# Ansilove

**REVISION HISTORY**

| NUMBER | DATE | DESCRIPTION | NAME |
|---|---|---|---|
| 1.11 | 2014-03-26 | | FC |

# Contents

# 1 Description

**Ansilove** is a set of tools to convert ANSi and artscene-related file formats into **PNG** images, supporting **ANSi** (.ANS), **PCBOARD** (.PCB), **BiNARY** (.BIN), **ADF** (.ADF), **iDF** (.IDF), **TUNDRA** (.TND) and **XBiN** (.XB) formats.

It includes an all purposes **command line converter**, along with a **library** to use on web pages for doing **"on the fly"** conversions. It creates size optimized **4-bit PNG** files and supports **SAUCE** (Standard Architecture for Universal Comment Extentions), 80x25 and 80x50 PC fonts (including all the 14 **MS-DOS charsets** and some unofficial ones), Amiga fonts, and iCE colors.

It is written in **PHP**, and can thus be run on any supported system : the command line converter can be used under **Linux**, **Mac OS X**, **Windows**, and so far and so on.

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**!** **Important**
Ansilove doesn't require any Web server : you can use the bundled command line converter to convert files locally on your computer.

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## 1.1 Features

- ANSi (.ANS) format support

- PCBOARD (.PCB) format support

- BiNARY (.BIN) format support

- ADF (.ADF) format support (Artworx)

- iDF (.IDF) format support (iCE Draw)

- TUNDRA (.TND) format support - http://tundradraw.sourceforge.net

- XBiN (.XB) format support - http://www.acid.org/info/xbin/xbin.htm

- Small output file size (4-bit PNG)

- SAUCE (Standard Architecture for Universal Comment Extentions)

- 80x25 font support

- 80x50 font support

- Amiga font support

- iCE colors support

## 1.2 Supported charsets

- IBM PC (Code page 437)

- Baltic (Code page 775)

- Cyrillic (Code page 855)

- French Canadian (Code page 863)

- Greek (Code pages 737 and 869)

- Hebrew (Code page 862)

- Icelandic (Code page 861)

- Latin-1 (Code page 850)

- Latin-2 (Code page 852)

- Nordic (Code page 865)

- Portuguese (Code page 860)

- Russian (Code page 866)

- Turkish (Code page 857)

### 1.3 Supported unofficial charsets

- Armenian

- Persian (Iran System encoding standard)

## 2 Requirements

**Ansilove** requires *PHP* with the *GD* module installed. If you want to convert huge files, you may have to increase the *memory_limit size* in your *php.ini* file.

## 3 Installation

### 3.1 Using tarballs

```
wget http://downloads.sourceforge.net/project/ansilove/ansilove-php/1.11/ansilove-php-1.11. ←
    tar.gz
tar xvfz ansilove-php-1.11.tar.gz
```

### 3.2 Using Git

```
git clone git@github.com:fcambus/ansilove.git
```

---

> **!** **Important**
> Under Windows people must install the PHP binaries : the easiest way is to use the *.exe* installer and enable the GD library.

---

## 4 Configuration options

The configuration options are defined in the *ansilove.cfg.php* file.

## 4.1   Options list

• ANSILOVE_FILES_DIRECTORY

Defines the directory where all the files to be rendered must be placed when using the library online to do "on the fly" conversions. Default value : *ansis/*

• ANSILOVE_LOG_FILE

Defines the log file used by the error message logger. Default value : *ansilove.log*

• PCBOARD_STRIP_CODES

Defines a serie of comma separated values containing PCBoard codes to be stripped from the output.

Default value : "@POFF@,@WAIT@", which means all *@POFF@* and *@WAIT@* codes will be stripped.

• DIZ_EXTENSIONS

Defines a serie of comma separated values specifying which files to render in DIZ mode. Default value : ".diz,.ion"

• SUBSTITUTE_BREAK

Whether or not stop rendering input files when the substitute (SUB) character is encountered.   Default value :  *1* (**ENABLED**)

• WRAP_COLUMN_80

Whether or not enable 80th column wrapping. Default value : *1* (**ENABLED**)

• CED_BACKGROUND_COLOR

Defines RGB values of the CED mode background color.

• CED_FOREGROUND_COLOR

Defines RGB values of the CED mode foreground color.

