

RPG Maker 20XX Engine

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Links:

Dream.In.Code: <http://www.dreamincode.net/>

RPG Maker .Net: <http://rpgmaker.net/>

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Introduction

The RPG Maker 20XX Engine is an open source replacement engine for Enterbrain's runtime engine for the RPG Maker 2003 Engine. It is designed to vastly improve upon the original system and to provide additional features. This engine can be used in other game projects and systems, not just RPGs and RPG Maker 2003.

Features include a more robust and stable sound engine, Direct3D rendering, full color, a user-based window drawing system, and more.

The original RPG Maker 2003 featured an active time-based battle system similar to that found in Final Fantasy 6. This provided more gameplay options. However, the implementation of the system is

heavily flawed. In The RPG Maker 20XX Engine, multiple styles of battle systems can be used and switched in the middle of gameplay.

You must be familiar with RPG Maker 2003 or other tool before using this engine. This instruction manual will only cover the new features added with this engine.

What is SDL?

SDL is short for *Simple DirectMedia Layer*. It provides the basic window and video surface for many open-source applications dealing with graphics including emulators and video players.

What is FMOD?

FMOD is a widely used hobby and commercial sound engine for a large family of audio file formats. It provides an audio experience superior to that of RPG Maker 2003.

Installation

The files included are the engine files. There should be many .DLL files, one .EXE file and some extra resources. These files are to be copied into the folder of the target game for installation.

Installation for RPG Maker 2003

The engine files should be placed where you find RPG_RT.exe in the game folder. You may decide to keep RPG_RT.exe or delete it. You may also delete HARMONY.DLL, it is not needed for this engine.

Basic Features

There are a few basic features that are available at any time while using the RPG Maker 20XX Engine.

32-Bit Full Color Images


The RPG Maker 20XX Engine can use up to 32-bit color image resources with an optional alpha transparency channel in the following formats:


.CUR, .ICO, .BMP, .PNM, .XPM, .XCF, .PCX, .GIF, .JPG, .TIF,
.PNG, .TGA, .LBM, .XV


If you're using the engine with RPG Maker 2003, you must have a 256-color image compatible with the software and the 32-bit image in the same resource folder.


In order to use a 32-bit image, place the 32-bit copy of the image next to the original with -2x after the name but before the extension. If you are using the RPG Maker 20XX Engine with a different program, you do not have to do this.

Example:

 Swamplands.png

 Tree.png

 Volcano.png

 Volcano-2x.png

Sample File Names

Here, *Volcano.png* is the file used when editing the RPG, but *Volcano-2x.png* is the actual 32-bit image to be used when the game is run.

Custom Window Size

The RPG Maker 20XX engine can have window sizes in factors of 320 by 240 pixels. By default, the game runs in a size of 1. A size of 2 would be twice as big and a size of 3 would be three times as big.

In order to specify the preferred viewing size of your game when run in windowed mode, add the following line to `RPG_RT.ini` or `wcrpg.ini`:

```
VideoSize=#
```

Where # is the preferred video size of your game.

Normal Mode VS. 20XX Mode

The RPG Maker 20XX Engine can operate in 20XX mode, which is ideal for new projects using this engine. Add the following line to RPG_RT.ini or wcrpg.ini to enable this mode for your game:

```
Year=20XX
```

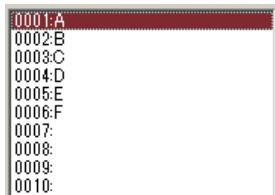
This will enable 20XX mode for your project.

Special Function Calls

The first six variables in the game will become the special function call variables. In order, they are labeled as A, B, C, D, E, and F. First, you write any parameters into A, B, C, and D (which means any special

command will use up to 4 options). Then you write the number of the command you want to use into E. Then, you write the value 1 into F in order to execute the command.

In RPG Maker 2003, you can use the Variable Operations command to do this. None of the variables are cleared or modified except for F, so you can call a function again with the same options by writing 1 into F again.



These Are the Special Variables

Special Commands

Special commands are only available in 20XX mode, and they can greatly extend the abilities of the engine. There are three kinds of special commands: a command that add new features, commands that modify the database and commands that draw things onscreen.

Key:

(E) Name of Command: (A,B,C, and/or D for options)

Description of this command

System Commands

These commands extend the original features of event scripts so that they can do more. These are the simplest type of commands to use.

(0) Stop: ()

Immediately causes the engine to close, losing any unsaved progress in the game.

Drawing Commands

These commands allow you to draw complex objects on the screen. They must be called inside of a Parallel Process or Auto Start event in RPG Maker 2003 so that these commands are called every frame. This is important as something needs to be drawn every frame for it to be visible. Likewise, you can stop drawing an object for it to disappear if this is what you mean to do.

(8) Draw Window: (x,y,w,h)

Draws a window using the current system graphic. X and Y are the location (in screen pixels) of the top left corner of the window. W and H are the width and height of the window in pixels.

(6) Draw Number (x,y,n,t)

Draws a number using the current system graphic. X and Y are the location (in screen pixels) of the top left corner of this number. N is the number to draw and T is the particular graphic to use. If T is 0, it uses the number font out of the standard system graphic and if T is 1, it uses the battle gauge graphic.

