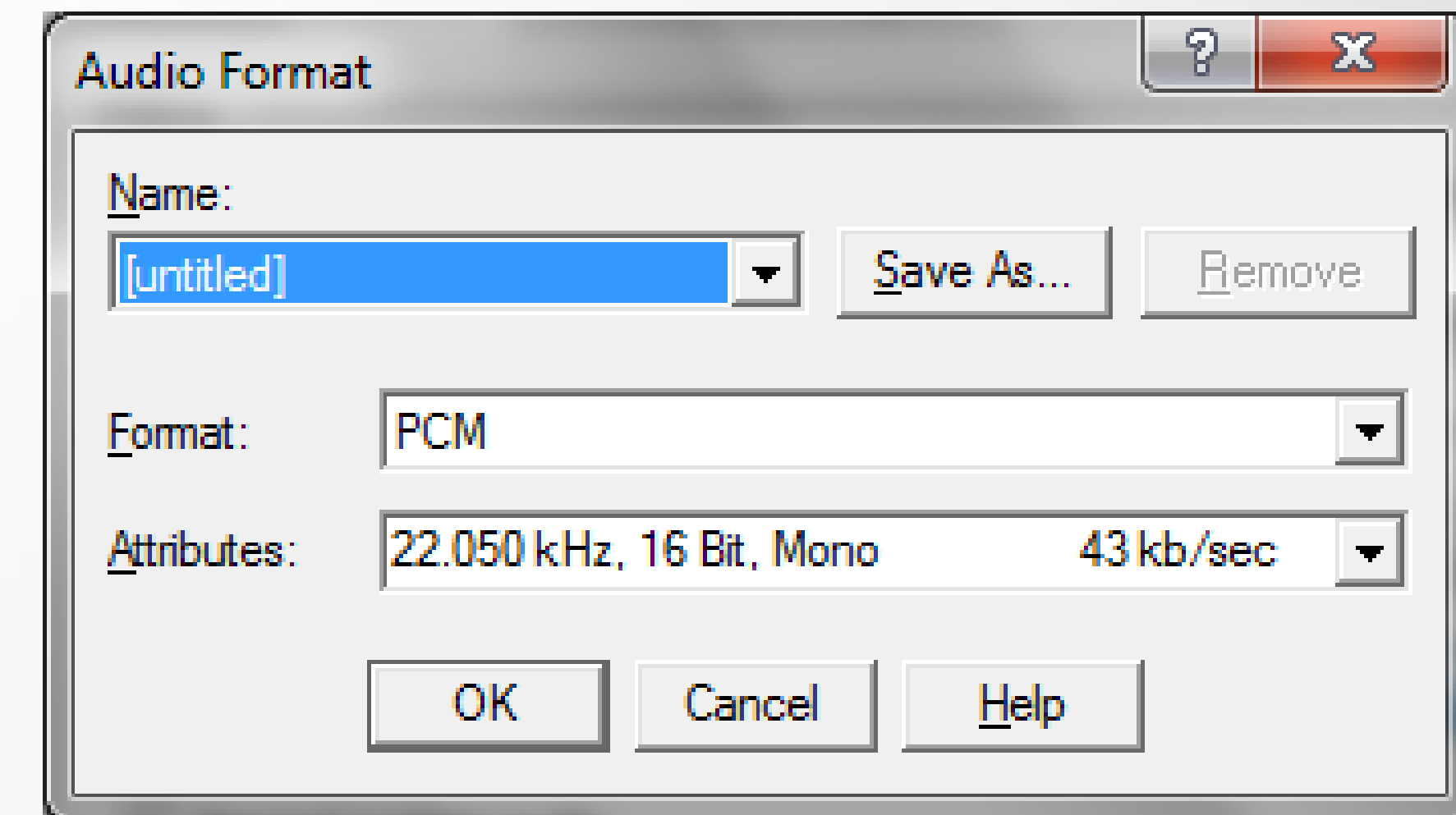
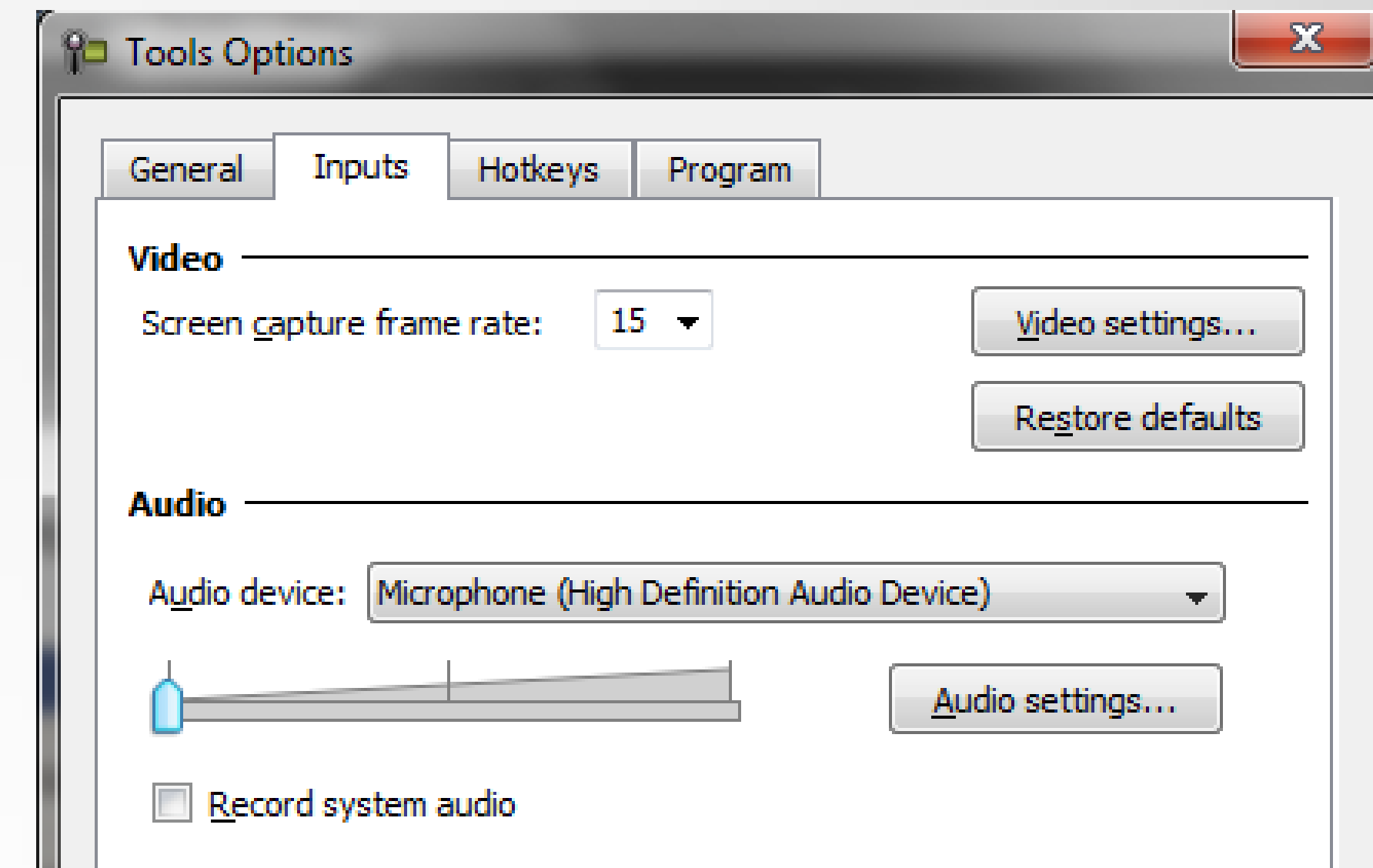
- Make sure audio is:  
On!  
That you see action on the meter ...





