

# list2pedc

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## A pedigree coordinates generator

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Version 0.5

### Abstract

*list2pedc* generates a pedc file (a small modification of the pedigree coordinates file as defined in **Pedpack**) from an ASCII list file. *list2pedc* is part of the **Pedfiddler** suite of programs for pedigree drawing.

## 1 Synopsis

*list2pedc* [ options ] [inputfile]

## 2 Description

*list2pedc* generates a pedigree coordinates file from an ASCII list file. The format for the list file is

<id> <father> <mother> [sex] [affection\_status]

where <> and [] mean mandatory and optional fields, respectively. colours for affection status are assigned and a label (or alias) is set to <id>. This label can be modified subsequently by editing the pedc file or with *pedcsharp*(1). The file input is assumed to be alphanumeric with sex and affection\_status coded as integers: 'unknown', 'male', and 'female' are coded as 0, 1, and 2, respectively; 'unknown', 'normal', and 'affected' are coded as 0, 1, and 2, respectively. The program does a minimal checking for consistency of the pedigree, inserts founders whenever are needed and generates indices and labels with their coordinates.

## 3 Options

If **inputfile** is not specifierd, the program opens a window that allows to set the options.

{ -o | --output }*outfile* Output file (default stdout).

{ **-s** | **--sex** } Input file includes sex.  
 { **-a** | **--affection** } Input file includes affection status.  
 { **-m** | **--minimize** } Minimize the square of line distances by simulated annealing (default no minimization).  
 { **-I** | **--iterations** } *n* Number of iterations for annealing (default 1000).  
 { **-T** | **--temperature** } *f* Annealing starting temperature (default 15.0).  
 { **-C** | **--cooling** } *f* Annealing cooling factor (default 0.9).  
 { **-N** | **--normal** } *r,g,b* RGB colours for icons:  
 { **-A** | **--affected** } *r,g,b*  $0 \leq r,g,b \leq 255$   
 { **-U** | **--unknown** } *r,g,b* without spaces between numbers.  
 { **-d** | **--default** } Show default values.  
 { **-v** | **--version** } Show version.

## 4 Examples

- Suppose the ASCII list file `famx.txt` has columns for sex and affection status. To generate a pedc file with unknown phenotype in ‘blue’ and the other default options, type:

```
list2pedc -sa -U 0,0,255 -o famx.pedc famx.txt
```

- To generate a pedc file with minimization of the length of the edges type:

```
list2pedc -a -s -m -ofamx.pedc famx.txt
```

Note the different styles for passing the options.

## 5 See Also

*editpedc*(1), *index2pedc*(1), *pedc2ps*(1), *pedcsharp*(1), *pedfiddler*(1), and *pfiddler*(1).

## 6 Version

Version: 0.5 of August 16, 2005

## 7 Acknowledgment

As part of **Pedfiddler**, *list2pedc* is based on the publicly available version of **Pedpack** (<http://www.stat.washington.edu>). The **Pedpack**-v2.2 counterpart of *list2pedc* is *setcoords*. Bugs and pitfalls in *list2pedc* are solely the responsibility of J C. Loredó-Ostí and Kenneth Morgan.

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