

# CHRISTMAS DAY - MUSIC BOX



## System requirement:

- Palm OS 5.0 or higher
- Screen resolution: 320x320 or 320x480
- Display: 65536 colors (true colors)
- ARM processor
- Streaming sound support
- 2.0 Mb of free heap memory

**Christmas Day** is a free Palm OS™ software, working like a 3D animated music box. While the 3D scene is rendered, some Christmas songs are played in background.

## 1) The Story

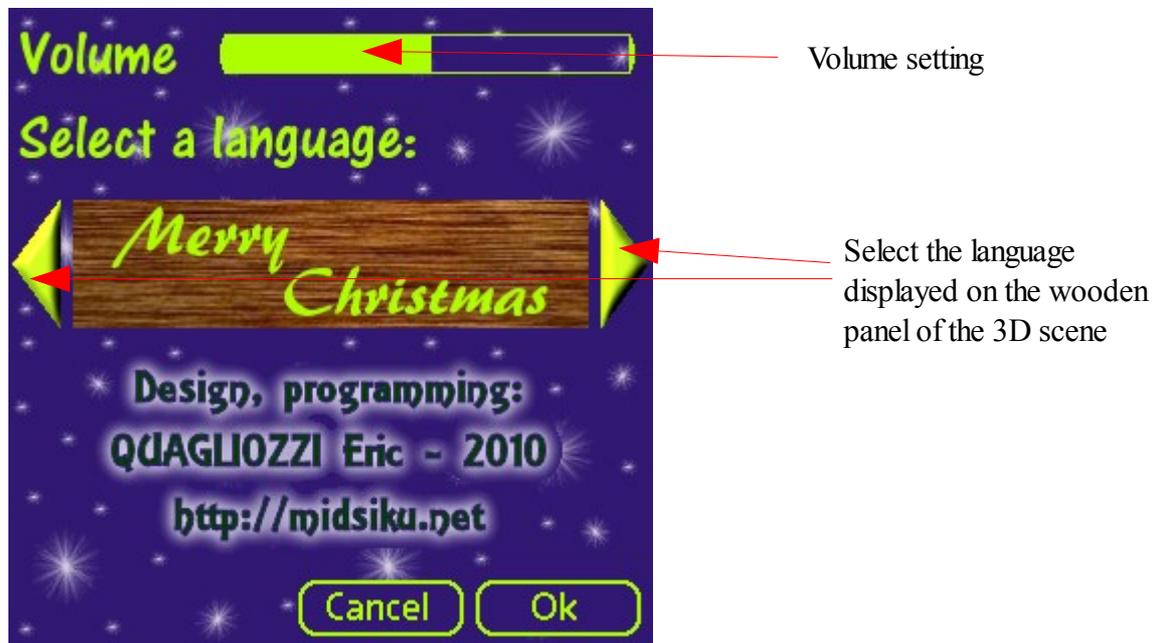
I've always been fascinated by the 3D graphics. In 2008 I decided to learn more about the technologies used for 3D rendering (math for 3D transformations, algorithms used to fill polygons with a texture, algorithms used for applying light on surfaces such as Gouraud and Phong, and so on), then I wrote my first 3D rendering engine based on ray casting (Delphi language). The following month, I decided to use it for applications running on Palm OS and I started porting the code in C (ARM code). Since then, I've never used this code for any type of application because I found it too slow to render 3D scenes in real-time on devices running Palm OS. Finally, I've decided to use it to create an application using the 3D rendering and playback of MIDI music: a music box for Christmas. It has been a very exciting experience!

## 2) First launch

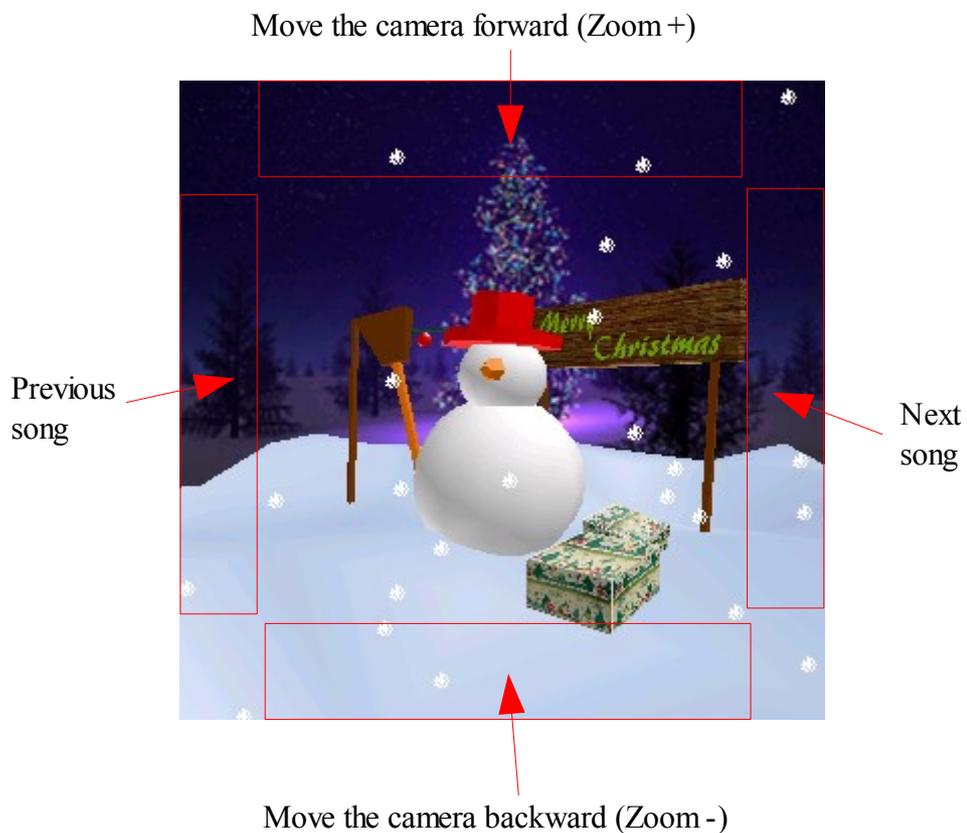
At first launch, the options dialog box appears to let you set the sound volume and select the language displayed on the wooden panel of the animated 3D scene. After settings done, the application restarts automatically. Even after this first step, at any time you will be able to change these settings.

### 3) Settings and options

This dialog box appears when pressing the « menu » button of your device.



### 4) Interactive areas



The interactive areas let you quickly change the song to be played and let you increase or decrease the depth of the camera (Zoom in / Zoom out), the current zoom value is also stored as user settings.

**Remark:** The songs are automatically played one after one, so you do not need to change them manually.

## 6) Contact

More details are available at the home page: <http://midsiku.net>

You can report bugs at: [Midsiku contact](#)