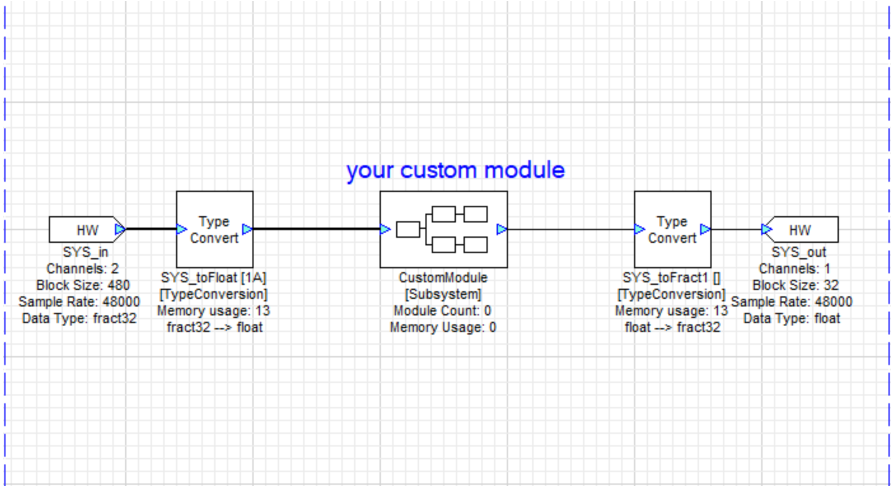
# Interpreted Modules



**Copyright Information**

**Disclaimer**

DSP Concepts, Inc. reserves the right to change this product without prior notice. Information furnished by DSP Concepts is believed to be accurate and reliable. However, no responsibility is assumed by DSP Concepts for its use; nor for any infringement of patents or other rights of third parties which may result from its use. No license is granted by implication or otherwise under the patent rights of DSP Concepts, Inc.

# Change Log

| Version | Date | Description |
|---|---|---|
| 1.0 | 22 Dec. 2022 | Initial Draft or major changes |

# Table of Contents

# List of Figures

# 1 About This Guide

The Interpreted Modules guide contains instructions for enabling a custom module to be imported into Standard and Pro versions of Audio Weaver and found in the 3rd party folder of the module browser by default, or a folder designated by the user with the “M.moduleBrowser.path” parameter in the .m file.

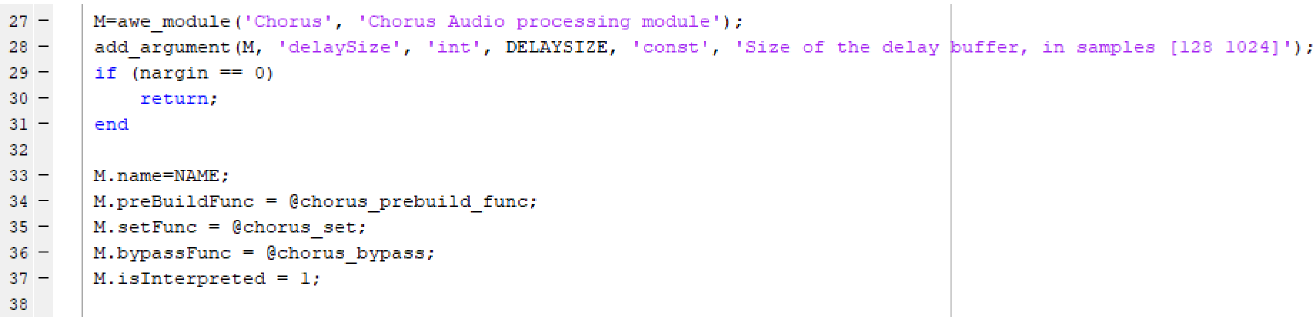
# 2 Steps for enabling a module as “interpreted”

## 2.1 MATLAB

Do the following steps to edit the MATLAB files of the module

1. Add the line "isinterpreted = true;" to the *<modulename>_module.m* file (found in the “matlab” folder of your custom module) directly after the “M = awe_module(…” assignment.

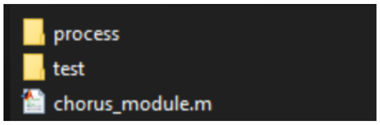
2. Add spaces around equals signs for assignment functions (see lines 34-37 in Figure 1)



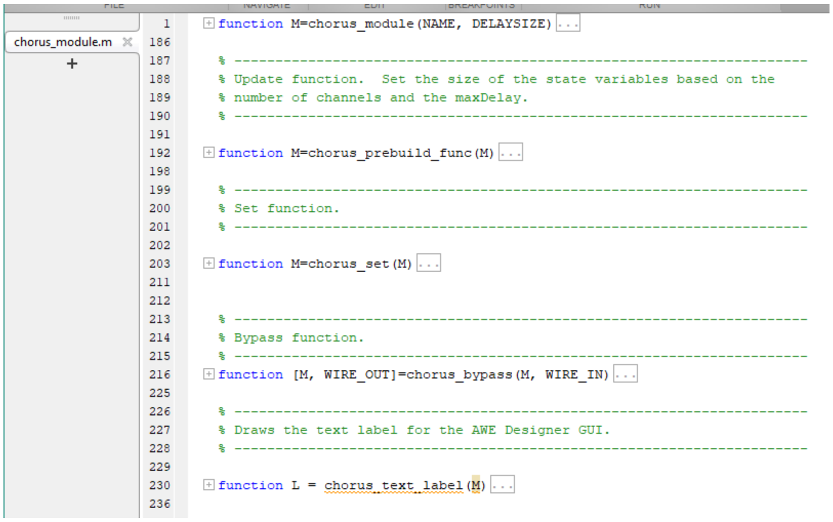
```
27 -   M=awe_module('Chorus', 'Chorus Audio processing module');
28 -   add_argument(M, 'delaySize', 'int', DELAYSIZE, 'const', 'Size of the delay buffer, in samples [128 1024]');
29 -   if (nargin == 0)
30 -       return;
31 -   end
32
33 -   M.name=NAME;
34 -   M.preBuildFunc = @chorus_prebuild_func;
35 -   M.setFunc = @chorus_set;
36 -   M.bypassFunc = @chorus_bypass;
37 -   M.isInterpreted = 1;
38
```

*Figure 1 - see line 37*

3. Since interpreted modules cannot have any local functions, separate out functions contained in the *<modulename>_module.m* file to individual *.m* files.

