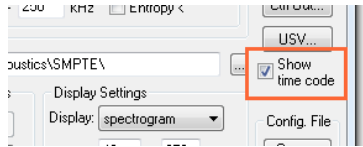
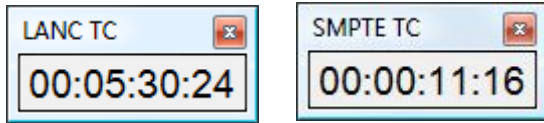


LANC / SMPTE time code interface

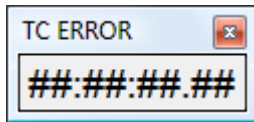
The RECORDER USGH software can decode LANC and SMPTE time code information that is fed into the UltraSoundGate digital inputs (DIN). To enable the time code signal detection / decoding mechanism, the option Show time code on the Configuration dialog box must be checked:



Once a valid LANC or SMPTE signal is detected on one of the DIN inputs, a time code display will be launched:



In case the software cannot extract a meaningful time stamp stream, a TC ERROR message is displayed:



Interfacing to LANC Time Code

LANC (or CTRL-L) time code information is available on a number of SONY and Canon camcorders. Note that not all models actually provide valid incrementing time stamps on their A/V jack. The LANC signal is usually a 2.5mm stereo TRS jack (or in newer models a 10-pin A/V terminal jack, which requires an appropriate adapter cable) that can be connected to a USG DIN socket by using a custom-made interface cable that has a 3-pole 2.5 mm TRS plug at one end (with the ring pin left unconnected) and a 2-pole 2.5 mm TS plug at the other end. Such a cable is available from Avisoft Bioacoustics (part# 40122).

Interfacing to SMPTE Time Code

SMPTE time code signals are provided by a number of SMPTE time code generators, such as the model HORITA PG-2100 or TG-50/TG-50P. The output signal of these devices is an AC-coupled signal that is originally intended for recording onto an analog audio input channel. It is therefore required to convert this AC-coupled signal to the open-collector DIN input of the UltraSoundGate. A suited adapter cable with integrated amplifier is available from Avisoft Bioacoustics (part# 40123.)

Using the acquired time code

The serial time code that is acquired by the DIN input of the UltraSoundGate hardware is stored into the least significant bit of the waveform data samples.

This information can be accessed by the Avisoft-SASLab Pro analysis software by selecting the options **LANC timecode on USG DI (LSB)** or **SMPTE timecode on USG DI(LSB)** from the main window command **Analyze/Time axis format...** The time axis on the both the main and spectrogram window will then represent the recorded time code. Red-coloured ticks along the time axis indicate the individual video frames.

Note that the time code track located on the least significant bits of the .wav file will be destroyed by applying any filter command, unless the option „keep DIO state“ is activated..