



L-ACOUSTICS® COAXIALS CLF DATABASE

INSTRUCTIONS FOR USE

TECHNICAL BULLETIN - VERSION 1.0

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FOLDER CONTENTS

The **L-ACOUSTICS_CLF_December_2012** folder is downloadable from www.l-acoustics.com and contains the following:

5XT.CF2 8XT.CF2 12XT.CF2 115XT_HiQ.CF2 108P.CF2 112P.CF2	CLF files for the L-ACOUSTICS® coaxial products
L-ACOUSTICS-CLF_TB_EN_1.0.pdf	instructions for using the CLF files (this document)

CONTEXT

This document describes how to use the CLF (Common Loudspeaker File Format) files to simulate the **L-ACOUSTICS® coaxial products** in **CATT-Acoustics™** and **Odeon** prediction software.

These files can also be used in other prediction software such as **LARA**, **Ulysses**, **SynAudCon** and **ETC Inc.**

The CLF viewer can optionally be used to view the CLF files, see Figure 1.

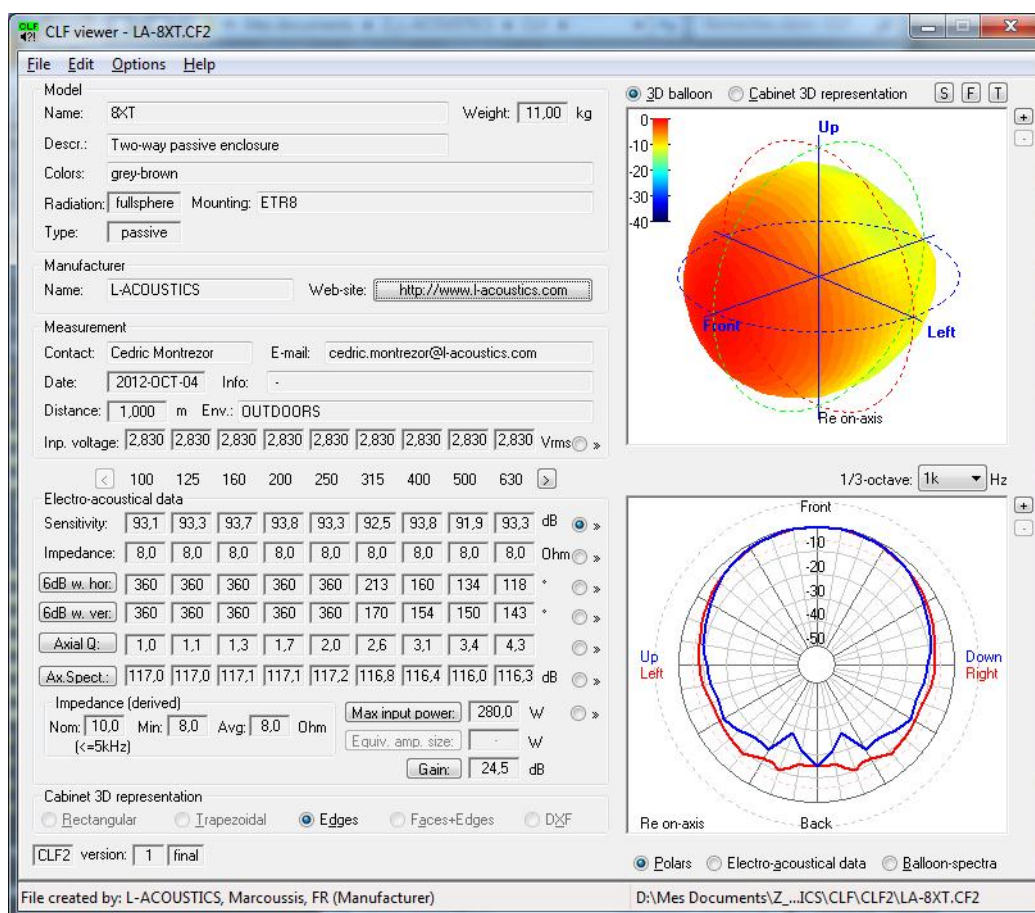


Figure 1: CLF viewer

USING CLF FILES IN CATT-Acoustic™

The source must be added to the **Text-file** of the **CATT-Acoustic™** project as shown in the example of Figure 2:

```

SOURCEDEFS
a      b      c      d
A0 0.0 0.0 10.0 8XT.CF2 0.0 1.0 10.0
Lplm_a = Lp_sensitivity
Gain_a = <24.5 24.5 24.5 24.5 24.5 24.5> e
Delay_e = 0
  
