

**NAME**

**rgbasm** — Game Boy assembler

**SYNOPSIS**

```
rgbasm [ -EhLVvw] [ -b chars] [ -D name[=value]] [ -g chars] [ -i path]
[ -M dependfile] [ -o outfile] [ -p pad_value] file
```

**DESCRIPTION**

The **rgbasm** program creates an object file from an assembly source file. Its arguments are as follows:

- b** *chars*  
Change the two characters used for binary constants. The defaults are 01.
- D** *name*[=*value*]  
Add string symbol to the compiled source code. This is equivalent to *name* **EQUS** "*value*" in code. If a value is not specified, a value of 1 is given.
- E**  
Export all labels, including unreferenced and local labels.
- g** *chars*  
Change the four characters used for binary constants. The defaults are 0123.
- h**  
By default, **rgbasm** inserts a ‘nop’ instruction immediately after any ‘halt’ instruction. The **-h** option disables this behavior.
- i** *path*  
Add an include path.
- L**  
Disable the optimization that turns loads of the form **LD** [**\$FF00+n8**],**A** into the opcode **LDH** [**\$FF00+n8**],**A** in order to have full control of the result in the final ROM.
- M** *dependfile*  
Print make(1) dependencies to *dependfile*.
- o** *outfile*  
Write an object file to the given filename.
- p** *pad\_value*  
When padding an image, pad with this value. The default is 0x00.
- v**  
Print the version of the program and exit.
- v**  
Be verbose.
- w**  
Disable warning output.

**EXAMPLES**

Assembling a basic source file is simple:

```
$ rgbasm -o bar.o foo.asm
```

The resulting object file is not yet a usable ROM image — it must first be run through **rgblink(1)** and **rgbfix(1)**.

**SEE ALSO**

**rgbasm(5)**, **rgbfix(1)**, **rgblink(1)**, **rgbds(5)**, **rgbds(7)**, **gbz80(7)**

**HISTORY**

**rgbasm** was originally written by Carsten Sørensen as part of the ASMotor package, and was later packaged in RGBDS by Justin Lloyd. It is now maintained by a number of contributors at <https://github.com/rednex/rgbds>