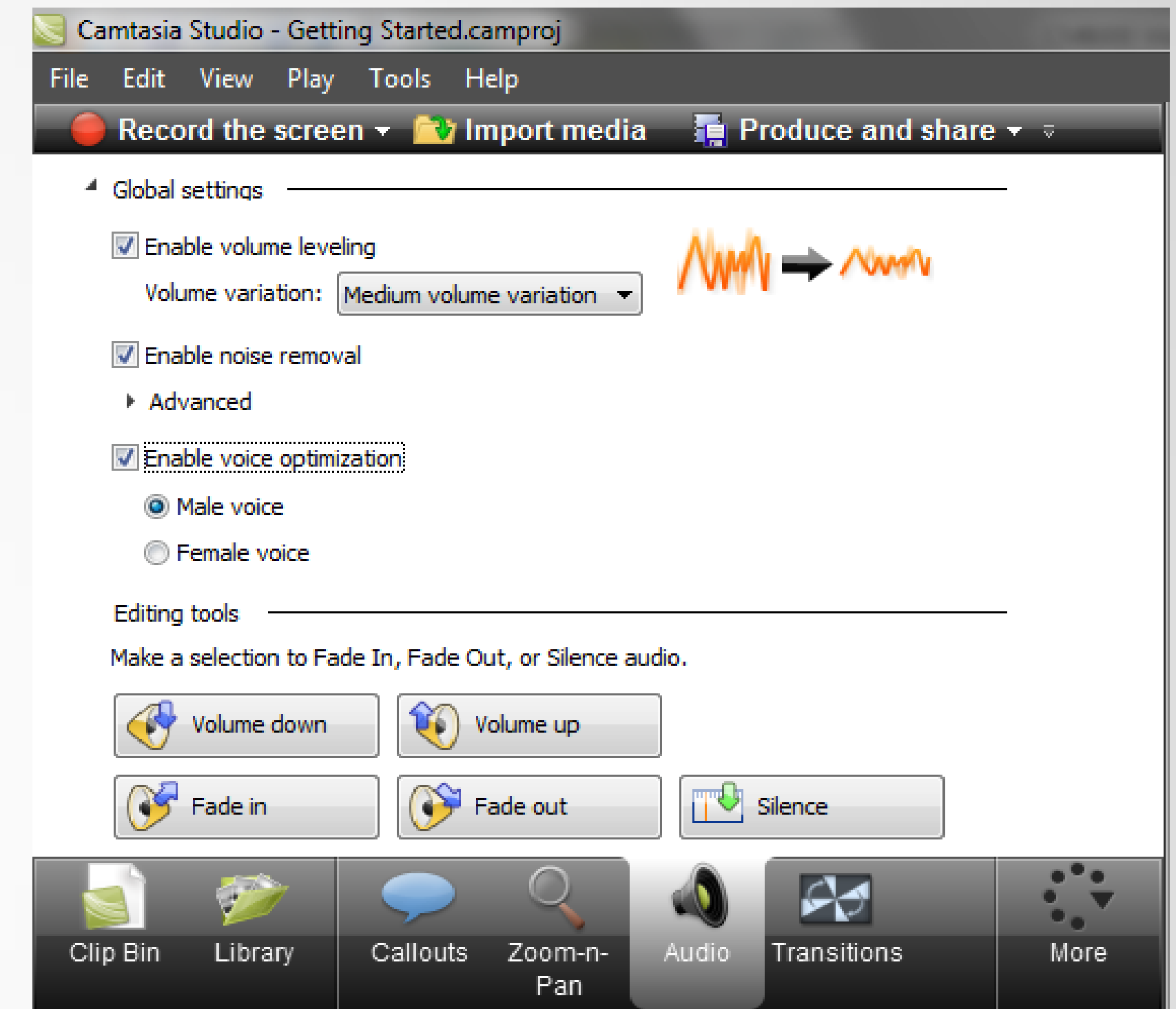
# Audio format

- For best results:  
22 kHz  
16 Bit  
Mono
- Why:  
Good sound  
Compact size ...