• WORKBENCH_COLOR

Defines RGB values of the WorkBench mode colors.

• THUMBNAILS_SIZE

Defines thumbnails size multiplicator. Default value : *1* (will produce 80 pixels width output)

- THUMBNAILS_HEIGHT

Defines maximum thumbnails height (in pixels). Default value : *0* (will produce full height output)

- THUMBNAILS_TAG

Defines the tag added to the output file name. Default value : *-thumbnail*

- SPLIT

Whether or not split output in multiple images files. Default value : *0* (**DISABLED**)

- SPLIT_HEIGHT

Define the height (in pixels) of each splitted pictures. Default value : *4096*

- SPLIT_SEPARATOR

Defines the separator used in output file names. Default value : .

# 5   Supported options for each file format

| Format | columns | font | bits | icecolors |
|--------|---------|------|------|-----------|
| ANS    |         | X    | X    | X         |
| PCB    |         | X    | X    | X         |
| BIN    | X       | X    | X    | X         |
| ADF    |         |      |      |           |
| IDF    |         |      |      |           |
| TND    |         | X    | X    |           |
| XB     |         |      |      |           |

# 6   Command line converter

The command line converter can be invoked by typing :

```
./ansilove
```

---

**Note**
Windows users should use the bundled *ansilove.bat* file.

---

> **!** **Caution**
> Check the file header to ensure the path of your PHP interpreter is correct : Ansilove uses /usr/bin/php as default.

## 6.1 Usage

```
ansilove inputfile columns font bits icecolors
```

> **Note**
> If no options are specified, default settings are used : 80x25, 8-bit font and iCE colors turned off. If no columns are specified for .BIN, default value is 160.

## 6.2 Columns options

> **!** **Important**
> Used for *.BIN* files only. Skip this option when converting other formats.

## 6.3 Font options

- 80x25

- 80x50

- PC or Amiga fonts (8-bit font only)

### 6.3.1 Amiga fonts options

- amiga (alias to Topaz)

- b-strict (Original B-Strict font)

- b-struct (Original B-Struct font)

- microknight (Original MicroKnight version)

- microknight+ (Modified MicroKnight version)

- microknightplus (alias to MicroKnight + to be used in URLs)

- mosoul (Original mO'sOul font)

- pot-noodle (Original P0T-NOoDLE font)

- topaz (Original Topaz Kickstart 2.x version)

- topaz+ (Modified Topaz Kickstart 2.x+ version)

- topazplus (alias to Topaz+ to be used in URLs)

- topaz500 (Original Topaz Kickstart 1.x version)

- topaz500+ (Modified Topaz Kickstart 1.x version)

- topaz500plus (alias to Topaz500+ to be used in URLs)

---

**Note**
All the amiga fonts come from the excellent Amiga bitmap fonts package by dMG.

---

### 6.3.2   PC fonts options

- 80x25 (Default, code page 437)

- 80x50 (Code page 437, 80x50 mode)

- armenian

- baltic (Code page 775)

- cyrillic (Code page 855)

- french-canadian (Code page 863)

- greek (Code page 737)

- greek-869 (Code page 869)

- hebrew (Code page 862)

- icelandic (Code page 861)

- latin1 (Code page 850)

- latin2 (Code page 852)

- nordic (Code page 865)

- persian (Iran System encoding standard)

- portuguese (Code page 860)

- russian (Code page 866)

- terminus (Terminus font)

- turkish (Code page 857)

## 6.4   Bits options

- 8 (8-bit)

---
Default rendering mode.
---

- 9 (9-bit)

---
Renders the 9th column of block characters, causing the output to look like it's displayed in real textmode.
---

- ced

Renders files in black on gray, and limit the output to 78 columns (only available in ANSi loader).

Used together with an Amiga font, the output will look like it is displayed on Amiga.

---

**Note**

It is possible to set custom RGB values by modifying the predefined constants *CED_BACKGROUND_COLOR* and *CED_FOREGROUND_COLOR* in the configuration file.

---

- thumbnail

Generate thumbnail, using the full length picture by default.

---

**Note**

You can adjust the maximum height and the output size by changing the *THUMBNAILS_HEIGHT* and *THUMBNAILS_SIZE* options in the configuration file. NOTE: It is also possible to change the tag added to the output file name by changing the *THUMBNAILS_TAG* option in the configuration file.

