VOICE RECORDING MANUAL

Dear decoding Friends!

Please, have below a very pragmatic and clear brief about practical aspects of voice recording from our expert, Tamás Gáspár, Budapest.

Thanks for him!

MICROPHONES

1) DONT DO THAT, PLEASE

We do **not recommend** due to low quality*:* built-in microphone of laptop, neither cheap normal microphone plugged-in a laptop, nor phone with voice recording feature – except iPhone! – due to high noise-level and poor quality. These tools are suitable for voice notes or phone-calls, but by no means for clip recording.

2) THE SMART PHONE TRICK

By using **mobile smart-phone** offering WAV, AAC, MP3 (above 128 Kbps) formats, of definitely 16-bit and minimum 32 kHz sampling, better 44.1 or 48 kHz.

It does NOT WORK with voice recording softwares for third party.

Microphones built in mobile phones are rather sensitive, but unless we use a good quality extra software, quality of sound recording will be unacceptably low, as built-in softwares overcompresse the recorded files (See point 1, not recommended). After all, You can use your smart-phone too, in case you are satisfied of the recorded sound-quality.

Recorded files can be saved to Your PC by connecting the phone as external memory via USB port.

TAPETALK

A right software option for Android system:

Tapetalk Voice Recorder (freeware; very simple)

Setting of Tapetalk:

Settings menu -> Sample Rate: 44.1 kHz;

Sample Format: 16 bit;

Hight Quality (WAV or PCM, non-compressed format): Yes or tick; choose MONO as microphone type, … all the rest of the settings is up to You.

Other softwares use similar options.

Switch-off AGC (Auto Gain Control) option, that changes sensitivity of the microphone automatically according to the actual input volume level to compensate it, causing „loud noise" pulsating during silent gaps between

BEST RECORDERS FOR DECODING

3**) Portable Voice Recorders**

Voice recorders may produce top-quality using them the right way, at reasonable price.

Please, find below a quick oveview and description of the most popular quality digital voice recorders:

http://digital-voice-recorder-review.toptenreviews.com/

We were using type **TASCAM DR-05** in Wildberg (Germany) – which is perfect for iTONGUE decoding and clip production:

http://digital-voice-recorder-review.toptenreviews.com/tascam-dr-review.html

I will have one TASCAM DR-05 on me (Korpusz, Hungary), so You are welcome to try it during our

meeting.

TOP QUALITY – FOR PROFESSIONALS

4) **Hunters for Top Quality**

Whoever wants to record by PC will need an external (USB or FireWire) sound controller, and a professional (XLR-plug) microphone, or can choose the simple (and cheap) solution of USB microphones (100-150 USD):

http://thewirecutter.com/reviews/the-best-usb-microphone/

http://www.sweetwater.com/c981--USB_Microphones/pn2

http://www.youtube.com/watch?v=KFIV1glxoKo#t=210

More expensive and sophisticated solutions are recommended for professionals only – dfinitely not for iTongue pjoject:

One-channel external voice controller is enough for simple speech.

You need 2-channel voice controller in case You want to record talk and music, i.e. several channels simultaneously:

http://bluemic.com/icicle/#/desc/

http://www.soundware.co.uk/sc/products/Focusrite-iTrack-Solo/254508/

http://www.soundware.co.uk/sc/products/M-Audio-M-Track/254838/

http://www.tonecontrol.eu/alesis-core-1

http://www.tonecontrol.eu/avid-fast-track-solo-usb-audio-interface

http://www.tonecontrol.eu/esi-maya-22-usb

Practical points for microphone buyers:

http://www.sweetwater.com/insync/studio-microphone-buying-guide/

Condenser microphones:

http://www.sweetwater.com/c105--Condenser_Microphones

Dynamic microphones for talk and singing:

http://www.sweetwater.com/c106--Dynamic_Microphones

Please, do not waste Your money and energy for tricky gears without right professional background – manual voice recorders used in Wildberg are quite easy to use, and results are excellent.

We recommend You to get a quality headphone for editing; You can hear minor defects too and achieve better end result. You can find good quality at modest price (100 USD), but better plugging earpones do to cut expenses:

http://www.fostexinternational.com/docs/products/TH-Series_TH-5_and_TH-7.shtml

http://www.akg.com/K99+Perception-1039.html?pid=1193

http://www.audio-technica.com/cms/headphones/5220ada2bd12e3b0/

http://www.shure.com/americas/products/earphones-headphones/headphones/srh440-professional-studio-headphones

GENERAL ADVICES

The place is an important factor! Recording is best inside a place free of noise and covered by refletion absorbers. You can use curtains, wallcarpets or blankets.