# Rendering (later)

- Set things up right now
- Rendering will run faster later
- Because:
  - Resolution will be right
  - Sound files will be compact
- Fast is good ...





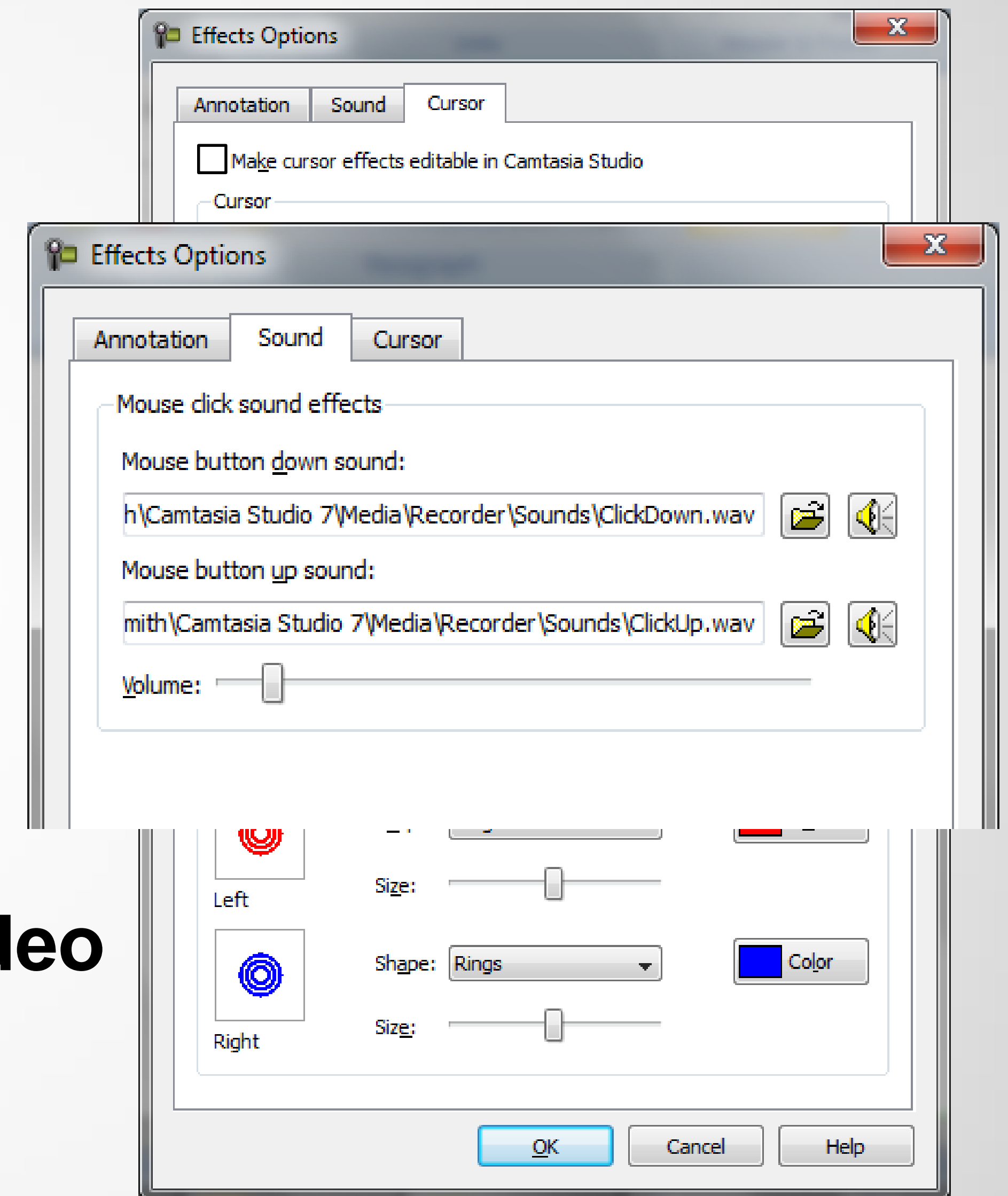
# **Audio/Visual Adjuncts**

**Because when they watch the  
video they don't see you**



# Clicks and picks

- **Visual:**
  - Uses flashing circles**
  - Color coded click/right click**
- **Audio:**
  - Sound for click**
  - Sound for right click**
- **Why:**
  - So you don't have to say it**
  - Just explain at the start of the video**
  - You can turn these off later ...**