---

- transparent

Renders files with transparent background (only available in ANSi loader).

- workbench

Renders files using Amiga Workbench colors (only available in ANSi loader).

---

**Note**

It is possible to set custom RGB values by modifying the predefined constants *WORKBENCH_COLOR* in the configuration file.

---

### 6.5  iCE colors options

- 0 (turned **OFF**)

- 1 (turned **ON**)

### 6.6  Examples

```
ansilove ansi.ans
ansilove ansi.ans 80x25 9 (80x25 font, 9-bit)
ansilove ansi.ans 80x25 thumbnail (80x25 font, thumbnail rendering)
ansilove ansi.ans 80x50 9 (80x50 font, 9-bit)
ansilove ansi.ans russian 9 (Russian font, 9-bit)
ansilove ansi.ans amiga (Amiga font)
```

```
ansilove pcboard.pcb
ansilove pcboard.pcb 80x25 9 (80x25 font, 9-bit)
ansilove pcboard.pcb 80x25 thumbnail (80x25 font, thumbnail rendering)
```

```
ansilove binary.bin 160
ansilove binary.bin 160 80x25 9 (80x25 font, 9-bit)
ansilove binary.bin 160 80x25 thumbnail (80x25 font, thumbnail rendering)
ansilove binary.bin 160 80x50 9 (80x50 font, 9-bit)
```

```
ansilove adf.adf
ansilove adf.adf thumbnail (thumbnail rendering)
```

```
ansilove idf.idf
ansilove idf.idf thumbnail (thumbnail rendering)
```

```
ansilove tundra.tnd
ansilove tundra.tnd 80x25 9 (80x25 font, 9-bit)
ansilove tundra.tnd 80x25 thumbnail (80x25 font, thumbnail rendering)
```

```
ansilove xbin.xb
ansilove xbin.xb thumbnail (thumbnail rendering)
```

---

**!** **Important**

Files with a .DIZ extension are rendered with the exact needed number of columns. White spaces and empty lines at the beginning and end of DIZ files are stripped from the output.

---

**Note**

You can customize file extensions definitions in the configuration fileby modifying the predefined constant called *DIZ_EXTENSIONS*

---

## 7 Library usage for doing on the fly conversions on web pages

Using Ansilove library for doing "on the fly" conversions on Web pages, can be done using these loaders :

- load_ansi.php

- load_pcboard.php

- load_bin.php

- load_adf.php

- load_idf.php

- load_tundra.php

- load_xbin.php

Upload the loaders you plan to use, the library *ansilove.php*, the config file *ansilove.cfg.php*, along with the *fonts* directory somewhere on your web site.

For security issues, all the files to be rendered must be placed in a directory, which is *ansis/* by default (the ending slash is required). This value is defined in the configuration file by the *ANSILOVE_FILES_DIRECTORY* constant.

> **Caution**
> Do **NOT** unset the *ANSILOVE_FILES_DIRECTORY* constant, else it'll be possible to convert files laying in the same directory than the loaders, which could lead to possible security leaks.

> **Important**
> Please note that the input is sanitized, so it is impossible to use / and .. in paths.

