

21M.380 MUSIC AND TECHNOLOGY  
SOUND DESIGN

SOUND DESIGN EXERCISE 3 (EX3)  
STEAM TRAIN DRIVE-BY

DUE: WEDNESDAY, APRIL 20, 2016, 9:30AM  
SUBMIT TO: MIT LEARNING MODULES ▶ ASSIGNMENTS  
10% OF TOTAL GRADE

1 Instructions

In groups, implement one Pd abstraction that will contribute to-  
wards our final steam-train drive-by scene.

Students	Abstraction A	Abstraction B
[REDACTED]	[doppler~]	[whistle~]
[REDACTED]	[bell~]	
[REDACTED]	[attenuate~]	
[REDACTED]	[rails~]	
[REDACTED]	[steamengine~]	
[REDACTED]	[pan~]	
[REDACTED]	[absorb~]	

TABLE 1. Student groups

2 Model

We have worked out a model for the steam-train drive-by together  
in class, which is summarized in figures 1 and 2.

3 Guidelines

- Use the framework of Pd patches provided with this assignment,  
starting with driveby~-help.pd.
- Inside that patch, you will find a skeleton of the abstraction that  
you need to implement, either in the [driveby~] or [rusty~]  
object.
- Do not make any edits outside the abstraction that you are re-  
sponsible for. Your final abstraction should work within the  
provided version of driveby~-help.pd.

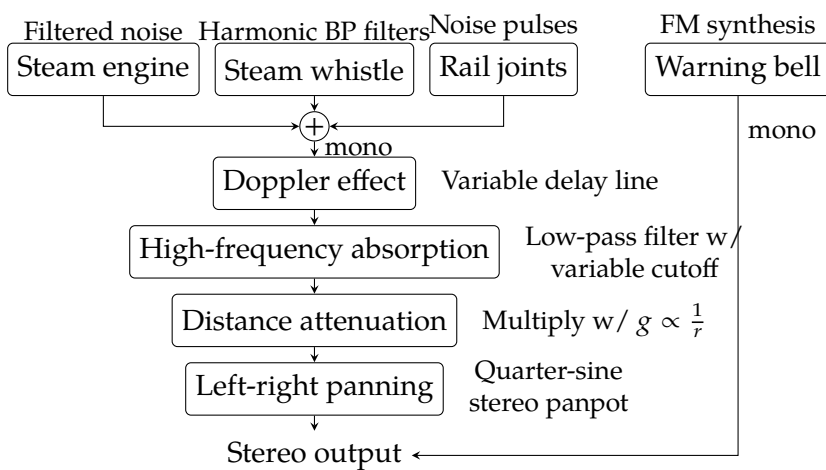


FIGURE 1. Block diagram of steam train drive-by model

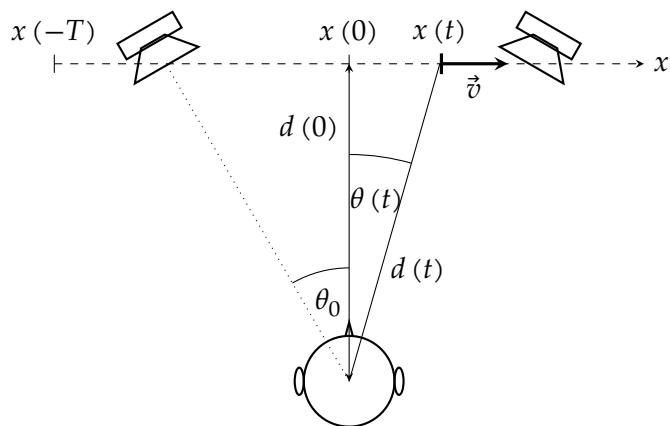


FIGURE 2. Geometry of steam train drive-by

- Use *only* the inlets and outlets that are already provided for your abstraction; don't add any additional ones!
- Stick to the specifications provided by the comments inside your skeleton abstraction, especially with regards to the expected creation arguments.

## 4 Assessment criteria

**Sonic quality** of the sound or acoustic effect

**Integration** How well does your abstraction integrate into the larger patch?

**Coding style** and quality of inline comments

## 5 Submission format

The student who in the above table is listed leftmost for your team should submit a single .zip archive that contains *only* the correctly named .pd file(s) for your abstraction(s). The reason why I ask you to zip the patch(es) is that Stellar (and probably also LMOD) automatically replaces any tilde character (~) in a file name with an underscore (\_). Your abstraction(s) will be tested with the version of driveby~-help.pd that is provided with this assignment.

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