

Title: SipLedger – Utility to control the width of ledger lines  
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Program conformity: v1.00 Build 003

## Introduction

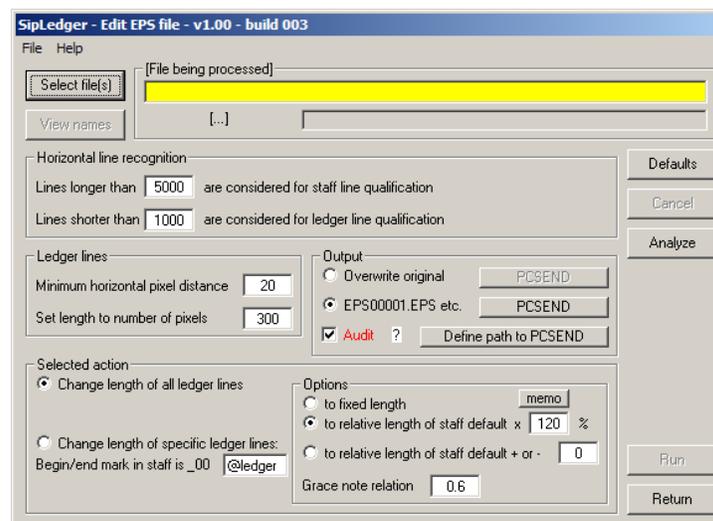
Score has ways to control the thickness of ledger lines but not the width. With this utility, Score users can verify if an engraving has overlapping ledger lines and change all or individual ledger line widths.

Reducing the width of ledger lines may be necessary in very tight notation, or more generally, the width may be adapted to whatever preference for reasons of taste and circumstances.

The program works on a Score generated EPS file. Any number of files can be handled in one run.

## User interface

The utility SipLedger is called from the SIP Control Center and shows the following panel:



The menu line and top portion for the selection of input is equivalent to that of all other SIP utilities and do not need further explanation.

## Horizontal line recognition

The utility must be able to identify staff lines and ledger lines. Generally, staff lines in an EPS file are 30,000 pixels (position 0 to 200). When it is safe to assume that horizontal lines longer than 10,000 pixels are most likely to be staff lines, this value is a good setting. Anyway, there must be 5 lines in a staff with equal distances in order to qualify as a staff line.

Ledger lines in Score have a width which is by default the staff size x 675. They will therefore be shorter than 1,000 unless a staff size of 1.5 or bigger is used. It is safe to assume that horizontal lines shorter than 1,000 are ledger lines. Anyway, ledger lines

must be close the top or bottom staff lines or close to another ledger line in order to qualify as one and have equal distances for the current staff size.

### Ledger lines

The program needs to know the minimum distance which is allowed between ledger lines. A good value is 20. When there are less pixels in adjacent ledger lines this can be considered as overlap or too close to be considered separate lines.

The desired length of ledger lines can be set as a fixed value here. It is however suggested to work with default sizes with a variation expressed in either a percentage or a number of pixels.

### Output

The resulting EPS file can overwrite the original input or the user can select to generate files with names EPSnnnnn.EPS starting at zero.

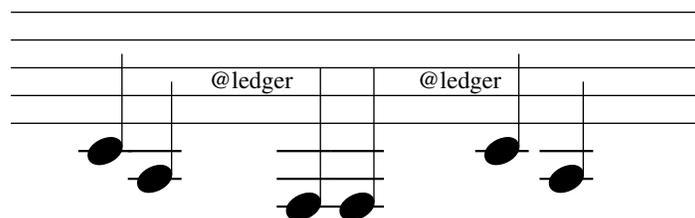
Once output has been created, it can immediately be sent to a printer when a path to PCSEND was predefined.

### Selected action

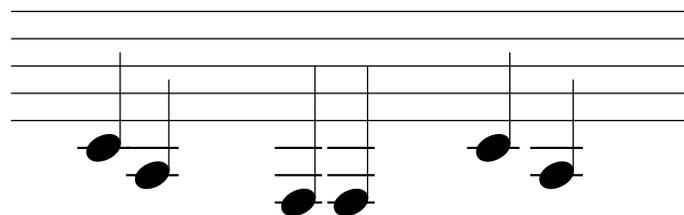
The user can decide to change all ledger line widths of a series of files, or select to only adapt individual sets of lines (a set being all ledger lines depending on a single note).

In the latter case, the MUS file needs additional information to define the beginning and end of the update action by means of marks.

Marks come in pairs. One or more pairs may be defined per staff. The mark is a text string of which the left position defines the beginning or end. This is an example:



The output of this would result in (Setting the default width to 90%):



Where the ledger lines between the marks were subject to the change but the others were not. The marks themselves are removed in the process. The size of the text items is not significant. The font must be an existing font but cannot be 90 or greater. The mark itself is user defined. Its default is the string '@ledger' as shown in the example.

The options are:

- To set the width to a fixed value. The value is taken from the ledger line definition;
- To take the default width for the current staff and add or subtract a percentage of pixels at either side;
- To take the default width for the current staff and add or subtract a fixed number of pixels at either side;
- To set the relation of size for grace note ledger lines.

### **Action buttons**

The top action button 'Default' resets all values in the profile and removes the path to PCSEND if it was defined before. Restart the utility with the default settings.

The 'Cancel' button interrupts a conversion. The output result is unpredictable.

The 'Analyze' button shows what kind of ledger lines are in the given file selection and provides a list of overlaps.

The 'Run' button is enabled when input was selected and starts the conversion.

The 'Return' button brings you back to the SIP Control Center.

### **Distribution**

The utility is free for licensed SIP users.

A prerequisite is that your SIP Control Center is at Build 084 or up. The current version can be downloaded by licensed users.

### **Update history**

Build 003 allows the processing of ledger lines for grace note. The earlier builds did not consider those.