## 7.1 Including custom image tags in HTML code

```html
<img src="load_ansi.php?input=ansi.ans">
<img src="load_ansi.php?input=ansi.ans&font=80x25&bits=9">
<img src="load_ansi.php?input=ansi.ans&font=80x25&bits=thumbnail">
<img src="load_ansi.php?input=ansi.ans&font=russian">
<img src="load_ansi.php?input=ansi.ans&font=russian&bits=9">
<img src="load_ansi.php?input=ansi.ans&font=amiga">
<img src="load_ansi.php?input=ansi.ans&font=80x50&bits=9">
<img src="load_ansi.php?input=ansi.ans&font=80x25&bits=9&icecolors=1">
```

```html
<img src="load_pcboard.php?input=pcboard.pcb">
<img src="load_pcboard.php?input=pcboard.pcb&font=80x25&bits=9">
<img src="load_pcboard.php?input=pcboard.pcb&font=80x25&bits=thumbnail">
<img src="load_pcboard.php?input=pcboard.pcb&font=russian">
<img src="load_pcboard.php?input=pcboard.pcb&font=russian&bits=9">
<img src="load_pcboard.php?input=pcboard.pcb&font=amiga">
<img src="load_pcboard.php?input=pcboard.pcb&font=80x50&bits=9">
<img src="load_pcboard.php?input=pcboard.pcb&font=80x25&bits=9&icecolors=1">
```

```html
<img src="load_binary.php?input=binary.bin&columns=160">
<img src="load_binary.php?input=binary.bin&columns=160&font=80x25&bits=9">
<img src="load_binary.php?input=binary.bin&columns=160&font=80x25&bits=thumbnail">
<img src="load_binary.php?input=binary.bin&columns=160&font=80x50&bits=9">
<img src="load_binary.php?input=binary.bin&columns=160&font=80x25&bits=9&icecolors=1">
```

```html
<img src="load_adf.php?input=adf.adf">
<img src="load_adf.php?input=adf.adf&bits=thumbnail">
```

```html
<img src="load_idf.php?input=idf.idf">
<img src="load_idf.php?input=idf.idf&bits=thumbnail">
```

```html
<img src="load_tundra.php?input=tundra.tnd">
<img src="load_tundra.php?input=tundra.tnd&font=80x25&bits=9">
<img src="load_tundra.php?input=tundra.tnd&font=80x25&bits=thumbnail">
```

```html
<img src="load_xbin.php?input=xbin.xb">
<img src="load_xbin.php?input=xbin.xb&bits=thumbnail">
```

> **Tip**
> Check *examples/ansilove.html* to see the library in action.

---

**Note**

If you want your HTML code to validate correctly, you should replace the *&* characters by *&amp;* and add an *alt* element to the *img* tags.

---

# 8 Library usage

It is also possible to use the library in your PHP applications or scripts :

## 8.1 Loading *ansilove.php* library in your PHP source

```
require_once('ansilove.php');
```

## 8.2 Calling the adequate loaders to convert input files

```
load_ansi($input,$output,$font,$bits,$icecolors);
```

```
load_pcboard($input,$output,$font,$bits,$icecolors);
```

```
load_binary($input,$output,$columns,$font,$bits,$icecolors);
```

```
load_adf($input,$output);
```

```
load_idf($input,$output);
```

```
load_tundra($input,$output,$font,$bits);
```

```
load_xbin($input,$output);
```

# 9 Retrieve SAUCE Informations

Retrieving SAUCE informations from files can be done using the *load_sauce* function :

## 9.1 Loading *ansilove.php* library in your PHP source

```
require_once('ansilove.php');
```

## 9.2 Loading sauce informations

```
$sauce=load_sauce($input_file_name);
```

The *load_sauce* function will return an array containing the SAUCE informations :

```
Array
(
    [ID] => SAUCE
    [Version] => 00
    [Title] => Title
    [Author] => Author
    [Group] => Group
    [Date] => 19970621
    [FileSize] => 1997
    [DataType] => 1
    [FileType] => 1
    [TInfo1] => 80
    [TInfo2] => 29
    [TInfo3] => 0
    [TInfo4] => 0
    [Comments] => 10
    [Flags] => 0
    [Filler] =>
    [Comment_Line_01] => Comment Line
    [...]
    [Comment_Line_255] => Comment Line
)
```

**Note**
You can find detailed informations about SAUCE (including full specifications) here : http://www.acid.org/info/sauce/sauce.htm

# 10  License

Ansilove is released under a MIT-style license. See *LICENSE* file for details.

```
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```

## 11  Distribution

If you want to add an Ansilove download link on your page, please use the following download link :

```
http://sourceforge.net/projects/ansilove/files/
```

Ansilove is now also available on GitHub :

```
https://github.com/fcambus/ansilove
```

## 12  Support and Donations

Ansilove is the result of countless hours of coding and testing, in order to provide the most accurate possible **ANSi** and **ASCii** conversion tool. If you find this program useful, please consider making a donation, thank you <3

## 13  Contact

Project Homepage : http://ansilove.sourceforge.net

Sister project : http://www.ascii-codes.com

For bug report, feedback, or any other reasons, please write at the following address :

```
Frederic Cambus <fcambus AT users DOT sourceforge DOT net>
```