# Story Boarding

**Don't make a great video of a bad demo**



# What is a story board?

- A very basic summation of your video
- Like this:
  - Explain new plotter name
  - Show standard page setups
  - Show standard styles
  - Run through example plot
- That's it – simply a block layout of the video ...



# Why do it?

- **To collect your thoughts**
- **To help create a course handout later**
- **The more you know now, the easier recording will be ...**





# Video Rehearsal

## Integrating recording into the process





# Talking it through

- **Get your example files ready**
- **Now do a dry run through the training**
- **Just pretend you're tutoring a user**
- **As you do this, record!**
- **Note – I haven't written a course guide yet ...**



# Listen to your first recording

- How does it sound?
- Did it flow well?
- Will it make sense to users?
- Would you change anything?
- Did you like your speech?
- Now you know what to improve ...



# Adjust and re-record

- **Modify example files**
- **Change sequence/flow if required**
- **Speed up/slow down as appropriate**
- **Record it again**
- **Review it again**
- **It should be pretty tight now ...**





# Presentation Tips

## Maximizing your training impact





# A few things to remember

- **Show the finished product first**
- **Give a brief overview first – state your approach**
- **Explain click/right click sounds/effects**
- **Move the mouse slowly so the user can see it**
- **Emulate a casual user training environment**
- **Speak clearly and calmly**

**Annunciate**

**Avoid “ums” and “aws” ...**





# Building Course Guides

## Handouts to go along with videos



# Yes, you still need to create handouts

- They will watch the vide
- Then they will go back to the handout
- You need a script for the video anyway
- Especially for
  - Step by step procedures
  - Learning software features
- Guidelines
  - Screenshots are best
  - Keep text minimal ...





# The good news

- Your video rehearsals make handouts easy
- Simply:
  - Run through the examples again
  - Get pertinent screen captures
  - Paste into Word document
  - Add descriptive text between captures
- Don't remember what you did?
  - Watch your own video
  - Listen to your own voice ...







# Live Training

## Integrating recording into the process



# Why not?

- If you're going to train live – record it
- It only adds a little effort to the process
- It captures you in natural training mode
- It gets you used to recording ...





# Final Recording

## Studio versus live





# In your studio

- Here's your checklist:

- Print out handout/script**

- Get your example files in order**

- Reboot machine**

- Disable email client or anything else that can “pop up”**

- Do a quick warm up recording to get settled in**

- Now run through your exercise at full speed

- Don't stop**

- Don't worry about minor errors**

- Try not to think about being recorded ...**





# Recording live training

- Here's your checklist:
  - Use a headset or wireless lavalier microphone
  - Print out handout/script
  - Get your example files in order
  - Reboot machine – connect to projector
  - Disable email client or anything else that can “pop up”
  - Do a test recording to verify machine setup
- Now conduct your training
  - Hold questions until later
  - Try not to think about being recorded ...





# Production

**If they can't see it (on their devices)  
they can't learn it**



# Set graphical parameters

- Pick your format:

