

## Common Initial Steps on Windows and Linux

1. Download the Acoustics Toolbox ZIP file using this link:  
<http://oalib.hlsresearch.com/AcousticsToolbox/> (the link may not work in future; in this case just Google “Acoustics Toolbox”)
2. Unzip the contents into a directory of your choice
3. The installation file you will need to run is the “Makefile”. It is in the root directory of the acoustic toolbox folder that you have just extracted from the ZIP file. The instructions tell us to comment/uncomment the relevant lines in this file, depending on which FORTRAN compiler we use. We will be using ‘*gfortran*’; for this I did not have to change anything in the Makefile.

## Next Steps on Linux

For simplicity I will assume that the directory where you have unzipped the Acoustics Toolbox source files is “~/at”, but obviously feel free to extract it elsewhere and replace “~/at” by your chosen directory in these instructions.

4. To compile the Acoustics Toolbox we will need ‘*gfortran*’ which comes as part of the GCC Compiler Collection, installed by default on Ubuntu. If for some reason you don’t have it, `sudo apt-get install 'gcc' or 'gfortran'` package.
5. All we need to do now is open a terminal, point to “~/at” or your equivalent, and run:

```
make all
make install
```

You should see success messages displayed in the Terminal. The installation instructions that come with the Acoustics Toolbox say that we should also run ‘`make clean`’ before these, but it worked without it for me.

6. Finally, remember to add the directories with the Acoustics Toolbox code and executables to your MATLAB path using, e.g. using the following MATLAB command:

```
addpath(genpath('<Acoustics Toolbox directory>'));
```

## Next Steps on Windows

For simplicity I will assume that the directory where you have unzipped the Acoustics Toolbox source files is “*C:/at*”, but obviously feel free to extract it elsewhere and replace “*C:/at*” by your chosen directory in these instructions.

4. To compile the Acoustics Toolbox we will need the ‘*gfortran*’ compiler and the ‘*msys*’ utility, both of which come as part of the MinGW package.
5. We will need to run it using the ‘*msys*’ utility, a command prompt that supports basic UNIX utilities (including ‘*make*’). First, you need to find where the ‘*msys.bat*’ file was installed. Search for it. If the search doesn’t show anything (like it didn’t for me), try looking into hidden folders under the root “*C:/*” directory. For me, the file was under “*C:/AppData/MinGW/msys*”. Assuming this is the case (use the directory you found for ‘*msys.bat*’ in the following instruction). Open the Windows Command Prompt, and run MSYS by executing the following:

```
C:/AppData/MinGW/msys/msys
```

6. Hopefully, a UNIX terminal-like window appeared at this point. This is MSYS. Now all we need to do is point to the directory where the Acoustics Toolbox source files were extracted, in our example, by running “*cd /c/at*”, where “*/c*” is MSYS syntax for accessing the Windows C disk. Check that you are in the right directory by running “*ls*” (you should see the contents of the Acoustics Toolbox folder, including the Makefile).
7. Now all you need to do is run the two following commands in MSYS:

```
make all  
make install
```

You should see success messages displayed in the *msys* window. The installation instructions that come with the Acoustics Toolbox say that we should also run ‘*make clean*’ before these, but it worked without it for me.

8. Finally, remember to add the directories with the Acoustics Toolbox code and executables to your MATLAB path using, e.g. using the following MATLAB command:

```
addpath(genpath('<Acoustics Toolbox directory>'));
```