



HexCheck

The Hexadecimal OCR output reader
© 2008 By Leszek Chmielewski

Manual

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00. System requirements

HexCheck should work with any Windows and any PC capable to run Windows.

01. WTF is HexCheck?

HexCheck is a simple and small utility I made for cheating. If you got Hexadecimal „Type-in“ from magazines, why not OCR them instead of typing it in? The problem is that after OCRing, there are many badly recognised characters. HexCheck can fix most of the problems.

I wrote this utility to re-enter all hex coder of „Sir Gawain“ from Microhobby (spanish) magazine for Spectrum, after this title was not working correctly.

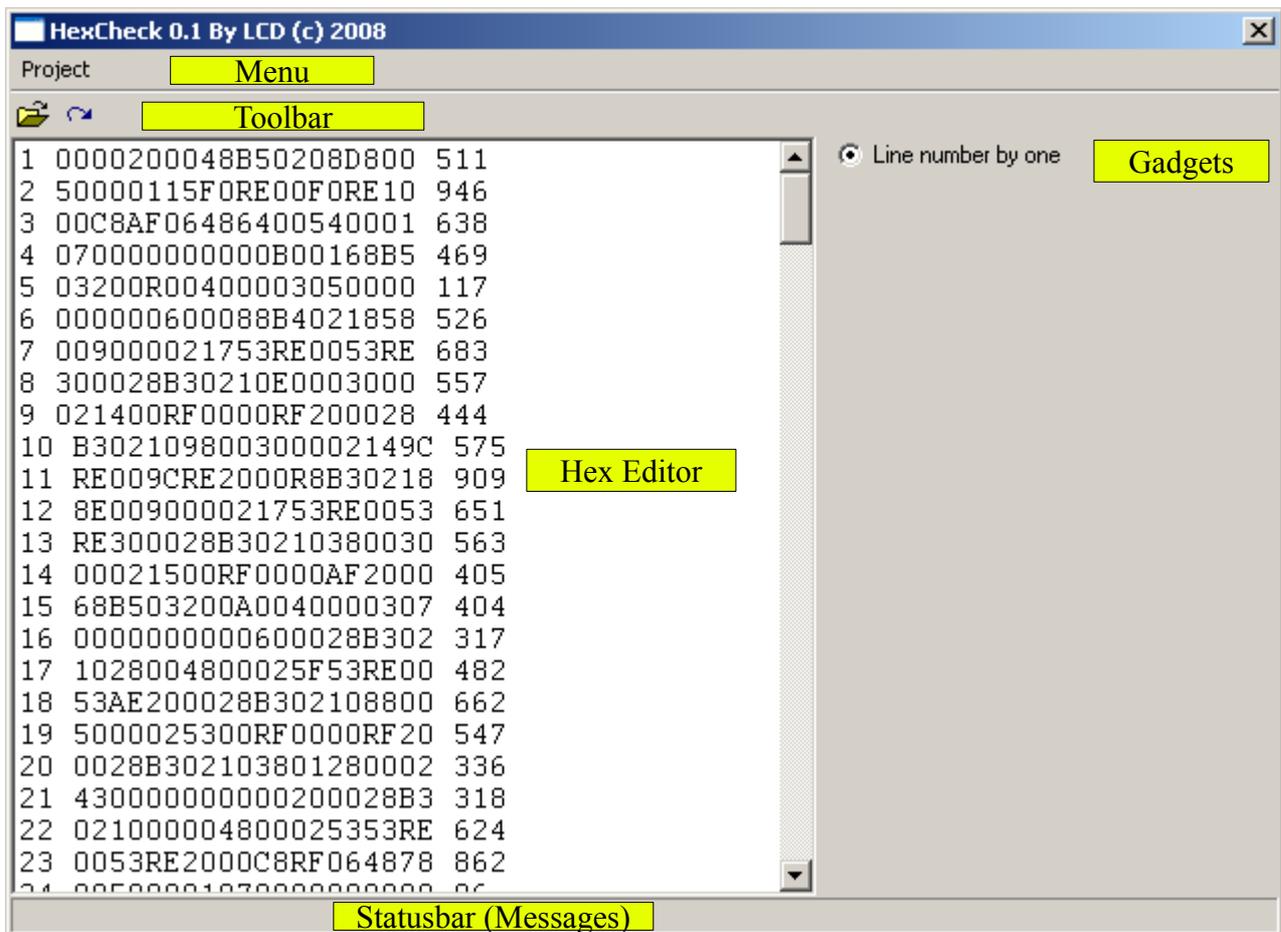
It works only with the standard Hex schema:

Each line consists of Line number starting with 1, step 1. Then ten bytes hex code follow (20 chars) and finally a checksum (decimal, all hex values added).

I think, this may be useful for Retro-Computing fans, who don't like to type up pages of Hexadecimal codes, finding out that there was a bug, months after starting to type (I'm talking about such monster programs like Giga CAD on C64).