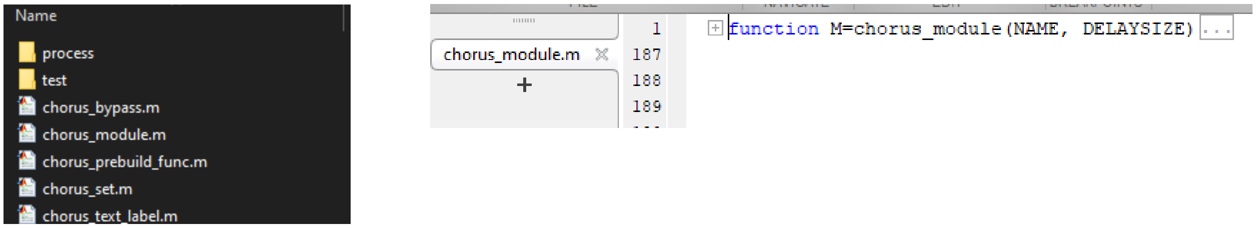


```
process
test
chorus_module.m
```



```
function M=chorus_module(NAME, DELAYSIZE) ...

% ----------------------------------------------------------------------
% Update function.  Set the size of the state variables based on the
% number of channels and the maxDelay.
% ----------------------------------------------------------------------

function M=chorus_prebuild_func(M) ...

% ----------------------------------------------------------------------
% Set function.
% ----------------------------------------------------------------------

function M=chorus_set(M) ...


% ----------------------------------------------------------------------
% Bypass function.
% ----------------------------------------------------------------------
function [M, WIRE_OUT]=chorus_bypass(M, WIRE_IN) ...

% ----------------------------------------------------------------------
% Draws the text label for the AWE Designer GUI.
% ----------------------------------------------------------------------

function L = chorus_text_label(M) ...
```

*Figure 2 - Before separating functions into unique .m files (Above, Right)*



```
function M=chorus_module(NAME, DELAYSIZE)...
```

*Figure 3 - After separating functions into unique .m files, the only function in chorus_module.m is chorus_module*

4. Move any module function up to the same folder as the *<modulename>_module.m*
5. Run "make_<modulename>_pack" to create the updated .c and .h files. Adding "(1)" to the end of the command will also updated the .html module documentation.

## 2.2 Building the module

Build the module, and before launching Designer, move or copy the created .dll file into the same directory containing *AWE_Server.exe* (e.g. "*<install directory>/Bin/win32-vc142-rel/")*

## 2.3 Set Module Path in Designer

In Designer, go *File-> Set Module Path*, then click *Add Folder,* select your custom module folder, and click *Select Folder*. Your module should now show in the modules tab and load into Designer.

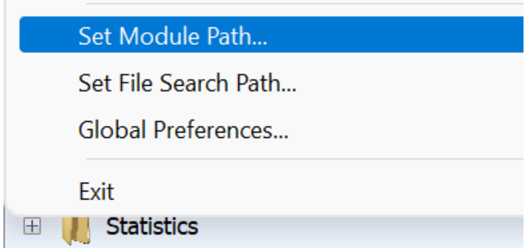
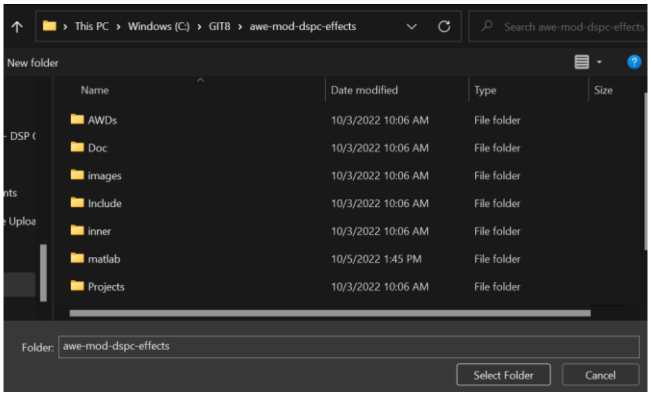
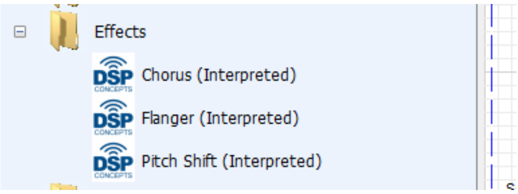


*Figure 4 - Add Module Path*



| Name | Date modified | Type |
|---|---|---|
| AWDs | 10/3/2022 10:06 AM | File folder |
| Doc | 10/3/2022 10:06 AM | File folder |
| images | 10/3/2022 10:06 AM | File folder |
| Include | 10/3/2022 10:06 AM | File folder |
| inner | 10/3/2022 10:06 AM | File folder |
| matlab | 10/5/2022 1:45 PM | File folder |
| Projects | 10/3/2022 10:06 AM | File folder |

Folder: awe-mod-dspc-effects


Effects
Chorus (Interpreted)
Flanger (Interpreted)
Pitch Shift (Interpreted)