

*In signal processing, the impulse response, or impulse response function (IRF), of a dynamic system is its output when presented with a brief input signal, called an impulse. More generally, an impulse response is the reaction of any dynamic system in response to some external change. In both cases, the impulse response describes the reaction of the system as a function of time (or possibly as a function of some other independent variable that parameterizes the dynamic behavior of the system). [...]*

*In acoustic and audio applications, impulse responses enable the acoustic characteristics of a location, such as a concert hall, to be captured. Various packages are available containing impulse responses from specific locations, ranging from small rooms to large concert halls. These impulse responses can then be utilized in convolution reverb applications to enable the acoustic characteristics of a particular location to be applied to target audio.*

*-Wikipedia*

*In collaboration with acoustician Stefan Kaak we created an impulse response for the exhibition space at Galerie Herold, Bremen, Germany during the exhibition 'Heavy Listening'. If you follow these steps, you can place your own sounds into the acoustics of the exhibition.*

1.

## **DOWNLOAD IMPULSE RESPONSE HERE**

*([www.researchandwaves.net/impulse.wav](http://www.researchandwaves.net/impulse.wav))*

- 2. Download Audacity [here](http://www.audacityteam.org/download/) (www.audacityteam.org/download/) and SIR1 [here](http://www.siraudiotools.com/sir1.php) (www.siraudiotools.com/sir1.php) - Windows only, sorry.*
- 3. Install Audacity*
- 4. Unzip SIR1 and place the SIR\_1011.dll file in C:/Program Files/Audacity/Plugins (C:/Program Files(x64)/Audacity/Plugins on 64Bit systems)  
(or follow [this](http://www.petekruse.com/2014/03/how-to-add-vst-dll-effects-into-audacity.html) tutorial www.petekruse.com/2014/03/how-to-add-vst-dll-effects-into-audacity.html)*
- 5. Open Audacity and go to > Effects > Add/Remove Plugins... Find SIR\_1011 and click > Enable*
- 6. Record or import Audio*
- 7. Go to Effects and choose > SIR\_1011*
- 8. In the new window choose > Open File and open the downloaded impulse response (.WAV)*
- 9. Test by using the > Play button and click > Apply and then > Close to use the effect on your Audio*