Windows Media

MP4

Flash

Other

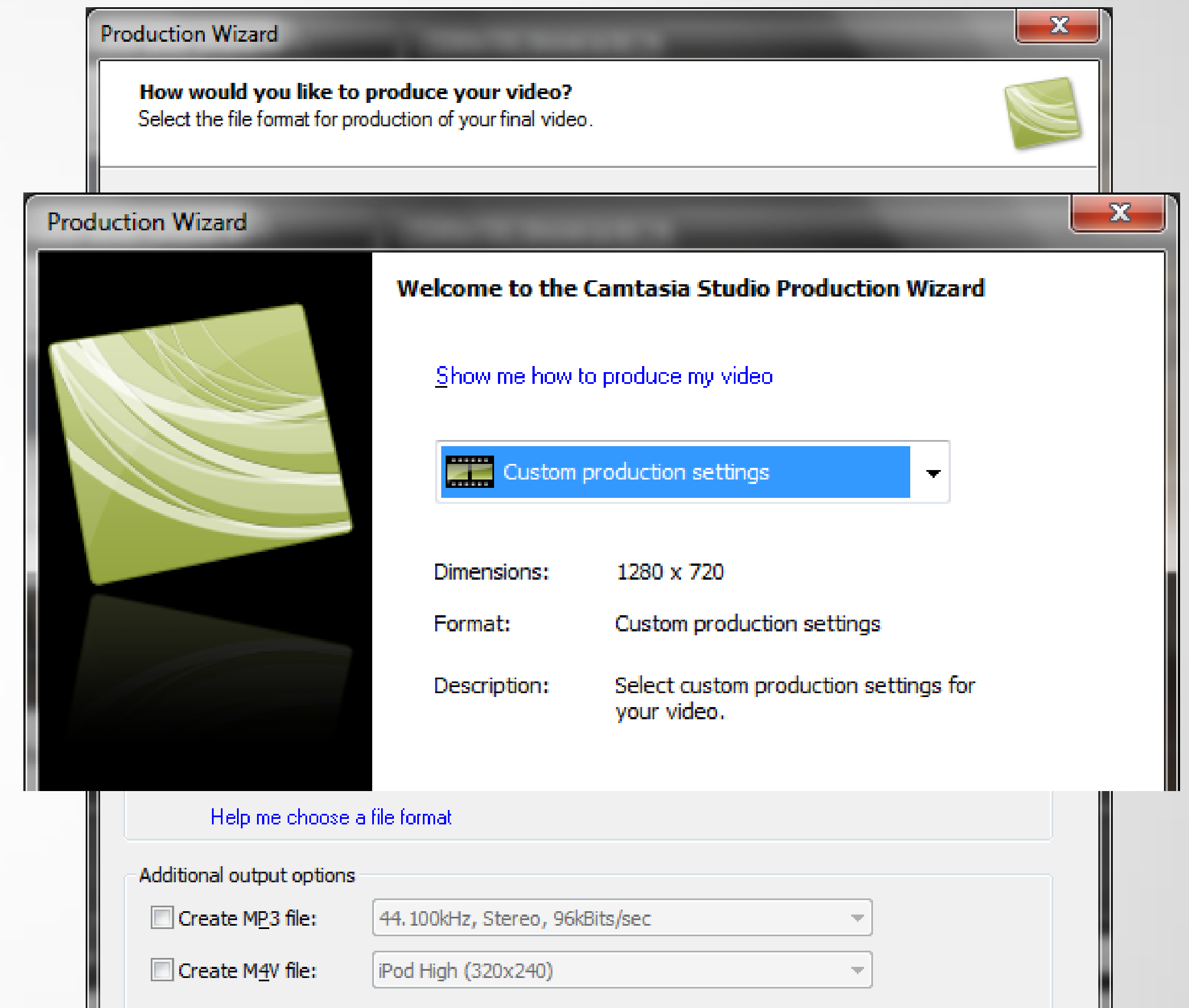
- Pick your size:

1920x1080

1280x720








1024x768

Other ...



# Alternate formats?

- iPod, iPhone:  
M4V
- Audio:  
MP3
- Can be created at the same time as other outputs ...