Condenser microphones are very sensitive for the slightest sounds, movements, breaths, speech defects… so speaker should **keep 30 cm distance**. Foam wind-protector can help a lot. Take care of closing potential noise sources out (phone, pet, tv,…) for the time of recording

Dynamic microphones should be **hold at 15-20 cm distance**, as these are less sensitive.

Keep a few second break between the sentences – this way You can make editing much easier. When You fail during text reading, **do not stop recording**, just repeat the sentence after a 2-3 second break. The spoiled section will be easily cut out in the course of editing.

Whatever You may use, take **good care of sound volume**: it should not run upto distortion, but shold not be too silent either. Manual recorders generally have volume display. PC recording offers VU metre by the software. Ont he mike You can adjust level by slide potmeter.

Recording format sould be 'non-compressed' for good quality; so choose .WAV, .AIFF, or: .FLAC, .ALAC, .APE, .WV (WAVPACK), depending on our editing gear. These formats will keep sound quality even after multiple cutting, filtering.

MP3 or AAC compresses the file at every modification, causing loss of quality.

When exporting the processed soundfile you can then chose different formates accordingly. If you need it for moviemaker, you export MP3

Recording can be done in STEREO or MONO format, it is irrelevant in that case, we handle it the same. STEREO effects are for advanced level editors.

AUDACITY Sound Editor

We recommend You a freeware software – **AUDACITY** – because it is aplicabble at every platforms (PC, every Windows versions, Linux, Mac), and knows all we need: cutting, multiple chnnel editing, all sound formats we may need.

http://audacity.sourceforge.net/

You may also get the ==portable== version, which You can run from a pendrive or an external drive.

SETTING UP AUDACITY

After having installed/wrapped out the software, start it,

and in EDIT menu click on PREFERENCES to get setting menu:

1) In DEVICES (left) set the surface, by what we gonna do the record.

2) In INTERFACES menu You can find ==MME== (MultiMedia Extension) – that is the basic setting, ==leave this unchanged.==

3) In PLAYBACK frame in DEVICE menu choose ==playback device==, eg. ==laptop headphones==.

4) Settings of RECORDING section are interesting only when You use directly plugged microphone to your PC for recording. Chose input device from menu, and below that at CHANNELS set 2 (STEREO).

5**) In Windows** CONTROL PANEL You should set SOUND menu, chosing the aplicable devices in PLAY-BACK and RECORDING section, setting them as basic option.

Also in ==PREFERENCES menu==/ QUALITY section, in SAMPLING frame set Default Sample ==Rate at 44100== or ==48000 Hz==, You are free to chose, except for DVD format (==DVD standard is 48kHz==).

For DEFAULT SAMPLE FORMAT set: 16 bit, all other settings are OK by basic setting. Save setting by pushing /OK/.

In case You record by external device (mobile phone, manual recorder), plug-in the computer your device by USB cable. Set the phone in (external storage mode), and copy the recorded files into an easy-to-reach folder of the computer to assure fast processing, and free use of recording device.

OPEN the copied sound-file in AUDACITIY (or in any Voice Editor at Your preference):

FILE menu → IMPORT (!) → AUDIO frame: just choose the track You want, or simply drag the file in.

As basic setting, software will ask if You want a safety copy of the opened track – it takes a little time, but safe, and we can reach original the version too. You may choose direct editing (no safety copy), at this case CTRL+S is for „project save", track can be saved by CTRL+SHIFT+E.

Opening of more than one sound file:

Pushing SHIFT or CONTROL You can click on the files You want for job, and drag into the opened AUDACITY frame. Software opened places files in tracks beneath each-other, that You can shift in time-line.

You can find usage tutorial of AUDACITY on the web, showing every step by video, and as the old Chinesesays: 1 picture shows more than 1000 words…

http://www.youtube.com/results?search_query=audacity%20tutorial&sm=3

… or tutorials on AUDACITY official website:

http://audacity.sourceforge.net/manual-1.2/tutorials.html

Plug-ins:

As You are getting mor experience, You can extend editor software by VST plug-ins to bring in new functions as sound creation, volume limiters, distortions, filterings, …

You can find freewares among them:

http://www.vst4free.com/

http://www.pluginboutique.com/free

etc..

…and endless choice of paying sites:

http://www.steinberg.net/en/products/vst.html

http://www.kvraudio.com/

http://www.vstwarehouse.com/

After unzipping copy the modules in PLUG-INS tray of AUDACITY software:

C:\Program Files (x86)\Audacity\Plug-Ins in Windows.

By restarting the software, You may find these in EFFECT menu point.

Find further detailed instructions here:

http://manual.audacityteam.org/o/index.html

ENJOY DECODING AS MUCH AS POSSIBBLE ☺ AND SMILE!

BEST WISHES FROM SÁNDOR, HUNGARY