Instructions for Capturing Echo Canceller Data

When integrating an echo canceller, tuning an echo canceller, or troubleshooting an echo problem, it is sometimes necessary to **capture data** and send it to Adaptive Digital.

When capturing data and sending it to Adaptive Digital, it is important that you follow these guidelines.

1. Four files should be recorded. (Please refer to the diagram to help with the terminology.)

    - EC Receive Input (Input from Far End)
    - EC Transmit Input (Input from Near End)
    - EC Receive Output (Output to Near End)
    - EC Transmit Output (Output to Far End)

2. The recordings must be made **simultaneously** – during a single voice call. In other words, the four recordings must be synchronized.

3. The inputs should be capture immediately before calling the EC, and the outputs should be captured immediately after calling the EC. We want to see the exact data that the EC algorithm sees, and we want to see the immediate output from the EC.

4. The captures should be 16-bit binary PCM, intel format. There should not be any compression applied (MP3, G.729, etc.)

5. The EC settings (initialization parameters) should be sent in conjunction with the captured data.

6.   If at all possible, perform two captures one with the Nonlinear Processor (NLP) enabled and one with it disabled. In the case of HD AEC, the NLP can be disabled by setting maxTxLoss to zero. In the case of G.168 the NLP can be disabled by setting the NLPType to NLP_OFF.

7.   There should be at least a few seconds of receive-only single talk at the beginning of the recording. In other words, somewhere at the beginning of the recording, there should be a period during which there is far end speech but no near end speech. If the recording is made live, perhaps that will not be the case. If so, there should be some period during the recording that has a few seconds of receive-only single talk.