-  ☐ MOV - QuickTime movie
-  ☐ AVI - Audio Video Interleave video file
-  ☐ M4V - iPod, iPhone, iTunes compatible video
-  ☐ MP3 - audio only
-  ☐ RM - RealMedia streaming video
-  ☐ CAMV - Camtasia for RealPlayer streaming video
-  ☐ GIF - animation file

[Help me choose a file format](#)

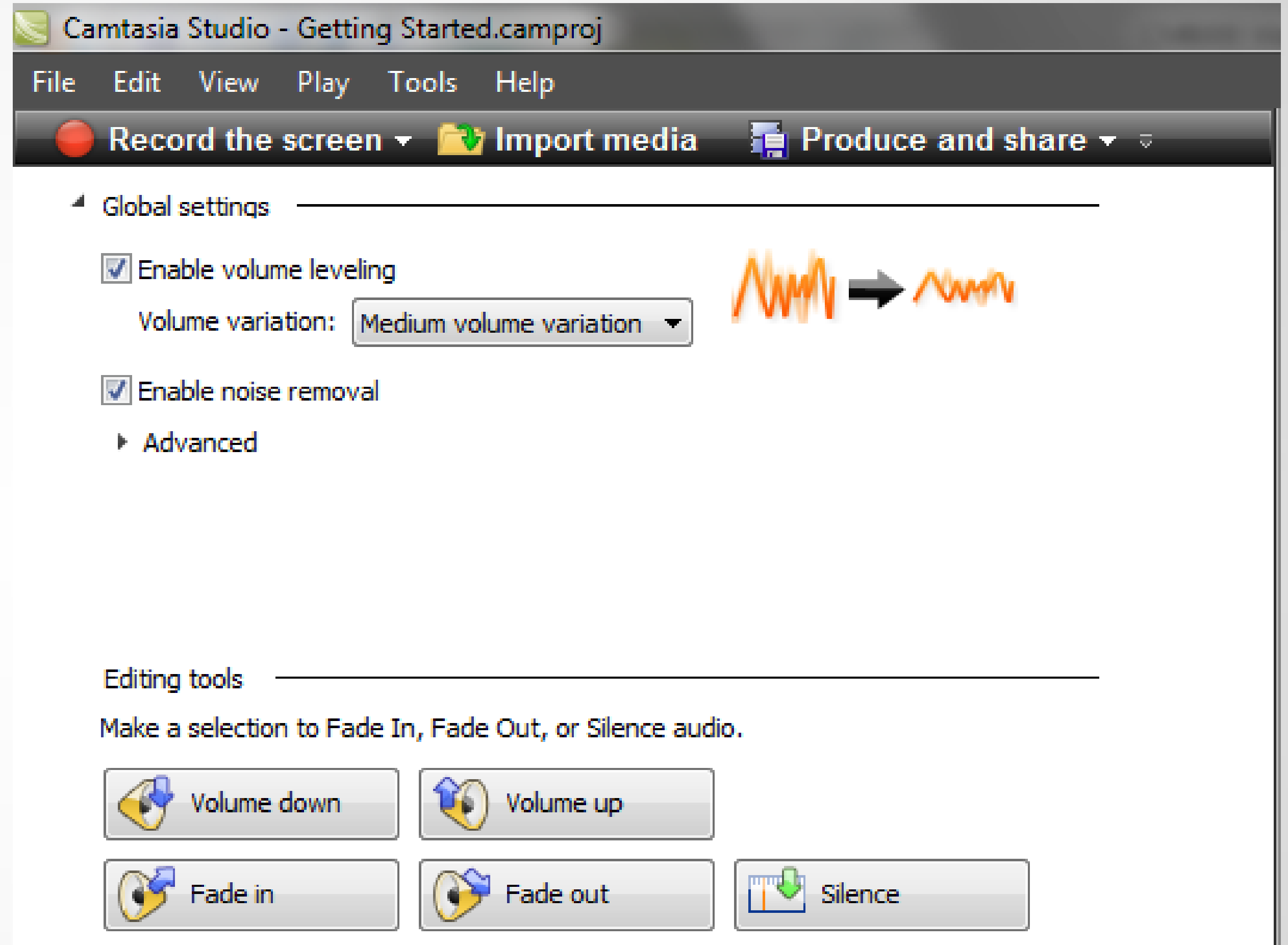
## Additional output options

- ☐ Create MP3 file: 44.100kHz, Stereo, 96kBits/sec
- ☐ Create M4V file: iPod High (320x240)



