### **SDFTOASC**

Convert an SDF data file to an ASCII data file and place the result in the destination file ( if it is entered). Otherwise view the result on the screen.

#### **Note**

All header information is lost when you convert to ASCII format.



[/C:<col>] [/S:<scan>[-<scanEnd>][,C]] [/L] [/F:<format>] [/B:<string>]

<sfile> Input SDF file.

[dfile] Output ASCII file.

/U Show help (usage information) for this program.

Overwrite [dfile] if it already exists.

/I Information only on the <sfile>.

/A All the frequency lines.

/X Include X data in the file.

/T:<c1>,<c2> Y coordinates, <c1> or <c2> may be one of the following:

B=dBm, D=dB, S=dB signed, M=Mag, R=Real, I=Imag, P=Phase, U=Unwrap

phase. Default is R, I for complex data, R for real data.

/Y:<units> Y units, one or more of the following:

L=Linear, P=Power, D=Density, R=RMS, A=Radians

/M:<dBmRef> dBm impedance reference. Default is use input impedance from data file if

 $< 1 \text{ M}\Omega$  (else use  $50\Omega$ ).

/G:<dBRef> Magnitude value used as a reference for dB type of coordinates. If /G with no

parameter, then default is 20E-6 (dBSPL).

/P:<points> Number of points per line. The default is 1.

/D:<data> Select data for the specified SDF\_DATA\_HDR. The default is 0.

#### Sharing Data Between Analyzers **SDFTOASC**

/R:<row> Select data for the specified row range. The default is 0. If "C" is specified, then

[-<rowEnd>] the row data will be arranged as one row per column.

[,C]

/C:<col> Select data for the specified column. The default is 0.

/S:<scan> Select data for the specified scan range. The default is 0 (1 scan). If "C" is

[-<scanEnd>]

[,C]

/LOrient the output data in lines instead of columns.

C printf format string. The default is "%14.6le." This specifies a double (long /F:<format>

float) with a width of 14 columns and a precision of 6 in exponential format. Other

formats are:

%lf — regular floating point format

%le — exponential floating point format (also %1E)

%lg — regular or exponential, whichever is shorter (also %1G)

specified, then the scan data will be arranged as one scan per column.

Field separator string. The default is " " (space.) Viewdata requires commas /B:<string>

between real and imaginary data.

### **Example 1**

Convert an SDF data file to an ASCII data file:

SDFTOASC TEST.DAT TEST.TXT

#### **Example 2**

Convert an SDF data file to an ASCII data file using a comma (",") as the field separator:

SDFTOASC TEST.DAT TEST.TXT /B:,

#### **Example 3**

Convert a spectrum SDF data file to ASCII (converting the data to Vrms^2 /Hz (PSD)).

SDFTOASC SPEC.DAT SPEC.TXT /Y:PRD

The "P" converts the data to V^2 (if not already power data), the "R" converts the data to rms, and the "D" converts the data to density units (/Hz).

# **Example 4**

Convert the complex data to dB, phase (instead of the default real, imaginary), and phase is in radians.

SDFTOASC FRF.DAT FRF.TXT /T:D,P /Y:A

## Example 5

Convert a waterfall to a format which a spreadsheet can read in as 1 column per spectrum.

SDFTOASC WFAL.DAT WFAL.TXT /S:0-1000,C

If the ending scan that is selected is too large for the waterfall, then the ending scan is set to the last scan in the waterfall. If the /L option is specified, then each spectrum is in a row (line) rather than in a column.

## **Example 6**

Convert a sound pressure spectrum to dBSPL.

SDFTOASC NOISE.DAT NOISE.TXT /T:D /Y:R /G:20E-6

The units of the NOISE.DAT file are Pascals, so the /T:D option converts to dB, and the /G:20E-6 option sets the dB reference to 20 micro-Pascals.