```

extract from the Text-file

- a Source ID (single letter + single number).
- b Source position in the venue.
- c CLF file (.CF2) containing the source.
- d Aim point.
The source points from the Source position (b) towards the Aim point (d).
Resulting aim direction: $(0.0 \ 1.0 \ 10.0) - (0.0 \ 0.0 \ 10.0) = (0.0 \ 1.0 \ 0.0)$ = positive y axis.
- e Gain values in dB at 125, 250, 500, 1k, 2k, and 4k Hz respectively.
Set to the value indicated in the Appendix section.

Figure 2: Adding a source

USING CLF FILES IN ODEON

Simply load the chosen CLF file and set the **Overall gain** value as indicated in the APPENDIX section, see Figure 3.

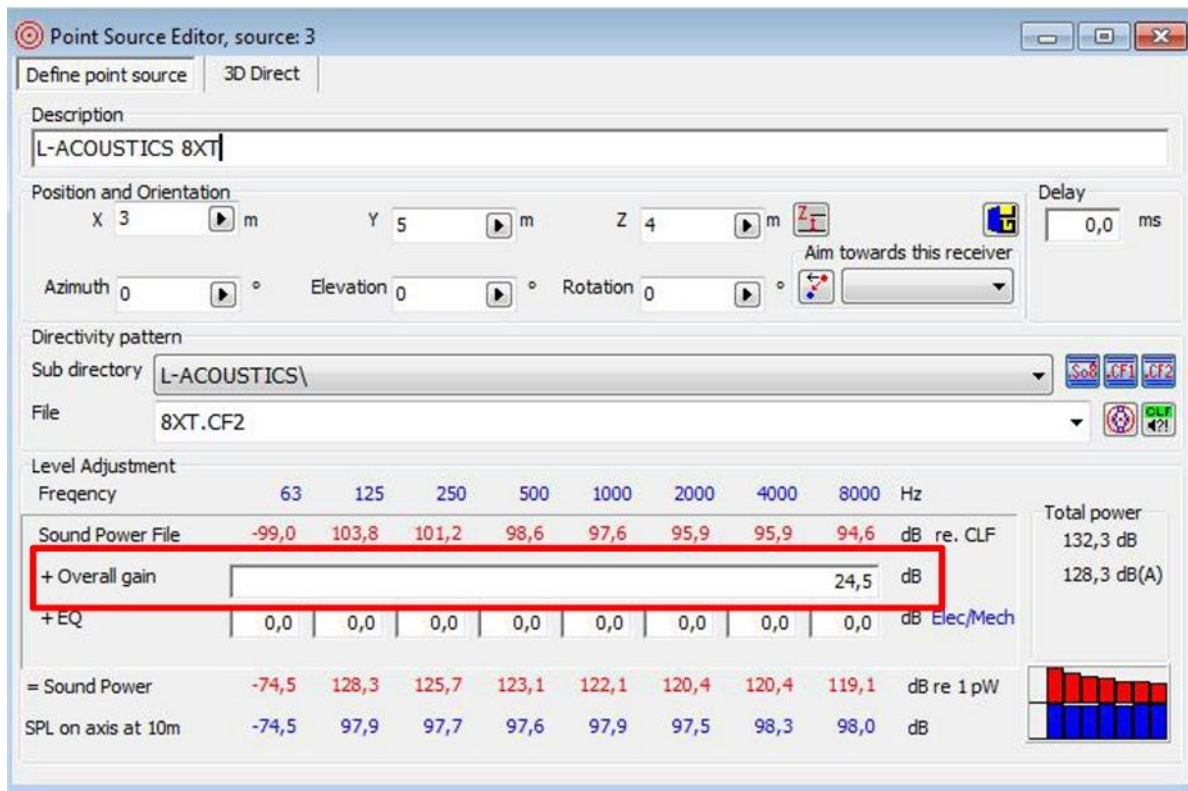


Figure 3: Setting the Overall gain



APPENDIX

The following table contains the values to set so as to obtain the maximum RMS level the loudspeaker can deliver:

Table 1: Maximum RMS gains

Loudspeaker	5XT	8XT	12XT	115XT HiQ	108P	112P
Max. gain (dB)	24	24.5	27.8	29.6	22.2	25.3



Peak levels

Obtain the peak levels increasing the values by 10 dB.