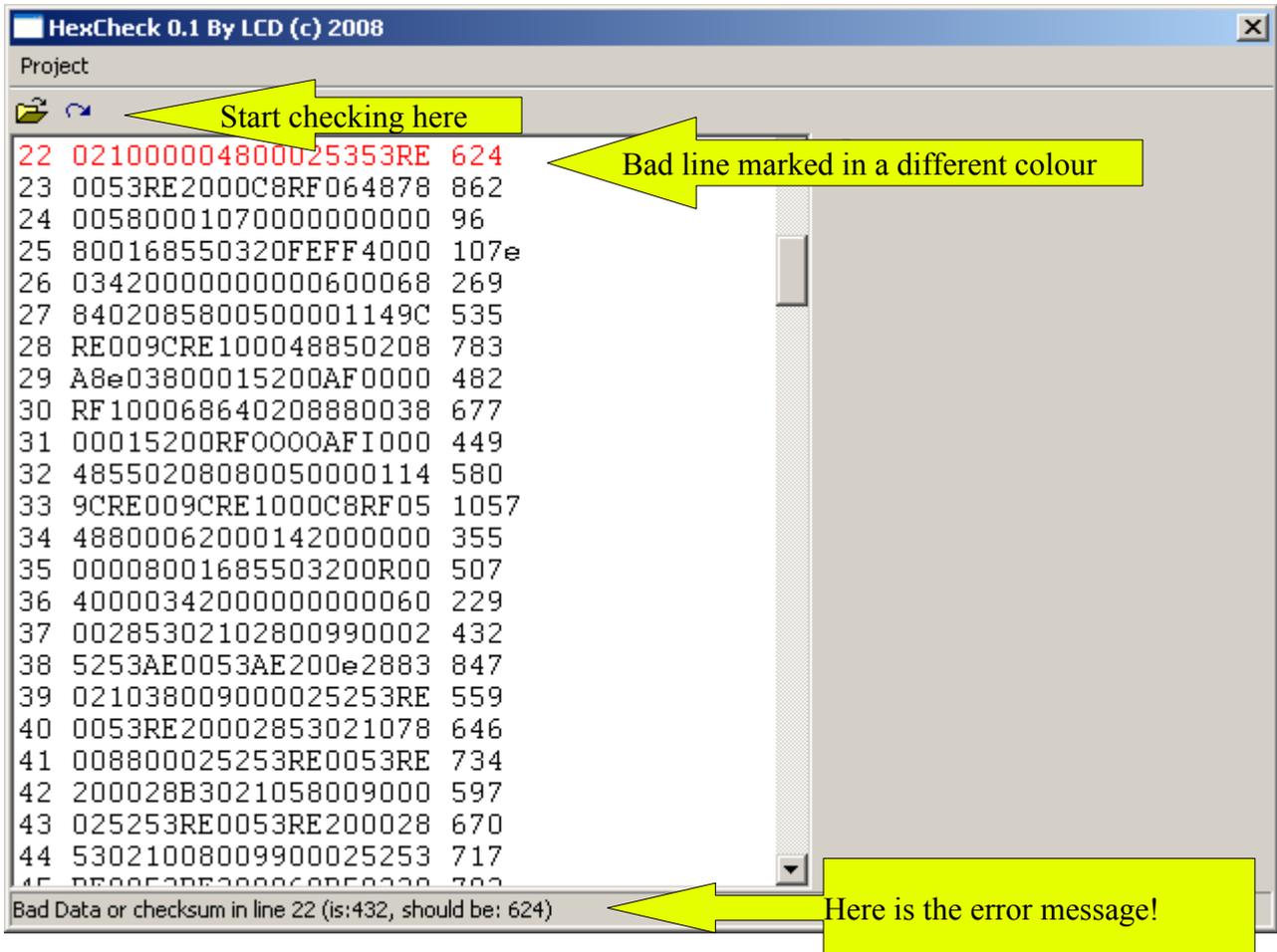
Anyway, If this program saved you hours, days or weeks of typing, I would be happy. I would be even more happy if you donate me a small amount of € (Paypal to retrozx@gmail.com). You can write comments, request and anything else to this mail address too.

02. User interface



03. Usage

After you load or paste the Hex codes (with line number and Checksum), you can start checking using the second Toolbar icon or from project menu. If the program detects a not correctable error in a line, it will put a message in the status bar and highlight the questionable line:



Now you can compare the original source line:

22 0210C0004800025353AE 624

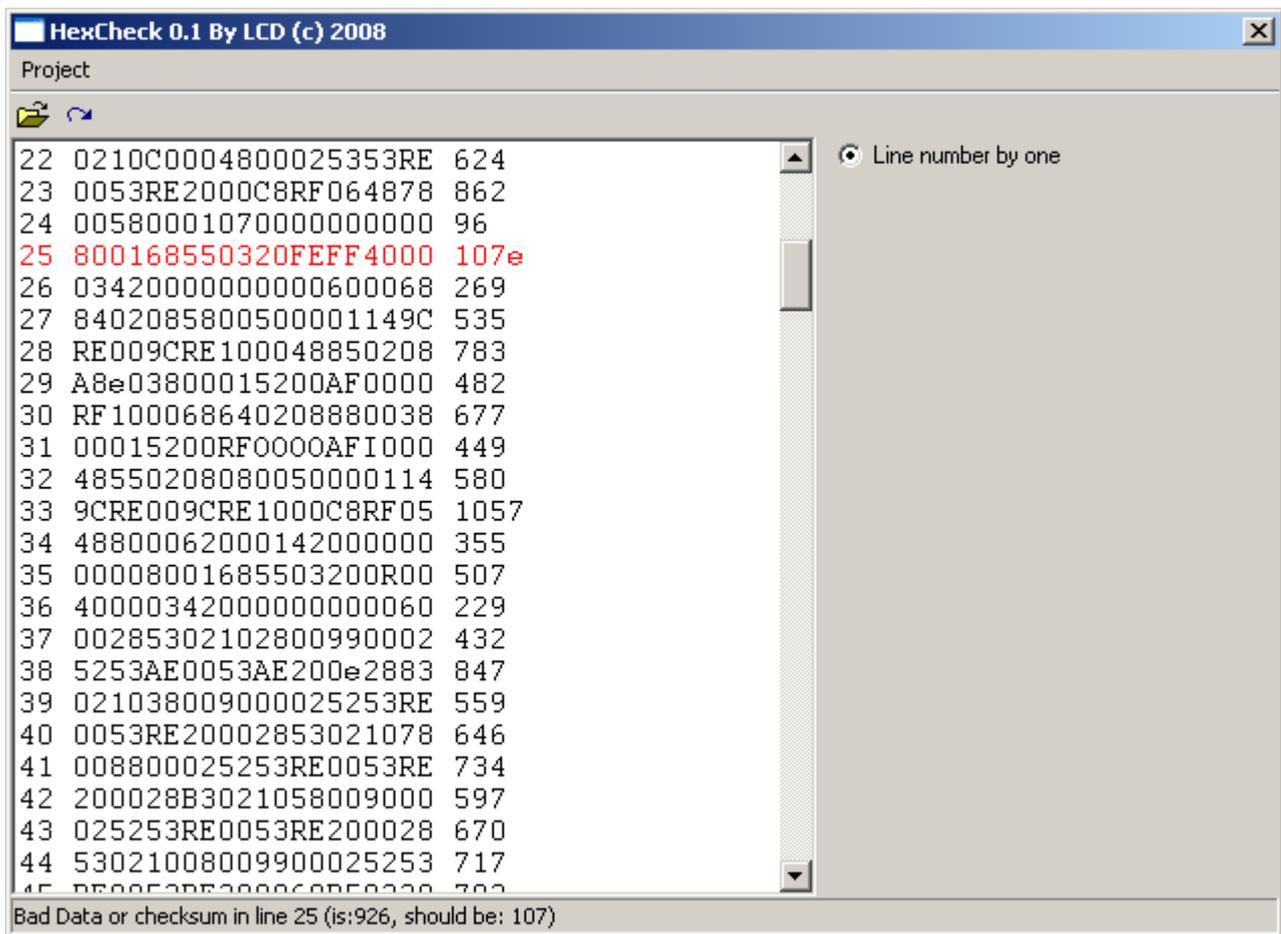
(Please notice that this scan was done at 150 DPI, as it was taken from already scanned magazine from a online archive), I recommend to use 200-300 DPI for less errors)

You can see: the 5th character was originally „C“, but Omnipage confused it with Zero. This is a critical error because the program cannot really recognise itself which of the nine zeros could be in fact a „C“. This is impossible since HexCheck has no own OCR routine (yet, who knows?), so such a error cannot be auto corrected.

Replace it and re-check the code (you can ignore the „R“ as it will be auto corrected to A by Hexcheck itself. This is a error that can be easy auto corrected).

The next problems are found in line 25 („R“s in line 23 are not reported as error due to auto correcting them to „A“, which saves a lot of time).

Now you got this:



Original:

25 B00168B50320FEFF4000 1070

You must check always the checksum first. It should be 1070, but Omnipage reads it as „107e“ (So the program confuses it with 107). There are more problems: „B“ was changed to „8“, the other „B“ was changed to „5“, these are not automatically correctable errors, so you must change it by hand.

The program detects also missing lines and other errors.

After you corrected all the errors, you can save the CODE Block as TAP or TZX (in case you are a Spectrum user like I), or BIN, for all other Home Computers. This can be done from menu.

You must enter the in-TAP name, Start address and file size (if padded, refer to the magazine what to save).

04. Technology

Auto correction for Hexadecimal numbers (very simple, I know) was created by me already in 2005, but not used until now.

05. Credits

HexCheck was coded in PureBasic 4.30 Final by Leszek Daniel Chmielewski. It was planed to include it as a part of Retro-X.

Instruction written in OpenOffice 3.0.

Hex examples from „Microhobby“ magazine game „Sir Gawain“