

CHEST DESIGNER

USER'S MANUAL

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SUMMARY :

Chest designer is dedicated to organbuilders who want to design, control and built directly their chests. Only pipe dimensions are needed as inputs. Chest designer outputs provides .DXF files which can control automated drilling machine tools, easily affordable with “service bureau” companies.

Chest Designer can display chests and whole organs in 3D.

All kind of chests can be designed : tracker chests, diatonic, chromatic, mixtures, and so on. For unit chests, chest designer provides pallet magnet sizes and number per size. Hole diameter security can be defined by the organbuilder.

Moreover, pipe dimensions can be given pipe by pipe or by octave.

CHEST FILE FORMAT :

Chest format Keywords : Dimensions are given in millimeters.(could be changed if necessary)
ENGLISH

CENTRAL HOLE : Hole position for a supporting the middle of the chest.

STOP : Defines a new register on the chest.

NPIPES : Number of pipes of the above stop

PIPE1 : defines the first pipe number

INCX : defines the increment of the stop : diatonic or chromatic if INCX is negative, pipes are computed from right to left left to right otherwise.

SHAPE: (don't forget the ':' character) Pipe shape SQUARE or ROUND

XY0 : X and Y position of the first pipe of the stop.

Then follows the successive dimensions ; (millimeters)

PIPE DIAMETER

HOLE DIAMETER (diameter of the hole under each pipe.

False chest diameter : pipe diameter at 12cm from the chest (can be changed)

HEIGHTS : Pipe heights

STOP : next register and so on.

NOTA 1: CHEST DESIGNER can also compute MIXTUR chests. :

Write the keyword “MIXTUR” before the “STOP” keyword. Next “MIXTUR” and “STOP” keywords define the different mixture ranks.

NOTA 2 : Pipe dimensions can also be given octave by octave, or pipe by pipe.

CONTROLS :

FILE

New : open a void chest

Open Chest : Opens a chest file (.dat).

Open Organ : .ORG FILES : opens an organ, defined by several chest files. Org files can be made of chests and air pipes.

DISPLAY :

Display 3D : displays the chest in a 3D representation.

Vector mode : displays the chest only with lines.

Reset view 3D : reset initial chest position.

Display infos : Displays magnet sizes, numbers by size.

Display magnet sizes : displays or undisplay magnet sizes.

Toogle rotation axis : allows rotations around another rotation axis.

Masq dimensions :undisplays dimensions on the screen.

Texture : allows texture changes.

Color :changes background color

Grid : displays a grid on the screen (10 cm)

CREATE :

Bar :create a bar (under development)

OUTPUTS FORMATS :

CHEST DESIGNER generates the following files :

_fs.DXF FILE : is a DXF file for the false chest board. Can control directly an automated drilling machine.

_som.DXF FILE : is a DXF file for the upper chest board.

_commande.wri : contains the wood parts dimensions in millimeters for the whole chest.