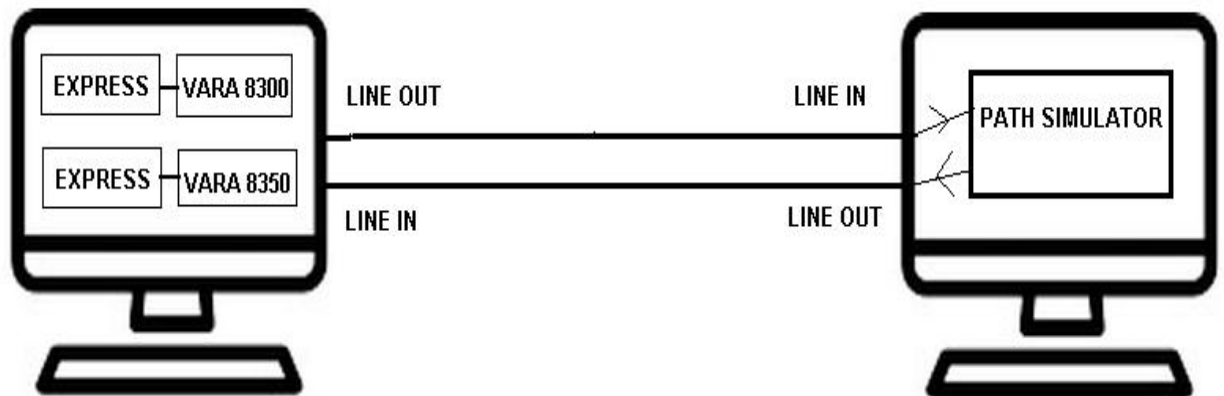## SOUNDCARDS CONFIGURATION

I have used 2 computers connecting LINE IN with LINE out in both soundcards. Path sim take the audio by LIEN IN, and play the sound by the LINE OUT (the others lines must be muted). The audio level should be adjusted to avoid VU in red zone 8saturation). This test requires extensive knowledge about audio levels soundcard adjustements.
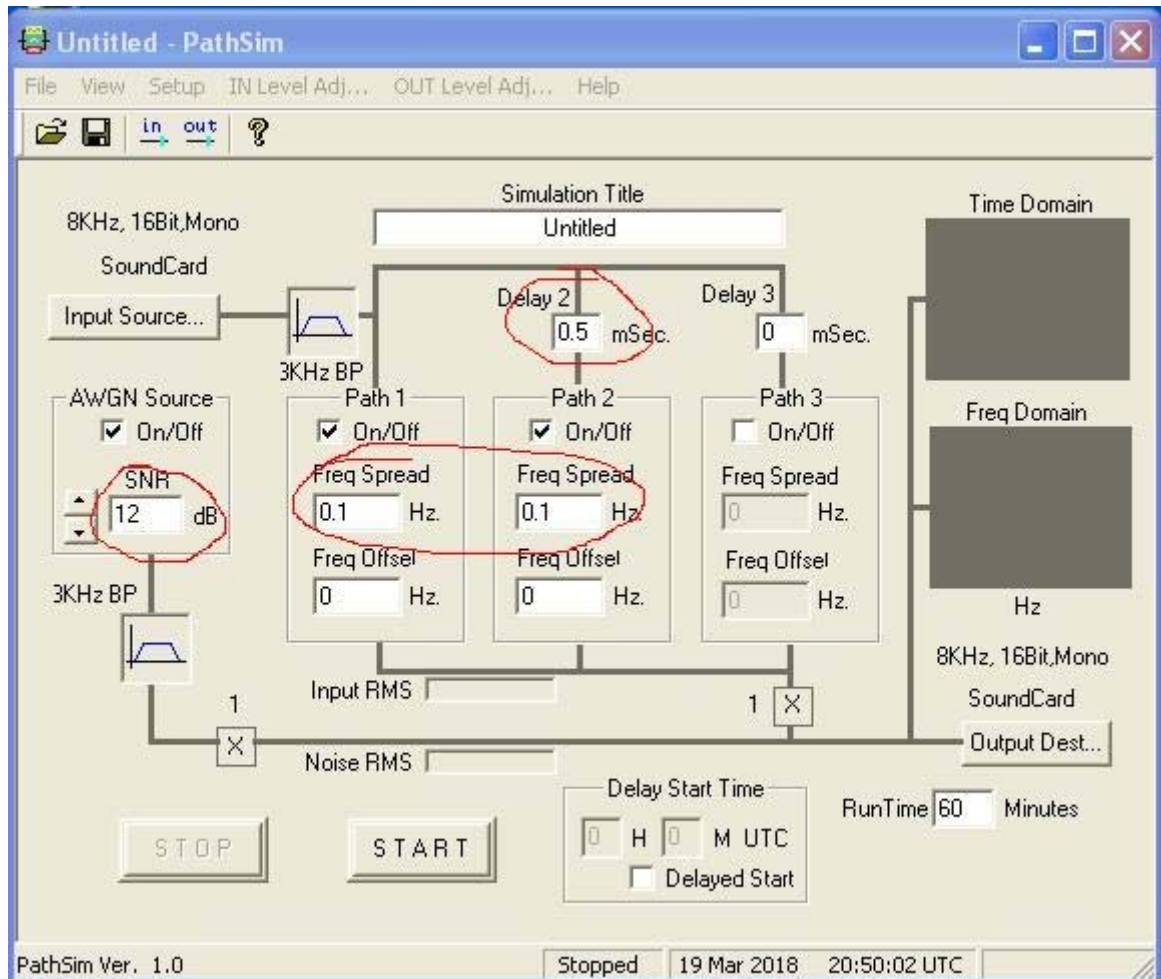
In the first PC you need run two RMS express P2P with another two VARAs. One VARA is using the 8300 Port, and the other one using the 8350 port, for example. You need a different folder to run both VARAs.

