

Title: SipTtoS – Tablature to staff notation converter  
Date: May 30, 2005  
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Version: 1.01

### Introduction

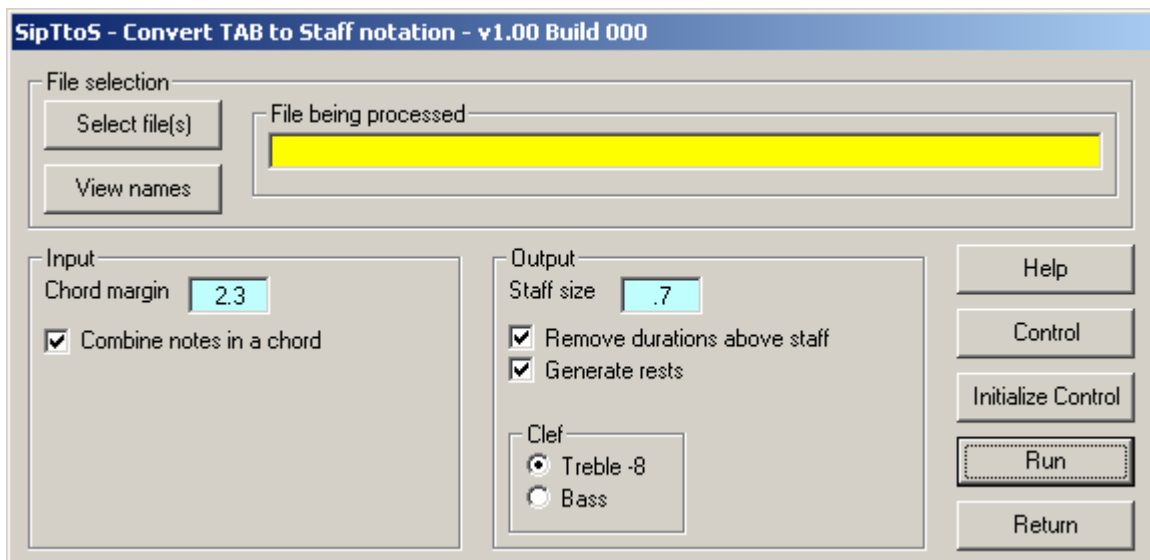
While Score has a feature to convert staff notation to tablature, the other way round requires a utility by the name of SipTtoS. This utility offers conversion capabilities independent of the tablature system. French, Italian and Spanish tablature can be converted.

Initially this utility was developed for gamba (*viola de gamba*) tablature but it can as well be used for lute, vihuela, guitar, etc.

### Graphic interface

This utility in the SIP suite of service programs for Score engravers is controlled by a control panel with file selection features, option settings, and control buttons.

The panel is shown here:



Most controls are self-explanatory and the user will appreciate the intuitive approach and conformity of all SIP utilities.

The first page result of a conversion is immediately shown with by Score.

### File section

One or more files can be selected for conversion. Input files are not modified. The output files are generated in the directory where SCORE is located. By the NX and NB Score commands, the user can walk through the generated result files. The name of the result file is fixed and the user needs to rename it to his preference. The first file generated is TTS00001.MUS and the numeric portion is incremented for subsequent files created by one run.

The name of the file being processed is shown in the designated area. Files selected for conversion can be viewed by the 'View names' button.

### **Input**

The following options exist:

#### *Chord margin*

In a tablature, positions which form a chord and when the characters used for a chord are not precisely identical (Code01Par03), SipTtoS needs to know the distance between those positions in order to recognize them as belonging together. The default is 2.3 but any value can be selected.

#### *Combine notes in a chord*

To instruct the program to combine positions into a chord, set this check mark.

### **Output**

The following options are provided:

#### *Staff size*

Tablature staff sizes are usually bigger than 1 to allow for readable music. However, the size of the output staff notation is entirely up to the user. The default is .7.

#### *Remove durations above the staff*

In tablature, duration indications are symbols above the staff. Normally a user does not want these in the generated score and this option allows for taking or not taking these symbols along.

#### *Generate rests*

When a duration symbol is provided above a tablature staff but there is no position, this indicates a rest. The option allows generating the proper rest.

#### *Clef*

The current version can convert to treble clef – 8 as is customary for plucked instruments or to bass clef as is common for gamba.

### **Other buttons**

A number of action buttons are provided for control of the conversion process.

#### *Help*

The Help button brings the user to a text as the one presented here.

#### *Control*

Tablature positions depend on the tuning of the instrument. The tuning for instruments is given in an external file named SIPTTOS.TXT which has instructions for the conversion of a particular instrument. Currently, the template is for gamba in the tuning of 'ffhfh'.

This is a user editable file and other instrument will be included in the template. The mechanism allows for great flexibility as any tuning can basically be defined.

#### *Initialize control*

The first time the program is used requires the setting up of the control file. A template file is generated.

#### *Run*

This starts the conversion. At termination, the first result file is shown by Score immediately.

#### *Return*

This terminates the program.

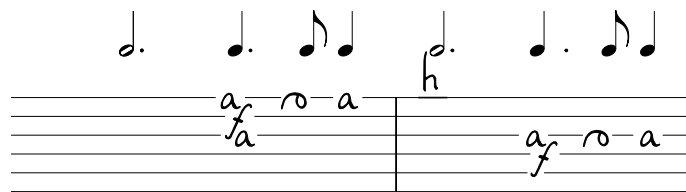
### Environment

For this program to work, the SIP environment is a prerequisite as SipTtoS uses existing functions of the SIP suite (file selection, interfacing with Score).

### Source description

The input files must have tablature created by Score. The converter distinguishes between durations and positions which are both Code01 items. Durations are the notes above the staff without ledger lines. They have a size code different from zero. The durations are only used when rests need to be generated. The rest code is generated from the note type, not from its Code01Par07.

The positions are any type of noteheads with a size code of zero. An example follows:



This converts to the following if the bass clef were selected:



### Control file description

For the above type of tablature, the lute symbols are used from the Score library. For every position to be translated, the control file has three values:

1. par4 of the input symbol. A vertical margin of .5 is applied
2. par6 of the input symbol.
3. par4 of the output symbol as if the treble clef were applied. Optionally this value is preceded by a '#' for sharp, 'b' for flat.

The beginning of this control file is shown here:

```
* SipTtoS.TXT - created 05-29-2005 - 19:09:50
* This file contains the conversion instructions for TAB to Staff notation conversion.
* There is one line per TAB character per string consisting of three values.
* Records with an asterisk in column 1 are ignored.
* The comment field is ignored. There must at least be one space between the values.
* The tabulation character is considered as a space.
* Leading and trailing spaces are ignored.
* The following template gives the setting for gamba in the 'ffhfh' tuning to
* treble clef8.
*
* The String value is plus or minus .5 so when a Par4=13.4 or Par4=12.7 it is considered
* as 13.
* The Input value can be any integer Code9 value.
* The Output value can be any integer Par4 value optionally preceded by # or b and
* optionally
```

\* followed by a minus sign (-). It is based on Treble clef-8

\*

* String (Par4)	Input (Par6)	Output (Par4)	Comment
13	900	9	a = D'
13	901	#9	b = D#
13	902	10	c = E
13	903	11	d = F
13	904	#11	e = F#
13	905	12	f = G
13	906	#12	g = G#
13	907	13	h = A
13	908	b14	i = Bb
13	909	14	k = B
13	910	15	l = C
13	911	#15	m = C#
13	912	16	n = D

\*

11	900	6	a = A
11	901	#6	b = Bb
11	902	7	c = B
11	903	8	d = C
11	904	#8	e = C#