

## Howto use a speaker as microphone over the same interface on Annunicom.

On the Annunicom100 it is possible to use a connected speaker also as microphone (no additional microphone required). Sure, this solution makes only sense in half-duplex mode, for full-duplex it is not usable.

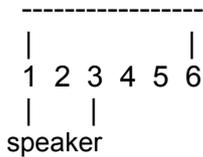
The schematics below are related to the upper orange 6-pin connector block of the Annunicom100.

There are two different solutions :

A - very low noise from mic, but only 1/4 output power for audio output (but was still loud enough here). The volume level should be increased (e.g. from 50% to 80%).

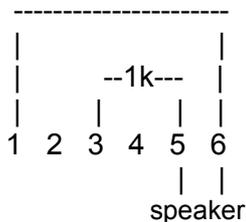
B - a little more noise from Mic (but acceptable) and full output power

**For A** connect your speaker to Mic input (Pin 1 & 3 of the upper orange 6 pin connector) additional short Pin 1 and Pin 6 . That's probably the easiest and probably also the best way.



**For B** short Pin 1 & Pin 6 , connect your speaker to speaker out (pin 5 & 6) and additional connect a 1k resistor between Pin 3 and Pin 5.

Use a shielded cable to connect the speaker to get a better result/audio quality.



For both installations a higher "Mic gain" should be defined in the Annunicom setup, e.g. 34,5 db.

We have tested with a HIFI headphone, a cheap headset and a 20 Ohm speaker and have got good results. Also with 8 Ohm HIFI speakers were possible, but they worked not so well.

This should be only an indication for you, you have to test it with your own speaker !