Path Simulator 1.0 add about **1.1 second of delay** in the ACK sending. This is not compatible with VARA protocol and cause bad decodes due to WAIT timer time out before the complete decoding time. So, I have attached a VARA.exe modified with the WAIT timer set to 1.5 seconds in order to pass through the Path Simulator. You need to copy this .exe file into both VARA folders.

PATH SIMULATOR CONFIGURATION

In PathSim you have to set the S/N, delay and spread Doppler as show the picture. Note the Spread Doppler must be added in both path (Path1 and Path2)

Select a run time of 60 minutes. I recommend press STOP-START before each session.

MEASURES

You have to take the bytes/minute shown in the **transmission** of RMS Express:

*** Connected to Peer: EA5HVK @ 2018/03/19 19:47:10 USB Dial: 7098,500 at 2018/03/19 19:47:10
;FW: EA5HVK
[RMS Express-1.5.11.3-B2FHM$]
EA5HVK DE EA5HVK >
  ;FW: EA5HVK
  [RMS Express-1.5.11.3-B2FHM$]
  ; EA5HVK DE EA5HVK (IM97LQ)
  FC EM DYA6UCHF5TWU 50356 49234 0
  F> 90
FS Y
*** Sending DYA6UCHF5TWU.
FF
*** Completed send of message DYA6UCHF5TWU
*** Sent 1 message. Bytes: 49638, Time: 04:30, bytes/minute: 11024
  FQ
*** --- End of session at 2018/03/19 19:52:16 ---
*** Messages sent: 1. Total bytes sent: 49638, Time: 05:06, bytes/minute: 9710
*** Messages Received: 0. Total bytes received: 0, Total session time: 05:06, bytes/minute: 0
*** Disconnecting
*** Disconnected from Peer: EA5HVK @ 2018/03/19 19:52:26
*** Session: 5.3 min; Avg Thruput: 880081 Bytes/min;   1 Min Peak Thruput: 880081 Bytes/min