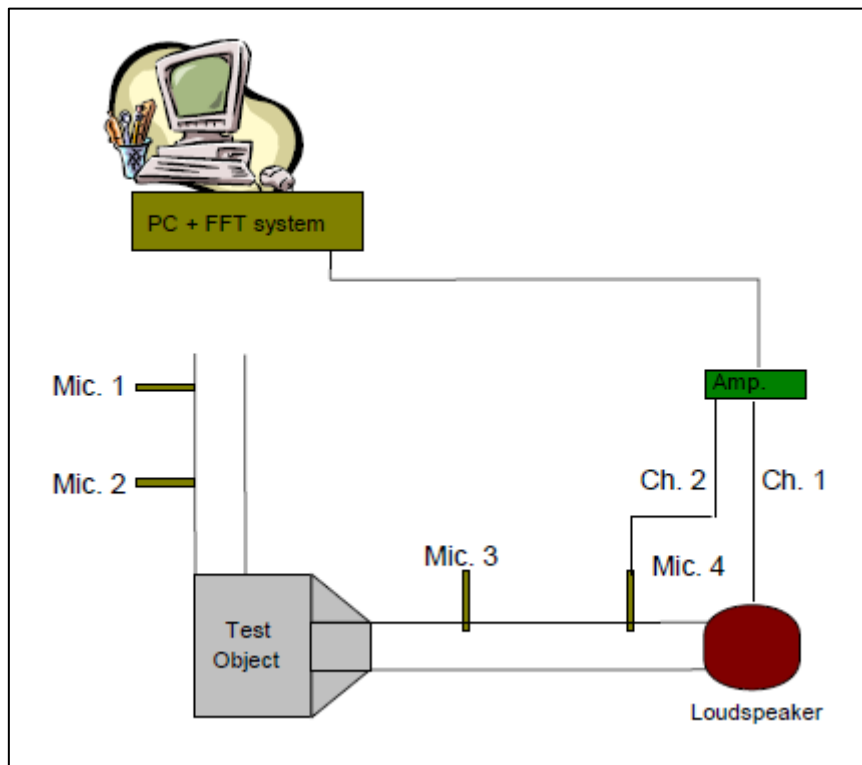# Measurement Information



- Frequency Range (Hz): 0 to 2000
- Distance between Microphones (m):
    - Mic 1 & 2: 0.42
    - Mic 3 & 4:  0.42
- Diameter of Pipes (m): Internal= 0.1; External: 0.11
- Density: Rho (kg/m3) = 1.2
- Temperature: T (C) = 20
- Distance between Microphone (Position 3) and Muffler: 0.375
- Distance between Microphone (Position 2) and Muffler: 0.375

## Data Info:

- **File Names:** the .dat/.mat files have the following name format → *MicrophoneNumber_EndType.dat or FRF_ MicrophoneNumber_EndType.mat*
    - 1.) *MicrophoneNumber* has the pressure measured at Microphone Position 1,2,3 or 4 (based on the figure above):
    - 2.) *EndType* has two types*:*
        - a. *'Foam_End'* = Absorption material attached at the termination for semianechoic termination (test case)
        - b. *'Rigid_End'* = Hard Wall termination for complete reflection (test case)
- **.mat files Variables:**
    - 1.) **Variable Frek:** Frequency datapoints of measurement in Hertz

*2.)* **Variable Amp:** Amplitude of the FRF between the measured microphone signal and the reference signal.

*3.)* **Variable Phi:** Phase angle of the FRF between the measured microphone signal and the reference signal (in degrees).