# Tweak the audio

- **Volume leveling:**  
**Low for studio**  
**Medium for live**
- **Use noise removal**
- **Be sure to save ...**





# Recycling

Reuse what you record



# Use videos again and again

- Make them available:

On your LAN/WAN

As downloadable Podcasts

Combine with handouts:

Store handouts in PDF

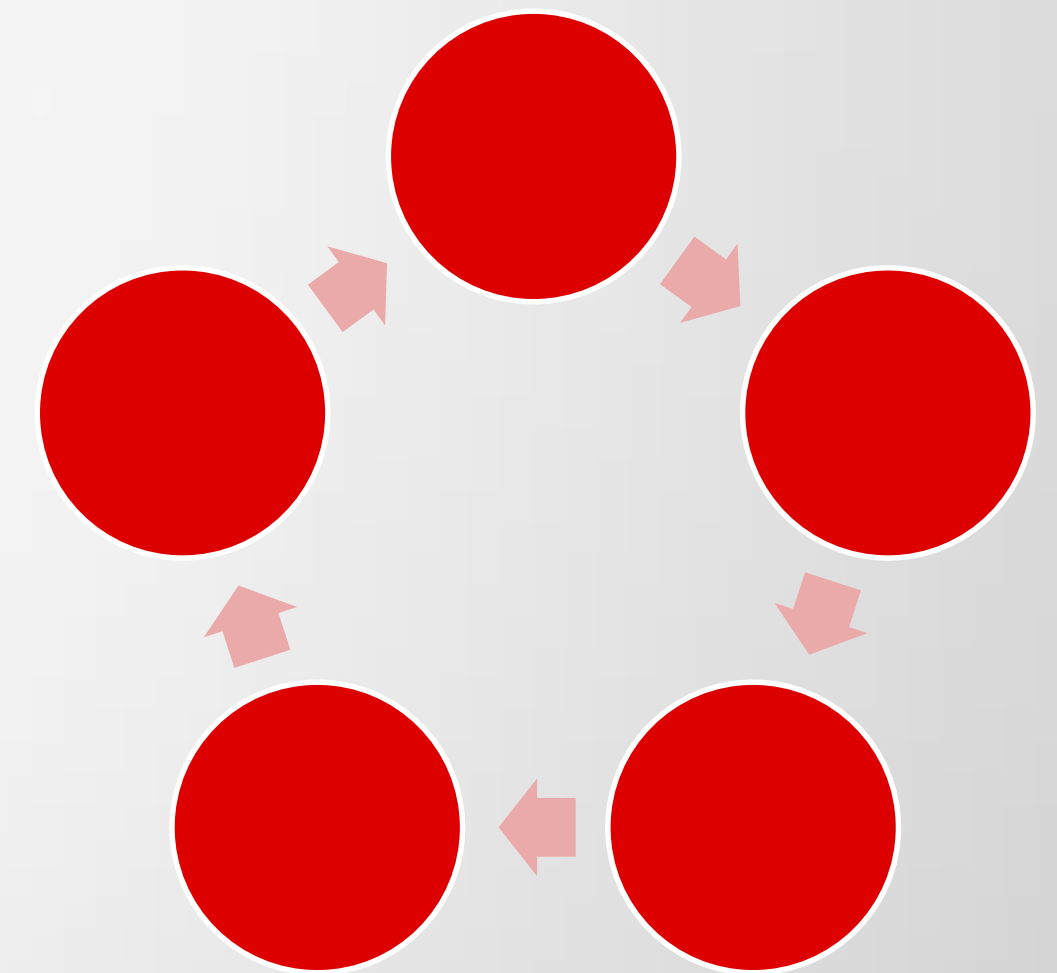
Embed hyperlink in PDF to launch videos

Make it simple:

To learn independently

For users to watch rather than ask again!

You'll be glad you did ...





**Keep at It!**  
**You can do it!**  
**(It becomes natural after a while)**





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