SoundPLAN[®] essential Braunstein + Berndt GmbH



... the low cost alternative for standard cases

Highlights:

- · Unlimited model size (your computer's memory is the only limit)
- Standards calculations conform to the proven, original SoundPLAN calculation core
- Intuitive, flexible graphic data entry
- Calculates single receivers, noise limit contours and color filled contour areas
- Preformated high quality graphics and table presentations for all time slots
- Documents partial noise levels for all sources for all receivers with spectral details
- · Results for each noise type or combination of road, rail and industry
- Window protection classes in accordance to DIN 4109

BRAUNSTEIN+BERNDT GMBH

INGENIEURBÜRO FÜR SOFTWAREENTWICKLUNG LÄRMSCHUTZ UMWELTPLANUNG



Etzwiesenberg 15 D-71522 Backnang Tel. +49.7191.9144-0 Fax +49.7191.9144-24 www.soundplan.de



Distribuidor oficial del modelo SoundPLAN en España y Portugal Parque Tecnológico de Álava

Leonardo Da Vinci, 14 - 78 E-01510 Miñano (VITORIA-GASTEIZ) Tel. (+34) 945 29 82 33 - Fax. (+34) 945 29 82 61 Correo e.: aac@aacacustica.com Web: www.aacacustica.com Razón Social: AAC Centro de Acústica Aplicada SL

SoundPLAN essential

Punktquelle (119) Name Garbage compactor				
assigned				
Calculation mode				
⊖Mean level 500 ⊢		TChart		
Ref. spectrum				
Emission				
	Day	Evenir	nq	Niqht
dB[A]	75.0	58.0		48.0
Correction Factors				
k-Wall	k	-		k-T
-	10).0	-	

Calculation procedures and noise types

SoundPLAN-essential calculates noise received from roads, railways, industry and parking lots. Calculations can be presented for individual noise types or for any combination of noise types. For each noise type or combination, you can generate variants with and without noise control.

Roads and railways are calculated in accordance to the appropriate calculation standard such as the NMPB or Schall03. For the entry and the noise assessment, select between two time slots for day/night, or three time slots for day/evening/night.

Parking lots are calculated with RLS-90 or the parking lot study from 2007. Industry

Receiver name

Green road 02

ed road 01

ed road 02

and other frequency dependant noise is calculated in accordance to ISO 9613-2. For the assessment, select between the models for weekday and for weekend, and a model with two or three time slots. It is also possible to evaluate the maximum noise levels.

The emission from the sources is defined for an averaged mean frequency or a third octave/octave spectrum. Quiet times can be defined with their noise penalties.

All noise types generate calculations, documentation and graphics for single receivers, noise limit contour lines, and color filled contour areas of Grid Noise Maps.

Night Lder

52.6 55.1 57.7 52.8

59.7 54.8

51.0

53.8 45.4 47.7 39.6 62.8 53.9 56.0 49.1 -10

46.3 49.2 43.4

51.4 48.1

Night

-12.2 -12.3

-9.5 -8.4 -13.3 -9.2 -8.6

-11.8

Iden

-12.3

-13.3 -12.4

-6.0

1.4

Seite 1

Night Lder

Tools to create the noise model

The easiest way to create model data is to import a georeferenced bitmap and digitize the data on top of it. If you already have the model data, import it via DXF, ASCII or ESRI shapefiles interfaces.

The following elements are available:

Noise sources (by noise type): roads, traffic signal, railways, parking lots, point, line and area sources and ground absorption areas

Elevation lines and spot heights to generate the digital ground model

Buildings, noise protection walls, berms (unlimited numbers)

Receivers attached to buildings and free standing receivers immission areas



Braunstein + Berndt GmbH Etzwiesenberg 15 71522 Backnang

Road noise (NMPB) - with DGM

Results of the Single Receiver Calculation

I den

60 60 60

60 60 60 60 58.1 66.4 61.5

50 50 60 60

50 50 50

50 50 60 60 57.7 55.4 66.0 63.5 51.4 46.4 59.6 54.8 -6.3 -9.0 -6.4 -8.7

50

50

Night l den

62.7 63.4

63.2

54.9 56.1 52.9

55.

54.3 54.0

72. 50.4 59.1 60.0 -13.0 -13.6 0.4 1.0

63.1 64.6

61.3

68.4 70.1 67.7 59.8 61.0 59.0

> 62.5 48.2

Eloo Night

EG

.OG 50 50 50 60 60 60 60

.0G EG

.OG

EG

EG

.OG EG

West

West

West

West

South

Sout

West

General lines and text elements



Übersichtliche Dokumentation der Ergebnisse einer Berechnung einzelner Immissionsorte

- · Documentation in tabular and graphical form
- Table with details of source properties
- Table with source contributions at the receiver
- Table of noise levels at the receiver with frequency details
- Tabular results of calculations and assessments at the receiver
- Graphic presentation of the geometry and results in small tables
- Noise limit contour line in combination with single receiver results
- Grid Noise Maps with color fills of the area between contour lines

