Setting up the E-MU 0404 USB audio interface for ultrasound playback

First install the device driver from the *E-MU Tracker Pre, 0202 USB and 04040 USB Software/Manual* Installation CD-ROM

Select the sample rate of 192.0 kHz from the E-MU 0404|USB [Control Panel], which can be accessed from Start>All Programs>Creative Professional>E-MU USB Audio>E-MU USB Audio Application:

Unfortunately, the most recent firmware update of the E-MU 0404 does not save this setting, which means that you need to do this each time after powering on the unit.

Make sure that the E-MU interface is connected via an USB 2.0 interface. If connected through USB 1.1, the sample rate settings of 96 and 192 kHz will not be available.

On Windows Vista and Windows 7 it is additionally required to select the playback sample rate from the Windows Control Panel (Start>Control Panel>Hardware and Sound>Sound>Playback>Digital Output E-MU 0404>Properties>Advanced):

The selected sample rate (192 kHz) must match the sample rate setting made on the E-MU 0404 USB control panel.

Note that the maximum sample rate supported by the E-MU 0404 audio interface is 192 kHz. This means that sound files having a higher sample rate (for instance 250 kHz) must be down-sampled to 192 kHz. This could be done from the Avisoft-SASLab Pro command
'Edit'/Format'/Sampling Frequency Conversion...’ Otherwise, the Windows audio playback engine might internally resample the high sample rate sound files to 44.1 kHz, which would limit the analog bandwidth to 22 kHz.

The **LINE IN** cinch input socket of the Avisoft portable ultrasonic power amplifier can be connected to the output of the E-MU 0404 by using an appropriate ¼” mono phone plug (TS plug) to cinch plug adapter cable. Alternatively, a 3.5 mm stereo TRS plug to cinch plug can be used.

The playback sound level is determined both by the **Main Output** level knob of the E-MU 0404 and the **VOLUME** knob on the Avisoft power amplifier.
Setting up the E-MU 04040 USB / E-MU Tracker Pre audio interface for ultrasound recording

First install the device driver from the E-MU Tracker Pre, 0202 USB and 04040 USB Software/Manual Installation CD-ROM

Select the sample rate of 192.0 kHz from the E-MU 0404|USB [Control Panel] , which can be accessed from Start>All Programs>Creative Professional>E-MU USB Audio>E-MU USB Audio Application:

Unfortunately, the most recent firmware update of the E-MU 0404 / Tracker Pre does not save this setting, which means that you need to do this each time after powering on the unit.

Make sure that the E-MU interface is connected via an USB 2.0 interface. If connected through USB 1.1, the sample rate settings of 96 and 192 kHz will not be available.

On Windows Vista and Windows 7 it is additionally required to select the recording sample rate from the Windows Control Panel (Start>Control Panel>Hardware and Sound>Sound>Recording>Microphone E-MU 0404>Properties>Advanced):

The selected sample rate (192 kHz) must match the sample rate setting made on the E-MU 0404 USB control panel.